



Photo by Owen Davis

# WHAT HAPPENED TO FRANCIS ROSE'S FLORA OF KENT?

**TRANSCRIPT**

edited by Geoffrey Kitchener

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Sandwich Bay, 13 August 1986. Photo by Rosemary FitzGerald.



Magpie Bottom, Shoreham, surveying for Kentish Milkwort, 1986, with James Teacher, Joyce Pitt and Jo Weightman. Photo by Rosemary FitzGerald.



This Flora reconstruction began with transcribing copies of fragments of the manuscript from various sources. However, since then, three of the four volumes of the original manuscript for the species accounts have come to light, and it has been possible to pursue a more complete transcription. This transcription begins with a surviving section from the missing first volume which Francis Rose revised quite fully, and then continues with such fragments as survive from that volume. The second, third and fourth volumes are given here as complete transcriptions. The manuscript transcription has been re-ordered in the sequence of the second edition of Clive Stace's *New Flora of the British Isles*, as Francis Rose latterly appeared to have intended.

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Photo by David Streeter

### Acknowledgements

Assistance is gratefully acknowledged from Anna Rose and Andrew Rose, who with David Streeter brought to light the greater part of the original manuscript; from Rosemary FitzGerald who provided photos and, with Joyce Pitt, photocopies of parts of the original manuscript; from Owen Mountford, who produced notes from his consultation of the manuscript in the 1980s; from Phyllis Davis, who kindly gave access to typescripts prepared by the late Owen Davis in collaboration with Francis Rose, with related material; and from David Pearman, who encouraged the pursuit of traces of the missing Flora.

Geoffrey Kitchener, 2016-2024

## WHAT HAPPENED TO FRANCIS ROSE'S FLORA OF KENT?

Between 1908 and 1982 there was a long gap without an overview of the Kent flora. The first of these dates relates to the Victoria County History account by E.S. Marshall, which may be regarded as a summary of the *Flora of Kent* (1899) by Hanbury and Marshall. The second is the publication date of the *Atlas of the Kent Flora* by Eric Philp. This gap would have been filled by Francis's Rose's Flora of Kent, but this work was never published; he died in 2006 and the manuscript only came to light some years afterwards. Even then, the surviving manuscript is incomplete.

In consequence, we have had no published full county Flora which deals with the transformation from Victorian Kent - a period of major habitat changes in the countryside with increased mechanisation in agriculture; the beginnings of use of herbicides in quantity; the extension of cultivation in wartime and

subsequent abandonment; and the effects of development generally, tempered by the introduction of town and country planning. Francis Rose undertook very extensive botanising in the 1940s, when there were still many areas of habitat with native flora which have since disappeared. However, although some record of these is maintained through his herbarium specimens (about 10,000), since absorbed into the Maidstone Museum herbarium, the unpublished status of the Flora means that we have been deprived of the benefit of the views of an ecologist of considerable national standing. The Flora would have been of much more than just county significance; and except as regards what has survived we lack the acuity of many of his observations which would have been contained in it as regards the occurrence and distribution of species, their relationship to ecological factors and their wider significance in terms of the British and Continental flora.

What can be reconstructed of the Flora is given below.

### **The writing of the Flora and its disappearance**

Francis Rose would have been the person to provide Kent's Flora: 'I know Kent intimately – I have done much work there from my youth (first field trip 1936!) and I lived there for 28 years, more or less, from 1941-1969. So I have a vast background of knowledge on Kent'<sup>1</sup>. However, the project was begun before all this knowledge had accumulated, when he was only 20. In 1949, Francis Rose gave an address to the Botanical Section of the South-Eastern Union of Scientific Societies at the 1949 Congress at Canterbury<sup>2</sup>. He said:

'since 1942 I have been engaged with Mr. J.B. Marshall and others<sup>3</sup> too numerous to mention here, on the preparation of a new County Flora of Kent.....It was hoped at one time to complete the Flora in time for the Canterbury Congress, but this proved quite impossible. Help is earnestly requested from everyone interested in the subject who can supply information on Kentish botany, whether past or present, from any aspect. The flora is intended to be ecological in approach, with an emphasis on the details of plant distribution considered scientifically. There will be a series of descriptive ecological articles on the various botanical districts of the county, in which typical areas of different vegetation types, such as heaths, downs, woodlands, etc., will be considered in detail. It is hoped to illustrate the Flora with about forty half-tone photographic plates of vegetation, and of interesting Kentish plants in their natural surroundings. It is not possible to give definite figures yet as to price or date of publication, but it is hoped to keep the price down to about two pounds or less by eliminating much material often included in local floras which is of interest only to very few people, such as very detailed historical notes, and excessive detail on critical groups.

It is hoped, too, to publish within three years from now.'

These aspirations proved to be optimistic in the extreme. Although by 1950 there had been contact with printers, some of the distribution maps had been prepared<sup>4</sup>, the dots being 'sketched as accurately as can be judged by eye from the one-inch Ordnance survey map', fieldwork was still in progress. However, in 1954, he considered that fieldwork was almost complete, and that the manuscript might be ready for the press by about 1955; and, indeed, in that year he was outlining publication proposals and describing some of the interesting features of plant distribution and preferences which had been revealed in the course of Flora preparation<sup>5</sup>.

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<sup>1</sup> Letter to Rosemary FitzGerald, 15 May 1985.

<sup>2</sup> Rose, F. (1950). The Flora of Kent. Address to the Botanical Section [of the South-eastern Union of Scientific Societies]. *The South-eastern Naturalist and Antiquary* **55**: 39-40.

<sup>3</sup> As regards those (unnamed) others, Clive Stace mentions that, from comments made by Francis, it seems that J .R. Wallis, an accomplished Lamberhurst botanist (1917-1944), might well have ended up collaborating over researching and writing the Flora, but for the latter's early death.

<sup>4</sup> Rose, F., Distribution maps of Kent Plants (Exhibit), in Lousley, J., ed. (1951) *The Study of the Distribution of British Plants* (1950 conference report), B.S.B.I., Arbroath.

<sup>5</sup> Rose, F. (1955). The New Flora of Kent. Presidential address to the Botanical Section [of the South-eastern Union of Scientific Societies]. *The South-eastern Naturalist and Antiquary* **60**: 9- 19.



Nevertheless, by 1960<sup>6</sup>, he could only say that the manuscript was, after many delays, about half completed. In 1963, subscription forms were being issued. Subscribers were essential, due to the absence of any capital for immediate payment for printing (other than £200 from Kent Field Club, who were to act as joint publishers, and the prospect of a grant from the Royal Society). Advanced discussions with T. Buncle & Co. as printers seem to have fallen by the wayside in July 1963; he was also corresponding with Kent Arms Printing Works who provided sample proofs; and later that year an approach to the Ray Society to publish came to nothing. Work on the Flora, however, continued and in the mid-1960s, he was sending out 'wants lists' for 10km ordnance survey squares, generating much correspondence over incoming records.

The mapping aspects were clearly on his mind, with progress shown at the 1965 BSBI annual exhibition meeting which he illustrated with *Agropyron caninum*, *Allium ursinum*, *Anemone nemorosa*, *Caltha palustris*, *Cardamine amara*, *Cardamine bulbifera*, *Cardamine pratensis* and *Paris quadrifolia*<sup>7</sup>. By 1966, he is quoted<sup>8</sup> as being in the process of reducing the book – then running to nearly 1,000 pages – to 600 pages, although surviving papers do not show evidence of this. It was always going to be a problem reducing the amount of material which had been assembled. Ted Lousley wrote (*in litt.*, 1963), when approached for suggestions as regards covering aliens: 'The difficulty, as I see it, is that your Flora will run to an immense book with the material you have already. If you take maps and diagrams in the text into account, I would be very surprised if you can get it into 550 pages, while if you cut down the Flora proper by much it will cease to serve its purpose'. Peter Wilberforce remembers being shown the manuscript in Francis Rose's work room in the late 1960s: 'This consisted of thousands of foolscap sheets with hand-written notes scattered all over the place, together with herbarium sheets. To me it was in total chaos, but Francis seemed to know where everything was!'

In 1969, the Rose family moved to live at Liss in Hampshire, which would not have incentivised completion of the Kent project, quite apart from the distraction of Francis Rose's prodigious production of papers and contributions to publications on other subjects which he continued to sustain. Around that time the first steps were being taken by Eric Philp and the Kent Field Club towards production of an Atlas of the Kent Flora based on tetrad mapping and this was published in 1982. Eric Philp renewed surveying in 1991 and this developed towards the production of a second Atlas (the surveying period closed in 2005, and publication took place in 2010). It was therefore awkward in some respects that the prospect of completion of Francis Rose's Flora arose at the same time, although the two Floras would have been very different, and in some respects complementary – the Atlas being a survey directed towards tetrad mapping with relatively little species comment, but including all aliens; while Francis Rose's Flora would have been more ecological in scope, with vegetation studies and examination of significant species at greater length. There had been many other projects to engage his attention, not least in that between 1985 and 1995 the preparation of a Hampshire Flora gathered pace, and Francis Rose was one of the three principal authors. In 1986, he wrote to Rosemary FitzGerald that 'I have a manuscript flora of Kent (which I intend to use for a book – much abridged – when other more urgent jobs are completed)...It occupies four looseleaf foolscap files!'

By the late 1990s, he was seriously considering the revival of the Kent Flora. He began working on the manuscript again and secured the help of Owen Davis in having it typed up. Supposedly, the Introduction was put into type (although this has not been found) and a start was made on revising the main part of the Flora, the species accounts. These in their original manuscript form have a feel of a 1940s/1950s Flora, and Francis Rose evidently took much trouble over revising in conjunction with the typing up: many of the records in the

<sup>6</sup> Rose, F. (1960). Botanical records for Kent, 1955-58 – Vascular Plants. *Transactions of the Kent Field Club* **1(2)**: 56-65. The manuscript contains some internal evidence about the state of drafting: the account for *Limonium vulgare*, for example, says that it was being written in 1962.

<sup>7</sup> Distribution maps of Kent plants, in Dony, J.G. (1966). Exhibition Meeting, 1965. *Proceedings of the Botanical Society of the British Isles* **6**: 279-281.

<sup>8</sup> Unsourced newspaper cutting.

manuscript were jettisoned in the revision, particularly for more common species, in favour of a more streamlined approach. Although he had visited Kent on many occasions since moving to Hampshire, he recognised the need to update as regards current distributional status, particularly where plants recorded at old sites had not been seen for many years but there was a prospect of their survival. He accordingly circulated to Kent botanists in 2000 a list of plants and sites for following up. This resulted in more current data becoming available. However, the typing arrangements with Owen Davis were discontinued, in order to reduce the complications of liaison over a distance as regards typing and corrections; and it was intended that Francis Rose would obtain help nearer home. He died in 2006, and nothing has been found which demonstrates that the updating continued after 2000.

It was then believed that the Flora was missing, perhaps lost. After an initial attempt to reconstruct the Flora was undertaken from copies of some of the species accounts which had been made during Francis Rose's lifetime, it was found that much of the original manuscript still survived. It had not followed his main written archive, which had been deposited with the National Museum of Wales, but had remained in his study where two of the four folders of species accounts were found in 2017 by David Streeter and Andrew Rose; a third folder was located by Anna Rose in 2019. All in all, nearly 90% of the species accounts are extant. The earlier sections of the Flora, essays on the characteristics of the vegetation of the county, have not been traced other than a few skeletal draft elements; although they are largely covered by papers published by Francis Rose 1946-72. The surviving manuscript and its related revisions and copies are described below ('the surviving species accounts').

### The planned contents of the Flora

"Kent is still one of the loveliest of the English counties, with a variety of scenery and wild life unique in the British Isles. Its flora is remarkably rich, both in number of species and in interesting plants. On a conservative estimate, Kent has still 1,200 species of native or established vascular plants; only Hampshire and Sussex have more. This total includes 30 species of orchids (only Hants. and Oxford have as many) and eight of our ten British broomrapes."<sup>9</sup>

The Flora was planned to be some 550 pages long, with an emphasis on ecological and historical aspects, and a three-page synopsis was circulated from time to time over many years<sup>10</sup>. From this, we have a clear understanding of what it would have covered.

After a preface with acknowledgements, the **introduction** was to set out the scope of the Flora and contain sections on the county and vice-county boundaries with some statistics<sup>11</sup>; on climate; on the geology and geomorphology of Kent; and on its soils. There was to be a brief historical sketch of earlier work on the Kent flora (apparently not to the same depth as had been undertaken in the 1899 Flora).

The Flora was then to contain a description, with boundaries, of 16 **botanical districts** based on natural regions of Kent, with some statistics of each district. This was a standard method of dealing with accounts of plant distribution before detailed mapping against overlays of geology or habitat types became the norm: the 1899 Flora has ten districts based on geology.

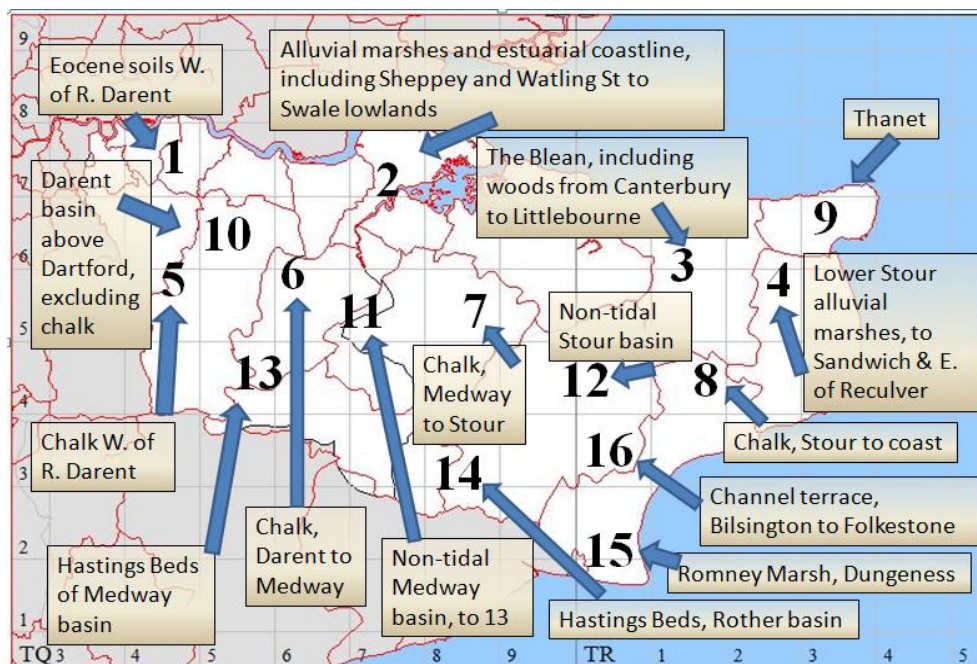
<sup>9</sup> Rose, F. (Autumn 1962): The Naturalists' Trusts: No. 1 The Kent Naturalists' Trust Ltd. *Countryside, the Journal of the British Naturalists' Association*.

<sup>10</sup> Retyped by Owen Davis c.2000 with changes made then by Francis Rose, which are reflected in the following description.

<sup>11</sup> A note by FR with the Flora papers shows some gathering of statistics: 'Kent ninth largest county, nearly 1,000,000 acres, 1,555 sq miles...N. Foreland – London 64 miles, N. Foreland-Dungeness -38 miles...[1947] 144,300 acres Woodland, 8,300 F[orestry] C[ommission], 136,000 private: 29,000 hardwood high forest: 7000 conifer high forest, 8000 mixed, 69,000 coppice or c[oppice] w[ith] s[tandards].'



### Botanical Districts



The identity of the 16 botanical districts is likely to have been as indicated in the reconstruction above<sup>12</sup>, namely:

- 1) the Eocene soils of north-west Kent, west of the River Darent;
- 2) the alluvial marshes and coastline of the estuaries of the Thames and Medway, including the Isle of Sheppey and the lowlands between Watling Street and the Swale;

<sup>12</sup> These are the same districts as given in Rose, F. (1949). A Bryophyte Flora of Kent I, *Transactions of the British Bryological Society*, **1**(3): 202-210. They are also given in a notebook (c. 1946-8, 'the Flora notebook') associated with the MS Flora papers together with lists of special vascular plant species for each district, under the following names: **1**) The Metropolitan District, **2**) The Thames-Medway Estuary, **3**) The Blean, **4**) Stour Marsh, **5**) Chalk W. of Darent, **6**) Darent-Medway Chalk and other Hills (**6E**), **7**) Medway-Stour Chalk, **8**) Stour-Channel Chalk, **9**) Thanet, **10**) Darent Basin, **11**) Medway Wealden Basin, **12**) Stour Wealden Basin, **13**) High Weald of Medway, **14**) Rother High Weald, **15**) Romney Marsh, **16**) Channel Terrace. These districts had to be decided upon before the MS Flora was begun to be assembled, as this is laid out with records under each species set in their relevant district. While the district names are reasonably descriptive, detailed boundaries are given for some in the Flora notebook.

**The Metropolitan district** is defined as follows: **N.** — the Thames from Deptford to Crossness. **E.** — Lessness Manor Way (L.C.C. b[oun]d[ar]y) to Abbey Woods Sta[tion] . — N. Kent Line to Crayford Mills: up to Met-Vickers to leave out Barnes Cray Marshes: Down to join A.206 on E. side of Marsh: by A.206 to Bull Hotel, Dartford: by A225 to "the Folly", Farningham: by track to W for ¼ m. And S.E. edge of Farningham Wood and Orchard to Farningham Hill Farm: by A.20 to Swanley.... by B.258 to Crockenhill: by road to Skeet Hill and Well Hill: by E. edge of Hollows Wood to join Timberden Lane at 550627: due S. 200yds, then: **S.** — W. for ½ m. along S. wood edge to A.224 at Badger's Mount: by A224 to Chelsfield Ch[urch]: to Gillmans Brimstone — to Worldsend and Green St[reet] Green: to Farnboro' by A21 and B2158: by path to Lower Hook: S. edge Holwood P[ar]k: Keston Ch[urch]: lane NW to Baston Manor: Cony Hall: A232 and B268 to Co[unty] B[oun]d[ar]y.

**The Thames-Medway Estuary district** is defined as follows: **N.** Thames from Cross Ness to Grain Jetty: NE coast of Sheppey: to where road meets coast ½ m W of Seasalter ch[urch] (by P[ost] O[ffice]). **E.** Inland to A.299: by A299 to Brenley Corner. **S.** by A.2 to Rainham Ch[urch]: down to Station: thence by R[ai]l[wa]y to Gillingham Sta[tion]: by A231 to Chatham Town Hall: by A.2 to Rochester Cathedral Gate: by Borstal Road to Wouldham Village: by River Road to Burham Ch[urch] and Rose Cott[age]: to N[ew] H[ythe] ferry Path — Aylesford Friars: High St[reet]: Forstal. Up river banks to Allington lock and back to Lit[tle] Preston: by R[ai]l[wa]y to N[ew]. Hythe: up N[ew] Hythe and by path to Lunsford La[ne]: **W.** — by A.228 to Ham Hill: by Marsh edge to Snodland: by A2286 to Holborough: by R[ai]l[wa]y to Strood (Rochester) (with obvious exceptions): round district 6) to Gravesend and Dartford.

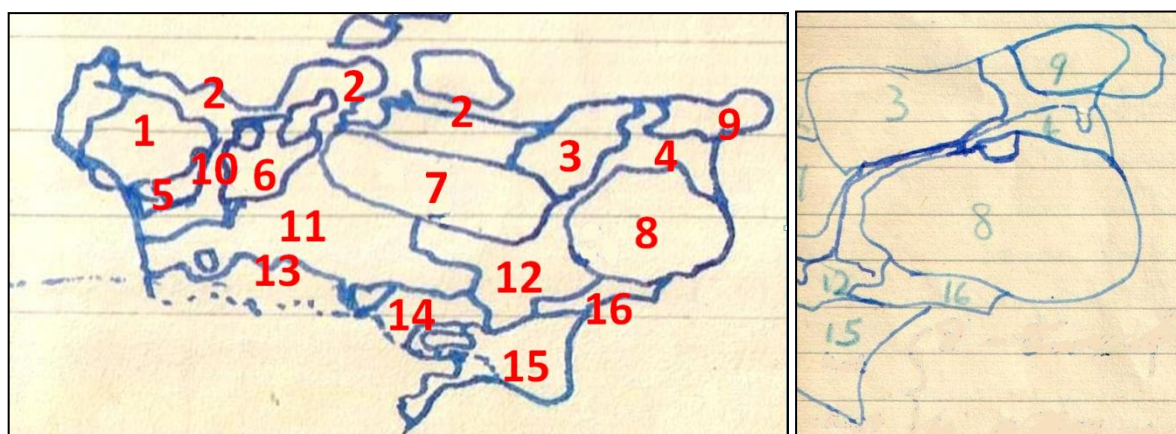
**The Blean district** is defined as follows: **N.** — Sea from Seasalter Post Office to Reculver Towers: **W.** — Kent Coast Road from Brenley corner to Seasalter+, then NW by road to sea: **S.** — by road thro' Boughton Church to Upper Ensign — from there by a track N. of Chalk to A28 ½ m W of Chartham (where cliffs meet the road). By A.28 from ½ m W of Chartham to Milton Bridge — by S[outhern] R[ai]lway to E. of Chislet. **E.** — Edge of the Upland from Reculver Towers by Chislet to the S[outhern] Railway; thence to Canterbury.

**Stour Marsh district** is defined as follows: **N.** Boundary, sea from Reculver Towers to Minnis Bay cliffs: **S.** border of Thanet upland to the Sportsman. **E.** — The sea, from the Sportsman at Ebbsfleet to Oldstairs Bay: **S.** The cliff foot from there to Walmer C[astle]: The edge of the chalk from Walmer C[astle] to Canterbury. **W.** Edge of Upland to C[anter]bury and Wingham.

**The Chalk W. of Darent district** is defined as follows: **S.** Boundary — Pilgrims way, from S[urre]y boundary to W. of Otford. **W.** Boundary — S[urre]y Boundary to Wickham-Croydon Road. **E.** Boundary — Road on W. side of River Darent, to Farningham and ½m N. The remaining districts are not defined in the notebook, but there is a sketch map of the eastern districts.

- 3) the wooded Eocene country north and east of Canterbury, usually known as the Blean, including the woods east of Canterbury as far as the Little Stour Valley at Littlebourne;
- 4) the alluvial marshes of the lower Stour from Canterbury to the coast at Sandwich and east of Reculver;
- 5) the Chalk west of the Darent;
- 6) the Chalk between Darent and Medway;
- 7) the Chalk between Medway and Stour;
- 8) the Chalk between the Stour and the coast;
- 9) the Isle of Thanet;
- 10) the Darent basin above Dartford (excluding the chalk);
- 11) the basin of the non-tidal Medway, as far south as the northern edge of the Hastings Beds;
- 12) the basin of the non-tidal Stour, above Canterbury;
- 13) the Hastings Beds of the Medway Basin (the Forest Ridge);
- 14) the Hastings Beds of the Rother Basin about Tenterden;
- 15) Romney Marsh (including Dungeness); and
- 16) the channel terrace, draining to the Channel, from Bilsington to Folkestone.

The numbers of botanical districts are used in the species accounts, in order to group records together. The reconstruction above is set on a map with local authority boundaries. No map has yet been found with Francis Rose's district boundaries superimposed, but the two accompanying sketches are taken from the Flora notebook. The first can be interpreted as showing the districts and for the purposes of this transcript, the numbers have been added. The second gives Francis Rose's own numbering of the eastern districts.



The numbers of botanical districts are used in the species accounts, in order to group records together. Sometimes the districts are subdivided, most frequently as regards **6)** and **11)**. District **6)** is sometimes divided so as to refer to **6A)** or **6a)**, but more frequently **6E)**. As the Flora notebook refers to '**6)** Darent-Medway Chalk and other Hills (**6E)**', it looks as though groupings of records under **6E)** should be regarded as applying to other (non-Chalk) hills, e.g. as covering areas where the geology is Thanet or Harwich Formations or Lambeth Group beds, perhaps also where the chalk is overlain with clay-with-flints or other superficial deposits (so **E** probably refers to Eocene). Because of the manner of cumulative entry of records into the manuscript, it is not always clear which records belong to **6E)** or to plain **6)**. Clarity is not helped by the occasional use of **6)T)** instead of **6)E)**, presumably referring to Tertiary deposits (=Eocene). Division of district **11)** into **G)** and **W)** is likely to be as between Greensand and Weald clay.<sup>13</sup>

<sup>13</sup> Division of **13)** in the *Radiola* account into **W)** and **E)** is less satisfactory, as both are on underlying Tunbridge Wells Sandstone, and west/east, there is some overlap. Also, the *Rosa canina* varieties have a division between **11)E)** Headcorn and **11)W)** Ryarsh, which appears geographical rather than geological. The combination of **11)E)** (for Hollingbourne) and **11)G)** (for Teston) in the *Lythrum hyssopifolia* account increases the difficulty of interpretation.



From the Flora notebook, descriptive comments on the botanical districts would have been included (although needing to be updated in nomenclature and plant occurrences) and the relevant material is set out in the Appendix to this transcription (Part 1).

**The history of the flora and vegetation of Kent** since Late-Glacial times was to be described, including the problem of re-immigration of plants<sup>14</sup>; the forest maximum; the fate of the open habitat species; early man in Kent; the historical period (including the use of old maps to show decline in heathlands and downland); and changes at the (then) present time. The most recent changes would presumably be those outlined by him in 1962<sup>15</sup>: the pressures of development and modern methods of farming and forestry. Farming changes had almost wholly eliminated the old permanent pastures of heavier soils, replacing them with leys; and had entailed the ploughing up of chalk downland slopes, the drainage of bogs and heathland, the loss of hedges with enlargement of fields or needless replacement by fences. Forestry had been affected by the old coppice-with-standards system becoming uneconomic, and at that time the old woods, except on chalk, were being replaced by pure chestnut coppice or dense conifer plantations. Francis Rose made some outline notes for this section, kept with his Flora papers, which are given in the Appendix to this transcription (Part 2).

Nearly half of the flora, excluding the species accounts, was to be devoted to an account of **the remains of the natural vegetation and habitats of Kent** up to the end of the mid-20<sup>th</sup> century, dealing with natural and semi-natural vegetation and with weed communities dependent upon man. Judging from Francis Rose's published work on similar topics for Sussex<sup>16</sup> and Hampshire<sup>17</sup>, this would have been a landmark description. It is unclear whether it was ever completed, but it may well have intended to be an expanded version of the habitat descriptions given in the county Bryophyte Flora, although there would of course have been a different emphasis in relation to the vascular plant flora and it was not to follow that work in being structured closely against the botanical districts.

The vegetation account was to cover ten different aspects, as follows.

It was to begin with the vegetation of the county coastline and estuaries. For the Thames-Medway estuary, consideration was to be given to its salt-marshes; the tidal marshes of the Upper Medway; brackish marshes and the effect of inking; sea-level changes; shell-sand beaches; and the clay cliffs of Sheppey. Examples of each were to be cited and discussed in detail. Then the Stour estuary was to be dealt with, and its salt marshes and brackish marshes were to be compared with those of the Thames/Medway. The sand dune system of Sandwich and the shingle beaches of north east Kent were to be described and comparison made with other British dune systems. The Romney Marsh region would be mentioned for the Romney-Lydd dune system; and the development and vegetation of the largest shingle tract in Europe, Dungeness.

The second aspect of the account was as regards the habitat of the sub-littoral fresh-water marshes and fens, and their former conditions. This involved the drained alluvial flats of the Kent coast and the aquatic

<sup>14</sup> Cf. Rose, F. (1957). The importance of the study of disjunct distributions to progress in understanding the British Flora. In (ed.) Lousley, J.E. *Progress in the study of the British Flora*, The Botanical Society of the British Isles, Arbroath.

This paper suggest that the chalk cliffs of East Kent may have provided a treeless open habitat for calcicole grassland species during the forest maximum, until Bronze Age clearances north of Dover enabled re-spread to occur. *Galium pumilum*, *Falcaria vulgaris*, *Euphorbia cyparissias*, *Silene nutans*, *Thesium humifusum* and *Cirsium eriophorum* as given as possible examples; also a pale form of *Polygala calcarea* in the Dover area. On the other hand, orchids and broomrapes may well have colonised by wind-blown seeds from the Continent, after the British Isles had become separated.

<sup>15</sup> Rose, F. (Autumn 1962): The Naturalists' Trusts: No. 1 The Kent Naturalists' Trust Ltd. *Countryside, the Journal of the British Naturalists' Association*.

<sup>16</sup> Rose, F. (1995). *The Habitats and Vegetation of Sussex*. Brighton.

<sup>17</sup> Brewis, A., Bowman, P. & Rose, F. (1996). *The Flora of Hampshire*. Colchester.

vegetation of their dikes; the relict fenlands of East Kent<sup>18</sup> (Ham, Wingham, Preston, Stodmarsh and Dungeness Open Pits); and the small inland spring fens of the chalk and ragstone springs.

The vegetation of the Eocene tracts of Kent would have covered the London clay areas of north west Kent with the heaths of the lower Eocene (Keston, Hayes, Chislehurst) and the old woodlands (Joydens Wood, Farningham Wood, Darenth Wood, etc.), their vegetation in relation to land use history. Also, the Hoo Peninsula and its soil-vegetation complex; the brickearths of the Swale plain; the Isle of Sheppey; making comparisons with south Essex. The vegetation of the Blean district was to be compared as regards its resemblances and differences to that of the High Weald; and general consideration was to be given to the cultivated lands of the Eocene and their weed flora.

The vegetation of the chalk country of Kent would probably have provided a lengthy section. It was to begin with comment on the structure of the chalk country, noting the dry valleys with their valley-floor deposits and the presence of varied drift cover. The history, structure and flora<sup>19</sup> of the chalk grasslands (being a sheep-adapted plant community) were to be considered as a whole, with mention of what Francis Rose described as the calcicole problem. Then there were the chalk woodlands, beech forest and other woodlands, with issues of succession and the scrub communities; and the chalk woodland communities of East Kent were considered in some respects to be unique. The account would address what was the original pre-Neolithic climax forest on chalk soil; variation in the vegetation of the chalk country from east to west, with the spread of the chalk grassland flora probably originating from three centres after forest clearance; also attention would be given to the drift-free chalk plateau of north east Kent and its vegetation, Thanet being compared with the South Downs. The vegetation of the drift-covered chalk plateau was to be related to its varied soils: clay-with-flints and Pliocene sands. Then there were the plant communities of the coastal cliffs and the arable weeds of the chalk lands. Francis Rose made some notes, kept with his Flora papers, which may indicate how he was going to approach describing aspects of characteristic Kent vegetation and its habitat – a draft for chalk woodlands is given in the Appendix to this transcription (Part 3).

The Gault clay belt and its damp oakwoods would prompt discussion as to the extent of their modification, resulting in the (then) present vegetation. Pasture and ponds would also be noted, and comparison made with the Boulder-clay woods of East Anglia.

The next aspect of the vegetational account would relate to the Folkestone Sand belt of Kent, its heathlands now lost or destroyed; its former vegetation and present relics: oakwood, heath, grass heath and valley bog. Hothfield Common is the best remaining example of the semi-natural vegetation of the Folkestone Sand; and it would be compared with the Thursley area of Surrey and with West Sussex. Then consideration would be given to the Folkestone Sand woodlands of the Wrotham-Sevenoaks area; and to the Sandgate and Bargate Beds (to be compared with the Surrey Bargate Beds woodlands). It is likely that the changes in vegetation over time would have received detailed treatment<sup>20</sup> in relation to Willesborough Lees, Brabourne Lees and Charing Heath, against the background of what is still known to occur on the Folkestone Sands belt in west Sussex, remaining very rich.

The Hythe Beds escarpment provides Kentish ragstone scarps and acid drift soils; and the effect of lithological changes westward would be noted; the sessile oak woods on head deposits over the Hythe Beds. The calcareous Kentish ragstone vegetation would be examined: ash-elm woodland, grassland and

<sup>18</sup> It is likely that this section would have drawn on Rose, F. (1950). The East Kent Fens. *Journal of Ecology* **38**(2): 292-302.

<sup>19</sup> It is unclear how this would have fitted into the Flora as described in the synopsis, but one of the surviving items which Francis Rose had typed out, probably around 2000, was headed 'Flora of Kent: orchid-rich downlands'. This consists of a list of 18 locations, with the orchid species and varieties known for each, ranging from 5 to 21 in total.

<sup>20</sup> Mentioned *in litt.*, 2000.



scrub and the effects of cultivation. The drift soils vegetation of the Hythe Beds plateau would also form part of this account, involving the West Kent 'Highlands' and changes over the Surrey border.

Coming to the Low Weald, there would be an account of the vegetation of the woodlands, pastures and ponds of the Weald Clay, and of the influence of river gravels, etc. on the vegetation.

The High Weald might be expected to generate an account of considerable interest, in view of Francis Rose's researches over a long period<sup>21</sup>. It would have dealt with the remarkable atlantic flora of the High Weald of Kent and Sussex, associated with the microclimate of the sheltered wealden 'gills', many of which appear to demonstrate long-term continuity of woodland presence from a period of warmer and wetter climatic conditions. The vegetation of the acid plateau woodlands on Tunbridge Wells and Ashdown Sands would be described; as also that of the sandrocks of the Weald and the Wadhurst clay woodlands.

The final element of the vegetation account was to be the freshwater rivers of Kent, comparing their vegetation with that of the dikes and canals of the alluvial marshes and with other English rivers.

The Flora was then to include **a comparison of the vegetation and flora of south east England (Kent and Sussex) with that of north France** (Pas de Calais, Nord, Somme, Normandy, Brittany), with a discussion of factors that may be responsible for differences. The findings would presumably have reflected other publications by Francis Rose on this subject.<sup>22</sup>

There would be a **numerical comparison**<sup>23</sup> **of the flora of Kent with that of Surrey, Sussex, Essex and north France**, with a discussion of geographic elements in the flora, considering both 'native' and 'alien' species.

The next part of the Flora would relate to types of **species distribution patterns**, with reference to dot-distribution maps given with the species accounts. It may be that this would be an expansion of the notes reproduced in the Appendix to this transcription (Part 4).

Symbols and abbreviations cited would be explained in a section, **the plan of the Flora**.

The main part of the Flora, originally estimated to comprise some 200,000 words and then amended to 100,000, was to be the **species accounts** – a systematic section with data on the distribution of the species 'given in such detail as appears justifiable', including up to 100 dot-distribution maps. The maps have not been found, but this transcript includes some samples which may have been intended for use as well as sketches from the manuscript. In 2000, he said that the maps would be for limited selected species at 10k square level,

<sup>21</sup> Rose, F. (1946). The vegetation of the Weald, with special reference to Tunbridge Wells district. *The South-Eastern Naturalist and Antiquary* **51**: 1-6.

Rose, F. (1952). "Atlantic" species in the flora of the Weald. *The South-Eastern Naturalist and Antiquary* **57**: 18-23.

<sup>22</sup> Rose, F. & Géhu, J.M. (1960). Comparaison floristique entre les comtés anglais du Kent et du Sussex et le département français du Pas-de-Calais. *Bulletin de la Société de Botanique du Nord de la France*. **13**(4): 125-130. This includes lists of species to be found in the English districts but lacking in the French; and vice versa.

Rose, F. & Géhu, J.M. (1964). Essai de phytogéographie compare, La vegetation du Sud-Est de l'Angleterre et ses analogies avec celle du Nord de la France. *Bulletin de la Société Botanique de France*. **111**: 38-70.

Rose, F. (1965a) Comparaison phytogéographique entre les pelouses crayeuses du *meso-xerobromion* des vallées de la Basse-Seine, de la Somme, de L'Authie, de La Canche, de la Cuesta Boulonnaise du Pas-de-Calais et du Sud-Est de l'Angleterre. *Revue Sociétés Savantes de Haute-Normandie – Sciences*. No. 37: 105-109.

Rose, F. (1965b). Botany on two coasts. *New Scientist*, July 15, 1965 pp.158-161.

Rose, F. (1972). Floristic connections between Southeast England and North France. In (Valentine, D.H. ed.) *Taxonomy, Phytogeography and Evolution*. London, Academic Press.

<sup>23</sup> Cf. the section in the Flora of Hampshire (1996) entitled 'A Comparison of Hampshire's Flora with those of some other southern counties'. Some preliminary work was done, however, towards a comparison between Kent, Surrey and Sussex. Francis Rose prepared a MS note listing species in Kent only; in Surrey only; in Sussex only; and in Surrey and Sussex, but not Kent.

or finer. The original intention was to include marine algae and bryophytes as well as vascular plants, but none of the former accounts has been traced. In any event, as regards bryophytes, Francis Rose published separately a Kent Bryophyte Flora in three parts over the period 1949-51. Also in 2000, he was contemplating the incorporation of a check-list of names of 'all plants recorded for Kent'. He was undecided as to whether this would be a separate section or would be combined with the species accounts so that, in effect, all the named species would be listed in systemic order (as in Stace and D.H. Kent<sup>24</sup>), but only those which were covered in more detailed 'case studies' (a term which appears to be equivalent to the concept of a species account) would receive more than brief mention. Casual aliens would be in a different font (this has not been pursued in the transcript).

The Flora would have ended with a **bibliography**, a **list of contributors** and (according to earlier versions of the Synopsis) a **list of subscribers**, plus an **index**. Of these, only a set of bibliographical references (in no discernible order) appears to survive and this has been transcribed, with entries placed in alphabetical order. The present Flora reconstruction incorporates at the end a list of contributors with other abbreviations which has been put together by the editor: there is no manuscript version by Francis Rose, although some contributor initials are taken from Rose (1960).<sup>25</sup>



Photo by Geoffrey Kitchener

### The surviving species accounts

The surviving original manuscript starts (in what would have been the second folder) with *Viola hirta* through to *Hedera helix*; then (third folder) *Hydrocotyle vulgaris* through to *Hieracium lanatum*; and then (the fourth folder, after a missing page or pages) from mid-way through *Alisma plantago-aquatica* to the end of the species accounts (i.e. virtually all of the Monocotyledons). The accounts were written on foolscap paper, which had been assembled into ring binders. The standard format gave a heading with the Latin name and authority for the taxon, followed (in most cases) by a note of which Kent vice counties (15 and/or 16) it had

<sup>24</sup> At that time: (1) the second edition of Stace, C.A. (1997) *New Flora of the British Isles*. Cambridge University Press; and (2) Kent, D.H. (1992). *List of Vascular Plants of the British Isles*. London, B.S.B.I.

<sup>25</sup> Rose, F. (1960). Botanical records for Kent, 1955-58 – vascular plants. *Transactions of the Kent Field Club* 1(2): 56-65.



been recorded in, the English name and the total numbers of 10km Ordnance Survey squares in which it had been known. Most taxa were then given a short commentary and the first recorded occurrence. Then the records were listed under the relevant botanical districts 1-16. The records were evidently added on an ongoing basis, and the result was sometimes messy, even near-indecipherable. At a later stage, it appears that, instead of just relying on citation of a botanical district, six figure grid-references were added to many records and a further grouping into the relevant 10km square was begun, often with annotated clusters of 10km square numbers to show how mapped distribution might appear (as well as smaller clusters as working notes to remind how the records in one or more botanical districts would contribute to the fuller mapped distribution)<sup>26</sup>.

While some of the initial part of the species accounts' original manuscript has not yet come to light fully, it is nevertheless (for ferns and fern allies especially) the most up-to-date section, as this was typed up by Owen Davies and revised by Francis Rose in 1999. Some of this section exists both as an interim typing and a re-type, in addition to photocopies of the underlying manuscript. The revisions were quite extensive, adding and removing material, as well as re-structuring the accounts. Items removed included some historical data, multiple sites for relatively common species and (from the headings) the numbers of known and extinct locations and the numbers of Ordnance Survey map squares where present or extinct. The later species accounts apparently did not advance beyond manuscript, and many of these bear extensive crossings-out and interpolations. At least some accounts seem not to have advanced since c. 1960.<sup>27</sup>

A number of accounts were preserved as photocopies taken by Rosemary FitzGerald in the mid-1980s, when the species accounts were lent to her for survey work on rare plants in South East England. These extracts, as well as copies from other sources, have helped fill in part of the content of the missing first folder.

The manuscript gives accounts more or less in the order of Clapham, A.R., Tutin, T.G. & Warburg, E.F. (1952) *Flora of the British Isles*. In this transcription, the accounts have been re-ordered and are laid out below in the systemic order of Stace (second edition) and D.H.Kent, as mentioned above, as though the revisions started in 1999 had been carried through then. It is assumed that Francis Rose would have adopted the approach which he was considering, of incorporating a check-list of Kent plants, so that where names of plants are set out here, they are taken from the check-list so far as it goes (unless otherwise indicated), but with author citations following Stace. The check-list was being compiled in 2000, starting from Eric Philp's *Atlas of the Kent Flora* (1982), with additions from the Kent Field Club Bulletins. Less than half of the check-list, however, survives. This is as a version typed up by Owen Davis in 2002 (annotated as 'To accompany "The Flora of Kent"') as far as the end of Aceraceae; the original manuscript also exists for this. Nomenclature of plants which would presumably have been in the rest of the check-list is in this transcript given in accordance with Stace (second edition), noting where the manuscript differs.

It was not Francis Rose's intention to cover everything: 'My book will not contain much detail on alien species except for those that form part (or are now beginning to form part) of the permanent flora. I have little taste

<sup>26</sup> Where the 10km squares were laid out in the manuscript to show county distribution, or are sufficiently grouped to show that he was thinking about a mapped appearance, these have in this transcript been superimposed on a gridded map of the county. It is likely that these would not all have been mapped in the Flora, if it had been completed: some of this work may have been undertaken to calculate the number of 10km squares where the taxon was present in the county, as sometimes given in the taxon heading. However, this transcript follows a course of supplying a hectad map (so as to replace lists of hectad numbers) where practicable, so that some 300 maps are supplied, although Francis Rose was thinking of about 100. Calculation of hectad totals also seems to have been carried out at times, often in pencil, by marginal lists of hectads (named, not numbered, and with names not necessarily representing the record location within the hectad) and these lists are sometimes included (in grey, smaller type) in this transcript. They can contain record date information not given in the main text, but are often overwritten and illegible.

<sup>27</sup> For example, that for *Euphorbia platyphyllos* is laid out on the original framework: a short introduction and then a listing of all 16 botanical districts for records to be filled in (mostly blank in this case). The proportion of old literature or herbarium records is high, and there are no modern records after 1956.

for rubbish-tip or wool shoddy aliens which mostly do not persist (except for those that become importantly established!)'.<sup>28</sup>

### How to read the species accounts

Some of the conventions used in the species accounts are familiar in many Floras, such as exclamation marks for records seen by the author; square brackets around species which are doubtful or extinct, and these are also used for records for locations where the species now appears extinct. As regards other conventions:

- The references to numbers which group records together (sometimes as plain numbers; sometimes with a bracket following, and in the manuscript enclosed in a circle) are to the botanical districts 1-16 (see above, 'The planned contents of the Flora'). They are not to be confused with two-figure numbers which appear occasionally within the records, to identify the 10km Ordnance Survey grid squares – these, often in red or green ink in the manuscript, appear to have been added to the manuscript as the author began to consider species distribution in terms of hectads and began to include tables of hectad numbers, perhaps for working convenience and not necessarily for inclusion as maps in the final version of the Flora. Where these hectad numbers were listed out, they have generally been replaced by maps prepared for this transcript, but it should be emphasised that this map format was not one which Francis Rose produced, nor would he necessarily have produced a map in every case. Maps in the transcript format have been added here even where Francis Rose provided one, so that in some cases there are two maps per species.
- As a separate approach to including hectad numbers against records, Francis Rose sometimes gave marginal annotations with place-names that generally appear to be his names for those hectads. These may be regarded as working notes to help him understand distribution. When included here (primarily if they add anything more to an understanding of the account), they are transcribed as lists in smaller, pale font. Sometimes they include information by way of a date which is lacking from the main text, so their status is somewhat confusing. They were sometimes overwritten by the hectad numbers added as mentioned above, and are not always legible.
- Grid references are given without any prefaced TQ or TR (except where supplied for non-transcript sections relating to district 15 – see below for **brown font text**). This means that 36 could be TQ36 or TR36, but in practice no issue seems to arise.
- The letter N in a species heading for check-list taxa signifies Native; H is of horticultural origin; C colonist; D denizen.
- The appearance in the heading of a number followed by '/52' (or by '/51') – there seems to have been a change in mind as regards the total – indicates the number of Ordnance Survey squares in the county, where the species is present; this notation has been removed by Francis Rose in his most recently revised entries.
- A dagger symbol (‡) marks an introduced species.
- An asterisk \* or \* (not used consistently) denotes first Kent record. Sometimes, however, it is used to denote an introduction, as with ‡.
- A genus number (not given consistently), e.g. 420 for *Linaria*, is the 'Dandy number'<sup>29</sup>.
- The place names – the Flora is rich in these – are not always consistently spelled and are often split (e.g. Wickhambreaux can become Wickham breaux). References to Simia field are to the land at Ospringe where *Orchis simia* grows; and references to Suomi are to Dr. E. Scott's address at Westwell.

<sup>28</sup> *In litt.*, 15 May 2000. Hence it is possible that where the check-list includes a alien plant name with a brief comment about it being naturalised or a garden escape, this may be the full extent of the species account which would have been given in the Flora. Where the comment is accompanied by a reference to E.P., the information is likely to have been derived from Eric Philp's *Atlas of the Kent Flora* (1982).

<sup>29</sup> As in Dandy, J.E. (1958) *List of British Vascular Plants*, British Museum & B.S.B.I., London.

**7)** 76 Bluebell Hill, H. Lamb, 1886; 1945! **MNE.** [Wigmore, Miss Young.]

O. elation Sutton 15, 16. Tall Broomrape.  
Native. Parasitic on Onobrychis elatior in chalk grassland  
grassy banks, scrub, and old pits on chalk; very rare. 7/51.  
In Surrey — and in Sussex, ~~rather~~ rare on the chalk;  
rare in Essex but locally common on chalk in the NW of the county;  
very rare in the Pas de Calais.

1 record, ~~1886~~ uncertain; none of those in Fl. Kent are very satisfactory, and  
may all refer to O. repum gemistae or some other species.

57  
66, 76  
77  
94  
15  
25

18 ⑥ Pilgrims Way, N. of Trothellic Church; 1945! many spikes, 1957! O.  
Davis; 1958! (M). 644610 to 646612. 1915. R. Elger (M); 275 pub. 1955.  
H.M.P.; Beam, Rev B. Glauze-H. Glauze (BRIST); dozens of plants 1955-56.  
Field No. 142, 57 S. of Stone, 578134, H.M.P.; Halling Down; Roushede, Cuxton, M. Atkins.  
off Boreath Wood 17 Chalk pits W. of Cliffe. 1958. (M) Pilgrims Way, between Dething & Booley, 1913.  
H. Elger (M)

25 212547 Roadside Chalk Banks, E. of Becken House, 1948, B. J. B. all really  
210551 Roadside S. of Adisham, 1962, B. J. B. & R. G. (R. G. Foster) "m. Woodhick" in Fl. Mch. 1963; probably O. repum -  
all really gemistae.

199518 - 200517. 1939, B. J. B.; 1946-62 (N) 15  
3. Chilton Park, near HOOKER

25 212547 Roadside Chalk Banks, E. of Becken House, 1948, B. J. B.

210551 Roadside S. of Adisham, 1962, B. J. B. & R. G. (R. G. Foster) "m. Woodhick" in Fl. Mch. 1963; probably O. repum -  
all really gemistae.

### Sample extract from manuscript



The manuscript itself presents some difficulties in interpretation, with numerous crossings out and additions. As the revisions appear to have been made on a cumulative ad hoc basis, there is often little consistency within an account, let alone between accounts. Colons and semi-colons are often difficult to tell apart; and even when obvious, they are not necessarily employed consistently. This transcript converts many colons to semi-colons. Underlining may denote italics, bold type or divisions between parts of the text, or may place emphasis on some locations (in Francis Rose's annotated Hanbury & Marshall, it refers to a level of confirmation at a location), and sometimes it seems without any logic. It is perhaps best ignored, as is done here, unless clearly intended to denote italics. Full stops are sometimes employed to excess, and these have been converted to commas or semicolons here when it would make it easier to tell where an entry begins and ends, and additional punctuation has been introduced for the same purpose.

The species accounts up to and including *Azolla filiculoides*, are taken from a typescript prepared by Owen Davies in collaboration with Francis Rose, and are a corrected draft revised by the latter in 1999 (the earlier typed draft also exists, in part, as also a copy of the pre-revision manuscript). The format/layout reflects guidance given by Rose as part of the typescript preparation process. Obvious errors in the typescript introduced in the process of typing are corrected here, after comparison with the manuscript, but a failure to follow consistently the prescribed format/layout has not always been corrected. The process of revision pruned down many records, so that the manuscript is often a richer source of raw data than the revised version. This had long been the intention; Francis Rose wrote in 1985 of his intention to publish 'in much shortened form'<sup>30</sup> from the manuscript. In effect, he must have been regarding the manuscript (with his field note-books) as the equivalent of a card-index, from which the more representative records might be taken, without an intention to carry through all. Footnotes are given here to highlight some of the pruning changes between manuscript and revised version, but these are only a small proportion of the changes made in the revision. By far the greater part of the species accounts, however, never reached a typed or revised status, and so their full records are given in this transcription.

Some accounts (flagged accordingly, **given in brown font**) are not an exact transcript, but are taken from notes made in summary form by Owen Mountford in 1981, when consulting the manuscript in Francis Rose's study. The information was extracted for use in relation to floristic change in the Romney and Walland Marshes and focussed on aquatic, wetland and grassland plants, disregarding information in the Flora outside botanical district 15 (Romney marsh including Dungeness). Tetrad details have been added by Owen Mountford. He also abstracted similar records from Francis Rose's notebooks, and these would have been capable of amplifying the Flora considerably, but Francis Rose's 1999 revisions show that he was more than likely to have reduced the number of records rather than adding to them. Indeed, the following transcription of the manuscript must be regarded as largely being the listing out of what amounts to a database of records, upon which Francis Rose would have drawn in order to produce a more succinct account. For the purposes of present-day botanists, however, it is all the more valuable for giving the complete records, rather than a summary.

So this transcript is not the Flora as Francis Rose would have revised and published, had he got round to it. I have made some adjustments for the sake of getting it nearer a publishable state, e.g. constructing a contributors/abbreviations section, re-ordering the species in a sequence towards which Francis Rose was working, adding English names where not given, adjusting the layout to be more readable and consistent and regularising the punctuation to a degree (although I have left many rough edges as regards the latter). But ultimately what we have are the notes accumulated and re-worked over a period of decades towards an ambitious conclusion which was never reached, but still well worth having despite their state.

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<sup>30</sup> Letter to Rosemary FitzGerald, 15 May 1985.

Queendown Warren, c. 1956, with Eric Philp and Victor Summerhayes. Photo by Owen Davis.



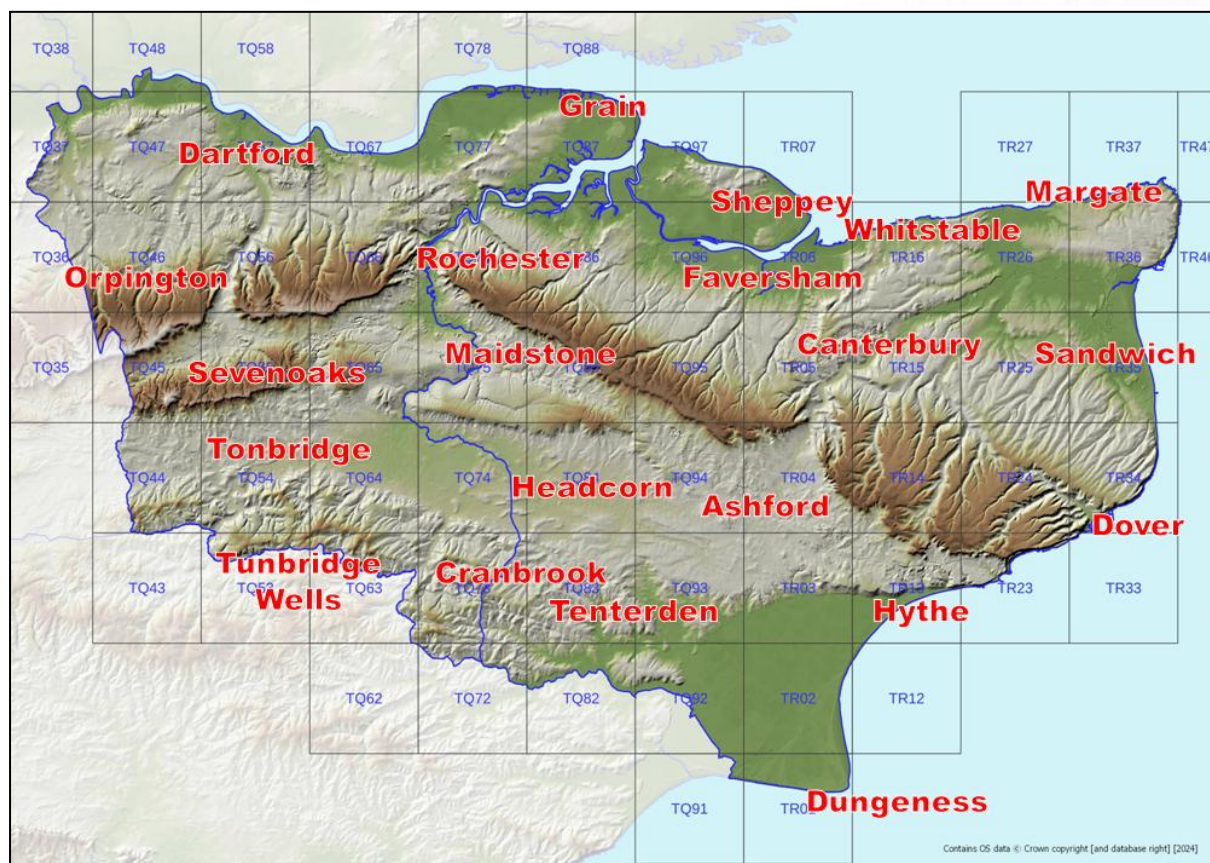


# FLORA OF KENT

FRANCIS ROSE

THE VASCULAR FLORA<sup>31</sup>

*Francis Rose*



32

## Lycopodiopsida

### LYCOPODIACEAE<sup>33</sup>

[*Lycopodiella inundata* (L.) Holub

Marsh Clubmoss.

[15, 16].

Wet heaths, always rare, as such habitats have never been extensive in Kent, and extinct since at least 1930. [N].

1) Chislehurst Common, Martyn 1763; Keston Common, Pamplin c. 1855; 1 plant, 1930, S .E. Chandler, Hb. Glennie (**BRIST**). St .Paul's Cray Common, 1885, H & M (Hb. F.J. Hanb[u]r[y]).

12) Hothfield Common G.E. Smith, FGEK, 1839; Hb. Glennie (**BRIST**). Reported by Miss Clarke 1931 ,but unconfirmed. Planted here experimentally by FR in 1947: it persisted until 1954, but has not been seen since.].

<sup>31</sup> For the most part transcribed from the original manuscript; otherwise taken from copy manuscript extracts or copied from typescripts; re-ordered in the sequence of the second edition of Clive Stace's *New Flora of the British Isles*].

<sup>32</sup> The county map and the species hectad maps are in a layout prepared for this transcript

<sup>33</sup> The typescript omits, presumably deliberately, an entry in the manuscript for a species of dubious status, viz.:

[*L. selago* L. Reported at Sutton Valence in Fl. K., but this record is unreliable and most unlikely: it is extinct in Surrey, but still exists in one locality in the High Weald of E. Sussex!]

Still on wet-heaths in Ashdown Forest, E. Sussex, and on Lower Greensand in W. Sussex and in SW Surrey (still locally plentiful at Thursley Common). Extinct in Essex. Most plentiful now in S. England in Hampshire (Woolmer Forest, New Forest). One site in Pas de Calais (Foret de Desvres).

A declining species in Britain and Europe now, due to habitat change, and lack of grazing and peat paring on heaths, but still with strong holds in Hants and SW Surrey. Extinct as a native in E. Anglia since c. 1970, but it is now (1999) being re-introduced to some former Norfolk sites with proper management.

**Lycopodium clavatum** L.<sup>34</sup> Common Clubmoss. [15, 16.] N.

Very rare now. Dry heaths, old sand-pits, and along rides in forestry plantations.

[1] Keston Mark (common?), Cooper *Fl Met.* 1836.]

10) Several sites found in rides between Kent Hatch on the Surrey Border, and a sandpit at Ightham Common 1948- 1980, several recorders (see Atlas). Now declining and no longer to be found in most of the former sites: 4252 Goodley Stock; 4452 Hosey Common; 4852 n[ea]r Goudhurst; 5052 Whitley Forest; 5855 sandpit S W of Ightham, J. Felton 1948(!) (**MNE**) destroyed by run-off from a piggery close by, 1952; 6252 N. of Gover Hill, Mereworth Woods (E.P. Atlas). Oaken Wood, Barming, 1901, J. H. Allchin – not since.

12) Hothfield Common WRJ, H & M; 1960, FR & P. Wilberforce in heath by northern bog: not seen since 1970.

13) 5738 Tunbridge Wells, 1849, Pryor (**MNE**); Tunbridge Wells Common WWR, c1880 (**TLS**). [7838 Brewers Wood, Cranbrook, among heather in ride, H & M]; 7234 Bedgebury Park, AHB 1944 (!)- gone by 1970; 7133 Bedgebury Pinetum, A.B. Jackson, 1945: several patches, 1964 FR. 7034 E. Philp (Atlas); 8236 Chittenden Wood, EP (Atlas) 19 [*sic*].

[14) Tenterden, H&M.].

*L. clavatum* had an extraordinary period of increase in localities in SE England between about 1948 and 1978, turning up mostly among *Calluna* in rides within conifer plantations, and also in a few sand and gravel pits. Since about 1985, it has gradually declined in SE England almost to the point of extinction. Its 19<sup>th</sup> century and earlier records were mostly from open *Calluna* heaths, many of which were planted up by the Forestry Commission, or private forestry concerns, from 1920 onwards. The majority of the sites, when examined today, are found to be covered with dense swards of *Agrostis canina* or *A. capillaris*, or with dense *Molinia* or *Pteridium*. Thus its phase of expansion suggests that, for establishment, it needs very open, sandy or gravelly skeletal soils. When natural succession occurs, the sites tend to become quite unsuitable for it and it is probably crowded out by competition and perhaps some degree of eutrophication, due to litter accumulation: it seems essentially to be a colonist of open habitats. The story is much the same throughout the English lowlands. When the present crops of conifers (now reaching maturity) are felled, and bare ground is created in the process, we may see a new development of *L. clavatum*, a species clearly adapted to very open, inorganic acidic substrates, both in lowland and montane areas.

## SELAGINELLACEAE

**Selaginella kraussiana** (Kunze) A. Braun Krauss's Clubmoss. H.

Very rare. Naturalised in places, e.g. in 13) in a shrubbery, Ferndale, Tunbridge Wells, 1958 CAS. Surely elsewhere in and near gardens on acid soils.

## Equisetopsida

### EQUISETACEAE

[**Equisetum hyemale** L. Rough Horsetail.

Formerly N, not seen for c. 150 years. "I have specimens from South Kent, sent me by Rev .G.E. Smith"- W. Borrer, *Phytologist*, (1853) V, p.45. Smith lived at Sandgate, and suitable habitats (boggy flushes), still exist in that area, but it has never been refound. It occurred in a wooded flush on Fairlight undercliff in VC 14, until at least 1939, H .P. Sargent, in a similar place at Wanborough Wood in Surrey, VC 17, until 1850: and still occurs in similar habitats near Crondall VC 12, and near Southampton, VC 11, so it may yet be refound in Kent.].

**E. fluviatile** L. Water Horsetail. 15, 16. N.

<sup>34</sup> The revision removed hectad occurrence totals: 2/52; [5/52] and the name Stag's-horn Moss.



Swamps, shallow lake margins, and marsh ditches, in waters of a wide range of pH and nutrient content. In places an important primary swamp colonist in the hydrosere. Widespread and locally common, but absent from the chalk districts 5) - 9). Commonest in the Low Weald, and in the Marsh districts 4) and 15). Over 70 sites known<sup>35</sup>.

Locally common in similar habitats in the adjacent counties: likewise the Pas de Calais and Flanders.

**E. arvense** L. Field Horsetail. 15, 16. N.

Roadside, rough fields, bare or waste open ground: common generally but very rare on chalk, except for a few sites on disturbed soil.

Ten sites in 8).<sup>36</sup> Common in all adjacent counties and in N. France.

**E. sylvaticum** L. Wood Horsetail. 15, 16. N.

In acidic flushes or on spring-lines in woodlands, especially in Alder carrs, on weakly acid, very wet, sandy or peaty soils where there is some horizontal movement of water.

Scattered in some ten sites in the High Weald 13) and 14), from Speldhurst E to SE of Biddenden, in one site in the Blean 3), and (formerly) on the Eocene strata SE of London 1).

This beautiful species has a largely northern distribution in Britain, where it is often in quite open situations, including railway banks: scarce in the southern counties

[1] Charlton Wood, Merrett, 1666; Chislehurst, Ray.]

[2] Near Oare Mill, Jacob, 1777].

3) Flush in Hunstead Wood N.R., Chartham Hatch, 097568, 1956- 97 **MNE**. [Other old records for 3).].

13) Avery's Wood, Speldhurst 5440, JP. Roundabouts Wood, Tunbridge Wells, 593408, 1943-54<sup>37</sup>. Brokes Wood, Southborough 5842, 1953! **MNE**; W. of Sherwood Park 6040, 1955 CAS; [Colebrooke Park, H&M]; Brookland Wood, Lamberhurst Quarter, 659387, JRW (1978!) **MNE**; N. of Pembury Waterworks 626429, JEL 1962! **MNE**; S. end of Brenchley Wood N.R! 648417 **MNE**; Combwell Wood, Goudhurst, 7134 Lord Stirling **TLS**<sup>38</sup> but not refound recently;

14) Sandpits Wood, Biddenden, 855305 1963 **MNE**.

In the Boulonnais and elsewhere in N. France.

**E. palustre** [L.] Marsh Horsetail. 15, 16. N.

Fens, wet peaty meadows, marsh dikes, dune slacks, in alkaline or weakly acid waters: common<sup>39</sup> in the alluvial districts 2), 4) & 15) and in the Holmesdale river valleys of 10), 11), 12) & 16) though now reduced by "improvements". Rarer in the Low Weald, more frequent in the High Weald 13) & 14). Absent from the chalk districts, except by the R[iver] Dour above Dover. Frequent in the adjacent counties and in N. France and Belgium, but diminishing everywhere today.

**E. telmateia** Ehrh. Great Horsetail. 15, 16. N.

In flushes and along spring-lines, where pervious water-bearing strata overlie impervious strata (e.g. clays) especially where the pH is high<sup>40</sup>. Absent from dry strata (chalk and sands) and from uniform areas of little relief. Hence rare or absent in 5) to 9) and in 15); very local in 2), 3) and 4): fairly shade-tolerant.

1) Rare; Ravensbourne, Catford; Scadbury Park, Pond Wood and Petts Wood, Chislehurst, on Eocene spring-lines.

2) Local; osier beds by tidal Medway: abundant in flushes on the slipping clay cliffs on the N. coast of Sheppey.

3) Occasional on the spring-lines on the south of the central Blean plateau.

4) Here and there on spring-lines at the junction with chalk or Eocene strata, not on the flat alluvial areas.

10) to 14), 16). Locally abundant along the foot of the chalk and Ragstone scarps, and scattered in undrained places in the High Weald.

<sup>35</sup> Listed or summarised according to district in the earlier manuscript, present in 36/52 hectads. First record 1777.

<sup>36</sup> This sentence seems inappropriate; the ubiquity of the species is such that it serves limited purpose to single out the number of sites in botanical district 8). The manuscript does not include this; but refers to 166 modern localities in 52/52 hectads, the plant growing 'mainly on clayey or sandy soils. First record \*1629: Grain to Cliffe. Johnson, *Iter*, p.8.'

<sup>37</sup> The attribution in the manuscript of this find to J.R.W. in alder carr has been omitted in the typescript.

<sup>38</sup> 1897 in the manuscript.

<sup>39</sup> The manuscript states 97 localities known in 40/52 hectads, but does not list them; var. *polystachion* is said to be not infrequent. First record 1777.

<sup>40</sup> The manuscript refers to 145 recorded localities in 38/52 hectads; first record 1632.

Locally common through S E England and in N. France.

## Pteropsida

### OPHIOGLOSSACEAE

#### *Ophioglossum* L.

**O. vulgatum** L. Adder's-tongue. 15, 16. N.

Dry or damp old pastures and meadows where unimproved, short-sward fens, old woodlands (especially on chalk); old quarries. Avoids acid soils.

Still widespread but decreased in last 100 years. 90 sites<sup>41</sup> in my records in all districts except 9). Occasional in adjoining counties and in N. France in unimproved sites.

#### *Botrychium* Sw.

**B. lunaria** (L.) Sw. Moonwort. 15, 16. N.

Formerly in ancient pastures or grass-heaths in short turf, on clay or loam soils. Never common, even in earlier recording times, now apparently extinct<sup>42</sup> (last record c.1960).

[Greenwich, L'Obel\*, 1570.

1) Blackheath; Chislehurst; SW of Dartford.

2) Graveney, Blackstone.

5) Hill Park, Westerham; Chevening Park, c.1930.

7) Small pasture on clay-with-flints, S. side A 249, top of Detling Hill, 1938, J.B.M. 1946-47! **MNE** (with *Orchis morio* and *Ophioglossum* etc.) Not refound since!

11) Coxheath, Gerard.

12) Ashford Warren, Miss L. West, before 1939 E.S.

13) Bedgebury Pinetum, 1960, F.R. Browning. Tunbridge Wells Common **TLS**; Combwell Farm, Goudhurst, 1900, Lord Stirling, **TLS**].

Spores of this species were found in a peat-deposit SE of Wingham (Bronze Age) (Godwin). It would probably have been common in late Devensian and early Flandrian times, when there was much open terrain in Kent. Not recently seen in England E. of N. Hants and S. of the Suffolk Breckland, but still in Sussex, Castle Hill W. of Lewes (1965!). Frequent in N and W Britain; very rare in N. France now.

### OSMUNDACEAE

#### *Osmunda* L.

**O. regalis** L. Royal Fern. 15,16. N, H.

As a native, this fern was formerly widespread in S.E. England, but the Victorian "Fern Craze" largely wiped out the native populations in most places, as *Osmunda* was a special favourite to grow in conservatories as well as water-gardens. All this activity has long ago died away, and *Osmunda* (and most other ferns) have recolonised very widely in the 20<sup>th</sup> century. What however, we cannot be sure of, is whether existing large plants of *Osmunda* in natural-looking sites (wet carrs, less acid bogs, pond margins, etc.), especially in former ornamental estates are i) relict natives, ii) old 19<sup>th</sup> century plantings, or iii) more recent invaders from elsewhere; but today the question is a rather academic one! The simple facts are that *Osmunda* is recolonising suitable habitats in some parts of Kent<sup>43</sup>.

The most likely natural sites are in boggy woods (it is moderately shade-tolerant), and the possibly natural re-invasions of damp walls and rocks, especially around Tunbridge Wells.

1) Keston Common, H&M: SE corner of Lower pond, Keston Common 1947 and since, **MNE**; Holwood Park estate, 1948-54 and to the present, **MNE** – possibly relict here in part; Ravensbourne estate, Keston, 1956 **MNE**; abundant by stream, Danson Park<sup>44</sup>, Welling, GMB.

[3] Old records for: Perry Woods, Selling; Bigbury Woods, Chartham to 1930 ,ECG; Chartham Hatch].

<sup>41</sup> The manuscript says 91 in all districts except 9) and 10). Records (or totals) are cited in the manuscript for each district and reference is made to Late Bronze Age spores found near Wingham.

<sup>42</sup> Assessed in the manuscript as extremely rare, and intermittent in appearance.

<sup>43</sup> The manuscript gives 6/52 hectads. First record shortly after 1666.

<sup>44</sup> Assessed in the manuscript as probably planted.

(4) Strangely it has never been recorded in the fens and marshes between Sandwich and Deal.).

[10] Rose Wood, Ightham Common, 1870, B. Harrison: not recorded since.].

12) 9835 Longrope Wood, Orlestone: (loc[ally] plentiful), E. Smith [*sic*]<sup>45</sup>.

13) 553414, wall, Speldhurst Church, KEB; 5840 railway cutting N of Tunbridge Wells station, CAS; 5639 Rusthall Common Rocks, 1949 KEB; 5740 Culverden Glen, 1947 FR; 6142 Pembury Woods, M. McFarlane; 7233 Bedgebury Pinetum, 1947-50, **MNE**.

14) 8934 Knock Wood, E. of Tenterden, in Alder carr, E. Scott 1956, **MNE**: possibly native here.

16) 1635 Ditch by old railway, Saltwood, 1955, LJM.

Scattered in the Surrey and Sussex Weald, where most present localities may be due to earlier landscape gardening, but certainly native though rare, in Ashdown Forest, Sussex, and Thursley Common in Surrey. Frequent and native, however, in New Forest bogs, and locally abundant still in carrs in the French Boulonnais.

## ADIANTACEAE

*Adiantum* L.

‡ *A. capillus-veneris* L.<sup>46</sup> Maidenhair Fern. 15, 16. H.

On damp stonework or old walls: alien in Kent, derived by spores from gardens or greenhouses, etc: very rare.

4) Damp stonework, Walmer Castle, D. H. Seth-Smith, *Gard. Chron.* 1962.

13) In an old well, Scotney Castle, 1960, KEB.

This is native in Britain as far east as Dorset only.

## PTERIDIACEAE

*Pteris* L.

‡ *P. cretica* L. Ribbon Fern. 15, 16. H.

Old walls, etc. As an escape from cultivation at: 4857 Chevening; 5466 Farningham, and 3042 Dover (EP in Atlas) (from S. Europe).

## MARSILEACEAE

*Pilularia* L.

[*P. globulifera* L. Pillwort. 15 - very doubtful.

Reported in H&M (p.429) from 11) Sutton Valence (Mrs. Petley), but this is unconfirmed in that area and almost certainly an error, as no suitable habitats for it have existed in that area for a very long time. It could have occurred by acid water ponds in the past in the Weald (as in Sussex).]

## HYMENOPHYLLACEAE

*Hymenophyllum* Sm.

*H. tunbrigense* (L.) Sm. Tunbridge Filmy-fern. 16. N (extinct).

\*1688 — found by Mr. Dare, 'circa Tunbrigiam', Kent<sup>47</sup>. This probably refers to its former occurrence on the High Rocks (in Sussex) where it has not been seen since c. 1875, but it is almost certain that it formerly occurred on the Hungershall Rocks in Kent on the opposite side of the road to the High Rocks, and possibly elsewhere nearby in Kent, but no localised Kent specimens are known to exist. Forster (*Fl. Tonbr.*) only gives Sussex localities by name, but adds "and most of the other rocks" in the neighbourhood (p.121). Jenner (*Fl. Tunbridge Wells*) likewise only names Sussex localities. It was however, reported from Penshurst (in H&M) by Mr. John Cox.

Every sandrock outcrop of any size in the Kent High Weald has been searched for it over the last fifty years, but it has not been found. It is still, however, (1998) in eleven Sussex sites, the nearest being at Eridge Green Rocks and Saxonbury Hill. Westward, the nearest localities now are in the Quantocks and near Porlock in

<sup>45</sup> E. Smith is given in the typed revision, but ES in the manuscript, which usually refers to E. Scott., who is amongst those giving other records for this locatoion. Also in the manuscript, *Osmunda* here is stated to be reputedly planted, rather than locally common.

<sup>46</sup> Districts were not allocated to the records in the typed revision, but these are now supplied.

<sup>47</sup> It is unclear why Francis Rose thought it necessary to add 'Kent' here, since it is not in the original source (which he cites in the manuscript as Ray's *Fasciculatus*, although there the record is given in English; in Latin it is instead in Ray's *Historia Plantarum*).

Somerset. It is also still S. of Cherbourg in Normandy. To the east today it persists at one site in Luxembourg. It is a plant that requires damp, lightly shaded acidic sandstone rocks to survive but it can occur on the lower parts of tree trunks rarely, in sheltered woodland. It is quite widespread in moist tropical forests, and in Britain it is presumably a relic of the extensive forests of the Atlantic period in pre-Neolithic times.

(*Trichomanes speciosum* Willd. (Killarney Fern) has been discovered in recent years on the Sussex sandrocks, but only as the gametophyte generation. This could be found on the Kent sandrocks; the gametophyte looks rather like a filamentous green alga, and is very easily overlooked.)<sup>48</sup>

## POLYPODIACEAE

### *Polypodium* L.<sup>49</sup>

**P. vulgare** L. Common Polypody. 15, 16. N.

As the aggregate, this is widespread in Kent. The segregate *P. vulgare* s. str. occurs mainly on tree boles or branches in woodland or on sheltered lane sides or hedgebanks in the Weald, and is rare or absent in the drier, less humid, north of the county and in the open flat districts.

**P. vulgare x P. interjectum (=P. x mantoniae** Rothm. [& U. Schneid.]).

In the Hawkhurst-Cranbrook area, rare, with both parents, E P in Atlas.

**P. interjectum** Shivas Intermediate Polypody. 15, 16. N.

This Polypody is found throughout Kent, mostly on walls and banks, but also in woodland. Many of the older churches and churchyards have it, especially on ragstone stonework.

**P. cambricum** L. (= *P. australe* Fée) Southern Polypody. 16. N.

Only so far reported in a wall at Penshurst Place; this very southern species may be found on more old buildings in the south of Kent, as it is scattered along the south coast into East Sussex.

## DENNSTAEDTIACEAE

### *Pteridium* Gled. ex Scop.

**P. aquilinum** (L.) Kuhn Bracken. 15, 16. N.

Heathland, open woodland, neglected grassland on well-drained, non-calcareous soil, also on damp walls and on waste ground. Abundant generally, except in the marsh districts 2), 4), & 15)<sup>50</sup>: unknown on the Denge Beach on leached fixed dunes at Sandwich Bay and Lydd. An agricultural pest which has become commoner with the lack of grazing in many grasslands. It has taken over many former *Calluna* heaths, being encouraged by heath fires and cessation of grazing. Chain-harrowing greatly reduces its vigour. It can be eliminated by specific herbicides such as Asulox, but these are expensive to use.

Common in all adjacent counties and in N. France.

## THELYPTERIDACEAE

### *Thelypteris* Schmidel

**T. palustris** Schott Marsh Fern. 15, 16. N.

In fen and fen carr. Very rare and local now<sup>51</sup>, but still plentiful at 4) Ham Fen, 11) by a pond E. of Edenbridge, 13) by lake in Angley Wood, Cranbrook<sup>52</sup>, and 15) by the Open Pits on Denge Beach. Formerly in 7) North Cray, and in 4) at Wingham<sup>53</sup> and Sturry.

<sup>48</sup> A prescient observation, as it was recorded in two Kentish areas in 2016.

<sup>49</sup> The *Polypodium* account has undergone major change from the earlier manuscript. This acknowledged that the *Polypodium vulgare* aggregate had 'recently' (giving literature references of 1961 and 1963, which afford some dating evidence for this part of the manuscript) been split into three species, 'but my records for these are very incomplete as most of my field recording was done before the segregates were recognised in Britain'. However, the manuscript gives a large number of records or record totals per district for *P. vulgare*, both as an aggregate (122 localities, 43/52 hectads; first record, 1629). and *sensu stricto* (9/52 hectads), and for *P. interjectum* (14/52 hectads), albeit that the *P. cambricum* (as *P. australe*) account is blank.

<sup>50</sup> In the manuscript, records are given for these areas of comparative scarcity, plus district 9) (Ramsgate). The total of hectads is 51/52. First record 1629, also spores identified c.1120 BC.

<sup>51</sup> The manuscript gives 4/52 hectads. First record, 1839.



[(*Phegopteris connectilis* (Michx.) Watt      Beech Fern      occurs in Surrey (Horse Wood, Haslemere!) and in Sussex (Worth Forest! Kidbrooke Park, Ashdown Forest!). It might occur in the similar flushes or stream banks in Alderwoods in the High Weald of Kent, but has never been reported.)]<sup>54</sup>

### **Oreopteris** Holub

**O. limbosperma** (Bellardi ex All.) Holub      Lemon-scented Fern.      15, 16.      N.

Damp heathy woodland rides on acid soils, and in boggy hollows in woods: frequent locally in the High Weald 13); also as follows:

- 1) [JoydensWood, one large plant in valley floor, 1945], **MNE** [Blackheath, Newman].
- 10) Parsons Marsh and Scords Wood. S. of Brasted, 1954-1963: not seen 1984. Seal Chart, SW corner, 1954 **MNE**. Lowest Pond, Ightham Common, 1955 **MNE**.
- 11) Ryarsh Wood, very rare in ride, 1945 **MNE**: not since.
- 12) 037426 Willesborough Lees, CPSK, 1829: 1944-55! In peaty ditch across bog remnants **MNE**.
- 13) Locally frequent from Redleaf Rocks W. of Penshurst, E. to Chittenden Wood: 18 sites<sup>55</sup>.
- 14) 8935 Knockheath, E. of Tenterden 1956 **MNE**, damp ride; 9535 ,Cole Wood, Woodchurch, ES.

Frequent over much of the High Weald of Sussex and on Lower Greensand in Surrey and Sussex. This is a "northern" species which is holding its own well in moist rides, etc, with intermittent horizontal water movement in the soil. Reported in the *Atlas* by EP in three sites in 8) on presumably acid superficial soils in plateau woodlands, but there is no very recent record in 8) since 1982 (grid refs. 1242, 1448, 1646).<sup>56</sup>

## **ASPLENIACEAE**

### **Phyllitis** Hill

**P. scolopendrium** (L.) Newman.      Hart's-tongue.      15, 16.      N (and sometimes H).

Woodlands, steep sheltered, shady, sometimes rocky banks, in humid but well-drained situations, on soils usually of fairly high pH; also on old walls and in wells. Widespread and locally common. In the drier N. and N.E. of county mostly confined to stonework, but in the ragstone [and] chalk valleys and scarps abundant in ash, ash-maple, or ash-oak woods. Most plentiful on the ragstone scarp woods in 10), 11), and 16) in the chalk valley woods W. of Dover. 8), and in Folkestone Warren 16), about Hythe and the Isle of Oxney, 14). Otherwise very scattered on old walls.

\* 1632, near Faversham, Johnson, *Descriptio*. p.31. 116 localities recorded<sup>57</sup>. Common in the High Weald gills and on the western wooded chalk scarp in Sussex; less common in Surrey, rare in Essex, very local in the Boulonnais and Pas de Calais. It is as plentiful in the suitable part of Kent as in S.W. England.

### **Asplenium** L.

**A. adiantum-nigrum** L.      Black Spleenwort.      15, 16.      N.

On old walls: widespread but not really common. On shingle under bushes on Denge Beach. Most common on old ragstone walls, from Westerham to Ashford. 10), 11), & 12): rarer elsewhere. About 70 sites recorded, mostly on old churches or in churchyards<sup>58</sup>. Rare on natural ragstone outcrops on lane banks (eg Westerham and Sundridge), and on Wealden Sandstone (e.g. Cowden Furnace Pond).

\*1629: Gillingham, Johnson, *Iter*, p.24. Sparsely in all adjacent counties and the Pas de Calais.

**[A. obovatum** Viv.      Lanceolate Spleenwort.      [16].      Extinct N.

Formerly on 13) Hungershall Rocks at Tunbridge Wells, and possibly then on other rocks in Kent nearby: Forster, *Fl. Tonbr.* Recorded (Herb. Buddle) at Tunbridge Wells as early as 1700, but no county is specified, and this may have referred to the High Rocks on the Sussex side. WW Reeves (c. 1885), said it was extinct on the

<sup>52</sup> In the manuscript described as 'Fen on site of Tuckers Pond...1945-61, abundant!'

<sup>53</sup> The manuscript entry is 'Fen N.W. of Wingham, 1947 **MNE**; D.A.C.L. 1963'.

<sup>54</sup> This entry is in the original manuscript but was not carried forward into the revision.

<sup>55</sup> Sixteen given in the manuscript, viz. Redleaf Wood, Penshurst; Ferndale, Tun[bridge] Wells; Hayes Wood, Pembury; Furnace Pond, Horsmonden; N. of Lamberhurst Quarter; Furnace Wood; G[rea]t Sandhurst Wood; E. side Bayham Woods; N.E. of Kippings Cross; Kildown Wood; Combwell Wood, abundant; Bedgebury Pinetum; Bedgebury Forest; Angley Wood; Old Park Wood; Sissinghurst Park Wood.

<sup>56</sup> The manuscript gives overall 10/52 hectads. First record, 1816.

<sup>57</sup> The manuscript lists, or gives districts for, many of these records. Total 46/52 hectads/

<sup>58</sup> The manuscript gives 69, in 36/52 hectads.

Kent side by then (due to tree felling) at Hangershall (*sic*, for Hungershall) Rocks, though formerly plentiful, but still existed on the Sussex side (i.e. on the High Rocks). Not reported reliably since then in either Kent or Sussex. It is long extinct in Dorset, and the nearest sites now are in W. Somerset and Devon. These Wealden occurrences were strange ones so far east for this highly oceanic and maritime species, but are well authenticated by specimens from the Tunbridge Wells area].

**[A. marinum L.** Sea Spleenwort. **[15].** Extinct N.

Apparently native formerly on the cliffs at Dover (\*1633 ,Gerard *emaculatus*, T. Johnson, p. 1143.) No specimens are known to exist however. In H&M, Rev. C .H. Fielding reported it at Dover but it has probably been extinct for a very long time].

The nearest sites today are in the Isle of Wight and on the E. Dorset cliffs.

**A. trichomanes L. ssp. quadrivalens D. E. Mey.** Maidenhair Spleenwort. 15, 16. N.

On old walls; rather common, on old churchyard stonework, and on other walls in the ragstone belt in 10), 11), & 12). (49 localities recorded in these three districts): rare in the High Weald 13) & 14), Romney Marsh 15) and in N. Kent 2): scattered elsewhere: 86 localities known in total<sup>59</sup>. Not seen recently on natural rocks in Kent.

All the Kent specimens seem to be referable to the ssp .*quadrivalens* D. E. Mey., ssp. *trichomanes*, a plant of more acidic rocks and walls, does not seem to occur in the S.E. of England, but in Wales and Cumbria.

\*1597, Gerard Herbal, p. 985.

Occasional in Surrey, Sussex and Hants: rare in Essex and Pas de Calais.

**A. ruta-muraria L.** Wall-rue. 15, 16. N.

On walls, both of stone and brick, and on ragstone rocks by lanes (e.g. Boughton Monchelsea). Rather common throughout the county<sup>60</sup>: abundant, especially on stonework in the ragstone belt: all districts. Only unrecorded in 51/36, 37, 61/07 & 61/02.

\*1597: Dartford, Gerard *Herbal*, p .983.

Frequent in the adjoining counties and in the Pas de Calais.

**A. septentrionale (L.) Hoffm.** Forked Spleenwort. 15. N.

One plant found on a brick bridge at 15) Brenzett by Mrs. [L.] B. Burt c. 1983; (1984!): no longer present in 1990<sup>61</sup>. No doubt of natural origin from a spore which must have travelled a long way, but far beyond its normal western and northern range in Britain: a remarkable find by Mrs Burt.

**Ceterach Willd.**

**C. officinarum Willd.** Rustyback. 15, 16. N.

On old walls; rather frequent on the ragstone belt in mid Kent, and in 8), rare elsewhere: 34 sites<sup>62</sup> recorded in 1), 4), 6), 8), 10), 11), 12), & 13). It can occur in non-calcareous walls with mortared joints.

\*1640: Strood, Parkinson, *Theatrum Botanicum*, p. 1045.

Rare in adjacent counties, and in Pas de Calais on natural Devonian limestone (Vallée Heureuse, Rinxent).

## WOODSIACEAE

**Onoclea L.**

**O. sensibilis L.** Sensitive Fern. 16. H.

Alien, rarely naturalised in damp places.

10) St. John[s] Jerusalem, naturalised by stream, Sir S. Tallents.

13) Redleaf Park, Penshurst, in damp woodland, FR 1947.

**Athyrium Roth**

**A. filix-femina (L.) Roth** Lady-fern. 15, 16. N.

<sup>59</sup> The manuscript gives in 39/52 hectads.

<sup>60</sup> The manuscript gives 48/52 hectads.

<sup>61</sup> It has been seen frequently since.

<sup>62</sup> In 12/52 hectads.

Damp or sheltered places in woodland, hedge-banks, fen carr; frequent to abundant as a whole S. of the chalk escarpment. Local in the Eocene woodlands of 1) and the S. part of 3); very rare in 2) and 4); in 15) only at the Open Pits on Denge Beach: absent in 9); scattered in valleys and in plateau woods in 5) - 8), especially where there are areas of acidic superficial soils: frequent in the damper woods on the Lower Greensand in 10), 11), 12) and 16), but scarce on Gault and Weald Clay except in sheltered valley woods: most abundant on the gills of the High Weald in 13) and 14). 124 localities recorded in total by me<sup>63</sup>.

\*1746: Chislehurst, Blackstone p 21 *Spec.Bot.*

Frequent in suitable places in the adjoining counties and in Pas de Calais.

### **Gymnocarpium** Newman

**G. dryopteris** (L.) Newman Oak-fern. 15. H or N?

\*1970, 8) West Wood, Lyminge Forest, 1343 and 1443. Mrs L. B. Burt: Mrs B Nash.

It is well established now (1980?)<sup>64</sup> in the valley in the conifer plantations here, on acid humus, and either introduced originally with young trees, or a long-distance colonist by a spore. Not yet found in any other county of S.E. England, nor in Pas de Calais: frequent locally in Wales and N. Britain.

(**G. robertianum** (Hoffm.) Newman: occurs on chalk scree in a ravine at Bignor in W. Sussex, but has never been reported for Kent).

### **Cystopteris** Bernh.

**C. fragilis** (L.) Bernh. Brittle Bladder-fern. 15, 16. H or N?

Either native, or more likely of horticultural origin, on damp mortared walls: rare.

5) Chevening Park, *K. Atlas*.

8) Olantigh Park, *K. Atlas*.<sup>65</sup>

11) Ragstone walls, E Malling; Loose.

## **DRYOPTERIDACEAE**

### **Polystichum** Roth

**P. setiferum** (Forssk.) T. Moore ex Woyn.<sup>66</sup> Soft Shield-fern. 15, 16. N.

Steep banks, rocks, slopes in sheltered, humid woodlands: shaded hedge-banks and sides of deep sunken lanes, on base-rich, humus-rich soils.

Widespread<sup>67</sup>, except in the drier, flatter, more open parts of Kent, but very rare N. of the North Downs.

\*c. 1730: Holloway, E. of Chislehurst, Rand (**BM**). Locally frequent in 10) and 11) on ragstone scarps and lane banks, and in sheltered valleys and tracks in woodlands in the chalk valleys in 8). Local in 12) and 16). Occasional in the western High Weald in 13), commoner eastwards in 14). Locally common in Sussex, Surrey and Hants, rare in Essex and Pas de Calais.

**P. aculeatum** (L.) Roth Hard Shield-fern. 15, 16. N.

In similar habitats to the last species, but usually in rather drier, better-lit situations, and often with it, but less frequent; occurs in less sheltered, less base-rich sites, and more often on churchyard walls and dry hedgebanks than the last (Map)<sup>68</sup>.

1) Hayes churchyard [DMcC (1946!)]: S. of Locks Bottom [F.H.B.]: Scadbury Park.

3) S. of Fordwich [R.G.W.];

6) Lane above Otford [W.C.R.W.];

7) N. of Westwell [E.S.];

<sup>63</sup> In 38/52 hectads.

<sup>64</sup> This suggests that Francis Rose had taken the status from Eric Philp's *Atlas of the Kent Flora* (1982) ('now well established'), and was seeking to confirm what this meant in terms of dates. The original version of the manuscript pre-dated the finding of this species in Kent, but refers to the possibility of its being found in alderwood flushes or stream banks in the High Weald – whereas the eventual find was, as indicated, not likely to be related to long-term native survival.

<sup>65</sup> The only record given in the manuscript is for 10) Darent Steps, Westerham, RAC, with the comment that there were other records, but probably in error.

<sup>66</sup> Cited in full the typed-up text: (Forsskaol) Moore ex Woynar.

<sup>67</sup> In 28/52 hectads.

<sup>68</sup> No map given; and the fern part of the manuscript does not include any of Francis Rose's annotations as regards hectad squares which later suggest a possible intention to prepare for mapping. 47 localities, but no hectad total given.

- 8) frequent in area W. of Dover;  
 10) Crockham Hill [P. Greenfield]; ragstone scarp W. of Plaxtol;  
 11) Elmstone Hole; Hever; Frittenden [Park, D.S.];  
 12) W. of Great Chart [E.S.]; E. of Bilsington [E.S.]; Sellindge churchyard [R.A.C.].  
 13) and 14) High Weald, frequent, 21 sites;  
 16) Hythe: Saltwood [L.J.M.].

A much more rigid and glossy fern than the last, with broader, more leathery pinnae curved towards the frond apex.

\*1700 — about Tunbridge Wells- Doody and Dubois. In all the adjoining counties, and in Pas de Calais.

#### **Cyrtomium** C. Presl

**C. falcatum** (L.fil.) C .Presl House Holly-fern. 15. H.

Established on an old wall, Sheerness, 9274, *K .Atlas*.

#### **Dryopteris** Adans.

**D. filix-mas** (L.) Schott Male-fern. 15, 16. N.

Woodlands of all types, hedgebanks, scrub, and damp walls: very common throughout Kent. In flat, more cultivated areas it is largely confined to walls.

\*1629: near Hoo, Johnson, *Iter*, p .8. 380 recorded sites<sup>69</sup>.

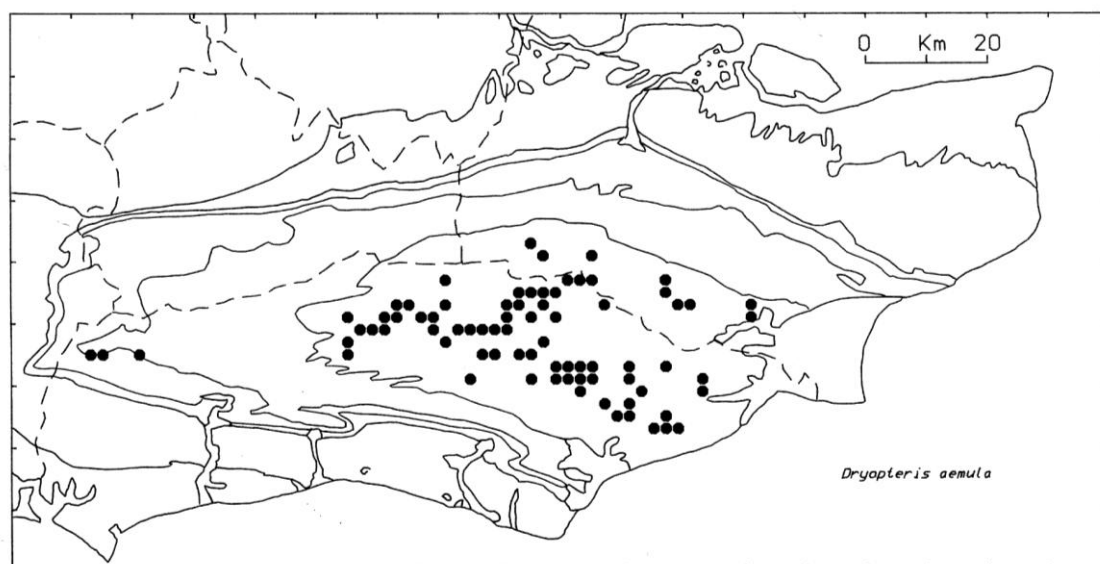
#### **D. filix-mas x D. cristata?**

A plant resembling this occurred with the supposed parents at Denge Beach Open Pits in 1952 (**MNE**).

**D. affinis** (Lowe) Fraser-Jenkins ssp. **affinis**. [Scaly Male Fern.] 15, 16. N.

The *D. affinis* complex is a series of hybrid forms derived from crosses between *D. oreades*, *D. caucasica*, and at least one other parent. The complex is variable, but has not been studied in depth in Kent. The complex is known through most of Kent, principally in sheltered woodlands on humus-rich soils: it includes, besides ssp. *affinis*, also ssp. *cambrensis* Fraser-Jenkins, and ssp. *borreri* (Newman) Fraser-Jenkins<sup>70</sup>. The complex is commonest in the High Weald, and is rare in 4), 5), and 9).

**D. aemula** (Aiton) Kuntze Hay-scented Fern. 15, 16. N.



<sup>69</sup> 52/52 hectads.

<sup>70</sup> The manuscript gives a full-length entry for **Dryopteris borreri**, as a plant of 'Woodlands, on moderately acid soils in sheltered, fairly humid situations: uncommon as a whole, though widespread, but locally very abundant in the gills of the High Weald in 13) and in 14) where it is often more abundant than *D. filix-mas*. 63 localities. \*1952, Dungeness, J. Pugh & F.R. Locally frequent in Surrey, common in the High Weald of Sussex, very rare in Essex and Pas de Calais. The truncate pinnules, shaggy rachises, and black spots beneath the pinnae at the junction with the rachis, distinguish this fern from *D. filix-mas*.' [Records or record totals are listed; presence in 23/52 hectads noted..]





14) 12 localities.

15) Fen on Denge Beach.

Best distinguished from the next by its oblong (not triangular) flat erect fronds, and the obtuse, wholly pale, scales of the rachis.

**D. dilatata** (Hoffm.) A.Gray. Broad Buckler-fern. 15, 16. N. (map)<sup>75</sup>

Woodlands, hedgebanks and ditch-sides. Very common except in the most open, dry and treeless areas; in all districts but most abundant in hilly, wooded areas<sup>76</sup>. Common in all adjoining counties and in N. France. Best distinguished from *D. carthusiana* by the more triangular frond outline, convex pinnules, and acute dark-centred rachis scales.

## BLECHNACEAE

**Blechnum** L.

**B. spicant** (L.) Roth Hard-fern. 15, 16. [N.]. 31/52

Native. Woodlands of oak, beech, birch or pine, on acid or less podsolised soils, where humidity and soil moisture are relatively high but drainage good. In the drier districts on sheltered sites such as N. slopes, valleys, or streambanks: most abundant on steep banks, often with *Vaccinium*, *Calluna*, *Deschampsia flexuosa*, *Mnium hornum* or *Dicranum majus*. Abundant throughout the High Weald of 13) and 14) in at least 106 localities. Common on the plateau drifts over the Hvtbe Beds and on the Folkestone Sand in 10) and the western part of 11), becoming much rarer to the E. and in 12). Very rare in the chalk districts, but present in a few woods on Pliocene loams and Eocene gravels in 7) and 8). Now rather rare in 1); common in S.W. of 3), on the Eocene gravels and sands of the Blean.

Almost absent on heavy clay soils and in the marsh districts 2), 4), and 15), except for one locality in acid fen on Denge Beach. 174 localities recorded.

\*1725: Shooters Hill, *Herb. Dill.*

Common throughout the High Weald and Lower Greensand areas of Surrey and Sussex: very rare in Essex (? six localities now). Very local in the forests on the Wealden strata in the Pas de Calais. A species of western tendency in S. Britain.

(map)<sup>77</sup>

## AZOLLACEAE

‡ **Azolla** Lam.

‡ **A. filiculoides** Lam. [Water Fern.] 15. H. 4/52

Alien, introduced from N. America: it occurred in Britain in an Interglacial period (Godwin, *Hist. Brit. Flora*, p. 287). Naturalised in ponds and dikes, plentifully in 4), rarely in 2). Rarely naturalised in Surrey, Sussex and Essex.

2) Pond and dike near R. Medway, below Aylesford, E.G. Philp, **MNE**.

4) Monkton, Lady Davy and Miss Vivian, B.E.C. Rep.\*1921, p. 404. Ditches E.N.E of Sandwich, Miss A. Stone, det. J.E. Little, B.E.C. Rep. 1925, p. 908: possibly introduced here as a deterrent to *Anopheles* breeding. Minster marshes, in dike, 1955. Dikes, Worth Minnis, 1946; Ham Fen, 1946-56 **MNE**; Woodnesborough marshes, 1946. Dike, Minnis Bay, 1960, Mrs. B. Dodds. Pluck's Gutter, 1962, KFC. Dike, Grove Ferry, 1961.

J .E. Little comments (vide supra): "The Sandwich Entomological Laboratory has been experimenting on the possible use of *Azolla filiculoides* as a deterrent to *Anopheles* breeding: this may account for the appearance of the plant near Sandwich."

## Pinopsida<sup>78</sup>

<sup>75</sup> No map has been found, nor does the manuscript give any indication that preparations were made for it.

<sup>76</sup> The manuscript, with minor exceptions, does not give individual records, but totals per district, overall 285 localities, 49/52 hectads, stated as unrecorded only in TQ87, TR07 and TR02.

<sup>77</sup> No map has been found, nor does the manuscript give any indication that preparations were made for it.

<sup>78</sup> From this point, there is no longer any revised typescript available, so the heading is taken from Francis Rose's check-list intended for use in or with the Flora; and then the account and records from the manuscript which continues as a whole up to and including *Taxus baccata*. After then, the surviving manuscript is incomplete but is transcribed in check-list sequence, as far as this goes. *Pseudotsuga menziesii* etc. and *Tsuga heterophylla*, however, are not given in the check-list.

## PINACEAE

[*Pseudotsuga menziesii* (Mirb.) Franco, *Picea abies* (L.) H. Karst, *P. sitchensis* (Bong.) Carrière, and *Larix decidua* Mill. are all widely planted in Kent, but none appears to have yet become naturalised (from self-sown seed).]

*Tsuga heterophylla* [(Raf.) Sarg.]

13) a few small plants, apparently self-sown from a plantation, Kilndown Wood, Goudhurst, 1960, FR & CAS.

*Pinus* L.

*P. sylvestris* L. Scots Pine. 15, 16. D. (Nat[uralise]d)

Possibly some populations are of native origin, though most are planted; the species is however thoroughly naturalised and common now on the acid sandy and gravelly soils in 1), 10), 11) (about Wrotham Heath, Platt, and Mereworth Woods), 13), and 14). Elsewhere it occurs widely as planted groups of trees, and more and more, as planted forests.

The first evidence from Kent is from peat deposits near Frogholt (Newington) and Wingham, in which the pollen is fairly abundant between horizons dated by Radiocarbon dating between about 1700 BC and 200 AD (Godwin, *Sonderdruck aus den Veröffentlichungen des Geobotanischen Institutes der Eidg. Techn. Hochschule, Stiftung Rübel, in Zürich, Heft 37*). It is clear that it occurred as a native in Kent until at least Roman times; Godwin suggests that the bulk of the pollen in these sites may have come from the acid sandy country of the High Weald. Some of the High Weald populations of today may well be descended from native stock, but it now seems unlikely that the situation there can be fully sorted out, as so much planting has occurred over a long period. Abundantly naturalised, and possibly in part native, on the Sussex High Weald and the Sussex to Surrey Lower Greensand, and on the Bagshot Beds and Lower Greensand in Surrey, certainly not native in Essex or Pas de Calais. Seen in all districts except 2), 9) and 15).

## CUPRESSACEAE

*Juniperus* L.

*J. communis* L. ssp. *communis* Juniper . 15, 16. N. 12/52

Native. Old chalk grassland and scrub, dry acid heathland. Formerly very common and widespread on the downs and heaths of Kent, this species has become much rarer this century, in numbers both of localities and of individuals, and since 1944 it has been seen in only 23 recorded localities (21 on chalk, 2 on heathland on acid soils). In most of these even it is unhealthy and appears to be dying out, and may before many years have passed be extinct in the county, unless effective conservation measures can be found and implemented.

Its disappearance from heathland habitats is probably partly due to cultivation and repeated heath fires; on the chalk, spread of coarser grasses and scrub on cessation of grazing, with consequent failure of regeneration, as well as fire, are undoubted contributory causes. At present, however, the senescent or dying condition of nearly all the remaining small colonies, and their failure to regenerate or even to produce much seed or even cones, can be correlated with the abundant presence of the parasitic fungus *Lophodermium juniperinum* on the bushes; but whether this is cause and effect is not yet definitely proved. The bushes on the seacliffs, though stunted, possibly by exposure, appear to be still healthy and free from any obvious disease. \*1562: "growth most plenteously in Kent" Turner, *Herball*, pt. 2, p.25.

It is still locally plentiful at a number of sites on the chalk in Surrey and W. Sussex, but in these counties the colonies are similarly senescent in appearance for the most part and do not appear to be regenerating effectively. It is now very rare indeed on the Surrey heaths, and has apparently now become extinct in Ashdown Forest, its only recent E. Sussex locality. It has long been extinct in Essex. In Pas de Calais and elsewhere on the N. French chalk downs it is still abundant and appears to be fairly healthy and regenerating well. It is worth noting that two Hertfordshire colonies near Hemel Hempstead are still healthy and regenerating freely: these are not far from the main line to Birmingham and the local gas works; is it possible that chemicals present in the fumes from these sources have a toxic effect on the *Lophodermium*, or whatever other pathogenic organism may be killing the plants elsewhere? The matter needs much more close study.

5) Hangrove, S.E. of Downe, 4 bushes, 1963.

6) Whitehill, Shoreham, c.40 bushes, 1952. Purvil Wood, E. of Harvel, about 6 bushes, 1964, and several dead ones. Down N. of Crookhorn Wood, Snodland, 1946, 8 bushes: 1958, 2 bushes.

7) Burham Downs above Church, 2 bushes, 1946; ½ mile to N.W., 2 bushes, 1963. Bluebell Hill, one bush, 1964. Westfield Wood E. of Lower Bell, 3 bushes, 1944: not refound, 1950. Queendown Warren, several bushes, 1946: 1963, 1 bush. Above Westwell, one bush, 1962, E.S.

8) Juliberry Downs, Chilham, rare, 1945: gone, 1960. N. of Crundale Church, about 6 bushes, 1958. Longport, Crundale, 1 bush, 1954. Fanscombe Wood, Wye, several bushes becoming overgrown, 1959. Yocketts Bank, Waltham, 2 old bushes in dense scrub, 1947; 1963. S.W. of Petham, 1949-59, 3 bushes. St Margarets Bay, cliff edges to S., 1945; to N., 1958. Langdon Bay cliff top, 7 bushes, 1953. Shakespeare's cliff edge, 1955.

10) Toys Hill, 2 bushes in heathland, 1952-61.

13) Southborough Common! 33 healthy bushes, 8 dying, 10 dead, all infected, 1960, C.A. Stace.

[Old records for the Juniper Pug moth (*Eupithecia sobrinata* Hubn.) exist for 1) Blackheath; 6) Shoreham; 7) Westwell; 8) Crundale; 11) Watlington; 14) Sandhurst. It is still found at Shoreham, Westwell and Crundale, so I understand.]

## TAXACEAE

### *Taxus* L.

**T. baccata** L.<sup>79</sup> Yew. 15, 16. 38/52 (as a native, or probably so.

Native. Woodlands on well-drained soils on chalk, sand, or sandy loam; abundant on the chalk as far east as the Wye area, on which substratum it forms pure woods about Otford, Snodland, Boxley, and Crundale, and an important colonist of chalk grassland and scrub in many places; also common as a sub-dominant beneath the beech canopy in chalk woodlands; much rarer and scattered E. of Wye and possibly not native east of the Canterbury-Dover road, although not uncommon in plantations: quite common on the Lower Greensand in 10) and 11), both on the ragstone escarpment and on the podsolised soils on "head" on the Hythe Beds plateau: rare on the Folkestone Sand. Common in the High Weald of 13), in gills and on steep rocky banks on sandstones, much rarer in 14). It occurs quite frequently even in woodlands on the Gault and Weald Clay as scattered trees, but probably always where patches of lighter drifts or seams of sandstone occur. Not uncommon on the Eocene Sands and Gravels in 1), 3) 5)–8), 10)–14), and very much at home in Kent: but equally certainly planted in many places. The churchyards of Kent contain many huge specimens, no doubt originally planted: those at Ulcombe and Newington near Folkestone are noteworthy.

It is common on the chalk of west Sussex and of Surrey, forming pure woodlands as at Kingley Vale and about Boxhill, but rarer on the eastern South Downs. It is common on the Sussex High Weald, especially in gills on the sandstone, and in many localities on the Lower Greensand in both those counties. In Essex and East Anglia it does not appear to occur except as a planted tree. It is unknown today, surprisingly, in Northern France, in spite of the extensive chalk areas, north of the Seine Valley cliffs about Rouen.

Only apparently natural localities are listed below, unless stated.

1) Keston Common: Hayes Common: Scadbury Park: Holwood Park: Spring Park Wood: Crofton Heath: Roundabout Wood: Shooters Hill Woods: Abbey Wood: Bourne Wood, W. of Swanley: Farningham Wood.

2) Self-sown on ruins, S. of Oare Mill Pond. Love Lane, Minster, OD; probably planted.

3) 16 Church Wood: 04<sup>80</sup> Holly Hill, Dunkirk: 05 W. of Radar S[atio]n, Dunkirk: 26 Shelvingford Wood.

5), 6), 7) Very common, forming pure woods in places.

8) 04 S. of Longport, Crundale. 04 The Junipers, Wye, rare. 15 Whitehill Wood. 15 Gorskey Wood. 14 Harts Wood, Upper Hardres<sup>81</sup>. 05 & 15 Denge Woods, Petham. 15 Bridge Hill. 14 Yocketts Bank. 24 E. of Wolverton. 13 Wood N. of Beachborough. 24 Staffords Wood. ‡ Tilmanstone; ‡ Goodnestone Park. ‡ Temple Ewell. 14 E. side Lynsore Bottom. 34 Eastling Wood.

10) 45 N.W. Slope of Toys Hill. 55 Scarp, Hubbards Hill. Rooks Hill; Wilmott Hill. Bitchet Common.

11)G) Scarp N.W. of Plaxtol. Comp Woods plateau. Swanton Valley. Oaken Wood. Allington Wood. Kings Wood plateau. Scarp N. of Hunton.

W) Wood on Weald Clay 2m N. of Tonbridge. Underriver.

12) Park Wood, Bilsington.

13) Frequent: 22 localities.

14) 73 Robins Wood, Cranbrook; Parsonage Wood, Netter[s]hall Gill, Benenden and Babbs Gill, Benenden. 83, 93.

<sup>79</sup> Not in check-list.

<sup>80</sup> In error for [TR]06.

<sup>81</sup> Queried in text.



## Magnoliopsida

### MAGNOLIIDAE (Dicotyledons)

#### LAURACEAE

*Laurus* L.

‡ *L. nobilis* L. Bay. (Garden outcast). H. [no surviving account]

#### ARISTOLOCHIACEAE

*Aristolochia* L.

[‡ *A. clematitis* L. Birthwort. D.

is naturalised at Mayfield in Sussex.

11) formerly on walls of Allington Castle, Dr. Fielding (in *Memories of Malling*, by his son, C.H. Fielding 1893.)

‡ *A. rotunda* L. Smearwort. D.<sup>82</sup>

#### NYMPHAEACEAE

*Nymphaea* L.

*N. alba* L.<sup>83</sup> White Water-lily. N.

Localised records for district 15:

Royal Military Canal at Hythe (tetrads **TR13M** and/or **13S**) [L.J. Margetts]; Royal Military Canal, Kenardington (tetrads **TQ93Q** and/or **93V**) [E.S.]; Appledore (tetrads **TQ92P** and/or **92U**).

*Nuphar* Sm.

*N. lutea* (L.) Sm.<sup>84</sup> Yellow Water-lily. N.

Localised records for district 15:

Surprisingly rare in this district and not recorded for the main Marsh area. Recorded: west of Appledore (tetrads **TQ92J** and/or **92P**); southwest of Small Hythe – possibly same record as “west of Wittersham” in 1955 and 1956 (**TQ888296**).

#### CERATOPHYLLACEAE

*Ceratophyllum* L.

*C. demersum* L.<sup>85</sup> Rigid Hornwort. N.

Localised records for district 15:

Largely replaced by *C. submersum* in this district:

**TQ82:** levels northwest of Wittersham toward Small Hythe in 1958 (tetrads **TQ82U** and/or **82Z**)

**TQ83:** dykes east of Friezingham (tetrad **TQ83Q**)

**TQ92:** east of Appledore in 1946 (tetrad **TQ92U**)

**TQ93:** ditch by Royal Military Canal, Kenardington (tetrads **TQ93Q** and/or **93V**) [E.S.]

**TR01:** Long Lake, Dungeness in 1950 (**TR0818**) [MNE]

**TR02:** west of Dymchurch (tetrad **TR02Z**); and 2) disused swimming pool, St Mary's Bay (tetrad **TR02Y?**)

**TR03:** Orgarswick in 1946 (tetrad **TR03V?**); dyke south of Aldington Knowle in 1958 (tetrad **TR03S**) [MNE]; and Royal Military Canal at Ham Street (tetrad **TR03B**) [Clive A. Stace]

**TR13:** dyke, Palmarsh (tetrad **TR13G**) [L.J. Margetts]; and Royal Military Canal west of Hythe in 1935 (tetrad **TR13M**) [MNE].

*C. submersum* L.<sup>86</sup> Soft Hornwort. N.

<sup>82</sup> Given in check-list, but no account in manuscript.

<sup>83</sup> This account – as with all the following highlighted accounts – is not a transcript, but it is taken from notes made from the Flora, and is limited to botanical district 15). See ‘How to read the species accounts’.

<sup>84</sup> Francis Rose's annotated copy of Hanbury & Marshall (1899) (hereafter FR's H&M) gives: Jacob's record for Oare as now seen by FR in 1957; Worth Minnis; S of Yalding; Teston 1947; Chiddingstone 1943; Appledore JHL, Rother Levels and everywhere on Romney Marsh

<sup>85</sup> FR's H&M gives: Worth; Hanbury's record between Stodmarsh and Grove Ferry as now seen 1949; Fordwich Marshes 1950; Hanbury's record between Marden Mill and Mockbeggar as now seen 1948; Hothfield Lake.

Localised records for district 15:

Often filling the dykes where the water is periodically brackish:

- TQ83:** ditches by the Windmill Channel east of Rolvenden in 1959 (tetrad **TQ83Q**) []
- TQ92:** dykes east of Appledore in 1946 and 1954 (tetrad **TQ92U**) [**MNE**]; Snargate in 1939 (tetrad **TQ92Z**) [E.C.W. in B.E.C. Report 1939-1940 p. 294]; commonly fruiting in dyke at Fairfield in 1954 (tetrad **TQ92T**) [J.P.M. Brennan – **K**]
- TQ93:** Dyke by lane 1 mile south-east of Kenardington Bridge in 1959 (tetrad **TQ93V**) []
- TR01:** Dungeness, Hoppen Pits and gravel pits in 1946 (tetrad **TR01U** etc)
- TR02:** Ditch west of New Romney in 1945 and 1950 (tetrad **TR02M?**); ditch north of Ivychurch (**TR031281**); and moat north of Old Romney (**TR03254**)
- TR03:** Dykes south of Aldington Knowle in 1958 (tetrad **TR03S**) []; and 2) Orgarswick (tetrad **TR03V?**).

## RANUNCULACEAE

### *Caltha* L.

**C. palustris** L.<sup>87</sup> Marsh-marigold. N. [no surviving account]

### *Helleborus* L.

**H. foetidus** L.<sup>88</sup> Stinking Hellebore. N. [no surviving account]

**H. viridis** L. ssp. **occidentalis** (Reut.) Schiffn.<sup>89</sup> Green Hellebore. N. [no surviving account]

### *Eranthis* Salisb.

‡ **E. hyemalis** (L.) Salisb. Winter Aconite. H. [no surviving account]

### *Aconitum* L.

**A. napellus** L. Monk's-hood. H. (‡ in Kent). [no surviving account]

### *Consolida* (DC.) Gray

**C. ajacis** (L.) Schur<sup>90</sup> Larkspur. C. Colonist formerly, now ‡ [no surviving account]

### *Anemone* L.

**A. nemorosa** L.<sup>91</sup> Wood Anemone. N. [no surviving account]

‡ **A. apennina** L.<sup>92</sup> Blue Anemone. H. [no surviving account]

### *Clematis* L.

**C. vitalba** L. Traveller's -joy. N. [no surviving account]

‡ **C. flammula** L. Virgin's-bower. H. [no surviving account]

### *Ranunculus* L.

<sup>86</sup> FR's H&M gives it as seen by him abund[ant] at Grain, at Harty, Warden, Elmley, Appledore '46, New Romney, Dungeness, with CW at Higham and ('44) All Hallows; agreeing with the H&M comment that *demersum* had not been seen in the Thames marshes; and referring to an unspecified BEC Report for *submersum*, at Whitstable.

<sup>87</sup> FR's H&M gives Ightham Mote, Harrietsham, Leybourne, Snodland, Dartford, Northfleet B[rooks], Burham, Eccles, New Hythe abund[ant], Birling M[arshes], Sandling, Lamberhurst. At Mereworth, he saw var. *cornuta* (*C. guerangerii* Boreau.)

<sup>88</sup> FR's H&M mentions Greenhills W[ood] ('54, C.T. Ingold); plentiful above Up[pe]r Halling for ¾ m. '42-'43 FR; Kings Wood, D. Kent '45; W. of Buckland 1961; abund[ant], 12 places in Boarley Warren; Bluebell Hill, FR, JHL, '44; Woodville, N.W. of Dover, B.J.B., FR '46!; Bredhurst Hurst; ‡ by roadside bet[ween] Headcorn and Biddenden, FR 28.11.43!; Jacob's record for Charing should be deleted as error for *H. viridis*. The H&M records are marked: for Birling, abundant '42; for Halling, present '38 and for Boxley Hill, present '42.

<sup>89</sup> FR's H&M refers to Chevening, '50; the H&M record for Upper Halling is an error for *foetidus*; Wrotham, CW, '42; Bredhurst ch[urch] **MNE**; Downs n[ea]r Wouldham, FR; Kings Wood, D. Kent, '45; N. of Stalisfield, FR, '46; Wotton, Miss L...ng; Coldred, BJB, '55!; Longreach Wood, abundant, 3m SW of Stockbury, FR, JHL; ...; Milsted, FR; Charing Heath, Pope; Horsmonden, Stirling; Boldshaves g[ar]d[e]n, Woodchurch, E. Scott; Wilmott Hill, Miss Turnbull, FR '46!; Near Ringwold, Chambers, 53!; 2 copses on Wye Downs, R. Harrison ('47!); Alkham, BJB; St Clere, Deakin; Westerham Wood, teste Fawkes; Bullingstone Wood near Speldhurst; Atchester Wood, BJB.

<sup>90</sup> FR's H&M mentions: one plant, Up[pe]r Halling, CW, '42; Up[pe]r Halling, l[ocally] a[bandant] in cornfield above Pilgrims Way, 1958, E. Phil (FR!); by pit at Ranscombe, '46; Cuxton, 1957.

<sup>91</sup> FR's H&M refers to var. *caerulea*, J. Bot. XXV (1887) 157; Hurst Wood, DMCC, 1950!.

<sup>92</sup> FR's H&M mentions it as planted but naturalised at Mereworth castle, FR, '43!

<b>R. acris</b> L. <sup>93</sup>	Meadow Buttercup.	N.	[no surviving account]
<b>R. repens</b> L. <sup>94</sup>	Creeping Buttercup.	N.	[no surviving account]
<b>R. bulbosus</b> L. <sup>95</sup>	Bulbous Buttercup.	N.	[no surviving account]
<b>R. sardous</b> Cranz <sup>96</sup>	Hairy Buttercup.	N.	
Localised records for district 15: Probably in marshes at Fairfield ( <b>tetrad TQ92T</b> ). Also at the Midrips ( <b>TR0018</b> ) and west of Hythe ( <b>TR03</b> or <b>TR13</b> ).			
<b>R. parviflorus</b> L. <sup>97</sup>	Small-flowered Buttercup.	N.	[no surviving account]
<b>R. arvensis</b> L. <sup>98</sup>	Corn Buttercup	N.	[no surviving account]
<b>R. auricomus</b> L. <sup>99</sup>	Goldilocks Buttercup.	N.	[no surviving account]
<b>R. sceleratus</b> L. <sup>100</sup>	Celery-leaved Buttercup.	N.	
Localised records for district 15: Surprisingly infrequent and only listed for Appledore, by the canal (tetrad <b>TQ92P?</b> ); Shirley Moor ( <b>TQ93</b> ); Sandhurst Levels ( <b>TQ82</b> ); Small Hythe (tetrad <b>TQ82Z</b> ); and west of Hythe ( <b>TR03</b> or <b>TR13</b> ).			
<b>R. lingua</b> L. <sup>101</sup>	Greater Spearwort.	N (& H).	
Localised records for district 15: in all the Hoppen Pits ( <b>TR0718</b> ) and natural fens of Denge Beach, locally abundant in 1962 (!) and previously noted in 1956. Also in shingle workings near the Old School, Dungeness in 1961 ( <b>TR01</b> ).			
<b>R. flammula</b> L. <sup>102</sup>	Lesser Spearwort.	N.	
Localised records for district 15: surprisingly very rare, [though Francis Rose stated the account was incomplete] - mainly off the Romney and Walland Marshes proper, at Hexden Channel in 1954 ( <b>TQ82</b> ); ditches southeast of Rolvenden (tetrad <b>TQ83Q</b> ); and shingle pits near Old School, Dungeness ( <b>TR01</b> ).			
<b>R. ficaria</b> L. <sup>103</sup>	Lesser Celandine.	N.	[no surviving account].
<b>R. ficaria</b> L. ssp. <b>ficaria</b>		N.	[no surviving account]
<b>R. ficaria</b> L. ssp. <b>bulbilifer</b> Lambinon		N.	[no surviving account]
<b>R. hederaceus</b> L. <sup>104</sup>	Ivy-leaved Crowfoot.	N.	
Localised records for district 15: Royal Military Canal at Appledore (tetrad <b>TQ92P?</b> ) [R.G.W. – recent]; Ham Street (off Romney Marsh?) [E.S. Marshall]			
<b>R. omiophyllus</b> Ten.	Round-leaved Crowfoot.	N.	[no surviving account]
<b>R. tripartitus</b> DC. <sup>105</sup>	Three-lobed Crowfoot.	N.	[no surviving account]

<sup>93</sup> FR's H&M mentions Leybourne, Lunsford, Holborough, New Hythe, Wildernes, Lenham, Sundridge, Riverhead, Smarden, Westwell Downs, Birling Marshes, Hothfield, W[est] M[alling] St[atio]n.

<sup>94</sup> FR's H&M says 'everywhere', followed by mention of Woods, Aylesford **BM**; Leybourne, W[est] M[alling], E[ast] M[alling], Ditton, Hothfield, High Rocks, Higham.

<sup>95</sup> FR's H&M refers to Down by Leybourne ch[urch] with double flowers, 1941; and substitutes for the 1777 first record one of 1766, Denton MS, Anon., B.M. lib[rary].

<sup>96</sup> FR's H&M gives Higham FR, CW, '44; Snodland Marshes, FR, '44; Holborough Marshes; between Strood and Cuxton, FR, '44!; Preston '46.

<sup>97</sup> FR's H&M rates this as very rare, with mention of: Warden Point, '47, LNHS; Westwell, Lady Davy (not seen, E. Scott); Downs above Ryarsh with *Ajuga chamaepitys*, 11.6.43, FR; Trosley, DMCC, 27.5.44.

<sup>98</sup> FR's H&M gives Chiddingstone, DT, CW; S Minster Marshes, '54, DMCC; n[ea]r Moorden F[ar]m, Penshurst, FR, '43; Newchurch, St Mary, D. Kent, '45; rare at Westwell, E Scott; Halls Hole, FR, JRW; Boro[ugh] G[ree]n, Platt, DMCC; Bet[ween] T[un]bridge W[ells] C[ommon] and Hurst Wood, Deakin.

<sup>99</sup> FR's H&M mentions Tilmanstone; Waldershare; Adisham; W of Chilham; top of Otford Downs; Hollingbourne Hill; Bredhurst Hurst; Wigmore Wood; Snarkhurst Wood; North Wood; Squirrels Wood; E. of Shoreham; S of Wye; large form, Owley in Oxney; Tenterden, abund[ant], 2 places; Lamberhurst to Bayham; Pembury.

<sup>100</sup> FR's H&M refers to Hollingb[ourne]; Burham; Snodland; Teston; W. Bury; Tonbridge; Chidd[ingstone]; Shirley Moor; Headcorn; Holborough Marshes; Cuxton; Burham; Upnor; Birling; Higham; Lunsford; Cliffe.

<sup>101</sup> FR's H&M says it is in at least 12 stations (but unclear if this is overall or just one district); and also gives Wouldham, FR; Worth, Miss Day; R[iver] Beult E, of Stile Bridge, Burgess (destroyed?); Headcorn, '47!; Southborough, Bromley (extinct, '46); Grove Ferry, Miss Day. There is also a reference to an incorrect record for Plumstead, W. Biddicombe, Sci[ence] Goss[ip] XXVI (1890) 3.

<sup>102</sup> FR's H&M gives Penshurst; Hothfield; Ryarsh; Birling; Holborough; Preston.

<sup>103</sup> FR's H&M mentions Wye; Shoreham; Westwell; Waltham; E[ast] M[alling]; W[est] M[alling]; Shorne; Chislehurst.

<sup>104</sup> FR's H&M refers to Keston Common, '48!; Hothfield, '46!; Hinxhill, '48!

- R. baudotii** Godr.<sup>106</sup> Brackish Water-crowfoot. N.  
 Locally common in district 15:  
**TQ92:** Appledore in 1947 (!) [E.S. Marshall]  
**TR01:** Dungeness in 1947 (!) [det. R.W. Butcher – MNE]  
**TR02:** Pit on Romney Warren in 1947 (!) (**TR0826**) [W.J.L.S.]. Dymchurch in 1947 (!) [F.J. Hanbury]. Northwest of Greatstone in 1950 (tetrad **TR02R**) [F.R. det. R.W. Butcher – MNE]. South of Littlestone in old estuary in 1946 (tetrads **TR02S** and/or **02X**) [F.R. det. R.W. Butcher – MNE]. Ditches near Lydd in 1891 [E.S. Marshall – det. as var. *marinus* by H. & J. Groves – BM]. Ditches near Lydd in 1901 [C.E.G.; det. H. & J. Groves as “*godronii*” and by W.H. Pearsall as “*radians* var. *godronii*”, though only *baudotii* fide F.R. (!) **SLBI**]  
**TR03:** South of Bilsington (tetrad **TR03L?**); and Newchurch (**TR0531?**)  
**TR13:** Royal Military Canal west of Hythe in 1880 (tetrad **TR13M?**) [A. Bennett – BM]; and Palmarsh pits in 1956 (tetrad **TR13G**) [L.J. Margetts det. R.W. Butcher as forma *marinus*].
- R. trichophyllus** Chaix<sup>107</sup> Thread-leaved Water-crowfoot. N.  
 Unlocalised record for TR03; otherwise, localised records for district 15: at:  
**TQ82:** Small Hythe (**TQ894298**) [David McClintock]  
**TQ92:** west of Appledore in 1949 (tetrads **TQ92J** and/or **92P**) [P.R.B. and F.R. det. R.W. Butcher – MNE]  
**TR01:** Dungeness  
**TR02:** in ditches northeast of New Romney in 1946 [det. R.W. Butcher – MNE]; ditches at Brenzett in 1945 (TR02D) [F.R.]; gravel pits on Romney Warren in 1959 (**TR02S**); dyke at St Mary’s in 1946 (D.H. Kent); and ponds south of Ivychurch (tetrad **TR02I**)  
**TR13:** Dyke south of Lympne (tetrads **TR13B** and/or **13G**)  
 Subsp. *drouetii* recorded: gravel pits on Romney Warren in 1945 (**TR02S**); and ditch near Selby Farm, south of Lympne (**TR1033**).
- R. aquatilis** L.<sup>108</sup> Common Water-crowfoot. N.  
 Localised records for district 15: fairly common, with sites at Northeast of Romney (**TR02**) [Flora of Kent (1899); R.G.W. in *ca* 1950]; east of Hythe (**TR13**) [Flora of Kent (1899)]; west of Hythe in 1958 (**TR03** or **13**) []; north-east of Brenzett in 1958 (tetrads **TR02D** and/or **02E**); west of Old Romney (tetrad **TR02H**); northeast of Old Romney (tetrad **TR02H**); Ham Street (**TR03B**) [C.N.P.]; and east of Appledore station in 1956 (tetrads **TQ92U** and/or **92Z**).
- R. peltatus** Shrank<sup>109</sup> Pond Water-crowfoot. N. [no surviving account]  
**R. pencillatus** (Dumort.) Bab. ssp. **pseudofluitans** (Syme) S. Webster<sup>110</sup> Stream Water-crowfoot. N. [no surviving account]
- R. fluitans** Lam.<sup>111</sup> River Water-crowfoot. N. – to refind in Medway. [no surviving account]
- R. circinatus** Sibth.<sup>112</sup> Fan-leaved Water-crowfoot. N.  
 Localised records for district 15: locally frequent:  
**TQ82:** Sandhurst Levels in 1954 [det. R.W. Butcher – MNE]  
**TQ92:** 1 mile east of Appledore in 1954 (!) (tetrad **TQ92U**) [Flora of Kent (1899)]; and northwest of Fairfield (tetrad **TQ92T?**)  
**TQ93:** Shirley Moor

<sup>105</sup> FR’s H&M describes the only site as having been built over and gives no others. It has since been found elsewhere in Kent although some, and perhaps all, plants are *R. x novae-forestae*.

<sup>106</sup> FR’s H&M refers to Higham Canal, FR, CW; Cuxton, FR, ‘44!; Wouldham Marshes, FR, ‘44; Sandwich, 47!; Dungeness, ‘47!; Romney, 47!; Dymchurch, ‘47!; Appledore, ‘47; Seasalter, ‘47!; Higham Marshes, FR, CW, & Chalk.

<sup>107</sup> FR’s H&M gives Higham, FR, CW; Well St[reet], E[ast] Malling, ‘45, FR; Sandwich, ‘47!; Westerham; Romney Marsh, Dr {A.H.?.} Ulyett, FR.; Appledore, FR & P.R.B., ‘49

<sup>108</sup> FR’s H&M mentions (under *R. heterophyllus*) Chislehurst Common; pool on Wye Downs, ‘48!; Trosley, FR, ‘44; Ryarsh Wood, Dr. C.W., and n[ea]r Ryarsh Wood, FR ‘44; 2 ponds, Matfield Green, FR; Wildernesse, Seal, FR, JHL, ‘44; Seal Chart, FR, JHL. Snodland, ‘44, is given for var. *submersus*.

<sup>109</sup> FR’s H&M refers to locations by Blean church, ‘45, FR; Printstile (Bidborough), FR, ‘45; Wouldham, FR, ‘44; Higham Marshes, FR, CW; Beltring, FR, ‘44; W. of Tonbridge Haysden Straight Mile.

<sup>110</sup> FR’s H&M has an insertion of *R. sphaerospermus* Gren. & Godr. which may belong with this taxon, and which is given as at Brasted, LNHS, and Chipstead, ‘44, ‘49; also Sundridge, FR & JHL.

<sup>111</sup> FR’s H&M refers to it at Hartlake Br[idge], 1952, DMCC & FR.

<sup>112</sup> FR’s H&M gives it between Grove Ferry and Preston, abund[ant], 47!; Sandhurst Levels, 1954; Dungeness, ‘47; ‘Miss Milward knows it near Canterbury’; and it is queried if the H&M record at Leybourne / Snodland is a mistake for *R. sphaerospermus*.



**TR01:** Hoppen Pits, Denge Beach (tetrad **TR01U**)

**TR13:** South of Lympne in 1958 (tetrads **TR13B** and/or **13G**) [det. R.W. Butcher – **MNE**].

#### Adonis L.

**A. annua** L. Pheasant's-eye. 15, 16. C. 5/52

Colonist. Cornfields and waste ground, mainly on chalk soils; formerly common in 6), and frequent in 1), 5), 7) and 8); recorded also for 2), 3), 4), 9) 10) and 11). Now very rare and confined to a few localities in 2), 5), 6) and 8). It is pointless to cite the many old records in detail: only recent ones are quoted.

2) Stone Marshes, 1957, H.M.P. Murton F[ar]m, Graveney, 1950, R. Theobald & R.E.W. Warden Point, 1951, Mrs. Bryson.

5) Chelsfield, G. Spooner.

6) S.W. of Cobham, 1946, J.T. Dodd. S.E. of Cobham, H.M.P. Mounts Road, Greenhithe, 1954, **MNE**. Cornfield n[ea]r Darenth Wood, 1951, H.M.P. Fawkhams, 1953, Mrs. D. Woods.

8) St Margaret's Bay, Radar Station, E.S. N. of Charlton Wood, Bishopsbourne, 1942, B.J.B. & F.R. Kingston, 1950, L.W.W.

#### Myosurus L.

**M. minimus** L. Mousetail. 15, [16]. N, C. 1/52

Native. Damp arable fields, mostly on sandy soils, and damp sandy or loamy banks near the sea: formerly widespread and locally frequent along the north Kent coastal plain, and recorded for numerous localities in 1)-4), 7)-9), 11)-13) and 16); now extremely rare and only recently recorded in 3) and 4). Similarly rare and decreasing in Surrey, Sussex and Pas de Calais, but still known at a number of places near or along the coast in Essex. \*1670; Deptford to Eltham, Ray, *Cat. Angl.*, p. 210.

*Recent records:*

3) Sandy arable field, Highams Farm, Fordwich, 1950, R.E. Wood; 1951! **MNE**.

4) Deep sandy hollow of dunes near Downs Farm, Sandwich, 1960, Mrs. E. Carlton; not refound in spite of several searches and subject to some slight doubt in the absence of a specimen.

( 12) Reported about 1954 by a farm worker at Sellindge to Prof. H. Miles of Wye College, but unconfirmed.)

#### Aquilegia L.

**A. vulgaris** L.<sup>113</sup> Columbine. N, H. [no surviving account]

#### Thalictrum L.

**T. flavum** L.<sup>114</sup> Common Meadow-rue. N. [no surviving account]

**T. minus** L. Lesser Meadow-rue. H. [no surviving account]

#### BERBERIDACEAE

##### Berberis L.

‡ **B. vulgaris** L.<sup>115</sup> Barberry. D. N? [no surviving account]

‡ **B. darwinii** Hook. Darwin's Barberry. H. [no surviving account]

‡ **B. x stenophylla** Lindl. Hedge Barberry. H. [no surviving account]

##### Mahonia Nutt.

‡ **M. aquifolium** (Pursh) Nutt. Oregon Grape. H. [no surviving account]

#### PAPAVERACEAE

##### Papaver L.

<sup>113</sup> FR's H&M gives records at Farningham Woods, '50; Strood, adventive, FR; Rodmersham, FR, '46; Bluebell Hill, FR, '42; Elham Park; Petham, SW of, v[ery] a[bundant], '49; Pett St[reet], '46; Covert Wood, abund[ant]; Acrise, Miss L.; Swingfield; Sibertswold; Woods above Stowting, '47!; SE of Chilham; Whitehill Wood, Dr. Scott; Woolwich Wood, '55; Trosley, FR; Halling, FR, CW, '43; S. of Cudham (pink); above Ryarsh, '44; H&M's Heden Wood record is queried as Illedon.

<sup>114</sup> FR's H&M refers to records at Barnes Cray, FR, '44; reed beds by the Medway near Burham, FR, JML, '43; abund[ant] S. of Chilham, FR, DC; by brook W of River [Medway above Snodland], FR, CW, JNL, 43!; N[ew] Hythe, '44, FR.

<sup>115</sup> FR's H&M mentions Hastingleigh, Wilson.

<b>P. pseudoorientale</b> (Fedde) Medw. <sup>116</sup>	Oriental Poppy.	H.	[no surviving account]
‡ <b>P. atlanticum</b> (Ball) Coss.	Atlas Poppy.	H.	[no surviving account]
‡ <b>P. somniferum</b> L. ssp. <b>somniferum</b> <sup>117</sup>	Opium Poppy.	H.	[no surviving account]
<b>P. rhoeas</b> L. <sup>118</sup>	Common Poppy.	N or C.	[no surviving account]
<b>P. dubium</b> L. ssp. <b>dubium</b> <sup>119</sup>	Long-headed Poppy.	N or C.	[no surviving account]
<b>P. dubium</b> L. ssp. <b>lecoqii</b> (Lamotte) Syme <sup>120</sup>		C.	[no surviving account]

**P. hybridum** L. Rough Poppy. [15, 16.] C.

Colonist. Cornfields and waste ground on chalk: not uncommon in parts of 6), 7) and 8), rare in 5) and 9), a very rare casual in 4) and 11). Local on chalk in Surrey and Sussex, rare in Essex, local in Pas de Calais. \*1597: Southfleet, J. Gerard, *Herbal*, p.300.

4) Sandwich Bay, Miss J. Moore.

5) [N[ea]r Swanley, 1877, J. Groves (BM).] Chalky track N. of Franks, Horton Kirby, PCH. W. of Sutton-at-Hone, WCRW.

6) Frequent in the N. part: 11 localities recorded from Darenth to Snodland.

7) Wouldham: Burham: Bluebell Hill: Borstal: Boxley Warren: Hollingbourne: Westwell.

8) 19 localities from Chartham and Bridge to Mongeham and St. Margarets, but not in the S.W. half of district.

9) W. of Cleve Court, Minster, 1963. Northdown, L.W.W. [old records at Ramsgate and Margate].

[11) Hadlow, 1877, W.E. Shrivell (TLS).]

**P. argemone** L.<sup>121</sup> Prickly Poppy. [15, 16.] C.

Colonist. Arable land and waste ground on chalky and sandy soils: widely but thinly distributed and rather uncommon.

Locally common in Sussex and Essex, rather common in Surrey and Pas de Calais. \*1597: Southfleet, J. Gerard, *Herbal*, p.300.

1) Eltham: Orpington, W.C.R.W.

2) Faversham.

4) Sandwich Bay: N. of Deal.

6) 11 localities.

7) Wouldham: Borstal, H.A.S.: Chatham, B. Carter: Westwell, E.S.

8) 8 localities, all in E. half of district.

9) Westgate: Birchington, L.W.W.

11) Wrotham Heath [FR, '42!]: Ryarsh Sandpits [FR, CW, '44]: Allington: Beasted: Hollingbourne: Bethersden, C.N.P.

12) Hothfield, C.N.P.: Potters Corner, C.N.P.: Sturry, Mrs. J.O.

14) Tenterden Station: Dungeness, near Lighthouse, Mrs. B.D.

**Meconopsis** Vig.

‡ **M. cambrica** (L.) Vig. Welsh Poppy. H. [no surviving account]

**Glaucium** Mill.

**G. flavum** Crantz<sup>122</sup> Yellow Horned-poppy. N. [no surviving account]

**Chelidonium** L.

‡ **C. majus** L.<sup>123</sup> Greater Celandine. (old D) [no surviving account]

<sup>116</sup> *Papaver orientale* L. in the check-list.

<sup>117</sup> FR's H&M gives records: Ridley; S. of Eynsford by Rifle R[ange], '54; freq[uent] at Greenhithe and Cobham.

<sup>118</sup> FR's H&M mentions *P. rhoeas* var. *strigosum* at Wingham, DPY.

<sup>119</sup> FR's H&M refers to this at Wrotham and Timberden Bottom, Shoreham; it was recorded at Riverhead by Deakin; and the H&M first record should be replaced by 1632, *P. erraticum minus*, Margate, Johnson.

<sup>120</sup> FR's H&M gives this as found at Platt by [D]McC.

<sup>121</sup> This account is taken from a typed copy, probably made in the 1980s and extending to no more than this (additions from FR's H&M).

<sup>122</sup> FR's H&M mentions records at Swanscombe 1945 J.E. Louusley; Pegwell Bay; Sandwich Bay; N. of Deal; Deal; Walmer; Kingsdown; St. Margarets Bay; Dover; Abbotts Cliff; Lydden Spout; Eastwear Bay; Reculver; Leysdown; Shellness!; Swalecliffe; Hythe; Littlestone; Dungeness; Greatstone; Minnis Bay; Sugar Loaf; Dymchurch; Romney Warren; St Marys Bay; abund[ant] Seasalter and Graveney.

<sup>123</sup> FR's H&M mentions Darenth: Gillets Hole, Hen Road, EM. Frogflane 34 W.M.

**Eschscholzia** Cham.

‡ **E. californica** Cham. Californian Poppy. H. [no surviving account]

**FUMARIACEAE****Corydalis** DC.

**C. solida** (L.) Clairv. Bird-in-a-bush. - ?N. [no surviving account]

**Pseudofumaria** Medikus

‡ **P. lutea** (L.) Borkh. (*Corydalis lutea* (L.) DC.)<sup>124</sup> Yellow Corydalis. H. [no surviving account]

**Ceratocapnos** Durieu

**C. claviculata** (L.) Lidén (*Corydalis claviculata* (L.) DC.)<sup>125</sup> Climbing Corydalis. N. [no surviving account]

**Fumaria** L.

**F. capreolata** L. White Ramping-fumitory. C, N? [no surviving account]

**F. muralis** Sond. ex W.D.J. Koch ssp. **boraei** (Jordan) Pugsley<sup>126</sup>

Common Ramping Fumitory. C. [no surviving account]

**F. officinalis** L. ssp. **officinalis**<sup>127</sup> Common Fumitory. C [no surviving account]

**F. officinalis** L. ssp. **wirtgenii** (W.D.J. Koch) Arcang. C [no surviving account]

**F. densiflora** DC.<sup>128</sup> Dense-flowered Fumitory. C [no surviving account]

**F. parviflora** Lam.<sup>129</sup> Fine-leaved Fumitory. C [no surviving account]

**F. vaillantii** Loisel. Few-flowered Fumitory. C [no surviving account]

**PLATANACEAE****Platanus** L.

‡ **P. x hispanica** Mill. ex Münchh. (*P. occidentalis* L. x *P. orientalis* L.). London Plane. H [no surviving account]

**ULMACEAE****Ulmus** L.<sup>130</sup>

**U. glabra** Huds. Wych Elm. 15, 16. N, H<sup>131</sup>

Native: on the steep escarpment and dip-slope valley sides of the ragstone from across the Surrey border eastwards to Boughton Malherbe and Egerton, widespread and locally abundant, and even locally co-dominant with *Fraxinus excelsior* and *Acer campestre* in these steep, often rocky woods; in mixed woodland on the sides of dry valleys on the chalk, associated with *Fraxinus* and *Fagus*, widespread and locally frequent; in gills in the High Weald on locally base-rich situations on sandstone rock, but here rare. Also widely planted in all sorts of situations. This species appears to be a genuine relic of the ancient forest cover on the steep uncultivable ragstone escarpment, at least; even forestry appears to have been completely neglected on many parts of this scarp. The scarp woods can be studied to best advantage at Scords Wood, Brasted, Brockhoul Mount, S. of Sundridge, and at Rooks Hill, Underriver, where a remarkable mixture of native tree species, many of

<sup>124</sup> FR's H&M refers to Teston n[ea]r Ch[urch]; T[unbridge] Wells n[ea]r Rose Hill Ho[use], Forster; E[ast] Malling, '42!; W[est] Malling, '43 FR.

<sup>125</sup> FR's H&M gives Hayes Common, D. McClintock, (FR, '46!); Springpark Wood, W. Wickham, CW; Leybourne, '52; Hothfield Heath, '45; Addington, J.B. Marshall; Oldbury Hill, abund[ant], FR; Potters Corner, '55; ....'54, E.Scott; Dungeness, '46!

<sup>126</sup> FR's H&M mentions Hollingbourne; Harrietsham; Charing; Sissinghurst 1930, Rex G[raham]; Warren Wood, E. Malling, '43, FR; E[ast] M[alling] village; Lamberhurst; Ki[ppings] [Cross]; Headcorn; Chart Sutton.

<sup>127</sup> FR's H&M gives under *F. officinalis*: Leybourne, E[ast] M[alling]; W[est] M[alling]; Stockbury; Burham; Aylesford; Boxley; Wrotham; Ryarsh; Birling; Bishopsbourne.

<sup>128</sup> FR's H&M refers to Downs W. of Shoreham; n[ea]r Stockbury, FR, CW; Kingston, '50; Greenhithe; Luddesdown; Wouldham; Halling; Bishopsbourne.

<sup>129</sup> FR's H&M provides records at Adisham, [D] McC; Bishopsbourne, '46.

<sup>130</sup> All the *Ulmus* records precede the arrival of Dutch Elm disease in the UK in 1971 and the consequent loss of many trees.

<sup>131</sup> Map taken from Rose, F. (1955) The new Flora of Kent. *The South-Eastern Naturalist and Antiquary* 60: 9-19.

considerable age and size, may be observed. Coppicing of the *Ulmus* has occurred in several places on this escarpment, but that does not necessarily imply planting. At Rooks Hill *U. glabra* is associated in woodland with *Fagus sylvatica*, *Acer campestre*, *Fraxinus*, *Quercus robur*, *Sorbus aria*, *Taxus baccata*, *Ilex aquifolium*, and, lower down the slope, with *Carpinus betulus*.

It thrives best on a highly calcareous soil with good drainage but a high moisture content.

At Boughton Malherbe and eastward populations occur showing increased hybrid introgression by *Ulmus carpinifolia*, which largely replaces it eastward on the ragstone at Egerton and Pluckley.

1<sup>st</sup> record, 1597: Southfleet, Gerard, *Herbal*, p.1297.

Only apparently native localities are quoted below.

5) 36 Well Wood, W. Wickham, 3964, 1958, PCH. Escarpment Woods E. of Hogtrough Hill, Brasted, 1955.

6) Ingram Wood, Stansted, 1959.

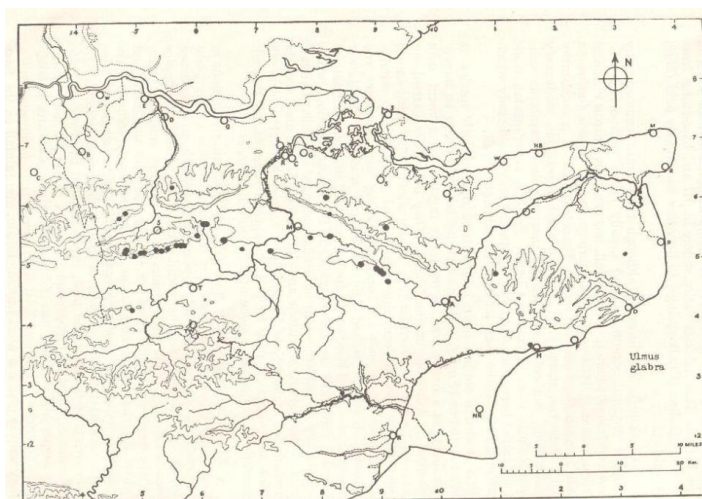
7) Wichling Wood. Trundle Wood, Milsted, 1956 MNE. Dry Valley E of L[owe]r Cox Street, Detling, 1954 MNE. Coxett Wood.

8) R[oa]dside copse, Martin road, Ringwould, 1960, Miss B. Nash.

10) On the ragstone at Scords Wood (*carpinifolia*<sup>132</sup>); Brockhoul Mount; N of Riverhill; St Julians; One Tree Hill, Rooks Hill; Wilmott Hill, abundant, and hybrids with *carpinifolia*; N. of Ightham Mote; Crockham Hill, ragstone scarp to SW. W. side of Ide Hill 1955 MNE.

11) Long Wood valley SE of Borough Green, on ragstone. Swanton Valley, Loose Valley MNE. Quarry Wood, E. Farleigh. Woods on escarpment, S. of Amberfield, Chart Sutton; Knowle Hill 1959 MNE; and Elmstone Hole MNE, n[ea]r Ulcombe FR & RM 1959; Popes Hall, Boughton Malherbe, and hybrids with *U. carpinifolia*. Welham Wood, Egerton, and hybrids with *U. carpinifolia*.

16) Saltwood, L.J. Margetts, 1959 MNE.



#### ***U. glabra x plotii***<sup>133</sup>

[15.]

7) n[ea]r Cox Street, Detling, 1950 MNE.

12) E. Stour F[ar]m, Godmersham, 1955 MNE.

#### ‡ ***U. x vegeta*** (Loudon) Ley<sup>134</sup>

Huntingdon Elm.

[15, 16.]

H.

2) Wood S. of Mill Pond, Oare, 1959 MNE.

7) Wood on chalk in valley, with *U. glabra*, Upper Cox Street, N of Detling, 1954 MNE. Wichling Wood, on chalk in valley, 1949 MNE. Trundle Wood, Milsted, 1956, MNE with *U. glabra*.

8) Capon Wood, Hunt Street, Crundale, 1954, MNE.

10) Ragstone escarpment woods Scords Wood, Brasted 1955 MNE. Ragstone escarpment woods Rooks Hill, Underriver, 1954 MNE.

13) Copse on Wadhurst Clay (calcareous loam) below Ash F[ar]m, Horsmonden, 1959 MNE. Cranbrook, 1956 MNE.

#### ‡ ***U. x hollandica*** Miller<sup>135</sup>

Dutch Elm.

D.

#### ***U. procera*** Salisb.

English Elm.<sup>136</sup>

15, 16.

?N,D.

Native, on well-drained but moist, base-rich, often sandy or gravelly soils, in the lower Medway valley below Maidstone, and on the plains of the Thames valley, the Hundred of Hoo, and S of the Swale in N. Kent; replaced

<sup>132</sup> Thus in the manuscript; presumably upon revision it would have been updated to *Ulmus minor* ssp. *minor*.

<sup>133</sup> Not in check-list.

<sup>134</sup> Given in the manuscript as *U. carpinifolia x glabra* = *U. x vegeta* (Loud.) A. Ley.

<sup>135</sup> Included in check-list, but not in manuscript unless covered by those entries given here as under *U. glabra x plotii* and *U. minor* ssp. *angustifolia x glabra*.

<sup>136</sup> The manuscript gives Common Elm as an alternative.



by *U. carpinifolia*<sup>137</sup> E. of Faversham in N.E. Kent. Widely planted elsewhere in parks and in hedges, but very rare in the whole of the Weald, even as a planted tree.

1<sup>st</sup> record, probably 1777: Faversham. E. Jacob, Pl. Fav. p.125.#

- 1) Shooters Hill, '54, GMB. Farningham Wood. E side Joydens Wood. Hayes Common. Bromley Common.
- 2) Cliffe, 1947, **MNE**. Cooling. Frindsbury. 1949 **MNE**. Brambledown, Sheppey, 1955 **MNE**. SE of Minster, Sheppey, 1958 **MNE**. Beacon Hill, Norton, 1949, **MNE**.
- 3) Waystreet Farm, Hernhill.
- 5) 36 Copse W. of Highams Hills 397612, 1958 PCH.
- 6) Northward Hill, High Halstow, dominant locally, 1950-58 **MNE**. Common about Cliffe, Cooling,<sup>138</sup> and Hoo.
- 7) Coxett Wood, Ospringe, 1959 **MNE** – loc[ally] dom[inant] on basic loam (?brickearth).
- 9) Brooksend, Birchington, 1956 **MNE**.
- 10) Otford. Shoreham. Sevenoaks tip, 1958, CAS. Scords Wood, Brasted Chart, 1954 **MNE**; locally dominant on loam over ragstone in valley.
- 11) Button's Bourne, Plaxtol, 1956 **MNE**, abundant on ragstone. Leybourne Wood. Larkfield Heath. On valley gravels of Medway below the Friars, Aylesford, forming almost pure woodland, down to New Hythe, 1949-62 **MNE**.

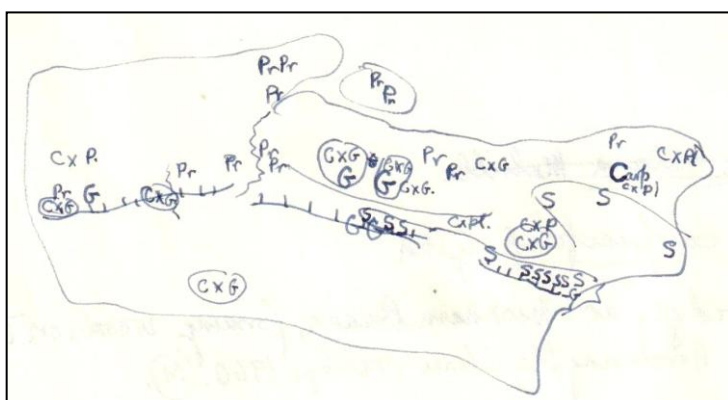
**U. minor** Mill. ssp. **minor** (*U. carpinifolia* Gled.)<sup>139</sup> Small-leaved Elm. [15.] N

- 3) Ellbridge, n[ea]r Wickhambreaux, forming woods on the Thanet sands and terrace gravels bordering the Stour valley, 1960, **MNE**.

**U. minor** Mill. ssp. **angustifolia** (Weston) Stace<sup>140</sup> [Cornish Elm]

**U. minor** Mill. ssp. **angustifolia** x **glabra**<sup>141</sup> [15, 16.]

- 10) Bayleys Hill, S. of Sundridge, 1958 **MNE**.
- 11) W. of Elmstone Hole, 1959. Roadside, Stone hill, Egerton, 1959, **MNE**.



[C= *carpinifolia* (*U. minor* ssp. *minor*)

G = *glabra*

Pr = *procera*]

**U. minor** Mill.ssp. **sarniensis** (C.K. Schneid.) Stace<sup>142</sup> [Jersey Elm] [15, 16.]

- 4) Wood at edge of marshes, Deerson, W. of Preston, 1956 **MNE**.
- 7) Stone Chapel, 1994. Coxett Wood, 1994.
- 8) Larkeyvalley Wood, Thanington, 1955 **MNE**. St Margaret's at Cliffe, 1955 **MNE**.
- 11) W. of Elmstone Hole, on ragstone escarpment, R.M. & F.R., 1959 **MNE**. NE of Grafty Green, R.M. & F.R., 1959, **MNE**. SE of Boughton Malherbe, R.M. & F.R. 1959 **MNE**. Foxden Wood, W. of Egerton, R.M. & F.R. 1959 **MNE**.
- 12) Lane off A.20, N. of Mersham, R.M. & F.R. 1959 **MNE**.

<sup>137</sup> *U. minor* ssp. *minor*.

<sup>138</sup> Also given under district 2).

<sup>139</sup> Given in the manuscript as *U. carpinifolia* Gled. throughout.

<sup>140</sup> Not in check-list. Given in manuscript as *U. stricta* Lindl. but with no entries.

<sup>141</sup> Given in the manuscript as *U. angustifolia* x *glabra*.

<sup>142</sup> Given in the manuscript as *U. x sarniensis* (Loud.) Melville. ?*carpinifolia*.

16) Copperhurst, Aldington, by roadside, R.M. & F.R., 1959 **MNE**. Port Lympe in woodland, R.M. & F.R., 1959 **MNE**. S.E. of Lympe Castle, 1947 **MNE**. W. end of Lympe Park Wood, R.M. & F.R., 1959 **MNE**. E. end of Lympe Park Wood, R.M. & F.R., 1959 **MNE**. Saltwood, L.J. Margetts, 1958, **MNE**.

#### **U. minor x plotii**<sup>143</sup>

- 3) ? Ellbridge, Stodmarsh together with *U. carpinifolia*, the dominants in wood on Thanet Sands, 1955 **MNE**.  
 5) ? Lattice coppice, N. of Knockholt Pound, in beechwood on chalk, 1956 **MNE**.  
 8) ? Capon Wood, S. of Hunt Street, Crundale (with *U. carpinifolia x glabra*), 1954 **MNE**.  
 9) copse in chalk pit, Monkton, Thanet, 1956 **MNE**.  
 12) SE of Westwell, on Gault clay, 1955 **MNE**.

‡ **U. plotii** Druce [Plot's Elm. 16.]

- 1) Hayes R[oa]d, Bromley, 1947, H.K. Airy Shaw; *Watsonia*, I, p.53, planted.

#### **MORACEAE**

##### **Morus** L.

**M. nigra** L.<sup>144</sup> [Black Mulberry.] [16.]

- 1) Abbey Wood, 1954, G.A.M.

##### **Ficus** L.

‡ **F. carica** Fig. H.

- 10) R[ai]l[wa]y bank, n[ea]r Sevenoaks Station, CAS.

- 11) Maidstone, L.R.A. Grove, 1958, **MNE**.

#### **CANNABACEAE**

##### **Cannabis** L.

‡ **C. sativa** L. Hemp. [15, 16.] H.

occurs occasionally as a casual on rubbish dumps, etc.

- 1) Wickham Tip, Mrs.Small.  
 6) Longfield Tip, 1956, PCH.  
 8) Stubblefield, Rubery, 2439 2557, '57 [? D McC].

##### **Humulus** L.

**H. lupulus** L. Hop. 15, 16 N.

Native, though also as an escape. Wet woods, fen carr, hedgebanks; locally common and widespread; certainly native in the fens about Sandwich (Ham Fen, etc.) and elsewhere in the Stour, Medway, and Thames Valleys. Widely cultivated in Kent; in the past, even more widely cultivated than now, so that it is not always easy to distinguish the truly wild from the escaped strains.

<sup>1st</sup> record, 1632; between Nash and Quex, Johnson, *Descriptio*, p.20.

- 1) 46 Crofton Heath PCH. 46 High Wood, Crofton PCH. Gravel pit, W. Wickham / Bromley, Hb. Davis **MNE**.  
 2) 76 wet copse, S.E. of Snodland, 1955 **MNE**. 87 R[oa]dside, Stoke, 821754, 1958, Mrs AG Side. 96 Luddenham, 1961, C. Turner,  
 3) 15 Oldridge Wood, Fordwich.  
 4) 35 Ham Fen, 1947 **MNE**; 35 Worth Minnis, 1950 **MNE**.  
 5) Valley S. of Timberden Bottom PCH.  
 6) Mounts Road PCH.  
 9) Damp copse SE of Durlock, Minster, 1959, Mrs AG Side.  
 10) Eynsford R[oa]dside PCH. Hedge N of Farningham PCH. St Johns Jerusalem PCH.  
 11) (R[oa]dside Wrotham PCH.) Str[eam], Addington Place, 1958, DMCC. Sandling Wood, 1958 **MNE**.

#### **URTICACEAE**

<sup>143</sup> Given in the manuscript as *U. carpinifolia x plotii* (? *carpinifolia*).

<sup>144</sup> Not in check-list.

**Urtica L.**

**U. dioica L.** Common Nettle. 15, 16. N.

Native. Waste ground, roadsides, rubbish tips, riversides, hedgebanks, woodland on deep base rich soils, partially drained marshland, neglected pasture; immensely common throughout Kent, and becoming more common and abundant; encouraged by sewage and industrial pollution, drainage of fens, disturbance of woodland by military occupation during 1939-45, rubbish tipping, and indeed any factors which produce an open, nutrient-rich soil, favoured by high phosphate ~~nitrate~~ concentrations, but in some wet alderwoods where it is extremely abundant, nitrate concentrations in the water were found to be very low on analysis. When once well established it tends to become dominant and to crowd out all other vegetation.

1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*, p.12.

1) Shooters Hill, '54 GMB. Abbey Wood PCH. Farningham Wood PCH; [FR] 82. Crofton Heath PCH. Holwood Park PCH. Bexley Ch[urch] y[ar]d PCH. R[iver] Cray N Cray PCH. N. Cray Wood PCH. High Wood Crofton, PCH. Dartford Heath, 54 GMB.

3) Weed, Murtons F[ar]m, Graveney, 1956, R. Theobald.

5) Halstead PCH. Polhill, Pilgrims Way PCH. Pilots Wood PCH. W of Highams Hill PCH. Wood, Darwins Bank Downe.

6) Darenth Wood PCH. Mounts Rd PCH. Dunstall Woods PCH. Preston Hill PCH. Wingate Wood PCH.

8) S. of Barfreton D.McC.

10) Knole Park PCH. Otford PCH. R[iver] path below Shoreham PCH. Eynsford PCH. S Darenth PCH. St J[ohn's] Jerusalem PCH. Sevenoaks tip, CAS, 1958. Westerham Wood 82.

13) Stone Cross Gill, Ashurst, CAS.

15) 56 Ham Hill Green, DMcC, '52.

var. **angustifolia** W.&G.

1) Abbey Wood, St. J. Marriott, B.E.C. Rep. 1925, p.894.

**U. urens L.** Small Nettle. 15, 16. C or N.

Native. Waste and cultivated ground, beaches by the sea, dunes, etc.; fairly common in most parts of Kent, rarer in the chalk districts and in the Weald. Commonest in market gardens and allotments on light soils, especially in N.W. and N.E. Kent.

1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*, p.12.

1) Shooters Hill, 1954, G.M.B. Elmstead Woods, 1956, Miss A. Mills. Swanley. Bexley Ch[urch] y[ar]d PCH.

2) Waste g[roun]d, Crossness, PCH. Grain.

3) Weed, Murtons F[ar]m, Graveney, R. Theobald 56.

5) Field W of Eynsford PCH. Potato field W. of Hogtrough Hill 62.

6) Mounts Rd PCH. Northfleet, 60 v[ery] a[bandant] weed, HAS (potato fields and r[oa]dsides).

7) 95 Garden, Eastling, 1961, C. Turner. Throwley, ES.

8) Arable S. of Barfreton DMcC.

10) Waste g[roun]d, S. Darenth PCH. St Johns Jerusalem PCH.

11) n[ea]r Sevenoaks Station, CAS. Tonbridge, J.R.W., 1941.

13) Farm weed, 643402, N. of Kippings Cross, CAS, 1957.

[‡ **U. pilulifera** L. (long extinct) Roman Nettle. [15, 16.]

Alien, formerly naturalised near the coast, also casual inland in gardens; probably extinct.

1) Garden weed, Blackheath, W.C. Trevelyan, (Loudons Mag. VIII, p.632); det. H.C. Watson as var. *dodartii* (L.) in Cybele Brit., vol.II.

15) Lydd and New Romney, Parkinson, *Theatrum Botanicum*, 1640, p.441: reputed by him to have been introduced by Roman soldiers and used by them to "chafe their limbs" to keep warm in the "extreame cold" British climate!]

**Parietaria L.**

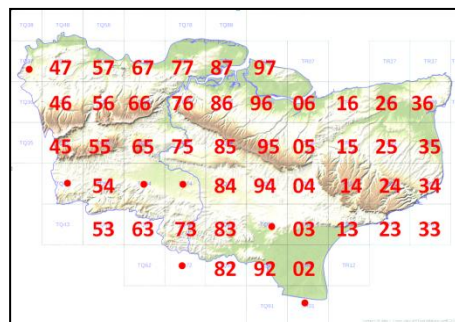
**P. judaica L.**<sup>145</sup> Pellitory-of-the-wall. 15, 16. N. 43/51.

Native. Chalk cliffs, and on and about old walls and rubbish heaps, particularly on or about churches; common near the sea and in the Thames and lower Medway valleys, frequent in the ragstone districts, thinly distributed elsewhere, though found on old walls even in the High Weald, where it is rare.

<sup>145</sup> In the manuscript given as *P. diffusa* Mert. & Koch, Wall Pellitory.

1<sup>st</sup> record, 1629: Gillingham Church yard, Johnson, *Iter*, p.4.

- 1) 47 Eltham Palace, 1906, T.F.B. 47 Old Bexley Church yard, 1905, WHG. 47 N. Cray Church, **MNE** 1954. 47 Bexley Ch[urch] y[ar]d Wall PCH. 46.
- 2) 77 Minster Church, Sheppey. 97 Eastchurch Ch[urch] y[ar]d. 06 Old Walls, Faversham and ch[urch]. 97 Queenborough Church. 87 Stoke Church. Snodland Church, A. Beadell. 87 Grain Church, 1958, Mrs AG Side. 87 All Hallows Church, 1945. 77 Higham Church, 1944. 77 Cooling Church 1944. 06 Davington Church REW.
- 4) 25 Staple, old wall, RGW; 1958, Miss B. Nash. 35 Sandwich, old walls. 26 Grove Ferry on wall REW '50. 15 Fordwich Church 1953 REW.
- 6) 57 Mounts R[oa]d. 57 Stone village walls and Church. 57 Walls and chalk cliffs, Greenhithe. 67 pits at Northfleet. 67 Swanscombe. 76 Cliffs, Strood. 78 Chalk Church. 76 Cuxton Church. 67 old wall, Red Street, Southfleet, 1958. 67 Northfleet Ch[urch] yard 61, HAS.
- 7) 76 Rochester Castle and Cathedral. 86 Rainham Church. 05 Chilham Castle 1051 REW. 95 Bredgar Church.
- 8) 14 Elham. 23 Abbots Cliff. 34 Dover Cliffs. 34 Cliffs, St Margarets Bay **MNE**.
- 9) 36 Chalk cliffs, Kingsgate.
- 10) 45. 56 old walls, Farningham PCH, FR. 57 old wall, Sutton at Hone. 57 Darenth Church **MNE**. 56 S. Darenth PCH. 55 Wall, Chevening Ch[urch] y[ar]d, PCH; FSEF, 1960. 56 Eynsford. 57 Dartford Priory. 56 Wall by bridge, Shoreham. 55 Knole House, Sevenoaks, CAS.
- 11) 65 Wrotham Church. 65 St. Leonards Tower, W. Malling. 75 Maidstone Church, and walls by river. E. Farleigh Bridge Hb. Lamb 1882 **MNE**. 85 Leeds Church. 85 Leeds Priory walls **MNE** 1959. 54 Tonbridge Castle FR, CAS. 84 Headcorn. [not 44] [not 64] [not 74]
- 12) 15 Canterbury Walls. 03 Smeeth Church. 04 Wye Church ES Edees 1949. 94 Westwell Ch[urch] ES.
- 13) 53 wall, Grosvenor Rd, T[unbridge] Wells KEB. 54 Wall, Penshurst Place, CAS. 63 Lamberhurst Church. 73 Goudhurst Church, 1957, **MNE**. 73 Cranbrook Ch[urch], 1956, D.S. [not 93]
- 14) 03 Rolvenden Ch[urch] y[ar]d, 1955, E.S. 82 Wittersham ch[urch], Oxney, 1962.
- 15) 02 New Romney, old walls. 02 St Mary in the Marsh Ch[urch] y[ar]d.
- 16) 13 Salt Wood. 13 Newington. 13 Wall, Hythe, Mrs MJ Comyn. 23 Folkestone.



#### **Soleirolia** Gaudich.<sup>146</sup>

- ‡ **S. soleirolii** (Req.) Dandy Mind-your-own-business. [15, 16.] E.
- 1) Churchyard, Parish Church, Woolwich, J. & P.C. Hall, 1956 **MNE**. By Cray, old Bexley, n[ea]r A2, G.M.B.
- 3) Whitstable Castle grounds REW, 1953.
- 8) Dover, Mrs Carlton.
- 11) Weed, Fairhill, 1948, DMcC.
- 13) Cabbage Stalk Lane, Tunbridge Wells Common, 1956, CAS. Victoria Rd., Southborough, CAS, 1956. Grange Cote, Bishopsdown, Tun[bridge] Wells, in turf, established, 1950, KEB.

#### ‡ **JUGLANDACEAE**

##### ‡ **Juglans** L.

- ‡ **J. regia** L. Walnut. [15, 16.] H.
- 1) Abbey Wood, 1954, G.A. Matthews.
- 6)E) 728766, 2 small trees in hedge of field, Cliffe, 1959, HMP. 87 Edge of sandpit S. of Beacon Hill, Upnor, 1957, PCH & JFH, 757711.
- 7) Belmont Park, 1958, D.McC.
- 11) Medway bank S. of South Park, Maidstone, 1958, EGP.

#### **MYRICACEAE**

##### **Myrica** L.

- M. gale** L. Bog Myrtle.<sup>147</sup> [15], 16 [now extinct<sup>148</sup>] N.

<sup>146</sup> In the manuscript given as *Helxine* Req. and *H. soleirolii* Req.

<sup>147</sup> The manuscript gives also as alternatives Sweet Gale, Sweet Willow.



Native. Bogs in fairly flushed situations; extremely rare.

1<sup>st</sup> record, 1640: Kent, Parkinson, *Theatrum Botanicum*, p.1451.

**1)** Keston Bog, W.C.R. Watson; 1944-55! **MNE** very locally abundant – the male plant only – by the stream through the bog. gone by c. 1960.

**[12]** Willesborough Lees, plentiful, E. Jacob, 1777; not recorded since. The Lees, though still of interest, has been much altered by partial drainage and enclosure, and we have been unable to find *Myrica* there, not even on the damp peat of Sweet Willow Wood: “sweet willow” is an old Kent and Sussex name for *Myrica*, and the name probably indicates where the plant formerly grew.]

**[13]** Near the Wells, Tunbridge, Martyn, *Pl. Cant.*, p.60; G. Wollaston; not recorded since then in Kent, though still locally plentiful ¼ mile over the S[ussex] border at Court Lodge Down.], and a few yards over the S[ussex] border, ¼ mile NW of Flimwell.

Still in several places in the High Weald of E Sussex, very locally frequent in W. Surrey; v[ery] rare in Pas de Calais.

## FAGACEAE

**Fagus L.**

**F. sylvatica L.**

Beech.

15, 16.

N.

Native. A characteristic woodland climax dominant species on chalk soils, and also locally on sands and loams where drainage is good.

**1)** Joydens Wood, f[requent]–l[ocally] d[ominant], on Blackheath beds 48. Beckenham Place P[ar]k, a few trees 55. Shooters Hill Woods, '54 GMB. Scadbury Park, frequent on Blackheath Beds '54. Keston Common, on Blackheath Beds, f[requent]–l[ocally] d[ominant], '54. Holwood Park, on Blackheath Beds, f[requent]–l[ocally] d[ominant], '54. Farningham Woods, (Thanet Sand), PCH; 82! [Mount Mascall, Bexley, PCH.]

**3)** Clay Hill Wood '55, on gravel, l[ocally] f[requent]. Blean Wood Dunkirk 55. N Bishopsden Wood 55. Church wood on gravel, 1¼m SW of Blean '55. L[ocally] dom[inant] on Thanet Sand, Hunstead Wood, Chartham '56. L[ocally] d[ominant] Joan Beech Wood, '57. L[ocally] abund[ant] as coppice and a few standards, Mincing Wood, Blean, '57. L[ocally] d[ominant] Grimshall Wood Blean '57. Holly Hill, RGW.

**5)** Wood (The Larches) W of Farnborough PCH. By A21, Polhill, dominant on Scarp. Above Tunnel mouth, Polhill, and to N., dominant. Pilots Wood, Polhill PCH. Chevening Park. On chalk, W of Eynsford PCH. Very old trees, decaying but still l[ocally] d[ominant], Lullingstone Park, '54. Wood W of Shoreham. Wood SW of Shoreham. Darwins Bank / Cuckoo Wood, Downe. 36 W. of Highams Hill 397612 PCH.

**6)** Woodlands Hill on Scarp N. of Ightham 55. Dom[inant] in wood on scarp, Wrotham Hill 55. Dom[inant] N. of Rifle Range S. of Eynsford. Kemsing Downs. Downs E. of Wrotham. Above Wrotham Water. Trottscliffe Hill, Downs to E. White Hill, Shoreham l[ocally] dominant and invading Scrub, 59. Dunstall Priory Woods, dominant 59. Preston Hill Shoreham '55 l[ocally] d[ominant]. Greenhill Wood, Otford. Ryarsh Downs (Forty acre Shaw). Birling Downs. Red Wood, Luddesdown 1947 (trees 120' high, > 200 years old) dom[inant] over c.20 acres./Up[pe]r Bush Valley, W. of Halling, l[ocally] d[ominant]. Wingate Wood, Halling, d[ominant]. Crookhorn Wood, Snodland, d[ominant]. Greatfork Wood. S. of Buckland. W of Buckland. Deans Bottom, Meopham.

**7)** Wouldham downs l[ocally] d[ominant] 54. Burham downs, invading Sorbus-Fraxinus-Acer camp seres, 1955. Boxley Warren, l[ocally] d[ominant] 59. West field Wood, 1950-59, dom[inant]. Bridgewood (Monks Wood) l[ocally] d[ominant], 55. Bluebell Hill '59. Horsted Valley l[ocally] d[ominant]. Lords Wood l[ocally] d[ominant] on chalk, '52. Rainham Park (d[ominant] at N. end) '52. Detling Hill; and downs to W. Queen Down Warren, and Woods on clay to N., '59. Bredhurst Hurst 55, l[ocally] d[ominant]. Down, BNE of Bredhurst Hurst 55. Purple Hill 53-9. Valley E of Scragged Oak 59. Valley E of L[owe]r Cox St[reet], 54.

**8)** RobSacks Wood, Wye Downs '54. The Junipers, Wye Downs (planted) 55. Not native E of Canterbury Folkestone R[oad], except possibly in Ileden Wood, 55; Woolwich Wood '55, a little only; and four trees at base of woods, N. side Alkham Valley; and four trees, Coombe valley Dover. (Planted by roadside, Keersney; Old Park, T[emple] Ewell; Woodville Park **MNE**; W. of Barfreton; Nonington; Goodnestone; N. of Coldred; Waldershare Park; W of Knowlton; Oxney Court, Ringwould; Patribourne; Bourne Park.)

**10)** Knole Park. (Horton Kirby PCH.) (Franks Park Farningham PCH.) local[l]y dominant, Rooks Hill, Underriver, 55.

**11)** occasional, Wood on Gault, SE of L[owe]r St Clere, Kemsing '55. Mereworth Woods, l[ocally] d[ominant] S of Mereworth and N. of Swanton Valley, '48. Starvecrow Woods N. of Tonbridge, on loam over Weald Clay '55.

**13)** Gill SW of Stone Cross, Ashurst CAS. Wood on T[unbridge] W[ells] S[and] SW of Leigh 55. Combwell Wood, 79. Gill on T[unbridge] W[ells] S[and], NE of Cobhambury Edenbridge '55. Dominant on river cliff, Ashour Wood, Bidborough, T[unbridge] W[ells] Sand, 1945-54.

**14)** Parsonage Wood, Benenden, l[ocally] d[ominant] on Ashdown Sandstone '57. Mopesden Gill, on sandstone, '55.

#### **Castanea Mill.**

‡ **C. sativa** Mill.

Sweet Chestnut.

15, 16.

D.

Introduced. Planted very extensively in the woods of Kent, nearly always for coppicing, especially on well drained acid soils, i.e. loams, sands, and gravels; also naturalised in places from seed. Commonest in the Blean Woods 3), on the N. Downs plateau 5)-8), the Folkestone Sand, the chert drift soils of the Hythe Beds plateau 10)-12), and on the lighter soils of the High Weald 13) and 14).

<sup>1st</sup> record, [blank]

**1)** Abbey Wood. Hayes Common **MNE**. N. Cray Wood PCH. Mount Mascall, Bexley, PCH. Holwood Park. Joydens Wood. Farningham Wood; 82!

**2)** Hawes Wood, Newington, 1959. Copse by str[eam] Bell F[ar]m, Minster, 1958, O Davis.

**3)** N. Bishopsden Wood 55. Church Wood W of Blean 55. Bysing Wood. Perry Wood.

**5)** Well Wood, W. Wickham, PCH. Pilots Wood Polhill PCH. Chevening Park plateau on c[lay] w[ith] f[lints].

**6)** Horton Wood. Dunstall Woods top PCH FR. Preston Hill top PCH FR.

**7)** Bridge Woods 55. Bredhurst Hurst 55. Stockings Wood on c[lay] w[ith] f[lints] plateau N of Detling '55.

**8)** Copse by Half Way House n[ear] Woolwich Wood, 55, on loam. Lady Wood Capel 1956 RAC.

**10)** Rooks Hill, local[ly] d[ominant] '55. Oldbury Hill v[ery] a[bundant]. Rose Wood Ightham l[ocally] a[bundant]. Severnoaks tip 1988 CAS.

**11)** F[olkestone] sand. Holt Wood, Aylesford '55 (d[ominant]). Leybourne Wood, 55. Larkfield Herth 59. Sandling Wood '55. Park Wood Boughton Mon[chelsea] '55. Oaken Wood Barming '55 (d[ominant]). Starvecrow Woods Tonbr[idge] (loam over W[eald] C[lay]) 55.

**13)** Wood on T[unbridge] W[ells] S[and], NE of Cobhambury SE of Edenbridge '55. Gill SW of Stone Cross, Ashurst, CAS. Combwell Woods, 79. Sissinghurst Park Wood. Angley Wood. Kilndown Wood. Chingley Wood. High Wood T[unbridge] W[ells], '79. Pembury Wood.

#### **Quercus L.**

‡ **Q. cerris** L.

Turkey Oak.

[15, 16.]

H.

**1)** 46 Holwood Park PCH. 47 Gattons Plant[atio]n PCH.

**6)E)** Cobham Woods, 683698, 1959, H.M.P. Holly Hill, 674624, 1959, HMP. 77 Woodland, Beacon Hill Upnor, 758713, 1957, PCH & JFH.

**7)** ‡ Belmont Park, 1958, DMCC.

**8)** Ruberry Down, 1948 DMCC.

**11)** 75 Sandling Wood, 1958, E.G. Philp. 85 R[oa]dside, Broomfield Wood, Kingswood, Mrs B Dodds, 1962.

**13)** 63 Hedge at entrance to Scotney Castle, Lamberhurst, JRW, 1941.

#### **Q. robur x cerris<sup>149</sup>**

**4)** Plucks Gutter, 1957, E.S.

‡ **Q. ilex** L.

Evergreen Oak<sup>150</sup>.

[15, 16.]

H.

**6)** Great pit, Horns Cross, 1962, self-sown.

**7)** Boxley Warren, naturalised and self sown.

#### **Q. petraea (Matt.) Liebl.**

Sessile Oak.<sup>151</sup>

15, 16.

N.

Native. Dry woods, mostly on sands and gravels, but not confined to such soils; locally abundant, especially on the cherty Hythe Beds plateau of west Kent, and on the sands of High Weald, but generally uncommon.

<sup>1st</sup> record, [blank]

**1)** Shooters Hill Woods, 1954, G.M.B. Keston Common. Joydens Wood, former dominant. Farningham Wood, dom[inant] in coppice; 82!

<sup>149</sup> Not given in the check-list. The occurrence of this hybrid at all is unconfirmed.

<sup>150</sup> In the manuscript, given also as Holm Oak and Ilex.

<sup>151</sup> In the manuscript, given as Durmast Oak, Sessile Oak.

- 3) Perry Wood, Selling, 1959 **MNE**. Denstead Woods, Chartham, 1950 **MNE**. Mincing Wood Blean (N[ature] R[eserve]). Bigberry Wood, RGW. Church Wood, Blean, RGW. Widespread on Blean gravels.
- 6) Mounts Road. Darenth Wood, 1960 **MNE** l[ocally] d[ominant] as coppice. Preston Hill plateau, a little.
- 6E) Northward Hill, High Halstow, on London Clay and 200' terrace gravel, 1950 **MNE**, dom[inan]t locally.
- 7) Squirrels Wood, Stockbury, on sandy loam over chalk, 1944. Bridge Woods plateau, 1998. Belmont Park, DMcC, 1958 **MNE**.
- 8) West Wood, Stowting, 1950 **MNE** on Pliocene sand. Wood W. of Stone Street, Lit[tle] Waddenhall, Stelling, 1961 **MNE**.
- 10) Dominant: Scords Wood; Brasted Chart; Toys Hill, S. of Beech area; Crockham Hill; Ide Hill (Hanging Bank); Fawke Common; Bitchet Common. Seal Chart. Oldbury Hill. Ightham Common.
- 11) Wrotham Heath, Valley Wood, 1956, **MNE** (F[olkestone] Sand). Penenden Heath, 1958, EG Philp: probably a relic here. King's Wood, Langley, dom[inan]t on chert drift, 1956 **MNE**; in W part – prob[ably] former dom[inan]t. Oaken Woods Barming [ N. Pole – prob[ably] former dom[inan]t- now very little here.
- 12) Willesborough Lees (on F[olkestone] sand) 1950, L.W.W. Plenty, mixed with robur and hybrids, in Ham Street Woods from Woodchurch to Bilsington.
- 13) Greybury Gill, CAS. Lane NE of Kippings Cross 1944. Wood on T[unbridge] W[ells] S[and] N. of Folly Hill, Colliers Green, 62. Still l[ocally] d[ominant], Angley Wood, Cranbrook, on T[unbridge] W[ells] S[and] 1960 **MNE**.
- 14) Standen Wood, Benenden, on T[unbridge] W[ells] S[and] 1960 **MNE**.

**Q. robur** L. Pedunculate Oak<sup>152</sup>. 15, 16 N  
Native.

- 1) Joydens Wood. Crofton Heath PCH. Holwood Park. Mount Mascall, Bexley, PCH. North Cray Wood. High Wood, Crofton. Abbey Wood. Chislehurst Common PCH. Shooters Hill Woods '54 GMB. Farningham Wood 82.
- 2) Copse by str[eam] Bell F[ar]m, Minster, 1958. O. Davis. Brambledown copse, 1955.
- 3) Fishponds Wood, Dunkirk, 1955 **MNE**. Holly Hill RGW. Oldridge Wood, Fordwich, 1960 **MNE**.
- 5) Pilots Wood Polhill PCH. Copse W of Highams Hill, 397611, PCH 1958. Wood above Darwins Bank, Downe, 1962.
- 6) Darenth Wood. Mounts Wood. Dunstall Woods, esp[ecially] on plateau c[lay] w[ith] f[lints]. Preston Hill on c[lay] w[ith] f[lints]. Greenhill Wood. Magpie Bottom. Stoneyfield Wood, Halling Downs PCH.
- 6E) Ladies Close Wood, 44 l[ocally] d[ominant]. Chattenden Wood, 62 l[ocally] d[ominant]. Northward Hill, 50 l[ocally] d[ominant].
- 7) Squirrels Wood, Stockbury, on loam, 1944 **MNE**.
- 8) Lady Wood, Capel, '56 R.A.C.
- 9) Sevenoaks tip, 58 CAS.
- 10) W of S. Darenth. Westerham Wood; 82! Copse N. of Brasted. Copse W. of Kemsing.
- 11) Gault: Ryarsh Wood, 1954 **MNE**. Horish Wood, '44-62. Honey hills Wood. Gore Wood. Snarkhurst Wood. Mereworth Woods. Comp Woods. Copse N of W. Malling Station '44. Warren Wood., E Malling. Oaken Wood, E Malling. R[ai]l[wa]y bank, Edenbridge 1955 DPY. Hobbs Wood, Marden Thorn. Brook Wood, Headcorn.
- 12) Ashford Warren. Coppice on W[eald] clay, 1m SE of Kingsnorth 1948 **MNE**.
- 13) Gill SW of Stone Cross, Ashurst CAS. Kipping's Cross, 1949, **MNE**. Wood N of Holly Hill, Colliers Green '62.
- 14) College Wood, Wittersham. Cuckoo Wood Wittersham.

**Q. petraea x Q. robur** = *Q. rosacea* Bechst.<sup>153</sup> N.  
1) Abbey Wood, St.J.M., BEC, 1922, p.747.

‡ **Q. rubra** L. Red Oak. H.

## BETULACEAE

**Betula** L.  
8. **pendula** Roth Silver Birch. [15, 16.] N.

<sup>152</sup> In the manuscript, given as Common or Pedunculate Oak.

<sup>153</sup> In the manuscript given as *Quercus intermedia* D.Don.

*B. verrucosa* Ehrh.; *B. alba* auct., L. p.p.

Native. Woodlands, scrub and heaths, on chalk, sand, gravel, clay and peat; very common throughout Kent, often in company with *B. pubescens*; more restricted to well-aerated soils than *pubescens*.

1<sup>st</sup> record, : [no entry]

1) Abbey Wood PCH. Keston Common. Chislehurst Common PCH & FR. Joydens Wood. Farningham Wood, PCH; 82! Beckenham Place Park 1958. R[iver] Cray, N Cray, PCH. N. Cray Wood PCH. Holwood Park PCH. Shooters Hill 54 GMB.

2) 87, 1 tree, Main Rd., Middle Stoke, Mrs AG Side. Cliff on Bagshot Sand, E. of Minster, Sheppey, 1959.

3) North Bishopden Wood 1955. Church Wood, 1 mile W of Blean 1955. Chequers Wood, Fordwich, 1955. Bigberry Wood, 1955 **MNE**. Foot of E. side of Clay Hill Denstrode 1951 REW.

4) Chislehurst (10k).

5) "The Larches" Wood, W of Farnborough PCH. Pilots Wood, Polhill PCH. Wood W. of Shoreham PCH. Darwins Bank Downe, '55 JEL; '62! 36 Copse W. of Highams Hill 397612 PCH '58.

6) Lords Wood, Darenth PCH. Horns Cross Great pit, 1962. Horton Wood PCH. Mounts Road PCH. Downs E of Shoreham PCH. Preston Hill PCH. Magpie Bottom PCH.

7) Ospringe Down HMW. Burham Downs, Culand end 1955. Downs N. of Bredhurst Hurst, 1955. Bredhurst Hurst, in glade 1955.

9) unrecorded for Thanet.

10) Toys Hill, 1954 **MNE**. Ightham Common n[ear] Ponds, '44. Westerham Wood 82.

11) Heriot Wood, 44. Holt Wood Aylesford '55. Sandling Wood, '55. Leybourne Wood, '55. Comp Woods, Mereworth, 1954 **MNE**. Park Wood Boughton Mon[chester] '55. A.21 SE of Hildenborough 55. Starvecrow Woods Tonbridge, 1955. Wet Wood N. of Four Elms (by road) ES. Hobbs Wood, Marden Thorn, 1954.

13) Lamberhurst, common, JRW. Wood on loamy T[unbridge] W[ells] S[and] NE of Cobhambury. Combwell Wood, 1943 **MNE**. Angley Wood, 1955 **MNE**.

15) scrub by gravel pit ponds, Romney Warren, 1959. Dungeness.

16) unrecorded for Folkestone Square.

**B. pendula** x **B. pubescens** = *B. aurata* Borkh.

N

**B. pubescens** Ehrh.

Downy Birch.

15, 16

N

Native. Woodland, scrub, and heaths, on chalk, sand gravel, clay, and peat, including waterlogged soils; very common throughout Kent, except in 2) Grain, 4) Lower Stour marshes from Canterbury eastwards, 9) Thanet, and 15) Romney Marsh; where it is unrecorded.

1<sup>st</sup> record: [blank]

1) Abbey Wood 1948 RAB. 37 Beckenham Place Park 1956 PCH. Joydens Wood, PCH. Keston Common, 1946 **MNE**. Farningham Wood 82.

2) Cliffs E. of Minster, 1954.

3) N. Bishopden Wood ES. Chequers Wood Fordwich '55.

4) Ham Fen, 1960 **MNE**.

6) Randall Wood, Shorne, on Eocene Sands and loam, 61, HAS.

7) Longbeech Wood, '62, on Pliocene sandy loam.

8) Wood n[ear] Wootton, Mrs. K.D. Rowlands, 1960, **MNE**.

10) Toys Hill, Brasted Chart, 1954 **MNE**. Westerham Wood 82. Seal Chart. Oldbury Hill. Ightham Common 44.

11) Leybourne Wood '55. Oaken Wood Barming '55. Ryarsh Wood, 1954 **MNE**, on Gault. Sandling Wood EGP. Starve Crow Woods, Tonbridge by stream '55. Hobbs Wood, Marden Thorn, '54.

13) Gill SW of Stone Cross, Ashurst, CAS. Lamberhurst in Woods JRW; Lamberhurst Down 55. Tunbridge Wells common. Wood E of High Wood, Pembury, 1944, **MNE**. Wood on T[unbridge] W[ells] S[and], NE of Cobhambury, Edenbridge 1955. Combwell Wood, 1943 **MNE**. Angley Wood, 1955 **MNE**.

14) L[i]t[tle] Pyx Hall, Hawkhurst '55. Mopesden Gill Hawkhurst '55.

**Alnus** Mill.

**A. glutinosa** (L.) Gaertn.

Alder.

15, 16.

N.

Native. Wet woods, usually by springs, flushes, or streams; stream and riversides; common throughout the county in suitable places; absent on Romney Marsh, rare along the N. Kent coastal plain, and rare in the chalk districts; extremely common on the greensand and chalk-gault springlines and in the High Weald, where it is on nearly every springline and in nearly every gill. It does not appear to flourish in brackish conditions or in



completely stagnant water, and in acid valley bogs only occurs where there is much wider movement, i.e. along the central streams of bogs; such “gallery woodland” can be seen at Hothfield Common.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p.31.

**1)** Catford. Scadbury Park (Holbrook Wood; Icehouse Wood); Petts Wood; High Wood, Crofton; Crofton Heath; Chislehurst; Moor Copse, Bickley; R[iver] Cray, North Cray; Bexley; Ravensbourne, Keston. Joydens Wood Valley PCH. Bexley Mill Pond PCH. North Crayford. Pond W. of W. Wickham 375661 PCH.

**2)** rare: Northfleet Brooks. Higham, N. of Church. Carr around and above the Pond, Tonge. Davington Osiers. Oare Mill Pond and woods S. of it. Carr, Waystreet F[ar]m, Hernhill. Carr, by Medway, S. of Burham; S. of Snodland.

**3)** Iron Hill, Boughton '57. Kemsdale Wood, Hernhill '56. Rhode common '59. N side of Bigberry Wood, loc[ally] dominant '54. Hunstead Wood, Chartham Hatch '56. Denstead Wood, abundant '50. down to below Fishpond Cottages '54. Old Park Canterbury '59. NW of Harbledown, '54. Dengrove Wood, Sturry '56. Mill Street, Hoath 59.

**4)** Wingham, fens N. of village (Lit[tle] Britton: G[rea]t Wenderton). Wet Woods N. and S. of Preston Church '58. Ham Fen '59. Hacklinge Marshes, '56. Worth Minnis '56.

**8)** Woolwich Wood, Womenswold 1955 **MNE**. Stafflands Wood, Sibertswold, both on chalk where overlain by clayey loam, as isolated coppiced trees in each case.

**9)** Copse S.W. of Minster. Dominant in wet copse S. of Durlock, S.E. of Minster, 1959.

**10)** St Johns Jerusalem PCH. By Darent, S. of Darent Church, 44; by Roman Villa; Farningham; Eynsford; below Shoreham; Lullingstone. Above S. Darent by R[iver] PCH. Greatness Moor. S. of Otford. Twitton copse. R[iver] N of Otford PCH. Westerham Wood 82. French Street, S of Brasted. Squerryes Park. Darent, W. of Brasted. Westerham. Sundridge. Crockham Hill. Scords Wood carr. Hill Water Bottom Wood. Below Chartwell. Dibden.

**11)** Long Wood, E of Brasted. S. of Basted. Buttons Bourne, Plaxtol. E of Dunks Green; Old Soar. Wet wood S.W. of Mereworth '55. Mereworth Park; Pizien Well. Leybourne castle lakes. Ryarsh Bourne. Lunsford Osiers. Well St[reet], E. Malling. Allington Lock by River L side 54, 55. Bottom of Sandling Wood in Sandgates [Beds] '55 **MNE**. Len Valley. Eden Valley. Medway Valley. Teise Valley. Beult. Wood by Str[eam] 1 m N. of Bough Beech '55.

**12)** Rooting St[reet] copse. Rooting Alders. Hothfield common, in Bog 1. Barkers Hill, Hothfield. Bybrook, Ashford. Chilton Park, at South source of Stour 60. Stour Bowley Lenham 54. Stour, S of Hubbards F[ar]m, Lenham H[ea]th, 60. 1m SW Charing Heath, carr by Stour, 60. Lit[tle] Chart n[ea]r Mill. Lit[tle] Chart by Ponds. Bourne Wood, Orlestone. Priory Wood, Bilsington.

**13)** Greybury Gill. Goudhurst Gill, Cowden. Gill SW of Stone Cross, Ashurst, CAS. Boggy Wood, 614395, SW of Pembury, PCH. Bedgebury Forest, 1947 **MNE**. Carr in gill W. of Folly Hill, Colliers Green, 1962. Wood by R[iver] Teise, Hoathly Lamberhurst 55. Valley Wood S.W. of Leigh '55. Gill NE of Cobhambury, Edenbridge '55.

**14)** Mopesden Gill, Hawkhurst '55. Wood SW of L[i]t[tle] Conghurst, Hawkhurst '55. College Wood, Wittersham '62.

A lacinate form at **13)** T[unbridge] W[ells] Common, 1896, E C Gilbert **TLS**.

‡ **A. incana** (L.) Moench Grey Alder. 15.

Introduced; naturalised locally. Wet woods, very rare.

**3)** Naturalised by stream in ravine, on Eocene sands, Iron Hill, Boughton-under-Blean, SE of Hickmans Green, 1957 **MNE**.

‡ **A. cordata** (Loisel.) Duby.<sup>154</sup>

**8)** Denton, Miss D.A.C. Long, 1960 **MNE**.

**Carpinus** L.<sup>155</sup>

**C. betulus** L. Hombeam. 15, 16. N.

Native. Woodlands on clay and loams, rarely on pure chalk soils; very common in nearly all wooded parts of Kent, particularly on the London Clay, Woolwich Beds, and gravel drifts of the Blean in 3), the clay-with-flints and Pliocene Beds of the North Downs plateau in 5)-8), on the gault, the Weald Clay, and the Wadhurst Clay; much less common on the L[owe]r Greensand strata and the Tunbridge Wells and Ashdown Sands. Usually

<sup>154</sup> Not in check-list; in the manuscript cited as L.

<sup>155</sup> In the manuscript, *Carpinus* and *Corylus* are treated under CORYLACEAE.

occurs now in Kent as a coppiced shrub, but standard trees occur occasionally, and old pollards occur often on ancient boundary banks.

Common throughout the Weald of Sussex and Surrey as far west as Loxwood; common in Essex and Pas de Calais.

1<sup>st</sup> record, [blank].

- 1) [Catford (Perry Hill) WHG.] Avery Hill 1907, J.F.B. Hurst Wood, Bexley 1906, Miss Pearce; '54 GMB. E. Wickham, JFB & W.H.G.] Joydens Wood, 1946 – l[ocally] d[ominant]. Farningham Wood, l[ocally] s[ub-] d[ominant]; 82! Petts Wood. Elmstead Wood, 1956, Miss A. Mills. Shooters Hill Woods, 54, G.M.B. Abbey Wood. Borstall Woods.
- 3) Blean Wood N. of Dunkirk, 55 **MNE**. Church Wood 1¼ m W of Blean, by stream, 55, 106600. Shelving Wood, Hoath, 1962. Hempshall Wood REW '50.
- 5) Rushmore Hill Wood PCH. New Years Wood, NE of Cudham, 1956 **MNE**. v[ery] fine trees, Lullingstone Park. Wood above Darwins Bank, Downe, on drift.
- 6) Claylane Wood, Cobham, 1961, HAS. Horton Wood PCH. Wood on Downs above Wrotham Water '62 (chalk and c[lay] w[ith] f[lints]). Scrub on chalk from below Crookhorn Wood, Snodland, 1943 **MNE**. Ladys Close Wood 44→. G[rea]t Chattenden Wood 44-62. Great Crabbles Wood 44→ 58. North Wood Cuxton 44 → Great W[oo]d, Cuxton 44→.
- 7) S. of Rainham, bridge Woods, Bluebell Hill. Purple Hill, on clay, '62. On sand, Roadside, Hartlip Hilol 1955. Wood on clay above Queendown Warren, 1955. Copse on coombe soil, below Purple Hill, 1955. Bredhurst Hurst, on Pliocene, s[ub-] dom[inant] 1955. Squirrels Wood, Stockbury, on loam, 1953 **MNE**. Hawkes Wood Chilham 1946 DHK.
- 8) 34 Coppice, S. edge of Eastling Wood, 1957, Miss B. Nash. Yocketts Bank.
- 10) Westerham Wood (copp[ice] on Gault PCH; 82! Copse on Gault N. of Brasted. Cockneys Wood, SE of Kemsing. Everlands, S. of Sundridge RA Clarke '60.
- 11) Ryarsh Wood. Park Wood, Boxley. Horish Wood l[ocally] d[ominant] 44→. Leybourne Wood, on F[olkestone] Sand, 55. N[ea]r N[orth] Pole, Oaken Wood, on chert drift, **MNE**. Langley **MNE**. n[ea]r Barming, Oaken Wood **MNE**. Woods on W[eald] Clay, Starvecrow Hill N. of Tonbridge '55. l[ocally] d[ominant] (coppice) on Gault, Horish Wood, Detling, 56. Snarkhurst Wood. Dering Wood, Smarden, 1960, on Weald Clay, **MNE**.
- 12) Coppice Wood 1m. SE of Kingsnorth, 1948 **MNE**. Woods N of Orlestone, '86,. Ham Street N[ational] N[ature] R[eserve].
- 13) Stone Crouch, Goudhurst, on clay '55.
- 14) Mopesden Gill, Hawkhurst, on Wadhurst Clay, 1955. Parsonage Wood, Benenden, 1958 **MNE**.

### **Corylus L.**

**C. avellana L.** Hazel. 15, 16. N.

Native. Woodlands of moderate to high base-status, both as a shrub usually coppiced, in coppice-with-standards oakwood on clays, sands and loams, in Ashwood and Ash-elm wood on chalk and ragstone, in open beechwood on chalk, and in chalk scrub; common and locally subdominant throughout Kent, except in the wood-less alluvial marshes of the Thames Medway and Stour estuaries and 15) Romney Marsh, where it is unrecorded. Very rare in 9) Thanet, the Swale plain, and Sheppey in 2). Formerly an important and valuable source of coppice poles and sticks, now either neglected or being replaced by chestnut coppice or high forest of greater economic value. The nuts are usually eaten, or hoarded by squirrels before humans can collect them.

1<sup>st</sup> record: [blank]

- 1) W. Wickham Wood, Hb. Davis 1916 **MNE**. Shooters Hill 1954, GMB. Dartford Heath 54 GMB. High Wood Crofton. Keston. Crofton Heath PCH. Joyden's Wood PCH FR. Farningham Wood PCH FR; 82!
- 2) Copse NE of Fenn Street, on L[ondon] Clay. Hawes Wood, Newington, '59, 865657. Streamside copse, W. of Bell F[ar]m Minster '59, l[ocally] freq[uent] 973731 **MNE**. One old bush, hollow by pond on springline, SE of Norwood F[ar]m, '59, Eastchurch, 975717.
- 3) Blean Wood Dunkirk 1955, 088608. N. Bishopsden Wood '55. Church Wood W. of Blean '55. Chequers Wood Fordwich '55.
- 5) Wood W of Shoreham. Pilgrims Way Polhill PCH. Chevening Park. Pilots Wood PCH, Darwins Bank, Downe.
- 6) Darenth Wood. Lords Wood, Darenth. Mounts Wood 44→. Horton Wood. Greenhill Wood Otford. Downs above Kemsing. P[ilgrims] Way, Kemsing →Wrotham PCH. Magpie Bottom PCH. Preston Hill PCH. Whitehill, Shoreham PCH. G[rea]t Crabbles Wood 44. Halling Downs. Great Wood Cuxton 44. North Wood Cuxton 44.

**6a)** Copse N. of Sharnal Street, H[igh] Halstow, on L[ondon] Clay '55. Ladies Close Wood 44. Chattenden Wood. Northward Hill Wood.

**7)** Queen Down Warren 55. Detling W Coombe 44. Stockings Wood Detling on c[lay] w[ith] f[lints] 55. Squirrels Wood Stockbury 44. Burham Downs E, 55. Copse below Purple Hill 55. Copse on Purple Hill 55. Bredhurst Hurst 44-62. Suomi Westwell.

**8)** Bridge Hill 55. Copse by A2, Halfway House, Denton, on clay, 55. Broad Downs Brook. Wood NW of S. Alkham, 1955. Lady Wood, Capel '56 RAC.

**9)** 36 Copse SE of Durlock, Minster, 1959.

**10)** Westerham Woods, FR & PCH; 82! R[iver] path below Shoreham PCH.

**11)** Wrotham Water '54. Ryarsh Wood. Park Wood Boxley '55. S[ub] d[ominant] Horish Wood '44. Oaken Wood, Teston **MNE**. Oaken Wood, Barming **MNE**. R[ai]l[wa]y bank Edenbridge 1956 DPY. R[ai]l[wa]y Hildenborough CAS. Brook Wood Headcorn '44-'60.

**13)** with peltate leaves, High Wood, Hawkenbury, CAS. Combwell Wood '79. Stone Cross, Ashurst CAS. Bedgebury Forest, 1948 **MNE**. South Park, Penshurst, '62.

**14)** Parsonage Wood Gill, SW of Benenden '57.

‡ **C. maxima** Mill.<sup>156</sup> Filbert. H.

## PHYTOLACCACEAE

**Phytolacca** L.

‡ **P. sp.** (probably is *P. acinosa* Roxb.). Pokeweed. H. [no account traced]

## AIZOACEAE

**Carpobrotus** N.E. Br.

‡ **C. edulis** (L.) N.E.Br. Hottentot Fig. H [no account traced]

## CHENOPODIACEAE

**Chenopodium** L.

**C. ambrosioides** L.<sup>157</sup> [Mexican-tea.] [16.]

**11)** Shoddy field, Wrotham Sta[tion], 1960, DMcC **MNE**.

**C. pumilio** R. Br.<sup>158</sup> [Clammy Goosefoot.] [16.]

**11)** Shoddy field, Wrotham, DMcC, 1961, **MNE**.

‡ **C. cristatum** (F. Muell.) F. Muell.<sup>159</sup> [Creasted Goosefoot.] [15, 16.]  
[Alien Australia.](#)

**1)** "Shoddy" fields, Stonehall Green, Hextable, 1950, D.McC, Hb. L., teste J.P.M.B.

**4)** field (sh[oddy]) Sandwich, 1960, DMcC **MNE**.

**11)** Shoddy field, Wrotham, 1960, DMcC.

‡ **C. capitatum** (L.) Asch. {Strawberry-blite.} [15, 16.]

[Casual alien in cultivated land, rare.](#)

**8)** 1 pl[ant] in carrot field, Patribourne, 1957, R. Gorer **MNE**.

**11)** vegetable field, near Langley, D. McClintock (sh[oddy]). Chart Sutton 1950, DMcC, det. JPMB.

**C. bonus-henricus** L. Good-King-Henry. 15, 16. D. 26/52.

[Denizen. Roadsides, village greens; widespread but rather rare. Formerly grown as a pot-herb; it clearly resembles spinach when boiled.](#)

<sup>156</sup> In check-list; no manuscript entry.

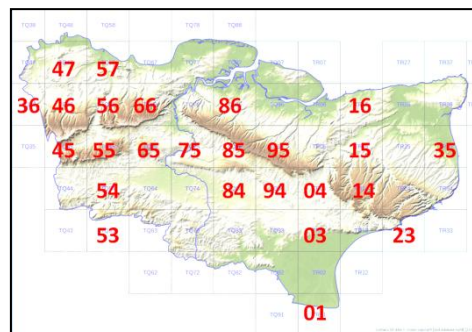
<sup>157</sup> Not in check-list.

<sup>158</sup> Not in check-list.

<sup>159</sup> Not in check-list. There are two entries for this species, in different parts of the manuscript, and these have been combined here to produce one account.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, *Descriptio*, p.20.

- 1) [47 Mottingham, 1906, L.C.C. Bot. Unit.] 46 Keston, 1933, PHC. 47 n[ea]r Lessness Abbey Farm, 1936, PHC; 1948, R.A.B. 46 Green Street Green n[ea]r Farnborough, G.M.B. 36 Near Coney Hall, Hayes, GMB. 36 Elmers End, 1915, Hb Davis **MNE**.
- 2) 06 Faversham.
- 3) 16 Sturry, path near R[ai][wa]y, 1962, Miss M.E. Millward. 15 Canterbury. Rhodes Minnis, P. Furneaux.
- 4) Deal, Miss J. Moore.
- 5) Roadside between Farnborough and Down, 1904, WHG. 46 Pratts Bottom, 1940: F.R. Browning.
- 6) 56 Mr. Knatts' Farm, Maples combe, 1905, WHG. 57 Green Street Green, 1957, P.C. Hall. 56 W. of Longfield, A. Beadell. 65 Meopham Green, KEB.
- 7) 86 Bredhurst village, 1944. 86 Hill Farm, Stockbury, 1960, E.Philp **MNE**. 95.
- 8) 23 opp[osite] Hawkinge Cemetery, VFPD. 14 n[ea]r Gate Inn, Rhodes Minnis, P. Furneaux.
- 10) 56 N. of Lullingstone castle, 1905, W.H.G. 56 Horton Kirby, 1954. 55 Greatness. 45 Brasted Ch[urch] y[ar]d 57 RAC. 55 Ightham Village, KEB.
- 11) **W)** Yalding, A.H.W.D., 1934. 55 E. Malling, 2 places. 65 Offham Village Green. 65 1942; 1956 **MNE**. 65 Red Hill, Watringbury. 66 S of Birling. 65 Mereworth. 65 Leybourne H Lamb 1883 **MNE**. E0 75 Maidstone Road, Boxley, 1881, E. Bartlett, **MNE**; 1960, E.P. 75 W. Farleigh Green. 84 Sutton Valence 47 DMcC. 75 Tovil, B. Carter. 75 Loose, B. Carter. 85 Sandpit, Burham, B. Dodds.
- 12) 94 Westwell Village. 04 Hinxhill, E. Scott. Mersham, CNP. Canterbury '55 RGW. Stowting, P. Furneaux.
- 15) 01 Dungeness. Lydd 1901 Lady Davy.
- 16) 03.



Elham 55; Headcorn, 58/60; Ashford; T. Wells '55; Tonbridge; Dungeness; Aldington; Folkestone '55; Westerham 57; Sevenoaks 55; Malling; Maidstone; Hollingbourne; Doddington; Canterbury '55; Sandwich; Keston, F.R.B.; Farningham; Chatham; Stockbury; Faversham; Woolwich (R.A.B.); Dartford.

### **C. glaucum** L.

Oak-leaved Goosefoot.

15, 16.

?N, C.

10/51.

Possibly native on the coast; a casual, sometimes becoming established inland.

1<sup>st</sup> record, 1793: Deptford, etc., Milne & Gordon, p.444.

[1] Formerly about Deptford, Lee, and Charlton: long extinct.]

2) 96 Queenborough goods yard, D.McC. 1938 (1947!) **MNE**. 06 Faversham Quay, Miss M. Cobbe (BEC, 1923, p.209). 96 Minster Marshes, by track from main road to Kings Hill Farm, Elmley, 1954, **MNE**. 96 Abundant in dump on sown grassland, N. of Blacketts, Tonge, D.McC. (1958!) **MNE**. 96 Conyer Brickworks, 1958, H.M.W., 1986! 75 One plant by pond, N. of Sewage Works, Aylesford, 1962.

3) 16 Wraik Hill, Seasalter, 100641, on manure heap, one plant, H.M.W., 1958.

7) 95 Eastling, C. Turner.

10) 55 Kemsing Station sidings, 1946, D.McC., **MNE**.

11) Borough Green Station, 1960, DMcC. 44 Edenbridge (waste ground at Falconhurst, Crouch House, etc.) G. Talbot & CE Salmon 1921-25.

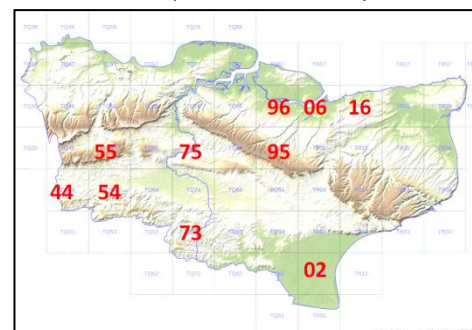
12) Cabbage field N of Vintners Park EGP. 75 Waste ground by A.20, 1958, Penenden Heath, Maidstone, EGP, **MNE**.

13) Bidborough GE Shaw. 54 Tunbridge Wells tip, 1941, JR Wallis; = High Brooms, J.H.L., 1945. +Wallaces Nursery T[unbridge] W[ells] KEB. 73 Cranbrook 1955.

14) Tudor Hall Hawkhurst 55 DMcC.

15) 02 Littlestone, 1947, **MNE**. Denge Beach SE of Lydd E Philp.

Teynham; Sheppey; Malling; Sevenoaks; Tonbr[idge]; Cranbrook '55; Maidstone 1959; Doddington 1958.



### **C. rubrum** L.

Red Goosefoot.

15, 16.

N.

38/51.

Native. Pond verges, brackish marhes and muddy pastures, waste ground, vegetable fields, farm yards, rubbish tips. Locally common in N. Kent and on the coast, rare in the Weald.



1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.14

1) 46 Hayes gravel pit, 1915, Hb. Davis, **MNE**; DMcC. 36 Beckenham, 1934, Hb. Davis, **MNE**. 37 Woolwich tip, 485790, '48, DMcC. 36 Hayes Common, 1951, J.D.L. Hayes Station tips PCH. Lessness Abbey RAB. 57 Joyce Green GMB. 37 Beckenham Place PCH. 47 Ruxley Pits.

2) 47 Woolwich Arsenal, 1944, MNE. 57 Erith. 57 Stone Marshes. 67 Swanscombe Marshes, JDL. Northfleet. 67 Denton. 67 Shorne. 77 Cliffe. 87 Grain. Aylesford Bridge. 07 pond at Warden. 97 Eastchurch. 06 Shellness. 06 Seasalter. 06 Harty Ferry, S. side. 06 Harty Isle. 96 Graveney.

3) 76 Wraik Hill, Whitstable, HMW.

4) Sandwich dunes, 1946 MNE. 35 Deal, Miss J. Moore 1960. 36 Richborough sidings 1962, Miss Milward. 35 Worth. 15 Fordwich Miss T Webber. 35 Ham, E. Robinson. Ickham DACL.

5) Downe tip 52 D.P.Y. & DHK.

6) 67 Gravesend. Longfield tip, '48, DMcC.

7) Eastling C. Turner. 76. 86. 05.

10) 55 Kemsing Sta[tion] DMcC. 45 Field E of Chevening Church, J.D.L.

11) Wrotham Sta[tion] '62 DMcC. 44 Edenbridge tip 56 DPM. 75 W of Edenbr[idge] DPY. 75 Oaken Wood, E. Malling 1942 **MNE**. 75 Farm yard, New Hythe. 75 Preston Hall, Ditton. 85 Fairbourne Mill, Harrietsham, Mrs Dodds, 1960. 75 Vintners Park, Maidstone, Cabbage field, 1958, EGP, **MNE** 64 Yalding, EGP, 1961.

12) 04. 94. 03. 93.

13) 63 Lamberhurst. 53, 54 Common in F[ar]m y[ar]ds, T[unbridge] Wells, 51/53 & 51/54, CAS. 54 Sewage Farm, T[unbridge] Wells, CAS.

14) 83 NE of Benenden. 83 NE of Tenterden R[ai]l[wa]y Sta[tion], 1959 **MNE**. 93 Woodchurch area, frequent ES.

15) 02 Littlestone Promenade, 1946, **MNE**. 92 borders of R[oyal] M[ilitary] C[anal], ½ m S. of Appledore, 1959. 92 Saline dyke, Fairfield, 1962, Mrs Rowlands.

16) Brockhill, LJM. Cliffe, Gravesend, Dartford, Woolwich, Blackheath, Keston, W. Wickham, Thanet E, Sandwich, Canterbury, Chilham '56, Doddington '58, Hollingbourne 1960, Maidstone, Malling, Sevenoaks ?'58, Ashford '56, Hothfield, Headcorn '58, Tonbr[idge] '57, Edenbr[idge] '56, Chatham, Stockbury '57, Teynham, Faversham, Whitstable '58, Aldington, Woodch[urch] '56, Tenterden, Lamberhurst, Romney, Appledore '59, Sheppey.

var. **cymosiflorus** Aellen

10) <sup>160</sup> Rubbish tip, Sevenoaks, 1936, HKAS, NYS & JPMB, K.

var. **pseudobotryodes**

1) Plumstead Marshes.

2) Denton Marshes.

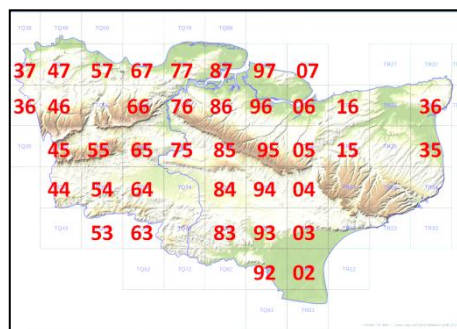
4) Sandwich Bay in sandy trench, DPY, 1947.

Cliffe; Gravesend; Dartford; Woolwich; Blackheath; Keston; W. Wickham; Thanet E; Sandwich; Canterbury; Chilham 56; Doddington '58; Hollingbourne 1960; Maidstone; Malling; Sevenoaks ?56; Ashford '56; Hothfield; Headcorn 58; Tonbr[idge] '57; Edenbr[idge] 56; Chatham; Stockbury 57; Teynham; Faversham; Whitstable 58; Aldington; Woodch[urch] 56; Tenterden; Lamberhurst; Romney; Appledore '59; Sheppey.<sup>161</sup>

**C. chenopodiodes** (L.) Aellen<sup>162</sup> Saltmarsh Goosefoot. 15, 16. N. 10/51.

Native. On mud, in brackish marshes and in dikes: rare, but locally very common in 2) in the Lower Thames estuary and the marshes adjoining the Swale E. to Graveney; rare in 4) and 15). This plant is characteristic of drying brackish mud, exposed in late summer by the fall of water level in dikes of the alluvial marshes, and in natural brackish marshes. In wet summers often few individuals can be found, as the seeds do not appear to germinate unless the mud is exposed to the air: in dry summers, the crimson-red fruits may colour the exposed mud over wide stretches.

1<sup>st</sup> record, 1864: Gravesend, Syme, *J. Bot.* p.253.



<sup>160</sup> District not given.

<sup>161</sup> All the entries in this list of 10km squares have been struck through in red ink, the same colour ink having been used for the insertion of 10km grid square references in the account text and for the preparation of the distribution map.

<sup>162</sup> In the manuscript given as *C. botryoides* Sm.

2) [Gravesend, Syme] (67 Denton Marshes, abundant, 1949!) 67 Shorne Marshes A.H.W.D. (1944 **MNE!** 1945!). 77 Higham: and 77 Cliffe Marshes A.H.W.D. (abundant 1945-1955! **MNE!**). 77 Egypt Bay, N. of High Halstow 1950, **MNE!**. 87 St May Hoo, 1952-61. 87 Grain Creek abundant, 1948 **MNE!**. 87 Wallsend. 87 Grain Crossing, 1945 **MNE!**. 87 Stoke Junction. 87 Port Victoria A.H.W.D. 96 Isle of Elmley, abundant all along coast, 1950-54 **MNE!**: 96/97 Minster Marshes (Smith) **MNE!**. 06 Isle of Harty, abundant E. of ferry, 1946: 06 Shellness. 06 Capel fleet N. of Harty 1959 **MNE!**. 07 Muddy pond, Warden Point, 1949. 96 E. of Conyers Creek, 1956, R.W. Butcher & F.R. **MNE!**. Graveney Marshes, 1949, J. Libbey. 06 Ditch near Oare Creek, 1962, H.M.W. 87 North Chetney Marshes, 1961, E.G.P. & G.M. S. Chetney Marshes (87, 86) 1962, v[ery] a[bandant] in fleets, 86.



4) [Pegwell Bay, H.C. Watson; Stonar, Syme.] 26 Brackish dike N. of Stuart, St. Nicholas, 1962.

15) 02 Brackish marsh S. of Littlestone, 1950 **MNE!** (site of the old Rother estuary). 92 Brackish meadows by Fairfield Church, 1962, Mrs K.D.R[owlands]. (sp!) 1994!

Egypt Bay; Gravesend; Cliffe; Grain; Sheppe; L[owe]r Halstow; Teynham; Faversham; Chislet; Romney; Appledore.

This species is probably far commoner in N. Kent than elsewhere in Britain, though further search in S. Essex may reveal that it is equally common there; I have seen it myself in Essex at Leigh marshes; and at Stansgate Abbey, E. of Maldon. It also occurs, very rarely, in E. Sussex (Rye Harbour), W. Sussex (Clymping!); on the S. Hampshire marshes; and near Yarmouth in E. Suffolk. In N. France I have observed it in brackish "pans" near the mouth of the Somme.

Seed identified as that of this species was found, together with that of *Atriplex littoralis* and fruit of *Ceratophyllum submersum*, in a Roman occupation site at Finsbury Circus, London; Reid, 1921 (Godwin, p.169): this suggests that it may have extended up the Thames in tidal marshes as far as London in Roman times, though the seeds may of course have been introduced from down stream.

### C. polyspermum L.

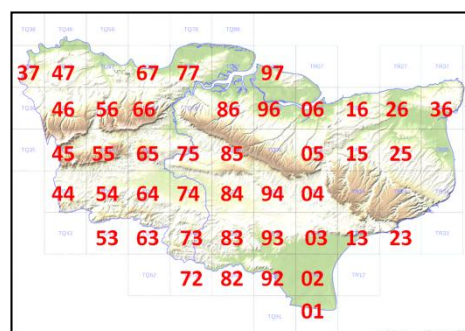
Many-seeded Goosefoot.

15, 16. N. 42/51.

Native, on the coast; colonist of cultivated ground, inland; also in waste ground, and woodland rides. Widely distributed, and common in many parts of Kent, especially in the Weald: rarer on the chalk.

1<sup>st</sup> record, 1777; Faversham, E. Jacob, *Pl. Fav.*, p.25.

1) Beckenham Place PCH. 46 St Mary Cray. 47 North Cray. 47 N. Cray tip, PCH. Penge West Sta[tion], 1951, J.D.L. Strawberry Fields, Crofton, 1903 WHG. Bromley; Beckenham, 1897, Scargill. Near Joydens Wood St J M. Lessness Abbey, RAB. Mill Pond Wood, Chislehurst GMB. Ruxley pits. Hayes, Scargill; DMCC. By Farningham Wood, PCH.; HMP. Holwood, D.McC. Penge, S.E.C.



Park Langley, Beckenham, 1915, Hb. Davis, **MNE!**, 1934. Ravensbourne, Bromley, 1915, Hb. Davis, **MNE!**.

2) Cuxton, AHW.D. Beach Sheerness, JSM. Upchurch, FM Webb. Dartford Marshes.

3) Milne, Sturry, 1952, DMCC. Herne Bay, Trimen. Coast E of Whitstable; S. of Herne Common, FJH. 16 Bishopstone, 1955, **MNE!**. S of Broadoak, RGW. Hales Place Wood site MEM. 05 Perry Wood, Selling, 1959, **MNE!**. 26 Shelving Wood, Hoath in 1 y[ea]r coppice, 1962. 16 Blean, C. Turner.

4) 16 Sturry, 1947, L.W.W. Chislet, E.S.M. 15 Fordwich, Miss T. Webber, E. Robinson.

6) 67 Shorne. Court Wood Higham. 66 R[oa]dside, Longfield Hill, 621679, Mrs D. Woods.

7) (Rochester, W.W.R.) 86 S of Bredgar on dump in Pit, 1963, H.M.P. 96 Wood above Ospringe Down, H.M.W., 1958. Above Lenham, Cobham F[ar]m, 1950 DMCC.

8) 04 Cadman's Wood, Brook, '51, DACL.

9) 36 Margate, 1950, L.W.W.

10) 55 Goldings, Sevenoaks, Lovis. Gault pit Greatness, RAC.

11) 75 E. Malling, 1944 **MNE!**. Trosley, Shepherd. Hadlow, EMH. Allington, H. Lamb. Farleigh, Stevens **BM!**. 84 Headcorn, ESM; 1949! **MNE!**. 65 Leybourne, EGP, 1961. 65 Ryarsh. 65 Addington. 65 Yalding, 1897, H. Elgar, **MNE!**. 75 Ride, Park Wood, Boxley, 1958 E.P. 1958 **MNE!**. 85 Garden, Polhill, Harrietsham, Mrs B. Dodds. 64 Golden Green, A.P. Brawn. 44 Edenbridge tip, '56, DPY.

12) Ashford, FM Webb. Westenhanger; Smeeth, ESM. Canterbury Precincts 1958 MEM. 15 Churchyard, Canterbury, Miss J Nisbett. 04 Hinx hill, 1956, **MNE!**.

**13)** 44 Cowden, 1947. 73 Sissinghurst, 1949. 73 Brewers Wood, Cranbrook. (Tun[bridge] Wells Miller.) Cranbrook ESM. 53 Tunbridge Wells SE, 592385, 1960, E Shorrocks. Wood E of Horden, Cranbrook.

**14)** 73 Wood at Diprose, Benenden, 1949. 72 Sandhurst in fields, 1946. 83 near Breaches Pond, 1947. 82 Wittersham, 1956, **MNE**. Hawkhurst, JC Melvill. 83 Railway NE of Station, Tenterden 1959, **MNE**.

**15)** 01 Dungeness. 13 Hythe. 02 Lydd Common. S. of Ham St[reet], FJH. 92 R[oyal] M[ilitary] C[anal], E of Appledore, B. Dodds. SW of Small Hythe in wheatfield. 23.

**16)** 03 Aldington (Postling Green). Saltwood ESM. 13 Sandling Road, Hythe, waste ground, LJM. Cult[ivated] g[roun]d, Park F[ar]m, V.F.P.D.

Blackheath '55; Woolwich '55; Gravesend; Cliffe '55; Elham; Alkham; Dover; Sevenoaks; Hollingbourne; Doddington; Sandwich; Grain; Sheppey; T[unbridge] Wells; W. Wickham; Chilham; Chislet; Dartford; Folkestone '55; Hythe; Aldington '55; Woodchurch '55; Tenterden; Cranbrook; Hawkhurst '56; E Oxney; W Oxney; Sandhurst; Romney '56; Dungeness '56; Edenbr[idg]e '55; Tonbr[idg]e '55; Pembury '55; Marden '55; Headcorn; Hothfield; Ashford; Westerham; Malling; Maidstone; Chilham; Canterbury; Wingham; Orpington; Farningham '55; Cobham '55; Stockbury '56; Teynham; Faversham '56; Whitstable '55; Thanet '55.

**C. vulvaria** L.                      Stinking Goosefoot.                      15, 16.                      N.                      8/51.

Native, on dunes and beaches on the coast: alien in cultivated fields and waste ground inland; rare, though locally frequent.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, Pl. Fav., p.13



*Chenopodium vulvaria* site, Princes Golf Course, Sandwich Bay, 13 August 1986. Photo by Rosemary FitzGerald.

**[1]** Woolwich Common 1923, St J.M. in Hb. No recent records; many old ones: Brockley, Deptford; Blackheath; Woolwich Warren; Lewisham, M&G. Greenwich Park, W.W.R. Lee, Crockenhill.]

**2)** behind N Beach Grain, S. Davey 1994. 06 Faversham Creek, E. Jacob; 1949! L[ocally] v[ery] a[bundant] S of Queenborough, J Pitt. [Woolwich Arsenal, AHWD; Higham Street, FJH; Upchurch, FM Webb; about Faversham, AHWD; Davington Hill, Cowell Fav.; By Medway S. of Rochester, FJH.]

**3)** [Whitstable, F.J.H.]

**4)** 35 frequent in tracks on the dunes, Sandwich Bay: J. Woods; ESM; v[ery] occ[asional] by club house Princes links, 1946-1953 **MNE**, 1986! C.50 pl[ant]s. Deal, H.C. Watson. 36 S. of Pegwell Bay, ESM; Gravel pit S. of Richborough 1946 **MNE**. 36 Ebbsfleet, 1945. Rubbish tip, Deal, Mrs. Begg.

**6)** 76 Halling, 1949, in field W. of village, **MNE**.

**7)** Waldershare, Hepworth.

**8)** Ringwould, Mrs Benson. Dover Parade, J. Woods.

**9)** Minster Abbey, below the walls, Flower.

**10)** Waste ground, W. Kent Cold Storage Works, Dunton Green, 1962, R.C. Palmer (Hb. Dr[uce], Ox.).

**13)** [Hythe Town, FGEK.] 13 Old shingle, Willow Tree F[ar]m, Burmarsh R[oa]d, Hythe, LJM.

15) a[bandant], Hythe W. Beach, CE Britton, abundant, 1949! **MNE**. 13 n[ea]r Boathouse Cafe, Seabrook, Miss V. Day. 02 Littlestone, ESM, abundant on sandy ground, 1946! **MNE**. 01 Dungeness, C.N.P. [New Romney, JSM.] 02 Lydd Common, 1946, **MNE**. Lydd SE, 65, B. Dodds.

‡ **C. hybridum** L. Maple-leaved Goosefoot, Sowbane. 15, 16. C. 7/51.

Probably introduced. Waste ground and cultivated land, v[ery] rare.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p26.

1) [Deptford to Brockley, Sydenham M&G. Charlton, Syme.] 46 St Mary Cray 1944, RWH, JEL, FR & CW. 56 Abundant in orchard, S. of Farningham Wood, J.E.L. (1947!). 47 Flower Bed weed, Lessness Abbey, 1951, LNHS Excur[sion] GAM.

2) [Woolwich, AHWD. Woolwich Common 1922 St JM.] [Crossness, AHWD.] [Faversham, Jacob.] Stone Marshes on pit fill, 1959, HMB.

3) 15 2 miles W. of Canterbury, 1949. 15 Orchard at Harbledown, 1951-2, Miss E. Milward.

4) 25 Wingham, field below Lit[tle] Britain F[ar]m 1947. 26 Stodmarsh, Undertrees F[ar]m, 1958, E.G.P. **MNE**.

6) 57 near Darenth Wood, H.M. Pratt. (Singlewell, Northfleet, Greenhithe M&G.) Greenhithe, 1863, ex hb. Lamb **MNE**.

8) 15 Allotment edge, Bishopsbourne, 1960, **MNE**.

10) By path S. of church, Darenth, 1948-52, H.M.P.

11) Ryarsh, waste ground, 1896, W.M.R.

12) Canterbury, Miss J. Nisbet; E. Robinson. Field by church, Chartham, Lady Ann Brewis, 1962.

Keston; Farningham; Woolwich; Wingham; Dartford; Whitstable 55; Canterbury.

[‡ **C. urbicum** L. extinct?] Upright Goosefoot. [15, 16.] C.

Alien, apparently extinct.

No recent records.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.26. Some of the records given may be errors.

1) Greenwich Flats E de C.

2) Faversham, Jacob; Cliffe Creek, FJH.

4) Dyke by Road S. of Chislet, F.M. Webb.

9) Farmyards, Thanet, Dr. Hunter, Fl. Thanet.

10) Field near Fawke Common, 1874, Roper.

**C. murale** L. Nettle-leaved Goosefoot. 15, 16. C. 17/51 [22/51].

Possibly native on the coast; only casual or colonist in fields, etc. Inland: rather rare.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.* P.14

In Surrey, Sussex, Essex and N. France

1) 47 Plumstead; 47 Eltham; 47 Abbey Wood, AHWD. [37 Deptford; 37 Greenwich, M.&G.] 46 Fields W. of St Mary Cray, 1944, JEL, FR & CW. 46 Bickley, 1941, FRB, det. AJW. 57 "Shoddy" alien, Plaxdale Green, 1945, DMCC; Hb. L. 56 Orchard S. of Farningham Wood, plentiful, 1948, R.A.B. Woolwich Common '60 GMB. 47 Lessnes Abbey Ruins, R.A.B.

2) [77 Higham, F.J.H.] [86 Upchurch, FM Webb.] [06 Faversham, E. Jacob.] 96 Blacketts, Tonge, 1958, D.McC. 87 Field by Grain Church, Mrs. M.H. Dolling, 1962.

3) [16 Seasalter, AHWD & ESM.]

4) 36 N. of Sandwich, FM Webb; ESM. 25 Wingham FGEK: Lit[tle] Britton F[ar]m, Wingham, 1947, in vegetable field on peat. [35 Walmer Beach, JSM.] 35 Deal, H.C. Watson; 1960, Miss J. Moore.

7) 76 Chatham, B. Carter.

8) 15 Kingston, in wheatfield SE of Bonny Bush Hill, Miss DACL, conf. R.W. Butcher. [S. of St. Margarets, JSM.]

9) 36 Margate, 1947; 1950; L.W.W.

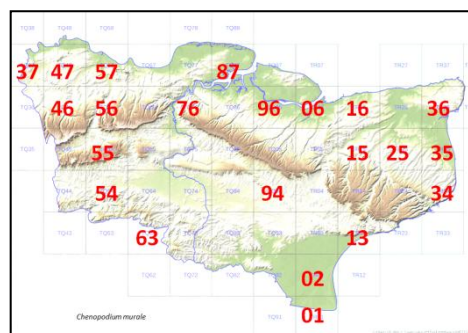
10) 55 Kent Cold Storage Works, Dunton Green, 1961, R.C. Palmer.

11) 75 Barming Heath, H. Lamb, 1898 **MNE**.

12) 94 Little Chart, B. Carter. G[reat] Chart ES.

13) 63 Halls Hole, Tunbridge Wells, 1897, Gilbert **TLS**. 54 High Brooms Brickworks, 1950, K.E.B.

15) 13 Willow Tree Farm, Burmarsh R[oa]d, Hythe, 1956 **MNE**. 13 Fields at W. Hythe 1947. Lydd Common, 1946, **MNE**. 01 near Hope & Anchor, Dungeness; and E of Wicks; WJL





Sladen, 1947. 02 Dungeness Bird Observ[ervatory], 56 JD Stephen, J Palmer. 12 Appledore; 02 Littlestone ESM; 1901 Lady D[avy]. 02 Dymchurch, FJH.

16) [Sandgate, G. Walton.] 13 Sandling Park, cabbage field, 1959, LJM. 13 Seabrook Nurseries, 1961, VFP Day.

### **C. cymosum**<sup>163</sup>

13) Tun[bridge] Wells, 1899, E.C. Gilbert, TLS.

‡ **C. dessicatum** A. Nelson<sup>164</sup> [Slimleaf Goosefoot.] [15, 16.]

1) Green Street Green, on waste ground, JPM Brenan, BEC Rep, 1939-40, p.291.

12) Chylmington Dump DMcC & ES, det. JPMB.

‡ **C. ficifolium** Sm. Fig-leaved Goosefoot. 15, 16. C. 9/51

Colonist. Cultivated and waste ground, rubbish tips, etc. Rare.

1<sup>st</sup> record, 1724: Reculver, etc., Mr. Dale, Ray, Syn. Ed.3, p.155.

1) Green Street Green, near Farnborough, 1937, J.E.L., Hb. L. Bickley, 1941, F.R.B., det. A.J.W. [Lee; Charlton, M.&G. Greenwich, Syme. Eltham, Woolwich, AHWD]. ...S. border Farningham Wood 82!

2) N. of Dartford, G.M. Brown. [Crossness; Woolwich Arsenal; AHWD. Canal, Higham Street, FJH. Below Faversham, Ray Syn; 1894, AHWD.]

4) Path E of Sandwich KEB.

5) Kale field Pilgrim Ho[use], Westerham, 1962.

6) [Ranscombe Farm, Cuxton, A.H.W.D.]

8) Wye, Miss M. Cobbe, BEC, 1923, p.209.

11) East Malling R.S. Ditton, C.W., 1942 MNE. Hop Gardens and Arable W. of R. Teise. E. of Horsmonden, 1956 MNE. Tonbridge Gasworks and Station, 1953 KEB. Orchard, Allington, 1949 MNE.

12) Chilmington Dump, ES, 983411.

13) Pantiles in Garden, 1953, KEB. Dunorlan Park, KEB.

Hothfield; Sandwich; Keston, Dartford; Meopham; E Oxney; T[unbridle] Wells; Cranbrook; Tonbridge.

### **C. filifolium**<sup>165</sup>

13) Cowden, 1910, E.C. Gilbert, TLS.

‡ **C. hircinum** Schrad.<sup>166</sup> [Foetid Goosefoot.] [15.]

12) Chylmington dump, DMcC, L.E.S., det. J.M.P.B.

‡ **C. berlandieri** Moq.<sup>167</sup> [Pitseed Goosefoot.]

‡ **C. opulifolium** Schrad. ex W.D.J. Koch & Ziz (casual alien). Grey Goosefoot. C.

1) E. Greenwich Marshes. Plumstead, AHWD. Tripcock Ness and Crossness, A.H.W.D.; Crossness, G.C. Druce, det. Dr. Murray, BEC 1926 p.130.

2) Brickfields by Faversham Creek, 1894 AHWD.

4) Sandwich. Worth, RGW.

10) W. Kent Cold Storage Works, 1961 RC Palmer, conf. J.P.M.B. (Hb. Dr[uce], Ox).

11) Tonbridge square, 1956, C. Stace. Hildenborough Sta[tion], 56, KEB.

13) 1 pl[ant] garden near Tun[bridge] Wells cent[ral] Sta[tion] 1953, KEB.

**C. album** L. Fat-hen, White Goosefoot. 15, 16. N. 51/51.

Native, on the coast; introduced, inland; beaches, sea and river-walls, waste ground, farmyards, roadsides, cultivated land; extremely abundant throughout Kent

1<sup>st</sup> record, 1777; Faversham, E. Jacob, Pl. Fav., p.13

<sup>163</sup> Not in check-list, and no authority given. Probably a nomen nudum: perhaps *C. griseochlorinum* f. *cymosum* F. Dvořák, or *C. gigantospermum* f. *cymosum* Aellen (a synonym for *C. simplex* (Torr.) Raf.).

<sup>164</sup> Given as *C. pratericola* Rydb. var. *Thellungeanum* Aell. In manuscript.

<sup>165</sup> Not in check-list and no authority cited, but *C. filifolium* Krock. Is now treated as a synonym of *C. ficifolium* Sm.

<sup>166</sup> Not in check-list.

<sup>167</sup> Given in manuscript with no details; not in check-list.



- 1) Keston. Woolwich. Hayes. Bromley. Chislehurst, **MNE**. Swanley. Hawley. Southend, WHG (viride). Crofton Heath PCH. Bexley Millpond PCH. Ruxley Pits. Shooters Hill, GMB.  
 2) N. of Dartford. Grain. Hoo. Woolwich Arsenal. Charlton by Thames 1843 R. Pryor **MNE**. Funton Creek, '62.  
 4) Hacklinge. Sandwich Bay. Richborough. Wingham.  
 5) Halstead. Westerham (near Pilgrim Ho[use]). Field W of Farnborough. N of Brasted.  
 6) Stone. Northfleet. Shorne. Cliffe. Gravesend 1900 CP Hurst **MNE**. E of Kemsing.  
 7) Kale field, Westwell, 1958 EGP **MNE**.  
 10) St John Jerusalem. Brasted Marsh RAC. [Seven]oaks tip. Kemsing Sta[tion] 48 DMcC.  
 11) E. Malling. Thurnham 1947 MLNH, **BM**. Hildenborough Sta[tion] 1955 **MNE**. Pad St[reet] Hedges, Maidstone, 1957 EGP **MNE**. Edenbridge tip DPY.  
 12) Chylmington Dump 57, ES & JEL, det. Aellen.  
 13) Stone Cross, Ashurst 518381 CAS.

Westerham 55; Sevenoaks 55: Welling; Maidstone; Hollingbourne; Doddington; Chilha; Canterbury; Wingham; Sandwich; Edenbr[idg]e 55; Tonbr[idg]e '55; Pembury 55; Marden 55; Headcorn 55; Hothfield; Ashford; Elham 55; Alkham 55; Dover; T[unbridge] Wells; Lamberhurst 56; Cranbrook; Tenterden; Woodchurch 55; Aldington 55; Hythe 55; Folkestone '55; Romney, E. Oxney; W. Oxney; Sandhurst; Dungeness; Beckenham; Orpington; Farningham; Cobham; Chatham; Stockbury; Teynham; Faersham; Whitstable 55; Chislet; Thanet; Blackheath; Woolwich; Dartford; Cliffe; Graves[en]d; Sheppey.

‡ **C. reticulatum** Aell. [*this is annotated, include under album*]<sup>168</sup>

- 1) Green Street Green (Farnborough) JPMB, BEC, 1939-40, p.291.  
 11) near Pendenden Heath, Maidstone, 1957, E.G. Philp.  
 12) Canterbury West station 57, Miss M.E.M.

‡ **C. suecicum** J. Murr.<sup>169</sup> (indistinguishable from album except on microscopic characters of seed coat.)

- 13) specimen labelled this Tunbridge Wells, 1899, E.C. Gilbert **TLS** should be checked!

‡ **C. probstii** Aellen<sup>170</sup> [Probst's Goosefoot. 15, 16.]

Alien, Australia.

- 1) Shoddy field, Plaxdale Green, Hextable, 1948, D. McC; Hb. L.  
 4) Sandwich, Shoddy field, D. McC, 1959 [or 1960], **MNE**.  
 11) Comp, shoddy field, 1960, DMcC, **MNE**.

[‡] **C. virgatum**<sup>171</sup> [16.]

- 13) Building site, Culverden Down, Tunbridge Wells, 1962, KE Bull, det. J.P.M.B.

**Atriplex** L.

‡ **A. hortensis** L.<sup>172</sup> [Garden Orache. 15, 16.]

- 1) Hayes, by road from Railway Station to Common, 1944.  
 7) Highstead Pit, Tunstall, DMcC.  
 11) Platt '49 DMcC. Boro[ugh] G[ree]n Sta[tion] Y[ar]d 48 DMcC. Edenbr[idg]e tip 56 DPY.  
 12) Great Chart, 1950, ER & ES, **MNE**.  
 13) waste ground, High Brooms Brickworks, 1950, KE Bull.

**A. sagittata** Borkh.<sup>173</sup> [15, 16.]

- 7) Highstead Pit, DMcC, 1953.  
 12) Chylmington Dump, E.S. ("A. nitens"). G[rea]t Chart ES, det. JEL.

**A. prostrata** Boucher ex DC..<sup>174</sup> Spear-leaved Orache. 15, 16. N. 47/51.

<sup>168</sup> Not in check-list.

<sup>169</sup> Not in check-list.

<sup>170</sup> Not in check-list. There are two accounts for this species, in different parts of the manuscript, and these are combined here to produce a single account.

<sup>171</sup> Not in check-list and no authority cited. If *C. virgatum* (L.) Ambrosi, it may now be a synonym for *C. foliosum* Asch.; if *C. virgatum* Thun., it may be a synonym for *C. acuminatum* Willd. N. of Blaketts; Tonge

<sup>172</sup> Not in check-list.

<sup>173</sup> Given as *A. nitens*, without citation; not in check-list.

<sup>174</sup> Thus in check-list; given as *A. hastata* L., Halberd-leaved Orache, in manuscript.

(= *A. hastata* auct. non L.)

Native, in the same habitats as the last species [*A. patula*], and like it, very common throughout Kent.

1<sup>st</sup> record, 1816{ near Tunbridge Wells, Forster, *Fl. Tonbr.*, p.115.

1) Elmstead, Beckenham, Hb. Davis 1915 **MNE**. Shooters Hill GMB. Dartford Heath. Bexley Ch[urch] y[ar]d PCH. By R[iver], N. Cray PCH. Ruxley Pits.

2) Grain. Upnor. Higham. Halling, 1943 **MNE**. River bank, Cuxton, PCH. Woolwich Arsenal, PCH, FR. Shellness, 1963. Cray Estuary GMB.

3) Rose in Bloom, Seasalter, 1958, H.M. Wilks. Leysdown, Hb. Davis, 1918 **MNE**. Swalecliffe.

4) Pegwell Beach, 1946 **MNE**. Coast E. of Reculver, 1946 **MNE**. Shellness.

6) Springhead, Northfleet. Buckland R[oa]d, Luddesdown, PCH.

10) Horton Kirby, PCH. S. Darent PCH. River path below Shoreham PCH. Path, Ide Hill 483517 CAS. [Seven]oaks tip CAS.

11) Peel St[reet] Hedges, Maidstone, 1957, EGP, **MNE**. By Medway, Tonbridge, CAS. E Peckham, CAS.

13) Hilbert Rec[reation] G[roun]d, T[unbridge] Wells, CAS. Quarry Rd., T[unbridge] Wells, 589405, CAS.

15) Lydd, H. Elgar, 1897, **MNE**. E. of Sandgate, 1955, **MNE**. Palmarsh, Hythe, **MNE**, LJM.

Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich; Blackheath; E Thanet; Chislet; Whitstable; Faversham; Teynham; Stockbury; Chilham; Cobham 56; Farningham; Keston; Sandwich; Wingham 55; Canterbury 55; Chilham; Doddington 55; Hollingbourne 56; Maidstone; Malling; Sevenoaks 56; Westerham 55; Dover; Alkham 55; Elham 56; (Ashford UR); Hothfield 55; Headcorn 56; Marden 55; Padd[ock] Wood 55; Tonbr[idg]e 55; Edenbr[idg]e; Folkestone; Hythe 55; Woodchurch 55; (Aldington N[ot] R[ecorded]); Tenterden; Cranbrook 55; Lamberhurst; T[unbridge] W[ells] '59; Appledore; W. Oxney 54; Romney; Dungeness.

**A. glabriuscula** Edmondston Babington's Orache. 15, 16. N. 15/51.  
(incl. *A. babingtonii* Woods).

Native. Shingle beaches, sea walls, stony shores; frequent on the coast and on tidal estuaries.

1<sup>st</sup> record, 1839: Sandwich salt pans, Cowell, F.G.E.K., p.75.

2) Cray-Darent estuary, GMB. Stone Marshes, 1950, H.M.P. Grain S Beach **MNE**. Shellness in Sheppey **MNE** →1963. Graveney Beach.

3) Beach, Rose in Bloom Seasalter, H. Wilks, 1958 **MNE**. Leysdown Beach **MNE**. Swalecliffe, 1945 **MNE**, in saltmarsh.

4) Pegwell Bay. N. of Deal; Sandwich Bay to Shellness point. Salt pans N. of Sandwich, 1950-59 **MNE**.

9) Minnis Bay.

11) N. Station y[ar]d, Edenbridge, 1956, DPY.

15) Dungeness, abundant 1946-61, **MNE**. Romney (Littlestone **MNE**). Hythe beach.

Sheppey; Grain; Cliffe; Gravesend; Dartford 55; E Thanet; Chislet; Whitstable; Faversham; Sandwich; Dover; Folkestone 55; Hythe; Romney; Dungeness.

**A. longipes** Drejer<sup>175</sup> Long-stalked Orache. N.

**A. littoralis** L. Grass-leaved Orache.<sup>176</sup> 15, 16. N.

Native. Sea shores, edges of salt marshes, sea walls; common on the coast and tidal estuaries, up the Thames to Crayford Ness, up the Medway to Cuxton, and up the Stour to Sandwich.

First record, 1724: Dover and Ramsgate, S. Dale, in Ray, *Syn.*, ed.3, p.153

2) Crayford Ness, G.M.B. Woolwich Marshes, c.1860, ex Hb. Lamb **MNE**. Stone. Swanscombe Marshes. Denton. Shorne. Northfleet. Uralite → Higham. Cliffe. N & S beaches, Grain **MNE**. All hallows **MNE**. High Halstow, Egypt Bay. St Marys Bay. Shore E. of Upnor 1960. Frindsbury. Lower Stoke. Rainham. Queenborough. N. of Leysdown **MNE**. Shellness in Sheppey, **MNE**. Elmley. Harty Marshes. Kings Ferry. Oare Creek. Faversham Creek, **MNE**. Banks by Funton Creek, '62. Sportsman and E. beach, Seasalter / Graveney. Conyers Creek. Nagden Marshes. Cuxton, 1945, **MNE**. Borstal saltings 1960

3) Whitstable W Beach REW. Swalecliffe.

Chatham; Stockbury; Teynham; Faversham; Whitstable; Chislet; S. Thanet.

4) Pegwell Bay. R. Stour, sea walls below Sandwich. Reculver to Minnis Bay. Sandwich.

9) Ramsgate, Pryor, ex Hb. Lamb, c. 1860, **MNE**.

<sup>175</sup> No account given. The taxon was only published as recognised in the British Isles in 1977; and in Kent, only its hybrid with *A. prostrata* has been recorded, viz. at Shellness in Sheppey, 1977 and 2016.

<sup>176</sup> Thus in check-list; given as Shore Orachen in manuscript.

(15) ?Dymchurch. ?South Brooks and Wicks? ?Dungeness.) Dungeness U[n]R[ecorded]: Romney U[n]R[ecorded]; Hythe U[n]R[ecorded]; Folkestone U[n]R[ecorded]; Dover U[n]R[ecorded].

**A. patula** L. Common Orache. 15, 16. N. 48/51.

Native. Salt and brackish marshes, sea-shores, on sand and shingle, on mud in ditches in alluvial marshes; cultivated and waste ground, inland; very common throughout Kent, especially along the coast and in estuaries. Very variable.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p10. C. 1425 – plaster from house at Larkfield, JRB Arthur (pl[ant] remains).

- 1) Beckenham, Hb. Davis, 1915, **MNE**. Up[pe]r Hockenden. Eltham High St[reet] GMB. Ruxley Pits.
- 2) Woolwich. Upnor. Dartford Creek. Thistle F[ar]m, Minster. Wouldham Marshes, 1945, **MNE**. Chetney Marshes, in brackish dried out dikes, '62, (+ Chen[opodium] botry[oides]). Shellness, Sheppey, 1959, **MNE**, 1963. "Rose in Bloom", Seasalter, H.M.W.
- 5) Chevening Park. Well Wood S of W. Wickham PCH.
- 6) Cornfield W. of Downs R[oa]d, Northfleet Green, 1958, **MNE**. Mounts Road. Eynsford.
- 7) Challock Woods near watch tower, ES.
- 8) Sibertswold. Denton.
- 10) St Johns Jerusalem PCH. [Seven]oaks tip CAS. Meadow above S. Darenth PCH.
- 11) Peel St[reet] Hedges, Maidstone, E.G. Philp, 1957 **MNE**. Sandling, EGP, 1958 **MNE**.
- 13) High Brooms, J.P.M.B., (var. bracteata Westerland), BEC, 1939-40, p.292.
- 15) Hythe, **MNE**. Lydd airport, DMCC.

Sheppey; Grain; Cliffe; Gravesend; Dartford; Woolwich (Blackheath U[n]R[ecorded]); E Thanet; Chislet; Whitstable; Faversham; Teynham; (Stockbury U[n]R[ecorded]); Chatham; Cobham; Farningham; Keston 55; Beckenham DPY; Sandwich; Wingham 57; Canterbury; Chilham; Doddington 56; Hollingbourne 58; Maidstone; Malling; Sevenpaks 56; Westerham 56; Dover 55; Alkham 55; Elham 56; Ashford; Hothfield; Headcorn 55; Marden 53; Paddock Wood; Tonbr[idge]; Edenbr[idge]; Folkestone 55; Hythe 55; Aldington 55; Woodchurch; Tenterden 56; Cranbrook 55; Lamberhurst 56; T[unbridge] W[ells] 56; Appledore; W Oxney 56; Romney; Dungeness; (Hawkhurst U[n]R[ecorded]).

var. **bracteata** Westerl.

- 11) Edenbridge Station, 1956, D.P.Y., det. J.P.M.B.

**A. laciniata** L.<sup>177</sup> Frosted Orache. 15, 16. N. 7/51.

Native. Sandy sea shores, near the drift line, fore-dunes; not common, but locally frequent on the coast where sandy beaches exist.

1<sup>st</sup> record, 1777: Sheerness, E. Jacob, *Pl. Fav.*, p10

- 2) Grain N. Beach, 1945!- **MNE**. Grain S Beach, 1959 **MNE**. Leysdown, Hb. Davis, 1918 **MNE**. Shellness in Sheppey, 1946-56 **MNE**. [Sheerness, extinct, E. Jacob.]
- 3) [extinct from Seasalter to Herne Bay.]
- 4) Sandwich Bay to Shellness, plentiful, 1950 **MNE** 1954. Beach, Pegwell Bay, 1840, Pryor **MNE**; 1945 **MNE**.
- 9) Cliffsend, Pegwell, 1946 **MNE**. Minnis Bay, 1946, rare, **MNE**. Botany Bay, Kingsgate, 1959 **MNE**. Joss Bay, HMW.
- 15) Dunes at Greatstone ESM (1946!, 2000! On strand line in Nature Reserve). (Romney, Hb. North)
- 16) Eastwear Bay Folkestone, 1947.

**A. portulacoides** L.<sup>178</sup> Sea-purslane. 15, 16. N. 15/51 ?17/51

Native. Better drained parts of salt marshes, especially along creek banks, and at the abrupt lower margin so characteristic of the eroding Thames-Medway salt marshes; also on sea walls, round salt water ponds, and on muddy beaches; common on the N coast, ascending the Thames estuary, to Stone, the Medway up to Cuxton and Wouldham, and the Stour to Sandwich; much less common on the SE coast.

1<sup>st</sup> record, 1597: Kings Ferry, Sheppey, Gerard, *Herbal*, p420.

[#1] Reported in wheat stubble as a casual introduction, Orpington, 1899, W.H.G.]

- 2) Cray Estuary GMB. Salt marsh, Stone, 1950, HMP, 1962 WAS. Swanscombe – Northfleet Marshes, FR, 1946; WAS, 1962. Denton. Shorne 1961 HAS. Cliffe. High Halstow. All Hallows. Higham. Grain. Stoke. Hoo. Upnor. Frindsbury. Strood. Cuxton 1943 **MNE**. Wouldham. Borstal. Rainham. L[owe]r Halstow. Funton. Kings Ferry. Conyers Creek, E of it. Oare Creek. S. of Harty Ferry. Faversham Creek, 1943 **MNE**; 1961.

<sup>177</sup> Given in the manuscript as *A. sabulosa* Rouay, with *A. laciniata* L., p.p. and *A. arenaria* Woods as synonyms.

<sup>178</sup> Given as *Halimione portulacoides* (L.) Aell., with *Oblione portulacoides* (L.) Moq. as a synonym.

Nagden. Graveney. Seasalter. Queenborough. Elmley, a[bandant; Harty, a[bandant]; Shellness, N of Leysdown, Hb. Davis 1917, **MNE**. Fowley Is[land], E.P.

3) Swalecliffe, 1945 **MNE**.

4) Reculvers; W. of Minnis Bay. Pegwell Bay, Shellness.#

[8] not seen recently at Dover or Lydden spout (G. Waltons records).]

9) Minnis Bay. Cliffsend. Ramsgate, 1863, Pryor in Hb. Lamb **MNE**.

15) N.E. of Dymchurch. By sluices to sea. (& SW?)

Dartford; Gravesend; Cliffe; Grain; Sheppey; Stockbury; Teynham; Faversham; Whitstable; Chislet; Thanet E; Sandwich; Hythe; Folkestone; (Romney, Dungeness – unrec[orded] for 02, 01.)

[**A. pedunculata** L.<sup>179</sup> Pedunculate Sea-purslane. [15, 16.] N extinct.

Native. Salt marshes, particularly on bare stony or sandy ground, less often on mud; very rare and not recently seen. Most of the records come from the Stour estuary, where it has been seen in a number of places, particularly near Ebbsfleet.

First record, about 1720; between Sandwich, and Pegwell, Petiver and Sherard Mss. Latest records, Ebbsfleet, 1930, A.J.Wilmott; Sportsman, 1924, Mrs Graham.

2) 2 miles below Gravesend, Mitten; Gravesend, 1842, HM Holman **BM**. Near Shorne Battery, B. Syme.

3) On black, boggy ground on (the right of) Seashore between Gravesend and Whitstable (near Swalecliffe, W. Wood in F.G.E.K.). Herne Bay, 1873, P. Marnock **BM**.

4) Many localities named in the Marshes of the Stour estuary from Sandwich to Ebbs fleet, from 1838-42, Hb. Winterbottom **BM**, Sandwich, 1856, J.T. Syme ex Hb. Lamb. **MNE**, to C.E. Salmon, 1924 **BM**. For latest records see above. Sandwich Beach, Flower. The later records are all from the S. end of Pegwell Bay near Ebbsfleet.

15) "Romney Marsh" in Hb. **BM**.

Many botanists have searched for this plant in vain in Kent since 1930.]

**Beta** L.<sup>180</sup>

**B. vulgaris** L. ssp **maritima** (L.) Arcang<sup>181</sup>. Sea Beet. 15, 16 N 20/51

Tidal river banks, edges of salt marshes, sea and river walls, beaches, cliffs; common on the coast and the tidal estuaries.

1<sup>st</sup> record, 1629: Gillingham to Sheppey, Johnson, Iter, p.5.

1) Plumstead Marshes, 1944. Erith Marshes, 1949. Crayford Ness, 1951, BWJCC, JEL. Stone Marshes. Swanscombe Marshes. Northfleet. Denton. Gravesend Canal basin. Shorne. Cliffe. Higham. High Halstow. All Hallows. Grain. Stoke. Upnor. Frindsbury. Strood. Borstal. Cuxton **MNE**. Wouldham. Burham. Halling. Snodland. New Hythe. Aylesford Station. Canal SE of Sheerness. Scrapsgate. Kings Ferry. Harty I[sle]. Elmley I[sle]. Sheerness. L[owe]r Halstow. Funton Creek '62. Conyers Creek. Faversham. Oare Creek. Harty Ferry S. Nagden. Castle Coot, Graveney. Seasalter. Leysdown, Hb. Davis **MNE**. Woolwich; Dartford; Gravesend; Cliffe; Grain; Sheppey; Maidstone; Chatham; Stockbury; Teynham; Faversham; Whitstable; Chislet.

3) Whitstable. Swalecliffe. E of Reculver.

4) W. of Minnis Bay (St Nicholas at Wade). Sandwich Bay. Deal. Pegwell Bay. Shellness (Sandwich). Kingsdown. Sandwich

8) Dover, E.Cliff (J Ridley **MNE**); W. Cliff; beach and salting below Abbots Cliff; St Margarets. Dover

9) Cliffs, Kingsgate. Pegwell. Cliffsend. Thanet East

15) 13 Hythe. 02 Dymchurch S. & N. 02 St Marys Bay. 02 Romney Golf Course. 02 Greatstone. 01 Dungeness. 13 Seabrook, LJM.

16) Folkestone, East Wear Bay. Sandgate east. Dungeness, Romney, Hythe; Folkestone.

ssp. **vulgaris**

5) Downe tip '56, DPY.

9) Minnis Bay, MS Campbell 1935 **BM**.

‡ **B. trigyna** W[aldst.] & K[it].<sup>182</sup> [Caucasian Beet. 16.]

2) Erith, St.J.M., BEC, 1926, p.130; Hb. St.J.M.

<sup>179</sup> Given as *Halimione pedunculata* (L.) Aell., synonym *Obione pedunculata* (L.) Moq.

<sup>180</sup> Follows *Chenopodium* in manuscript.

<sup>181</sup> Subspecies cited as (L.) Thell. in manuscript.

<sup>182</sup> Not in check-list.

**Sarcocornia** A.J. Scott

**S. perennis** (Mill.) A.J. Scott<sup>183</sup> Perennial Glasswort. 15, 16. N. 8/51.

Native, on firm consolidated mud in the general salt marsh community; sometimes on more sandy mud. Not extending up estuaries away from the zone of highest salinity. Not on the S. Kent coast now.

1<sup>st</sup> record, 1688: Sheppey, D. Stone, in Ray, *Hist. I*, p.1857.

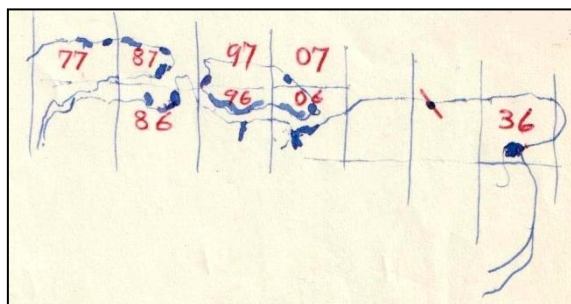
2) 87 All Hallows. 87 Grain, Ray *Syn* ed.3. (1945-9!), NE Beach 1945 **MNE**, 1959 **MNE**; S Beach 1948 **MNE**. 77 Egypt Bay. 77 St Mary's Bay. 87 Lower Stoke. 96 Conyers Creek. 06 Nagden Marshes. 06 Graveney Marshes. 86 Funton Creek, '62. 86 Chetney Marshes. 96 Marshes of Elmley 1950 **MNE**, 1954 **MNE**; and 06 Harty. 06 Shellness 1944 **MNE**, 1956 **MNE**. 07 N. of Leysdown, 1918, Hb Davis **MNE**; 1956. 97 Queenborough ESM.

4) 36 Pegwell Bay C.P.S.K. (1946-55!). 36 Shellness, in saline slacks, 1954 **MNE**. 35 [Deal, WWR.]

15) [02 New Romney, E.S.M. (extinct through drainage)] South Brooks, E.P.

Stockbury sq[uare]; Cliffe; Grain; Sheppey; E Thanet; Chislet; Faversham; Teynham.

Absent in Surrey, very local in Sussex (Rye, Shoreham and Chichester Harbour only) but common in the Essex Saltmarshes. Unrecorded in Pas de Calais.

**Salicornia** L.

**S. pusilla** Woods One-flowered Glasswort. 15,16. N.  
(*S. disarticulata* Moss)

Native. At the upper edge of the general salt marsh association, about spring tide level; locally frequent in the Thames, Medway and Stour estuaries.

1<sup>st</sup> record

2) Egypt Bay?! St Marys Bay? Higham Marshes? 77 Frindsbury, 1945 **MNE**. 87 Grain, 1948 **MNE**. 86 Funton Creek '62. 96 Conyer Creek. 06 Faversham Creek (Nagden). 96 Elmley, 1950 **MNE**, 1954 **MNE**. 06 Harty, 1945 **MNE**, 1963. 06 Shellness, Sheppey, 1949 **MNE**; 1956 **MNE**; 1960 **MNE**; 1963.

3) Whitstable, G.C.D., BEC, 1926, p.130. Castle Coot, Marsh W. of Seasalter, 1960, Mrs B. Dodds; 1960, **MNE**; 1962, CA Lister.

4) 36 Shellness, at mouth of R. Stour, 1954 **MNE**.

Stockbury; Teynham; Faversham; Grain; Cliffe; Stourmouth.

**S. ramosissima** Woods Purple Glasswort.<sup>184</sup> 15, 16. N.

Native, at various levels in the general salt-marsh association, usually in fairly closed vegetation; very common 2) on the N. coast, from Cliffe to Grain, on the Medway up to Cuxton, throughout the Swale salt marshes, and at Leysdown, 4) the Stour estuary, and 15) at the Midrips. Exceedingly variable; there are many forms which form distinct-looking populations, particularly by the Swale and in Grain, but recent experimental work is claimed to indicate that these are not really distinct. Far more experimental work is needed on the polymorphous forms of the Medway-Swale estuarine system before the problem can be said to be settled.

1<sup>st</sup> record, 1899: Fl. Kent

2) Stone Marshes, 1962, H.A.S., in saltings and in marsh dikes. Higham Marshes. Egypt Bay. St Mary's Bay. W. of All Hallows, 1954 **MNE**. N. & S. coasts of l[sle] of Grain, 1948 **MNE**, 1959 **MNE**. L[owe]r Stoke Marshes. Hoo Marshes. E. of Frindsbury 1944 **MNE**, 1945 **MNE**, 1949 **MNE**. Salting, Cuxton Station. Borstal. Funton Marshes '62. L[owe]r Halstow '62. Elmley 1950 **MNE**, 1954 **MNE**. Harty. Shellness, Sheppey, 1949 **MNE**, 1956 **MNE**, 1960 **MNE**. Leysdown, 1917, Hb Davis **MNE**; 1956. Conyer Creek. Oare Creek. Faversham Creek, from ½ m. above Nagden Farm to the Swale. Graveney Marshes.

3) 16 Swalecliffe.

4) 35 Stour estuary; 35 below Sandwich; 36 Shellness, 1954 **MNE**. 26 E. of Reculver.

15) 02 Old Rother estuary between Littlestone and Greatstone ("adpressa") 1950. 01 Midrips, 1946 **MNE**; 01 Wicks. 92 Fairfield, saline meadows by church, 986264, 1962, Mrs. K.D.R.

<sup>183</sup> Given under *Salicornia*, as *Salicornia perennis* (Gouan) Mill.

<sup>184</sup> Thus in check-list; Common annual glasswort in the manuscript.



This species and *S. pusilla* need 2-3 days undisturbed by tidal inundation at anthesis for effective flowering and wind pollin[ation], teste V.J. Chapman.

**S. gracillima** (Townsend.) Moss<sup>185</sup> 15, 16  
(included under *S. ramosissima*)<sup>185</sup>.

Native. General salt-marsh associations, not uncommon, but a doubtfully distinct species generically, though appearing distinctive in the field.

2) E. of Frindsbury, 1945 **MNE**. Grain. Shellness, Sheppey, 1949 **MNE**; 1956 **MNE**. Elmley, 1950 **MNE**. Harty Ferry, 1945, **MNE**. Faversham Creek, 1962.

4) Shellness, near Sandwich.

**S. prostrata** Pall. sec. Moss<sup>186</sup>

**S. appressa** (Dum.) Dum.<sup>187</sup>

Drier, thinly vegetated salt marshes, especially upon dry saline mud behind sea walls and beaches; locally abundant on the coast and in estuaries.

1<sup>st</sup> record, 1891: New Romney, E.S.M., *J. Bot.*, 1894, p.146-7.

2) Grain 1946 **MNE**. Swanscombe 1945 **MNE**. Harty 1945 **MNE**. E. of Frindsbury 1945 **MNE**, 1945 **MNE**. Seasalter, A.H.W.D. & ESM, 1894. Shellness, Sheppey, 1949 **MNE**. Elmley, 1950 **MNE**. N of Leysdown, 1949 **MNE**; 1956 **MNE**.

4) Shellness, Sandwich 1954 **MNE**.

15) New Romney, 1891, E.S.M. (1950!).

**S. smithiana** Moss<sup>188</sup>

Drying saline mud flats at the top of salt marshes and behind sea walls; locally frequent.

2) Crayford Ness, 1949, FR. Swanscombe Marshes, 1945, A.J.W. & F.R. **MNE**. S.E. of All Hallows, D. Hamblen & F.R., 1954, **MNE**. E of Frindsbury, F.R., 1944 **MNE**; 1945, det. A.J.W.; 1949, **MNE**. Grain, 1945 **MNE**; 1948 **MNE**. Shellness, Sheppey, 1956. Elmley, 1950 **MNE**. S. of Harty Ferry, 1957, **MNE**.

4) E of Reculver, 1946, **MNE**.

**S. europaea** L. Common Glasswort.  
15, 16. N. 12/52.

Native, common in the lower zones of salt marshes, on rather bare mud.

1<sup>st</sup> record,<sup>189</sup>

2) 77 Higham Marshes. 77 Egypt Bay. 77 St Mary's Bay. 87 All Hallows. 67 Swanscombe Marshes, 1945 **MNE**. 96 Temple Marsh, Strood 1954 **MNE**. E of Frindsbury, 1944 **MNE**, 1945 **MNE**, 1949 **MNE**. 77 Hoo. 77 Lower Stoke. 76 Cuxton. 76 Borstal. 87 Grain W shore 1945, 1948 **MNE**, 1959 **MNE**. 97 Queenborough. 86 Chetney Marshes, 1961, E.P. 96 Elmley, 1950 **MNE**, 1954 **MNE**. 06 Harty, 1961. 86 Funton Marshes, '62. 86 L[owe]r Halstow. 06 Shellness, Sheppey, 1956 **MNE**, 1960 **MNE**. Oare Creek. 06 Nagden Marshes. 96 Conyer Creek. 06 Graveney Marshes. Castle Coot, Seasalter, 1960 **MNE**.

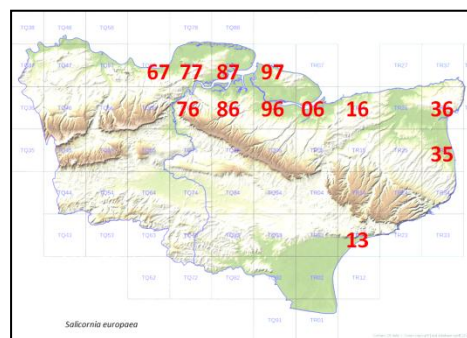
3) 16 Whitstable GMB.

4) 36 Bloody point. Shellness, near Sandwich, 1954 **MNE**. 35 Salt pans, N. of Sandwich.

15) 13 Mud deposits (saline) Palmarsh gravel pits, L.J.M.

(**S. europaea** L. sec. Wilmott.

2) Swanscombe Marshes, 1945, AJW & F.R. Higham Marshes, 1948, F.R. teste A.J.W. St Mary's Bay, 1958, F.R.)



<sup>185</sup> Although inclusion was Francis Rose's intention, the records appear thus in the manuscript under *S. gracillima*, a taxon not in the check-list.

<sup>186</sup> Given a heading in the manuscript, but without entry. Not in check-list and to be treated as included in *S. ramosissima*.

<sup>187</sup> Not in check-list and to be treated as included in *S. ramosissima*.

<sup>188</sup> Not in check-list and to be treated as included in *S. ramosissima*.

<sup>189</sup> Unstated.

**S. obscura** P.W. Ball & Tutin      Glaucous Glasswort.      N.

**S. nitens** P.W. Ball & Tutin (= *S. emerici* Duval-Jouve)      Shiny Glasswort. [15]      N.  
**15)** 92 Fairfield, saline meadows by church, 986264, K.D.R., det. T.G. Tutin.

**S. fragilis** P.W. Ball and Tutin      Yellow Glasswort.      N.

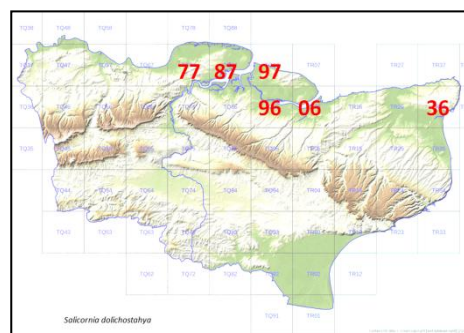
**S. dolichostachya** Moss      Long-spiked Glasswort.      15, 16.      N.      6/52.

Native. On bare mud below the closed salt marsh association; locally frequent on the N. coast.

1<sup>st</sup> record,<sup>190</sup>

**2)** 77 Bare mud below saltings E. of Frindsbury, 1949 **MNE**. (? at High Halstow or Cliffe or Higham). 87 Grain., 1945 **MNE**. 87 All Hallows. 97 Elmley Marshes, 1950 **MNE**. 97 Queenborough. Faversham Creek, ES. 06 Shellness, Sheppey, 1949 **MNE**. 06 Harty Marshes. 06 Nagden Marshes, Mrs B. Dodds, det. D.McC.

**4)** 36 Stour estuary, Shellness, 1954 **MNE**.



**Suaeda** Forssk. ex J.F. Gmel.

**S. vera** Forssk. ex J.F. Gmel.<sup>191</sup>      Shrubby Sea-blite      15.      N.

Native. On firm sand and on shingle at the upper parts of salt marshes; extremely rare, and only spontaneous at one place in 2); naturalised in 15), locally abundant in the salt marshes of Essex; not in Sussex or Surrey; only naturalised in Pas de Calais.

**2)** Lower Halstow; by sea wall on edge of Creek, 1964, E.G.P.

**15)** Abundant round a salt water lagoon at the Midrips on muddy shingle (vc14). Originally reported planted by the Range warden at Lydd, teste R.G. Williams, but now well naturalised ad spreading, 1947.

**S. maritima** (L.) Dumort.<sup>192</sup>      Annual Sea-blite.

Native. Salt marshes and sea walls. Very common in the Thames, Medway and Stour tidal estuaries, more local on the S. coast of Kent where fewer suitable habitats occur.

1<sup>st</sup> record: 1629, "*Kali minus*". Queenborough. Johns[on] Iter, p.7.

Ascending to Thames to below Erith (formerly to Plumstead) and the Medway to Wouldham.

**2)** Crayford Ness. Stone. Swanscombe Marshes. Northfleet Marshes. Gravesend, 1850, R. Pryor **MNE**. Denton. Shorne, 1961 HAS. Higham. Cliffe. High Halstow. St Mary Hoo. All Hallows. Grain. L[owe]r Stoke. Hoo. E of Upnor. E of Frindsbury. Temple Mead, Strood. Cuxton. Halling. Wouldham. Borstal. Rainham. L[owe]r Halstow. 86 Funton. Kings Ferry. Conyer. Harty Ferry. Oare Creek. Queen borough. Faversham. Nagden, Graveney. Seasalter. 96 Elmley. 06 Harty. 06 Shellness 1956 FR **MNE**. 97 N of Leysdown, 1918 Hb Davis **MNE**. Fowley I[sland], E.P.

**3)** 16 Swale Cliffe. 16 Tankerton. 16 Whitstable.

**4)** 26 E of Reculver. 36 Pegwell Bay. 36 Shellness, and Stour marshes. Salting behind Shingle Beach, 1m W of Minnis Bay, 1962! 35 up to Sandwich.

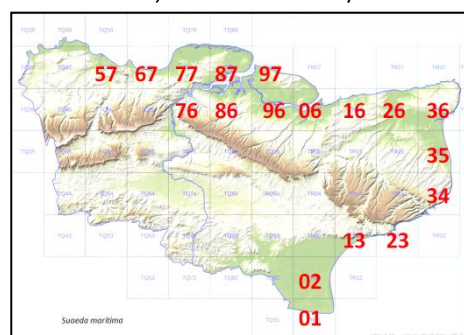
**8)** 34 Beach below Shakespeares Cliff.

**9)** 36 Cliffsend. 26 Minnis Bay.

**15)** Dymchurch (02 S. of village between main road and sea wall, 13 N. of village by sluice.) 13 Seabrook. 01 Wicks. 01 South Brooks. 01 Midrips 92 Fairfield, saline meadow by Church, 1962, Mrs. K.D.R.

**16)** Sandgate Beach and sea wall, VFP Day. 23 Eastwear Bay.

Dartford; Gravesend; Cliffe; Grain; Sheppey; Hythe; Romney; Chatham; Sheppey; Teynham; Faversham; Whitstable; Chisle; Thanet; Sandwich; Dover; Folkestone; Dungeness.



<sup>190</sup> Unstated; it is mentioned for Kent in the *Cambridge British Flora*, 1914.

<sup>191</sup> Given as *S. fruticosa* Forsk.

<sup>192</sup> Cited as *S. maritima* Dum. In manuscript, Englished as plain 'Seablite', and order of *Suaeda* species is reversed.

**Salsola L.**

**S. kali** L. ssp. **kali**<sup>193</sup> Prickly Saltwort. 15,16. N.

Native. Sandy shores, mostly along the strand zone, where its seeds are deposited by high spring tides. Very local, as the extent of suitable sandy shores is limited.

1<sup>st</sup> record, 1629: Queenborough, Johnson, *Iter*, p.7.

2) Grain N beach, BDJ; frequent, 1945-7! **MNE**. Beach W. of All Hallows, 1958, A.G. Side. Shellness in Sheppey, common 1946 **MNE** – 56. [extinct at Queenborough] Leysdown, 1917, Hb. Davis **MNE**.

4) Pegwell Bay. Abundant from Shellness to Sandwich Bay, 1954 **MNE**.

8) Beach, Lydden Spout, 1945, DHK.

9) Cliffsend, 1945 **MNE**, 1959. Minnis Bay, 1946, **MNE**.

15) Greatstone, F.J.H.; 1946 **MNE** – 50! 1959! Strandline, 2000! [Not seen at Dungeness, though a sp[ecimen] is in Hb. Sim, teste *Fl. Kent*]

[16) Below Folkestone Warren, 1898, Hb Lamb **MNE**; extinct at present.]

‡ **S. kali** L. var. **tenuifolia**

2) Faversham Miss M. Cobbe, BEC, 1923, p.209.

**S. kali** L. ssp. **ruthenica** (Iljin) Soó<sup>194</sup>

13) High Brooms tips '44, JEL.

**AMARANTHACEAE****Amaranthus L.**

‡ **A. retroflexus** L. Common Amaranth<sup>195</sup>. [15,] 16

Alien, now widespread in cultivated land, especially where “shoddy” has been used. Persistent at 1) Farningham Wood, Stone hill Green, 2) N. of Dartford, 3) about E Malling and Barming.

1) Common about Swanley in fields dressed with shoddy: N. of Stonehill Green, 1948; S. of Farningham Wood in orchards, 1947, JEL, Hb. L. det JPMB; 1948, R.A.C. Beckenham, Hb Davis, 1934 **MNE**.

2) Tripcock Ness, Plumstead, \*1894, A.H.W.D. Warden, Mrs Bryson, det. J. Ramsbottom. Long Reach, Dartford, 1945, P.H.C. det. D.H.K.; common N. of Dartford, 1952, F.G.S.

3) Garden Seasalter, HMW '56. Whitstable harbour REW.

6) Stone village, in garden, H.M.P. Longfield Tip, '56, DMcC.

9) Sacketts Hill, Broadstairs, on dump in pit, 1958, **MNE**. Ebbsfleet 1936 PHC.

11) S of E. Malling: Barming, in vegetable fields manured with Shoddy, 1942, 1945; and in Warren Wood, E. Malling, 1944 **MNE**, 1953 Lrag, **MNE**. Near Laboratory, Ditton, 1948, C. West, det. DMcC **MNE**. [it]tle Buckland, Maidstone, 1954, 1956, Lrag, **MNE**; 1960, E.P. By station, Borough Green, 1955. D.McC, **MNE**. Wrotham, 1960, D.McC, **MNE**.

15) near Hythe, on shingle, 1953, D.P. Murray, **MNE**.

var. **deliliei** (Richter & Loret)

1) Hextable, 1953, DMcC.

[‡] **A. hybridus** L.<sup>196</sup> Green Pigweed [15,] 16

Alien, in shoddy fields.

1) Stonehill Green, Hextable, N.W. of Swanley, 1948, RAB, FR, ECW, **MNE**.

2) Motney Hill, Rainham, 1951, DMcC.

6) Longfield Tip, DMcC.

9) Birchington, 1960, KDR.

11) E. Malling, in fields manured with shoddy, 1948, C.W., **MNE**. On shoddy, Wrotham, 1960, DMcC., **MNE**. Comp, shoddy field, 1960, DMcC **MNE**. Yalding Station, 1961, D.McC.

[‡] **A. quitensis** Kunth<sup>197</sup> [Mucromate Amaranth 16.]

<sup>193</sup> Named as species, rather than subspecies, in manuscript.

<sup>194</sup> Not in check-list; given as *S. pestifer*.

<sup>195</sup> Pigweed, in the manuscript.

<sup>196</sup> Not in check-list.

11) Shoddy field, Comp, 1960, DMcC, **MNE**.

[‡] **A. caudatus** [Love-lies-Bleeding. 16.]

6) Longfield tip, 48, DMcC.

‡ **A. albus** L. [White Pigweed. 15, 16.]

1) Bromley, Cole (as *A. blitum* L.).

2) Tripcock Ness, 1894, A.H.W.D. (as *A. albus* L.).

3) Faversham, Jacob, 1777\*.

4) Deal, 1880, Baker.

5) Cudham, in *Fagopyrum* '52 PCH det. BM (as *albus*).

6) Longfield tip, DMcC, '56 (*albus*).

15) waste ground, former dunes, behind esplanade at Littlestone, 1946, det. F.H.P., 1962 (as *albus*).

‡ **A. thunbergii** Moq.<sup>198</sup> [Thunberg's Pigweed. 15, 16.]

1) Abbey Wood, St.J.M., Hb.L. Det. J.P.M.B., BEC Rep., 1926, p.129.

4) Sandwich, 1959, DMcC (forma *maculatus*) **MNE**.

[‡] **A. graecizans** L.<sup>199</sup> [Short-tepalled Pigweed. 16.]

6) Longfield tip, DMcC. 1956 **MNE**.

## PORTULACACEAE

**Portulaca** L.<sup>200</sup>

‡ **P. oleracea** L. [Common Purslane. 16.]

1) Garden weed, Petts Wood, 1959, F.A. Swain.

**Claytonia** L.

‡ **C. perfoliata** Donn ex Willd. Spring Beauty. 15, 16. C.

Naturalised in sandy open ground; now established locally.

1<sup>st</sup> record, 1869: Eltham, J. Cracknell

1) Woolwich R[oa]d, Abbey Wood, '50, G.A.M., **BM**. 3 plants in ditch on Hayes Common, C.E. Britton, 1894; common, 1904, WHG; freq[uent] 1938, D.McC. Beckenham: Shortlands ASK. Hayes Station, 1904, WHG. Danson Park GMB. Near Blackheath GMB. [Keston Common, 1896-1905, SEC.] Greenwich Park 1901, ADW, 1958 GMB. Cherry Hill, 1906, LCC Bot. Unit. Elmstead Woods, 1956, Miss A. Mills. Park Wood Swanley, BEM.

3) Weed, Whitstable Castle G[rou]nds; Kingsdown Park, Tankerton, REW.

4) Sandwich Bay, 1950, M.E.M.

8) Wood opp[osite] Red Lion, Denton, VFPD.

10) Westerham, A. Beadell. Knole Way, Sevenoaks, 1958, KEB. Bessels Green, on sandy roadside, 1949, **MNE**. Farningham Village Hall. Montreal Park, Riverhead, F.S.E. Fawkes, HMP. Near Tubs Hill Sta[tion] F.S.E.F. Sandpit, Ightham, 588548, M. McFarlane. Knowle Way, Sevenoaks, 1957, KEB. Shrubbery, Sevenoaks, H. Brenchley, 1963.

11) Borough Green, D.McC. Allington, 1936, **MNE**.

12) Ashford Newtown, E. Scott. Willesborough Lees, 1946, CNP. Wood, Potters Corner, 992446, ES. St Dunstons Ch[urch] y[ar]d & Tower Gardens, Canterbury, DACL.

13) Stone wall, Culverden Down, T[unbridge] Wells, 577405, M. McFarlane. By R[oa]d, Sandhurst Park, T[unbridge] Wells, 1960, CAS.

16) Sandling Park, Hythe, Miss V. Day; 1952, DACL. Garden, Folkestone, 1949, V. Day.

‡ **C. sibirica** L.<sup>201</sup> Pink Purslane. 16. H.

Alien, naturalised in several places.

<sup>197</sup> Not in check-list; cited with authors as Humb., Bonpl., & Kunth.

<sup>198</sup> Not in check-list.

<sup>199</sup> Given as *A. angustifolius*; not in check-list.

<sup>200</sup> Not in check-list.

<sup>201</sup> Given as *Claytonia alsinoides* Sims (*Montia sibirica* L.)

1) Shortlands, ASK.

10) 55 Oldbury Lane, Mrs. Besch. 55 near Sevenoaks GMB.

13) **W.** Well naturalised in a boggy wood at Cryalls, SW of Brenchley, 1954, **MNE**. 53 Tun[bridge] Wells Common, P. Lane, 1960, teste C.A.S. 63 Hook Green, E. Shorrocks. 53 Lonsdale Gardens / Molyneux Park R[oad]/ & Chapel Place, T[unbridge] Wells, KEB.

16) 13 Sandling Park, DACL, '52.

### Montia L.

**M. fontana** L.<sup>202</sup> Blinks. 15, 16 N. 16/52 [23/52]

**Native.** Bare, sandy or gravelly ground, and turf, shingle beaches, arable land on gravelly soil, either by springs or in places liable to be very wet in winter: now quite rare.

1) [46 Hayes rectory lawn, formerly, DMCC.] 46 Hayes Common, 1905, F.M.R. 57 Dartford Heath, W.W.R., in dry gravelly turf, 1946! [46 Keston Common, Cooper Fl. Met.] [47 Chislehurst Common, Glasspoole in Hb. Geldart: W.Watson.] 46 Track, Sparrow Fields, W of Orpington, C. Swain, 1954. Blackheath / Charlton / Sydenham, M&G.

2) 06 Meadows by Faversham, A.G. Turner; 1946 DHK. (76 Snodland by Ditches, P. Jacob, FGEK.) 97 Meadow N. of Kings ferry bidge, Sheppey, 1960, E. Philp.

3) Ride, Trenley Park Wood, Fordwich, 1949 **MNE**. 15 Thornden Wood, RGW. 26 Stodmarsh, J.O.

4) 26 abundant in damp arable land on Oldhaven pebbly Beds, N. of Preston church, 1958. [35 Fields near the Sea, Walmer, Miss L. Day.] [35 Dunes N. of Deal, E.S.M.; BN.]

6) [67 Gravesend Hill, R. Pocock, 1813 **BM**.]

9) [26 Birchington; 36 Margate; 36 Minster; 26 Monkton and 26 St Nicholas Marshes, Dr. Hunter, F.G.E.K.]

10) 45 Marshy g[roun]d by stream ¼m S of Westerham, GMB.

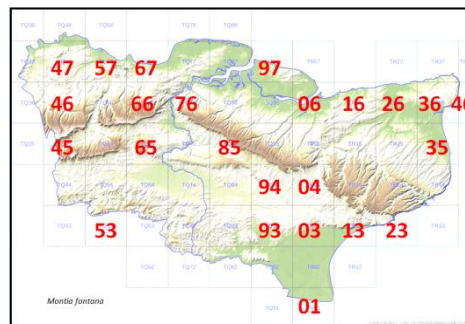
11) 66 Pond, Ryarsh Wood, 1944. 65 Hoads Common, Shipbourne, 1945. 94 Hoads Wood, G[rea]t Chart, E. Scott & C.N.P. 85 Disturbed soil in field near beginning of M.20, Hollingbourne, E.P. & G.M.

12) 04 SE of Hinxhill, in wet field, 1948, **MNE**. 13 Gibbon's Brook, G. Walton (1945!) **MNE**. 04 Mersham Lake, 1960, FR & ES, **MNE**. 94 Hothfield Common, F.M. Webb; 1954 CNP; Frog-hole to 1963!; 968456 bank N. of Main Bog, HMP, 1960. 93 Burnt Oak, Orlestone '51, CNP. 03 Ham Street N.R., CNP. 04 Willesborough Lees '54 CNP.

13) [53 Tunbridge Wells Common, W.W.R.]

15) 93 S. of Kenardington in dike, 1953, ES. 13 Gravel pits, W. of Hythe, 1949, **MNE**. 01 locally frequent in damp low of shingle beach, at edge of alluvium, The Forelands, S.W. of Lydd, 017191, 1958. 01 S.E. of Hamilton F[ar]m, Dungeness, 1960, FR, **MNE**. 01 N end of Long Pit, Dungeness, 1960, EP.

16) [Turf near boathouse, E. of Sandgate, C.P.S.K.] 13 Gossy Banks, Hythe; 23 Brockhill; Path, Pedlinge, LJM.



### Segregate records:

**M. fontana** ssp. **chondrosperma** (Fenzl) S.M. Walters

1) 46 Keston Common, Hb. FW Payne **BM** det EBBa. Crayford, R.P. det. EBBa, **BM**, "prob[ably]".

3) 15 Ride, Trenley Park Wood, Fordwich, 1949, FR, det. S.M.W., **MNE**.

4) Deal dunes, 1889, ESM, **BM** det. SMW & EBBa.

6) 67 Gravesend Hill, 1813, R. Pocock, **BM**, det. SMW.

12) 04 SE of Hinxhill, open boggy field, 1948, FR, det. S.M.W., **MNE**.

15) 13 Gravel pits W. of Hythe, 1949, FR, det. S.M.W., **MNE**.

**M. fontana** L. ssp. **indet.**

1) 46 Sparrow Fields, W. of Orpington, 1954, CA Swain, det. S.M.W., **MNE**.

12) 13 Gibbons Brook, Sellindge, 1945, FR, det. SMW **MNE**.

**M. fontana** ssp. **intermedia** (Beeby) SMW

11) Staplehurst Wood, 1911, RS Adamson **BM** "prob[ably] *intermedia*" E.B.Ba.

<sup>202</sup> The check-list gives only "*M. fontana* ssp. *minor* Hayw. (= ssp *chondrosperma* (Fenzl) Walters)", which seems surprising, so the account is given here with manuscript nomenclature, dealing with the various segregates.



13) Wallaces Nursery, T[unbridge] Wells, 1931, H.W.P. **BM** “cf. *Intermedia*”, EBBa.

## CARYOPHYLLACEA

### *Arenaria* L.

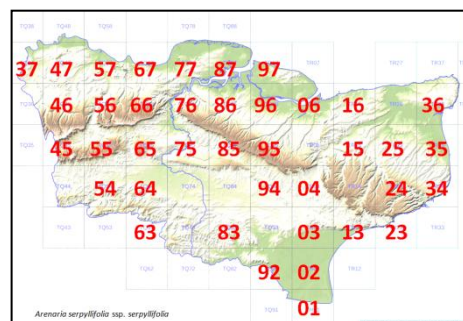
**A. serpyllifolia** L. ssp. **serpyllifolia**<sup>203</sup> Thyme-leaved Sandwort.

[15, 16.]

N.

Native. Dry base-rich ground, bare places on chalk downs, old quarries, wall tops, dunes, beaches: very common in suitable places on chalk, Ragstone, Folkestone sand, and the coast, but absent from nearly the whole of the Low and High Weald except at Stone Cliff and Tonbridge. Moderately calcicole.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.* P.4. The var. *glutinosa* Koch is not uncommon on sea-beaches. Seeds abundant at Minnis Bay, in Late Bronze Age, clearly ruderal or weed at that time (Conolly, 1941: Godwin, p.94). c.1425, in plaster from House, Larkfield, JRB Arthur.



1) Ruxley Pits. Keston Common. Hayes Common 1945 **MNE**.

Abbey Wood. Keston Park Estate. Greenwich Park GMB. Blackheath REW.

2) Shellness; Leysdown **MNE**; Seasalter – these appear to be var. *glutinosa* Koch. Egypt Bay REW. Woolwich Arsenal AHWD. Grain S Beach, AHWD 1893 **BM**; 1955! **MNE** (*glutinosa*). N of Nagden Marshes (1928, CES, **BM**) = Castle Coot (*glutinosa*).

3) Beach W. of Seasalter, 1947 **MNE**. Whitstable. Swalecliffe Beach, REW.

4) Sandwich, 1875 J.F. Duthie **BM** det. E Drabble (abundant from Deal to Shellness on the dunes!). Kingsdown Beach, 1954 **MNE**. Pegwell Bay.

5) Chalk W. of Eynsford PCH.

6)E) Green Street Green 1945 **MNE**. Mounts Rd, PCH. Stone HMP. Grassy hill on Blackheath Beds, Higham Upshire, 1955, **MNE**. Cliffe Chalk pit. Thong. Cornfield, Dunstall Priory, PCH. Downs E of Shoreham PCH. Downs, Paddlesworth PCH.

7) Rochester Castle, 1838, Hb. F. Ballard, **BM**. Newnham. Wichling. Frinsted. Hollingbourne Downs.

8) 15 Chalk turf, Larkey Valley Wood, Thanington, 1948 **MNE**. 15 Field, Marley Lane, Kingston, 1948 **MNE**. 13 Downs above Asholt Wood, Newington, 1950 **MNE**. 34 Shakespeares Cliff, 1955 **MNE**. 34 Dover E. Cliff, 1955 **MNE**. 15 Bridge, Miss T Webber, JG. 15 Iffin Wood C Haes. 24 Woodville Park Wood. 24 Woodville Downs. 25 Fredville stubbles.

10) Old wall, Darenth AHWD. 45 Wall Brasted 471551, CAS. 55 Wall of house near Ightham Mote, CAS. 55 Sandpit Riverhead CAS. 55 E of Sevenoaks PM Hall 1933 (v[ar]. *scabra*) **BM**. 56 Horton Kirby. 56 S. Darenth. 45 Farley Common, Westerham, 1934, DPY.

11) 85 Sandy verge of A.20, W. of Hollingbourne. 75 E Malling. 65 W. Malling, on Ragstone Walls. 64 E Peckham Gravel Pits, CAS. 54 R[ai]l[wa]y, Hildenborough 563482 CAS. 54 Tonbridge

12) 94 Hothfield Common. 04 Ashford Warren.

13) v[ery] rare, 63 S. of High Wood, Hawkenbury, GE Shaw.

14) very rare; only at 83 Tenterden R[ai]l[wa]y Sta[tion], 1959; and 92 Stone Cliff, Oxney, 1949.

15) (var. *Lloydii* Jord.) Greatstone; S. of New Romney 1871, ESM, **BM**. Romney Warren, 1945 **MNE**–62. Greatstone Dunes. Dungeness beach.

16) Rocky Ragstone scarp, 03 Postling Green, Aldington. Aldergate 096351 / 088352. Stutfall Castle. 13 Lympe. W. of Hythe. 23 Folkestone Leas. Ancient Dunes S of West Hythe 1962.

**A. serpyllifolia** L. ssp. **leptoclados** (Rchb.) Nyman Slender Thyme-leaved Sandwort 15, 16. N.

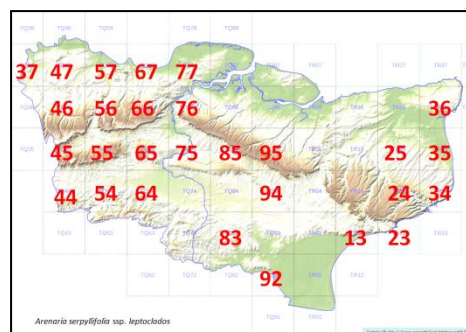
Native. Old walls, dry banks on chalk, sand and ragstone, bare ground on chalk, dry arable land, waste ground; locally common with a similar distribution to *A. serpyllifolia*, but less calcicole, more often found in arable land; less often on the sea shores. Absent from the High Weald, Grain to Sheppey, and most of the N coast, but occurs in Thanet.

1<sup>st</sup> record, probably 1866: Canterbury, Hb. J.S. Mill.

1) Petts Wood, on R[ai]l[wa]y bank, 1905, WHG. Old farm walls, Abbey Wood, 1930, R.W.R. Lessness Abbey Walls, HAS. St Pauls Cray Common, 1905, WHG. Chislehurst; Bickley, W.W. Hayes; Beckenham, 1926, FGS. Keston Common, Hb Davis 1915 **MNE** 1954! **MNE**.

<sup>203</sup> Given as plain *A. serpyllifolia* (ssp. *leptoclados* was treated as a separate species).

- 2) Upnor, by shore, 1963, H.M.P. [Isle of Grain, St J.M. Hb.] (Abs[ent] Faversham, Whitstable, Bexley, Grain, Sheppey.)
- 4) Sandwich Bay Dunes, 1954 **MNE**. Walmer Beach, 1960, B. Nash, **MNE**.
- 5) 36 Stubble near police kennels, SW of Keston PCH. Cornfield on downs NE of Brasted RAC.
- 6) Wall W. of Darenth, 1946. Green Street Green.. Shorne Village on brick wall a[bundant], 1961, HAS. Eynsford Village GMB. Cuxton. Halling, Greenhithe. Arable S. of Great Wood, Cuxton, 1954 **MNE**, 1955 . Merralls Shaw, Cuxton **MNE**. Chalk grassland, Red Wood, Luddesdown, 1951 **MNE**.
- 7) Burham Downs. Boxley Warren, 1949 **MNE**. Simia Wood 1980. Downs 2½ m. E of Lenham, above Cobham F[ar]m, 1945 **MNE**. Westwell, Pilgrim way beechwood: and cornfield, ES.
- 8) Abbots cliff. Marley Lane, Kingston, 1948 **MNE**. Barham Downs RGW. Kingston Downs, RGW. Cornfield, Stowting Hill, 1954 **MNE**. Woodville Downs, 1955, **MNE**. Ringwould, L.W.W. Near Stubbins Wood, Sibertswold KDR. Arable, Coldred Hill, Lydden BN. Arable NWW Studdall BN. Wall Ch[urch] St[reet] Walmer BN. Chilham, Juliberry Downs 1945 DPY. Cornfield, Sutton, 1960, B Nash **MNE**. E. Crete Rd Folkestone VFP Day.
- 9) Old Railway Cutting, Nash, 1954. Ramsgate, LRAG, 1958, **MNE**. Arable 1m N.E. of Monkton, 1958, **MNE**. North down, L.W.W.
- 10) abs[ent] Westerham. Old wall, Sutton at Hone, 1945 **MNE**.
- 11) Clumps Hill, Chegworth, Mrs. B. Dodds. Old ragstone walls, E. Malling; W. Malling. Ragstone quarry S. of Preston Hall, Aylesford, 1945 **MNE**. Leybourne. All Saints ch[urch] y[ar]d, Maidstone, MNHS, 1849, **MNE**. By Allington Castle, MNHS, 1850, **MNE**. Loose, Hb Lamb 1885 **MNE**. Arable on F[olkestone] Sand, N. of A.20, Chegworth, Harrietsham, 1958 **MNE**. Leeds Village Walls, 1959 **MNE**. Hale Street E Peckham, on dry bank, 1954, **MNE**. Edenbridge (abs[ent] at Tonbridge.)
- 12) Westwell Leacon, in arable on F[olkestone] Sand, 1955 **MNE**.
- 13) (abs[ent] at T[unbridge] Wells) Wall, Penshurst Park, CAS.
- 14) very rare; Tenterden Railway Station, 1959 **MNE**. (Appledore or Stone Cliff?) R[ai]l[wa]y track 2 miles S. of Rolvenden Sta[tion], 1959, **MNE**.
- 15) Dungeness. Lydd Common, 1956, **MNE**. Romney Warren '86.
- 16) Saltwood. Aldington. Stutfall Castle. Lympne. Lympne escarpment. Ragstone cliffs, W of Hythe, 1955 **MNE**.



- ‡ **A. balearica** L. Mossy Sandwort. [16.] H.
- 13) By T[unbridge] Wells Sta[tion], DMCC, 1957. Small patch at base of wall, Grange Cote, Bishopsdown, T[unbridge] Wells, KEB.

### **Moehringia** L.<sup>204</sup>

- M. trinervia** (L.) Clairv. Three-nerved Sandwort 15, 16 N.
- Native. Woodlands on all but the most acid soils, hedgebanks. Common throughout most of Kent, but absent from Grain, Thanet 9), Sheppey, the lower Stour marshes, and Romney Marsh 15).
- 1<sup>st</sup> record, 1763: Charlton Wood, Martyn, *Pl. Cant.*, p.52.
- 1) [Bromley, 1882, H&JG, **BM**] Abbey Wood RAB. Hayes (Barnet Wood) DMCC. Scadbury Park 54. Town Court Wood 54. Bourne Wood St Mary Cray 54. Hockendell Wood St Mary Cray. Ruxley Pits. Holwood Park. Dartford Heath, GMB. Farningham Wood (82!). Mount Mascall, Bexley. Shooters Hill Woods. GMB.
- 2) Hawes Wood, Newington. 804759 Copse S of St Marys Hoo, 1955 **MNE**.
- 3) Bysing Wood. Bigbury Wood.
- 4) Wenderton Manor Wood, 1959, B. Nash.
- 5) Wood W. of Shoreham c[lay] w[ith] f[lints].. Pilot Wood. Hangrove Wood, Downe, JEL. 396611 Highams Hill copse PCH. Jewells Wood.
- 6) Cobham Park 1838 F. Ballard **BM**; 1846, JFY **BM**. Darenth Wood. Mounts Wood. The Thrift, Bean. Dunstall Woods, Shoreham. Holly Hill (Blackheath Beds) Birling, 1962.
- 6T) Northward Hill, High Halden. In Oak-Ash Wood, 1956. Shorne Hill, 61, HAS. Court Wood Higham.

<sup>204</sup> Follows *Honkenya* in manuscript.

- 7) Copse below Purple Hill 1955. Bredhurst Hurst 1955. S. of Ospringe. Simia Wood. Wichling Wood. Darland, J.B.M. **BM**. Burham Downs by Lane E of Church. Copse c[lay] w[ith] f[lints] Cox Street.
- 8) Woods SW of Lydden. 2<sup>nd</sup> wood W Coombe Vale Dover N. Coombe Vale S side. Poulton N side. Ewell Minnis. Iffin Wood C Haes. Woodville Park. S of S. Alkham. Church Hougham ES. Winterage Wood Acrise DACL. Junipers Wye. Beech Wood Wye. Rob Sacks Wood. Reinden Wood, B. Nash '58. Sutton Downs. Free Down.
- 10) Rooks Hill 1955. Westerham Wood, B. Sennitt. Brockhoult Mount. Darenth, in copse by River.
- 11) W. Farleigh, AA **BM**. Oaken Wood. Leybourne Wood. Larkfield Heath. Snarkhurst Wood. Warren Wood. Kings Wood Ulcombe. Senacre Wood. Wood S. of Boughton Mon[chelsea]. Birling (Ham Hill), 1938, JBM **BM** (1947!). Boxley 1882 E. Bartlett **MNE**. 1m E of Yalding.
- 13) 63 Wood by R. Teise, Hoathly 1955. 63 Wood S of Pembury New Church, 1944. 63 Wood 1m SW of New Church PCH. Forest Ave[nue] Tun[bridge] Wells RE Sh. SW of Leigh. Greybury Gill. 614397 Lamberhurst. Corles Pond. Bayham CAS. 53 Stone Cross, Ashurst 518381 CAS. 64 Pembury Woods, PCH. Scotney PCH. Blackbush Wood, Cranbrook, PS.
- 14) SE of Conghurst. S. side Oxney by Rye R[oa]d. Owley Gill. Silverden Sandhurst. S of Hawkhurst Ch[urch]. NE of Pix's F[ar]m Rolvenden.
- 16) Casebourne Wood. NW of Aldington Knowl. Shorncliffe.

### Honckenya Ehrh.

- H. peploides** (L.) Ehrh Sea Sandwort. 15, 16. N.  
Native. Sandy beaches (including cockleshell); locally common where these habitats exist.  
1<sup>st</sup> record, 1597: Isle of Sheppey, Gerard, *Herbal*, p.498.
- 2) Grain Beach, E.S.M. (N. and S. beaches) (1955!) **MNE**. All Hallows Beach, 1945 **MNE**; plentiful, Mrs A.G. Side, 1958. E. of St Mary's Bay, on shell sand, 1958, Mrs Side. E. of Sheerness, Martyn Pl. Cant; FGEK; J.S.M.; (Scrapsgate, 1949!). Shell-sand beach, Shellness, Sheppey, E. Jacob (1956!). W of Seasalter; W. of Sportsman: Castle Coot, Graveney Beach. Shellsand beach NW of Leysdown, F.J.H.; Hb. Davis; (1956!).
- 3) Whitstable. Swale Cliffe.
- 4) Sandwich Bay, FGEK; 1933, T.J.F., **BM**; 1957! V[ery] a[bundant] from Deal to Shellness, **MNE**. Pegwell Bay, J.S.M.; F.M. Webb; 1946-1957! **MNE**. W of Minnis Bay, 1947, LWW.
- [8] Dover; J.C. Melvill: not seen.]
- 9) Minnis Bay. Pegwell Bay. N. Foreland JG. [Westgate Bay, Johnson, 1632.]
- 15) Greatstone, ESM (plentiful on the Dunes, 1946-1958!) **MNE**, N. of Romney, F.J.H. (plentiful on the dunes near sea, 1950!). Dungeness, J. Hubbard.
- 16) Folkestone, G.E. Sm. (Eastwear Bay, 1956!).

### Minuartia L.

- M. hybrida** (Vill.) Schischki.<sup>205</sup> Fine-leaved Sandwort 15, [16] N.  
Native, now extremely rare, and only recently seen in Thanet.
- [1] Hayes, Cole
- 6) A mile or two east of Dartford, c.1680, Newton MS. (1<sup>st</sup> record)]
- 9) I[sle] of Thanet, Irvine in Hb. Mill. Wall of Cleve Court Kitchen Garden, 30.5.1963, Miss B. Nash; 1963!
- [13] Rocks, M[oun]t Ephraim, Tunbridge Wells Common, Cherry. Cranbrook, Crowden – probably an error.]  
1<sup>st</sup> record, c.1680. "Alsine tenuifolia" – E. of Dartford, Newton MS.

### Stellaria L.

- S. media** (L.) Vill. Common Chickweed.<sup>206</sup> 15, 16. N.  
Native. Cultivated land, waste ground, roadsides, hedges, copses, meadows, etc.; abundant everywhere.  
1<sup>st</sup> record: 1629, Johns. Iter, "Alsine media glabra" Gravesend to Rochester, p.3. Seed, Minnis Bay, Late Bronze Age, Conolly 1941 (Godwin, p.93).
- 1) Fallow, Swanley, 1885, H.& J.G. **BM**. Woolwich. Farningham Road. Bexley Ch[urch] y[ar]d. Cray Valley. Bostall Heath. Abbey Wood. Beckenham Hb. Davis 1915 **MNE**. Chislehurst Common. Shooters Hill. Blackheath GMB. Ruxley Pits S&S. Elmstead Woods.
- 2) Woolwich Arsenal. Plumstead Sewer Bank. Copse S. Brambledown Farm 1956. Brambledown Oak Wood 1956. Cooling. Sheerness West. Sheerness Canal. Cornf[iel]d Thistle Hill Minster.

<sup>205</sup> Cited as *M. hybrida* (L.) Hiern.

<sup>206</sup> Plain Chickweed in the manuscript.

- 3) Arable E. of Seasalter Church 0964, 0965, 1065, 1958 HMW.  
 4) Wenderton Manor Road '58, B. Nash. Sandwich Bay.  
 5) Halstead. 396661, PCH. Wood W. of Shoreham. Field W. of Farnborough. Chevening Park.  
 6) Dartford. Lords Wood, Darenth. Romney St[reet]. R[oad]side, Cuxton. Mounts Rd. The Thrift, Bean, PCH. Shorne. Northfleet Green. Luddesdown.  
 8) Wye.  
 9) Acol field + r[oad]s. Minster '63. Field W. of Clere Court Minster 63.  
 10) Cornfield by Shoreham Church. Eynsford. St John Jerusalem. Above S. Darenth. N. of Darenth '44. S. of Darenth 44. Westerham Wood 82.  
 11) [Edenbridge 1898 CEB **BM**; Eden Villa, D. Smith 1906 **MNE**.] Swanton Valley floor. E. Malling 1957. [Maidstone Upper Fant Rd 1881 HL **MNE**.] Tonbridge. Yalding. Beltring.  
 13) Stone Cross Ashurst 518381 CAS. Bayham CAS. High Wood, T[unbridge] Wells PCH.  
 15) Ancient dunes S of W Hythe '62. St Mary in the Marsh. Dymchurch.  
 16) Aldergate.

**S. pallida** (Dumort.) Crép.<sup>207</sup> Lesser Chickweed 15, 16. N.

Native. Dry sandy or gravelly fields, sand dunes and beaches, open places in sandy woods, heaths; local, but frequent on the coast and the Folkestone Sand.

1<sup>st</sup> record: Fl. Kent, 1899.

- 1) Dartford Heath, 1946. Pauls Cray Common, W. Watson.  
 2) Isle of Grain, B.D. Jackson; S. beach, 1955! **MNE**. Beach, Shellness, Sheppey, 1950-56 **MNE**. Oare Creek. Seasalter beach, 1947, **MNE**. Beach W. of Sportsman, 1958, H.M. Wilks.  
 3) Rough Common, RGW.  
 4) Dunes from Deal to Sandwich Bay, F.J.H., abund[ant] (abund[ant], 1946!). Deal links, 1961, **MNE**.  
 6) Near Shorne Windmill, abundant, 1946.  
 10) Dartford Park, 1960, GMB. Sand S. of Platt, DMCC.  
 11) Larkfield heath, 1945, **MNE**. SES of Bearsted, 1946. E. of Addington 658593, 1947. Ryarsh Roughetts, 1947. R[ail]wa[y], Hildenborough to Tonbridge, 563482, 1958, CA Stace. By Medway, Branbridges, 675486, C.A.S.  
 12) Hothfield Heath, 1946→54 **MNE**.  
 15) Romney Warren, 1947. Shingle at Forelands, S.W. of Lydd, 1958 **MNE**. Old Dunes S. of West Hythe '62. Near Hoppen Pits, Dungeness shingle beach, 1949, ECW, **BM**. Shingle, W. of Hythe, LJM.

**S. neglecta** Weihe<sup>208</sup> Greater Chickweed. 15, 16. N. 8/52

*S. media* var. *major* Koch; *S. umbrosa* Opiz; incl. *S. Elizabethae* F. Schultz.

1<sup>st</sup> record, Fl. K. 1899. Confused in Fl. Kent with *S. umbrosa* Opiz.

Native. Damp copses on base-rich alluvial soils by stream and rivers; rare, but locally abundant on the Medway in Ash copses on alluvium, and in the Cray, Darent and Stour Valleys in very limited localities.

- 1) 47 N. Cray Brooks, G.M.B. & F.R. 1955 **MNE**. 47Greenwich Park, 1958, 1960, G.M.B.

[3] (16) Elmsden Wood, Hanbury, Fl.K.] Roadside S of Tyler Hill, RGW.

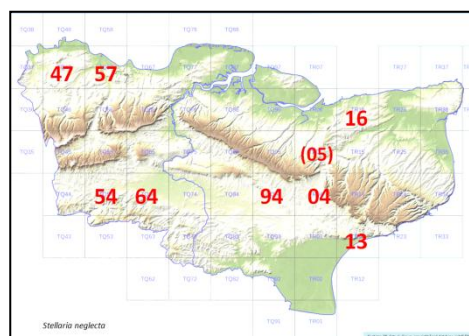
4) 16 Westbere Marshes, 55, RGW.

[5] Field, Bush Green, Halstead, E.F. v[er]y doubtful.]

7) [05 Challock Woods, near Nursery above Whitehill, E.S.]

10) 57 Abundant in wet copse S. of Darenth Church, AHWD; 1944-1950! **MNE**. 57 By the Roman Villa, S. Darenth, 1958.

11) Abundant in damp Ash coppices by R. Medway: (i) 54 above Tonbridge, 1945 **MNE**; 54 copse by Medway, Barden Park, Tonbridge, + ..., '57, CAS; (ii) 64 above Hartlake Bridge, 1956 **MNE**; (iii) 64 S. of E. Peckham, 1956, **MNE**; (iv) 64 near Medway, Brandbridges, 1957, C. Stace.



<sup>207</sup> Given as *Stellaria apetala* Ucria incl. *S. pallida* (Dum.) Piré & S. Boreau Jord.

<sup>208</sup> A distribution sketch map is given in the manuscript as well as some fragmentary assemblages of hectad map squares which are consolidated here to provide a single hectad map.



- 12)** 95 Wet copse by R. Stour N. of Bowley F[ar]m, Lenham, 1944, **MNE**. 94 Wet copse by Stour, Charing Heath, 917486, E.S. 04 Wet copse, 043443, N. of Blackwall Farm, Willesborough, E. Scott (1955!) **MNE**. N of Willesborough Lees EP. Stour, Little Chart Mill.
- 13)** Bargrove Wood, SW of Frogholt, VFP Day.
- 16)** [Folkestone, B.D. Jackson.]

**S. holostea** L. Greater Chickweed "Satin Lady", Folkestone. 15, 16 . N.

Native. Woodland and hedgebanks, roadsides: very common indeed, one of our most abundant plants, yet rare in Thanet and Romney Marsh, and so far only found by one roadside in the Isle of Sheppey: this seems inexplicable.<sup>209</sup>

1<sup>st</sup> record: 1632: Johnson Kent *Descriptio* p36: "Holosteum Ruellii, Gramen leucanthemi, Dod. Faversham, Woods near"<sup>210</sup>.

- 1)** Petts Wood. Lessness by pond RAB. Abbey Wood. Bostall Heath AHWD. NW of Petts Wood Sta[tion]. Farningham Wood. Joydens Wood. Hayes Common. W. Wickham, Hb. Davis 1916 **MNE**. High Wood, Crofton PCH. Crofton Heath. Hewitts Chelsfield. Ruxley Pits. R[ai]l[wa]y Ravensbourne. Ninhams Wood. R[ai]l[wa]y E of Beckenham J[un]ct[ion]. Crofton Wood.
- 2)** Only found in Isle of Sheppey by roadside 1 mile N. of Kings Ferry Bridge. Funton Creek, bank by R[oa]d. 804759 Fenn St[reet]. Hawes Wood. Hedge N. of Oare C.T. 9472 Minster E.P. W of Leysdown EP.
- 3)** Dengrove Wood. Chequers Wood Fordwich. Homestall W[oo]d Harbledown. Bigbury Wood.
- 5)** R[oa]dside, Washneys, Halstead. 396611 PCH. Pilot Wood.
- 6)** Lords Wood. Darenth. Darenth Wood. Romney Street. Preston Hill. Hedge Northfleet Green. Swanscombe Wood AHWD.
- 6E)** High Halstow 60, HAS. Higham Upshire copse. NE of Hoo Common. Claylane Wood 61 HAS. Cuxton. Paddlesworth Downs. Wingate Wood, Halling.
- 7)** Borstal. L[owe]r Bell. Squirrels Wood, Stockbury 1943 **MNE**. Putt Wood. Aylesford Common.
- 8)** Sladden Wood. Wolverton Wood. SW of Lydden. Coldred Wood. Coombe F[ar]m W of Dover. N of Alkham. Elms Vale N. Hougham S 61/23. S ide Coombe Vale. Beechen Wood Wye. Lit[tle] London. Capon Wood Crundale. Sutton Downs. Winterage Wood Acrise '63 DACL. Reinden Wood, 58, B. Nash. Iffin Wood.
- 9)** Minster, Thanet, RGW 61/36.
- 10)** Horton Kirby PCH. R[oa]dside N of Farningham R[oa]d PCH. Westerham Wood, B. Sennitt (82!). S of Ightham Mote. W of Harrietsham. Path S. of Ryarsh Ch[urch] 44. Plaxtol Village 44.
- 11)** R[oa]dside N. of Hildenborough 1955. R[ai]l[wa]y Hildenborough 563482 CAS. Rats Castle, E. Malling. Mereworth Rd., W. Malling. Oaken Wood. Larkfield Heath. Leybourne Wood. Ryarsh Roughetts. Elmstone Hole and to N. By Sandway Bog. Kings Wood Ulcombe. 871515. E of E. Farleigh. S of Boughton Mon[chelsea]. Park Wood Otham. Langley R[oa]dside. 804759. Collier St[reet]. Congelow. Knox Bridge. S of Stile Br[idge]. N of Staplehurst.
- 12)** Kennington. Stonehill Sellenge. Bybrook. Hothfield C[ommon].
- 13)** Stone Cross Ashurst CAS. Sissinghurst. By R[oa]d New Ch[urch] Pembury, PCH. Cornwallis Ho[use] Cranbrook.
- 14)** SE of Conghurst. Lane S of Sandhurst [Cross]. M[oun]t Pleasant Benenden. Rye R[oa]d S side Oxney. Owley Gill. Rolvenden Sta[tion]. NE Pix's F[ar]m Rolvenden.
- 15)** Dungeness, rare, J. Hubbard.
- 16)** S of and NW of Aldington Knoll, LJM. Seabrook. Casebourne Wood. Hedge N of Horn St[reet]. W of Hythe Lane to Scar. Shornecliffe. Wood W of Hythe.

**S. palustris** Retz. Marsh Stitchwort. 15. N.  
(incl. *S. dilleniana* Moench, and *S. glauca* With.)

Native. Swampy Fens and pond borders: very rare, though in several places in the fen swamps of the lower Stour Valley.

1<sup>st</sup> record, 1839: N. of Deal, J. Layton in F.G.E.K., p.74.

- 4)** [Between Deal and Sandwich, J. Layton, Fl.G.E.K.] Ditch in Preston Court Marshes, S.W. of the church, 240605, 1947! **MNE**; ½m N of Ch[urch], 245611, 1962!. Marsh dikes N. of Newborns Farm, Stodmarsh, L.W.W. abundant, 1947, (1949-55!) **MNE**. Marsh S.W. of Grove Ferry, Miss Belton, 1928; L.W.W., 1947-49, **MNE**. Westbere Marshes, 198608, R.G. Williams; 1986!

<sup>209</sup> This is qualified by finds by Eric Philp given below.

<sup>210</sup> Although given within the quotation marks, the last words (in English) are not part of the *Descriptio* text.



**12)** By Pond at Stubbs Cross, Kingsnorth, 1952, E. Scott (1952! 1954! **MNE**). S. Willesborough Dikes, R. FitzGerald, 1986.

[The Tunbridge Wells locality given as the 1<sup>st</sup> record in *Fl. Kent* (1899) is in Sussex; it is extinct there now any way.]

**S. graminea** L. Lesser Stitchwort. 15, 16. N.

Native. Grass-heaths, dry pastures upon sand and gravel, occasionally on the downs where there is a drift over the chalk; very common in the Weald and on the Tertiaries; rather rare in the Marsh districts and the chalk country.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.22.

**1)** Beckenham Place. 46 Keston Common; 46 Holwood Park. Blackheath GMB. 47 Chislehurst Common. W. Wickham Comon PCH. 46 Hayes Common. 46 Bickley. 57 Joydens Wood. 56 Farningham Wood. (Beckenham, AG Davis, 1915 **MNE**.) 47 Mount Mascal, Bexley. 47 R. Cray, N. Cray. 47 By N. Cray Church. 47 North Cray Wood. 57 Dartford Heath, HMP, GMB. NW of Petts Wood Sta[tion].

**2)** 97 Minster Marshes, Sheppey, 1918, A.G. Davis **MNE**. 77 Meadow ¾ m S of Cliffe 1944. Bagshot Sands E of Minster. 77 Upnor. 87 Grain, PCH. 96 Tonge, DMcC.

**3)** 05 Grassy hillside N. of Dunkirk. 16 Thornden Wood. 16 Tylers Hill. Scotland Hills, E of Canterbury, R. Gorer, 1963. Chestfield track 123660 HMW.

**4)** 35 Sandwich Bay.

**5)** 45 Hogtrough Hill, Brasted. 56 Plateau of downs SW of Shoreham. 46 R[oa]dside, Washeys, Halstead PCH. 56 Andrews Wood, S. of Badgers Mount PCH.

**6)** 57 Near Darenth Wood, 1880, Hb. J.G., **BM** (1946!). 67 Shorne Warren. 76 Strood (above Salters Cross) 1938, JBM, **BM**; 1962, Mrs MH Dolling. Beacon Hill Upnor. 77 G[ras]sl[an]d on L[ondon] clay, Lodge Hill, Cooling, 44. 56 Preston Hill, PCH.

**7)** Walderslade; Lords Wood, BC. 95 Lenham Downs. 86 Downs near Three Squirrels, Stockbury, 1943 **MNE**, 45. Squirrels Wood 45. 95 Roadside, Highcroft, 959503, ES.

**8)** Swingfield Minnis DACL, '56.

**10)** 55 Oldbury Hill. 55 Knole Park, PCH. 55 Meadow at St Johns, Sevenoaks, 1950 **MNE**. 56 Meadow S. of Lullingstone, 1956, **MNE**. 56 Meadow by R[iver] above S. Darenth PCH. [Seven]oaks tip CAS.

**11)** 65 (F[olkestone] S[and]) Ryarsh Roughetts, 44. 66 Ryarsh Wood. 65 Wrotham Heath. 65 Mereworth Woods. 75 Oaken Wood. Maidstone Hb Lamb 1880, **MNE**. 75 Penenden Heath. 84 Scrub N. of Bushmans Green, Smarden, 1962. Collier Street. R[ai]l[wa]y, Edenbridge DPY. Mead[ow] hear R[iver] ½ m N of Shoreham.

**12)** 94 Hothfield Heath. 04 Willesborough Lees. 94 Ashford Warren. 03 Sellenge. 04 Fen meadow W. of Cuckoldscoomb, Brook, 44.

**13)** 53 Stone Cross Ashurst 518381 CAS. 53 Tunbridge Wells Common. 53 Rusthall Common, 1963. Bayham CAS. 54 W. of Penshurst. Combwell Wood, 79. 63 Boggy Wood SW of Pembury 614395, CAS. Cornwallis Ho[use] Cranrook.

**14)** 72 S. of Hawkhurst PCH.

**15)** Hexden Channel.

**16)** Newington Moor.

**S. uliginosa** Murray<sup>211</sup> Bog Stitchwort. 15, 16. N.

Valley bogs, boggy alderwoods, wet hollows and ruts in damp woods, usually on acid soils; locally common in the Weald and on the Tertiaries and the greensand.

1<sup>st</sup> record, 1632: East of Canterbury, Johnson, *Descriptio*, p.30

**1)** Bog on Keston Common, JSM; W.W.R.; (still plentiful in the bog, 1955!). By pond, Farningham Wood, PCH. Hayes Common, DMcC. N. of Avery Hill, Eltham, G. Brown. [Pond between Keston Church and Heath, JSM, 1863.] [St. Mary Cray Common, 1905, R.H.C.] Bostall Wood; Lessness Abbey Wood, P.H.C. Pauls Cray Common, W.W.

**2)** Meadow, Wey Street Farm, Hernhill, 061623, C. Turner.

**3)** [E. of Canterbury, Johnson.] Homestall Wood, Harbledown. Freq[uent] Blean Woods RGW. Trenley Park Wood RGW.

**4)** [Preston, E.S.M.] Fordwich Marshes, 1949, E. Robinson. Wingham Fen, '63, DACL.

**[6)** Garden, Spring Head, (Southfleet) R. Pocock, 1818.]

<sup>211</sup> Given as *Stellaria alsine* Grimm, with *S. uliginosa* as a synonym.

8) West Wood, Stowting, B.N. Sibton Wood, ride on c[lay] w[ith] f[lints], 1997.

10) Wet meadow 1m E. of Westerham, 1955, MNE. Seal Chart, Roper; SW corner, 1954! MNE. Ightham Common, 1955. Oldbury Hill, 1947. Greatness alderswamp., 1955. Wet copse by church, Darenth, A. Beadell. 55 Whitley Forest RAC.

11) S of Mereworth in marshy wood. Lunsford Osiers, E. Malling. Sandway Bog, Lenham. Shipbourne Common. Boxley, H. Lamb 1880 MNE. Marsh in wood E. of Bearsted, N. of A.20, 1944 MNE. Ramchild Marsh, Harrietsham, Mrs B. Dodds.

12) Hothfield, F.W.M. (abundant in bogs on the Common, 1943!)60! MNE. Stonehill Bog, Sellenge. Willesborough Lees, JSM 1863, (1955). Gibbons Brook, 1954. Bog, Ashford Warren. Mead[ow] by Stour, Chilham Mill 1962, Mrs Brickenden. Meadow N of river, E. Stour Farm, Godmersham, E.S.

13) Stone Cross Gill Ashurst, 518381 CAS. Cowden, Furnace Pond; and Scarletts Pond, 1956. Bedgebury Pinetum 1945 MNE. Louisa Lake, Bedgebury Forest. Carr S. of Colebrook Park, Pembury, 1954 MNE. Lamberhurst Quarter, J.R.W., 1944. N. of Redleaf, Penshurst. Ditch S. of Lamberhurst Church 684365 CAS. Roundabout Wood, T[unbridge] W[ells], 1954 MNE. Swamp by Eden, W. of Penshurst. Angley Wood, 1957 MNE. Hawkenbury Bog AG. BoggyWood SW of Pembury 614395 PCH. Combwell Wood 79. Friezley Bog. 614397 Pembury S.

14) Robins Wood, Cranbrook. Church Wood, Wittersham, 1964.

(15) Dungeness, KDR, 1957??)

16) Brockhill Marsh, 1962, DACL.

### Holosteum L.

[H. *umbellatum* L. (walls of St. Mary's Barracks, Chatham, & casemates of St. Mary's Barracks years ago.). (J. Hepworth, Rochester & District Sketch Guide, 1913)]. Jagged Chickweed

### Cerastium L.

C. *arvense* L. Field Mouse-ear.<sup>212</sup> 15, 16. N.

Native.. Dry pastures and roadside banks, principally on chalk, but also on sand and gravel; abundant on chalky roadsides (the relics of former downland, now mostly ploughed) all over the largely drift free chalk plateau of E. Kent, E. of Watling Street, and in Thanet; very scattered and rather rare on the chalk and greensand in Mid and W. Kent; absent from the Weald and N. Kent

1<sup>st</sup> record: probably Johnson's Iter, 1629; "Alsine hirsuta major Gravesend to Rochester" – but see Fl. Kent.

1) Keston, 1926, J.E.L. Hb. L. Roadside E of Swanley, 1951, MNE.

3) Sandy hills between Boughton and Dunkirk, Dowker.

4) Dunes, Sandwich Bay, v[ery] local on fixed dunes, 1946, W.J.L.S. Shingle N of Deal, DHK.

5) Orpington by-Pass, 1931; Westerham, 1942, PCH.

6) Bank, Cobham terrace Road, S. of Greenhithe, 1946. 572742 Horns Cross, Stone, H.M.P. Chalk gravel pits, 1946, MNE. Roadside Bank E of Hartley, Ch[urch], 1946. Cornfield by R[oa]d to Lane End, SE of Dartford. 589698, R[oa]dside, Pinden chalkpits, Longfield, 1946; 1955 HMP. By Fawkham Church, G.Goff, 1899 MNE. [R[ai]l[w]ay cutting, Northfleet, AHWD, 1891, BM.] Down by Red Wood, Luddesdown, 1951 MNE. Down S. of Eynsford GMB. Hatch Hill, Luddesdown DMCC. (Meopham, Miss Barnesdale.)

7) S. of Ospringe, Mrs. Verschoyle. (Hollingbourne Downs, JH Allekin, 1911; E. Elgar [sic], 1925, MNE.)

8) Abundant in the remaining chalk turf (mostly by roadsides) on the open chalk plateau in the E. of this district. Walmer, Miss Day. St. Margarets, FJH (46!) E. of Dover Castle, F.G.E.K. (1946!). Lower Hardres RGW. Free Down, Ringwould, F.J.H. (1947!-54!), MNE. Barham Downs; E. of Bishopsbourne; Eythorne; West Langdon; Golgotha, near Sibertswold. Chartham Downs, Hookham (1947!). Bank NE of Denton R.G.W. Martin Mill, ESM (1945!). Adisham, L.W.W. (1948!). Goodnestone. Betteshanger. Deal, Miss Burrows. Kings Down. W. of Lydden, 1050 MNE. Tilmanstone, H. Elgar, 1912. E. of Waldershare, 1954, MNE.

9) Ramsgate, F.G.E.K., near Lord of the Manor, LWW. [E. of Margate, Whitwell.] Westgate F.J.H., L.W.W. Acol. Birchington. [St Peters, F.J.H.] Sarre; Pegwell Bay; Shotterdene; Hale (St Nicholas); Brooksend, Birchington, L.W.W. [Cross]roads N. of Minster, '63. Manston Airport, B. Dodds. N. Foreland, J. Gibbons. R[oa]d E. of Sarre RGW.

11) 1 mile W. of Hollingbourne, on sandy verge of A.20 on F[olkestone] Sand, 1945 MNE.

12) Hothfield Common, W. border FMW, (1945-1960!) MNE.

13) Greatstone, E. Scott.

<sup>212</sup> Thus in check-list; but given as Large-flowered chickweed in the manuscript.

- ‡ **C. tomentosum** L. Snow-in-summer. [15, 16.] H.
- 1) Birchwood R[oa]d, edge of Joydens Wood PCH. Ruxley Pits. Hayes St[atio]n tip, PCH. Button Street, Farningham, 1963, WAS.
  - 2) Waste ground, Crossness, PCH.
  - 3) Gas Works, Whitstable, HMW.
  - 4) Dunes N. of Deal; Sandwich Bay.
  - 6) Mounts Road, Greenhithe. ... Stone, HMP. Gravesend, 1962, W.A.S.
  - 7) On chalk, Whitehill, Ospringe, 1954, REW.
  - 8) Langdon Bay; St Margarets, DPY.
  - 10) Sevenoaks tip, CAS.
  - 11) Dittons Wrotham Heath.
  - 12) Hothfield Common. Smeeth Sta[tion] RAC. Canterbury bombed sites DHK.

**C. fontanum** Baumg.<sup>213</sup> (= *C. vulgare* Fries; *C. triviale* (Murb.) J alas) ssp. **vulgare** (Hartman) Greuter & Burdet  
Common Mouse-ear. 15, 16. N.

Native: pastures, walls, Roadsides, open woods, meadows; abundant throughout Kent on all types of soils, except in very wet places.

1<sup>st</sup> record; probably 1629, Johns. Iter, p3 "Alsine hirsuta minor. Gravesend to Rochester". (but see Fl. Kent.)

- 1) Farningham Wood. Abbey Wood, GAM. Dartford Heath. W of Petts Wood St[atio]n. Up[pe]r Hockenden, Swanley. Holwood Park PCH. Ruxley Pits. Blackheath GMB. Mount Mascal, Bexley, PCH. N. Cray, PCH. Shooters Hill, GMB.
- 2) Woolwich Arsenal, 1943; 1954, PCH. Cromers, waste ground PCH. S. Minster Marshes 1955. Scrub, S. of Scrapsgate 1955. Copse S. of Brambledown Farm 1955. Leysdown – Shellness 1955. SW of Upnor 1945. Eastchurch Cliffs 1955. Holborough Marshes; Snodland Marshes. Sheerness Canal. Kings Ferry. Hawes Wood. E end Minster on Bagshot S[ands]. E of Teynham.
- 3) North Bishopsden Wood 1955. Bigbery gravel pit. Church Wood West of Blean 1955. Trenley Park Wood. N. of Dunkirk. Dengrove Wood.
- 4) Fen S of Wingham, 1948, **MNE**. Ham. Hacklinge, tall meadow form, 1954 **MNE**.
- 5) Chalk W. of Eynsford. Darwins Bank Downe. 396611 W of Highams Hill, PCH. Pilots Wood PCH.
- 6) Green St[reet] Green, Darenth, 1945 **MNE**. Darenth Wood PCH. Horton Kirby Wood PCH. Mounts Road, Greenhithe. Swanscombe Wood. Rectory G[ar]d[en] Otford. Pilgrims Way, Wrotham. Cooling; Higham; Upnor. S of Cliffe. Chalk heaps E of Otford Station. Downs E of Shoreham PCH. Preston Hill, PCH. Halling Downs.
- 7) Hartlip Village 1955. Wouldham Downs. Burham Downs. Clay with flints Wood Cox Street. Squirrels Wood (plateau acid drift) Stockbury. Field below Church Wood (ch[al]k).
- 8) Woodville Downs T[emple] Ewell, 1955 **MNE**. Winterage Wood / Garden Wood Acrise, 1963 DACL. Iffin Wood C Haes. Chilverton Elms and toll. Coombe F[ar]m Down Dover. Wall, Woodville. Lit[tle] London.
- 9) N. Foreland J.G.
- 10) Darenth Meadows, 1944 **MNE**. Meadow N. of Shoreham 1954 **MNE**. Meads by R[iver], S. Darenth, PCH.
- 11) Knole Park, PCH. Birling Marshes, 1943 **MNE**. Field NW of Ightham, 1955. Holt Wood; Bare ground, Aylesford, 1955. Sandpit E of Forstal 1955. Larkfield Heath '55. Wrotham Heath, 1946 **MNE**. Hartlake Bridge 1956 **MNE**. Penshurst Meadows. Leybourne. Boxley, E. Bartlett. E. Malling. W. Malling. (The Mote, Maidstone, MNHS 1848 **MNE**.) (Pendenden Heath MNHS 1849 **MNE**.) Mereworth Wood N of Swanton. Gover Hill, ride.
- 12) Chilham. Hothfield Common. Stowting Meads. Brabourne Coomb. Var **holosteoides** (Fr.) Wahl.<sup>214</sup> Brook; Brabourne Stowting, in wet meadows.
- 13) 54 S.W. of Leigh '58. 53 near Stone Cross Ashurst 518381 CAS. 63 High Wood, T[unbridge] W[ells], PCH. Bayham CAS. Tun[bridge] Wells Common '62 CAS.
- 15) Dungeness, near Lighthouse 1955. Black Wall, Dungeness, 1955. Between St Marys and New Romney 1882 JFDP **BM** (1947!). Romney Warren '62. Ancient dunes, S. of West Hythe 1962. Lydd Airport DMcC.
- 16) Honeyfoot Aldington 088353. Shorncliffe. Postling Green scarp. Sandy ridge above Casebourne Wood.

**C. glomeratum** Thuill. Sticky Mouse-ear.<sup>215</sup> 15, 16. N.

<sup>213</sup> Given as *C. holostoides* Fr. Common mouse-ear chickweed In the manuscript.

<sup>214</sup> In the check-list, this is given a separate heading, *C. fontanum* Baumg. ssp. *holosteoides* (Fries) Salman, Ommering & de Voogd N.

<sup>215</sup> Given as Sticky mouse-ear chickweed in the manuscript.

(*C. viscosum* auct.)

Native. Dunes, dry pastures and banks, wall tops: very common.

1<sup>st</sup> record: Jacob 1777. "*Alsine hirsuta* *Myosotis latifolia* *praecocior*", Faversham Abbey walls.

1) Borstal Heath 1866 H.T. **BM**. Keston Common, AHWD 1900 **BM** (apetalous). Beckenham Place. Ruxley Pits. Lessness Abbey RAB. Farningham Wood. Hayes Common '45.

2) (var. **apetalum**) Queenborough 1889 ESM **BM**. Grain. Shellness. SW of Upnor, 1945.

3) Open grassland N. of Dunkirk. Dengrove Wood. Trenley Park Wood. Thornden Wood (v. robust, leaves 1" across) RGW. Reculver, M.E.M.

4) Sandwich Bay.

6) Swanscombe. Greenhithe. SE of Dartford. Beechy Lees, Kemsing. Downs E of Shoreham PCH. Preston Hill, PCH. Court Wood Higham. Gravesend common weed 61 WAS. Stone House playing fields, 1961, 558743, H.M.P. Green Street Green, 44; AHWD, **BM** (apetalous). A.2 N of Cobham Park.

7) Burham. Boxley.

8) Wye Downs. Down NE of Alkham. Down, Lit[tle] London. Winterage Wood, Acrise, 1963, DACL. Waldershare Park DPY.

11) Wall, Ivy Hatch, CAS, 588543. E. Malling, on walls. Leybourne Wood. Ryarsh Sandpits. Wrotham Heath, 1946 **MNE**. Wall, Fairlawne House, Plaxtol, CAS. Swanton Valley (rag loam). Larkfield R[ai]l[wa]y Boughbeech. By Hartlake Bridge on Medway Bank, 1956 **MNE**. (Bearsted, 1843 MNHS **MNE**. Maidstone HL 1884 **MNE**.)

12) Hothfield Heath. Ashford Warren. Brabourne Lees. Willesborough Lees.

13) Tunbridge Wells Common, on steps, CAS. Scotney Castle PCH. Sandy field SW of Pembury/ by R[oa]d to High Wood, 1944 **MNE**. Arable field, Pembury Lower Green, 635413, CAS. R[oa]d, SW of Penshurst.

15) The Forelands, Midrips, 1958 **MNE**. Lydd Airport, DMCC. Romney Warren fixed dunes 1962.

16) NE of Seabrook. Shorncliffe. Scars W of Hythe.

This very glandular plant is of a paler more yellowish hue than *C. vulgatum*, but has large curved fruits like that and unlike the small ones of *C. semidecandrum*.

**C. brachypetalum**<sup>216</sup> Pers. Grey Mouse-ear. ?N.

**C. diffusum** Pers.<sup>217</sup> Sea Mouse-ear. 15, 16. N.

(*Cerastium tetrandum* Curt.)

Native. Sand-dunes, sand and shingle beaches, common: open sandy heaths and sandpits inland, very rare. This species is very glandular, has very laxly branched dichasia, and almost entirely herbaceous bracts (i.e. devoid of a translucent silvery margin).

1<sup>st</sup> record, 1836: Cooper, Fl. Met.

1) [Blackheath, Cooper Fl. Met.]

2) Grain South Beach, E.S.M. (1946! 1955!) **MNE**. Queenborough, ESM. Beach N. of Leysdown; Shellness, abundant, 1950-55 **MNE**. Graveney Beach, 1947. Seasalter Beach, 1950, **MNE**. Sea Wall, Harty Ferry S side, C.T.

3) Herne Bay, F.J.H. Whitstable W. Beach, REW.

4) Pegwell Bay, F.J.H. (1946!) Reculver, MEM. Dunes, Sandwich Bay FJH (1946-56! **MNE** abundant for some miles. Shingly breaches at Deal; Walmer; N. of Kingsdown 1954 **MNE**; S. of Kingsdown, on chalky rubble on shingle, 1946 **MNE**. Dunes, Deal, 1888, ESM **BM**: 1954!

9) Minnis Bay, 1947.

11) Sandy verge of A.20, Wrotham Heath, D.McC, 1954.

12) Sandpit, Brabourne Lees, 1946, **MNE**.

15) Hythe shingle beach to west 1946 **MNE**; Dymchurch; Littlestone 1947 **MNE**; Romney Warren, 1948 **MNE**, 1962. Dungeness beach, FJH; 1949, by lighthouse! By narrow gauge R[ai]l[wa]y sta[tion] 090170, 1961, HMP.

16) Shorncliffe, G. Walton. Folkestone Lees, 1946.

**C. pumilum**<sup>218</sup> Curtis Dwarf Mouse-ear. N.

**C. semidecandrum** L. Little Mouse-ear 15, 16. N.

<sup>216</sup> Given in check-list, but no manuscript account.

<sup>217</sup> Given as *C. atrovirens* in the manuscript.

<sup>218</sup> Given in check-list, but no manuscript account.

Native. Sandy banks, open heaths; locally common on the coast and on the sandy commons inland; absent on chalk and clay.

1<sup>st</sup> record 1777: Faversham, E. Jacob, p24. The record in Johnson's *Iter*, quoted in Fl. Kent, "*Alsine hirsuta minor*" probably refers to *C. vulgatum*.

1) Bostall Heath 1866, H.T. **BM** (1904 RHC.) [Blackheath & Greenwich Park, Curtis.] Woolwich Common; Chislehurst Common AHWD (1949!). [Charlton Wood, Hb. Dill.] Dartford Heath! GMB. Farningham Wood F.M. Webb (1949!). Hayes Common 45, Keston Common. Wall, West Wickham, 1926, JEL, Hb. L.

2) Grain S beach 1955 **MNE**. Filled in canal, Higham. Upnor, on river bank. Shellness in Sheppey, 1950-55 **MNE**. Conyers Creek. Queenborough, ESM. Graveney by shore RGW. Seasalter RGW.

3) Oldridge Wood. Trenley Park Wood. E. of Whitstable; and Herne Bay, F.J.H. Walls, Canterbury. Anthills, Blean.

4) Deal, Duthie. Sandwich, F.J.H. Reculver M.E.M. Abundant on the dunes from Deal; to N. of Sandwich Bay 1948 **MNE**. Kingsdown Beach, 1954 **MNE**. Pegwell Bay, F.J.H.

6) Green Street Green, AHWD, (1944-1947!). Frindsbury, 1945 **MNE**. 1m, SE of Dartford. W. side Darenth Wood: AHWD (1945!). Northfleet AHWD. By A.2, N. of Cobham, 1945. By Windmill, Shorne, 1946.

7) Putt Wood, Ospringe. Challock Woods, D.H.K. Rainham, Miss Young.

8) Downs SE of Chilham, D.H.K.

9) Broadstairs; E. of Margate, F.J.H.

10) Bank of A25, Bessels Green, 1951 **MNE**.

11) Eccles Gravel pits, 1944 **MNE**. Wrotham Heath. Lunsford Lane, Larkfield, 1946. Ryarsh Roughetts. Ryarsh sandpits 1944 **MNE**. W. of Borough Green, H.L. 1910 **MNE**. By A20, 1m W of Hollingbourne 1944, 1945 **MNE**. Harrietsham sandpits. Sandpit by A.20 by Leeds Castle, 1944 **MNE**. Platt, 1946. Bearsted. Hadlow 1878 FWE Shrivell **TLS**.

12) Hothfield Heath 1945-50 **MNE**. Ashford Warren, Marshall (1945!). Willesborough Lees. Brabourne Lees. Walls, Canterbury, RGW.

13) Tunbridge Wells Common, 1944 **MNE** – 1962 CAS. Anthills in field, Frizley, Cranbrook 1944. Rusthall Common. Highwoods, Hawkenbury, CAS.

15) Hythe, Duthie (beach W. of, 1949!). Ancient dunes, West Hythe, 1962. Dungeness, 1946. Romney Warren, F.J.H. (1947! 1962!). Littlestone 1958 **MNE**. Dunes NE of Littlestone.

16) Sandgate, Walton (Shorncliffe, 1955!) **MNE**.

### **Myosoton** Moench

**M. aquaticum** (L.) Moench Water Chickweed. 15, 16. N.

Native. By river, stream and ditch sides, often in partial shade; local, though common by the Medway, Darent and Stour rivers, absent from much of the county.

1<sup>st</sup> record: probably 1629, Johns[on] *Iter*, p.3, "*Alsine maior glabra*", Journey from Gravesend to Rochester, unless this is *Stellaria neglecta* Weihe.

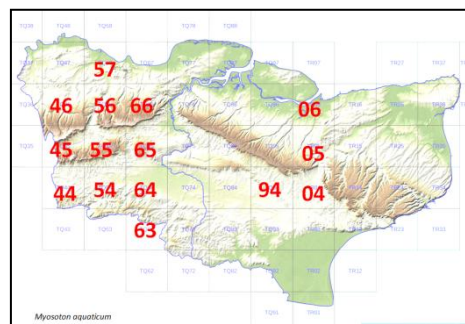
1) [Deptford 1773 Hb. Banks, **BM**.] [By Ravensbourne, Back of Lewisham 183A [sic] AA, **BM**.] Ravensbourne, Southend 1906, WHG. Abundant by Kyd Brook, Crofton, 1954. [Ravensbourne, L[owe]r Sydenham, J.S.M., 1863.] [Beckenham, Scargill, 1897.] Sidcup, W. Watson.

2) [Davington, Brooks; Goodnestone, J. [sic, for E.] Jacob, 1777.] Abundant S. of Snodland, in wet copses and marsh ditches, 1944-45 **MNE**. Barnes Cray, HMP. 66 W of Ham Hill, PCH. New Hythe: Aylesford, by R. Medway, 1943. Sea wall by Sportsman, Seasalter, 1960, HMW, **MNE**.

4) Margate Brooks, Dr. Hunter, Fl.G.E.K.

10) Stream, E. side Crockham Hill, 1958, RAC. Bradbourne Pits FSEF. By Darent, S. of Lullingstone Castle, 1956 **MNE**. Abundant in wet copse S. of Darenth Church, AHWD (1943-1957!), **MNE**. R. Darent by Roman Villa, Darenth, 1957. Below Darenth, PCH. River path N. of Shoreham, 1901, W.H.G.; 1954 PCH, GMB, F. Swain. S. Darenth and above. Central Park, S. of Dartford, H.M.P., 1950. Farningham GMB. St John's Jerusalem, Sutton at Hone PCH. Spring E. of Crockham Hill RAC.

11) [Allotments, E. Malling, 1946.] Abundant by the Rivers Eden and Medway from Edenbridge 1955 **MNE**; Chiddingstone; by Penshurst and Straight Mile, Tonbridge, to Barming. Leybourne. Lunsford Osiers. (Maidstone HL 1882, 1883 **MNE**.) R. Teise, at Marden Mill. Lamberhurst, JRW. Hartlake, JRW. S. of Cheveney Bridge, Marden, 1956 **MNE**. SE of Horsmonden 65. Ashour Wood bank of Medway.





**12)** By Stour; at Willesborough; Wye; Godmersham 1955 **MNE**; Chilham Mill 1955 **MNE**, ES; by Milton Bridge, on R. Stour. Shalmsford Street Bridge 1960. Marshes N. of Willesborough Lees, E. Scott, 044443, 1955. (Blackwall) S. Willesborough ES. Rippers [Cross] ES. E of G[rea]t Chart, ES. E. of Hothfield Lake, ES. Stour, E Stour F[ar]m.

**Moenchia** Erh.

**M. erecta** (L.) P. Gaertn., B. Mey & Scherb.

Upright Chickweed.

15, 16.

N.

14/51 [21/51] 19 modern localities<sup>219</sup>

(*Cerastium quaternellum* Fenzl)

**Native.** Dry open grassy heaths on sand or gravel, sand and shingle near the sea; very local, but not rare in 1), on the Folkestone Sand, and on the coast of Romney Marsh.

<sup>1st</sup> record, 1724: Blackheath, Ray *Synopsis*, ed.3, p.344.

**1)** 57 Dartford Heath, W.W.R. (1945, SW corner! →1950 HMP, GMB. 46 Hayes Common, Fl. K. DMcC 406654, 411648, (1946! **MNE**). 46 Keston Common, 1946 **MNE**. 46 Sparrow Fields, W. of Petts Wood, F Swain, 1954. 46 Holwood Park, 1903, WHG. [37 Blackheath, Ray Syn (1838, J.B. Soc. Bot. Edin.) **BM**.] [47 Chislehurst, RJS, **BM**; 1885 HFP.] [1832; Pauls Cray Common, FJH. 47 Bostal Heath 1866, H.T. **BM**.]

**2)** [06 Nagden, J. Jacob.] 97 Queenborough, ESM. 96 Towards the sea, NW of Faversham towards Teynham Street, RGW.

**3)** 05 Sandy grass-heath N. of Dunkirk, 1945; 1955 **MNE**.

**4)** 26 Banks in Sandy meadow SW of the Church, Preston, 1958, B Nash! 35 Dunes N. of Deal, Mrs Benson (Miss E. Day, c.1930). 35 N of Deal, 1961, Mrs. Pankhurst, W.F.S. Excur[sion]! S. end Royal St Georges, 1977, FR & E.G.P., a[abundant].

**6)** 67 Behind Windmill, Shorne, 1946. [57 Green Street Green, E. de C.] 66 Scalers Hill, Cobham, 1961, on Tertiary sands in short turf HAS, abund[ant]; V. Brunby.

**9)** [36 Swins Court to Salmston, Dr. Hunter.]

**10)** 45 Crockham Hill, 1923, R.W. Ribbons.

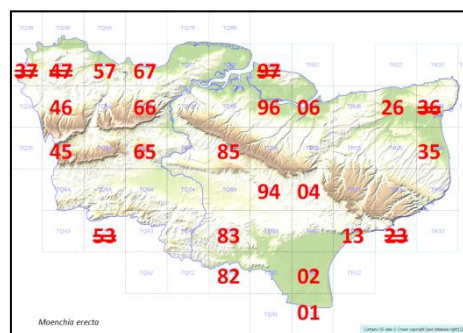
**11)** 65 Roughetts Common, Ryarsh, 1945-55, **MNE**. 85 Sandy verge of A.20, 1m W. of Hollingbourne, 1945 **MNE**.

**12)** 94 Ashford Warren, 1945, **MNE**, 1960. 04 open sandy track, Mersham le Hatch Park, 1960, **MNE**. 94 Frog Hole Toll, Hothfield Common, 1948, locally plentiful **MNE**; 1960 **MNE**. Centre of common, by track 968456, 1960, HMP.

**13)** [53 Tunbridge Wells Common, W.W.R.]

**15)** 13 Shingle bank between Dymchurch and Hythe, H.B. Mackeson (1949, abund[at]!) **MNE**, 1½m. W of Hythe, LJM. 02 Romney, F.J.H. (by A.259 near Warren House, 1948!) **MNE**. 01 Near Lighthouse, Dungeness, 1949, **MNE**. 01 Forelands, 4m. SW of Lydd, 1958 **MNE**. On turf/shingle ½m. SW of Lydd, 1958 **MNE**. 01 Boulderwall, Denge Beach, Mrs. B. Dodds. 01 NE of Littlestone, '62, E.S.

**16)** [23 E. of Sandgate Castle, G.E. Sm.] 13 Shornccliffe, 1948, Mrs B Welch. 13 Gossy Banks, Hythe, 1958, L.J.M.



**Sagina** L.

**S. nodosa** (L.) Fenzl

Knotted Pearlwort.

15

N.

Dune slacks and shingle hollows, liable to wet in winter; now very rare.

<sup>1st</sup> record, 1829: Sandwich sandhills, G.E. Smith in C.P.S.K., p.27.

**4)** Sandwich (dunes) G.E. Sm. (Cat. Pl. S.K.) = Dune slack ½ mile S. of Shellness, Sandwich, 1946, rare and not refound since. Abund[ant] near Downs Farm, Sandwich, 1962, Mrs Brickenden. [Ham Brooks, W.W. Saunders in Fl.G.E.K.] [Stonar, Fl.G.E.K.] Pegwell Bay, E. Day, 1927.

**9)** [Thanet, common; Margate Brooks, Fl.G.E.K.]

**15)** Near Romney Warren; C.P.S.K. Greatstone, in dune slacks, 1947-1950 l[ocally] abund[ant]. Lydd, CPSK (Dungeness, in damp shingle lows (where quarried) E. Scott, 1953.)

<sup>219</sup> The numbering of overall records has been reworked in the manuscript. The reference to 19 modern localities appears to be early handwriting in the draft. The 14/51 hectad total appears to have been written over 19/51, and 21/51 is a later addition after hectad numbers had been assigned to the records (an exercise apparently done in conjunction with preparing the hectad distribution maps in the manuscript, which themselves were prepared twice over, with differing results). There is also a marginal summary list of named hectads, but these total only 12: Dartford, Chislehurst, Chilham, Keston, Gravesend, Malling, Hollingbourne, Hothfield, Ashford, Hythe, Romney, Dungeness.

[*S. subulata* (Sw.) C. Presl                      Heath Pearlwort).                      {Extinct}]

**S. procumbens** L.                      Procumbent Pearlwort<sup>220</sup>.                      15, 16.                      N.

*Native. Waste ground, paths, walls, woodland rides, meadows, etc.; abundant throughout Kent, both inland and near the sea, though not in saline habitats. Double flowers at Littlestone, St J.M., Hb. St J M, 1925.*

**1)** Woolwich Arsenal (v[ar]. *spinosa*) AHWD. Blackheath (v[ar]. *spinosa*) CEB, GMB. Crown Woods Shooters Hill AHWD 1889. Beckenham, Hb Davis, 1915, **MNE**. Hayes C[ommon]. Keston C[ommon]. Chislehurst C[ommon]. Blackheath ECW. Joydens Wood PCH. Abbey Wood (var. *spinosa* St JM). Pickhurst Mead PCH. Dartford Heath, G.M.B. Ruxley Pits. Farningham Wood, PCH. Bexley Ch[urch] y[ar]d, PCH. Shooters Hill GMB.

**2)** [near Canal, Denton, R. Pocock.] E End Minster on Bagshot Sand. Queenborough, E.S.M.

**3)** Bigberry gravel pit. Dengrove Wood.

**4)** Sandown Castle M.N.H.S., 1850 **MNE**. Sandwich Town. N of Deal. Walmer Beach.

**6)** Stone House cricket field HMP. Mounts Wood PCH. Preston Hill, PCH. Dartford HMP. Old wall, Cobham, HMP.

**7)** Squirrels Wood plateau drift ride. Putt Wood gravel pit.

**8)** Dover Town. Swingfield Church. Winterage Wood, Acrise, 1963, DACL. Iffin Wood C Haes.

**9)** Downs S. of Kingsdown, 1946, **MNE**.

**10)** Greatness, Hb. Rudge.

**11)** E. Malling. Ditton. Leybourne Wood. Paths Ightham Common '44. Maidstone, Hb. Lamb, 1880 **MNE**: 1959!. Leeds Ch[urch]. Oaken Wood. Path, Comp Woods, Mereworth, 1954 **MNE** (drift). Swanton valley floor (rag[stone]). Gover Hill (drift) rides. Shipbourne Forest, NE. Widehurst Wood, Marden, '58.

**12)** Brabourne Lees. Hothfield Comm[on]. Ashford Warren 44. Walls, St Augustines, Canterbury. Lenham Ch[urch] y[ar]d.

**13)** 63 Sandy fields SW of Pembury, 1944 **MNE**. 64 Pembury Wood PCH. Friezley Wood. Stone Cross Ashurst 518381 CAS. Tun[bridge] Wells 1894 HWP **BM**. 63 High Wood, T[unbridge] Wells PCH. Cornwallis Ho[use], Cranbrook. Ashour Wood ride N.E. (Wad[hurst] C[lay]). Bayham CAS. By Brighton Lake, T[unbridge] Wells, CAS.

**14)** Wood near Breeches Pond, RAC.

**15)** Walls in, and Beach W. of, Hythe 1945-58 **MNE**. Dungeness, 1945-1960 **MNE**. NE of Littlestone: (var. Daviesi Dr., St JM); also double form here, Lady Davy (BEC 1923). Greatstone. St Mary in the Marsh. Ivychurch Ch[urch] y[ar]d.

**S. apetalata** Ard. ssp. **apetalata** (= *S. ciliata* Fries, & *S. filicaulis* Jordan).                      Annual Pearlwort.                      N.

**S. apetalata** Ard. ssp. **erecta** F. Herm.                      N.

[N.B. the checklist, following Stace (1997), lumps (as above) segregates together under *S. apetalata* for which Francis Rose gave separate accounts as species in the manuscript. These species and their accounts are accordingly given below, with the names used in the manuscript. Standard British treatment regarded *S. apetalata*, *S. ciliata* and *S. filicaulis* as separate species from 1952 to 1962, when *S. filicaulis* became regarded as a variety of *S. ciliata*. From 1987, *S. ciliata* was considered to be a subspecies of *S. apetalata* (viz .*subsp. apetalata*), but, from 2010, *S. filicaulis* was again regarded as having specific rank.]

**S. apetalata** L.                      Pearlwort.                      15, 16.                      N.

*Native. Dry sandy and gravelly ground, paths, and wall tops. Fairly common.*

*1<sup>st</sup> record, 1724: all round London, Ray, Synopsis, ed 3, p.478.*

**1)** Abbey Wood (eglandular form with short pedicels) St J.M. 1923 (BEC 1923). Woolwich AHWD. Dartford Heath GMB. Keston Park Estate. Chislehurst Common GMB. Crofton Heath PCH. Farningham Wood, PCH. Wall, Bexley Village, PCH. Greenwich Park GMB.

**2)** Grain beach. Bank by Holborough Marshes, Snodland 1945 **MNE**.

**4)** Deal beach. Sandwich Town. Kingsdown Beach, 1946, **MNE**. Wingham.

**6)** Randall Wood, Tong, 1820, R. Pocock, **BM**. Horton Wood, PCH. Manor F[ar]m Y[ar]d, West St. Cliffe, B.J. Couzens

**7)** Boarley Warren. Belmont Park, 1958, DMCC. Challock Forest rides, E.S. Brick Wall, Kemsley Street, Bredhurst, 1960 **MNE**. Squirrels Wood (ride on plateau loam). Eastling, gravel path, C.T.

<sup>220</sup> Common Pearlwort in the manuscript.

8) Wall in Petham, 1950 **MNE**. Little London. Crete R[oa]d Folkestone on Pliocene sand VFP Day. Walls and paving stones, Elham High Street, 1955-58 **MNE**. Iffin Wood C. Haes. Kearsney, walls, KDR. Woodville Downs DPY.

10) Farningham, PCH. Sutton at Hone PCH.

11) Wrotham Heath. Maidstone. W. Malling. E. Malling. Stony Rde, Comp Wood, Mereworth, 1954 **MNE**. Churchyard Wall, Boughton Monchelsea, 1959 **MNE**. Churchyard, Headcorn, 1962. Edenbridge, NW of, RAC.

12) Hothfield Common. Brabourne Lees. Lenham churchyard Wall. Field, Great Chart, 1950, **MNE**.

13) By Brighton Lake, T[unbridge] Wells, CAS. Path, Park House, Bedgebury Pinetum, WJ Davies, 1958. Bayham Walls, CAS.

16) Folkestone. Shorncliffe.

**S. ciliata** Fr. 15, 16 N.

Native. Dry open sandy or gravelly ground, wall tops: locally frequent.

1<sup>st</sup> record, 1849: Greenwich Park, Mr Luxford<sup>221</sup>, Babington, *Bot Gaz* p176.

1) Keston Common, 1877, H.&J.G. **BM** (1945-1955!) **MNE**. Beckenham Place. Hayes Common, 1945 **MNE**. Farningham Wood, sandy W. border. Crofton, W.W. Chislehurst Common A.H.W.D.; W.W. Greenwich Park. Mr Luxford, 1849- (1<sup>st</sup> record: Babington in *Bot Gaz*, 176) 1958, GMB. Bexley churchyard wall, J.S.M. 1963. Grass-heath, W. side Farningham Wood. Dartford Heath, 1960.

2) Coast near Grain, 1892 ESM **BM**; (1945!) **MNE**. Filled in canal, Higham. Pits, SE of Bysing Wood, H.M.W. R[iver] bank below Upnor, 1960, **MNE**.

3) [Hatch Green, FMW. Field below Fordwich, F.J.H.] Dengrove Wood. Rough Common 55 RGW. Upper Ensign, 1945, DHK.

4) Deal beach. Kingsdown Beach 1954 **MNE**. Dunes at Sandwich Bay. Deal links, 1954 **MNE**. Beach S. of Oldstairs Bay, Kingsdown 1956 **MNE**.

6) Near Shorne Windmill, 1945 **MNE**. Sandy bank by A.20, N. of Cobham Park. Green Street Green AHWD (1945!) **MNE**. Old wall at Darenth, AHWD; Darenth Wood AHWD. Swanscombe Wood. W. side of Mounts Wood.

7) Burham Cement Works, 1953, **MNE**. Challock Woods, in ride, E.S.

8) L[owe]r Hardres, F.M.W. R[ai]l[wa]y, Siberts Wold, D.PY. 1946 **MNE**.

9) Westgate, L.W.W. Minster Ch[urch] y[ar]d, 1963.

10) Chert pits, E of River Hill, RAC.

11) Wrotham Heath W.M.R. (1945!). Ryarsh Sandpits. By A.20 W. of Hollingbourne. By A.20, Leeds Castle. Harrietsham, EGP, 1958. Platt, DMCC. [Penneden [sic] Heath, F.M.W.] Gravel bank by Pond E of Hale St[reet], E. Peckham 1954 **MNE**.

12) Hothfield Heath F.M.W. (1945-1960!) **MNE**. Ashford Warren, F.M. Webb (1944! 1960) **MNE**. Willesborough Lees. Old walls, Canterbury RGW.

13) Tunbridge Wells Common, A.G. More in Phyt. N.S. i 294; K.E. Bull, 1958, **MNE**.

15) Romney Warren. On old dunes, Lydd Common, 1956 **MNE**.

16) Folkestone Leas, 1945. Shorncliffe.

**S. filicaulis** Jord. 15, 16.

Sandy ground and wall tops.

This is now included under *S. ciliata*<sup>222</sup>: its records are given below.

2) Wall at Preston, Faversham, 020604, 1949, D.McC. & JEL.

4) Sandwich Bay, R. Graham, 1947.

8) Dry waste ground by R[ai]l[wa]y NE of Sibertswold, 1949, D.P. Young.

11) Wall top, Edenbridge, D.P Young, 1956.

**S. maritima** Don<sup>223</sup> Sea Pearlwort. 15, 16. N.

Native. Banks, stony slopes, brackish or saline mud, always near the sea or tidal waters: local.

1<sup>st</sup> record, 1873: E. Kent, A. Bennett, in *Top Bot*.

<sup>221</sup> Francis Rose here and later refers to Mrs Luxford, but the Botanical Gazette refers to Mr Luxford (presumably George Luxford, known to have botanised at Cobham in 1838).

<sup>222</sup> But see introductory note on *Sagina* for changes in usage of the name *S. filicaulis*.

<sup>223</sup> Cited as *S. maritima* Sm.

- 2) 87 Grain, 1947. Stony shore and banks below Upnor, 1950-60. 06 Shellness in Sheppey, FJH (1946!-54!) **MNE**. 06 Oare Creek, 1946. 76 Bank by river, Cuxton, 1951, **MNE**.  
 4) 36 Sandwich Bay FJH (Shellness, in saline slacks, 1946-1959!) **MNE**. 35 Deal, FJH (N. of, 1946!).  
 8) 23 Lydden spout, on mud behind sea wall, 1953. 34 Dover Cliffs, JEL, 1925. 34 Shingle road, St. Margarets Bay, Mrs. B. Dodds.  
 15) 01 Saline lows, W. of Dungeness. 02 Behind sea wall, Romney Warren, 1945, **MNE**. 02 S. of Littlestone, 1950. 23 Muddy ground behind sea wall, Sandgate, 1946.  
 16) Folkestone Warren F Swain.

### **Scleranthus L.**

**S. annuus L.** Annual Knawel. 15, 16. N.

Native on open sandy ground on heaths, then usually biennial ("var. *hibernus* Rchb.: *S. biennis* Reut."): in sandy arable fields, then normally annual.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2. ("*saxifraga anglicum*")

- 1) Beckenham Place, P.C.H. Hayes Common, D.McC. & F.R. 1945 **MNE**. Oatfield by Hayes Church yard, 1947 P.H.C. Keston, E. de C. (1946!). Chislehurst Common, Hb. Sim (1945!). Dartford Heath. Heath, W border of Farningham Wood, 1945 **MNE**. [Eltham, Hb. Salter: Bexley, EMH.] Bromley, Hb. Davis, 1915 **MNE**.  
 2) Sheppey, Hb. Davis 1915 **MNE**. Cliff top, on Bagshot sand, NE of Minster in Sheppey, 1954, **MNE**. Warden P[oin]t, Sheppey, PCH. Faversham J.[sic, for E.] Jacob. Sittingbourne, Cowell.  
 3) Sandy hillside N. of Dunkirk, 1945. [Hatch Green, FMW.] Gravel pit, Swanton F[ar]m, Littlebourne, 1955 **MNE**; 1960. Gravelly field W. of Shelving Wood, Hoath, 1962. Fordwich, E. Robinson. Chequers Wood, Fordwich, 1981. Arable land 132606, E. of Blean Ch[urch], RG Williams.  
 4) Stodmarsh, F.J.H. (1949!). Preston, F.J.H.; field N. of. Preston Church, 1958 **MNE**.  
 5) Field, Cudham, F.A. Swain. Arable W. of Saltbox, 1950, J.D.L.  
 6) Sandy fields S, of Darenth Wood, A.H.W.D. (1945! 1950 H.M.P. **MNE**). S of Greenhithe. Shorne, near Windmill. Arable NE of Otford, GMB.  
 7) Field, Frittenfield, NW of Westwell, 980495, ES. Rodmersham, 1951, DACL.  
 8) 14 Arable, Palmstead, Lynsore. Covert Wood W. of Derringstone, B. Nash, 1959.  
 9) [Quex, Johnson, *Iter*, p.21. (1629.)]  
 10) 55 Fawke Common, Roper; chert pit, 1954, **MNE**. [Stone Street, ESM.] 45 Sundridge, 1932, J.E.L., Hb. [J.E.]L. 45 Arable 1m. S. of Brasted, 1955 **MNE**.  
 11) 65 Ryarsh, W.M.R., 1844, sandpits! HL, 1894 **MNE**. [Addington, WMR.] 64 Yalding rubbish tip, 1961, CAS. [Barming Heath, MNHS, 1849, **MNE**. Maidstone, H.L., 1885 **MNE**.] Cornfield N of A20 on F[olkestone] Sand, N of Chegworth, 1958. 85 Cornfield, Fairbourne Lane, Harrietsham, Mrs B Dodds. Sandpit, Sandway, 1965, Mrs B. Dodds.  
 12) 94 Hothfield Heath F.M.W. (1945! **MNE**. 969463 ES. 94 Charing Heath, 1955, **MNE**. 94 Westwell Leacon, 959479, ES. 94 Shoddington, SE of Westwell, 997465, ES. 04 Wye, C.N.P. 94 Ashford Warren ESM (1944!). Lenham, AG Webb, 1940. 94 Sandpit SW of Charing 940488, ES. 94 W. of Hanger Hatch 935477, ES. 04 Willesborough Lees, 040423, ES.  
 13) (Tunbridge Wells, Miller.) (Bidborough, Miller.) 53 near Lakes Rd, Tun[bridge] Wells Common, 1961 CAS, 1962! Toad Rock Rusthall, KEB. 53 Hawkenbury rubbish dump, KEB, 1958.  
 16) Sandling Park, 1951, FA Swain. A20 bank, Frogholt, VFP Day. Arable, Kiln Road, Sandling, TJM.

[**S. perennis L.**<sup>224</sup> [Perennial Knawel.]

Pollen of this species was reported in a Neolithic site at Addington, Kent, by Burchell & Erdtman, 1950 (Godwin, p.168), so it may have been present in Kent as a native species then; it is one of those open-habitat species of highly disjunct present distribution in Britain (Radnor to Breckland) which was probably widespread in the open conditions of the Late Glacial Period.]

### [**Corrigiola L.**

**C. litoralis L.**<sup>225</sup>

Casual on dunes near cinderheap with other aliens, Sandwich Bay, 1932, Col. R. Meinertzhagen, **BM** conf[irme]d. JEL.

<sup>224</sup> Not in check-list.

<sup>225</sup> Taxon not included in check-list and any purported finding by this recorder has to be treated with caution, as many of his ornithological discoveries have been claimed as fraudulent..

**Hernaria L.**‡ **H. glabra L.**

Smooth Rupturewort. [16.]

1) Near Bexley, J. Taylor, BEC Rep. 1926, p.129; specimen not seen by G.C. Druce.(H. *glabra* and H. *hirsuta* both occur in Somme.)**Illecebrum verticillatum L.**

Coral Necklace.

16

N.

Probably native. In damp woodland rides on sandy loam: very local and rare.

The history of this plant in Kent makes a strange story. According to Fl. Kent (1899), specimens of this species were seen by Mr. Duthie labelled "Boggy places 4 miles S.W. of Dover" in Herb. Univ. Edinburgh. In Hb. Bot. Gard. Edin. there is a sp[ecimen] labelled nr. Dover, Hb. Mitchinson, presented 1900. In B.E.C. Rep. 1920 VI, I, p.143, Mrs Godden records it as being found "In great quantity near Doves, Kent". This refers to a farm S.E. of Cranbrook (N.G.R. 51/783344), but is extremely vague as a record. Mrs. Godden commented that the locality "four miles SW of Dover" (vide supra) may be a misreading for "Doves", as her locality is just about four miles from that place. It is strange indeed to record a plant as near a farm four miles away and not under the parish or nearest village or hamlet: nevertheless the Bedgebury locality is about 4 miles WSW of Doves Farm; possibly Mrs Godden lived, or was staying at, Doves. The first completely unambiguous evidence for Kent is "near Cranbrook, 1935", A.H.W.D. (specimen in Hb. T[unbridge] Wells Museum).

13) Outside Bedgebury, 1938, Miss Collins. 4 miles SW of Dover [sic], Aug. 1846,, ex Hb. Dr. W. Mclvor (2 sheets) Herb. Roy.Bot. Gard. Edin., on one sheet is a ref[erence] to Trans. Bot. Soc. Edin. XIII p.95, teste DMCC, 1964. "Very improbable locality – the herbarium shows over and over again the inaccuracy of Dr. Mclvor's tickets", Trans. Bot. Soc. Edin. XIII, p.96. Damp rides on sandy loam, Bedgebury Forest, near Louisa Lake, 1944, F.R. & C.W. (MNE). Since found to be widespread in the central part of the Forest in rides, but varying in its exact localities. It is undoubtedly spread in the Forest rides by tractor traffic, but so far has not been found in neighbouring woods nor in Sussex.

**Spergula L.****S. arvensis L.**

Corn Spurrey.

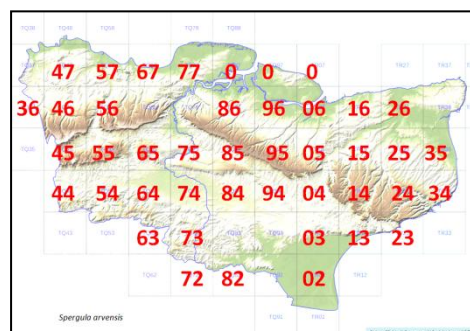
15, 16.

N or C.

40/52

This species has two varieties, var. *vulgaris* (Boenn.) Mert. & Koch and var. *sativa* (Boenn.) Mert. & Koch. These are often raised to specific rank, but all combinations of the diagnostic characters may be found in a single field (see Fl. of Brit. Isles, 1952, pp325-326). There seems therefore little justification in maintaining these varieties. Arable and waste ground, mostly on sandy soils; locally frequent where sandy soils occur; not recently recorded for Thanet, nor in Grain and Sheppey.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2. Seed, Minnis Bay, L[ate] Bronze Age site, Conolly, 1941 (Godwin p.95).



1) Hayes, DMCC. Orpington. Sparrow Fields, F. Swain. Fields at Swanley Junction. Chislehurst Common GMB. Farnborough GMB, F. Swain. Sandy field, W. border of Farningham Wood. Sandy field, S. of Joydens Wood, 1948 MNE. Chelsfield F Swain. S. Blackheath, G.M.B.

2) Sandy fields S. of Bysing Wood, pits to S.E., H.M.W. Sharnel St[reet] Sta[tion], PCH. 96 Conyer, KDR.

3) N. of Sturry in sandy fields. Chartham Hatch Mrs B. Sandy arable, Hernhill, 1955, MNE. Sandy arable, W. of Shelving Wood, Hoath, 1962.

4) Arable S. of Preston, 1945. E of Stodmarsh in arable fields. Sandwich, 1946.

5) Knockholt, 1941, P.C.H. (var. *sativa* Boenn.). Downe, AG Davis, 1915 MNE. Field, Halstead Place, PCH.

6) Chalk gravelpits, R. Pocock BM. Southfleet, in market gardens. Arable S. edge Darenth Wood, HMP. (abs[ent] Cobham.)

7) Rainham weed OD. 05 Challock Forest, rides, ES. 95 Longbeech Wood E., E.S.

8) 15 loamy arable, Pett Bottom, L[owe]r Hardres, 1958 BM. 24 Lit[tle] London, Lydden, K.D.R. 24 Swingfield Minnis '56 DACL. 34 Whitfield BN Dover Hill, Folkestone, on Pliocene Sand, VFPD.

10) Sandy arable land S. of Brasted, 1955 MNE. Sandy field E. of Chipstead, 1955, MNE.

11) Wrotham, roadside, AF BM. Ryarsh. Leybourne. Addington. Penenden Heath, MNHS, 1850, MNE. Field, Eyehorne Street, Hollingbourne, 1960, E.G.P. Field, Harrietsham 1958 EGP. N of Vinters Park, EGP. Underriver. Sandling Wood. Sandy Cornfield, N. of Chegworth, Harrietsham, 1958. Edenbridge [square] 55;



Tonbridge [square], S.E. of Yalding [square], Marden [ square] '55, Headcorn [square] '58, '59 or '60, Malling [square], Maidstone [square], Hollingbourne [square] '58.

**12)** (var. *sativa* Boenn.) Westenhanger, 1893, E.S.M. (**BM**). Lenham Forstal, sandy cabbage field, 1958, **MNE**.

**13)** Hogshole Lane, Lamberhurst: both var. *sativa* Boenn. and var. *vulgaris* Boenn., JRW. Dodhurst Farm, Hawkenbury, JRW (1944!) (var. *vulgaris* (Boenn.) Mert. & Koch. Cornfield, Pembury, 1943, H.W.P. **BM** (*sativa*).

**14)** Hawkhurst, P.&J. Hall. Loamy cornfield, W. of Wittersham, 1956. (not near Tenterden nor Woodchurch.) (E. Oxney u[n]r[ecorded].)

**15)** Lydd common, 1946, **MNE**. (Dungeness u[n]r[ecorded].)

**16)** Saltwood, ESM (var. *sativa* Boenn.). Sandy arable S of Newington, 1954, **MNE**. Folkestone, allotments, VFP Day.

### **Spergularia** (Pers.) J.. & C. Presl

**S. media** (L.) C. Presl

Greater Sea Spurrey.<sup>226</sup>

15, 16

N

(*S. marginata* (DC.) Kittel)

**Native.** Tidal Salt Marshes; chalk cliffs by the sea in the spray zone; common round the coast and on tidal estuaries, never away from tidal waters.

**1<sup>st</sup>** certain record, 1836: Northfleet, J. Forbes Young, (Hb. **BM**).

**Note.** *Spergularia rupicola* Le Jolis might have been expected on the chalk sea cliffs of Kent, but the only species found on them so far is the present one. *S. rupicola* occurs as near as the Isle of Wight.

Easily distinguished from *S. salina* by the broadly winged seeds and the larger, paler flowers.

**2)** Stone Marshes. Plumstead Marshes, 1893, AHWD **BM**. Shorne Battery 1893 AHWD **BM**. 67 Shorne Saltings: 1961 HAS. Northfleet, 1836 JFY, **BM**. 76 Cuxton HL **MNE**, 1943-54! **MNE**. 57 Crayford Ness, 1949. 67 Swanscombe Marshes. 77 Higham. 87 Stoke. 87 Grain 1945 **MNE**. 76 Halling. 77 Frindsbury, NE of. 76 Snodland. 77 St Marys Bay, 1958; Saltings, 61 HAS. 87 All Hallows 1945 **MNE**. 97 Sheerness, 1876, H.&J.G. **BM**. 96 Conyers Creek. 06 Harty. 06 Shellness. 06 Faversham Creek, 1962. 76 Borstal. 06 Oare Meadow '62 HMW. 86 Funton Creek, 1962. 06 Seasalter, C. Turner.

**3)** Whitstable, 1883, E. de C. **BM**.

**4)** 36 Pegwell Bay! 1902, H.& J.G. **BM**; **MNE**. 36 Saltings at Shellness 1945 **MNE**, 1962; and along the Stour. 35 NE of Sandwich '62, PWW; '63!

**8)** 23 Folkestone Warren, 1947. 23 Abbot's Cliff, 1903, H.J.R. **BM**,; 1901, HWP **BM**; (1947!-56! **MNE**, 1960 **MNE**). 34 Shakespeares Cliff! (J. Ridley, 1911 **MNE**), 1955 **MNE**. 23 Lydden Spout, 1902, G.C.D. **BM**, (1947!). 34 Shingle below cliffs, St Margaret's Bay, Mrs. B. Dodds; 1899, HWP **BM**.

**9)** Ramsgate, SD **BM**.

**15)** Salting n[ea]r The Redoubt, W. of Hythe, TJM. W. of Dungeness in salt marshes, freq[uent], 1947. Salt marsh S. of Littlestone, a little inland.

### **S. media x marina**

**2)** Salting, Cuxton Station, 5/8/1950, J.K. Morton ("considerable meiotic irregularities in P.M. cells, and heterosis", J.K.M. in Hb. JK Morton.

**S. marina** (L.) Griseb.

Lesser Sea Spurrey.

15, 16.

N.

(*S. salina* J.& C. Presl)

**Native.** In salt marshes, saline dune slacks and shingle lows; common round the coast and in tidal estuaries, absent inland: occurs both with *S. marginata* and also in drier places than those in which that species occurs. Easily distinguished from the last by its unbordered seeds, smaller darker pink flowers, and its smaller capsule, shorter than its stalk.

**1<sup>st</sup>** records, 1724: Ramsgate; Shellness; Sheppey – Dr. Dillenius in Ray *Syn.* Ed.3, p.351.

**2)** Riverwall, Plumstead, 1879, H.&J.G. **BM**. Erith Marsh, 1949. Crayford Ness, 1949. Stone Marshes →1962. Swanscombe Marshes →1962. Higham →1962. Cuxton. E of All Hallows 1954 **MNE**. Gravesend Canal basin 1962 WAS. Brackish hollows S. of Snodland 44. Upnor. Grain, 1945-59 **MNE**. Harty. Shellness, 1956 **MNE**. Stoke Junction, 1949 **MNE**. Stoke Saltings, ECW, 1935 **BM**. Leysdown, Sheppey, AG Davis 1918 **MNE**. Conyer, C.T. Oare Creek, 1959 **MNE**. Faversham Creek, E. side, 1943 **MNE**–1962. W of Seasalter. Oare Meadow 62 HMW.

**3)** Swalecliffe, 1944. Whitstable GMB.

<sup>226</sup> Salt marsh Spurrey in the manuscript.

4) Shellness, N. of Sandwich Bay, in drier saltmarshes, and behind dunes in brackish dikes →1962. Pegwell Bay, in dikes behind road. Marsh NE of Sandwich near Stour PWW, 62.

8) Beach below Abbotscliff, 1945, F.R. & C.W. Cliff fort, S. of Oldstairs Bay, Kingsdown, 1956 **MNE**.

9) Ramsgate, 1721, SD, **BM**. N. Foreland JG.

15) Saline muddy ground behind sea wall, Seabrook, 1955, **MNE**. Littlestone, E. Bartlett, 1889 **MNE**. By Fairfield Church, 1952, **MNE**. W. of Dungeness in shingle lows, 1947. Dymchurch: S of Romney, 1946.

Var. *neglecta* (Kindb.) Dr.

2) River Bank, Erith Marshes, 1927, t

**S. rubra** (L.) J. & C. Presl

Sand Spurrey.

15, 16.

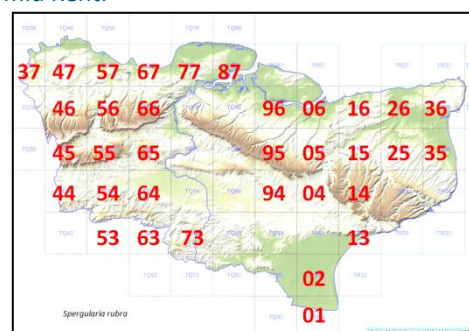
N.

30/51

Native. Dry open sandy or gravelly ground, gravel paths, sand dunes, beaches, etc., locally common, but apparently absent from large areas. Very tolerant of trampling, not recently observed in Sheppey or Grain, probably absent in Thanet; no recent records for the Greensand of mid Kent.

1<sup>st</sup> record, 1632: W. of Sandwich, Johnson, *Descriptio*, p.28.

1) [Eltham, 1886 AHWD **BM**.] 37 Blackheath, 1838, AA (**BM**); 1839, Hb. E.B. (**BM**); 1912 W.F., 1916 Fawcett; 1946, E.C.W.; GMB. 47 Danson Park. 46 Keston Common, Cooper Fl. Met. (1945!) **MNE**. Chislehurst, Hb. Sim. Charlton, Fl. Met. N of Eltham. Plumstead Common. Bexley. Mottingham. Bostall Heath, AHWD. 47 Ruxley Pits. 46 Hayes Common, E. de C.(1945!). 47 Abbey Wood, G.A.M., R.A.B. (F.J.H.). 57 Dartford Heath, AHWD (1947!) GMB. 46 By r[ai][wa]y, Orpington, 1944. Shooters Hill, GMB.



Blackheath '55, Bexley '56, Keston,

Dartford, Farningham '55.

2) 87 Grain, ESM, **BM**. [E. of Sheerness, FJH.] 57 Stone Marshes, HMP. Upchurch, F.M. Webb. Dunkirk, Dowker. Hernhill, E. Jacob. Teynham sq[uare]

3) Elbridge, JG. Hoath: Hatch Green F.M. Webb. 26 Seasalter '37 F Hyland. Scotland Hills, Canterbury RGW. Chilham '55, Faversham '55, Canterbury, Whitstable '55.

4) 35 Sandwich Bay, Fl.G.E.K. (1946!). 35 N. of Deal, H.C. Watson (1946!). Sidings, Richborough, 1946 **MNE**. 25 Preston! ESM. 26 Minnis Bay W., MEM. Sandwich, Chislet sq[uare], Wingham sq[uare].

6) 67Gravelly ground at Shorne, near Windmill, 1945, ESM. 77 Gadshill, 1947. 57 Green Street Green, Darenth, 1947. 66 E of Ash Place F[ar]m, 605645, Mrs D Woods. Gravesend, Cobham '55, Cliffe.

7) 05 Challock Forest, rides, ES. 95 Eastling, on Path, C. Turner.

8) 14 Gravelly drive, Court Lodge, Denton, 1945.

Alkham

9) [The Brooks, Margate Dr Hunter FGEK.]

10) 55 Sandy Field S. of Chipstead, 1955 **MNE**. 55 Knole Park, PCH. 45 Farley Common etc. Westerham, D.P.Y., 1948. 45 Chevening Churchyard, 1951, JDL.

11) [Maidstone, H. Lamb, 1885 **MNE**.] 65 By Leybourne Castle, 1959, **MNE**. 54 By Medway, Tonbridge. 44 Hever Castle Grounds CAS. Westerham '57, Tonbr[idge], Sevenoaks, P[addock] Wood sq[uare].

12) 94 Hothfield Common, F.M.W. (1945-1960! **MNE**). 04 Ashford Warren, 1945 **MNE**.

Doddington 1958, Hothfield, Ashford (Warren), Chilham '55.

13) 53 Tunbridge Wells Common, 1817, JFY, **BM** (1946!). 63 Scotney PCH. 54 Pavement weed, East Cliffe Rd, Tun[bridge] Wells, 51/54, C.A.S. Rusthall Common. 53 Broadwater Down, weed, KEB, 1958. 63 Lamberhurst, JRW. 64 Pembury Woods CAS. 73 Bedgebury pinetum. 64 Pembury Road, T[unbridge] Wells, CAS.

T[unbridge] Wells, Lamberhurst, Cranbrook

15) 02 New Romney, Warren, W.R.J. 02 Lydd, F.J.H. (1946!). 02 W. of Dungeness, 1946. 13 Hythe, JG.

Dungeness, Hythe

16) 13 old r[ai][wa]y Banks on F[olkestone] Sand, SE of Sandling Sta[tion], '62, DAEL. 13 Shornecliffe.

**Lychnis** L.

‡ **L. coronaria** (L.) Murray<sup>227</sup>

Rose Campion.

[15, 16.]

H.

Casual alien

1) Old chalk pit, Green Street Green, 1937, J.E.L., Hb. L. Ruxley Pits.

<sup>227</sup> Cited as *Lychnis coronaria* (L.) Desv.

6E) Cockham Woods, 51, DMcC.

15) Sea front, Littlestone, on waste g[roun]d among furze, 1953, KEB.

**L. flos-cuculi** L.

Ragged Robin.

15, 16.

N.

Native. Streamsides, marshes, fens, wet woodlands, both in alderswamps and in wet rides; very common, except in the chalk districts.

1<sup>st</sup> record, 1629: Gillingham to Sheppey, Johnson, Iter, p.5.

1) Holwood Park. Keston Bog **MNE**, GMB. Hayes, DMcC. Ravensbourne, Bromley, AG Davis 1916 **MNE**. Pokeridden Wood Orp[ington] Swain. N. Cray Marshes. [Hanging Wood, Charlton, 1890, AHWD **BM**.]

2) Holborough Marshes 44, 1980! Hawes Wood, Newington. Snodland Marshes. Meadow 1¾ m S of Cliffe. Northfleet, PCH.

3) Marshy hollow NW of Dunkirk, 1955 **MNE**. Bigbury Wood. Church Wood.

4) Dune slacks, W. of Princes Club House, Sandwich Bay, 1962. Ham Fen.

6) Fern St[reet] 804759.

7) Berengrave pit, Rainham, PM Roberts.

10) Meadow N. of Shoreham 1954 **MNE**. Otford PCH. Meadows, Eynsford GMB. Sutton at Hone HMP. By River @ Darenth; and N. of Darenth '44. N.W. of Bat and Ball. Westerham Wood, B. Sennitt.

11) Addington, 1938, JBM. Leybourne Marshes. Cuckoo Wood, Sandling. Harrietsham. Birling Marshes 1943 **MNE**. Ride on Gault, Horish Wood 44. Chegworth Carr. Boxley Stream. Kiln Wood, Lenham, 1965, B. Dodds. 64 Ditch, Beltring, 44.

12) 94 Hothfield Common. 03 Sellinge (Stone hill). 13 Gibbons Brook. 94 Westwell. 14 Stowting. 04 Willesborough. 04 Brook. 04 Fen W of Cuckolds coomb, Brook, '44. 05 E. Stour Farm, Godmersham in meadow by River, ES. 05 Chilham Meadows ES. SW of Sellindge Ch[urch] in mead[ow] RAC. Brabourne Coomb. Stowting Meads. S of Brabourne Ch[urch]. SE of Lenham Ch[urch].

13) Stone Cross Ashurst 518381 CAS. Frizley Bog. Bedgebury. Cowden Ponds. Pembury. Moorden, Penshurst, 1949 **MNE**. Wet Wood NW of Pembury, W. of A.21, 1950 **MNE**. S of Woolpack Biddenden. M[oun]t Pleasant Benenden. Boggy Wood W. of Pembury, 614395, CAS. R[ai]l[wa]y W. of Tun[bridge] Wells Sta[tion], 1960, CAS. Blackbush Wood, Goudhurst, DS.

14) Wood E of St Michaels Tenterden RAC. Wood by Breeches Pond RAC.

15) Hoppen Pits Dungeness 1946 **MNE**. Sandhurst Levels.

16) Postling Green Aldington. Spring Honeypot 089353. NW of Aldington Knowle.

**Agrostemma** L.

‡ **A. githago** L.<sup>228</sup>

Corn Cockle

15, 16.

C.

Colonist. Cornfields and waste ground, now extremely rare, and usually only a casual, though formerly very common in arable land, especially on chalk. Very rare now in adjoining counties. It is one of the arable weeds that has decreased in England due to cleaner seed, though still fairly common in N. France. There is some evidence that (in the days of its mediaeval abundance) the high saponin content may have caused susceptibility to leprosy: it seemed to have been limited too with rye crops formerly, and rye is now scarcely grown in England (Godwin, p.91).

1) Casual on rubbish dump, Green Street Green, 1946, **MNE**. Well Hall, Eltham, 1888 AHWD **BM**. Hayes Common, AG Davis, 1902 **MNE**.

4) Fordwich, 1940, L.W.W.

5) Halstead, AA, BM.

6) Cornfield SE of Cobham Park, 1946, 1 plant **MNE**. Pilgrims Way, Wrotham, Miss Tatton Brown. Near Dartford, P.H.C. Near Trottscliffe Ch[urch], 1939, Miss Nisbett. 596676 cornfield near Fawkhams Ch[urch], DVS Woods, 1 plant.

7) Boxley, Miss Hayton. Cornfield, Rainham, Alex P. Major, 1948-49.

8) Field between Gate Inn and Wheelbarrow Town, 1954, R.G.W.; DACL. St Margarets Bay, 1893, H W Pugsley. Field SE of Stelling Minnis, 1958, RAC.

10) Near Dartford. P.H.C.

11) Maidstone to Snodland Marshes, 1883, E. Bartlett **MNE**. Deakin Leas, Tonbridge, 1 pl[ant], 1944, KEB.

12) Mersham, D. Smith, 1908, **MNE**. Allotments, Willesborough, 022421, 1955, E. Scott. Near R[ai]l[wa]y Sidings Ashford 1955, Mrs N. Baker, det. Mrs Farquarson. Cornfield, freq[uent], Sandyhurst Lane, Ashford, 1947, GRP.

<sup>228</sup> Marked 'now extinct' in check-list.

**13) Cornfield Goudhurst, 1900, J.S., TLS.**

**Silene L.**

**S. italica** (L.) Pers. (Introduced originally?).

Italian Catchfly. [15], 16.

?N or H.

Synonyms: *S. patens* Peete. *S. paradoxa* auct. non L.

Denizen. Roadsides, chalk quarries, banks and cliffs, very rare.

This plant has been much confused with the varieties of *S. nutans* L.

It appears to have been first recognised in Kent as distinct from *S. nutans* by W. Peete, who found it at Dover in 1825, and recorded it (with a figure) as *S. patens* in *Eng. Bot. Suppl.* vol 2, no. 2748, in 1832. He pointed out that *S. nutans* also grew at Dover and (1) it was accurately described by Ray, and mentioned by him as growing there, and (2) both species had been found by his friend T.F. Forster at Dover some years before<sup>229</sup>. The plate was subsequently identified with *S. italica* (L.) Pers. It has not been observed at Dover for many years.

**6) [Dartford, J.B. Syme, 1859 BM. Roadside, Dartford to Darenth, J.B. Syme, 1863; 1876, A.B., BM. Roadside, Dartford to Green Street Green, J.S.M., 1863; 1888-9, A.H.W.D. BM. Lane from Dartford to Darenth Wood, 1867, H.T. BM; W.W.R.; 1881, A. Bennett BM. Between Dartford and Greenhithe, quite wild and abundant, 1869-71, J.C. Melvill. Dartford 1922 Mrs Wedgewood BM. Reservoir, Darenth, HB 1875 BM. Hedge near Dartford 1867 FA Hanbury (Hb Coll Marl.). Not recently observed in any of these places! Greenhithe, 1862, Hb Lamb MNE; 1863, J.S.M.; Hb. Mill; 1921 GCD BM; 1924, T.J.F BM; 1947, H.M. Pratt BM; etc. 1946-54 MNE, abundant on banks of Mounts Road, Greenhithe and on adjacent quarry cliffs! Galley Hill, G.C. Druce; 1931, JEL, BM.**

**8) Dover, Peete, 1825. Cliffs E. of Dover, 1819, E. Forster in BM<sup>230</sup>. (lectotype in Hb. Sowerby).**

**S. nutans L.**

This species has been the subject of immense confusion in the past, both with *Silene italica* Pers. and *S. paradoxa* L., and also with regard to its own (actually very distinct) varieties. Much of this confusion was sorted out by F.N. Hepper in 1951 (The variations of *Silene nutans* L. in Great Britain, *Watsonia*, II, pt. II, 1951, pp. 80-91) but experimental work is still needed. Only the main conclusions, as they affect Kent, are discussed here.

It appears that there are two very distinct taxa in Kent (and in Britain); Heppner gives these varietal status, but these taxa could, in my opinion, equally well be regarded as sub-species<sup>231</sup> or even as species, by analogy with other groups of plants. I have tested plants from Kent populations of the two taxa in cultivation, and they maintain their distinctness.

The two varieties, with their main distinguishing characters, the 1<sup>st</sup> records and distributions in Kent are given below.

**S. nutans L. ssp. smithiana** (Moss) Jeanm. & Bocq<sup>232</sup> Nottingham Catchfly. 15. N.

Plant much stouter and hairier than (var.) **salmoniana**, radical leaves broader, ovate-lanceolate to elliptical, blunter, more abruptly tapering into the petiole. Capsule 8-10 mm long. Carpophore 2.0-2.5 mm long. Flowers usually pure white.

Synonyms: *Cucubalus viscosus* L. sec. Huds. excl. diag. et syn.

*Silene paradoxa* L. sec. Smith, non L.

*S. nutans* L. sec. Salmon, in sensu strict., non L.

Native. Chalk sea-cliffs and short turf on their summits, very local. First reported in Kent in 1690 at Dover by Mr. Newton in Ray, *Synopsis*, ed. 1, p.15, as "*Lychnis major noctiflora Dubrensis perennis*".

**8) Abundant on the chalk cliffs, and on the short turf on top within a few yards of their edges, from Folkestone Warren to Dover West Cliff, and from Dover East Cliff to just S. of Oldstairs Bay, Kingsdown, more or less continuously. Many specimens in BM, K and MNE, from 1828 onwards.**

**1) naturalised on old wall, Lessness Abbey, 1948, R.A.B.**

This plant grows with *Crithmum maritimum* and *Limonium binervosum* on the ledges of the cliff faces, and in turf of *Festuca rubra* and *ovina* or *Brachypodium pinnatum* on the cliff-tops. A plant apparently identical with this (reputably endemic) British variety is abundant on limestone rocks in open woodland at Urach, Swabia Gura, S.W. Germany. Elsewhere in Britain similar plants occur on the chalk cliffs at Beer in Devon, and in

<sup>229</sup> The source cited does not support Forster having found *S. italica* as well as *S. nutans*.

<sup>230</sup> There is a deleted section in the manuscript which treated this as an error for *S. nutans*.

<sup>231</sup> Treated as subspecies in the check-list, and so subspecific names have been substituted here.

<sup>232</sup> Given in the manuscript as *S. nutans* L. var. *smithiana* Moss Dover Catchfly.

Derbyshire, Denbigh, Caernarvon (Great Orme's Head), Dorset, Knaresborough in Yorks, and on the cliffs on the E. Scottish coast.

**S. nutans** L. ssp. **salmoniana** Hepper<sup>233</sup>

15. N.

Plant slender, radical leaves narrow-lanceolate, acute, attenuated gradually into the petiole, shortly pubescent to very glandular. Capsule 11-14 mm long, carpophores 3-4 mm long, flowers cream or rose-pink.

Synonyms: *S. dubia* Herbich sec. Salmon (1905, J. Bot. Vol. 43: 1918, J. Bot. Vol. 56) non Herbich.

*S. nutans* L. sec. Moss, non L. in sensu strict.

*S. nutans* L. var. *vulgaris* Moss (1920, Cambridge Brit. Flora).

Native. Shingle beaches and sandy cliffs.

First recognised as a distinct plant by E.S. Marshall, who collected it at Dungeness beach in 1890; it was however recorded wrongly as *S. italica* Pers. in Fl. Kent, 1899. On chalk downs in Sussex, and in a gravel pit in Surrey.

**12)** Roadside of A20, E. of Willesborough, C.N.P.

**15)** Dungeness beach, from near Greatstone and just west of the lighthouse inland to Boulderwall and S. of Lydd: not on the newest shingle where there is no turf or soil. It is very abundant over several square miles, associated with *Teucrium scorodonia*, *Jasione*, *Festuca ovina* ssp. *tenuifolia*, *Sedum anglicum*, *Dicranum scoparium* and *Cladonia* spp. There are several gatherings from here in **BM** and in **MNE**. 13 Hythe shingle beach, 1895, Dickinson; J. Walton, old shingle, Willow Tree Farm, Burmarsh Road, Hythe, LJM 1957.

**16)** Abundant on cliffs of Folkestone Sand, Shorncliffe, 1955. [Sandgate castle, Dillwyn, Fl. Brit. (probably this)] This is common in stony hollows of sand-dunes in the Pas de Calais and at Hadelot, and on the Belgian coast: I have seen very similar plants on gravelly glacial rubble by a stream in Klein Walsertal, Allgauer Alps, Austria.

**S. otites** (L.) Wibel

[Spanish Catchfly.

16.]

Alien, long extinct.

[1]] Charlton chalk-pit, Miss S. Berkeley, Cooper, *Mag. Zoo. Bot.* **1**, p.495: possibly sown as food for caterpillars of [sic]<sup>234</sup>.

**S. vulgaris** Garcke ssp. **vulgaris**<sup>235</sup> Bladder Campion ("Billy Bunter" Folkestone).

15, 16.

N.

*S. cucubalus* Wibel

Native. Roadside banks, rough grassland, waste ground; common on chalk and ragstone, rather rare elsewhere, and unrecorded from Sheppey and Grain.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

**1)** Abbey Wood GAM. Dartford Heath GMB. Ruxley pits. R[oa]dside, Orpington, 1930, JEL **BM**.

**2)** Woolwich arsenal (var. *oleracea*, 1893 and var. *puberula* Syme A.H.W.D.; 1943! var. *puberula*. River Wall, Dartford Marshes, 1962. Higham Marshes, Sea Wall, 1931, SEC.

**3)** NW of Chartham → C[hatham] Hatch. Old R[ai]l[wa]y S of Whitstable HMW.

**5)** N.W. of Eynsford. 3964 Well Wood, W. Wickham PCH. Jewells Wood, Hb Davis **MNE**. A.20, Farningham [cross]r[oa]ds. Field W. of Shoreham.

**6)** Chalk bank ¾ m SE of Dartford 44. Hangman's Shaw, Rochester, 1938, JBM (No. 592). Cuxton. Strood. Lane End Darenth PCH. The Thrift, Bean, PCH. Mounts Rd, Greenhithe 44. Horton Kirby, PCH. Downs Rd Northfleet Green. Gravesend 60 HAS. Northfleet. Greenhithe. Upper Halling Hb Lamb 1901 **MNE**; 1942-60! Upper Halling (var. *puberula*) 1893, AHWD **BM**.

**7)** L[owe]r Bell, L.R.A.G/, 1951 **MNE**. Down NW of Three Squirrels Stockbury 44. Nashenden.

**8)** Ileden Wood.

**10)** Darenth R[oa]d, Dartford 44. S. Darenth PCH. Ide Hill, CAS. Kemsing St[at]io[n]. Sevenoaks Sta[tion] CAS.

**11)** R[ai]l[wa]y, Hildenborough, 563482, CAS. NW of Tonbridge R[ai]l[wa]y Station by r[ai]l[wa]y 1958 CA Stace. Meadows W of Eden Br[id]ge.

**13)** Claremont R[oa]d, T[unbridge] Wells, CAS, 1962. N. of Tunbridge Wells Sta[tion], by R[ai]l[wa]y 1958 CA Stace. Hilbert Rec[reation] G[r]oun[d], T[unbridge] Wells, CAS. Pinewood Road, T[unbridge] Wells, CAS. Langton, Barnsdale. T[unbridge] Wells Common, 576338, CAS. R[ai]l[wa]y, Grosvenor Rec[reation] G[r]oun[d], T[unbridge] Wells, CAS.

**15)** Romney Marsh, 1881, J.F.D.P. Dungeness (and flore pleno, VFP Day).

<sup>233</sup> Given in the manuscript as *S. nutans* L. var. *salmoniana* F.N. Hepper Nottingham Catchfly.

<sup>234</sup> Perhaps Viper's Bugloss Moth *Hadena irregularis*.

<sup>235</sup> Cited as *S. vulgaris* (Moench) Garcke.



var. **hirsuta**

5) Westerham, 1921, R.W.R. (1943!).

var. **oleracea** Bor.

2) Woolwich arsenal, 1892, AHWD.

var. **puberula** Syme

11) near Wrotham, 1774, Hb. Banks.

**S. uniflora** Roth (= *S. maritima* With.<sup>236</sup>)

Native. Sea shores, mostly on shingle: rare but locally abundant.

1<sup>st</sup> Rec[ord] 1632 Johnson *Descriptio* p24 'Lychnis marina anglica Lob.' – Margate to Sandwich by the sea shore.<sup>237</sup>

2) [Established on river gravel, Woolwich Arsenal AHWD, 1892 BM.] Seasalter, Cowell, F.G.E.K. (w of, 1944-49! **MNE**, 1958!; 1938, JBM **BM**. Shellness in Sheppey, 1955.

3) Whitstable, Cowell (beach W. of, 1945! & RGW). Swalecliffe, 1945.

4) Sandwich Bay, Cowell, FGEK; L.W.W.; RGW. [Stonar Beach, Cowell, FGEK.] [Walmer Beach, Miss L. Day.]

8) [Dover beach, Hb. F.A. Hanbury; J. Ridley, 1911 **MNE**; J.C. Melvill.]

9) [Margate, Miss Nevill.]

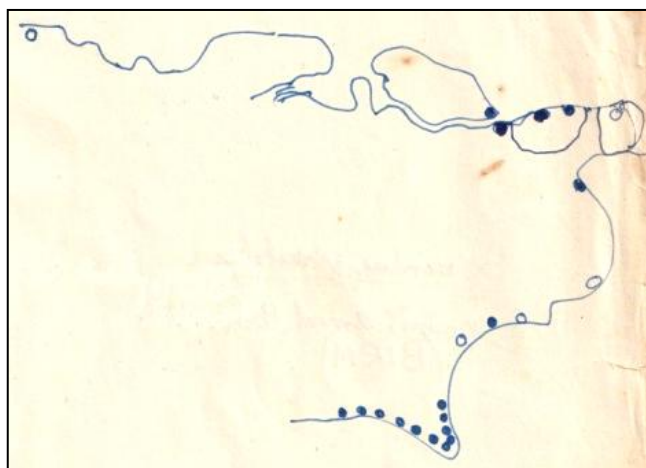
15) Shingle W. of Hythe, abundant, 1945. [Dymchurch, FJH.] Dungeness, Dowker; H.L. 1897 **MNE**; very common, 1945-1957 **MNE**, from NE of Lydd and Lade to Hope & Anchor, Holmstone, and Midrips, and inland to the edge of the shingle: usually attacked by *Ustilago violacea*.

16) Between Folkestone and Sandgate, M.N.H.S., 1848 **MNE**.

Sea Campion.

15, 16.

N



**S. vulgaris** x **uniflora**<sup>238</sup>

2) Woolwich Arsenal, 1901, AHWD (**BIRM**).

‡ **S. armeria** L.

Sweet-William Catchfly.

1) [Observatory Hill Enclosure, Greenwich Park, 1901, A.D. Webster.] Hayes Old Rectory, 1936, DMCC. Hayes Church, D.McC. (1946!)

[?6] Near Dartford, W.W.R.]

[11] Yalding, near Medway, Bab. Man. ed2; Borrer; Edwards in Phyt.1, 1080.]

**S. noctiflora** L.<sup>239</sup>

Night-flowering Catchfly.

15, 16.

C.

Colonist. Cornfields on chalk and on sand: rare but widely distributed; mainly in E. Kent.

1<sup>st</sup> record, 1632: "Lychnis sylvestris parva" W. of Sandwich, Johnson, *Descriptio*.

1) [Plum Lane Brickfield, Plumstead, 1 plant, 1892. R[oa]dsides, Bostall Heath to Bexley Heath, AHWD.] Cornfield near Darrick Wood, Orpington, 454649, F. Swain, 1959, **MNE**. Green Street Green.

6) Arable field on chalk, N of Lower Bush, Cuxton, 1952 **MNE**. E of Darenth Wood, 1 plant, AHWD. Dartford, 1930, P.H.C. Cornfield on chalk, W. side Downs Road, Northfleet Green, 1958, P.C. & J. Hall. Field E of Claylane Wood, Cobham, 667704, PCH.

<sup>236</sup> It is under this name that the species is given in the manuscript.

<sup>237</sup> This entry replaces a deleted reference to Johnson's Chatham record in the 1629 *Iter* (where Johnson wrote of *Caryophyllus marinus*, *sive gra: marinum*).

<sup>238</sup> Given as *S. maritima* x *cucubalus*.

<sup>239</sup> Treated as *Melandrium noctiflorum* (L.) Fr.

- 8)** Stubble, Fredville, 2650, DMCC, '37. Cornfield S of Eastry BN. Cornfield on chalk E. of Knowlton, 1958. [Bridge, Miss T. Webber.] 330480, cornfield, Sutton Downs, 1958, Mrs D. Rowlands, **MNE**; 1962. 35 Cornfield by Willow Wood, Tilmanstone, B. Nash, 1959. Cornfield N. of Folkestone, 1944, DHK. Below Castle Hill, Folkestone, 1957, KDR. Tank trap at NW entrance to Warren, VFDP.
- 9)** Frequent in Thanet: Dumpton Gap, C.P.S.K. Chalky arable field, Joss Bay / North Foreland, F.R., E.S., J.M.; 1954, **MNE**. Cornfields in Quex Park, plentiful, 1950; Northdown; Birchington, L.W.W. Cornfield on chalk, NW of Plumstone Farm, Monkton, 1958, J.M., F.R. & H.J. Wilks, **MNE**. Cornfield W. of Cleve Court, Minster, 1963.
- 11) G)** Cornfield on Folkestone Sand, N. of A.20, near Chegworth, Harrietsham, 1958, P.C. & J. Hall & F.R., **MNE**.

**S. latifolia** Poiret<sup>240</sup> (= *S. alba* (Mill.) E. H.L. Krause nom. illeg.) White Campion. 15, 16 N.

See Baker (J. Ecol., 1947) for an account of hybridisation between this and *M[elandrium] rubrum*.

Colonist.: arable land, roadsides, waste ground, hedgebanks; common on the chalk and the coast, much less common in the Weald.

1<sup>st</sup> record, 1629: Grain to Cliffe, Johnson, *Iter*, p.8.

This species probably arose in the Middle east and spread west and north with agriculture: it has hybridised with *M[elandrium] rubrum* as it has spread. It was most likely a Neolithic introduction in Britain (Godwin, p.90).

- 1)** Dartford Heath. Blackheath GMB. Elmers End, AG Davis 1915 **MNE**. Ruxley Pits. Abbey Wood, AHWD 1889 **BM**; GAM, 1951.. Keston (pink fl[ower]s). By R. Cray, N. Cray. Farningham Wood.
- 2)** Eastchurch Cliffs 1955. Woolwich Arsenal PCH. Plumstead Sewer bank PCH. SW Sheppey. Hawes Wood Newington. Kings Bridge Sheppey. NE of Sharnal St[reet].
- 4)** Wingham E of. Sandwich Bay.
- 5)** Lullingstone W and S of Park in arable. 3964 near Well Wood PCH. Knockholt Sta[tion]. Ploughed Down S. of Timberden Bottom. Chelsfield W of Eynsford PCH. Field W.of Farnborough. Polhill, Pilgrims Way. Mounts Rd Greenhithe. Swanscombe Wood. Downe Bank Wood.
- 6)** R[oa]dside NW of Darenth 44, **MNE**. Dartford. Horton Kirby. Halling Downs. Wrotham, Pilgrims Way, PCH. Stone HMP. Swanscombe HMP. Northfleet Green 58. Darenth Wood PCH. Gravesend r[oa]d verges and field banks freq[uent] 60 HAS. NE of Wainscott. Cuxton Village. Hoo → Sharnal Street.
- 7)** Borstal. Newnham.
- 8)** Arable Woolwich Wood. Arable Fredville. Arable Free Down. Woodville Down. Hougham V.F.P.D. F[olkestone] Warren V.F.P.D. Caesars Camp V.F.P.D. Ileden Wood 1980. Langdon Bay.
- 9)** Ramsgate, 1850, T.M. **BM**. Arable W. of Cleeve Court, Minster, '63.
- 10)** S. Darenth PCH. Shoreham Ch[urch] in cornfield, P.C.H. Darenth Ch[urch] 44. R[ai]l[wa]y, Sevenoaks, CAS. Kemsing Sta[tion] (white rose and pink) DMCC. Sevenoaks tip, CAS.
- 11)** Maidstone, HL, 1882 **MNE**. Wrotham Heath 1945 **MNE**. W. of Marden, 1956 **MNE**. S of Lenham Heath (sandy field). R[ai]l[wa]y, Hildenboro[ugh]-Tonbridge, C. Stace, 1958. R[oa]dside W of Leigh CAS. R[oa]dside NE of Mill F[ar]m Bethersden. Edenbridge tip DPY.
- 13)** Eridge R[oa]d, T[unbridge] Wells CAS. Pembury L[owe]r Green CAS. R[ai]l[wa]y, High Brooms, CAS. Dane Farm, T[unbridge] Wells ... CAS. Cleremont R[oa]d T[unbridge] Wells, 1962, CAS.
- 15)** Dungeness, J. Hubbard.
- 16)** Hillhurst F[ar]m, Pedlinge, LJM. Kiln Wood, Sandling, LJM.

**S. latifolia x dioica**<sup>241</sup>

Hybrids are frequent, e.g.

- [1)]** Blackheath GMB. 47 Abbey Wood, St J M.
- 2)** 07 Warden, Sheppey, 1947.
- 8)** 04 E of Pett Street, Wye, 1961, CAS, with parents. Crundale, by r[oa]d, ab[undant], DHK 1945.
- 12)** 03 Near Stour, Smeeth, LJM.

**S. dioica** (L.) Clairv.<sup>242</sup> Red Campion. 15, 16. N.

[synonyms:] *Lychnis dioica* L. p.p., *Melandrium dioica* (L.) Coss & Germ.

Native. Woodlands on a wide range of soils, shady hedgebanks. Very common except in treeless districts; absent from district 15). 1<sup>st</sup> record, 1632: Nash to Quex. Johnson, *Descriptio*, p.21.

<sup>240</sup> Treated as *Melandrium album* (Mill.) Garcke.

<sup>241</sup> Given as *Melandrium rubrum* x *M. album*.

<sup>242</sup> Given as *Melandrium rubrum* (Weig.) Garcke.

- 1) Abbey Wood. Joydens Wood. Petts Wood. Hayes Common GMB. Farningham Wood. Ruxley Pits. Bexley GMB. North Cray, Wood by R. Cray, PCH. E of St Mary Cray GMB. Scadbury Park. Elmstead Woods, Miss A Mills. Holwood Park. Blackheath, by pond in Pond La[ne], GMB, to 1952.
- 2) Copse S. of Brambledown Farm 1955. Brambledown Oak Wood 1955. Rd. W. of Eastchurch 1950-55 **MNE**. Warden Ash copse 1955. Eastchurch cliffs 1955. Norwood Springs 975717. Norwood F[ar]m, 973716. Ravine Bell F[ar]m Minster.
- 3) Shelvingford Wood. Marley Pits, Hoath. Bigbury Wood. Homestall Wood Harbledon. Dengrove Wood.
- 5) 396611 W of Highams Hill PCH. Jewells Wood, Biggin Hill, A.G. Davis, **MNE** 1915.
- 6) Darenth Wood. Mounts Wood. Stone HMP. NE of Wainscot. Beacon Hill Upnor. Cobham Great Wood. Wingate Wood. Horseholders Wood. Pilgrims Way, Wrotham.
- 7) Reported in Bridge Woods – not seen by me – V[ery] rare in west part of 7). Bluebell Hill, 3 pl[ants] only 59, AF Mussellwhite. Boxley Hills; Detling, BC. SW of Doddington.
- 8) N of Alkham. Wolverton Wood. Sutton Downs. Sladden Wood Alkham. N of W Hougham. Elms Wood. Elms Vale N. & W. Woolwich Wood. Coldred Copse. Coombe Vale Dover Wd2. Iffin Wood C Haes. S side Coombe Vale. N of Postling Wents. Coldred Village. Coombe Wood Stowting. Eastling Wood. Lit[tle] America. Walderchain Wood NW. Ileden Wood 1980. Yocketts Bank 84. Lynsore Bottom 84. Waldershare Park. Elmstead FRAC. Stowting RAC.
- 10) Rook's Hill 1955. Westerham Wood, B Sennitt. Boot Wood Plaxtol. Darent N of Shoreham. NE of French St[reet].
- 11) Oaken Wood. Horish Wood 44. Larkhill Heath, 1947 **MNE**. Leybourne Heath. Allington, E Bartlett, 1881 **MNE**. Wood by Lake S. of Bearsted Church 44. Collier Street. E. Sutton 836497. Leeds 829540. Bank W of Harrietsham 850528. Senacre Wood /Park Wood, Otham. E of Ulcombe Ch[urch]. Copse N of W. Malling Station '44. Medway Bank, Ashour Wood. 1m E Yalding. Millbay Wood. Snarkhurst Wood. Warren Wood EM. Warren Wood Leeds. Fullingmill. Kings Wood Ulcombe. Polhill 861523, 860528. Wood (r[a]g[stone]) Swanton Valley. E of Hale Street near Pond CAS.
- 12) Bybrook. Brabourne Coomb. 071386 Park Wood Smeeth. Bowley 901499. SW of Sellindge in wood by R[ai]l[wa]y.
- 13) Ditch S of Ch[urch], Lamberhurst, 684365, CAS. S. of Chingley Wood. N of Silverden Sandhurst. Ethnam Sandhurst.
- 16) Sandgate 1810, Herb. B.R. Club **BM**. Casebourne Wood Seabrook. Lane to Hythe Scars from Town. Shornecliffe. Roadside W[oo]d W of Hythe. Kiln Wood Sandling Park. S of Aldington Knoll.

‡ *S. coeli-rosa*<sup>243</sup> Godr.

Rose-of-Heaven.

H.

*S. gallica* L. (incl. *Silene anglica* L. and *Silene quinquevulnera* L.)<sup>244</sup> [Small-flowered Catchfly. 15, 16.]  
Sandy fields, waste ground, only a casual in Kent.

[1] West Wickham, 1926, F.G.S.: Hb L. Blackheath. Bromley. Spring Park Wood, 1926, F.G.S. Hb. L.<sup>245</sup> Hayes, 1936-8; now gone, D.McC.]

2) One plant on Shell sand beach, St Marys Bay, St Mary Hoo, 1958 **MNE**.

[3] Hatch Green, F.M. Webb.]

[6] Darenth, J.C. Melvill. Green Street Green, E.F.]

8) Lit[tle] Mydekin, Denton, Miss DACL, 1958, **MNE**.

9) (Cornfields, rare, Fl. Thanet.)

11) Near Edenbridge\* (as *quinquevulnera*) Talbot, BEC Rep. 1922, p720\*. Mill Refuse, Tovil, H. Lamb. Near Wrotham\* Hudson, Fl. Ang. ed.2 p188.

[12] Between Brabourne and Kennington (Mersham) G.E. Sm. FGK.]

13) Tunbridge Wells\*, Miss Nevill.

16) Sandgate\*, Syme, Eng. Bot. II, p.61; p852, F. Brent, **BM**; (*quinquevulnera*) 1852\* FY Brocas, Hb Coll. Marl. Records marked thus\* are for *S. quinquevulnera* L. s.s.

First record: 1835, G.E. Smith – "South Kent" New Bot. Guide, p.71. c.1425 – capsules, calyx and seeds in plaster from house at Larkfield, J.R.B. Arthur in *Plant Remains* (as *S. anglica*).

<sup>243</sup> Given in check-list, but no account in the manuscript.

<sup>244</sup> An earlier, deleted draft of this account, with fewer records and treating *S. quinquevulnera* as a separate species, appears on a sheet preserved because it carries two other species accounts on the back.

<sup>245</sup> Apparently duplicated entry.

[[‡] **S. dichotoma** Erh. [Forked Catchfly. 15.]  
SE. Nat., I, 1896, and J. Bot. XXXIV, 1896.  
4) Wingham, Dowker.

**S. conica** L. Sand Catchfly.<sup>246</sup> 15, [16] N.  
Native. On sand-dunes, especially in slightly disturbed ground; very rare, but v[ery] locally frequent on the coast.

1<sup>st</sup> record, 1724: Sandown Castle, *Ray Syn.* ed. 3 p341.

[1] Cloverfield, St. Mary Cray, 1925, J.K. Spearing.]

4) Deal, Sherard and Rand in *Ray Syn.*: Herb. Banks **BM**; frequent in hollows and in bunkers on the sand dunes, N. of Deal, O.B.G.; MNHS, 1850 **MNE**, 1954. By Guilford Hotel 1946-56 **MNE** and N. of Sandwich Bay, 1956 **MNE**, 1965, abund[ant].

[6] Fallow field near Dartford, right of road to Darenth Wood, 1877, E. de C. **BM**.]

15) Romney Warren, Rev. Stacey (1946! **MNE** by the New Romney-Dymchurch road). On the dunes on the Golf Course, N. of Littlestone, 1946-50, frequent; 1954, plentiful J.P.M.B., K. Shingles W. of Hythe, Mrs. B. Welch, 1948.

This species, very distinct in its stiff inflated green-and-grey ribbed calyces and small pink petals, is very common on the dunes of the Pas de Calais and grows larger there than in Kent.

### **Saponaria** L.

‡ **S. officinalis** L. Soapwort. 15, 16. D.

Denizen. Hedgebanks, roadsides, waste ground; local, but well distributed; a relic of ancient culture.

1) Dartford Heath HMP. Below W Hill Blackheath, GMB. 37 New Cross to St John's by railway, 1901, P. Cochrane; DMCC. Ruxley Pits. 46 Hayes Common, and in village (double flowers) D.MCC. 57 Stonehill Green, Hextable, PCH; 505703 HMP. 56 Swanley Junction, 1913, L.J.T. Ravensbourne, Bromley, AG Davis, 1917 **MNE**. 57 R[oa]dside Hawley, PCH. R[oa]dside Wilmington PCH.

2) 47 Woolwich Arsenal, abundant. 47 Crossness, waste g[roun]d, PCH. (57 Stone Marshes AHWD 1891 **BM**.) 97 Eastchurch. 06 By r[ai]l[wa]y, Ace Sand & Gravel Co., Oare (single) H.M.W. 76 Snodland Churchyard, A. Beadell; by Gas Works, 1980.

4) Littlebourne, Mrs B. 25 Abundant on hedgebank of main r[oa]d, W. of Ash, 1946-50, **MNE**. 25 Wingham. 36 Ebbsfleet, L.W.W.]

5) Near Swanley, 1878, H. & J.G., **BM**.

6) Roadside near Shorne, 1878, H. & J.G., **BM**. 57 Near Stone Church, 1914, C.L.W. 57 Cotton Lane, Stone HMP. Snodland PCH. 57 ... Stone. 57 Darenth, H.M.P.; 1962, WAS. (Gravesend, C. Andrews **BM**.) Higham, by A.226, H.M.P. 710710.

7) Near Rochester, 1834, Herb. J.S. **BM**. Syndale Farm, FGEK; '50, REW.

8) 05 E. of Godmersham, L.W.W.; ES. 34 Dover DHK. 15 ... Lane S of Canterbury, RGW.

10) 57 Ditches, Sutton-at-Hone, H.M.P. By Ightham Mote HMP. 57 By Darenth, Hawley, H.M.P. Sevenoaks gas works CAS. S[even]oaks Dump DMCC.

11) Malling, J James 1830 **MNE**. 75 Allington, H. Lamb 1881 **MNE**; by lock, 1961, HMP, 746582. 65 Gravel pit N. of Hadlow, 1943. 75 Bank, Ivy Farm, E. Malling. 65 Yalding. 94 NE of Bethersden, J.E. Chambers (fide CES, J Bot 1924, p.307); E. Scott.

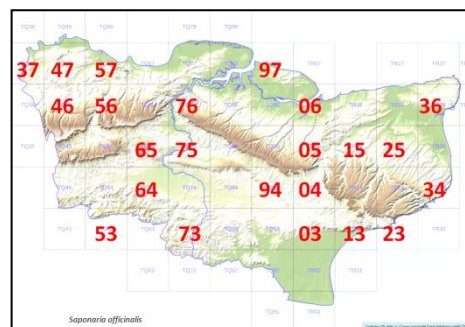
12) Lenham Heath, AG Davis, 1902, **MNE**. 05 Godmersham, 1936, Miss E Milward. Sturry WW. Hothfield, AE Webb. 04 Brook. 04 Willesborough, E. Scott. 94 Westwell, ES. 94 Westwell Leacon. 94 Tut Hill, ES. Ashford GMB. Sellindge SW RAC. 94 Hothfield Common S end, ES. 04 Kennington ES. 03 S.E. of Kingsnorth, ES.

13) 53 Forest R[oa]d, Tun[bridge] Wells, 588378, E Shorrocks, 1960. 64 Pembury L[owe]r Green, CAS. Rusthall Common KEB.

14) 73 Hawkhurst, J. Piper, fide DS.

15} 13 waste g[roun]d by Redoubt, Dymchurch Rd., Hythe, LJM.

16) 23 Cheriton, on Railway bank, 1944, DHK. Coolinge, VFPD. 13 Sandpit, Stone Farm, Newington, 1959, LJM.



‡ **S. ocymoides** L. Rock Soapwort. [15]. H.

<sup>246</sup> Sand Catchfly in the check-list; Striated Catchfly in the manuscript.

Alien, naturalised on a shingle beach and on a roof; very rare.

15) On shingle N. of Pilot Inn, Dungeness, 1947 **MNE**.

16) On roof in Lympe Village, 1947 **MNE**.

### **Vaccaria** Wolf

‡ **V. hispanica** (Mill.) Rauschert Cowherb.<sup>247</sup> [15, 16.]

(*Saponaria vaccaria* L.; *S. segetalis* Link.)

Casual alien.

[1] Beckenham, Wright. Woolwich Arsenal, A.H.W.D. Plumstead, 1893 AHWD **BM**.] Gravelly bank near W. Wickham Station, A. Verrall, teste WHG. Charlton Pit, 1903-7, J.F.B. & WHG.

[3] E of Herne Bay Pier, 1832, F.G.E.K.]

[4] Beach, Sandown, N. of Deal, Mrs Benson.]

5) Cockerhurst, near Lullingstone 1933; by Chelsfield Railway Station, P.H.C.

6) Gravesend 1924, St.J. M.

[8] Waldershare, cornfields, Duthie.]

11) Vetch field, S of Malling, 1864, J.S.M. (E. & W. Malling, Bot[anist's] Chron[icle] (1864) p.85.

13) N[ea]r Groombridge, G.E. Shaw.

### **Petrorhagia** (Ser. ex DC.) Link

**P. nanteuillii** (Burnat) P.[W.] Ball & Heywood<sup>248</sup> Childling Pink. [15.] (? extinct) N.

Native. Dry gravelly pastures and shingle beaches: extremely rare.

1<sup>st</sup> record, 1899: Fl. Kent, though found by E. Forster & Woods long before. VC. 16 – Top. Bot. Suppl.1.

4) ‡ Railway sidings, Richborough 1937, D.McC; 1939, JPMB & NYS (BEC 1939-40, pp252-3); 1956, BN; 1946-58! **MNE**; 1960, Mrs D.K.R. [sic, for KDR?] **MNE** & Mrs B, both sides r[oa]d.

[11] Sandy railway Bank, Malling, plentiful, 1882, E. de Cresp., **BM**. Also by E. de C., ex Hb. Charles Bailey (**BIRM**).]

15) Shingle W. of Hythe, Woods in Hb. Borrer; on "Drilling Ground", Hanbury; 1900, S.E. Chandler; Miss Murray, 1922; by road to ranges, S. of range canteen, 1948, Mrs B. Welch; by road S. of range canteen, 158, abundant here, 1958! **MNE**. In lane 1½m W. of Hythe on N. of Dymchurch road, E.F. **BM**.

‡ **P. saxifraga** (L.) Link<sup>249</sup> Tunic-flower. [15.]

Alien, naturalised in chalk pit.

7) Old chalk pit, Highstead, S. of Sittingbourne, 1958, D. McClintock & E.G. Philp **MNE**.

‡ **Gypsophila porrigens** Boiss.<sup>250</sup>

1) Abbey Wood, Poore & St.J.M. (BEC 1922).

### **Dianthus** L.

‡ **D. caryophyllus** L. Clove Pink. 15. D.

Long-established Denizen: on old walls, vey rare.

1<sup>st</sup> record, 1666, Rochester Castle, Merrett, *Pinax*, p.23.

2) "Snodland Marshes", E. Bartlett, 1883 **MNE**; presumably on a wall, if correct.

6) Halling Great pit, H. Davison, 1962.

7) Rochester Castle walls, 1666, Merrett; 1847, C.A.S. **BM**; MNHS, 1850 **MNE**; 1871, A.G.; 1902, H.W.P. **BM**; 1905, 1906, S.H.B., **BM**; 1924, T.J.F., **BM**; 1938, J.B.M. No.665 **BM**; (1953, F.R., still l[ocally] f[requent]!) **MNE**. On outer wall near River entrance and on inner face of outer wall opp[osite] keep, GCP[;] and by gents!

[8] Deal castle: Hudson; Dillwyn. Sandown Castle, Hudson. Dover, Miss Russell in Hb. F.A. Hanbury.] [Escape, Folkestone Warren, 1873, Hb. F.J.H.]

11) Boxley Abbey, Finch, in Hb. Palmer. Gravel pit E of Aylesford, R. Herdwick.

‡ **D. plumarius** L. Wild Pink. [15, 16.]

Denizen. Old walls, extremely rare.

<sup>247</sup> Given as *Vaccaria pyramidalis* Med.

<sup>248</sup> Given as *Kohlrauschia prolifera* (L.) Kunth., Synonyms:- *Dianthus prolifera* L., *Tunica prolifera* (L.) Scop.

<sup>249</sup> Given as *Kohlrauschia saxifraga*.

<sup>250</sup> Synonym: *Gypsophila pilosa* Huds.



6) [Old wall, Geen Street Green, E. Forster **BM**.] Abundantly nat[uralise]d Holborough chalk pit cliff, Snodland, 702627, 1961. Also in aband[one]d garden nearby: G.L. Davison.

10) Sevenoaks tip, CAS.

12) Westenhanger Castle C.P.S.K.; 1893, E.S.M. (**BM**).

**D. deltoides** L. Maiden Pink. 15, 16. N (? Now extinct as N).

Probably extinct as a native. Dry sandy or gravelly pastures, naturalised in a disused ragstone quarry; very rare now and most often as a garden escape; formerly in several localities.

1<sup>st</sup> record 1597: Deptford, Gerard, *Herbal*, p.476.

[1] Deptford, Gerard. [Sandy ground, W. side Farningham Wood, J. Tabor & C. West, c.1910.]

4) ‡ By ruins of coast guard station at Sandwich Bay, 1946, **MNE**.

7) [Rochester, H. Lamb.] [Beacon Hill, Norton, Blackstone.]

10) Plentiful in disused ragstone quarry on gritty loam, Dry Hill, Chevening, F.S.E. Fawkes (1954!-60!) **MNE**; seed originally sown here by P. Armstrong, teste A. Brown.

11) Straight Mile, Leigh, H.S. Vere-Hodge: not refound, F.R. 1957. ‡ Wrotham Heath; and ‡ Addington, by A.20, probably garden escape, 1945-50 **MNE**. Bearsted, 1909, H. Elgar, **MNE**.

13) [Hawkhurst, Melvill. Angley Park, Cranbrook, in sandy field, A.W. Hudson.]

‡ **D. barbatus** L. Sweet-William. 16. H.

Garden escape, naturalised in a few places.

5) Chalky railway cutting near Chelsfield, 1946, D.H.K.

6) Chalk railway cutting S. of Eynsford, 1949, JEL, Hb. L.

7) Long reach Wood, Detling, 1948, DMCC.

**D. armeria** L. Deptford Pink. 15, 16. N.

Native. Dry banks and fields on sand and gravel, usually in full sun: formerly locally common, now quite rare.

1<sup>st</sup> record, 1629: E. of Gillingham, Johnson, *Iter*, p.5.

1) railway bank (E. side) N. of Orpington Station, R.W. Hale (1944!-1949! **MNE**). [Elmers End, Beckenham, 1900 ASK; A.G. Davis, 1906 (**MNE**).] S. facing bank on Thanet Sand, S. side of Farningham Wood, 1948, R.A. Boniface (1949! 1950! 1952 H.M.P.) **MNE** (1982! 20 plants. On dump of debris from bombed sites, 495652, 12 plants 1964, S. of Crown Wood Chelsfield, C.A. Vick.

3) Near Canterbury, Hb. Harvey. [Near Harbledown Windmill by Pilgrims Way, 1946, Miss Long, Ploughed, 1948.] Fishpool Hill Wood, in open grassy area by track on sand, near Johnson's record of 1632. 1954!-1960! **MNE**.

6) Fawkham, Mrs D.G. Woods. [Coast Guard Stn, Greenhithe, 1862, Hb. Lamb **MNE**.] [Cobham, Maidstone N.H.S. 1848, **MNE**, several old localities.] Luddesdown, 678689 S. of Cobhambury Wood by lane, D.V.S. Woods. 598676 Culery Down Broke, near Fawkham Ch[urch], D.V.S. Woods.

7) By Rainham Park Wood in open grassland on sandy loam, 650810, Mrs. V. Bramby 1951; B. Carter, 1952

8) Hedgebank by church, Lower Hardres, F.M. Webb: Miss J. Nisbet, 1939: L.W.W. 1949: 1958! **MNE**. Also by S.E. corner of Whitehill Wood, → 16/53, 1950, L.W.W.

10) Ightham, F.W.E. Shrivell, 1879 **MNE**. ?Introduced – Wood in garden, Sevenoaks, F.R. Waley.

11) 683492, on gravel bank by Pond W. of railway, E. of Hale Street, E. Peckham, D.E. Kimmins 1954; **MNE**. Reported at Straight Mile, Leigh, H.S. Vere-Hodge. [Two colonies S. of W. Malling, Gray, now apparently gone.] [Malling Woods, 1837, C.A. Stevens Hb. Coll. Marl. Between Bethersden and Great Chart, J.E. Chambers, 1924.

14) Copse S.W. of Susans Hill, N.W. of Woodchurch, 927349 after coppicing, 1955 C. Skinner, 1956 E.S.

16) On sandy cliff, W.end of Folkestone Leas, G. Walton: 1947-58! **MNE**. Roadside, Radnor Cliff head to Rivera, Sandgate, 1958, Miss V. Day.

## POLYGONACEAE

**Persicaria** Mill.

‡ **P. campanulata** (Hook. f) Ronse Decr.<sup>251</sup> Lesser Knotweed. [15, 16.]

7) Walderslade, path off Lordswood Lane, 1917, S. Andrews.

[13] Roadside N. of Kildown, towards Goudhurst, DMCC & FR, 1947 **MNE**, not seen 1962, OW.]

<sup>251</sup> In the manuscript given as *Polygonum campanulatum* Hook. f.

‡ **P. wallichii** Greuter & Burdett<sup>252</sup>

[Himalayan Knotweed. 15, 16.]

7) Paddock by A252, n[ea]r Challock 57 DMcC.

13) By r[ai]l[wa]y, Hilbert Rec[reation] G[roun]d, T[unbridge] Wells, 591 408, CAS. R[ai]l[wa]y W. of T[unbridge] W[ells] West Sta[tion] 1960 CAS.

**P. bistorta** (L.) Samp.<sup>253</sup>

Common Bistort. 15, 16.

N.

Native. Damp meadows, damp open woods, damp roadside verges near streams; rare, more so than formerly. This species is protandrous; it has an unpleasant smell when the stamens are mature, which disappears on the maturation of the ovaries (see Porsch, O. (1954) *Österr. Bot. Zeitschr.* 101, pp.359-378.)

1<sup>st</sup> record, 1629: Dartford, T. Johnson, *Iter*, p.[ ]

1) [Meadow by lane from Hayes to Bromley, J.S.M. Phytol. NS II, p550, (Hb. Mill).] Greenwich Park, 1903, AD Webster; 1958, GMB. Damp roadside, Keston Mark, 1954, G.M. Brown. Meadow by R. Cray, N. Cray, J.B. Marshall, 1947.

4) [Minster and Monkton Marshes, Dr. Hunter in F.G.E.K. p.77, an unreliable recorder.]

5) Knockholt, c.1936, A. Beadell.

6) Hedgebank on lane on clay-with-flints, S. of Weike Farm, E. of Shoreham, 556607, 1956, **MNE**.

8) Roadside n[ea]r Pumping Station by Nail Bourne, Ottinge, n[ea]r Elham, Solley, c. 1948. Waldershare, 1956, Miss DACL. [Field N[ea]r Stone Street eight miles from Hythe, C.P.S.K.]

10) 476553 Damp wood between R[iver] Darent and A.25, E. of Brasted, 1942-62 **MNE**. Bank of R[iver] Darent, E. of Sundridge crossroads, 1956, P.C.H. and F.R. **MNE**. Riverhead, J.S.M.; Otford, Miss Worship; E.M.H. Lane bank on spring line, Mariners, E. of Crockham Hill, RAC, 1958.

11) Birling, H. Lamb. Aylesford, Miss Young. [Wet meadow N.E. of Goose Green n[ea]r Hadlow, 1942 (since ploughed up).] Wood opposite Allington Castle, J.B. Hopkins, F.G.E.K. Roadside by bridge over stream W. of Harrietsham, 1921, AS Kennard; 1954! **MNE**.

12) By the river, Ashford, G.E.S. in FGK.

13) W. of Furnace Pond, Cowden, abundant, E.S. Salmon (1947!); 1957, T.D. Pennington. Bedgebury, by one of the lakes, J.R. Wallis, 1943. Bayham, in meadow, 655367, TWNHS, before 1939; not seen, C.A.S. [locally] abundant] Hook Green, Lamberhurst, J.R. Wallis, 1941. Roadside verge by stream, Frizley, Cranbrook, 1954, **MNE**.

14) Tenterden Mill Ponds, Prebble.

15) By Military Canal, Sandgate, Ulyett.

In Surrey, Sussex, Essex and in Pas de Calais.

‡ **P. amplexicaulis** (D. Don) Ronse Decr.<sup>254</sup>

Red Bistort.

[15, 16.]

Naturalised alien, garden escape.

1) Holwood Park, 1948, n[ea]r lakes, E.B. Bangerter & F. Rose, **MNE**. *Hand List*.

9) Nettle bed, Dumpton Park, Ramsgate, 1950, LWW, det. JEL.

**P. amphibia** (L.) Gray<sup>255</sup>

Amphibious Bistort.

15, 16.

N.

Native. Ponds, lakes, ditches, slow streams; also on dry ground near water as an erect ± hairy habitat form. Widely distributed and locally common, especially in the alluvial coastal marshes and in the Weald.

1<sup>st</sup> record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.27.

1) 36 Pickhurst Common, 3956 63, Hayes, 1953, PC & JFH. 37 Beckenham Place Park, 1956, PCH. 47 N. Cray tip, PCH. 47 Ruxley Pits, '58. TH Angel.

2) 67 Northfleet Brooks, 1944. 47 Woolwich Arsenal, 1944. Eastchurch, Sheppey, Hb. AG Davis, 1917 **MNE**. 66 Ham Hill, Birling, 1956, PCH.

4) 35 Hacklinge, in dike, 1946 **MNE**. 26 Preston Marshes, N. of Ch[urch], 1962, KFC.

6) Chalk pit, Northfleet, 1956, PCH.

8) 15 Pond by A.2, 2m. SE of Canterbury, 1946.

10) 57 St. John Jerusalem PCH. 56 Stream below Farningham R[oa]d and S. Darent PCH.

11) 65 Stream, Addington Place, 1958, DMcC.

<sup>252</sup> In the manuscript given as *Polygonum polystachyum* Wall. ex Meisn.

<sup>253</sup> In the manuscript given as *Polygonum bistorta* L., Bistort, Snake-root

<sup>254</sup> In the manuscript given as *Polygonum amplexicaule* D.Don.

<sup>255</sup> In the manuscript given as *Polygonum amphibia* L., Water Persicaria.

- 12) 05 R[iver] Stour, Chartham, 1955 **MNE**. Vauxhall Lakes, Sturry, 1954 ES.  
 13) 73 Bedgebury Lakes, 1946. 73 Pond n[ea]r Spelmonden, E. of Lamberhurst, 1939, JRW.  
 15) 01 Dungeness Open Pits, 1946, **MNE**. R[oyal] M[ilitary] C[anal], Hythe, Mrs MJ Comyn.

**P. maculosa** Gray<sup>256</sup> Redshank. 15, 16. N.

Native. Waste ground, cultivated land, pond borders, marshes, and near the sea shore; very common.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

- 1) Up[pe]r Hockenden Swanley PCH. Joydens Wood PCH. Crofton Heath PCH. Millpond, Bexley, PCH. R[oa]dside, Bexley, N. Cray, PCH. R[iver] Cray, N. Cray, PCH. Ruxley Pits, 58, TH Angel. 36 Tip by Hayes Sta[tion], 395660, 1958, PCH. Shooters Hill Woods '54 GMB.  
 2) Woolwich Arsenal, PCH. N. of Lunsford, 1944.  
 3) Murtons F[ar]m, Graveney, R Theobald '56.  
 4) Ham Brooks (also white) C.C.T. Sandwich Bay.  
 5) Pilgrims Way, Polhill PCH.  
 6) Romney St[reet] PCH. Mounts Rd, PCH. The Thrift, Bean, PCH. Northfleet, '61 HAS. Claylane Wood, fresh copp[ice], 1960, HAS.  
 7) Arable of chalk S. of Purple Hill, Bredhurst, 1962.  
 8) Castle Hill, Dover, PWW, 1958. 35 arable about Fredville DMcC.  
 10) St. Johns Jerusalem PCH. By R[iver] above S. Darenth PCH. R[iver]path below Shoreham PCH. Sevenoaks tip 1958, CAS.  
 11) 451455 Edenbridge rubbish tip, 1956, DPY.  
 13) Combwell Wood.  
 14) 924347 Woodch[urch], ES.

**P. lapathifolia** (L.) Gray<sup>257</sup> Pale Persicaria. 15, 16. N.

Native. Waste ground, cultivated land, pond borders, marshes. Common generally in Kent.

1<sup>st</sup> record, 1777: Blackheath, Curtis, *Fl. Lond.* I, p.25

- 1) 47 N. Cray tip, PCH. 56 Orchard NE of Farningham Wood, PCH.  
 2) 76 Snodland Marshes, 1949. 76 Holborough Marshes '44. 47 Woolwich Arsenal 1944. 47 Waste ground, Crossness PCH.  
 4) 35 Sandwich (dikes W. of) 1946.  
 5) 36 Barley field N of Blackmans 397604, 1958, PCH.  
 6E) 17 Sharnal St[reet] St[at]ion, 1958, JF & PCH.  
 7) 86 Arable on chalk, S. of Purple Hill, Bredhurst, 1962. 95 Arable, Eastling, 1961, C. Turner.  
 8) 13 Arable N of Tolsford Hill T.V. Mast, 160390, 1959, LJM. 24 Damp arable, Temple F[ar]m, West Whitfield, 1957, Miss B. Nash.  
 11) Aylesford Gravel Pits EGP, 1960. Tonbridge. Field S.W. of Ightham Court 593573 (F[olkestone] Sand) 51 DMcC. Fairbourne Mill, Mrs B. Dodds, 1960. 451455 Edenbridge rubbish tip, 1956, D.P.Y. Dried up Pond SE of Sutton Valence 1944.  
 12) By Stour, Shalmsford Bridge, Chartham, 1960 **MNE**. Hinxhill ES.  
 15) New Romney.  
 16) 13 Grange Alders, Saltwood, 1958, LJM.

**P. lapathifolia** [as *Polygonum nodosum* L., a small decumbent form formerly separated as a species and given accordingly in the manuscript]

Native. Waste and cultivated ground, open damp ground by ponds and lakes: rare. I have seen little of it myself.

1<sup>st</sup> record, 1845: Tunbridge Wells, Jenner, *Fl. Tunbr. Wells*, p.21.

- 1) Woolwich, abundant, replacing *P. persicaria*, A.H.W.D. Fields n[ea]r Swanley Junction, E.S.M.  
 2) Fields n[ea]r Upchurch, F.M.W.; fields near Faversham, Stowell (*Phytol NS*. II. P.154).  
 3) E. of Canterbury, F.M.W.  
 4) Deal, Baker. Preston Marshes, 1961, Mrs. B. Dodds (by Deerson Stream, NW of Ch[urch]).  
 8) Arable N. of Tolsford Hill T.V. mast, 160390, 1959, L.J.M.  
 11) Between Marden and Staplehurst; Headcorn, E.S.M.

<sup>256</sup> Given in the manuscript as *Polygonum persicaria* L., Persicaria.

<sup>257</sup> Given in the manuscript as *Polygonum lapathifolium* L.

- 12) Ashford, in fields; Willesborough; Westenhangar, E.S.M.  
 13) Mount Nod, Tunbridge Wells, Hb. Borrer (K). Orchard, Pembury Lower Green, CAS.  
 15) Halfway Bush, Denge Beach, 1957, J. Hubbard: = minus?  
 16) Pond, Frogholt, Newington 174373, 1959, LJM.

‡ **P. pensylvanica** (L.) M. Gómez<sup>258</sup> Pinkweed.

**P. hydropiper** (L.) Spach<sup>259</sup> Water-pepper. 15, 16. N.

Native. Open wet ground, where there is little competition, such as wet rutted rides in woods, pond borders, also in shallow water of ponds, ditches and slow streams. Very common, except in chalk districts. Readily distinguishable by its acrid, burning taste.<sup>260</sup>

- 1) North Cray. Joydens Wood, PCH. Crofton Heath, PCH. Farningham Wood 82! Chislehurst Common. Keston Common. Bromley Common.  
 2) Stream, Level crossing, Graveney. H.M.W., 1958.  
 3) Perry Wood, Selling, 1945, DHK.  
 5) on c[lay] w[ith] f[lints], Andrews Wood, S. of Badgers Mount, PCH.  
 6) on c[lay] w[ith] f[lints], Preston Hill, PCH.  
 10) R[iver] path below Shoreham, PCH. Sevenoaks tip, 1958, CAS. Darent E of Westerham, G.M.B.  
 11) Stream, Addington Place, 1958, DMCC. Below Aylesford. Marsh ditches and R[iver] above, Tonbridge, v[ery] a[bundant]; below Tonbridge, v[ery] a[bundant].  
 13) Bog in Wood SW of Pembury 614395, '56, PCH. Angley Wood, 1961, HAS. Ditch S. of Lamberhurst Ch[urch], 684365, CAS. Combwell Wood.

**P. laxiflora** (Weihe) Opiz<sup>261</sup> Tasteless Water-pepper. N.

Wet open ground, ditches, ponds, etc.: extremely rare in Kent. 1<sup>st</sup> record,<sup>262</sup>

- 1) [Lewisham, A.A. BM.] Chislehurst Common, F.J.H. Wet path, Pokeridden Wood Orpington, 1954, C. Swain. MNE.  
 2) Near Minster-in-Sheppey F.J.H.  
 11) [Hadlow, Miss Peers ("spring field". Is this a reliable record?)]  
 13) Marsh below Fishers' Castle, Tunbridge Wells, 1 plant, A.G. More. Phytol. N.S. 1. p. 294. Wet ride in Angley Wood, J.P.M. Brenan.

**P. minor** (Hudson) Opiz<sup>263</sup> Small Water-pepper. [15, 16.] N.

Native. Wet open ground, especially on gravel soils, ditches and ponds: extremely rare. 1<sup>st</sup> record,<sup>264</sup>

- 1) roadside, Blackheath, 1802, M.S. note on drawing for *Engl. Bot.* 1043: Blackheath, Cooper, Fl. Met., p.48. [Chislehurst Common, 1946 MNE. 1965, ext[inct] now]  
 10) [Seal Chart, Roper, 1874.]  
 11) By Medway. L[owe]r Haysden, Tonbridge, G.E. Shaw, 1938 TLS: MNE.  
 12) [Wilkesborough Lees, rare, 1863, JSM.]  
 15) Halfway Bush, Dungeness, in bomb crater, 1946. MNE.

### **Fagopyrum** Mill.

‡ **F. esculentum** Moench Buckwheat. 15, 16.]

A mere casual from previous cultivation. Formerly cultivated much more widely, and recorded as early as Gerard's time (*Herbal*, p.83). The only recent records I have are:

- 1) Flower bed, Stone, 562746, HMP, 1959.

<sup>258</sup> Given in check-list, not in the manuscript.

<sup>259</sup> In the manuscript given as *Polygonum hydropiper* L., Water-Pepper.

<sup>260</sup> No first record given, but presumably would have been Gravesend to Rochester, 1629, T. Johnson, *Iter*.

<sup>261</sup> In the manuscript given as *Polygonum mite* Schrank. The check-list, in giving *P. laxiflora*, unusually does not follow Stace's *New Flora* 2nd edition in providing *Persicaria mitis* (Schrank) Opiz ex Assenov.

<sup>262</sup> Nothing given, but presumably it is the Tunbridge Wells record (1855).

<sup>263</sup> In the manuscript given as *Polygonum minus* Huds.

<sup>264</sup> Nothing given: it is presumably the 1802 note cited. The 1899 *Flora of Kent* gives Cooper's record (1836) – incorrectly, as the text of *English Botany* (1802) refers to Blackheath, irrespective of the origin of the plant figured.

8) field W of Postling Wood, 1950, Miss DACL.

9) N. Foreland, L.W. Wilson.

12) Field at Charing Heath, 1942.

13) (51/54) Albion Rd., T[unbridge] Wells, 1954, CAS. (51/63) Dunorlan P[ar]k, T[unbridge] Wells, 1954, '56, CAS.

### **Polygonum L.**

**P. oxyspermum** C.A. Mey & Bunge ex Ledeb.<sup>265</sup> Ray's Knotgrass 15, [16] N.

Sandy shores, especially on cockleshell sand; very rare, but still very locally frequent; largely confined now to beaches near the E. end of the Swale; principally along the drift-line.

1<sup>st</sup> records, in 1899: Flora of Kent, Marshall, E.

2) [Grain spit, very scarce, A.H.W.D. and E.S.M., Fl. K., 1899; not refound here in spite of close search!]

(1) Shellness beach, Sheppey, 1938, J.E.L.; abundant locally, but variable in quantity, 1946-62! **MNE**.

(2) Leysdown, North beach, abundant locally, 1948-62 **MNE**.

(3) Shell-beach SE of Mussel Farm, Leysdown, c.45 plants, 1959, **MNE**.

(4) Beach ¾m. W. of Sportsman 1959, 8 pl[ants], H.M.W.

(5) Beach west of Seasalter, n[ea]r Sportsman; locally common 1945 **MNE**; 1959; 1960 **MNE**.

(6) Beach by white sluice, Seasalter, locally frequent, 1959, F.R. and H.M. Wilks; Castle Coot, 1983, l[ocally] a[bandant]!

(7) by the "Rose in Bloom", 1959, H.M. Wilks, **MNE**.

3) Whitstable Beach, E. de C.

4) [Pegwell Bay, A. Bennett.] Stour estuary, 1 plant, S side on beach, 1946, **MNE**. 19 pl[ants], Sandwich Bay, opp[osite] Princes Links, 1986!

15) One plant, on beach, W. of Sandgate, 1894, E.S.M.

This attractive little plant is readily distinguished from all forms of *P. aviculare* agg. by its large polished chestnut-brown fruits, 5-6mm long, which much exceed the white or pink perianth. Now very rare on the Sussex coast, commoner on the coast of Western England; extinct, apparently, in Essex; unrecorded for Pas de Calais.

**P. aviculare** agg. [Knotgrass 15, 16.]

Abundant everywhere in open waste ground, cultivated land, roadsides, woodland paths, rough pastures, sea shores, etc.

1<sup>st</sup> record, 1632: Nash to Quex, T. Johnson, *Descriptio*, p.20.

The Segregate records given below are based on the work of B.T. Styles, *Taxonomy of P. aviculare and its allies in Britain, Watsonia*, 5, pp.177-214, 1962. The old varietal names have been ignored in the present work!

1) Shooters Hill Woods 54 GMB. Farningham Wood 82. N. Cray Woods PCH. N. Cray Tip PCH. Millpond Bexley PCH. Crofton Heath PCH. Upper Hockenden, Swanley PCH. Ruxley pits '58, T.H. Angel.

2) Woolwich Arsenal PCH. Sheerness, garden weed, 1956, Mrs. Bryson.

3) Graveney, farm weed, R. Theobald '56. Oare meadow '62.

5) Halstead PCH. Field W of Farnborough PCH. Potato field W. of Hogtrough Hill '62. Cornfield W. of Chevening Park, 1962. Cornfield below Morants C[our]t Hill '62.

6) Romney St[reet] PCH. Mounts Rd PCH. Stonyfield Wood, Halling Downs PCH. Kale field ½m NE of Kemsing Ch[urch] '62.

10) Cornfield by Shoreham Ch[urch] PCH. River path below Shoreham PCH. Sevenoaks tip, 1958, CAS. Eynsford PCH. St Johns Jerusalem PCH. Farningham R[oa]d to S. Darenth PCH.

11) Rubbish Tip, Edenbridge 451455, 1956, DPY, S. R[ai]l[wa]y bank Edenbridge, 1956, DPY, S.

13) 53 Lamberhurst 1956 PCH.

**P. arenastrum** Bor[eau] Fl. Centre France, Ed.3, 2: p.560 (1857). [Equal-leaved Knotgrass.] N.

Waste ground; very common.

3) 16 Cornfield by Cemetery, Sturry, 1962, Miss ME Milward, det. F.R.

5) 55 Cornfield below Morants Court Hill, 1962.

9) 26 Birchington, 1960, Mrs. B.Dodds and Mrs J. Russell, KFC Excur[sion].

11) 44 Rubbish tip, 451455, Edenbridge, 1956, D.P.Y.

<sup>265</sup> In the manuscript given as *Polygonum raii* Bab.



- P. aviculare** L. s[ensu] s[tricto], sec[undum]. Styles<sup>266</sup> [Knotgrass. 16.] N.  
 5) Potato field, W. of Hogtrough Hill, 1962, det. F.R. Cornfield, NW of Chevening Park, 1962, det. F.R. Cornfield S. of Morants C[our]t Hill, 1962, det. F.R.  
 11) Rubbish tip, Edenbridge, 451455, 1956, D.P.Y.. R[ai]l[wa]y bank, Edenbridge, 1956, D.P.Y.

- P. rurivagum** Jord. [ex Boreau] [Cornfield Knotgrass. 15, 16.]] N.  
 Arable land, especially on chalk; not very common.

- (1) Deptford, Hb. Banks. Eltham; Bromley, B.D.J.  
 2) Grain, B.D.J. Sheerness; Minster F.J.H. Upchurch, F.M.W.  
 3) Hatch Green, F.M.W. E. of Canterbury, F.M.W. Fordwich; E. of Sturry, F.J.H.)  
 4) 35 Corn[fiel]d Hacklinge, Miss Vachell & F.R. 1947.  
 6) 55 Cornfield NE of St. Clere, Kemsing, 1962. 66 Cornfield W. of Pilgrims House, Trottiscliffe, 1958. [Cuxton to Halling; Lane End, AHWD.] 66 Cornfield SE of Luddesdown, 1959. 66 Lads Farm, Snodland, 1960 **MNE**.  
 7) 95 Cornfield 1m SW of Doddington, 1957. 86 Cornfield, N of Yelsted, Stockbury, 1960, **MNE**. 76 Cornfield E of Barham, 1960 **MNE**.  
 11) Leybourne; Yalding, F.J.H.

- ‡ **P. patulum** M. Bieb.<sup>267</sup> {Red-knotgrass. 15.]]  
 16) Waste ground by cliffs, N of Copt Point, Folkestone, J.P.M.B., B.E.C. Rep., 1939-40, p.292.

- ‡ **P. arenarium subsp. pulchellum** (Loisel.) Thell.<sup>268</sup> [Lesser Red-knotgrass. 16.]  
 10) W. Kent cold storage W[or]ks, Dunton Green, R.C. Palmer, det. B.T. Styles.

### **Fallopia** Adans<sup>269</sup>

- ‡ **F. japonica** (Houtt.) Ronse Decr.<sup>270</sup> Japanese Knotweed [15, 16.]  
 Alien, naturalised in places by roadsides and on waste ground.  
 1) 56 W. side, Farningham Wood, 536 664, H.M.P. 47 N. Cray tip, PCH. 46 High Wood, Crofton, PCH. 36 Pond, 375662 W. of W. Wickham 1958 PCH.  
 2) 47 Plumstead Sewer Bank PCH. Woolwich Arsenal PCH.  
 4) Littlebourne Village, L.W.W., 1947.  
 6) R[oa]dside, Cuxton, PCH. 76 Snodland, 1956 PCH.  
 8) St. Margarets Bay C.C.T.  
 10) 55 Sevenoaks tip 1958, CAS. Farningham, PCH.  
 11) 75 E. Malling, naturalised. 75 Maidstone, 1958, E.G. Philp **MNE**. Basted DMCC.  
 12) 15 Watling St[reet] Car Park, Canterbury, 1959 HMW. R[oa]dside 007434 Ashford 1959 HMW.  
 13) 53 Common at T[unbridge] Wells CAS.  
 16) Brockhill Park, Saltwood, 1955, L.J.M.

- ‡ **F. sachalinensis** (Schmidt ex Maxim) Ronse Decr. Giant Knotweed. [16.]  
 Alien, naturalised in many places by roadsides and on waste ground.  
 11) Hever castle grounds, CAS. R[oa]dside, Leigh Village, CAS.  
 13) Near Pond, cul-de-sac to Ch[urch], 681367, Lamberhurst, CAS, 1955.

- ‡ **F. baldshuanica** (Regel) Holub<sup>271</sup> [Russian-vine. [15, 16.]  
 Alien, naturalised here and there on waste ground near gardens.  
 1) Waste ground, Stream Way, Belvedere, PCH.  
 6) Hills above Kemsing CAS.  
 10) waste g[roun]d, S. Darent, PCH.  
 11) R[oa]dside, Watlington, CAS.

<sup>266</sup> This record set duplicates information given for the aggregate.

<sup>267</sup> Not in check-list.

<sup>268</sup> Not in check-list, but in the manuscript given as *Polygonum pulchellum* Lois.

<sup>269</sup> In check-list, but all subsumed under a continuation of *Polygonum* in the manuscript.

<sup>270</sup> Given in the manuscript as *Polygonum cuspidatum*.

<sup>271</sup> Given as *Polygonum baldschuanicum* Regel in the manuscript.

13) by Cafe, Flimwell, CAS (just in Kent). R[oa]dside Pembury → L[owe]r Green CAS.

15) Road verge, Lydd to Dungeness, 056203, 1960, H.M.P.

**F. convolvulus** (L.) Á. Löve<sup>272</sup> [Black-bindweed. [15, 16.] N.

Native. Woodland borders and rides, in coppice the first two years after cutting, occasional; cultivated land; widespread and fairly common through much of Kent, especially on light soils (chalk, sand and gravel).

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, Iter, p.2.

1) Chislehurst 1902, W.H.G. (var. *subalatum* V. Hall). Abbey Wood, 1948, FR, RAB. Farningham Wood, 82. Shooters Hill Woods 54 GMB. 47 Bexley Ch[urch] y[ar]d PCH. 56 Cornfield below Farningham Wood, PCH. (Sheppey, Hb. A.G. Davis, 1915 **MNE**.) Garden weed Sheerness, 1956, Ian Bryson.

3) 05 Perry Wood, Selling, in coppice cut the previous winter, 1959, abundant locally **MNE**. 26 Shelving Wood, in coppice cut 1961; 1962.

5) 56 Chalky field W. of Eynsford PCH. 46 Field N of Farnborough PCH. 45 Potato field W. of Hogtrough Hil, 1962. 45 Cornfield W. of Chevening Park, 1962. 36 Cornfield n[ea]r Well Wood, 396642, '58. PCH.

6) 55 Kale field ¼m NE of Kemsing Ch[urch] '62. 55 Cornfield NE of St Clere 1962. Gravesend, 1960, weed of cult[ivation], HAS. 57 The Thrift, Bean, PCH. 57 Cornfield, Mounts Rd, Greenhithe. 66 Cornfield, Buckland Rd, Luddesdown, PCH. 66 Cornfield Grub Wood Ridley 619652 Mrs Woods. 66/76 Arable NW of Cuxton S. of Great Wood, 1955 **MNE**.

7) 86 Copse on Eocene Gravel, Keycol, Newington, 1958 **MNE**.

8) 15/25 Arable, Bonny Bush Hill, Kingston, 1955, **MNE**. 25 Arable about Fredville DMCC. 14 Arable, S.W. of S. Barham, 1956 **MNE**.

10) 56 Cornfield by Shoreham Ch[urch], PCH.

11) 75 Cuckoo Wood, Sandling, 1948 **MNE**, 1958. Sandy field SW of Ightham Court 593573, '51 DMCC. 44 Edenbridge rubbish tip, 451455, 1956, D.P.Y. Woods by R[oa]dside, Potters Corner, 1950, ES.

13) 73 one y[ea]r coppiced wood W. of Horsmonden Old Church 1959 **MNE**.

var. *subalatum* (Lej. & Courtois) D.H. Kent,<sup>273</sup> with narrowly winged fruiting sepals, has been confused with the next species: it is reported at 1) Lessness Heath, AHWD; Chislehurst 1902 WHG; 5) Halstead, A.A. (B); 10) Sevenoaks, Rogers.

**F. dumetorum** (L.) Holub<sup>274</sup> Copse-bindweed. 15, 16. N.

Native. Dry woods on sand and gravel, particularly in coppice of chestnut, birch, etc. where it may only appear at long intervals of years. Rare. It is an annual: after the coppice is cut, the light appears to stimulate germination, of a fair number of seeds and the plants may appear in abundance from seeds which have lain dormant for 10 years or more. This plant should be checked experimentally: its capacity for delayed germination seems to be remarkable and precise factors causing break of dormancy should be investigated.

1<sup>st</sup> record, 1857, Bysing Wood, Stowell, in Phytol. N.S. II, p.154.

1) Abbey Wood, 1862, Hb. Lamb **MNE**; 1863, J.S. Mill; 1927, St. J. Marriott, on a "shell bed" in Blackheath Beds; 1948 G.E. Matthews. Behind Woolwich Cemetery, 1894, A.H.W.D.

[3] N. side of Bysing Wood, towards Luddenham vicarage, Stowell, loc. cit. Hedge, E. end of Trenley Park Wood, 1875, F.M. Webb, not refound L.W.W., 1948.]

11) Cuckoo Wood, Sandling, n[ea]r Maidstone, C. West, 1948 (1948!) **MNE**. not since.

12) Potters Corner Woods, Ashford, W.R. Jeffrey; J.G. Baker; E. Scott, 1950; C.N.P. 1950 et seq. (1952), locally abundant! **MNE**. 1960 Mrs B. Dodds. Hedge of lane N.E. of Little Chart, Forstal, 957457, E. Scott, 1952.

**Rheum** L.

‡ **R. x hybridum** Murray Rhubarb. H.

**Rumex** L.

**R. acetosella** L. Sheep's Sorrel. 15, 16. N.

Native. Open areas, trackways and grassy places on heathlands; rides and borders of woods on acid sandy or gravelly soils; almost invariably found on dry, acid, often podsolised soils, but not a peat plant. Very common locally, especially in 1), 3), 10), 11), 12), 13), 14), and on the shingle of 15).

<sup>272</sup> Given as *Polygonum convolvulus* L. in the manuscript.

<sup>273</sup> Cited as var. *subalatum* V Hall.

<sup>274</sup> Given as *Polygonum dumetorum* L. Copse Buckwheat in the manuscript.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) W. Wickham Common ↑58. Keston Common, **MNE**. Chislehurst Common ↑'57. Hayes Common **MNE**. Holwood Park. JoydensWood. Dartford Heath. Farningham Wood, 82! Hollows Wood. Shooters Hill '54, G.M.B. Abbey Wood RAB 1946.
- 2) River Wall, Dartford Marshes.
- 3) Perry Wood, Selling, **MNE**. Sandy soil, Farm Weed, Murton F[ar]m, Graveney R. Theobald, '56. Pasture on Eocene gravels, S. of Highsted, Hoath '62. Shelving Wood, Hoath, '62.
- 4) Sandwich Bay, on old decalcified dune grassland, 1950 **MNE**. Widespread on St Georges Links, 1962.
- 6) Darenth Wood, PCH, on Blackheath Beds. Cobham Park, '44 **MNE**. On top of Downs E of Shoreham (on Pliocene drift) PCH. Holly Hill, Birling (Blackheath Beds) 1962.
- 7) Heath on Eocene gravels, Danaway, Newington, 1957 **MNE**.
- 8) 14 Stelling Minnis. 14 West Wood. 34 Arable, SW edge of Eastling Wood, Waldershare, 1957, Mrs B Nash.
- 10) Knole Park, PCH. Sevenoaks tip 1958 CAS.
- 11) Wrotham Heath 1945 **MNE**. Ryarsh Roughetts. W. of Allington, 1951 **MNE**. Larkfield Heath. Penenden Heath. N. of Pendenden Heath, EG Philp 1959 **MNE**. R[ai]l[wa]y, Hildenborough 563482 CAS.
- 12) Hothfield Common. Willesborough Lees. Hinxhill, on Folkestone Sand, 1950 **MNE**. Ashford Warren '44. Potters Corner Woods. Merham le Hatch.
- 13) Stone Cross, Ashurst, in gill, 525388, CAS. Lake Rd. T[unbridge] Wells Common CAS.
- 14) 13 Woodchurch ES.
- 15) Dungeness: v[ery] a[bundant]. Car Park Ferryfield Lydd 55 DMCC. Romney Warren 1986.
- 16) Sandling Park.

**R. acetosella** L. ssp. **acetosella** (*R. tenuifolius* (Wallr.) A. Löve is scarcely a good species).<sup>275</sup>

- 3) Bigbury Wood, 1950, **MNE**.
- 4) Sandwich Bay, old tennis court 362576, RAG 1956, conf. JEL.
- 7) Dry bank on Thanet Sand, S. of Mounts Wood, Greenhithe, 1946.
- 8) Dry gravelly rides, West Wood, Stowting (on Pliocene) 1950.
- 10) Broadhoath Wood, Stone Street, 1950 **MNE**.
- 11) Borough Green sandpit. By A20, Leeds, 1955 **MNE**. Sandy verge by A.20, Wrotham Heath, 1950 **MNE**.
- 12) Merham-le-Hatch Park, 1956, E.S.
- 15) Shingle turf, n[ea]r Hamilton F[ar]m, Dungeness, 1956 **MNE**. 079187, Dungeness, 1952, DMCC.
- 16) Shornecliffe, 1955 **MNE**.

[‡ **R. scutatus** L.<sup>276</sup>

Alien, formerly naturalised.

- 11) Cottage garden wall, Maidstone, abundant, (B.E.C. Rep. 1879, p.24) Beeby.]

**R. acetosa** L. ssp. **acetosa** Common Sorrel 15, 16 N

Native. Meadows, pastures, both dry and moist, open coppice woodland, roadsides, on and near shingly and sandy beaches, cliffs, undercliffs, etc. Abundant throughout Kent, except in extremely dry or very acid or saline habitats.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) Shooters Hill '54, G.M.B.
- 3) Weed, Murtons F[ar]m, Graveney 1956, R. Theobald.
- 5) 36 Well Wood, W. Wickham.
- 10) Meadow N. of Shoreham, by R[iver] Darent, 1954 **MNE**.
- 11) Ryarsh Roughetts '44. Hildenboro[ugh] R[ai]l[wa]y, 563482, CAS.
- 13) Stone Cross, Ashurst in gill, 523388, CAS.

[**R. longifolius** DC., *R. aquaticus* auct., *R. domesticus* Hartn.

Recorded, doubtless in error, by rivers at Tonbridge and Penshurst, by Forster in Fl. Tonbr. P.46; not a species of southern England.]

[‡ **R. salicifolius** Weinm. (= *R. triangulivalvis* (Danser) Rech. [f.] Now extinct].

<sup>275</sup> Thus stated in check-list. However, the manuscript has a full entry as follows, under *Rumex tenuifolius* (Wallr.) Löve.

<sup>276</sup> Not in check-list.



11) N of Yalding, 1944 **MNE**. R[ai]l[wa]y Hildenborough 563482, CAS. R[oa]d S. of Yalding '44. R[ai]l[wa]y bank, Edenbridge, 1956, DPY.

12) Ashford Warren '44.

15) Denge Beach. Car Park, Ferryfield, Lydd, '55 DMcC.

**R. crispus** L. ssp. **littoreus** (J. Hardy) Akeroyd<sup>282</sup>

N.

**R. crispus** x **obtusifolius** = *R. x acutus* L. (= *R. x pratensis* Mert. & W.F.J. Koch).

2) Dartford Marshes, J.E.L. & F.R., 1945.

6) Wrotham, 1901, E.C. Gilbert, **TLS**.

10) Riverhead, Sandpit by R[ai]l[wa]y to S of A25, CAS. Park House, Penshurst. 1943, DMcC.

11) 539458 SW of Leigh, 1946, D.McC.

13) Hopfierld, Kippings Cross, CAS.

**R. conglomeratus** Murray

Clustered Dock.<sup>283</sup>

15, 16.

N.

Native. Waste ground, roadsides, marshy fields, especially near the sea; tolerant of brackish conditions; rarely in shaded habitats; very common throughout most of Kent, though less common in the High Weald.

1<sup>st</sup> record, 1629: "*Lapathum acutum minimum*, Lob." Gravesend to Rochester, Johnson, *Iter*, p.2.

1) 37 Beckenham Place Park, 1956, PCH. 47 Elmstead Woods, 1956, Miss A Mills. 47 Shooters Hill 54, G.M.B. R[iver] Cray, N. Cray, PCH.

2) Cliffe Marshes, by Dike, 61, HAS. Egypt Bay, High Halstow, by brackish Creek, 1946. Holborough Marshes. Oare Pond Meadow '62 HMW.

6) Swanscombe, chalkpit marsh, 61, HAS.

7) 95 Eastling, 1961, C. Turner.

10) R[iver] path below Shoreham PCH. R[iver] bank S. of S. Darenth PCH. St Johns Jerusalem PCH.

11) Leybourne Castle, 44. N. of Lunsford 44. Mote Park, Maidstone, EG Philp 1960 **MNE**. Headcorn. 93 W. of Bethersden 1954 **MNE**.

12) Lenham Heath, 1954, **MNE**.

13) By Brighton Lake, T[unbridge] W[ells] C[ommon] AS. 53 Lamberhurst 1956 PCH.

**R. conglomeratus** x **pulcher**<sup>284</sup>

By roadside bank, The Rocks, East Malling, 1959.

**R. conglomeratus** x **maritimus** = *R. x knafii* Celak.

2) Egypt Bay, High Halstow, by brackish fleet with the parents, 1946, **MNE**.

**R. sanguineus** [L.] var **viridis** (Sibth.) W.D.J. Koch<sup>285</sup>

Wood Dock.

15, 16.

N.

This form has green-veined leaves (*R. viridis* (Sibth.) Druce, *R. nemorosus* Schrad. ex Willd.)

Native. Woodlands, hedgerbanks, roadsides, particularly in shade; very common throughout Kent, except in Romney Marsh and the Dungeness area 15), where it is unrecorded, and Thanet, where it is rare.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, pp.55-56.

1) 57 Beckenham Place Park, 1956, PCH. 47 Shooters Hill Woods, '54, GMB. Farningham Wood 82. High Wood Crofton PCH. N Cray Wood, PCH.

2) Stone Marshes, 1903, W.H.G. 67 Shorne Marshes, 1945 **MNE**.

5) 36 W. of Highams Hill 397612, 58, PCH. Darwin's Bank, Downe, 1955, JEL. Pilots Wood PCH.

6)E) Ladies Close Wood '44.

6) Horton Wood PCH. Preston Hill, PCH. Dunstall Woods PCH.

8) foot of Downs, Brook '44.

10) Chevening Park PCH. R[iver] above S. Darenth PCH. Copse S. of Darenth Ch[urch] '44. Westerham Wood, 82.

11) N. of Yalding '44. S. of Yalding '44.

12) Lenham Heath, 1954, **MNE**.

<sup>282</sup> No separate account in the manuscript.

<sup>283</sup> In the manuscript given as Sharp Dock.

<sup>284</sup> Given with parents in the reverse order.

<sup>285</sup> In the manuscript given as *Rumex sanguineus* L. var. *viridis* Sibth. Green Dock.



13) gill SW of Stone Cross, Ashurst 523388, CAS. Combwell Wood '79. Kilndown Wood, 1897, JS, **TLS**.

‡ **R. sanguineus** var. **sanguineus**

An escape from cultivation, very rare.

1) Ravensbourne, 1908, A.O. Hume.

2) Davington Brooks, E. Jacob, Pl. Fav., p.55. (Foreshore, Gillingham and Borstal – Rochester NHS: - ?Beta? [sic])

8) Dover, Wild Fl. Dover, p.15.

11) n[ea]r Maidstone, Hudson, Fl. Angl., Ed 2, p.153.

‡ **R. brownii** Campd.

[Hooked Dock.

15]]

4) Sandwich, in "shoddy" field, D.McC., 1959 **MNE**.

**R. pulcher** L.<sup>286</sup>

Fiddle Dock.

[15, 16.]

N.

Native. Dry trodden pastures and waste ground, particularly on gravel and sand, village greens, banks behind the seashore; common along the coastline and near the Thames and lower Medway Valleys, occasional in dry pastures and about village greens, etc., on the ragstone; very rare otherwise inland. Very tolerant of grazing and drought, and hence a feature of many dry well grazed pastures in the regions mentioned; it often occurs along the N. coastal plain with *Calamintha nepeta* which occurs in similar habitats.

1<sup>st</sup> record, 1746: Faversham churchyard, Bateman in Blackstone, p.43.

1) Blackheath, E.C.W.(1952!).

2) 47 Plumstead Marshes, 1944. 57 Below Crayford. 57 Dartford Heath, 1954, G.M.B. 57 Stone. 67 Swanscombe Marshes. 67 Denton Marshes. 67 Shorne Marshes. 87 Grain. 97 Leysdown. 86 Horrid Hill, Rainham, 1950 **MNE**. 86 Bobbing by roadside on gravel. 06 Davington, field opposite church, with *C. nepeta*, 1954 **MNE**. 06 Abbey F[ar]m, Faversham, 1960, HMW. Oare Pond Meadow.

3) Blean Churchyard.

4) 36 Richborough. 35 Sandwich. 35 Walmer Beach. 35 by Deal Castle.

6)E) Lane End, Darenth. Green Street Green. Darenth 1944→. Shorne, gravelly common by School. 77 Tower Hill, Upnor, **MNE**. 67 Northfleet village and waste ground to west, with *C. calcitrapa*. 67 Denton.

7) 76 The Lines, Chatham (chalk). 86 Chestnut Street, E of Newington (valley gravel pasture). 95 Drive, Belmont Park, Throwley, 1958, DMCC.

8) 14 Elham. 05 Rough Pasture, Godmersham Common (n[ea]r Woodsdale F[ar]m), D.H.K. & FR, 1945.

10) Darenth Church, 1944. Horton Kirby Village, 1955, GMB.

[Not W[ester]ham or S[even]oaks]

11) 75 E. Malling, Green **MNE**; 75 E. Malling Rocks; Mill Street; track S. of Mill Street. 65 Wateringbury, in dry pasture on alluvial gravel by R. Medway. 65 Leybourne castle pastures, on alluvial gravel, 1944-61. Offham Green. 75 Aylesford Gravel pit, EGP, 1961 **MNE**. 75 Ditton Green. 75 Aylesford, by Medway 64 Hale Street E. Peckham, on dry lane bank, 1956. Tonbridge n[ea]r Medway 1957, P Grattan.

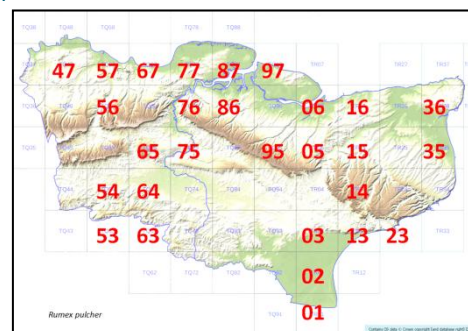
[not in Hollingbourne]

12) 15 Near Stour, S. of Milton Bridge, Thanington, 1955 **MNE**. 15 Chartham, by Stour, Mrs B, 1960. 05 Meadow by Stour below Chartham, Mrs B, 1960.

13) 53 Tunbridge Wells Common. 63 Lamberhurst.

15) Hythe Shingle beach, at rear, 1952-5, **MNE**. Dungeness; Lydd Common; Romney Warren.

16) 13 Ragstone escarpment, Lympne; W. Hythe; 03 scarp Aldington; 03 Aldergate SW of Court at Street; 03 Honey pot, W. of Court at Street. 23 Folkestone Leas.



**R. pulcher x obtusifolius**<sup>287</sup> = *R. ogulinensis* Borbás

6) Lane End, A.H.W.D., fide Townsend.

**R. obtusifolius** L.

Broad-leaved Dock.

15, 16.

N.

Native. Roadsides, waste ground, rough pastures, cultivated land; abundant everywhere in Kent, except on very acid or saline soils

<sup>286</sup> In the manuscript given as ssp *pulcher*.

<sup>287</sup> Given with parents in reverse order.

1<sup>st</sup> certain record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.56. or 1632: “*Lapathum syl. folio minus acuto*”, Thanet, Johnson, *Descriptio*, p[ ]

- 1) Eltham, 1907, J.F.B. Ravensbourne, 1868 A.O. Hume. Keston. Hayes. Crofton Heath. Bexley Ch[urch]y[ar]d. Shooters Hill '54 GMB. Dartford Heath '54, GMB.
- 2) Dartford Marshes. Stone Marshes. Sheerness, Canal Dump, 57, OD.
- 3) Murtons F[ar]m Graveney R. Theobald 56.
- 4) Sandwich Bay.
- 5) 36 W. of Highams Hill 397612, PCH.
- 6) Mounts Rd PCH. Green St[reet] Green '44.
- 10) n[ea]r R[iver], Eynsford, PCH. Darenth Ch[urch] '44. Sevenoaks tip '58 CAS. W. of S. Darenth PCH. St Johns Jerusalem PCH. Riverhead Sandpit CAS.
- 11) N. of Yalding '44. SW of Leeds, 1949, **MNE**. Rubbish tip, Edenbridge, 451551, 1956, DPY.

‡ ssp. **syvestris** Čelak<sup>288</sup> By river, Greenwich, Warren, J Bot, 1866 p.202.

**R. palustris** Smith Marsh Dock. [15], 16. N.

Native. Bare, muddy ground by ponds, and in marsh dikes, nearly always at the present day in Kent near tidal water; very rare, and now apparently confined to the neighbourhood of the Thames in 1) and 2).

1<sup>st</sup> record, 1629: “*Hydrolapathum minus*” Erith, Johnson, *Iter*, p.10.

- 1) Blackheath, Miss G. Bacon, B.E.C. Rep. 1920, p.146. Muddy edge of Pond by Lessness Abbey, W. of Belvedere, R.A.B. 1948 (1949!).
- 2) Plumstead Marshes, A.H.W.D., 1944/1949, in alluvial marsh dikes! **MNE**. [Plumstead Station Hb. J.S.M.] [Northfleet swamp, 1863, JSM]. Swanscombe Marshes, in dikes, 1946, rare, **MNE**. Shorne Marshes, near Shornmead Fort, locally abundant, 1945, 1946, **MNE**.
- [4] Between Margate and Sandwich, T. Johnson, *Descriptio*, 1632 (probably near Pegwell Bay: no recent records.)
- [12] Pond, Kennington, 1863, JSM.]
- [13] Reported by the “new road” between Tonbridge and the Wells by Forster in *Fl. Tonbr*: not reported since.]
- 15) Denge Beach, by scrape W of Boulderwall F[ar]m, 1997!

**R. maritimus** L. Golden Dock. [15], 16. N.

Native. Alluvial marsh dikes and brackish “fleets”; extremely rare, and now apparently only in two localities, one in 2) and one in 4); formerly on the S.E. coast.

1<sup>st</sup> record, 1724: Hythe, Mr. J. Sherard, in Ray, *Synopsis*, ed.3, p.142.

- [1] Greenwich Flats, E. de C.]
- 2) Plumstead Marshes, J.S.M., 1863 (Hb. Mill); A.H.W.D.; J.P.M.B., 1935; not seen by me in spite of search. [Between Erith and Gravesend in ditches, E. de C.] Shornmead, G.M.B. Egypt Bay, High Halstow, in a brackish “fleet”, J.B. Marshall, 1938 (1946! 1958! abundant!) **MNE**.
- 4) Marsh side l[ocally] abundant, Chislet, Roberts 1955; 1962! 3 plants, F.R. and Mr. & Mrs. Side, **MNE**.
- [15] Pond between Hythe and the sea, J. Sherard. Marshes between New Romney and the beach, Petiver and Sherard MSS.]

[**R. dentatus?** x **maritimus** (= *R. kloosii* Danser) was reported at 1) Blackheath, in 1920, by Miss Gertrude Bacon, in B.E.C. Rep., 1925, p.781.]

## PLUMBAGINACEAE

**Limonium** Mill.

**L. vulgare** Mill. Common Sea-lavender. 15, 16. N. 13/51

Native. Muddy salt-marshes, characteristic of the “general salt-marsh community” in the middle zone of the Kent salt marshes, where *Puccinellia maritima* is dominant, far less abundant in the lower zones where *Aster* or *Spartina townsendii* are dominant and rare in the upper zones with *Halimione*, *Festuca rubra* and *Agropyron pungens* dominant; common and generally abundant in the salt marshes of North and N.E. Kent on the Thames from Higham downwards, on the Medway from Cuxton downwards, throughout the Swale marshes and creeks eastwards to Whitstable; east of Reculver; and in the Stour salt marshes below Sandwich to Pegwell Bay. Not

<sup>288</sup> In the manuscript cited as (Wallr.) Reching.

on the S. coast of Kent. It ascended the Thames to Greenwich about 1860 (Hb. J.S. Mill) and still as far as Greenhithe about 1890 (A.H.W.D.). It occurred at Chalk marshes just below Gravesend in 1945! but has now (1962) receded to Higham marshes. This retreat, shown also by other plants of the Thames tidal marshes, is probably due to the progressive and now extreme pollution and deoxygenation of the Thames water. Not in Surrey; locally frequent in Sussex, very common in Essex; very rare in Pas de Calais.

1<sup>st</sup> record, 1597: Gravesend, J. Gerard, *Herbal*, p.333.

\*L[owe]r Bronze Age, Minnis Bay, inflorescence, F. Rose.

2) [Greenwich, J.S. Mill, 1860.] [Woolwich to Erith, Milne & Gordon.] [Greenhithe AHWD.] [By Thames, Chalk, 1945.] Higham Marshes. Cliffe Marshes. Egypt Bay. St Marys Bay. W. of All Hallows. Marshes on N. coast of Grain. Marshes on SW coast of Grain. L[owe]r Stoke Marshes **MNE**. Hoo Marshes. Frindsbury E Marshes. Marshes below Cuxton Station **MNE**.

[Burham 1883 **MNE**: Exb.] 53 Borstal Marshes. Rainham Marshes (Horrid Hill; Motney Hill). 58 L[owe]r Halstow. 62

Funtun Marshes. Greenborough Marshes GM. Milton Creek 1958 Mrs KDR. N. of Blacketts, Tonge, **MNE**. 58 Kings Ferry. 58 Chetney Marshes. Conyers Creek **MNE**. Oare Creek. Faversham Creek **MNE**. Graveney Marshes. W. of Seasalter. Queenborough Marshes. Elmley **MNE**, abundant. N. of Leysdown **MNE**. Windmill Creek. Harty Marshes, abundant **MNE**. Shellness Marshes, **MNE**. Fowley Island, 1960, E.G.P.

3) Swalecliffe, 1945 **MNE**. Shore, W. of Whitstable.

4) E. of Reculver. Below Sandwich, by R[iver] Stour '54 **MNE**. Shellness Marshes. Pegwell Bay.

The var *pyramidale* C.E. Salmon, with more elongated inflorescence branches and more widely spaced flowers, occurs widely on the Kent salt marshes; all intermediate states between this and the type can however be found in most localities, and it seems hardly worth maintaining as a variety.

[**L. humile** Mill.

Lax flowered sea-lavender .

[15]

Native. Muddy salt-marshes; extremely rare, and apparently extinct. Gravesend, 1847, (Herb. **CGE**) and confirmed C.E. Salmon, 1913.

2) Between Whitstable and Seasalter, Masters in *Phytol.* N.S. vol. I, p.189, 1855; probably = Whitstable, 1867, A.A. in **BM**. Isle of Harty, B.D.J. in *Fl. K*.

Intensive search of most of the accessible salt-marsh areas of North Kent has been made for many years but this plant has not so far been rediscovered anywhere in Kent. Its apparent absence today is remarkable, as it is fairly common in the Essex salt-marshes at a number of places (e.g. Tillingham, Bradwell, Wrabness, etc.) and occurs again plentifully in the salt-marshes of Chichester Harbour in W. Sussex; not recorded for Pas de Calais, nor for Surrey.]

**L. binervosum** agg. (G.E. Sm.) C.E. Salmon

Rock Sea-lavender.

15.

N.

5/51

ssp. **binervosum**. (S.E.Kent, Dover Cliffs). N

ssp. **cantianum** Ingr. (Thanet cliffs & saltmarshes). N

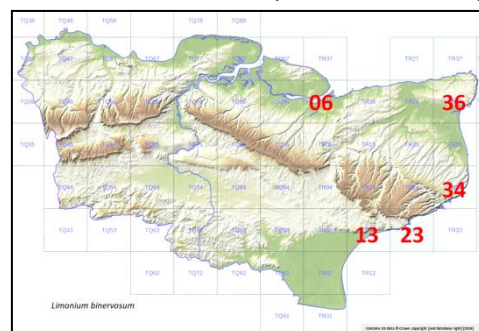
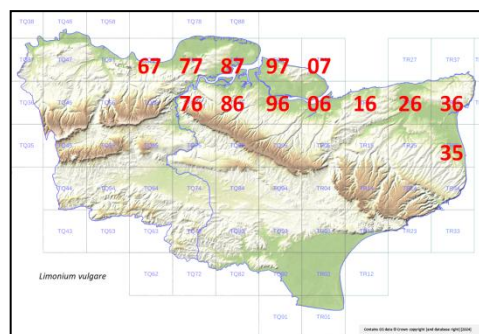
Native. Ledges of sea-cliffs, and in the uppermost parts of sandy salt-marshes; locally very plentiful on the chalk cliffs from Folkestone to S. of Kingsdown, rare elsewhere; rare and local in Sussex, very rare in Essex; only one loc[ation] in Pas de Calais (Cap Gris Nez).

1<sup>st</sup> record, 1597; Margate, Gerard, *Herbal*, p.333.

2) 06 Shellness, Sheppey, J.E.L., 1938; 1959, abundant! **MNE**. It occurs here on sandy shingle behind the *Ammophila*-dominated beach adjacent to saltmarsh, on ground which is never immersed in saltwater but is moistened from below by salt water at the highest spring tides. Isle of Harty, B.D. Jackson (1946, a few plants on a sandy patch on the salt-marsh!). [near Sheerness, Syme.]

4) 36 Shellness, N.E. of Sandwich; in the uppermost zone of the sandy saltmarsh, 1946; 1954, **MNE**.

8) 23 East wear Bay, CPSK; 1956! **MNE**; 13 Abbots Cliff; 23 Lydden Spout, 55 **MNE**; 34 Shakespeare Cliff; 34 East Cliff, Dover, 55 **MNE**; 34 S. Foreland; 34 St Margarets Bay, 58 **MNE**; 34 S. of Oldstairs Bay, Kingsdown, 58 **MNE**; abundant on the ledges of the chalk cliffs within the salt spray zone (about 200 feet up the cliffs along the whole of this coast, many observers to 1958!)



9) 36 Dumpton Gap, L.W. Wilson, 1949; RGW. [Margate, Gerard. Ramsgate, Ray, *Synopsis*.]

15) 13 Saline gravel pits, Palmarsh, W. of Hythe, 1956, L.J. Margetts **MNE**.

16) [13 Sandgate Cliffs, G.E. Smith, **BM**.] 23 On Gault east of Folkestone Harbour, L.W.W.

**Armeria** Willd.

**A. maritima** (Miller) Willd. ssp. **maritima**<sup>289</sup> Thrift.<sup>290</sup>

Native. Drier upper parts of Salt-marshes, Shingle beaches; locally common on the coast and in estuaries. It ascends the Thames to Higham (formerly to Northfleet, Fl. Kent) and the Medway up to Cuxton and Wouldham. Common locally on the coasts of Sussex and Essex and the Pas de Calais.

1<sup>st</sup> record, 1629: Chatham, Johnson, *Iter*, p.4.

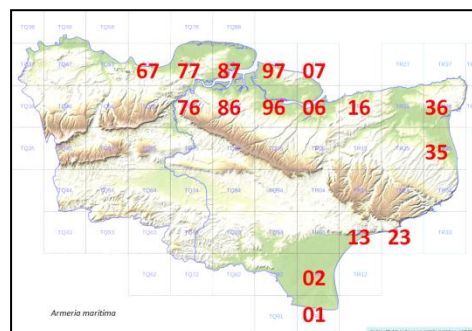
2) 77 Higham. 77 Cliffe. 77 St Marys Bay, 1958. 87 All Hallows 45 **MNE**. 87 Grain N Beach. Grain S Beach. Cuxton **MNE**. 76 Frindsbury. 96 N.E. of Sittingbourne, 1953 Mrs KDR. 96 Elmley. 06 Harty. Shellness in Sheppey. 97 Leysdown Hb Davis 1918 **MNE**.

87 Dead Mans Island, Queenborough 1955, O.D. 06 Faversham Creek, to below Nagden **MNE**. 06 Oare, near Harty Ferry. 06 Saltings, Castle Coot. 35 R[iver] Stour, Sandwich, NE of, 45 **MNE**.

4) 36 Shellness, Sandwich 54 **MNE**. 36 Pegwell Bay.

15) 23 Folkestone Warren. 13 Shingle W. of Hythe. 02 New Romney. 01 Dungeness Beach **MNE**, abundant over a wide area, and inland as far as the Boulderwall and Hamilton Farm area, and W. to Midrips **MNE**.

15, 16. N. 15/51



## ELATINACEAE

**Elatine** L.

**E. hexandra** (Lapierre) DC, Six-stamened Waterwort 16 N (extinct?).

Native. In the rather peaty, base-poor water of a lake. Extremely rare.

13) In Marshall Lake, Bedgebury Pinetum, Goudhurst, 1947, R.A.B.; 1947! 1948! **MNE** underwater, on mud near SW shore of lake. The first record. Surrey, E./W. Sussex. (*E. hydropiper* L. – Surrey & Sussex W.)

## [CLUSIACEAE]

[**Hypericum** L.]

‡ **H. calycinum** Rose-of-Sharon . 15, 16 H.

Alien, now naturalised in many places.

1<sup>st</sup> record, 1837: Greenhithe Park, Dr J. Mitchell in Cooper, *Fl. Met. Add.* P.119.

1) Harrington estate, Beckenham, '55 J.M. Sherwood [?].

3) Whitstable Castle RGW. St Thomas' Hill, Canterbury, RGW. Tyler Hill, RGW.

5) Halstead, A.A. (Hb. Geldart). Hill Park Lane, Westerham Hill, RAC.

6) Mounts Road, Greenhithe, J.E.L. (1945!); 1954, PCH. 553729, S. of A2 in tree belt, H.M.P. Pilgrims Way Otford GMB.

7) Border of Hawkins Wood, Chilham, 1943, D.H.K. (1945!). Kings Wood Chilham / Soakham Downs 1953 RGW.

8) Betteshanger Park, abundantly naturalised. Beech Plant[at]n S of Goodnestone, 1958. Bishopsbourne old R[ai]l[wa]y RGW.

11) Bearsted. E. Malling, Hb. Lamb 1881 **MNE**. The Forest, Pluckley, E.S.

12) Ham Street Sta[tion], R[ai]l[wa]y bank, KEB, 1959.

13) Bedgebury Pinetum. Redleaf Park, Penshurst, Redleaf Wood. Horsmonden. Tunbridge Wells.

**H. androsaemum** L. Tutsan 15, 16 N. 30/52

Native. Woodlands and hedgebanks, widespread on the Tertiaries, in the chalk districts, and in the Weald, but not generally very common, though locally so in the High Weald and in the woods on chalk about Dover. Often only a single plant occurs in a locality, possibly because it relies upon birds which eat the berries.

1<sup>st</sup> record, 1632: n[ea]r Faversham, Johnson, *Descriptio*, p.36.

<sup>289</sup> Cited as *A. maritima* (Miller) Willd. ssp. *maritima*.

<sup>290</sup> In the manuscript also given as Sea Pink.



1) ‡ weed at Hayes Old Rectory DMcC. W of Chislehurst, Dillwyn, O.B.G. p354. 55 Farningham Wood, 1949. 46 Sparrow Fields, 1962, 1 pl[ant] M. Swain. 47 The Tarn, Mottingham, PCH. 46 Holwood Park (by uppermost Pond, 1 pl[ant]) 1962, M. Swain. 46 Wood, Chelsfield, 1962, M. Swain.

3) 05 Bower Wood, NW of Chartham, 1943, DHK. Trenley Park, Dowker. Perry Wood, DHK.

5) Chevening Park, A. Beadell. Knockholt Woods, RAC.

6) 67 Swanscombe Wood, 1945. 66 Downs Wood, E of Vigo Inn, 635614, Mrs. Woods. 57 Darenth Wood, J.S.M., 1863 (1951!). Greenhithe 1853 A.M. Glennie (**BRIST**). Cobham, Lady Bligh. Trosley, wood edge on Downs, Shepherd. H. Elgar 1915 **MNE**.

7) 05 Hawkins Wood, Chilham, 1944, D.H.K. 05 Godmersham, 1944, D.H.K. Chilham Park, J.S.M., 1863. 95 Copse at Whitehill, Ospringe, 1945. Torry Hill, Newnham, Mrs. I.M. Hubble. 04 Challock Woods, 008497, E. Scott. S. of the Lees. 023497, NE Eastwell Park, E.S. 041503, Kings Wood, E.S. 010475, Eastwell, N. of ch[urch], E.S.

8) 05 Penny Pot Woods, near Sole Street, E. Scott. 24 Combe Vale Woods W. of Dover, 1945 **MNE**. The Warren CPSK. St Radegunds CPSK. E of Chilham CPSK. Alkham, Mrs Benson. Penny Pot Wood D Smith 1877 **MNE**. 24 Woolwich Wood, Barham 1955 **MNE**. 24 Wood on c[lay] w[ith] f[lints] N. of St Radegunds Abbey, CPSK; 1948, D. McC. 14 Covert Wood, Barham, 1957. Gatteridge, Denton, 1 pl[ant] DACL (1 pl[ant] for 30 yrs!). 24 River, on bank of Dour, 1960, T. Miller. 15 Catts F[ar]m, Upper Hardres, P. Furneaux. 24 Wood Hougham DPY. 23 The Warren VPF Day 1952.

9) Shrubberies, Cleve C[our]t Manston, Fl Thanet.

10) 45 Ide Hill, 1949, **MNE**. 45 French Street, Westerham, RAC. Ide Hill escarpment, J.S.M.

11) 65 Swanton Valley, Mereworth Woods, 1944. 65 S. of Platt, 1946. 75. 44 Hever Castle grounds CAS.

12) 94 Hothfield, 1 pl[ant], 1944, C.N.P. 94 On gault, Charing, L Hawkins. 03 Barrow Wood, Ruckinge, J Fenton, teste ES.

13) 54 AshourWood, CAS. 54 Bullingstone Wood, Speldhurst, 1950 **MNE**. 73 Bedgebury Woods, JRW (1945!). 63 Mount Pleasant, Lamberhurst. 63 Bayham Woods. 54 Redleaf Park, Penshurst, 1947. 63 Chingley Wood. 73 Lane N. of Sissinghurst, 1952. 54 Ashour Wood, Penshurst, 1946. 53 Blackhurst Lane, Tun[bridge] Wells, 1943, HWP **BM**. 83 Rogers Wood, W. of Biddenden 1954 **MNE**. 54 Roundabout Woods CAS. 64 A[bundant], Gedges Wood N of Matfield, 1960, CAS. Catstail Wood, Cranbrook 1860 teste ASK.

14) 83 Wood NW of Breeches Pond, Tenterden, 1947. 83 Benenden. 93 Finchbourne Wood (Devils Drop) Tenterden, J. Ridley, 1909 **MNE**. 92 Lords Wood, Stone, Oxney, 1937, A.S.K. 72 Wood W. of Sandhurst Cross, 1958.

16) 03 Wood N of Aldington Knoll! LJM. 23 Folkestone Warren, EGP, 1960. Willow Wood, Saltwood/ Brockhill Woods, LJM.

‡ **H. x inodorum** Mill.<sup>291</sup> [Tall Tutsan. 15, 16].

An escape, scarcely naturalised.

5) Jail Lane, Biggin Hill, RAC.

7) Thickets n[ear] Selling Station – an escape from cultivation, 1944, D.H.K.

16) Hedge, Hythe, 1889, H. Guermonprez, **BM**.

‡ **H. hircinum** L.

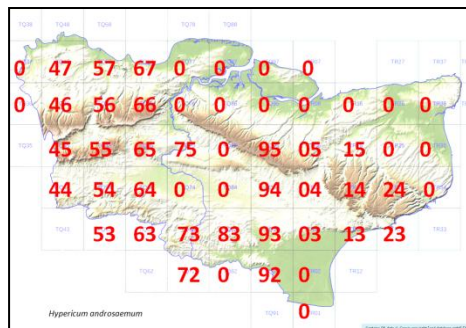
“Kent (not native)” Syme, ii, p.146.

16) Hedge, Hythe, 1936, E.C.W. **BM**.

**H. perforatum** L. Common St Johns-wort. 15, 16. N.

Native. Open woods, scrub, grasslands, riverbanks, hedgebanks, roadsides: very common throughout the County; commonest on calcareous and sandy soils, but not infrequent on clay soils too.

1<sup>st</sup> record, 1627: E of Gillingham, Johnson, *Iter*, p5. Seed, possibly of this but uncertain, was found in the late Bronze age site at Minnis Bay: Conolly1941 (Goodwin p97).



<sup>291</sup> Given as *H. elatum* Ait.



- 1) Holwood Park. Crofton Heath. Farningham Road PCH. North Cray Wood. Ruxley Pits. Railway Bank, Orpington. Abbey Wood 1952. Blackheath ECW. Dartford Heath GMB. W. Wickham Woods 1916 Hb. Davis **MNE**. R[ai][wa]y near Bexley Heath AHWD 1893 **BM** (var. *angustifolium*).
- 2) Brambledown by old Railway 1955. Eastchurch Cliffs 1955. Higham Canal, PCH.
- 5) Downe (Darwins Bank). N. of Westerham. 396611, Highams Hill, PCH. Pilots Wood, SW of Shoreham, PCH. Pilgrims Way, Polhill PCH. The Larches, W of Farnborough, PCH. Chalk W. of Eynsford, PCH.
- 6) Woodlands Hill, Wrotham, 1955. Downs above Kemsing. Horton Kirby Wood PCH. Magpie Bottom, PCH. Mounts Road PCH. Mounts Wood PCH. Otford Mount. The Thrift, Bean. Halling Warren. Whitehill E. of Shoreham. Preston Hill. Darenth Wood N east. Ryarsh Downs 1944 61 HAS. Claylane Wood Cobham 61 HAS.
- 7) The Lane S.W. of Q[ueen] D[own] Warren 1955. Bredhurst Hurst 1955. Detling Coombe, 1948. Hollingbourne Hill 1962. Charing Hill. E of Molash. Longreach Wood, Stockbury, **MNE**. A249 S of Stockbury Ch[urch]. Squirrels Wood acid drift. Primrose cafe Stockbury. Bluebell Hill Boxley. Simia wood 1980.
- 8) Wye Downs. Brook Downs.
- 9) Iffin Wood. Reinden Wood, '55, B. Nash.
- 10) S. of S. Darenth. S[even]oaks tip CAS. Horton Kirby.
- 11) Swanton Valley floor & N. E of Kemsing St[atio]n. SE Oaken Wood on cut copp[ice]. Sandpit E. of Forstal, '55. Larkfield Heath. By R. Medway, Leigh; Penshurst; above Tonbridge, below Tonbridge **MNE**; Hartlake **MNE**; E. Peckham; Yalding Lees. Beltring 1944. Hever Park, Mrs Mallinson. Shipbourne Forerst, NE. Otham. Boughton Quarries. Lane on F[olkestone] Sand 1m W of Hollingbourne '44.
- 12) Hothfield Common. Pluckley.
- 13) Tunbridge Wells Common. R[oa]dside Chidd[ingstone] Hoath on clay. SE Horseshoe G[ree]n (Wad[hurst] C[lay]). Bayham CAS.
- 14) Benenden. Sandhurst. Lords Wood, Stone in Oxney, 1964
- 16) Aldington.

**Hypericum maculatum** Crantz ssp. **obtusiusculum** (Tourlet) Hayek

Imperforate St. John's-wort 15, 16. N. 7/15

Native. In grassland, open woods, and scrub; rare, with a very scattered distribution. Much commoner in Sussex and in Surrey, but rare in Essex and in Pas de Calais.

1<sup>st</sup> record, 1836: Charlton Wood, Cooper, *Fl. Met.*, p.55.

- 1) Blackness Keston, F. Swain.
- 3) Wood by stream 1m S of South Street, Whitstable, 1960, HMW.
- (5) Norstead, Cudham, F. Swain)
- 6) Swanscombe Wood, 6073, 1948, H.M.P. (Romney Street? F. Swain.)
- 10) 45 Near Ide Hill, 1939, C.E. Britton, B M.
- 11) 75 Penenden Heath, Maidstone 1944, 1952; in scrub on E. side ,**MNE**. Wrotham, F. Swain. 85 Harrietsham, bank by station, Mrs B. Dodds.
- 13) 53 Banks by stream, E. of High Rocks, 1943, HWP **BM**; 1945! 1962, CAS. 54 Pasture, Culverden Down, 1945. 53 Tunbridge Wells Common, 1962, CAS. 73 Goudhurst, 1896, JS, **TLS**.
- 14) 93 Robins Wood, Cranbrook, 1944.
- 15) 02 Golf course, N. of Littlestone, in grassland, 1950.

**H. x desetangsii** Lamotte

**H. perforatum x maculatum**

Native. What appears to be a form of this hybrid occurs principally on the banks of the Medway, where it is frequent from Tonbridge to Yalding.

- 8) Ilden Wood 1980.
- 10) E of Dunton Green, in gravel pits, A. Beadell, det. CEB, **BM**. Sandy banks N of Greatness, RAC, det. D.P.Y.
- 11) By R. Medway, S. of Yalding Station. Yalding Leas. Below Cannon Bridge, Tonbridge, J.P.M.B.; 1947, 1952! **MNE**. Hartlake Bridge, Tudeley, 1952 **MNE**. W. of Tonbridge, 1955 **MNE**. Railway bank S. of Ightham Court, 1957, D.McC. & CW. Sevenoaks Weald, **MNE**. Brungers F[ar]m, S. of Ulcombe, 1958, **MNE**. A plant which may be this is frequent by the Medway, below Tonbridge (Cannon Bridge): Hartlake Bridge; S. of Yalding Station; and at Yalding Lees.
- 13) N[ea]r Ferndale Park, Tunbridge Wells, 1942, H.W.P. **BM**.

**H. tetrapterum** Fries

Square-stalked St John's-wort.<sup>292</sup>

15, 16.

N.

<sup>292</sup> Square-stalked St John's-wort in the list of taxa; Square-stemmed St John's Wort in the manuscript.

Native. Marshes, fens, riversides, wet meadows and damp woods. Common in suitable habitats: absent from the chalk.

1<sup>st</sup> record, 1777: Davington Brooks, E. Jacob, *Pl. Fav.*, p.49

- 1) Holwood Park. Ravensbourne Estate, Keston. Elmers End, Hb. Davis 1915 **MNE**. W. Wickham Woods, Hb. Davis 1916 **MNE**. Chislehurst Common, 1933, PCH; GMB. Joydens Wood, PCH. Ruxley Pits. Foots Cray Meadows.
- 2) Holborough Marshes, 1944, 1980! Luddenham Marshes near Ch[urch], HMM. Graveney Marsh, near Broom Street, REW. Wood S of Oare Mill Pond, REW.
- 3) Wet places on hillside N. of Dunkirk, 1945. N.W. corner Ellenden Wood REW. Broomfield Gate, Thornden Wood REW '50. Brook below Hempshall Wood REW '50.
- 4) Wingham Fen. Ham Fen. Hacklinge Fen. Stodmarsh W. of Grove Corner 1950 REW. Ditches W of Wenderton Manor '59 B. Nash.
- 6) Preston Hill Plantation PCH.
- 6E) Randall Wood 59, PCH.
- 8) Browns Wood, Temple Ewell, KDR.
- 10) Darenth. Riverhead. Brasted, GMB. Westerham, 1937 PCH. Ditch in pasture above S. Darenth PCH. Sutton at Hone HMP, GMB. Otford by R[iver], GMB. Horton Kirby GMB. Westerham Wood 82.
- 11) Addington Place DMCC. Ryarsh Wood. W of Tonbridge. E. of Tonbridge. Leybourne Castle Lakes. Brook by Lunsford Lane. Wet Wood, S of Mereworth. Wateringbury. Headcorn. E. Farleigh. Teston. Buttons Bourne, Plaxtol. Birling. Sandway, by Len, Mrs B Dodds. Hoads Wood. Hever Castle Grounds CAS. Field, Hever, 474448, CAS.
- 12) Stowting. Brook. Hothfield. Gibbons Brook.
- 13) Stone Cross Gill, Ashurst Mrs Mallinson. Cowden, Furnace Pond. Swaylands, Penshurst. By Spa Golf Course Lake, Tun[bridge] Wells, CAS. Blackbush Wood DS. Scotney, PCH. Cornford Lane, Tun[bridge] Wells, CAS. R[ai]l[wa]y W. of Tun[bridge] Wells West St[at]io[n], 1960, CAS. Ashour Wood NE Corner (Wad[hurst Clay]. Pond, Broadwater Lane, T[unbridge] Wells, CAS.
- 14) Gill Wood W. of Silverden, Sandhurst.
- 15)<sup>293</sup>
- 16) Copt P[oin]t, VFP Day.

**H. humifusum** L.                      Creeping St John's-wort.                      15, 16.                      N.

Native. Heaths, acid grasslands, and dry woods on acid soils; common on the teriaries, and the Greensand, and the High Weald; not infrequent on drift soils on the chalk plateau locally; absent from the marsh districts, Grain, Sheppey and Thanet.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p29. Seed, Minnis Bay, L[ower] Bronze Age site; Conolly 1941 (Godwin, p97).

- 1) Keston Common, 1946. Hayes Common. Chislehurst Common, 1946 **MNE**. Road, Bromley, 1879, J. Groves **BM**. Ravensbourne Bromley Hb. Davis, 1913 **MNE**. Joydens Wood 1945 **MNE**. Farningham Wood, 1945. Gattons Plantation PCH. Dartford Heath, 1923, St J M.
- 3) Perry Wood, Selling, DHK, 1945; 1959! **MNE**. Hempshall Wood, Whitstable, REW, 1951. Bigberry Wood pit. Trenley Park, M.E.M. E. Blean Wood L.W.W. Church Wood Rough Common RGW.
- 5) Woods on c[lay] w[ith] f[lints], top of Chevening Park, 1951 **MNE**.
- 6) On Tertiaries, Swanscombe Wood; Darenth Wood; Great Wood, Cobham; G[rea]t Crabbles Wood. Wingate Wood, Halling, on Plateau of Clay-with-flints. Randall Wood, Shorne. Broomfield Wood, N of W. Kingsdown.
- 7) Kings Wood, Challock 05. 96 Putt Wood, Gravel Pit, 1958 HMW. 96 Wood on Thanet Sand above Ospringe Down, 1958, HMW. 95 Long beech Wood ES. Kettle Hill Wood (c[lay] w[ith] f[lints]) Eastling, C.T.
- 8) Denge Wood. Iffin Wood, C. Haes. Burstard Wood JG. In felled wood, Grabble Wood, north of Paddlesworth, BN, 1956.
- [9] Margate, 1841, A.T. Teuton in Hb. Croydon LNHS.]
- 10) Ide Hill. Seal Chart **MNE**. Bitchet Common. Ightham Common, 1944. Oldbury Hill, 1945 **MNE**. Wildernessee. Toys Hill. Scords Wood. Westerham Wood 82.
- 11) Ryarsh Wood. Larkfield Heath. Oaken Wood. Comp Woods. Mereworth Woods. Wrotham Heath. Warren Wood, E. Malling. [Penenden Heath, 1848 **MNE**; 1944!] [Wood near Preston Hall 1848, Mrs Blunt **MNE**.] Shipbourne Forest NE end. Hoads Wood.

<sup>293</sup> No records given in manuscript, but notebooks mention Localised sites for district 15: Shirley Moor at and south from TQ 940 320 in 1954; and stream by bridge, Potman's Heath in 1956 (TQ 872 281).

**12)** Hothfield Heath. Potters Corner, Warren Woods, Ashford 1955 **MNE**.

**13)** Pembury Wood, 1943, HWP. Bedgebury Forest. Combwell Wood. Brewers Wood. Angley Wood. 1959 **MNE**. Sissinghurst Park Wood. Old Park Wood, Goudhurst. Oaks Wood, Cranbrook. Ashour Wood, CAS, FR. N of Redleaf. Ferndale, T[unbridge] Wells, CAS (51/53). Several paths and banks in T[unbridge] Wells, CAS. Scotney PCH. Pembury L[owe]r Green, 635413, CAS. Penshurst Park RAC.

**14)** Hurst Wood, Sanshurst. 92 Lords Wood, Stone in Oxney, 1964. 82 Church Wood, Wittersham, 1964. Wood by Breeches Pond RAC.

**16)** Kiln Wood, Sandling, LJM. Grassy Banks, Hythe, LJM.

**H. pulchrum** L. Slender St John's-wort. 15, 16. N.

**Native.** Dry woods and heaths, mainly on sand and gravel soils, rarer on clay, very rare on chalk; common in all wooded parts of Kent, but absent from the marsh districts, Grain, Sheppey, and Thanet.

<sup>1st</sup> record, 1632: W. of Canterbury, Johnson, *Descriptio*, p.33.

**1)** Holwood Park, DMCC. Joydens Wood. Farningham Wood. Keston Common, FR; 61 HAS. Abbey Wood 1951, G.A.M.

**3)** Denstead Wood, 1950, **MNE**. Fordwich JG. Church Wood, Rough Common, RGW.

**5)** Halstead Miss T. Webber. E. of Biggin Hill Jail Lane RAC.

**6) A)** On Tertiaries, Swanscombe Wood; The Thrift, Bean **MNE**; Mounts Wood; Darenth Wood. Grassland on clay, Lodge Hill, S. of Cooling, ;44. Randall Wood, Shorne. Downs above Kemsing.

**7)** Kings Wood, Challock, 1947. Putt Wood, Gravel pits 1958, HM Wilks. Squirrels Wood (acid loamy drift).

**8)** (?Leached) chalk grassland, among *Brachypodium pinnatum*, Wye Downs plateau, 1943. 085437, Brabourne Downs P Grattan. Frandham SW of Temple Ewell JG. Gravel capping above Pean, VFP Day.

**10)** Goodley Stock RAC. Westerham Wood, B Smith 82. Scords Wood. Seal Chart. Wildernessee.

**11)** Larkfield Heath. Hot Wood. Ryarsh Wood. Oaken Wood (Barming Heath H Lamb 1882 **MNE**). Comp Woods. Wood N. of Swanton Valley. Hoad's Wood. Hildenborough by R[ai]l[wa]y, 563482 CAS. Shipbourne Forest NE corner.

**12)** Bourne Wood, Orlestone, 1957. Hothfield Heath. Willesborough Lees.

**13)** Stone Cross Gill, Ashurst, 518381 CAS. Bedgebury Forest and Pinetum. Ashour Wood. Redleaf, Penshurst. Angley Wood. Combwell Wood. Chittenden Wood W. of Biddenden 1955 **MNE**. T[unbridge] Wells Common GMB. Wood W. of Pembury, 614395, CAS (TWS). Blackbush Wood, Cranbrook DS. Old Park Wood. Bayham CAS.

**14)** Hurst Gill Wood, NW of Sandhurst, 1958. Wood E of St Michaels Tenterden RAC. Church Wood Wittersham, 1964.

**16)** Kiln Wood, LJM.

**H. hirsutum** L. [Hairy St John's-wort.] 15, 16. N.

**Native.** Grassland, scrub, open woods, wood borders, railway banks, roadsides, hedgebanks, on chalk, ragstone, and clay soils, not often on sandy soils; very common except in the marsh districts; apparently absent from 15) Romney Marsh, and from the Isles of Oxney, 9) Thanet, and Grain.

<sup>1st</sup> record, 1597: Southfleet, Gerard, *Herbal*, p.443.

**1)** Joydens Wood. Farningham Wood. Gattons Plantation. Ruxley Pits. W.Wickham Hb. Davis 1915 **MNE**.

**3)** Pine Wood, Littlebourne L.W.W. Shelvingford Wood, MEM.

**5)** Darwins Bank Downe. Polhill, Pilgrims Way PCH. Chevening Park PCH. Pilots Wood SW of Shoreham PCH. 3964 Well Wood W. Wickham PCH. Jewells Wood Hb. Davis 1915 **MNE**.

**6)** Cockham Woods Upnor. Chattenden Wood, S. of Cliffe. Cliff Chalk Pits. Northward Hill. High Halstow. Below Crookhorn Wood. Swanscombe Wood. The Thrift. Darenth Wood (chalk). Downs E of Shoreham PCH. Preston Hill PCH. Ryarsh Downs, 44. Ladies Close Wood (L[ondon] clay). Eynsford SE. Otford Downs.

**7)** Bredhurst Hurst 1955. W. Coombe, Dettling [sic] 1955. Hollingbourne Hill '62. Bluebell Hill. Burham Downs. Boxley Warren. Long reach Wood, Stockbury 1957 **MNE**. Simia Wood. Putt Wood. Coxett Wood.

**8)** Hacklinge on chalk. Iffin Wood C Haes.

**9)** Reinden Wood 58 B Nash.

**10)** R[oa]dside N of Farningham R[oa]d Sta[tion], PCH. Wresterham Wood, B Sennitt. Ightham. Wilmot Hill, CAS. R[oa]dside, Ightham, 58541 CAS.

**11)** Wood S.E. of L[owe]r St Clere. Ditton quarries. Oaken Wood; Barming R[oa]dside and N. Pole. Beltring, by Medway, 1944. Straight Mile, Leigh. E. of Hale St[reet], CAS. By R. Medway, Penshurst; Chiddingstone. S. of Yalding. Allington **MNE** 1868-1937 Lamb, W...**MNE**. Swanton Valley. Otham. Boughton Quarries. E. Malling Isol[ation] Hosp[ital].

- 11W)** Hartlake Bridge. E. Peckham, 682495, CAS. By Medway, Tonbridge CAS. Pluckley Brickworks, Dering Wood. Hoads Wood. Egerton.
- 11E)** Snarkhurst Wood. Horish Wood. Ryarsh Wood. Longham Wood.
- 12) SE of Lenham. Chylmington. Pluckley.
- 13)** Lamberhurst Quarter. Streamside, Vauxhall Lane, Southborough CAS. Wood S. of Highfield Rocks. Blackbush Wood, Cranbrook, DS.
- 14)** Blackbush Wood, D.S.<sup>294</sup>
- 16)** W of Hythe. Lympne.

**H. montanum** L. [Pale St John's-wort.] 15, 16. N.

Native. Dry hedgebanks, scrub, and wood-borders on calcareous soils, particularly at the junction of the calcareous Thanet Sand (or other overlying sandy strata) and the chalk; rare, and mostly near London. Very rare in V.C.15.

1<sup>st</sup> record, 1666: Lewisham, Merrett, Pinax, p.8.

**1)** [Charlton Woods, Hb Sowerby (BM).] [SE of Elmstead Wood [sic] Station near Chislehurst, W. Watson; now destroyed.] Between Bexley and Sutton, JSM, 1863. Elmstead Lane, N. of Bickley, on shady banks, 1944, plentiful; 1957 rare **MNE** 1968! Farningham Wood, J. Tabor, c.1910. Abbey Wood (Boaters Wood) St.J.M., 1950, very rare, 2 plants, G.E. Matthews.

**[3)** Bysing Wood, Faversham, Bateman in Blackstone, 1746, p.38: the locality which is partly on Thanet Sand, is still possible but it has not been refound in spite of search.]

**5)** Jane's Wood, W. of Nash, near Keston, W. Watson (1954, 1955!) **MNE**. [Swanley, J. Groves, 1883, **BM**.]

**6)** In a wood between Greenhithe and Southfleet plentifully, Doody. [Greenhithe, 1850, Glennie (**BRIST**).] R[oa]dside, Dartford to Greenhithe, 1888, A.H.W.D. **BM**. Bank of A.2, N. side of The Thrift, S. of Greenhithe, 1945! **MNE**. Banks of A.2, N. end of Darenth Wood, 1945 **MNE**, 1962! 198-, BN. These localities are at the junction of the chalk and Thanet Sand. West Kingsdown Fl. Lond.

**7)** N side of A.249, on steep scree in chalk scrub, Longreach Wood, SW of Stockbury, 1957, 1960, 1965 about 15 plants **MNE**.

**8)** Oxney Woods near Snowdown in chalk scrub, 1960; 2,000 P Gay (sp!) 7 locations.

**[10)** Bessels Green near Sevenoaks, probably on ragstone, W.W. Reeves **TLS**: not refound.]

[Charlton Wood; Bexley Lane; Lewisham; Trosley; Down; between Eynsford and Farnborough; Barnesfield Pit, near Dartford.]<sup>295</sup>

**H. elodes** L. [Marsh St John's-wort.] 15, 16. N.

Native. Valley bogs and acid boggy pools: very rare.

First Record: 1724. Bog at Charlton, Doody: Ray Syn. Ed,3, p.344.

**1)** [Extinct at Chislehurst (1893, HFP; 1900, SEC), Hayes, Lee and Charlton.] Keston Bog, Cooper Fl. Met.; J.S. Mill 1863; 1916, A.G. Davis **MNE**; 1917, PHC; 1924, JEL; 1950, JD Lovis, not observed since 1950.

**12)** "Near Ashford" 1848 in Hb Lamb **MNE**. Hothfield Common J.S. Mill, 1863; HL 1900 **MNE**; abundant in several bogs, 1942-56! 1994!). [Extinct at Willesborough Lees; and at Westenhangar (Gibbons Brook, where it was recorded up to 1925 by J. Walton).]

**13)** Hawkenbury Bog, in V.C.14 (Kent) 1945; 1963 RE Shorrocks; Bog, Forest Way, Hawkenbury, CAS. Bog by Louisa Lake, Bedgebury Forest, JRW, 1941 (1944-1955, abundant!). [Extinct elsewhere in the district at Rusthall, Fishers Castle, Tunbridge Wells Common, Culverden Down, and Colliers Green.]

## TILIACEAE

**Tilia** L.

*Tilia* pollen (prob[ably] all *cordata*) has been found at L[owe]r Halstow (Interglacial) Burchell, 1921, and at Neolithic-Mesolithic levels at Northfleet, Burdell & Pigott, 1939.

**T. platyphyllos** [Scop.] Large-leaved Lime 16. (?N).

<sup>294</sup> Duplicates entry under **13**).

<sup>295</sup> This list, added without reference to botanical districts, appears to be a précis of sites mentioned in Hanbury and Marshall (1899), whose reference to Farnborough is taken from *Phytologist* v: 372, where it may be an error for Farningham.

Possibly native in one woodland: extremely rare. The pollen of this species has been found in peat sealing a Mesolithic site at Addington, by J.P.T. Burchell (see Godwin, H. (1957) *The History of the British Flora*, p.98) and see Burchell & Erdtman (1950) *Nature, Lond.*, **165**, p.411.

1) Chislehurst, Planted GMB.

6) Eynsford Vill[age], Planted, GMB.

8) Planted, Broome Park, Denton, Miss D.A.C.L., 1960. **MNE**.

13) **W.) (hybrid)** about 7 trees, scattered along a stream in a small valley, remote from houses, among native vegetation, Combwell Wood, 1959, **MNE**, 703337, F. Rose. It is just possible that this is a native relic here; the situation is a very natural-looking wood.<sup>296</sup> 1954, **MNE**, Goudhurst. Roundabout Woods, Tunbridge Wells, CAS.

‡ **T. x vulgaris** Hayne (= *T. europea* auct., non L.) **T. platyphyllos x T. cordata**.

Common Lime

Widely planted.

1) Hayes Common, 1901, Hb. Davis **MNE**. Shooters Hill, GMB. Dartford Heath, GMB. Ruxley Pits.

2) Love Lane, Minster, 1958, OD.

5) ‡ Halstead, A.A. **BM**.

6) Darenth Wood, planted coppice, 1949, **MNE**.

7) Planted, Belmont Park, 1958, DMCC.

12) Stowting, 1956, ES.

16) Saltwood, L.J.M.

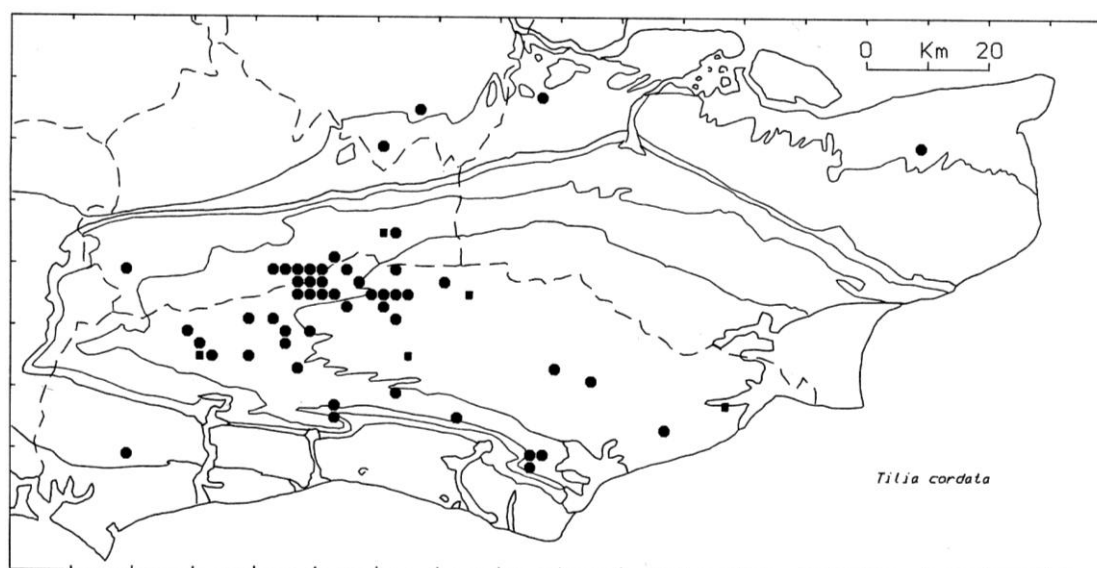
**T. cordata** Mill. <sup>297</sup>

Small-leaved lime.

15, 16.

N.

From pollen analytical data it is known that this species was widespread as an indigenous forest tree in S. England in the "Atlantic" period and later, and its pollen was identified on a Mesolithic site at Addington, Kent (Burchell & Erdtman, 1950; see above), but it does not occur certainly native anywhere in Kent today. Regarded as native now in Surrey (Glovers Wood), and in Sussex in *Fl. Sussex* (p.91). Certainly native and still abundant in many woods in Mid and North-east Essex on glacial gravelly loams. [deleted] native in Pas de Calais, but it appears to be so in the chalk woods of the Somme Valley.



<sup>296</sup> This entry appears to have been revisited at least twice in redrafting. Once was to add the grid reference and change 14 trees to seven. Another was to annotate as '(hybrid)', reinforced by another note 'no, hybrid'. This is explained by a manuscript report prepared by Francis Rose under contract headed 'Survey of Four Woodland sites in Tunbridge Wells District', relating to a survey carried out 4-6 September 1990 at, inter alia, Combwell Wood:

'...the stream gill at "J" was reached (704 339) and the *Tilia* trees that I found here c.1957 were refound. These were identified then by someone at the British Museum (N.H.) as *Tilia platyphyllos*, and hence published as such in the *Bulletin of the Kent Field Club*. However, with more knowledge of *Tilia* spp. gained from Prof C.D. Pigott since then, it was clear to me in 1990 that these trees are hybrids of *T. cordata* and *T. platyphyllos* and very likely were originally planted.'

<sup>297</sup> Map is present with Francis Rose-related papers, but it is not clear if intended to be used in Flora.



- 1) Farningham Wood, a few coppiced specimens, R.A.B. & F.R.; a few large standards, J. Pitt. Spring Park Wood, W. Wickham, 1895, Hb. Davis **MNE**; c.1956, D.P.Y., but in parallel rows.  
 3) Clowes Wood, Joyce Pitt, 1985.  
 5) Halstead, 1848, A.A. **BM**.  
 8) Covert Wood, G. Peterken.  
 11) Medway bank, below Maidstone, not evidently planted, 1958, E. Philp, **MNE**.  
 13) ‡ Tunbridge Wells Common, CAS.

## MALVACEAE

### Malva L.

**M. moschata** L. Musk-mallow. 15, 16. N. 41/51

**Native.** In open, well-drained woods, on chalk, sand, and clay, and in hedgebanks and scrub; frequent in the Weald, and on ragstone, chalk and sand; abundant in Oxney, Romney Marsh, Grain, and Sheppey, and the lowlands S. of the Swale; very rare in Thanet, and in district 4) (Lower Stour valley) ; frequent in Sussex and Surrey, especially on chalk and in the Weald; uncommon in Essex; rather rare in Pas de Calais.

1<sup>st</sup> record, 1640: Westerham, Parkinson, *Theatrum*, p.306.

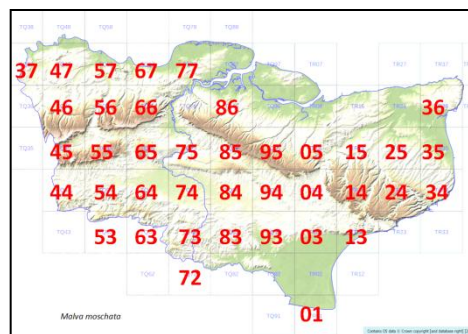
1) 46 Hayes , DMCC, GMB. 47 Foots Cray, 1945. 36 W. Wickham 1915 Hb. Davis **MNE**. 47 Abbey Wood, 1922, St.J.M. 47 Ruxley Pits. 37 Beckenham Place Park, PCH. Keston; Blackheath 56; Bexley.

3) 15 Trenley Park Wood, 1950. 16 Clowes Wood, L.W.W. 15 by Chequers Wood, Canterbury Golf Course, '50, REW. NW of Bekesbourne / Haystack Wood, AW Roberts. Whitstable 55.

4) 25 Hedgebank near Wenderton Manor, Wingham, L.W.W.

5) 36 Well Wood, Nash, 1946. 56 Lullingstone Park, H.W.P., 1901 **BM**. 45 Chevening Park, F. Swain. 45 Norsteads, F. Swain. 45 W. of Hogtrough Hill J.D.L. 45 Knockholt, 1940, P.H.C. (var heterophylla Lej. & Court). 55 Polhill, Mrs E Waley. 46 Darwins Bank, Downe, JEL '55.

6) 57 Darenth Wood, HMP. Darenth Village. NE of Otford, 1840, A.A.; GMB. S of Luddesdown Ch[urch]. Wingate Wood, Halling. Halling Downs, 1946 **MNE**, 1954 **MNE**; Bush Valley, plentiful. 56 Romney St[reet] GMB, F Swain. 67 Swanscombe Wood. 66 Red Wood, Luddesdown. Snodland Downs. Ryarsh Downs. (Eynsford.) Cuxton. Greenhithe. Birling. Trosley Downs. Downs NW of Wrotham 1947 **MNE**. Pasture, Preston Hill Plantation PCH. Chalk pit above Paddlesworth PCH. L[owe]r Upnor Scarp, '51, DMCC. 77 Woods S. of Cliffe. 77 Upnor Woods. 77 Northward Hill, High Halstow, 1949, abund[ant], 1950 **MNE**.



Farningham; Cobham; Dartford; Gravesend; Cliffe.

7) 75 Boxley Warren CT. 95 Wrinsted Court, Wichling. 95 Stalisfield REW. 04 Kings Wood, near Whitehill, 1949. 05 Molash, 1949 **MNE**. 75 Boarley Warren top, 1960, E.P. 04 Challock Ch[urch] Lane 007497, ES. 05 Godmersham Down 055500 ES. 95 Challock Lees 995503, ES. 94 Westwell 980483, ES. 993485 N of Dunn St[reet] '55 HMW. 95 Belmont Park REW. 76. 86. Chatham; Stockbury.

8) 24 Denton, 1946. 15 S.E. of Bishopsbourne, L.W.W. Little Iffin Wood Chartham, AW Roberts. 13 Etchinghill, 1959 **MNE**. 04 Amage F[ar]m, 095459. Pickersdean 075450. 14 Waltham AW Roberts. 04 Wye Downs. 04 Brooke Downs. 24 W of Dover (Coombe Vale) 1945. 04 Hastingleigh 1946 **MNE**. 25 Ileden Wood, Kingston, 1960 **MNE**. Elham; Alkham 55; Dover 55; Chartham; Canterbury; Wingham; Sandwich 56.

9) 36 near Hengrove, Margate, L.W.W., 1948. Thanet 55.

10) 55 S.W. of Bessel's Green 1955 **MNE**. 56 Pastures N. of Farningham PCH. 55 Rooks Hill 1950. 45 R[oa]dside N of Ide Hill, 1944. Westerham; Sevenoaks.

11) 65 Wrotham Heath. 75 by M20 Cobtree, Aylesford. 1961, E.P. Woods E of Ditton Lab[oratory], CW. 85 Kings Wood, (Langley) 1886, E. Bartlett, **MNE**; 1897, Lamb **MNE**. Swanton Valley Floor (Rag[stone]). 65 W. Malling, 1886, Hb Lamb **MNE**. Fairbourne Mill, Harrietsham, Mrs B. Dodds. 84 Headcorn. 94 Hoads Wood, 1946, **MNE**. 94 Pluckley Brick Works 920435. 94 W of Hoads Wood 944425. 93 SW of Bethersden, 1956, **MNE**. 74 Marden, 1952, **MNE**. 93 E of Bethersden 947394. 93 W. of Shadoxhurst 960375. Edenbridge tip DPY. Ulcombe 1829 AM Glennie (**BRIST**). Malling; Maidstone; Hollingbourne; Edenbr[idge]; Marden; Headcorn; Woodchurch 56.

12) 04 Bybrook 015440. 04 Blackwell 045437. 04 Boughton Lees 027475. 94 Hothfield Heath. 03 Ham Street, 1890, ESM. 04 Willesborough Lees, 1946. 94 S. of Charing 946475. 94 S. of Charing 950474. 94 Hurst Hill: 945442 / 943439. 95 Lenham Heath, sandy bank Bank E of Lenham. 91 Faggs Wood 980345. 93 Hunts Wood

960337. 03 Bourne Wood 005335 / 003340. 03 Kingsnorth SE 013 382. 93 Chilmington 978396. 94 W of Hothfield 961442. 94 Westwell 9903475. 94 S of W[est]well 990460. 94 N of Yonse 987455. 04 Lenacre 005455. 04 Sanatorium 010450. Hothfield; Ashford; Doddington.

**13)** 73 Angley Wood. 63 Lamberhurst, J.R.W. 44 Chiddingstone Hoath. Field E of Ashurst M. Mallinson. 44 N. of Cowden, 1947. Hever Sta[tion] KEB. 73 Kilndown Wood. Causton Wood. (Cranbrook, 1889 ESM). 94 Redleaf, Penshurst, 1947. Brookhurst Wood, Bidborough, HNC. Pembury Lower Green, 634425 / 1956 / CAS. Bayham CAS. T[unbridge] Wells; L[amber]hurst 56; Cranbrook; Tenterden; Tonbridge; Pembury.

**14)** 83 Wood near Breeches Pond. Cherry Garden, 50 acre Wood, Woodchurch ES. 83 Benenden. 73 Hawkhurst. S. of Hawkhurst.

**15)** 01 Dungeness near Old School, 1960, EGP. Dungeness rare.

**16)** 13 Saltwood, 1950. Aldington; Hythe.

**M. sylvestris** L. Common Mallow . 15, 16. N. 49/51

Native. Roadsides, banks, rough pastures, beaches nearly always in very well-drained places; common throughout most of Kent, though less so in the Weald than elsewhere. On the Weald Clay tract it occurs mostly by roadsides on the *Paludina* limestone and sandstone seams.

1<sup>st</sup> record, 1632: Sandwich, Johnson, *Descriptio*, p.25.

**1)** Elmers End, 1915, Hb Davis, **MNE**. Blackheath GMB & ECW. St. Mary Cray. Crayford. Bexley ch[urch] y[ar]d PCH. Orpington. Joydens Wood, 1910, H.&J.G. **BM**. Abbey Wood, GAM. Ruxley Pits. 36 Hayes Sta[tion] tip PCH. 676493 W. Wickham PCH. W. Wickham; Keston; Blackheath; Bexley.

**2)** Woolwich Arsenal. Sewerbank, Plumstead. Grain;. All Hallows. St Mary Hoo. High Halstow. Stoke. Hoo St Werbergh. Cliffe. Port Victoria ESM. A249, N. of Iwade. Minster Marshes, SW Sheppey. Canal SE of Sheerness O.D. Teynham; Faversham '55; Grain; Sheppey.

**3)** Whitstable.

**4)** Sandwich. Chislet.

**6)** Stone. Cuxton. Halling. Snodland. Green St[reet] Green PCH. Buckland Rd, Luddesdown PCH. Wrotham, Pilgrims Way PCH. Gravesend, a[bandant], HAS; on wasteland and banks 1960. R[oad] S of Spendiff Cooling, 44. R[oad] S of Cooling Village 44. Farningham; Cobham; Dartford; Gravesend; Cliffe.

**7)** Charing Hill. Chilham. Dane Court. R[oad]side Park Wood Chilham. Challock Lees. Dunn Street. Bilting. Squirrels Wood. Primrose Cafe Stockbury. A249 NE Stockbury Ch[urch]. ½ m W of Chilham A26. Chatham; Stockbury; Doddington55

**8)** Wye Downs. Bridge JG. Bekesbourne. St. Margarets Bay 1893 HWP **BM**. River, KDR. Canterbury; Wingham; Sandwich; Elham; Alkham; Dover.

**9)** Fields W of Cleeve Court Minster '63. Thanet.

**10)** Shoreham River path PCH. Dartford HMP. Eynsford, by r[oad] PCH. Horton Kirby PCH. S. of S. Darent PCH. Yalding. Sevenoaks tip CAS. Westerham; Sevenoaks 55.

**11)** E. Malling. Leybourne. Ryarsh sandpits. Maidstone Hb L[amb], 1883 **MNE**. St. Leonards St[reet]. SW of Gover hill. Yalding. Platts Heath. Sandway. Tonbridge town. Straight Mile Leigh. Plaxtol village 1944. NW of Yalding. E of Hale St[reet], freq[uent] CAS. Pluckley Village ES. By B2077, SW of Pluckley Thorne. Bethersden, 1955, by A.28. ½ m W of Headcorn. Moat F[arm] G[reat] Chart. Edenbr[idg] 55; Tonbr[idg] 55; Malling. Maidstone; Hollingbourne; Woodchurch 55; P[addock] Wood; Marden 55; Headcorn.

**12)** Ashford. Willesborough Lees. Hinxhill. Mersham. Smeeth N. Chilmington (ragstone). Beaver Green. Great Chart. Charing; E of Charing. West well. Westwell Leaon. Hothfield Common. Hothfield Village. Potters Corner. N of Potters Corner. Kessington. Lenacre. Boughton Lees. Wye town. Wye near Racecourse. Lenham Heath. Bilting. ½ m NE of Chilham A.26. Hothfield; Ashford; Chilham.

**13)** (rare about Tun[bridge] Wells, Lamberhurst, Goudhurst and Cranbrook.) Bidborough path, Southborough, HMC. High Brooms (one white flowers) KEB. (Lamberhurst? JRW); Cranbrook 56; (T[unbridge] W[ells] N[ot] R[ecorded]).

**14)** (Not recorded S. of Hawkhurst or at Sandhurst.) Kenardington Ch[urch] ES.

**15)** Appledore St[at]io[n], 1958 **MNE**. Hythe Seafront KEB. Tenterden 59; W Oxney 59; Appledore; (Sandhurst N[ot] R[ecorded]).

**16)** Sandgate. Hythe. Dungeness; Romney; Aldington; Hythe; Folkestone.

‡ **M. ambigua** Guss.<sup>298</sup> [16.]

**11)** waste ground, Tonbridge, JPMB, B.E.C. 1939-40, p.272.

<sup>298</sup> Not in check-list; since regarded as synonymous with *M. sylvestris*.

‡ **M. nicaeensis** All.<sup>299</sup> {French Mallow.} [16.]

1) Field, Avery Hill, Eltham, AHWD, 1892, **BM**.

‡ **M. parviflora** L. Least Mallow. [15, 16.] C.

1) Old chalk pit, Green St. Green, Farnborough, 1937, JEL (Hb L.) **BM**.

2) Waste g[roun]d, near Faversham Sation, 1893, AHWD.

4) Manure heap N. of Sandwich, BEC, 1864, p.10, Syme. Shoddy, Sandwich, 1960 DMcC **MNE**.

11) Edenbridge, Mr. Justice Talbot, 1924, BEC, p.563 (carpel glabrous).

15) Broadwater Down, Tun[bridge] Wells, garden weed, KEB, det. JEL.

‡ **M. pusilla** Smith<sup>300</sup> Small Mallow. [15, 16.] C.

1) Rubbish heap, Plum Lane, Plumstead 1893 A.H.W.D. **BM**.

2) Cross ness, near Erith, 1892, AHWD **BM**. Plumstead Marshes, 1915, JE Cooper. Motney Hill, 1951, DMcC. Higham, PCH.

4) Kingsdown, 1890, ES Salmon (J Bot. 1890).

11) Edenbridge, ESS (J Bot, 1890). Shoddy Field, Comp, 1960, DMcC **MNE**.

15) Hythe, Ray, Syn.

**M. neglecta** Wallr. Dwarf Mallow. 15, 16. N. 41/51

*M. rotundifolia* auct., nec L.

Native, on beaches, dry roadsides, pastures and banks, waste ground, often at foot of walls in or near villages, usually on extremely well drained soils in full sun.

First record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.30.

1) [Deptford, 1773, Hb Banks.] 46 Hayes, [D]Mc.C. 47 S. of Bexley 1955, **MNE**. Dartford Heath pit HMP. Ruxley Pits. 47 Chislehurst Common near smaller pond, 1961, 443705, HMP. Joyce Green GMB. Bromley M[ar]k[e]t place, ROJ Dare, 1956. 676493 W. Wickham PCH.

Keston 55; Blackheath; Bexley.

2) 57 Edge of Swanscombe Marshes. Otterham quay BC. 87 All Hallows sea wall, AG Side. 06 Faversham. 06 Graveney, 1949.

Sheppey DHK; Cliffe; Grain 58/9; Faversham 55.

3) Whitstable 55.

4) Reculver Marshes, on new sea walls, REW '53. 35 Sandwich town. Sandwich Bay. 36 behind dunes N of Princes 1962. 35 N. of Princes club Ho[use], 1950, L.W.W. 35 Deal Links, KDR. 35 Walme Beach, 1949 L.W.W. 100 yds N. of Lifeboat Ho[use]. 15 Fordwich Village 1954 **MNE**. 36 Minster Marshes 1963.

Wingham; Canterbury; Sandwich.

Cobham; Dartford; Gravesend.

Chatham; Stockbury; Teynham; Doddington.

Alkham '56.

6) 57. 66. 67.

7) 95 Belmont Park Faversham. Highsted Pit HMW.

8) 15 Bridge, Miss T. Webber. Goodnestone JG.

9) 36 Hengrove, Margate, E.M. Treves, 1905, teste LWW. 36 Allotments by Sta[tion], Minster 1963.

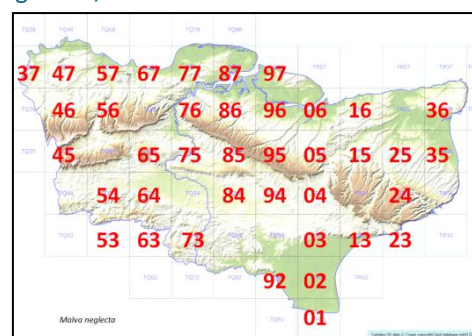
Thanet 63.

10) By bank NW of Brasted 1957 RAC.

Westerham 58/9; Farningham 55.

11) Edenbridge tip DPY. 54 pavement weed near Tonbridge School, CAS. 64 E. of Hale Street, on dry bank. 64 E. Peckham, J.R.W., 676493; 1956 **MNE**. 75 The Rocks, E. Malling. Leybourne. 66 Birling Church Yard. 65 Yalding Churchyard., 1960, 698501, H.M.P. 75 N. of Larkfield, 1946 **MNE**. 75 Pendenden Heath, 1960, E.P. 75 Cobtree, by M.20, 1961, E.P. Hadlow, Bourne Mill ES. Houslodge, N of Tonbr[idg]e HS Vere Hodge. 64 Shoddy field, Yalding, 1961, E.P. 85 Fairbourne Mill, Mrs B. Dodds. Headcorn; Malling; Maidstone; Hollingbourne 56.

12) 15 Canterbury, 1948. 95 E. Lenham F[ar]m, 1958. 14 Brabourne, 1961, Miss B. Nash. 94 R[oa]dside Lenham Heath, 1954 **MNE**. 03 Mersham Mill, 1956, **MNE**. 94 West Well Village ES. 94 Tuthill ES. 04 Hinxhill, E. Scott. 94 G[rea]t Chart ES. 94 N of Chilmington ES. 04 Ashford (Magazine Rd). 04 W of Goat Lees. 04 S. of Lenacre Hill. 04 Boughton Lees. 04 Wye town. 05. Hothf[ie]ld; Ashford; Doddington 56; Chilham.



<sup>299</sup> Not in check-list.

<sup>300</sup> Cited as Sm. & Sow.

**13)** 53 Tunbridge Wells Tip, J.R.W.; 1959, KEB. Dribbles Wood, Bedgebury, LJ Danes. Southborough, HNC.

Lamberhurst JRW; Cranbrook; Tunbridge [sic]; Pembury.

**14)**

E Oxney.

**15)** Lydd Common F Swain. 13 Hythe Beach 1947 **MNE**. 02 near Romney Station. St Marys Bay, 1881, JFDP; HMP, 1963. 01 Dungeness 1947. 92 R[oa]dside, Appledore Sta[tion] 1959, **MNE**. Romney; Dungeness.

**16)** Hythe W Scars F Swain. Saltwood, LJM. Park F[ar]m, Folkestone, VFPD. Aldington; Hythe; Folkestone.

‡ **M. verticillata** L. [Chinese Mallow. 16.]

**13)** garden, High Brooms, 1900, E.C. Gilbert, **TLS**.

### **Lavatera** L.

‡ **L. arborea** L. Tree-mallow. (15) C. 6/52

Apparently always introduced in Kent, but well naturalised and at home locally on the coast.

1<sup>st</sup> record, 1860: Walmer, J.S. Mill. Not recorded as native in SE England, though in Sussex it occurs in similar places on the coastal cliffs to the Kent localities. Not recorded in N. France.

**3)** 16 Coast guard Station, Swalecliffe, 1938, JBM. 16 Whitstable Harbour abundant, RE Wood; H. Wilks, 1958 (on reservoir bank and waste ground near). 06 Thanet Way, 1m W of Borstal Hill, Seasalter HMW.

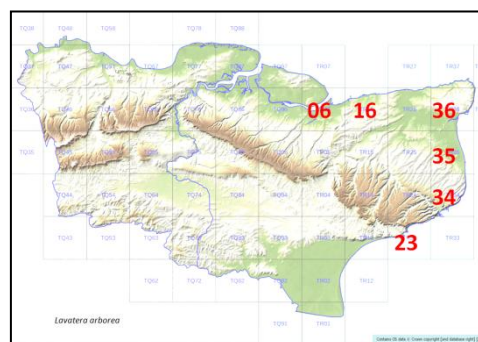
**4)** 35 Shingle beach, Walmer, naturalised, 1860, J.S. Mill; 1850, Hb.L., **MNE**. 34 Kingsdown, K.D.R. 1957.

**8)** 34 Shakespeares Cliff, JE Lousley, J. Bot., 1925, p.340: plentiful in one spot, 1949, **MNE**! 1955; and in the beach, 308398, 1958, KDR. 34 St Margaret's Bay, W.W.R., in a garden below cliff, Fl. Kent; on shingle, 1947, DHK; fully naturalised here, 1957! **MNE**.

**9)** 36 Several places in Thanet, LWW (Cliffs at Broadstairs, Mrs Benson; H. Clifford, 1893 **BM**; Westgate, FJH; Kingsgate, Withering; Whitwell.).

[**14)** Hedge, Wittersham (prob[ably] bird sown, 1935 ASK.)

**16)** 23 On top of the beach / below the Leas, Folkestone, B.D. Jackson: L.W.W. & F.R.!



‡ **L. cretica** L.<sup>301</sup> [Smaller Tree-mallow.]

‡ **L. thuringiaca** L. (= *L. olbia* [auct.] non L.)<sup>302</sup> Hyeres Tree-mallow.

‡ **L. trimestris** L.<sup>303</sup> Royal Mallow

### **Althaea** L.

**A. officinalis** L. Marsh-mallow. 15, 16 . N. 11/51

Upper borders of saltmarshes, borders of dykes in drained former saltmarsh, and banks of tidal rivers. Formerly in all the estuarine marshes; still locally frequent by the upper tidal Medway, and abundant in Romney Marsh, and occasional in the lower Stour estuary, but extinct in many former localities on the Thames, Swale, and W. of Thanet.

1<sup>st</sup> record, 1597: Thames Marshes, Gerard, *Herbal*, p.789.<sup>304</sup>

**1)** [Extinct in the Thames side localities at Woolwich, Erith, Cliffe, Greenhithe and Gravesend – first recorded by Gerard.] Alien at Joyce Green, Dartford, GMB.

**2)** 76 River bank S. of Burham Church, 1943 **MNE**, 1953 **MNE**. 76 by the ferry, Wouldham. 76 NE of Halling in Salt Marsh 1956. 76 Holborough Marshes. Reed beds N. of Snodland, NE of Gasworks, 1980. 76 Marshes S. of Snodland, 1883 E. Bartlett **MNE**; 1901, H. Lamb; 1943 **MNE**; 1946 **MNE**. Below Upnor on river shore below Cockham Wood 1 pl[ant] 1999! 75 By river near the Friars, Aylesford. 75 [Extinct at Faversham, Ospringe, Graveney, Oare, Luddenham, and Goodnestone, first recorded there by Bateman in Blackstone, 1746.]

**4)** [Sandwich, H.C. Watson.] Riverside ditches NE of Sandwich, D.P.Y., 1947 (1947!). 35 S.W. of Downs Farm. 35 Ditches E of Worth, 1948; freq[uent] by new cut, 1950-53, REW. 36 R. Stour W of Red Lion, and New Cut /

<sup>301</sup> Entry given in manuscript, but no account.

<sup>302</sup> Given in check-list, but no account in manuscript. In Stace's *New Flora*, ed.2, this is given as Garden Tree-mallow.

<sup>303</sup> Given in check-list, but no account in the manuscript.

<sup>304</sup> Repeated later in the account, referring to Woolwich etc. as well.

Richborough L.W.W. 1949, REW. 36 Dikes by R[ai]l[wa]y, S. of Minster CA Roberts. [Extinct at St Nicholas, Sarre, and Pegwell.]

**12)** [Casual inland. W. of Orlestone by r[oa]d; Westwell, 1 pl[ant], 1947, ES.]

**15)** Plentiful in Romney Marsh and its adjacent alluvial marshes. 03 S. of Ham Street JS Mill (1946!). 03 Newchurch. 93 S of Kenardington 1959, **MNE**. 13 Dykes near Redoubt, Dymchurch Rd, Hythe LJM. 03 W. of Burmarsh. 13 N. of Dymchurch. 02 W of Brenzett. 1945 **MNE**. 92 W and E of Snargate. 02 S. of Brookland. 02 Ivychurch. 02 Old Romney, 1959 **MNE**. 93 Shirley Moor. 03 S. of Bilsington. 13 S. of Lympne. 03 S. of Aldington. 82 S. of Small Hythe. 92 SW of Appledore. SE of New Romney Ch[urch] RAC. 82 W. of Wittersham. 92 E. of Appledore, 1954 **MNE**. 13 Sea front, Seabrook, 1944, DHK. S of Wittersham ASK. Appledore, 1871, R. Pryor, **MNE**. Romney Marsh, R. Pryor **MNE**. Marsh at New Romney, 1909 **MNE**.

Chatham; Maidstone; Sandwich; E. Thanet; W. Oxney; Hythe; Tenterden; Aldington; Woodchurch; New Romney.

Not recorded as a native in Surrey, though it probably occurred at one time by the tidal Thames; locally abundant in the estuarine marshes of Sussex, of Essex, and of the N. French coast from Gravelines to the Somme.

[Tipped into the manuscript is a sheet in Francis Rose's handwriting as follows:]

***Althaea officinalis* L.**

Most Grid refs. approximate, when 6 figures. Dates given when I have them in my records

(Medway)

S of Burham Old Church, 1953 – 716613.

Wouldham Ferry, 1953 706638.

Saltmarsh NE of Halling, 1956, 710644.

Holborough Marshes, 1980, 710625.

N of Snodland, E of Gas Works, Reed bed, 1980, 607623.

S o Snodland 1946 – (maybe gone now) – 7161.

NE of New Hythe Ferry, 1950 – 714604.

River by the Friars, Aylesford, 726588.

Riverside below Cockham Wood, Upnor, 1999, 766714.

(Stour)

Riverside ditches NE of Sandwich, 1947, 3458.

SW of Downs Farm, NE of Sandwich 343587.

Ditches E of Worth, 343566.

New Cut Richborough, 1950, 336612.

Dike by Railway S of Minster, 313642.

(Romney Marsh)

(mostly only the 1km square recorded by me)

S of Ham Street, 1946→ 0031.

Newchurch, 0531.

S of Kenardington, 1959, 9830 & 9831.

W of Burmarsh, 0931.

N of Dymchurch, 1031.

W of Brenzett, 0027, & 0028.

NW & E of Snargate, 9828 & 9928.

S of Brookland, 9825.

Ivy church, 0027.

Old Romney, 1959 – 0325.

Shirley Moor. 1943-55 – 9332 etc. (common).

S of Bilsington, 0433,( to c.1990).

S. of Lympne 1233.

SE of New Romney ch[urch], R.A. Clarke, 0624, c.1960

Dikes S of Appledore, by B2080, and nearby – till 1980+, 9629.

S of Aldington 0733.

Seabrook seafront, 1944, DH Kent – 1835.

W of Wittersham by road by dike – 8826.

SW of Wittersham, 8825.

S of The Stocks, 9125.

Near Potmans Heath, 8728.

Beach E of Sandgate, DH Kent 1945; now gone, 2035.

SW of Hythe, Dikes by The Redoubt, by A.259, LJ Margetts, c.1962 – 1232.

S of Small Hythe, 8929.

SW of Appledore, 1954, 9528.

Older records from Hanbury & Marshall (1899)

Woolwich; Erith 1597; Greenhithe, Gerard. Cliffe Marshes Johnson 1629. Gravesend, Gerard. Faversham Johnson 1629: Graveney, Oare, Luddenham, Bateman 18cent[ury]; Goodnestone, Jacob 1777; St Nicholas at Wade; Pegwell; Cliffsend; Sarre.

(*Althaea* was clearly widespread in North Kent at one time but has now largely disappeared there from the Thames marshes.)

**A. hirsuta** L.

[Rough Marsh-mallow.]

(15), 16.

N.



Probably native. In rough chalk grassland and arable fields, very rare and local; also as a casual. Persistent near Cuxton since at least 1792\*. It has occurred in a rough chalky field near Reigate in Surrey, and in one near the Cuckmere in Sussex: its status at those places is uncertain. It is regarded as native on the chalk in Normandy and has been reported in Nord though not in Pas de Calais or Somme.

**6)** Corn field near Cobham, J. Rayer, 1792; in Symons Synopsis, 1798: sp[ecimen] in Herb. Ed. Forster (1<sup>st</sup> record). Numerous records (and specimens) since from this locality, which is now better described as cornfields and rough chalk grassland *Brachypodium pinnati* S. of Great Wood, N. of Cuxton. It has been reported extinct more than once, but is still plentiful in some seasons; seen up to 1962! 4 pl[ants] J. Cadbury; 1964; 1 pl[ant], Sir Jim Holland; abund[ant] also in '37; 42; 45. Cobham 1838, ex Hb Lamb **MNE**; F. Jones, 1880 ex Hb L[amb] **MNE**; Hb. L[amb] 1880 **MNE**; 1901 **MNE**; 1945/1946/1952/1955 **MNE**; 1933 JEL **BM**; 1921 HWP **BM**; 1907 HWP **BM**. *Salvia pratensis* and many other interesting calcicoles grow with it. Luddesdown, F. Forsyth, 1930. Dartford, Tagg, 1911. (Hedge at NW corner of Red Wood, Luddesdown, 7 or 8 pl[ants] 663669, 1948, Mrs B Welch.)

**7)** Wouldham, Kent, J.F.Y. (Soc. Bot. Lond. 1840.)

**11)** Casual in works yard near Tillings, Maidstone, Miss Bunyard; C. West, 1948, **MNE**. Casual Platt, 1951, DMcC.

### Alcea L.<sup>305</sup>

‡ **A. rosea** L. Hollyhock. [16.] H.

**1)** pit, Dartford Heath, HMP. Ruxley Pits. Beckenham '55 JM Sherwood. Farningham Wood, 1963, W.A.S.

**2)** Waste ground, Crossness, PCH.

**8)** Longfield Tip, 1956, P.C.H. Lane End, PCH.

**10)** Sevenoaks tip, DMcC.

### Arbutil Miller

**A. theophrasti** Medikus<sup>306</sup> Velvetleaf H.

### Hibiscus L.

‡ **H. trionum** L. [Bladder Ketmia. 16.]]

**1)** Beckenham, H. Davis, 1934; 1935, **MNE**.

## [SARRACENIACEAE]

### [Sarracenia L.]<sup>307</sup>

[**S. purpurea** {L.} seed of this was sown at Gibbons Brook in 1960 by R. Gorer.]

## DROSERACEAE

### Drosera L.

**D. rotundifolia** L. Sundew. 15, 16. N.

Native. Wet-heath, and valley-bogs, among *Sphagnum* species; now very rare and in three localities only; formerly much more frequent; on the Tertiaries, the Folkestone Sand of 12), and on the Hastings Sands.

1<sup>st</sup> record, 1570: Kent, L'Obel, Adv. P.454.

**1)** Keston Common bog, 1836 Fl. Met.; many observers to 1957! **MNE**. About 60 plants still existed in 1954; 1961, HA Sandford, still many plants. [Hayes Common, M.&G. Caesar's camp bogs, near Bromley (i.e. Holwood Park) M.&G. Bromley Common, M.&G. Chislehurst Common, W.W.R.]

**2)** "Stone Marshes" Dr. McReddie, 1901-8, teste S. Priest.

**12)** Hothfield Common, 1848, Hb. Lamb **MNE**; 1863 J.S.M. (Hb. Mill); to 1956 **MNE**, very abundant in and by the main valley bog, also in two other bogs on the common! [Willesborough Leas, C.P.S.K.; now extinct, the area having been partially drained; though still interesting, it is not now suitable for *Drosera*.] Gibbins Brook, Sydney Webb; G. Walton; AE Webb; 1938; 4 plants, 1945! **MNE**; 1949, E.C. Green; apparently now gone, 1954.

<sup>305</sup> Given as *Althaea*.

<sup>306</sup> Given in check-list, but no account found in the manuscript.

<sup>307</sup> Not in check-list.

**13)** [High Broom *[sic]* Tunbridge Wells, Miller.] Hawkenbury Bog<sup>308</sup>, 1942, J.R.W.; (1945! etc.) **MNE**; 1954, C. Stace. [Tunbridge Wells, Hb. Lamb 1870 **MNE**.] [Bog round Louisa Lake, Bedgebury Forest, Goudhurst, J.C. Melvill; Clarke; apparently not there now, 1943-52, though habitat appears ideal for it still!]

This species is only really plentiful at Hothfield Common; it is now partly protected from trampling at Keston bog. The Hawkenbury site is protected as a nature reserve. It probably occurred widely at one time, on the Folkestone Sands heaths, and in the High Weald; locally still very common in Ashdown Forest in E. Sussex, and on the Greensand heaths of W Sussex and SW Surrey, very rare in Essex (Epping Forest now) and very rare in Pas de Calais (2 loc[ation]s) and N France generally.

[**D. intermedia** Hayne would have been expected in Kent, as it is common locally in Ashdown Forest and in west Surrey, but it has never been reported so far as I know, and certainly does not occur now as a native. I planted this species experimentally in a marked plot at Hothfield Common in 1947, and it has survived to 1964 but not spread.]

[**D. anglica** Huds. was planted at 1) Petts Bog, Chislehurst, by Sherard, the plants coming from Westfield Down in E. Sussex (where it is now extinct), and a specimen exists in Hb. Dillenius; a record by Milne & Gordon probably had a similar origin. It is not known now as a native nearer than the New Forest and N. Suffolk (Redgrave and Thelnetham Fens).]

## [CISTACEAE]

### **Helianthemum** L.

**H. nummularium** (L.) Mill.<sup>309</sup> Rock Rose.<sup>310</sup> [15, 16.] N.

[synonyms] *H. nummularium* (L.) Mill., *H. vulgare* Gaertn.

Habitat: in old chalk grassland, and hedgebanks and cuttings on chalk; widespread and frequent to common in the chalk districts; also on sunny s-facing banks on the calcareous Thanet Sand.

1<sup>st</sup> record, 1597: Gravesend, etc., Gerard, *Herbal*, p.1102.

**1)** On Thanet Sand, Holwood Park, 1947. Farningham Wood, S Edge, GMB. [Locks Bottom Common, Mrs. Children<sup>311</sup> (A.A.) **BM**.] [Hedgebank near Wilmington, H. & J.G. **BM**.] [Crofton, LNHS (?correct).]

**5)** W. of Polhill: above Polhill Tunnel. Darwins Bank, Downe. Downs W. of Shoreham. 3964 Well Wood, W. Wickham. Jewells Wood, A.G. Davis **MNE**. Scrub S. of Timberden Bottom PCH. Chevening Park. Pilots Wood, SW of Shoreham.

**6)** Horton Kirby. S. hedgebank of Darenth Wood, on Thanet Sand. Stone, on chalk bank, HMP. Shoreham Downs (Juniper Hill). Preston Hill. Railway Cutting S. of Eynsford. Otford Downs. Kemsing Chalk Pit. Wrotham Downs by A20. Trosley Downs. Ryarsh Downs '44. Crookhorn Downs, Snodland. Hedge of Mounts Road, Greenhithe. Wrotham Water Downs. Downs S.E. of Meopham Green '56 **MNE**. Down near Hartley Church 1946. Magpie Bottom 1980. Pilgrims Way E of Wrotham. Halling Downs, '44-60.

**7)** Pilgrims Way, Boxley, 1938 JBM **BM**. Wouldham Downs. Burham Downs, v. abund[ant] **MNE**. Bluebell Hill H.L. 1885 **MNE**; 1959! **MNE**. Boarley Warren. Monk's Wood. Boxley Warren H Lamb **MNE**, 1945 **MNE**. Detling Downs, NW Coombe, '44. Berengrave pit Rainham DM Roberts. Walderslade Valley. Rainham Park. Three Squirrels Down 44. Purple Hill. Queendown Warren, '44. Stockbury Valley. Thurnham Castle, and to W. South Street! Downs, NW of Broad Street. Filmer Wood. Timbolds Hill. Allington. Hollingbourne Hill. Harrietsham Downs. NE of Lenham. Cobham Farm. Hart Hill. Charing Hill. W of Wormshill. W of Frinsted. N of Milsted. Ospringe Down. College Wood. Belmont Park. C[lay] w[ith] f[lints] by Park Wood, Molash. Westwell chalk pit. Bilting Downs, 1954.

**8)** Wye Downs. Long port Downs, Crundale. Crundale Church Down **MNE**. Brook Downs. Downs NE of Winchcomb F[ar]m Godmersham 1957 **MNE**.

**8E)** Chartham Down, **MNE**. Broadway Green, Petham. Park Gate. G[rea]t Shuttlesfield. Downs N. of Clavertye Wood Elham 1950 **MNE**. Poylton Valley, Dover 1955 **MNE**. With white flowers, Sibertswold, 1921, W. Beeston & Prof. Boulger **BM**. Folkestone Warren, Miss F Fagg; 1960! **MNE**. Lydden Spout.

**16)** [Sandgate, 1816, J.F.Y. **BM**.] in Hb Coll. Marlborough the label "Sandgate, Kent" appears on a specimen on the same sheet as a specimen labelled from Somerset dated 1869.

<sup>308</sup> Not in vc16.

<sup>309</sup> Given as *H. chamaecistus* Mill.

<sup>310</sup> Common Rock-rose in check-list.

<sup>311</sup> Anna Atkins' maiden name was Children, so this should have been given as Miss Children if it was her find before marriage, but may have been her step-mother's find, preserved by Anna.

## [VIOLACEAE]

**Viola L.****V. odorata L.** Sweet Violet. [15, 16] N.[Text missing from manuscript]<sup>312</sup>**V. odorata L. x V. hirta L.**

- 1) near Keston, C.E. Britton, teste Beeby. Between Orpington and Chelsfield. C.E. Britton.  
 5) Down, 1877, K. & J.G. **BM**. Shoreham, 1879, H. & J.G. **BM**. W. of Eynsford, W.W. Above Morant's Court Hill chalk pit, ESM, 1889.  
 6) near Farningham, 1880, H. & J.G. **BM**. Near Cobhambury Wood, 1939, J.B.M. 773 **BM**. Maplescombe, 1923, W.W. Shoreham 1932, JEL, Hb L. teste PMH. Trottiscliffe Downs, 649612, 1955, DMcC.  
 7) Slope of Downs, Detling Hill, 1939, J.B.M. No. 767.  
 8) Martin Mill, 1889, E.S.M., **BM** \* *Viola permixta* Jord. Hedgebank, above Winchcombe F[ar]m, Crundale, 1962.  
 11) Ryarsh Wood, 1943.

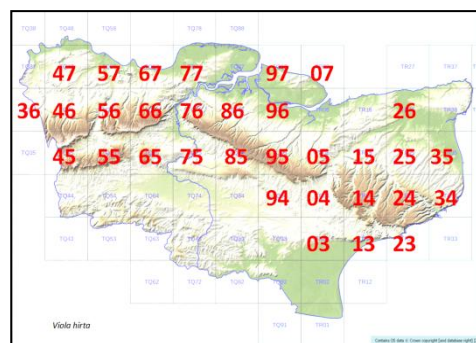
**V. hirta L.**<sup>313</sup> Hairy Violet. 15, 16. N. 33/52

Native. Grassland and scrub on chalk, abundant and very constant: open woods and banks on ragstone, common: local on Thanet Sand: one locality each on Folkestone Sand and on London Clay in Sheppey. Unknown on other soils. Rare in 1), 2), 4); abundant in 5)–8); rare in 9) and 10); locally common in 11); and 16) on ragstone.

1666\*; Charlton Wood etc., C. Merrett, Pinax, p.125.

Common on chalk in Surrey and Sussex; rare in Essex; common in Pas de Calais.

- 1) S. hedgebank of Farningham Wood, 1949 **MNE**, on Th[anet] Sand. Open bank SE aspect in Scadbury Park, 1959, on Th[anet] Sand. Chislehurst by Sta[tion] GMB.  
 2) Ash coppice S. of Warden, 1959, **MNE**, 026721, O.D. '56. Old R[ai]l[wa]y, Stickfast Lane, Minster, '58.  
 3) Grassland on L[ondon] Clay NE of Rhode Common, 1946.  
 4) Wood on Thanet Sand, Wenderton Manor, Wingham, 1959, B.N.  
 5) Downs W of Polhill '47. Chevening Park '50 **MNE** '61. Berry's Green Wood 62. Down NE of Pilgrim Ho[use] Westerham. Well Wood, W. Wickham, PCH. The Larches, SW of Farnborough. Darwin's Bank, Downe '61, '58. Golf Course, Downe '58, 428608. Birchingbank Wood, Pratts Bottom. Lullingstone Park.  
 6) Farningham on chalk bank to SE, GMB. Luddesdown (Wrangling Lane) 1939 JBM. Copse SE of Dartford '44. Hogmore Down Wrotham. Birling Downs (Brometum). Ryarsh Downs (Brometum). Above Trosley. Pilgrims Ho[use], Trottiscliffe. Down above Wrotham Water. Downs, Kemsing, N of Ch[urch]. Downs E of Otford. White Hill, Shoreham. Down SE of Farningham. 49. Down SE of Eynsford Sta[tion] 49. Magpie Bottom. Preston Hill E down. Romney St[reet] St JM. Wrotham Hill. Downs N of Ightham. Berry's Maple, Ash, 609369. Down N. of Crookhorn Wood. Ex-arable S. of Great Park Wood. Holly Hill Brometum. Maplescombe GMB. Down 1m NW of Kemsing '60. Shorehill Kemsing. White Ash Wood, 611645. Great Crabbles Wood 1936 JBM. Cobhambury Wood 61 HAS. Upper Halling Down. Cuxton. W. of Buckland '61. Down ENE of Priestwood 61. Parvil Wood 64. Mounts Wood. S edge Darenth Wood (Thanet Sand). Northward Hill – grassland on 200' terrace on top, '58. Swanscombe, pit E of Paper Mills 598753 HMP. Moodys Lane, Stone, 5675 HMP.  
 7) Bridge Woods '39, JBM. Boarley Warren, '61, '59. Bluebell Hill (P[ilgrims] view 62. Bocley Warren '62. NW Coombe Detling, Purple Hill, '63. QueenDown Warren. Wouldham Downs. Barham Downs. Downs E of



<sup>312</sup> This would have been the first page for *Viola*, which instead starts with *Viola hirta* at the beginning of vol. 2 of the manuscript. This is a loose page, so what preceded it has presumably been lost. *Viola odorata x hirta* was found after *Viola canina*, but is also a loose page and presumably became detached and was re-inserted later. Francis Rose's annotated Hanbury & Marshall (1899) includes records at Shorne; Folkestone; lilac [flowers] at Pluckley; white [flowers] – v[ery] a[bandant] Pluckley, Ulcombe, Shorne, Sutton V[alence]; very abundant about Mallings, Birling, Leybourne....Ightham, Halling down.

<sup>313</sup> At this point, the second volume of the manuscript begins.

L[owe]r Bell '62. Stockbury Hill Wood '60. 813617 E side. Tunbury Wood. Soakham Down '52. Belting Down '54. Hollingbourne Downs. Downs W of Thurnham Castle '61. Downs E of Thurnham Castle 61. Simia field., 59. Down E side Belmont Golf Course 59. Down W of Club Ho[use] Belmont 59. Downs N of Wichling 1/6/58. Lees Park, Sheldwich. Cox Street Downs. Westwell Downs. Hawkins Wood Chilham DHK.

**8)** The Junipers Wye. Olantigh Plantation '54. Rob Sacks Wood 54. Brook Hillock '45 **MNE**. Giddy Horn, E.N.E., '62. Broad Downs Brook 62. Fanscombe Wood '59. Beech Wood, Wye, '59. Pett Street Down 59. Eggerton Manor. Newgate Scrubs. Yockletts Bank 65. Down S. of Yockletts 59. Crundale Down (Brometum). Postling Downs '45 **MNE**. Arpinge Down spur 2, '59. Downs E of Etchinghill '60. 192487. Iffin Wood C. Haes. Wolverton Down. SW of Lydden. Coombe F[ar]m Down Dover & to W. Down S, of Alkham. N of Pean Newington 48 B.W. The Lynch. Sutton Downs. Temple Ewell Down 65. Woodville. Eastling Wood '59. Free Down '62.

**9)** Backman's Hill, 1853, A.A. (**BM**).

**10)** Rooks Hill scarp woods, 565531, CAS: FR.

**11)** Sandpit S of Cobtree Aylesford, '55 **MNE** (F[olkestone] Sand). Ditton quarries '45 **MNE**. Quarry Wood W. Farleigh 45 **MNE**. Well St[reet] E. Malling (Springhead) '46-'64. Swanton Valley Mereworth. Basted Quarries. Offham Quarries. Scarp E. of East Hall, Boughton Mon[chelsea], '60. Egerton Scarp. Pluckley Scarp. Senacre Wood, Otham.

**12)** Smeeth Ch[urch] y[ar]d RAC.

**16)** Lympne Castle Scarp. Scarp W. of Hythe. Postling Green Aldington.

**V. hirta** L. subsp. **calcareea** (Bab.) E.F. Warburg

15, 16

**Native.** Chalk downs, frequent. The taxonomic status of this plant is doubtful.

1<sup>st</sup> records, 1899: Flora of Kent, p.46.

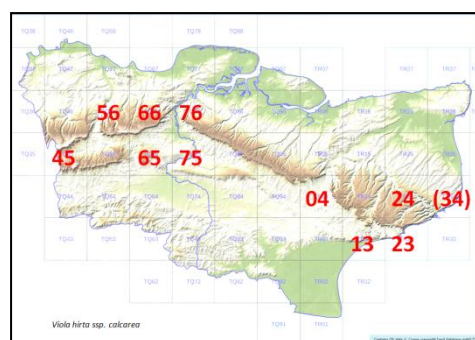
**5)** SW of Biggin Hill, 1948, Mrs B. Welch. Hogstrough Hill, Brasted, 1946.

**6)** Maplescombe Valley, WDRW. Downs above Paddlesworth, near Snodland, 1946. Wrotham Downs, E.S. Edees.

**7)** Downs at Boxley and Boarley Warren, 1945. Burham Down, E.S. Edees.

**8)** St. Margaret's, 1889, E.S.M. Hb, **BM**. Postling Downs, 1945. Below tumulus, Brook Downs, 1945. Downs behind Folkestone, E.S. Edees. Down SW of Lydden, 1961, Mrs. Thatcher.

**16)** Folkestone, Mrs. R's HERB.



**V. riviniana** Rchb.<sup>314</sup>

[Common Dog-violet.]

15, 16.

N.

48/52

**Native.** Woodlands, hedges, sheltered grassland. Very common in all parts of Kent except the alluvial marshlands of 2), 4) and 15).

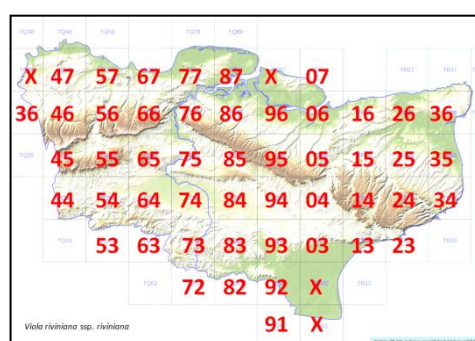
1<sup>st</sup> records either 1597: Blackheath, Gerard; or 1632: Faversham, Johnson, *Descriptio*. See W.A. Clarke in *J. Bot.* 1892, p151.

**1)** Bowane [Bourne?] Wood (St M[ary] Cray) 1954. Hockendell Wood 1954. Petts Wood, 1954. Town Court Wood Orpington 1954. Chislehurst St[atio]n GMB. Kevington 1954. Elmstead Woods, Miss A Mills, 1956. Scadbury Park '59. Wood W of Petts Wood St[atio]n. Shooters Hill Woods GMB. Farningham Wood 82. Joydens Wood 1948. Abbey Wood, St J.M. (1948!), 1951, GAM. (Crofton (var. *diversa* Greg.) W.W.) Roundabout Wood, Crofton Heath, PCH. S of Well Hill. Ninhams Wood. Crofton Wood by ch[urch]. 804759 S. of St Mary Hoo. Dartford Heath GMB.

**2)** Hawes Wood 863658, '59. Warden Copse.

**3)** Trenley Park Wood, L.W.W. W. edge Blean above Rhode Common 1946 **MNE**. Iron Hill 60. Copse N Ford N of Hoath 201653, 59. Shelving Wood, Hoath, 62. Wood NE of Rhode Common, 59. Pine Wood Littlebourne 202581, 198577, 58. Hoomestall Wood Harbledown. Oldridge Wood. Clowes Wood '65. Thornden Wood '47. Church Wood. Blean N.R. 57. Bigbury Wood. Wood NE of Ellbridge [*sic*], 60.

**4)** Wenderton Manor. Wood on Thanet S[and], '59, B Nash. Copse N of Preston Ch[urch] 22607 58.



<sup>314</sup> Check-list has plain *V. riviniana* Rchb.; the manuscript has *V. riviniana* Rchb. ssp. *riviniana*.

**5)** 396661. Higham Hill PCH. Downe, Hb. Davis 1916 **MNE**. Jewells Wood, Biggin Hill, Hb Davis **MNE**. Chevening Park Woods, 1950 **MNE**. Rushmore Hill PCH. Wood W of Shoreham PCH. Pilots Wood, PCH. Hangrove Wood Downe '61. Lattice Coppice. Lullingstone Park. Plateau W of Shoreham. Ne of Cackets F[ar]m E of Cudham. Shellam Wood Cudham.

**6E)** Cockham Woods Upnor.

**6)** Copse E of Red St[reet], Southfleet. Copse S of East Hill, W Kingsdown, 1956 **MNE**. Copse SE of Dartford '44. Darenth Wood. Lords Wood, PCH. Wingate Wood. Horseholders Wood. Maplescombe Valley, SEC. Whiteash Wood 611645, 59. Field NW of Ingram Wood 610615, 59, 611616. Greenhills Wood Otford 61. Cox's Wood Stanstead 606613, 59. Randall Wood, Shorne. Kingsdown, 1929, JCR. Stoneyfield Wood, Halling, PCH. Downs E of Shoreham, PCH. Preston Hill, PCH. Court Wood Higham. Horton Kirby Wood PCH. Court Wood Southfleet. Kemsing Downs CAS. Claylane Wood Cobham. Greenhills Wood, PCH. The Thrift, Bean, PCH. G[rea]t Crabbles Wood 1944.

**7)** Shaw N of Boxley Grange. Wood E of Newnham. Marshall Wood Rainham ES. Purple Hill, Hartlip 1955 **MNE** '61. Stock Wood, Frinsted 1951 **MNE**. S. of Keycol, 1958 **MNE**. Ab[undant], Bredhurst Hurst 44. Longbeech Wood 975505, 62. Lower Cox St[reet], 814613, 809606, '60. Squirrels Wood (acid drift) & Church Wood Stockbury. Coxett Wood '61 & '63. Filmer Wood 62. Tassells Wood Norton, '62. Park Bottom W[oo]d, Newnham 62. Mintching Wood, Kingsdown 63. Lit[tle] Budds Hucking 63. Longton Wood 63. Snoad St[reet] E of, 63. Beacon Hall Wood Badlesmere 63. Aylesford Common. Tunbury Wood. Broomham Wood, Eastling 58. Hurst Wood Stalisfield 58. Cox Street, c[lay] w[ith] f[lints]. Razor Grinders Wood Wichling. ¼ mE of Badlesmere Lees W[oo]d ch[al]k, 015539. *Simia* field Ospringe. Westwell. Hawkins Wood Chilham DHK..

**8)** Lady Wood, Hawkinge. Covet Wood. Ferlingham copse 60. Lit[tle] America Waldershare. Eastling Wood. Wood N of Wye Crown. Beech plant[at]ion N of Coldred Court. Downs above Chilham, 145, DHK (var. *flavicornis* (Forst.)). Olantigh Plantation 1954. Robsacks Wood 1954. Woolwich Wood 62. Wolverton Wood 62. Broad Downs Brook 62. Wood W of Bossingham 62. Hunts Wood Up[pe]r Hardres 61. Up[pe]r Hardres Wood 61. Copse SW of Goodnestone '53. S of Crundale ch[urch]. Denge Wood plateau 59. Clavertye Wood, Elham 1956 **MNE**. Iffin Wood C Haes. Stafflands Wood '62. Goodnestone Ch[urch] y[ar]d 62. Fanscombe Wood Wye 59. S of Alkham. S side Coombe Vale Dover. Shakespeare Cliff. SE of Swingfield. Lydden Valley a[bandant]. Ewell Minnis. Sutton Downs Wood. Reinden Wood B Nash 58, 62! River, KDR. SW of Lydden KDR. Lousyberry Wood T[emple] Ewell. Lords Wood T[emple] Ewell. 1<sup>st</sup> & 3<sup>rd</sup> woods Coombe Vale Dover. S of Hougham Wood in 61/23. Folkestone Warren.

**10)** Rooks Hill. Springhill Mill Whitley Forest 61. Quinten Wood '60. Brockholt Mount carr '60. Copse SW of Ide Hill 54. Scords Wood, 1954 **MNE**. Dibden Bottom. Gudge Wood SE Crockham Hill '58. Spring Wood W of Crockham Hill 58. Farley Heath Westerham 58. Scarp foot E of Bayleys Hill 58. Dry pasture Brockhoath W[oo]d 507515, 60. Westerham Wood 82.

**11)G)** Kings Wood Langley. Chestnuts Addington. East Hall Boughton Mon[chelsea]. Park Wood Boughton Mon[chelsea]. 921457 Pluckley Park Wood. Elmstone Hole. Senacre Wood Otham. Scarp E of Knole Hill Ulcombe. Oaken Wood SE. R[oa]s[ide] Oaken Wood W n[ea]r N[orth] Pole. Warren Wood E Malling. Copse S.W. Ide Hill 1954. Road W. of W. Malling 1954. S. of Ryarsh, 1954. Ryarsh Wood 1954. Roughetts Wood Ryarsh, 1956. Ryarsh Wood 1954 [*uplicated*]. Wood by Teston Lock 1954. Fulling pits Wood 787567, F[olkestone] S[and], 1m W, Bearsted 59. Leeds Golf Course. Leybourne Wood. Larkfield Heath. Mereworth Wood E plateau Rd '58. Harrietsham sandy bank. Holt Wood, 1944 **MNE**, 1955 **MNE**. Wet copse S. of Mereworth 1944 **MNE**. Mereworth Park 1944 **MNE**. Penenden Heath 44. Swanton Valley N. (neutral loam). Wood NE of Boughton Malh[er]be 60. Reason Hill Hunton 61. Allington Wood 59. Wood on rag[stone] W of Gover Hill '58. Pizian Well, W[at]eringbury. NE Penenden Heath, 1958 **MNE**. Horish Wood '63. Kiln Wood Lenham '62. Kings Wood Ulcombe S side 58. Kings Wood S of Chegworth 59. Wood S of Boughton Monch[elsea] 59.

**11)W)** Hoads Common, Shipbourne 1959 **MNE**. S of Mundy Boys. Brook Wood Headcord 60. Shipbourne forest E. Millbay Wood. Dering Wood '60. Golden Sq[ua]re Wood Smarden '62. W. of Shipbourne + R[oa]ds. Wood SW of Frittenden 801420, 53. Maplehurst 801420 copse on paludina.

**13)** 44 Greybury Gill Edenbridge 1954 **MNE**. 63 Lamberhurst Quarter. Wood 1/2m E of Horseshoe F[ar]m (Wad[hurst] C[lay]). Wood S. of Highfield Rocks (T[unbridge] W[ells] S[and]). 74 Hartshurst, S. of Marden Thorne. 73 Bedgebury Pinetum 1955 **MNE**. Stone Wood Speldhurst '61. Below Rocks Angley. Friezley Wood 780385, 58. Hawkenbury. 63 High Wood, T[unbridge] Wells. E of Horsmonden. 73 Angley Wood. 54 Hurst Wood, T[unbridge] W[ells]. 53 Groombridge. 64 Wood S. of Pembury New Church 1944 **MNE**. 54 SW of Leigh, towards Penshurst Park 1955 **MNE**. 53 Stone Cross Gill, Ashurst, 518381, CAS. 64 Pembury Woods PCH.



G[rea]t Sandhurst Wood 60. South Park Penshurst. Stone Wood Speldhurst 61.<sup>315</sup> Gill W[oo]d E Crundalls Gill Brenchley 672427, '58. Scotney PCH. Broke Wood Southborough. Greybury Gill Cowden. S of Pembury Rd 614397. S of Past Heap Kippings [Cross]. Corks Pond. Wood W of Old Horsmonden Ch[urch] 701384. Copse E of Horden on Weald C[lay]. 2m NE of Goudhurst.

**V. riviniana** Rchb. x **V. canina** L.

"West Kent", G. Nicholson (Beeby, *J. Bot.*, 1889, p.227).

6) May's Wood Cuxton, 1938, J.B.M. No. 496.

8) Stelling Minnis '62.

10) Between Crockham Hill Common and French Street, 1913, E.B.B. Small heath near Westerham, with the parents, C.E. Britton, det. Beeby.

13) Heathy grassland SW of Leigh 1955. Rough ground Weir Field Shaw, Lamberhurst, 1940, JRW, Hb. JRW, det. PMH. Hook Green, JRW.

**V. reichenbachiana** Jord. ex Boreau<sup>316</sup> Bor. Synonyms:- *Viola sylvestris* auct.

[Early Dog-violet.]

15, 16.

N.

**Native.** Woodlands on more base-rich soils; common on the chalk and ragstone, less so on the Tertiaries and in the Weald, but frequent, very widespread in all wooded areas,

1<sup>st</sup> record: 1882; North Cray, H. & J. Groves, in *Herb. Brit. Mus.*

1) North Cray, 1882, H. & J.G., **BM**. Bourne Wood 1954. Petts Wood 1954. Farningham Wood, 1949; 1954 PCH. Abbey Wood RAB. Goddington, Chelsfield / Roundabout Wood Orp[ington], F. Swain. Elmstead Woods, Mrs A. Mills, 1956. Open track, Icehouse Wood, Scadbury Park, '59.

3) Bysing Wood (Thanet S[and]) 59. Shelving Wood, Hoath, 1962.

5) Jewells Wood, Hb. Davis, 1915 **MNE**. Chevening Park Woods 1950 **MNE**. Birchingsbank Wood, Pratts Bottom, PCH. Hang Grove Wood Downe '61. Berry's Green Wood, Cudham, '62. Cudham Frith – scrub E side valley '58.

6) SE of Eynsford. White Hill Shoreham. Mounts Wood, Greenhithe, 1946. Magpie Bottom (var. *leucantha* Beck) W.W. Wood ↑ Kemsing Downs 1956 **MNE**. Purvil Wood Meopham 61. Kemsing Downs CAS. Beech wood Trottiscliffe Downs (above Wrotham Water). Claylane Wood Cobham 61 HAS.

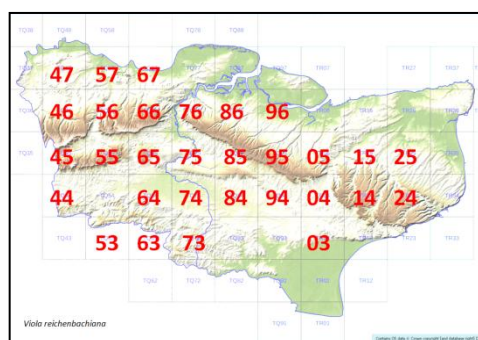
Wood above Shoreham AJW **BM**. Maplescombe Valley SEC. Copse N of Berrys Maple 609639 (chalk).

7) Foxen Wood Newnham, C. Turner. Filmer Wood 62. Woods, Worms Hill, 1946. Bluebell Hill. Stock Wood, Frinsted 1951 **MNE**. Squirrels Wood, Stockbury 1953 **MNE**. Copse below Purple Hill, 1955 **MNE**. Simia Wood, Ospringe HMW. R[oa]dside Stockbury Wood Detling. Aylesford Common. Eccles, 1944. Cox Street, Detling, 1960 **MNE**, wood on chalk. Wood N of Milsted '63. NW of Otterden Place 63. Stockings Wood 803597. Hill Wood Stockbury 60. Eastling, 1930, G.P. (var. *punctata* Dr.). Beechwood W of Westwell 62. E of Lower Cox St[reet] 809606 & 813617, 60. W of Purple Hill 65. Bredhurst Hurst NW & SW 61. Lees Park Sheldwich 62. Hawkins Wood Chilham DHK.

8) SE of Big Combe F[ar]m Wye 61. Olantigh Plantation 1954. Rob Sacks' Wood 1954. Lynsore Bottom, 1945. Near Ham Ponds, 1889, ESM, **BM**. Wye: Fanscombe Wood 59 / Beech Wood 59. N of Bavinge F[ar]m 62. Elham Park Wood. 491485 Covert W[oo]d Barham. S of Crundale Ch[urch]. Iffin<sup>317</sup> Wood C. Haes. Thanington Miss T. Webber. Frandham Wood, River, KDR '57. Woolwich Wood. Lynsore Bottom. Ileden Wood 60. Hunts Wood Up[pe]r Hardres 61. Atchester Wood, 61. Wolverton Wood 65. Yockletts Bank 62. Up[pe]r Hardres Wood, 62. Reinden Wood, 62. S side Coombe Vale Dover '55. Little London Lydden.

10) Otford, 1888, E.S.M. Scords Wood, 1954 **MNE**. Copse at base of ragstone S of St Julians '61. Rooks Hill scarp Woods.

11) 666603 Ryarsh Wood 1954. (S E corner). Oaken Wood, 1945 **MNE**, 65. Millbay Wood E Peckham. Swanton Valley. Senacre Wood, Otham '60. 921457 Park Wood Pluckley. Quarry Wood, E. Farleigh 1945 **MNE**. Warren Wood, E. Malling, 1946-65. Holt Wood, Aylesford **MNE**. Ulcombe Ch[urch] Y[ar]d '64. Buttons



<sup>315</sup> Entry is duplicated above.

<sup>316</sup> In the manuscript cited as *V. reichenbachiana* Bor.

<sup>317</sup> Entry is duplicated above.

bourne, Plaxtol. Ragstone copse NW of Gover Hill, 58. Dean Street, E Farleigh HL 1883 **MNE**. N of Pizien Well. R[ai]lw[a]y bank Barming Station.

**13)** 64 Pembury, 1945. 53 Hawkenbury 1945. 63 Tongs Wood Lamberhurst, JRW, 1941. 63 Laneside bet[ween] Coldharbour and Tong F[ar]m, Brenchley, 1941 JRW. 63 Between Uzzards and Clay Hill, 1941, JRW. 63 Wood N. of Parsonage F[ar]m, Lamberhurst, 1942, JRW. 53 Tun[bridge] Wells, common, C.A.S. Wood NE of Cobhambury, Edenbridge. 64 Bank by Waterworks, Pembury, P.C.H. Copse Ash F[ar]m, Horsmonden (Wad[hurst] C[lay]).

**14)** 73 Robins Wood, Cranbrook, 1944. 73 Gill N. of Netherhall, 1958. Parsonage Wood, on base rich loam, 65.

**16)** 03 Aldington Knoll, LJM. Bargrove Wood / Bluehouse Wood, Newington, VFP Day.

**V. canina** L. [ssp. **canina**<sup>318</sup> Heath Dog-violet.] 15, 16. N. 21/52<sup>319</sup>

**Native.** Heaths, grass-heaths, leached chalk downs and sand dunes; widespread but uncommon.

**1<sup>st</sup> record, 1839:** Brabourne Lees G.E. Smith, etc., in Cowell, *F.G.E.K.*, p.71.

**1)** 57 Dartford Heath, A.H.W.D.; 1946! G.M.B. '54. 46 Hayes Common, DMCC.

**3)** [Tylers Hill, F.G.E.K. Old Park, Canterbury, FG EK.] 05 Base of Blean scarp on Thanet Sand, Iron Hill, 1960. 16 Sandpit, between Canterbury and Broadoak, RGW.

**4)** 35 Old fixed dunes, Sandwich Bay, W.J.L. Sladden, 1946. 35 Damp grassland W. of St Georges Links, B. Nash, 1958. [Castle Field, Walmer, F.G.E.K. **BM**. Deal, Baker.]

**6)** 55 Kemsing 1 pl[ant], CAS.

**7)** [Rainham, Miss Young.] 86 Heath on Thanet Sand S. of Keycol, Newington, 1958. 14 Down E. of Elham, above chalk pit, 1950, **MNE**.

**8)** 34 Between St. Margaret's and Ringwold, 1889, E.S.M. 14 Lyminge Forest KDR. 14 Stelling Minnis '62.

**10)** 45 Crockham Hill Common, 1913, EBB; 1921 RNR; 1960, RAC. 55 Knole Park, GMB.

**11)** 75 Penenden Heath, F.M. Webb; 1958! 55 Hoads Common, Shipbourne 1945; 1964. 55 Shipbourne Common, 1946; 1948, Mrs Warnett.

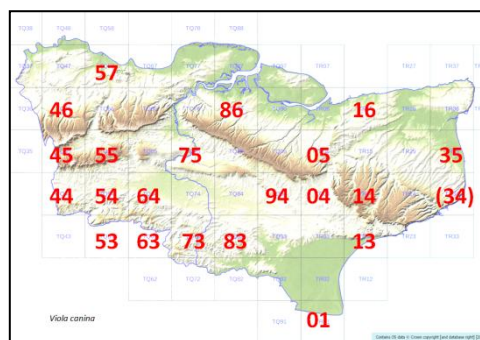
**12)** 94 Hothfield Common, F.M. Webb; 1946! 1954 **MNE**. 94 Ashford Warren, F.M. Webb; 1945! **MNE**. 04 Grass heath, NE Mersham le Hatch Park, 1945; 1960, **MNE**. [Brabourne Lees, G.E. Smith in FG EK; 1832, JC Rickman in Hb. Coll. Marl.; Rev. B. Glennie (**BRIST**).] 13 Gibbon's Brook, 1945 **MNE**. 04 Willesborough Lees, 1950 **MNE**.

**13)** 53 Tunbridge Wells, 1834, Christy **BM**. Tunbridge Wells Common 1882, F.H.W. **BM**; G. Shaw. 54 Open area on sandy soil, SW of Leigh, 1954-5, **MNE**: 1901, CEB **BM** var. *ericetorum*, var. *lanceolata*. 63 Rough ground near Weir Field Shaw, Lamberhurst, 1940, JRW, det. P.M. Hall (Hb. W.). Near Scotney Castle, Lamberhurst, 1942, JRW (Hb. W.). 63 Near Bayham, 1942, JRW. 73 Heath by Rocks Angley Wood, Cranbrook. 64 Wood near Waterworks, Pembury, PCH.

**14)** 83 Grass-heath near Breeches Pond, Tenterden, 1947.

**15)** 01 By the Long Pit, Dungeness, L.J. Margetts, 1959 **MNE**.

**16)** 13 Sandling Park (Kiln Heath) LJM; 1958! **MNE**.



**V. lactea** Sm. [Pale Dog-violet.]

**Native.** Dry heaths, very rare and probably extinct, though its hybrid with *V. riviniana* still occurs.

**1<sup>st</sup> record, 1798:** Tunbridge Wells, , T.F. Forster, *Eng. Bot.*, p.445; 1797 in Hb **BM**.

**11)** [Shipbourne Common, Miss H.M. Crampton; not refound by me: possibly *V. canina*, which occurs there, was meant.]

**13)** Tunbridge Wells Common, 1855, A.G. M., **BM**; 1870, W.W.N.; 1894, C.E. Palmer (Hb. FJH); Dr. Gilbert, 1896, **MNE**; G.E. Shaw, c. 1936; not since. Between Leigh and Penshurst Park, E.S.M. in Vict. Co. Hist., 1906 (what is probably a hybrid of this and *V. riviniana* found on a sandy grassy bank here, 1955, but no trace of *lactea* itself, 1955!) **MNE**.

**V. lactea x canina**

<sup>318</sup> Subspecies given in check-list, not in the manuscript.

<sup>319</sup> The manuscript contains two versions of Francis Rose's grid map for this species, of which the more complete one provides the data for the map given here.

13) Tun[bridge] Wells, 1936, G.E. Shaw **TLS**.

**V. palustris** L. Marsh Violet. 15, 16. [N, Ext.]

Native. In Valley bogs, and flush-bogs in alder woods with acid drainage water, usually among *sphagnum*. Confined to the High Weald where it is locally frequent in 18 localities, and to the Folkestone Sand, where it occurs in six localities.

1<sup>st</sup> record, 1839: Sellinge [sic], G E Smith in Cowell, F.G.E.K. p69.

[1] W. Wickham, Petiver.]

[3] reported at Hoath by Rev. A.T. Browne.] –Error.

10) Alderswamp, S. of Greatness Mill Pond, Sevenoaks, 1955 **MNE**.

11) Bog at Sandway, Lenham, on Folkestone Sand, 1954 **MNE**, 1955.

12) [Among Alders Sellindge and Smeeth G E Smith.] Alder wood, Brabourne Lees, 1954 **MNE**. In the main bog, Hothfield Heath, J.S. Mill, 1863; H Lamb 1901 **MNE**; (frequent in the bogs, 1945-54!) **MNE**. Willesborough Lees, 1944-55, **MNE**. [Westenhanger (Gibbons Brook) G. Walton.] Bog, Mersham-le-Hatch, 1960, FR & ES, **MNE**. Bog, N side Ashford Warren, 1945. Alder carr, Warren Wood, Ashford, W side, ES. Boggy Wood E. of Ashurst, Mrs M. Mallinson.

13) Chiddenden Wood, 1889, E.S.M. (1944! **MNE**). Bog, Broke Wood, Southborough, 1954 **MNE**. Bog below Fishers Castle, Tunbridge Wells, 1947. Hawkenbury Bog, 1945. Pembury Woods, 1953. S of Colebrook Park, Pembury, 1952-4 **MNE**. Chingley Wood 1947 **MNE**. Kilndown Wood. Combwell Wood 1952 **MNE**. Old Park Wood, Goudhurst. Frizley Bog. Angley Wood, Cranbrook 1954 **MNE**. Sissinghurst Park Wood, 1948. Bogs in Bedgebury Pinetum. Louisa Lake Bog, Goudhurst, J.R.W.; (1945!), **MNE**. Cinderhill Wood, Brenchley 1953. By Furnace Pond, Horsmonden, 1954. 63 Boggy Wood SW of Pembury, 614395, P.C. & J. Hall. Old Park Wood, Goudhurst, '60.<sup>320</sup> Great Coppice, Bayham, '64, AW Crump. Alder carr W of Folly Hill, Colliers Green, '62. Brewers Wood, 1950 **MNE**, etc.

**V. tricolor** L. ssp. **tricolor** Heartsease, "Kitty run the Street". 15, 16. N or C.

Colonist. Cornfields, waste ground; chiefly on acid soils, frequent.

1<sup>st</sup> record, 1763: Blackheath, Martyn, *Pl. Cant*.

Incl. *V. cantiana* Drabble, *V. lloydii* auct., *V. lepida* auct., *V. penseaui* auct., *V. floribunda* auct.

2) Field, Bell F[ar]m, Minster, 1958, O. Davies.

3) London R[oa]d, Canterbury, 1958, MEM.

5) Halstead, A.A. Knockholt, S.E. Chandler.

6) (*V. floribunda* Jord.) Cobham, Miss Stevens, BEC Rep., 1921, p375. S of Cobham P[ar]k 615653 DVS Woods. (*V. lloydii* Jord.) Greenhithe WW. Sole Street HMP. Field Kemsing, Mrs. Spear.

7) Cornfield E of Burham Church.

8) Chartham Hospital, Mrs.B. Cornfield, Chilverton Elms, 55.

10) Bitchet common (*V. lepida*) 1894, AHWD **BM**. (*V. lloydii*) Sundridge, 1932, JEL: Hb. L., teste ED. Dryhill, Sundridge, RAC. (*V. varieta* Jord.) Sundridge, 1933, PMH, Hb. L. SE of Sundridge, 1955 **MNE**. Arable 1m. S. of Brasted, 1955 **MNE**.

11) (*V. lloydii*) E Malling, FR. Cornfield by path, Ide Hill – Sevenoaks, CAS. The Quest, Harrietsham, Mrs. B. Dodds.

12) R[oa]dside N of Potters Corner, 1956, CNP.

13) Timberlog Wood, Lamberhurst, 1939, JRW. (Tunbridge Wells, R. Pryor 1838 **MNE**.) Weed, Ravenswood Ave[nue], T[unbridge] Wells, CAS (51/54). Field behind Pembury Church, CAS. Corn Field ¼ m NW of Flimwell, '60 **MNE**. Farncombe Rd., T[unbridge] Wells, CAS (51/53). Hever Park, Mrs M. Mallinson, det. FR. Field S of Combwell Wood JEL '44.

14) Arable Field on loam, W of Wittersham in Oxney, 1956 **MNE**. Near Beneden, 1889, E.S.M., **BM** (*lepida*). Hawkhurst, J. Piper, fide DS.

16) Sandling Park, 1894 ESM (*V. lloydii*); L.J. Margetts, 1958 **MNE**. (F[olkestone] sand) old r[ai]l[wa]y banks, SE of Sandling, (blue fl[ower]s) 1962, DACL.

**V. tricolor** L.: segregate records: *V. cantiana* Drabble, *V. lejeunii* auct., *V. lloydii* auct., *V. lepida* auct.<sup>321</sup>

<sup>320</sup> Duplicated entry.

<sup>321</sup> This section is not easy to interpret, and sets out various names, with related records, of microspecies which are now usually subsumed into either *V. tricolor* or *V. arvensis*, although some are given varietal status in Sell & Murrell's *Flora of Great Britain and Ireland*, vol. 1 (2018). The section is annotated by Francis Rose as to whether the taxa fall under *tricolor* or *arvensis*, notwithstanding the *tricolor*

(tric)] **V. anglica** Drabble

8) St. Margaret's Bay, G.C.D., det. E. Drabble, BEC, 1926, p107. Near Deal, L.W.W.

(tric) **V. variata** Jord.

6) E of Longfield, 1903 CEB **BM**.

7) Settington, Chatham, CEB 1894 **BM**.

10) Sundridge, 1933, PMH: Hb. L. **BM**.

(tric) **V. lloydii** Jord.

6) Greenhithe, W.W.

10) Sundridge, 1932, JEL: Hb L., teste E.D.

13) S of Combwell Wood 44 JEL.

16) Sandling Park, 1894 ESM.

(tric) **V. lepida** Jord.

5) Knockholt, SEC: *BEC Rep.* 1926

10) Bitchet Common, 1894, AHWB **BM**. Sundridge, PMH, 1933 **BM**.

14) Sandling Park, 1894, ESM **BM**.

(tric) **V. lejeunii** auct.

Sundridge, R.B. Ulman, 1932 **BM**.

(tric) **V. cantiana** Drabble.

Ashurst, 1916, EBB, **BM**.

(tric)<sup>322</sup>] **V. contempta** Jord.

6) In chalky field, Bean near Stone, St J.M., det. E Drabble (Hb. St J.M.) BEC. 1926, p.107.

(tric.) **V. lepida** Jord.

5) Knockholt, S.E.C., BEC 1926 Rep., [p]194, 1927, teste E.D.

**V. arvensis** Murr. [segregate records]<sup>323</sup>

(arv.) **V. arvatica** Jord.S

11)W) Field N. of Malling Aerodrome, 1942.

(arv.) **V. obtusifolia** Jord.

11)W) Field N. of Malling Aerodrome, 1942. Field S. of Wrotham Heath, 1942.

(arv.) **V. agrestis** Jord.

1) Grove Park, 1881, H. & J.G. **BM**.

2) Fields below G[rea]t Wood, Cuxton, 1943, FR CW.

8) R[ai]l[wa]y bank S. of Chilham, D.K., 1945.

(arv.) **V. segetalis** Jord.

(arv.) **V. latifolia** Drabble

10) Sundridge, 1932, JEL, Hb L., teste ED.

(arv.) **V. ruralis** Bor.

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heading. As some of the microspecies are also mentioned in the main accounts of *V. tricolor* and *V. arvensis*, it may be that this section should be treated as a working document only; and the the general decline of interest in the microspecies since means it is unlikely that they would have found a place in any final revision of the Flora of Kent.

<sup>322</sup> Thus annotated, although cf. entry for *V. arvensis* x *tricolor* later.

<sup>323</sup> Mixed with the *V. tricolor* segregate records mentioned in previous footnote.

6) E. of Eynsford Church, W.W.

(arv.) **V. deseglisei** Bor.

1) Near W. Wickham Railway Station, 1926, JEL; Hb L., teste E.D.

10) Sevenoaks, 1931, Mrs Wedgewood, **BM**. Manor F[ar]m, Sundridge, 1933, P.M. Hall **BM**.

(arv.) **V. subtilis** Jord.

**V. derelicta** Jord.

**V. x wittrockiana**

[Garden Pansy.

16.]

1) Ruxley Pits

**V. hybrida**

1) Ruxley Pits.

**V. arvensis** Murray agg.

{Field Pansy.]

15, 16.

N or C.

Colonist. Cultivated ground; common, especially on the chalk.

1<sup>st</sup> record 1777: Hernhill, E. Jacob, Pl. Fav., p.123.

[incl.] *V. latifolia*, *V. anglica*, *V. agrestis*, *segetalis*, *obtusifolia*, *ruralis*, *deseglisei*, *arvatica*, *derelicta*.

1) 36 W. Wickham Sta[tion], JEL. 47 Bexley Ch[urch] Y[ar]d PCH. 37 Beckenham Place, PCH. 36 Ravensbourne, Bromley, Hb. Davis, 1915 **MNE**. 47 Grove Park 1881, H. & J. G. 47 SE of Bexley, Sidcup NHS.

2) 97 E. of Minster on Sheppey, on Bagshot Sands in fields. 77 Field, High Halstow 2 792753 PCH.

3) 26 Shelving Wood, gravelly cornfield, '62. 25 Pine Wood, 61/25, 1958.

5) 46 Field, Washneys Halstead, PCH. 56 Chalky field W of Eynsford PCH. 36 Well Wood 396642 PCH. 46 Downe, 1962, E. Eagles. Morants Court Hill PCH.

6) 56 E of Eynsford Church, W.W. 67 Corn[fiel]d, Downs Rd, Northfleet Green, 58, 628704 PCH; FR. 76 Fields below G[rea]t Wood, Cuxton, FR, 1943. 57 Green St[reet] Green GMB. 56 Farningham GMB. 66 Cornfield on chalk, W. of Wrotham Water, 1958 **MNE**, 624595. 66 Field below downs, Trosley. 55 Arable on chalk 592595 W. of Wrotham '58. 57 Cornfield, Mounts Road, Greenhithe. 56 Arable by Fawkham church '56 D.V. Woods. 55 Cornfield NE of St Clere, Kemsing 1962. 65 619595 cornfield on chalk NE of Wrotham 62. 55 Otford GMB.

7) Bluebell Hill, H. Lamb, 1889, **MNE**. 95 Pig Green, Eastling, 954564, C.T. 86 Field S of Purple Hill 1962. 76 Cornfields E of Burham '60. 75 Arable above Charing Quarries ES. 05 Chilham, DHK, 1945 **MNE**.

8) 14 Cornfield, Stowting Hill, 1954 **MNE**. 15 Corn[fiel]d S of Milton F[ar]m, Chartham '60. 14 Arable, Woodlands, Lyminge, 1950 **MNE**. 34 St Margarets Bay, GCD (anglica, det. ED) BEC 1926 p107. 15 E of L[owe]r Hardres, 1958 **MNE**. 25 Cornfield E. of Knowlton, 1958, **MNE**.

9) 26 Cornfield 298665 Plumstone F[ar]m, 1m NE of Monkton, 1958 **MNE**. 36 Arable W of Cleeve Court, Minster, '63. 36 Field by Acol [cross]r[oa]ds, Minster '63. Corn[fiel]d 1 mile SSW of Margate '59. Corn[fiel]d St Peters Rd 369691 SE of Margate '58.

10) 45 Sundridge, 1932, JEL. 55 Riverhead Sandpit by R[ai]l[wa]y CAS. 56 Cornfield by Shoreham Ch[urch], PCH. 45 Cornfield, E. of Ide Hill CAS.

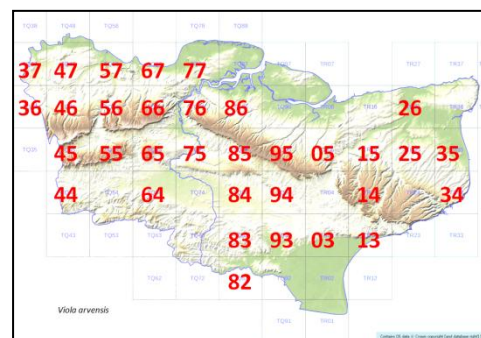
11) Penenden Heath/ The Mote Maidstone, MNHS, 1843 **MNE**. 65 Fallow SE of W. Malling, 1942 **MNE**. 75 Garden, E. Malling. 65 Allotment S of Wrotham Heath 1942. 65 Yalding Gravel pits CAS. 44 Arable N. of Marsh Green, 439448, 1958. PC Hall. 84 Cornfield on clay 849437, 1m. E. of Headcorn, CAS, 1962. 85 Cornfield on F[olkestone] sand, A20 Chegworth N, 58. Ryarsh Sandpits, 1944.

12) 94 Westwell Leacon, 1955 **MNE**.

13) 64 Kippings Cross F[ar]m, Pembury, CAS.

14) 82 Arable field, Wittersham in Oxney, 1956 **MNE**. 93 Stubble E of Robhurst, Woodchurch, 924347, ES. 83 R[ai]l[wa]y, Tenterden St[atio]n.

16) 13 Sandy cornfield S. of Newington, 1954 **MNE**. 13 Hythe, MJ Comyn. 0.3 Aldergate in cornfield, 097350, 1958. Fields S. of Castle Hill, Folkestone, VFP Day.





**V. arvensis x tricolor**

*V. contempta* auct., *V. variata* auct.

6) Stone, St. J. Marriott det. E. Drabble (as *V. contempta* Jord.) BEC Rep. 1926, p107.

8) Temple Ewell, Miss Fawdry, 1961.

10) Manor F[ar]m, Sundridge, 1933, PMH: Hb L.

**TAMARICACEA****Tamarix L.**‡ **T. anglica** Webb

Planted by the sea. Records for this species are doubtful and may refer to the next.<sup>324</sup>

15) Old shingle, E. of Hythe, 1956, L.J.M.

16) Folkestone, H Lamb, 1884 **MNE** ?correct.

‡ **T. gallica** L. [Tamarisk 15 H.]

Planted by the sea.

1<sup>st</sup> record, 1829: Sandgate, G.E. Smith, *C.P.S.K.* p18.

2) Sheerness: Minster in Sheppey, 1944, D.H.K. Seasalter, 1944, D.H.K. Leysdown, AG Davis 1917 **MNE**.

3) Whitstable: Tankerton, 1944, D.H.K.

4) Sandwich Bay, on dunes, H.M.P., 1961; 1962.

8) Walmer to Kingsdown, F.G.E.K. (1946!).

9) Pegwell Bay, F.M. Webb (1946!).

15) Hythe, 1944, DHK. New Romney. Littlestone, CAS; GMB. Seabrook, 1944, DHK. Dymchurch CAS.

16) Folkestone, G.E. Smith, C.P.S.K.; Hb Lamb, 1863 **MNE**; (1945!). Sandgate, C.P.S.K. Hythe CAS.

**FRANKENIACEAE****F. laevis** L. Sea-heath 15 [N.]

Native. Sandy or shingly salt marshes, above normal spring tide level; st the base of chalk sea cliffs, within reach of salt spray; very rare, though locally abundant. It has become extinct in several localities, particularly in N. and N.E. Kent, and now appears to survive only in the Dungeness area and between Folkestone and Dover.

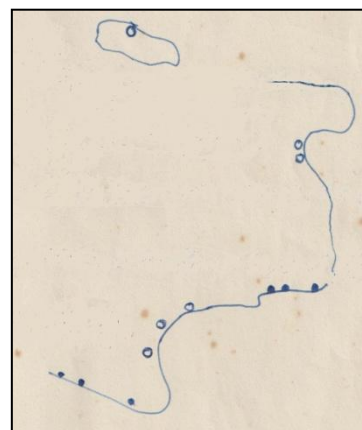
First record, 1762: Sheppey, Hudson, *Fl. Angl.*, ed.1, p.120.

2) Apparently extinct in the North Kent Marshes. [Minster, Jacob, 1777. Sheerness, Cooper. Ham Marshes, F.M. Webb.] Bank above Faversham Creek, 1875, in Hb FJH, **BM**. Sheppey, Hudson, 1762: Hb. Banks, **BM**; 1837, D. Cooper, **BM**. E. of Sheerness, J.S. Mill, 1863.

4) [Thanet, Hudson, *Fl. Angl.*] [Pegwell Bay, C.P.S.K.; Mrs Benson; HT Mennell, 1883.] Apparently extinct in the Stour estuary. Salt pans, Sandwich, Rev. B. Glennie (**BRIST**).

8) Lydden Spout CPSK; J.S. Mill; (1945!) **MNE**. Below Abbots cliff on base of cliff face, abund[ant], 1946-53, F.R. **MNE**. Below Shakespeares Cliff, 1953, D. Hambler; 1958, abund[ant]! **MNE** – 1963! Folkestone, 1836, H. Mackeson Hb. Glennie (**BRIST**).

15) [New Romney, C.P.S.K.; Littlestone, Lady Davy: apparently extinct.] [Dymchurch, C.P.S.K.; Hb. Lamb, 1900, **MNE**: not now.] Dungeness Hb. Lamb 1871 **MNE**: Plentiful in shingle low (saline) by Hope & Anchor, W of Dungeness, 1945-59 **MNE**. Abundant at The Wicks **MNE**; and Midrips to SW of Lydd, 1946. W of Galloways, 1947, JHL. [Shingle, Hythe, 1906, Miss McMurray, in Hb. Bed[ford] Coll[ege] Lond[on] ex Hb. WCR Watson.]

**CURCUBITACEAE****Bryonia** L.

<sup>324</sup> They were maintained as separate species until and including Clapham, A.R., Tutin, T.G. & Warburg, E.F. (1962) *Flora of the British Isles*, 2<sup>nd</sup> edition. The practice since has been to combine them under *T. gallica*.

**B. dioica** Jacq. [White Bryony. 15, 16. N.]

Native. Wood borders, hedgebanks, open woods and scrub; mainly on chalk, ragstone and Thanet Sands, and very common on the soils derived from those strata.

1) 37 Beckenham Place Park, 1956, PCH. Shellbeds, Abbey Wood 1948 RAB. North Cray Wood PCH. Bexley ch[urch] y[ar]d, PCH. Ruxley Pits, 58, TH Angel. Farningham Wood, PCH; 82!

2) Plumstead Sewer Bank.

3) Hedges between Wingham and Ickham. By Swanton F[ar]m, Littlebourne, 1949 **MNE**.

4) Shelving Wood, 1962, on Thanet Sand.

5) Rushmore Hill PCH. 36 Copse W. of Highams Hill 397612 PCH '58. Down W. of Shoreham PCH. Chalk W of Eynsford. Pilots Wood, Polhill.

6) neglected garden, Gravesend, 61, HAS. Mounts W[oo]d Greenhithe; Mounts Rd., PCH. R[oa]dside, E of Kemsing. R[oa]dside, Romney Street. N[ea]r Pilgrims House, Trosley, 1949 **MNE**. Bush Valley, PCH. Darenth Wood PCH. (Shorne AF Mussellwhite 1959.)

E) Cockham Wood, Upnor, 1960 **MNE**.

10) 543585 Copse on gault W of Kemsing 1957 CAS. St Johns Jerusalem P.C.H. By R[iver] above S. Darenth P.C.H. By R[iver] path, below Shoreham PCH. Wilmott Hill, Underriver, CAS. Sevenoaks, R[ai]l[wa]y Sta[tion] cutting CAS.

11) Addington Place Park, '58, DMcC. Larkfield Heath (F[olkestone] S[and]). Warren Wood, E. Malling (R[agstone]). Old Ragstone Quarry ½m N. of Yalding 1962. Sutton Valence Hill (R[agstone]). Scrub on Scarp E of E. Hall, Boughton Monchelsea (R[agstone]).

12) R[oa]dside S. of Wye. Brook. Hothfield.

## SALICACEAE

### Populus L.

‡ **P. alba** L. White Poplar. [15, 16.]

Alien, widely planted and in places naturalised in hedges and in damp woods; not uncommon.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.87.

1) 36 Pickhurst Common, Beckenham, 395663, 1957, PCH. [Blendon P[ar]k AHWD.] [Shortlands, Cole.] Joydens Wood, BD Jackson. Avery Hill. Greenwich Park, L.C.C. R[iver] Cray, N Cray PCH. Woolwich Common (Nurses q[uar]t[er]s), 1934, L.R.A.G. **MNE**. Shooters Hill '54 GMB.

2) [Faversham, E. Jacob.] 87 Grain 1958, Mrs AG Side.

3) [Herne Bay, FJH. Hoath, F.M.W.]

4) [Minster Marshes, Fl. Thanet. Preston, E.S.M.] 25 Littlebourne, spinney by Lit[tle] Stour, 1960, Miss B. Nash. 24 Denton 1956 Miss DACL.

5) 46 Nash, n[ea]r Keston, 1954 **MNE**.

6) n[ea]r Fawkham Church 1956, Mrs D. Woods.

8) 25 R[oa]dside spinney, [Five] Wents, Easry, 1960, Miss B. Nash. 35 Northbourne Ch[urch] y[ar]d, 1960, B. Nash.

9) [St Peters, FJH.]

10) [Godden Green, Cole.] Franks Park Farningham PCH. Kemsing Village, CAS.

11) [Maidstone, W.W.R. Headcorn FJH. Sutton Valence, Mrs P[etley].] 64 R[oa]dside, Whetsted, 687453, CAS. 85 Stubble. Hill, Harrietsham 1961 Mrs Dodds. 55 R[oa]dside, Shipbourne, 578519, CAS. 65 Addington Place '53 DMcC.

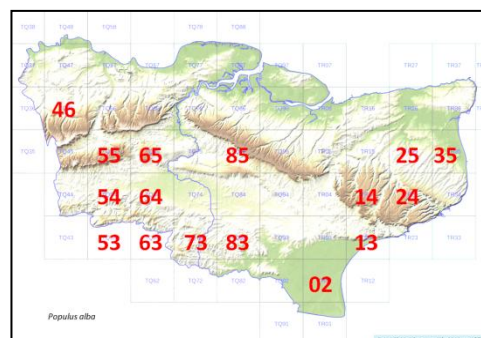
12) [Ashford, WRJ. Willesborough Lees, ESM.] Hornash NE of Shadoxhurst ES. 14 Stowting Village ES, 1956, and Marsh to S., ES.

13) 54 Shadwell Woods, Rusthall, CAS. 63 By Lamberhurst Ch[urch], 681367 CAS. 53 Sibleys Cross, Hawkhurst, JRW; CAS. 53 Ferndale, T[unbridge] Wells, CAS. 73 Lower end of Bedgebury Lake, 1941, J.R. Wallis.

14) Hawkhurst J.C.M.

15) 02 Old Romney, 1959. 02 Ivy church to New Romney, 1950. (W. of Hythe FJH.) 13 Canal, Hythe, Mrs M.J. Comyn.

16) 02 (Sandgate, G. Walton.)



(prob. ‡) **P. x canescens** (Aiton) Smith (**P. alba** x **P. tremula**)  
Grey Poplar. [15, 16.]

Possible native in damp woods, but often planted; widespread but rare.

1<sup>st</sup> record, 1816: Tonbridge, E. Forster, Fl. Tonbr. P.113.

1) Lee, J.S.M. Catford Bridge, E. de C. Blackheath, Hb.Dill[enius]. Bexley EMH.

2) Cooling ESM.

3) [Herne Bay, H.T. Woods N. of Canterbury, G.C.D.] 05 Blean Woods, S. of Dunkirk, 1946 **MNE**. 05 Denstead Wood, Chartham, 1950 **MNE**.

4) [Preston, E.S.M.] 25 Wenderton Manor Wood, 1959, Miss B. Nash.

6) 57 Great Chalk pit, Stone, 1962.

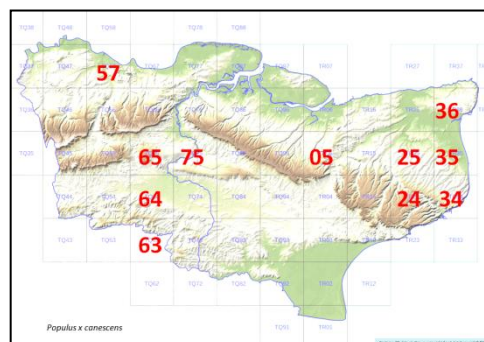
8) 24 n[ea]r Kearsney, 1959, Mrs. K.D.R. **MNE**. 34 Valley N. of Lighthouse, S. Foreland, 1960. B. Nash.

9) 36 W. of Minster, 1958 **MNE**, in hedge.

10) 57 Darent above Dartford 1956 PCH. Mill pond, Westerham, 1957, R.A.C.

11) Valley Wood, Wrotham Heath, 1950 **MNE**. 64 Wood N[ea]r Medway, S. of Brambridges, 1943. 65 Addington Place '58 DMCC. 65 N[ea]r Mereworth Park, 1944. 64 Pearsons Green, JRW, 1941. 75 Senacre Wood S. of Otham, 1949.

13) 65 Pembury. Gill S. of new Church; 1944; 623399, 1958 CAS. 63 Bewl Bridge, JRW, 1941. 63 N[ea]r Scotney, JRW 1942. Copse, High Woods, Hawkenbury, CAS. 64 n[ea]r Corks Pond Brenchley, 1954 **MNE**.



**P. tremula** L. Aspen. [15, 16].

Native. Woodland on clay or loam, usually on rather heavy or base-deficient soils; forms dense stands by vegetative spread. Very common on the Weald Clay and the Wadhurst Clay, common on the High Weald generally; common on the Greensand Plateau, the woods on the Eocene near London and in the Blean; scarce elsewhere. The food plant of several interesting insects in the woods of Kent, The var. *sericea* Döll with yellow leaves, is common in the High Weald.

1<sup>st</sup> record, 1777: Hernhill, E. Jacob, Pl. Fav. p.87

1) 46 Keston Common, 1903, WHG; 1946! **MNE**. 57 Joydens Wood, 1954 **MNE**. 56 Farningham Wood, 1949; 1982! 46 Petts Wood 1949. 46 Bromley to Crofton WHG (Sparrow Woods N. of Crofton, abund[ant]). Abbey Wood RAB. 47 Eltham Common, LRA, 1934 **MNE**. Shooters Hill Woods 1954 GMB. 37 Beckenham Place Park 1956, PCH.

3) 16 Mincing Wood N[ature] R[eserve], Blean, abundant. Hempshall Wood, Whitstable REW 1950.

4) 35 Woodnesborough. 25 Littlebourne, by R[iver] n[ea]r old Mill, 1958, Miss B. Nash.

5) 3964 Well Wood, W. Wickham, 1958, PCH.

6) 57 Great Chalk pit, Horns Cross, 1962, 67 Swanscombe Wood 1945 **MNE**.

7) Bridge Wood, 1998. 75 Wichling Wood, 1949 **MNE**.

8) Eastling Wood, edge by r[oad], 1959, B. Nash.

10) R[oad]side SE of Knole Park, 541524 CAS. Westerham Wood, 1982!

11) Wrotham Heath. Mereworth. On Gault, Ryarsh Wood, 1943 **MNE**. Horish Wood, '44. Kings Wood, Langley. Park Wood, Pluckley, 1956 **MNE**.

W) n[ea]r Hever CAS.

12) Bourne Wood. Longrope Wood. Birchett Wood.

13) Gill SW of Stone Cross, Ashurst, CAS. Mount Pleasant, Lamberhurst, JRW 1942 villous form. Wadhurst Lane, Lamberhurst, JRW 1943, villous form. Lamberhurst Quarter, 1944. Timberlog Wood, Lamberhurst, JRW (var. *sericea*). Matfield. Wood S. of Pembury Church, 1944 **MNE**. Pembury Woods, FR 1950; CAS, **MNE**. Pembury Lower Green CAS. Combwell Wood. Bedgebury Forest. Pinewood R[oad], Tun[bridge] Wells, CAS. R[ail]w[ay] W. of T[unbridge] W[ells] W[est] Sta[tion] 1960 CAS. Ashour Wood, CAS.

16) Copse (Gault) NE of Asholt Wood, S. of R[ail]w[ay], 1948, B. Welch.

**P. nigra** L. ssp. **betulifolia** (Pursh) Dippel.<sup>325</sup> (by Hothfield Lake, J.Pitt.). [Black-poplar. 15, 16 N.]  
Alien. Always planted in Kent **MNE**.

<sup>325</sup> This name and citation is taken from the check-list (together with the note about Hothfield Lake, but in the manuscript it is given as *Populus nigra* (Duroi) Moench Black Poplar, although that name would normally have been applied to the Lombardy Poplar, which is given separately in the check-list as *Populus nigra* var. *italica*).

- 1) Shooters Hill Woods (agg.), 1954, G.M.B.
- 2) West Court Meadows, Shorne, 1957, P.C.H.
- 10) Otford, by stream, 1953, Hb. Gardiner.
- 11) 140' at Fairlawne, teste H.L. Edlin, *The Living Forest*.
- 12) Group nr. Ashford Hosp[ita]l ES, 1956.
- 13) Angley Wood, 1956, D.S.
- 16) Stream N. of Saltwood Castle, 1959, LJM.

‡ **P. nigra** L. var. **italica** Münchh. (much planted).

[Lombardy-poplar.]

- 8) 14 Covert Wood, 1960, Miss B. Nash.<sup>326</sup>

‡ **Populus x canadensis** Moench (much planted in various forms) Black Italian poplar.<sup>327</sup>  
(*P. serotina* Hartig; *P. lloydii* Henry; *P. deltoides* auct.; *P. deltoides* Marsh x *P. nigra* L.)

- 8) 34 Martin, r[ai]l[wa]y embankment, 1960, Miss B. Nash. 15 Nackington ‡ Miss M..E.M. 14 Acrise Place, wood by Ch[urch], 1960, Miss B. Nash. 24 ‡ Tappington F[ar]m, Denton, Miss DAC Long, 1960.
- 10) Above Dartford, PCH.
- 13) Cranbrook D.S. 1956.

**Populus x jackii** Sarg.<sup>328</sup> 'Gileadensis'

Balm of Gilead.

‡ Maidstone, MNE; collected unknown.

## Salix

‡ **S. pentandra** L.

Bay Willow.

[15, 16.]

Alien in Kent; native in N. Britain.

- 1) Lane between Chislehurst and Eltham, with double catkins, W.W.R. (G. Brown; 1959!).
- 2) About Oare Mill Pond; Rope Walk dikes, Faversham, Cowell, Fl. Fav.
- 12) Godinton, W.R. Jeffrey & J.G. Baker.
- 13) Cranbrook, Crowden.

**S. fragilis** L.<sup>329</sup>

Crack-willow.

[15, 16.]

N.

Native. River-, stream-, and dike-sides, pond margins, fens, wet woods, hedgebanks, sometimes even away from water; common generally in Kent except in the chalk districts and on dry uplands. Apparently mostly planted but almost certainly native in the river valleys.

- 1) 47 Chislehurst Common PCH. 37 Blackheath, Miss Barnsdale 1953. 37 Southend by Ravensbourne. 1902, WHG. 47 Avery Hill, Eltham, 1907, L.C.C. 36 pond W. of W. Wickham, 375661, PCH. 47 Shooters Hill Woods 54 GMB.
- 2) 57 Ditches Below Barnes Cray, '44.
- 6) 67 Shorne, a few trees by pond, 1961, HAS. 36 Ebbsfleet channel 1961, HAS.
- 10) 57 Darenth, copse S of ch[urch] '44. Westerham Wood, 1982! 55 Sevenoaks tip, 1958, CAS. ♂ Hills Wood, Kemsing 563585, 57, CAS.
- 11) 44 Meadows W of Edenbridge, 1956, CTP & DPY. 64 Copse W of Brandbridges, \_ FR. 64 R[oa]dside, Beltring to Whetsted, CAS.
- 12) 15 Vauxhall Lakes, Canterbury, 1958, H.M.W.
- 13) 63 Ditch and R[iver] Teise S. of Ch[urch], Lamberhurst CAS.

var. **russelliana** [(Sm.) W.D.J. Koch]<sup>330</sup>

- 11) Beltring to Whetsted, 1952 CAS, det. RD Meijkle.

**S. fragilis x triandra** (= *S. x alopecuroides*)<sup>331</sup>

[16.]

<sup>326</sup> In the manuscript, this record was placed under *P. x italica*, with author citation (Pursh) W. Wettst., and it is assumed that the check-list name above applies.

<sup>327</sup> Hybrid Black-poplar in Stace's *New Flora*, edn.2.

<sup>328</sup> In check-list given as *P. candicans* Aiton, and in manuscript given as *Populus gileadensis* Rouleau.

<sup>329</sup> The name *S. fragilis* was used in both check-list and manuscript, as preceding recognition that most of what was covered by that name is hybrid, *S. x fragilis*.

<sup>330</sup> But see *S. x rubens* below.

**13)** Wood behind Cold Bath, Rusthall Common, E.F., Fl. Tonbr. (1803, **BM**).

**S. x rubens** Schrank (**S. alba** x **S. fragilis**). Hybrid Crack-willow. [16.]  
(*S. russelliana* Sm.)

**1)** Mottingham to Burnt Ash, AHWD, det. E.F. Linton.

**2)** Northfleet; Dartford, AHWD, det. E.F. Linton.

**11)** Beltring to Whetsted, CAS, det. RD Meikle.

**S. alba** L. White Willow. [15, 16.] ?N.

Native or denizen; river and stream banks, very widely planted, and fairly common. Probably not native in Kent.

<sup>1st</sup> record, 1777: Faversham, E. Jacob, Fl. Fav., p.99.

**1)** 37 Greenwich Park, 1901, A.D.W.

**2)** 57 Northfleet Brooks. 77, Marshgate 761762, Cooling, 2 trees, 1957, PCH. 77 Higham Marshes. 66 Ham Hill Birling 1956 PCH.

**8)** Penchester G[ar]dens, by Dover, 1959, Mrs. K.D.R.

**10)** Sevenoaks tip, 1958, CAS.

**11)** wasteland by R[oa]d, Aylesford 736588, CAS. W of E. Peckham, by Medway CAS. SW of Beltring: r[oa]dside. R[oa]d E of Whetsted, CAS.

**13)** Pembury Lower Green CAS. Tudeley Brook, N of Pembury, 652438 CAS. By R[iver] Teise, Lamberhurst CAS.

**15)** Ham Street, Miss M.E.M. Burmarsh R[oa]d, Hythe, 1956, L.J.M.

**var. vitellina** (L.) Stokes

n[ea]r Cold Bath, Rusthall Coommon; Tonbridge; E.F., Fl. Tonbr. P.110.

‡ **S. x pendulina** Wender. (*S. babylonica* x *S. fragilis*). (= *S. x blanda* Andersson)<sup>332</sup>

‡ **S. x sepulcralis** Simonk. Weeping Willow.<sup>333</sup>

‡ **S. triandra** L. Almond Willow. {15, 16.]

Denizen; streambanks, ditches; rare; few modern records.

<sup>1st</sup> record, 1777: Faversham, Jacob Pl. Fav. p.100

**2)** (Faversham, Jacob; AHWD.) (Snodland Park, F.M. Webb.)

**(3)** Stream below windmill, Harbledown, F.M. Webb.)

**4)** Ham Ponds, FJH. 26 Minster Marshes, 1958 (♂); Miss B. Nash. 35 N[ea]r Coach & Horses, Hacklinge, 1958, Miss B. Nash.

**10)** by River, Darenth, St.J.M.

**11)** E of Marden by pond, FJH. Staplehurst, ESM. Headcorn, FJH. Edenbridge, B.D.J. Bradbourne Lakes, E. Malling, 1959, R. Hardwick. ♂ by R[iver] Shode, S. of Basted, 605553, 1957. V[ery] abund[ant] ♀, by Whetsted Beltring Road, 1957, C. Stace. N. of Leybourne, FJH. W. Farleigh, Stevens. Yalding; S.W. of Coxheath; S. of Yalding; Penshurst, FJH. R[iver] Eden, Chiddingstone, ESM.

**12)** N. of Willesborough Lees, FHW. Smeeth, ESM.

**13)** Speldhurst; Tunbridge Wells, E. Forster. N[ea]r Edge of W. Pond, Clatfields, Edenbridge, 1960 RAC

**S. triandea x purpurea**<sup>334</sup>

**10)** Darent above Powderworks, Dartford, AHWD; noted with some doubt by ESM in Fl Kent.

**S. triandra x viminalis** = *S. x mollissima* Hoffm. ex Elwert<sup>335</sup> [Sharp-stipuled Willow. 16.]

**10)** by River, Darenth, St.J.M. female tree, det. G. Fraser, BEC Rep. 1923, p.211.

**S. purpurea** L. Purple Willow. [15, 16.] N.

<sup>331</sup> In the manuscript given as *S. x speciosa*. Not in check-list.

<sup>332</sup> In check-list; no account in the manuscript.

<sup>333</sup> In check-list; no account in the manuscript.

<sup>334</sup> Not in check-list; the manuscript gives this with parents reversed..

<sup>335</sup> In the manuscript cited as *S. x mollissima* Ehrh., *S. x lanceolata* Sm. (*S. undulata* Ehrh.). Not in check-list.



Probably native; very rare in Kent. Readily distinguished by its sub-opposite, rather glaucous leaves.

- 1) Catford (var. *lambertiana* (Sm.) Koch) E. de C.
- 2) Northfleet Meadows, A.H.W.D. Brooks, Luddenham Road, Faversham, Cowell, Fl. Fav. Davington Osiers, Stowell. Swampy fields and thickets S. of Snodland, FJH; A.H.W.D.
- 4) Ham Ponds, O.B.G. (*lambertiana*). Sarre, Minster and Monkton, Fl. Thanet. N[ea]r Fordwich Ch[urch], RGW.
- 8) 35 R[oa]dside Spinney, Five Wents, Eastry, 1960, Miss B. Nash.
- 10) By the River above Darenth, A.H.W.D. Hedgebank, StoneStreet, Seal; 1949.
- 11) By the Eden, Chiddingstone, E.S.M.
- 12) Ashford, J.G. Baker.
- 14) Hawkhurst, J.C. Melvill.

**S. *purpurea* x *viminalis*** = *S. x rubra* Huds. [Green-leaved Willow. 15, 16.]

- 2) Davington Osiers, Stowell; Phyt N.S. ii 155.
- 4) Between Deal and Sandwich, Merrett. Ham Ponds, FJH. Luddenham Road Brooks, Cowell, Fl. Fav.
- 11) by stream, Basted ♀ with *triandra*, CAS.
- 13) R[oa]dside, A21, opp[osite] Bayham turning ♂, CAS, '56.

‡ **S. *daphnoides*** Vill. <sup>336</sup> European Violet -willow.

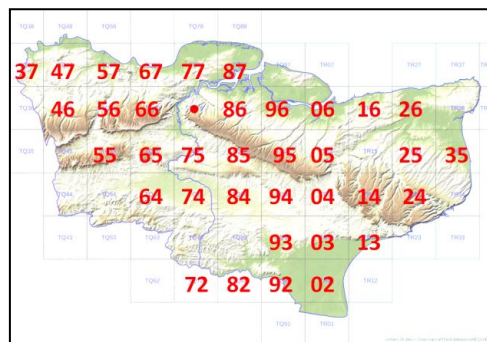
**S. *acutifolia*** Willd. <sup>337</sup> Siberian Violet-willow.

**S. *viminalis*** L. <sup>338</sup> Osier. 15, 16 N. 36/51

Native or denizen. Riversides, pond-margins, fens, and wet woods, and in plantations; widely distributed by fresh waters, very rare elsewhere. Widely planted in the past, though probably native in fens and wet woods; it is now becoming common by spread from seed around and in disused gravel pits, particularly in the Medway valley.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, Fl. Fav., p.100.

- 1) [Ravensbourne / Southend Village, 1905 WHG.] [Bickley; Beckenham, Scargill.] [Ditch, Farnborough, 1902, A.D.W.D.]
- 37 Beckenham Place Park, 1956, PCH. 46 Keston, Miss Barnsdale, 1953.
- 2) 67 Northfleet Brooks. 57 Dartford Marshes, 1956. PCH. 77. Not noted for 76, surely present. 66 Ham Hill Birling, 1956, PCH.
86. 87. 96. 06 Swamp by old brickworks, Graveney HMW.
- 4) 16. 25. 35. 26.
- 6) 57 Great chalk pit, Horns Cross, 1962.
- 7) Berengrave pit, K. Jelley, 1952.
- 8) 14 Damp road verge, N. Elham, 1960, Miss B. Nash. 24.
- 10) By R[iver] above S. Darenth, planted, 56 PCH. 55.
- 11) 75 R[oa]dside, E. Malling, 702570, CAS. 65 Yalding. 64 Hale Street. 64 Beltring, roadside ditches towards Whetsted: FR, CAS. 65 Leybourne Lakes, v[ery] a[bundant]. 85. 64 Medway, W of E. Peckham, CAS. 74. 84.
- 12) 95. 94. 04. 05.
- 13) 64 Pembury L[owe]r Green → Whetsted, C.A.S.
- 14) 72 S of Hawkhurst. 82. 92.
- 15) 02. 93. 03. 13.



**S. *viminalis* x *caprea*** <sup>339</sup> [= *S. x sericans* Tausch. ex. A. Kern.] <sup>340</sup> [Broad-leaved Osier. 15.]

- 7) Hothfield pit DMcC teste H.&M. Tunstall 1958.
- 11) Waste g[roun]d, E of Aylesford CAS, 734588, occasional in osier beds, etc.

**S. [x] *smithiana*** Willd. = *S. cinerea* <sup>341</sup>

<sup>336</sup> In check-list; no manuscript account.

<sup>337</sup> In check-list; no manuscript account.

<sup>338</sup> In the manuscript given as Common Osier.

<sup>339</sup> Not in check-list; parents given in reverse order in manuscript.

<sup>340</sup> In the manuscript given as = *S. x laurina* Sm.

- 1) Northumberland Heath, A.H.W.D. det. E.F. Linton.  
 2) Northfleet Brooks, A.H.W.D. det. E.F. Linton.  
 10) Chevening Park, J.S.M.  
 11) Medway, E of E Peckham, CAS.  
 15) n[ea]e Lydd, J.S.M.

**S. caprea** L. ssp. **caprea**<sup>342</sup> [Goat Willow.] 15, 16. N  
 Native. Woodland, especially coppice, scrub, fenland, hedges; not only on wet soils but even on the chalk; abundant in many old chalk gravel and sand pits; very common throughout Kent.  
 1) Chislehurst Common. Abbey Wood (also hermaphrodite, P.H.C.). Shooters Hill Woods, '54, GMB. Joydens Wood. Farningham Woof, '82. Dartford Heath 54 GMB.  
 3) 05 Rhode Common in wet copse HMW. 26 Upstreet: Hersden, RGW.  
 5) 36 Copse W of Highams Hill, 397611, 1958 PCH.  
 6) Mounts R[oa]d, '44.  
 10) Westerham Wood, 1982.  
 11) Horish Wood, '44. Medway W. of E. Peckham 1934 AHWD. R[oa]dsides, Beltring to Whetsted, CAS, 57 conf. RD Meikle.  
 13) Gill SW of Stone Cross, Ashurst, CAS. Pond Broadwater La[ne], Tun[bridge] Wells, CAS. R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], CAS.

**S. caprea x cinerea**<sup>343</sup>  
 4) Ham Ponds, E.S.M., teste B. White.  
 13) Pond, Broadwater La[ne], Tun[bridge] Wells, CAS. R[ai]l[wa]y W of Tun[bridge] Wells West Sta[tion], CAS.

**S. cinerea** L ssp. **cinerea**<sup>344</sup> Grey Willow. [15.] N.  
 Native. Fens; very rare and local.  
 4) Ham Fen, 1755, the first certain report for Kent. It is abundant here with *Cladium*. Fens N. of Wingham,.

**S. cinerea** ssp. **oleifolia** Macreight<sup>345</sup> [15, 16.] N.  
 Native. Damp woodland, scrub, fenland, ditchsides, hedges, very common throughout Kent, except on the chalk, where it is rare except in those disused chalkpits that are damp in winter. Particularly abundant in, and characteristic of, the damp oakwood association of the Weald Clay, but equally common on the Gault and London Clay.  
 1<sup>st</sup> record, 1804: J.E. Smith, *Flora Britannica*, p.1406.  
 1) Chislehurst Common. Sparrow Woods, Orpington. North Cray, by R[iver] Cray. Petts Wood. 86 Tip by Hayes Sta[tion], 395660, 1958 PCH. 37 Beckenham Place Park, 1956 PCH.  
 2) Berengrave pit 1992. Graveney brickworks, 1958, HMW.  
 6) Swanscombe, pond in old chalk pit ♂, '61, HAS.  
 10) Sevenoaks tip, 1958, CAS. Westerham Wood, 1982. Ightham Common Ponds, 44-62.  
 11) Ryarsh Wood. Horish Wood, '44. R[oa]dsides, Beltring to Whetsted, CAS. Medway W. of E Peckham 1934, AHWD.  
 12) Hothfield common, in centres of valley bogs. Ashford Warren.  
 13) Brighton Lake, T[unbridge] Wells, 1960, CAS. Pond, Broadwater Lane, T[unbridge] Wells, CAS. R[ai]l[wa]y W. of T[unbridge] wells West Sta[tion], CAS.  
 15) R[oyal] M[ilitary] C[anal] n[ea]r Selby Farm, SW of Lympne, 1958, LJM. New Romney Warren Ponds, 1959.

‡ **S.x laurina** Sm. (**S. cinerea** x **S. phyllicifolia** in Stace); (Philp: "S. caprea x viminalis")<sup>346</sup>

<sup>341</sup> In the manuscript referred to as *S. atrocinerea*. Hybrid not given in check-list. The hybrid name has been used for both *S. caprea* x *viminalis* and *S. cinerea* x *viminalis*.

<sup>342</sup> In the manuscript given as *S. caprea* L. Goat Willow, Great Sallow, Palm. The check-list erroneously adds '& var. *argentea* (Smith) Newman [sic, should be Neumann] ex Rech. f.', which belongs to *S. repens*, no doubt a typing error.

<sup>343</sup> Not in check-list. The manuscript gives it as '=*S. Reichardtii* A. Kern' which, as *S. x reichardtii* became the recognised binomial subsequently, but not at the time of the second edition (1991) of Stace's *New Flora of the British Isles* which the check-list (and this transcript) generally follows.

<sup>344</sup> In the manuscript given as plain *S. cinerea* L. (*S. atrocinerea* being treated as a separate species).

<sup>345</sup> In the manuscript given as *S. atrocinerea* Brot.

- S. aurita** L. Eared Willow<sup>347</sup> 15, 16 N  
 Native. Damp hearths, Damp woods on acid soils; locally frequent in parts of the Blean and the Weald, both on clay and sand, rare elsewhere.  
 1<sup>st</sup> record, 1724: Chislehurst, Dillenius in *Ray's Synopsis*, ed.3, p.450.  
 1) Keston Common, E. de C. (1954!). Chislehurst Common Ray (1945!). Joydens Wood, B.D.J. Petts Wood. Sparrow Woods, W. of Orpington. Eltham Common, AHWD. Shooters Hill AHWD. Northumberland Walk, AHWD.  
 3) Thornden Wood, FJH (1945!). West Blean Wood, FJH (1945!). Mincing Wood, Blean, 1959. Chartham Hatch, F.M. Webb. Hoath, F.M. Webb. Blean above Rhode Common, 1946.  
 7) Kingsdown, ESM. N. of Charing ESM.  
 8) E of Wye, E.S.M.  
 10) Westerham Common, B.D.J. Kemsing, ESM. Scords Wood, CAS.  
 11) Hadlow, Miss Peers. (Edenbridge, ESM.) Hildenborough ESM. Underriver ESM. 44 Meadows W of Edenbridge, 1957, CTP & DPY. Medway W of E Peckham 1934 AHWD. SW of Marden Thorn, FJH. Lenham ESM. E. of Marden ESM. Ryarsh, M. Rogers.  
 12) Hothfield, Ham Street, ESM. Sevington FMW. Willesborough FMW. Longrope Wood, Miss MEM 1954.  
 13) Bedgebury Forest, JRW; 1945! [Tunbridge Wells, Hb. Dill.] Free Heath, Lamberhurst, JRW. R[oa]dside on T[unbridge] W[ells] S[and], Folly Hill, Colliers Green '62. Combwell Wood. [Cranbrook, ESM.] Chiddenden Wood, 1954.  
 14) Woodchurch, BDJ. Kennardington, ESM.  
 15) Dungeness, CAS.  
 16) n[ea]r Sandling Junction ESM.

**S. aurita x repens**<sup>348</sup> = *S. [x] ambigua* Ehrh. Has been reported at 3) by a stream in Hernhill Wood by Stowell, and a specimen from Tunbridge Wells in Hb. Dill. Is referred here by G.C. Druce.

[**S. myrsinifolia** Salisb.<sup>349</sup> Reported on Rusthall Common by E. Forster (Fl Tonbr. P.110): an error or else planted. This is a northern species.]

- S. repens** L. Creeping Willow. 15, 16. N.  
 1<sup>st</sup> record, 1640: Romney Marsh, Parkinson, *Theatr.*, p.1433.

var. **repens**<sup>350</sup> [15], 16 Native. On inland heaths, usually in damp-heaths; very rare.

- 1) Keston Common, J.S.M. (1954!). Chislehurst Common, A.H.W.D. (1946!).  
 13) By Brighton Lake, Eridge R[oa]d, Tun[bridge] Wells, CAS. Field by Forest R[oa]d, Hawkenbury, 593385, VC14, CAS. Bedgebury Pinetum, A.B. Jackson (1946-57!).  
 The following old records probably fall under [var.] *repens*, but there are not recent records from these localities.

- 1) Hayes Common, E. de C. St Mary Cray Common, E. de C. West Wickham, Cock field, 1813.  
 13) Tonbridge, E. Forster **BM**. Southborough Common W.W.R. – next seen here, 1918-1944, Miss HM Crampton. Chiddenden Wood, E.S.M.  
 14) n[ea]r Woodchurch, BD Jackson.

var. **argentea** (Sm.) Wimm. & Grab.(Smith) Neumann ex Rech. f.<sup>351</sup> Dune Creeping Willow 15. N.  
 Native. Fens and dune-slacks; very local and scarce.

- 4) Ham Ponds, W. Pamplin in F.G.E.K., 1839; locally abundant 1946-52! Not seen since the sea-floods of January, 1953, which flooded Ham Fen temporarily with salt-water. It grew here with *Cladium*, *Thelypteris*

<sup>346</sup> In check-list, not in the manuscript.

<sup>347</sup> Eared Sallow in the manuscript.

<sup>348</sup> Not in check-list.

<sup>349</sup> In the manuscript given as *S. nigricans* Sm.

<sup>350</sup> In the manuscript given as ssp. *repens*.

<sup>351</sup> Author citation in accordance with the second edition of Stace's *New Flora of the British Isles*, but the check-list, which generally follows this, has (Smith) Neumann ex Rech. f. The manuscript refers to ssp. *argentea* (Sm.) A. & G. Camus [should be E.G. & A. Camus].

*palustris*, etc. Deal sand dunes, E. Jacob, 1777; 1954! Sandwich Bay dunes, Ray, *Synopsis*, ed.2, p.215; locally abundant, 1958! 1997!

15) Dungeness, Dowker; fen by Open pits, 1946 et seq.! Old shingle workings n[ea]r School, 1962.

The following old records probably fall under this [variety]:

4) Walmer Castle, Dr. Goodenough, Fl. Brit., 1059.

6) n[ea]r Southfleet, Hb. Dill. (probably in the ancient valley fen, now terribly polluted, between Northfleet and Southfleet).

15) New Romney, J.G. Baker. Romney Marsh, Parkinson.

***Salix repens* var.<sup>352</sup> *argentea* x *S. cinerea***

4) Ham Ponds, 1948-54.

## BRASSICACEAE

### ***Sisyrnrium* L.**

‡ <i>S. irio</i> L.]	London -rocket.		[no surviving account]
‡ <i>S. loeselii</i> L.	False London-rocket.		[no surviving account]
‡ <i>S. altissimum</i> L. <sup>353</sup>	Tall Rocket.		[no surviving account]
‡ <i>S. orientale</i> L. <sup>354</sup>	Eastern Rocket.		[no surviving account]
<i>S. officinale</i> (L.) Scop.	Hedge Mustard.	N.	[no surviving account]

### ***Descurainia* Webb & Berth.**

‡ <i>D. sophia</i> (L.) Webb ex Prantl <sup>355</sup>	Flixweed.		[no surviving account]
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### ***Alliaria* Heister ex Fabr.**

<i>A. petiolata</i> (M. Bieb.) Cavara & Grande <sup>356</sup>	Garlic Mustard.	N.	[no surviving account]
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### ***Arabidopsis* (DC.) Heynh.**

<i>A. thaliana</i> (L.) Heynh.	Thale Cress.	N.	[no surviving account]
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### ***Isatis* L.**

<i>I tinctoria</i> L. <sup>357</sup>	Woad.	H.	[no surviving account]
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### ***Bunias* L.**

‡ <i>B. orientalis</i> L. <sup>358</sup>	Warty-cabbage.		[no surviving account]
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### ***Erysimum* L.**

<i>E. cheiranthoides</i> L. <sup>359</sup>	Treacle Mustard.	N.	[no surviving account]
‡ <i>E. [x] marshallii</i> (Henfr.) Bois ( <i>E. allioni</i> hort. nom. illegit.).	Siberian Wallflower		[no surviving account]
<i>E. cheiri</i> (L.) Crantz <sup>360</sup>	Wallflower.	H.	[no surviving account]

### ***Hesperis* L.**

‡ <i>H. matronalis</i> L.	Dame's-violet.	H.	[no surviving account]
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<sup>352</sup> In the manuscript given as ssp. *argentea*. Not in check-list.

<sup>353</sup> Francis Rose's annotated copy of Hanbury & Marshall (1899) (hereafter FR's H&M) mentions records at E[ast] Malling; Cuxton; Woolwich; St Mary Cray; Hayes; Sandwich dunes, freq[uent]; Plumstead Ma[rshes], FR.

<sup>354</sup> FR's H&M refers to records at Cuxton and E[ast] Malling.

<sup>355</sup> FR's H&M gives records at Westcourt F[ar]m, FR, CW, '44. Cliffe' FR, CW, '44; Lydd Common, '46; New Brompton, Lamb; Borstal, B. Nash; Boarley, Elgar.

<sup>356</sup> FR's H&M refers to N[ew] Hythe; Oxney; Tenterden; Benenden; Penshurst; and substitutes for H&M's first record '1766 Denton, MS Anon, BM'.

<sup>357</sup> FR's H&M says 'There has been a long history in Kent, but is not now to be found.' Nevertheless, it was included in the check-list.

<sup>358</sup> FR's H&M refers to a find at Kingston n[ea]r C[anter]bury, '38, Hyland.

<sup>359</sup> FR's H&M mentions records by FR at Aylesford and Wrotham Heath; and gives Kingsnorth, E. Scott.

<sup>360</sup> FR's H&M gives Charing, 1942; Tonbridge Castle, Bayham Abbey; Rochester; Canterbury; Dartford Priory Railway.

**Malcomia** R. Br.<sup>361</sup>

‡ *M. maritima* (L.) R. Br. Virginia Stock. H. [no surviving account]

**Matthiola** W.T. Aiton

*M. incana* (L.) W.T. Aiton<sup>362</sup> 'Hoary Stock. ?N. [no surviving account]

**Barbarea** W.T. Aiton<sup>363</sup>

*B. vulgaris* W.T. Aiton<sup>364</sup> Winter-cress. N. [no surviving account]

‡ *B. stricta* Andz. Small-flowered Winter-cress. [no surviving account]

‡ *B. intermedia* Boreau<sup>365</sup> Medium-flowered Winter-cress. [no surviving account]

‡ *B. verna* (Mill.) Asch.<sup>366</sup> Americal Winter-cress. [ no surviving account]

**Rorippa** Scop. (incl. **Nasturtium** W.T. Aiton<sup>367</sup>)

*R. nasturtium-aquaticum* (L.) Hayek<sup>368</sup> Water-cress. N

Localised records for district 15: ditch ½ mile west of Appledore Station in 1954 and 1959 (tetrad **TQ92U**); Boulderwall (tetrad **TR01U**); and moat north of Old Romney in 1959 (**TR033254**)

*R. x sterilis* Airy Shaw (*R. nasturtium-aquaticum* x *microphylla*) [no surviving account]

*R. microphylla* (Boenn.) N. Hyl. ex Å. & D. Löve Narrow-fruited Water-cress. H.

Localised records for district 15: ditch at Fairfield (**TQ92T**) [MNE det. F.H. Perring]; and ditch north of Snave (tetrads **TR02E** and/or **TR03A**) [MNE det. F.H. Perring]

*R. islandica* (Oeder ex Murray) Borbas Northern Yellow-cress. [no surviving account]

*R. palustris* (L.) Besser<sup>369</sup> Marsh Yellow-cress. N.

Localised records for district 15: by B2080 east off Reading Street in 1956 (tetrad **TQ93F?**)

*R. sylvestris* (L.) Besser<sup>370</sup> Creeping Yellow-cress. N. [no surviving account]

*R. amphibia* (L.) Besser<sup>371</sup> Great Yellow-cress. N.

Localised records for district 15:

**TQ83:** near Tenterden in 1897 [R.R. Hutchinson – Hb. Croydon N.H.S.]

**TQ93:** ditch bank by B2080, Shirley Moor west of Appledore in 1954 (tetrad **TQ93F**) [E. Scott; also 1957 (!) – both in MNE]; Kenardington Bridge in 1950 (**TQ9731**) [E.S.]

‡ *R. austriaca* (Crantz) Besser Austrian Yellow-cress. [no surviving account]

**Armoracia** Gaertn., B.Mey. & Scherb.

<sup>361</sup> In the check-list given as *Malcomia* R. Br. and *M. maritima* (L.) Br.

<sup>362</sup> FR's H&M gives this at St. Margaret's Bay, Brenan, FR! '45.

<sup>363</sup> The check-list gives *Barbarea* R. Br., followed by *B. vulgaris* R. Br. The order of species is in the transcript given in accordance with Stace's New Flora 2<sup>nd</sup> edition, although unusually the check-list did not follow either its nomenclature or species order.

<sup>364</sup> FR's H&M says 'most abundant, even above chalk (Wingate Woods)' and continues with: Barming; E[ast] Farleigh; Tovil; Aylesford; Birling; Halling; Leybourne; Ryarsh; Tonbr[idge]; Haysden; Leigh; SW of Pembury, H.W. PugsleyChidd[ingstone]; W[atering]bury; Teston; Cowden; Marden; Yalding; Beltring; Goudhurst; Wye; Ditton Quarries; Lamberhurst; Horsmonden; Collier St[reet].

<sup>365</sup> FR's H&M gives Harty, JEL; Woolwich Arsenal, FR.

<sup>366</sup> FR's H&M mentions Plumstead, FR; Harty, JEL; Dungeness, 48!

<sup>367</sup> R. Br. in the check-list.

<sup>368</sup> FR's H&M refers to Ham Hill; Birling Marshes; Sandling; E[ast] M[alling]; Ditton; Barming; Farleigh. There is none for H&M's *microphyllum*, so these records should probably be taken as the aggregate.

<sup>369</sup> FR's H&M provides records: Wildernesse, Seal, FR, JHL, '44; Chiddingstone, Dr CW, abund[ant] '43; freq[uent] above and below Tonbridge, [F]R, [JH]L, '44; Medway banks at Aylesford, Dr CW & FR. '43!; Penshurst; Pond at Chiddingstone, R&C.

<sup>370</sup> FR's H&M gives Teston, FR, '42.

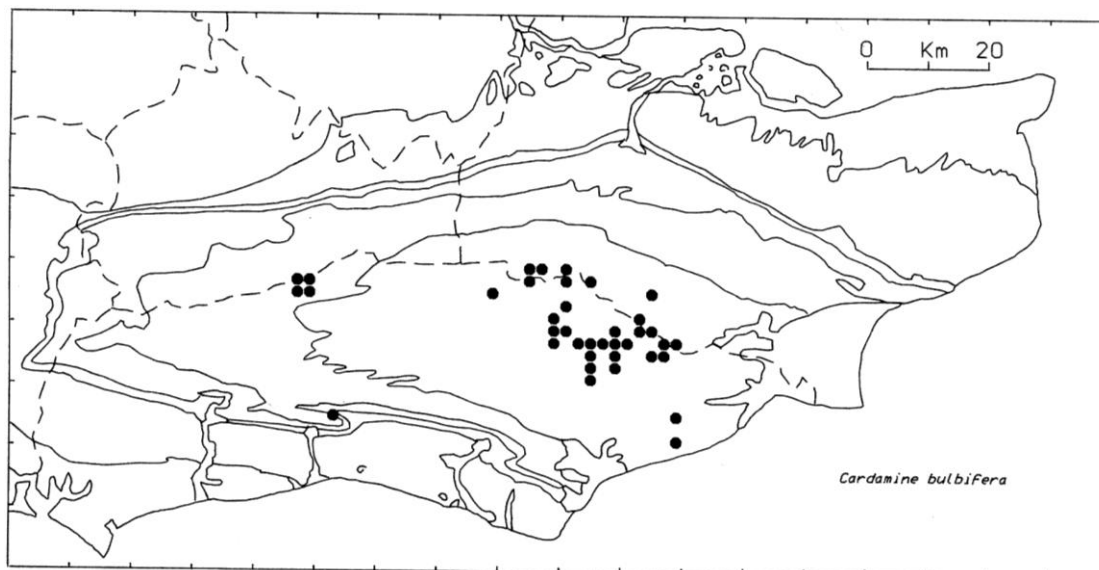
<sup>371</sup> FR's H&M mentions Teston! '42; below High rocks, FR, JRW; abundant by Straight Mile, Leigh, '43, '44, F[R], [JH]L; Penshurst; Leigh, [F] & [JH]L; Willesboro[ugh], CN Pope; Sturry, RGW; Aylesford, '44; v[ery] fine and abund[ant] above and below Tonbridge, '44.



‡ *A. rusticana* Gaertn., B.Mey. & Scherb. Horse-radish [no surviving account]

### Cardamine L.

*C. bulbifera* (L.) Crantz (= *Dentaria bulbifera* L.)<sup>372</sup> Coralroot N [no surviving account, map exists]



*C. amara* L.<sup>373</sup> Large Bitter-cress. N. [no surviving account]

*C. pratensis* L. Cuckooflower. N.

Localised records for district 15:

**TQ82:** Sandhurst Levels

**TQ92:** By road north of Oxney in 1954; and northeast of Old Romney church by dyke 59 (TR0325)

**TQ93:** Shirley Farm, north of by-road 62 (TQ9332)

**TR01:** Halfway Bush (tetrad TR01U)

**TR02:** Dymchurch in 1882 [J.F.D.P.]

*C. impatiens* L.<sup>374</sup> Narrow-leaved Bittercress. N.

[no surviving account]

*C. flexuosa* With.<sup>375</sup> Wavy Bittercress. N. [no surviving account]

*C. hirsuta* L.<sup>376</sup> Hairy Bittercress. N. [no surviving account]

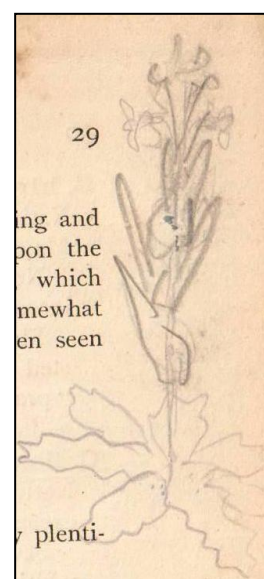
*Arabis glabra*, sketch in margin of Francis Rose's annotated Hanbury & Marshall (1899)

### Arabis L.

*A. glabra* (L.) Bernh.<sup>377</sup> Tower Mustard. N (?ext[inct])

[no surviving account]

‡ *A. caucasica* Willd. ex Schldl.<sup>378</sup> Garden Arabis. [no surviving account]



<sup>372</sup> FR's H&M gives; '14 loc[ation]s'; 150 yds E. of H[igh] Rocks Halt on N. of Road, J.H.L., 1943; Goudhurst, 1942, Mrs E. Clarke; about Lamberhurst, 3 locations, Wallis, FR & JRW '44!; High Wood. E of Tun[bridge] Wells; W. of High Rocks, JFW & FR; Wood E. of High Wood! FR & JRW, '44.

<sup>373</sup> FR's H&M gives S. Darenth, Tagg; Darenth, FR; near Canterbury, '47! ....Trenley Park; Hawkenbury; by Medway at Eccles, FR, '44; Mereworth S. of Vill[age], FR, '44!; Lamberhurst Hoathly, JRW & FR, '44; Leybourne, FR; Lunsford, FR; Birling in the stream, '42! FR; Lit[tle] Chart, FR; Hadlow; below Tonbridge; below the High Rocks, near the stream, FR, CW, abund[ant], '44.

<sup>374</sup> FR's H&M has: below and above, quite abund[ant] throughout, [FJR & JH]L, '44; abundant by the Eden, FR 1943, still abundant!; below Leigh; 1½ M. above Tonbridge, plenty, FR, 1943; plentiful at Teston, 1943! FR.

<sup>375</sup> FR's H&M refers to records at Mereworth; Lamberhurst; High Rocks; Eccles; Sandling; Leybourne; Birling; E[ast] Malling; Cowden; Tonbr[idge]; Chiddingstone; Penshurst; W[atering]bury; Teston, etc.

<sup>376</sup> FR's H&M mentions E[ast] M[alling]; Wrotham; Eccles; Mereworth; W[est] Malling.

<sup>377</sup> FR's H&M gives Larkfield Heath, D]McC, '46 ‡, FR 46!!; Leybourne Wood 1949...

<b>A. hirsuta</b> (L.) Scop. <sup>379</sup>	Hairy Rock-cress.	N.	[no surviving account]
<b>Aubrieta</b> Adans.			
‡ <b>A. deltoidea</b> (L.) DC.	Aubretia.	H.	[no surviving account]
<b>Lunaria</b> L.			
‡ <b>L. annua</b> L.	Honesty.		[no surviving account]
<b>Alyssum</b> L.			
[‡ <b>A. alyssoides</b> (L.) L.]	Small Alison.		[no surviving account]
‡ <b>A. saxatile</b> L.	Golden Alison.		[no surviving account]
<b>Bertoroa</b> DC.			
‡ <b>B. incana</b> (L.) DC.	Hoary Alison.		[no surviving account]
<b>Lobularia</b> Desv.			
‡ <b>L. maritima</b> (L.) Desv.	Sweet Alison.		[no surviving account]
<b>Draba</b> L.			
[ <b>D. muralis</b> L.] (ext[inct])	Wall Whitlow-grass.		[no surviving account]
<b>Erophila</b> DC.			
<b>E. verna</b> (L.) DC. <sup>380</sup> var. <b>verna</b>	Common Whitlow-grass.	N.	[no surviving account]
<b>E. verna</b> (L.) DC. var. <b>praecox</b> (Steven) Diklic		N.	[no surviving account]
( <b>E. glabrescens</b> Jord.?)	Glabrous Whitlow-grass.		[no surviving account]
<b>Cochlearia</b> L.			
<b>C. anglica</b> L.	English Scurvygrass.	N.	[no surviving account]
<b>C. danica</b> L. <sup>381</sup>	Danish Scurvygrass.	N.	[no surviving account]
<b>Camelina</b> Crantz			
‡ <b>C. sativa</b> (L.) Crantz <sup>382</sup>	Gold-of-pleasure.		[no surviving account]
<b>Capsella</b> Medik.			
<b>C. bursa-pastoris</b> (L.) Medik.	Shepherd's-purse.	N.	[no surviving account]
<b>Jonopsidium</b> Rchb.			
(‡ <b>I. acaule</b> (Desf.) Rchb.)	Violet Cress.		[no surviving account]
<b>Teesdalia</b> W.T. Aiton <sup>383</sup>			
<b>T. nudicaulis</b> (L.) W.T. Aiton	Shepherd's Cress.	N.	[no surviving account]
<b>Thlaspi</b> L.			

<sup>378</sup> Author citationis just Schlecht. In check-list.

<sup>379</sup> FR's H&M refers to this being 'rare as a native' and to records at: Keston, CW; Higham, 1 plant on filled in canal, CW & FR, '44!; St. Margaret's l[ocally] a[bundant], '46!; n[ea]r Iffib Woof, '49!; Barham (Gravel Castle) FR & BJB, '42; Stockbury the Warren, 1943! FR, '45/'46! abund[ant]; Ryarsh Sandpits, 1 plant, FR & CW, '44!

<sup>380</sup> This and the following have in the check-list author citations of (L.) Chevall. FR's H&M gives for this: Bradbourne, '42; New Road, Top Meadow, '43!; Boxtree Ho[use] walls, 44!; Eccles pits; W of Burham, abund[ant]; Blean; Bysing Wood; Brenchley; Pembury; Shorne.

<sup>381</sup> FR's H&M describes it as very rare but l[ocally] a[bundant], giving records at Sandwich, '46!; n[ea]r Hotel, '47, to S. v[ery] a[bundant]; v[ery] a[bundant] W. of Dungeness, '46!; v[ery] a[bundant] N. of Dungeness, '48; v[ery] a[bundant] at Deal, '48; Sydenham, introduced, H. Beisley, Bot[anist's] Chron[icle] (1864) 95.

<sup>382</sup> FR's H&M says 'in Flax' and gives a record for Hunt St[reet], Crundale, '42.

<sup>383</sup> Genus and species in the check-list have author citations of R. Br. and (L.) R. Br. respectively. FR's H&M provides *T. nudicaulis* records: [Ashford Warren, C.N. Pope, '42-'46, gone, '47.]; W. of Hythe, Walton, '46!; Dungeness, v[ery] a[bundant], '45!; Lydd, FR, '45!; [gone from S. of Walmer, '46!]

<b>T. arvense</b> L. <sup>384</sup>	Field Pennycress.	C.	[no surviving account]
‡ <b>T. alliaceum</b> L.	Garlic Pennycress.		[no surviving account]
<b>Iberis</b> L.			
‡ <b>I. sempervirens</b> L.	Perennial Candytuft.		[no surviving account]
<b>I. amara</b> L. <sup>385</sup>	Wild Candytuft.	N.	[no surviving account]
‡ <b>I. umbellata</b> L.	Garden Candytuft.		[no surviving account]
<b>Lepidium</b> L.			
‡ <b>L. sativum</b> L. <sup>386</sup>	Garden Cress.		[no surviving account]
<b>L. campestre</b> (L.) W.T. Aiton <sup>387</sup>	Field Pepperwort.	N.	[no surviving account]
<b>L. heterophyllum</b> Benth. <sup>388</sup>	Smith's Pepperwort.	N.	[no surviving account]
<b>L. ruderae</b> L. <sup>389</sup>	Narrow-leaved Pepperwort.	Prob. N	[no surviving account]
<b>L. latifolium</b> L. <sup>390</sup>	Dittander.	N.	[no surviving account]
‡ <b>L. draba</b> L. ssp. <b>draba</b> L. <sup>391</sup>	Hoary Cress.		[no surviving account]
<b>Coronopus</b> Zinn			
<b>C. squamatus</b> (Forssk.) Asch. <sup>392</sup>	Swine-cress.	N.	[no surviving account]
‡ <b>C. didymus</b> (L.) Sm. <sup>393</sup>	Lesser Swine-cress.	C.	[no surviving account]
<b>Diplotaxis</b> DC.			
<b>D. tenuifolia</b> (L.) DC. <sup>394</sup>	Perennial Wall-rocket.	?N.	[no surviving account]
<b>D. muralis</b> (L.) DC. <sup>395</sup>	Annual Wall-rocket.		[no surviving account]
<b>Brassica</b> L.			
<b>B. oleracea</b> L. <sup>396</sup>	Cabbage.	N.	[no surviving account]
‡ <b>B. napus</b> L. ssp. <b>oleifera</b> (DC.) Metzg.	Oil-seed Rape.		[no surviving account]
<b>B. rapa</b> L. ssp. <b>campestris</b> (L.) A.R. Clapham	Wild Turnip.	N.	[no surviving account]
‡ <b>B. juncea</b> (L.) Czern.	Chinese Mustard.		[no surviving account]
<b>B. nigra</b> (L.) W.D.J. Koch <sup>397</sup>	Black Mustard	N.	[no surviving account]
<b>Sinapis</b> L.			
<b>S. arvensis</b> L. <sup>398</sup>	Charlock.	N.	[no surviving account]
‡ <b>S. alba</b> L. <sup>399</sup>	White Mustard.	C.	[no surviving account]

<sup>384</sup> FR's H&M refers to Swanley; very common Malling district, '41, '42; Ditton; Westwell; Wrotham; Ightham; Ryarsh; Hollingbourne; Higham; All Hallows; Swanscombe; Grain; Stoke; Strood; Greenhithe.

<sup>385</sup> FR's H&M refers to Westwell, 1 plant, E. Scott; Cherry Garden Down, Folkestone, Miss Day, 1952 (1954, abund[ant]!).

<sup>386</sup> FR's H&M mentions its occurrence on a chalk bank at Burham, '47; and at Folkestone, Miss V. Day.

<sup>387</sup> Author citation (L.) R. Br. In check-list. FR's H&M gives it at E[ast] Malling; Tylers Hill; Downe; Shorne.

<sup>388</sup> FR's H&M refers to it at Kingnorth near Ashford, Pope / Sankey.

<sup>389</sup> FR's H&M gives Grain, '46, '49!; Stone, by River, Tagg; Richborough, '46; Higham, CW, FR, '44; Cuxton, '44, FR; Conyer's Creek, FR, SW, '43!

<sup>390</sup> FR's H&M mentions Swalecliffe, Wilson; Sandwich, n[ear] the Gasworks, E. Day, '46!

<sup>391</sup> FR's H&M refers to Dartford; Graveney; Rochester; Cuxton; abundant about Halling; Burham; Aylesford; Wouldham, etc.; Faversham; Conyer's Creek; Higham; Cliffe, FR, CW; Sandwich Bay; Kingsdown; Pegwell; Folkestone, FR; Challock Lees; C[anter]bury.

<sup>392</sup> FR's H&M gives Ranscombe; Cuxton, FR, CW, '43; E[ast] M[alling], '44; Cliffe, '44; Conyers, FR, CW, '43!; Higham, '44!; Grain; Lydd; Green St[reet] Green.

<sup>393</sup> FR's H&M mentions a mod[erate] quantity by Warren Wood, E[ast] Malling, '43! FR; E. of Great Lake, Bedgebury, FR, '44; Lydd; Gr[ee]n St[reet] Green; Chittenden Wood, '44.

<sup>394</sup> FR's H&M says 'Has expanded greatly in N.W. Kent'; Erith; Belvedere; Upnor, abund[ant]; Frindsbury, abund[ant]; Tonbridge Castle FR, 1942: Woolwich Arsenal, abundant, 1943! FR; Dartford, Northfleet, abundant all along here; Gravesend, FR; N of Cuxton.

<sup>395</sup> FR's H&M gives Abbots Cliff FR; E[ast] M[alling] R[esearch] S[tation]; Stone, Tagg; Halling Down, FR, '43; (type) Hayes gravel pit, Croydon N.H.S. VIII (1912) XCIV.

<sup>396</sup> FR's H&M provides records W of St Margarets; Dover Cliffs, C.W., Prof. Tabor; Eastwear Bay. FR; AbbotsCliff, FR.

<sup>397</sup> FR's H&M refers to Stone, '45; Folkestone, FR!, '45!; between Speldhurst and Penshurst, FR!; Aylesford; Birling; Teston; W[atering]bury; Yalding; Headcorn; Tonbridge;; Penshurst; Peckham; Leigh; Chiddingstone.

<sup>398</sup> FR's H&M in relation to the H&M statement of 'most abundant' says 'Less so than alba in dis[trict] 8' and queries the 1629 Johnson record as 'surely *Raphanus*?'.  
<sup>399</sup>

<b>Eruca</b> Mill.			
‡ <b>E. vesicaria</b> (L.) Cav.	Garden Rocket.		[no surviving account]
<b>Erucastrum</b> C. Presl			
‡ <b>E. gallicum</b> (Willd.) O. E. Schulz	Hairy Rocket.		[no surviving account]
<b>Hirschfeldia</b> Moench			
‡ <b>H. incana</b> (L.) Lagr.-Foss.	Hoary Mustard.		[no surviving account]
<b>Cakile</b> Mill.			
<b>C. maritima</b> Scop. <sup>400</sup>	Sea Rocket.	N.	[no surviving account]
<b>Rapistrum</b> Crantz			
‡ <b>R. rugosum</b> (L.) J.P. Bergeret <sup>401</sup> All.	Bastard Cabbage.		[no surviving account]
‡ <b>R. perenne</b> (L.) All.	Steppe cabbage.		[no surviving account]
<b>Crambe</b> L.			
<b>C. maritima</b> L. <sup>402</sup>	Sea-kale.	N.	[no surviving account]
<b>Raphanus</b> L.			
‡ <b>R. sativus</b> L.	Garden Radish.		[no surviving account]
<b>R. raphanistrum</b> L. ssp. <b>raphanistrum</b> <sup>403</sup>	Wild Radish	N.	[no surviving account]
<b>R. raphanistrum</b> L. ssp. <b>maritimus</b> (Sm.) Thell. <sup>404</sup>	Sea Radish.	N.	[no surviving account]

## RESEDACEAE

<b>Reseda</b> L.			
<b>R. luteola</b> L. <sup>405</sup>	Weld.	N.	[no surviving account]
‡ <b>R. alba</b> L.	White Mignonette.	C.	[no surviving account]
<b>R. lutea</b> L. <sup>406</sup>	Wild Mignonette.	N.	[no surviving account]
‡ <b>R. phyteuma</b> L.	Corn Mignonette.	C.	[no surviving account]

## ERICACEAE

<b>Rhododendron</b> L.			
‡ <b>R. ponticum</b> L.	Rhododendron.	[15, 16.]	H.
Naturalised alien. Woods and heaths on acid sandy soils, often planted and now widely naturalised from seed in such places. A native of Britain in the Pliocene.			
1) Keston Common. Holwood Park. Wet wood by R[iver], N. Cray, PCH. Shooters Hill Woods, 1954, G.M.B. Joydens Wood.			

<sup>399</sup> FR's H&M says 'has since become much more abundant'.

<sup>400</sup> FR's H&M refers to Stone, Tagg; All Hallows, CW, FR, '45; Shellness, '46!; Grain, common on N. coast, FR, '45; Folkestone, D[AC]. Long, '45; S. of Romney, '46; Cliff's End, '46; Pegwell Bay, '46; Sandwich, E.Day, '46; E. of Folkestone, '47, FR; Minnis Bay, '46.

<sup>401</sup> Author citation given as (L.) All. In check-list, where the order of the species is reversed, both amounting to departures from Stace's *New Flora*, 2<sup>nd</sup> edition. FR's H&M says 'Se BEC. Rep. 1945'; Stone; Swanscombe, J.E.L., '45; Shornemead. Generally, there seems to have been some confusion in determinations, with FR re-allocating records *between R. rugosum. R. orientale and Raphanus*. A record for *R. orientale* (a taxon now falling under *R. rugosum*), viz. - still there [by the Medway at Forstal], 1942! CW & FR - is unaffected. But there are grouped records which may be for *R. rugosum* or *Raphanus*: Bluebell Hill; Aylesford, CW, '45; Upnor, '46; Faversham Quay; Cuxton, 1943, FR; 'increasing rapidly on allotments now'.

<sup>402</sup> FR's H&M considered the species frequent, rather than H&M's 'rare' and gives records at Seasalter, FR, CW, '44; Pegwell, '47; Lydden Spout, still here, FR, CW, '45!; Eastwear Bay, FR, CW, '45!, '47!; below Abbots Cliff, v[ery] v[ery] a[bundant] from Lydd on Sea by Dungeness to S[ussex] border, 46. 2m W of Hythe, '47; abund[ant] W of Hythe.

<sup>403</sup> FR's H&M marks 'Johnson' against H&M's first record assigned to Merrett.

<sup>404</sup> FR's H&M mentions 3m W. of Dungeness, VC.15, W.J.L. Sladen - cannot see, FR, '47; Pegwell, J.E.L. - not there, '47!.

<sup>405</sup> FR's H&M gives Grain; Wye; Bluebell Hill; Darenth; Greenhithe; Cobham; Tonbr[idge] Castle, Deakin; Kingsdown; Woolwich Arsenal, FR; Abbots cliff; Lydden Spout.

<sup>406</sup> FR's H&M refers to Hastingleigh; Boughton Lees; Wye; Kingsdown, Grain, Woolwich FR, ~~Alkham~~.

3) Holly Hill Wood / Thornden Wood, 1950 REW.

6) E) Northward Hill, 1950, REW.

7) Stedehill Wood, 1960, Mrs. B. Dodds.

10) Westerham Wood 82. Brasted Chart, 1982.

11) Platt Woods. Wrotham Heath (Valley Wood). Sandling Wood, 1960, E.G.P. Comp Woods. Mereworth Woods. Oaken Wood, E. Malling to Barming.

13) Gill SW of Stone Cross, Ashurst, CAS. Wood S. of Hook Green, Lamberhurst, 1939, J.R.W. Bedgebury Forest. Bedgebury Pinetum. Combwell Wood. Wood on T[unbridge] W[ells] S[and], W. of Folly Hill, Colliers Green '62.

16) Sandling Park.

‡ *Daboecia* D. Don

*D. cantabrica* (Huds.) K. Koch<sup>407</sup>

[St Daboec's Heath.]

13) planted, Bedgebury pinetum, T. Tynan, 1954 MNE.

*Gaultheria* L.

‡ *G. shallon* Pursh

Shallon.

[15.]

H.

10) above Sevenoaks Weald, A. Beadell c.1936. Brasted Chart. Whitley Scrubs.

13) Pembury Woods, opp[osite] Hosp[ital], 1949, KEB.

‡ *G. mucronata* (L.f.) Hook and Arn.<sup>408</sup>

Prickly Heath.

H.

*Calluna* Salisb.

*C. vulgaris* (L.) Hull<sup>409</sup>

Heather .

15, 16 .

N.

41/51

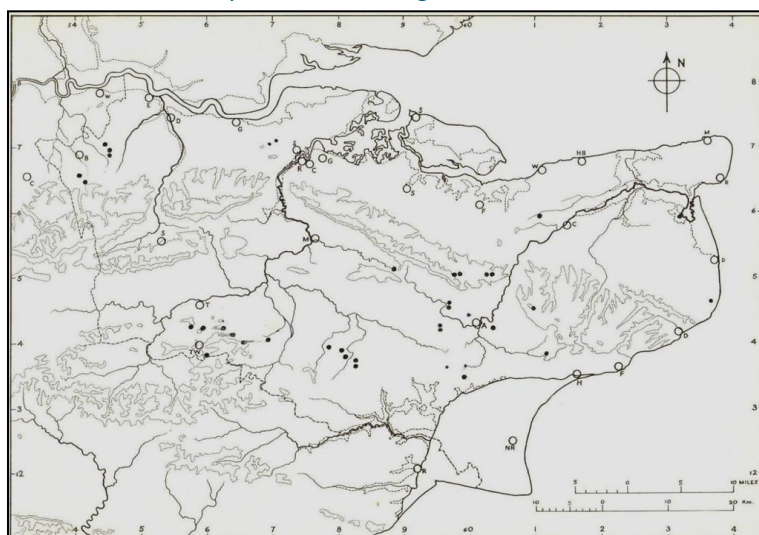
Native. Heaths, both wet and dry, open areas and rides in woods on acid soils, both on sands, and gravels, and clay; common on the Eocene strata in 1) and 3), on the Greensand in 10, 11), 12) and 16), and in the High Weald; local on the Weald Clay and the Pliocene Beds of 8); rare elsewhere, and absent from the Isle of Oxney, Romney Marsh (except for one occurrence at Dungeness), the Hundred of Hoo, Grain, Sheppey, Thanet, and the alluvial marshes of the Thames, Medway and Stour. Very rare on chalk in Kent; it does however form a "chalk-heath" association on the downs N. of St. Margarets at Cliffe where a non-calcareous superficial soil overlies the chalk. True *Calluna*-heath is local and is best developed at Keston Common; Dartford Heath; Toys Hill, at Whitley Scrubs S. of Sundridge, Seal Chart, Ightham Common, Wrotham Heath, Hothfield Common, and in open areas of the woods about Pembury, Goudhurst, Cranbrook, and S. of Biddenden, though in most of these areas dry oak-birch-pine wood with a *Calluna* understorey covers much larger areas.

1<sup>st</sup> record, 1629: Dartford (Heath?)

Johnson, *Iter*, p.9. \* Lower Bronze Age, Minnis Bay, (macroscopic) A Conolly.

1) 36 West Wickham Common 1958 PCH. 46 Hayes Common. 46 Keston Common. 47 Chislehurst Common. 57 Dartford Heath, 1960. Holwood Park. Petts Wood. 46 St. Pauls Cray Common. 47 Camden Park, Chislehurst. 47 Abbey Wood. 45 Bostall Heath. 57 Joydens Wood. 56 Farningham Wood, 82. 46 Well Hill, Chelsfield. 46 Hollows Wood. SE of Chelsfield.

3) 96 Bysing Wood. E side Clay Hill Wood RGW. N[ear] Denstroude RGW. 06 West side of Blean, N. of Dunkirk,



<sup>407</sup> Not in check-list.

<sup>408</sup> Given in check-list; no manuscript entry.

<sup>409</sup> This account is illustrated by part of a series of maps from Francis Rose's folder marked Kent Flora Maps; the distribution dots appear incomplete and the map may be mis-labelled. In addition, a hectad map is supplied for this transcript based on the manuscript's marginal noting of groups of hectad numbers.



1945-55. Rhode Common. Perry Wood, Selling, 1959 **MNE**. 16 Mincing Wood, 1959. Church Wood, n[ea]r Rough Common, 1954. Thornden Wood n[ea]r Reservoir, REW. Thornden Wood N of Blaxland F[ar]m. Bigberry Wood. Denstead Wood, forming heathland. Old Park, Canterbury. Oldridge Wood. Trenley Park Wood. Clowes Wood, bet[ween] f[ar]m and R[ai]l[wa]y RGW. Tyler Hill, REW. E. Blean Wood RGW.

4) Waste ground by Richborough castle 19846 **MNE**. Scrubland n[ea]r Little Wenderton, Wingham, 1961, Miss B. Nash.

5) Cudham, F.A. Swain.

6) 57 Darenth Wood. Shorne Ridgeway. Court Wood, Shorne, rare, 1958. 66 Bank by A.2, N. of Cobham. Holly Hill, Birling, on Blackheath Beds outlier.

7) 86 Heath S. of Keycol, Newington, 1958, on Thanet Sand. 86 Heath NW of Dannaway, Newington, on Thanet Sand; 86 E. of Dannaway. Kings Wood, SE of Challock, Centre and W, ES. 95 Longbeach Wood, W. and E. 94 n[ea]r Frittenfield, Westwell.

8) On Pliocene NE of Hastingleigh, ES. Whitehill Wood on Pliocene? West Wood, Stowting, on Pliocene Beds. Ewell Minnis, Mr. Baker. Chalk-heath, S.W. of Ottybottom, SW of Kingsdown, 1955. Free Down 1955-62 **MNE**. Pliocene, Covert Wood, 1958, Miss DACL. Abund[ant] in Wood on Pliocenes, W. of Stone Street, Waddenhall, 1961 **MNE**. Up[pe]r Hardres Wood (plateau on Pliocene) 1961.

10) Hosey Common. Crockham Hill Common. Brasted Chart. Toys Hill. Scords Wood. Hanging Bank, Ide Hill. Whitley Scrubs, Sundridge and Chevening. Roadsides and chert pits N of Bayleys Hill. Knole Park. Fawke Common. Bitchet Common. Seal Chart. Broadhoath Wood. Oldbury Hill. Ightham Common.

11) (Folkestone Sand) Wrotham Heath **MNE**. Platt Woods. Addington Common. Ryarsh Roughetts. Larkfield Heath. Penenden Heath. Bearsted Golf Links. Heath W. of Hollingbourne. Warren Wood, Leeds. (Hythe Beds) Comp Woods. Mereworth Woods. Oaken Wood, E. Malling. Ditton Common. Kings Wood, Langley **MNE**. Sandway Heath.

(Weald Clay) Widehurst Wood, S. of Marden. Hoads Wood, Bethersden, centre and S. 84 Dering Wood, 1962, ES.

12) Hothfield Common. Ashford Warren. Willesborough Lees. Gibbons Brook.

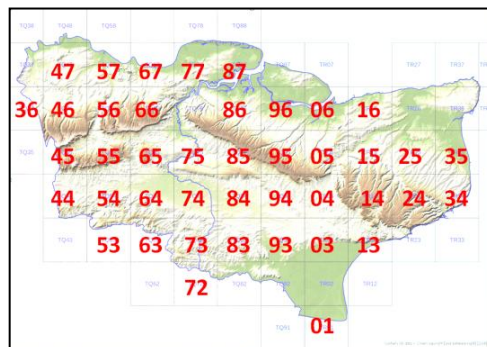
Weald clay: Bourne Wood, Orlestone. Wood S. of Shadoxhurst. Wood SW of Sugarloaf. Wood SE of Bromley Green.

13) Chiddingstone Hoath. Ashour Wood, Bidborough. Gill SW of Stone Cross, Ashurst CAS. Rusthall Common. Tunbridge Wells Common. Fishers Castle Rocks, Tunbridge Wells. Somerhill Park, Tonbridge. Southborough Common **MNE**. Hungershall Rocks. Pembury Walks. Broke Wood, Southborough. Bayham Woods, Lamberhurst. E of Kippings Cross. Heath by Furnace Pond, Horsmonden, 1954 **MNE**. Wood W of Folly Hill, Colliers Green, '62 (T[unbridge] W[ells] S[and]). Old Park Wood. Kilndown Wood. Chingley Wood. Combwell Wood **MNE**. Bedgebury Pinetum. Bedgebury Forest. Goudhurst. Angley Wood. Sissinghurst Park Wood. Brewers Wood. Hocker Edge Wood; Chittenden Wood **MNE**; Roundshill Park, Cranbrook. Causton Wood. Rogers Wood, Biddenden. Wood E of Rock Farm, 2m. S. of Staplehurst.

14) Robins Wood, Cranbrook. The Brogues. Sandpit Wood, Biddenden. Knock Wood and Heath, Tenterden. 72 Hurst Wood, Sandhurst. [unrecorded in Oxney]

15) Dungeness, 2 patches each 2' dia[eter], n[ea]r old School, 1958, E. Scott.

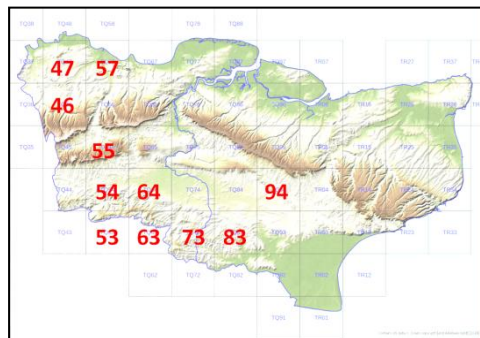
16) Sandling Park, 1958.



## Erica L.

**E. tetralix** L.<sup>410</sup> Cross-leaved Heath.  
15, 16. N. 11/52

Native. Wet-heaths, valley bogs; locally abundant, but generally rare, and absent from wide areas, including all of N.E. Kent, the chalk districts 5) -9) and the marsh districts 2), 4) and 15). This species must have been much commoner on the Folkestone Sand before most of the heaths were enclosed and cultivated. Its main centres now are the heaths on the Blackheath Beds in 1) at Hothfield Common in 12), and in the large woods of the HighWeald between Tunbridge Wells and



<sup>410</sup> Dot map found with Francis Rose-related papers, but may not have been intended for the Flora.

Biddenden in 13); 20 localities are still known.

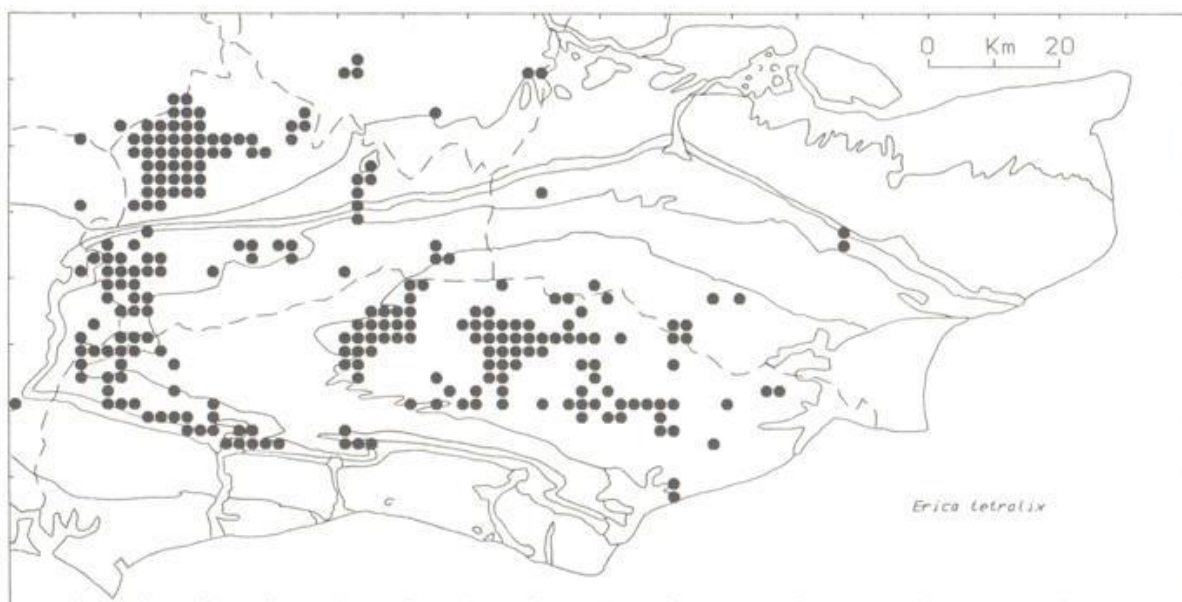
1<sup>st</sup> record, 1777: Ospringe, E. Jacob, *Pl. Fav.*, p.34.

1) 46 Keston Common 417642, on wet-heath by the bog; Cooper; 1954! **MNE**. 46 Hayes Common, D.McC. 46 Holwood Park, 1954. 46 Petts Wood, 1954. 47 Chislehurst Common, J.S. Mill (1946!) **MNE**. [Blackheath, Cooper, Fl. Met.] 46 St Pauls Cray Common, 1949. 57 Joydens Wood, 1948; 1955, PCH **MNE**.

[3] Unrecorded from the Blean district and almost certainly absent, though it would be expected to occur.]

[7] JuddsWood, S.W. of Ospringe, 1777, E. Jacob, *Pl. Fav.*, p.34.]

10) Heathy Wood bordering a pond on 55 Ightham Common, near Crown Point, Miss Worship; 1958! **MNE**. Whitley Forest, EGP.



[11] Penenden Heath, FGEK.]

12) Hothfield Common, J.S. Mill; 1958, locally dominant in wet-heaths here! **MNE**.

13) [Tunbridge Wells, Miss Anderson.] 53 [Hawkenbury Bog, J.R.W. (1949!) destroyed, c1990 CAS.] Wet Heath, Pembury Woods, 1949-52. 63 Chingley Wood; 63 Kilndown Wood; 73 E side Combwell Wood **MNE**; 73 Bedgebury Forest, Louisa Lake Bog; 73 Bedgebury Pinetum, Goudhurst, **MNE**. 73 Angley Wood, **MNE**. 83 Chittenden Wood, Cranbrook, 1948-58. 83 Causton Wood, 83 Biddenden.

[16] Shornecliffe Camp, G. Walton.]

**E. cinerea** L. Bell Heather. 15, 16. N. 18/52

Native. Dry heaths, dry heathy rides and banks in woods on sandy and gravelly soils; locally common on the heaths of the Eocene Beds in 1), the Greensand of 10) and 11), and on the heathy plateau woods of the High Weald in 13); extremely rare elsewhere, and absent from N.E. Kent, and the chalk and marsh districts.

1<sup>st</sup> record, 1777: Charing Heath, E. Jacob, *Pl. Fav.*, p.34 (still there in 1948!).

1) 46 Keston Common. 46 Hayes Common. 47 Chislehurst Common. 57 Joydens Wood. 57 Dartford Heath, 1952, H.M.P.; 1960! **MNE**; 1954 GMB. 56 Farningham Wood.

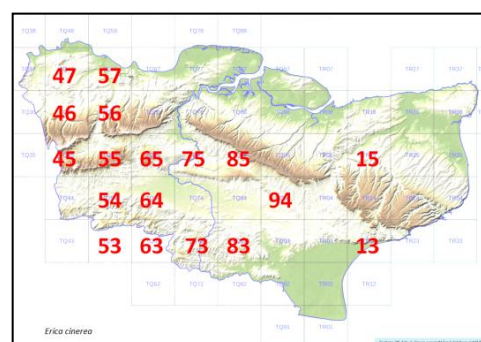
3) 15.

10) 45 Crockham Hill Common. 45 Brasted Chart, Toys Hill, 1962. 45 Whitley Scrubs, 1950 **MNE**. 55 Seal Chart. Ightham Common. Oldbury Hill.

11) 65 Valley Wood, Wrotham Heath **MNE**. 65 Woods E. of Platt. 65 Comp Woods. 65 Mereworth Woods. 75 Oaken Wood, Barming, **MNE**; and 75 E. Malling. 75 Ditton Common. 85 Heath by A.20, W. of Hollingbourne, 1942-58. 85 Kings Wood, Langley.

12) 04 R[ai][wa]y bank Ashford Warren '44—'60 (absent on Hothfield Common). 94 Charing Heath, E. Jacob, 1777; still a little in the churchyard as a relict, 1948!

13) 53 Tunbridge Wells Common. 73 Old Park Wood; 73 Combwell Wood; 63 Kilndown Wood; 73 Bedgebury Pinetum; 73 Bedgebury Forest, Goudhurst; 73 Angley Wood **MNE**; 83 Chittenden Wood, Cranbrook. 83 The



Brogues, Biddenden. 83 Sandpit Wood, Biddenden. 83 Standen Wood, Benenden (T[unbridge] W[ells] S[and]) 1960, **MNE**.

**14)** 73 Wood ¼ m W. of Flimwell, 1960 **MNE**.

**16)** Kiln Heath, Sandling Park, 1958 **MNE**.

‡ *E. vagans* L.<sup>411</sup>

Cornish Heath.

H.

*Vaccinium* L.

[*V. oxycoccus* L.<sup>412</sup>

Cranberry.

Extinct, if indeed really found.

Reported at Oldborough (?Oldbury Hill) by Mrs. Benson and ... ~~Tunbridge Wells~~ by Wollaston, teste Fl. Kent, but I suspect that the first is a mistake for *Vaccinium myrtillus* (though Mrs Benson records this there also) and the second due to some slip of the pen. There is no confirmation of the occurrence of this species in Kent. It occurred formerly in Ashdown Forest, E. Sussex, and still occurs in valley bogs on the Folkestone Sand of W. Surrey (Thursley) and of W. Sussex (Hurston Warren and Parham Bog).]

*V. myrtillus* L.

Bilberry

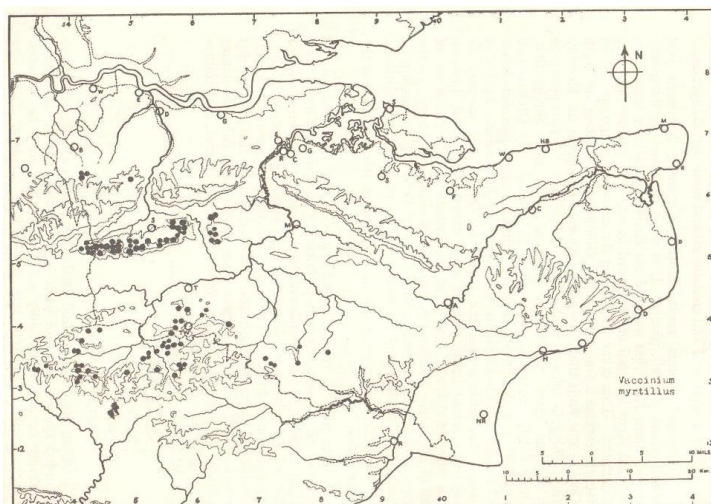
15, 16

N<sup>413</sup>

10/51

Native. Calcifuge, scrubby Pine-birch heaths, dry heathy oakwoods and banks, on podsolic soils on sand and gravel strata; generally rare, and almost absent from East Kent, but common and locally very abundant on the

Lower Greensand Plateau Woods on Folkestone Sand and Hythe Beds chert "head" soils in 10) and 11) as far east as Mereworth Woods and Wrotham Heath (formerly further east but now extinct); locally frequent in the sandy woods of the High Weald from Tunbridge Wells to S.E. of Cranbrook; very local about Keston and Chelsfield in 1). Otherwise absent now, though formerly it occurred further east, both in the Blean, on the Pliocene Beds of the Downs plateau, and on the Greensand. The sharp eastern limit may have some climatic origin; it is very rare in Sussex, east of Ashdown Forest, Flimwell, and Dallington, common on the High Weald of Sussex to the west, and on



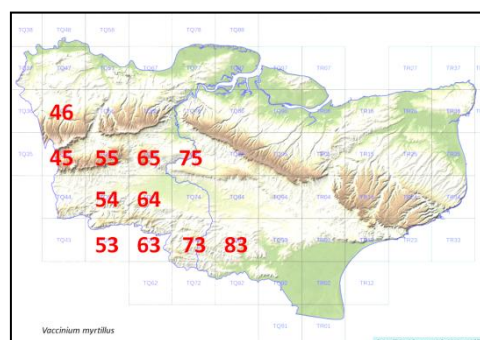
L[owe]r Greensand in W. Sussex and in Surrey, very rare in Essex, rare in Pas de Calais.

1<sup>st</sup> record, 1829: Stowting, Mr. W. Fagg in C.P.S.K., p.24.

**1)** 46 Keston Common, E. de C. (1954, **MNE** frequent and locally abundant in heathy Pine and birch woods! 417642). 46 Holwood Park, 1954, **MNE**. 46 Hayes Common, W.W.R.; 1953, F Swain. 46 Wood at Well Hill Chelsfield, on Blackheath Beds, J.B.M., 1947; (1954!), **MNE**.

**10)** 45 Crockham Hill Common. 45 Goodley Stock. 45 Hosey Comon. 45 Brasted Chart. 45 Toys Hill **MNE**. 45 Scords Wood, l[ocally] d[ominant] above on plateau **MNE**. 45/55 Whitley Scrubs **MNE**. 45 R[oa]dside S. of Sundridge. 55 Bayleys Hill, on plateau. 55 S. of Kippington, Sevenoaks. 55 Fawke Common. 55 Bitchet Common. 55 Seal Chart. 55 Oldbury Hill. 55 Ightham Common **MNE**. 55 Lane SW of Ightham.

**11)** 65 Wrotham Heath (Valley Wood) **MNE**. 65 Platt Woods. 65 Comp Woods, S.W. part, abundant. [75] "Malling Woods" Oaken Wood, Barming, E. Bartlett, 1887 **MNE**; 1969, E. Philp. 54 Hurst Wood, Tunbridge Wells 1954 **MNE**. 54 Southborough Common, **MNE**. 54 Broke Wood, Southborough, 1952. 54 Fishers Castle Rocks, 1948. 53 Hungershall Rocks, 1949. 53 Rusthall Rocks, 1949. 64 Pembury Woods, 1949. 64 Quarry W. of A.21, N. of Pembury. 64 S. of Greggs Wood,



<sup>411</sup> Given in check-list, no manuscript account.

<sup>412</sup> In manuscript given as *Oxycoccus palustris* Pers.

<sup>413</sup> Map taken from Rose, F. (1955) The new Flora of Kent. *The South-Eastern Naturalist and Antiquary* 60: 9-19.



Pembury **MNE**. 53 T[unbridge] Wells Common, 1955- only one patch KEB. Sandhole, on r[oa]dbank, NE of. 64 Kippings Cross, 1946 **MNE**. 73 Bedgebury Forest (centre and SW), **MNE**. 73 Bedgebury Pinetum. 73 W. edge Combwell Wood, rare **MNE**. 73 Angley Wood, rare, to 1960 **MNE**. 83 Chittenden Wood, by ride n[ea]r S. end, 1951, very local (vc.15.).

**14)** 73 E. Robins Wood, Cranbrook, in oakwood on side of deep gill, 1951-62 **MNE** (v.c.15.).

## PYROLACEAE

### *Pyrola* L.

**P. minor** L. Common Wintergreen.<sup>414</sup> 15, 16. N. 2[3]/51

Native. Woodland on acid humus soils; very rare in Kent. Very rare in Sussex, rare in Surrey, unrecorded in Essex, v[ery] r[are] in Pas de Calais.

1<sup>st</sup> record, 1839: Nackington, W. Wood, F.G.E.K., near Crundale, P.M.H. and W.H.P.

**1)** In five stations in a wood [Holwood Park] at Keston, A.D. Webster 1893 (as *P. media*, probably this.).

**[8)** Wood ...(between)...[sic] Nackington (and) Hardres, W. Wood, F.G.E.K. (probably Whitehill Wood, but no recent confirmation). (This record is likely to be correct, as W. Wood reports *P. rotundifolia* separately elsewhere, at Petham); and there are specimens from “near Canterbury” in Hb. Borrer **K** collected by W.W.R.]

**10)** Old chert pit in pine wood, Brasted Chart, 1953-62 **MNE** 1982! A patch of about three square feet, Sevenoaks Forest. 1954 – 20 infl[orescences]; 1955 – 31 infl[orescences]; 1956 – 53 infl[orescences]; 1957 -; 1958-.

**11)** Bank by track, on acid humus over Folkestone Sand, in heathy woodland under chestnut coppice, Valley Wood, Wrotham Heath, 1944; 1961 **MNE** a patch of about a square yard. Between Loose and Coxheath, 1906, '07 Rev. Gardner Waterman **MNE**; = E. Farleigh, Elgar 1911 **MNE**; not yet refound by me.

(Reported from **7)** near Eastwell Park, and from **8)** Plantation near Wye Racecourse, by W.R. Jeffrey; but this recorder does not mention *P. rotundifolia* which was formerly found in the latter locality, so these records are probably errors for *P. rotundifolia*, though there is no reason why *P. minor* should not occur at Wye, as it does in acid humus soils in Beechwoods in the Chilterns and the Cotswolds.)

**P. rotundifolia** L. Round-Jeaved Wintergreen. 15, [16]. N. 14/51 [7/51]

Native, scrub and open woodland on chalk and Gault Clay; calcicole; rare, but widely scattered on the chalk and Gault of E. Kent, in at least 14 recorded localities, in six of which it certainly still occurs, and in some of which it is plentiful over a small area. Very rare in Surrey, Sussex and Essex (one locality each); abundant in dune slacks, rare in chalk scrub in Pas de Calais.

1<sup>st</sup> record, 1836: Mid and S. Kent, G.E. Smith, N.B.G., p.74.

**[1)** Joyden's Wood, Bexley, Beeby. Probably extinct here.]

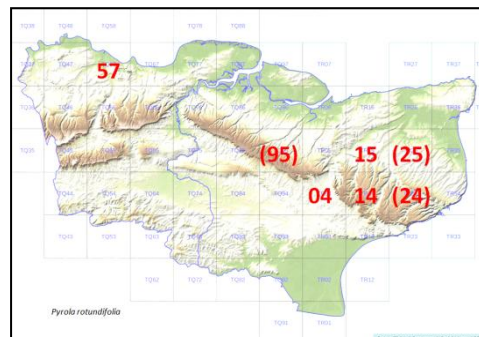
**6)** 57 Great Chalk pit, Horns Cross, Mrs. A.G. Side, 1962; 1962! **MNE**.

**7)** 95 Near Milsted, G.E. Smith (in Hb. Borrer) **K**.

**8)** Old records: [ [25] Ileden Wood, Kingston, T.H.M. Bartlett, F.G.E.K. 24 Stafflands Wood, Sibertswold, 1888, 1889 C.J. Plumptre.] [15] Wood at Petham, W. Wood, F.G.E.K. [Wood between Lyminge and Elham, 1900, SE Chandler.] [14] Coombe Wood, Stowting, G.E. Smith F.G.E.K.; (Stowting, J.W. Andrews). [04] Copse near Coombe Farm, Hastingleigh, F.J.H., 1894. [04] Long Plantation, Olantigh Park, Wye, Prof. Percival; 1922, 1928, G. Richardson.]

Modern records: 15 Larkey Valley Wood, Thanington, Miss Spillett (1956!) **MNE**. 14 Yocketts Bank, Waltham, Mrs. Bentley; abundant among *Brachypodium pinnatum* 1947-62! **MNE**. 14 Copse N. of Maxted Street, Elmsted, Miss D.A.C. Long (1954!) **MNE**. 04 Wood border 093 472 N. of Hazel Street, 1½ miles N. of Hastingleigh, W.H. Pearsall; 1956! **MNE**. 14 Clavertye Wood, Elham, in grassy glade, Solley; Miss B. Nash, 165453.

**12)** 04 [on Gault under beech, Cadmans Wood, SDE of Brook, Dr E. Scott; extinct now.] On Gault in coppice, Nackholt Wood, E. of Hinxhill CNP (1952!) **MNE**.



## MONOTROPACEAE

<sup>414</sup> Given in the manuscript as Lesser Wintergreen.

**Monotropia L.****M. hypopitys L.**<sup>415</sup>

Yellow Bird's-nest

15, 16.

N.

Native. Woodlands, mostly of beech or conifers, under a heavy canopy; mostly on the chalk, where it is not uncommon; very rare elsewhere. A total saprophyte, devoid of chlorophyll. Locally frequent in Surrey and Sussex, very rare in Essex, rare in Pas de Calais.

1<sup>st</sup> record, (aggregate) 1746: Wood n[ea]r Maidstone, Mr. Jarvis, Blackstone, Specimen Botanicum, p.39.

3) [Trenley Wood, Fordwich, Mitchinson.] 75 Church Wood, Blean, 1 plant, RGW.

5) Wood W. of Shoreham, 1946. 46 Darwins Bank, Downe, 1946. 46 E of Holwood, P. Hall. 45 beechwood E of Chevening Park, 1937. 46 Cuckoo Wood, Downe, W.C.R.W. 46 Holwood Park, WCRW. 46 W of Farnborough, WCWR; PCH. 46 Rushmore Hill, WCRW.

6) 55 Beechwood E. of Otford, 1939. 66 Woods n[ea]r Cobham Pamplin. Stansted, tall form. 66 Beech wood E. of Buckland, W. of Snodland, 1946. 56 E. of Shoreham, E. Brown. 66 Horseholders Wood, Halling, H.M.P., 1958. Upper Halling Hanger, 1951, D Hamblen.

7) 75 Detling, Beechwood, 7758, H.M.P. Rainham 813643 Park Wood, 3 infl[orescences] 1956, O. Davis. 94 Beechwood, Westwell, 1946, E. Scott. 95 Torry Hill, Frinsted, T. Tynan, 1954. 96 Sandbanks Wood, Ospringe, 1955. (Harrietsham, H. Lamb.) (Walderslade, J. Hepworth.)

8) Rubery Down, 1951, DMCC. Siberts Wood, Miss Hibbard, 1948. [Fir Wood, Free Down, Ringwuld, FJH.] [Wood, Patricxbourne, W. Wood, FGK.] Womenswold, 1945. Under beeches, Chilham, RGW. 24 Beech Wood E. of Denton, Miss D.A.C. Long, 1949. Bourne Park, 1939, BJB. 04 Cuckolds coomb, SE of Wye, PR Bell. Eythorne, Miss Anderson. [Beechwoods, Wye Downs, W.R. Jeffrey.] Coombe Wood, Stowting, GE Smith. [Covert Wood, THM Bartlett, FGK.] [Woods S. of Chilham, ESM.]

11) Ryarsh Wood, 1942. [66 lghtham. EMH, 1921 Ben Harrison. Aylesford, Miss Wickham.]

12) Nackholt Wood, E. of Hinxhill, 1952. [94 Stowting, among Alders and Ashes, W.J.Hooker, N.B.G.]

This taxon has been divided into two species<sup>416</sup>: *M. hypopitys* L. s.s. with the inner faces of the petals, filaments, style and sometimes the ovary stiffly hairy, a dense-flowered inflorescence, and  $2n=48$ , and *M. hypophegea* Wallr., with the petals, filaments, ovary and style wholly glabrous, a laxer fewer-flowered inflorescence and  $2n=16$ . *M. hypophegea* appears to be the commoner species in Kent as elsewhere in Britain. Records for the segregates follow.

**M. hypopitys L. ssp. hypopitys**

Yellow Bird's-nest.

N.

(pubescent with stiff hairs on style, filaments and inside of petals.)

6) Beechwood between St Michaels School and Kemsing, 546595, PCH. 66 Buckland! H. Elgar, 1904 **MNE**, 672637, E of, 1946 **MNE**.

7) Beechwoods W. of Westwell, Miss E. Milward, 1962; 1962, abund[ant]! 983481. 86 Wood above Queen Down Warren, 830631, T. Tynan and F.R., 1954 **MNE**.

8) 25 lleden Wood, Kingston, 1950, **MNE**. 24 Wood on chalk, S. of Chilton, Alkham, 280430, T. Miller, 1960.

**M. hypopitys L. ssp. hypophegea (Wallr.) Holmboe**

N. (glabrous)

5) 46 Beechwood (The Larches) W. of Farnborough, PCH, 434636. 45 Chevening Park, Rev. H.L. [?] Denner, 1845 **MNE**; 1937! Beech wood by Morants Court Hill pit, 1956, PCH, 501590.

6) 66 Wingate Wood, Halling, PCH, 696656.

7) 94 Beech hanger W. of Westwell, c.10 spikes, 1962, Miss E. Millward; vidi sp. 1962! **MNE** c.983481.

8) 25 SE of Nonington, 266512, 1945 **MNE**; 1954. 15 SW of Bishopsbourne, 179517, 1939, B.J. Brooke **MNE**. 24 S.W. of Barfreton, PHC, 1955 **MNE**, 260500. 24 SW corner, Waldershare Park, Eythorne, 1957 **MNE**; 1960 B Nash, 275476. 35 Tilmanstone Wood, 1960, Miss B. Nash, 305515.

11) n[ea]r West Malling, F. James, 1893 **MNE**.

**PRIMULACEAE****Primula L.****P. vulgaris Huds.**

Primrose.

15, 16.

N.

46/51

<sup>415</sup> The manuscript refers to separate species below aggregate level, viz. *M. hypopitys* L. s.s. and *M. hypophegea*. The check-list is followed here in the transcript, by giving these at subspecific level instead.

<sup>416</sup> Since regarded as subspecies – see preceding footnote.



Native. Woodlands, very common except under a closed beech canopy or on acid or very light soils; open scrub in sheltered places on the chalk, locally common; hedgebanks, frequent in the Weald and on the chalk. Unrecorded from district 15) (Romney Marsh); 4) (Lower Stour Marshes); 9) (Thanet) (except as a garden escape); very rare in the eastern part of the Hoo peninsula and only known in one locality in Sheppey (Warden). This species flourishes best in open woodland on heavy soils, particularly in coppice with oak standards, and shows its greatest flower production in the second spring after coppicing has occurred. It flourishes also in open grassy scrubland on chalk where grazing is light or absent. In the southern part of the High Weald about Tenterden and Oxney it flourishes even on hedgebanks relatively exposed to full light intensity, possibly due to a combination of a moisture-retentive loam derived from the Wadhurst Clay and a humid local climate. It has diminished near the suburbs of London but still persists in many places in the suburban district 1). Generally common in Surrey, Sussex and Essex., rare and local in Pas de Calais.

1<sup>st</sup> record, 1632: Faversham, Johnson, *Descriptio*, p.36.

1) Hayes, DMcC. Crofton Wood, WCR Watson. Abbey Wood, 1954, GA Matthews, Spring Park Wood, 1916, Hb, Davis **MNE**. Farningham Wood PCH.

2) [Ash copse, Warden, c.1947, Mrs Bryson, teste O. Davis.] Damp copse E. of Fenn Street, St Mary Hoo. Hawes Wood, Newington.

3) Woods N. of Dunkirk, 1946. Trenley Park Wood. Oldridge Wood. Biberry Wood. Church Wood, Harbledown end. 085575 Fishpond Wood. W. Blean Wood. Thornden Wood. Marley pits Hoath. Shelving W[oo]d, Hoath. Pine Wood / Fir Downs / Jacobs Close, Littlebourne.

5) Darwins Bank, Downe, v[ery] a[bundant] 1962. Rushmore Hill, Halstead. Downs by Hogtrough Hill, Brasted. Above Polhill tunnel. Andrews Wood, S of Badgers Mount PCH. Pilots Wood PCH. The Nower, Brasted, 57 RAC.

6) 57 Darenth Wood, N.W. edge, on chalk, 1947; 1955, PCH. 66 Cobhambury Woods, 61, a[bundant], HAS. 56 Horton Wood, a[bundant], 575644, 1961, H.M.P. 56 Downs E. of Shoreham. 56 Preston Hill. 66 Wrotham Water Downs. 66 Trottiscliffe Downs. 66 Scrub, Luddesdown, 1947 **MNE**. 66 Scrub above Halling Warren PCH. 66 Wingate Wood, Halling PCH.

6)T) 77 Great Chattenden Wood, Cliffe. 77 Northward Hill, High Halstow.

7) Chalk scrub: 76 Wouldham Downs; 76 Burham Downs; 75 Boxley Warren **MNE**; 76 Bluebell Hill. 86 Bredhurst Hurst. 86 Kemsley Street, Bredhurst.

8) Watertower Wood / Pitts Wood / Frights Wood, Adisham, G. Alcock. Gorsley Wood. Whitehill Wood. Upper Hardres Wood. Fleet Wood, Lydden. Lydden Hill. Sladden Wood, Alkham. Lockering Wood, Alkham.

9) Westerham Wood (82!). Copse on Gault by R[ai]l[wa]y N. of Brasted, '62. Scords Wood on ragstone. One Tree Hill.

11)G) Ryarsh Wood. Snarkhurst Wood, Hollingbourne. Park Wood, Boxley, 1956 **MNE**. Horish Wood, Detling. Skeet Hill, Plaxtol, abundant. Boot Wood, Plaxtol. Swanton Valley, Mereworth Woods. Oaken Wood, E. Malling, v[ery] local. N.Pole, Teston **MNE**. Warren Wood, E. Malling.

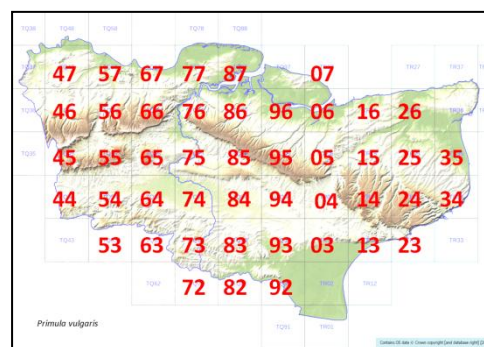
W) R[ai]l[wa]y Hildenborough, 563482, CAS. Plantation, Hildenborough, 1961, 565487, H.N.P. Shipbourne Wood. Cold Blow.; Clear Hedges; Point Wood; Kiln Wood; Claypits W[oo]d; Peacock W[oo]d; Tinley Lodge Wood, Shipbourne. Hobbs Wood, S. of Marden Thorne. Dunks Green Wood 609525 C.S. Chettoe.

12) By the springs, Westwell. Bourne Wood, Orlestone. Captains Wood, Mersham. Bliby Wood, Mersham. Court Lodge, Mersham. Barrack Wood, Mersham. Quarrington, Mersham. Nackholt Wood, Hinxhill.

13) Shernden Wood. Judd Wood, Bidborough. A[bundant], Wood W.of Capel Ch[urch], C.S. Chettoe. Gill SW of Stone Cross, Ashurst, CAS. R[ai]l[wa]y W of Tun[bridge] Wells Sta[tion] CAS. Combwell Wood Goudhurst '79. Cryalls / Castle Hill / Pivot Hill, Brenchley.

14) Robins Wood, Cranbrook. Attwaters Gill, Cranbrook. Risden Wood/ Clegg Wood/ Alderden Wood/ Hurst Wood, Sandhurst. Gill S. of Tenterden. Owley, Wittersham. College Wood, Wittersham. Cuckoo Wood, Wittersham. Moons Green, Wittersham. Hedgebanks at Stone, Oxney. Great Heron Wood / Silcocks Wood, Kenardington, O.S.C. Reed Wood, Iden Green.

16) Postling Wents, on Gault. Form with 10 cor[olla] lobes, 10 calyx teeth, 8 styles Postling Wents 1956 Mrs Walton. Lympe Park Wood.



Native. Chalk grassland and open scrub, especially in less exposed places, on deeper soils, and on the marly lower chalk, locally common and characteristic; pastures on other basic soils, especially on loams and clays derived from ragstone and Gault, occasional; very rare in patches on clay in the Weald; almost absent from Kent N. of the chalk and in Thanet. The Cowslip is not nearly as common in pastures on basic clays in Kent as it is in parts of the Midlands and western England.

The cowslip has decreased near large towns and is not now to be found anywhere north of the chalk except at Stone Marshes. It has even disappeared from the northern fringes of the chalk country between Dartford and Rochester, about Sittingbourne and Faversham, and in Thanet (except for a few plants at Greenhithe); common on chalk, rare elsewhere, in Surrey and Sussex; local in Essex; common in Pas de Calais.

1<sup>st</sup> record, uncertain: Johnson's "Primula veris, sive Primula sylvarum, Lob." In woods at Faversham in 1632 is probably *P. vulgaris*.

1) (Bexley square) '56.

2) 57 Stone Marshes, 558757, 1955, H.M.P. No other recent records.

3) no recent records.

5) Scrub, Cuckoo wood, Downe, 1948. Wood S. of Cudham, 1958 **MNE**. Darwins Bank, Downe, v[ery] a[bundant] 1962. Downs N. of Chevening, 1943, J.R.W. Rushmore Hill, Halstead. PCH, FR.

6) White Hill, E of Shoreham, PCH. S of Rifle Range, Shoreham, 1948 **MNE**. Preston Hill, PCH. South end, Maplescombe Valley 1958 RA Clarke. Cricket field of HMS Worcester, 590752, Greenhithe, a few pl[ants], 1962, Miss JK McL. Field outside Ingram Wood, Stansted, 1959. Kemsing Downs. Wrotham Downs. Trosley Downs, in pit. Wrotham Water Downs. Snodland Downs. Wingate Wood, Halling.

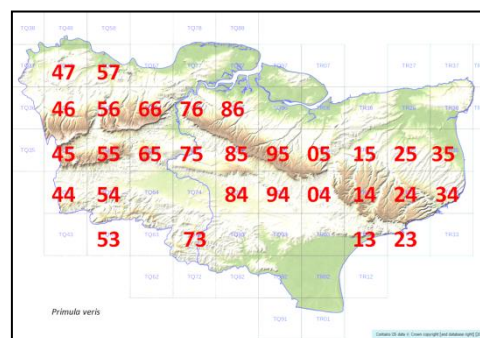
7) Burham Downs. Boarley Warren **MNE**. above Boxley, '62. Pilgrim View 1993. Stck Wood, Frinsted '50 **MNE**. Queen Down Warren. Hollingbourne Hill 45 **MNE**. Downs at Wrinsted Court, Timbolds Hill. Downs, Broad Street, 834569, '48, DMCC. S. of Madams Court. By Park Wood, Molash. Wood E of Whitehill Ospringe, 1946 **MNE**. [not 96, 06, 16, 26, 35.]

8) Wye Crown Downs. Brook Downs. Crundale Downs. 14 Clavertye Wood '58 **MNE** (23.9.1956, in flower.). 13 Downs NE of Coombe Wood, Etchinghill 1960 **MNE**. Down (1<sup>st</sup> spur) N. of Penn 1948 B. Welch.

10) 45 Pasture below Ide Hill, 1956 **MNE**. 55 Pasture SE of Brockhoul Mount, Everlands, Sundridge, 1960 **MNE**. On gault SE of Yaldham Manor, Kemsing, 1949, Mrs Warnett

11) 55 Pasture below Ightham Mote, Miss Warnett, 1949. 54 Hildenborough in pastures, Mrs Warnett. 84 Pasture N.E. of Greenhill Farm, Ulcombe, on loam over ragstone, 1955, **MNE**. 66 Banks about Coldrum Stone circle (gault), Trottiscliffe, abundant (gault). 65 Plaxtol, in pastures. 75 Aylesford Brickyards, on gault, 1918, Hb Davis **MNE**. 66 Birling Marshes, in alluvial meadow, 1951 **MNE**. Harrietsham Ch[urch] y[ar]d. Fairbourne Mill, Mrs B. Dodds. 54 R[ai]l[wa]y W of Hildenborough, 563 482, on imported chalk and ragstone CAS.

13) 53 R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion] CAS. 41 Pasture on Wadhurst Clay, by Scarletts Pond, Cowden, 1949, 1955 **MNE**. n[ea]r Cranbrook. N. of Stridewood, Chiddingstone, 1954, Mrs M. Mallinson.



**P. x polyantha** Miller (*P. vulgaris* x *P. veris*)<sup>417</sup> False Oxlip.

Scattered through the chalk country and elsewhere where the parents meet together.

6) Downs E. of Shoreham, 1948.

7) Wood near Pett Dane, Ospringe, 1946. Wood W of Otterden Place, 1960, G.L. Davidson ("flowers like large cowslips, but solitary, 1 to each peduncle").

8) Scrub on Downs, above Brook, 1955, **MNE**. 099444 copse by Hastingleigh Ch[urch], 1959, P. Furneaux. Wotton, 232464 and 234461, 1958, Mrs KDR. River, Mers. K.D. Rowlands, 1958 **MNE**.

11) Harrietsham Ch[urch] y[ar]d / Fairbourne Mill, 1962, Mrs B. Dodds. Snarkhurst Wood, Hollingborne, 825556, 1956, HMP.

13) R[ai]l[wa]y W. of Tun[bridge] Wells West Station, CAS. N. of Stridewood, Chiddingstone, 1954, Mrs M. Mallinson.

(The true Oxlip, *P. elatior* (L.) Schreb., does not occur in Kent. In England it is a plant of woods on chalky Boulder Clay in East Anglia, in Essex, Suffolk, Norfolk, Cambridgeshire, Hunts and Beds, with a restricted though definite area of distribution and within its area it is abundant and largely replaces *P. vulgaris* in the woodlands (see Miller Christy, J. Ecol., 192 ). It is the common woodland *Primula* of the Pas de Calais, though *P. vulgaris*

<sup>417</sup> In the manuscript given also as (= *P. x variabilis* Goupil).

occurs there locally too. *P. elatior* might have been expected in Kent in woodlands on moist calcareous clays or marls but it appears to be absent: all records appear to refer to *P. x variabilis* Goupil). Did it occur on basic clays (e.g. on the Gault and chalk marls) in the primaeval forest of pre-Neolithic times?

*P. elatior* appeared in a garden at Pembury apparently spontaneously during the war and spread from seed, teste FW Johns in litt. to R.S.R. Fitter, 1956; the identification was correct.

### Hottonia L.

**H. palustris** L.                      Water-Violet.                      15, 16.                      N.                      17/51

Native. Ponds and marsh ditches; still locally common on the eastern half of the Weald Clay, on Romney Marsh, and on the Gault about Ashford; now rare elsewhere, it appears to be extinct in N.W. Kent, and it is extremely rare now in N.E. Kent. Rare in the adjoining counties (now rare in Surrey, very local in Sussex, rare in Essex), in the Pas de Calais, locally common in the Flanders Plain, rare on the Channel coast. This is an extremely beautiful plant in full flower, with spikes of whorled pink star-shaped flowers rising from the water.

1<sup>st</sup> record, 1632: W. of Sandwich, Johnson, *Descriptio*, p.27.

[1] formerly in Ponds opposite Coldharbour Farm, S.E. of Mottingham, E of Chislehurst, A.H.W.D. Many old records about Dartford; Greenwich; Woolwich; and Bromley.]

[2] Faversham Decoy Ponds, E. Jacob, Pl. Fav.]

4) [Ham Ponds, 330554, 1913-21, G.L. Davidson.] 35 Dike, Worth Minnis, 1956, P.C. & J. Hall & F.R., **MNE**. [Reported formerly in Minster; Monkton; and Sarre Marshes, and in marshes at Sandwich Bay; Sholden; Hacklinge; Ickham; Ham; Deal 1850 MNE; Preston; Sandwich; see Fl. Kent, but there are no recent reports from any localities in NE Kent except at 35 Worth, though it has been searched for repeatedly and extensively.]

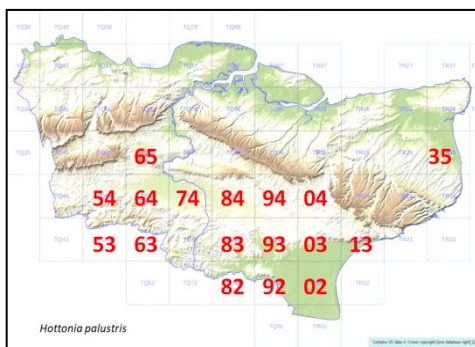
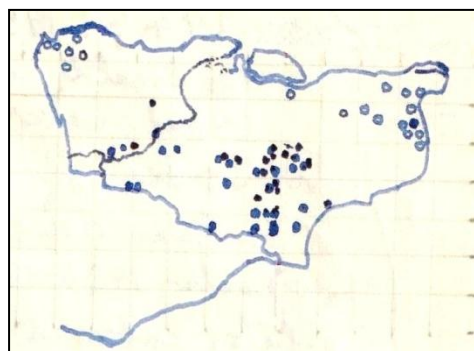
11) 64 Pond S of Ryarsh Wood, 1953. Pond, N. Frith Woods, Tonbridge, H.S. Vere-Hodge. 54 Pond at Upper Haysden, Keeble, 1946. 94 Ponds 1½ m S.W. of G[rea]t Chart, 965404, ES; and 963403 ES. 64 Gravel pit pond 682495 S. of Yalding, by railway, 1948; 1957, CAS. 74 Pond S. of Woolpack, 1½ m. S. of Yalding, 1954. 84 Pond S. of Railway, 1m E of Headcorn, 1944/62. 94, Ponds NE of Vitters Oak, 953407, 952408, Bethersden 1954. 84 Pond, Leighbridge, 2m.NW of Headcorn 1959-62 **MNE**. 74 Pond by Railway, 1m. ENE of Saplehurst. 94 Pond E of Winter F[ar]m, Bethersden 941405, ES. By R[ai]l[w]ay, Pond 1m W. of Sta[tion], Staplehurst, KEB. 83 Pond at Worsenden, Biddenden, 1954.

12) [Vauxhall Lakes, Canterbury, 1937, Miss E. Millward.] [¼m. SW of Canterbury West Sta[tion], 1936, Miss M.E.M.] 94 Pond on Gault by Hothfield Station, Elgar; E. Scott, 980460. 94 N. of Hothfield Common 975473 ES. 94 SW of Digges Court 970475, ES. 93, Pond at Spot House 973350, Warehorne, E. Scott. 93 Pond, 963387, Handcocks Farm, Shadoxhurst, 1946. 04 Shoddington, E of Westwell, 001465, ES. Pond, Ducklane, Shadoxhurst, 1949 LWW. 04 W of Kennington, 013458, ES. 04 Pond, Blackwall Farm, Willesborough, 038437, 1946. 94 W of Beaver Green 993413. 93 Scotts Pond, Kingsnorth, 986394, ES. 04 Nackholt, 057426, ES & FR, 1950-61, **MNE**. 93 Boldshaves, 923356, ES. 04 Mersham Park Lakes, 063407; and 067405, E.S. & F.R. 1960 **MNE**. 03 Pond, SE of Kingsnorth, 012387; and 020370. 93 pond ¼m W of Ch[urch], Shadoxhurst, 966373. 93 two ponds E of Stubbs Cross, Kingsnorth, 990387; 990390.

13) 54 Pond in N. part of Penshurst Park, Mrs. Warnett (1954!). 53/63 Dunorlan Lake, Tunbridge Wells, C. Stace & KEB, in both 53 and 63. 64 Furnace Pond, Horsmonden, 1899, J. Stirling **TLS**.

14) Pond, in clay pit, Oxney, ½m. E. of The Stocks, 1958, 922271, **MNE**. Pond, Beals F[ar]m, Redbrook Street, Woodchurch, 1960, H.W. Adams.

15) Dike S. of Ham Steet Canal Bridge, RGW. 82 Marsh dikes, S. of Eltham, Sandhurst Levels, 1954, abund[ant], 811265 **MNE**. Shirley Moor, 1943 **MNE**. Dikes ½ m. W. of Appledore Station, abund[ant] 1959, 969299. Dikes between Appledore Station and Kenardington Canal Bridge, 972302 abund[ant], 1959 **MNE**. Dike parallel to R[oyal] M[ilitary] Canal, Kenardington, 975310, 1959. 03 Ditch W. of Newchurch, 1954. [Dymchurch 1939, Hb. Glennie **BRIST**.] 13 Ditch SE of Burmarsh, 102318, L.J.M., 1957.



### Cyclamen L.

‡ **C. hederifolium** Aiton<sup>418</sup> Cyclamen. 15, [16]. D. since 1778. H.

Denizen. In woodlands, usually hornbeam coppice, in the S.E. part of the Weald; very rare.

1<sup>st</sup> record, 1778: West Farleigh, Hasted, *Hist. Kent*, vol.2, p.297.

See Fl. Kent (1899, p.232-3) for a full account of the history of this species in Kent. It might have been suspected as a possible native species but for its European distribution, which is entirely central and southern. It is probably a relic of eighteenth century landscape gardening.

11) West Farleigh, in woods, Hasted, *loc. cit.* Sown in a wood at Barming, E.M.A., in *Phytol.* N.S. VI, p.189.

14) 921348 in *Carpinus* coppice west of Woodchurch, 1955, C. Skinner (E. Scott & F.R., 1955! **MNE** a few plants). Alderden, Sandhurst, 1819, W. Ross, abundant in a wood; 1861, now rare, J.C. Melvill; 1943! 1952 **MNE**! not abundant now, only two plants seen. The locality is on the sloping side of a gill on Hastings Sand under *Carpinus*. Near Sandhurst, in woods on both sides of the main Hawkhurst-Newenden Road, 1841. E. Jenner and W.W. Reeves, in *Brit. Phaenogamous Botany*, by W. Baxter (with fig., vol. VI, (fig.505)). W.W.R. later informed F.J. Hanbury that the plant was abundant in the woods at Sandhurst, both white and pink flowered "By Sandhurst Green" 1834, Hb. Borrer **K**. (Probably in woods near here). Small Copse by Boxhurst Farm, S.E. of Sandhurst, Miss H. Turnbull; plentiful, 1947! **MNE**. In a wild garden, Newenden, 1962, CA Lister. Shrubberies and plantations about Hawkhurst, common and looking wild, J.C. Melvill; no recent records.

Also reported at Peasmarsh (1947!) and Northiam, Sussex, in woodland.

### **Lysimachia** L.

**L. nemorum** L. Yellow Pimpernel<sup>419</sup> 15, 16. N. 43/51

Native. Woodlands on soils of moderate to rich base-status and of wide range of water content; very common throughout all parts of Kent where old woodland exists; particularly common in coppice and in woodland rides. Unrecorded and probably absent from Grain, Sheppey, Thanet, and the alluvial marsh districts of the lower Thames and Swale in 2), the lower Stour in 4), and from 15) Romney Marsh. Rare on the chalk plateau between Dover and Sandwich, where few unplanted woods occur.

Common in the adjacent counties, local in Pas de Calais.

1<sup>st</sup> record, 1640: Ashford, etc., Parkinson, *Theatrum Botanicum*, p.559.

1) Abbey Wood, 1948, RAB. Damp carr, Keston Common. Hayes, DMCC. Holwood Park. Joydens Wood. Roundabout Wood. Crofton H[ea]th PCH. Crofton Heath PCH. Shooters Hill Woods 1954 GMB. Farningham Wood PCH; 82! Bexley, Orpington, W. Wickham 56.

3) Thornden Wood REW 1950. Clowes Wood (n[ea]r Hempshall Wood) REW 1950. Cane Wood, Tyler Hill, REW 1950. Fishpool Hill Wood L[itte]lbourne, REW 1950. Perry Wood Selling, REW 1950. Bigberry Wood. 085575 Fishponds Wood. Faversham 55, Whitstable 55, Chisle 58, Canterbury, Chilham

5) Pilots Wood, on c[lay] w[ith] f[lints], PCH. Wood W. of Shoreham on drift. PCH. 36 copse W of Highams Hill, 397612, PCH.

6) Swanscombe Wood. Darenth Wood. Great Crabbles Wood. High Wood, Shoreham PCH on c[lay] w[ith] f[lints]. Top of Preston Hill, PCH. Cobham, G[rea]t Wood 44 **MNE**. Beechy Lees Wood, Kemsing, PCH. Crest of Scarp woodland (Beech) Trottscliffe, 1961, HAS. Stonyfield Wood, Halling PCH.

Dartford, Gravesend, Higham

7) Stockbury, Burham 55, Doddington 55, Hollingbourne

8) Oak Coppice and Rides, West Wood, Stowting, 1953. Wingham 55, Wye, Elham, Alkham 55, Dover

10) Lower ...p[ar]t of Scords Wood, 1953. Westerham Wood 82! Westerham, Sevenoaks

11) Oaken Wood, Barming / E. Malling. Warren Wood, E. Malling. Kings Wood, Langley. Gault: Ryarsh Wood; Snarkhurst Wood; Langham Wood; Horish Wood. Millbay Wood. W. Malling, Maidstone, Headcorn, Marden

12) Hothfield, WoodCh[urch]

13) Gill SW of Stone Cross, Ashurst, CAS. Hurst Wood, Tunbridge Wells. M[oun]t Pleasant, Lamberhurst, '46 **MNE**. Bedgebury Forest (Roadside in Pinetum). Combwell Wood '79. Angley Wood. Brewers Wood, Cranbrook. Chittenden Wood. Edenbr[idge], Tonbr[idge], Pembury, Cranbrook, Lamberhurst. T[unbridge] Wella 55.

14) Tenterden, E Oxney 56/9, W Oxney, Hawkhurst S

16) Aldington 56, Hythe

Common in Surrey, Sussex, Essex; rather rare in the Pas de Calais.

**L. nummularia** L. Creeping Jenny. 15, 16. N. 40/51

<sup>418</sup> Given in manuscript with this name as an added alternative, the original being *C. neopolitanum* Ten. (*C. europaeum* auct). The vernacular is given as Sowbread

<sup>419</sup> Also given as Creeping Yellow Loosestrife.



Native. Damp woodland, especially in rides and on banks and in alder carrs, stream and ditch-banks, marshy meadows, fens and moist hedgebanks, usually in wetter habitats than *L. nemorum* and apparently more base-demanding, but it occurs sometimes in full sun, and is more drought-tolerant, teste C.T.W. Widespread but only locally common; plentiful generally in the Weald, and by many ditches in Romney Marsh. Unrecorded for Dungeness, the country between Gravesend and the Isle of Grain, Sheppey and Thanet. Frequent locally in Surrey, Sussex, Essex and Pas de Calais.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p.31.

1) Abbey Wood PCH. Holwood Park. Ravensbourne Estate, Keston '55 **MNE**. Keston. Hayes. Pickhurst Green, 1915, Hb Davis **MNE**. Joydens Wood, 1945. Hollows Wood, S.E. of Chelsfield, 1946.

W. Wick[ham] '56, Bexley, Orpington

2) Holborough Marshes. Burham Marshes. Burham, ..., Faversham '58

3) Streamside, Thornden Wood, 1945. NE Corner Trenley Park Wood, REW. Swalecliff brook, Carrots Wood, E of South Street REW.

Whitstable

4) n[ea]r Little Britton, Wingham Fen, 1945. Fen meadow, Hacklinge, 1945. Ham Ponds. Dike, Marshside, Chislet, L.W. Wilson. Grove Ferry, LWW. Fordwich Marshes, 1949. Preston Marshes, 1962, Miss DACL. Stodmarsh, RGW, REW. Minster Marshes, RGW.

Chislet '55, Ash '56, Sandwich, Wingham '58

5) Well Wood, W. Wickham, PCH. Downe Village Pond, FHB.

6) Swanscombe Wood, on clay. Darenth Wood PCH. Preston Hill plateau, PCH. Bush Valley PCH.

7) Park Wood, Molash. Kings Wood, Challock.

8) 24 By R[iver] Dour, Kearsney, 1958, Mrs KD Rowlands.

Stowting, Alkham '57

10) Darenth, copse S. of Church, 1944. Darenth Water Measows PCH. Sevenoaks tip, 1958, CAS. Meadow E. of Riverhead, 1944. 1m. E of Westerham in meadow, 1955. Westerham Wood PCH; 82! Ightham Mote 1942.

Westerham, Sevenoaks, Deptford....

11) Birling Marshes. Leybourne Marshes. Lunsford. Ryarsh Wood. Horish Wood. Snarkhurst Wood. Warren Wood, E. Malling. By Medway, Teston, 1942. Bearsted. Pond, The Quest, Harrietsham, '60 Mrs B Dodds. Hoads Common. Ditch N. of Collier Street. Pond 683493 E of Hale St[reet], CAS 1957. By R[iver] Beult, Headcorn S. of Ch[urch]. The Forest, 922430, Pluckley 1949, JEL & DMCC.

Cobham

(Birling), Maidstone, W Malling, Hollingbourne, Marden, Headcorn, Tonbr[idge], Edenbridge], Pembury

12) Hothfield Common. Willesborough Lees. Wet copse S.E. of Lenham. Gibbins Brook. Meadow below Chilham Mrs B 1960. Birchett Wood 992358, DMCC, 1952. Doddington, Canterbury, ....'55, Ashford, Hothfield

13) Gill SW of Stone Cross, Ashurst, CAS. Penshurst. Hayden Wood, Lamberhurst, JRW, 1936. Ditch S. of Lamberhurst Church, CAS, 684365. Bedgebury, by Roadside by Pinetum 1943. Boggy Wood SW of Pembury, 614395 PCH. Chittenden Wood, SE of Cranbrook.

T[unbridge] Wells, Lamberhurst, Cranbrook

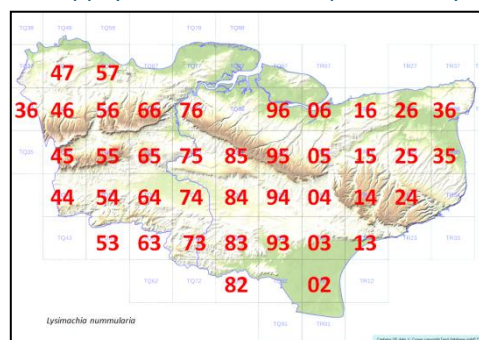
14) Oxney, RGW.

Tenterden

15) Ditch sides, Shirley Moor 1943. Brenzett. Ditches Appledore. Dikes, Bonnington; Ruckinge; Ham Street.

Romney '58/9, Woodch[urch] '56, Sandhurst E, Aldington, Hythe

Common in Surrey, Sussex, Essex; frequent in the Pas de Calais.



## **L. vulgaris** L.

Yellow Loosestrife.

15, 16.

N.

28/51

Native. Fens, fen-carr, wet woods, riversides, ditchbanks; not common generally, but widely distributed and locally common in the Low Weald and in the fens and marshes of district 4) (lower Stour); unrecorded, or now extinct, from the North Kent Marshes, the Hundred of Hoo, Grain, Sheppey, and the Swale marshes in 2); unrecorded for Thanet and for Romney Marsh, except Dungeness, Local and not common in Surrey and Sussex, rather rare in Essex, locally common near the coast and in the plains of Pas de Calais.

1<sup>st</sup> record, 1777: Stone Bridge, E Jacob, *Pl. Fav.*, p.65.

1) [extinct about Greenwich, Woolwich, Mottingham, etc] [Eden Park, Hb Davis, 1919 **MNE**.] Wet wood North Cray, by R[iver] Cray, Hb Sim; P.C.H., J.H., & F.R., 1954 **MNE**; FR & MB, 1955. Darrick Common, Farnborough, W.C.R. Watson. South edge of Petts Wood, 1954.

Bexley '55, Orp[ington]

2) [Extinct at Northfleet Brooks, where recorded by Pocock, Nat. Hist. Kent, 1809, p.199.] [Faversham, E. Jacob; Extinct.] Marshes S. of Snodland, in wet copse, 1945-56.

Cobham, Burham

3) 15 Church Wood, Blean, rare, RGW.

4) 35 Ham Fen, F.J.H.; 1958, plentiful! **MNE**. 35 Worth Minnis, 1946. 35 Hacklinge marshes **MNE** 1945. Ditch, NE corner Trenley Park Wood, REW 1950. N[ea]r Little Britton. 25 Wingham Fen, FGEK; 1945 **MNE**. 26 Preston



Marshes, 1947; 1960 Mrs Dodds. 26 Grove Ferry, Mrs Brickenden 1961. 26 Stodmarsh 1955 **MNE**.

Chislet, Wingham, Sandwich, Whitstable 55.

7) 06 Dry Gravel pit, Putt Wood, Ospringe, BJB, 1958 **MNE**; 1958!

Ospringe

10) 45 N Edge Crockham Hill Common, 1950, JD Lovis. 57 Ditch near River, ½m. S. of Darenth, 1944; 1957, H.M.P. 64 n[ea]r Medway 558706 S. of Yalding, 1953 **MNE**. Barming 1866 **MNE**; Maidstone 1881 **MNE**. 54 By R[iver] Eden, below Redleaf Park, 1950. Now rare by the Medway, formerly common: 75 Medway bank below E. Farleigh, 1944. 75 Medway above Teston Bridge 1942; now gone, 1959.

Westerham 58, W. Malling, Maidstone.

11) 74 Between Marden and Collier Street, JRW. Ditchside 1m. N. of Marden, 1954! **MNE**. 64 Hartlake Bridge, 1952. 64 Ditch E. of Medway, E. of Brambridges, 1952. 64 Ditches S. of Collier Street. Ditch E. of Collier Street ch[urch]. 54 Marshes below Tonbridge WWR, 1944! 74 East of Marden, 1946. 64 Ditch S. of Yalding 1946. 84 Headcorn, 1944.v Ditch S. of Beltring 674472, '57 CAS. 84 R[oa]dside ditch Leighbridge, Headcorn, 1962.

Headcorn, Marden, Pembury, Tonbr[idge]

12) 05 Godmersham, by R[iver] Stour ES. 63 NE of Goss Green, 015361. 05 Copse. Pope St. Farm, E.S. 04 W. of Cradle Bridge, Willesborough, ES. 03 SE of Kingsnorth, 019378, 022381, and 023385, E.S. Stour, Canterbury, RGW 1955.

Chilham 55, Canterbury 56, Bilsington

13) Roadside pond, Stone Cross, Ashurst, 1958. In Redleaf Park, Penshurst, 1947. Pond, Broadwater Lane, Tun[bridge] Wells, CAS. By R. Teise below Lamberhurst Church, JRW, 1941. Ashurst 58, Lamberhurst

14) Wet copse NW of Newenden village, 1954. Sandhurst. Great Heron Wood ES. Pond Boldshaves Woodchurch 923356 ES.

E. Oxney 1958, Tenterden, Newenden

15) Dungeness fen SE of Hamilton Farm, 1952. Ditch near Galloways, 1953. Shirley Moor, E.S. R[oyal] M[ilitary] C[anal], Kenardington Bridge, ES; 1959 **M NE**. Dyke, Ruckinge, Mrs M.J. Comyn.

Aldington, Woodchurch, Appledore 578/9, Dungeness

16) [recorded formerly near Folkestone by Ulyett.]

Very local in Surrey, locally frequent in Sussex, rare in Essex, not uncommon in the coastal fens of the Pas de Calais.

‡ **L. punctata** L.

Dotted Loosestrife.

[16.]

H.

(all var. *verticillata* in Kent, teste C. West)

Naturalised Alien.

10) 483540 Birchfield Wood, Sundridge, 1958, RA Clarke.

13) Roadside near Scott's Tower, Horsmonden, 1947 **MNE**. Wet ride in Wood, N. of Lamberhurst Quarter, 1947 **MNE**. Rough Field by Broadwater Lane, Tun[bridge] Wells, 1958, KEB.

**Trientalis** L.

‡ **T. borealis** Raf. <sup>420</sup>

[16.]

H.

(Ightham)

**Anagallis** L.

**A. tenella** (L.) L. <sup>421</sup>

Bog Pimpernel.

15, [16]

N.

8/51

Native. Calcareous fens, base-rich flushes in valley bogs; always among short vegetation of the *Parvocaricetum* type; now rare and very local, and almost confined to calcareous fens in districts 4), 12), and 16), to valley bogs on the Folkestone sand in 12), and to Dungeness in 15). Formerly widespread, and described as "rather common" in *Fl. Kent*, which work gives 28 localities, it is now known in only 12 localities. Now rare in Surrey, occasional in Sussex, very rare in Essex, locally common in the coastal dune slacks in Pas de Calais.

1<sup>st</sup> record, 1666: between Deptford and Lewisham, Merrett, Pinax, p.83.

[1] Formerly at: Lewisham; Chislehurst; Charlton; Keston Common; St Mary Cray Common; Bromley Hills.]

[2] Formerly at Northfleet Brooks; Faversham, Abbey Meadow; Luddenham Road.]

4) [Formerly at Birchington, Brooksend and from Minster to St Nicholas-at-Wade, in the Marshes; in Walmer Castle field and at Wingham and Preston.] Fen-meadow between Hacklinge and Ham Fen, 1945, **MNE**. Ham Ponds, FSEK; 331553, 1921, G L Davidson. Fen-meadow, Worth Minnis, 1950-56, **MNE**. Fen below Northbourne, 1946. Littlebourne marshes, Miss E. Day, c.1930; not seen, 1956.

[10] Formerly at Greatness moor, Sevenoaks, Rudge, **BM**: not refund.]

<sup>420</sup> Given in check-list, no manuscript account.

<sup>421</sup> Cited as *A. tenella* (L.) Murr. in the manuscript.

**12)** Hothfield Common, in base-rich flush in valley Bog V, (pH 6.7) W.R. Jeffrey; 1944-58! **MNE** [formerly at Willesborough Leas, C.P.S.K.]. Valley bog, Gibbons Brook, G. Walton; 1954! **MNE**. Abundant in calcareous spring-fens at Cuckolds coomb, Brook, 1945 **MNE**-55; and at Stowting, 1954 **MNE**.

**13)** In V.C.14 (Kent) at Hawkenbury Bog, J.R. Wallis, 1943; 1944-1959 **MNE**; 1954, C. Stace; 1969!

**15)** Dungeness, Hoppen Pits, G. Dowker, 1867; 1946, J.H.L.; rare in fen S.E. of Hamilton Farm, 1952!

**16)** Beachborough, C.P.S.K.= calcareous spring fen, The Lince, Etchinghill, 1946-58! **MNE**. Darnley Vale, E. of Sandgate, in calcareous flush, 1955, **MNE**. [formerly at Newington Moor CPSK; at the Undercliff, C.P.S.K.; and at the Warren, G. Walton.]

Now rare in Surrey and largely confined to the valley bogs of the Greensand and Bagshot Sand in the west; uncommon and local in Sussex, though plentiful in Ashdown Forest and locally elsewhere in the High Weald and on the Greensand; probably extinct in Essex; locally plentiful in the coastal dune slacks of the Pas de Calais and the Somme.

**A. arvensis** L. ssp. **arvensis** Scarlet Pimpernel. 15, 16. N. 51/51

Native. Cultivated and waste ground, and on Sand dunes and shingle beaches; very common throughout Kent. Besides the common form with salmon-red corollas, a pale pink variety (var. *carnea* Schrank) and a blue variety (?var. *coerulea* (Schreb.)) occur rarely; records for these are quoted. Common in adjacent counties and N. France.

1<sup>st</sup> record, 1629: Grain to Cliffe, Johnson, *Iter*. p.8.

**1)** Field by Farningham Wood PCH. Field S. of Joydens Wood PCH. Farningham Wood PCH; 82! N. Cray tip PCH. Bexley Ch[urch] y[ar]d PCH. W. Wickham, 1915, Hb. Davis **MNE**. Beckenham 1934, Hb Davis **MNE**. 46 St Mary Cray. 87 Arable fields, Isle of Grain, 1958, Mrs AG Side.

**2)** 47 Woolwich Arsenal 1945. 97 Cornfield SW of Scocles F[ar]m, Minster, 1958 **MNE**. Weed, Murtons F[ar]m., Graveney, '56, R Theobald.

**3)** Ride, Trenley Park Wood, 1948, L.W.Wilson.

**5)** 46 Field n[ea]r Washneys Halstead, PCH. 56 Ploughed down S. of Timberden Bottom PCH. 45 Chevening Park PCH. 56 Field W of Eynsford PCH. 36 cornfield n[ea]r Well Wood 396642 '53 PCH.

**6)** field E. of Kemsing PCH. Horton Wood PCH. Mounts Rd PCH. The Thrift, Bean PCH. Preston Hill, PCH. Romney St[reet] PCH. Cornfield N. of Station, Cuxton 1951 **MNE**. Cornfield W. of Wrotham Water, 1958 **MNE**. Clay Lane Wood Cuxton '61, f[requent] in fresh coppice, HAS. Halling Warren PCH.

**7)** Ospringe Down HMW.

**8)** Cornfield NE of St Margaret's at Cliffe, 1955 **MNE**. Cornfield SW of S. Barham 1956 **MNE**. Cornfield E of Knowlton 1958 **MNE**. 25 arable about Fredville, DMCC.

**9)** Cornfield NE of Monkton, 1958.

**10)** R[iver]side above S. Darenth, PCH.

**11)** Sandy field SW of Ightham Court 593573 (Folkestone) sand) '51 DMCC. Field N. of W. Malling aerodrome 1942 **MNE** (abnormal form with leaf-like corolla lobes and leaflets for stamen and carpels). Crouch, 1947, D.McC (verticillate form). Arable Field E of Hale Street, 1956 **MNE**. The Mote, Maidstone, 1842, **MNE**.

**13)** SE of Ashurst, 1955, Mrs M. Mallinson. Kippings Cross F[ar]m, CAS, '57, 643402. Ride, Combwell Wood, Goudhurst, 1959 **MNE**; '79! Pembury Lower Green 634425 (gooseberry field) 1956 CAS.

Very common in all adjacent counties and in N. France.

var. **carnea** (Schrank) Dr.

**1)** Bickley, W.C.R. Watson.

**3)** Trenley Park Wood LWW.

**6)** Higham, J.S. Henslow. Luddesdown (v. *pallida*) Baker.

**8)** Sibbertswold, Miss Anderson.

**11)** Aylesford, F.J.H.

**12)** Great Chart, C.N. Pope (1946!).

**13)** High gate, Hawkhurst, J.C. Melvill.

var. **azurea** Wilmott. Records for *A. coerulea* in Fl. Kent are included here where it is uncertain to which ssp. they should be referred.

**1)** Potato field, Orpington 1938, JBM, det. A.J.W.

**3)** Clowes F[ar]m S of Whitstable 1950 REW.

**4)** Richborough, Miss H. Turnbull.

**5)** Farningham, Pamplin. Below Keston in oatfield, 1896, Scargill. Keston to Downe, Milne & Gordon: E. de C.

- 6) South fleet, Gerard, 1597. Greenhithe, Cooper, Fl. Met. Darenth Lane End, Bossey. Luddesdown, Pocock. Cobham, H.N. Ridley. Downs above Kemsing, M Zambra 1947.
- 8) Adisham, FGEK. Northbourne, Miss L. Day. Ringwould, Mrs. Benson. Wingham, G. Dowker. Lyminge, C.P.S.K. Dover, Grayling.
- 9) Minster, Fl. Thanet.
- 10) Seal Chart, Zambra, 1947.
- 11) Maidstone, W.W.R. Bearsted, H. Lamb.
- 12) Ashford, W.R. Jeffrey. G[rea]t Chart, C.N. Pope, 1946! St. Dunstan's churchyard, Canterbury, Miss DAC Long, 1947.
- 16) Westenhangar, C.P.S.K.

**A. arvensis** ssp. **foemina** (Mill.) Schinz & Thell.<sup>422</sup> Blue Pimpernel. [15, 16.] N.

This sub-species is frequently confused with the blue variety of ssp. *arvensis*: it has the fruiting pedicels equalling or shorter than leaves (not longer as in ssp. *arvensis*): flowers always blue, up to 12 mm diameter (up to 14 mm in ssp. *arvensis*): narrow-obovate corolla-lobes, which are very sparingly (not densely as in ssp. *arvensis*) fringed with 4-celled glandular hairs (5-celled in ssp. *arvensis*). It is a rare plant of cornfields on the chalk in Kent. Fl. Kent does not distinguish clearly between this ssp. and the blue variety of ssp. *arvensis*.

Authentic records include the following: 3/51.

- 5) Downe, W.C.R. Watson, Cornfield W. of Salt box, Biggin Hill, 1950, J.D. Lovis. Leaves Green, 1956, Miss C.A. Swain.
- 6) Cornfields below Great Wood, N.W. of Cuxton, Hb. J.S. Mill: one plant, 1943! **MNE.** ? [sic] Cobham, Ridley (probably the same locality). Darenth Wood, A.A. **BM.**
- 7) Cornfield, Westwell: 1 plant, 1947, E.S.
- 10) Near Ide Hill, J.H. Woodhead. (? correct).

Very rare in Surrey and Sussex; in Essex? [sic]; rare on chalk in the Pas de Calais; commoner in Somme.

Reported at 4) W. side golf course, Sandwich Bay, 1955, Mrs. Brickenden: "seed caps[ules] 5-veined".

**A. minima** (L.) E.H.L. Krause (*Centunculus minimus* L.). Chaffweed. 15, 16. N. 11/51

Native. Damp loamy or clayey rides in woodland, usually on bare soil; widespread and locally abundant in the High weald on the sandy loams of the Tunbridge Wells and Ashdown Sands, in 13), widespread but uncommon on the Weald Clay in 11) and 12); very rare (only one modern locality) on the Folkestone Sand and very rare (one modern locality) on the Eocene of district 1). On the High Weald this is usually associated with *Radiola linoides*, but the latter species does not accompany it on the Weald Clay.

1<sup>st</sup> record, 1724: Chislehurst, Dillenius in Ray, *Synopsis*, ed.3, addendum.

- 1) Ride in Joyden's Wood, Bexley, one plant only seen, P.C. & J. Hall & F.R., 1954 **MNE.** [Chislehurst Common, Dillenius loc. Cit.; Hb. J.S. Mill; W.W.R.; W.C.R. Watson, up to about 1934.] Dartford
- 11) Golden Stable wood, Shipbourne Forest 1954, **MNE.** Snoad Wood, S. of Marden, 1954 **MNE.** Widehurst Wood, S. of Marden, 1958, **MNE.** South Park Wood, S. of Grafty Green, 1954, **MNE.** Hoads Wood, Great Chart, 1946-54, 953423 & 954420, **MNE.** W. Malling, Marden, Headcorn, Hothfield, Bilsington
- 12) [Hothfield Common; Willesborough Lees; Brabourne Lees, C.P.S.K.: no records since.] Bourne Wood, 008344, Orlestone, 1946; 1958, E.S. Priory Wood, Bilsington, 038354, 1956, E.S. & F.R. **MNE.**
- 13) Ashour Wood, E. of Penshurst, 1954, **MNE.** Wood N. of Edenbridge Road, 1m. W. of Leigh, 1947-60, **MNE.** Great Sandhurst Wood, W. of Lamberhurst, 1945-56 **MNE.** Pembury Woods, 618426, 1952. Wood at Mount Pleasant, Lamberhurst, 1945. Chingley Wood, 1949-60. Kilndown Wood, 1945→, **MNE.** Combwell Wood, 1945-59 **MNE**-1979! Old Park Wood, Goudhurst, 1954, **MNE.** Bedgebury Forest, near Louisa Lake, and to W., common, 1944-55, **MNE.** Sissinghurst Park Wood, 1948-57, **MNE.** Roundhill Park Wood, 1949. Wood S. of Roundhill Park Wood, 1954 **MNE.** Angley Wood, 1947-54. Chittenden Wood SE of Cranbrook, 1946→**MNE.** Causton Wood, 1946. Brewers Wood, 1960, **MNE.** Friezley Wood, 1960.

Tonbridge, Pembury, Lamberhurst, Cranbrook, Tenterden

- 14) Coomb Wood, Wittersham, 1964. Lords Wood, Stone in Oxney, 1964.

- 16) Ride in Kiln Wood, Sandling Park, E.S.M.; L.J.M. & F.R., 1958! **MNE.** Hythe '58

Apparently much rarer in Surrey, where it is more often found on open damp ground on heaths than in woods; frequent in the High Weald of Sussex; very rare indeed in Essex (e.g. Stow Wood, Wrabness); near the coast of the Pas de Calais area.

<sup>422</sup> Given as ssp. *coerulea* Hartman in the check-list; but the manuscript refers to ssp. *foemina* (Mill.) Schinz and Thell., as does Stace's *New Flora* 2<sup>nd</sup> edition, and it has since been treated as a separate species, *Lysimachia foemina*.

**Glaux L.****G. maritima L.**

Sea-milkwort. 15, 16. N. 18/51

Native. In salt-marshes, tidal riverbanks, and in brackish marshes and hollows behind sea walls; very common in these habitats, absent elsewhere. Locally frequent on the coasts of Sussex and Essex and of the Pas de Calais.

1<sup>st</sup> record, 1597: E. of Whitstable, etc., J. Gerard, *Herbal*, p.448

1)

Woolwich 57.

2) River bank near Crossness, 1927, H.J.B. Erith Marshes, 1937, P.H.C. Littlebrook Marshes, 1930 R.W.R. = Stone Marshes, 1945, F.R.; 1951, H.M.P. Swanscombe Marshes, 1917, PHC; 1946, FR; 1951, H.M.P. Shorne. Higham. Cliffe. All Hallows. Salt Marsh, N. Grain. S. Grain. Cuxton **MNE**. Wouldham Marshes. S. of Upnor. **MNE** 1960. S. of Snodland '44 **MNE**. N. of New Hythe **MNE** 45. L[owe]r Halstow, 1956. Funton Marshes, 1962. Shellness, Sheppey. Harty. N of Leysdown 1918 **MNE**. Elmley. W of salting Seasalter, 57 HMW. Graveney. Conyer Creek 1960 **MNE**. Marsh N. of Oare Mill Pond '59 **MNE**.

Dartford, Burham, L[owe]r Halstow, Teynham, Faversham, Gravesend, Higham, Grain, Sheppey.

3) Swalecliffe Brook, REW, 1950. Faversham Creek 1960 **MNE**.

Whitstable

4) Shellness, Sandwich. Pegwell Bay. Deal Links **MNE**. Behind Beach N. of Stuart, St Nicholas, 1962.

Sandwich, Chislet 55, Pegwell

15) Dymchurch, behind sea wall. The Wicks, W of Dungeness, 1946, **MNE**. Brackish meadows, Church, Fairfield, 1952 **MNE**.

Romney, Dungeness, Fairfield 52, Hythe.

**Samolus L.****S. valerandi L.**

Brookweed.

15, 16.

N.

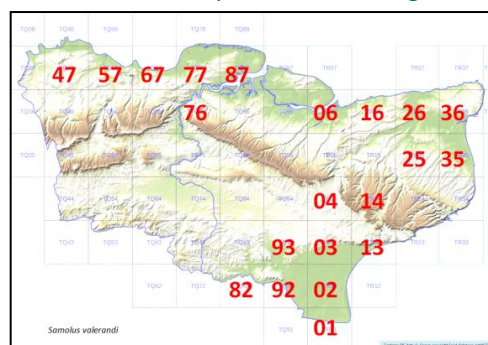
22/51

Native. Edges of Alluvial Marsh dikes, brackish marshes, and damp dune slacks; calcareous fens inland; frequent to locally abundant near the sea and estuaries, very rare further inland. A species of short vegetation in damp, highly base rich, habitats, common in damp places near the sea in Sussex and Essex; probably extinct in Surrey; frequent along the coast, in dune slacks, marshes and fens, in the Pas de Calais.

1<sup>st</sup> record, 1629: Dartford salt-marsh, Johnson, *Iter*, p.9.

2) 47 Ditch, Woolwich Arsenal Grounds, 1949. 57 Brackish Marshes E. of Erith, R.A.B., 1948. 57 Dartford Marshes 1957 GMB. 57 Stone Marshes, W. Watson. 67 Swanscombe Marshes, 1949. 67 Shorne Marshes 45 **MNE**. 77 Higham Marshes, in dikes behind river wall, 1944 **MNE**. 77 Cliffe Marshes. 87 Grain, by dikes. 76 Holborough Marshes, N of Snodland. 76 Marshes S. of Snodland 1870 **MNE**; 1946! 06 Marsh dikes, Harty, 1946. 06 Marsh dikes below Faversham, 1958. 06 Brackish Meadow, S of Oare creek, 1958, **MNE** '62. 06 E. of Oare Creek **MNE**. 06 Marsh dikes W. of Seasalter, 1957, HMW.

Dartford 55



3) 16. 26 Dikes, Marshside, Chislet, 1962. 26 Dikes N. of Stuart, St Nicholas, 1962. 25 Dikes, Little Britton, Wingham, 1945-60 **MNE**.

Whitstable '55

4) 35 Ham fen, 1945. 35 Hacklinge, 1946 **MNE**. 35 Ditch by Downs Darm, NE of Sandwich, 1945, **MNE**. 35 Slacks N of Sandwich Bay 1950 **MNE**. 26 Preston Marshes, 1960, Mrs. B Dodds. Dikes W. of Sandwich, 1946, DMCC. 35 Worth Minnis 1946-56-60 **MNE**. 35 Stour ditches 2m NE of Sandwich '57 **MNE**. Deal, 1850 **MNE**. 35 Pit ½m N of Sandwich 1945 **MNE**. 26 Stodmarsh 1955 **MNE**. 36 Ebbsfleet, 1961, C. Turner.

12) 14 Stowting meadows, 1947 **MNE**. 04 Willesborough, C.N. Pope. In open place in wood on gault n[ea]r Charing, 1948, L. Hawkins. [Kingsnorth, W.R. Jeffrey.]

[13] stream near the High Rocks, E. Forster, *Fl. Tonbr.*, p.31; possibly in Sussex.; no recent records.]

15) 01 old pits n[ea]r School, Dungeness, 1946. 03 Dike S. of Ruckinge, 1956 **MNE**. 93 Dikes, Shirley Moor, 1945. 02 Dike, W. of Brenzett n[ea]r Farm, 1945, **MNE**. 92 Dike, E of Appledore, 1945. 82 Dikes on levels, Sandhurst, 1954, **MNE**. 13 Canal SE of Burmarsh, 1958, LJM.

16) 13 Calcareous mire, The Lince, Etchinghill, 1954-58 **MNE**. [23 Folkestone Warren, D. Smith, 1907 **MNE**; Rev. Glennie, **BRIST**.

## ‡ HYDRANGEACEAE

‡ *Philadelphus* L.*P. coronarius* L.

1) Ruxley Pits, A.G. Spooner &amp; B.D. Stoyel.

13) Roundabout Woods, CAS.

## GROSSULARIACEAE

*Ribes* L.*R. rubrum* L.<sup>423</sup>

Red Currant.

15, 16.

N.

Native, almost certainly: by streams and in swampy areas in woods, also in drier woods, frequent in all wooded areas of Kent, especially in the Weald.

1<sup>st</sup> record, 1777: Ospringe, E. Jacob, *Pl. Fav.* p.97.

1) 46 Holbrook Wood, Scadbury Park, Chislehurst, 1959 **MNE**. Ruxley pits. 56 Farningham Wood, PCH, 82! 47 Wood by R[iver], N. Cray PCH. 46 High Wood, Crofton PCH.

2) 06 Davington Osiers, 1956 **MNE**. 87 Wood NE of Fenn Street 804759, A.G. Side.

3) 15 Trenley Park Wood 1949 **MNE**; 15 Fishpool Hill Wood, L.W.W. Bysing Wood HMW. Chartham Hatch, RGW.

5) 396611 PCH.

6) 66 Wingate Wood, 1943. Wood, Southfleet 621707 PCH. C[lay] w[ith] f[lints] woods E of Shoreham GMB. 57 Darenth Wood, PCH; 5872 HMP.

7) 85 Trundle Wood, Wormshill, on deep calc[areous] loam, 1967 **MNE**. 033552 Badlesmere CT.

8) 13 Postling Wood, L.W.W. 14 Winterage Wood/Garden Wood, Acrise, 1963 DACL. 24 Frandham Wood, River, KDR. 24 R[oa]dside SW of Sibertswold, Miss Hibberd. 14 Covert Wood, J. Moor. 34 Eastling Wood/Napchester Wood, 1959, B. Nash. Sibton Wood, 1997.

9) Copse, Deerlock, Minster, AGS.

10) 57 copse in Water Meadows, Darenth PCH. Ide hill in wood 1950 Gardener. The Moor, Greatness, CAS. Westerham Wood 82.

11) 65 Long Wood, Borough Green, by stream. 65 Addington, 1963, WAS. 75 Bydews Wood, Tovil, 1958, E. Philp. 85 King's Wood, Harrietsham, Mrs B. Dodds.

12) 94 SE quadrant of Warren Wood, Ashford, E.S., 1957.

13) 63 Hall's Hole Lane, Tunbridge Wells. 63 N. of Lamberhurst Quarter, 1944→, in wet wood. 63 Kilndown Wood, 1946 **MNE**. 63 S. of Pembury New Church, by stream in Wood. 63 1m SW of Pembury New Church PCH. 64 Pembury Woods, PCH. 44 Stream & Wet Wood on Wadhurst Clay, ½m SW of Chiddingstone Hoath.

14) Cole Wood, Woodchurch ES. Robins Wood Cranbrook, DS.

*R. nigrum* L.

Black Currant, "Gazells".

15, 16.

N.

Native, probably. Damp ground, Alderswamps, and by streams in woods; not uncommon in the Weald.

1<sup>st</sup> record, 1777; Faversham, E Jacob, *Pl. Fav.*, p.96

1) Hedge, West Wickham, 1934-6, D.McC. Ruxley Pits. Wood, Coney Hall, G.M.B. R[iver] bank S. Mary Cray, 1957, F.H.B.

2) 06 Davington Osiers, 1956 (Faversham, 1777, E. Jacob).

4) 35 Northbourne, 1961, Miss B. Nash. 25 Riverside carr, Wenderton, 1959, Miss B. Nash. 25 Wingham Well, 1959, B. Nash.

7) 05 Challock Woods ES.

8) 34 Eastling Wood/Napchester Wood, 1959, B Nash. 24 Woodville, T[emple] Ewell, KDR.

10) 55 Dibden, Sevenoaks, CAS, 513540. 55 The Moors, N.E. of Sevenoaks (Bat & Ball) CAS. 56 Shoreham Castle F[ar]m, by Darent 526637 DMcC. Wood W of Kemsing St[atio]n, B Sennitt. Scords Wood carr RAC. N[ea]r R[iver] opp[osite] Lullingstone in Wood, 533645, GMB. Westerham Wood 82.

11) 65 Basted, DMcC. 75 Bydews Wood, Tovil, 1958, E Philp. By Medway E Peckham to N, AHWD.

12) Gault wood SW of Bulltown; W. Brabourne RAC. 94 Hothfield Heath. 1948. 03 Park Wood, Smeeth, C.N.P. Chilham, CNP. Shalmsford St[reet], copse by Stour, RGW.

13) 63 S. of Pembury new Church by stream, 1944. SW of Pembury new Church PCH. Bewl Bridge, 1939 Lamberhurst, JRW. 63 Pond between Uzzards and Clay Hill, 1941 Lamberhurst, JRW. 53 Wood N. of High Rocks, 1943, JRW. 64 Furnace Pond, Horsmonden, JRW, 1941. 53 R[oa]dside opp[osite] entrance to Hawkenbury Cemetery, CAS. 54 Roundabout Woods, Tunbridge Wells, CAS.

<sup>423</sup> In the manuscript given as *R. sylvestre* (Lam.) Mert. & Koch.



14) Breeches Pond, RAC.

‡ *R. odoratum* H.L. Wendl.<sup>424</sup> Buffalo Currant.

‡ *R. sanguineum* Pursh<sup>425</sup> Flowering Currant [16.]

1) Ruxley Pits

15) 54 Top of Quarry Hill, Tonbridge, CAS.

*R. uva-crispa* L. Gooseberry. [15, 16.] N.

Probably always an alien, but naturalised in several places in woods and hedges.

1<sup>st</sup> record, 1777: Ospringe, S. of Whitehill, E. Jacob, *Pl. Fav.*, p.44.

1) 57 Dartford Heath, 516728, 1948; 1961, HMP. Keston Common, DMcC. 47 Abbey Wood, PCH. Ruxley Pits.

2) 06 Davington Osiers, 1956. 86 Hawes Wood, Newington, 1950, **MNE**.

6) Wood E of Shoreham Station, 533613, GMB.

7) 05 Hedgerows between Old Wives Lees and Upper Ensign, 1945, DHK. 95 Hope Shaw 967561, Eastling, C. Turner. 95 Broomham Wood 970562, Eastling, C. Turner.

8) 15 Copse E. of Gorsley Lane, Bishopsbourne, 1947, BJB & FR. 25 Knowlton, Roadside hedge, L.W.W. Wingmore, J.O. 14 Acrise, 24 Woodville, Temple Ewell, KDR. R[oa]d SW of Sibertswold to Wootton, Miss Hibberd.

10) Hedge, Shoreham GMB.

11) North Wood, Aylesford, CW.

12) By River, Chilham, E.S., 1956. Willesborough Lees CNP.

13) Robingate Wood, Tun[bridge] Wells, 1960, CAS. Bewlbridge, Lamberhurst, 1939, JRW. Somerhill Park, Tonbridge, CAS. By A21, top of Pembury Walks, CAS. Hurst Wood, Tun[bridge] Wells, 55, CAS.

16) 1 bush by Brockhill stream, Saltwood, 1959, LJM.

## CRASSULACEAE

*Crassula* L.

[*C. tillaea* Lest.-Garl.]<sup>426</sup> Mossy Stonecrop. Ext[inct] N (Sandwich c.1900)

Formerly native. Fixed sand dunes; extremely rare, and probably now extinct.

4) Sandy track on old dunes N. of Deal, c.1908, Tabor & West. Dr. Cyril West tells me that about 1908 Prof. Tabor showed him this plant in quantity on a sandy track about ½ to 1 mile N. of the end of Deal town, and that he is certain that it was this species. It has not been refound, and it has not proved possible to obtain further information from Prof. Tabor.]

‡ *C. helmsii* (Kirk) Cockayne New Zealand Pigmyweed. [16.]

(see Watsonia, 1961)

1) Pond at Sidcup (introduced probably with *Pontederia* from Perry's nursery, Enfield); F.H. Jones, 1960 **MNE**.

*Umbilicus* DC.

*U. rupestris* (Salisb.) Dandy Navelwort. 15, 16. N.

(*U. pendulinus* DC.; *Cotelydon umbilicus-veneris* auct.) 6 localities now.

Native. Crevices of old walls; very rare. A Mediterranean and W. European species, common in Western Britain, only just extending to a few localities in Kent, on old walls; not in East Anglia. It is very local in Surrey (Chart and Ewhurst areas); and in east Sussex, where it occurs on old walls about Winchelsea. Not in Essex or Pas de Calais.

First records, 1777: Tenterden Church, etc. E. Jacob, *Pl. Fav.*, p29

[2] All Hallows Church, Pocock.]

8) [Barham, F.G.E.K.] Goodnestone, on wall of Church, Miss V.A. Carpenter, 1929, teste Miss E. Day; 1962! about 20 plants **MNE**. Dover Castle, J.J. Bennett, Hb. Croydon NHS.

10) Old wall, 447507, E. of Crockham Hill Village, R. Clarke, 1958; 1959! Abundant on S facing sandstone wall against bank S. of the Youth Hostel, Crockham Hill, 1960, R. Clarke; 1960! **MNE**.

<sup>424</sup> Given in check-list (after *R. uva-crispa*), but no manuscript entry.

<sup>425</sup> Order of species given in check-list does not accord here with Stace's *New Flora*, 2<sup>nd</sup> edition.

<sup>426</sup> In the manuscript given as *Tillaea muscosa* L., with *C. tillaea* as synonym.

**11)** [Boughton Monchelsea Quarries, on old wall, E. Jacob; W.W. Reeves.] [Maidstone Church, A. Pratt.] The Priory, Leeds, on old wall, L. Musslewhite, 1959; 1960! **MNE**.

**12)** Westwell Church yard wall, CN Pope (1946!); only 1 pl[ant], 1962, Miss E. Milward. Old flint wall, East Stour Farm, Godmersham, C.N. Pope, 1947; 1949! **MNE**; (1957!)

**13)** On tree trunks, by drive, Scotney castle, 1961, KEB.

**[14)** Tenterden Church, E. Jacob.]

### [‡ *Sempervivum* L.

‡ *S. tectorum* L. House-leek.

Not naturalised in Kent; apparently much planted at one time on walls and roofs, but very rarely now.

Many old records, from 1629 in Johnson's *Iter* (E. of Gravesend); not worth repeating in detail.

**1)** Hayes Place, DMCC. Chislehurst GMB.

**2)** Faversham, E. Jacob (on a brick pillar, Abbey Street, L.W.W. c.1948.); 1950 Partridge Lane, REW; RGW on old roof.

**4)** n[ea]r Stodmarsh Church, L.W.W.

**5)** Halstead, A.A. **BM**.

**6)** Eynsford on old roof HMP.

**7)** Wall, Otterden Place, G.L. Davidson, 1961

**8)** Lit[tle] Fredville on cott[age] roof, '55, DMCC.

**9)** Haine, L.W.W.

**12)** Sankey House, Brook, Mrs. Kirby.

**13)** Bridge House, Lamberhurst, RW, 1941. Cottage roof, Groombridge Hill, CAS.]

### *Sedum* L.

‡ *S. spectabile* Boreau<sup>427</sup> Butterfly Stonecrop.

*S. telephium* L. Orpine.

15, 16.

N.

31/52

ssp. *telephium*<sup>428</sup> (*S. purpureum* auct.)

Native. Woods and hedgebanks, usually on sand or gravel soils, though not on podsol; widespread, and locally frequent, though nowhere really common. Probably, as stated in *Fl. Kent*, more frequent than in any other part of England. Frequent in Surrey and Sussex, rare in Essex, v[ery] rare in Pas de Calais.

1<sup>st</sup> record, 1632: S. of Margate, Johnson, *Descriptio*, p.14.

**1)** [Charlton Wood, Martyn. Bromley, Irvine. Shooters Hill, Curtis.] [St. Pauls Cray Common, AHWD.] [Wood E. of St Mary Cray, Cole.] 46 Hayes, Miss A Mills, 1956. 46 Roundabout Wood, Swain. 36 Nash, to 1946, ASK. 56 Farningham Road, PCH.; 82! Keston, Farningham, Dartford

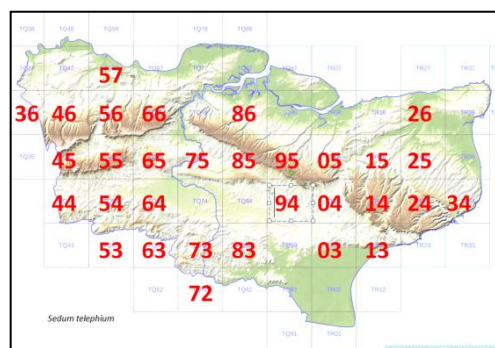
**3)** 15 Fishpond Hill Wood 1950 REW. 15 Hospital Wood, Fordwich, 1950 15 Oldridge Wood, on pebble beds, 1949, plentiful (L.W.W.). 15 Lane opp[osite] Canterbury Golf Links by club Ho[use] L.W.W. 15 Trenley Park Wood L.W.W.; wood and r[oad]sides REW. 15 Roadside, BigberyWood, P.R. Bell; 1954! **MNE**. 05 Fishponds Wood, L.W.W. 96 Bysing Wood, E. Jacob; HMW. 15 Edge of Homestall Wood, 123588, R.G.W. 05 Edge of Bower Wood, Rhode Common, 1943, DHK. 05 Perry Wood, DHK, C. Turner. Dunkirk, REW. 26 S corner Church Wood, Blean, RGW (var. *fabaria* Koch). Chislelet '56,

Canterbury, Chilham, Teynham '56, Wingham

**5)** [Knockholt, 1838, A.A., **BM**.] 56 Andrews Wood, S. of Badgers Mount, 506617, PCH.

**6)** 66 Ridge Wood, Meopham, E. Baker. 66 Luddesdown, Mrs. Stevens. 55 By r[oad], Wood NE of Otford, GMB. 56 c[lay] w[ith] f[lints] E of Shoreham, Swain. 57 Roadside, Darenth Wood 5872, E. de C.; 1950, HMP. 66 Downs Wood, E of Vigo, 637613, Mrs D. Woods. 66 Woods N of Cobham 683693 HMP. Meopham

**7)** 96 S edge of copse N. of the Oaks, S.W. of Ospringe Ch[urch] 1950 REW. [Cocksett Wood, Ospringe, E. Jacob.] [E. of Hartlip, Trimen.] 05 Hawkins Wood, Chilham, D.H.K. (Plateau soils). 05



<sup>427</sup> Given in check-list; no manuscript entry.

<sup>428</sup> Given in the manuscript as ssp. *purpurascens* (Koch) Syme; not mentioned in check-list, and ssp. *telephium* is substituted here from Stace's *New Flora* 2<sup>nd</sup> edition.

Kings Wood, on Pliocene loam, 047510, ES. 86 Hedge, Meres Court Lane, Rainham Park, B. Carter, 814635. Nr. Sittingbourne, Hb. Davis, 1917 **MNE**. 95 Hedge E of Bowl Inn, Stalisfield, 1952, REW.

Stockbury '56, Doddlington

**8)** 05 Denge Wood, 093513, Mrs. B. 14 Covert Wood, Cowell; (1947!); Miss D.A.C.L., 1958; 190485, '60, KDR. 14 Garden Wood, Acrise, on drift, 1963, DACL. 14 Elham Park Wood, 591637<sup>429</sup>, 1960, Mrs. B. 14 Upper Hardres Wood, E. Robinson. 24 Wood E of Wootton, 1950, MNE. Whitehill Wood, 604722<sup>430</sup>, E Robinson. Bossingham 600663<sup>431</sup> / Atchester Wood E. Robinson. 25 Frogham, Barfreston, 1958, B. Nash.

Dover E, Alkham, Elham

**[9)** N. of Nash, Johnson, *Descriptio*.]

**10)** 45 Ide Hill, 1944, F.R. 55 Oldbury Hill, GMB. 55 Whitley Scrubs, E Armstrong, RAC abund[ant].

S[even]oaks, Westerham

**11)** 66 Ryarsh Wood. 65 Sandy Wood E of Addington. 75 R[oa]dside N. of Teston. 775578 Penenden Heath copse O.D. 85 Sandy lane off A.20, 1m. W. of Hollingborne. 54 Stocks Green Wood, Hildenborough, 1960, CAS. 85 Kings Wood, Sutton Valence, HMP. 85 Lane SW of Harrietsham Mrs B. Welch. E Malling Woods Hb. Lamb 1853 **MNE**. Boxley, Hb. Lamb, 1860 **MNE**.

Hollingbourne, Maidstone, W. Malling

**12)** 04 Brook, C.N. Pope. Brabourne Lees, CNP. 03 Sellindge, on r[oa]d to Stonehill (Folkestone Sand) 1947; 1954. 04 Warren, Ashford, 003444, ES. 94 Warren Wood, S. 992444, ES. 04 Nackholt Wood, 064425, ES.

Wye, Hothfield

**13)** 44 Chiddingstone (R[oa]dside S.W. of) 1943. 54 R[oa]dside, Saint Hill, S. of Penshurst, 1946. 73 R[oa]dside S. of Kildown. 73 Oaks Wood, Cranbrook. 73 E. entrance, Angley Wood, Cranbrook, 1946 **MNE**. 63 N[ea]r Stream, 651363, Bayham, M. McFarlane. 53 Robingate Wood, T[unbridge] Wells, 1959, CAS. 53 Tun[bridge] Wells Common, SW corner, 1959, 1962, CAS. 44 S. of Hever, 1943. 54 Wood N. of Penshurst Park, 1947. 54 Moorden, Penshurst. 83 R[oa]dside E. of Golford, 1946 **MNE**. 83 Causton Wood, E.S.M.; (1946!).

Pembury, Tonbridge, Edenbridge, Cranbrook

**14)** 73 Edge of Attwaters Gill, Cranbrook, 1955 **MNE**. 83 E. of Penhill, 1947. 83 N. of Penhill 1947. 73 Robins Wood, S.E. of Cranbrook. 73 lane at Diprose, SW of Benenden, 1949. 83 R[oa]dside, Goddards Green, 1947. 73 Hawkhurst. E of St Michaels, RAC.

Tenterden, Sandhurst

**16)** 13 R[ai]lway track SE of Hythe. 13 Old R[ai]lway SE of Sandling 1962 DACL. Thorn Wood (fabaria), LJM.

Hythe, Bonnington

‡ **S. spurium** M. Bieb.

Caucasian- stonecrop.<sup>432</sup>

[16.]

**1)** Ruxley pits.

‡ **S. rupestre** L. (*S. reflexum* L.)

Reflexed Stonecrop.<sup>433</sup>

15, 16.

Probably introduced, but completely naturalised. It is possibly native on the Folkestone Sand, on sandy hedgebanks, but also occurs on old walls.

1<sup>st</sup> record, 1777: Faversham Abbey, E. Jacob, *Pl. Fav.*, p.104.

**1)** 46 Hayes Common, FR. [Bromley, Cole.] [Keston Common, C.E. Britton.] Keston Common, 1916, Hb. A.G. Davis **MNE**. Petts Wood, '56, DMCC. Ruxley pits. Bickley, Orpington, GMB.

**2)** 87 Road by Grain church, 1958 AG Side. [Faversham Abbey, E. Jacob. Bobbing church, Pocock.] [Oare, B.D. Jackson.] Brents, Faversham, 1958 HMW.

**3)** SW corner Bysing Wood HMW. Whitstable Gas Works HMW.

**4)** 25 Roadside on Thanet Sand, N. of Wingham 1958. Walmer Beach, DMCC.

**5)** Knockholt, 1840, AA, **BM**.

**6)** (Higham, F.F. Meopham, F.F.) 67 Shorne, n[ea]r Windmill, on gravel, HMP, 1978. Roadside by WarMem[oria]l Stone, 572742 HMP. Roof at Fawkham, 5965 HMP.

**7)** Bredgar, Pocock. Boughton Aluph on wall, E.S.M.

**8)** [Dover, FGEK.] 14 Lynsore Bottom, Miss DACL. 05 Chartham Downs, nr Mental Hosp[ital] RGW.

**9)** [Roof of Smithy, Monkton, Wardale.]

**10)** 45 Chipstead 1958, R.A.C. Sevenoaks, Riverhead, Hb. Rudge **BM**. 45 Ide Hill by R[oa]d, E.S. Salmon. 55 Abundant on sandy lane banks SW of Ightham to Ivy Hatch, H. Lamb **MNE**, (1946-57!).

<sup>429</sup> Grid-reference appears to be in error.

<sup>430</sup> Grid-reference appears to be in error.

<sup>431</sup> Grid-reference appears to be in error.

<sup>432</sup> In manuscript given as *S. stoloniferum*.

<sup>433</sup> *Sedum reflexum*, Large Yellow Stonecrop in the manuscript.

- 11) 65 Plaxtol, 1936, GE Shaw **TLS**. 65 Swanton, nr. Mereworth, 902, J. Britten **BM**. [Boxley R[oa]d, Maidstone, Hb. Lamb, 1849 **MNE**.] Wrotham Heath, on bank of lane, by Mill Hill, W.M.R.; AHWD; 1946! 75 Ditton Quarries. Boxley Abbey, F.G.E.K. (Hb. M). 75 Lane W. of Bearsted, abundant, 1943-58. 85 By A20 W of Harrietsham (Clarks Hill), Mrs B Dodds. 75 Sandling Wood, in cut coppice, 1960, E.G.P.
- 12) 94 Hothfield, bank on sand by A.20, 1946-52→. Wye, Freeman. 03 R[ai]l[wa]y bank, Ham Street Station n[ea]r Woolpack, 1959, KEB.
- 13) Garden walls, Cranbrook DS. Well nat[uralised] in hedge, Kibbles la[ne] Southborough, KEB.
- 16) 13 Rock outcrop, Tanners Hill, Hythe, 1959, L.J.M.

‡ **S. forsterianum** Sm.<sup>434</sup> Rock Stonecrop. 15, 16. 5/51  
 Alien? Naturalised completely on shingle beaches, and looking like a native, very rare and local.  
 1<sup>st</sup> recorded on the shingle at Walmer in 1875: A. Bennett in Hb **BM**.

- 2) [Higham Street, F.J.H.] ‡ All Hallows, GMB.
- 4) 35 Shingle beach, between Kingsdown and Walmer, 1875; 1910, A.B. **BM**; 1907, F.L. Foord-Kelcey **BM**; 1914 L. Day **BM**; 1945-54, plentiful! **MNE**. 36 Richborough sidings, L.W.W.
- 6) 67 colony in chalkpit, Northfleet, 1962, W.A.S. Green Street Green in pit HMP, 5870.
- 10) Wall at St. Clere, Kemsing, 1874, Roper.
- 13) 54 R[ai]l[wa]y S. of Tonbridge Sta[tion] CA Stace 1958; KEB. ‡ Bayham CAS.
- 15) 02 Littlestone beach, 1947.

**S. acre** L. Biting Stonecrop<sup>435</sup>. 15, 16 N.  
 Native. Sand-dunes, shingle beaches, cliffs near the sea; bare sandy or gravelly ground; old walls and roofs. Frequent in many parts of Kent.  
 1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

- 1) Hayes Common, DMc.C. (1945!). Ruxley pits. Woolwich Common, GMB. Gravel pits, Dartford Heath Leyton Cross, PCH. Keston Common, Hb Davis, 1916 **MNE**. R[ai]l[wa]y, St Mary Cray GMB.
- 2) Beaches, Isle of Grain; Shellness in Sheppey; Warden to Leysdown; E. of Sheerness.
- 4) Abundant on the dunes from Deal to Sandwich Bay and N. to Shellness. Kingsdown Beach **MNE**. Walls in Sandwich. Pegwell Bay: E. Bartlett, 1884 **MNE**.
- 6) Farningham-Eynsford; Shoreham, GMB. Ryarsh Downs. Trottiscliffe Downs. On chalk SE of Dartford; Greenhithe, in chalk and gravel pits; Swanscombe, in pits. Stone, on walls. Strood, in pits. Wrotham by-pass.
- 7) Burham Downs, on bare chalk. Hartlip, wall, BC. Highsted pit HMW.
- 8) Cliffs, Lydden spout; St Margarets Bay.
- 9) Minster ch[urch] yard. Cleve Court wall, P.C.H. & FR '63.
- 10) 57 pits S of Dartford, GMB. Old wall, Sutton Corner, Darenth, PCH. 55 Knole Park Wall, B. Sennitt. 55 Sandpit by R[ai]l[wa]y, Riverhead, CAS. (Riverhead, D. Smith, 1906 **MNE**.) Farningham Village; Eynsford Village, Shoreham Village, GMB.
- 11) 65 Ragstone walls, Offham; E. Malling. Boro[ugh] Green Quarry. (Penenden Heath, Hb. Lamb, 1848 **MNE**.) 85 Harrietsham churchyard, Mrs. B. Dodds. 54 R[ai]l[wa]y Embankment, Hildenborough, 563482, CAS.
- 12) 94 R[oa]dside on F[olkestone] Sand, A.20, Hothfield Heath, 1947 **MNE**. 03 Mersham near Church, CNP.
- 15) 02 Old Sand dunes, Romney Warren. 13 Shingle Beach W. of Hythe, 1948 Mrs Welch. 01 On shingle n[ea]r old lighthouse, Dungeness, 1962. 01 Between Dengemarsh Sewer and the sea, P. le Brocq, 1950.
- 16) Folkestone Warren VFP Day. Sandling junction, Sandpit, LJM. (Folkestone, Hb Lamb 1895 **MNE**.)

‡ **S. sexangulare** L.<sup>436</sup> Tasteless Stonecrop. 16.]  
 1) L[owe]r Sydenham, Syme. W. Wickham Swain. Greenwich Park wall, Withering.

‡ **S. album** L.<sup>437</sup> White Stonecrop. [15, 16.]  
 (possibly native on shingle & chalk cliffs). ?N, C, H 3/51 as possible native; total, 10/51  
 Native or introduced. Naturalised on old walls and on cliffs and beaches by the sea; rare. Regarded as native on Carboniferous limestone in the Pas de Calais; possibly so in Kent, on the chalk cliffs.  
 1<sup>st</sup> record, possibly 1629, "Sedum medium vulg." Gravesend to Rochester, Johnson, *Iter*, p.1.

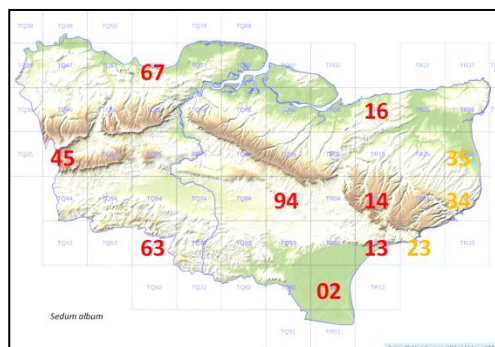
<sup>434</sup> In the manuscript given as ssp. *elegans* (Lej.) E.F. Warb. (*S. rupestre* auct.).

<sup>435</sup> Also Wall-pepper in manuscript.

<sup>436</sup> Not in check-list.

<sup>437</sup> In the manuscript given as ssp. *album*.

- 3) 16 R[oa]dside, Radfall Hill, Whitstable, 1950, REW.  
 4) 35 Sandwich Bay, 1946. (Walls at Deal and Walmer, Miss L. Day.) 35 Walmer Beach; 34 Kingsdown Beach, 1946.  
 5) Berrys Green RAC.  
 6) 67 Wall at Shorne, 1948. Dartford by pass, G.N.B. Darenth, GMB.  
 7) [Bredgar Church, F.J.H.] 95 Old wall, Tong F[ar]m, Eastling, 959562, C. Turner.  
 8) 194834 Cliffs at St. Margarets Bay, 1958. 23 Plentiu on shingle Beach below Abbotscliff, 1960, **MNE** 1962. 34 Top of Shakespeare Cliff, Mrs B. Dodds. 23 Cliffs E. of Folkestone above the Warren, E.S.S.; D.McC & J.E.L., 1948. 14 wall, NW of Elham, 1960 **MNE**.  
 10) 45 Toys Hill, A. Beadell, c.1936.  
 12) (Wall 1m. N. of Ashford, F.J.H.) 94 Wall opp[osite] Gate of Bishops Palace, Charing, HMP, 954495. Hothfield Common, CNP. Roof, Wye, 1883 FJH in Hb FJH.  
 13) Bayham, CAS. Opp[osite] Culverden Hill, T[unbridge] W[ells], KEB. Garden walls Cranbrook DS.  
 15) 02 Littlestone beach, 1946. Hythe pavement, HMW.  
 16) 13 old walls, Saltwood, LJM, 1959. Folkestone Warren, V.F.P. Day.



‡ **S. lydium** Boiss.<sup>438</sup> Least Stonecrop.

**S. anglicum** Huds. English Stonecrop. 15, 16 N.

Native. Shingle beaches; rare, but locally abundant at Hythe and Dungeness.

1<sup>st</sup> record, 1777: nr. Sandown Castle, E. Jacob, *Pl. Fav.*, p.103.

[3] Formerly occurred at: Shellness, Mrs. Bryson; beach at Swalecliffe, FJH.]

[6] Wall-top, Gravesend, EMH.]

[8] beach, below Abbots cliff, O.B.G.]

4) (stony places among the dunes) N. of Deal, E. Jacob; (1946!). Not as common here now as it appears to have been last century.

[13] introduced with shingle, Plain nursery, Bedgebury, LJ Davies, 1956.)

15) New Romney Dunes, 1823, R.P. **BM**. (1946, Littlestone Beach!) Dungeness beach, F.J.H. (abundant from near the lighthouse and Hoppen pits and Halfway Bush westward to the Midrips and N. to Greatstone, e.g. 072188 and 091170, 1945-62!) **MNE**. Shingle beach W. of Hythe, F.J.H. (1945!); 1948, Mrs B Welch.

[16] Sandgate, G. Walton.]

At Dungeness it is abundant among the moss-lichen carpets on the stabilised older shingle over a very wide area.

‡ **S. dasyphyllum** L.<sup>439</sup> [Thick-leaved Stonecrop. 15, 16.]

Naturalised alien. Old walls; very rare.

[2] old wall at Faversham, 1860, J.S.M. (Hb. Mill)]

[10] old wall at Farningham, J. Woods; F.M. Webb.]

[11] Hadlow, 1878, FWES, **TLS**.]

16) Saltwood Castle Walls, 1953, C.N. Pope.

‡ **S. rosea** (L.) Scop.<sup>440</sup> Roseroot. (Garden relic or escape). H.

## SAXIFRAGACEAE

**Bergenia** Moench

‡ **B. crassifolia** (L.) Fritsch<sup>441</sup> Elephant-ears.

<sup>438</sup> In check-list, but no manuscript entry.

<sup>439</sup> Not in check-list.

<sup>440</sup> In check-list; but no manuscript entry.



**Saxifraga** L

‡ **S. x urbium** D.A. Webb (*S. umbrosa* x *S. spathularis*) (*S. umbrosa* var. *crenatoserrata* Bab.).  
Londonpride. [16.] H.

Alien, naturalised in one or two places.

6) Ridge Wood, Meopham, Baker; 1948! **MNE**.

14) Naturalised in plantations, Highgate, Hawkhurst, J.C. Melville; Fl. Kent, 1899.

**S. [x] geum** L.<sup>442</sup> Scarce Londonpride 16.]

13) Bulls Hollow, Rusthall, 1 pl[ant], 1958, K.E.B.

**S. granulata** L. Meadow Saxifrage. [15, 16]. N.

Native. Dry grassland, hedgebanks, and old pits on sandy or gravelly, not markedly acid soils; drier parts of alluvial meadows on valley gravels; only locally common; woods on (?Pliocene) sandy loams on the plateau of the North Downs, rare.

This species has a very peculiar distribution in Kent. It is, or was, common on the Tertiary and river terrace sands and gravels near London and down the Thames and extends up the gravels of the Darent Valley meadows to the Folkestone Sand E. (but not N.) of Sevenoaks, and extends intermittently along the Folkestones as far E. as Hollingbourne on the plateau of the North Downs. It is found E. and W. of the Darent Valley and NW of the Medway occasionally; at one place between the Medway and the Stour; and in two places east of the Stour. It is unknown elsewhere in Kent, being absent from the Stour Valley; from the Greensand east of Hollingbourne; and from the Hastings Sands. It apparently absent as a native plant in Sussex. In Surrey its localities link up with those in N.W. Kent about Croydon, and it occurs on river terrace gravels near the Thames in S. Essex as it does in N. Kent. Its habitats have in common that they are all on very free draining soils, and of neutral or very weakly acid reaction: both calcareous and very acid soils are avoided.

The pattern of distribution in Kent suggests relatively recent spread from the Thames Valley up the Darent to the L[owe]r Greensand, possibly largely by vegetative means after forest clearance; long range dispersal of some kind may account for the very isolated colonies on the Downs plateau of mid and E. Kent.

1<sup>st</sup> record, 1777: Beacon, Ospringe, J. [sic] Jacob, *Pl. Fav.* p.102.

1) Pit on Blackheath Beds, Hayes R[ai]l[wa]y Sta[tion], 1926, JEL; and on Hayes Common, W.W.R.; 406664, D.Mc.C. Field E. of Hayes Church, 1946, DMCC & FR **MNE**. Holwood Park (Blackheath Beds) W. Watson; (45!). In Farningham Wood (Thanet Sands), 1950. Keston Common opp[osite] War Memorial 1960, 415642 HMP. [Chislehurst; Wollaston.] Chelsfield, F.M. Webb. W. Wickham, Fl. Met.; (on railway, 1937, JBM). S.W. of Orpington, CEB; Swain.

2) [Beacon Hill, Ospringe, J. [sic] Jacob, 1777; apparently extinct; n[ea]r Sittingbourne, Grayling.]

5) Halstead Place, 1861, A.A. **BM**. W. of Biggin Hill; A. Beadell; WCRW. Hill W. of Shoreham, WCR Watson.

6) Woods on (Pliocene?) plateau loams, Greenhills Wood, 650', NE of Otford, G. Brown. White Ash Wood, AG Side. Hartley Wood, 300', F.R. 1956; **MNE**. Elbows Wood, 400', S.W. of Meopham, C. Swain. Hatch Hill, 682657, SE of Luddesdown, 420', 1951. On Backheath Beds, Darenth Wood, 1951. On valley gravel, Green Street Green, 1952. On Thames valley gravels, in old pits E. of Chalk, 1946 **MNE**. [Greenhithe, F.J.H.] Stone Village, H.M. Pratt. High Halstow, Miss Burrows.

7) 85 Coppice Wood on plateau loam, Colyers Wents, S. of Bicknor, 550', 1952; 1958 **MNE**.

8) 04 In coppice, Cherry Garden Wood, on plateau loam, 500', above the Crown, Wye, C. Haes; 1954! 15 grassy roadside on loam, 250', S.E. of L[owe]r Hardres, 157523, P. Furneaux, 1955.

10) Darenth Ch[urch] y[ar]d HMP. [W. of Riverhead; Riverhead to Seal, Miss Worship.] 555733 Reservoir Park Road, Dartford, H.M.P. Meadows SE of Hawley; N of Darenth; Sutton-at-Hone, H.M. Pratt. Darenth S. of Church PCH. Darenth ch[urch] y[ar]d HMP. Farningham, Miss T Webber, GMB. Eynsford GMB. Meadows, St John's Jerusalem **MNE**, S. Darenth; Horton Kirby church yard, F.R. Meadows, Horton, 63, KC Side. Meadows, N. of Shoreham **MNE**. N. of Otford Bridge, F.R. ¼ m S of Otford, P.C. Hall. On Folkestone Sand, by Railway; n[ea]r Childs Bridge, NW of Seal.

11) **W** On Folkestone Sand by R[ai]l[wa]y, from N. of Ightham, by Borough Green; and N. of Platt; to Wrotham Heath **MNE** and Offham crossing, abundant. Platt church yard, DMCC. Gallows Hill, E of Platt, J.B.M. Sandpit E of Platt **MNE**. Lane SE of Borough Green, F.R. On Folkestone Sand, R[oa]dside 1 m. W. of Ryarsh Roughetts

<sup>441</sup> In check-list; but no manuscript entry.

<sup>442</sup> Not in check-list.

**MNE**; SE corner Ryarsh Wood **MNE**; S. of Ryarsh church **MNE**; Larkfield Heath **MNE**; bank by A.20 Ditton. Addington Ch[urch] y[ar]d P. Grattan Addington **MNE**. R[oa]dside 594573 N of Ightham CAS.

**11)E** On Folkestone Sand, Lane Bank, B.2011, 1 m.W. of Bearsted; by A20, E. of Caves Cafe, Hollingbourne; lane off A.20, 1 m. W. of Hollingbourne, **MNE**. Lane by Maidstone Road, ½m W. of Hollingbourne turn, Mrs. B. Dodds. Harrietsham on F[olkestone] sand, 1923, ASK.

**[12]** one plant thought to have been seen from train between Hothfield and Ashford Warren, 1954, FR. A.20, Charing SE, 1948, Miss J. Coast.]

**[13]** Reported at Tunbridge Wells, Baker; probably a garden escape here.] **[Lamberhurst Churchyard, double fl[ower]s, naturalised; CAS.]**

‡ **S. hypnoides** L. An escape. Mossy Saxifrage. [16.] H.

**10)** Naturalised on Deep lane bank S. of Farley Green, Westerham, 1958, RAC.

**S. tridactylites** L. Rue-leaved Saxifrage. 15, 16. N.

Native. Fixed sand dunes, shingle beaches, old walls; locally common on the coast, not infrequent on ragstone walls about Maidstone, and Malling, very scattered and rare elsewhere, and absent now from large areas, including the entire Weald, and the N. coast E. to Shellness in Sheppey.

1<sup>st</sup> record, 1597: suburbs of London, Gerard, *Herbal*, p498.

**1)** Chelsfield church yard walls. Hayes, DMCC. Wilmington, Tagg. Lessness Abbey, 1948, RAB. Orpington Swain.

**2)** Newington (church yard wall), 1950. Davington church walls, 011618, C. Turner. Faversham, H.A. Stowell, 1857 (Phyt. N.S. II, p.46). Seasalter Beach, C.A. Roberts, 1957.

**3)** Whitstable W Beach, 1951, REW. Whitstable 1958). Sturry sq[uare]

**4)** Fixed dunes, Sandwich Bay, 1889, ESM, **BM**; abundant, 1946-54! **MNE**. Walmer beach; Kingsdown beach. Old wall, Worth, 1951 **MNE**. Dunes E of Downs F[ar]m, Sandwich, 1962. Pegwell Bay, REW.

**6)** [Wall in Queen Street, Gravesend, R. Pocock.] Shorne Village, 1961, on old wall, HAS, N 51/67. 642653 Meopham Green on wall, Mrs. D. Woods.

**7)** Wall, Burham, 1954 **MNE**. Old walls in village, Hartlip, 1955-58, **MNE**. Wall, Otterden Place, G.L. Davidson, 1961.

**8)** [Denton Rectory, on imported shingle from coast, casual, c.1945, Miss DACL.]

**9)** Minster Churchyard, 1963. E. Thanet

**10)** 55 Otford, 1853, A. Atkins **BM**. 57 Old Wall, Sutton Corner, Darenth. 56 Old wall, Farningham, PCH; GMB. Old wall Lullingstone, GMB. near Westerham; Farningham

**11)** 66 Wall near Church, Trottiscliffe, 1962, W.A.S. 65 Ryarsh sandpits. 65 W. Malling, on ragstone walls. 75 Walls and roofs in village, E. Malling **MNE** 1942-62. 85 by A20 W. of Hollingbourne. 75 Aylesford Friary 1958, 62 **MNE**. 75 Maidstone Churchyard wall. 75 Boxley, on old wall (ragstone), Hb Lamb 1848 **MNE**; 1960! Allington churchyard, Miss Bunyard. Bradbourne, E Malling. Loose, on ragstone wall, 1960 EGP. 85 Old wall Eythorne Street, Hollingbourne, 1962. 74 Churchyard wall, East Sutton, 1960 **MNE**. 84 Boughton Malherbe Ch[urch] y[ar]d, 1960. (Maidstone Hb. Lamb, 1882 **MNE**). Cobham sq[uare]

**12)** 85 Lenham Churchyard Wall. Chilham, on roofs and on churchyard wall, D.H.K. Castle steps, RAC. Canterbury on walls, Miss T. Webber, 1958. Chilham; Canterbury

**13)** 73 Finchcocks, 1897, J.S., **TLS**. 63 Scotney Castle, old walls, 1961, K.E.B.

**15)** 02 Romney Warren, 1882, J.F.D.P., **BM**; 1948! 13 Hythe Shingle beach. 13 On ancient dunes S. of West Hythe, 1962. NE of Littlestone, 1962, ES. New Romney ch[urch] y[ar]d, RAC.

**16)** Stutfall Castle walls, Lympne, WE Warren, 1946.

**Heuchera** L.

‡ **H. sanguinea** Engelm.<sup>443</sup> (Escape on waste ground). Coral-bells.

**Tellima** R. Br.

‡ **T. grandiflora** (Pursh) Douglas ex Lindl. [Fringecups. 16.] (Garden escape).

**13)** Large patches, Tun[bridge]Wells Common, KEB, 1959.

**Chrysosplenium** L.

**C. oppositifolium** L. Golden Saxifrage [15, 16.] N.

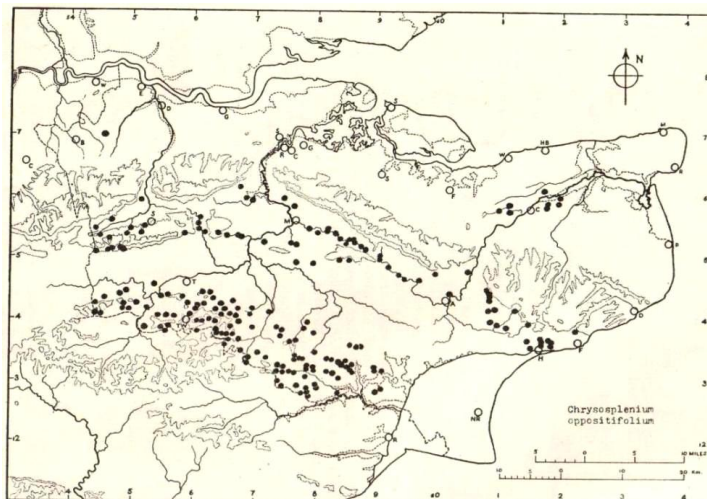
<sup>443</sup> In check-list; not in manuscript.

Native. Damp shaded woods, mostly alder coppice, by springs and on wet stream banks. This plant is abundant generally in the county wherever spring lines occur, except in the Isles of Thanet, Sheppey, Grain and the N. side of the Chalk dip slope from Orpington to E. of Faversham. It occurs abundantly throughout the High Weald in every one of the 100 gills visited, all along the chalk and greensand springlines, in many places by springs and streams in the Blean district, but is absent from the main level tract of the Weald Clay, where there are no S facings, and only occurring where well marked valleys are cut into this by streams along the margin of Romney Marsh. It appears to depend upon physical rather than chemical factors for its successful establishment.<sup>444</sup>

1<sup>st</sup> record, 1633: Woods at Chislehurst, G. Bowles, in Gerard's Herbal, revised by T. Johnson. It still occurs there abundantly.

1) [Charlton Wood, E. Forster, **BM**. Beckenham, Scargill. E. Wickham, AHWD.] [Abbey Wood, St. J. Marriott, 1925: now extinct.] [Crofton, W. Watson, extinct.] Chislehurst, G. Bowles, 1633 (Icehouse Wood, Scadbury Park, 1954! **MNE**) [Moor Copse, E. of Bickley, 1957 **MNE**, now destroyed, 1958, by railway reconstruction works.]

3) NE part Trenley Park Wood, 1949. Dengrove Wood, Sturry, 1955. Old Park, Canterbury, 1966 **MNE**. Chequers Wood, Fordwich, 1955→1981! Alder copses, NE of Fishponds Cottages; N of Denstead Farm, Chartham, 097581. By stream, S.



Bishopsden Wood. Alder copse, NW corner of Bigbury Wood, 1954. Alder copse, SE of Hickmans Green, Dunkirk 1957 **MNE**. 162609, copse W. Of Broadoak, R.G.W. Oldridge Wood, stream on N. side, 1949. Kemsdale Wood, Hernhill, 1956, **MNE**. Church Wood, N. of Upper Harbledown, 1954. Perry Wood, Selling, 1959.

[4] Reported at Northbourne Court, n[ea]r Deal by G.C. Druce.]

[7] Juds Wood, Ospringe, 1777, E. Jacob<sup>445</sup>; long extinct here.]

10) Otford A.A. 1853 **BM** (Twitton Copse, 1946-58!) **MNE**. Martens Wood, W of Ightham Mote, 1957. N. of Kippington, Riverhead. Dibden, S of Bessels Green. SE of Bayleys Hill. SW slope of Ide Hill. Scords Wood. Valley, Mill Bank, Whitley Forest. Hill Water Bottom Wood, 1m S. of Sundridge Church, R. Clarke (1958!). Wood SE of Toys Hill, 1960. Wood by stream N. of French Street, Westerham 1954 **MNE**. Wood, S. of Chartwell, Westerham. W. of Crockham Hill. Squerries Park, E of Camp in springy Alderwood. R[oa]dside copse on Gault, NW of Brasted. Pond edge, Westerham Wood, 82! Everlands grounds, springs 508518, R. Clarke.

11) Copse by Len, N. of Church, Otham, 1955. E of Greenhill, Otham, 1950 **MNE**. W. of Fullingmill, Leeds. Side stream, Woodcut Hall in Aldercopse by A20. Wet copse, R. Len W. of B2163 N. of Leeds. Leeds Castle Park. Wet copse W. of Chegworth Court, 1954. By Chegworth Mill, 1958. Side stream W. of Harrietsham, N of A20, 1954. Polhill, Harrietsham, 1954. Lower Runham, Harrietsham, 1954. Source of Len, Plattes Heath, 1954. Boxley, R. Pocock **BM**. Park Wood, 1956, **MNE**. Cuckoo Wood, Sandling, 1955, **MNE**, Loose Valley, above Loose, 1950. Quarry Wood, W. Farleigh. Copse, SE of Teston Lock. Copse S. of Smiths Hall, W Farleigh. Copse E of East Sutton. Copse E of Ulcombe.

11)W)<sup>446</sup> NE of Aylesford Pottery, 1946. Leybourne Alders, 1942-57 **MNE**. Wood ¼m SW of Boughton Monchelsea Church. Wood S. of Pizeon Well, Watlington 1943. Wet Wood SW of Mereworth 1955. Mereworth Park, 1945. Below Swanton Valley, 1955. R. Shode. Old Soar, Plaxtol, 1958. S. of Fairlawne,

<sup>444</sup> An account of this species is also given as follows, in Rose, F., Distribution maps of Kent Plants (Exhibit), in Lousley, J., ed. (1951) *The Study of the Distribution of British Plants* (1950 conference report), B.S.B.I. Arbroath. Occurs only in those areas where permanently moist but well-drained stream banks or springs occur, and thus is widespread in the dissected, well watered Hastings Beds country of the Weald. It also occurs elsewhere along the springlines at the junction of pervious and impervious strata. Its distribution map is very complex as a result; besides the dry chalk and sand, both the low-lying Weald Clay and the alluvial marshlands of the coast are avoided, for in both there is a lack of permanently damp, well-drained, shaded habitats.

<sup>445</sup> Erroneously given as J. Jacob.

<sup>446</sup> It is not particularly clear how the 11) records are being separated from the 11)W records.

Plaxtol 1960. Long Wood SE of Boro[ough] Green. Abund[ant] S. of Basted. N & SE of Buttons Bourne. S. of Allens Farm.

**12)** Alder copses NE of Chilston Park, Lenham, 1960 **MNE** [and] Bowley, Lenham. SW of Charing Heath. NW of Little Chart Church. NW of Little Chart Village **MNE**. Hothfield Common Bog II. Rooting Alders. Westwell Springs. Eastwell Springs, S. of church. Bybrook, Ashford. Troytown, Brook. Below Bulltown, Brook. Cuckolds coomb. Brabourne coomb. Stowting Springs. L[ocally] r[are], Brook Village, REW. N. of Stonehill, Sellindge. **MNE**. S. of Brabourne Lees, **MNE** Hurst Wood, Charing Mrs B. E. end Hothfield Lake 1953 REW. On Weald clay, Bourne Wood, Ham St[reet] N[ature] R[eserve]; & Priory Wood, Bilsington **MNE**. Ruckinge, REW.

**13)** Wood by R. Teise, Hoathly Lamberhurst 1955. Wood between Leigh and NE corner Penshurst Park, 1955. Gill Wood NE of Cobhambury, SE of Edenbridge 1955. Greybury Gill, 1954. Goudhurst Gill, Cowden 47. Waystrode Manor, Cowden, 1956. Stridewood Gill, 1m SE of Mark beech. Stonewall Park; N. of Chiddingstone Hoath. Lockskinners SW of Chiddingstone, 1956 **MNE**. Gill E of White Post, S. of Coldharbour, Penshurst. Ashour Wood. Meadow Wood, SW of Printstyle. Gill N of G[rea]t Bounds, Bidborough 1957. Broke Wood, Southborough **MNE**. Hurst Wood, Tun[bridge] Wells. SE of Speldhurst. Bullingstone Wood, Speldhurst. Boggy Wood SW of Pembury 614395 CAS. Gill S. of Stone Cross, Ashurst. Homewood, Langton. N of High Rocks. Pembury Wood. Gill 1m S. of Tudeley. Colebrooke Park. S.W. of Pembury. SW of Kippings Cross. G[rea]t Sandhurst Wood. SE of Hawkenbury. Hayes Wood, Pembury. Gills NW and NE of Bayham Abbey. Cinderhill Wood, W. of Matfield. Playfoots, SW of Matfield. ½m NW of Brenchley Church. Gill E of Crundalls Brenchley. Parsonage Lane & Hoathly, Lamberhurst. Combwell Wood. Old Park Wood, Goudhurst. Angley Wood. Friezley. SW of Scotts Tower, Horsmonden. Glassenbury. Brewers Wood. E. of Ladham House, Goudhurst. W of Chittenden F[ar]m, Cranbrook. Chingley Wood.

**14)** Robins Wood, Cranbrook '54. Allwaters Gill '44. Tanyard Gill, Hawkhurst '55. Mopesden Gill, Hawkhurst '55. S. of Bokes, Hawkhurst '54. S. of Lillesden, Hawkhurst '55. Wood E of East Heath, Hawkhurst 1955. S. of Ockley, Hawkhurst '54. Well Wood N.W. of Beeches F[ar]m, Sandhurst 1963. Netters Hall Gill. Lit[tle] Ninevah. G[rea]t Ninevah. E of Dingledden. Babbs Gill, N and S. Parsonage Wood / Church Wood Benenden. W. of Dingledden. S of Beacon Hill, Benenden. SW of Sandhurst. W. of Silverden, Sandhurst. E. of Alderden, Sandhurst. Newenden (Frogs Hill). ¾ m E of Rolvenden. ¾m NE of Rolvenden. ¾ [m] NW of Rolvenden. NE of Hole Park, Rolvenden. E of Broad Tenterden. S of Kench Hill **MNE**. N. of The Gibbet, in two gills. Owley Gill, Oveny. SW of Stone. Church Wood, W of Wittersham **MNE**. Bates Gill, SW of Wittersham. Rooks Wood, Oxney. Gill W of Tophill, Wittersham, Oxney.

**16)** Grange Alders, Newington. Holywell, Folkestone, 1948. Newington Moor. E. of Saltwood Castle, 1950. Paraker Wood, Seabrook.

### **C. alternifolium** L.

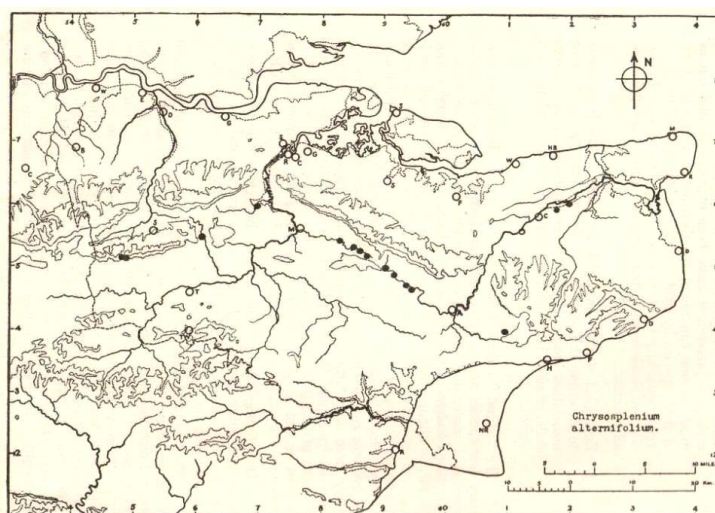
Alternate-leaved Golden-saxifrage<sup>447</sup>

15, 16.

N.

Native. In springs and flushes, and by streamlets, in alderwoods on strata yielding base-rich water; confined in Kent to the spring areas on the Thanet Sand and the Ragstone, both of which yield water which is somewhat calcareous but also contains other salts as well. Absent from the chalk springs, which yield water containing abundant calcium salts but mere traces of othersalts, and from the springs of the non-calcareous rocks of the central Weald.

Rare generally, but very locally abundant in the ragstone areas across Kent from Toys Hill to Sellindge, and in two places on the Thanet Sand near



<sup>447</sup> Two maps are given here. The second one was present with Francis Rose's papers made available to other botanists; the first is taken from Rose, F. (1955) *The new Flora of Kent. The South-Eastern Naturalist and Antiquary* 60: 9-19. An account of this species is also given as follows, in Rose, F., *Distribution maps of Kent Plants* (Exhibit), in Lousley, J., ed. (1951) *The Study of the Distribution of British Plants* (1950 conference report), B.S.B.I, Arbroath. Although it appears to require exactly similar physical conditions, and usually grows with or near *C. oppositifolium*, has evidently narrower chemical requirements. It is confined to springs and streamside flushes on the Kentish Ragstone and on the Thanet Sands. It is noteworthy that these two strata yield water of alkaline reaction, moderately calcareous, but containing many other soluble minerals as well, particularly iron, unlike the Chalk.



Canterbury; commonest in the valleys of the Len and Stour. 18 modern localities.

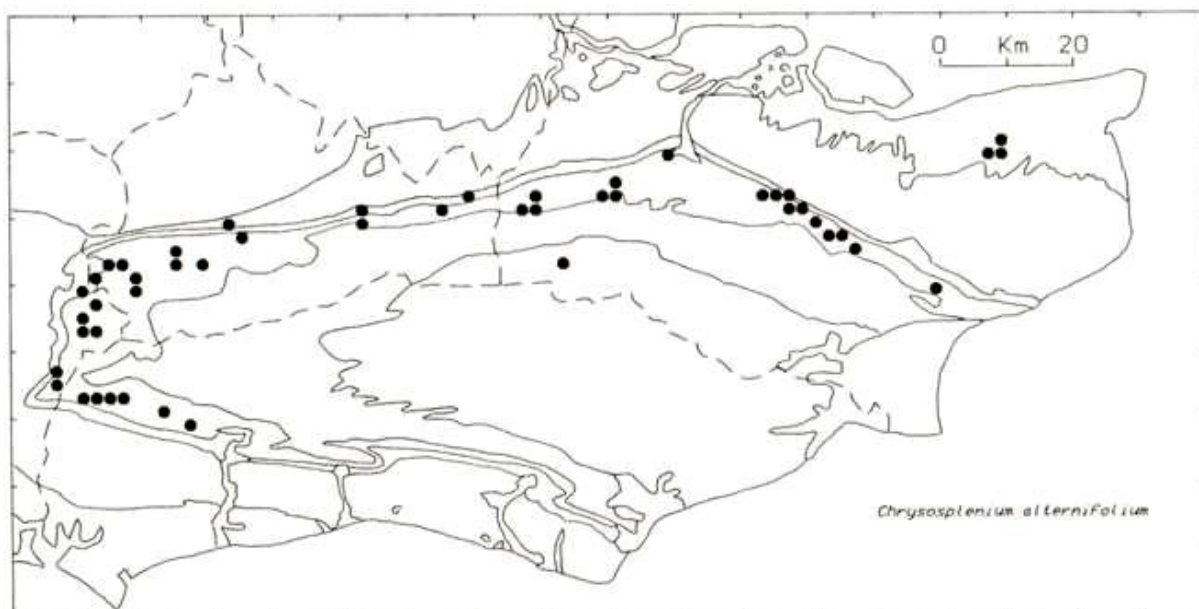
[1] Charlton Wood, Blackstone, 1746 – the first record: probably in Thanet Sand springs here. Long extinct.] L.W. Dillwyn did not believe this record (see O.B.G. p.346) but it is very likely.

3) NE corner of Trenley Park Wood, Fordwich, L.W. Wilson; 1951! **MNE**. Chequers Wood, Fordwich, 1954 **MNE**, 1981, abund[ant]. Both on Thanet Sand.

10) Springs in copse below Scords Wood, Toys Hill; E.S. Salmon; 1950-1957! **MNE**. Spring on SW slopes of Ide Hill, 1954, **MNE**. Trowlers Wood, Copse below this, 1960 **MNE**. Hill Water Bottom Wood, S. of Sundridge, 1958, R. Clarke (1958!).

11) Spring in copse, Button's Bourne, NE of Plaxtol, 1954 **MNE**. Wet copse by R. Shode, E. of Dunks Green, 1958. The Osiers, Lunsford / E. Malling, 1945-57, **MNE**. Plentiful by R. Len W. of Leeds Park, 1954-58, **MNE**. Plentiful by R. Len, at Chegworth, Ulcombe, 1954-8; at Pollhill, Harrietsham, 1954 **MNE**; and at L[owe]r Runham, Harrietsham, 1954 **MNE**. The Brooks, Harrietsham, Mrs B. Dodds. Alder carr SE of Lewsome Farm, Chilston Park, Lenham, 1960 **MNE**.

12) By the R. Stour in Alder copses, at Bowley, Lenham, 1954, **MNE**. Copse 916481, at Charing Heath, E. Scott (1958!). W. of Little Chart Church, 1946; 1962 ES. W. of Little Chart Mill, J.E. Little, 1893; C.N. Pope (1946!) **MNE**. Copse by Stour (w. bank) ¼m W. of Hothfield Common, 1959 **MNE**. Aldercopse, Stonehill, Sellenge, G.E. Smith, Hb. Borrer; 1954, plentiful! **MNE**. [By Milton Chapel n[ear] Chartham, FGEK – presumably on river gravels fed from chalk; extinct.]



[16] Between Sandling and Beachborough, C.P,S,K;; not refund. Castle Hill Folkestone, J.C. Melvill; not refund.] Saltwood, J. Pitt.

## ROSACEAE

**Sorbaria** (Ser. ex DC.) A. Braun<sup>448</sup>

‡ **S. tomentosa** (Lindl.) Rehder (nat[uralise]d in N.W. Kent.). Himalayan Sorbaria H.

‡ **S. grandiflora** (Sweet) Maxim. (nat[uralise]d in W. Kent.). H.

**Spiraea** L.

**S. salicifolia** L.<sup>449</sup>

[Bridewort. 15, 16.]]

1) Chislehurst GMB. Crayford GMB.

5) Downe Tip DPY.

6) Otford GMB.

<sup>448</sup> Both *Sorbaria* species are in the check-list, but no entries in manuscript.

<sup>449</sup> Not in check-list.



- 12) Hedge between Mersham and Kingsnorth, 1958, Miss D.A.C. Long.  
 13) Rusthall, 557410, CAS. Pond, Broadwater Lane, T[unbridge] Wells, AS; 1962, Mrs MW Page.

‡ **S. billardii** Hérincq (**S. alba** x **S. douglasii**). (nat[uralise]d in W. Kent). Billard's Bridewort. [16.] H.  
 1) Ruxley pits.

‡ **S. douglasii** Hook. (nat[uralise]d in W Kent.). Steeplebush. [16.] H.  
 1) Ruxley pits.

‡ **S. canescens** D.Don<sup>450</sup> (nat[uralise]d Longfield). Himalayan Spiraea. [16.] H.

‡ **S. x arguta** Zabel<sup>451</sup> (nat[uralise]d Darenth Wood) [Bridal-spray. 16.]

#### Aruncus L.

[‡] **A. dioicus** (Walter) Fernald<sup>452</sup> [Buck's-beard. 16.]  
 6) Cotton La[ne], Stone HMP.

#### Holodiscus (K. Koch) Maxim.

‡ **H. discolor** (Pursh) Maxim.<sup>453</sup> (nat[uralise]d. Wall, Knowle [sic] Park). Ocean-spray. H.

#### Filipendula Mill.

**F. vulgaris** Moench Dropwort. 15, 16. N.

Native. Old chalk Downland; very local, but locally abundant east of the Medway Gap, east of Wye, and from Dover to Kingsdown. Its rarity in West Kent today is hard to explain: it appears to have been far commoner formerly.

First record, 1632: Thanet; Johnson, *Descriptio*, p.21.

[2] Reported in "Broom fields" at Hernhill; and Oare, Bateman in Blackstone; probably erroneous.]

5) [Morants Court Hill, etc.; common on the chalk, W.W. Reeves. Extinct, if correct: no other records.]

6) [Near Kingsdown, Cole.] [E. of Shoreham, E. de Crespingy.] [Longfield Wood, Pinden, Cooper Fl. Met. Suppl.] [St Clere, Roper (1956, Mrs.B. Rogers, trackside up down. I could not refind, FR.) 66 Halling, Clowes (20 pl[ants] 1957, Mrs. Brumby, 10 yds SW of TV aerial on hill top.) Cobham, 1881, H.H.R. BM. 66 2 plants on Down S. of Cobham Great Wood 693675 (at edge of spur of wood running S.), Major Jackson, 1952.

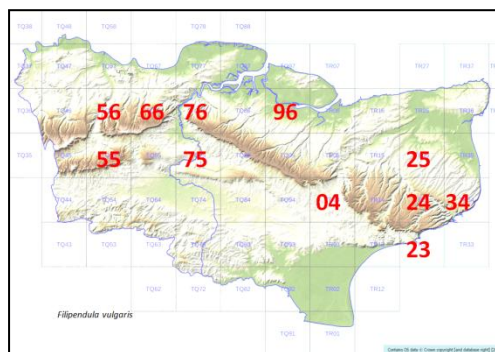
7) 76 Wouldham Downs 1954 MNE. 76 Church spur; Scarborough spur, Burham Downs, FJH (1947-62, v[ery] abund[ant]!) MNE. 76 Bluebell Hill, H. Lamb, 1886; 1945! MNE. 75 Boxley Warren, AHWD & ESM (1944→!). [Beacon Hill Faversham, J. [sic, for E.] Jacob, 1777.] [Wigmore, Miss Young.]

8) 04 Wye Crown Downs F.J.H. (1952-4! MNE). 04 Brook Downs, rare, 1947. 04 Crundale Downs, 1945-52. [Gravel Castle, Barham, 1945-6 MNE; ploughed up.] [Barham FGEK.] Barham Downs, Miss DAC Long 1958; 1960! MNE. 25 Coldharbour F[ar]m., Bekesbourne, RGW. 24 Crabble Downs! 1948. 24 Woodville Downs, Lydden to Temple Ewell, 1949-59 MNE. 23 Abbots Cliff top. 34 Cliff top N. of St Margarets Bay. 23 Dover Hill, Folkestone, 1958, Miss V. Day. Swingfield Valley NCC. 45 Downs S. of Kingsdown, abundant, 1946-57, MNE. 34 Free Down, 1954-62, abundant, MNE. 34 The Lince, Ringwould, 1951-54 MNE. [Denton, CPSK.]

[9] Between Nash and Quex, Johnson, *Descriptio*. Margate Brooksend Dr. Hunter FGEK.]

‡ 13) Skinners' School Playing fields, Southfields Park, Southborough, CAS; prob[ably] introduced with turf or grass seed. R[ai]l[wa]y bank, SE of Tun[bridge] Wells, 583384, 1960, KE Bull, comm. E. Shorrocks. R[ai]l[wa]y bank, W. of Tun[bridge] Wells Sta[tion] 1960 CAS. R[ai]l[wa]y bank, E. of Tun[bridge] Wells Sta[tion] 1960 CAS.

**F. ulmaria** (L.) Maxim. Meadowsweet. 15, 16. N.



<sup>450</sup> Given in check-list, but not in the manuscript.

<sup>451</sup> Given in check-list, but not in the manuscript.

<sup>452</sup> Not in check-list; in the manuscript given as *A. sylvester*.

<sup>453</sup> Given in check-list, but not in the manuscript.

Native. Wet meadows, river- and streamsides, fens, swamps, and wet woodlands, always on fairly base-rich substrata; it avoids stagnant waters and is favoured by a fluctuating water table. Very common in suitable habitats, except in the North Kent marshes, where it is known only in two places between Northfleet and Hernhill E. of Faversham. Absent from the chalk country, except from Reinden Wood, Hawkinge.

First record, 1629: between Grain and Cliffe, Johnson, *Iter*.

1) 47 North Cray Brooks. 47 Ruxley Pits. 36 Kelsey Park Lake, Beckenham, 1948 S.E.C. 46 High Wood, Crofton, PCH. [Elmers End, Hb. Davis 1915 **MNE**.] 46 Crofton Heath, PCH. 37 Beckenham Place PCH. Orpington Park, PHC. 57 Joydens Wood PCH.

2) [Northfleet Brooks, 1944; not seen 1958.] 87 Ditch S of Beluncle Halt, Stoke, AG Side, 1959 **MNE**. 06 Alder Wood, Waystreet Farm, Hernhill, 1955. 76 Marshes S. of Snodland, 1944. 06 Kemsdale Wood, NW Hernhill, 1956. 055610 ditch by A.229 to S, 1958, H.M.W. 86 Steamside and small fen, 857669, L[owe]r Halstow, 1962. 76 Holborough Marshes.

4) 35 Ham "Ponds". 35 Hacklinge. 25 Wingham Fen. 25 Wenderton Manor Carr, '59. B Nash. 26 Preston Marshes, 62. 36 Minster Marshes RGW. 26 Dikes 225661, Marshside, Chislet, '62. Worth Minnis.

6)E) 77 Cockham Woods, Upnor, in clearing, 1962, Mrs. M.H. Dolling.

8) 24 On moist calcareous loam in valley bottom, a[bandant], Reinden Wood Hawkinge, 1958 B Nash; 1962! 05 Track made up with chalk, SW part of Denge Wood, 1963, Mrs. B.

10) Riverbank, Otford, PCH. Riverbank, Shoreham PCH, S. of Darenth, 1954. R[iver] above S. Darenth PCH. By Darent, Roman Villa, S. of Darenth, 1954. Dartford HMP. St. John's Jerusalem PCH. Meadow S of Darenth Church 44. Westerham Wood, 82!

11)G) Leybourne Lakes, '44-60. Marsh 1m SW of Gover Hill; E of Dunks G[ree]n '54. The Mote, Maidstone, Hb Lamb, 1842; 1882 **MNE**. Trottiscliffe SW. Boxley Abbey. Addington Place DMCC. Wrotham Water. Ryarsh Wood. Horish Wood '44. Longham Wood. Snarkhurst Wood. Harrietsham. Kiln Wood, Lenham (Sand Beds) '62, plateau and by stream.

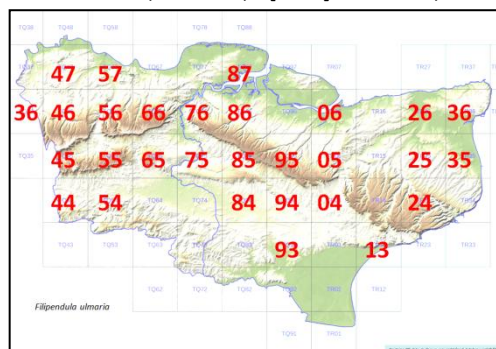
11)W) R[oa]d 1m S of Yalding '44. Moat Farm, G[rea]t Chart, '54. Pond, Yardhurst, G[rea]t Chart, 54. Pond, Vitters Oak, 1 ½m E of Bethersden, '54. Roadside, Hoads Wood, 46-54 **MNE**. Pond E of Buckhall, W. of Bethersden '54. Ditch, Hamden, SE of Smarden '54. Ditch, 1m WSW of Smarden '54. Ditch ½m W. of Headcorn by R[oa]d to Staplehurst 54. R. Teise, 1m NW of Marden 54. Ditch by R[oa]d 1m W. of Chiddingstone Causeway '54. R. Eden bank N. of Chiddingstone Mill 54. Medway bank below Ashour Wood, 1954. Ditch 1m E of Headcorn 849437, '62. Scrub by Beult, N of Buckmans Green 889419, '62. By Beult, S. of Birchwood, Bethersden, 62. By Beult S. of Headcorn Ch[urch] 831440, '62.

12) Copses on Gault, E. Lenham. Hothfield Common. Alderwood by Stour.

13) R[oa]dside Pond, Printstile '54. S.E. Corner Ashour Wood, on W C[lay] '54. Swamp N. of Highfield Rocks, Chiddingstone 54. Bayham CAS. Ditch S. of Ch[urch], Lamberhurst 684365, CAS.

15) Marsh edge, W of Pigeon Hoo, Tenterden 1962.

16) Darnley Vale. Newington Moor, 1954.



var. **denudata** Boenni[n]g.

1) Orpington Park PHC.

3) Tyler Hill, RGW ...form by str[eam].

10) Lane, Chevening S., PHC. Ightham, AHWD. Kemsing DMCC.

11) Horish Wood; Longham Wood; Snarkhurst Wood; Ryarsh Wood; Hoads Wood.

12) Copses on Gault E. of Lenham, 1944.

13) Bedgebury **BM**; Chittenden Wood ESM; Ashour Wood, 1944; Ditch below Timberlog Wood, Lamberhurst, 1940, WRW.

## Rubus L.

[The manuscript includes a separate sheet of Rubus records marked by Francis Rose as 'det. B.A. Miles 1964'. These records have not been integrated as a whole with the species account (although some are already included), and are transcribed separately here:]

**R. albionis** WCRW[atson] –S. of Acrise –scrub on Pliocene loam 1950; FR, WCRW.

**R. plicatus** W[eihe]&N[ees] Halstead, wood on c[lay] w[ith] f[lints] 1951, FR.

**R. spectabilis** Pursch. Loose Valley – 1958 RB Haynes. Puckland Wood, Sibertswold 1956 FR. Near Woodlands Lyminge 1950 FR.

**R. nutkanus** Moc. [=R. *parviflorus* Nutt.] Puckland Wood 1956 Mrs E Brickenden.

**R. euryanthemus** WCRW[atson] Elham Park FR 1950.

**R. vestitus** W[eihe] & N[ees] NW of Cuxton, '55, below G[rea]t Wood. Joydens Wood, 1946 FR. Medway Bank Maidstone Barracks EGP 1988.

**R. ulmifolius x caesius** – Woods S of Cliffe 1950 FR.

**R. laciniatus** – Near Stone, HMP 1956.

**R. lindleianus** – Farleigh Common Medway bank, MNHS 1847.

**R. idaeus** – Snodland Brook Dr J. Evans-Smith 1894. Penenden Heath H Lamb 1885. Maidstone Medway Bank VC15 1988 EGP.

**R. caesius** Fullingmill, Leeds, GH Morgan, EGP, 51957 [sic]. Sea wall E Coast Grain 1958, Mrs AG Side. Medway near M[aid]stone Barracks 59 EGP. Penenden Heath, 1847 MNHS. Barming H Lamb 1885.

**R. caesius x idaeus** – Ham Ponds 1950 FR. Seen there 1900 ESM (**CGE**).

**R. idaeus** L. Raspberry 15, 16. N.  
Native, but often an escape from cultivation. Fens, Alder carr, heathy woodland; and as an escape in hedges.  
1<sup>st</sup> record, 1597: Thanet, near Quex, Gerard, Herbal p1090; or 1777: near Lees Court, etc. E. Jacob, *Pl. Fav.* p.98.

1) Hayes Common, 1946. Abbey Wood, G.A.M. Ruxley Pits. High Wood, Crofton PCH. Crofton Heath PCH. Roundabout Wood PCH. Wood, North Cray, PCH. Dartford Heath HMP. Chislehurst Common GMB.

3) R[ai]l[wa]y, Seasalter, 1956, H.M.W.

4) Ham Ponds, probably native; 1875, J.F.D. (var. *obtusifolius* Willd. **BM**); plentiful, 1947. Carrs by stream, Wenderton Manor, Wingham, 1959, B Nash / Wingham Well, 1959, B. Nash.

5) 3964 Well Wood PCH.

6) Swanscombe Wood, 1946. Wood, Beechy Lees PCH.

7) Challock Lees, CNP.

8) 05 Downs E of Godmersham. 14 Winterage Wood / Garden Wood, Acrise 1963, DACL. 24 Reinden Wood, B. Nash, 1958.

10) 55 Broadhoath Wood. Oldbury Hill, GMB.

12) Willesborough Lees, CNP.

13) 63 Hook Green, Lamberhurst, J.R.W., 1937. 44 Boggy Wood, N. of Highfield Rocks, Chiddingstone, '54. 63 Boggy Wood SW of Pembury 614395 CAS.

16) 13 Pedlinge, LJM (?escape).

‡ **R. phoenicolasius** Maxim.<sup>454</sup> Japanese Wineberry. H.

‡ **R. spectabilis** Pursh Salmonberry. [15, 16.] H.  
Alien, N. Amer[ican].

6) Gravesend, D. Friend '48.

8) Puckland Wood, Sibertswold.

16) 152363 Wood E of Sandling Sta[tion], 1956 John Field, det. EFW; and by old r[ai]l[wa]y to SE, DACL, 1962. Grange Alders, Willow Wood, LJM.

‡ **R. loganobaccus** L. H. Bailey<sup>455</sup> Loganberry. H.

**R. fruticosus** agg. (not covered here)<sup>456</sup>. Bramble [15, 16.] N.

\* Lower Bronze Age: Minnis Bay, Conolly; Bronze, Roman, Crossness, Spurrell, 1889, Reid, 1899.

1) Keston C[ommon]. Hayes C[ommon]. Chislehurst C[ommon]. Ruxley Pits. St Pauls Cray C[ommon]. Dartford Heath.

3) Bigberry Wood. Chartham Hatch.

4) Ham Fen. Wingham Fen. Sandwich Bay.

<sup>454</sup> In check-list, no entry in the manuscript.

<sup>455</sup> In check-list, no entry in the manuscript.

<sup>456</sup> 'Not covered here' is what is stated in the check-list. In the manuscript, *R. fruticosus* agg. has relatively few records and some microspecies which would fall under *R. fruticosus* agg. are given separate records.

5) 396611.

7) Squirrels Wood / Church Wood, Stockbury. Challock Lees.

11)G) SE of , NW / Oaken Wood, old copp[ice].

W) Pond NW of Buckhall Bethersden.

13) R[oa]dside T[unbridge] W[ells] S[and] ½m E Up[pe]r Haysden. NE corner Ashour Wood.

### **R. laciniatus** [Willd.]<sup>457</sup>

1) Abbey Wood, G.A.M. Ruxley pits.

3) Bats Oak Hill Sturry, Miss E. Millward '63. Bigbury '59 DKR [*sic*, ?for KDR. SE corner Oldridge Wood REW.

13) T[unbridge] Wells Common, KEB. Angley Wood DS.

16) Sandling, R[ai]l[wa]y, L.J.M.

### **R. ulmifolius** [Schott]<sup>458</sup>

Native. Woods, chalk downs, heaths, scrub, hedgebanks, etc.; our commonest bramble.

*Rubus fruticosus* agg. Fruit stones of this were found in a late Bronze level at Minnis Bay, Conolly, 1941; and in Bronze Age and Roman levels at Crossness, Spurrell, 1889; Reid, 1899 (Godwin, p.112).<sup>459</sup>

2) E. end Minster cliffs. Furze Hill Minster. 67 Higham Canal, PCH. 77 Sharnal Street.

3) 15 Bigberry Wood. 06 E edge Blean Wood, Dunkirk BN. 25 Elmstone (Preston) near Ch[urch] by R[oa]d, BN. 26 Highstead. 16 Hoath E Blean Wood R[oa]dside BN. Sturry Broadoak near Pond BN.

4) 35 Sandwich Bay. 26 Preston. 26 SE of Sarre.

5) 46 Darwins Bank, Downe. 45 Westerham Hill. W. of Shoreham.

6) 56 Eynsford SE. 56 Whitehill, Shoreham. Fawkham. 55 Kemsing Downs. 66 Wrotham Water. Trosley Towers. 57 Stone Chutch, Greenhithe. 66 Foxenden, Meopham. 67 Tollgate. 66 Halling Downs. 66 Snodland Downs.

6E) 77 Northward Hill.

7) 76 Burham Downs. 75 Boxley Warren. Queen Down Warren. 85 Hollingbourne Hill. Thurnham. 86 Berengrave pit, Rainham. 06 OspringeDown. 94 Westwell chalk pit. Timbolds Hill. Downs E of Lenham. Park Wood Molash. 95 W. of Doddington. 05 Chilham Downs N of Down Wood BN.

8) 15 Whitehill Wood, BN. 15 GorsleyWood B[isho]p[s]bourne. 04 Wye Downs. 25 Brambley, by R[oa]d, BN. 14 Paddlesworth Court. 25 Ileden Wood. 25 Frogham, Nonington BN. Lynsore Bottom BN. 14 Hastingleigh. 24 Shelvin E of Denton BN. 24 Wolverton. 34 Kingsdown BN. 34 Walmer (Hawkshill) BN. 35 Northbourne BN. 35 Eastry B.N. 34 St Margarets Bay. 23 Folkestone Downs and Warren. 23 Hawkinge S of Terlingham BN. Pean, Chalk scarp BN.

9) 36 R[oa]dside, Sevenscore Minster BN.

11) 54 R[ai]l[wa]y Hildenborough CAS 563482. 75 E. Malling. 65 W. Malling. 84 S. of Headcorn. 84 Chart Sutton. 94 Pluckley Brickworks. 75 Aylesford Meadows.

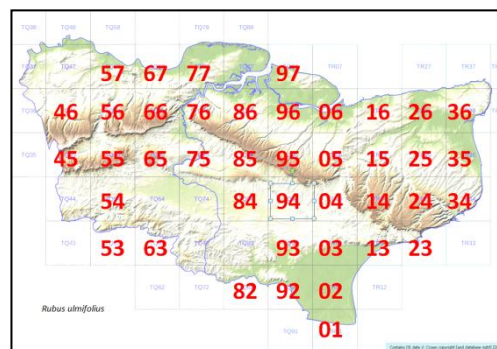
12) 16 Sturry, Miss MEM. 04 Withersdane, Wye, BN, R[oa]dside hedge. 04 R[oa]dside N of Brabourne Coombe, BN. 03 Bonnington – Allington on wet clay and sand by R[oa]d, BN.

13) 53 Stone Cross, Ashurst, 518381 CAS. 63 Chingley Wood, W. Wats[on]. 63 Kilndown A.21.

14) 93 Kenardington. 82 Wittersham. 92 Stone in Oxney. 02 St Mary in the Marsh hedge by r[oa]d S of Ch[urch], BN. 92 SW of Brookland.

15) 02 Lydd Common. 01 Denge Beach, frequent. 02 Romney to Greatstone. 13 Hythe Beach.

16) 23 Eastwear Bay. 13 Shepway Cross Lympe, on ragstone BN.



### **R. pruinus** Arrh.<sup>460</sup>

[Pruinose Bramble. 16]

[13)] T[unbridge] W[ells] Common 1938, E.D. Morgan, TLS, det. AHWD.

<sup>457</sup> Not in check-list.

<sup>458</sup> Not in check-list.

<sup>459</sup> Another version of this note appears under *R. fruticosus* agg. above.

<sup>460</sup> Not in check-list, given as *R. sublustris* in the manuscript.

**R caesius** L. Dewberry. 15, 16. N.

Native. Scrub, hedgebanks, open woods; widespread and frequent.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, p.96.

- 1) Ruxley Pits. Beckenham, S.E.C., 1948.
- 2) Sea wall, Grain, E. Coast, 1958, A.G. Side. Streamside copse, Bell F[ar]m, Minster, 1958, OD.
- 4) Ham Fen.
- 6) Dartford E, HMP.
- 8) River; Dover E. Cliff, KDR. Kingston, RGW. Chartham, RGW. Stelling Minnis, Miss T. Webber. Hacklinge chalk pit.
- 11) 578488 Hilden Brook, Hildenborough, '55, CAS.
- 13) R[ai]l[waj]y W. of Tun[bridge] Wells Sta[tion] 1960, CAS. Stone Crossing Gill, Ashurst, 578381, CAS.
- 14) Cole Wood, Woodchurch, ES.

**Rubus caesius x idaeus**<sup>461</sup>

- 4) Ham Ponds, 1893, E.S.M. BM.

**Potentilla** L.

**P. palustris** (L.) Scop. Marsh Cinquefoil. 15, [16] N.

Native: swamps, fens, lake borders; very rare, and apparently confined at present to 15) Dungeness, where it is however abundant in the fens and swamps of the Hoppen Pits, also in a shingle pit S.W. of Lydd.

First record, 1836: Keston, Cooper, *Fl. Met.*, p.79. ?Achene, Late Bronze Age, Minnis Bay, Connolly 1941 (Godwin, p.117).

[1] Keston Common Cooper *Fl. Met.*; here about 1939, W. Watson; not there now.]

[4] [Minster Marshes, Dr. Hunter, in *Fl. Thanet.*] [Stodmarsh, dike by Lampen Wall, R.E. Wood, 1952; det. E. Scott.]

[12] near Ashford, Mitchinson; unconfirmed.]

[13] near Tunbridge Wells, Wollaston; unconfirmed.]

15) Hoppen Pits, Dungeness, Dowker, *Fl. K.*; (H. Lamb, 1901 **MNE**; H. Elgar 1912 **MNE**); 2 large pits **MNE**; small adjacent one; fen E of Hamilton Farm **MNE**. Shingle pit, Dengemarsh Rd, S of Lydd, R.M. Payne. Old shingle pits near School, Dungeness, 1962.

‡ **P. alba** L.<sup>462</sup>

Alien

16) "Grassy bank of garden, until recently virgin woodland, evidently not intentionally planted"; Hythe, Mrs. Murray, B.E.C.Rep., 1921, p.381.

**P. anserina** L. Silverweed. 15, 16 N.

Native. Roadsides, waste ground, damp meadows, damp woodland rides, dune slacks, marshes. Very common throughout Kent.

1<sup>st</sup> record, 1629: Gravesend to Rochester; Johnson *Iter*, p.2. ?Achene, Late Bronze Age, Minnis Bay; Connolly, 1941 (Godwin, p.116).

1) Ruxley pits. Chislehurst Common PCH. 36 Pickhurst Mead, PCH. Elmers End Hb Davis 1915 **MNE**. R. Cray, N Cray, PCH.

2) Holborough Marshes 1944.

4) Dune Slacks, Sandwich Bay; Shellness; N. of Deal; Pegwell Bay. Hacklinge. Worth. Wingham.

5) Norheads<sup>463</sup>, Biggin Hill. S. of Timberden Bottom, on ploughed ch[alk] g[roun]d, PCH. Chevening Park, PCH. W. Wickham Ch[urch] y[ar]d SEC. Darwin's Bank, Downe, JEL.

6) Stone. Swanscombe Wood. Wrotham, Pilgr[ims] Way. R[oa]dside above Otford Mount, PCH.

7) by A249 below Stockbury Church 54. Berengrave pit Rainham PM Roberts.

8) Copse at base of Broad Downs, Brook '44. River, KDR.

10) R[iver] path below Shoreham PCH. R[iver] above S. Darenth, PCH. St John's Jerusalem PCH. Dartford HMP.

11) G) Leybourne Castle Lakes. 1m E of N. Pole By R[oa]d, Oaken Wood '54.

<sup>461</sup> Not in check-list.

<sup>462</sup> Not in check-list.

<sup>463</sup> Given as Norsteads in the manuscript, but that is a placename between Cudham and Pratt's Bottom.



**W)** Shipbourne Forest, N end, W side Plaxtol R[oa]d, '54. Hoads Wood, '54. Near Pond NW of Buckhall, W. of Bethersden, '54.

**12)** Roadside E of Lenham Heath, '54.

**13)** 63 Lane 1m SW of Pembury New Ch[urch], PCH. 64 Pembury Wood, PCH.

**15)** St Marys Bay, 1881, J.F.D.P. **BM**. Hoppen pits / Halfway Bush / E of Old School, Dungeness.

**P. argentea** L. Hoary Cinquefoil<sup>464</sup> 15, 16 N.

Native. Dry sandy or gravelly banks, open grassland, and old pits; frequent on the Eocene and later sands and gravels N of the Downs, but local; very rare S of the Downs, unrecorded in the Weald, on Folkestone Sands in 11) only.

1<sup>st</sup> record, 1746: Blackheath; Blackstone, p.70.

**1)** Keston Common, E. de Crespigny; 1945→!54! **MNE**. Holwood Park, Hb. Davis 1916 **MNE**. old records: [Swanley Junction, F.M. Webb; Crayford, E de C; Erith, H Trimen 1861 **BM**; Blackheath, Blackstone; Dartford Heath, St J M; Abbey Wood, FJH, St J M 1925; Bromley, Pamplin; Belvedere, FM Webb; Sidcup, EMH; Plumstead, Sherry; Bickley, W W Reeves, 1900 LBH; W. Wickham; Beckenham, E de C; Hayes Common, Prebble; Bexley, 1871, F.J.H.; Pauls Cray Common, W.W.]

**2)** [Bysing Wood, Cowell Fl. *Faversham*.] Bank on Dartford Marshes, 546761; 1931, PHC; 1956, G. Brown; 1962! Near Uralite Halt, Miss E. Burrows. Woods N. of Newington, 1918, Hb Davis **MNE**.

**3)** Gravelly bank, Fishpool Hill, Littlebourne, Miss DAC Long; 1949, 1960! **MNE** -1963. Gravel pits, Swanton Farm, Littlebourne, 1949-63. Roadside between Stodmarsh and Ellbridge, L.W.W., 1948; 1950, REW. Pit at Westbere, L.W.W. 26 Wood border SW of church, Preston, B Nash, 1958.

**4)** Bretts Gravel Pit, Sturry, REW 1951.

**6) E)** Gravel pit E. of Chalk, AHWD (1945, abundant!) **MNE**. Shorne, behind windmill on gravelly grassland, 1945 **MNE**, 1954. On gravel heap, Green Street Green, 578708, 1960, HMP; PCH.

**7)** Putt Wood, Ospringe, in gravel pit, 1950-65 **MNE**; 6 pl[ants], 1980! [gravel pits, Newnham, J Jacob; Sandbanks Wood; Coxett Wood, Stowell.]

**8)** Plateau above Juliberry Downs, Chilham, 1958, Mrs.B; ES.

**[9)** Margate, 1841, Hb Woodward.]

**11)** Sandpit W. of Wrotham Heath, DMCC. Sandy scrub, N. of Addington, 1946, **MNE**. Ryarsh sandpits, H. Lamb; Gray. Roadside, 773 573, N. of Penenden Heath; H Lamb 1880 **MNE**; O. Davis. [Maidstone, H.L. 1880 **MNE**.]

‡ **P. inclinata** Vill.<sup>465</sup> Grey Cinquefoil.

‡ **P. recta** L. Sulphur Cinquefoil. 15, 16 4/51

Naturalised alien. Waste ground, v[ery] rare.

**1)** [Hayes to Beckenham, 1897, Scargill.] [Langley Park, Hb. Davis, 1918 **MNE**.]

**2)** Graveney, 1959, R.Th.

**4)** 36 N. of Red Lion, Richborough, (E of R[oa]d), L.W. Wilson, 1949 **MNE**.

**6)** [Rochester, 1883, W.W.R.] 57, 67 Swanscombe Wood, abundant on cutting (Woolwich Beds) of A.2, 1946 **MNE**; 1962, WAS. Cotton Lane Stone HMP. Upper Halling Mrs V Brumby.

**9)** 36 St. Stephens College, Broadstairs, Mrs. B. Dodds. Botany Bay, LWW.

**10)** [near Brasted Chart, 1910, C.E.S. **BM**.] Sevenoaks sandpit, Mrs Spear.

**11)** Ryarsh Roughetts 1954 DMCC.

**13)** Pantiles, in garden, 1958, KEB.

var. **sulphurea**

**6)** Swanscombe, 1948, H. Milne-Redhead **BM**.

‡ **P. intermedia** L. Russian Cinquefoil. [16.]

**10)** Sandpit, Riverhead, 1964, E.S. Hewson, det. D,McC.

‡ **P. norvegica** L. Temate-leaved Cinquefoil. [15, 16.]

**1)** Bickley, 1907, R. Beer **BM**. Woolwich Common, 1963, G.M.B.

<sup>464</sup> Silver Cinquefoil in the manuscript.

<sup>465</sup> In check-list, but no entry in the manuscript.

2) Woolwich Arsenal, 1893, A.H.W.D. **BM**. Murtons F[ar]m, Graveney, R. Theobald, 1959 **MNE**.

12) near Stour, Shalmsford St[reet], RGW.

14) R[ail]l[way] St[ation], Tenterden, 1962, R. Elphick.

**P. erecta** (L.) Raeusch. ssp. **erecta** Tormentil. 15, 16. N.

Native. Heaths, dry open woods, nearly always on light, acid soils. Common inland, but absent from the Hundred of Hoo, Sheppey, and the coastal Marshes, except on shingle at Dungeness and on sand dunes at Sandwich.

First record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.31.

1) Hayes Common. Keston Common **MNE**. Chislehurst Common. St Paul's Cray Common. Petts Wood. Dartford Heath. Farningham Wood. Joyden's Wood. Hollows Wood, W of Shoreham. Shooters Hill GMB. Crofton Heath PCH.

3) Blean N. of Dunkirk. Bigberry Wood, N slope in copp[ice] on gravel, 54. Boughton Hill S of A2 HMW.

4) Richborough, 1960, Mrs B.

5) Halstead PCH. Andrews Wood, S. of Badgers Mount PCH.

6) **E**) Darenth Wood. The Thrift. Randall Wood, Shorne, 1954. Cobham Park, 44. [Otford, A.A. **BM**.] On c[lay] w[ith] f[lints] top Beechy Lees Wood, Kemsing, PCH. On c[lay] w[ith] f[lints] Preston Hill, PCH.

7) Heath at Dannaway, Newington, 1957. Coxett Wood on Th[ane] Sand HMW. Longbeach Wood, on plateau Drift.

8) Covert Wood. West Wood, Stowting. 34 On leached soil in chalk grassland with *Calluna*, NW of St Margaret's at Cliffe 1955. Free Down, 1962. Downs SW of Lydden, FR & DPY, '55. Stelling Minnis.

9) 24 Reinden Wood, B. Nash, 1958.

10) 55 Oldbury Hill, Ightham, 1945 **MNE**. 55 Ightham Common (Rose Wood). 55 Seal Chart. 45 Westerham Wood, B. Sennitt; (82!).

11) **G**) 65 Leybourne Fen '44. 75 Horish Wood, 1849, Hb Lamb **MNE**. 75 Ride SE corner Oaken Wood Barming, 1954. 65 Valley Wood, Wrotham Heath. 65 Ryarsh Roughetts, '43, '44 **MNE**. 75 Penenden Heath '44. [Barming Heath, Hb. Lamb, 1949 **MNE**.] 75 Oaken Wood, Ditton.

11) **W**) 74 Widehurst Wood, S. of Marden '58. 65 Shipbourne Forest N end, W side Plaxtol Rd '54. 84 Dering Wood, W. part, E. Scott, 1962. 94 Birch Wood, Bethersden, 1962.

12) 04 Willesborough Lees '45 **MNE**. 94 Hothfield Heath '45 **MNE**; '62. 94 Ashford Warren.

13) 53 Stone Cross Gill, Ashurst, CAS, 518381. 54 SE corner Ashour Wood in ride, '54. 44 Molinia Heath N. of Highfield Rocks, Chiddingstone 54. 63 High Wood, T[unbridge] Wells, PCH. 64 Pembury Wood. 73 Bedgebury Pinetum. 93 Combwell Wood. 83 Sissinghurst Park Wood. 63 Wood SW of Pembury 614395 CAS, Bayham CAS.

15) Denge Beach Hoppen Pits 1938 SEC.

16) 13 Heath N. of Kiln Wood, Sandling Park, 1958.

**P. x suberecta** Zimmerer<sup>466</sup>

**P. anglica** Laichard. Trailing Tormentil. 15, 16. N.

Native. Wood borders, rides, heaths, and scrub, usually on lighter soils, but occurring on heavy loams and even on Weald and Wadhurst Clays; well distributed, especially in the Weald and on the Greensand, but uncommon generally.

First record, 1777: Hernhill, J. [*sic*, for E.] Jacob, if correct.

1) Orpington, 1896, C.E.B. **BM**. Holwood, 1921, E.B.B. [Locks Bottom 1897 NFP.] Chislehurst, WCRW. Bexley, GMB. Farningham Wood, PCH. Crofton Heath PCH. Pokenden Wood Swain.

3) Honey Wood, Tyler Hill; RGW.

4) Gilling Drove, MEM.

5) In woodland on plateau drift loam, near Shepherds Barn, Timberden Bottom, SW of Shoreham, 1947, plentiful; 1956 **MNE**; HMP. 396611, Highams Hill in copse, PCH.

6) Horns Cross pit, Stone, 1962, 570745, HMP. Horton Kirby Wood PCH. Preston Hill, PCH. Grass-heath N. of Romney Street 1952 **MNE**. Mounts Wood, PCH. Cobham Warren, PCH. Randall Wood 1957, PCH.

7) Otterden, 196-.

8) Covert Wood, KDR, 1957; 190485, 1960. Whitehill Wood, Miss E.M.

10) S. of Sundridge, R.A.C., 1958.

<sup>466</sup> In check-list, but no entry in the manuscript.

**11)** Kings Wood, H. Elgar 1897 **MNE**; Kings Wood, Ulcombe, Mrs. B. Dodds 1960 **MNE**; Kings Wood, Langley, 1954 **MNE**. Dering Wood, Pluckley, 1949. The Forest, Pluckley, DMCC & JEL, 1949. Hoaths Wood, 1957, ES. Widehurst Wood, SE of Warden Beech, 1958, **MNE**.

**13)** Tun[bridge] Wells, E.D. [*sic*, for Ed[ward]]? Forster **BM**. Angley Wood, ESM; Brenan 1957! **MNE**. Chiddenden Wood, Cranbrook, 1889, ESM **BM**. Combwell Wood, 1959 **MNE**. 63 Bayham Woods, Lamberhurst, 1956. 63 Field below Timbderlog Wood, Lamberhurst, 1938, JRW. 53 Lane to High Rocks from Rusthall, TF Forster (1946!). 54 Culverden Down, 1945 **MNE**. Rusthall Common, Whitwell. 53 Rough Pasture near High Rocks, JRW, 1943. 54 Grass-heath, SW of Leigh, 1954 **MNE**. 63 Love Lane, Kilndown, 1899, J.S. **TLS**. 64 R[oa]dside, Pembury Wells, 1961, CAS.

**14)** 93 Ride, Pond Wood, High Halden, 1955, F.R. & E. Scott. 73 Rough field by Attwater's Gill, Cranbrook, 1955 **MNE**. 72 Hurst Wood, W. of Sandhurst, 1958 **MNE**. 82 Church Wood Wittersham 1964.

**16)** Shornecliffe, Mrs. B. Welch, 1948. Kiln Wood, Sandling Park, 1958, L.J.M. **MNE**; 1958! **MNE**. Near Pedlinge Chapel 1958, L.J.M. **MNE**. Folks Wood, Pedlinge, 1957, LJM.

**P. x mixta** Nolte ex Rchb. (**P. reptans** x **P. anglica**, plus **P. reptans** x **P. erecta**)<sup>467</sup>. [15, 16.] N.  
[*P. reptans* x *erecta*]

**8)** Covert Wood, 1960, B.Nash.

**16)** Saltwood, L.J. Margetts, 1958 **MNE**, det. F.H.P.

[*P. anglica* x *reptans*]

**1)** Orpington, 1896, C.E.B. **BM**.

**13)** Chittenden Wood, 1889, E.S.M. **BM**.

**16)** Sandling Park, 1958, L.J. Margetts, **MNE**, det. F.H.P.

**P. reptans** L. Creeping Cinquefoil . 15, 16. N.

**Native.** Hedgebanks, wasteground, open coppice woodland, scrub, and grasslands, on neutral or basic soils; abundant throughout the county.

**1<sup>st</sup> record, 1632:** Faversham to Gravesend; Johnson, *Descriptio*.

**1)** Abbey Wood, GAM. Joydens Wood. Shooters Hill Woods, GMB. Ruxley pits. Blackheath GMB; ECW. Dartford Heath, GMB. Farningham Wood 82. Beckenham, 1948, S.E.C. Kelsey, Beckenham, 1915, Hb Davis **MNE**. Crofton Heath PCH. Bexley Ch[urch] y[ar]d, PCH.

**2)** By A249, 1m. N. of Iwade 1954. Holborough Marshes '44. Plumstead Sewer Bank PCH. Woolwich Arsenal PCH. R[ai]l[wa]y bank, Cuxton.

**4)** Sandwich Bay dune slacks.

**5)** Chalk W of Eynsford, PCH. 396611 PCH. Chevening Park PCH.

**6)** Mounts Wood. Kemsing Downs PCH. P[ilgrims] Way E of Wrotham PCH. Stone Castle. Horton Kirby PCH. Wood E of Lullingstone Castle 1958 **MNE**. G[rea]t Crabbles Wood '44. Greenhills Wood, Otford, PCH. Halling Downs PCH. Shoreham Rifle Range PCH.

**7)** R[oa]dside chalk below Stockbury Church, by A249, '54. Putt Wood 1980. R[oa]dside Primrose Cafe Stockbury 54. R[oa]d, Charing Hill, '54, by A252. R[oa]ds[ide] Park Wood Molash, 54, by A252.

**8)** Foot of Broad Downs, Brook '44. Covert Wood, Mrs DKR [*sic*, ?for KDR], 1960 **MNE**.

**9)** River, KDR. Shakespeares Cliff, KDR. Minster Ch[urch] y[ar]d, 1963.

**10)** Farley Common, Westerham (mostly 4-petalled), 1948 DPY. R[iver] above S. Darenth PCH. St John's Jerusalem, PCH. N of Bat & Ball CAS.

**11)** **G)** 1m E. of N. Pole F[ar]m by Rd 54.. Addington. R[oa]dside SE Chequers W. Farleigh 1954.

**W)** R[ai]l[wa]y, Hildenborough 563482, CAS. Hoads Wood, '54. Shipbourne Forest Wood, W. side Plaxtol Rd 54. (Sandy La[ne], Boxley Hb Lamb 1848 **MNE**.)

**12)** 15 Vauxhall Lakes, Canterbury, Miss DACL, 1958, **MNE**. 05 R[oa]dside E Stour Farm Godmersham, 54.

**13)** 44 Swampy Wood N. of Highfield Rocks, '54. Combwell Wood, 1979. 63 Lane NE of High Wood, Pembury PCH. 64 Wood by Pembury W[ater]Works, PCH.

**14)** Old R[ai]l[wa]y, High Halden Sta[tion], 1960, BN.

**15)** Dungeness Lighthouse, 1938, S.E.C.

var. **microphylla** Tratt.

**1)** Holwood Park, St.J. Marriott, BEC Rep. 1922 p.227.

<sup>467</sup> This is the heading in the check-list. In the manuscript there are separate treatments, in different places as (a) *P. erecta* x *reptans* = *Potentilla* x *italica* Lehm. and (b) *P. anglica* x *reptans* = *P. x mixta* Nolte ex Reichb.

**P. sterilis** (L.) Garcke Barren Strawberry. 15, 16. N.

Native. Dry woodlands, scrub, and hedgebanks; very common in most parts of Kent, but absent from the Hundred of Hoo east of Chattenden Wood, from Grain, Sheppey, Thanet, the Thames, Medway and Stour Marshes, and Romney Marsh.

1<sup>st</sup> record, 1633: Greenwich Park, Johnson edition of Gerard's *Herbal*, p.998.

1) Abbey Wood, G.A.M.; RAB. Joydens Wood.

5) Rushmore Hill, Halstead PCH. Chevening Park, 1950 **MNE**. 3964 Well Wood PCH.

6) **E**) Chattenden Wood, 1954. Darenth Wood. Lords Wood Darenth PCH. Horton Kirby Wood PCH. Mounts Rd Greenhithe. Swanscombe Wood. G[rea]t Crabbles Wood, PCH. Claylane Wood Cobham '61 HAS, young copp[ice]. Cobham Bury Wood, 61, HAS, young copp[ice]. Copse S. of Kingsdown; Gravel pit Wood, W Kingsdown; Broomfield Wood, W Kingsdown; Billet Wood, W Kingsdown; Ridley Wood; Springcroft Wood, Fawkham; Redhill Wood, Fawkham; Middle Wood, Fawkham; White Ash Wood, Fawkham.

Downs E of Shoreham PCH.

7) Bredhurst Hurst 1944. Simia Wood, Ospringe, HMW. Berengrave pit Rainham PM Roberts.

8) Iffin Wood C Haes. SW of Lydden, KDR. Reinden Wood '58 B Nash. Wood S. of River KDR. Rubery Down.

9) absent.

10) 55 Westerham Wood, PCH; 82!

11) **G**) 65 Mereworth Woods N. of Swanton Valley; ride neutral loam; and copp[ice] '54. 75 SE Part Oaken Wood in fresh and old coppice '54 **MNE**.

**W**) 54 R[ai]l[wa]y, Hildenborough, 563482, CAS.

13) Tun[bridge] Wells, 1903, H.&J.G. **BM**. 44 Wood ½ m SW of Chiddingstone Hoath 1954. 44 Wood S. of Highfield Rocks Chidd[ing]stone 1954. 63 High Wood, T[unbridge] Wells, PCH. 64 Pembury Wood, PCH. Blackbush Wood DS.

16) Addington Knoll, LJM. Cherry Garden VFP Day.

**Fragaria** L.

**F. vesca** L. Wild Strawberry. 15, 16. N.

Native. Woodland, hedgebanks, scrub, and rough grassland, especially on base-rich soils; common generally, but absent from Grain, Sheppey, Thanet, Romney Marsh, and the Thames, Medway, and Stour alluvial marshes. Particularly common on the chalk and ragstone.

1<sup>st</sup> record, 1629: Gravesend to Rochester; Johnson, *Iter*, p.3.

1) (Bromley, 1874, J.Cherry **BM**.) Farningham Wood, 1950. Joydens Wood. Abbey Wood, GAM. Ruxley pits. Roundabout Wood, Crofton, PCH. Holwood Park PCH. The Larches, W of Farnborough, PCH. W. Wickham 1915 Hb Davis **MNE**. Bexley Ch[urch]y[ar]d PCH. Elmstead Woods, 1956, Miss A. Mills.

3) Grassland and scrub NE of Boughton-under-Blean. Hersden Wood, RGW. Blean Wood, N. of Dunkirk, 1955. Church Wood, W. of Blean, 1955. Bigberry Wood, N slope, '54. Gravel Pit, Bigberry Wood '54.

5) Darwins Bank, Downe. Woods W. of Shoreham. 3964 Well Wood PCH. Chalk W. of Eynsford, PCH. Chevening Park PCH. Pilots Wood PCH.

6) **E**) Chattenden Wood, 1954. Mounts Wood. Swanscombe Wood. G[rea]t Crabbles Wood 44. Court Wood. Ladies Close Wood, Cliffe (L[ondon] Clay) '44. Darenth Wood PCH. Lords Wood, Darenth PCH. Greenhills Wood, Otford. Romney St[reet] PCH. Halling Downs. Dunstall Woods Shoreham PCH. Preston Hill, PCH. Halling Warren 44. R[oa]d bank, Harvel, 61, HAS. Billet Wood. Ridley Wood. Horton Wood. Springcroft & Middle Woods.

6) Cliffe chalkpits. Juniper Hill, Shoreham. Woodlands Hill, Wrotham 1955. [Northfleet 1837, Hb. E. Banks **BM**.]

7) Stockings Wood, Detling 1955. Bredhurst Hurst; Down N. of Bredhurst Hurst, 1955. Queen Down Warren, 1880 **MNE** F. Osborne; 1955! Squirrels Wood on drift loam 54. Church Wood Stockbury on chalk 54. Burham Downs. Bluebell Hill. Boxley Warren. Hollingbourne Hill. Berengrave pit Rainham. Simia Wood, Ospringe HMW. Coxett Wood.

8) Iffin Wood C Haes. 24 Reinden Wood B Nash, 58.

10) 55 Rooks Hill escarpment Woods 1953. Westerham Wood, B. Sennitt, 82!

11) **G**) 75 Park Wood, Boughton Mon[chelsea], 1955. 75 Sandpit E of Forstal, 1955. 75 Sandling Wood, N of Maidstone, 1955. 65 Oaken Wood (N Pole end) 1958. 65 Oaken Wood Barming end in coppice old & fresh 54. 75 Holt Wood, Aylesford, 1955. 65 Ride on chert drift N. of Swanton Valley cott[age]s '54. 65 Gover Hill Plateau Wood 54. 75 1m E. N Pole by R[oa]d 54. (Iguanodon Quarry Maidstone, F James 1881 **MNE**.)

**W**) 94 Hoads Wood '54. 54 R[ai]l[wa]y, Hildenborough 563482 CAS. 65 Shipbourne Forest (Golden Stable W[oo]d) '54.

**13)** 53 Stone Cross Gill, Ashurst, 518381, CAS. 44 Wood ½m SW Chiddingstone Hoath 54 (Wad[hurst] Clay). Blackbush Wood, DS. 64 Pembury Wood, PCH. 63 High Wood, T[unbridge] Wells, PCH.

**16)** Postling Wents Wood (Gault).

‡ **F. moschata** (Duchesne) Duchesne Hautbois Strawberry. [15, 16.] H.

**1)** R[ai]l[wa]y E of Blackheath, Fl.K.

**6)** Darenth Wood, Fl.K. Eynsford, Mrs. Mallinson.

**7)** Boxley Warren, Fl.K.

**8)** Bank at Bridge, well nat[uralise]d RGW.

**11)** Medway Valley Penshurst → Maidstone Fl.K.

Possibly some of these are errors for the next.

‡ **F. x ananassa** (Duchesne) Duchesne<sup>468</sup> Strawberry. [15, 16.] (garden escape). H.

**1)** R[ai]l[wa]y bank, Hayes, D.McC. Ruxley pits.

**6)** R[ai]l[wa]y bank E of Castle F[ar]m, Shoreham. PCH. & S of Eynsford, GMB. A2 verge, 580732 HMP.

**7)** Down SW of Ospringe HMW.

**10)** R[oa]dside High Cross. Ightham CAS.

**11)** W. Malling Station, on bank. Harrietsham Station, Mrs B. Dodds.

**12)** R[ai]l[wa]y bank, Whitehill, Canterbury, CA Roberts. R[ai]l[wa]y S. of Wye Sta[tion], PCH.

**16)** R[ai]l[wa]y Bank, Westenhanger, L.J.M.

**Duchesnea** Sm.

‡ **D. indica** (Jacks.) Focke<sup>469</sup> Yellow-flowered Strawberry. H.

(*Fragaria indica* Andr.)

**11)** Roadside by Nut Orchard, Brungers Farm, S. of Ulcombe, Mrs Bamborough, per L.R.A.G., 1956, **MNE**.

**[13)** Garden weed, Sissinghurst Castle, not really wild, DMcC.]

**Geum** L.

**[G. rivale** L.<sup>470</sup> Water Avens.

“Wood near Barbers Mill, Hothfield,” J. [sic, for E.] Jacob, 1777. Probably an error: no other record. The species comes no nearer to Kent than W. Sussex (Rogate), W. Surrey (Chertsey) and Essex (Chingford). Naturalised in garden Wilderness, Carlton Rd, T[unbridge] Wells, 591396, 1955 C.A. Stace.]

**G. urbanum** L. Wood Avens.<sup>471</sup> 15, 16. N.

Native. Woods and hedgebanks on base rich soil; very common generally, absent from the Marsh districts; Grain; and Sheppey.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

**1)** Keston Common PCH. Abbey Wood, GAM. Beckenham, 1948, SEC. Holwood Park PCH. Shooters Hill Woods, GMB. Kent Gate, W. Wickham, 1915 Hb Davis. Roadside, Bexkey, N Cray PCH. Wood by Cray, N Cray, PCH. High Wood, Crofton PCH. Ruxley pits.

**2)** Farningham Wood, PCH; 82!

**3)** Chequers Wood, Fordwich, 1955.

**5)** [Halstead, A.A. **BM.**] Copse near Washneys F[ar]m, Halstead, PCH. Darwin’s Bank Woods Downe. Chevening Park. 396611 copse Highams Hill PCH. Wood W of Shoreham. Chalk Wood W of Eynsford.

**6)** Copse SE of Dartford ’44. W. of Woodlands Hill Kemsing, 1955, 567595. Wood 1¼ m NW of Wrotham 590596, 1955. [Gravesend, 1837, Hb. E.B. **BM.**] Horton Kirby, PCH. Horton Kirby Wood, PCH. Cobham G[rea]t Wood 44. Darenth Wood. G[rea]t Crabbles Wood PCH. Mounts Wood, PCH. The Thrift, Bean, PCH. Swanscombe Wood. Downs above Kemsing PCH. Pilgrims Way, Ryarsh, 44. Dunstall Wood PCH. Preston Hill PCH. Wingate Wood Halling.

**7)** by r[oa]dside Hartlip Hill 1955. Queen Down Warren Wood, 1955. S. of Gillingham, 1938, JBM. Copse below Purple Hill 1955. Squirrels Wood on drift loam 54. Church Wood, Stockbury on chalk 54. Simia Wood /

<sup>468</sup> In the manuscript, *Fragaria x ananassa* Duchesne (*F. chiloensis* x *F. virginiana*); but in the check-list it is given as *F. x ananassa* (Weston) Lois., Vilm., Nois. & J. Deville. This transcript follows Stace’s New Flora 2<sup>nd</sup> edition instead.

<sup>469</sup> In the check-list and manuscript, cited as (Andrews) Focke.

<sup>470</sup> Not in check-list.

<sup>471</sup> Also as Herb Bennet in the manuscript.



Coxett, Ospringe. Berengrave pit Rainham PM Roberts. Bredhurst Hurst 1955. W. Coombe, Detling Downs 1955.

**8)** Copse, Broad Downs Brook '44. Bishopsbourne 1955. Lockeringe Wood NW of Alkham 1955. Iffin Wood C Haes. Reinden Wood, B Nash, 58.

**10)** Rooks Hill Scarp Wood 1955. Westerham Wood PCH; 82! R[iver] above S. Darenth PCH. Edge of water meadow, Darenth, PCH. Horish Wood '44.

**11) G)** Copse by Len Willington St[reet] 1955. Holt Wood, Aylesford, 1955. Sandling Wood N of Maidstone 1955. Swanton Valley Floor (Ragstone) 54. SE part Oaken Wood, Barming (fresh copp[ice]) '54. 1m E, N. Pole, by R[oa]d, Oaken Wood, 54. Loose Valley, H.L. 1884 **MNE**. Allington Wood H.L. 1880 **MNE**.

**W)** Hoads Wood. '54.

**13)** Stone Cross Gill, Ashurst, 518381, CAS. Wood by R. Teise, Hoathly, Lamberhurst 1955. Wood ½m SW Chiddingstone Hoath 54. Bayham CAS. 63 Wood 1m SW of Pembury New Ch[urch], PCH. 64 Pembury Wood, PCH. Combwell Wood, 1979.

‡ **G. quellyon** Sweet<sup>472</sup>

**Agrimonia** L.

**A. eupatoria** L.

Agrimony.

15, 16.

N.

**Native.** Roadsides, hedgebanks, open woodland, scrub, downland; very common throughout the county, on all soils except very wet, v[er]y acid, or saline areas. In all 10km sq[ua]re[s] of National Grid in Kent.

**1<sup>st</sup> record, 1629: between Grain and Cliffe, Johnson, lter.**

**1)** Hayes Common. Holwood Park. Beckenham Place PCH. Kent Gate, Hb. Davis, 1915 **MNE**. Mount Mascal Bexley PCH. Ruxley pits. Chislehurst GMB. Dartford Heath, GMB.

**2)** Farningham Wood; 82! Scrub E. of Scrapsgate, Minster. Grain. All Hallows GMB. Higham Canal, PCH. Brambledown; East Church Cliffs, 1955. Bank by R[iver], Cuxton, PCH.

**3)** Gravel pit, Bigberry Wood, '54.

**5)** Down W. of Norheads, Biggin Hill, 1958. Halstead, PCH. 396611 PCH. Farningham R[oa]d Sta[tion] Approach PCH. Darwins Bank, Downe, JEL. The Larches, W of Farnborough, PCH. Chalk W. of Eynsford, PCH. Pilgrims Way, Polhill PCH. Chevening Park PCH. Pilots Wood, PCH.

**6)** Dartford E HMP. Horns [Cross] pit, 1962. Higham Upshire, 1938, JBM. Mounts Wood PCH. Horton Kirby PCH. Horton Kirby Wood PCH. Gravesend, HAS, 60. Kemsing Downs, PCH. P[ilgrims] Way E of Kemsing PCH. SE of Eynsford GMB. Farningham GMB. Halling Downs. Downs E of Shoreham PCH. Preston Hill PCH.

**7)** Queen Down Warren. Berengrave pit Rainham. Simia Wood, Ospringe, HMW. Burham Downs East 1955. A.249, below Stockbury Church on chalk bank 54. Church Wood, Stockbury. Challock Lees / Park Wood Molash, by A252, '54.

**8)** Iffin Wood C. Haes.

**9)** Banks W. of Cleeve Court, Minster, 1963.

**10)** R[ai]l[wa]y cutting Gault E of Kemsing Station '54.

**11)G)** Wood Aylesford '53. Oaken Wood Barming end, 1955. Isol[ation] Hosp[ital] E. Malling. Oaken Wood, Teston end. Mereworth Woods. R[oa]d Startled Saint W. Malling 54. Swanton Valley Floor. Sutton Valence [cross] R[oa]ds ¾ m N of village 54. N. of E Sutton 54. N. of Ulcombe 54. Fairbourne Heath 54.

**W)** R[oa]dsides N. of Bough Beech 1955. ½m SW of Brook Street Tonbr[idg]e 54. Shipbourne Forest by Plaxtol R[oa]d 54. R[oa]d ½ m S. of Dunks Green. Bethersden Village '54. Hoads Wood 54. ½m S. of Smarden '54. 1m WSW of Smarden 54. By Pond E of Buckhall W of Bethersden '54. By Pond NW of Buckhall W of Bethersden '54. R[oa]dsides ½m W of Headcorn Ch[urch] '54. Vitters oak E of Bethersden 54. ½m E of Vitters oak 54.

**13)** Hedgebank, SW of Leigh 1955. SE Corner Ashour Wood on W Clay 54. R[oa]dsides S. Park Penshurst 54. Field ½m SW of Chiddingstone Hoath 54. [T[unbridge] Wells, R. Pryor, 1838 **MNE**.]

**A. procera** Wallr.<sup>473</sup> (*A. odorata* auct. non (L.) Miller)

Fragrant Agrimony.

15, 16.

N.

**Native.** Hedgebanks, scrub, woodland rides and woodborders on acid, often damp, soils; locally frequent in the High Weald ( 13) and 14) ), and in the Blean 3); scattered and rare elsewhere, but occurring on the Tertiaries near London, and on the Gault and Greensand.

**1<sup>st</sup> record, 1855: Rusthall Common; A.G. More in Phyt. N.S. 1, p.294 BM.**

**1)** S. side Petts Wood, 1930, R.W.R.

<sup>472</sup> In check-list as *G. chilensis* Balbis; no account in the manuscript.

<sup>473</sup> In the manuscript given as *A. odorata* (Gouan.) Mill.

[2] Plumstead Marshes, Bot Cray Ravensbourne & Thames – probably an error.]

3) 15 Trenley Park Wood, Fordwich, F.J.H.; 1950! **MNE**. 05 Fishponds Wood, Dunkirk, in ride, 1949 **MNE**, '54, '55. 15 Streamside by Bigberry Lane, Harbledown, 1950 **MNE**. Bigberry Wood, 1957. 25 Gravel Pit, Swanton F[ar]m, Littlebourne, 1963, Mrs. KDR. Sandpit, Dengrove Wood, Sturry, C.A. Roberts, 1957.

5) 399611, R[oa]dside, near Jewells Wood, on c[lay]w[ith] f[lints], PCH.

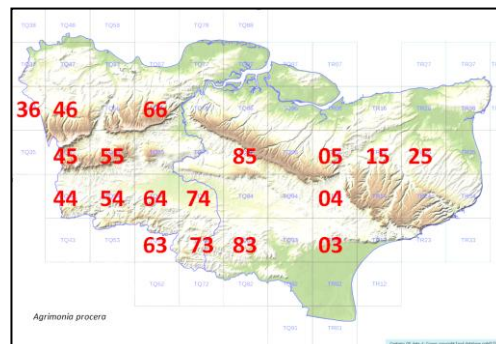
10) 45 Old leached ragstone quarry spoil  $\frac{3}{4}$ m S. of Brasted 1955 **MNE**. 55 Wood border, Sevenoaks, Mrs. Hewson.

11) 66 Ryarsh Wood, on Gault, 1949, **MNE**. 85 Wood border, Platts Heath (SW of Lenham), on Drift over Hythe Beds, 1954, **MNE**.

12) 04 Sandy scrub, Brabourne Lees, (on Folkestone Sand) 1950, **MNE**. 03 Wood on Weald Clay, NW of Bilsington, 1958 **MNE**. Near Seely, Mersham, 1950, ES.

13) 54 old pits in Wood, Wat Stoke, Chiddingstone, 1953. 53 Rusthall Common, AG More, 1855 **BM**. Wood N. of Penshurst Park, 1947-50. 54 Roadside, Ensfield, 1m. S. of Leigh, 1947. 54 Roadside, South Park, Penshurst, 1954. 63 Bayham Woods, Lamberhurst, 1945. 64 Cinderhill Wood, Brenchley, 1953. 44 Damp roadside SW of Lockskinners, Chiddingstone, 1954. 74 Wood SE of Knox Bridge, Staplehurst. 83 S. part Chittenden Wood, 1947. 54 Redleaf Park, Penshurst, 1947. 54 By r[oa]d  $\frac{1}{2}$ m. W. of Penshurst, 1946. S. of Chiddingstone Hoath, 1947. 54 By main r[oa]d  $\frac{1}{2}$ m. N. of Southborough, 1946. 63 Mount Pleasant, Lamberhurst, by r[oa]d, JRW; 1945! 73 Combwell Wood, Goudhurst 1945 **MNE**. 83 Sissinghurst Park Wood, 1948→.

14) 83 R[oa]dside E of Goddards Green, 1947. 83 By Benenden Sanatorium, 1947. 83 R[oa]dside S. of Sandpit Wood (Parkgate) Tenterden 1947. 83 Scrub NW of Breeches Pond, Tenterden, 1947 83 R[oa]dside E of Breeches Pond, 1947. 83 R[oad]side, Babbs Farm, W. of Benenden, 1949. 93 NE of Hawkhurst.



### **Sanguisorba L.**

[**S. officinalis** L.<sup>474</sup>

There is no real evidence for the occurrence of this plant in Kent. It has been reported at 2) Sittingbourne, Grayling; 6) Roadside, Dartford to Green Street Green, Cooper *Fl. Met.*; 8) Petham, Hookham; 10) near Ightham, Gasson; 13) Redleaf, C. Cox; and Cranbrook, Crowden. No specimens are known. It is not a likely native of Kent; its nearest known native localities are about Perivale, Kingsbury and Hendon in Middlesex, and, S. of the Thames, at Frimley in N.W. Surrey by the R. Blackwater. It is unknown now in Wessex and Sussex. It occurred at Nazeing, Essex, in the Late-Glacial (Godwin, p.118).]

‡ **S. canadensis** L. (an escape, J. Wallis, 1943.)

Alien, naturalised in Bayham Abbey Park, Lamberhurst, by the R. Teise, 1939, J.R. Wallis, det. D.H. Valentine.

E. temp[erate] N. America. Planted at Bayham, 1931, and escaped from water garden to banks of River Teise, teste L[or]d Camden's Sec[retary], in litt. to JRW 1939.

**S. minor** Scop. ssp. **minor**<sup>475</sup>

Salad Burnet.

15, 16.

N.

Native. Chalk grassland, scrub and hedgebanks on chalk, abundant and completely general on the chalk, though now very rare in Thanet, due to its intensive cultivation; also on the Folkestone Sand Cliffs at W. end of Folkestone Leas, where other calcicoles also occur; Thanet Sand at Scadbury Park, Chislehurst, and in an old ragstone quarry S. of Preston Hall, Aylesford. Absent elsewhere.

1<sup>st</sup> record, 1629: Chalkedale, Dartford, Johnson, *Iter*, p.9.

1) Scadbury Park, in g[rass]l[an]d on Thanet Sands, R. Button.

2) old R[ai]l[wa]y, Abbey F[ar]m, Faversham, 1960, HMW.

3) Grassland on L[ondon] Clay NE of Rhode Common 1946.

5) Darwin's Bank, Downe 1962. Downs W. of Shoreham, 1945 **MNE**. W. Wickham, Hb Davis, 1916, **MNE**. Chevening Park. Down W. of Norheads<sup>476</sup>, Biggin Hill, 1958. Chalk W. of Eynsford PCH. Pilgrims Way Polhill PCH. Pilots Wood PCH.

<sup>474</sup> Not in check-list.

<sup>475</sup> Given in the manuscript as *Poterium sanguisorba* L., to which name it has reverted since the check-list was drawn up.

<sup>476</sup> Given as Norsteads in the manuscript, but that is a placename between Cudham and Pratt's Bottom.

- 6) Juniper Hill, Shoreham. Mounts Wood border, Greenhithe. Otford Mount PCH. Kemsing Downs, PCH. P[ilgrims] Way E of Wrotham PCH. Wrotham Water Downs. Downs above Trottiscliffe. Ryarsh Downs. Birling Downs. Downs W of Snodand. Mounts R[oa]d, Greenhithe. N edge of Darenth Wood. Horns [Cross] pit. Whiting pit, Swanscombe. Green St[reet] Green. Downs, Up[pe]r Halling.
- 7) Wouldham Downs. Scarborough Spur; Church Spur, Burham Down. Bridge Woods. Bluebell Hill **MNE**. Boarley Warren. Boxley Warren. Queendown Warren. Rainham, 1892 ESM (glaucous and hairy forms in BM). Newnham Gravel Pit, 1950, REW. Down NW of [Three] Squirrels, Stockbury, '44. Chalk scrub, Park Wood, Molash, 1954. Chalkpit, opposite Putt Wood, 1945, **MNE**; 1962! Westwell, 1908; ES; 1954!
- 8) Crundale Church Down. Longport Down Crundale. Wye Crown Down. Pett Street Down. Broad Downs. Podlinge Down. Yocketts Bank. Lynsore Bottom. Stowting Hill. Postling Downs. E of Etchinghill. Newington Downs. Cheriton Downs. Folkestone Castle Hill and to E. Shakespeares Cliff. Folkestone Sugarloaf. Folkestone Warren. Abbots Cliff. Lydden Spout.
- 9) Chalk grassland, N. Foreland Golf Course, 1954. Ch[al]k g[rass]l[an]d, Kingsgate, Thanet, 1959 **MNE**.
- 11) Old ragstone quarry S. of Preston Hall, Aylesford, 1952. Back of Beech Inn, Swanton Valley, with *Acaena*, 641541, C.A.S. R[ai]l[wa]y bank, Hildenborough-Tonbridge, 563482, on imported ragstone, 1958, CA Stace.
- 16) Leas Cliff, W. end Folkestone Leas, 1947-58, abundant locally.

‡ **[S. minor] ssp. muricata** (Gremli) Briq.

(=*Poterium polygonum* Waldst. & Kit.<sup>477</sup>). Fodder Burnet 15, 16

Alien, completely naturalised on the chalk downs above the cliffs from Dover to Kingsdown. A native of the Medierranean, naturalised in C. and N.W. Europe.

1<sup>st</sup> record, 1866: St Margarets Bay, Syme.

- 1) Rough field, Green St[reet] Green, near Farnborough, 1937, JEL.
- 2) Uralite Works, Shorne, 1939, J.B.M. Horrid Hill, Rainham, 1951 **MNE**. Waste g[roun]d W. of Conyers Creek, Teynham, 1958, **MNE**.
- 5) Downe, Hb Davis, 1916, **MNE**. Between Northfleet and Greenhithe, WWR. Greenhithe, 1850 Hb. Lamb **MNE**.
- 7) Thurnham Downs, E.S.M.; Mrs. Begg, c.1960.
- 8) S. of St Margaret's Bay, 1894, Syme; J.E. Lousley; (abundant, 1946-58!) **MNE**. Langdon Bay, Dover, and to east, abundant, 1948-55, **MNE**. (Clover field between Dover and Ringwould, Mrs. Benson) Field near Adisham Station, F.M. Webb. R[oa]d, Ringwould to Kingsdown, AH Carter, 1930 **BM**.
- 10) R[oa]side, Darenth, 1963, W.A.S.
- 11) Barming, 1885, Hb. Lamb, **MNE**. Preston Hall, by A.20, Miss Bunyard.

**Acaena** Mutis ex L.

‡ **A. novae-zelandiae** Kirk<sup>478</sup> (introduced) (?with shoddy) nat[uralise]d.). Pirri-pirri-burr. 16

Alien from E. Australia and New Zealand, now completely naturalised in woodland rides and rough grassland.

1<sup>st</sup> record, Mereworth Wood, 1937, CA Rylands in K.

- 11) Swanton Valley **MNE**; and rides to N. and E in Comp Woods **MNE**, Mereworth, 1943-56; Mereworth Woods, 1947, J.E.L. **BM**. Teston, 1958. Oaken Wood, S. of 6 wents, 1962. Ride in Oaken Wood, N. of. Gover Hill, 1954.

**Alchemilla** L. Lady's Mantles.

**A. vulgaris** L. sensu lato<sup>479</sup> Lady's Mantle

There are several old records for the aggregate as follows:

- 1) Old Park Wood, E. Wickham, Milne & Gordon. Hayes Common, 1899, CE Britton.
- 3) Trenley Park Wood, Miss WLB Tower, 1956.
- 4) Brooks meadows, Margate; woody meadows at Minster and Monkton, Dr. Hunter, *Fl. Thanet*.
- 5) Hill Park, Westerham, R Scott in Jenner, *Fl. Tun. Wells*.
- 7) "Kings Wood, near Faversham", Parkinson, 1640, *Theatrum Botanicum* (1<sup>st</sup> record).
- 8) Roadside, NW of Iffin Wood, Nackington, Miss WLB Tower, 1956.

<sup>477</sup> The name under which the manuscript account was written, given as a synonym in the check-list which follows the nomenclature given above..

<sup>478</sup> In the manuscript given as *Acaena (anserinifolia)* (J.R. & G. Forst.) Druce.

<sup>479</sup> Not given as such in the check-list, but the manuscript assigns this name to records where the *Alchemilla* species is uncertain.

**10)** Manor House Meadow, Riverhead, Miss Worship. Crockham Hill, Westerham, Miss Peers; C.E. Britton (Mariners). Broadhoath Wood, Stone Street, H.W. Monington (*J. Bot.*, 1888, p.311).

*In the absence of specimens, these records cannot be assigned to the segregates.*

**A. xanthochlora** Rothm.<sup>480</sup> [Pale Lady's-mantle.] [15.] Lyminge Forest, R Gorer. N

**A. filicaulis** Buser ssp. **vestita** (Buser) M.E. Bradshaw [Hairy Lady's-mantle. 15, 16]  
(Cobham G[rea]t. W[oo]d, Oaken W[oo]d. Barming).

*Native, grassy woodborders, very rare, though probably most of the records for the aggregate belong to this species.*

**11)** Oaken Wood, Teston, near N. Pole Inn, 1886, 1896, 1898, 1900; H. Lamb (specimens all in **MNE.**); E. Malling Heath (?same locality) 1920, H. Elgar **MNE.**; 1969, E.P. (FR, 1969, 1970!).

**14)** Tenterden, 1897, R.R.H. in Hb. Croydon NHS, det. D.P.Y.

**[A. glabra** Neygenf.<sup>481</sup> [Smooth Lady's-mantle.] 16 (SW of Snodland, 1947).]

*Native. Damp meadows; very rare.*

**11)** Alluvial meadow, Birling Marshes, 1951, det. S.M.W. **MNE.**

‡ **A. mollis** (Buser) Rothm.<sup>482</sup> [Soft Lady's-mantle] (Garden escape).

[‡] **A. cf venosa?** Juz.<sup>483</sup> (Sevenoaks, in garden, nat[uralise]d-1972).

**Aphanes** L.

**A. arvensis** L. s.l.

*First record for aggregate, 1629: Gravesend to Rochester, Johnson, *Iter*.*

*Aggregate:*

**13)** Scotney Castle to Lit[tle] Scotney, 1941, J.R.W.

**A. arvensis** L. s.s. Parsley-piert. 15, 16. N.

*Native. Arable land, bare ground on chalk grassland, rides in woods, mostly on basic soils, common.*

*First record for segregate, 1843: Ramsgate, W.W.N. in **BM.**; or 1833, Dartford (Brent,) (Heath) JB Tuck, in **BM.***

**1)** Shortlands, 1882, H.&J.G. **BM.** Shooters Hill GMB. Keston, 1923, JEL, Hb. L teste SMW.

**2)** E. End Minster, on Bagshot Sand, '54. Higham, PCH. Wall at Upnor, HMP.

**3)** Trenley Park Wood, '51 **MNE.** Dengrove Road, Sturry, '55 **MNE.** 15 Hoath Court, Blean, RGW. Whitstable Harbour Sta[tion] HMW.

**4)** Fields N. of Wingham, 1947 **MNE.**

**5)** Rushmore Hill, PCH. Wood on chalk, W. of Shoreham, PCH. Salt Box, Cudham, Hb Davis, 1916 **MNE.** Arable 396642 S of W Wickham PCH.

**6)** SE of Eynsford 1952 **MNE.** Stone, 1947, H.M.P. **BM** det. E.B.Ba. [Dartford Brent, 1833, JB Tuck **BM.**] Darenth Wood PCH. Otford, PCH. Cornfield below downs above Trottiscliffe, PCH. Cornfield W. of Wrotham Water, 1958, **MNE.** [E of Dartford, 1886, FJH **BM.**] Horton Kirby Wood PCH. Mounts Road cornfields, Greenhithe, 1954 **MNE.**; PCH. The Thrft, Bean, PCH. Downs E of Shoreham PCH. Copse opp[osite] Court Wood, Higham.

**7)** S of Gillingham 1938, JBM. Chalky field, Hucking, 1949 **MNE.** Path Gorham Wood, Bicknor, 1950. **MNE.**

**8)** Stowting Hill, arable, 1954 **MNE.** W. of Woodlands, Lyminge, arable, 1950 **MNE.** Bare g[roun]d at base of Downs, Woodville, Lydden, 1955 **MNE.** Cornfield E of Knowlton, 1958 **MNE.** Field N of Wolverton. St Margarets at Cliffe. 35 Wood, Betteshanger, 1958, B. Nash.

**9)** Ramsgate, 1843, W.W.N. **BM.**

**10)** Cornfield, Ide Hill, CAS.

<sup>480</sup> Given in check-list but no manuscript account.

<sup>481</sup> From the inclusion of this species in square brackets in the check-list, it would appear that it was intended to treat as extinct; the manuscript does not recognise this. Its species order has been adjusted from that in the check-list to reflect Stace's *New Flora* 2<sup>nd</sup> edition.

<sup>482</sup> Given in check-list but no manuscript account.

<sup>483</sup> Given in check-list but no manuscript account.

- 11) Offham, 1882, Hb Lamb, **MNE**. Wall, Preston Lane, Ayleford, 1952 **MNE**. Path, Oaken Wood. Straight Mile, Tonbridge, 1960, CA Stace.
- 12) Ride SSE of Kingsnorth, 1956 **MNE**.
- 13) Cranbrook, Weed, DS.
- 14) Ethnam, Sandhurst.
- 15) Field, Sandhurst Levels, 1954 **MNE**. Pen Bars, Dungeness, J Harper.
- 16) Ragstone Scars, W. of Hythe, 1949 **MNE**. Shornecliffe, 1955, **MNE**. Ragstone Scarp, Aldergate, 096351. Aldington, LJM.

**A. australis** Rydb.<sup>484</sup>

Slender Parsley-piert. 15, 16.

N.

Native, cornfields, open ground, and damp woodland rides and heaths on acid soils. Common in suitable habitats.

1<sup>st</sup> record for segregate<sup>485</sup>

- 1) Keston Common, by War Memorial, 46, **MNE**. Hayes Common, 1902, F. Druce **BM**; 1954! Dartford Heath, 516728, 1961, HMP, det FH Perring. Catford, F.W. Payne **BM**. W of Farningham Wood, 1950, E.B. Ba.; 1954, PCH. Rams Wood, E of Swanley (Blackheath Beds) 1948 **MNE**. Hockendell Wood, E of St Mary Cray (Blackheath Beds) 1954 **MNE**. Joyden's Wood, Bexley (Blackheath Beds) 1954 **MNE**. Holwood Park, PCH. Crofton Heath, PCH. Keston Park Estate.
- 2) Hawes Wood, Newington 1950 **MNE** (on Eocene Sand). Fields N. of Blacketts, Tonge, DMCC, 1958 **MNE**.
- 3) Grassland on sand NW of Dunkirk, 1955 **MNE**. Bigbury Wood, Harbledown, 1950 **MNE**. Oldridge Wood Fordwich, 1950 **MNE**. Dengrove Wood. Rough Common. Near Waystreet F[ar]m, R.Th. Old Park golf course, 1981.
- 4) Gravelly field, N. of Preston Church, 1958 **MNE**. Stodmarsh / Fordwich Gravel Pits, 1950, REW.
- 6) E) Gravesend, R.P. **BM**. 57 Stone House grounds, 558743, 1961, HMP, det. F.H. Perring. Higham Upshire, on Blackheath Beds, 1955 **MNE**. 67 Shorne Ridgeway, PCH. Cockham Wood, Upnor, (Thanet Sand) 1960, **MNE**. Wood, Holly Hill, Birling, on Blackheath Beds, 1962.
- 7) Squirrels Wood, Stockbury, ride on acid, flinty loam drift, 1954. Putt Wood gravel pit, REW; 1980! Divan Wood, Eastling, 1950 **MNE** on loam. Chestnut Street, on Eocene Gravels, 1957 **MNE**.
- 8) Denge Wood, rides, on Pliocene, 1959 **MNE**. West Wood Stowting, 1950 **MNE**, on Pliocene. Upper Hardres Wood, 1962, on Pliocene sand. Cornfield on clay S of Wolverton BN. Whitehill Wood L[owe]r Hardres, BN. Cornfield St Radigunds, BN. On anthills on top of Woodville Downs.
- 10) SW corner of Seal Chart (F[olkestone] Sand) 1954 **MNE**. Fawke Common (Chert) 1954 **MNE**. Sandy arable 1m. S. of Brasted, 1955 **MNE**. Sandpit by R[ai]l[wa]y, Riverhead CAS. Heath, Toys Hill. Field, Crockham Hill RAC.
- 11) Ham Hill, Birling, PCH. Leybourne Wood. Wrotham Heath. Ryarsh Roughetts. Larksfield Heath. 65 Comp Woods, Mereworth, in ride, 1954 **MNE**. 75 Oaken Wood, E. Malling, 1962. 65 Ride N. of Swanton Valley Cotts, Mereworth, on stony drift, 1954. 75 Barming Woods, E.G. Philp, 1961, **MNE**. 85 path on chert drift, Kings Wood, Ulcombe, 1954 **MNE**. 65 Shipbourne Forest, wet ride on Weald Clay E of Plaxtol Rd, 1954. 54 Straight Mile, Tonbridge, 1960, CA Stace. 54 R[ai]l[wa]y, Hildenborough-Tonbridge, 1957 CA Stace. 85 Sandway, Lenham, on ploughed Heath, 1960 **MNE**. Sandpit, Hollingbourne, REW (probably this). 94 Birch Wood, Bethersden, 1962, on sand.
- 12) 03 Great Priory Wood, Bilsington, 1956, **MNE**: Weald Clay. 94 Path, Hothfield Common (F[olkestone] Sand) 1960 **MNE** -1981!. 94 Ashford Warren (F[olkestone] Sand) 1960 **MNE**. 04 Grass-heath, Mersham Park, 1960, ES & FR **MNE** (F[olkestone] Sand).
- 13) 54 SE Corner Ashour Wood, damp ride on Wadhurst Clay 1954 **MNE**. 54 Brokes Wood, Southborough CAS – prob[ably] this. 44 Sandy Hummock near Mill Stream, Chiddingstone Mill, 1958, PCH, 495462. 63 Fields on T[unbridge] W[ells] S[and], SW of Pembury, 1944 **MNE**. 63 High Wood, T[unbridge] Wells, PCH. Bayham CAS. 73 Combwell Wood, Goudhurst, 1954, **MNE**. 83 Sissinghurst Park Wood, 1954, **MNE**. Woodland below Angley Rocks.
- 14) 83 The Brogues, Biddenden. 82 Church Wood, Wittersham, 1964.
- 16) 13 Kiln Wood, Sandling Park, 1958 **MNE**. Sandy track S. of Summerhouse Hill '60 BN.

**Rosa L.**

<sup>484</sup> Given as *A. microcarpa* (Boiss. & Reut.) Rothm. in the manuscript, and in check-list as *A. (inexpectata)* Lippert) now *A. australis* Rydb.

<sup>485</sup> No entry.



It has been decided for the purposes of this flora to adopt a modern treatment of this genus on the lines of the List of British Vascular Plants (1958). Varieties and forms have therefore been ignored, and only hybrid records authenticated by Dr. R. Melville have been accepted.

It is now generally accepted that many of the varieties and forms recognised previously are in reality hybrids between various species of the genus.

‡ **R. multiflora** Thunb. ex Murray Rare escape (E.P.) Many-flowered Rose. [16.] H.  
13) Roundabout Woods, Tunbridge Wells. CAS.

‡ **R. luciae** Franchet & Rochebr.<sup>486</sup> In Stace (1991) (not in E.P.). Memorial Rose. [15.] H.

**R. arvensis** Huds. Field-rose. [15, 16.] N.

Native. Woodlands, hedgebanks, and scrub, chiefly on rather heavy soils, but widespread and very common throughout the county, except in Thanet, where it is not recorded.

1<sup>st</sup> record, 1777: Faversham, J. [sic] Jacob.

1) Shooters Hill Woods, G.M.B. Beckenham, 1948, S.E.C. Chislehurst GMB. Farningham Wood 82.

3) Hales Place, '64 R. Gorer & F. Hubbard.

5) Darwins Beech Wood (c[lay] w[ith] f[lints]) Downe JEL. 397604 hedge W of Blackmans PCH.

6) Dartford E, HMP. Up[pe]r Halling Downs, 1949, **MNE**. Hedges, Meopham via Harvel to Birling Hill, 1962 HMP. SE of Eynsford GMB.

E) Lodge Hill, Cooling (Lond[on] Clay) 44.

7) Squirrels Wood, Stockbury, on clay w[ith] flints drift '54. Simia Wood, Ospringe HMW.

8) Woods on chalk, Chilham, 1890, E.S.M. (var. *bibracteata* Bast.) **BM**. Scrub on Down NE of Elham Park Wood, 1958 **MNE**. Ileden Wood 1980.

9) Wet copse, Durlock, Minster! AGS.

10) Copse on alluvium, above Darenth, 1943, 1944 **MNE**. Westerham Wood, B. Sennitt; 82!

11) Leybourne 46 **MNE**; SE Oaken Wood '54; Warren Wood; Springhead, East Malling. Mereworth Woods (W Malling end; Offham end; Swanton Valley. On Gault, Platt DMcC. Horish Wood '44. Snarkhurst Wood. Copses S. of Woolpack, Yalding, '44. Pond NW of Buckhall, Bethersden, '54.

12) Damp wood, Willesborough Lees.

13) Gill, Stone Cross, Ashurst, CAS, 518381. Wood S. of Pembury, near Ch[urch]. Gill at Stone Cross, Ashurst. SE Corner Ashour Wood, '44. Combwell Wood 1979. ½ m W. of Chiddingstone Hoath by Road on clay '54. Blackbush Wood DS.

**R. rubiginosa x arvensis**<sup>487</sup>

6) Ryarsh Downs, 1943, **MNE**.

**R. arvensis x canina** = *R. x wheldonii* W.-Dod<sup>488</sup>

3) Hales Place, Canterbury, 1964, R. Gorer & F. Hubbard.

11) Maidstone, E.G. Philp, 1958, **MNE**.

‡ **R. sempervirens** L.<sup>489</sup> [Evergreen Rose.]

**R. pimpinellifolia** L. Burnet Rose. 15, 16. N.

Native. Chalk grassland and scrub, locally common on both sides of the Medway gap on the downs from Trottscliffe to Cuxton and from Wouldham to Detling; elsewhere only known now on shingle at Dungeness. Old records from near Dover are unconfirmed and are probably errors. Locally common on chalk in Sussex, very rare in Essex, very local in Surrey and confined to the heaths near London, common on fixed dunes in Pas de Calais.

1<sup>st</sup> record, 1763: between Milton and Chalk, Martyn, *Pl. Cant*.

1) [Mill Hill, Cobham, 1881, H.W.R. **BM**.] Trosley Downs DMcC 649612, 1955. Ryarsh Downs, ESM; 1951! Birling Downs. Down, Mount Ephraim, Snodland, 1950, **MNE**. Downs N. of Crookhorn Wood, Snodland, 1953

<sup>486</sup> In check-list but not in the manuscript.

<sup>487</sup> Not in check-list.

<sup>488</sup> *R. x verticillacantha* Méral in Stace's *New Flora* 2<sup>nd</sup> edition. Not in check-list.

<sup>489</sup> Not in check-list; heading given in the manuscript but no account.

**MNE.** Upper Halling Downs, F.M. Webb; abundant, 1950-51, **MNE.** Bush Valley, NW of Halling. Red Wood, Luddesdown, 1951 **MNE**, 1957. Down S. of Luddesdown Church, 1950. Down S. of Dean Farm, 1½ m. S.E. of Meopham, 1946.

7) Wouldham Downs. Burham Downs, FJH; 1954! **MNE**; 1960. Top of old chalk pit, Pilgrims View, Bluebell Hill, 1962. Boarley Warren. Boxley Warren, 1882, E. Bartlett **MNE**; AHWD; (1946!). Walderslade Valley. [Darland, Miss Young.] Detling Downs in coombe to NW, 1944.

[8] About Dover, plentiful, Mrs. S.; FGEK; probably an error.]

[11] (Maidstone, 1840, Hb. Woodward; N.E. of Yalding, F.J.H.)

15) W. of Hope & Anchor Inn, on shingle, Dungeness, 1954, B. Axell; 1955, P. le Brocq, **MNE** 054173, near Herring Gull Colony, 4 patches each c. 4 sq. m. By track to Hoppen Pits, 1948 Mrs B. Welch.

**R. pimpinellifolia x tomentosa** = *R. x involuta* Sm.<sup>490</sup>

6) Wood in hollow of downs W. of Snodland, J.S.M. (Hb. Mill), as *R. sabini*. Halling Downs, A.H.W.D. & E.S.M., 1893, Hb. AHWD, **BM**; 1923, IM Roper **BM**; 1944, JEL. Foot of Trottiscliffe Downs, E.S.M., 1893, Hb. A.H.W.D. **BM**.

[reported at 10) Guildables F[ar]m, Crockham Hill, Dickinson; Southborough Common, More, in *Phyt* N.S. i 294, but doubtful because *R. pimpinellifolia* is not known there.]

**R. pimpinellifolia x rubiginosa** = *R. x cantiana* (W.-Dod) W.-Dod.

7) Boxley Warren, 1875, Beeby; 1894, ESM: Hb. AHWD, (with the parents) **BM**.

‡ **R. rugosa** Thunb. ex Murray (FR etc., EP). Japanese Rose. [15, 16.] H.  
Native of N. China, Korea and Japan.

4) Naturalised on Dunes SE of Prince's Club House, Sandwich Bay, 1961-2.

6) Kemsing Downs, Mrs. C. Rogers, 1955 **MNE**.

15) Railway E. of New Romney Sta[tion], KEB.

**R. rugosa x tomentosa?**

8) S. of Kingsdown Golf Course, 1954 **MNE**. )check.<sup>491</sup>

**R. stylosa** Desv. Short-styled Field Rose. 15, 16. N.

Native. Scrubland, on chalk and clay, formerly widespread, but I have seen little of it in my survey of the county.

1<sup>st</sup> record, 1817: Woods in Trans. Linn. Soc., XII, p.230.

1) Joydens Wood, 1878, J. Groves, **BM**. Bromley, Cole. Shooters Hill, AHWD. Dartford Heath, AHWD. Chislehurst Common. 1915, C.E. Britton.

2) In scrub near Saltings at: 86 Horrid Hill, Rainham, 1951, **MNE**; 86 Motley Hil, Rainham, 1949. 76 Scrub near Cuxton Station, 1944, C. West & J.E. Lousley; (FR & DMcC 1951!). 77 By Medway, Cockham Woods<sup>492</sup>, Upnor, 1951, DMcC; 1960, FR.

3) N. of Canterbury in woods, E.S.M. 25 Gravel pit, Swanton Farm, Littlebourne, 201590, DMc[C] & JEL, 1949.

4) Plucks Gutter KDR.

5) Halstead, A.A. **BM**. Downe, 1962, E. Eagles.

6) Cliffe; Halling; Shoreham, ESM. Otford Downs, 1962, KFC. Holly Hill, Birling, W.M. Rogers. Cookham Woods, Upnor, 1949, 1960. Tower Hill, Cuxton, on London Clay, DMcC, 1951.

7) Boughton Aluph, E.S.M. Borstal, Dr. St. Brody, det. W.M. Rogers.

8) Chilham, Woods on chalk, 1890, E.S.M. **BM**. Wood NW of St Radigund's, 1956 BN. 25 Adisham, T.B. Blow, BEC Rep., 1974-5; 1949! Lane, Chillenden to Ilden Wood KDR. Nonington, F.M. Webb.

9) Hedge off Margate-Deal Road, Dr. Hunter, *Fl. Thanet*.

10) Ightham, A.H.W.D.

11) Edenbridge, ESM. Near Snodland, AHWD. Ryarsh, W.M. Rogers.

12) Westenhanger, E.S.M. Ham Steet, ESM.

<sup>490</sup> From Stace's *New Flora* 2<sup>nd</sup> edition, *R. x involuta* is to be interpreted as *R. pimpinellifolia x sherardii*, and *R. x coronata* Crép. ex Reut. as *R. pimpinellifolia x tomentosa*.

<sup>491</sup> This may have been what has since been identified as *R. villosa*.

<sup>492</sup> Presumably this entry was placed in district 2 as being estuarial, rather than on the chalk, which would fall within district 6, where Cockham or Cookham Wood entries are generally placed (as immediately below).

- 13)** Penshurst, 1815, Hb. Hooker. Bidborough, *Fl. Tonbr. Supp.* Cooks Broom Wood, Lamberhurst, 1939, JRW.  
**14)** Kenardington, E.S.M. **BM**.

**R. canina** L. (incl. *R. dumetorum* auct. non Thuill.). Dog-rose. 15, 16. N.

Native. Woods, scrub, hedgebanks, grassland; on all soil types; abundant throughout the county. Immensely variable, much of the variation being due to its hybridisation. The cytology of the *Caninae* Roses is very peculiar (see C.T.W., p.520).

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav*, p.97.

- 1)** Keston Common, Hb. Davis, 1916, **MNE**. Abbey Wood, GAM. Ruxley Pits. Shooters Hill, 1958, GMB. Beckenham Place PCH. Dartford Heath, GMB. Farningham Wood 82.  
**2)** Horrid Hill, Rainham, 1951 **MNE**. Frindsbury, 1949, **MNE**.  
**3)** Hales Place, R. Gorer.  
**5)** Knockholt, 1852, A.A. **BM**. Westerham Hill, RAC, 426577. Darwins Bank, Downe. 396611, PCH.  
**6)** Horns [Cross] pit. Whiting pit, Swanscombe. Mounts Rd. Greenhithe, 1951, DHK (var. *lutetiana* Lém.) Baker. Cliffe chalk pit, 1949, **MNE**. Upper Halling Downs, 1944, **MNE**. Otford Downs. On chalk by River, Cuxton, 44. G[rea]t Crabbles Wood, '44. Clay Lane Wood 60, HAS.  
**E)** Lodge Hill (London Clay) 1944-54.  
**7)** Ospringe village 1958 HJW. Lane, Sheldwich, 1958 HJW. Down opp[osite] Putt Wood HMN. Church Wood, Stockbury, 1954. Coombe NW of Detling 1944. Squirrels Wood Stockbury '44. Berengrave pit Rainham.  
**10)** Westerham Wood; 82!  
**11)** Horish Wood, 1944. Sandling Wood, E.G. Philp, 1957. Bank by r[oa]d S.E. of Chequers, W. Farleigh 54. East Malling, 1943 **MNE**. R[ai]l[wa]y, Hildenborough, 563482, CAS. Near Pond E of Buckhall Bethersden, 54. By Pond NW of Buckhall Bethersden, 54. ½ m. S. of Smarden, 54. 1m E. of Vitters oak. Maidstone, EGP, 1958, **MNE**. [Barming 1885, H. Lamb **MNE**.] SE Part Oaken Wood, Barming, by R[oa]d, '54. By R. Eden, N. of Chiddingstone Mill, '54. Copse S. of Woolpack, Yalding.  
**13)** Gill, Stone Cross, Ashurst, 518381, CAS. ½ m. E of Up[pe]r Haysden (T[unbridge] W[ells] S[and]) 1954. SE Corner Ashour Wood, 1954. Bayham CAS. S. of Golford, Cranbrook, 1949 **MNE**.

**R. dumalis** Bechst.<sup>493</sup>

- 10)** Sevenoaks, W.M.R.  
**11)** Ryarsh, W.M.R. Headcorn, ESM, conf. Crépin.  
**13)** Field below Mount Pleasant F[ar]m, Lamberhurst, 1939, JRW, det. AHWD, BEC Rep. 1939-1940, p.276.

vars. of **R. canina** L.<sup>494</sup>

var. **blondeau** (Dir.) Rouy

- (3)** Mount Pleaant, near Lamberhurst, 1939, JRW, det. A.H.W.D., BEC Rep. 1939-40, p.276.

var **lutetiana** (Lém.) Baker

- 6)** Greenhithe, 1951, D.H.K.

var. **sphaerica** (Gren.) Dum.

- 14)** near Kenardington, E.S.M., 5.7.1893; Hb. AHWD **BM**.

var. **collina** Jacq.

- 13)** Tunbridge Wells, Hb. E.D. Forst.

var. **sentiosa** (Ach.) Baker

- 12)** near Smeeth, E.S.M., 5.7.1893; Hb. AHWD, **BM**.

var. **decipiens** (Dum.)

- 10)** Fawke Common, 1895. E.S.M. **BM**.

var. **ramosissima** Rau

<sup>493</sup> Not in check-list.

<sup>494</sup> These varieties are listed in the manuscript, although the heading to *Rosa* indicates that it was not intended to include them in the Flora.

**8)** Between Lyminge and Elham; hedge, Elham, 18.7.1893, E.S.M., det. & Hb. AHWD **BM** (AHWD had some doubts).

**12)** Between Westenhangar and Smeeth Stations, E.S.M., 15.7.1893, Hb AHWD **BM**.

var. **verticillacantha** (Mérat)

**11)** Headcorn, 1893, ESM **BM**.

var. **forsteri** Sm.

**5)** Halstead, 1852, A. Atkins. **BM**.

var. **sylv[ul]arum** (Rip.) Rouy

**10)** Fawke Common, AHWD, 1.7.1894; Hb. AHWD **BM**.

var. **andegavensis** (Bast.) Desp.

Lodge, Clock Farm, "W Kent", 1900, Hb AHWD **BM**.

**11)** Aylesford, E. Kent, 14.7.1894, Hb. AHWD **BM**.

var. **pouzinii** (Tratt.) W.-Dod

**10)** R[oa]dside, Bitchet Green to Stone Street, 1.7.1894 (type specimen), Hb. AHWD **BM**, also *J. Bot.* 1924, p.204. Fawke Common, E.S.M. 3.10.1895, Hb. AHWD **BM**, also *BEC* 1925, p.1047; *J. Bot.* 1924, p.204.

**12)** Smeeth, 15.7.1893, Hb AHWD **BM** "some doubt in absence of fruits".

vars. of "**R. dumetorum**" Thuill.

var. **typica** AHW-D

**6)** Upper Halling, 1951, R. Melville. Mapie Bottom, GMB.

**14)** Kenardington, E.S.M. 5.7.1893; Hb. A.H.W.D.; **BM**.

var. **rumealis** (Pugsli.) W.-Dod

**11)** **E)** Headcorn, E.S.M., 15.7.1893; "probably this", AHW-D; Hb AHWD **BM**.

var. **gabrielis** (F. Gér.) R. Kell

**11)** **W)** Ryarsh Wood, W. Moyle Rogers, 8.1896, Hb. AHWD **BM**.

**R. canina x pimpinellifolia** = *R. x hibernica* Templeton

**6)** Down S. of Luddesdown, 1951, DMCC. Red Wood, Luddesdown, F. Rose, 6-1951.

**R. canina x tomentosa** = *R. x curvispina* W.-Dod<sup>495</sup>

Mote Park, Maidstone, F. Rose, 9-1950.

**R. obtusifolia** Desv.

Round-leaved Dog Rose.

15, 16.

N.

Native. Hedgebanks, scrub and woodlands. Widely distributed but uncommon. I have seen little of it myself.

First record, 1866: Kent, J.B. Syme, *Eng. Bot.* III, p.215.

**1)** N. of Shooters Hill F.M. Webb. S. of Shooters Hill; Charlton; Belvedere: AHWD.

**6)** Dartford, 1947, D.H.K.

**7)** near Selling, F.M. Webb (?Perry Wood).

**10)** Kemsing, 1894, A.H.W.D. **BM**. Fawke Common, AHWD. R[oa]d NE of Bitchet Green, AHWD.

**11)** Ryarsh, W.M.R. Trosley, AHWD. Aylesford, W.M.R. Staplehurst, E.S.M., 1893, Hb. A.H.W.-D, **BM**. Headcorn, E.S.M. 1893, **BM**. Edenbridge; Underriver, ESM.

**12)** Gates, Godington Park, F.M. Webb. Hothfield Common; near Ashford, F.M. Webb. Near Ham Street, 1890, E.S.M., **BM**. N. of Willesborough Lees, on peat, F.M. Webb.

**13)** Mount Pleasant, near Lamberhurst, 1939, J.R. Wallis, det. A.H.W.D., B.E.C. Rep. 1939-40, p.277. Penshurst, E.S..

**15)** S. of Ham Street, F.M. Webb.

<sup>495</sup> *R. x scabriuscula* Sm. in Stace's *New Flora* 2<sup>nd</sup> edition. Not in check-list.

**R. tomentosa** Sm. Harsh Downy-rose.<sup>496</sup> 15, 16. N.

Native. Open woods, hedges, chalk downs and scrub; frequent on the chalk, scattered through the Weald.

1<sup>st</sup> record, 1763: Charlton Wood, Martyn, *Pl. Cant.* p.52.

1) Town Court, near Orpington, H.&L.J. Groves, 1877, Hb AHWD **BM** (as var. *dimorpha* (Bess.) Déségl.). Keston, E. de C. Eltham, AHWD.

3) near Hoath, E.S.M.

5) Halstead, 1880, ESM **BM** (as vars *sylvestris* (Lindl.) Woods and *pseudorubiginosa* Lejeune). Darwins Bank, Downe, JEL. Knockholt, 1852, A. Atkins **BM**. N. of Westerham, A.H.W.D. (var. *brittoni* A.H.W.D.).

6) near Shoreham, 1877, H.&J.Groves **BM**; ESM. Near Paddlesworth, E.S.M., 1893; Hb. AHWD **BM** (as var. *dimorpha* (Bess.) Déségl.). Wood by R[iver] SW of Eynsford Sta[tion], GMB. Lane between Trottiscliffe and Downs, 1894, AHWD **BM**, (as var. *scabriuacula* Sm.). Northfleet St. Brody. Greenhithe St Brody. Downs E. of Trottiscliffe, 1894, AHWD **BM** (as var. *Brittoni* W.-Dod). Edge of woods on downs, Otford, ESM, 1889, Hb. AHWD **BM** (as var. *Brittoni* W.-Dod). Darenth Wood, 1894, AHWD **BM** (as var. *sylvestris* (Lindl.) Woods, but “untypical”, AHWD). Upper Halling Downs, ESM, 1893 **BM**; abund[ant] 1944-1951! **MNE**. Luddesdown FM Webb; DMCC 1956. Snodland AHWD. Downs above Wrotham Water, 1945. NE of Station, Cuxton, on chalk, 1951 **MNE**. Bush Valley, SW of Cuxton, 1951 **MNE**. Cobham G[rea]t Wood AHWD.

7) Burham Downs, 1946. Longreach Wood, Stockbury, 1948. Thurnham Downs, E.G. Philp, 1959, **MNE**. Thurnham Castle, 1961. Westwell Downs ES. Detling Downs, 1950; 1954, **MNE**. Hollingbourne Downs H. Lamb. Charing, E.S.M. Lenham, E.S.M. Kits Coty, AHWD.

8) Chilham ESM. L[owe]r Hardres FM Webb. Paddlesworth ESM. Downs W. of Woodville, Temple Ewell, 1955, **MNE**. Whinless Down, Elms Vale, 293416, 1958, Mrs. K.D. Rowlands **MNE**.

10) R[oa]dsides near Fawke Common, 1894, Hb AHWD **BM** (as var. *scabriuacula* Sm. forma *foetida* (Bart.) Ser.).

11) near Aylesford, 1894, AHWD **BM** (as var. *pseudocuspidata* (Crép.) Rouy.). E end of Boughton Quarries, 1949, **MNE**. Birling AHWD. Trottiscliffe Shepherd. Ryarsh WMR. N of Marden FJH. Yalding FJH. Edenbridge ESM. Hildenborough ESM. Marden Thorn FJH. E of Marden FJH; ESM. E of Staplehurst FJH.

12) Near Ham Street 1890, ESM **BM**. S. of Shadoxhurst, in hedge, 1954 **MNE**. Hinxhill W. Jeffrey.

13) Tunbridge Wells, 1848, Miss Attersole, **BM**; Hb, Borrer K. Hawkenbury, 1898, HFR. Near Matfield, W.H. Pearsall Sen., 1931, Hb AHWD **BM** (as var. *Brittoni* W.-Dod). Hedge by R[oa]dsides, approach to Bedgebury Pinetum, Goudhurst, 1949. Near Dundale F[ar]m, W. of Lamberhurst, on wood border, 1956, **MNE**. NW of Goudhurst, 1949, **MNE**. ½ m S of Combwell Wood: - in the wood, 1979. SE of Penshurst. FJH. SE of Speldhurst FJH. Chid[d]ingstone ESM. Penshurst ESM.

14) N. of Sandhurst, in hedges, 1949. Hawkhurst, J.C. Melvill. Kenardington ESM.

16) Coombe Wood, Newington, L.J. Margetts, 1958 **MNE**.

**R. sherardii** Davies<sup>497</sup> (*R. omissa* Déségl.; *R. glaucoides* W.-Dod.; *R. shoalbrei* W.-Dod.)

Sherard's Downy-rose.

Native. Vey rare.

11) Staplehurst, E.S.M., 5.7.93, det. & Hb. AHWD, **BM**.

(**R. mollis** Smith – reported by EP (northern species- -not likely to occur). (Culverston Green - garden escape?)

Soft Downy-rose.

**R. villosa** L. (*R. pomifera* Herrm.; *R. mollis* Sm.)<sup>498</sup> Villous Downy-rose.

8) near Deal, 1903, G.C. Druce; Hb AHWD, **BM**. Bush below cliffs, Kingsdown, H.E. Fox, 1916; Hb. A.H.W.D. **BM**, (both as *R. villosa* var. *pomifera* (Herrm.) Desv.

**R. rubiginosa** L. Sweet Briar. 15, 16. N.

Native. Chalk downs and scrub, common; very rare on other soils.

1<sup>st</sup> record, 1777: Oare, E. Jacob, *Pl. Fav.*, p.97. In Hb. Dill. From Greenhithe.

1) Dartford Heath 1894, AHWD **BM** (as var. *rotundifolia* Rau, but “untypical”, AHWD.). [Erith, Fl. Met.] Charlton, E. Forster **BM**. Hayes Common E de C.

2) [Oare, E. Jacob.]

3) Bigbury Wood / Bysing Wood 1954, REW. Coast E. of Whitstable, F.J.H. Bysing Wood, Stowell.

<sup>496</sup> Given in the manuscript as plain Downy Rose.

<sup>497</sup> Not in check-list.

<sup>498</sup> Not in check-list.



4) N. of Sandwich ESM.

5) Down W. of Shoreham, 1945. Well Hill, F.M. Webb. NW of Downe, Prebble. Polhill, E. Jenner, Miss E. Waley, 1939.

6) Valley SE of Park Wood, Eynsford, 1947 **MNE**. Kemsing Downs, 1954, **MNE**. Greenhithe, Hb. Dill.; E. de C. Shoreham, 1876, J. Groves, **BM**; Downs E. of Shoreham, PCH. N. of Romney Street, 1929, R.W.R. Upper Halling Downs, 1893, AHWD (**BM**) (as var. *typica* W.-Dod & forma *Corstophinae* (Druce) W.-Dod); 1944-54! **MNE**. Cuxton, on chalk nr. Station '44. S.E. of Cobham. Bush Valley/ E of Luddesdown, PCH. Birling Downs, AHWD; FR. Ryarsh Downs, 1943 **MNE**. Downs above Wrotham Water. Maplescombe GMB. Otford Downs, ESM; 1963! 67 Gravesend, 1 bush in hedge, 1963, W.A.S. Downs N of Kemsing, 1946 DMcC.

6E) Northward Hill, High Halstow, on London Clay, 1950, **MNE**.

7) 75 Boxley Warren, 1894, ESM; Hb. AHWD **BM** (as vars. *typica* W.-Dod & *jenensis* M. Schultz); 1944! 75 Boarley Warren; 76 Bluebell Hill; 76 Burham Downs; 86 Queendown Warren. 86 Three Squirrels Down, Stockbury Valley '44. 95 Lenham Downs. 96 Ospringe Down. 95 Charing Old Quarries, ES. Westwell, CWP. Darland/ Luton, Miss Young. Rainham, St. Brody. Belmont, Stowell. Lees Court, Stowell. Boughton Aluph, ESM.

8) 04 Wye Downs. 25 Roadside scrub 1½ m. S. of Adisham Station. Brook Downs, CNP. 24 Border of Swanton Wood, Lydden, Mrs. B. Dodds. 24 Downs N of Woodville/ T[emple] Ewell, 279451, 1958, Mrs K.D. Rowlands **MNE**. 34 The Lynch, Ringwould, 1951, **MNE**. Elham ESM. East Wear Bay CPSK. Downs W of Folkestone, G Walton. Chalk bank n[ea]r Ham Fen, FJH. Nash C[ourt], Birchington, Fl. Thanet.

11) n[ea]r Medway, Tonbridge, P Grattan. Lane n[ea]r Boxley Abbey AHWD & ESM. Hadlow, Miss Peers.

13) Hedgerow n[ea]r Marsh Green, 1958, PC Hall.

15) Hythe Station, LJ Margetts, 1958 **MNE**.

**R. micrantha** Borrer ex Smith Small-flowered Sweet-briar.<sup>499</sup> 15, 16. N.

Native. Chalk downs & scrub, frequent; rare elsewhere.

1<sup>st</sup> record, 1837: S. Kent, *New Bot. Guide*, p.70.

1) Dartford Heath, 1894, A.H.W.D., **BM** (as var. *hystrix* (Lam.) Baker).

5) Halstead Park, W. Moyle Rogers, 1899; Hb. A.H.W.D. **BM** (as var. *typica*, Chr.).

6) Northfleet, 1877, H. Groves. E of Otford, 1962, KFC. Ryarsh Downs. S.E. of Eynsford. Wrotham, H. Lamb, 1885 **MNE**. Downs W. of Snodland. Halling Downs, 1944-51.

7) Burham Downs, 1946. Down NW of Three Squirrels, Stockbury, '44. Hawkin's Wood, Chilham, DHK.

8) Roadside scrub 1 ½ m. S. of Adisham Station, 1949. [Newington, 1894, E.S.M.]

11) Hedge, Liverton Street, Harrietsham, 1943.

13) Bayham Chapel, 1939, J.R.W., det. A.H.W.D. (as var *typica* Chr.). Kilndown, 1899, J.S. TLS.

16) Chalk heap, Coombe Wood, Newington, L.J. Margetts, 1958 **MNE**.

**R. micrantha x R. rubiginosa**<sup>500</sup>

7) Boxley Warren, 1896, E.S.M.

**R. agrestis** Savi (H&M - not recently). (Syn. *R. elliptica* auct. non Tausch.), and *R. sepium* Thuill.- non L. auct. Needs re-finding. Small-leaved Sweet-briar. 15 (N ? ext[inct].)

Native. Wood borders & scrub on chalk; very rare.

1<sup>st</sup> record, 1891: Chilham to Crundale, E.S. Marshall, *J. Bot.* p.120.

8) Bekebourne, 1875, H. & J. Groves **BM**. Between Chilham & Crundale, E.S.M., 1890, **BM**. Penny pot Woods, S.E. of Chilham, E.S.M., 1896, Hb. AHWD **BM**; (as var. *typica* R. Kell., forma *arvatica* (Pugsl.) Rouy). Roadside edge of chalk scrub, 1¾ m. S. of Adisham Station, F.M. Webb, 1875, Fl.K.

11) Sutton Valence, F.M. Webb, Fl.K.

**R. "permixta"** Désègl.<sup>501</sup> 16

6) Halling Downs, 1894, A.H.W.D. **BM**.

**R. "carpencaria"** Désègl.<sup>502</sup> 16

<sup>499</sup> Sweet Briar in the manuscript; Small-flowered Sweet-briar in check-list.

<sup>500</sup> Not in check-list.

<sup>501</sup> Not included in check-list, presumably to be treated as subsumed into *R. micrantha*.

1) Chelsfield, 1876, J. Groves BM.

‡**R. cinnamomea** L.<sup>503</sup> 14

13) Hook Green, Lamberhurst (vc14), 1939, J.R.W., B.E.C. Rep., 1939-40, p.277.

**R. japonica**<sup>504</sup>

1) Ruxley pits

**Prunus** L.

‡ **P. persica** (L.) Batsch Peach. [16.] (planted - rare escape). H.

1) Ruxley Pits.

**P. dulcis** (Mill.) D.A. Webb Almond. (planted - rare escape). H.

‡ **P. cerasifera** Ehrh. Cherry Plum. [15, 16.] (planted and now well naturalised). H.  
 Alien, in hedges, either planted or bird sown.

1) Ruxley pits.

3) SE Blean Wood, Dunkirk, 1964, B. Nash.

6) one pl[ant] by Watling St., Cobham, '61, HAS. Boxley, Mrs. B. Dodds.

7) by track in wood on chalk, Bredhurst Hurst, 1962, FR & CAS.

10) nr Ightham Mote, 584537, CAS.

11) n[ea]r Basted, 607550, CAS. Roadside, Hildenborough, 571485, CAS.

13) hedge E. of Printstile, Bidborough, 1945, F.R. & C.W.

**P. spinosa**. Blackthorn, sloe. 15, 16 Abundant. N.

Native. Woodland and scrub, on heavy soils, where it is an important seral dominant in succession to woodlands; abundant throughout Kent. A stunted, semi-prostrate form occurs as a scrub former on the Dungeness and Hythe shingle beaches, where the bushes bear interesting bryophyte and lichen epiphytes  
 1<sup>st</sup> record, 1777: Faversham, *Pl. Fav.*, p.90.

1) Abbey Wood, GAM. Blackheath, GMB. Chislehurst Common, PCH. Crofton Heath, PCH. N. Cray, PCH. Shooters Hill GMB. Ruxley pits. Dartford Heath, GMB.

2) Sewer Bank, Plumstead, PCH. Below Barnes Cray '44. Higham Canal, PCH.

3) Fishponds Wood, Dunkirk, 1960 **MNE**.

5) PilgrimsWay Polhill, PCH. 396611 PCH. Sepham, Polhill, D. Smith, 1909 **MNE**.

6) a[abundant] in hedges, Gravesend area 61 HAS. Stone HMP. Horton Kirby, PCH. Greenhills Wood, Otford PCH. Mounts R[oa]d, Greenhithe, PCH. Buckland R[oa]d, Luddesdown, PCH. Whitehill E of Shoreham, PCH.

7) Bluebell Hill 1948 **MNE**. Berengrave pit Rainham. E of Bredhurst Ch[urch]. Church Wood, Stockbury, '54.

8) G[rea]t Shuttlesfield, 1980. Reinden Wood entrance track from N, '53 B Nash. River, K.D.R. Elms Wood, Hougham.

9) Copse, Durlock, Minster, AGS.

10) Westerham Wood 82.

11) SE Part Oaken Wood Barming by R[oa]d on loam '54. N of E Sutton by ridge road '54. R. Eden bank N. of Chiddingstone Mill, '54. R[ai][wa]y, Hildenborough, 563482, CAS. R[oa]d ½m S. of Dunks Green, '54. R[oa]ds ½m E of Dunks Green, '54. ½m. E of Vitters Oak / ½m NE of Vitters Oak / E of Buckhall by Pond – 1½m. E of Bethersden '54. 1 mile WSW of Smarden '54.

12) ½m NE of Chilham by A.28.

13) 53 Gill, Stone Cross, Ashurst 518381, CAS. 63 Wood 1m SW of Pembury New Ch[urch], PCH.

15) Dungeness Beach, locally abundant where the water-table is fairly high; SE of Boulderwall; SE of Hamilton F[ar]m; W. of Lade; Hoppen Pits; Midrips; Forelands. Shingle beach W. of Hythe.

**P. x fruticans** Weihe – (**P. spinosa** x **P. domestica**). Common now.<sup>505</sup>

<sup>502</sup> Not included in check-list, and is a somewhat puzzling name ; the handwriting in the manuscript is clear and cannot be construed as, e.g., *R. crepiniana*.

<sup>503</sup> Not included in check-list (but then, this is not a Kent record) and presumably relates to an introduced rose, *R. blanda* or *R. majalis*?

<sup>504</sup> Not included in check-list; query if the cultivar *R. 'Japonica'* was intended.

<sup>505</sup> In check-list, but no manuscript entry.

- ‡ **P. domestica** L. (old introduction - now common). H.
- a) ssp. **domestica** Wild Plum, Damson, "Scad".<sup>506</sup> 15, 16.  
 Alien, more or less naturalised in hedges.  
 1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p90.
- 1) Hedge W. of Puddledock (former orchard) A.H.W.D. Abbey Wood, GMB. E. of Crofton Court, Orpington, 1923, E.B.B. R[oa]dside SW of Wilmington 505672, HMP. War Bank, Keston, ASK.
- 2) Hawes Wood, Newington.
- 3) Whitstable Harbour HMW. 122605, Blean, R.G.W. Hedge, Broadoak Rd, Sturry, 1938, HMW.
- 5) N[ea]r Downe, 1921, E.H. Ellis **BM**; 1937 JEL. Rushmore Hill, Halstead, 1861, A.A. **BM**.
- 6) Cliffe, F.J.H. N[ea]r Strood, F.M.W. SE of Northfleet Green in hedge, 1958. Greenhithe, GMB. Hartley, hedge, 604676, HMP.
- 7) Luton, Miss Young. 032546, 032555, n[ea]r Badlesmere, C.T.
- 8) Wye, E.M.H. St Margarets, Free Down, DPY. Hedge, Stowting, ES.
- 10) Lullingstone, FJH. Darenth, GMB. Farningham PCH.
- 11) Maidstone, H. Lamb. Ryarsh, E.M. Rogers (45!). E. Malling. Marden to Staplehurst; Staplehurst to Headcorn, FJH (1962! Leighbridge!). Sutton Valence, Mrs. Petley.
- 12) Willesborough CNP.
- 13) Mount Pleasant, Lambderhurst, JRW, 1943. Hedge, Vauxhall Lane, Southborough, CAS. Top of Cumberland Walk, T[unbridge] Wells, CAS.
- 15) Frequent about Appledore; SW of Small Hythe; Snargate; Brenzett; Burmarsh; Dymchurch, often planted in hedges in the Weald. Where this and the next were planted was legally an orchard and could not be dug for roadstone by the parish overseers, teste ASK.
- b) ssp. **insititia** (L.) C.K. Schneid. (*P. insitita* L.) Bullace. 15, 16.  
 Native or denizen. Scrub, open woods and hedgebanks; not common, except in Romney Marsh.  
 1<sup>st</sup> record, 1777: Selling, E. Jacob, *Pl. Fav.*, p.90.
- 1) Wood by Chislehurst Rd, Bickley, 1846, JSM. Plaistow; Shortlands, Cole. Kidbrook, B.D. Jackson. Keston, C.E.B. Ruxley pits.
- 2) Roadside, Isle of Grain, 1949 (fruits globular). Plumstead Marshes, A.H.W.D. N of Rainham, F.M. Webb. Brook W of Warden P[oin]t, O.D. Nr Ham Green, L[owe]r Halstow.
- 3) N of Thornden Wood, P. Bell, 1947. Frequent in Blean area, RGW.
- 4) E of Stodmarsh, F.J.H.
- 5) Hedge, nr Morants Court Hill, 1943, JRW.
- 6) S.E. Border, Darenth Wood, A.H.W.D. Frindsbury, F.M. Webb.
- 7) Old Wives Lees, 1943, DHK. Boxley, by Pilgrims Way, 1944. Selling, E. Jacob. Belmont Park, 1958; CPSK. SW of Newington; Boughton Aluph; SE of Borstal, F.M. Webb.
- 8) N. of Womenwoud [*sic*], F.M. Webb. Beachborough, CPSK. Wye, E.M.H. Folkestone, B.D.J. Lower Hardes, F.M. Webb. Paddlesworth, ES Marshall.
- 9) Manston; Cheesmans F[ar]m, Fl. Thanet. Monkton, Dowker. Pegwell Bay, H. Lamb, 1863 **MNE**.
- 10) n[ea]r Otford, 1922, LJT. Darenth, 1948-51, H.M.P. Riverhead, Miss Worship.
- 11) Tonbridge, Miss Peers. Edenbridge, B.D.J. Ryarsh, E.M.R. Hollingbourne, E.M.H. Staplehurst, ESM. E of Stonehill, Egerton, 1960 **MNE**.
- 12) Ashford, W.R.J. Mersham, E.S.M. Westwell CNP.
- 13) Chiddingstone, ESM. Hook Green, JRW, 1938. [Kippings Cross, 1902, ASK].
- 14) Reading Street, n[ea]r Tenterden, 1945, by roadside **MNE**. NW of Tenterden, BDJ. Stone in Oxney, 1933 ASK.
- 15) R[oa]dside SW of Hythe, 1958 **MNE**.
- 16) Court at Street, Lympe, 1947. Below Fort Lympe LJM.

**P. avium** (L.) L. Wild Cherry.<sup>507</sup> 15, 16. N.  
 Native. Woodlands, especially abundant in the chalk and ragstone districts, but very common on the Tertiaries and on the Weald clay and Hastings Beds. Absent from Romney Marsh and Grain, rare in Thanet and Sheppey.

<sup>506</sup> The last two English names are given in the manuscript, not in the check-list.

<sup>507</sup> Gean in the manuscript.

1<sup>st</sup> record, 1666: Kent. Merrett, *Pinax*. p.244. Fruit stones found in Bronze age and Roman levels, Crossness, Reid, 1899 (Godwin, p110).

- 1) Keston, 1902, W.H. Griffin **BM**. Abbey Wood, GAM; RAB. Hayes, DMcC. Joydens Wood, TH Angel 1952. Shooters Hill, GMB. Ruxley pits. N. Cray Wood, PCH. Farningham Wood, PCH; 82!
- 2) W. of Warden Point, 1955.
- 3) Bysing Wood (Thanet S[and]) '62. Brotherhood Wood / Trenley Park Wood REW. Pine Wood, P. Grattan. Shelving Wood, Hoath, 1962.
- 6) Darenth Wood. Swanscombe Wood. Greenhithe Wood, 1962. Claylane Wood, Cobham 61, HAS.
- 7) Bluebell Hill, 1951 **MNE**. Hollingbourne Hill '62. Stalisfield, 1950 **MNE**. SyndaleWood, 1957 **MNE**. Eastling C.T. HawkinsWood Chilham DHK.
- 8) Foot of Broad Downs, Brook '44. Wood above Wye Crown, REW. Iffin Wood C Haes. Garden Wood, Acrise, 1963, DACL. Ileden Wood 1980. Folkestone Water Works VPF Day. Eastling Wood, B.N.
- 9) Small damp wood SW of Minster Village, 1958.
- 10) N. of Bat & Ball CAS.
- 11) Ryarsh Wood. SandlingWood, EGP. Mereworth Woods. Warren Wood, Leeds, REW.
- 12) 03 Bourne Wood, Orlestone, 1957.
- 13) 64 Gill NW of Brenchley, 1958. 64 Pembury Woods, PCH. 44 GoudhurstGill, Cowden, 1956 **MNE**. 63 High Wood, T[unbridge] Wells, PCH.
- 16) East Cliff, Folkestone, VFP Day. Gault, Warren, B.N.

‡ **P. cerasus** L. Dwarf Cherry.<sup>508</sup> 15, 16. Introduced.

Native or denizen. Woodland, usually on sandy or loamy non-calcareous soils, hedges. Rare.

1<sup>st</sup> record, 1899: Fl. Kent. Jacob's 1777 record (see Fl. Kent, p.107) probably refers to *P. avium*, which can have red fruits.

- 1) Joydens Wood, 1948. Farnborough, 1938, P.H.C. Farningham Wood A.G. Tagg. Bexley, E.M.H.; S. of, F.R., G.M.B., 1955 **MNE**. Foots Cray by R[iver], GMB.
- 2) n[ea]r Minster, Sheppey, F.J.H.
- 3) Brotherhood Wood, Blean, 1947. Reculvers, F.J.H.
- 4) N[ea]r Sandwich, 1864, J.B. Syme **BM**. Hedge, Plucks Gutter, 1962, KFC.
- 5) Chevening Park, Miss Worship.
- 6) Green St[reet] Green, GMB. [Meopham, F.J.H. Higham, F.J.H. Cobham, H.N. Ridley. Above Trottiscliffe, E.S.M.]
- 7) Rodmersham Wood, F.J.H. Molash, F.J.H. High Wood, Wormshill, 1956 **MNE**. Hartlip, Trimen. Eastling; Stalisfield; Lenham (N of) REW. Kingsdown, ESM. Boughton Aluph, E.S.M.
- 8) Deal: Ham, H.C. Watson. Bekesbourne, F.M. Webb. E of Hastingleigh, 1946 **MNE**. Wye, F.J.H. E of Chartham, F.M.W. Lydden, 1949 **MNE**. Thanington, FMW. N of St. Margarets at Cliffe, 1955 **MNE**. L[owe]r Hardres, F.M.W. Paddlesworth, E.S.M. Folkestone Warren, 1960 **MNE**.
- 10) E. of Westerham, B.D. Jackson. Sevenoaks, FJH.
- 11) 65 Mereworth Woods. Edenbridge, B.D. Jackson. Sutton Valence, Mrs. Petley. 65 Milbay Wood Nettlestead. 85 Boulderwood F[ar]m., Sandway, Mrs. B. Dodds. Ryarsh, E.S.M. Senacre Wood, 1863, Hb. Lamb **MNE**.
- 12) Willesborough Lees, E.S.M.
- 13) Bedgebury, n[ea]r Pinetum. Cranbrook, Crowden. Redleaf, C. Cox. Penshurst, F.J.H. Stonemead, Matfield, 1952 **MNE**.
- 14) Hawkhurst, Melvill. Banks n[ea]r Small Hythe, 1949 **MNE**.
- 16) Downs n[ea]r Sandgate, G. Walton. Westenhangar, F.J.H. Sandling Park. E.S.M.

‡ **P. mahaleb** L.<sup>509</sup> St. Lucie Cherry. H.  
(Introduced and well-naturalised esp. by railways; N. France native)

**P. padus** L. Bird Cherry. H.  
Alien. Several old records, some probably erroneous; one modern record as an established alien.

- 2) Faversham AB Turner.
- 3) Brotherhood Wood, N. of Canterbury, Miss Long, 1947, quite naturalised.

<sup>508</sup> Thus in check-list; Morello Cherry in the manuscript.

<sup>509</sup> Given in check-list, not in the manuscript.

- 6) Garden, Stone, 1949 HMP.  
 7) Westwell, Miss D’Ombrain.  
 10) Lullingstone, EMH.  
 11) Sutton Valence, Mrs Petley.  
 13) Matfield Ch[urch] y[ar]d, 1935, G.E. Shaw **TLS**.

‡ **P. serotina** Ehrh.<sup>510</sup> Rum Cherry. H.

‡ **P. lusitanica** L.<sup>511</sup> Portugal Laurel. H.

‡ **P. laurocerasus** L.<sup>512</sup> Cherry Laurel. H.

**Oemleria** Rchb.

‡ **O. cerasiformis** (Torr. & A. Gray ex Hook. & Arn.) W. Landon<sup>513</sup> Oso-berry. H.

**Cydonia** Mill.

‡ **C. oblonga** Mill.<sup>514</sup> Quince. H.  
 (rare escape, hedges and waste ground E. P.)

**Chaenomeles** Lindl.

‡ **C. speciosa** (Sweet) Nakai Japanese Quince. H.  
 (occasionally naturalised: E.P.)

1) Ruxley pits.

**Pyrus** L.

‡ **P. pyraeaster** (L.) Burgsd.<sup>515</sup> Wild Pear. H.

‡ **P. communis** L. Pear.<sup>516</sup> 15, 16 H.

Probably introduced, but possibly native.

1<sup>st</sup> record, 1777: S. of Kennaway, S. of Faversham, E. Jacob, *Pl. Fav.*, p.9[1].

1) Keston Common (var. *pyraeaster* L.) 1922, J.E.L.; Warbank, Keston, ASK; 1946! Elmstead Woods, Miss A. Mills, 1936. Normans Wood, Bromley, '54, 1 tree, Roy Day. ‡ Ruxley pits. Chislehurst Common, HMP. Foots Cray, GMB. Abbey Wood, H. Lamb, 1863 **MNE**; GMB.

8) 13 Hedge, Postling Downs, L.J.M. Bridge, J.O.

10) N. of Westerham. R.A, Clarke, 1958.

11) Roadside N.E. of Mill F[ar]m, NE of Bethersden, 1954, FR & DMCC. Roadside hedge, S. of Whetsted, CAS. R[ai]l[wa]y, Hildenborough 563482, CAS.

12) Ham Street Woods, 1956, ES.

13) N. of Sissinghurst, 1949.

14) Copse by R[oa]d, Palstre Court, 1½ W. of Wittersham. Isle of Oxney, 1958, D.MCC. & FR **MNE** (resembling *P. cordata*).

**Malus** Mill.

**M. sylvestris** (L.) Mill.<sup>517</sup> Crab Apple.<sup>518</sup> 15, 16. N.

Probably native. Woodlands, scrub and hedges on various soils; occasional to locally frequent.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.66.

<sup>510</sup> Given in check-list, not in the manuscript.

<sup>511</sup> Listed in the manuscript, without any account.

<sup>512</sup> Listed in the manuscript, without any account.

<sup>513</sup> Given in check-list, not in the manuscript.

<sup>514</sup> Given in check-list, not in the manuscript.

<sup>515</sup> Given in check-list, not in the manuscript.

<sup>516</sup> 'Wild Pear' in the manuscript.

<sup>517</sup> All the following records were headed '**a**) *subsp. sylvestris* (M. *pumila* auct.)' and these continued with records under '**b**) *subsp. mitis* (Wallr.) Mansf.'. In this transcript, the latter have been placed under *M. domestica*, which would accord with the check-list treatment.

<sup>518</sup> 'Wild Apple' in the manuscript.



- 1) Joydens Wood. Hockendell Wood, St. Mary Cray. Roundabout Wood, Crofton Heath PCH. Keston, DPY. Hayes Common, DMCC. W. Wickham Common PCH. Abbey Wood, RAB.  
 3) Blean, N of Dunkirk. Trenley Park Wood.  
 5) Chevening Park, PCH. Downe, ASK.  
 6) Darenth Wood. Lords Wood. The Thrift, Bean. Swanscombe Wood.  
 7) Bredhurst Hurst, '44.  
 8) N[ea]r A.A. Box A2, Denton, DACL 1960, det. F.H.P.  
 10) Westerham Wood, B. Sennitt.  
 11) Snarkhurst Wood. Holt Wood, Aylesford, CW.  
 13) Ashour Wood, 1944 **MNE**. S. of Penshurst.  
 16) Grange Alders LJM.

‡ **M. domestica** Borkh. Apple. [15, 16.] H.  
 In hedges, frequently bird-sown.

- 1) Ruxley pits. Dartford Hill GMB. Bexley GMB,  
 8) Gutteridge Denton, DACL. LodgeWood, Lydden, KDR. Hedge, Frogham, Nonnington, BN.

‡ **M. spectabilis** (Aiton) Borkh.<sup>519</sup>  
 Alien; native of N. China

- 13) Tun[bridge] Wells Common, 1963, KEB.

‡ **M. purpurea** (E. Barbier) Rehder Purple Crab. [16.] H.  
 (Nat[uralise]d. in W. Kent: garden origin c.1900.

**Sorbus** L.

[**S. domestica** L.<sup>520</sup>

- 8) N. of Elham Park Wood, 1958 **MNE**.]

**S. aucuparia** L.. Mountain Ash; Rowan. 15, 16. N.

Certainly native. Woodlands and scrubbyheaths on sand, sandy loam and gravel; calcifuge, and a characteristic associate of the sessile oak and birch in the dry oakwood association; common on the Tertiary sands and gravels and drifts of [districts] 1) and 3), on the Greensand (Folkestone Sand and Hythe Beds plateau drifts) and on the Hastings sands: v[ery] rare on the chalk plateau drifts, app[arently] absent on the Weald clay and Gault and in the alluvial marsh districts, the drift-free eastern chalk plateau, Thanet, Grain and Sheppey.

1<sup>st</sup> record, 1597: Weald of Kent, Gerard, *Herbal*, 1290.

- 1) Scadbury Park; Petts Wood, Chislehurst. Keston Common, plentiful, 1948, **MNE**. Joydens Wood, 1948, frequent. Farningham Wood. Hayes Common! PCH. Abbey Wood PCH; RAB. Greenwich Park, Miss J. Webber. Shooters Hill Woods GMB. Ruxley Pits. Beckenham Place, PCH. Crofton Heat, PCH. Wood by Cray, N. Cray, PCH. N. Cray Wood, PCH.  
 3) Blean Wood, N. of Dunkirk. Denstead Wood, Chartham, 1950 **MNE**. Bigbury Wood, RGW (freq[uent] in whole of 3), RGW). Oldridge Wood, J.O.  
 5) The Larches, W. of Farnborough, PCH. 3964 Well Wood PCH.  
 6E) Darenth Wood, 1946. Lords Wood, Darenth, PCH. Shorne Hill, 2 trees in wood on Eocene gravel, 1961, HAS.  
 7) Above chalk pit, Preston, 018602, C Turner].  
 8) Wood W. of Stone Street, L[ittle] Waddenhall, Stelling, on Pliocene sand, 1961 **MNE**. On drift, Frandham Wood, River, Miss B. Nash, 1958.  
 10) Ightham Common. Seal Chart. [Ightham, H. Lamb 1888 **MNE**.] Whitley Scrubs. Bayleys Hill. Scords Wood. Toys Hill. Crockham Hill  
 11) Valley Wood, Wrotham Heath. Highlands, by golf course. Larkfield Heath. Comp Woods. Mereworth Woods.  
 12) Willesborough Lees.

<sup>519</sup> Not in check-list.

<sup>520</sup> Not in check-list, and the manuscript entry is marked 'check' with record details deleted.

**13)** High Rocks. Bedgebury Forest, JRW, 1941; 1948! Timberley Wood; EllisWood, Lamberhurst, 1941, J.R.W. Woods S. of Scotney Castle, 1942, J.R.W. Bayham, CAS. 63 Wood 1m. SW of Pembury New Ch[urch], P.C.H. 64 Pembury Wood, PCH. Combwell Wood 79.

**14)** Robins Wood, Cranbook, 1945 **MNE**.

**16)** Parkland, Brockhull; nr. Stream, Sandling Park, L.J.M.

**S. aria x aucuparia** = **S. x thuringiaca** (Ilse) Fritsch [16.] N.

**6)** Darenth Wood, E. Forster Hb. **BM** (labelled *S. aria* var. *pinnatifolia*).

**10)** border of wood and heath, in hedgebank, Ightham Common, 1942-54, with the parents: 1947 **MNE**. Scords Wood, Brasted, with parents, 1963. By brook, Raspit Hill, Ightham, 1942→

‡ **S. intermedia** (Ehrh.) Pers. Swedish Whitebeam. [16.]

**1)** Ruxley pits.

**6)** Chalkpit, Swanscombe, 1947, H.M.P.; J.E.L. & D.H.K.; many trees, 1951, H.M.P. Horns Cross Pit HMP.

**12)** 2 fine trees, n[ea]r Up[pe]r Cricket G[[oun]d, T[un]bridge Wells Common, CAS.

**S. aria** (L.) Crantz Common Whitebeam.<sup>521</sup> [15, 16.] N.

Native. Woodlands and scrub; abundant on the chalk; frequent on the western Greensand (on ragstone, Plateau chert drift and Folkestone Sand) as far east as Mereworth Woods; locally common on the sands and gravel drifts of the Blean, very rare in Thanet; absent elsewhere, except where planted. Common on the chalk in Surrey, more local in Sussex; extremely local in N. France (only on chalk scarp between Samer and Desvres!).

1<sup>st</sup> record, 1666: Sandwich, Goodyer in Merrett, *Pinax*, p.10.

**1)** 57 Joydens Wood. Hayes, GMB.

**3)** 15 Bigberry Wood, N side road, on plateau gravel, 1954. 05 Perry Wood, Selling, on Eocene gravels, 1959, **MNE**. 05 Denstead Wood, on gravel-capped hill, 093565, 1950 **MNE**. 16 NE corner, Hempshill Wood, Whitstable, 1951, REW.

**5)** 46 Darwins Bank, Downe, 1962. 55 Pilgroms Way, Polhill, PCH; FR. 56 Pilots Wood, SW of Shoreham PCH. 45 Wood, Valley SE of Cudham 1958 **MNE**. 3965 Well Wood, PCH. 45 Down S.W. of Biggin Hill, 1948, B. Welch. 45 Wood E of Berrys Green, Cudham. 409584 Lusted '59, RAC. 426577 Westerham Hill, RAC.

**6)** [Thong Woods, R. Pocock **BM**.] [Greenhithe, Hb. E. Forster **BM**.] 56 S.E. of Eynsford, 1950 **MNE**. 55 Greenhills Wood, Otford. 55 Kemsing Downs. 56 Horton Kirby, PCH. 56 Downs E of Shoreham. 56 Preston Hill, PCH. Magpie Bottom. Knatts Valley. W. of Wrotham. Wrotham Hill and to E. 66 Wrotham Water. 66 Vigo Hill. 66 above Trosley Ch[urch]. 66 Ryarsh Downs. 66 Birling Downs. 66 Crookhorn Wood, loc[ally] dom[inant] in scrub. 66 M[oun]t Ephraim. 66 Upper Halling Downs.

**7)** Wouldham Downs v[ery] a[bundant]. 76 Burham Downs v[ery] a[bundant]. 75 Boarley Warren a[bundant]. 75 Boxley Warren, a[bundant]. 86 Longreach Wood, Stockbury, '58. 94 Charing Hill, by A252, 1954.

**8)** Wye. 04 Longport Down, Crundale, 1962. Yocketts Bank. Downs W of Cheriton, LJM. Elms Wood, DPY. 24 Temple Ewell, RDR. 24 N side Coombe Valley, Dover, 1955, **MNE**. 34 One, S. edge Eastling Wood, B. Nash 1957. 35 Willow Wood, Tilmanstone, B. Nash, 1959.

**9)** In scrub in old railway cutting on chalk E. of Nash, S. of Margate, 1955.

**10)** 55 Ightham Common. 55 Oldbury Hill, 1945 **MNE**. 45 Scords Wood, in *quercetum petraeae*, freq[uent], 1963. One Tree Hill, B. Sennitt. 55 Seal Chart, B. Sennitt. 45 Ide Hill. Crockham Hill E above Chartwell, RAC, '57.

**11)** 65 Comp Woods, Mereworth, on plateau and in Swanton Valley on ragstone. 65 East Mereworth Woods, frequent.

**13)** 54 Southborough Common, 1 tree, Miss H.M. Crampton, 1945, **MNE**; 1 large tree, 1960, CAS.

**S. torminalis** (L.) Crantz Wild Service-tree. [15, 16.] N. 20/51

Native. Old woodland, on Weald Clay, London Clay, superficial gravels, Hastings Sands and Clays, and (rarely) on chalk; widespread but very scattered; usually only a single tree occurs in one place, though larger colonies occur locally in the Blean Woods. Single trees of great size are occasionally found: they appear to be left when coppicing is carried out. Probably once common in the primitive Wealden forest.

1<sup>st</sup> record, 1597: Southfleet and Gravesend, Gerard, *Herbal*, p.1287.

**1)** 47 Chislehurst W.W.; woodland relic in grounds of "Sira", 1957! [W. of Grove Park, W.W.] 47 Woods, Shooters Hill, G.M.B. Abbey Wood, 1921, St J.M. Greenwich Park, GMB.

<sup>521</sup> 'Whitebeam' in manuscript.

**3)** 05 Several trees at border of Wood NE of Boughton Street, 1947, **MNE**, 1955 **MNE**. 16 Thornden Wood, 1464, St. Edmunds School N.H.S. 16 Small Wood S of Thanet Way, Clapham Hill. 16 Whitstable, R.E. Wood. Rather common in the Blean Nature reserve (Minching Wood, Blean), 1957. 16 N. edge of Clowes Wood, several trees, 1950, REW. NW corner, Hempshall Wood, REW. 06, 16 Ellenden Wood, Blean, 1966-7. E. Blean Wood KFC. Rough Common.

**4)** 26 E. of Stodmarsh, 1955, **MNE**.

**6E)** 67 Southfleet KFC. Stone Wood, Bean, 5972, HMP. 57 Darenth Wood, 582781 NE corner, several trees, 1947; 1951 **MNE**. 77 Chattenden Wood, Cliffe, 1956 **MNE**; widespread, 1965. 56 on chalk, Pennis Wood, Fawkham, one tree among *Fagus* and *Sorbus aria*, 1950, 1953 **MNE**. 57 Swanscombe Wood, one tree at W border, 598728, PCH. Wood SW of Longfield 5968 KFC. N of Longfield 6069.

**8)** 15 Gorsley Wood, M. Chalmers-Hunt.

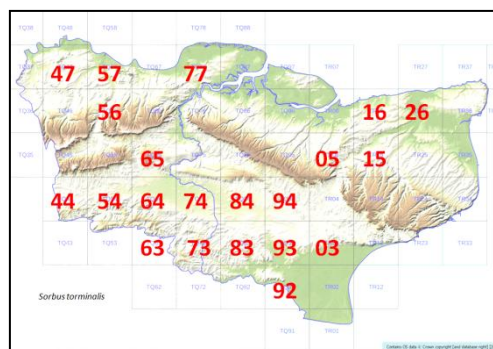
**10)** 74 Ragstone Scarp S. of Amberfield, Boughton Mochelsea, 1959, **MNE**. 65 on ragstone, Swanton Valley, Mereworth, 1960, **MNE**.

**11)** 84 Moatenden F[ar]m, NW of Headcorn, 1944, one large tree, 818464, **MNE**. 54 Hildenborough, J.B.M. 54 By Medway, Leigh, three, A. Graseman. 94 N. of Bethersden, 936416, E.S. 84 Golden Square, Smarden, 1962, 885415. 84, Brook Wood, 825423, SW of Headcorn, 1960. 84 R[oa]dside hedge, N. of Morley F[ar]m, Smarden, 863439, 1962. 74 R[oa]dside, n[ea]r Spenny F[ar]m, Collier St[reet], 709452, 1956. 44 roadside N. of Chiddingstone, 1960, CAS. W. of Bethersden, RAC. 94 R[oa]dside on Gault, W. of Westwell, Mrs. B. Dodds.

**12)** 93 Longrope Wood, Orlestone, 1946, several trees. 93 Faggs Wood, Orlestone, 1950, several trees. 03 Bourne Wood, Orlestone, a few trees, J. Archibald; ES. Smallman's Wood. 93 Burnt Oak, 1 mile NW of Ham Street, ES. 93 Birchett Wood, ES. Chiddingstone, 1902, H.F.P. in Hb. Croydon NHS. 44 Shernden Wood, 447428, S. of Edenbridge, one fine tree, 1958, PC Hall.

**13)** 73 E. of Louisa Lake, Bedgebury Forest, one very large tree, 1947, 733329, **MNE**. 54 Ashour Wood, Bidborough, Miss H. Turnbull. 64 Cornford Lane, Pembury, 1939, J. Guthrie, **TLS**. 63 Cuckoo Lane, 1935. 63 Hedge of East Wood, Lamberhurst, 1941, JRW. 64 n[ea]r Pearsons Green, Brenchley, 1941, JRW. 63 Hook Green, turning off A21, Lamberhurst Quarter, 1962, CAS. E of Brenchley, RAC. 64 Lane E of Furnace Pond, Horsmonden, 1954. 73 n[ea]r Church, Old Horsmonden, Prof. P.W. Richards. S. of Hawkenbury, G. E. Shaw. Lane towards Cambourne, Goudhurst, P.W.R.

**14)** 83 Gill N.E. of Benenden, one gigantic tree, 1954, 825333. 1 large tree Coever F[ar]m, Knock Wood, RAC 1958. 82 NE of Alderden, Sandhurst. Owley, Oxney KFC. 93 Beales F[ar]m, Red-Brook Street, Woodchurch, Mrs. Adams; 1961, CA Lister. 92 Lords Wood, Stone in Oxney, 1937, ASK.



#### **Amelanchier** Medik.

‡ **A. lamarckii** F.-G. Schroeder (*Amelanchier confusa* Hyland., *Amelanchier laevis* auct., *A. intermedia* auct., *A. canadensis* auct.) Juneberry. [15, 16.] H.

**1)** Hayes Common, C.E. Britton, *B.E.C. Rep.* 1922, p.727; there in 1911, JEL. Fisher's Wood, Bromley, 1961, J.R. Palmer.

**3)** Wood 2m. N. of Canterbury, 1946, DACL **BM**.

**10)** Parsons Marsh, Brasted, 1960; strong colony, R.A. Clarke. Hosey Common; Crockham Hill, 1939, A. Beadell.

**13)** Tunbridge Wells Common, 1949, KEB; CAS, 1961. N[ea]r Tuckers Pond, Angley Wood, Cranbrook, 1956 **MNE**. Kenward Green, Pembury, 1962, CAS.

#### **Photinia** Lindl. (*Stranvaesia* Lindl.)

‡ **P. davidiana** (Decne.) Cardot<sup>522</sup> Stranvesia. H.

#### **Cotoneaster** Medik. (all introduced)<sup>523</sup>

‡ **C. ellipticus** (Lindl.) Loudon (*C. lindleyi* Steud., nom. illegit.).

‡ **C. affinis** Lindl. Purpleberry Cotoneaster.

<sup>522</sup> Not in the manuscript; the author citation in the check-list appears to be Decne., but is mistyped.

<sup>523</sup> All the following species are given in the check-list, but the only ones given in the manuscript are those for which accounts are transcribed, plus *C. frigidus* (in manuscript but no account).

- ‡ **C. frigidus** Wall. ex Lindl. Tree Cotoneaster.
- ‡ **C. salicifolius** Franch. Willow-leaved Cotoneaster.
- ‡ **C. pannosus** Franch. Silverleaf Cotoneaster.
- ‡ **C. lacteus** W.W. Sm. Late Cotoneaster.
- ‡ **C. integrifolius** (Roxb.) G. Klotz (*C. microphyllus* auct. non Wall. ex Lindl.). Small-leaved Cotoneaster.  
vc15: BEC, 1934, p.826.
- 7) Chalkpit W. of Eccles, E.S., 1963.
- 8) Folkestone Warren, 1960, **MNE**. E. Cliff, Dover, 334418, DCL, KDR, Mrs. B. Dodds. Fan Bay, 353428, P. Le Brocq, 1953.
- ‡ **C. cashmiriensis** G. Klotz Kashmir Cotoneaster.
- ‡ **C. horizontalis** Decne. Wall Cotoneaster. [15, 16.]
- 6) 598752 Pit E of Empire Paper Mills, Swanscombe, HMP. Naturalised on chalk down, below A.20, Wrotham Hill, DMcC; 1953! **MNE**.
- 7) chalkpit W. of Eccles, E.S., 1963.
- 8) Hawkshill Down, Walmer, 1955 **MNE**. River, K.D.R. E. Cliff, Dover, KDR. S. Foreland Road, St. Margarets Bay, Mrs B. Dodds.
- 11) Basted rag[stone] pits, CAS, 1960.
- 13) By Brighton Lake, Tun[bridge] Wells, C.A.S.
- ‡ **C. divaricatus** Rehder & E. H. Wilson Spreading Cotoneaster.
- ‡ **C. simonsii** Baker<sup>524</sup> Himalayan Cotoneaster. [15, 16.]
- vc16: BEC, 1935, p.38.
- 7) Highsted Pit, DMcC.
- 8) Chalk cliffs, Folkestone, F.W. Place, *B.E.C. Rep.* 1925, p.873. Folkestone Warren, E.G. Philp, 1961 **MNE**. S. Foreland, Mrs. B. Dodds.
- 9) N. Foreland, 1948 DMcC.
- 16) One plant in stonework, Brighton Lake, Tun[bridge] Wells Common, to 1959, KEB
- ‡ **C. bullatus** Bois Hollyberry Cotoneaster.
- ‡ **C. franchetii** Bois Franchet's Cotoneaster.
- ‡ **C. zabelii** C.K. Schneid. Cherry-red Cotoneaster.
- Pyracantha** M. Roem.
- ‡ **P. coccinea** M. Roem. Firethorn. [16.]
- 1) Ruxley pits
- ‡ **P. rogersiana** (A.B-Jacks.) Coltm.-Rog.<sup>525</sup> Asian Firethorn. [15, 16.]
- Mespilus** L.
- M. germanica** L. (*Pyrus germanica* (L.) Hook. f.) Medlar. [15, 16.] ?N or H.
- Possibly native in the Weald; certainly planted, escaped from cultivation, or bird-sown, elsewhere; very rare. The status of this is not clear. It may be a genuine relic from the "primaeval" Wealden Forest about Tonbridge; it has been suggested that it may have a similar status in the E. Sussex Weald about Dallington, Ashburnham and Hastings, and in Surrey at Redhill. It is not recorded in Essex. It occurs scattered in N. France (Pas de Calais

<sup>524</sup> In the check-list given an author citation of Bois, but this may be a mistyping.

<sup>525</sup> Given in check-list, not in the manuscript.

and Nord) in woods and in hedges; if native there, it may be also so in SE England. The evidence is however inconclusive at present.

1<sup>st</sup> record, 1777: "Between Tonbridge town and the Wells, common in woods thereabouts" R. Waring, Phil. Trans. LXI p.376.

1) Holwood Park, D.McC. Near Chelsfield, on Lullingstone Rd, F.J.H. Wood E of Bexley Church, PCH.

3) Blean Woods, Boughton F.G.E.K. =? Hernhill Wood, Stowell. Hales Place, Canterbury, 1962, Miss Millward, one tree. Hedge, St Stephens, Miss Millward. Tyler Hill Alcroft Gr[ange], MEM 1950.

10) corner of field, Ightham Mote, Mrs Warnett. Edenbridge, Mead[e-]Waldo. N[ea]r Medway NE of E Peckham '34 AHWD.

11) by A.227, in woods at Lit[tle] Trench, N. of Tonbridge, 1945. Frogs Bridge, Tonbridge.

13) Bidbrough, 1884, W.W. Reeves, Hb. H. & F.G. **BM**. ?= Ashour Wood, Penshurst, 1919;1937; Miss H.M. Crampton; 1945 (**MNE**)-54! 1960, CAS. Hedge, Forest R[oa]d, (~~top of junction of Forest Road & Bayhall Rd.~~) Tunbridge Wells, 536376, E. Shorrocks & CAS, 1960. Hedge, Quarry Hill, Tonbridge (?cultivated form) 1945.

14) Doubtfully wild at Hawkhurst, J.C. Melvill.

16) Wood E. of Cherry Garden, Cheriton, C.P.S.K. Spinous form from a wood near Hythe, 1880, W.R. Jeffrey; Fl. Kent, p.141.

### **Crataegus L.**

Charcoal of this genus was found in the Iron Age site at Bigbery Camp. Harbledown; Jessup & Cook, 1936 (Godwin, p.120).

‡ **C. coccinoides** Ashe<sup>526</sup>

**C. monogyna** Jacq. Hawthorn<sup>527</sup> 15, 16. N.

Native, but universally planted in hedges. As a wild plant in open woods and scrub; particularly common as a seral scrub dominant, both on the less shallow loams in chalk scrub areas, and on clay and sand.

1<sup>st</sup> record as a wild plant, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.69.

1) Beckenham Place Park '55. Dartford Heath, St. J. M., BEC, 1925, p.873 (var. *parvifolia* Dr. and var. *incisifolia* Dr.). Shooters Hill, GMB. Ruxley pits. Blackheath GMB. Dartford Heath GMB. Abbey Wood. Farningham Wood 82, Joydens Wood. Crofton Heath. Bexley Ch[urch] y[ar]d. N. Cray Wood. High Wood, Crofton. Keston C[ommon].

2) Sewer bank, Plumstead. S. Minster Marshes '55. Minster village '55. Warden ash copse '55. East church cliffs '55.

3) Chequers Wood 1955.

5) Norsteads '58. Down W. of Shoreham. Chalk W of Eynsford. The Larches, W. of Farnborough. P[ilgrims] Way, Polhill. Pilots Wood, SW of Shoreham.

6) Downs W of Woodlands Hill n[ea]r Kemsing '55. Hill 1m. W of Wrotham '55. Downs Wrotham, N. of village 55. Lords W[oo]d, Darenth. Darenth Wood. Otford. Kemsing Downs. Greenhills Wood. Mounts Rd, Greenhithe. Downs E of Shoreham. Preston Hill. R[oa]dside, Cuxton.

6E) S of Cooling 44.

7) Roadside A.2 Harble Hill '55. Wood above Queen Down Warren '55. Berengrave pit, Rainham. Bredhurst Hurst 55. Detling Hill top 55. Detling Coombe 44. Burham Downs 55. Squirrels Wood 44. Upper Bell 55. Down E of L[owe]r Bell 44-62. Park Wood, Molash.

8) A2 Bridge Hill 55. Lockerage Wood NW of S. Alkham '55.

9) Copse SE of Minster AGS.

10) Kemsing, 1891, ESM **BM**. Westerham Wood 82. Knole Park. Otford. Shoreham, River Path. W. of S. Darenth. Darenth nr Church.

11) Wood SE of L[owe]r St Clere 55. Roadside S of Aylesford Br[idge] 55. Wet Wood SW of Mereworth 55. Starve Crow Woods 55. Tonbridge Castle '55. Medway E Peckham (incisa) CAS. E. Malling Heath 45 **MNE**. Leybourne Wood 55. Larkfield Heath '55. N. of Bough Beech 55. We Wood N. of [Four] Elms by r[oa]d 55. R[oa]dside Whetsted 45. Ryarsh Roughetts 55. Horish Wood, '54. R[ai]lway Hildenborough 563482 CAS.

12) (Red) Lane S of Sellinge by str[eam] RAC.

13) Wood by R Teise, Hoathly, Lamberhurst 55. Lamberhurst Down '55. ½m E of Up[pe]r Haysden on T[unbridge] W[ells] S[and], 1954. Bayham CAS. 63 High Wood, T[unbridge] Wells, PCH. 64 R[oa]dside 1m SW of Pembury New Ch[urch], PCH.

<sup>526</sup> Given in check-list, not in the manuscript.

<sup>527</sup> In the manuscript given as Common Hawthorn, "Haggazells".



## 14) Mopesden Gill '55.

**C. x media** auct. *C. x oralis* Kittel (**C. monogyna x C. laevigata**).<sup>528</sup> [15, 16.] N.

Common with the latter, e.g.

1) Abbey Wood, G. Matthews.

8) Little London, Lydden DPY.

11) The Forest; Hoads Wood; Bradshaw. Horish Wood / Honeyhills Wood, Bradshaw. Wrotham Heath, AHG Alston **BM**.

13) Wood W of Bidborough, 1945 **MNE**.

**C. monogyna x Mespilus germanica**<sup>529</sup>

13) Planted, in wood N. of Bidborough, 1942, J.R.W.

**C. laevigata** (Poir.) DC.<sup>530</sup> Midland Hawthorn. 15, 16. N.

Native. Old woodlands, especially on heavy soils; very common in well-wooded parts of the county, particularly in the Blean, on the plateau woods of the chalk districts, the Gault, the Weald Clay, and the Wadhurst Clay; absent from the marsh districts, Thanet and Grain; very rare in Sheppey.

1<sup>st</sup> record, 1899: Fl. Kent, p.142.

1) 57 Joydens Wood, 47 **MNE**. 46 Roundabout Wood, Crofton, PCH. 47 Woods, Shooters Hill GMB. 47 Abbey Wood, 1950, G. Matthews. Scadbury Park. Chislehurst GMB. W of Southborough, JEL, 1944. Dartford Heath, St J M. (var. *excisifolia* Dr.)

2) 97 One bush in small oak wood N.E. of Brambledown Farm, S.E. of Minster, Sheppey.

3) 16 Thornden Wood. 06 Blean Wood, N of Dunkirk, 1945 **MNE**. 16 Clowes Wood, 1951 REW. 05 Fishponds Wood, Dunkirk, 1960 **MNE**.

5) 46 Jewells Wood, Biggin Hill. 46 R[oa]dside. Holwood Farm, PCH. 45 Hogtrough Hill, Brasted, 1958 **MNE**.

6) [55 Otford, 1879, H. & J. G. **BM**.] 67 Swanscombe Wood. 57 Darenth Wood. 66 Holly Hill. 66 Wingate Woods above Up[pe]r Halling, 1945 **MNE**. 56 Plateau Woods E of Shoreham. 66 Red Wood, Luddesdown, 1947. 56 SW of Kingsdown. 56 Horton Kirby Wood PCH.

7) 86 Bredhurst Hurst '44. 76 West field Wood, 1944 **MNE**. 86 Squirrels Wood, '44. 95 Divan Wood, Eastling, 1950 **MNE**. 35 Steede Hill Plateau Woods, Harrietsham, Mrs. B. Dodds. In Simia, Sandbanks Wood HMW.

8) Wye, 1922, T.J.F. **BM**. Tappington Valley, Denton DACL. Wood on chalk, Little London, Lydden, 1949, **MNE**. Ileden Wood 1980.

10) Seal, 1902, C.E.B., **BM**. Darenth St. J. M. BEC, 1923, p.183 (var. *eriocarpa* Dr.). Westerham Wood 82. N. of Bat & Ball CAS. N of Franks Lane by Darent 556680, PCH.

11) E. Malling Heath 1945 **MNE**. Ryarsh Wood; Horish Wood '44, pure AD Bradshaw 1947; Park Wood Boxley; Gore Wood, Bearsted; Snarkhurst Wood. Honey Hills Wood, AD Bradshaw. Hildenborough, F.R. Browning 1962. Hoads Wood, Pluckley, The Forest (many hybrids too with *C. monogyna*) A. Bradshaw.

12) Nackholt Wood. N. of R[ai]lway W of Sellindge RAC. Ham Street Nature Reserve Woods. Birchett Wood. Longrope Wood. Cadmans Wood, Brook. Copse on gault, SE of Lenham.

13) Chatfields, Edenbr[idg], RAC. Wood W. of Bidborough, 1945 **MNE**. Combwell Wood. Blackbush Wood, DS. Wood 1m. SE of Markbeech (on Wadhurst Clay) '54. Winbridge JRW, 1939. Skiffs Cott., Lamberhurst, 1939, JRW. R[oa]d to Owl Ho[use]; copse n[ea]r Grantham Mill, Lamberhurst, 1942, JRW. Bayham Woods CAS. 63 1m SW of Pembury New Ch[urch], PCH.

14) Woods E. of Stocks, Oxney. Bank of Crane, Cranbrook, DS, '56

16) Lympe Park Wood, Postling Wents (Gault) (Thorn Wood).

‡ **C. laciniata** Ucria Oriental Hawthorn H.

## CAESALPINIACEAE

**Cercis** L.<sup>531</sup>

‡ **C. siliquastrum** L. Judas Tree. [15.] H.

<sup>528</sup> Given as *C. monogyna x oxycanthoides* in the manuscript.

<sup>529</sup> Not in check-list.

<sup>530</sup> In the manuscript given as *Crataegus oxycanthoides* Thuill (*C. oxycantha* auct.).

<sup>531</sup> Genus and species not in the manuscript, but given in check-list.

Waste ground, Hythe.

**Senna** Mill.<sup>532</sup>

‡ **S. occidentalis** (L.) Link [Coffee Senna.]  
Oil-seed casual.

**FABACEAE**<sup>533</sup>

**Robinia** L.

‡ **R. pseudoacacia** L. False- acacia.<sup>534</sup> Widely naturalised in woodland, quarries, roadsides etc.  
Alien, planted in parks, etc. and on railway banks.

1) Mount Mascal, Bexley, PCH. Gattons Plantation, PCH. Ruxley Pits. 36 Hayes, tip near sta[tion], PCH.  
Langley Park 1955 JM Sherwood.

5) The Larches, W. of Farnborough, PCH.

6) Chalk pit Swancombe HMP, 1957.

7) Belmont Park, planted, 1958, DMcC.

**Phaseolus** L.

‡ **P. vulgaris** L. French Bean. [16.]  
Casual on rubbish tips.

10) Sevenoaks tip, CAS.

‡ **P. coccineus** L.<sup>535</sup> Runner Bean.  
Casual.

‡ **P. lanatus** L.<sup>536</sup>  
Casual.

**Vigna** Savi

‡ **V. radiata** (L.) Wilczek<sup>537</sup> Mung-bean.

**Glycine** Willd.

‡ **G. max** (L.) Merr. Soya-bean. [16.]  
Casual.

1) B[ritish] O[il] [and] C[ake] M[ills], Erith, DMcC, 1956.

**Galega** L.

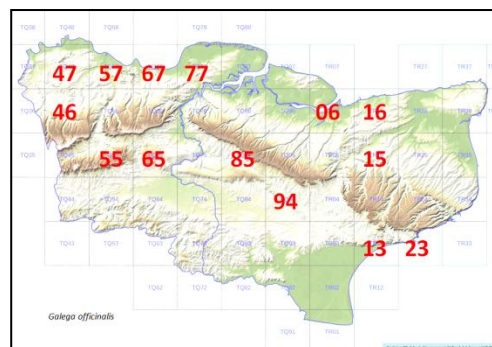
‡ **G. officinalis** L. Goat's-rue. 15, 16.  
Naturalised on waste ground.  
Alien, naturalised in waste ground near houses.

1) Hayes Common HMP. Ruxley Pits. 57 Joydens Wood PCH;  
FR; PBS. 47 near Belvedere Sta[tion], PCH.

2) 47 Woolwich Arsenal, 1944. 57 By ruins of Longreach  
Tavern, Dartford Marshes, 1961, HMP 544779. 47 Erith  
Marshes, 1937, PHC (Hb. LNHS). 47 Crossness, PCH. 57 Stone  
Marshes, 1962, HAS.

3) Seasalter, HMW. 06 Blue Anchor, Seasalter, REW 1951.  
Whitstable, LWW. 16 Herne Bay Cliffs, J. Gurr, 1964.

5) 46 Waste g[roun]d, Orpington Bypass, PCH. Badgers Mount,  
E Armstrong.



<sup>532</sup> Genus and species not given in the manuscript. In the check-list given as *Cassia* L. and *C. occidentalis* L.

<sup>533</sup> Given in the manuscript as PAPILIONACEAE, starting with *Lupinus*.

<sup>534</sup> Thus in check-list; given as Locust Tree in the manuscript.

<sup>535</sup> Given in check-list, but no manuscript account.

<sup>536</sup> Given in check-list, but no manuscript account. It is not wholly clear what is intended here: whether *P. lanatus* Benth. or *P. lunatus* L.

<sup>537</sup> Given in check-list, but no manuscript account.

6) 57 near Greenhithe, 1937 PHC. 57 Green St[reet] Green, Darenth, PCH. 77 Cliffe Chalk pit, 1958. Snodland, PCH. 67 Northfleet in chalk pit 1962 (pink & white) WAS. Moodys L[a]ne, Crossing, Stone HMP. 640610 Trosley DMCC.

8) 15 R[oa]dside, Bonny Bush Hill, Kingston, 1956, DAC Long, 1960! **MNE**.

10) 55 waste ground., W. Kent Cold Storage W[or]ks, Dunton Green, R.C. Palmer. Whitley Forest RAC.

11) 85 Harrietsham, E.G. Philp, 1958 **MNE**. 65 Roadside, Mereworth–Hadlow, 1960, CAS. Aylesford Gravel pits, EGP, 59.

12) 94 A.20, Charing, Mrs B. Dodds. Canterbury Bombed sites, DHK.

15) 13 Shingle beach S. of Range Canteen, W. of Hythe, 1958.

16) 23 Folkestone Warren, KDR.

### Colutea L.

‡ **C. arborescens** L. Bladder-senna. 15, 16.

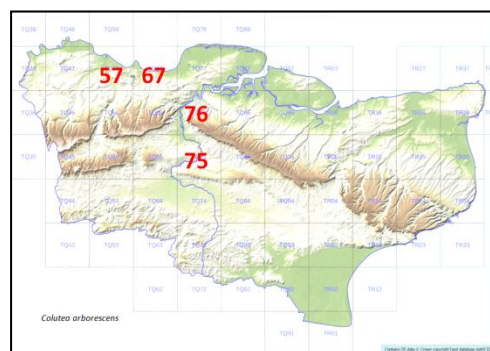
Naturalised on waste ground.

1) Woolwich tip 455790, '48. DMCC. Ruxley Pits. Hayes, CAC. West Wickham old dump; Langley Park G[olf] C[ourse] in Wood, '55, JM Sherwood.

2) 67 Denton Marshes by canal, 1962, HAS.

6) 57 Greenhithe, P.H.C. 57 Swanscombe chalk pit, 1950, H.M.P. 67 Gravesend, 1962, HAS. 76 Halling, roadside, Mrs. B. Dodds.

11) 75 R[ai]l[wa]y, Bank, Maidstone, EGP, 1960.



‡ **C. x media** Willd. Orange Bladder-senna. [16.]

Naturalised on waste ground.

1) Eltham, 408708, 1951 DMCC. (Kidbrook P[ar]k R[oa]d corner)

### Astragalus L.

**A. glycyphyllos** L. Wild Liquorice.<sup>538</sup> 15, 16. N 11/52 [14/52]

Native. Hedgebanks, scrub, woodborders, on chalk and ragstone, widespread but rather rare, with a scattered distribution, although abundant locally; also on a bank on Folkestone Sand.

1<sup>st</sup> record, 1620: Erith to Gravesend, Johnson, *Iter*, p.3.

1) Charlton Wood, Tournefort; Blackstone; Hb. Lambert.

6) 57 Mounts Wood Border, S. of Greenhithe; Winch, NBG; J. Priest; (1945→) **MNE**; 1947, HM Pratt **BM**; gone, 1965. 57 Darenth Wood border, Cooper, Fl.Met. (1949, 1955 H.M.P.); NE corner 582730. 67 Swanscombe Wood, Hb. Woodward; 1958 H.M.P. **MNE**. 67 Northfleet Green, in hedgebank, 1946-58 **MNE**. 67 Hedgebank of A.227, Nurstead, Miss Burrows; (1946 **MNE** -58!). 66 Hedge at S. edge of Cobham Park, W. Pamplin (1945, abund[ant]! **MNE**). 66 Pilgrims' Way above Ryarsh, Beadell; Gray (1943-56!). S. border of Great Wood Cuxton. 66 Red Wood, Luddesdown, in chalk scrub, 1946→. 66 Darenth Wood E, EP. Darenth Wood S, EP. Swanscombe EP. Above Birling EP.

7) 75 Pilgrims Way, E. of Boxley, 1954, S[outh-] E[astern] U[nion] of S[cientific] S[ocieties] Excursion; above Boxley. 95 Belmont Park, near golf course, Mrs Verschoyle; 1958, K.F.C. excursion; 1959! **MNE**. Peasdown, near Whitehill, Ospringe, E. Jacob. Middle of Farm Selling, 1960, B. Neame. [Rodmersham; Milsted; Selling Lees, H&M.] [Cades, Cowell.] 95 Hedge, Barn Wood, Eastling, C. Turner, 1958. 05 Park Wood border, Chilham, 1946-62, **MNE**. 95 Scooks, Ospringe, C. Turner.

8) 04 Hedgebank by lane at foot of Downs, Pickersdean, W.R. Jeffery; E Scott (1955! **MNE**); and tet[rad] to E, E.P. 0844. Hedge below Sugar loaf Folkestone, C.P.S.K.; G. Walton.

11) 75 Ragstone Quarry, 1 mile S. of Ditton, C. Stace, 1957 (1958!). )

75 E. Malling, J.S. Mill, 1865 ( ½m. SE of, 1942-57!). )

75 The Rocks, E Malling 1953 LLAG **MNE**. )on ragstone soils

65 Hedge of lane SE of Mereworth Park, 1943-61, **MNE**. )

65 Edge of Woods S. of Platt, Miss Hayton; E. [sic] Elgar 1893 **MNE**. )

[65 1m SE of W. Malling, Gray; apparently destroyed.] )

75 Allington Wood, WWR; (H. Lamb 1883 **MNE**; by railway cutting, 1947!). Hedge by Malta Inn, 1962 EGP. 75 Sandling, by A.225, opposite Running Horses, 1946-63, on Folkestone Sand **MNE**. E. Farleigh, W.W.R.; EP. 75

<sup>538</sup> Also named as Milk-vetch in the manuscript.

W Farleigh, TW Morris, 1868 **MNE**. 74 W of Chart Sutton, 1959 **MNE**. 74 East Hall, Boughton Mon[chelsea] 1891, E.S. Salmon, **MNE**; 1959! **MNE**.

**14)** 83 Tenterden, R[ai]l[wa]y embankment, ES; 1959! **MNE**. Potmans Heath, Maytham, E.P.

**16)** [13 near Sandling Junction, by A.20, Miss Long; destroyed by road widening.] 03 Between Lympe and Aldington, H.B. Mackeson (Copperhurst, Postling Green), on ragstone roadbank, 1954-58!) **MNE**. [23 Sandgate; Cheriton, C.P.S,K.] [13 Hythe, GE Shaw.]

### **Onobrychis** Mill.

**O. viciifolia** Scop.

Sainfoin.

[15, 16.]

N, also colonist & planted.

(*O. sativa* Lam.)

Probably native in chalk grassland in the areas indicated below, but rare and local, except in 8). Frequent elsewhere on the chalk as an escape from cultivation. The native plant is smaller than the cultivated strains.

<sup>1st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

**1)** R[ai]l[wa]y Bank, New Cross, 1946, DHK. S of Farningham Wood, 1951, H.M.P. R[ai]l[wa]y Bank Grove Park, 1943, DHK.

**2)** Woolwich Arsenal PCH. Stone Marshes HMP.

**3)** Thanet Way near Roman Galley REW.

**5)** NW of Leaves Green, 1917, PHC; BENA. Chalk cutting, A20, Farningham, PCH; HMP. W. of Shoreham, 1946. Chalk W. of Eynsford, PCH.

**6)** Eynsford, 1929, RWR. Gravesend, 1962, WAS. Halling Downs; Snodland, near Lads F[ar]m. By Pilgrims Way, E of Wrotham, PCH. 607686 R[ai]l[wa]y Longfield DVS Woods. Bean Rd Greenhithe '57 HMP. Frindsbury,\* 1938, J.B.M. Rochester Rd \*verge A224 Gravesend 61 HAS. Waynde, Darenth\*, 1963, W.A.S. Otford, BENA. Green St[reet] Green GMB.) (Farningham GMB.) [\* = Probably not native here.]

**7)** appearing native at Wouldham ...RGW; Burham Downs,' 47 **MNE**; W of Bluebell Hill, 44 **MNE**; Down E of L[owe]r Bell, 44; and Queen Down Warren, 535460, **MNE**. Bilting Downs, C.N.P. Walderslade Downs, app[arently] native. Alien, 038600, S. Side A.2

**8)** Appearing native as below: Brabourne Downs CNP. Crundale Downs, 1945 **MNE**. Down by Shuttlefield Farm Lyminge 1946. Downs behind Folkestone. Langdon Bay, Dover '52 **MNE**. St Margarets Bay, 1948 N.Y.S.; '58 **MNE**. Downs 1m. NE of St Margarets '62. Abund[ant], S. Foreland, S of St Margarets, 46 **MNE**. Kingsdown golf course, abundant, 1946-56 **MNE**. Sainfoin Hill, Coombe Vale, Dover, abundant '59 **MNE**. Downs NW of Woodville Park. Shakespeares Cliff '55 **MNE**. Temple Ewell. Ringwould (the Lynch) '51 **MNE**. Free Down, '54 **MNE**. Also ?naturalised, at Sutton. Eythorne. Womenswold. NE of Ham.

**10)** Whitley Row 498 532, F.S.E. Fawkes.

### **Biserrula** L.

‡ **B. pelecinus** L.<sup>539</sup>

[15]

Alien, Syria.

Sturry, casual, 1951, J.O. & DMCC, det. JEL.

### **Anthyllis** L.

**A. vulneraria** L. ssp. **vulneraria**

Kidney Vetch.

15, 16.<sup>540</sup>

N.

ssp. ‡ **polyphylla** (Ser.) Nyman<sup>541</sup>

Native. Downs, cliffs, and banks on the chalk, particularly in sparse vegetation, very common in old ragstone quarries and on dunes and chalky shingle, occasional; otherwise absent, except on imported chalk of railway banks, etc. A very characteristic species of chalk in Kent; it is most plentiful in seral communities colonising bare chalk, less common in mature closed turf.

<sup>1st</sup> record, 1597: by roadside, on Blackheath, half a mile from Greenwich, Gerard, *Herbal*, p.1061.

**3)** R[ai]l[wa]ybank on chalk, opp[osite] "Rose in Bloom", Seasalter, 1958, H. Wilks.

**4)** Waste ground by Richborough Castle, 1946. Dunes at Shellness (Sandwich) 1946. Kingsdown Beach on fixed shingle 1946. Walmer Beach opp[osite] Castle, 1946, **MNE**.

<sup>539</sup> Given in the manuscript as *Bisserula telectinus*.

<sup>540</sup> The subspecies are given in the check-list, but not in the manuscript account. The latter gives an alternative English name for the species, Lady's fingers; also "Granny's toenails, Folkestone".

<sup>541</sup> Author citation given as (DC.) Nyman in check-list.

- 5) (W. of Biggin Hill, H. Davis 1915 **MNE**.) Morants Court Hill Chalk pit. Darwins Bank, Downe. Downe Golf Course. Chalk pit bet[ween] Leaves Green and W. Wickham 1917 PHC. Saltbox. Downs W. of Shoreham. Downs above tunnel, Polhill.
- 6) Gravesend Road bank, 587745 Greenhithe '46 **MNE**. Banks and Down S. of Great Wood, Cuxton. Wrotham Hill, by A.20. Otford Downs, '49 **MNE**. White Hill, Shoreham Downs 49 **MNE**. Northfleet by r[oa]d on ch[al]k HMP. A.2 road cutting, Swanscombe Wood, '45 **MNE**. Cobham Terrace Rd, Stone, HMP. 585734 Bean Rd. A.2 N. of Darenth Wood, H.M.P. Mounts R[oa]d, Greenhithe, PCH.
- 7) Burham Downs, abund[ant], **MNE**, 1945-52. Down NE of L[owe]r Bell '44. Wouldham Downs. Horsted Valley, Walderslade 52 **MNE**. Down N of [Three] Squirrels, Stockbury, '44. Downs ½m. E of Lenham 1956 **MNE**. Border of Park Wood, W. of Chilham. N. of Boughton Aluph, near Wye, 1900 CES (var. *allioni* DC.) **BM**.
- 8) Juliberry Downs, Chilham. Chartham Downs '49 **MNE**. Stowting, 1887, W.H.B. (var. *allioni* DC.) **BM**. Temple Ewell Downs. Downs N. of Folkestone '49 **MNE**. The Lynch, Ringwould, 1951, **MNE**. Free Down '62. Down 1m NE of St. Margarets at Cliffe, '62. Track ½m NE of St Marg[are]ts, 62. Dover E Cliff. Shakespeares Cliff. Lydden Spout. Abbots Cliff top. S. of St. Margarets Bay. Hacklinge<sup>542</sup>, old chalk pit, '62.
- 9) Roundabout, St Nicholas at Wade. Gr[ass]l[an]d on cliff tops, Kingsgate, Thanet, 1959 **MNE**. Minnis Bay, on cliff top, G.C.P. (near *Tetragonolobus*).
- 11) Old ragstone Quarry, Offham.
- 12) Old ragstone Quarry, by A.20, Mersham, 1946.
- 16) Sandgate, 1815, J.F.Y., **BM**.

### Lotus L.

- L. glaber** Mill. (*L. tenuis* Waldst. & Kit. ex Willd.<sup>543</sup>) Narrow-leaved Bird's-foot-trefoil. 15, 16. N.  
Native. In grassland on heavy clay and on alluvial mud or silt esp[ecially] near the sea; locally frequent in the coastal and estuarine marshes, rarer inland.  
1<sup>st</sup> record, c.1700: Greenwich, 1696, Doody, MS.
- 1) [Greenwich, Doody.] Near Orpington Railway Station on clay cutting, W. Watson. L[owe]r Sydenham, 1948, D.McC. Joyce Green, GMB.
- 2) Plumstead Marshes, H.&M. Stone Marshes H.&M. (1945! **MNE**). Swanscombe Marshes near Greenhithe, Doody; 1946! Chalk Marshes. Shorne Marshes, 4-. Higham Marshes, Henslow (1945!). Holborough Marshes, Snodland 44. Elmley Marshes. Warden Point, on London Clay. Marshes N. of Leysdown, 1947 **MNE**. Faversham, A.H.W.D. S of Minster, Sheppey, on London Clay 1960 **MNE**. Grain, H.&M. Scrapsgate, Minster, 1965, J.E. Nichols. In grassland, Shellness, 1963. Seasalter Marshes 058648, C. Turner.
- 3) Whitstable Harbour HMW. Swalecliffe Brook, REW. By "Red Lion" S of Whitstable; near Church & State P[ublic] H[ouse] Denstroude REW.
- 4) Preston Marshes '46 **MNE**. Wingham Marshes, 1946 **MNE**. Marshside, Chislet 1962. Old Sidings, Ebbsleet, Richborough, 1946 **MNE**; 1962, Miss E. Millward. [Pegwell, H.&M.] Salting edge behind beach, N. of St. Nicholas, 1962. [Deal, Baker.] [Sandwich, Miller.] Stodmarsh, 1955 **MNE**. Damp slacks behind Dunes, N. of Sandwich Bay, 1956 **MNE**. Meadow, Plucks Gutter, B. Nash.
- 5) Chalky bank, W. of Eynsford, PCH & F.R. 1954, **MNE**. Chalky bank of by pass, Farningham [cross] r[oa]ds, PCH.
- 6) Lodge Hill Cooling, in grassland on London Clay escarpment, 1944-50. Swanscombe Wood; Mounts Wood, Greenhithe, v[ery] abund[ant] on old clay workings in both woods, 1946→. Grassland at Luddesdown, N.Y. Sandwich. Gravesend to Cobham, Hb.Webb.
- 9) Old R[ai]l[wa]y Cuttings, N. of Haine, Ramsgate, on chalk, 1959 **MNE**.
- 10) Darenth Road verge, S of Dartford, 1943 **MNE**. Meadows at Eynsford, 1954.
- 11) Marden Thorn, H&M (1945! Roadside). [Maidstone, Elgar, 1893 **MNE**.] Roadside, Widehurst Wood to Collier Green, 1945.
- 12) Kingsnorth, W.R. Jeffrey.
- 15) Brenzett, in alluvial pastures, 1945, **BM**, F.R. **MNE**. Sandhurst Levels, 1954.
- 16) Newton, C.P.S.K.

### L. corniculatus L.

Common Bird's-foot-trefoil.<sup>544</sup>

15, 16.

N.

<sup>542</sup> Normally, Hacklinge is assigned to district 4).

<sup>543</sup> It is under this latter name that the manuscript account is given.

<sup>544</sup> In the manuscript given as Bird's-foot Trefoil.



Native. Grasslands, roadsides, scrub; abundant throughout the county on all types of soils, both dry and damp, only absent on very wet or very acid soils.

1<sup>st</sup> record, 1629: Chatham, Johnson, *Iter*, p.4.

- 1) Hayes Common. Orpington R[ai][wa]y bank. Ruxley Pits. Joydens Wood. Blackheath GMB; ECW. Dartford Heath, GMB. Shooters Hill GMB.
- 2) Woolwich Arsenal. Sea Wall, Dartford Marshes, 1962. Upnor. Cuxton Marshes. Snodland Marshes. Seasalter. Holborough Marshes. Higham Marshes. New Hythe. Conyers Creek. Faversham Creek. Wouldham Marshes, 1938, JBM. Minster, Sheppey, 1960 **MNE**.
- 3) Swalecliffe. Swanton Farm pit, Littlebourne, 1960 **MNE**. Dry gravelly Pasture S. of Highstead, Hoath '62.
- 4) Sandwich Bay 1960 **MNE**. Deal Links 1954 **MNE**. Walmer Beach.
- 5) Morants Court Hills. Nower, Brasted. Golf Course, Downe. Darwins Bank Downe. Polhill, Pilgrims Way, PCH. Pilots Wood, PCH.
- 6) G[rea]t Pit, Horns Cross, 1962. Down ½ m SE of Dartford '44. Darenth Rd, Dartford 44. Cuxton. Halling Whitepit. Halling Downs. Darenth Wood PCH. Gravesend, 1837, EB **BM**; 1946! Mounts Rd., Greenhithe 44. Otford Mount, PCH. Swanscombe Wood, 1939, PHC (v. *incanus* Gray.). Betsham 1938, PHC (v. *incanus*). Magpie Bottom. Wrotham, P[ilgrims] Way. Kemsing Downs. Beechy Lees. Halling Downs. Green St[reet] Green, Darenth. Downs E of Shoreham. Preston Hill, PCH. Cobham Warren '44 **MNE**.
- E) R[oa]dside S. of Cliffe, '44. Gr[ass]l[an]d, Lodge Hill (L[ondon] Clay) 44. Clay lane Wood 61, HAS. Gravesend 60 HAS.
- 7) Down NE of L[owe]r Bell '44. Boxley Warren, 1938, JBM; 1946! Berengrave Pit, Rainham. Burham Downs (Church Spur; Scarborough Spur) '62. Bluebell Hill, Pilgrims View; and scrub by Main Rd. Down W of [Three] Squirrels, Stockbury '44 **MNE**. Down, Filmer Wood, Doddington, 62. Edge of Tassels Wood Norton, '62. Down opp[osite] Putt Wood. Park Wood Molash.
- 8) Hacklinge chalk pit. Dover E. Cliff. Shakespeares Cliff. Lydden Spout. Devils Kneading Trough '62. Brooke Hillock, 62. Downs ENE of Giddy Horn, '62. Crown Down, Wye. Postling Downs. Broad Downs. Downs above & NE of Lydden, J.G. Dony, 1955 **MNE**. Downs W of Woodville. Downs SW of Lydden. Free Down, 62. Down 1m NE of St Margarets at Cliffe '62.
- 9) Down on cliff top, Kingsgate, Thanet, 1959 **MNE**.
- 10) R[oa]dside N of Ide Hill '44. Dartford, HMP. Westerham Wood. Knole Park PCH. By R[iver], above S. Darenth PCH. R[oa]dside N of Darenth '45 **MNE**.
- 11) E. Malling. Maidstone Hb L[amb] 1880; 1884 **MNE**. Swanton Valley, ride. Wrotham Heath. Snarkhurst Wood, '44 **MNE**. R[ai][wa]y, Hildenborough, 563482, CAS R[oa]dside Vitters Oak Pond. Pond S. of R[ai][wa]y, E. of Headcorn, 849437, 1962. Ride on sand, Birch Wood, W. of Bethersden, 1962. Daniells Water, G[rea]t Chart, g[rass]y track on Weald Clay, '46, **MNE**.
- 12) Ashford Warren, '44. Hothfield Common. Willesborough Lees '44. Vauxhall Lakes, RGW.
- 13) Stone [Cross] 513381, Ashurst, CAS. Tunbridge Wells Common. Bayham CAS. 63 High Wood, T[unbridge] Wells. PCH. 64 Bank by Pembury W[ater] Works, P.C.H. M[oun]t Pleasant, Lamberhurst, 1944 **MNE**.
- 14) Sandy R[oa]dside hedgebank ¼m W. of Conghurst, Hawkhurst 1955. 50 Acre Wood Woodch[urch], ES. R[ai][wa]y track, Tenterden Sta[tion], 1959 **MNE**.
- 15) Romney Warren. St Marys Bay, 1881, J.F.D.P. Shirley Moor ES.
- 16) Folkestone Leas Cliff. Grassland on Scars W. of Hythe, 1955. Shornecliffe, 1955. Sandy field above Caseborne Wood, Seabrook, 1955.

**L. pedunculatus** Cav. (*L. uliginosus* Schkuhr)<sup>545</sup> Greater Bird's-foot-trefoil. 15, 16. N.

Native, marshes, fens, streamsides, ditches; damp woodland rides, wet meadows, drier pastures also on heavy clay soils; common generally, abundant in the Weald.

1<sup>st</sup> record, 1632: W. of Sandwich, Johnson, *Descriptio*, p.29.

- 1) Keston Bog. Chislehurst Common. Elmers End; W. Wickham Woods, 1915, H. [sic, for A.G.] Davis **MNE**. Bickley. Holwood Park Lakes. Shooters Hill, GMB. Kelsey Park Lakeside, Beckenham, 1948, SEC. R[ai][wa]y, Orpington, 1877, H&JG; 1948! Farningham Wood, 82! Joydens Wood. M[oun]t Mascall, Bexley, PCH. Gattons Plant[at]ion PCH. North Cray Wood, PCH
- 2) Meadow ¾m. S. of Cliffe, 44. Holborough Marshes. Snodland Marshes. Shorne Marshes, 1938, J.B.M. Luddenham Marshes HMW.
- 3) Clay grassland, NW of Dunkirk. Trenley Park Wood, A. Grattan.
- 4) Wingham Fen. Hacklinge; Ham Ponds. Sandwich Bay, in dune slack.

<sup>545</sup> The manuscript treats this species under the second name; and is Englished as Marsh Bird's-foot Trefoil.

- 6) Lodge Hill, Cooling, in grassland on London Clay, '44. Swanscombe Wood, in old clay workings, 1945 **MNE**. Darenth Wood, HMP. Mounts Wood, PCH. Old gravel pit NE of Green St[reet] Green, PCH. Scrub, Northward Hill, on London Clay, 1950, **MNE**.
- 8) Eastling Wood, '56, B.N. Reinden Wood '57, B Nash.
- 10) Darenth. Lit[tle] Darenth, St J M. Meadows E. of Westerham, G.M.B. Westerham Wood, 82!
- 11) Holt Wood, Aylesford CW. Leybourne Castle Lakes; Birling Marshes. Penenden Heath. (var. *glaber*) steam, W of Addington, DMCC, 1958 **MNE**. Ryarsh Wood. Horish Wood. Snarkhurst Wood. Harrietsham. Mereworth, marshy woods S. of village. On clay, Kiln Wood Lenham, 1962. Penshurst meadows. Shipbourne Forest, E&W. Medway Banks, Hartlake, 1939, JRW. R[iver]bank Brandbridges, 44. By R Eden NE of Chiddingstone. Pond, Leighbridge, Headcorn, 1962, 813454. Pond E of Hale St[reet] CAS. Hoads Wood. Pond E of Buckhall Bethersden. Vitters Oak Pond. Maidstone Hb Lamb 1884 **MNE**.
- 12) Hothfield Common, in base rich peat of bogs. Willesborough Lees, '44. On Gault at Lenham. Brook (Cuckoldscoomb '44). Stowting Fen. Str[eam] E of Lenham Heath.
- 13) Dry bank S.E. of Horsmanden. Gill ridge and Moorden, Penshurst. Cowden, by Furnace Pond. Blackbush Wood DS. Chittenden Wood. Frizley Bog. Pond, Broadwater Lane, T[unbridge] Wells CAS. Bayham CAS. Lamberhurst, by roadside at M[ount] Pleasant. Swamp, Highfield Rocks N. Chiddingstone. Hawkenbury Bog. Combwell Wood, -1979! Angley Wood. Bedgebury Pinetum Forest. Boggy Wood SW of Pembury 614395 CAS. T[unbridge] Wells Hb Lamb 1838 **MNE**.
- 14) Breeches Pond, 1947.
- 16) Newington Moor, in fen, 1955. Wood on Gault, Postling Wents, KDR 1957. Darnley Vale, Sandgate, 1955. Whiting Brooks, 1947.

**L. angustissimus** L. Slender Bird's-foot-trefoil. 15, [16.] N.

Native, open sandy or gravelly ground, very rare.

1<sup>st</sup> record, 1875: I[sle] of Grain, Jackson & Newbould, *J. Bot.* p.280.

- 2) [Isle of Grain, in some quantity, Jackson & Newbould, 1875; not refound, in spite of much search. Near Gravesend, Herb. Sim.] Stone Marshes, W. Watson.
- 3) Open Sandy bank (Thanet Sand) of lane by Waystreet Farm, Hernhill, 1955, I[ocally] abund[ant] **MNE**, 1978!). Old gravel pit N.E. of Swanton Farm, Littlebourne, abund[ant] 1949; 50; 1957, 1960, FR, **MNE**. Trenley Park Wood, Miss E. Day.
- [4] Reported at Richborough, C. Cloke; and 16) Folkestone, G. Walton (possibly *L. tenuis* was meant.)
- Appearing native in Surrey on a sandy bank near Albury, very like the Hernhill habitat; probably extinct in Sussex. More frequent in the SW of England, in France, absent N.E. of the Cotentin peninsula.

**Tetragonolobus** Scop.

**T. maritimus** (L.) Roth Dragon's-teeth. 15, 16 ?N.

(*Lotus maritimus* L., *L. siliculosus* L.)

Alien? completely naturalised on the cliffs of London Clay in Sheppey, and on cliffs in Thanet.

1<sup>st</sup> record, 1910: Birchington, W.H. Hammond. Warden, 1918, AE [*sic*, for AG] Davis.

- 2) abundant on London Clay Cliffs, W. of Warden Point, 1918 AG Davis **MNE**, BEC Rep. 1926, [p]111; 1929, Lt. Col. C.C. Foss **BM**; 1933, F.R.B.; 1947!; 1954! **MNE** 1955! R[oad]side, Minster to Sheerness on waste g[round] Mrs Begg. Scrapsgate, Minster, 1965, J.E. Nichols. Shellness, A.G. Side. Elmley Ferry, 1950, REW.
- 4) Planted E. of Reculver, 1961, A.C. Cawston.
- 6) on chalk N. of A.2, Stone, 1950-51, HMP, 585737, by bomb crater by diagonal path between S[tone] Castle and Bean Roads. Old Rectory grounds, Longfield, AG Side, 1956 **MNE**.
- 9) Birchington, Thanet, 1910, W.H. Hammond; = 1919 Mr. Tatham; = Minnis Bay, on top of Cliffs, 1950, L.W.W.; just about to be destroyed by building, 1960, AC Cawston & J.E.L.; 80 plants moved to garden by old Puddle Mill, Minnis Bay.
- 11) Tovil, H. Green, 1936, **MNE**.

[**Dorycnium** Mill.

‡ **D. pentaphyllum** Scop.<sup>546</sup> Naturalised: Warden Point (? now fallen into sea): "road verge, Canterbury": E P.

Alien, naturalised on London Clay cliffs in Sheppey and at Meopham; apparently now extinct.

- 2) Sheppey. A.G. Davis ex St. J. Marriott, B.E.C. Rep. 1926, p.111; between Minster and Leysdown, 1929, Miss K. Wood; sea shore, Isle of Sheppey, 1933, F.R. Browning **BM**; abundantly naturalised on the London Clay cliffs

<sup>546</sup> In the manuscript given as *D. gracile* Jord. (*D. herbacea* auct.; *D. suffruticosum* auct.).

W. of Warden Point, Mrs. Welch, F.R., and DMcC., 1947 MNE; apparently extinct through erosion of the cliffs by 1954.

6) 1½m S.E. of Meopham, 644636, WH Pearsall 1933; C.E. Baker, 1934 **BM** J. Bot. 1934, p.349-350, in wild valley, on eastern slope of downland – now gone.]

### **Ornithopus** L.

‡ **O. compressus** L. [Yellow Serradella.] [16.]

Naturalised on road bank n[ea]r Swanley. (Not in E P. area, but in VC 16).

Naturalised alien (Mediterranean).

1) Sandy bank on N. side of A.20, ¼ m. W. of "The Bull", Hockenden, Miss Poulter, det. (B.M.N.H.), (1957!).

**O. perpusillus** L. Bird's-foot 15, 16. N.

Open sandy and gravelly ground, on heaths and roadsides, or leached dunes. Common locally on the Tertiary sands and gravels; on the Folkestone Sand; not very common on the coastal dunes and shingles; very rare elsewhere.

First record, \*1570: Greenwich, L'Obel (Adv. 403). c.1425:pod in plaster from home, Larkfield, JRB Arthur In Pl[ant] Remains.

1) SW of Brockley by R[ai]l[wa]y, ECW. Hayes Common E. de C.(1946! **MNE**); GMB. [Bostall Heath, A.H.W.D.] [Abbey Wood, H&M.] Keston Common, Cooper (1954!) **MNE**. Chislehurst Common, E.M.H. (1945!). [St Pauls Cray Common, WWR.] [Plumstead Common, Cherry.] [Woolwich, A.H.W.D.] Joydens Wood GMB. Avery Hill GMB. Dartford Heath, W.W.R.; 1947-1955 HMP, 526726; GMB. Sandy ground, W. side of Farningham Wood, 1945. 537684, East end ditto, 1953, HMP; and 5468 EP. [Greenwich Park, L'Obel.] Blackheath, C. Merrett; G.M.B., still there on SE side.

2) Conyers Creek, on sandy ground, 1943. SE of Boughton in Woods, Mrs B. Perry Wood, Selling, 1959 **MNE**. Sandy grassland N. of Dunkirk, 1947 **MNE**, 1955. Fishponds Wood, 1950. Bigberry Wood Gravel pits, 1950. Church Wood, Blean, L.W.W.; at heathy entrance RGW, from Rough Common REW 125593. Sandy field W. of Shelving Wood, Hoath **MNE**; (Wool[wich] and Oldhaven Beds, 1962). N of Sturry, J. Oldaker. 96 Bysing Wood, 1945. Gravel pits, Swanton Farm, Littlebourne, 1949-57 **MNE**, very fine. Old Park Golf Links, Canterbury, 1954→1981! Bank, Waystreet F[ar]m, Hernhill, 1955 **MNE**. E of Rhode Common.

4) Sandwich Bay, 1953. Dunes N of Deal, 1954.

6) Green Street Green, E de C (1946!), 5870. Shorne Warren. Behind Shorne Windmill, 6870. By A.2 N of Cobham Park, 1945, **MNE** 6868; also 6668, EP.

7) Heath N. of Danaway, Newington 1957 **MNE**. Heath SE of Danaway, 1957. Heath S. of Keycol, Newington, 1957.

10) On Folkestone Sand,

Sandy ground E. of Chipstead on Folkestone Sand, 1955, **MNE**. Bessels Green Gardens, 1948. S. side of Toys Hill, Brasted, 1954 (on Hythe Beds). Ightham Common. [Greatness, Rudge.] [Westerham, Roper.] Stone Street, near Ivy Hatch, CAS. Sevenoaks tip CAS. Knole Park, EP.

11) on Folkestone Sand:

65 sandpit W. of Wrotham Heath 45 **MNE**. 65 Railway bank and roadside, Wrotham Heath. 65 E of Addington, 1938, J.B.M.; 1960 **MNE**. 65 Larkfield Heath, 698594, FR; CAS. 75 Holt Wood, 1955. Ryarsh Sandpits, **MNE** '45. 65 Ryarsh Roughetts. 65 Leybourne Wood **MNE** '55. [Bearsted, E. Bartlett. 1884, **MNE**.] 85 A.20 Roadside N. of Leeds Park, 1955 **MNE**. 85 by A.20, W. of Hollingbourne, 1945; '55 **MNE**. Sandling Sandpit, B. Dodds, 1965.

12) on Folkestone Sand:

94 Hothfield Common, FM Webb; H. Lamb 1913 **MNE** (1954! 1960! 1981). 04 Ashford Warren, '45 **MNE**, '60 **MNE**. 04 Willesborough Lees. 04 Brabourne Lees, 1945 **MNE**. 04 R[oa]dside sand pit Charing Heath '54 **MNE**. 04 Mersham Park, 1960, **MNE**.

W. of Chartham REW

13) 53 Tunbridge Wells Common, Forster (1944-56!); CAS, 1962. Abund[ant] Lake Rd, T[unbridge] W[ells] Common, 1961, CAS. Langton, EP. 53 Rusthall Common, F.J.H.; CAS, 1958. 63 Hook Green, G.E. Shaw. Cranbrook, School Cricket field bank, DS.

15) Romney Warren, 1946. Midrips, 1946, **MNE**. Hythe, Duthie. Dungeness, H.&M.

16) Folkestone Leas cliff top. Shornecliffe, G. Walton; 1955, w. end, abundant **MNE**. Sandling Park, H.&M. (!).

[‡ **O. pinnatus** (Mill.) Druce.<sup>547</sup>

[Orange Bird's-foot.

16.]

<sup>547</sup> Not in check-list.

Reported in *Sci. Goss.* 1891, p.69; and as being found by a visitor in Folkestone Warren by G. Walton in litt. to H.&M. 1897: he had a specimen but had not seen it growing. Most improbable records for this Southern species.]

### Coronilla L.<sup>548</sup>

‡ *C. scorpioides* [(L.) W.D.J. Koch] [Annual Scorpion-vetch. 16.]  
[13] Rubbish heap, Royal Chase, T[unbridge] Wells, 1938, L.B. Langmead **TLS.**]

### Sesbania Adans.

‡ *S. exaltata* (Raf.) Cory<sup>549</sup> [Colorado River-hemp.]  
Oil-seed casual.

### Hippocrepis L.

‡ *H. emerus* (L.) Lassen.<sup>550</sup> [Scorpion Senna. 16.]

2) Hedge of this species, Grain, 1947, H. Donesthorpe, **BM.**

*H. comosa* L. Horseshoe Vetch 15, 16. N.]<sup>551</sup>

Native, old chalk grassland, and roadside banks and cliffs on chalk; exclusive to, and generally very characteristic of (*Festucetum ovinae* and *Brometum erecti*) chalk grassland, but absent from areas of the chalk where there is no old grassland now, as between Dartford and Cobham, north of a line from Farningham to Longfield and Nurstead.

1<sup>st</sup> record, 1640: near Swanscombe, Parkinson, *Theatrum*, p.1092.

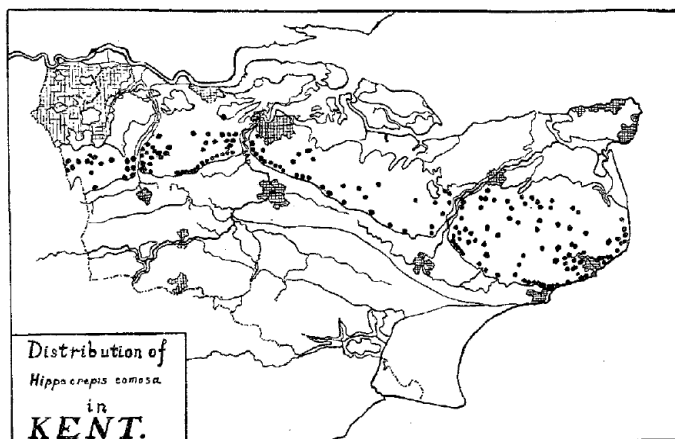
[1] Wilmington, 1880, H.&J.G. **BM.**]

5) 45 Chevening Park 487586 rare, 1951, H. Greenfield, 1958; 1961! **MNE.** 55 Downs above Polhill tunnel. 55 Morants Court Hill chalk pit. [Halstead, 1840, Adam White, Hb. AA **BM.**] 55 Downs W. of Shoreham. 46 Downs W. of Saltbox, Biggin Hill, 409603, R.A.C. 46 Darwin's Bank, SE of Downe.

6) 56 Downs E. of Shoreham (Juniper Hill). 56 Preston Hill, Shoreham. 56 Magpie Bottom '49 **MNE**, 1960! 55 Otford Downs (1883, H.&J.G. **BM.**); 1944-54, **MNE.** 55 Kemsing Downs NW

of Church; 55 E. of Beechy Lees. Downs NW of Wrotham 47 **MNE**; 65 Wrotham Hill. 66 Downs above Wrotham Water, 1945 **MNE.** 65 Downs at Hogmore F[ar]m; W. of Pilgrims Ho[use], Trosley. 66 Downs N. of Crookhorn Wood, Snodland '43 **MNE.** 66 bank E of Hartley Church. 66 Below Ridley Wood, Ridley '53 **MNE.** 66 Down S. of Cobham Park. 66 Down S. of G[rea]t Wood Cuxton '44 **MNE.** Cuxton Warren. Upper Halling Downs.

7) 76 Wouldham Downs. 76 Burham Downs, v[ery] a[bundant] **MNE.** 76 Scarborough Spur; Church Spur; Det.... '62. 76 Bluebell Hill, NE of L[ower] Bell. 75 Boarley Warren. 75 Boxley Warren H Elgar **MNE**; 1961! 86 Down E of Bredhurst Ch[urch] 1961. 86 Magpie F[ar]m Bredhurst '60 **MNE.** 95 Timbalds Hill, Frinsted. 95 by Filmer Wood, Wichling. 96 Down opposite Putt Wood, Ospringe. 95 College Wood, Ospringe. 95 Belmont Park, Throwley **MNE** '54. 05 Park Wood border, W of Chilham. 86 Queen Down Warren '54 **MNE.** 86 Below Purple Hill. 75 Detling Downs. 85 Thurnham Castle, 1961. 85 Downs NW of Broad Street, Hollingbourne, 1961. 85 Hollingbourne Hill. (Bredhurst 1885 H.L. **MNE.**) 86 N. of Bredhurst Hurst. 76 Walderslade Bottom. 76 Horsted Valley '52 **MNE.** 86 Rainham Park. 86 Longreach Wood, Stockbury. 86 Stockbury Valley, W of [Three] Squirrels, '44. 95 Pilgrims Way, E of Lenham '56 **MNE.** 95 Foxbury Down, Lenham. 94 Charing Hill. 95 Charing Chalk pits. 94 Westwell chalk pits, ES 94 Scarp foot NW of Westwell ES. 94 Lane SW of Suomi, Westwell ES.



<sup>548</sup> Not in check-list.

<sup>549</sup> Given in check-list, but not in the manuscript.

<sup>550</sup> Given in the manuscript as *Coronilla emerus* L.; not in check-list.

<sup>551</sup> Map taken from: Rose, F., Distribution maps of Kent Plants (Exhibit), in Lousley, J., ed. (1951) *The Study of the Distribution of British Plants* (1950 conference report), B.S.B.I., Arbroath.

8) 04 Crown Downs, Wye, ES & FR. Chartham Downs. 04 Devils Kneading Trough 62, 1981! 04 Crundale Downs, N of church ES & FR. 04 Down above Amage F[ar]m, Wye, ES. 04 Cuckolds Coomb Down, ES; 1981! Stowting Downs E. The Warren on chalk. 23 Top of Abbots Cliff 46 **MNE**. 34 Free Down, 1962. (Folkestone 1865, H.T. **BM**.) 04 Brook Hillock '62, 1981! 04 ENE Giddy Horn 1962. 13 Postling Downs 44 **MNE** '81! 13 Tolsford Hill 46 **MNE**. 24 Downs E of Houghham above A259 '46 **MNE**. 24 Downs NE of Wolverton Alkham '49 **MNE**. 34 Shakespeares Cliffe. 34 Dover E Cliff. 23 Lydden Spout. Stowting chalk pit. Stowting E Downs. 13 Downs N. of Pean, Newington, 1948. 15 Lane SW of Iffin Wood, Mrs B. Welch; '55! Broadway Green. 15 Downs SW of Petham '49 **MNE**. Larkey Valley W[oo]d. 14 Yocketts Bank, 1963. Charlton Park. 15 E of Bursted Manor. 14 Lynsore Bottom. 13 Downs E of Etchinghill, '59 **MNE**. 25 Barham Downs. 23 Folkestone Downs '49 **MNE** (Castle Hill; Folkestone Hill; Sugar Loaf; Creteway Down). 23 Cheriton Downs. 34 Top of cliffs E of Dover 49 **MNE**. Cherry Gardens 1981. 35 R[oa]dsides, Willow Wood, Tilmanstone, 1959, B. Nash. 24 Woodville Downs. Shuttlesfield Down 1980-81. Park Gate Down 1980-81.

9) Not recorded for Thanet.

**Securigera** DC. (= *Coronilla* L.)

‡ **S. varia** (L.) Lassen (C. *varia* L.)

Crown Vetch.

[15, 16.]

H.

Well naturalised in a few places.

Naturalised alien. Rare.

1) 47 Ruxley pits.

2) 47 [Plumstead Marshes, 1915, J.E.C.; Woolwich Arsenal 1932 Mrs M. Mallinson; PCH. 47 Erith W. Marshes, 1951, GA Matthews, BM; GMB 1954 **MNE**. Sewerbank Plumstead, N of Abbey Wood Sta[tion] GMB; PC Hall. 47 [Erith, 1937, PHC, Hb. LNHS.] 06 S of Faversham Sta[tion] LC Bushby, 1956. 57 Greenhithe, 1937, P.H.C.

7) 76 Chalkpit, Bluebell Hill, among native vegetation, 1943, J.H.L. (1944!), **MNE**.

8) 34 Kingsdown, 380497, Miss J. Moore; Mrs. Godfrey 1961.

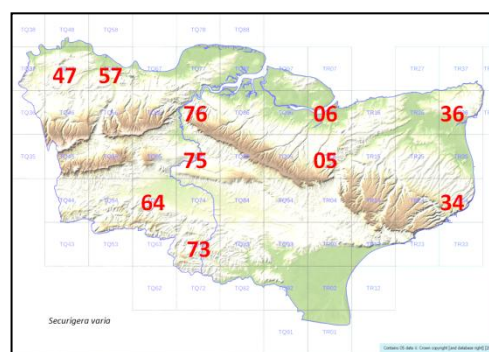
34 St Margarets, by r[oa]d, B. Nash, 1959. 25 Elms Vale, Dover, 1909, G Taylor; G. Miller, comm. K.D.R. 1961. 34 Whinless Down, 302418.

9) Westgate LWW.

11) 64 near Sir Thomas Wyatt, Allington, Miss Bunyard. Hadlow P Grattan.

12) 05 near Chilham Sta[tion], Mrs B.

14) R[ai]l[wa]y N of Hawkhurst Sta[tion] '54 DACL.



**Scorpiurus** L.

‡ **S. muricatus** L. <sup>552</sup>

[Caterpillar-plant.]

Casual: tip and wool alien

**Vicia** L.

**V. cracca** L.

Tufted Vetch

15, 16.

N.

Native. Hedgebanks, roadsides, scrub, wood rides and borders, fen-carr, shingle beaches, on a wide range of soils; it requires a fairly high illumination to flower; very common.

1<sup>st</sup> record, either 1632: E. of Canterbury, Johnson, Descriptio, p.31 ("Vicia maxima dumetorum, Bauh. Cracca major, Tab.") or

1777: near Faversham, J. [sic] Jacob, *Pl. Fav.*, p.30.

1) Holwood Park, 1944. Keston Common 61, HAS. West Wickham Woods, Hb. Davis, 1915 **MNE**. Shooters Hill, GMB. Beckenham Place PCH. Ruxley Pits. Crofton Heath, PCH. R. Cray, N. Cray, PCH. W side Farningham Wood, PCH.

2) Woolwich Arsenal, PCH. Higham Canal, PCH. [Snodland Marshes, E. Bartlett, 1883 **MNE**.]

5) NW of Biggin Hill, 3961, PCH. Farningham R[oa]d Sta[tion] by R[oa]d PCH.

6) (Gadshill, Cobham to Luddesdown, R.P. **BM**.) Dartford E., HMP. Romney St[reet], PCH. Mounts Wood Greenhithe PCH. The Thrift, Bean, PCH. Cornfield, Buckland Rd, Luddesdown, PCH.

7) Berengrave pit, Rainham PM Roberts.

8) Bridge, JG. Reinden Wood, '58, B Nash. River, KDR. Kingsdown JG. Hacklinge.

<sup>552</sup> In check-list; no account in the manuscript.



10) S. Darenth, PCH. Westerham Wood, '82. Dunton Green FSEF.

11) R[oa]dside, N. of Yalding, '44. Wateringbury (Red Hill). Leybourne Castle Lakes. Kiln Wood, SW of Lenham (S. Beds, loam) 1962. Edenbr[idge] R[ai]l[wa]y DPY. Hever Park, Mrs Mallinson. W[eald] Clay R[oa]dside SW of Broad Street, Tonbridge. Grassy track and Pond edge E of Headcorn, 849437, 1962. Clay scrub by Beult N. of Buckmans Green 1962. Hoads Wood, ½m S. of Smarden.

12) Hothfield Common. Willesborough Lees.

13) Ashurst Gill. Bedgebury. Lamberhurst, Common, 1936 JRW. NE corner Ashour Wood (Wad[hurst] Clay). W. of Penshurst. R[oa]dside South Park, Penshurst. Bayham, CAS.

15) Dungeness, Oppen Pits, 1947 **MNE**.

16) Valley fen, Darnely Vale, Sandgate, 1955. Shorncliffe 1955. Newington Moor.

**V. tenuifolia** Roth

Fine-leaved Vetch.

[15, 16.]

Naturalised: V[ery] R[are]: [Aylesford], Dover cliffs.

8) Golgotha, Shepherds Hill, B. Nash, 1960 **MNE**.

11) N. of Aylesford Station, 720587, 1962, D.McC.

‡ **V. cassubica** L.<sup>553</sup>

[Danzig Vetch

[16.]]

Formerly naturalised at Greenhithe; now extinct.

Alien, naturalised in a gravel pit at Stone, near Greenhithe.

6) Old pit, Greenhithe, 1931, F. Druce **BM**; Pit near Greenhithe, A.J. Wilmott **BM**; gravel pit, E. of Horns Cross, 1946-54, F. Rose **MNE**; 1956, HMP; destroyed by 1965.

**V. sylvatica** L.<sup>554</sup>

Wood Vetch

15, 16.

N.

Native: borders of woods, and of rides in woods, and in coppice, on chalk, base-rich loam over chalk, and on ragstone; very local, and now confined to district 8) in its central part, and to Aldington Knowle in 16). Formerly it appears to have been more widespread, if the records are all correct. The Kent distribution is very isolated; it is probably only naturalised in Surrey, and absent from Sussex and Essex. The nearest native localities to Kent are Wain Wood near Hitchin in Herts, and in central Hampshire. It is unknown in N. France.

1<sup>st</sup> record, 1829: Lyminge to Elham, G.E. Smith in C.P.S.K., p.40.

[1] Woody ravine n[ea]r Eltham, J.S. Mill (Hb. Mill).]

[6] "Cobham, Ridley".] Fawkham, Churchdown Brake, 594683, near bomb hole, DVS Woods.?

8) S. of Kingston / Covert Wood, F.G.E.K. (1939-56, abund[ant] **MNE**) Covert Wood, 1945-62! W. of South Barham, 1963. Wood W. of Dane Farm, Elham, 1950-58. N. end Bursteds Wood, LWW (1950!). N end Atchester Wood, 1938 E. Robinson, abund[ant]; L.W. Wilson (1951!) **MNE**; 1954 Miss DACL. Lynsore Bottom, 1953-63 (W of Palmstead). Swanton Banks, Miss Long 1946 (1950! By road; 1962! **MNE**). Woods SE of Swanton, Lydden, 1958. Garden Wood, Acrise, 1953, DACL, BN. Tappington Valley Denton DACL. Between Barham and Elham, W. Pamplin (above Palm Tree Inn, 1955!). Woolwich Wood, Womenswold FGK (1955; 1965!) **MNE**. Lyminge, Wollaston. Dover, W. T. Bree in Loudon's Mag., v.198. Ringwold, Mrs Benson. Waldershare Woods, Miss Harvey. Between Sibertswold and Wootton, Mrs. Benson.

[9] Manston, Fl. Thanet.].

[10] Kippington, Sevenoaks, Rev. H.P. Thompson.].

[11] Wood borders 3 m. N. of Tonbridge, Miss Peers. Allington; Maidstone, H. Lamb.].

[12] Kingsnorth in woods, W.R. Jeffrey.].

[13] Cranbrook, Crowden.].

16) Aldington Knowle, F.G.E.K. (1946; 1954-8! Two places by B.2067) **MNE**.



<sup>553</sup> Not in check-list; relocated from manuscript position within the *Vicia* sequence.

<sup>554</sup> The spatial relationship of district 8) records is given by jottings in the manuscript, re-formatted here for the purposes of this transcript.

This very beautiful plant only appears when there is sufficient light and it appears to be a short-lived perennial. When coppice is cut, it may soon festoon bushes with its showy racemes of flowers, which are white, pencilled with purple veins. Unlike *V. cracca*, it is quite glabrous.

- ‡ *V. villosa* Roth<sup>555</sup> Fodder Vetch [15, 16.] Naturalised.  
 1) Beckenham, Hb. Davis, 1934 **MNE**.  
 4) Near Hotel, Sandwich Bay, 1957, DACL, det. Kew; 1960, K.E.B.  
 5) Leaves Green tip, '53, DPY.  
 6) Roadside, Holly Hill, Birling, 1962, R.D. English.  
 10) Otford R[oa]d, Sevenoaks, 530577, 1962, DMCC.<sup>556</sup> Waste ground, Otford R[oa]d, Sevenoaks, Miss H. Spean, 1962.  
 15) Hythe, 1903, H.J.R. **BM** (as var. *glabrescens* Koch).

- ‡ *V. villosa*?<sup>557</sup>  
 8) Rough grassland on chalk, ½m. NE of St Margarets [at] Cliffe, 1959, RB Codd **MNE**; 1960, E.G. Philp **MNE**; 1961, 1962! **MNE**.

- ‡ *V. pseudo-cracca* Bertol.<sup>558</sup>  
 1) Beckenham, Hb. AG Davis, 1934, **MNE**.<sup>559</sup>

- V. hirsuta* (L.) Gray Hairy Tare. 15, 16. N.  
 Native. Hedgebanks, scrub, rough grassland, field borders, especially on sandy soils, but found also on chalk and clay soils: common.  
 1st record, 1632: Between Sandwich and Canterbury, Johnson, *Descriptio*. C.1580: plaster from house, Bicknor Court, JRB Arthur in *Plant Remains* (seeds and pods).  
 1) Ravensbourne, Bromley, 1918 **MNE**, Hb. Davis. Beckenham Place PCH. Ruxley Pits. Crofton Heath. Sandy area W. side Farningham Wood, PCH, 82!  
 2) Higham Marshes, 1944. Grain fort, 1946; S. beach '55 **MNE**. Minster in Sheppey 1946. Graveney DHK.  
 3) Sandy grassland N. of Dunkirk 1946. S. of Dunkirk 1946. Shelvingford Wood, Hoath, MEM.  
 4) Sandwich Bay. Deal Links 54 **MNE**. Walmer Beach. Ebbsfleet on old dunes '63. Kingsdown Beach, KDR.  
 6) chalk g[ras]s[an]d SE of Dartford 44. Swanscombe Wood, R.P. **BM**; PCH. Darenth Wood, PCH. Preston Hill PCH. Sandpit Stone HMP. Green Street Green '44. Mounts Wood, Greenhithe, PCH. Shorne Mill. Higham Upshire (Black[heath] Beds) 36 **MNE**, S. of.  
 7) Gillingham, 1938, JBM. (Sittingbourne Hb Davis 1918 **MNE**.)  
 8) Kingsdown, 1902, CEB **BM**, **MNE**. Swanton Banks DACL. Bridge; Kingston JG.  
 10) N of Ide Hill, by roadside, '44.  
 11) Addington, P Grattan. Larkfield Heath. Ryarsh Sandpits '54 **MNE**. Wrotham Heath. Bearsted. (1 mile W of Hollingbourne by A.20, **MNE**. (Allington, E. Bartlett [18]82 **MNE**.) (Offham Lamb [18]82 **MNE**.) Sandpit, Runham, Mrs B Dodds. Edenbr[idg]e R[ai]l[wa]y DPY. R[oa]dside, Beltring, '44. Leigh, by Medway (Straight Mile). R[ai]l[wa]y, Hildenborough 563482 CAS.  
 12) Hothfield Common. Verge N of Potters' Corner, ES.  
 13) Hawkenbury T[unbridge] W[ells] RE Sh. 53 Rusthall Common. Bayham CAS. 63 sandy field W. of Pembury, '44 **MNE**. 64 Bank by Pembury W[ater] Works PCH. 73 Bedgebury, by Pinetum on roadside, 1954; T.T. **MNE**.  
 15) Romney Warren 194562. Dungeness, '46 **MNE**. Lydd Common '56 **MNE**.  
 16) Sandy turf N. of Seabrook, 1955. Folkestone E Cliff, on sandy soil, VFP Day.

- V. parviflora* Cav.<sup>560</sup> (*V. gracilis* Lois.) Slender Tare. 15, 16.

<sup>555</sup> In the manuscript there are separate accounts for *V. villosa* and *V. varia*, but these are combined here on the basis that they are synonymous.

<sup>556</sup> This record was given as *V. varia*.

<sup>557</sup> This was originally entered in the manuscript as *V. pannonica*, then changed to '*V. villosa*'.

<sup>558</sup> Not in check-list, and a taxon probably best placed under *V. villosa*.

<sup>559</sup> Not in check-list, and may be treated as part of *V. villosa*.

<sup>560</sup> Not in check-list; in the manuscript given as *V. tenuissima* (M. Bieb) Schinz & Thell. and here placed in a sequence according with Stace's *New Flora* 2<sup>nd</sup> edition.

Possibly native, more likely alien. Hedgebanks, tracksides, scrub; very rare indeed, and only seen recently in one spot.

1<sup>st</sup> record, 1849; Kent, Mr. Quekett, Eng. Bot. Supp. p.2904.

3) Herne Bay, Trimen. Between Whitstable and Canterbury, G.C. Druce (J. Bot. 1888).

6) Between Cobham Park and Ifield in a lane (now A.2) Quekett in Hb. Borrer K.

13) Formerly abundant at Southborough, W. Fawcett (J. Bot. 1869). Disused track, to Gilridge, N. of Penshurst, 1953 **MNE**.

16) Folkestone, Miss V.F.P. Day.

**V. tetrasperma** (L.) Schreb.

Smooth Tare.

15, 16.

N.

Native. Hedgebanks, rough grassland, scrub, field borders; common on clay soils, but found frequently on chalk and on sand and gravel; common.

1<sup>st</sup> record, 1777: near Faversham, J. [sic] Jacob.

1) Bromley Common, DMcC. Hayes gravel pit, 1909, Hb. Davis **MNE**. N Cray tip PCH. Near Falconwood Sta[tion], G.M.B. Ruxley Pits. Farningham Wood W edge, 82!

2) Minster in Sheppey, on cliffs, H Davis 1910 **MNE**; 1946! Grain. Furze Hill, Minster, 1960 **MNE**. Base of Cockham Woods, Upnor, by Medway, 1960 **MNE**.

3) Grassy slopes NW of Dunkirk '55 **MNE**. Fordwich JG. Whitstable Miss T. Webber. Tankerton cliffs, C.T.

4) Deal Links, '54 **MNE**. Ebbsfleet on old dunes '63.

5) Cudham GMB.

6) Sandpit, Stone, HMP. Green Street Green '45 **MNE**. Halling Downs. Mounts Wood, PCH. Swanscombe Wood, PCH. Tower Hill, Upnor. Northward Hill, High Halstow, '50 **MNE**. Gravel pit NE of Green St[reet] Green, PCH. 621669, Middleton Farm, Longfield, Mrs D. Woods.

7) Grassland, Walderslade, '52 **MNE**. W. of Chilham. Putt Wood gravel pit ES.

8) N. of Broome Park, Barham, 1942. Bridge JG. Covert Wood '50 **MNE**. Duskins, Kingston, 56 **MNE**. Woolwich Wood, KDR. Swanton Banks, DACL.

10) Westerham Wood, B Sennitt; 82!

11) Maidstone, Hookers La[ne] Pumping Sta[tion], EGP. Harrietsham, 1958, EGP. Grassy track on clay E of Headcorn, 849437, 1962. Woods, N. Pole, Teston, H.L., 1883 **MNE**. Bearsted Hookers Lane EGP, '58 **MNE**. Eden Br[idge] R[ai][wa]y, DPY. R[oa]ds[ide], Beltring '44. By Medway, Leigh, at Straight Mile. By R. Eden, W. of Penshurst, 1944 **MNE**. R[ai][wa]y, Hildenborough, 563482, CAS. Pond E of Buckhall Bethersden.

12) Sandy verge N. of Potters Corner ES.

13) R[oa]ds[ide], M[oun]t Pleasant, Lamberhurst, JRW '43, **MNE**. Rides, Chittenden Wood, 1950 **MNE**. Hedgebanks, Goudhurst, PWR.

15) Dungeness.

var. **tenuissima** Druce

6) Swanscombe Park, 1962, WAS 57 & 67.

?12) Godmersham, Hon. E. Legge, *BEC Rep.* 1924, p.568.

**V. sepium** L.

Bush Vetch.

15, 16.

N.

Native. Woodlands, hedgebanks; abundant throughout Kent, except in Sheppey, where it is unrecorded. Sometimes white or cream flowered. In deep shade it often fails to flower.

1<sup>st</sup> record, 1632: *Aracus Galegae silvestris* Dod. E. of Cantebury, Johnson, *Descriptio* applies, I think, more probably to this species than any other.

1) Wickham, 1878, H.&J.G. **BM**. Joydens Wood, 1946 **MNE**. Shooters Hill, G.A.M.; RAB. Keston C[ommon].

2) Farningham Wood, PCH; 82! Bunkers Hill, N Cray, PCH.

3) Perry Wood DHK.

5) Mace Lane, Cudham, PCH. Woods, Darwins Bank, Downe, JEL. Hedge, 399611, PCH. Pilgrims Way, Polhill, PCH. Wood W. of Shoreham, PCH.

6) Swanscombe Wood, 1811, R.P. **BM**, PCH. Lord's Wood, Darenth, PCH. Darenth Wood, PCH. Horton Kirby, PCH. Wingate Wood, Halling. G[rea]t Crabbles Wood, PCH. Greenhill Wood, Otford, PCH. Mounts Wood, Greenhithe, PCH. Preston Hill, PCH. Claylane Wood Cobham fresh copp[ice] 60, HAS.

7) Westwell, 1891, E.S.M. **BM**. Squirrels Wood, Stockbury, on drift '54. Filmers Wood, Doddington, loam, 1962. Simia Wood, Ospringe, HMW. Spuckles Wood, Stalisfield, on loam 1962.

8) Coppice Wood W. of Podlinge '62. Wolverton Wood, Alkham '62. Garden Wood Acrise '63 DACL. Hunts Wood, Up[pe]r Hardres '62. Lane N of Bossingham '62. Wood W of Misling F[ar]m, Elmsted (loam) 1962. Puckhead Wood, (ch[al]k loam) Sibertswold '62. Reinden Wood, on Pliocene? loam 1962.

10) Westerham Wood, 82! S. of Broadhoath Wood, Stone Street, 1950 **MNE**.

11) E) Woods on loam N. of Swanton Valley, Mereworth, 54. SE part Oaken Wood, Barming in fresh copp[ice] 54. R[oa]dside, Boxley, 1943 **MNE**. R[oa]dside N of Yalding '44. (Maidstone, Hb Lamb 1883 **MNE**.) Kiln Wood, SW of Lenham (S. Beds, loam) 62. Hever Park, Mrs Mallinson. R[ai]lway, Hildenborough 563482, CAS.

13) 53 Stone Cross Gill, Ashurst, 518381, CAS. 54 NE Corner Ashour Wood, Bidborough '54. 54 R[oa]dside S. Park, Penshurst 54. 44 Wood ½m SW of Chiddingstone Hoath 54. 64 (white) Kippings Cross to Bush House, CAS. Bayham CAS. (white) Hawkenbury CAS. Bidborough Ridge (alba) KEB. 64 Roadside 1m SW of Pembury New Ch[urch], PCH. 64 Wood by Pembury W[ater] Works, PCH. (T[unbridge] Wells Hb Lamb 1838 **MNE**.)

14) 72 Wood W. of Sandhurst Cross, 1955. 72 Gill E of Conghurst, Sandhurst, 1955. 72 Hedge by A229, ¼m. S of Hawkhurst Church 1965.

16) 13 Hedge W. of Horn Street, Seabrook, 1955. 13 Hedge W of Pedlinge, 1955. 03 Aldington Knoll LJM. 13 Wood N. of Pedlinge Road, Hythe, 1955. 13 Hedge of old R[oa]d to Lympne 1m. W. of Hythe, 1955.

var. **ochroleuca**

11) Egerton, 1952, EH Bowles, det. **BM**.

‡ **V. pannonica** Crantz Hungarian Vetch. [15, 16.]

Naturalised in Dartford: formerly at St.Margaret's at Cliffe.

The following records, made originally for *V. lutea*, probably refer in the main to this species. It is a very hairy, more or less erect, plant, with primrose-yellow flowers. Sepals entire. Flowers 2-4 together (pod + adpressed hairs).

1) Alien, Lower Sydenham, 1912, H. & J.G. **BM**.

\*2) Horrid Hill, Rainham, W.C.R.W.; 1951-61! **MNE**. Roch. Nat. 1948 ("*lutea* var. *hirta* det. Kew")

4) "Alien", Richborough, L.W.W. ("*V. lutea*"). Sandwich Bay, 1946, W.J.L.S. ("*V. lutea*")

6) Chalk turf, Gravesend, 1962, H.A.S. ("alien form" of "*V. lutea*").

\*7) Rochester R[oa]d, N. of Maidstone, Mrs H. Brice, 1960 **MNE**.

\*8) Abbot's Cliff top, 1953 **MNE**. Chalk grassland N.E. of St Margarets Bay, J. Codd etc. det. E. Melderis.

9) Cliff top, Pegwell Bay, 1961, Mrs Dodds. ("*V. lutea*")

12) "Alien" near Ashford Warren, 1894, E.S.M.

13) Old allotments, T[unbridge] Wells, 1962, Mrs M.W. Page. ("*V. lutea*")

**V. sativa** L. ssp. **nigra** (L.) Ehrh.<sup>561</sup> Narrow-leaved Vetch. 15, 16. N.

Native. Dry banks, hedges, wood borders, heaths and commons, roadsides; common throughout Kent.

1<sup>st</sup> record, 1777: Hernhill, E. Jacob, p.122.

1) Keston Common SEC. Hayes Common. Chislehurst Comon. Belvedere Park Hb Lamb 1861 **MNE**. N. Cray tip PCH. Farningham Wood; 82! Dartford Heath, HL 1898 **MNE**; 1945! Garden Wood, Erith, PCH. Ruxley pits. Blackheath ECW.

2) By Canal, Higham. Cuxton Station. Lower Stoke 1959 **MNE**. SW of Upnor 1945. Minster Sheppey, H. Davis 1913 **MNE**; cliff tops E. of, 1954! **MNE**. G[ras]s[an]d on L[ondon] C[lay] Furze Hill Minster 1960 **MNE**.

3) Gravel pit Swanton F[ar]m Littlebourne 1955 **MNE**. Grassy slopes NW of Dunkirk (L[ondon] C[lay]) 1955 **MNE**. Canterbury Golf Course REW.

4) Sandwich Bay Dunes 1948-62 **MNE**; yellow fl[ower]s DACL '51). Deal Links 1954 **MNE**; 1961. Marshside, Chislet, 275661, '62. Minster Marshes by r[oa]d '63.

5) Jewells Wood, W of Saltbox, Hb Davis 1915 **MNE**. 3964 Well Wood PCH.

6) Rochester, J.B.M., 1938. E. of Stone, 1946 **MNE**. A2 N of Cobham Park '45. Green St[reet] Green, Darenth 1944; PCH. Mounts R[oa]d PCH. Preston Hill, PCH. Cornfield Buckland R[oa]d, Luddesdown, PCH. Red Wood Luddesdown, 1951 **MNE**.

7) Chestnut St[reet], Newington, on Heath Eocene gravels, 1957 **MNE**.

8) Cheriton Downs, ES Edees. Juliberry Downs, DHK.

11) S. of Ch[urch], Ryarsh, '44. (Ightham H Elgar 1899 **MNE**.) Fen at Leybourne 44. East Malling. Wrotham Heath. Snarkhurst Wood (Gault) '44 **MNE**. Lane N of A20, W of Hollingbourne (F[olkestone] Sand) '44 **MNE**.

<sup>561</sup> In the manuscript given as *V. angustifolia* (L.) Reichard.

N. of Yalding 44. Edenbr[idge] R[ai]l[wa]y DPY. W of Penshurst by R Eden 44. R[ai]l[wa]y, Hildenborough, 563482, CAS. Beltring '44. Track S. of R[ai]l[wa]y, 1m E of Headcorn 849437, 1962.

**12)** Ashford Warren. Willesborough, CNP. New Inn Green, VFP Day. Hothfield Common.

**13)** 73 Cranbrook, High Street, 1955. 64 Bank by Pembury W[ater] Works, PCH.

**14)** 72 R[oa]dside ½m S. of Hawkhurst Church, 1955. 83 R[oa]dside, Knock Wood, E of Tenterden 1962.

**15)** 02 Romney Warren. 01 Dungeness. NE Littlestone, '62, ES. Hythe Shingles.

**16)** Grassland on Scars W. of Hythe, 1953. Sandy grassland N. of Seabrook, 1955. Shorncliffe, 1955, **MNE**. Sandy field above Casebourne W[oo]d / glade, Casebourne Wood, Seabrook 1955.

var. **nigra** L.

**1)** Blackheath, Hb NB Ward, det. Paul le Reincourt, *B.E.C. Rep.* 1926.

var. **bobartii** Koch<sup>562</sup>

**1)** Keston Common, SEC.

**6)** Gravesend, L.T. Powis in Hb F.J.H. det. A. Melderis.

**8)** Stelling Minnis, 1953.

**16)** Sandy grassland N. of Seabrook, 1955. SE Sandling by old R[ai]l[wa]y D.A.C.L., 62, on F[olkestone] Sand.

**V. sativa** L. ssp. **segetalis** (Thuill.) Gaudin<sup>563</sup> Common Vetch. 15, 16. Well naturalised.

Colonist, also naturalised on waste ground and roadsides, borders of fields, railway banks, etc.; common throughout the county.

1<sup>st</sup> record: Uncertain.

**1)** St. Mary Cray, 1878, H.&J.G., **BM**. Dartford Heath GMB. Ruxley pits. Orchard NE of Farningham Wood PCH. Crofton Heath PCH.

**2)** Woolwich Arsenal PCH. Medway bank below Upnor, 1960 **MNE**. E. of Seasalter Church, 1965, 0965, 0964, H.M.W. 1958.

**4)** alluvial grassland behind dunes, Sandwich Bay, 1962.

**5)** Pilgrims Way, Chevening, PCH.

**6)** Dartford E, HMP. Lane End, Darenth PCH. Lords Wood, Darenth PCH. Mounts Rd., PCH. Pilgrims Way, E of Wrotham, PCH. Otford, PCH.

**10)** Darenth.

**11)** Boxley, 1943 **MNE**.

**12)** R[ai]l[wa]y, Hildenborough, 563482, CAS.

**13)** Bayham, CAS.

**15)** Dymchurch, 1882, J.F.D.P. **BM**, Romney Warren, 1962. Ancient dunes W Hythe 1962.

**16)** Sandgate, 1815, J.F.Y. **BM**. Arable field 1m. W. of Hythe 1955. Grassland on Scars, 1m W. of Hythe, 1955. Shorncliffe, 1955.

**V. sativa** L. ssp. **† sativa**<sup>564</sup>

Casual

**† V. cordata** Wulf. [ex Hoppe]<sup>565</sup>

**1)** Hayes, Mrs. Wedgewood, *B.E.C. Rep.* 1921, p.379.

**V. lathyroides** L.

Spring Vetch.

15, 16.

N.

Native, fixed dune turf, bare sandy ground, consolidated shingle beaches; rare but locally abundant on the coast; very rare inland. This species can be readily confused with small forms of *V. angustifolia* [*V. sativa* ssp. *nigra*] in the vegetative condition.

1<sup>st</sup> record, 1724: Greenhithe, Sherard & Rand, in Ray, *Syn.* ed.3, p.321; sp. in Hb. Dill.

[**1)** Dartford Heath, F.J.H.; Fl. K., spec[imen] in Hb FJH correct, det. A. Melderis.]

**4)** Sandwich Bay, abundant on fixed dunes, 1946; 51 **MNE**. Dunes of Downs Farm, Sandwich, 1962. Dunes N. of Deal, 1887, E.S.M. **BM**; 1954, abundant! **MNE**.

<sup>562</sup> The manuscript has two sets of records for this taxon, which are combined here.

<sup>563</sup> In the manuscript, this is treated as plain *V. sativa*.

<sup>564</sup> In check-list, but no separate manuscript account.

<sup>565</sup> Not in check-list, and generally treated as part of *V. sativa*.



6)E) Shorne Warren, D.McC., 1948, (sp[ecimen]!).

15) Fixed Shingle Beach, W. of Hythe, 1946. Romney Warren, 1955-'62, **MNE**, on old fixed dunes by Warren House. Dungeness, 1949 **MNE**→. Shingle SW of Lydd, 1958 **MNE**. NE of Littlestone, '62, ES. Ancient Dunes, S. of W. Hythe, 1962, **MNE**.

16) On F[olkestone] Sand in short turf, Shorncliffe, 1955 **MNE**. R[ai]l[wa]y track, SE of Sandling, 1962, DACL.

**V. lutea** L. Yellow-vetch. 15, 16. N.

Native, on shingle and shell-sand beaches, very rare, though locally common about Dungeness.

The native species is an almost glabrous, more or less prostrate plant with linear leaflets and cream-coloured flowers which become pale rose-tinted as they fade.<sup>566</sup>

1<sup>st</sup> record, 1873: Kent east (Dungeness) W.R. Jeffrey, in *Top. Bot.* VC16 – BEC, 1915, p.262.

2) Grain, S. Beach, 1955 (native form) **MNE**.

15) Dungeness Beach, 1905, E.A. **BM**; 1879, F.J.H. **BM**; J.W. Long, 1911 **MNE**; H. Elgar, 1920 **MNE**; abund[ant] near Hoppen Pits, Dungeness: J.E.L., 1926: 1946-60! **MNE**. Abund[ant], S[outh] Brooks, 1946. Abund[ant], Midrips, 1946 **MNE**.

var. **caerulea** Archang.

15) Lydd, W.H. Kew, *B.E.C. Rep.*, 1924, p.567.

‡ **V. hybrida** L.<sup>567</sup> [Hairy Yellow-vetch. 15, 16.]

Naturalised, alien (stipules toothed; l[ea]f[et]s emarg[inate]; fl[ower]s solitary, yellow; standard pubescent dorsally; pod + spreading hairs).

5) Railway bank, E. of Swanley, W. Watson.

8) Downs between Dover and Deal, 1908, S.H.B. **BM**.

**V. bithynica** (L.) L. Bithynian Vetch. 15, 16. N.

Native. In grassland or scrub on clay soils, especially near the sea and tidal waters; very rare.

First record, 1835: Frindsbury, Henslow in Hooker & Arnott's *British Flora*, edn.1, p.324.

1) Woolwich Common, c. 1960, G.M.B.

2) [Greenhithe, Hb. Lamb, c.1860 **MNE**]; 1975. Scrub on London Clay Cliffs near "Royal Oak", East End, Minster in Sheppey, 1946-63 **MNE**. Shellness Point, Rochester N.H.S. c.1930 (var. *angustifolia*). Grassy scrub, Horrid Hill, Rainham, W. Watson; 1950-52! **MNE**. Upnor and Frindsbury, Henslow; 1835 Borrer; L. Stevens c.1890 **BM**; Miss Young. Clay Bank by Medway below Cockham Wood, Upnor, Mrs M. Dolling, 1959; 1960! **MNE**.

[4] Deal, Duthie (var. *angustifolia* Syme)]

[6] Darent Wood, Berkeley in *Fl. Met. Supp.*] Greenhithe Fl. Lond. area. Springhead, Northfleet, Fl. Lond. Area.

[8] "Reported at Lydden Spout", Mrs Walton.]

[16] Lower Sandgate R[oa]d, Folkestone, J.B. Syme, **BM**; 1864, F.J.H. Ditto, by steps from Lees (sic) to Lower Sandgate Road, 1877, F.J.H. Folkestone, 1885, Hb. E.F. Linton **BM**. Folkestone, H.L., 1863 **MNE**. Formerly on the Gault Forelands ... Eastwear Bay, Folkestone, before 1953; but not observed since, Miss V.F.P. Day.]

‡ **V. faba** L. Broad Bean. [15, 16.]

(*F[aba] vulgaris*)

Escape from cultivation.

1) Ruxley Pits.

8) one plant in wood on Downs between Chilham and Chartham, 1945, DHK.

10) Sevenoaks tip, CAS.

11) Platt Brickfield DMCC.

Lens Mill.

‡ **L. culinaris** Medik. Lentil.

Casual alien on tips, etc.

**Lathyrus** L.

<sup>566</sup> The original manuscript account as first drafted went on to mention a different, alien form; and subsequently records for the latter were transferred to *V. lutea*.

<sup>567</sup> Not in check-list.

‡ **L. niger** (L.) Bernh.

Black Pea

[16.]

Naturalised on railway banks Tun[bridge] Wells (K.E. Bull).

[13]] Naturalised, Railway bank, W. of Tunbridge Wells West Station, K.E. Bull, 1957; CAS, 1960.

**L. japonicus** Willd. (*L. maritimus* (L.) Bigelow).

Sea Pea

15

N.

Native. On shingle beaches: very rare and local.

First record, 1640: New Romney, Parkinson 1060.

[2] beach, Sheerness, Cheney Rock, 1920, and White House Cliff, 1932, now gone, Mrs. Bryson.]

[3] Swale Cliffe, Miss AB Cobbe, *B.E.C. Rep.* 1923, p.51: extinct by 1945.]

4) Plumpudding Island, W. of Minnis Bay, Birchington, L.W.W., (1949!); 1950 REW; 1962 **MNE**. Many old records on the Beach from Walmer to Kingsdown (Dillwyn, O.B.G. (1802)<sup>568</sup> **BM**; J. Sowerby **BM**, etc. Hb. J.F.Y. **BM**; J.B. Syme 1963 **BM**; 1886, FJH **BM**; H. Lamb, Kingsdown 1850 **MNE**; Kingsdown, CP Hurst 1901 **MNE**; Kingsdown, H. Lamb 1916 **MNE**. Beach opposite Walmer Castle, 1945-54! **MNE**.

[8] Formerly near Dover (1838, CE Broome, Hb. R.J.S. **BM**.) [St Margarets Bay, 1883, Hb. EF Linton **BM**.]

15) Dungeness, Camden (opposite the Low Light, 1946-62! **MNE**). Beach near Pilot Inn, Dungeness, 1947 **MNE**. E of Midrips, Miss E. Burrows (near *Suaeda fruticosa*); 1952, KEB. Shingle Beach W. of Hythe, J.E. Lousley; 1954 at 144332 LJM; 2 colonies, 1955 & 1956 LJM; and near Redoubt, B. Clay, teste LJM; 1958, B.J. Brooke **MNE**. [Extinct at New Romney (Parkinson).]

**L. linifolius** (Reichard) Bässler (*L. montanus* Bernh.).<sup>569</sup>

Bitter Vetch

15, 16

N

36/51

(*L. macrorrhizus* Wimm.; *Orobis tuberosus* L.)

Native. Dry woods, wood borders and hedgebanks. Frequent in wooded parts of the county, particularly on sands, gravels and loams; commonest in the High Weald, and on the Folkestone Sand, and in the Hythe Beds plateau woods.

1<sup>st</sup> record, 1670: Kent, Ray, *Cat. Angl.*

1) 46 Hayes Common, 1914 Hb Davis **MNE**; 1936, PHC; 1938, DMcC. 47 Joydens Wood. 56 Farningham Wood. 47 N. of Bickley (Elmstead Lane). Beckenham (R[ai][wa]y bank) 1948, SEC. [Elmers End, H.J. Sutton, 1906 **MNE**.] 46 Holwood Park ;54 **MNE**. 46 Keston Common. 46 Hollows Wood, Shoreham. 47 Chislehurst Common 1945 **MNE**. Chislehurst by R[ai][wa]y line, GMB. Petts Wood, Swain. Darrick Wood, Swain. Pokeridden Wood, Swain.

3) 96 Bysing Wood '45 **MNE**. 16 Thornden Wood. M. of Dunkirk 1945 **MNE**. 05 Wood NW of Dunkirk, 1955 **MNE**. 16 Dengrove Wood, Sturry, 1955, **MNE**. West Blean Wood, RGW. Church Wood, RGW. Bigbury Wood, RGW. Trenley Park Wood, RGW. W. of Rough Common RGW.

5) 45 Westerham Hill, MMW, [Hb.]L.

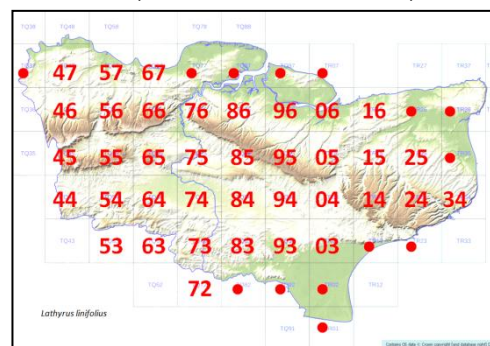
6) 57 Darenth Wood. 67 Swanscombe Wood. 67 Shorne Ridgeway. 56 Horton Kirby Wood, PCH. [Thong Woods, 1812, R. Pocock, **BM**.] By lane, Plateau on c[lay] w[ith] f[lints] E of Shoreham, GMB.

7) 86 Bredhurst Hurst, 1938, J.B.M. Hedgebank SW of, 1944! [Top of Boxley Hills, E. Bartlett, 1882 **MNE**.] 86 Top of Queendown Warren, F. Forsyth. 86 YaugherWood, Hartlip, F. Forsyth. 96 Syndale Wood (Juds Wood) Ospringe 1945 **MNE**.

8) 05 Roadbanks, Penny Pot, Sole St[reet], DHK. 25. Ileden Wood, A. Henderson, 1980. 14 Grass heath, Stelling Minnis 1962, on Pliocene Sand. 15 Iffin Wood C Haes. 15 Whitehill Wood, Miss E.M., 162537. 14 Duskins, Covert Wood, Kingston, on sandy loam 1956 **MNE**. 14 West Wood, Stowting (Pliocene sand) 1956 **MNE**, 1960 **MNE**. (24 Sibertswold Miss Hibberd.) 24 Wood, N side Coombe Vale, Dover, 1955, on loam, **MNE**. 34 R[oa]dside, W. Langdon, B. Nash. 24 Frandham Wood, K.D.R. 24 Reinden Wood, '58. B. Nash. 34 Eastling Wood, '57 B. Nash.

10) 45 Ide Hill. 55 Bitchet Common. Sevenoaks Forest. 45 Brasted Chart, 1913, E.B.B. Whitley Scrubs, E. Armstrong.

11) 75 Oaken Wood, Ditton parish 1954 **MNE**. 65 Ryarsh Wood. 65 Mereworth Woods. 85 Kings Wood, Langley. 85 Kings Wood, Chegworth Hill, Mrs.B. Dodds. Maidstone 1880 Hb Lamb **MNE**. 65 Golden Stable Wood, E of Shipbourne, 1954.



<sup>568</sup> 1802 is the date of Dillwyn's *Catalogue* rather than his *Botanists Guide*.

<sup>569</sup> Given as *L. montanus* in the manuscript.

- 12)** 03 Ruckinge, 1882, J.F.D.P. **BM**. 93 Burnt Oak, Orlestone, '51 CNP.
- 13)** 44 Lanebank, Greybury Farm, SW of Edenbridge 1954. 44 Wood SW of Chiddingstone, 1943 **MNE**. 63 Mount Pleasant, Lamberhurst, 1944 **MNE**. Bayham CAS. 73 Bank N. of Combwell Wood, Goudhurst 1959 **MNE**. 53 Banks of R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], 1960, CAS. 63 NE of High Wood, Pembury, PCH. 63 High Wood E of Hawkenbury 1944. 64 Pembury W[ater] Works, PCH. 73 Cranbrook. 73 Angley Wood, Cranbrook. 73 Bedgebury Forest. 73 Bedgebury Pinetum.
- 14)** 73 Attwaters Gill, Cranbrook, 1944 **MNE**. 72 border of Gill SE of Hawkhurst, 1955 **MNE**. Mopesden Gill, P.W.R. Robins Wood, Cranbrook. Mount Ho[use], Biddenden, 849366, A.G.S. E of St Michaels, Tenterden RAC. 93 S, end, Lit[tle] Heron Wood, Appledore, 1962.
- 16)** Woods N of Aldington Knoll LJM.

var. **tenuifolius** Druce:

- 3)** West Blean Wood; Church Wood + type, REW.

- L. pratensis** L. Meadow Vetchling.<sup>570</sup> 15, 16. N.  
 Native. Hedgebanks, roadsides, woodborders, scrub, rough grassland, on a wide range of soils. Abundant throughout the county.  
 1<sup>st</sup> record, 1629: between Grain and Cliffe, Johnson, *Iter*.
- 1)** Keston Common, 61, HAS. Shooters Hill GMB. Elmers End, Beckenham, Hb Davis 1915 **MNE**. Crofton Heath, PCH. R. Cray, N. Cray, PCH. Ruxley Pits.
- 2)** Woolwich Arsenal, PCH. Higham Canal, PCH. Holborough Marshes '44. Grain, PCH.
- 4)** Hacklinge. Ham Fen. Wingham Fen.
- 5)** Halstead, 1852, A.A. **BM**. Darwin's Bank, Downe, JEL. 396611 PCH. Pilgrim's Way, Polhill, PCH. Chalk W. of Eynsford PCH.
- 6)** Frindsbury, 1938, J.B.M. Chalk pit SE of Dartford '44. Green St[reet] Green PCH. Ronney St[reet] CH. Stonyfield Wood, Up[pe]r Halling, PCH.
- 7)** Bluebell Hill, Downs, 1944 **MNE**. NE of L[owe]r Bell. Three Squirrels, Stockbury 1943 **MNE**. Down, Filmer Wood, Doddington, 1962. By A252, Park Wood, Molash '54. Ch[alk] grassland, Lees Park, Sheldwich, 1962.
- 8)** Devils Kneading Trough '60. Track NE of St Margarets '60. Free Down '60. Plant[at]io[n] (chalk) W. of Lit[tle] Mongeham, '60. Reinden Wood, '58, B. Nash.
- 10)** Darent Water Meadows, PCH. Sevenoaks tip CAS. Westerham Wood 82. Chevening, F.S.E.F., '54.
- 11)** **E** R[oa]dside Kings Wood, N. of Ulcombe R[oa]dside SE of Chequers, W. Farleigh, 54. R[oa]dside, 1m E of N. Pole, Oaken Wood, Barming, '54. Edenbr[idg]e D Smith 1907 **MNE**. Glade, Kiln Wood, Lenham (Sandpit B) 1962.
- W)** R[ai]l[wa]y Hildenborough, 563482, CAS. By Pond E of Buckhall Bethersden W 54. 1 m E of Vitters Oak, S.W. of G[rea]t Chart 54. Grassy Track 1m E of Headcorn 849437, 1962. Leighbridge Headcorn 813454, 1962. ½ m. S of Dunks G[ree]n (R[oa]dsde on W[eald] C[lay]) '54. R[oa]dside W of Brook Street Tonbridge '54.
- 13)** R[oa]dside ½m. E. of Upper Haysden, '54 (T[unbridge] W[ells] S[and]). R[oa]dside, S. Park, Penshurst, '54. Bayham CAS. Combwell Wood, 1979.
- 14)** R[oa]dside ½m. S. of Hawkhurst Parish Church, 1955. R[oa]dside, Knockwood, Trenterden, 1962. Wood W. of Sandhurst Cross, 1955. Clay pit E of The Stocks, Isle of Oxney, 1958 **MNE**.
- 15)** St Marys Bay, 1881, J.F.D.P. **BM**.
- 16)** Grassland on scars W. of Hythe 1955. Meadow, Darnley Vale, 1955. Hedge W of Horn Street. Edge of Fen, Newington Moor, 1955.

- ‡ **L. tuberosus** L. Tuberous Pea.<sup>571</sup> 15, 16  
 Naturalised at Sandgate.  
 Naturalised Alien: banks, orchards, waste ground; very rare.  
 First record, 1926: Folkestone, Dr Eagles, *B.E.C. Rep.* p.112.
- 1)** By pond, Darrick Wood, Farnborough, 440650, to c.1959; M. Swain.
- 3)** Orchard, Neats [*sic*, for Neals?] Place Farm, Canterbury, GMC Mount 1955 **MNE**.
- 6)** Well naturalised around refuse tip, Longfield, P.C. Hall 1956 **MNE**.
- 8)** Elms Vale, + *Coronilla*, 1909, J. Taylor.
- 10)** Waste ground, W. Kent cold Storage Works, Dunton Green, R.C. Palmer, 1961, **OXF**.

<sup>570</sup> Yellow Pea given as an alternative in the manuscript.

<sup>571</sup> Thus in the check-list; given as Earth-nut Pea in the manuscript.

**16)** Well established on sandy bank of ditch around Martello Tower, W. end of Leas, Folkestone, Dr. Eagles, *B.E.C. Rep.* 1926, p.112; J. Walton 1950; 1958! **MNE**.

‡ **L. grandiflorus** Sm.<sup>572</sup> Two-flowered Everlasting-pea. [15.]  
Naturalised Trenley Park Wood

**L. sylvestris** L.<sup>573</sup> Narrowleaved Everlasting-pea. 15, 16. N.

Native, scrub, borders of woods, glades, and hedgebanks, principally on chalk, but occurring also on the Tertiaries and on a railway bank on Folkestone Sand; rather rare and very local, but locally frequent on the chalk plateau of East Kent, east of Watling Street, where it occurs, usually in abundance, in at least nine localities.

First record, 1597: Swanscombe Wood, Gerard, *Herball*, p.1053; it is still plentiful there!

[formerly found at **1)** Erith (E. de C.) and E. Wickham (Cooper Fl. Met.). **2)** Minster cliffs, c.1940, Mrs Bryson. **3)** NE of Canterbury; Bigberry Wood. **6)** Cobham Park. **7)** Faversham; Rodmersham. **11)** Fant Woods, Maidstone; Sutton Valence. **16)** W. of Hythe; Aldington; Lympne Castle. Apparently extinct in these places.]

**4)** Between Preston and Grove Ferry, L.W.W. Richborough, L.W.W.

**6)** Swanscombe Wood, Gerard, 1597; very abund[and] and l[ocally] d[ominant] 1945-58! **MNE**; 1962, HAS. Court Wood, E. of Shorne, on bank of A226, 1945 (first found here by Irvine.) Bank of A.2, Springhead, S. of Swanscombe.

**8)** Hedgebank by Coombe Farm, Etchinghill, 1954, **MNE**. [Terlingham, Paddlesworth, E.S. Marshall.] Woolwich Wood, abundant, 1955-7! **MNE**. Hedge by Bypass, Patribourne, Miss Kenrick (1946!). Wood SE of Patribourne, FGEK, Miss D.A.C. Long; 1946! **MNE**. Wood border, SE of Knowlton, Miss L. Day (1949, 1955! **MNE**). Snowdown, B.J.B. Wood S.E. of Tilmanstone, F.J.H.; 1955, abundant! **MNE**. Between Whitfield and Waldershare in hedge, O.B.G.; Miss Nash, 1956; 302466, 1959! NW of Elvington, 1956 **MNE**. Hedge of Puckland Wood, 1962, R. Gorer, FR & CW. Sutton Down, hedGes, B.N. 1956. Cliff top, St Margaret's Bay, 1958 **MNE**. Whitewell Wood, Nackington, L.W.W. E of Rifle Range Top of Abbots Cliff, Mrs KD Rowlands, 1959 **MNE**. [n[ea]r Betteshanger, Lady Davy.] Scrub, Golgotha, Sibertswold, 1958, **MNE**.

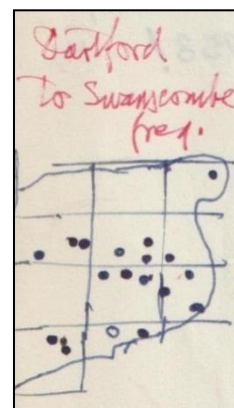
**9)** St Peter's, L.W.W.

**11)** Pits E of Aylesford, 736588, CAS. Wood near Allington Lock, Sandling, J. Woods; W.W.R.; J.B. Marshall; on ragstone; probably still here. [Ightham, 1901, ASK.] E of East Hall, B[oughton] Monchelsea on scrub on ragstone 1959; 1960 **MNE**.

**15)** On shingle by R[oa]d S. of Pilot Dungeness 1960, Mrs KDR; 1962!

**16)** Railway bank E. of Sandling Junction, E.S.S.; Hb Lamb 1863 **MNE**; (1946!). Old r[ai]l[wa]y NW of Newington 1936.

A broad-leaved form of this described as *L. heterophyllus* occurs in Swanscombe Wood with the type, and with intermediates; it may be a hybrid with *L. latifolius*.



‡ **L. latifolius** L. Broadleaved Everlasting-pea. 15, 16. Naturalised.  
Alien, naturalised well now on railway banks, etc.

1<sup>st</sup> record, 1746: near Faversham, Blackstone, *Spec. Bot.* p.43.

**1)** By Railways at Erith; Plumstead; Bromley. St Mary Cray, 1946 PHC, [Hb.] L. Ruxley Pits. Green St[reet] Green DMCC. Belvedere Station, PCH. Dartford Heath, 1962 WAS.

**3)** Old R[ai]l[wa]y Station, Whitstable Harbour, 1958, H. Wilks. R[ai]l[wa]y Seasalter by P[ost]O[ffice], HMW. R[oa]dside, Boughton Street, J. Jacob.

**4)** R[ai]l[wa]y, Grove Ferry, REW.

**6)** [Strood, Winch in NBG, p69.] 66 Chalk railway cutting between Meopham and Fawkham Stations, E.S.M., 1894; (1945!); and 56 E. of Farningham Road. 55 by Otford Station. 57 Stone Castle Gravel Pit, 1947, JEL; 1950, HMP. 67 Northfleet, in pit, 1962, W.A.S. R[ai]l[wa]y Swanley ASK. Horns [Cross] Gravel pit 575744 HMP. Swanscombe Wood, HMP.

**7)** [Cobham: J. [sic] Jacob, 1777.] 75 Newnham, C.T.

**8)** 35 Walmer Station.

<sup>572</sup> Given in check-list but no manuscript account.

<sup>573</sup> Map reproduced from manuscript margin only covers part of East Kent; the note above applies to West Kent abundance.

10) Sevenoaks tip '48 DMCC. Sevenoaks Forest, Mrs. Hewson.

11) 65 Ryarsh sand pits. 54 By R[ai][wa]y, Tonbridge, CAS. R[ai][wa]y E of Pluckley KEB. 85 Harrietsham Station, 1962, Mrs. B. Dodds. Edenbridge R[ai][wa]y y[ar]d DPY. 75 Maidstone near R[ai] [wa]y Bridge over Medway, E.G. Philp, 1958 **MNE**. 75 Vintners Park, 1960, EGP. Hildenborough Sta[tion] KEB. Boro[ugh] Green Station KEB.

12) 94 Hedgebank, Little Chart, ES. 94 Hothfield, Mrs. B. Dodds. S of West Well Leacon ES.

13) 63 R[oa]dside, Lamberhurst Quarter, 1960, CAS. Southborough Ch[urch] y[ar]d 1950, KEB.

15) Old Salting, Dymchurch, LJM.

A Gravesend schoolmaster used to sow seeds of this, *Campanula medium*, *Antirrhinum majus*, etc, on r[ai][wa]y cuttings; this may account for their present distribution in such habitats.

‡ *L. odoratus* L.<sup>574</sup> Sweet Pea. Casual.

‡ *L. sativus* L.<sup>575</sup> [Indian Pea.]

1) Beckenham, Hb. Davis, 1934 **MNE**.

‡ *L. annuus* L.<sup>576</sup> Fodder Pea. Casual.

‡ *L. hirsutus* L. Hairy Vetchling<sup>577</sup> 15, [16].

Naturalised, now rare – formerly locally abundant (Kingston)

Naturalised alien, but sometimes only casual; hedgebanks, waste ground; very rare, possibly native in Essex.

1<sup>st</sup> record, 1878: Southborough, Fawcett, **BM**, J. Bot. 1878.

1) Rough field, Bromley, 408675, 1955, DPY.

2) Milner Court Sturry, J.O., 1956.

[6] Cobham; Strood. Miss Stevens; *B.E.C. Rep.* 1925, p.871.]

4) S. of Ebbsfleet, towards Richborough port, on waste ground, 1937, D.McC.; 1939, F. Druce; 1949! FR, LWW, plentiful; 1958! **MNE**; 1962, abundant, R. Gorer & BJB. Walmer, L.W.W.

8) Roadside, Bonnybush Hill, Kingston, 1939, BJB; abund[ant] 1954 DACL, 3 pl[ants] '56 DACL; 1957, B.J.B.: 1958, Mrs. Rowlands **MNE**; 1962! **MNE**. N.E. of St Margarets at Cliffe, 1959, R.B. Codd **MNE**.

13) [Markbeech, 1914, G.F. Talbot, **BM**.] [Southborough, in wood by road, 1875, W. Fawcett.]

VC16 BEC, 1925 p.371.

‡ *L. articulatus* L.<sup>578</sup> Casual.

‡ *L. clymenum* L.<sup>579</sup> [Climbing vetchling.] Casual.

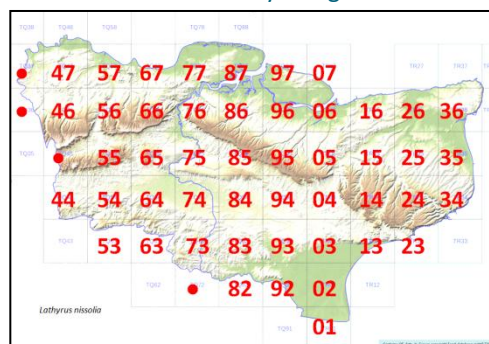
*L. nissolia* L. Grass Vetchling<sup>580</sup> 15, 16 N 47/52 (all save 36, 37, 45, 53, & 72)

Native. Grassland and scrub, on heavy clay soils particularly; also on alluvium and sandy shingle near the sea; commonest on the London Clay and alluvium of the N. coast of Kent, very rare in the High Weald, but very widespread in the county; probably commoner in Kent than anywhere else in Britain. Frequent in Surrey and Sussex, common in most of Essex, quite rare in Pas de Calais.

1<sup>st</sup> record, 1670, Ray, *Cat. Angl.* p.61.

1) [47 Eltham Park; 46 near Farnborough, W.W.] 46 Grassl[an]d S.E. of Bickley, 1944, JEL. 46 Crofton, Swain. 46 Orpington, PHC, BENA. 46 E. of Chelsfield Station, 1945. 47 Ruxley Pits.

2) 57 Stone Marshes, Gasson, 1911; FJ Epps; 1949-50 DHK;



<sup>574</sup> Given in check-list, but no manuscript account.

<sup>575</sup> Not in check-list.

<sup>576</sup> Given in check-list, but no manuscript account.

<sup>577</sup> In the manuscript given as Hairy Pea. The headline assessment of status is from the check-list, drafted later than the account below.

<sup>578</sup> Given in check-list but no manuscript account; probably to be equated with *L. clymenum* L. below.

<sup>579</sup> Given in check-list, but no manuscript account.

<sup>580</sup> Grass Pea in the manuscript.



HMP. 57 Dartford Marshes, 1931, PHC. 87 N. Coast Grain '45 and 862753 DMcC. 87 Shorne Marshes '62, WAS. 77 Cliffe Marshes. 77 High Halstow Marshes '58. 87 All Hallows, abundant 45 **MNE**. 87 E coast Grain, abundant 45 **MNE**. L[owe]r Stoke Marshes, Hoo. St Mary Hoo Marshes, 1958 **MNE**. 76 Cuxton 1951 **MNE**. 77 below Cockham W[oo]d Upnor, 1960 **MNE**. 86 Motley Hill, '54 **MNE**. Horrid Hill, Rainham, 51 **MNE**. 97 Minster-in-Sheppey Cliffs. 07 Leysdown Hb Davis 1917 **MNE**. 07 S. of Warden Point in clay grassland, 1953 **MNE**. By sea wall, Scrapsgate, 1965, v[ery] a[bundant], JE Nichols. 97 S. of Minster by old r[ai]l[wa]y track (Stickfast Lane) 1958. 97 Eastchurch Sheppey Hb Davis 1917 **MNE**. 97 Furze Hill, Halfway, Minster, 1960 **MNE**. 06 Clay scarp W. of Harty Ferry, 1960 **MNE**. 06 Grassland on E. side of Faversham Creek, 1960. 86 Chetney, N. of Iwade, 1960 **MNE**. near P[ubli]c H[ouse] Ham Marshes, 54 RWB. 06 Seasalter, near Sportsman, J. Cannon, 1952. 06 Oare Creek, 1959 **MNE**. 96 Elmley hills.

**3)** 16 Tankerton Cliffs. 16 S. of Herne Bay. Moleshill Sturry '47 DHK. Near Reservoir by Thornden Wood Rd REW. 05 Clay Escarpment NE of Boughton Street, 1955, **MNE**. Whitstable Harbour HMW. 16 G[ras]s[an]d on clay, Radfall Road, Blean, 1957 **MNE**. Slopes to sea W of Whitstable. Hales Wood, Canterbury, 1939, Mrs E. Milward. Mouth of Brook, Swalecliffe E of Sewage w[or]ks E. Robinson; & REW. Scotland Hills: SW of Sturry, R. Gorer, 1963. Chestfield 123660 rough track HMW. Broad oak, Derelict Garden, 1965, M. Ch[almers]-Hunt. Seasalter, near Medina Avenue, HMW.

**4)** 36 Richborough 1946. 35 Deal Links, 1954 **MNE**. 35 Golf Course, Sandwich, A. Grattan. 36 Pastures 1m N. of Downs Farm, Sandwich flats, 1963. 26 Bank of track N. of R[ai]l[wa]y, N. of Shuart, St Nicholas, 271692, 1962. Downs F[ar]m, Sandwich.

**5)** Chalk SE of Orpington, Leaves Green, BENA. Near Knockholt Station, Chelsfield Rd, E Armstrong. Darwins Bank, Downe, '55, JEL. 56 Farningham. 57 Cotton Lane Chalkpit, Stone, 564747, 1962 HMP.

**6E)** 57 Lane End to Green St[reet] Green, Darenth, 1945 **MNE**; PCH. [Longfield, 1901, SEC]

**6)** 76 Downs SW of Cuxton Church, 1945, on loam **MNE**. 57 E. of Darenth village. 57 Mounts Rd, '44. 57 Mounts Wood border, S. of Greenhithe 1946. 67 Swanscombe Wood. 694735 Pit N of Shorne PCH. 66 E of Cobham 1946. 77 S. of Cliffe (Lodge Hill). 66 Holly Hill, Mis Bunyard. 65 verge, Wrotham By-Pass, 1959 **MNE**. 582732 A2 N of Darenth Wood, '44 J Priest; '55 HMP. (on ferruginous pipe material) Tower Hill Upnor / Upnor Cliffs, DMcC. Cliffe Village & NJ Cameron [?]. Hoo Brickworks DMcC.

**7)** 86 by main road below Stockbury Church. 86 Berengrave pit Rainham PM Roberts. 86 Down behind "Three Squirrels", Stockbury, 1943 **MNE**. 76 Wouldham Rectory Quarry, 1946. 96 Putt Wood, Ospringe ES. Walderslade / Fort Horsted, BC. 95 Sharsted Park, ES. 027575 Badlesmere, C.T. 05 SE of Park Wood, Chilham, ES. 94 Dunn St[reet], Westwell, in field, E. Scott.

**8)** 23 N of Lydden Spout, Hougham, in grassland. Eggerton Manor. Rose La[n]e Bishopsbourne, 1961, B.J.B. 05 Down, Bagham Mill, Chilham, E.S. 23 Hougham Corner. 34 Langdon Bay. 34 Dover E. Cliff KDR. 14 Stelling Minnis, 1953 **MNE**. 15 Gorsley Lane, Bishopsbourne, 1955, B.J.B. 23 Cheriton Downs, 1960 **MNE**. Bridge; Baraham, JG. 04 Pickersdean, ES. 34 Shakespeares Cliff, 307398, 1948, DMcC. 23 Hedge, base of Sugarloaf, F[olke]stone 223378, 1948, DMcC. 24 Grassland above cricket ground Dover, 1960, EGP. 25 rough chalk g[ras]s[an]d W. of Pitt Wood, Adisham, 1955 **MNE**. 25 Elvington, in chalk scrub, 1956, **MNE**. Denton '56 DACL.

**9)** 26 Birchington. 36 Pegwell Bay, on cliffs, 1946 **MNE**.

**10)** 57 Hawley, A.G. [sic, for A.C.] Tagg. 55 W. Kent Cold Storage Works, Dunton Green, RC Palmer, 1961. 55 Otford, Miss E Waley.

**11)** 85 Bank E of Waterlane F[ar]m, Harrietsham, 862520, 1962, Mrs. B. Dodds. 85 Field W. of Templetree, Harrietsham 875523, 1962, Mrs. B. Dodds. Wrotham Heath '52 DMcC. Platt Brickyard DMcC, 622579! 75 Ragstone Quarry, Ditton, C. West; 715576, CAS. 75 Ride, Oaken Wood, due N. of Teston, 1958. 74 Rough scrub 1m W of Staplehurst Sta[tion] on W[eald] Clay, 1963. [Staplehurst, 1855, HEF, **BM**.] 64 W of Hartlake Br[idg]e GE Shaw. 74 Marden E Wolffia Pond '56 J Stephens. 94 A.28, ½ m SW of New Street F[ar]m, G[rea]t Chart, ES. 93 Handcocks F[ar]m, Shadoxhurst ES. Pluckley Brickworks, E. Scott. 65 Borough Green ragstone Quarry, 1948, Miss J. Nisbett. 65 Lawn, The Dene, Borough Green, CAS. 84 Grassy track E of Headcorn, 849437, 1962 (849437, 1949 DMcC). 84 R[oa]dside SW of Gladdish, Sutton Valence, 1956 **MNE**. 893406 DMcC Smarden. (Birling Dr. Evans Smith 1884 **MNE**.) (Harrietsham Hb Lamb 1897 **MNE**.) 54 R[ai]l[wa]y, Hildenborough, CAS, 563482. Brickyard, Leigh, HV Wood. 94 Edenbridge, Dr Smith, 1907, **MNE**. {Seven}oaks Station, 1960, RAC.

**12)** 04 Roadside on Gault, NE of Hinxhill, 1946 **MNE**. 94 Field NW of G[rea]t Chart Church, E.S. 94 Bank near Stour, SW of Ashford, 995424, E.S. Near Brabourne RAC. Fordwater W Brabourne RAC. 94 by A.20, NW of Hothfield Common (sw side road) 968467, E.S. 94 by B.2077, 1 m. S. of Charing, 945476, E.S. 04 N of Ch[urch], Willesborough, 030417, E.S. 14 Roadside, Brabourne, CN Pope. 94 by A.20, SW side, NW of Ashford, 998440, ES. 94 N. of Westwell Lagoon, ES. 94 Ram Lane Hothfield, ES. 94 A.20 1 m NW of Ashford ES. 94 SE of Rippers Cross ES. 94 N of Goldwell, ES. 94 Goldwell Quarry ES. 04 Stour N. of Clock House, Ashford ES. 94 Quarry N of

Chilmington ES. 93 Scotts Pond, ES. 93 Longrope Wood ES. 93 S. of Warehorne ES. 03 R[oa]d 1m ESE of Kingsnorth. 03 SE of R[ai]l[wa]y Br[idge] Kingsnorth ES. 03 E of R[ai]l[wa]y Br[idge] Kingsnorth ES. 03 ½m SW of Cheesemans G[ree]n ES. N of Cheesemans G[ree]n ES. 1m S of Cheesemans G[ree]n ES. 15 Vauxhall Lakes Miss E.M.

**13)** 63 Mount Pleasant, roadside, Lamberhurst, J R Wallis 1937; (1944!); 1946 **MNE**. [54 Southborough, Fawcett.] 73 G[rea]t Swifts Cranbrook at field edge '55 DS. 83 Tenterden R[ai]l[wa]y Sta[tion]. [Tenterden 1897 RRH.] Tenterden J Ridley 1909 **MNE**. Quarry Hill, Tonbridge Hb Lamb 1843. T[unbridge] Wells Mr Blunt 1870 **MNE**.

**14)** 93 SW corner Cole Wood, Woodchurch by lane, 952347, ES. High Halden Ch[urch] Y[ar]d RAC. Woodchurch ch[urch] y[ar]d RAC. 93 N. of Brook St[reet] Woodchurch, ES. Robhurst to Woodchurch RAC. 82 Claypits, Potmans Heath 1958. 92 Dump E of Stocks, Stone in Oxney 1958. W. of Cherry Gardens, Woodchurch, by B.2067, 917340, E.S.

**15)** 01 near Lighthouse, Dungeness, 1903, E. Chandler; 1946! **MNE**, 1956; 1954, J. Cannon. 13 Hythe shingle beach, 1955; 1958 **MNE**. 02 Romney Warren.

**16)** 13 N side A20, Roadside W. of Newington, 1950. 13 Grassy slope below scars W of Hythe, 1955. 13 S side A20, S of Summerhouse Hil, 1962. 13 Sandy Ridge above Casebourne Wood, Seabrook, in grassland, 1955, **MNE**.

**L. aphaca** L. Yellow Vetchling. 15,16 ?N.

Alien<sup>581</sup>, occasionally naturalised on roadsides, banks, pits, and waste ground, mainly on chalk and sand: with a long history in the county, but not of long standing anywhere.

1<sup>st</sup> record. 1632; Faversham to Gravesend, Johnson, *Descriptio*, p.37.

**[1]** Old records at: Elmers End, H.J. Sutton, 1910 **MNE**; Beckenham, 1909, E. Marston; Hb. Davis, 1934 **MNE**. S. of Bromley, 1892, Whitwell; n[ea]r Dartford.] Ruxley pits, 1963.

**[2]** Northfleet, Hb. Lamb, 1847, **MNE**; Minster, Elgar 1906 **MNE**; Sarre. Ringwold. Dover. Chatham. Folkestone (1865, Eliz[abeth] Chandler). Westenhanger.]

**3)** 1 plant in grassland N.W. of Dunkirk, 1945.

**4)** Ebbsfleet, Richborough, L.W.W. 1949; 1958, Miss B. Nash, E. of level crossing. Pegwell Bay, N of Richborough, L.W.W., REW.

**6)** Greenhithe; chalkpit E of Mounts Road, 1950, E.C.W. & R.A.B. Lane End (Gravel pit) to Green St[reet] Green 578708 !56, HMP; PCH. Verge of Wrotham by-pass in chalk turf, 300 yds S.E. of roundabout, 1950-63. [Copse by Nurstead Church, R. Pocock, **BM**.]

**6E)** Green Street Green in gravel pit,<sup>582</sup> 1947, H.M. Pratt; roadside, P.C.H. 1954. Lane End, on green, PCH.

**8)** St. Margarets at Cliffe, on rough chalk grassland by track, R.B. Codd 1958: abundant 1962! **MNE**. Selsted near Hawkinge, Miss E.M. Ratcliffe.

**12)** 1 plant, grounds of Grove House, Sellindge, 1956, Martyn Rix, comm. Miss D.A.C.L. Weed in Canterbury, E. Robinson, 1949.

**14)** Appledore waste ground, D.A.C.L.

**15)** Dungeness, *teste* D.A.C.L.

**Pisum** L.

‡ **Pisum sativum** L.<sup>583</sup> Garden Pea. [16.]

Casual.

**10)** Sevenoaks tip, CAS.

**Cicer** L.

‡ **C. arietinum** L. Chick Pea. [16.]

Casual.

**1)** Beckenham, Hb. Davis, 1934 **MNE**.

**Ononis** L.

**O. spinosa** L. Spiny Restharrow. 15, 16. N.

<sup>581</sup> In the check-list it is given as 'Doubtfully native, but established'.

<sup>582</sup> There is some duplication here as regards entries uunder **6)**.

<sup>583</sup> In the manuscript given as *Pisum arvense*.

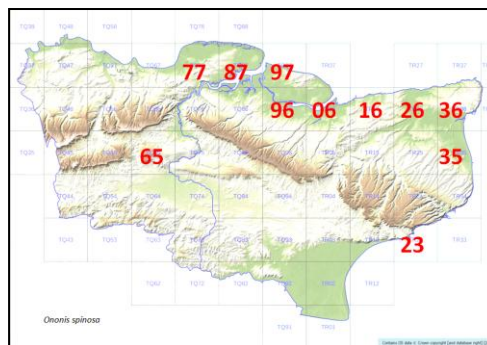
[version 1] Native. Grassland or scrub, almost confined to heavy clay soils; locally frequent on London Clay and on alluvial clays along the north coast of Kent and the Stour, very rare elsewhere, though apparently formerly in several places in the Weald and on the Greensand.

[version 2] Native. This species is today distributed rather thinly along the N. and NE coasts of Kent, where it occurs on heavy clay soils, on London Clay or alluvium, in grassland or scrub, particularly on cliffs and banks near the sea. Formerly it occurred on the Weald Clay; near London; and about Folkestone but it seems to have disappeared in most of these areas, probably due to building, or ploughing of grassland. Commoner in Surrey and on clay soils in Mid-Sussex than in Kent; rather common in Essex, common in Pas de Calais.

1<sup>st</sup> record, 1632: between Sandwich and Canterbury, Johnson, *Descriptio*, p29.

[1] Greenwich, Petiver. Eltham. Hayes, E. de C. Dartford Heath, E. de C.; E.B. Bishop. Apparently now gone from dist[ri]ct 1.)

2) 87 Clay banks, at edge of saltings, E of All Hallows, 1954 **MNE**. 97 S. of Halfway Ho[use], Minster, Sheppey, 1959 **MNE**. Neats Court Marshes Queenborough, 1955 OD. 96 Elmley Isle, on Clay hillside, 1950, OD. 06 Harty Isle, on Clay hillside, near ferry, 1945, abundant 1955 **MNE**; 1961. 87 L[owe]rStoke, 1959 **MNE**. Warden Cliffs OD. Leysdown OD.



3) 06 Fox Cross, corner Wraik Hill and Pilgrims Lane, 097636, 1958, H. Wilks. 06 Seasalter Lane – Thanet Way junction, 092636 and 093635, 1958 H. Wilks. 16 Tankerton, on cliffs E of Whitstable (125673) 1944-50. 16 Swalecliffe, 1945; 1956 ES. “Canterbury” 1839 R. Pryor **MNE**. Broadoak R[ai]l[wa]y Crossing RGW. 123660 Chestfield HMW. 16 Thanet Way S. of Herne Bay, 1945. 26 Cliffs at Bishopstone, 1955. 26 Reculver, 1946. 16 W of Tylers Hill; 1891, ES Marshall **BM**; 1958 RGW. 16 Thanet Way near Clapham Hill, 108644, 1958, H. Wilks. Sea wall 1m W of Sportsman 1986. The Park, St Stephens, Canterbury RGW. Roadside N end Church Wood Blean RGW.

4) 26 Banks N of Shuart, N. of St Nicholas at Wade, 1962. 36 golf course Pegwell Bay 1902, H.L. Grove **BM**; 1946 **MNE**. Dikebank behind dunes, Princes Links 1962. R[ai]l[wa]y Minster Marshes 324627 ES. (36 Richborough, Phyt., 1861.) 26 W. of W. Stourmouth, 1956, **MNE**. 26 Behind Saltings, at beach, N. of St. Nicholas, 1946; 1962, 35 Causeway Downs F[ar]m Sandwich P. le B. 26 Banks above Dikes, Marshside Chislet, 1962. 26 W. of Minnis Bay, Mrs B Dodds. 35 Clay grassland E. of Worth. 35 near Stour NE of Sandwich, FJH (1957, l[ocally] a[bundant]!) 26 Plucks Gutter, 1962 DACL + KFC, also fl. alba.

6) On London Clay, abundant in grassy, scrubland, Lodge Hill, S. of Cooling, 1944; 1954!). [Cliffe, Hanbury.] (Cobham HN Ridley.) (St[r]ood, Miss Young.) 65 Chalk Downs (1 pl[ant]) N. of Blacksole Field, W. of Wrotham, H.M. Pratt. I have not seen this here, but it occurs on chalk in e.g. Bucks.

[9] Barren places, frequent, Fl. Thanet p.14, ?Pegwell in 4) meant?]

[11] Maidstone WWR; between Marden and Staplehurst FJH.] Kings Wood, H. Lamb 1886 **MNE**.

16) [Cliff W. of Folkestone, G. Walton; N of New Inn Green FJH.] 23 Gault Cliffs EastWear Bay, Miss V.F.P. Day.

**O. repens** L.<sup>584</sup> Common Restharrow. [15, 16.] N.

Native. Chalk grassland, sand dunes and sandy and shingle beaches, sandy cliffs, very common; less common on grassland on ragstone; very rare on other soils, though occasionally found on disturbed roadsides or in quarries, where there is little competition.

1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*.

1) Chislehurst W.W. Dartford Heath, PHC. Ruxley pits.

2) Grain Beach. Shellness Beach. Leysdown Beach.

4) abundant on dunes, Sandwich Bay to Shellness, 1954 **MNE**. Only a little, N. of Deal on the dunes. Kingsdown Beach. Spinosa form, recorded as repens x spinosa, on dunes, Sandwich, H.M.P. 1961.

5) Leaves Green. 1929. J.C.R. Brasted, 1935, M.M.W. Kent Gate, W. Wickham 1915, Hb. D[avis] **MNE**. Halstead, PCH.

6) Mounts Road Greenhithe '44. Up[pe]r Halling, Down. (Cobham, 1924, TJF **BM**.) Horns Cross, Stone. W of Wrotham. Northfleet. Stone. Gravesend, W.A.S. below G[rea]t Wood, Cuxton, 1943 **MNE**; 1960. Otford Mount, PCH. Stonefield Wood, Halling, PCH. SW of Romney Street. Shoreham White Hill.

7) Burham Downs. Bluebell Hill. Boxley Downs, 1880, H.L. **MNE**; 1961. Lane W. of Westwell. Suomi Down, Westwell.

<sup>584</sup> Given in the manuscript as *O. repens* L. ssp. *repens* E.B. (*O. arvensis* Fries.), Rest-harrow.

8) Folkestone Downs. Abbots Cliff. Eastwear Bay; Lydden Spout, 1945 **MNE**. SW of St. Margarets Bay. N of St Margarets Bay. Pickersdean. Down SE of Crundale. Eastwear Bay, D. Smith 1907 **MNE**. Adisham. Bishops bourne. Down NE of Gravel Castle Barham 1945 **MNE**. Ringwould 1951 **MNE**. Eastling Wood, B.N. Walderslade Park DPY.

9) Margate R[oa]d NE of Sarre, MEM.

11) Roadsides W. of W.Malling. Leybourne. Roadside, Hale St[reet] E. Peckham, C.A.S.

12) Goldwell Quarry (ragstone) ES. Shoddington, by r[oa]d, ES.

13) Tonbridge, S.D. **BM**. By Timberley Wood, Lamberhurst, 1938; new road verge, Lamberhurst Quarter, 1939, J.R.W. Eridge Rd, T[unbridge] Wells, 1952, CAS. Horsmonden, J.S. **TLS**.

14) abundant on the ancient sea-cliff of Ashdown Sand, Stone Cliff, Oxney, 1958, **MNE**.

15) Blackwall F[ar]m, Dungeness, 1956 **MNE**. Romney Warren, A.J. Wilmott, **BM**; 1945-62!

‡ *O. mitissima* L.<sup>585</sup> [Mediterranean Restharrow. 16.]

11) Waste ground, Tonbridge, J.P.M. Brenan, B.E.C. Rep., 1939-40, p.273.

‡ *O. alopecuroides* L.<sup>586</sup> [Salzmann's Restharrow.]

Casual, on tips, v[ery] r[are] (E.P.).

### Melilotus Mill.

**M. altissimus** Thuill.<sup>587</sup> Tall Melilot. 15, 16. ?N or C or D 28/51

Probably native, usually in closed vegetation (grassland scrub or open woodland) on clay or chalk, also in waste ground as an adventive; widely distributed but local.

1<sup>st</sup> record, 1627: between Grain and Cliffe, Johnson, *Iter*, still found about Cliffe.

1) 46 L[ondon] Clay Railway bank, Orpington, 1946, **MNE**. 46 Hayes, DMCC. 37 R[ai]l[wa]y, Hither Green Grove Park, CAS. Dartford Heath, Hb. St J M.

2) 57 Erith, waste g[roun]d, St J M. By railway, Cotton F[ar]m, Stone Marshes, 1 plant, 1953, H.M.P. 06 Faversham.

3) 16 Hales Place, M.E.M.

4) 35 Northbourne, Miss B. Nash, 1961. 35 Sandwich Bay, 1946, **MNE**. 25.

5) 46 Chalk grassland and scrub W. of Saltbox, Biggin Hill, 1955, **MNE**. 46 R[ai]l[wa]y, Knockholt, CAS.

6) 77 Ladies' Close Wood S. of Cliffe, ESM **BM**; (1946!); grassland, R. Pocock, **BM**. 77 Cliffe chalk pits, 1949. Northfleet, 1887, H&JG **BM**. Foot of Downs, E. of Trosley, 1946. 67 Swanscombe Wood, 1949. Northfleet and Southfleet, 1919, PHC. 56 Shoreham, 1933, PHC.

8) 35 Eastry, Mrs B. Nash, 1961. 14 Down S. of Stelling Minnis, 1959, B Nash. 34 Top of chalk cliffs, Kingsdown, 1956, **MNE**. 34 Free Down, 1962, FR. 34 Down NE of St Margarets at Cliffe, 62. 24 Railway Footbridge, Lydden, DACL.

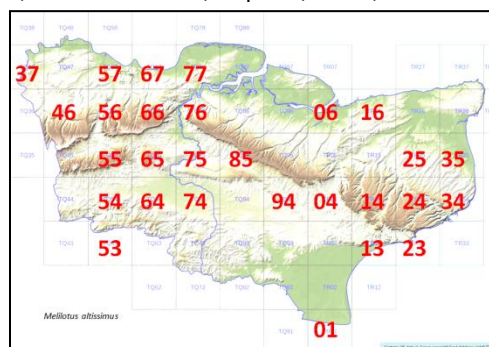
10) 55 Sevenoaks Brick Works, 1951, D.McC.

11) 66 Ryarsh Wood on Gault, 1946, l[ocally] a[bundant], **MNE**. 94 Pluckley Brick Works on Weald Clay, 1949. 75 E. Malling. Maidstone, 1882, E. Bartlett, **MNE**. Allington, 1883, H. Lamb **MNE**. 65 Ditton Q[uarr]y, CAS. 75 E of Aylesford by pit, 1955 **MNE**. 75 N. of Aylesford in pit, EG Philp. 85 Headcorn Sta[tion] Mr B Dodds. 54 R[ai]l[wa]y, Hildenborough, 563482, CAS. 94 Birch Wood, Bethersden '62. 85 Harrietsham Station, 1962 Mrs B Dodds. 64 By Medway, E. Peckham, CAS. 75 Maidstone E. Station 1960 EGP. 77 W of Staplehurst '63 FR & KFC.

12) 94 Hothfield Common, 1961 EGP.

13) Eridge Rd., Tun[bridge] Wells 1952, CAS. Highbrooms Brickworks/Gasworks, etc., KEB, 1950. 53 E of Town by str[eam] Tonbridge n side Vane Hodge.

15) 01 Dungeness. 13.



‡ *M. albus* Medik.<sup>588</sup> White Melilot. 15, 16. C. 36/51

<sup>585</sup> Not in check-list.

<sup>586</sup> Not in check-list.

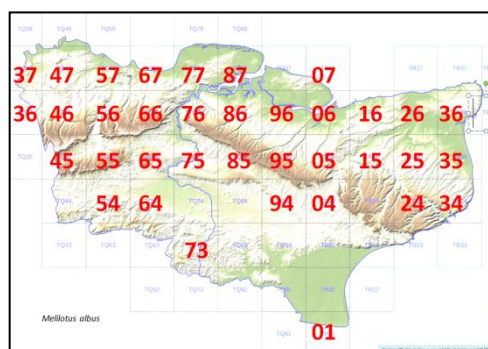
<sup>587</sup> *Melilotus altissima* Thuill. Wild Melilot (*M. officinalis* Lam. ex Hague) in the manuscript.

Alien, now completely naturalised on the coast and by railways along the Thames and Medway.

[first version] 1<sup>st</sup> record: Faversham, Atkins **BM**.

[alternative version] 1<sup>st</sup> record, 1860: Beckenham, Wollaston in Phyt N.S. VI. P.63.

- 1) 47 Charlton, DMcC. 47 Sidcup DMcC. 47 Slades Green GMB. Erith sand pits, E. de C. (1944!). 46 Hayes Common DMcC. [Beckenham Station, Wollaston.] 56 Swanley Junction. 47 N Cray tip. Bexley GMB. 36 Hayes Sta[tion] PCH. 37 R[ai][wa]y. Ruxley Pits. St Mary Cray GMB. Blackheath GMB.
- 2) 47 Woolwich Arsenal, AHWD (1944!; 1954 PCH). 77 Higham old canal, 1938, JBM; 1944!). 06 Shellness, Sheppey, 1954, DMcC, **MNE**. Sittingbourne RGW. 87 Grain S. beach, 1958. 06 Faversham, A. Atkins **BM**. 07 Leysdown Sheppey, 1918, Hb D[avis] **MNE**. 96 Conyer Creek brickworks, 1961, E.G.P.; 1986! 86.
- 3) Seasalter, Miss T. Webber. Whitstable Harbour REW. Harbledown REW. Oare Mill '50, REW.
- 4) 36 Richborough. 35, 36 Sandwich Bay v[ery] abundant on the dunes N. to near Shellness: JEL 1925; 1954! 36 Ebbsfleet. 34 Kingsdown. 25.
- 5) 46 Orpington Bypass, waste g[roun]d, PCH. Down W of Saltbox, JDL.
- 6) Meopham Sta[tion] KEB. Pits E of Ranscombe F[ar]m KEB. 76 Strood to Cuxton, AHWD (1943!→). 66 Longfield tip DMcC. Eynsford. Cliffe chalk pit, 1958. 57 Horns Cross G[rea]t pit, 1952. 57 Swanscombe pit 60 HAS.
- 7) 05 Between Old Wives Lees and Shalmsford Street, 1 plant, 1943, DHK. 66 Sole St[reet] Sta[tion] CAS.
- 8) 24.
- 9) 26.
- 10) Dartford. 45. 55. Farningham [cross] r[oa]ds PCH.
- 11) 65 Maidstone H. Lamb 1882 **MNE**. 75 By M.20, Sandling, 1960, E.G.P. 75 Sandpits N of Aylesford, 1958, EGP. 75 Ragstone Pit, Ditton, CAS, 714575. 85 By A20 **MNE** W. of Caves Cafe, Hollingbourne, Mrs B Dodds. 54 R[ai][wa]y Tonbridge, CAS. 64 Branbridges CAS. 54 R[ai][wa]y sidings Hildenborough CAS.
- 12) 05 Riverside, Chartham, Mrs. B., 1958. 15 Precincts, Canterbury MEM. 16 Sturry 51 DMcC. 94 Roadside Hoads Wood. 04 Wye, Lady D. 15 Canterbury RGW.
- 13) 64 R[oa]dside, SE of Tonbridge, 611424, M. McFarlane. 73 Bedgebury Forest, LJ Davies.
- 15) 01 Denge Beach, shingle pits. Lydd, KEB.

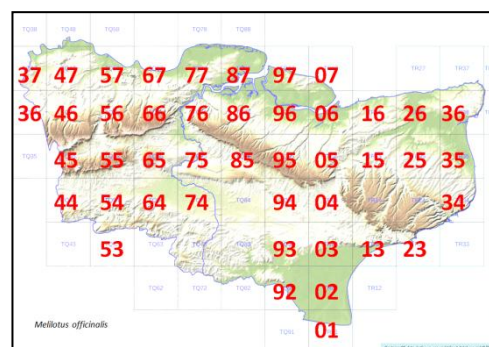


‡ **M. officinalis** (L.) Pall.<sup>589</sup> Ribbed Melilot 15, 16. .C 44/51  
(*M. arvensis* Wallr.)

Alien, completely naturalised on dunes, chalkpits, waste ground, etc. Common.

1<sup>st</sup> record, 1899: A.H. Wolly Dod in *Fl. Kent*.

- 1) Lee. 47 Bexley Heath, A.H.W.D. 46 Hayes Gravel pits, 1960 **MNE**. 47 Plumstead. 57 Erith. 47 Chislehurst. 46 Green St[reet] Green/Farnborough. 46 St Mary Cray. Blackheath GMB; ECW. Chelsfield. 47/37 Kew Cross to Woolwich by railway. 36 Beckenham, 1934, Hb. D[avis], **MNE**. 47 N. Cray tip, PCH. 47 Shooters Hill GMB. Ruxley Pits. Grove Park.
- 2) 47 Woolwich Arsenal area AHWD; 1944-47, v[ery] a[bundant]. 76 waste g[roun]d, Holborough Marshes, Snodland, 1945 **MNE**. 77 Cliffe. 77 Higham. 87 Grain. 97 Sheerness. 07 Warden. 06 Shellness. 06 Faversham AHWD (57!). 86 Otterham Quay / Motney Hill, BC.
- 3) 16 Whitstable, Miss T.W. 16 Swalecliffe, E. Robinson. Blean, freq[uent], RGW.
- 4) 35 Abundant, Sandwich Bay to 36 Shellness on the dunes; JEL, 1925; completely naturalised. 36 Richborough 1946 **MNE**. 36 Pegwell Bay. Deal-Walmer beach. 34 Kingsdown beach. 25.
- 5) 56 Lullingstone.



<sup>588</sup> Given as *M. alba* Desr.

<sup>589</sup> Given in the manuscript as *M. officinalis* (L.) Lam, Common Melilot.



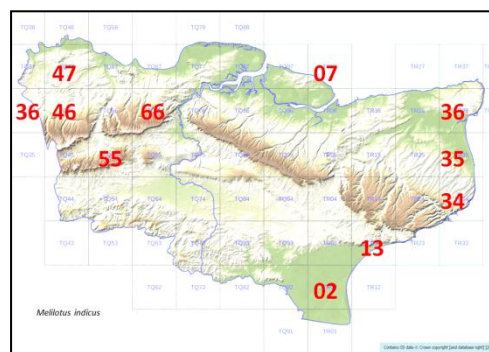
- 6) Eynsford. 57 Stone. 57 Dartford. 57 Darenth. 57 M[ou]nts Rd, Greenhithe 1954 **MNE**. 66 Longfield Hill Mrs D. Woods, 621679. 67 Swanscombe. 67 Northfleet. 67 Gravesend. 57 Horns Cross pit 62. 76 Cuxton. 76 Halling. 66 Cobham. 57 Lane End to Green St[reet] Green, PCH.  
 7) 76 Burham. 76 Wouldham. 76 Rochester. 76 Strood. 76 Chatham. 76 Borstal. 95.  
 8) 39 Kingsdown. 15.  
 9) 36 Ramsgate. 36 Broadstairs. 36 Cliffsend, abundant. 26.  
 10) 57 Dartford. 55 Greatness, RAC. 515568 NE of Riverhead, F.S.E.F. Pits E of Longford FSEF. 45.  
 11) 64 S. of Yalding. 65 Yalding Station. 75 Ditton. 75 Aylesford. 44 Edenbridge Tip DPY. 54 Main R[oa]d, Hildenborough, CAS. 64 Branbridges, E. Peckham, CAS. 74. 85.  
 12) 94 Charing, near Swan Hotel, ES. 05 Chilham, near River, ES. Canterbury, RGW. 04.  
 13) 54 Hilbert Rec[reation] RG[roun]d, T[unbridge] Wells, CAS. 54 R[ai]l[wa]y High Brooms Sta[tion] CAS. 64 R[oa]dside, SE of Tonbridge 611424, M. McFarlane. 53 Pantiles, Tun[bridge] Wells, KEB.  
 15) 13 Hythe. 02 Romney Warren. 01 Dungeness, 1947, **MNE**. 92. 93.  
 16) 23 Folkestone brickworks 1949. 13 Sandpit, Stone Farm, Newington, LJM. 03.

‡ **M. indicus** (L.) All.<sup>590</sup> Small Melilot. 15, 16. C. 10/51  
 (*M. parviflora* Desf.)

Alien, now well naturalised, though not abundant, on rubbish tips, sand dunes, shingle beaches.

1<sup>st</sup> record, 1864: Kent, Syme.

- 1) 46 Green Street Green, Farnborough, 1936, P.H.C. Hb. LNHS. St Mary Cray, Swain. 47 Lessness Abbey, 1948, RAB. 36 Beckenham, Hb. D[avis], 1934, **MNE**. N Cray tip PCH. [Well Hall, Eltham; Plumstead; E. Wickham, AHWD.]  
 2) 47 Abbey Wood Marshes, 1906, H.&J.G. Near Leysdown, 1963, F.R. & J.D. 07 Seasalter 51 DMcC. 06 Faversham Creek RGW. Graveney, 1 pl[ant], 1954, R.Th.  
 4) 35 Sandwich Bay, 1 plant near Hotel, 1946, DMcC; now in several spots, locally common, 1957. 34 Kingsdown beach, locally frequent, 1946. 36 Richborough '56 BN.  
 6) 66 Longfield Tip, 1956, D.McC. 77 Hoo Brickworks DMcC.  
 8) Chalky r[oa]d verge, Kearnsey, RD English.  
 10) 55 Kemsing station, 1948, D.McC.  
 11) Aylesford 1902, H.L. **MNE**. 75 Gravel pits E of Aylesford, 1959, E.G.P., **MNE**. Tillings Maidstone, Mrs Bunyard. 75 Allotment, W. of Penenden Hill, 1960, E.G.P. [Comp, Shoddy alien, 1960, D.McC, **MNE**.]  
 12) Sturry, DMcC.  
 15) 13 Shingle W. of Hythe, Mrs. Welch, 1948; 1958! 02 Shingle, Halfway Bush, Dungeness, 1958, **MNE**. 13 Palmarsh Pits.



‡ **M. sulcatus** Desf.<sup>591</sup> Furrowed Melilot. C.

### Trigonella L.

‡ **T. corniculata** (L.) L. Sickie-fruited Fenugreek. 16.

Casual.

- 1) Beckenham, 1934, Hb. Davis, **MNE**.

‡ **T. procumbens** (Besser) Rchb.<sup>592</sup> 16.

- 1) Abbey Wood, St J.M. BEC 1925, p.870 (1926).

- 2) Thames Wall, Erith, R.A.B.

‡ **T. hamosa** L.<sup>593</sup> 16.

- 1) Beckenham Place Park, 1934, E.J.B., Hb. L.

<sup>590</sup> Given as *M. indica* (L.) All. Small flowered Melilot.

<sup>591</sup> In check-list; no account in the manuscript.

<sup>592</sup> Not in check-list; cited as *T. procumbens* Reichb. In the manuscript.

<sup>593</sup> Not in check-list.

‡ **T. caerulea** (L.) [Ser.<sup>594</sup>] [Blue Fenugreek.] 16.  
 1) Eltham, Mrs Wedgewood, *BEC Rep.*, 1921, p.378. Abbey Wood, St. J. Marriott, *BEC Rep.* 1925, p.870.

‡ **T. monspeliaca** L.<sup>595</sup> 16.  
 1) Beckenham, 1934, Hb. Davis, **MNE**.

‡ **T. corniculata** [(L.) L.<sup>596</sup>] 16.  
 1) Beckenham, 1934, Hb. Davis, **MNE**.

‡ **T. foenum-graecum** L. Fenugreek. 16.  
 Casual.  
 1) Beckenham, 1934, Hb. Davis, **MNE**.

### **Medicago** L.

**M. lupulina** L. Black Medick. 15, 16. N.

Native. Chalk grassland, grassland on ragstone and Folkestone Sand, sandy beaches and dunes, roadsides, very common throughout Kent.

1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*, p.12. ("Trifolium luteum minimum Lob., sive medica sem. racemoso").

1) Blackheath, 1838, A. Atkins **BM**; ECW; GMB. Up[p]er Hockenden, PCH. Crofton Heath, PCH. Ruxley Pits. Beckenham, 1915, Hb. D[avis], **MNE**. N. Cray Tip PCH. Elmstead Woods, Miss A. Mills.

2) Woolwich Arsenal, PCH. Plumstead Sewer Bank PCH. River Wall, Dartford Marshes 1962. Grain beach. Shellness beach. Leysdown beach. Bobbing, R[oa]dside A249. N of Iwade, R[oa]dside A249.

3) Bigberry Wood Pit.

4) abundant on the dunes, N. of Deal; Sandwich Bay; Shellness. Pegwell Bay. Track bank 271692, N. of R[ai]l[wa]y, N. of St Nicholas '62. Sea Wall 1m. W. of Minnis Bay '62.

5) Field W. of Shoreham PCH. Chalk W. of Eynsford PCH. Polhill, Pilgrims Way PCH. Chevening Pilgrims Way PCH. Chevening Park.

6) Dartford E. Green Street Green. Mounts Rd., Greenhithe '44. Stone. High Halstow 60 HAS. Tollgate St J M. Kemsing Downs. Downs E. of Shoreham PCH. Preston Hill, PCH.

7) Halling Downs. Burham Downs. Borstall, 1939, J.B.M. **BM**. Wood and Down opp[osite] Putt Wood. Putt Wood. Charing Hill R[oa]d side. Park Wood edge Molash. Edge of Jessels Wood Norton (chalk) '62.

8) 23 Folkestone Downs. 23 Lydden Spout. 04 Brook Hillock (fuciflora site) 1962.

10) Horton Kirby PCH. By R[iver] above S. Darenth. PCH. R[iver] path below Shoreham PCH. Sevenoaks tip CAS.

11) E. Malling (Well Street: walls in village). Maidstone 1882, Hb. L[amb] **MNE**. SE Oaken Wood (track bank on loam). Barming quarries. Edenbridge tip and R[ai]l[wa]y DPY. R[ai]l[wa]y Hildenborough 563 482 CAS. ½m S of Dunks Green (W[eald] C[lay] R[oa]dside). Pond S. of R[ai]l[wa]y E. of Headcorn, 849437, 1962.

12) Lenham Heath. Yardhurst W of G[rea]t Chart.

13) Forest near Hawkenbury 594383, 1958, E. Shorrocks. Bayham CAS.

15) Greatstone. Dunes N. of Littlestone. RomneyWarren 1945-62! Shingle beach W. of Hythe, 1958. Ancient dunes S of W, Hythe, 1962.

16) Grassland below Scars W. of Hythe, 1955. Sandy Ridge above Casebourne Wood 1957.

var. ~~**Willdenowiana** Koch~~

1) Holwood, 1921, E.B.B.

10) Force Green, Westerham, BTW, 1932<sup>597</sup>

**M. sativa** L. ssp. **sativa**<sup>598</sup> Lucerne. 15, 16. Naturalised.

A frequent escape from cultivation, becoming naturalised in field borders.

1) 46 Hayes, D.McC. Ruxley Pits. Near Charlton, 1819, J.F.Y. **BM**. Blackheath NE GMB. Abbey Wood St J M. 47 Woolwich Arsenal PCH. 47 Sewer Bank, Plumstead, PCH.

<sup>594</sup> The manuscript has two entries for this taxon, one with (L.) as authority; the other with (Ser.) Druce.

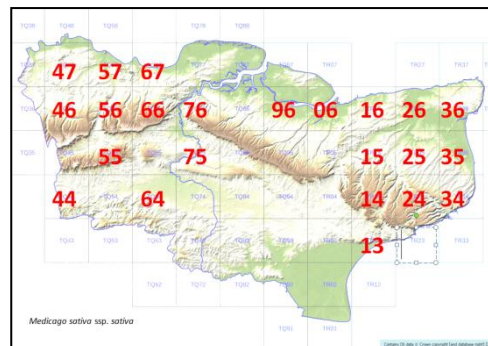
<sup>595</sup> Not in check-list.

<sup>596</sup> Not in check-list.

<sup>597</sup> Marked "Delete", although not actually deleted.

<sup>598</sup> Plain *M. sativa* L. in the manuscript.

- 2) 76 Wouldham, by River Medway, 1945. 06 on shingle, Seasalter, 1926, TJF, **BM**. 96 Iwade, HM Musselwhite.
- 3) 16 Seasalter '56 HMW.
- 4) commonly naturalised about 25 Wingham, Ash, 35 Sandwich, 36 Richborough. 36 Pegwell Bay, DACL. 26 Bankls N. of R[ai][wa]y N. of St. Nicholas, 1962.
- 5) 46 Halstead, F.R. 56 Chalk W. of Eynsford PCH. 55 Morants C[our]t Hill E side in pit PCH. 3964 Well Wood PCH.
- 6) 57 Stone. 57 Dartford, E. of. 67 Southfleet. 76 Cuxton. 76 Halling. 76 Snodland. 57 Greenhithe, 1882, F.H.W. BM. 67 Gravesend 60 HAS. 67 Swanscombe 61 HAS. Claylane Wood 61 HAS. 66 Pilgrims Way, E of Wrotham, PCH. 57 Green St[reet] Green, Darenth, PCH.
- 7) 76 Wouldham, Burham. Thurnham 1847, M.N.H.S., Hb. L. **MNE**.
- 8) frequent in the east of the district (35 Eastry; 25 Knowlton; 24 Eythorne; 24 Sibertswold; 34 St Margarets; 15 Chartham; 15 Bishopsbourne; 14 Lynsore Bottom; 24 Derringstone, Barham). Rhodes Minnis, BN.
- 9) 26, 36 very commonly naturalised in Thanet.
- 10) 55 Chipstead, 1945. 57 St Johns Jerusalem, PCH. 56 Pastures N of Farningham PCH. Westerham 438557, '55, BS Brooks.
- 11) 75 E. Malling, 1945. 57 Edenbr[idge] tip DPY. 44 R[oa]dside, Hever, 475 448 CAS. 64 Corner of field, E. Peckham, near Pond, CAS. E of Hale Street.
- 14) Cranbrook near Robins Wood, crop relic, DS.
- 16) 13 London Rd., Hythe crop relic, LJM.

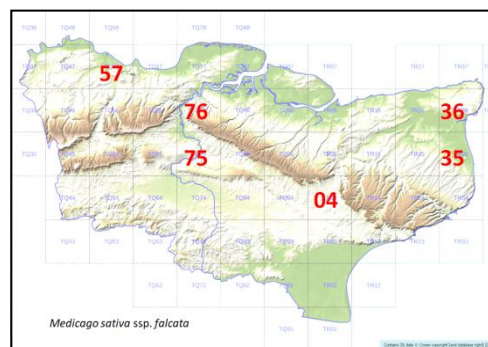


ssp. **falcata** (L.) Arcang.<sup>599</sup> Sickie Medick. 15, 16 Naturalised. 6/52 [9/52]  
 var. *tenuifoliata* [sic]

Alien, now naturalised in rough fields, on dunes, riverbanks, and roadsides.

1<sup>st</sup> record, 1829: Ramsgate, C.P.S.K.

- 1) Crayford, 1916, J.E.C.; JBM. 47 Plumstead Common (Casual) AHWD. 57 Dartford Heath HMP, 1947, 1950. Ruxley pits S&S. Blackheath E edge 1951 GMB. Ruxley, A20. (46 Widmore, Cole.)
- 2) 47 Plumstead Marshes, 1915, J.E.C. 97 Minster in Sheppey, F.J.H. 07 Leysdown, Sheppey, 1918, Hb. Davis **MNE**. Cliffs, Warden, 1951, Mrs. M. Bryson. 47 Woolwich Arsenal 1932, Mrs M. Mallinson. Locally plentiful, Rough field by River Medway, opposite The Friars (VC16), Aylesford 1943 FR, C.W. **MNE**. 76 Riverbank (V.C.15) New Hythe, 1947. 76 Riverwall, Wouldham, 1945, **BM**, **MNE**. [Warden P[oin]t, 1949, now gone, Mrs Bryson.]
- 4) 35 Sandwich, 1937, F. Hyland (var. *tenuifoliata*) **BM**. 35 Walmer Beach 1932 Miss F. Clarke. 36, 2m N. of Sandwich Bay on dunes, Miss E. Day (1947!). 36 near R[oa]d N. of Ramsgate Rubbish Dump, Pegwell Bay, Miss DAC Long, 1956.
- 6) 76 Strood, 1950, on chalk bank of Cuxton Rd., **MNE**.
- 9) 36 Dumpton Gap, C.P.S.K. 36 Clifftop, Broadstairs, R.E. Wood, **MNE**.
- 10) Dartford By-pass near Gravel Ponds GMB.
- 11) 76 Between Leybourne and Ham Hill, 1900, H.L. **MNE**. 75 side of towpath by Balston's Paper Mill, 1906, J.H. Allchin **MNE**. Near Allington Lock, 1906, H. Elgar, **MNE**.
- 12) 04 Sevington, E.S.



ssp. **varia** (Martyn) Arcang.<sup>600</sup> Sand Lucerne. 15, 16 Naturalised.  
 Has arisen naturally in Kent where the parents grow together: back crosses and segregates occur.

1) Barnes Cray to Slades Green, 524754, HMP.

<sup>599</sup> *M. falcata* L. in the manuscript.

<sup>600</sup> Given in manuscript as as *Medicago x varia* Martyn; *M. falcata* L. x *M. sativa* L.; *M. sylvestris* Fries.

- 2) Wouldham, river Medway bank, 1945 with the parents, **MNE**. New Hythe, 1947, DMcC. [Dartford 548748, on gravel, 59,, F. Swain – gone since.]  
 4) By r[oa]dside, N. of Ramsgate rubbish dump / Pegwell Bay, 1956, Miss D.A.C. Long.  
 6) on chalky bank by road S. of Strood, 1949. Chalkpit W. of Temple F[ar]m Estate, R. Dolling.  
 13) 3m. from Tunbridge Wells, Kent, 1896, F. Roberts; in hedgerow bordering a former hop garden.  
 12) By Sevington Water Mill, 1950 ES.

‡ **M. ciliaris** L. All. <sup>601</sup>

Wool alien, v[ery] r[are] casual.

‡ **M. truncatula** Gaertn. <sup>602</sup>

[Strong-spined Medick.]

Casual.

‡ **M. laciniata** (L.) Mill.

[Tattered Medick.]

Casual.

1) Hextable, "Shoddy" alien, 1943, DMcC; 1949 JEL, Hb. L. **BM**. <sup>603</sup>

4) Sandwich, shoddy, 1960, DMcC **MNE**.

11) Offham, shoddy, 1960, DMcC **MNE**. Basted, shoddy, 1960 DMcC **MNE**. Wrotham Station, shoddy, DMcC, 1960 **MNE**. Yalding Station, Shoddy alien, 1961, D.McC. <sup>604</sup>

**M. minima** (L.) L.

Small Medick.

15, 16.

N.

Native, on fixed dunes and on sandy or shingly turf by the sea, very local, but locally plentiful.

First record, 1968: Sheerness, Rand.

1) [Blackheath, Irvine; E.J.] St Mary Cray 1925 JK Spearing.

2) [Sandy ground, E. of Sheerness, 1768, Rand, Phyt iii 168.] 562764 River Wall, Dartford Marshes, n[e]ar Isol[ation] Hosp[ital] '58, R. Whitehead det. JEL. E. & W. of "Sportsman" beach and wall W. of Seasalter, AHWD and E.S.M.; JEL, 1930: E.S. 1948; 1951 **MNE**; H. Wilks, 1957; 1959! **MNE**; 1960. Seashore, Whitstable, 1882, H.&J. G **BM**; 1922, T.J.F. **BM**. Seasalter 079650, H.M.W., 1956. Grain S. beach, rare, 1955 **MNE**.

4) Sandy ground N. of Sandwich, CPSK; Fl K (Pegwell Bay, AA **BM**; 1876, E. de Crespigny **BM**; 1882, Hb. L[amb] **MNE**; 1947!.) Walmer, BS Furneaux. Dunes, Sandwich Bay, F.J.H. (1946-56!; 1949 **MNE**; 1953 **MNE**; 1954 **MNE**). N. of Deal, 1954.

15) Romney Warren, E. [sic, for W.] Borrer; (1945! **MNE**; 1946! **MNE**; 1947! **MNE**; 1962!; 1986!). Littlestone, 1946-58! **MNE**; 1955 KEB **MNE**. Shingle beach W of Hythe, J.J.H.; 1955! **MNE**; 1958! **MNE**.

*Alien plants:*

1) Hextable, 48 DMcC & JEL.

3) Bigbury, Harbledown, P. Furneaux, 1955 **MNE**. S. of Bysing Wood, in arable field, 1958, **MNE**.

4) Sandwich, in shoddy area, 1959, DMcC. **MNE**; 1960 **MNE**.

6) Stubble N. of Shorne 694724 PCH. Sharnal Street 783737 shoddy PCH.

9) Station Yard, Birchington, E.G. Philp, 1960 **MNE**.

11) Basted, in shoddy field, 1960 DMcC. Yalding Station 1961 DMcC, **MNE**. Waste ground, Tonbridge, J.P.M. Brenan, *BEC Rep.* 1939-40, p.274. Wye, Miss A.B. Cobbe, *BEC Rep.* 1923, p.178. ([both] as var. *longiseta* DC.).

‡ **M. praecox** DC. <sup>605</sup>

[Early Medick.]

15, 16.]

1) Hextable, "Shoddy" alien, 1950, D.McC.

3) By Bysing Wood Faversham 1945, FR, det. DMcC **MNE**.

4) Sandwich, Shoddy field, 1960 DMcC **MNE**.

9) Station Yard, Birchington 1960, E. Philp, det. DMcC **MNE**.

11) Offham, Shoddy field, 1960 DMcC **MNE**.

**M. polymorpha** L.

Toothed Medick.

15, 16.

N.

<sup>601</sup> Given in check-list but not in the manuscript. Perhaps to be placed under *M. intertexta* (L.) Mill.

<sup>602</sup> Given in check-list but not in the manuscript.

<sup>603</sup> Also given with *M. polymorpha* account as *M. laciniata* (L.) Mill. 1) Hextable, shoddy alien, 1948, DMcC & JEL.

<sup>604</sup> These last two locations are also given for *M. aschersoniana* Urb., although this is since regarded as synonymous with *M. laciniata*.

<sup>605</sup> Not in check-list.

(*M. hispida* Gaertn.) (*M. denticulata* Willd.)

Native, on fixed dunes and sandy or shingly open ground near the sea. Casual alien inland.

1<sup>st</sup> record, \*1666: Romney Warren, C. Merrett, *Pinax*, p76.

1) [Blackheath, Irvine; E.J.] ‡ Beckenham Place Park, 1934, EJB, Alien. ‡ Hextable, a “shoddy” alien here, 1948, DMCC. Beckenham, 1934, Hb. Davis **MNE**. Alien: St Mary Cray JK Spearing 1925.

2) [Alien: Crossness: Tripcock Ness, AHWD.] 06 Seasalter, on sea wall, J.E.L., 1930; 1957, H. Wilks. 16 Whitstable, E. de C. 1883, **BM**; 1958, H. Wilks, at 101661. Short turf by shore, Swalecliffe, 1960 HMW.

4) Dunes by Sandown Castle, Deal, Dillwyn in Fl. Brit.; (1954!). Gilling Drove, Chislet, MEM! 35 Dunes, Sandwich Bay, F.G.E.K. (1946! **MNE**; 1949! **MNE**; 1956, abundant locally!). Between Sandwich and Pegwell Bay, J.S.M. (Hb. Mill); (36 Richborough, 1946!). 35 Walmer Beach, J.S.M. (Hb. Mill); (1946!). 34 Kingsdown Beach, KDR.

6) [Dartford, F.J.H., Fl. K 87; the alien var. *denticulata* (Willd.) Burnat. Stubble N of Shorne 694724 PCH.] [Sharnal St[reet], shoddy var. 783137 PCH.] 76 Alien: Broomhill allotments, Strood, Mrs MH Dolling.] 77 E. end Cockham Woods, Mrs MH Dolling.

8) ‡ Bridge, JG.

10) Force Green bean field, '58, RAC.

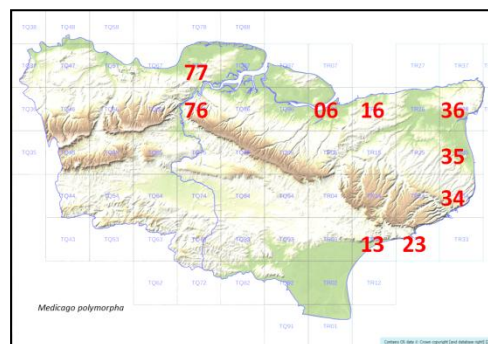
9) [cliff top, Langnose Stairs, 2 miles E of Margate, FJH (Fl K); not refound, L.W.W.]

11) [‡ casual, E. Malling, 1945.] Fieldside N. of Vintners Quarry, Maidstone 1956, Lrag, **MNE**. Basted in shoddy field, 1960, DMCC **MNE**. Wrotham Station 1968, shoddy, DMCC **MNE**. Yalding Station, 1961, DMCC.

13) casual, Hopgarden, Hoathly, Lamberhurst, JRW, 1940, det. Kew. Sandgate, G.E. Sm.; g[ras]sland on cliffs, Shornecliffe (1955! **MNE**).

15) 02 Romney Warren, C. Merrett 1666 (1946! **MNE**). 02 Littlestone, beach, 1946. 13 W. of Hythe, F.J.H.; 1955! **MNE**; 1958! **MNE**. Dungeness, G. Dowker, Fl. K.

16) 23 Folkestone Leas, E Forster **BM**; W. Borrer; (1945! **MNE**).



**M. arabica** (L.) Huds.

Spotted Medick.

15, 16.

N.

(*M. maculata* Sibth.)

Native. In dry grassland, on roadsides and baks, dunes; mainly on sand and gravel, but on chalk near the sea. Common near the coast, up the Thames and Medway estuaries, and locally on the Folkestone sand and on river banks inland.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.* P.115.

1) Charlton, Hb. Banks **BM**. Farningham Wood 82. 47 Elmstead Woods Miss A Mills 1956. Lessness Abbey GMB. Ruxley Pits.

2) 57 Erith Marshes. 87 allHallows [sic] 60 HAS. 77 Higham. 77 Cliffe. 87 Grain. 07 Leysdown. 06 Shellness. 76 Cuxton, J.B.M. 77 by Medway Below Upnor, 1960 **MNE**. 77 Higham Canal PCH. 07 Leysdown, 1917, Hb. D[avis] **MNE**. 06 W. of Seasalter. Dartford, 1860, Hb. T. **BM**; 1886, E de C **BM**. Motney Hill 1951, DMCC. Luddenham Marshes HMW. Canal SE of Sheerness, OD.

3) Hernhill, M[oun]t Ephraim, DMCC. 26 Gravelly field W. of Shelving Wood, Hoath '62.

4) 35 N of Deal. 35 Walmer. 35 Sandwich Bay. 36 Pegwell. 26 Reculver. 36 Dunes, Downs F[ar]m, Sandwich, 62. 35 Shoddy field, Sandwich, 1960, DMCC **MNE**.

6) 76 Strood. W Sharnal St[reet] 783737 PCH. 77 Upnor. 76 Halling. 76 Snodland. 57 Green St[reet] Green 1949 **MNE**. 57 Lane End. 57 Mounts Rd, and Sandpits, Greenhithe. 57 Stone. Gravesend, S. Dale (1659-1732); R. Pocock **BM**. 67 Shorne Warren DMCC. N of Cobham Park by A2. 86 Berengrave pit Rainham PM Roberts.

7) 05 Chilham (Mulberry Hill) DHK. 05 Old Wives Lees, DHK, 1945, abund[ant].

8) 34 Dover. 34 St. Margarets. 23 Capel le Ferne. 24 River, KDR. Bridge JG. Lower Hardres, abund[ant] DHK. 24 By R[ai]lwa[y] bridge, Woodville, Temple Ewell, DACL. 24 Swanton, near Lydden, DACL. Sutton Downs, DPY.

9) 36 Minster Churchyard '63. 36 Field SE of [cross] r[oa]ds N. of Minster 63.

10) 55 Dibden, S. of Riverhead, Miss Waley. Dartford GMB. 56 Lullingstone, 1952, T.H. & E.L. Angel. 57 below Darenth Church by track, PCH. Gaysham Westerham RAC. 56 R[iver] above S. Darenth = Horton Kirby PCH.

11) 65 Basted, S. of Boro[ugh] Green, 606564, CAS. Offham, H. Lamb, 1882 **MNE**. L[owe]r Street Hildenborough, HV Wood. 65 W. Malling (Piney Toll), 1943 **MNE**. 65 Mill St[reet] E Malling. 65 Larkfield Heath. 54 N. Bank Medway Tonbridge 599467 CAS '55. 65 Leybourne. 65 Ryarsh Sandpits. 75 Aylesford Sandpit. 75 Rocks E Malling. 66 Birling Ch[urch] y[ar]d. 75 Allington. 75 Teston. 85 Snarkhurst Wood,



Hollingbourne, at entrance. 85 Harrietsham Sta[tion], Mrs B Dodds. Penenden Heath, 1848, MNHS **MNE**. 75 Sandling sandpit, 1957 **MNE**. 65 Yalding station, 1961, DMCC. 44 Edenbridge Ch[urch] Y[ar]d, KEB. Medway, E. Tonbridge 51/54 & 51/64. 64 Medway, E. Peckham, CAS. 84 Headcorn ch[urch] y[ar]d, 1962.

**12)** Hothfield. Ashford Warren. Willesborough. Mersham. Brabourne Lees. Canterbury JG.

**13)** Lamberhurst Q[uar]t[e]r. 03 r[oa]dside W. of Lamberhurst (M[oun]t Pleasant), 1944. 64 Pembury Walks, 614429, CAS. 73 Bedgebury Nursery, WJ Davies. 63 R[oa]dside, Finchcocks to Lamberhurst 1909 JS **TLS**.

**14)** Woodchurch ch[urch]y[ar]d and Village Green RAC. St Michaels Tenterden RAC.

**15)** 13 Shingle beach W of Hythe, 1958 **MNE**. 02 Romney Warren 1881 JFDP **BM**; 1945-'62!. 13 Ancient dunes W. of Hythe 62. Dymchurch. 02 Littlestone 1946 **MNE**. Dungeness. 02 Lydd Common. 02 Brenzett. 92 Fairfield. 93 Snave. 92 Appledore. 13 Burmarsh, KDR.

**16)** 13 Scars, W of Hythe, 1955. 03 Lympne. 03 Copperhurst, Aldington. 23 Folkestone Leas 1945 **MNE**. 13 Shornecliffe 55. 13 sandy turf N. of Seabrook 1955. 13 ridge above Case borne Wood, Seabrook, 1955. 23 Dry meadow, Darnley Valley, N end, 1955 and 23 Dry Slopes at Spur 1955. 13 Seabrook, by m...R[oa]d 1955.

### **Trifolium L.**

**T. ornithopodioides** L.<sup>606</sup> Bird's-foot Clover. 15, 16. N.

Native, very local on paths, banks and open turf on sandy or gravelly heaths inland, and on dunes or consolidated shingle near the sea.

1<sup>st</sup> record, c.1780: Blackheath, Curtis.

**1)** [Blackheath, Curtis; CA Johnson Phyt. NS, IV (1860) p.255] Hill W. of Blackheath, Hb. Banks. 46 Keston Common, 1945, **MNE**; 1946 **MNE**; 415642, 1960, HMP. [Abbey Wood 1861 HEF **BM**, in sandy ground.] [Chislehurst Common; St Pauls Cray (WWR)]. [Plumstead Common, Syme.] 57 Dartford Heath GMB '58. Hayes Common, 1900, Hb D[avis] **MNE**.

**2)** 77 Sandy gl[rou]nd by Medway, by Cockham Wood 773715, below Upnor, 1960, **MNE**. 87 Tracks behind Sea wall, and on banks near it, Isle of Grain, 1945, **MNE**. 87 behind sea wall, All Hallows, 1945, **MNE**. [Queenborough, E.S.M., 1889, **BM**.] 06 Bank by Faversham Creek, 1958, H. Wilks, 026637 & 050635, on disturbed soil.

**3)** Whitstable Harbour Sta[tion] HMW.

**4)** Pegwell Bay, Fl. Thanet, 1847; E. de C. 35 Dunes N. of Deal F.G.E.K. (1946-57! **MNE**).

**6)** 57 Stone House fields, Stone, 578710, 1960, HMP. [Dartford Brent]: chalk, FJH. 57 Green Street Green, W.R.L. (1945 **MNE**; 1951! **MNE**; 1954, PCH; 1959, PCH). 67 Shorne, near Windmill, on Blackheath Beds, 1945. Gadshill, Higham, 1832, W.W.N.] Stone House, '60, 578710 HMP.

**7)** 96 Gravel pit, Putt Wood, Ospringe, 1958, H. Wilks, **MNE**.

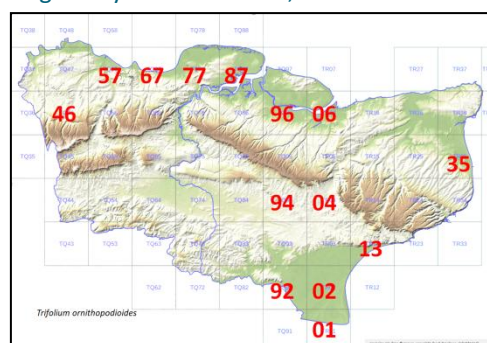
**10)** Chert pits E of Riverhill RAC.

**12)** 94 Hothfield Heath, J.E. Chambers, 1924; abundant locally on sandy grassland, 1945 **MNE** – 62 **MNE**; 1981. H.L., 1913 **MNE**. 04 Brabourne Lees 1954 **MNE**.

**14)** 92 Top of sandstone cliff, Stone Cliff, Oxney, 1949 **MNE**, a sea-cliff, before Romney Marshes were reclaimed.

**15)** 02 New Romney Warren, O.B.G. (1945!). Littlestone Beach, BS Furneaux. 13 Hythe, H.B. Mackeson (1946!). Lydd Airport, DMCC. 01 Roadside SW of Lydd 1958 **MNE** 01 Track near Hamilton F[ar]m, ES, 1960. 02 Lydd Common and town, FJH. W of Dungeness, near Midrips, 1946, **MNE**. 01 by old railway, Dungeness E.P.

**16)** Sandgate C.P.S.K. 13 Sandy turf N. of Seabrook, 1955 **MNE**.



**T. repens** L. White Clover. 15, 16. N.

Native but also extensively sown in leys. Meadows, pastures, roadsides, wasteground, dunes, etc.; very common and abundant throughout Kent.

1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*.

**1)** Hayes Common. Chislehurst Common. Keston Common. Ruxley Pits. Crofton Heath PCH. Shooters Hill GMB. Blackheath ECW; GMB. Farningham Wood 82. Bexley Mill Pond PCH. N Cray Wood PCH. Dartford Heath, GMB.

**2)** Woolwich Arsenal. Isle of Grain coast. Sea Wall, Dartford Marshes, 1962. By A249, N of Iwade.

**3)** Bigberry Gravel pit.

<sup>606</sup> *Trigonella ornithopodioides* (L.) DC, Birdsfoot Fenugreek in the manuscript.

- 4) Deal Dunes, 1954 **MNE**. Sandwich Bay. Track bank N of R[ai]i[wa]y 271692 St Nicholas, '62.  
 5) Halstead PCH. 396611 PCH.  
 6) Green Street Green 1945 **MNE**. Otford PCH. Preston Hill, PCH. Shorne behind Windmill. S. of G[rea]t Wood Cobham. Mounts Rd, Greenhithe PCH. Swanscombe Wood PCH. Halling Warren, PCH.  
 7) A249 verge below Ch[urch], Stockbury. Field below Church Wood Stockbury.  
 8) Brook "fuciflora" hillock (ley) '62.  
 9) Minster Ch[urch] y[ar]d 63.  
 10) Dartford. {Seven}oaks tip. Darenth meadows. Chevening, F.S.E.F. Westerham Wood 82.  
 11) E. Malling. Shipbourne Forest Plaxtol Rd. R[oa]dside 1m S. of Staplehurst 1955. Pond NW of Buckhall Bethersden.  
 12) Ashford Warren '44. Hothfield Common. Canterbury.  
 13) Stone [Cross] Gill 518381 Ashurst CAS. R[oa]dside, Chiddingstone Hoath. Bayham CAS.  
 14) By Parish Church, Hawkhurst 1955.  
 15) Lydd Airport, DMcC. Dungeness ballast workings. Romney Warren.  
 16) Railway side, Sandling Junction 1955. Sandy turf N. of Seabrook 1955. Fen Meadows, Darnley Vale, Sandgate 1955. Turf, Ragstone scars W of Hythe 1955. Sandy ridge above Casebourne Wood, Seabrook 1955.

var. **phyllanthum** Ser.

- 1) Abbey Wood, St. J. Marriott, *B.E.C. Rep.* 1925, p.871.  
 4) Walmer Beach, BS Furneaux.

‡ **T. hybridum** L. Alsike Clover. 15, 16. Well naturalised.

Introduced: often sown in leys, etc., but naturalised on banks and roadsides; common.

1<sup>st</sup> record, 1863: between Stowting and Smeeth, Hb. J.S. Mill.

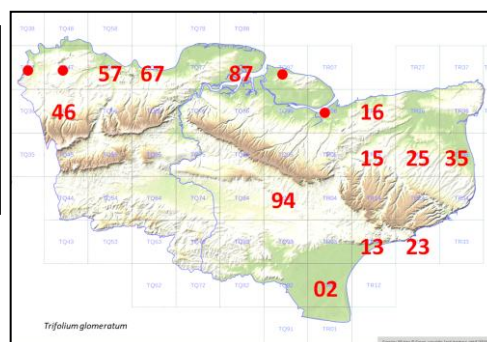
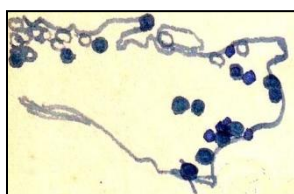
- 1) 46 Hayes DMcC. 47 Chislehurst, 1879, H.&J.G. **BM**. 46 Green St[reet] Green, Farnborough, 1947, J.E.L. & J.E.W. 36 Langley P[ar]k, H. [sic, for A.G.] Davis 1917 **MNE**. 37 Blackheath ECW. Beckenham Place PCH. 46 Crofton Heath PCH. 47 R[oa]d S. of Ruxley PCH. 47 N. Cray tip, PCH. 47 Shooters Hill GMB. 47 Ruxley Pits.  
 2) Stone Marshes by Power Sta[tion], HMP. 87 Isle of Grain. 76 Snodland Marshes. 77 Higham Marshes.  
 3) 15 Field by Brotherhood Wood, Canterbury, C.A. Roberts.  
 5) 56 Chalk W. of Eynsford, PCH. 398611 field edge PCH. 45 Chevening, Pilgrims Way PCH. 45 Knockholt PCH.  
 6) 65 Wrotham PCH. Farningham St J M. 57 Green St[reet] Green, PCH. 67 Swanscombe Wood, PCH. 66 Cobham Warren, PCH.  
 7) 86 Stockbury, [Three] Squirrels, 1943 **MNE**. 95 N. of Newnham, C.T. 95 Belmont Park, Faversham, 1958, DMcC. 05 Challock Woods, E.S.  
 11) Addington Place DMcC. 75 E. Malling. 75 Larkfield. 65 Ryarsh. 66 Birling. 75 Maidstone, Elgar **MNE**; E.G. Philp, 1958 **MNE**. 79 Cornfield S. of Marden 1958. 85 Fairbourne Lane, Harrietsham, Mrs B. Dodds. Fairbourne Heath REW.  
 12) Stowting to Smeeth, Hb. J.S. Mill. S. of Sellindge by...RAC. 15 Canterbury Miss T. Webber.  
 13) 63 Stairhouse yard, Lamberhurst, 1939, JRW.  
 15) 01 Dungeness, KDR.

**T. glomeratum** L. Clustered Clover. 15, 16. N. 11/51<sup>607</sup>

Open sandy and gravelly turf, near the sea and on commons inland; locally common and probably as frequent in Kent as in any county, but very rare over much of Kent.<sup>608</sup>

First record, about 1700: near Woolwich, Buddle, and Blackheath, Doody.

- [1] [47 Woolwich, Buddle MS; 37 Greenwich, Blackstone. Blackheath, Doody MS (Hb Dill.); JJB c.1890. 37 E. of Deptford,



<sup>607</sup> The total of 11 hectads is not easy to understand and 12 are given in the map prepared for this transcript, plus 4 former sites. The manuscript margin carries the map drawing reproduced here, plus two different hectad charts. The difference between 11 and 12 may be accounted for by the latesness (1981) of discovery in TR15.

<sup>608</sup> A marginal note indicates '19 localities today'.

Hb Banks, **BM**; 47 Belvedere Park, Hb Lamb, 1861 **MNE**. 47 Abbey Wood HE Fox 1866 **BM**.] [47 † Chislehurst, W.W.] [57 Dartford Heath, Borrer **K**; AHWD.] Quarry near Crayford Station GMB. 46 Keston Common, C.T.; (1946-55!) **MNE**.

2) [Greenhithe, Cooper, Fl. Met.] 87 Grain near the Fort, 1945-7. (97 Sheppey, Hudson.) 97 Queenborough, E.S.M. 06 Seasalter, E.S.M.

3) [16 Swalecliffe W.Wood in FGEK.] 16 Bank S of Dengrove Wood, Sturry, 1955, **MNE**. 16 At base of clay cliffs, Tankerton, RG Williams. Gravel pit, Swanton F[ar]m, Littlebourne, H.M.W. 15 Old Park, Fordwich 1981!

4) 35 Dunes N of Deal, Duthie; (1954!). 35 Sandwich Bay, FJH; 1949 (abundant, 1960!) **MNE**.

6) [67 Northfleet to Gravesend Hb Dill.] 57 Gravelly turf, Green St[reet] Green, Darenth, H. Trimen 1867, **BM**; (1944-50! **MNE**); 578709, 1961, HMP. 67 Shorne behind Windmill, 1945→, abundant; 1954 **MNE**.

12) 94 Hothfield Heath, GES, FGEK; (1945!). 94 Ashford Warren 1945; both these on Folkestone Sand.

15) 13 Ancient dunes S. of W Hythe, 1962; 1981 v[ery] a[bundant] by car park. W. of Hythe, HB Mackeson (1946!). Romney Warren, Hb Borrer **K** (1945!) **MNE**. On shingle, Willowtree F[ar]m, Hythe, LJM. Littlestone, 1924, BS Furneaux.

16) 13 Shornecliffe, CPSK; 1955! **MNE**. 13 Plentiful N of Seabrook 1955 **MNE**. 23 Folkestone Leas, 1945 **MNE**, 1958. 13 Sandy ridge above Casebourne Wood Seabrook 1953. Gossy Banks LJM. Sandling Junct[ion] Sandpit LJM.

### **T. suffocatum** L.

Suffocated Clover.

15, 16.

N.

7/51<sup>609</sup>

Open ground and turf on neutral sandy and gravelly soils, especially on the coast; rare but locally plentiful. Very tolerant of trampling.

First record, 1829: Sandgate, etc., C.P.S.K., p[40].

1) [47 Chislehurst Common; Blackheath, W.W.R.; 47 Plumstead Common, 1880, H.&J.G. **BM**.]

2) [77 Upnor, P. Jacob in F.G.E.K.] 87 Coast of Isle of Grain, 1945, **MNE**.

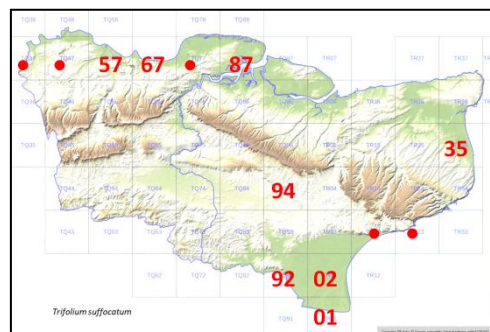
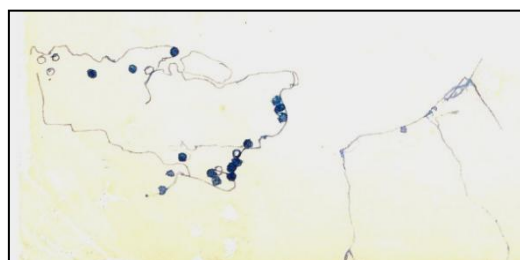
4) 35 Walmer Beach, Hb J.S. Mill; on Esplanade opp[osite] Castle, 1946! 1962!). 35 Deal sand dunes, 1874, J.F.D. **BM**; ESM; 1954! 35 Sandwich Bay, E.S.M. (1946-56! abund[ant]) **MNE**.

6) 57 Green Street Green, Darenth, 1945-51 **MNE**; 1959 PCH. 67 Shorne, behind Windmill 1945; 1947 **MNE**.

14) 92 on the ancient sea cliff, Stone-in-Oxney, 1949, **MNE**.

15) Hythe shingles, H.B. Mackeson. 02 sea wall S. of Dymchurch 1946. 02 Romney Warren, C.P.S.K.; (1945!) **MNE**; By road, 1962! [02 Lydd Common, C.P.S.K.] Dungeness, South Brooks, 1946. 01 gravelly roadside SW of Lydd (by Range entrance) 1958. 02 Littlestone beach, 1958. Lydd airport DMCC. 01 R[oad]side SE of Hamilton F[ar]m, Dungeness, abund[ant], 1960.

16) Sandgate, C.P.S.K.



### **T. fragiferum** L.

Strawberry Clover.

15, 16.

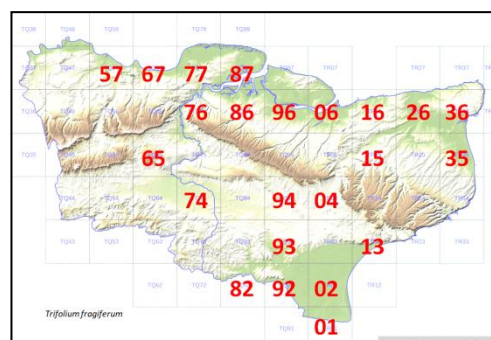
N.

23/51

Native. Brackish meadows near the sea and tidal estuaries, in 2), 3), 4) and 15) common; heavy clay pastures and roadsides inland; rare in 12); also on chalk very rarely in 6).

1<sup>st</sup> record, 1629: Cliffe, Johnson, *Iter*.

2) Plumstead Marshes, 1839, T. Sansom: Hb. R.J.S. & AA **BM**. 75 Swanscombe Marshes HMP. 57 Stone Marshes 1945. Greenhithe W.W.; Hb. Lamb 1870 **MNE**. 67 Shorne Marshes 1946. Dartford Marshes, Darent estuary, GMB. 77 Egypt Bay, High Halstow. 77 Cliffe. 87 Grain, 086753, 1946 **MNE**. 77 Upnor Marshes, 1949. 76 Wouldham Marshes, 1945. 76 Snodland: to New Hythe, 1945, 1949 **MNE**. 87 St Mary Hoo Marshes 61, HAS. 77 Cliffe Marshes, 1945 **MNE**. 06 Harty, 1955 **MNE**. Cuxton, Hb Lamb 1840 **MNE**. 06 Oare



<sup>609</sup> Marginal note: 13 modern records.

Creek, 1959. 06 Faversham Creek. 06 Seasalter Marshes, E. Robinson. 06 Shellness. Oare Meadow, HMW. 86 Chetney Marshes. 96 Conyer. Blacketts, Tonge. (no records for 97 or 07.)

3) 16 Swalecliffe. 16 Whitstable, Miss T Webber. Herne Bay, 1910, S.E.C.

4) 15 Lady Wootton Green, Canterbury, 1956 **MNE**. W of Minnis Bay ES. 26 E. of Reculvers 1946. 26 Meadow, Grove Ferry, 1946. 35 Princes Links, Sandwich Bay **MNE**. 36 Richborough 1946. 35 N of Deal 1946-1954 abundant in damp sandy areas behind dunes. 26 Dikeside N of Shuart, St. Nicholas, 62. Walmer Beach BS Furneaux. 26 Preston Marshes 1946 **MNE**, 1962 KFC. 35 Worth Minnis 1946 **MNE**. 35 Hacklinge Marshes 1946, 1956 **MNE**. 26 N of Paramour St, Ash, in Marshes, 1956 **MNE**. 26 NE of Stodmarsh, 1955 **MNE**.

6) Roadside verge, A.20, Wrotham By-Pass, 1959 **MNE**.

7) Nashenden, B Carter.

11) 74 Marden. 65 Trottiscliffe Sandpit, B. Carter.

12) 94 abundant in green lane on Weald Clay, Purchase F[ar]m, W of Great Chart, 1946; 1950; 1954, ES **MNE**.

04 Field S. of Bethersden, ES. 04 Nackholt / Hinxhill, field by Pond, ES; 1956! **MNE**. 93 By B.2070 N. of Birchett Wood, ES. 15 Green Court, Kings School, Canterbury, 1952, Mrs E. Milward. 13 Gibbons Brook, 1958, LJM.

15) 02 Romney Warren. 13 N. of Dymchurch. Hythe, 1905, S.E.C.

01, 82, 92, 93: not extracted.

‡ **T. resupinatum** L. Reversed Clover. [15, 16.]

Casual – no recent record.

1) Orpington, Mrs. Mallinson. E. Wickham tip Mrs L. Small. Sandy field W. of Farningham Wood, 1946.

6) Allotment, Strood, 1962, Mrs. M. Dolling.

12) Hothfield, Miss A.B. Cobbe, *B.E.C. Rep.* 1923, p.178.

13) Field, Etchinghill, Goudhurst, JS **TLS**.

‡ **T. tomentosum** L. Woolly Clover [15.]

Casual. "Shoddy" Alien.

4) Sandwich, D.McC., 1960, **MNE**.

‡ **T. aureum** Pollich<sup>610</sup> Large Clover [15, 16.]

V.C.16 BEC 19[ ], p.472.

Casual in crop fields.

1) Green St[reet] Green n[ea]r Farnborough 1937, JEL & HWM.

7) Rainham Park Wood, 1963, O.D.

11) Tonbridge E.C. Gilbert **TLS**.

16) Old R[ai]l[wa]y, Saltwood, LJM. Bombed sites Hythe, 1947, Miss V. Day.

**T. campestre** Schreb. Hop Trefoil. 15, 16. N.

(*T. procumbens* auct.)

Native. Dry pastures, chalk downs, roadsides, dunes, sandy ground. Widespread and generally fairly common, except in the Weald, where it is very rare.

1<sup>st</sup> record, 1632: *Trifolium luteum majus lupulinum* – Margate, Johnson. Descriptio,

A flower of this species was found in Late Bronze age strata at Minnis Bay.

1) Open sandy ground, W. side Farningham Wood; 82! Dry ground by ponds, Abbey Wood GAM, RAB. Ruxley Pits. Dartford Heath GMB. Beckenham (Elmers End) Hb. Davis 1916 **MNE**. Beckenham Place Park PCH. Keston C[ommon].

2) Grain. All Hallows, 1945 **MNE**. Oare Creek 62 HMW.

3) Banks, Hernhill, 1955 **MNE**.

4) Sandwich Bay 50 **MNE**; Deal Links 54 **MNE**; Walmer; Kingsdown Beach. Littlebourne, 1957, **MNE**. Track bank N of R[ai]l[wa]y 271692, N. of St Nicholas '62.

5) Pilgrms Way, Chevening PCH. Darwin's Bank, Downe JEL. Chalk Bank, Farningham Bypass.

6) E. of Dartford HMP. Stone gravel pits. Green St[reet] Green '45 **MNE**. Greenhithe chalk pits. Mounts Rd, Greenhithe, '44. Swanscombe Wood. Gravesend (Whitehill) 1812, R. Pocock **BM**; 1946! Chalk gravel pits. SE of Cobham. S. of Darenth Wood. Cuxton, r[oa]dside, PCH. Halling Warren. Downs E of Shoreham. Preston Hill.

<sup>610</sup> There are two accounts for this species, which are combined here.



- 8) Chilham. Lords Wood, Temple Ewell, 1959 **MNE**. Cheriton Downs Edees. Downs NE of St Margarets Bay '62. Free Down '62.
- 11) Larkfield Heath '59 **MNE**. Ryarsh Sandpits. Wrotham Heath '45 **MNE**. Bearsted. Leeds (Warren Wood) '44 **MNE**. Sandling '59 **MNE**. Harrietsham sandpits. Sandling, by A229. S. of Preston Hall in Ragstone Quarry 1945 **MNE**. N[orth] Pole, Teston, H. Lamb 1882 **MNE**. By A20 Hollingbourne 43 **MNE**.  
(unrecorded for Headcorn, Marden, Paddock Wood squares.)
- 12) Hothfield Common 1948. Ashford Warren 45 **MNE**. Willesborough Lees. Canterbury Miss T Webber.
- 13) R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], 1960, CAS.  
(unrec[orde]d Cranbrook /T[unbridge] Wells sq[uare]s – v[ery] r[are] Lamberhurst.)
- 14) (unrec[orde]d Woodchurch & Tenterden sq[uare]s, W. Oxney – Newenden – Sandhurst sq[uare]s.)
- 15) Romney Warren, 1946. Dungeness (Hamilton F[ar]m) 1960. Dungeness (Lighthouse) 1938, SEC. Shingle Beach, W. of Hythe, 1955. Lydd Common '56 **MNE**.
- 16) Shornecliffe, 1955. Folkestone Leas, 1945 **MNE**.

**T. dubium** Sibth. Lesser Trefoil.<sup>611</sup> 15, 16. N.  
Native. Dry roadsides, banks, walltops, pastures, open ground in woods, downs, dunes, shingle, commons, etc.: abundant throughout Kent.  
1<sup>st</sup> record, uncertain.

- 1) Hayes Common **MNE**. Keston Common 46 **MNE**. Chislehurst Common. W. of Farningham Wood. Joydens Wood. Holwood Park, PCH. Shooters Hill GMB. Ruxley Pits. Bexley Ch[urch] y[ar]d PCH. Dartford Heath 45 **MNE**. Blackheath GMB.
- 2) Higham Marshes. Upnor. Cliffe Marshes. S beach, Grain '55 **MNE**. Woolwich Arsenal PCH.
- 3) Whitstable.
- 4) Dunes, Sandwich Bay. Hacklinge. Stodmarsh, REW. Deal Links '54 **MNE**.
- 5) Darwins Bank, Downe, JEL. 3964 Well Wood PCH.
- 6) Green Street Green '44. SE of Dartford. Mounts Rd, Greenhithe. Northfleet. Ryarsh Downs. Halling chalk pits. Cuxton Downs. Downs E of Shoreham, PCH. Preston Hill, P.C.H. (Gravesend, R.P. **BM**.) Darenth Wood. Swanscombe chalk pits 60 HAS.
- 7) Bluebell Hill. Detling Downs. Down off Putt Wood, Ospringe, HMW. Squirrels Wood (Plateau drift ride). Field below Ch[urch] Wood Stockbury (ch[a]lk).
- 8) Alkham; River, KDR.
- 10) Darenth. By R[iver] above S. Darenth, PCH.
- 11) R[oa]dside, Wrotham Heath '44. Ryarsh Sandits '44 **MNE**. Ryarsh Roughetts '44. E. Malling. Leybourne. The Mote, Hb Lamb 1842 **MNE**. Sandling, by A29, '57 **MNE**. W of Hollingbourne by A.20. E. of Hollingbourne. Ditton [cross]roads. ¼m S of Marden 1958. By Pond E of Buckhall, Bethersden. R[ai]l[wa]y Hildenborough 563482 CAS.
- 12) Hothfield Common. Ashford Warren. Willesborough Lees. Stowting Meadows, 1954 **MNE**.
- 13) 53 Stone {Cross}, Ashurst, 518381 CAS. 53 Tunbridge Wells Common, Pryor? Hb. Lamb, 1838 **MNE**. 63 High Wood, T[unbridge] Wells, PCH.
- 14) R[oa]d side ¼m. S. of Hawkhurst Parish Church, 1955. Tenterden R[ai]l[wa]y track, 1959, **MNE**.
- 15) Shingle Beach W. of Hythe 1955. Lydd Common, 1956 **MNE**. Lydd Airport DMCC. Romney Warren.
- 16) Sandy ridge above Casebourne Wood, Seabrook, 1955. Sandy turf N. of Seabrook, 1955. Meadow, Darnley Vale, Sandgate, 1955. Shornecliffe, 1955.

**T. micranthum** Viv. Slender Trefoil.<sup>612</sup> 15, 16. N.  
Native. Short turf mostly on light soils, common on the coast and on sandy or gravelly ground inland, also on lawns; much less common on heavy soils. Unrecorded for Sheppey, Thanet, and for the Weald Clay.  
1<sup>st</sup> record, 1744: Blackheath, Ray, *Syn.*, ed.3, p331.

- 1) Hayes Common 1945 **MNE**. Keston Common '45, '46 **MNE**. Chislehurst Common W.W. Hayes Gravel pits, 1904, H.&J.G. **BM**. St Pauls Cray Common W.W. W. edge of Farningham Wood on sandy heath. Holwood Park, PCH. Dartford Heath, 1936 PHC; GMB. Shooters Hill GMB. Abbey Wood 1860, H.F.F.; 1936, PHC. Hayes [Old and New] Rectories on Lawns, D.McC.
- 2) Grain, S. beach 45 **MNE**. Faversham Creek, ½ m. above Shipwrights Arms, 1958, H. Wilks. Ham Marshes, Mrs. Verschoyle. (Dartford H. Lamb 1898 **MNE**.)

<sup>611</sup> In the manuscript, Lesser yellow trefoil.

<sup>612</sup> In the manuscript, Least yellow trefoil.



- 3) Old Sandpit, Westbere, L.W.W. Lawn, Seasalter, 1959. 123660 track Chestfield HMW. Trenley Park Wood, 1956, A. Grattan. Turf, Old Wives Lees, DHK. Swalecliffe, near sea, REW. Old Park G[olf] course, Fordwich, 1981.
- 4) Sandwich Bay: Deal Links, 1954 **MNE**.
- 6) Green Street Green (Darenth) '45 '46, **MNE**; 1960, HMP (by school). On Blackheath Beds, behind Shorne Windmill, 1946 **MNE**. Small co... Higham Upshire, on Blackheath Beds, 1955 **MNE**. Stone House grounds HMP.
- 7) Putt Wood, Ospringe, quarry grassland on Valley gravel, H. Wilks, 1958, **MNE**. Lawn, Eastling, 963565, C Turner.
- 8) Swanton Banks by R[oa]d '55 DACL.
- 10) 45 S. of Sundridge, R.A.C., 1958.
- 11) Ryarsh Wood, in rides. Ryarsh Roughetts. Rides, Oaken Wood, S. of E. Malling, 1962. By A20 E of Hollingbourne, 1955 **MNE**. Sandling, by Running Horses (F[olkestone] Sand) 1957 **MNE**. Approach track to Sandhurst Wood. Wrotham Heath 1945 **MNE**.
- 12) Willesborough Lees, '44. Hothfield Common, 1903 Lamb **MNE**; 1945 **MNE**!; 1962, EGP. Ashford Warren '44.
- 13) Tunbridge Wells Common, 1944, **MNE**. Tennis Court, Skinners School, Tun[bridge] Wells, CAS. Ride, Sissinghurst Park Wood (T[unbridge] W[ells] S[and]) 1954 **MNE**. Angley Wood RAC. Hook Green, GE Shaw. Lawn weed Cranbrook DS.
- 14) High Halden ch[urch] y[ar]d RAC.
- 15) Romney Warren, 1945; 1962. Littlestone, BS Furneaux. Lydd Airport, DMCC.
- 16) Leas Cliff, Folkestone. Sandy turf, N. of Seabrook, 1955.

**T. pratense** L. Red Clover (includes cultivar, var. *sativum* Schreb.) 15, 16 N & H.  
var. **sylvestre** Syme.<sup>613</sup>

Native, abundant throughout the county in meadows, scrubland, old grassland on chalk, clay, and sand, and roadsides.

1<sup>st</sup> record, 1632\*: "Trifolium pratense purpureum... Margate to Nash", Johnson, *Descriptio*.  
c.1425: calyx and seeds in plaster from house at Larkfield, J.R.B. Arthur in Plant Remains.

var. **sativum** Schreber.

Common, as a relic of cultivation, in ley grassland, old arable land, and waste ground.

Records for v. *sylvestre*:

- 1) Keston. Crofton Heath PCH. N Cray tip. N. Crayford. Shooters Hill, GMB. Beckenham Hb. Davis **MNE**. Ruxley Pits. Farningham Wood 82. Abbey Wood GAM; RAB. Blackheath GMB.
- 2) Woolwich Arsenal PCH. Sea wall, Dartford Marshes, 1961. Higham. Snodland S. Marshes, 44. Halling. Grain. Dartford Heath GMB. Shornmead, 1822 R. Pocock **BM**. A.249, N. of Iwade.
- 3) Whitstable, 1912, AJW **BM**, 1958.
- 4) Wingham fen, **MNE**, basin to Preston. About Sandwich. Worth. Ham. Hacklinge. Richborough sidings, **MNE**. Deal Links **MNE**. Ash, RGW. Track Bank, 271692, N. of R[ai][wa]y, St Nicholas at Wade, 62.
- 5) Halstead PCH. Chalk W. of Eynsford PCH. Chevening, Pilgrims Way, PCH. Darwin's Bank, Downe, JEL.
- 6) Shorne, near Windmill. Upnor. Downs above Kemsing PCH. Downs E of Shoreham. Green Street Green **MNE** 1947. Mounts Rd, Greenhithe, PCH. Swanscombe Wood. Swanscombe pits HAS.
- 7) A249 below ch[urch], Stockbury.
- 9) Free Down, abund[ant], '62. Minster Ch[urch] y[ar]d.
- 10) Darenth meadows **MNE**. Dartford HMP. St Johns Jerusalem PCH. E of Farningham R[oa]d Sta[tion] PCH. Shoreham Ch[urch] y[ar]d, PCH.
- 11) Fairbourne Heath by R[oa]d. Meadows at Edenbridge, Delaware, Chiddingstone, Penshurst. Maidstone H. Lamb, 1880 **MNE**. Vintners Quarry, Lrag, 1953 **MNE**. Birling Marshes **MNE**, 1943. Shipbourne Forest Plaxtol Rd., W side. 893454, R[oa]dside Leybridge Headcorn 62. Pond E of Backhall Bethersden.
- 12) Brook (Cuckoldscoomb Fen). Brabourne meadows. Stowting Fen. Chilston Park R[oa]dside. Godmersham Village A28. ½m NE of Chilham by A.26.
- 13) Ellis' Wood, Lamberhurst, 1946 **MNE**. Stone [Cross] Gill, Ashurst, 518381 CAS. T[unbridge] W[ells] S[and] R[oa]dside E of Upper Haysden. R[oa]dside ½ m S of Penshurst TWS. R[oa]dside W. of Chidd[ingstone]

<sup>613</sup> This is not a legitimate name.

Hoath. Bayham CAS. Field (Past[ure]) E. of Horseshoe Green (Wad[hurst] C[lay]). G[rassy] field Rusthall L.L.W. Combwell Wood 1979.

15) St Marys Bay, 1881, J.F.D.F.

16) The Lince, N. of Asholt Wood. Darnley vale calc[areous] meadows, 1955. Newington Moor 1955. Grassland below Scars W. of Hythe 1955. Sandy field above Casebourne Wood, Seabrook, 1955. Meadow W. of Horn Street, Seabrook.

**T. medium** L. Zigzag Clover. 15, 16. N.

Native. Roadsides, hedgebanks, rough grassland, and wood borders; mostly on rather heavy loams or clays. Widely distributed and common locally in the Weald, on the Hythe Beds, and on the Pliocene plateau soils of the E. Kent chalk.

1<sup>st</sup> record, 1777: Bysing Wood, J. [sic] Jacob.

1) Chislehurst Common. Camden Park. Keston, near the bog, W.W. [Plaistow, Cole; Eltham, Hb. Dillenius.] R[ai][wa]y bank Orpington, 1949, **MNE**. Elmers End H[b] Davis 1915 **MNE**. Ruxley Pits. Holwood, D.McC. Sparrow Fields Swain. Near Falconwood Sta[tion] GMB.

2) Stone Marshes, 1931, P.H.C.

3) Bysing Wood, E. Jacob. Perry Wood, Stowell, Phyt. N.S. 1 378. S. of Bigbury Wood, RGW. St Stephens Hill RGW. Field near Church Wood, Blean, RGW.

4) Ash, RGW.

6) Swanscombe Wood. The Thrift, S. of Stone cutting Southfleet, 1963, WAS. [E. of Gravesend, R. Pocock **BM**.] N E of Otford by R[oa]d to Romney St[reet] GMB.

7) Kings Wood, Challock, frequent. Challock Lees. Rattle Hall, ES.

8) Stone Street verges. Upper Hardres. West Wood, Stowting, 1956 **MNE**; and N. of Stelling Minnis. E. of Petham. Elham Park Wood, 1955 **MNE**. Wood borders, Hastingleigh. Capel le Ferne, near edge of cliff.

10) Roadside S from Ide Hill. Coombe Bank RAC. Dry Hill quarry, Chevening, 1954 **MNE**. Dunton Green Brickfield, AB.

11) Ditton Ragstone pit, 715556, CAS. Oaken Wood, Barming, H. Lamb, 1901 **MNE**; FR.! Larkfield Heath. SE corner Mereworth Woods by R[oa]d. S. of Platt, DMCC. Kings Wood, Ulcombe. Langley Heath. R[oa]dside W. of Sutton Valence. Fairbourne Heath. Pits E of Aylesford 936588, 56, ES. Ryarsh Wood, 1945 **MNE**. Near Startled Saint, W. Malling, 1960 **MNE**. Shipbourne Forest Plaxtol Rd. Henghurst, Woodchurch, ES.

12) R[oa]dside N. of Ham Street, 1946. R[oa]dside 1m SE of Shadoxhurst ES. R[oa]dside Birchett Wood, ES. R[oa]dside Sugarloaf ES. R[oa]dside W. of Priory Wood, ES. Warren Woods, by A20. R[oa]dside 1m SE of Kingsnorth Ch[urch], ES. Halfway Ho[use] by B.2070 S. of Kingsnorth ES. Mersham Quarry by A.20, ES; 1954, **MNE**. Goldwell Quarry (rag[stone]) 774427 ES. 997377, N of Ham Street ES.

13) By Stone Cross Gill, Ashurst, 518381 CAS. 1m S of Penshurst (South Park R[oa]dside). Bedgebury. Chittenden Wood. Speldhurst, '51, Mrs M Mallinson. M[oun]t Pleasant, Lamberhurst, 1938, JRW; 1944! **MNE**. E & N borders of Bayham Woods. Matfield Green, roadsides, 1947 **MNE**. Horsmonden. Kilndown. R[oa]d N. of Kilndown, Goudhurst, 1946 **MNE**. Tun[bridge] Wells, 1817, J.F.Y. **BM**. Rusthall Common, L.W.W.; PWR. Combourn, Goudhurst, PWR. Pembury Rd, Tonbridge CAS. Southfields Park, Southborough, CAS. R[ai][wa]y W. of Tun[bridge] West Sta[tion], 1960 CAS.

14) The Brogues, S. of Biddenden. Near Breeches Pond, Tenterden. Benenden.

16) Aldington Frith, 1950 **MNE**.

**[T. ochroleucon** Huds. Sulphur Clover

1) "Bank;...Greenwich", Dickson Fl. Met. P.47.

2) Sheppey, Miss de Satze, *W.F.S. Mag[azine]*., 1947.

6) "Between Northfleet & Gadshill"...*"Trifolium montanum majus flore [albo] sulphureo"*, C. Merrett, *Pinax*, p.121, 1666.]

It is likely that these records are errors, except perhaps Merrett's. The Sheppey record almost certainly refers to *Dorycnium* (see below).

The species is common in much of Essex and comes as near to Kent as Kelvedon Hatch and Stapleford Tawney; the latter is only 11 miles from the nearest part of Kent. It is a species of calcareous clay, grassland and roadsides, and might be expected in N. Kent, but the evidence is not quite conclusive.

**T. stellatum** L. Starry Clover [16.] Possible former N.

Dartford saltmarsh before 1700 (Hb. Du Bois.) [Long extinct in Kent.](#)<sup>614</sup>

‡ **T. incarnatum** L. ssp. **incarnatum** Crimson Clover. [15, 16.] H.

[Occasional, as a relic of cultivation only.](#)

- 1) Casual, Hayes, D.McC. W. Wickham, near Nash, H[b]. Davis, 1916 **MNE**.
  - 3) Tyler Hill, crop relic, RGW.
  - 4) Fields near Ash, W, WJL Sladden, 1947. Crop relic, Grove, RGW.
  - 8) Kingston, in arable. Chilverton Elms, 1955, BSBI Excur[sion]. Felds N of Nackington DHK.
  - 9) Freq[ue]ntly cult[ivated] in Thanet, L.W.W.
  - 11) Fields, Hermitage Lane, Barming, 1944.
  - 16) Sandgate, 1854, Hb. J. Groves **BM**. Kiln Wood, Sandling, L.J.M.
- (These records have little significance: plant not seen truly naturalised.)

**T. striatum** L. Knotted Clover.<sup>615</sup> 15, 16. N.

[Native, open sandy and gravelly ground, on heaths and near the sea; locally common and widely distributed, except in the Weald.](#)

[First record, 1790, Blackheath; Curtis iv, p.51.](#)

- 1) [Blackheath, Curtis.] [Bexleyheath, 1866, A.A. **BM**; H.E.F. **BM**.] [n[ea]r Erith, Hb. JS Mill.] [Hurst, AHWD.] [W. of Mottingham AHWD.] Abbey Wood, H. Lamb, 1861 **MNE**. Keston Common, JSM; H[b.]. Davis 1910 **MNE**; (1946! **MNE**); HMP. Chislehurst Common WWR (1944!). Hayes Common J.J. Scargill (1945, JEL, F.R.! & var. *erectum* Gasp.); 1954 **MNE**; 1946 **MNE**. Dartford Heath, 1887, H.G. **BM**; W.W.R. (1946!).
- 2) Gravelly River wall (l[eft] bank), New Hythe, 1943 **MNE**. Filled in Canal, Higham, 1944. Gravelly Medway bank, Aylesford, C. West. Grain, B.D.J. (1945!); N. coast 1945 **MNE**. Grain, S. Beach 1955 **MNE**. [N[ea]r Faversham Union, Cowell.] Ham Marshes, by P.H. 1954, RWB. Oare Marshes, REW. Shellness, Sheppey, RWB. Seasalter RGW.
- 3) Old sandpit, Westbere, (behind cement works) L.W.W. Whitstable RGW. Swalecliffe, RGW. Path in woods above Boughton Street, 1958, Mrs. B. St Martins Ch[urch] Y[ar]d, Canterbury, 1939, Mrs J Nisbet. Chislet, MEM. Rough Common RGW. Old Park Golf Course, Fordwich, 1981.
- 4) Sandwich Bay, FJH; DMcC **MNE**; (1956!). N of Deal 1863 JBB **BM**; 1954 **MNE**. Pegwell Bay, FJH (1946!). Walmer. Kingsdown.
- 6) Stone House Grounds 562742 etc.; Stone sand pits, HMP. Green Street Geen, E. de C. (1945! 1951 **MNE**) (=Lane End, AHWD). Shorne, gravelly area near Windmill, on Blackheath Beds, 1945. [Upnor, P. Jacob in FGK.] Higham Upshire, on Blackheath Beds, 1956 **MNE**.
- 8) foot of Dover cliffs, JSM. Petham, E Robinson.
- 10) Gravel pit, S. Darenth, 1955, PCH. Bradbourne, Sevenoaks, Mrs E. Waley.
- 11) Wrotham Heath, 1945 **MNE**; 1960 DMcC **MNE**. New Hythe Sand pits 1946. Bearsted, 1946. 1 mile W. of Hollingbourne, JBM **BM**; by A.20, 1944-55 **MNE**. Opp[osite] "Running Horses", Sandway, 1957 **MNE**. Sandway Sandpit, 1965, B. Dodds.
- 12) Hothfield Heath, 1945, 1949 **MNE**. (var. *erectum* Gasp.) Hothfield, Miss A.B. Cobbe, *BEC. Rep.* 1923, p.178. Ashford Warren, 1945 **MNE**. Ashford Bypass roundabout, 1951, ES.
- 15) Ancient dunes, S. of W Hythe, 1962. Romney Warren 1954 **MNE**. Greatstone dunes. Shingle beach, W. of Hythe, 1955. SW of Dymchurch, FJH (1946!). Dungeness FJH (1946!) **MNE**. Littlestone ESM (1946!). Midrips WJLS. Lydd Airport, DMcC.
- 16) 23 Folkestone Leas, Ulyett; 1945 **MNE**. [East Wear Bay, JSM.] 13 Shornecliffe, 1955. 13 Sandy pasture near Saltwood Castle, 1959, LJM. 13 Sandy turf N. of Seabrook, 1955, **MNE**.

var. **erectum** Gaspar

- 1) 46 Hayes Common, 1945, F.R., J.E.L.
- 12) 94 Hothfield Heath, 1945.

**T. scabrum** L. Rough Clover.<sup>616</sup> 15, 16. N.

[Native. Sand and shingle beaches and dunes, common near the sea; now extinct inland on sandy heaths; from Grain, by Shellness and Seasalter to Kingsdown; Hythe to Dungeness.](#)

<sup>614</sup> Given in check-list, but no account in the manuscript.

<sup>615</sup> Thus in check-list; given as Soft knotted Trefoil in the manuscript.

<sup>616</sup> Given as Rough knotted Trefoil in the manuscript.

First record\*, 1763: Sheppey, etc. Martyn Pl. Cant. P.56.

- [1] [Blackheath, Cooper, Fl. Met. Greenwich Park, Power (Hb. Geldart). Chislehurst Common W.W.R.; W.W., c.1925-30. Bickley 1869, HFP in Hb. Croydon NHS.] Dartford Heath, 1924, Hb. St.J.M.
- 2) Grain S. Beach, 1946-58, **MNE**. Sheppey, Martyn; H[b]. Davis, 1911, **MNE**. Upnor, shore, DMCC. Beach, Shellness, 1956. Sheerness, FJH. Beach W. of Sportsman, Seasalter, 1958, H. Wilks **MNE**. E. of Sportsman (Red Sluice) 1959, **MNE**. Ham Marshes, Mrs Verschoyle. Oare, REW.
- 3) Herne Bay to Whitstable, W. Wood, FGEK. Seasalter, A.H.W.D.; 1882, H&JG **BM**; 1883, E de C **BM**. Whitstable, RGW.
- 4) Dunes, Sandwich Bay, FJH; abund[ant] 1948 **MNE** (1956, abundant!). Dunes N. of Deal, 1823, R. Pocock **BM**; 1954 **MNE**; 1961 **MNE**. S of Pegwell Bay, J.S. Mill (Hb. Mill). Kingsdown Beach. Walmer beach, Miss Day (1946!).
- 6) [Dartford to Greenhithe, Winch, NBG; Darenth, JC Melvill; Northfleet to Gravesend, Curtis; Gravesend, 1763, Martyn Pl. Cant. p56]
- 8) [Denton, on introd[uced] shingle, casual, DACL.]
- 15) E of Hythe, 1945 **MNE**. Shingles W of Hythe, Cowell FGEK; (1955! **MNE**; 1958 **MNE**). Ancient dunes, S. of W. Hythe, 1962. Romney Warren, OBG (1945! **MNE**; by r[oa]d, 1962). Dymchurch, Cowell (1946!); RGW. Bird obs[ervatory] and Lighthouse, Dungeness, ESM (1946!). Littlestone ESM (1946!).
- 16) Folkestone FJH (Leas, 1945!).

‡ **T. hirtum** All.<sup>617</sup>

Rose Clover.

Wool alien casual.

‡ **T. lappaceum** L.<sup>618</sup>

[Bur Clover.

16.]

1) Eltham, Mrs. Wedgewood, BEC Rep., 1921, p.378.

‡ **T. spumosum** L.<sup>619</sup>

[Pink Clover.

16.]

[1)] Wickham tip, Mrs Small teste JEL.

**T. arvense** L.

Hare's-foot Clover.

15, 16.

N.

Native, open sandy or gravelly ground on heaths, grass-heath, sandpits, dunes, sandy shores, dry pastures, and neglected arable land; locally common near the sea and on the Folkestone and Tertiary Sands.

1<sup>st</sup> record, 1629: between Grain and Cliffe, Johnson, *Iter*, p.8.

- 1) Hayes Common, 1924, JEL; 1938 DMCC (1948!). West Wickham Common, H[b]. Davis, 1915 **MNE**; 1938, DMCC. Keston Common, 1936 PHC; 1948, E.B. Bangerter; PCH. Dartford Heath, 1919; E.B.B.; GMB Farningham Wood, PCH; 82! Repository grounds, Woolwich, LRA, 1934 **MNE**. Ruxley Pits. Chislehurst Common; near St[ation], Crayford; Blendon, GMB.
- 2) Sandy ground by Conyers Creek, Teynham, 1943. Canal path, Gravesend, 1819, R. Pocock **BM**.
- 3) Hackington, E. Robinson. Hales Place, Miss E.M. R[oa]d verge SW of Herne Bay, REW. Thanet Way verge, near Roman Galley, PH, REW. Old Park, G[olf] C[ourse]. S. of Fordwich.
- 4) Dunes, Sandwich Bay **MNE**. Dunes N. of Deal, JBS **BM**; 1954! **MNE**. Walmer Beach. Kingsdown Beach.
- 6) Shorne Warren. Darenth Wood. Stone pits, HMP. Green St[reet] Green. Green Street Green to Bean. Swanscombe Wood, PCH. In grassy scrub, on Blackheath Beds, Highham Upshire, 1958.
- 8) Stelling Minnis, E. Robinson. [Denton on introd[uced] shingle, casual, DACL.]
- 10) R[ai]l[wa]y Bank, Bat & Ball sta[tion], Sevenoaks. Sandpit by R[ai]l[wa]y, Riverhead, CAS. Chipstead, FSEF. Greatness in sandpit RAC. 444547 sandy bank Westerham, by Croydon Road, DPY, 1956.
- 11) Wrotham Heath 1945 **MNE**. Sandpit, ½m. W of Wrotham Heath, 1944. Lawn, The Dene, Borough Green, CAS. Trottscliffe Sandpit, 1952, B Carter. Ryarsh Sandpits 1945 **MNE**. S. of New Hythe. Bearsted, H. Lamb 1885 **MNE**; F.R. 1m W of Hollingbourne by A.20.
- 12) Hothfield common. Ashford Warren. Brabourne Lees. By A.20, Woolpack, Hothfield. Charing Heath, ES; 1954! **MNE**.
- 15) Romney Warren. Lydd Common. Littlestone, Miss E. Armitage (var. *littorale* Jord.) *B.E.C. Rep.* 1926, p.22; GMB.
- 16) Folkestone Leas.

<sup>617</sup> In check-list; no manuscript account found.

<sup>618</sup> Not in check-list.

<sup>619</sup> Not in check-list.

‡ *T. angustifolium* L. Narrow Clover. [15, 16.]

Casual. "Shoddy alien".

4) Shoddy field, Ash, DMcC, 1959 **MNE**. Shoddy field, Sandwich, DMcC, 1960 **MNE**.

9) Shoddy, Birchington, Mrs B. Dodds, 1960 **MNE**.

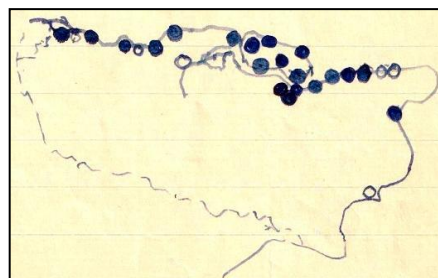
11) Shoddy, Comp, DMcC., 1960 **MNE**.

*T. squamosum* L. Sea Clover 15, 16 N.  
(*T. maritimum* Huds.)

Dry saltmarshes, sea walls, and grassy banks, on clay or silt soil near the coast and estuaries. Very local, and apparently confined now to the North Kent coast.

1<sup>st</sup> record, 1633: Dartford, Johnson in his edition of Gerard's *Herbal*, p.1208.

2) Between Greenhithe and Northfleet, 1914, T.J.F. **BM**; L.W.W.; PHC. Stone Marshes, hear sea-wall, 1945, JEL & FR, **MNE**. E. Erith Marshes, Cooper, Fl. Met. (R.A.B., 1948!). Shorne Marshes, 1946 **MNE**. Cliffe Marshes, 1946. Grain, ESM, 1892 **BM**; [locally] a[bandant] on grassy banks near the Fort, Grain, 1946-9, **MNE**. Sea wall Scrapsgate, Minster, a[bandant], 1965, JE Nichols. Sheerness Canal abund[ant], 1950, OD. Grassy banks near the Ferry, Isle of Harty, 1955-60 **MNE**. [Isle] of Elmley, 1950. By Faversham Creek, Cowell (D.H.K. 1945). Warden p[oin]t, F.J.H. Roadverge W of Seasalter, HMW. & behind beach W. of Sportsman, Seasalter, 1958, H. Wilks; 1986! **MNE**. Eastchurch Marshes, A. Davis, 1918, **MNE**. [Formerly Dartford Marshes, Gerard em[aculatus]. John[son]; Gravesend, Cooper (JBS 1867); Strood, E Jacob; Sheerness 1739, Hb Blackstone **BM**; Sheerness, Doody; Shellness E. Jacob; Graveney, Stowell.] Oare Creek, 1959 **MNE**, 1962. S of Warden, G.L. Davidson, 025713, 1961. Ham Marshes Mrs Verschoyle.



3) a[bandant], fields, North of Westbrook, Hampton 1954 REW. Clay cliffs opp[osite] George Hotel Herne Bay REW. Whitstable Harbour H.M.W. Cliffs E of Herne Bay, '47 DHK. Abund[ant] Deck House, Island Wall = Salt Marsh, W. side of Whitstable, 1958, H. Wilks, 103664. Swalecliffe, W. Wood in Cowell 134674<sup>620</sup> (L.W.W., 1949; Miss E Milward, 1954; field at mouth of brook, 1954 REW; ES 1956. Herne Bay, 1868, H. Trimen **BM**; H. Elgar 1898 **MNE**; 1910, S.E.C. Reculvers, Turner; E. of, H.M. Wilks, 1959.

4) [Sandwich Saltmarshes, Dillwyn; DMcC 1937; but not reported since.] Pegwell Bay, 1954, J.O.

[16] Folkestone, G. Walton.]<sup>621</sup>

E Erith; Stone; Swanscombe; Shorne; Cliffe; Grain; E[ast]ch[urch]; Warden; Elmley; Harty; Oare; Faversham; Herne n[ea]r Sportsman; W Whit[stable]; W[hitstable] Harbour; Swalecliffe; E. Herne Bay; E of Reculvers; Pegwell

*T. subterraneum* L. Subterranean Clover.<sup>622</sup> 15, 16. N. 20/51

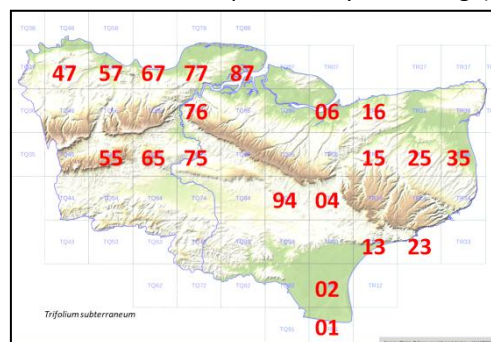
Native. Sandy or gravelly grass heaths, both in turf and in open ground; widespread but rare and only locally plentiful. Not particularly a coastal species.

1<sup>st</sup> record, 1670: between Eltham and Deptford, Ray, *Cat. Angl.* p.306.

1) 57 Dartford Heath, Cooper, Fl. Met.; 1977, H.&J.G. **BM**; FJH; (1946!; 1955, HMP). {Dartford, H. Lamb 1896 **MNE**.) Lawn weed, Langley Court, Beckenham, 1950, DPY. (\*1670: Eltham to Deptford, Ray, *Cat. Angl.*) [Blackheath, A.A. **BM**; Greenwich P[ar]k, J. Sowerby.] Ruxley pits, TH Angel.

2) [77 Upnor, P. Jacob, Cowell, Fl Fav: not since.] Ham Marshes. 06 Faversham, Cowell; (1946, Mrs W Verschoyle). Queenborough, E.S.M. Dry gravelly bank, Joyce G[ree]n, Dartford Marshes, GMB. 87 Grain, N. Beach 1945 **MNE**. 87 Grain near the Fort, ESM; 1945! abund[ant] **MNE**. 87 Grain S. Beach 1955 **MNE**. Marshes N. of Higham Church, J.B. Marshall; 1962, Mrs MH Dolling. 87 Stoke Marshes, W. Dolling 1961 **MNE**. Oare, REW.

3) 16 Sandpit, Westbere. 25 sandy verge E. of Elbridge, L.W.W.



<sup>620</sup> It is unclear which of the entries this gridreference belongs to; it can scarcely have been Cowell's, although placed below this.

<sup>621</sup> There is some appearance of this having been deleted.

<sup>622</sup> Given as Subterranean Trefoil in the manuscript.



15 Rough Common, Miss T. Webber; RGW. [06 Hernhill, Turner.] Swalecliffe RGW. Bigbury Gravel pit 1965. St Thomas' Hill RGW.

4) 35 Dunes N. of Deal, F.J.H. (1946-1954! **MNE**). 35 Walmer Beach, L.W.W. 35 near Club House and on dune grassland; Sandwich Bay, 1949→, local. Stodmarsh, Undertrees F[ar]m, LWW; REW. ½m SW of Stodmarsh LWW.

6) 57 Green Street Green, E. de C. (1946→! 1949-1951 **MNE**; 1959 PCH). [Gravesend, 1817, R. Pocock **BM**.] 57 Grassland at Stone House 559742, Stone, H.M.P. 67 Shorne, behind Windmill, 1945→**MNE**. 76 (E) Strood, Broomhill allotments, Mrs M.H. Dolling.

[7] 96 Rodmersham Green, FJH.]

[8] 34 Ringwould, Mrs. Benson.]

10) Bradbourne, Sevenoaks, Miss E Waley, 1939. 65 Sandpit Wrotham, DMcC **MNE** 1960.

11) 75 Sandling, opp[osite] Running Horses, 1957 **MNE**. [Penenden Heath, H. Lamb, 1885 **MNE**.] 75 Roadside, Sandling Wood, 1960, E.G.P.

12) 94 Hothfield Common Hb. J.S. Mill opp[osite] "Woolpack" (1945→!1962) **MNE**; 1981. Ashford By Pass ES. A20 Warren Woods ES. [Ashford Warren E.S.M.] 04 Willesborough Lees, 1945, **MNE**. Charing Heath RGW. N. of Fishpond Wood Smeeth RAC (=Brabourne Lees).

15) 13 Ancient dunes S. of West Hythe, 1962. 02 Romney Warren, Dillwyn (1945!) 1962! **MNE**. Littlestone, BS Furneaux. [13 Shingle W. of Hythe HB Mackeson (Cowell, FGK).] 01 Road near Hamilton Farm, 1960. Palmarsh gavel pits LJM. 01 Dungeness, FJH; (01 South Brooks, 1946!). 01 Midrips, 1946 **MNE**. The Wicks JHL, 1946.

16) 23 W end of Folkestone Leas, 1946 **MNE**. 13 Sandy turf N. of Seabrook, 1955, **MNE**. 13 Ridge above Casebourne Wood, Seabrook, 1955. 23 on F[olkestone] Sand dry slope above Darnley Vale, Sandgate, 1955. Pasture Brockhill, LJM. Gossy Banks LJM. Hythe W scars Swain.

#### Lupinus L.

‡ **L. arboreus** Sims Tree Lupin. [16.]

Widely naturalised esp[ecially] sandy areas incl[uding] the coast.

1) Naturalised, Crofton Heath, PCH.

6) abundantly naturalised in old clay pits at the Thrift, S. of Stone.

10) R[oa]dsides N. of Bat & Ball, Sevenoaks, K.E. Bull, 1962.

‡ **L. x regalis** Bergmans (**arboreus x polyphyllus**).<sup>623</sup> Russell Lupin.

Often planted and escapes on waste ground.

‡ **L. polyphyllus** Lindl.<sup>624</sup> Garden Lupin.

Naturalised on waste ground.

#### Laburnum Fabr.

‡ **L. anagryroides** Medik. Laburnum. [15, 16.]

Naturalised widely now.

1) Ruxley Pits.

2) W. Wickham 55 JM Sherwood. 36 Hayes Sta[tion] PCH.

6) 57 chalk pit, Greenhithe, G.C. Druce (BEC, '21, 378); HMP. Mounts Wood PCH. 67 self-sown on bank Gravesnd 61, HAS.

12) 03 by R. Stour Smeeth WM 1959. Canterbury Bombed sites DHK.

#### Cytisus Desf.

**C. nigricans** L.<sup>625</sup> Black Broom. [15.]

Nat[uralise]d in old gravel pit, Aylesford, 1970

**C. scoparius** (L.) Link<sup>626</sup> Broom. 15, 16. N.

<sup>623</sup> Given in check-list, but no account in the manuscript.

<sup>624</sup> Given in check-list, but no account in the manuscript.

<sup>625</sup> Given in check-list, but no account in the manuscript.

<sup>626</sup> *Sarothamnus scoparius* Koch. in the manuscript; *C. scoparius* L. in check-list..

Native. Heaths, scrub, open glades in woods, old sand and gravel pits, etc.; mainly on light soils, but not confined to them; very common, but not recorded for Sheppey or Thanet. The var. *prostratus* is abundant on the older shingle at Dungeness, and forms a “climax” in the succession there.

1<sup>st</sup> record, 1629: between Grain and Cliffe, Johnson, *Iter*.

1) Keston Common. R[ai]l[wa]y S. of Petts Wood. St Mary Cray, R[ai]l[wa]y banks. , R[ai]l[wa]y W. of Swanley. Hayes Common 1916 Hb D[avis] **MNE**; 1958! Abbey Wood, GAM, RAB. Ruxley Pits. By R. Cray. N. Cray, PCH. N. Cray Wood, PCH. Shooters Hill Woods, GMB. Farningham Wood, PCH; 82[!]. Up[pe]r Hockenden. Swanley, PCH. Joydens Wood. Dartford Heath. Hollows Wood, SE of Chelsfield.

2) Old Canal, Higham, 1944.

3) abundant N. & S. of Dunkirk, 1947 **MNE**. Holly Hill, Boughton. NW Corner Ellenden Wood, REW. Blean Wood, Boughton. Mincing Wood. Church Wood. Thornden Wood. Bigberry Wood. Swanton Farm, Littlebourne. Chequers Wood. Old Park. Fishponds Wood W. of Harbledown, 1950 **MNE**.

4) Wenderton Manor Wood, '59. B Nash.

5) Knockholt, 1947. SW of Timberden Bottom.

6) Cobham, J.B.M. 1938 **BM**. Horton Kirby. Horton Wood. Mounts Wood, Greenhithe. Swanscombe Wood. Darenth Wood. Lords Wood, Darenth. E Shorne Hill on sands & gr[avel], 1961 HAS. A2 Shorne, on sands & gr[avel], 1961 HAS.

7) Down NW of Three Squirrels, Stockbury, '44. Wood and Down opp[osite] Putt Wood. Putt Wood.

8) Frandham Wood KDR. Reinden Wood, on Pliocene loam, 1962. Lords Wood, Temple Ewell, 1949 **MNE**. Near Swingate Inn, Guston, B. Nash.

9) Ramsgate, RGW.

10) Seal Chart. Ightham Common and sandpits. Oldbury Hill. Bitchet Common. Westerham Wood, B. Sennitt.

11) Wrotham Heath. Platt Woods. Roughetts, Ryarsh. Sandpits, Ryarsh. Leybourne Wood. Addington. Larkfield Heath. Ham Hill. Sandpit E of Platt. Sandling Wood. Penenden H[ea]th 1843 Hb L[amb] **MNE**. Bearsted. 1m W. of Hollingbourne 1944 **MNE**. Leeds Castle, Warren Wood. Ditton Quarry. Oaken Wood. Mereworth Wood. Comp Woods. Barming Heath, 1882, Hb L[amb] **MNE**. Allington 1882 **MNE**; 1961 E.P. Shipbourne Common. R[ai]l[wa]y Hildenborough 563482 CAS.

12) Ashford Warren '44.

13) 53 Gill, Stone Cross, Ashurst, CAS. 63 by A.21, NW of Lamberhurst. 73 Bedgebury. Blackbush Wood, DS. 63 High Wood, T[unbridge] Wells, PCH. 64 Pembury W[ater] Works, PCH. 64 Pembury Woods. Combwell Wood 1979.

15) var. *prostratus* Dungeness, 1933, T.J.F.**BM**, the dominant plant over much of the Dungeness shingle. Hythe shingles. In a paper by J.K. Morton (Chromosome studies on *Sarothamnus scoparius* and its ssp. *prostratus* (Bailey) Tutin, *New Phyt.* 54, pp68-69, (1955) it is stated that ssp. *prostratus* has 2n=48 while ssp. *scoparius* has 2n=24. It is suggested that ssp. *prostratus* arose as an allotetraploid from ssp. *scoparius*. Morton only cites ssp. *prostratus* for the coasts of Cornwall, Pembroke, Cork and the Channel Islands.

#### Ceratonia L.

‡ **C. siliqua** L. <sup>627</sup> [Carob Tree.]

Casual on dumps.

#### Spartium L.

‡ **S. junceum** L. Spanish Broom. [15, 16]

Naturalised from plantings.

1) By A.2, Rochester Way, 506737, Bexley, H.M. Pratt (as *Genista tinctoria*); G.M. Brown.

15) Seashore, Hythe, 1876, J.F.D. **BM**.

#### Genista L.

**G. monspessulana** (L.) L.A.S. Johnson <sup>628</sup> Montpellier Broom.

Naturalised at Dartford.

#### G. tinctoria L.

Dyer's Greenweed.

15, 16.

N.

Native. Grassland, scrub and woodborders, principally on heavy clay soils, widespread but not common, but frequent and locally abundant in chalk grassland in the Dover district.

<sup>627</sup> In check-list; no account in the manuscript.

<sup>628</sup> In check-list; no account in the manuscript.

1<sup>st</sup> record, 1629: Stoke, Johnson, *Iter*.

- 1) Darrick Wood, Farnborough, WMG; W.W. (½m N. of Farnborough Church, LNHS.) (‡ Rochester Way, Bexley and Dartford Heath, prob[ably] planted, H.M.P. This is *Spartium junceum*, teste G. Brown.) Sparrow fields, Crofton, Miss CA Swain. [Between Bromley and Pickhurst, Spooner]. BromleyCommon, 1961, J.R. Palmer.
- 3) Tankerton E. Cliff, 1944-50: RGW. Hempshall Wood, S. of Whitstable, RGW. East Blean Woods, ESM; (L.W.W.) 1947. Cliffs, E of Herne Bay, 1893, H. Elgar **MNE**; F.J.H. (R.E. Wood, 1952). Field W of Bullockstone Lane, Herne Common, REW, 1950. Bishopstone to Reculver, 1956. Cliff top W of Swalecliffe (Priest & Sow Corner) REW.
- 5) Open woodland E of Badgers Mount, 1955, F Swain. [Between Cudham and Knockholt, J.S.M., 1863. Chalk downs SE of Salt Box, Biggin Hill, 1906, W.H.G. Chalk downs near Downe, 1906, WHG; 1915, Hb. Davis **MNE**.]
- 6) Abundant on hillside in grassland and scrub on London Clay, Lodge Hill, Cooling, 1944 **MNE**; 1950 **MNE**; 1954. [Cobham, Bligh.] [Woodchurch, 1823, R. Pocock **BM**.] [Farningham, 1912, SEC.] [Greenhithe, 1890, AC Tagg.]
- 7) Copse, Rodmersham, F.J.H.]
- 8) Down SE of Capon Wood, Hunt Street, Crundale, 1954, l[ocally] a[bandant]. Wye Crown Down, 1954. Downs NE of Elmsted, W. of Stelling Minnis 1942 **MNE**. Downs by Slad[d]en Wood Alkham 1954 **MNE**. S. of Chilton, Alkham, 1948 DMCC. Downs E. of Hougham Church 1945. Woodville Downs, Temple Ewell, 1948-1960 **MNE**. Downs SW of Lydden, 1955. Down S. of Wolverton, 1949. Downs W. of Shakespeares Cliff, abundant, 1955, **MNE**. Coombe Vale Dover, 1959 **MNE**. Lydden Spout, CA& F Swain.
- 11) Pasture on clay below Ide Hill to S., E Armstrong. Bethersden. Haysden (Tonbridge). On raised bank, straight mile, Leigh, 1944 **MNE**. Meadow at Staplehurst, 1942. Pasture SW of Biddenden, 1954 **MNE**. Marden PCH. Headcorn, SE of, FJH; (863438 DMCC 1948).
- 12) (Mersham, FGEK.) Field S. of Stubbs [Cross] 985385, ES. 020377 – 016377, S. of Kingsnorth ES. Streets Lane SE of Kingsnorth, 013383, ES. Longrope Wood, 978364, ES.
- 14) St Michaels, Tenterden, 1909, J Ridley **MNE**. [SE of Tenterden, B.D. Jackson.] [Hawkhurst, J.C. Melvill.] Fields SE of Robins Wood, Cranbrook, 1944. [Woodchurch WR Jeffrey.] N. of Breeches Pond, Tenterden, 1947. Rolvenden, 1949.
- 13) Fields E of Great Sandhurst Wood S of Kippings Cross, 1947 **MNE**. [Twysden, Goudhurst 1896 JS.] Edenbridge BDJ. (S of Shernden Wood, 3m S of Edenbridge, 1947.) [Bidborough; Speldhurst FJH.] [Tunbridge Wells, Whitwell; 1894 R.R.H. N. of Penshurst, C. Cox.] [Lamberhurst Ch[urch] to Scotney, 1897, J.S. **TLS**.] By piggery, Speldhurst Rd., Southborough 575414, CAS. [Field, Twysden, Goudhurst, 1896, JS, **TLS**.]<sup>629</sup>
- 15) Dungeness, FJH (E. Scott, 1953 **MNE**, l[ocally] a[bandant]!).

‡ ssp. **elator** Koch. Alien, on roadside at Orpington, 1930, JE Lousley.

**G. pilosa** L. Hairy Greenweed [16.] N, ext[inct]]

Native; on a dry heath; almost certainly extinct.

Wrotham Heath, in a pit by the path from the Inn to the Mill, G.E. Sm.; Hb. Borrer. Although a little suitable heathland still exists here, I have failed to refind the plant, as have many others. It still occurs on Ashdown Forest, E. Sussex, though in much less abundance than formerly]

**G. anglica** L. Petty Whin.<sup>630</sup> 15, 16 N.

Native. On peaty, usually damp or wet heathland. Rare now, though apparently once common. On the Tertiaries near London; the Folkestone Sand; and the Tunbridge Wells Sand.

1<sup>st</sup> record, 1777: near Faversham, J. [sic] Jacob.

1) [St Pauls Cray Common, Hb. Sim.] Chislehurst Common, W. Wats[on]; by cricket ground, 1958, GMB. Keston Common, Fl. Met. (rare) Hb. Davis, 1915 **MNE**; 1944! rare **MNE**; 1945! **MNE**. Hayes Common, Scargill; (rare, 1945! **MNE**); GMB. Locks Bottom Common F Swain. Dartford Heath, Bossey; (1947! Abund[ant] **MNE**; 1960! 523730 **MNE**. [W.Wickham, 1918, L.J.T. (=? Hayes Common).] [Bexley Heath, R. Pocock **BM**.]

3) Faversham, J. [sic] Jacob; Blean Wood, Hookham.] [Outskirts of East Blean Wood, S. Morris, 1936 (MS at **BM**).]

6) N. of Otford, PH Cooke – error?]

7) Sittingbourne, Grayling. error?]

<sup>629</sup> Duplicates earlier entry.

<sup>630</sup> Thus in the check-list; Needle Whin, in the manuscript.

**12)** Hothfield, W.R.J.; 1901, H. Lamb **MNE**; 1913, H. Lamb **MNE**; (1946-60! l[ocally] a[bandant]) (1946 **MNE**; 1947 **MNE**; 1952 **MNE**; 1960 **MNE**.) [Ashford Warren, W.R. Jeffrey.] [Willesborough Lees WRJ.] 117385 Gibbons Brook, J. Walton; (1954!); 1956, LJM.

**13)** Tunbridge Wells, Hb. Woodward (Hawkenbury Bog, JRW) 1944! **MNE**; 1963, R.E.S.; 1969! Chittenden Wood, J.R.W. (1946, 1958!). [N. of Penshurst, Cox.] [Bedgebury, J.C.M.; area cleared for forestry, 1961, L.J. Davies.] Priors Heath Wood N. of Combwell Wood, 1957-60, LJ Davies **MNE**. Small Bog, Forest Way, Hawkenbury, CAS. "T. Wells" 1860; ex hb. Lamb **MNE**; 1896, Hb. Lamb **MNE**.

**G. hispanica** L.<sup>631</sup> Spanish Gorse. [16.]  
Naturalised Darenth Wood, E.P.

## **Ulex** L.

**U. europaea** L. Gorse, Furze. "Fuez" is old Kent name. 15, 16. N.

Native, Heaths, scrub, rough grassland, downs, open woodland and hedgebanks, on a wide range of acid soils, but where it occurs on the chalk, usually the surface soil layers are leached or else the chalk is covered with superficial drifts; very common throughout Kent, except in Grain, where it is rare, and the Isle of Thanet, where it is unrecorded.

1<sup>st</sup> record, 1777: Beacon Hill, Faversham, E Jacob. Iron age charcoal of this genus has been found at Bigberry Camp, Jessup & Cook, 1936 (Godwin p107).

**1)** Abbey Wood. Bostall Heath. Blackheath 1958, Miss T. Webber; GMB. Keston C[ommon]. Hayes C[ommon] Hb. D[avis] **MNE**. W. Wickham C[ommon]. Chislehurst C[ommon]. Petts Wood. St Pauls Cray C[ommon]. Town court Wood. Near Elmstead Woods St[ation]. R[oa]dside Bexley, South of, PCH. Kevington. Dartford Heath. Joydens Wood. Shooters Hill Woods, GMB. Hollows Wood, Shoreham. Ruxley Pits. 36 Pickhurst Mead, PCH. Farningham Wood, 82.

**2)** Higham Canal, PCH. Conyers Creek.

**3)** Blean Wood, Broughton. N. & S. of Dunkirk. Bigberry Wood. Denstead Wood. Rough Common. Trenley Park. Oldridge Wood.

**4)** Richborough. Wenderton Manor Wood, '59, B. Nash. Elmstone, RGW.

**5)** N. of Knockholt. Polhill, Pilgrims Way.

**6)** 6E) Shorne. By A2, and at Shorne Hill on sands and gravels 61 HAS. Swanscombe Wood. Darenth Wood. N. of Cobham Park. Lodge Hill, Cooling, 44.

**7)** Burham Downs, on clay patch. 95 Sharsted Park ES, rare in E of 7).

**8)** Stelling Minnis, '62. Paddlesworth. Shakespeares Cliff. Langdon Bay. St Margarets Bay. East Cliff, Dover. Downs above Farthingsole, Dover.

**10)** Crockham Hill C[ommon]. Hosey Common. Goodley Stock. Brasted Chart. Toys Hill. Whitley Scrubs. Ide Hill. Fawke Common. Oldbury Hill. 55 Seal Chart. 55 Ightham Common. 55 Bitchet Common.

**11)** Wrotham Heath. Platt Woods. Comp Woods. Mereworth Woods. Oaken Wood. Ryarsh Wood. Roughetts. Larkfield Heath. Aylesford Quarry. Sandling Wood. Bearsted. Penenden Heath 1849, M.N.H.S., Hb. Lamb **MNE**; 1944. [Maidstone Hb. Lamb, 1885 **MNE**.] Sandway, Lenham. Leeds Castle. Warren Wood. Kiln Wood, Lenham. R[ai]l[wa]y Hildenborough 563482 CAS.

**12)** 94 Hothfield heath. 94/04 Ashford Warren '40. 94 Warren Woods. 04 Willesborough Lees.

**13)** 73 Bedgebury Forest. 73 Old Park Wood. 83 Chittenden Wood. Bayham Woods. 64 Bank, Pembury by W[ater] Works PCH. 64 Pembury Woods. Hook Green.

**15)** Dungeness (Boulderwall; Hamilton Farm; NW of Lighthouse; Holmstone). Hythe Beach.

**U. gallii** Planch. Western Gorse.<sup>632</sup> 15, 16. N.

Native, grass-heath on loam, very rare; it occurs in two places on superficial drifts (?Pliocene) on the E. Kent Chalk plateau, one on drift over Weald clay, and on a railway bank in W. Kent.

1<sup>st</sup> record, 1918: near Dover, E.S. Marshall, J. Bot., LVI, p.91.

**3)** Clowes Wood, KFC.

**10)** a recent arrival, new railway embankment E of Kemsing Station, 1953, D.McC **MNE**, 1955!

**8)** near Dover, 1918, E.S. Marshall. Stelling Minnis, plentiful in grass-heath with *U. europaeus*, 144470, 1949 **MNE**; 1965; 1984! Bank near Court Farm, Paddlesworth, 196401, 1950.

**16)** Aldington Frith, 052365, abundant, 1950, **MNE**.

<sup>631</sup> In check-list; no account in the manuscript.

<sup>632</sup> Thus in check-list; Western Furze in the manuscript.

[Reported from Hothfield by FMW, 1875; error for *U. nanus*.]

**U. minor** Roth Dwarf Gorse.<sup>633</sup> 15, 16. N.

Native. Dry heathland; local and uncommon, but widely distributed, on the Tertiary soils near London, the Lower Greensand, and on the Hastings Beds.

1<sup>st</sup> record, 1829: Shornecliffe, G.E. Smith in C.P.S.K.

**1)** Keston Common, 1877, J. Groves; W.W.R.; (1955!). Hayes Common, W.W.R.; 1904, 1905, H&J Groves **BM**; Hb. D[avis] 1916 **MNE**; (1945-1955!) **MNE**. Farnborough Common, Locks Bottom, Mr. Children **BM**; Fl. Met.; 1954! S of Bexley EGP. Chislehurst Common, W.W. (1945!), Dartford Heath, Bossey (1947!); 1951, H.M.P., GMB. Darenth Wood, N&S, EGP.

**4)** Bank at Stodmarsh, 1958, G. Morgan & E. Philp.

**6)** Great Crabbles Wood, EGP.

**[8)** "Between Wye and Stelling Minnis", F.J.H.; St Radigunds, F.G.E.K.: do these refer to *U. gallii*?]

**10)** (?<sup>634</sup> Seal Chart, 1948.) 55 Fawke Common F.C.S. Roper; (EGP). [Riverhead Miss W.] 55 Bitchet Common, Miss Bunyard.

**11)** Wrotham Heath, 1945-57. Ryarsh Roughetts, 1944. Oaken Wood, S. of E. Malling 1947. [Pennenden [*sic*] Heath, 1842, ex Hb Lamb **MNE**; F.M.W. (1944! **MNE**; since destroyed.)] Larkfield Heath, F.J.H. Roadside N. of Teston, 1948, **MNE**; 1959. Kingswood E of Leeds Park Harrietsham.

**12)** Hothfield Heath CPSK (1963!; a form with v[ery] long spines, 1960!**MNE**; 1981!). Ashford Warren, 1946. [Willesborough Lees, W.R.J.: extinct.]

**13)** Rusthall Common F.J.H. (1946!). Southborough Common, 1946 **MNE**. Road bank N of Combwell Wood and Roadside Bedgebury Cross, 1945 **MNE**. Chittenden Wood, Cranbrook, 1946, **MNE**. Bedgebury Forest, LJ Davies, 1961. Angley Wood, 1946-57 **MNE**. Tunbridge Wells, 1869, AG More **BM**; 1838, ex Hb. Lamb **MNE**. T[unbridge] W[ells] Common, RGW. (VC.14) Hook Green, Lamberhurst JRW; 1960! **MNE**. Wood NW of Flimwell, 1960, CAS.

**14)** [Hawkhurst, JC Melvill.] Pembury Woods.

**[16)** Shornecliffe, C.P.S.K. near Hythe, Duthie: extinct in this district.]

**Arachis** L.

‡ **A. hypogaea** L.<sup>635</sup> [Peanut.]

Casual.

## ELAEAGNACEAE

**Hippophae** L.

**H. rhamnoides** L. Sea-buckthorn. 15. N.

Native. Sand dunes, and on rough cliffs of chalk and sand near the sea; locally frequent in E. Kent from Minnis Bay to Lydd-on-sea. In places (Greatstone and Sandwich Bay) it forms scrub on the dunes locally on a small scale, reminiscent of the much more extensive scrub formed by this species on dunes in Lincs, Norfolk, and the Pas de Calais.

The dunes at Camber in E. Sussex appear to be the S.W. limit in Britain as a *native*, though it is widely naturalised further west. It was widespread in N. Europe in the late glacial, and apparently survived only [on] the coastal dunes (and after the development of the post glacial forests inland in mountains on the continent).

1<sup>st</sup> record, 1666: N. of Deal, C. Merrett, *Pinax*, p.104.

**[2)** formerly in the Isle of Sheppey (saltmarsh 2 m. from Sheerness, rare, Blackstone, Specimen Botanicum, 1746, p.82; also John Hill, in Hb. **BM**.)

**3)** W. Beach, Whitstable, REW, (planted at Seasalter, REW.)

**4)** Pegwell Bay, J.P.M.B. (on St. Augustine's Golf Course, 1946!). Shellness, mouth of Stour, two places, 1946→. Around village, Sandwich Bay, and 2 ms to N, loc[ally] abundant on the dunes, 1946-58, **MNE**. Dunes 1m. N. of Deal, Merrett, C.P.S.K. (1947!). Walmer Beach, L.W.W.

**8)** on chalk by r[ai]l[wa]y line, Folkestone Warren, B.D. Jackson (1954!) **MNE**. [Chalk at Lydden spout, CPSK.] Dover, G. Walton.

**9)** Minnis Bay: Cliffs, Epple Bay/Birchington, 1947, J.W.W.

<sup>633</sup> Dwarf Furze in the manuscript.

<sup>634</sup> Francis Rose queried this, but the species has since been found at Seal Chart.

<sup>635</sup> Given in check-list, but not in the manuscript.



**15)** Locally abundant on sandy ground (ancient dune-sand) behind sea wall, 1 m. NE of Dymchurch, 1947 **MNE**. Greatstone dunes, locally dominant, 1947-58. Lydd on sea, one plant, 1946. Dungeness, a bush NE of Old School, in old shingle pit, E.S.; 1961!

**16)** Cliffs below Folkestone Church, C.P.S.K. (1945!). W. of Folkestone Pier, L.W.W. Leas Cliff (Folkestone Sand) Folkestone, D.B.G. (1945! LWW, 1950!) **MNE**. Shornecliffe, L.W.W. By pool on Gault, Folkestone Warren, 1965, B.N.

### **Eleagnus L.**

‡ **E. umbellata** <sup>636</sup>Thunb. Eleagnus.

Bird-sown alien, and on waste ground.

## **HALORAGACEAE**

### **Myriophyllum L.**

**M. verticillatum** L. Whorled Water-milfoil. 15, 16. N.

V[ery] rare now (H&M - E.P.).

Native. Ponds and fen and marsh dikes, in fresh water; rare, but locally abundant.

1<sup>st</sup> record, 1777: Graveney Marsh, E. Jacob, *Pl. Fav.*, p.81

**1)** [47 E. of Greenwich, Fl. Met.]

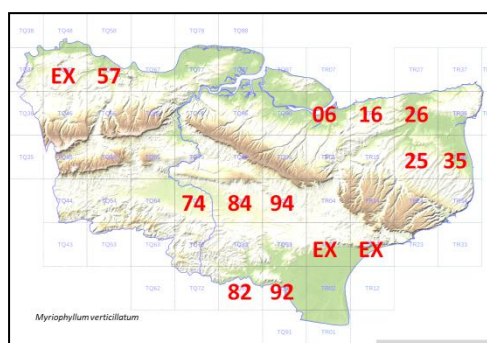
**2)** [57 Dartford Marshes, Hb. Lamb, 1898 **MNE**.] 57 pits, Stone Marshes, HMP, 1947. 06 Oare, in gravel pit ponds near creek, 1959 **MNE**. 06 Davington Pond, Mrs B Dodds. 06 Marsh dikes W. of Waystreet Farm, Hernhill, 1953 **MNE**. 06 Seasalter Marshes, E Robinson.

**4)** 25 Dikes, Wingham Fen, = Fen E. of Little Britton F[ar]m, Wingham, abundant, 1946-62 **MNE**. 16 Fordwich Marshes, 1950 **MNE**. 25 Dikes NE of Wickhambreaux, 1956 **MNE**. 26 Preston Marshes, 62, B. Dodds. [Minster; Sarre Fl Thanet] 35 Fen dikes, Worth Minnis, 1956 **MNE**.

**11)** 74 Marden to Staplehurst, FJH. 84 Pond, Leighbridge, 1½ m. NW of Headcorn, 813454: 1949-1962, **MNE**. 84 Pond, Pond F[ar]m ¾m. E. of Frittenden, 1954 (827409) **MNE**. 84 R[iver] Sherway, Sherway Br[idge], Smarden, 867447, 1962.

**12)** 94.

**15)** 82 Sandhurst Levels, S. of Ethnam, 1954, **MNE**. 92 Shirley Moor, 1954. Hythe, FJH. Ham St[reet], W R Jeffrey.



‡ **M. aquaticum** (Vell.) Verdc. <sup>637</sup> Parrot's-feather.

H.

Introduced by aquarists to ponds. Not in E.P. 1982.

**M. spicatum** L. Spiked Water Milfoil. 15, 16 N, freq[uent.]

Native. Ponds and marsh dikes, mostly in alluvial marshes near the sea and estuaries, in both fresh and brackish water; common in the Thames-Medway-Swale estuaries of 2), the Stour estuary marshes of 4), and in 15) Romney Marsh; very rare elsewhere.

1<sup>st</sup> record, 1777: Oare and Graveney, E. Jacob, *Pl. Fav.*, p.87.

**1)** 47 Ruxley Pits. 46 Keston Ponds. 47 Crayford, 1955, GMB. Cray, old Bexley GMB. 57 Stone Marshes, in lake, 1962, W.A.S. Greenhithe, Hb. Lamb 1871 **MNE**.

**2)** 47 Plumstead Marshes. 06 Dikes, I[sle] of Harty. 07 Warden point, in pond. 57 Ditch Dartford Marshes, 1962, 541761; & 543772. Darent, below Dartford GMB. Shorne Marshes GMB. 77 Higham Marshes. 06 Nagden Marshes, 57 Gravel Pit 694735 N of Shorne PCH. 77 Cliffe Marshes '50; 61, HAS. 77 High Halstow Marshes on Rifle Range, CAS. 77 S. of Egypt Bay 1958. 77 S. of St Marys Bay 58 **MNE**. 87 E. of Allhallows 1954 **MNE**. 87 Dikes, I[sle] of Grain 1958 **MNE**. 57 Darent, below Dartford, GMB '55. 77 Hoo Marshes. 06 Dikes Seasalter, CT. 76 Burham Marshes, near old Church. 06 Ditch W. of Sportsman, 046648, HMW.

**3)** 16 near Sewage Works, in Ditch at Swalecliffe, HMW.

<sup>636</sup> Given in check-list, but not in the manuscript.

<sup>637</sup> Given in check-list, but not in the manuscript.

- 4) 35 N. of Sandwich. 26 Brooksend, L.W.W. 35 Worth Minnis. 26 Grove Ferry, Stodmarsh, 1963, P.W.W. 25 Little Britain, Wingham, 1963 DACL. Fordwich Marshes, 1949, E Robinson. Not 36.
- 6) 67 Flooded chalkpit, Northfleet, 1961, H.A.S.
- 7) 86 Lake, Berengrave chalk pit, Rainham, P M Roberts.
- 8) 24 Kearsney Abbey, K.D.R. 1957.
- 10) 56 Horton Kirby, in gravel pit, 1962, W.A. Sandford; GMB. 56 Eynsford, GMB.
- 11) 65 Pond, Swanton Valley, Mereworth, 645539, CAS. 44 Hever Castle Moat, CAS. 64 Pond, Ploggs Hall, Whetsted, CAS. 54 Ballast pit, Tonbridge, 574459, M. McFarlane. 44 Hever Park Lake, Mrs Mallinson.
- 12) 04 Mersham Lake, E.S. & F.R., 1960 **MNE**. 15 Vauxhall Lakes HMW.
- 15) 93 Shirley Moor. 02 Brenzett. 13 Dikes S, of Lympne, 1958 **MNE**. 13 R[oyal] M[ilitary] Canal, Hythe 1955 **MNE**. 13 Dike below The Roughs, West Hythe, LJM. 13 Palmarsh Gravel pits, L.J.M. Canal St Marys Bay LJM. 92 R[oad]side Dike, E. of Appledore **MNE**. 01 Dikes S of Boulderwall Farm, Dungeness **MNE**. 92 Fairfield 1952 **MNE**. 02 Romney Warren. 01 S. of Lydd. 93 The Dowels, S. of Kenardington, 1959 **MNE**. 03 S. of Aldington. Ruckinge.

**M. alterniflorum** DC. Alternate Water-milfoil. 15 [, 16.] N.

now v[ery]. rare; Ashurst, Brabourne. H&M - E.P.

Native. Ponds and peaty fen dikes, in fresh water; apparently very rare, and not recently reported.

1<sup>st</sup> record, 1899; Fl. Kent

- 1) Keston Ponds, 1950, D.P.Y. (Hb. D.P.Y.).
- 4) Preston Marshes, E.S.M. Ham Fen, E.S.M.
- 15) Appledore, E.S.M.

#### [GUNNERACEAE]

**Gunnera** L.

**G. tinctoria** (Molina) Mirb. (= *G. chilensis* Lam.)<sup>638</sup> [Giant-rhubarb.]

**G. manicata** Linden ex André [Brazilian Giant-rhubarb. 16.]

- 11) By Hever castle Lake, CAS.

#### LYTHRACEAE

**Lythrum** L.

**L. salicaria** L. Purple-loosestrife. 15, 16. N.

Native. Riverbanks, ditches, lake and pond margins, fens, marshes, carr; locally common by the Medway and its tributaries, along the Darent, Cray, Rother, and Stour, and in the Weald generally, and in the marshes and fens of 4), but not common elsewhere and absent from wide areas, including much of Romney Marsh, the chalk districts, Thanet, the N. Kent coastal plain from Gravesend to Hernhill, including the Hoo Peninsula, Grain and Sheppey.

First record, 1629: Erith, Johnson, *Iter*, p.9.

- 1) Holwood Park Lakes, 1954. St Mary Cray. By R[iver] Cray, North Cray, 1954. Petts Wood/Chislehurst Common, GMB. Pond, Greenwich Park, G.M.B.
- 2) Northfleet Brooks, 1944; not seen in 1958. Holborough Marshes, 1944. Ditch by railway ¼m. N of New Hythe, 1954. Stream, L[a]ne above Lower Halstow, 1962. Ditch S. of A.299, NW Kemsdale House, Hernhill, (055372) 1958, H.J. Wilks.
- 3) Alder swamp, Bigberry Wood, '54.
- 4) Ham Fen **MNE**. Northbourne Fen. Hacklinge. Worth Minnis. Preston Marshes, NW of Village, 197632. Wingham Fen. Wenderton, copse by str[eam], B Nash. Stodmarsh 1950 REW.
- 10) Darent meadows, H.M.P., 1950. By R[iver] Darent, Sundridge 491558, FSE Fawkes
- 11) (Len) Marsh on site of pond, below Polhill, Harrietsham 1958. Boxley Marshes. (Medway) Ashour Wood, Medway Bank '54. Medway above Tonbridge, 1964. E of Hale Street, by pond, Medway Broadbridges. Hartlake Br[idge]. Laddingford. Leybourne Castle Lakes, abundant, 1959. (Eden) R[iver] Eden N of Chiddingstone Mill, '54. Hever Park Lake, Mrs. Mallinson. (Teise) Ditch ½m. N. of Marden, 54. Teise 1m. NW of Buckhall, Betersden, 54. Ditch ½m. W. [of] Marden Mill, 54. Ditch N. of Collier Street '54. Paddock Wood

<sup>638</sup> No records given.

GMB. R[iver] Beult, Birch Wood, Bethersden, 915402, 1962. (Beult) Pond by Beult NE of Staplehurst, '54. Bethersden, R[iver] Beult, 923396. Moatenden, 1944. Pond NW of Buckhall, Bethersden, 54. Pond E of Buckhall, Bethersden, 54. Leighbridge, Headcorn, 1962, 813454. Sherway Br[idge] 867447, 1962. Bethersden Village Ponds, '54., R[iver] Beult, S. of Headcorn Ch[urch], 831440, 1962. Beult, N. of Buckmans Green, 839419, 1962.

**12)** Stour: W of Hothfield Common, 96245865. S. of Rooting St[reet], TQ954445. ES. Lit[tle] Chart Lake 941461, ES. N. of Clock House, 996422, ES. By the Stour at Milton Bridge, 54. E of G[rea]t Chart 992423, ES. S. of Sevington, 035395, ES. 1 mile NE Chilham, 54. Brook, 066444, ES. Stour N. of Godmersham 63. Copse by Stour, E Stour F[ar]m, Godmersham, '54. Spiders Castle, 045453; 048448. By stream, Stowting Fen Meadows '54. N.W. of Ham Street, 998432.

‡ **L. junceum** Banks & Sol. <sup>639</sup>

False Grass-poly.

[15, 16.]

Wool -alien casual, and in gardens.

Native of Mediterranean region (Dunn, Alien Flora).

**1)** waste ground around a farm, E. of Chelsfield, 492640, no obvious shoddy present, A.G. Spooner, 1961, det. G.A. Matthews at **B.M.**

**9)** Minster, 1903, **BM** teste G.A. Matthews.

[**L. hyssopifolia** L.

Grass-poly. <sup>640</sup>

? N; extinct.]

Native, originally (see below) but possibly most recent records are casual occurrences. Damp ground, ditches, and cultivated land; extremely rare and not seen for 20 years <sup>641</sup>; possibly extinct.

<sup>1st</sup> record: 1746: near Faversham Abbey, Bateman in Blackstone, p.33. Calyx and fruit found in late Bronze Age level, Minnis Bay, Conolly, 1941 (Godwin, p129), "beyond question" H. Godwin.

**1)** S.W. of Elmers End, 1875, Prebble.

**2)** Near Rochester, Syme. Ditches near Faversham, Abbey Pond, Blackstone. Seasalter, 1937, F. Hyland, det. Kew.

**6)** Longfield tip, DMCC, 56.

**11)G)** by streamlet entering the Medway below Teston Lock (right bank), 1938, F. Forsyth (det. C. West). Garden of "Yewtree", West Malling Gray: a casual.

**11)E)** Hollingbourne, Mr. James, 1913, **MNE**.

**L. portula** (L.) D.A. Webb (*Peplis portula* L.)

Water Purslane. <sup>642</sup>

15,16

N.

Native. Wet rutted rides in woods on clay, sand and loam; edges of ponds. Local and well distributed in the Weald and the Blean, locally very common in the High Weald.

<sup>1st</sup> record, 1632: Woods W. of Canterbury, Johnson, *Descriptio*, p.33.

**1)** 47 Danson Park, GMB. [Blackheath, Curtis. Keston, W.W.R.] 47Pond, Chislehurst Common, E. de C.; 1946! **MNE**. 57 Pond, Dartford Heath, H.M.P., 1948-50. 57 Joydens Wood, B.D.J.; 1954, FR & PCH **MNE**. 46 Hayes Common, 1951, J.D. Lovis. 46 Sparrow Wood 435667; 441665 Roundabout Wood; 46 Pokeridden Wood 430659, Swain. 56 Farningham Wood damp valley 5468 HMP.

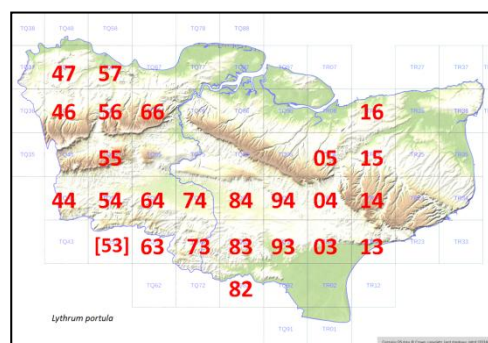
**2)** [Brent Meadows, Faversham; Thorne, E Jacob.]

**3)** flooded Wheel Ruts, Cane Wood; Thornden Wood; Hempshall Wood, RGW. 16 Clowes Wood, 1950, L.W.W.; REW; 1965! See also <sup>1st</sup> record. 05 Rhode common, in wet trackway up escarpment on L[owe]r Eocene Beds, 1959 **MNE**. 15 Rough Common RGW. 16 Church Wood, Blean, RGW.

**4)** [Margate Brooks.]

**7)** 05 Ruts in ride, near Watertower, Challock Forest, E.S. 05 Jacketts field, Challock, ES.

**8)** 13 Stelling Minnis, F.J.H.; (1956!) in pond on Pliocene loam **MNE**. 15-05 wet ruts in track on plateau clay soil, Denge Wood, sw of Petham, 1959, **MNE**. 14 Tracks on sandy loam, Upper Hardres Wood, 1964.



<sup>639</sup> As given in check-list; in the manuscript cited as *L. monanthum* Link, syn. *L. graefferi*.

<sup>640</sup> As given in check-list; stated as Hyssop-leaved Loosestrife in the manuscript.

<sup>641</sup> This should probably be taken as implying that the account was written c.1958.

<sup>642</sup> Given as *Peplis portula* L. in the manuscript with *Peplis* as a separate genus. The addition of reference here to *Peplis portula* is taken from the check-list.

**10)** [45 Fawke Common, Roper.] 55 Pond, Knole Park, CAS.

**11)W)** 94 Hoads Wood, G[rea]t Chart, 1954 **MNE**. 64 Ride, Golden Stable Wood E of Shipbourne 1954 **MNE**. 64 Pond E. of Hale Street, E. Peckham, 1954 **MNE** 1956; 683493 CAS. 84 Wood N. of Southpark Wood, Grafty Green, 1954, **MNE**.

**G)** 66 Pond Ryarsh Wood, 1947, **MNE**. 74 Ride, Widehurst Wood, SE of Marden Beech, 1958 **MNE**. 44 Pond near Edenbridge 1928, SEC.

**12)** 94 Hothfield Common, W.R.J.; (1946!). 03 Bourne Wood Ham Street, 1954, CNP. 13 Gibbons Brook, by Pond, LJM, 1957. 93 Shadoxhurst Woods, CNP. 04 E end bypass, Ashford, CNP.

**13)** 54 South Park, Penshurst, in woodland ride, 1962. 63 East Wood, Lamberhurst, 1937, JRW. 54 wet ride, SE corner Ashour Wood, 1954 **MNE**. [Tun[bridge] Wells Common, Miller.] [Rusthall Common, FJH.] 54 Wood on T[unbridge] W[ells] Sand W. of Leigh, 1950. 63 Dundle Wood, Lamberhurst. 64 Kippings Cross, in Wood to NE. 73 Combwell Wood, 1959 **MNE**; 1979! 63 Bayham Woods. 63 Mount Pleasant, Lamberhurst. 73 Angley Wood. 73 Cooks Wood, Cranbrook. 73 near Louisa Lake, Bedgebury Forest, 1952, **MNE**. 83 Chittenden Wood, Cranbrook, E.S.M.; (1946!). 63 Kilndown Wood, 1946 **MNE**. 73 Brewers Wood, Cranbrook. 83 Sissinghurst Park Wood, 1948-61 **MNE**.

**14)** 83 Wood N.W. of Breeches Pond, 1947. 83 The Brogues, Biddenden. 83 Knock Heath, E. of Tenterden, 1956 **MNE**. 82 Comb Wood, Wittesham, Oxney, 1964.

**16)** 13 Damp ride, Kiln copse, Sandling Park, 1958, **MNE**.

## THYMELAEACEAE

### Daphne L.

**D. mezereum L.** Mezereon. 15, [16]. N & H.

Native. Woods on chalk and loam over chalk; extremely rare.

1<sup>st</sup> record, 1899: *Fl. Kent*, p.305.

**6)** Brewers Wood, Shorne, Lady E. Bligh in *Fl. Kent*.] Greenhills Wood, Otford, K. White, 1960, *Lond. Nat.* 40, p.18; 1962, one bush, C.A. Lister & FR! Upper Bush, Cuxton, 1972.

**[7)** Godmersham Park, Bishop Mitchinson.] Lane, Mountain Street, Chilham, 1951 REW.

**8)** [Woolwich Woods, J. Jacob (possibly still existing somewhere in this extensive wood.)] [Park Wood, E. of Six Mile Cottages, Miss Elliott teste Miss D.A.C. Long – apparently all transferred to gardens. Chalk railway cutting, Bishopsbourne, 1951; 1 plant dug up 1960, BJB. Yocketts Bank, 1972, 1986!]

**13)** [Catstail Wood, Hilly Fields, c.1860. Cranbrook, c.1860, Kennard, teste his son A.E. Kennard in litt.]

This attractive shrub has a precarious existence everywhere in Britain; wherever it is found, it is likely to be transferred to gardens.

**D. laureola L.** Spurge Laurel. 15, 16. N. 31/51

Native. Common in beechwoods and scrub on chalk, much rare elsewhere, but locally frequent in woods on Wadhurst Clay about Penshurst. A characteristic member of the chalk beechwood consociation, it becomes rarer in the extreme east where deep moist loams have developed on the chalk, except in beech plantations. Common on the chalk in Surrey and in W. Sussex, rare in E. Sussex; very rare in Essex; very local in Pas de Calais, and nearly confined to the chalk scarp of the Boullonnais.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, *Descriptio*, p.20. Formerly held in repute as a tonic for horses, which was said to make their coats glossy, hence perhaps some colonies in odd places, teste ASK.

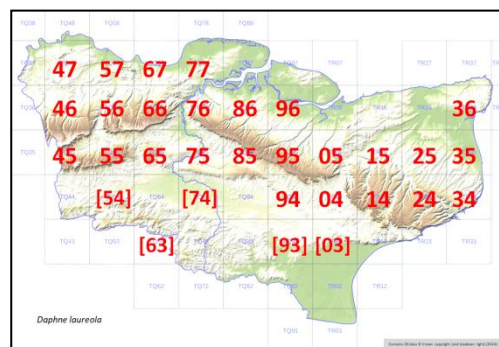
**1)** [Chislehurst, JSM. Foots Cray, Hb. Sim.] 57 Joydens Wood, 1948, on chalk inlier. 56 Farningham Wood, l[ocally] f[requent] on Thanet Sand, 1949-56; 82! 47 Gattons Plantation, N. Cray, PCH.

**3)** [Byssing Wood, Cowell, Fl. Faversham.]

**5)** Betsoms Hill, RAC. 45 Chevening Park in copse, 1943, JRW. 46 Darwins Bank, Downe. 56 Wood W. of Shoreham. Chelsfield F. Swain. 55 Wood below Polhill Arms. 56 Pilots Wood, PCH.

**6)** 56 Beechwoods, Juniper Hill, Shoreham. 56 Dunstall Woods **MNE**. 56 Preston Hill. 56 L[owe]r Austin Lodge, Eynsford.

Magpie Bottom PCH. 56/55 Greenhills Wood, Otford. 55 R[oa]dside, E of Otford PCH. 56 Kemsing P[ilgrims] Way, CAS. SE of Eynsford. NW Maplescombe Farm, AC Cawston, and to S. 66 Ridley Wood. 66 E. of Stansted. 56 Pennis Wood, Fawkham. 56 Horton Wood. 66 Middle Wood. 66 Whiteash Wood. 57 Darenth Wood. 67





Swanscombe Wood. 57 Mounts Wood. 57 The Thrift, Stone. 57 Copse by Stone Castle 1947 **MNE**. 66 Purvil Wood, Priestwood, 1961. Molehill Wood W. of Buckland, 1961. 77 G[rea]t Crabbles Wood, Shorne 1944-1953 **MNE**. 66 S. of Cobham Park. 76 Merralls Shaw, Cuxton. 66 Up[per] Halling Downs **MNE**. Wingate Wood. 66 Red Wood, Luddesdown. 66 Crookhorn Wood, Snodland. 66 Ryarsh Downs (40 Acre Shaw; L[i]t[tle] Commodity). 66 Trosley Downs. 65 Hogmore, Wrotham. 66 SW of Vigo Inn. 65 Beechwood above A.20, Wrotham Hill. 66 Woods SE of Meopham Green.

7) Wouldham Downs. 76 Burham Downs. 76 Bridge Woods. 76 Bluebell Hill. 77 Westfield Wood. 75 Boxley Warren **MNE**. 75 Detling Hill. 86 Stockbury Valley. 85 Wood W. of Wormshill. 86 Queen Down Warren. 86 Bredhurst Hurst. 95 Wood N of Milsted, 1963. 95 Charing Hill, 960501, ES. 94 Westwell (Pilgrims Way) 982481; 985480; 987482; 980482; 991474, ES. 96 Coxett Wood / Simia Wood, Ospringe. Belmont Golf Course 54 REW. 95 Stalisfield, 1946 **MNE**. 05 Hedgebank, Old Wives Lees 1945, DHK.

8) 04 Wye Downs. 05 Woods E. of Chilham. 04 Olantigh, 058476, ES. 04 Broad Downs, 075453, ES. 04 Cuckoldscoomb, 083444, ES. 35 Copse W. of Lit[tle] Mongeham, 1962. 04 Woods NE of Winchcombe<sup>643</sup> Farm, E. Robinson. Fredville 49 DMCC. Pit SE of Wingham J. Gurr. Hurst Wood Hassell St. 57 ES. Sibertswold, '48 Miss JE Hibberd. Stafflands Wood. Wood above Stowting, 56 LJM. 15 Larkey Valley Wood, 54 REW. Copse, SE of Chartham, REW. 15 Whitehill Wood, Nackington. 15 Above chalk pit/Lit[tle] Iffen Wood, Chartham Downs, Mrs. B. Dodds, 1961. 14 (Rare) -. 24 Woodville, Rubery Down, Temple Ewell. Whitfields, VFP Day. 34 Knights Bottom, Kingsdown, B Nash. 24 S. of Barfreton. 24 Woolwich Wood. 25 Ackholt, Aylesham, 1954 **MNE**.

9) 36 Quex Park/Birchington, plentiful. 36 Plantation N. of N. Foreland Golf Course, 1954. It may be planted in Thanet, but was first found n[ea]r Quex in 1632. Manston C[our]t: Cheesmans la[ne] Nash /Fl. Than.

10) 55 R[oa]dside, Ivy Hatch Ightham Mote, CAS. Sundridge Rec[reation] G[roun]d RAC. 45 Scarp, Crockham Hill, 1935, DPY. 45 Scarp, Toys Hill, DPY.

11) 74 Hedgebank of lane, S. of Mockbeggar Hill, Yalding, 1943. 54 Hedgebank, Hildenborough, 5656489, CAS. 94 N of Bethersden, 932405; 94 E. of Bethersden 937403, ES. Wood, Bourne Tap, Bonnington, a[bundant] 048363, ES. 93 A.28, Benenden, SW of G[rea]t Chart 963396, ES.

12) 03 Sellindge Ch[urch] y[ar]d, RAC.

13) Vauxhall Lane, Southborough, 1959, P.A. Lane. 54 The Grove, 1 m SW of Penshurst, abundant in coppice on Wadhurst Clay, 1956, **MNE**. 54 Ashour Wood, Bidborough, 544435, locally frequent. 74 Winchet Hill, by r[oa]d, N. of Goudhurst, 1944 **MNE**. 54 Marlpit Corner, Bidborough, 538432, CAS. 63 Hedge by Lamberhurst Ch[urch], 678367, CAS.

14) High Halden Rectory, 1958, RAC.

16) 03 Aldington Frith, 048364, ES.

## ONOGRACEAE

### *Epilobium* L.

Hybrids occur between most of the species in Kent, they are recorded between 1x2; 3 x8, 2x3.<sup>644</sup>

#### 1 *E. hirsutum* L.

Great Willowherb.<sup>645</sup>

15, 16.

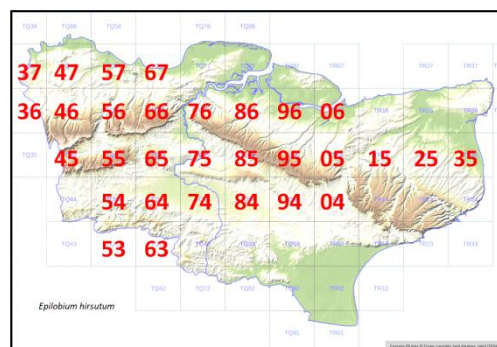
N.

Native. Fens, marshes, wet woods, stream sides, ditches and riverbanks. Very common, except in the chalk districts.

1<sup>st</sup> record, 1629: Grain to Cliffe, Johnson, *Iter*, p.8.

1) Holwood Park. By R[iver] Cray, North Cray. Foots Cray. Ruxley Pits. 47 Shooters Hill, GMB. 37 Blackheath, '46, ECW. 36 Pickhurst Mead, PCH. 46 Crofton Heath, PCH. 46 Keston Ponds, PCH. (Greenwich Park, 1907 D Smith **MNE**. Ravensbourne near Bromley 12915 Hb Davis **MNE**.

2) Northfleet Brooks 1944, '61 HAS. Stone Marshes HMP. Sewer Bank, Plumstead PCH. Medway at Aylesford; New Hythe; Snodland. Luddenham Marshes HMW. Holborough Marshes 1944. Oare Meadow. L[owe]r Halstow 62. New Hythe, 1938, J.B.M. 055610 Ditch S. of Thanet Way Hernhill HMW, 1958.



<sup>643</sup> Winchcombe is what was originally written in the manuscript, although it has the appearance of being altered to Winchdale.

<sup>644</sup> Not the only ones, as will be seen further in the accounts.

<sup>645</sup> Thus in check-list, but in the manuscript given as Great Hairy Willow Herb, Codlins & Cream.



- 4) Ham Fen, v[ery] a[bundant]. Hacklinge, l[ocally] a[bundant]. Northbourne Fen. Worth Minnis. Fordwich Marshes. Dikes behind dunes, N. of Sandwich Bay 1962.
- 6) Northfleet, 61, HAS. Wingate Wood / Halling on c[lay] w[ith] f[lints], 1949. Berengrave chalk pit, Rainham, '52, K. Jolly.
- 7) Stream, Painters Forstal, 997591, C. Turner.
- 8) Roadside S. of Yockletts Farm, Elmsted, 1964.
- 9) Wet copse SE of Minster AGS.
- 10) R[iver] Darent, Otford; Shoreham; Eynsford; W. of S, Darent; St Johns Jerusalem; Darent Church, PCH. N. of Bat & Ball CAS. Westerham Wood, 82.
- 11) Leybourne Fen, 1944-1961. By Medway, Allington Lock; Maidstone. St Leonard's Lake, W. Malling, 54. R[oa]dsides, Beltring, '56; N. of Paddock Wood, 58. E of Upper Haysden, '54. Marsh 1 m. SW Gover Hill near Dunks Green. Stream by R[oa]d 1 m. W. of Chiddingstone Causeway, '54. R[oa]dside NE of Mill F[ar]m, Bethersden, 54. Pond NE of Vitters Oak, NE of Bethersden 54. Pond 1 m E of Vitters Oak, NE of Bethersden 54. Ditch ½m W. of Headcorn, 54.
- 12) 94 NW bog Hothfield Heath. 03 Kingsnorth. 95 Stream by Charing Rd, E of Lenham Heath, '54. 04 Cadmans Wood (Gault) 1952 **MNE**. 14 Stowting springs, 1944. Hinxhill. Nackholt.
- 13) 53 Gill Stone Cross, Ashurst, 518381, CAS. 53 Hilbert Rec[reation] G[roun]d, Tun[bridge] Wells, 1962, CAS. 63 Ditch S. of Ch[urch], Lamberhurst 684365, CAS. Bayham CAS. 63 Wood on SW of Pembury Heath, PCH.
- 15) Airport Car Park, Lydd DMCC.

**2 E. parviflorum** Schreb.                      Hoary Willowherb.<sup>646</sup>                      15, 16.                      N.  
Native. Wet meadows, stream-and ditch-banks, wet woods, waste ground, not confined to wet places. Very common.

1<sup>st</sup> record, 1629: Grain to Cliffe, Johnson, *Iter*, p.8.

- 1) Holwood. Keston Common, PCH; 61 HAS. Blackheath, ECW, '46. Ruxley pits. Beckenham, 1948, SEC. Spring Park, W. Wickham, Hb. Davis 1915 **MNE**. Chislehurst GMB.
- 2) Aylesford, 1924, T.J.T. **BM**. Lower Halstow 62. Ham Marshes 026626, C. Turner. Rope Walk 021616, C. Turner. Davington Osiers 006617, C. Turner. Oare Meadow / Luddenham Marshes, HMW.
- 3) Medina Av[enue] Seasalter HMW.
- 6) The Thrift, Stone. Swanscombe Wood to 61 HAS / Darent Wood. Chalkpit E of Dartford Sta[tion], GMB. Wingate Wood 1944 **MNE**. Halling Cement works.
- 7) Challock Forest, common, E.S. Highstead Quarry, Tunstall, 1958, DMCC **MNE**.
- 9) Alder carr W. of Minster, Thanet, 1958 **MNE**.
- 10) Sandpit by R[ai]l[wa]y Riverhead CAS. Greatness, Hb. Rudge **BM**. Path by R[iver] Darent, N. of Shoreham PCH. St John's Jerusalem, PCH. Darent HMP. Eynsford GMB.
- 11) Leybourne Castle Lakes. Teston. Holt Wood, 1944. Collier St[reet], 1954 **MNE**. Moatenden, Headcorn, 1944. Hoads Wood.
- 12) Near Wye, 1895, F.M. Webb **BM**. Westwell, C.N.P. Willesborough Lees. Hothfield Common. Cadmans Wood, Brabourne 1952 **MNE**.
- 13) Copp[ice]d Wood ½m SW Chiddingstone Hoath, 1954. Hilbert Rec[reation] G[roun]d, Tun[bridge] Wells 1962, C.A.S. Brighton Lake, T[unbridge] W[ells] CAS, 1960.
- 15) New Romney. [New Romney, J. Ridley, 1908 **MNE**.]

**E. parviflorum x montanum** = *E. x limosum* Schur.<sup>647</sup>                      [15, 16.]

- 6) Wingate Wood, 1944, det. J.E.L.
- 11) Ryarsh Wood, E.M. [*sic*, for W.M.?]Rogers in *Fl. Kent*.

**E. parviflorum x tetragonum** [ssp. **tetragonum**] = *E. x palatinum* F.W. Schultz<sup>648</sup>                      [15, 16.]

- 3) ? Fordwich, E. Robinson, 1949 **MNE**.
- 13)W) Waste ground, High Brooms, J.P.M.B., *B.E.C. Rep.* 1939-40, p.278.

**E. parviflorum x tetragonum** ssp. **lamyi**<sup>649</sup> = *E. x palatinum* F.W.Schultz                      15.

<sup>646</sup> In the manuscript given as Small hairy Willowherb.

<sup>647</sup> Here placed in sequence, with parents reversed from order given in the manuscript.

<sup>648</sup> Given in the manuscript as *E. adnatum x parviflorum* = *E. weissenburgensis* F.W. Schultz.

<sup>649</sup> Given as *E. lamyi* in the manuscript.

8) 05 Penny Pot Woods. Between Chilham and Crundale, 1890, E.S.M. **BM**.

**E. parviflorum x obscurum** = *E. [x] dacicum* Borbás<sup>650</sup> 15, 16.

2) Woolwich Arsenal, A.H.W.D. & E.S.M., Fl. Kent

6) Cliffe, 1892, E.S.M. **BM**.

11) Medway banks below Tonbridge 1934 AHWD, det. G.M.A. **TLS**.

12) Willesborough Lees, E.S.M.

**E. parviflorum x roseum** = *E. x persicinum* Rchb. [15, 16.]

2) Woolwich Arsenal, A.H.W.D.

12) Between Westenhanger and Smeeth Stations, E.S.M., 1893 **BM**.

**3 E. montanum** L. Broad-leaved Willowherb 15, 16 N.

Native. Woodland, scrub, cleared woodland, roadsides and banks, waste ground; very common on a wide range of soils throughout Kent.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Plantae Favershamienses*, p.64.

1) Keston. Holwood Park. Beckenham 1948 SEC. Elmsted Lane, Bickley, '45 **MNE**. Joydens Wood. Abbey Wood, G.A.M. Shooters Hill GMB. Blackheath ECW 46. Dartford Heath GMB. Farningham Wood PCH; 82! Roundabout Wood, Crofton, PCH. Wall, Bexley Village, PCH. [Elmers End Hb Davis 1915 **MNE**.]

3) Gravel pit, Bigbery Wood, 1954. N. slope, Bigbery Wood, 1954. Church Wood W. of Rough Common RGW. Homewood R[oa]d, Sturry, 1962, Miss E. Milward.

5) Wood W. of Shoreham, PCH. Darwin's Bank Wood, Downe, JEL.

6) Gravesend Hill, R. Pocock **BM**, Swanscombe Wood **MNE**; Darenth Wood; The Thrift, Stone. G[rea]t Crabbles W[oo]d, Shorne. Horton Kirby Wood, PCH. Mounts Wood, Greenhithe PCH. Preston Hill, PCH. Red Wood Luddesdown '51 **MNE**. Wingate Wood, Halling, 1944.

7) Bredhurst Hurst, 1944. Squirrels Wood, Stockbury, Plateau drift, 1954. Copse between Old Wives Lees and Selling station, 1943, D.H.K.

8) Whitehill Wood (also *alba*) L.W.W. 24 Reinden Wood, 1953, B Nash. 34 Cop[s]e W. of Lit[t]le Mongeham 1962.

9) Broadstairs, RGW.

10) Westerham Wood 82! 56 R[iver] Darenth, above S. Darenth, PCH. 55 N of Bat & Ball CAS.

11)G) Holt Wood, Aylesford, 1944. N. of Swanton Valley '54. S.E. part Oaken Wood Barming in fresh copp[ice] 1954. Tonbridge Castle KEB. Allington '82 HL **MNE**; FR. Harrietsham, Mrs B Dodds 1959 **MNE**.

W) Shipbourne Forest (Golden Stable Wood) '54. Hoad's Wood, 54.

13) 44 Wood on Wadhurst Clay, ½m SW Chiddingstone Hoath, 1954. 53 Hilbert Rec[reation] G[roun]d. Tun[bridge] Wells. 1962, CAS. T[unbridge] Wells, 1838 Hb. Lamb **MNE**. Capel Manor Horsmonden JRW. Bayham Woods CAS. 63 Ditch S. of Ch[urch], Lamberhurst, CAS, 684 365. 63 Chingley Wood, Goudhurst, 1960. 63 Wood 1m. SW of Pembury Heath, PCH. Blackbush Wood DS.

14) Lords Wood Stone in Oxney, 1964.

**E. montanum x lanceolatum** = *E. x neogradense* Borbás<sup>651</sup> 16

2) Woolwich Arsenal, A.H.W.D. and ESM, in Fl. K.

**E. montanum x obscurum** = *E. x aggregatum* Čelak. [15, 16.]

2) Woolwich Arsenal, A.H.W.D.

8) Penny Pot Woods, Chilham / Woods N of Crundale, 1890, E.S. M. **BM**.

11) Roadside bank, Starvecrow Hill, Tonbridge, J.P.M.B. *BEC. Rep.* 1939-40, p.279.

12) Willsborough Lees, 1893, E.S.M. **BM**.

13) Waste ground High Brooms, J.P.M. Brenan, *B.E.C. Rep.* 1939-40, p.279. Wood W of Skiffs Cott[age]s, Lamberhurst, 1941, JRW.

**4 E. lanceolatum** Sebast. & Mauri Spear-leaved Willowherb. [15, 16.] N. 19/52

<sup>650</sup> Here placed in sequence, with parents reversed from order given in the manuscript.

<sup>651</sup> Here placed in sequence, with parents reversed from order given in the manuscript.

Native. Open woods, hedgebanks, quarries, particularly on ragstone, gravel, and sand, but also on other soils; widespread now in Kent, locally common in mid-Kent, but still thinly distributed and uncommon as a whole, certainly increasing slowly.

1<sup>st</sup> record, 1887: Chislehurst to Bickley, A. Bennett, *J. Bot.*, p.27.

1) Chislehurst to Bickley, A. Bennett, *J. Bot.*, p.27 (1<sup>st</sup> record). Hayes, 1945, CW. R[oa]dside S. of Bromley Common PHC. Joydens Wood, 1946. Under beech, Farningham Wood, '55 KEB.

2) Woolwich Arsenal, on rubbish heaps, A.H.W.D. in Fl. Kent.

3) N. of Canterbury, G.C. Druce (*J. Bot.*, 1888, p.349); 1949, E. Robinson. (sp[ecimen] in **BM** labelled "Canterbury"; no collector given; probably this record). Oldridge Wood, 1950.

4) Kingsdown shingle beach, 1946 **MNE**.

5) Fox Lane, Keston, GMB, 1954.

6) abundant in Swanscombe Wood, 1946-50 **MNE**. Mounts Wood, Greenhithe 1945 **MNE**. The Thrift, Stone, 1945. Darenth Wood, 1945; 1950 HMP. Wingate Wood, Halling, 1944, J.E.L., F.R., C.W. Roadside N.W. of Trottcliffe, 1945, **MNE**.

7) Gravel pit, N.E. of Newnham, 1945. Putt Wood, Ospringe, on valley gravel, 1950 **MNE**. Glade below beech hanger, NW of Westwell, 1962.

8) 15 Bishopsbourne, 1946. 25 Wood, Nonnington (ch[al]k) 1958 **MNE**. 15 Iffin Woods, C. Haes.

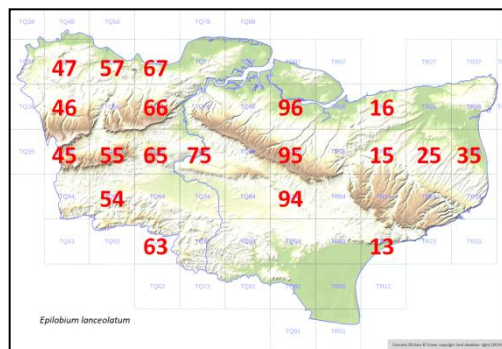
10) 55 Roadside, Riverhill, Sevenoaks, A.H.W.D.; J.P.M.B. 45 Westerham town, RAC, det. DPY. Wall near Chevening church 1951 **MNE**, RC Palmer, 1961. 55 Rooks Hill, in open wood on ragstone escarpment, '51 **MNE**. 55 Ightham, 1947.

11) 95 Ditton Quarry, 715556, CAS. 75 East Malling. 65 old wall at Plaxtol. 65 Borough Green Sandpits, 1946 **MNE**. Platt, DMCC. 65 Wrotham, J.P.M.B. 65 Ride in Mereworth W[oo]ds, N of Swanton Valley. Swanton Valley floor. 75 Boughton Monchelsea, on bank, 1959, **MNE**. 75 Allington Quarries (ragstone). 54 Old masonry by road, Lyons Crescent, Tonbridge, J.P.M. Brenan, *BEC. Rep.* 1939-40, p.279. 66 Ryarsh Wood, 1947 **MNE**. 54 Hildenborough Station, KEB 1956 **MNE**. 54 Tonbridge Castle 1957 **MNE**.

12) 15 Canterbury, 1947 RGW; 1949 E. Robinson **MNE**.

13) 63 Verge of A.21, between Lamberhurst and Pembury, 1940, J.R.W. 54 Wall, Linden Park Road, Tunbridge Wells, 1961, KEB; CAS.

16) 13 Shornecliffe, 1946.



**E. lanceolatum x roseum** = *E. x abortivum* Hausskn.

[15,] 16

2) Woolwich Arsenal, A.H.W.D. and E.S.M. in Fl. K.

3) N. of Canterbury, G.C. Druce, *J. Bot.*, 1888, p.349.

**5. E. tetragonum** L. (*E. adnatum* Griseb.)<sup>652</sup>. Square-stalked Willowherb. 15, 16 N

Native. Damp ground, roadsides, ditch banks, damp rides and recently coppiced woods, waste ground: common generally.

1<sup>st</sup> record, 1864: Fooths Cray, etc., Syme, *English Botany*, Ed.iii, IV, p.16.

1) 46 Keston per Bog; 1959, HMP. Fooths Cray; Sydenham; Shooters Hill, Syme. Mottingham; Charlton pit; Eltham; Welling; E. Wickham, AHWD. Ruxley pits.

2) 47 Woolwich Arsenal, A.H.W.D. (1944!), Grain, ESM. 57 Stone HMP. E. of Sheerness, F.J.H. Snodland, F.M. Webb. 67 Denton, canal towpath, 1961, HAS.

3) [(Herne Bay, Trimen. Hoath, F.M. Webb. Tylers Hill, ESM. N. of Canterbury, F.J.H.) 25 Swanton F[ar]m, Littlebourne, 57 **MNE**. 16 Homewood R[oa]d, Sturry, 1962, Miss E. Milward. 06 Garden, Seasalter, 1959, **MNE**. Church Wood, Rough Common RGW.

4) Stodmarsh to Grove Ferry, F.J.H. Sandwich, H.C. Watson.

5) Jail Lane, Biggin Hill RAC.

6) 66 Wingate Wood near Upper Halling. J.E.L., A.H.W.D.; F.R. & C.W., 1944. Northfleet J.S. Mill. Cliffe, ESM. Higham, PCH. 67 Swanscombe Wood, 1945 **MNE**. 57 Mounts Wood, Greenhithe. 57 The Thrift, Stone. 57 Darenth Wood, 1945. 66 White Pit, Up[pe]r Halling, 1958, **MNE**. 76 Cuxton, 1955 **MNE**. 76 Broomhill allotments, Strood, Mrs. M.H. Dolling.

7) Woods NW of Wye, FJH. Near Lower Bell, AHWD. 05 Park Wood, Chilham, 1945.

<sup>652</sup> Given in the manuscript as *E. adnatum* Griseb., *E. tetragonum* auct.

8) Woods SE of Chilham; Crundale, ESM. 35 Copse W. of Lit[tle] Mongeham, 1962.

10) E. of Westerham, B.F.D. Jackson; 1955! In Marsh, **MNE**. Ightham, A.H.W.D. Kemsing, E.S.M. Westerham Wood 82.

11) Edenbridge, B.D.J. Tonbridge; N. of Marden, J.J.H. Aylesford, W.W.R. Barming; Ryarsh, W.M. Rogers. Holt Wood, Aylesford, 1944. Swanton Valley floor, 54. Dering Wood, Pluckley 1949 **MNE**. Headcorn, B.D.J. Boxley Abbey, ESM. Mereworth Comp Woods, '54 **MNE**. Ryarsh Wood. Snarkhurst Wood. Warren Wood, E. Malling. Penshurst, 1936, GE Shaw **TLS**.<sup>653</sup>

12) Ham Street, F.M. Webb. Westwell, ESM (1947!). Near Ashford, F.M. Webb. Westenhanger, F.J.H. Sevington, F.M. Webb. Hothfield, 1946. Willesborough Lees, 1946.

13) W) Tunbridge Wells, Hb. Banks. Speldhurst, F.J.H. Penshurst 1936 GE Shaw **TLS**. Lower Tott Shaw, Lamberhurst, 1942, J.R.W. S. of Matfield, 1944. By Brighton Lake, T[unbridge] Wells, CAS 1960. Combwell Wood, 1979.

14) S.E. of Cranbrook, ESM.

15) R[oa]dside, 2m. W. of Wittersham, Oxney, 1958 **MNE**. Dungeness 1947!; Lydd; S.E. of Ham Street, F.J.H. E of Appledore, E.S.M.

16) Hythe, FJH. Folkestone; Pedlinge; BDJ.

**E. tetragonum** ssp. **lamyi** F.W. Schultz (Nyman)<sup>654</sup>

15, 16.

Native. Woodland rides, hedgebanks, and waste ground; rare and apparently nowhere abundant.

1<sup>st</sup> record, 1889: Godmersham, etc., E.S.M., *J. Bot*, p.145.

3) 16 Thornden Wood, 1891, E.S.M. **BM**; RGW. Said to be frequent in the Blean Woods by ESM. 15 Pine Wood, Littlebourne, 1958, **MNE**; 1962, Mrs J. Russell. Church Wood, Rough Common, RGW, 1965.

6) 66 field at foot of downs, near Upper Halling, J.P.M.B., *BEC Rep.* 1939-40, p.278. 67 Swanscombe Wood, G.M.A. & F.R., det. G.M.A.

8) 05 Woods E. of Godmersham; Crundale; E. of Wye, E.S.M. 04.

10) 55 Waste ground, Sevenoaks, J.P.M.B., *BEC Rep.* 1939-40, p.278. 45 by Pond SE of Sundridge, 1955 **MNE**.

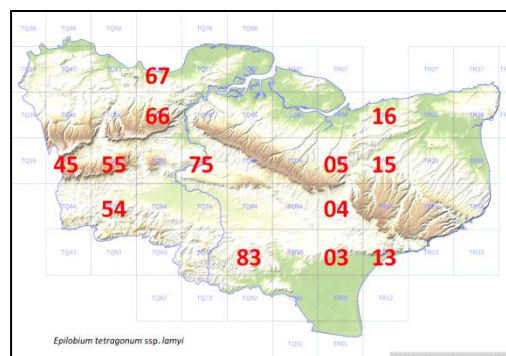
11) 54 Waste ground, Tonbridge, J.P.M.B. 66 Ryarsh Wood, W.M. Rogers (1947!) **MNE** det. GMA. 75 Lane near Boxley Abbey, E.S.M.

12) 04 Willesborough Lees, 1893, E.S.M., **BM**. 03 Bourne Wood, Ham Street. D.McC. & F.R., 1946.

13) 54 waste ground, High Brooms, J.P.M.B. 83 Roundshill Park, Sissinghurst, 1949, **MNE**, det. G.M.A.

14) Tenterden 1897, RRH, Hb Croydon, det. GMA.

16) 13 Undercliff road, E. of Sandgate, on hedgebank, 1947, **MNE**.



**6. E. obscurum** Schreber

Short-fruited Willowherb.

15, 16.

N.

Native. Marshy ground, open woods and coppice, waste ground, river banks; common in many parts of Kent.

1<sup>st</sup> record: possibly 1632; Nash to Quex, Johnson, *Descriptio*, but uncertain: could be montanum.

1) 46 Hayes, Miss A. Mills. Ruxley pits. Joyce Green; / Chislehurst GMB.

2) 97 Old R[ai]l[wa]y SE of Minster, Sheppey, 1958 **MNE**.

3) Church Wood, Rough Common, R.G.W. 1965.

6) 76 Wingate Wood, J.E.L. F.R. & C.W., 1944. 57 The Thrift, Bean, PCH.

7) 94 Westwell, arable on chalk, 1958, EGP **MNE** det. F.H.P. 95 Belmont Park, 1958, DMcC.

10) 45 Darenth E. of Westerham GMB.

11) 54 Garden, Tonbridge, 1927, J.E. Little **BM**. 65 Warren Wood, E. Malling. 65 Oaken Wood, near N[orth] Pole Inn, 1958 **MNE**. 75 Sandling Wood, EGP, 1958.

12) 94 Yardhurst, W. of G[rea]t Chart. 94 Moat F[ar]m, G[rea]t Chart. 94 Hothfield Common, DMcC & B.Dodds. 13 Gibbins Brook, track. LJM. Canterbury, 1955, RGW. 15 Sturry Rd., Canterbury, by Lake, C.A. Roberts.

13) 53 Tunbridge Wells, 1848, Miss Attersell, **BM**. Bayham CAS. 73 Angley Wood. Old Forge F[ar]m High Brooms JRW. 63 Chingley Wood Goudhurst, 1960, FR & CAS. Capel Manor Horsmonden JRW. Combwell

<sup>653</sup> This record has been duplicated, being also, probably more accurately, assigned to district **13** below.

<sup>654</sup> Treated in the manuscript as a species, *E. lamyi* F.W. Schultz. Not separated from *E. tetragonum* in the check-list.

Wood 1979. 53 By Brighton Lake, T[unbridge] Wells, 1960, CAS. 83 Rogers Wood, Biddenden, 1954. 734 Blackbush Wood, DS.

14) 82 Church Wood, Wittersham, 1964.

16) 13 By Sandling Road, Hythe, LJM.

**E. obscurum x palustre** = *E. schmidtianum* Rostk.

15, [16.]

11) Headcorn, E.S.M.

12) Hothfield Common, E.S.M.

15) Ponds, Dungeness, E.S.M.

**7. E. roseum** Schreber

Pale Willowherb.

15, 16.

N

Native. Stream- and ditch-sides, waste ground, roadsides, gardens; widespread, but certainly rare and very scattered.

1<sup>st</sup> record, 1873: Kent, H.C. Watson in *Top. Bot.*

1) Lewisham, A. Atkins **BM**. Beckenham, by stream, E.D.C.; 1915 Hb Davis **MNE**. Bickley, Cole. Foots Cray, Hb Lamb 1861 **MNE**. Wood, Northumberland Heath, A.H.W.D. 46 By R[oa]d E. of Ravensbourne Estate, Keston, 1955 **MNE**. Abbey Wood, G.A.M. Chislehurst, GMB. 37 Blackheath, E.C.W., 1946. 46 roadside E. of Keston Common, 1955.

2) Woolwich Arsenal AHWD. 06 Bank by Faversham Creek, 1960 **MNE**.

3) Church Wood, by Rough Common, 55 RGW.

5) 46 Roadside, Downe, 1955.

6) [Cobham, Miss Young, *Fl. Kent.*]

10) Westerham, Beeby. Near St Clere, Kemsing, Roper. 45 Puddledock, SW of Toys Hill. c.1936, A. Beadell.

11) Ditch by R[oa]d S. of Boxley, F.M. Webb. 75 Plentiful by stream, E. Malling, 1951-58 **MNE**. 74 ½m. W. of Marden, by a ditch, 1956 **MNE**. 75 Market St[reet], Maidstone. 85 Fairbourne Mill, Mrs B. Dodds, 1960. 44 locally plentiful, Edenbridge, KEB. Headcorn, E.S.M.

12) Willesborough Lees, E.S.M. By the E. Stour, Westenhanger to Smeeth station, plentiful, E.S.M.

13) 54 Southborough, in garden, Miss Crampton 63 Pond N. of Hoathly, Lamberhurst, 1940, JRW. 54 Hilbert Rec[reation] G[roun]d, Tun[bridge] Wells, 1962, C.A.S. Old allotments, 1962, CAS. 53 By Brighton Lake, T[unbridge] Wells, 1960, CAS. Broadwater Down, KEB. 63 Scotney Castle, weed in garden, 1962, KEB. 63 Bayham Woods, VC16, 1956, CAS. Bishopsdown T[unbridge] W[ells], '50, KEB.

**8. † E. ciliatum** Raf.<sup>655</sup>

American Willowherb.

15, 16.

Alien, now completely naturalised, and after *E. montanum*, our commonest Kentish *Epilobium*: common all over Kent in damp woods, especially coppices, on streamsides, gardens, and waste land generally. Felling of woodland has helped in the increase of this species. It is often plentiful in coppice 2 years after cutting.

1<sup>st</sup> records, vc15: 1936:Denge Beach, Lousley & Wallace. Vc16: 1929, Ryarsh Wood, A.R. Horwood, Hb. **K: J. Bot.** 1935, p.179 and *BEC 1935 Rep.* p.135<sup>656</sup>.

1) 46 Waste ground, Green Street Green, JPMB; 1945! 46 Ravensbourne Estate, Keston, 1955 **MNE**. Keston Bog, HMP, 1959. Ruxley pits. Beckenham Place PCH. 56 Farningham Wood, PCH; 82!

2) 77 by canal, Higham. 75 Below Aylesford, E.G. Philp, 1958 **MNE**. 06 Oare Creek, H.M.W., 1962, det. FR.

3) 16 Homewood Rd., Sturry, 1962, Miss E. Millward, det. F.R. Church Wood, Rough Common, RGW, 1965.

5) Chalk pit, between Farnborough and Green St[reet] Green, 1939, JMPB, *B.E.C. rep.* 1939, **40**, p.278.

6) 76 Cobham Woods; 76 Strood, garden weed, Mrs. M.H. Dolling. Wingate Wood '51 FR.

7) 85 Squirrels Wood.

8) 14 Covet Wood, Kingston, 1950 **MNE**. Upper Hardres Wood, 1964. 24 Walderchain Wood, Barham, DACL. 24 above Shelrigs, Denton, DACL. Wolverton; Alkham, DACL. 34 Oxney, 1957, B. Nash. 24 Reinden Wood, B. Nash '58, 34 Napchester Wood / Eastling Wood, B. Nash, 1957.

9) 36 Minster Ch[urch] y[ar]d, 1965.

10) 55 sandpit by R[ai]l[wa]y, Riverhead, CAS. 55 Waste ground, Sevenoaks. On tip N of Bat & Ball, 1938, JPMB. 57 Sutton at Hone Meadows HMP. Brasted Marsh RAC. Darenth Meadows HMP. Sundridge, '55, DPY de[t.] GMA. Westerham Wood 82.

11) Ryarsh Wood, A.R. Horwood, 1929, **K: J. Bot.** 1935, p.179 and *BEC 193 Rep.* p.135. Tonbridge tip, 1938, JPMB (S of Postern Farm). Lyons Crescent, Tonbridge, 1939, JPMB; 1941, JRW. 54 Trench Wood, Tonbridge,

<sup>655</sup> *E. adenocaulon* Hausskn. in the manuscript.

<sup>656</sup> The BEC Report citation does not refer directly to this record.



JPMB, 1939. L[eft] bank Medway N of Yalding, VC16, 1935, JPMB. 64 Plentiful on banks of Medway, Hartlake Bridge, Tudeley, J.P.M.B., 1939; 1952! **MNE**. 64 Yalding EG Philp, 1957 **MNE**. 65 Hook lane, Harrietsham, Mrs. B. Dodds. 75 Maidstone, EG Philp 1958 **MNE**. Ditch by r[oa]d, Hever R[oa]d, Edenbridge, 1930, JEL, Hb JEL (J. Bot. 1935, p.257) conf[irme]d G.M.A.

**12)** 84 Denge Wood, Pluckley, 1950 **MNE**. 04 Hinxhill (W. of by R[oa]d) 1956 **MNE**. 94 Hothfield Common! ES Canterbury, 1949, FR & CW.

**13)** By str[eam] Polebrook to Old Forge F[ar]m, T[unbridge] Wells, 1941, JRW. 52 Gill S. of Stone Cross, Ashurst, 518381 CAS. 54 Waste ground, High Brooms, 1939 JPMB. 63 Timberlog Wood, Lamberhurst, 1940, J.R.W. det GMA. 53 N. of High Rocks. 54 SE corner Ashour Wood, '54. 63 Ditch S. of Lamberhurst Ch[urch] 684365, CAS. Teise below Golf Course, Lamberhurst, 1941, JRW. Combwell Wood. Angley Wood, 1935, NY Sandwith. 54 Hilbert Rec[reation] G[roun]d, Tun[bridge] Wells, 1962, CAS. 63 Chingley Wood, Goudhurst, 1960. 53 By Brighton Lake, T[unbridge] W[ells], CAS, 1960. W. of Hoathly by Teise JRW, 1941. Near Teise, copse Capel Manor Horsmonden JRW 1941. Furnace F[ar]m copse and Weir field shaw, 1941, JRW. Stream S of Sissinghurst, 1941, JRW.

**14)** Wood near Breeches Pond RAC.

**15)** 01 by Pool, Denge Beach, JEL & ECW, 1936 Hb JEL. 01 Halfway Bush, Dungeness, 1947, **MNE**.

**16)** 13 Wood NW of Sandling Junction, J.P.M.B., 1939. Saltwood LJM. Brockhill LJM.

### 9. *E. palustre* L.

Marsh Willowherb.

15, 16

Native. Valley bogs, marshy fields, ditches, rather rare and local. In Surrey, Sussex, Essex and Pas de Calais.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p65

**1)** Chislehurst Common, 1946 **MNE**. Darrick Woods, 440650, '59, F. Swain.

Chislehurst N.

**2)** Holborough Marshes, 1944. Ham Marshes, 026626, C. Tancer.

Faversham, Thanet E.

**3)** Church Wood near Rough Common, 1965, RGW.

Canterbury

**4)** Sandwich Bay, 1932, R. Meinertzhagen **BM**. Stodmarsh, L.W.W. Fordwich Marshes, 1949, E. Robinson. Monkton Marshes, J.S.M. Sarre Marshes, Fl. Thanet. Deal, H.C. Watson. Sandown Dikes, Miss L. Day. About Stourmouth, Dowker.

**8)** Lydden Spout, by freshwater spring at foot of cliffs, 1945, **MNE**.

Maidstone; Tonbridge, W.W.R. Headcorn, E.S.M. Moatenden, Headcorn, 1944? Meadows W of Edenbridge 1957 DPY.

**12)** Hothfield Common, F.M.W. (1943-54, 1962! **MNE**), plentiful in the main bog. Gibbons Brook, F.R. Ham Street Woods, E.S.M. Willesborough Lees, W.R. Jeffrey.

Wye, Hoth[field], Hythe, Pembury, Edenbr[idge].

**13)** Friezley Bog, Cranbrook, 1944. Hawkenbury Bog. Angley Wood, 1945. Bog W. of Ellis Wood, Lamberhurst. Furnace Pond, Horsmonden, 1955 **MNE**. Ditch S. of Ch[urch], Lamberhurst, 684365, CAS.

Cranbrook, T[unbridge]-W[ells], Lamberhurst.

**14)** [Hawkhurst, JC Melvill.]

**15)** Dungeness Open Pits, FJH (1948!).

Dungeness

### 10. † *E. brunnescens* (Cockayne) Raven & Engelhorn <sup>657</sup>

New Zealand Willowherb.

16.

H.

Alien, recently introduced and becoming naturalised..

First reported at Pembury Walks by C.A. Stace.

**13)** Wall, Linden Park Rd, Tun[bridge] Wells, 1958, KEB; 1960 CAS. Bare bank, Lonsdale Gardens, near Central Station, T[unbridge] Wells, 1960/61, KE Bull. Tun[bridge] Wells Common, 577386, 1960/61, E. Shorrocks. 620427, Pembury Walks Wood '56, C. Stace. [Bridge over Teise, Bayham Park, CAS, VC14.] By Brighton Lake, T[unbridge] Wells, CAS, 1960; not '62. Broadwater Down T[unbridge] W[ells], 56 KEB.

**10)** Knole Park, near S. end, 1959 Mrs AG Side; 1959 Dr Melville; 1962, Miss G.M. Prideaux; Miss H. Speer; 1963 Mrs Hewson. Knole Park, near House, 1962, CAS.

**Chamerion** (Raf.) Raf. <sup>658</sup> (= *Chamaenerion* Seguiet nom. illeg.)

**C. angustifolium** (L.) Holub

Rosebay Willowherb.

15, 16.

N.

Native. Open or cleared woods, recently-cut coppice, roadsides, waste ground; now extremely common throughout Kent.

First record, 1666: Greenwich, Merrett, *Pinax* p.25.

<sup>657</sup> Given in manuscript as *Epilobium nerterioides* Cunn. (= *Epilobium pedunculare* auct.)

<sup>658</sup> Treated as *Chamaenerion* in the manuscript, with the species given as *Chamaenerion angustifolium* (L.) Scop. and English names as Rose-bay Willowherb, "Platelayers Pride", Folkestone..

- 1) Holwood Park. Joydens Wood. Farningham Wood, 82! Hayes Common, Hb. Davis 1915 **MNE**; 1962! Blackheath ECW. Ruxley pits. Chislehurst Common PCH. Beckenham 1948 SEC. Abbey Wood. Crofton Heath. Bexley Millpond. N. Cray Wood. Shooters Hill GMB.
- 2) Woolwich Arsenal PCH.
- 3) Shelving Wood, Hoath, 1962.
- 5) Wood W. of Shoreham PCH. Pilots Wood PCH. Chevening Park PCH. Darwin's Bank Wood, Downe. 396611 PCH.
- 6) Stanstead, Mrs White in Hb. A. Atkins **BM**. T) Holly Hill, Birling. T) Chattenden Wood. North Wood, Holly Hill. Wingate Wood, Halling, '44. T) Darenth Wood. T) Swanscombe Wood. T) Lords Wood, Darenth. R[oa]dside E of Kemsing, PCH. Horton Wood PCH. Mounts R[oa]d. T) Mounts Wood PCH. T) The Thrift, Bean PCH. Halling Downs. Downs E of Shoreham. Preston Hill.
- 7) Challock Leas 54. Park Wood Molash '54. Opp[osite] Primrose Cafe, Stockbury '54. Squirrels Wood, Stockbury 54. By A249 below Stockbury Ch[urch] '54. Simia Wood, Ospringe PCH.
- 10) Westerham Wood, B. Sennitt; 82! By R[iver], S. Darenth, PCH. N of Bat & Ball CAS.
- 11)G) Fairbourne Heath opp[osite] Re[servoir], '54. Kings Wood N. of Ulcombe, '54. Mereworth Comp Woods N. of Swanton Valley 54. Swanton Valley floor, 54. Gover Hill Plateau '54. Coxheath '54. SE Oaken Wood, fresh copp[ice] '54. Kings Wood, H Elgar [18]97 **MNE**; 1960!
- W) Shipbourne Forest, E side N end '54. Widehurst Wood, 1958 **MNE**.
- 12) Moat F[ar]m, G[rea]t Chart 54. Pond E. of Buckhall, W of Bethersden, '54. Hoads Wood, '54.
- 13) 53 Gill S. of Stone Cross, Ashurst, 518381, CAS. 54 NE Corner Ashour Wood on clay '54. 54 R[oa]dside S. Park, Penshurst, '54. 63 High Wood, T[unbridge] Wells, PCH. Blackbush Wood DS. Scotney (white fl[ower]s) '64, KEB. 64 Pembury Woods PCH. Bayham CAS. Combwell Wood, 1979.

(Ludwigia L.

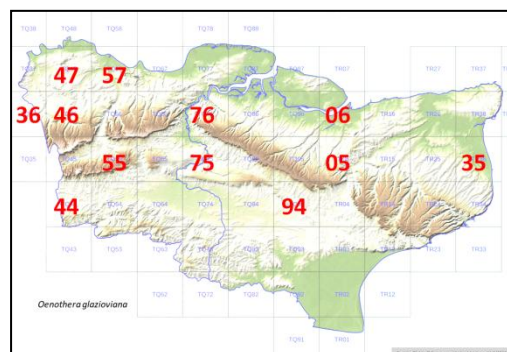
**L. palustris** (L.) Elliott formerly occurred at Buxted in E. Sussex, but is now confined in Britain to the New Forest.)

**Oenothera** L. (All derive from *N. America* originally, except *O. biennis*)

**O. glazioviana** P. Micheli ex C. Mart.<sup>659</sup> Large-flowered Evening-primrose. [15, 16.]

Alien, naturalised in a few places on waste ground.

- 1) 46 Crofton Heath, PCH. 36 Tip, W. Wickham, 1955 J M Sherwood. 36 Hayes near Sta[tion], PCH. 46 Hayes Churchyard Wall, 1956, Miss A. Mills. 47 Ruxley pits.
- 3) 06 Rose in Bloom, Seasalter, on bank, HMW.
- 4) Richborough, 1960, Mrs B. 35 Sandwich Bay, 1962.
- 6) 57 Great chalk pit, Horns Cross, 1962.
- 7) 76 Strood High Street, on r[ai]l[wa]y bank, Mrs M.H. Dolling. 94 P[ilgrims] Way, Westwell, 1950s, ES.
- 8) 05 Denge Wood, in forestry road, 1963, Mrs.B.
- 10) 55 Sandpit by R[ai]l[wa]y, Riverhead, CAS. 55 Sevenoaks tip CAS.
- 11) 75 waste land by R[oa]d, Aylesford, CAS. 44 Edenbridge tip, DPY.
- 13) opp[osite] Culverden Arms, T[unbridge] Wells, KEB.



‡ **O. biennis** L. Common Evening-primrose. 15, 16.

Alien, frequently naturalised on waste ground and dunes.

- 1) Shooters Hill; Lewisham Fl. Met. 1836\*. 36 tip, W. Wickham '55 J.M. Sherwood. L[owe]r Sydenham, 1863, J. Britten. 46 Crofton Heath PCH. Swanley Junction, E.S.M. 46 Bromley R[ai]l[wa]y bank, FR. 47 Ruxley pits. 47 Slades Green. 46 Petts Wood GMB.
- 2) 47 Woolwich Arsenal, AHWD (1943!) 1954 PCH. R[ai]l[wa]y, S. of Snodland, F.J.H. 57 Stone Marshes, behind river wall, 544719, 1961, H.M.P. Graveney, R[ai]l[wa]y cutting, REW.
- 3) 15 Whitstable Castle, REW. N. of Canterbury in Blean, freq[uent] RGW.<sup>660</sup>
- 4) Deal, Duthie. Sandwich Bay 1946 DMCC. 34 Kingsdown Beach, 1946. Ash; Sandwich, REW.
- 5) Halstead (Brook glade) 1852, A. Atkins, **BM**. 56 Farningham R[oa]d Sta[tion], old chalk pit PCH.

<sup>659</sup> Thus (in similar form) in the check-list; in the manuscript given as *Oenothera erythrosepala* Borbás.

<sup>660</sup> Altered in the manuscript from REW.

6) Cobham, Miss Young in *Fl. Kent*. Darenth Wood, 1874, M'Lachlan. 66 R[ai]l[wa]y cutting, Bush 698673, Mrs. D Woods. 57 Cotton Lane, Stone, HMP. 66 Longfield Tip, 6168, PCH, 1956. 67 Tollgate, Hb St J M 1925.

7) 86 Berengrave pit, Rainham, PM Roberts.

8) St Margarets Bay, Duthie. 24 Whitfield Hill, rough garden, B. Nash, 1959.

10) 55 Sevenoaks tip DMcC.

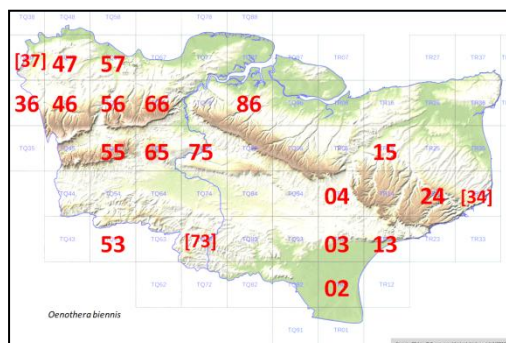
11) Fant Quarry, E.M.H. Addington, ESM. Sandling, Hb. Lamb, 1883 **MNE**. Ditton q[uarr]y. 65 Bracken Hill, Platt, DMcC.

12) 04 Willesborough Lees ESM; 1933 T.J. Frazer. 04 Ashford; 03 Kingsnorth, CNP. 15 Canterbury, Common, RGW.

13) Hawkhurst, J.C. Melvill. 53 Rusthall Common KEB.

15) 02 Littlestone. 02 Greatness Dunes.

16) 13 Roadside Bank NW of Sandling Junction, 1958.



**O. cambrica** Rostanski<sup>661</sup>

Small-flowered Evening-primrose.

**O. stricta** Ledeb. ex Link

Fragrant Evening-primrose.

15, [16]

*Alien, completely naturalised on sand dunes at Sandwich Bay.*

4) Between Richborough and Sandwich by Railway, 1861, *Phyt. N.S.* V, 184. Richborough Castle, by river, J.Reid, 1875. Sandwich Bay, 1932, R. Meinertzhagen **BM**; 1946, locally frequent on dunes, near hotel and 2m. to N! **MNE**.

10) Ightham, E.M.H.

15) Littlestone, KEB.

**O. perangusta** Gates<sup>662</sup>

Narrow-leaved Evening primrose.

(Hybrids occur between several of the species;but are hard to identify.)

**Clarkia** Pursh<sup>663</sup>

‡ **C. amoena** (Lehm.) A. Nelson & J.F. Mcbr.

Godetia.

*Casual.*

‡ **C. unguiculata** Lindl.<sup>664</sup>

*Casual.*

‡ **Fuchsia** L.<sup>665</sup>

‡ **F. magellanica** Lam.

Fuchsia.

**Circaea** L.

**C. lutetiana** L.

Enchanter's-nightshade.

15, 16.

N.

*Native. Woodlands on a wide range of soils, but not found on very dry or markedly acid soils; shady hedgebanks; very common in most parts of Kent, but absent from the alluvial Marsh district (15), extremely rare in 2) and 4), and absent from Thanet, Grain and Sheppey.*

*1<sup>st</sup> record, 1629, Gravesend to Rochester, Johnson, lter, p.3.*

1) Holwood Park. Joydens Wood. Farningham Wood; 82! Keston Common PCH. Roundabout Wood, Crofton Heath PCH. Abbey Woods, GAM. Ruxley pits. Blackheath, Miss Barnsdale. Beckenham, 1948, SEC. Woods by R[iver] Cray, N. Cray PCH. High Wood, Crofton PCH. West Wickham, 1915, Hb Davis, **MNE**. Shooters Hill GMB.

2) Garden weed, Sheerness, '53, Mrs. Bryson.

3) Whitstable Castle g[roun]ds, REW<sup>666</sup>. N. end Clowes Wood, 1965.

<sup>661</sup> Given in check-list, but no entry in the manuscript.

<sup>662</sup> Given in check-list, but no entry in the manuscript.

<sup>663</sup> Given in check-list, but no entries in the manuscript.

<sup>664</sup> Given in check-list as *Clarkia elegans* Dougl. ex Lindley.

<sup>665</sup> Given in check-list, but no entry in the manuscript.

- 4) Preston Court, RGW.
- 5) Shoreham, AA **BM**. Wood W. of Shoreham. Chevening Park. Pilots Wood. 3964 Well Wood, PCH.
- 6) Brewers Gate, Shore, 1823, R. Pocock **BM**. Swanscombe Wood. Darenth Wood. Beechy Lees Woods. Dunstall Woods, Shoreham PCH. Preston Hill, PCH. **T**) Chattenden Wood. The Thrift, Bean, PCH. Halling Woods PCH. Cuxton Woods, BC.
- 7) Bridge Woods; Lordswood; Westfield Wood; Monkdown Wood; Hill field, Boxley. Simia Wood, Ospringe, HMW. Squirrels Wood, S.E. of Primrose Cafe, on clay drift, 1954. Church Wood, Stockbury (chalk) 1954.
- 8) Reinden Wood B. Nash, 55. Bettshanger Wood / Northbourne Court, 1959. B. Nash. G[rea]t Mongeham, Miss J. Moore.
- 9) Copse SE of Minster, AGS.
- 10) Westerham Wood, B. Sennitt; 82! Broadhoath Wood, 1950, on ragstone, **MNE**.
- 11) **G**) SE part Oaken Wood, Barming, on basic loam 54. Swanton Valley floor; Ride N. of Swanton Valley cott[age]s on drift 54.
- W**) Shipbourne Forest (E side Plaxtol R[oa] `d) '54. Hoads Wood 54.
- 13) 53 Gill S of Stone Cross, Ashurst, 518381, CAS. Bayham CAS. Combwell Wood, 1979. 54 NE corner Ashour Wood (W[?adshurst] Clay), '54. 44 Wood S. of Highfield Rocks, Chiddingstone 54 (T[unbridge] W[ells] S[and]). 44 Wood ½m SW of Chiddingstone Hoath, '54 (W[eald] C[lay]). 64 Pembury Woods, PCH. Blackbush Wood, DS.

## CORNACEAE

### Cornus L.

**C. sanguinea** L. Dogwood. 15, 16. N.

(*Thelycrania sanguinea* (L.) Fourr., in *List of British Vascular Plants*)

Native. Scrub, open woods, hedges; abundant throughout the chalk districts, where it is the main seral dominant of the forest wood phase in the succession from grassland to woodland; very common on ragstone and gault, frequent to rather common in the Weald; app[arently] absent only in I[sle] of Sheppey and Romney Marsh.

1<sup>st</sup> record, 1629: E. of Gillingham, Johnson, *Iter*, p.5. Common in Surrey, Sussex and Essex and N. France. Fruits at Bronze Age Roman levels, Crossness, Spurrell, 1889; Reid, 1899; charcoal at Roman level, Butchery Lane, Canterbury, Williams & Frere, 1948 (Godwin, p.138).

1) Joydens Wood 1945. Abbey Wood, RAB, on shell bed. Crofton Heath. Wood by R[iver] Cray. N. Cray, PCH. High Wood, Crofton. Hayes, D.P.Y. Ruxley pits. Farningham Wood 82.

3) Scrub N. of Dunkirk, 1945. Bysing Wood (Thanet S[and]) '62.

5) Near Keston, Hb. Davis 1918 **MNE**; D.P.Y. Darwin's Bank, Downe; Downe Golf Course; Jewells Wood. 396611 PCH. Downs W. of Shoreham. Chalk W. of Eynsford. Polhill, Pilgrims Way. Pilots Wood.

6) Cliffe chalk pits. Shoreham rifle range. Greenhills Road, Otford. Woodlands Hill Wrotham 1955. Kemsing Downs. Cuxton Downs. Halling Downs. (T) Great Chattenden Wood, 1944. Lords Wood, Darenth, Mounts Road '44-62. Preston Hill. Great Crabbles Wood '44. Scrub, etc. Northfleet, 1961, HAS. Claylane Wood Cobham 1961 HAS. Horton Kirby PCH. Darenth Wood, N. end, '62. Crookhorn Valley, N & S sides, '59.

7) Burham Downs, 1958 **MNE**. Wouldham Downs 1958. Bluebell Hill. Boarley Warren. Boxley Warren. Church Wood Stockbury 1959. Detling Hill, A249, 1954. Down N of Bredhurst Hurst 1955. Hollingbourne Hill, 62. Simia Wood/Down, Ospringe HMW. Coombe NW of Detling 44-62. Charing Hill, A252, '54. Bank on chalk by A28 1m. NE of Chilham, 1954.

8) Broad Downs, Brook, '44-'62. Bridge Hill, North, 1955. Chalk, Folkestone Warren.

10) R[iver] path below Shoreham PCH. Westerham Wood 82!

11) **G**) By Startled Saint, W. Malling, 54. Swanton Valley floor (ragstone) 54. SE part Oaken Wood by R[oa]d; and ½m to W; 1954. Wet Wood S. of Mereworth 1958. By A249, Horish Wood, 1954. R[oa]dside 1 m S. of Borough Green, 1959. R[oa]dside Platts Heath, 1954. R[ai]l[wa]y NW of Tonbridge CAS. Edenbridge, 1904, D. Smith, **MNE**.

**W**) ½m S. of Dunks Green on Weald clay 54. R[ai]l[wa]y Sevenoaks tunnel Sand. R[ai]l[wa]y, Hildenborough, CAS. R[oa]dside, Whetsted 1945. Medway Bank, Ashour Wood '54. Brook Wood, Headcorn, '54. By stream Starvecrow Hill '58. N. of Bough Beech 1955. Wet Wood N of [Four] Elms '55.

13) R[oa]dside S. Park Penshurst 1954. R[oa]dside ½m E of Up[pe]r Haysden, Tonbridge (T[unbridge] W[ells] S[and]) 1954. Vauxhall Lane, Southborough, CAS. R[ai]l[wa]y High Brooms to Tonbridge, CAS. Roundabout

Wood, Tun[bridge] Wells, CAS. Near Sewage F[ar]m, North Farm Rd, Tun[bridge] Wells, CAS. Roadside W of Bidborough CAS. Near Cowden Station, D. Smith 1904 **MNE**. Wood Ne of Cobhambury/Edenbridge 58.  
**16)** Gault, Folkestone Warren, 1965, BN.

‡ **C. sericea** L.<sup>667</sup> [Red-osier Dogwood. 16. H.]  
 1) Ruxley pits.

‡ **C. mas** L.<sup>668</sup> [Cornelian-cherry.]

‡ **C. suecica**<sup>669</sup> [Dwarf Cornel. 16.]  
 Alien in S. England.

**10)** Introduced with *Rhododendrons* in plantation, Sevenoaks, H. Brenchley, 1963.

**Aucuba** Thunb.<sup>670</sup>

**A. japonica** Thunc. Spotted-laurel. H.

## SANTALACEAE

**Thesium** L.

**T. humifusum** DC. Bastard-toadflax. 15 N, but apparently recently extinct.

Native. In short turf in *Festuca* chalk grassland on very shallow rendzina or skeletal soils, parasitic on grasses; very rare and confined as far as is known to three localities S. of Canterbury. Possibly more widespread on the chalk plateau of E. Kent before enclosure and cultivation of the former extensive sheep walks.

1<sup>st</sup> record: Bishopsbourne, Rev. E. Ellman; n[ea]r Upper Hardres, Mrs Acheson, *BEC Repr.*  
 In Surrey and E Sussex, occasional on chalk grassland; not in Essex; rather rare in Pas de Calais, but on both chalk and calcareous dune grasslands there.

**8)** Down E. of Burstard Manor, 2m. SW of Bishopsbourne (probably same as first record) 1946:58 **MNE**, gone by 1998. Strip of down with junipers, N. of Broadway Green F[ar]m, Petham, 1902, W.H. Hammond, Hb. FJH; 1949:52:60 **MNE**, gone by 1978. Steep grassy lane bank on chalk, N. of Swarling Farm, Chartham Downs, SW of Iffen Wood, (known here previously by R.G.W. and others) 1949-63; 61 **MNE**, gone by 1978 due to close mowing.

## VISCACEAE<sup>671</sup>

**Viscum** L.

**V. album** L. Mistletoe 15, 16 N 21/52

Native. Parasitic on various trees, especially old limes, apples, hawthorn, elm and maple; rather rare in Kent, with a very scattered distribution, but locally frequent N. of Ashford. See paper by Cove, D.J. (1956), in *Starfish*, 7, pp.20-32, on distribution and hosts of this species in Britain (Cove: of 831 infestations in Brit[ain], 345 on apple, 222 on Hawthorn, 133 Elm, 76 Tilia).

1<sup>st</sup> record, 1777: On orchard trees, etc., Faversham, E. Jacob, *Pl. Fav.*, p.124.

**1)** [Foots Cray, Hb. Sim.] [Dartford Heath, S. Priest.] [Swanley Horticultural College, on lime, 1900, G.N. Melland.]

**2)** [Shooting meadow Faversham, on lime, Cowell, *Fl. Fav.*] [Graveney, Stowell.] 06 on apple, Murton F[ar]m, Graveney, R.Th. & REW, 1950.

**3)** 06 Perry Wood, Selling, abund[ant] on apple in orchard S. of Inn, 1950, REW. On Laxton apple trees, garden of house, Tankerton Road, Whitstable; has certainly arrived naturally, 1958, H.J. Wilks. 06 On tree in orchard, by Lychgate Filling Station, Thanet Way, n[ea]r Dargate, 1958, H.J. Wilks. [Perry Wood, on oak, Stowell.]

**4)** 26 on *Crataegus monogyna*, n[ea]r Preston, 1962, P.J. [sic, for P.W.?] Wilberforce.

<sup>667</sup> Given as *T[helycrania] sericea*.

<sup>668</sup> Given in check-list; not in the manuscript.

<sup>669</sup> Given as ‡ *C. suecicum* under ‡ *Chamaepericlymenium*.

<sup>670</sup> In check-list, but not in the manuscript.

<sup>671</sup> Loranaceae in the manuscript.



- 6) 66 Cobham, on *Acer campestre*, Miss Young; A.A., **BM**; and on thorns, Cobham & Bush, Pamplin, *N.B.G.*; on lime, 1887, teste ASK; B. Carter, 1952. 96 Woodstock, Sittingbourne OD. 94 E. of Suomi, E.S. 94 ¼m N. of Westwell Ch[urch], ES.
- 7) 05 Trees N. of Chilham Church, 1958, E. Philp. 05 N[ea]r Heronry Godmersham Park 1951 REW. 04 Soakham Down, on *Crataegus monogyna*, 1955, 038495; & on *Acer campestre*, BJB. 34 Eastwell Park, ES, **MNE**, on *Crataegus* 994474, 004477, 020703 [*sic, obviously wrong*], 025487, 010475, 015470, 015478. 05 Godmersham, 055501, 060505, 066506. [Lees Court Park (on Oak) J. Martin, Gard[eners] Chron[icle] 1875.] [Selling, in orchards, Stowell.] 04 Challock, 003495, ES. 05 Chilham Park, 060525, ES.
- 8) [Ringwould, Mrs. Benson.] [Charlton Park, on apple and maple, F.G.E.K.] 24 Waldershare Park limes, 1945. 04 SE of Pickersdean, 078448, ES. 04 S.E. of Amage F[ar]m, Wye, 073454, ES. 15 122532, 118525, n[ea]r Kenfield Hall, Chartham, Miss E.M. Wye Down, *Crataegus*, 1913, G. Richardson.
- 9) [Cheesmans, on apple & pear, Fl. Thanet.]
- 10) [Riverhead Miss Worship, Fl K.] 45 Limes, Valence Bank, Westerham, 1958. 55 Limes, Wildernes Park, Seal, 1961. 45 Limes, Brasted Place, 1962. Ightham ...on lime 1920 ASK
- 11) W. Ryarsh 1922 on maple ASK. Harrietsham 1923 on apple ASK. 65 Herne Pound, Mereworth, 1.'62. 75 Chequers, E. Farleigh, 1.1962. 65 On limes, Watlingbury 684536 n[ea]r Church. 65 On limes, Mereworth Park 669536 & 668537; abundant on limes. 65 In avenue, Fairlawne, Plaxtol, 603533, (Sutton Valence, Mrs. Petley.) 75 E. Malling, 1942. 85 Platts Heath, Mrs. B. Dodds.
- E. On elm and *Acer campestre*, S. of Boxley church, 1958, E. Philp **MNE**. 65 N. of Yalding, 1945. (Maidstone, W.W.R.)
- 12) Brook, on apple, ES. 94 Westwell, E. Scott. Shoddington. 94 Godmersham Park, on Hawthorn, W R Jeffrey. On Ilex, Canterbury, Kings School, AHS. 03 The Paddock, Smeeth, on apple, LJM. 04 Mersham Hatch Park, 056404; 065402, ES. 04 apple, Brabourne to Brabourne Lees, LJM. 04 Kennington 022452; 027451, ES. 04 Boughton Lees, 023473, ES. 14 Stowting Old Rectory apple and lime LJM 1958. 14 Planted at Stowting Court on apple and Hawthorn, LJM.
- 13) 63 On tree by pond, Horsmonden Road, Lamberhurst, 1937, J.R.W. 63 Limes, Parsonage Lane, Lamberhurst, 1944, JRW, (1944!). 73 On apple, grounds of Cornwallis House, Cranbrook, D. Streeter (1955!) **MNE**. 54 Abundant on limes, Penshurst Park, F.J.H., (1951!), CAS 1958. (Bidborough, on lime, Jenner, *Fl. T.W.*)
- 14) 72 Tall trees by R[oa]d, Hawkhurst end of Sandhurst, CAS.

## CELASTRACEAE

### *Euonymus* L.

**E. europaeus** L. Spindle.<sup>672</sup> 15, 16. N.

Native. Open woods, scrub, and hedges; abundant on chalk, frequent on ragst one, more scattered on sand and clay, but well distributed in the Weald; apparently absent from Grain, Sheppey, and Romney Marsh.

1<sup>st</sup> record, 1629: Chalkdale, Dartford. Johnson, *Iter*, p.9.

1) Bromley Common, D.McC. Vicarage Lane, Bexley, 1903 RHC. Clothworkers Wood, Shooters Hill, 1933, L.R.A.G., **MNE**. Farningham Wood PCH; 82! Abbey Wood, 1904, R.H.C.; 1945, RAB; 1951, GAM. SE of Bexley Heath, Miss Peace. Elmstead Woods, Miss A Mills, 1956. Ruxley Pits. Greenwich Park, LCC. Avery Hill LCC. Gattons Plant[at]ion, Bexley PCH. Wood by River, N. Cray, PCH.

3) Hempshall Wood, Whitstable, RGW 1951. Copse by stream, 1 mile S. of South Street, HMW, '60.

5) Halstead, AA **BM**. Wood near Washneys' F[ar]m, Halstead, PCH. Wood W. of Shoreham PCH. Chalk W. of Eynsford, PCH. Darwins Bank, Downe. 396611, Highams Hill, PCH.

6) Stone pits. Tower Hill, Upnor. Chattenden Wood, S. of Cliffe. Claylane Wood, Cobham 61 HAS. Shorne (G[rea]t Crabbles Wood!) JBM, 1938 **BM**. (N.W. of Strood, 1838 HB. EB, **BM**.) ((Greenhithe, AHWD 1889 **BM**.) SE of Park Wood Eynsford, 1949 **MNE**, 1951 **MNE**. Horton Kirby, PCH. Pilgrims Way, E. of Wrotham. Halling. Snodland. Ryarsh Downs 44. Bush Valley. Otford Mount. Darenth Wood. Preston Hill. Mounts Rd Greenhithe, PCH.

7) Burham Downs 1947 **MNE**. Wouldham Downs. Boxley Warren. Detling. Bredhurst Hurst '44. Squirrels Wood, Stockbury (ch[al]k) '44. Putt Wood. Down opp[osite] Putt Wood. Boxley Hills E Bartlett 1882 **MNE**.

8) Wye Downs. Reinden Wood '53, B Nash. Littlebourne, Mrs B.

10) Roadside, Brasted – Toys Hill, CAS.

11) (Gault) Horish Wood 44. Brambridges, JRW, 1939. Easterfield, E Malling. Lunsford, E Malling. Allington Wood, 1880, H. Lamb **MNE**; 1959! Medway just W. of Tonbridge 1960 CA Stace. Hadlow, 639509. B.Kempster,

<sup>672</sup> Spindle tree in the manuscript.

teste CAS. Hoads Wood, '46. Barming Tunnel. Ryarsh Wood. Loose. Linton. Oaken Wood (Barming Rd hedge). Hobbs Wood, Marden. Mereworth (Swanton Valley). Staplehurst. Brook Wood, Headcorn, '44.

**12)** Brook on Gault. G[rea]t Chart.

**13)** Hedge, Sissinghurst. Path to Hurst Wood, Tonbridge Wells, 1960 CA Stace. Hedge Lamberhurst, FR. Copse, Ash F[ar]m, Horsmonden, CAS.

**16)** Aldington Knowle 1946. Asholt Wood (form with later dark red fr[uit]s. leaves →brown in autumn -) Miss V. Day 1955.

‡ **E. latifolius** [(L.) Mill.]<sup>673</sup>

**4)** Hedge by Sandwich Rd., Littlebourne, 1960, DMCC.

‡ **E. japonicus** L. fil. Evergreen Spindle. [16.] H.  
(Locally naturalised from gardens.)

**6)** Horns Cross shrubbery HMP.

## AQUIFOLIACEAE

[Ilex L.]

**I. aquifolium** L. Holly. 15, 16. N.

Native. Woodlands, hedges; very common on sandy and gravelly soils; less abundant on chalk and clay.

First record, 1629: "Aquifolium. Gillingham to Sheppey." Johnson, *Iter*, p.5. 1669 "At Dungeness for a mile and more grew abundance of Holly trees naturally among nothing but beach and pebbles." Childrey, p.68. 1712 Itinerary of John Leland, ed. T. Hearne, 1712, p.142; 1744, ii, VI 133.

Pollen in (Neolithic?) peat sealing Mesolithic occupation site, Addington, Burchell & Erdtman (1950).

**1)** Keston Common. Hayes Common. Chislehurst Common. Petts Wood. Abbey Wood. Joydens Wood. Farningham Wood, 82! Skeet Hill. Holwood Park. Spring Park Wood, W. Wickham, 1915, ARD **MNE**. Crofton Heath. Mount Mascal, Bexley. Dartford Heath GMB. High Wood Crofton. North Cray Wood. Shooters Hill Woods GMB.

**3)** Bigbery Wood. Hunstead Wood, 1956. Bysing Wood, 1962 (on Thanet S[and]). Holly Hill, Boughton, REW. NW corner Ellenden Wood, REW. Clay Hill Dunkirk REW.

**5)** Jewells Wood, Biggin Hill, 1949 **MNE**. Darwins Bank Wood, Downe, JEL. Norheads<sup>674</sup>, Biggin Hill, 1958. Wood W. of Shoreham. 396611 Highams Hill PCH.

**6)** Pilgrims Way 1m E of Wrotham. Romney Street. Magpie Bottom. Mounts Rd, Greenhithe. Wingate Wood Halling. Wrotham Water Downs, in beechwood on c[lay] w[ith] f[lints], '66. Darenth Wood. Swanscombe Wood. Stone HMP. Colony in hedge, Shorne Hill 61 HAS.

**7)** 95 Longbeach Wood ES. Razor Grinders Wood Wichling 1958 **MNE**.

**8)** Lockering Wood, Alkham, KDR. NW entry, Reinden Wood, B Nash '58.

**10)** Seal Chart. Ide Hill. Brasted Chart. Toys Hill. Knole Park. Westerham Wood, r[are], 82. Westerham Wood, B. Sennitt.<sup>675</sup> Oldbury Hill. Ightham Common. Darenth.

**11)** Mereworth Woods: Comp Woods. Wrotham Hearh '66. Larkfield Heath. Leybourne Wood. Ryarsh Roughetts. Warren Wood; Oaken Wood, E. Malling. Pluckley.

**12)** 04 Willesborough Lees. 03 Mersham, C.N.P. 94 Ashford Warren. 94 Hothfield Common.

**13)** Ashour Wood. N. of Redleaf. Langton Green. Groombridge. Stone Cross, Ashurst, 518381; CAS. Kilndown Wood. Hedges S. of Horsmonden. Old Park Wood; and Windmill Hill, Goudhurst. Bedgebury. Sissinghurst Park Wood. High Wood, T[unbridge] Wells, PCH. Combwell Wood, 1979. Wintleberry Wood, Southborough Common. Pembury Wood, PCH.

**15)** (The placename Wickmary Holm at Dungeness is O.E.; Arich [*sic*] = mere; holm = holly.

Holmstone = strong place with Hollies. This place-name was in use in 1460 (*Arch. Cant.*, Vol. 43).) Holmestone, abundant since Childrey's time. Dungeness. Halfway Bush.

**16)** Brockhill Woods LJM.

## BUXACEAE

<sup>673</sup> Not in check-list.

<sup>674</sup> Given as Norsteads in the manuscript, but that is a placename between Cudham and Pratt's Bottom.

<sup>675</sup> The duplication is because the later (1982) record is Francis Rose's own.

**Buxus L.**

**B. sempervirens L.** Box [15, 16.] N (and planted, or self-sown)

Almost certainly Native on the chalk escarpment at Boxley; the name of the village apparently derives from the plant. The village names in this part of Kent date from the 6<sup>th</sup> and 7<sup>th</sup> centuries.

1<sup>st</sup> record, 1695: 'Buxus' I find in the notes of my learned friend Mr. John Aubrey that at Boxley, there be woods of them. Ray, in Camden's "Brittania" p262. The plant thus appears to have been abundant at Boxley at one time, but it is not so now. Elsewhere the Box has been frequently planted, especially on the chalk downs.

7) Boxley Warren, 1884, H. Lamb **MNE**; 1948! **MNE**; 1952! **MNE**, only about three trees left, one very large, 1952-4.

Almost certainly a native relic on the chalk river cliff of the Mole at Boxhill in Surrey; probably of similar status on the steep chalk scarp by the Arun NE of Arundel, Sussex. Not in France N. of the Somme, but on similar chalk or limestone cliffs by the Seine near Rouen, and at Mariembourg in SE Belgium; probably a relic of the Boreal period.

As an escape or planted at:

5) one old bush in chalk scrub, Betsoms Hill, at 800', "looks native", 1956, R.A.C.

16) Brockhill, Saltwood, wood by stream, 1959, LJM.

**EUPHORBIACEAE****Mercurialis L.**

**M. perennis L.** Dog's Mercury 15, 16 N.

Native. Woodlands on base-rich soils, frequently dominant in the field layer in woodlands on chalk and ragstone, soils on gault, and more locally in flushed areas on other soils. Abundant and widespread throughout Kent, except in Grain, Sheppey, Thanet, and the alluvial marsh districts of 4) (Lower Stour) and 15) Romney Marsh, in which islands and districts it is unrecorded and appears to be absent.

1<sup>st</sup> record, 1597: Greenhithe, etc., Gerard, *Herbal*, p.263.

1) Shooters Hill Woods, 1954, GMB. Beckenham Place Park, wood W. of R[ai]l[wa]y. High Wood, Crofton, PCH. N. Cray Wood, PCH. Bexley ch[urch] y[ar]d, PCH. Holwood Park, on Woolwich Beds PCH. Abbey Wood PCH. Farningham Wood PCH; 82!

2) Hawes Wood.

3) Bysing Wood, eastern edge on Thanet Sand, 1958-9.

5) Wood on chalk N of Farnborough PCH. Chalk W of Eynsford PCH. Rushmore Hil, PCH. Beech Wood W of Shoreham, PCH. Beech Wood, Chevening Park PCH. Pilots Wood, PCH. 36 copse W. of Highams Hill, 397611, 1958, PCH. Beechwood, Darwins Bank, Downe, 1962. Mounts Wood PCH. The Thrift, Bean PCH. Darenth Wood PCH; FR.

6) Horton Wood PCH. Randall Wood, Shorne, l[ocally] d[ominant] on T[hanet] Sand, HAS, 61. Claylane Wood, 1961, HAS. Greenhills Wood. Magpie Bottom PCH. Dunstall Woods PCH. Preston Hill, PCH. Ryarsh Pilgrims Way '44. Great Crabbles Wood 44. Kemsing Downs PCH. Wood above Up[pe]r Halling PCH. North Wood Cuxton 44. Great Wood Cobham '44.

7) Lane S.W. of Queen Down Warren 1955. Wood above Queen Down Warren 1955. Copse below Purple Hill Bredhurst, 1955. Chalky valley floor, Bredhurst Hurst, 1955. Stockings Wood, Detling, 1955. Wood by R[oa]d, top of Detling Hill 1955. Floor of W. Escarpment Coombe, Detling, 1955. Bridge Wood 1998.

10) Ragstone escarpment wood, Rooks Hill, 1955. Westerham Wood, on gault in coppice PCH; 82!

11) Wood by lake, N of A20, E of Bearsted, 1950 **MNE**. Ryarsh Wood. Park Wood Boxley. Horish Wood 44. Snarkhurst Wood. Kiln Barn copse, E Malling. Oaken Wood, on basic soils, E Malling. Warren Wood, E Malling. Springhead copse, E Malling. 440470, R[ai]l[wa]y bank Edenbridge, 1956 DPY. R[oa]d side of lane N. of Hildenborough 1955.

13) Gill SW of Stone Cross, Ashurst, CAS 518381. Tun[bridge] Wells 561384 **MNE**. Copse on Wad[hurst] Clay, below Ash F[ar]m., Horsmonden, 1959 **MNE**. On alluvial loam, Wood by R[iver] Teise, Hoathly, Lamberhurst, 1955. 764398 gill in Alder Carr N. of Folly Hill Colliers Green 1962.

14) College Wood, Wittersham, '62. Cuckoo Wood, Wittersham, '62.

**M. annua L.**

Annual Mercury; Snodland Pride 15, 16 C.

Native or colonist. Waste ground, gardens, allotments, vegetable fields; very common throughout the coastal islands and lowlands, and the Thames, lower Medway and Stour valleys; rare and very scattered in the Weald and on the Greensand, except about Maidstone, Malling and Ashford, where it is very common.

Unrecorded only for the Westerham, Edenbridge, Lamberhurst and W. Oxney grid squares, though searched for intensively there. Sometimes monoecious.

1<sup>st</sup> record, 1597: Rochester, Gerard, *Herbal*, p.262.

- 1) Wood, Penge, Hb. Davis, 1915 **MNE**; JD Lovis, 1950. Waste Ground, Blackheath PCH. N Cray tip, PCH. Cornfield below Farningham Wood PCH. By Dartford Heath, '54 GMB.
- 2) Erith. Northfleet, on waste ground behind marshes. All Hallows. Grain. Sheerness, Canal Dump, '57, O. Davis. Sheerness, garden weed, 1956, Mrs. Bryson. Cuxton PCH. Medway n[ea]r Aylesford CAS.
- 4) Sandwich Bay and town. Richborough.
- 5) 56 Valley S. of Timberden Bottom, PCH. 35 E. of Crossroads, nr Highams Hill, 396612, 1958, PCH.
- 6) Mounts R[oa]d, PCH. Mounts Wood PCH. The Thrift, Bean PCH. Gravesend, common weed, 1960 HAS.
- 8) Sibertswold, Cornfield DPY. 25 Arable S. of Fredville 1949 DMCC. Arable, St Margarets Bay DP Murray '53.
- 10) Field, Eynsford, PCH. St Johns Jerusalem PCH. **NOT** observed in 45 Westerham area by any recorders.
- 11) R[oa]dsides, Watlington, 597543. Sutton Valence. E. Malling, abund[ant] weed. W. Malling, a[bandant]. Maidstone, abund[ant] in gardens; Brenchl[e]y gardens, 1954, **MNE**. Fairbourne Mill, Harrietsham, 1960 Mrs B Dodds. 54 common in side street gardens, Tonbridge. 54 Tonbridge castle, 1954. 54 loco sheds KEB 55.
- 12) Canterbury city, D.P.Y.
- 13) 53 Western R[oa]d / 53 Goods Station R[oa]d, T[unbridge] Wells, 51/54, 51/53, CAS. 53 T[unbridge] W[ells] West Station allotments KEB. Garden weed, Cranbrook burn, 1955, DS.
- 15) Dungeness, n[ea]r Lighthouse CAS. Bird Observatory JD Stephen 1956. St Marys Bay P.O.

**Ricinus** L.<sup>676</sup>

**Ricinus communis** L. Caster-oil-plant.

Casual introduction on dumps.

**Euphorbia** L.

**[E. peplis** L. Purple Spurge. [15.] Former native, now extinct.

Reported twice in 4) one plant, St Georges Links, Sandwich – 1900, Rev. J. Roffey Hb. FJH. Sandwich Bay, one specimen on shingle, Miss H.G. Belton, det. Miss Robinson, ex Lady Davy, B.E.C. 1926, p.131. **This very rare Atlantic-Mediterranean species can only be regarded as a casual in Kent.]**

**E. platyphyllos** L. Broad-leaved Spurge<sup>677</sup> 15, 16 N or C.

Native or colonist. Arable land and waste ground, particularly on heavy clay soils; rare but widespread, at least formerly: most modern records are from the eastern Weald.

1<sup>st</sup> record, 1777: Faversham, Jacob, Pl. Fav.

- 1) [Chislehurst, Woods, O.B.G. p.347.] [Southborough to Town Court, 1863, JSM.]
  - 2) Stone, St. J. Marriott, B.E.C. Rep., 1921, p.397. (Thorn, Faversham, in cornfields, E. Jacob.)
  - 6) [Northfleet Huds. Fl. Ang., Ed. 2 1778, p.210. S.E. of Dartford E. de C.]
  - 7) Arable by Hawkins Rough, on clay soil, Chilham, D.H. Kent, 1945.
  - 8) [Stowting, G.E. Sm. In F.G.E.K.]
  - 11) [N. of Chiddingstone, J.S. Mill **MNE**.] [Hop garden, Edenbridge, E.S.S.] [Maidstone, Clover fields, W.W.R.] [Staplehurst, E.S.M.] [Frittenden to Headcorn, JSM. 1863.]
  - 12) Cornfield on Weald Clay, "Scotts Pond", Stubbs Cross, Kingsnorth, 1955, E. Scott. (1956!) **MNE**. Cornfield S.W. of Merstham, near Bliby, 1954, E. Scott. [Aldington, F.G.E.K.. Brabourne, F.G.E.K.]
  - 13) [Tunbridge Wells, Henslow in Hooker & Arnott, Ed. 1, p.381. W.W.R. **TLS**. Near High Rocks, E. Forster Fl. Tonb. E. of Rusthall Common, E.J. Fl. T.W.]
  - 14) [Between Cranbrook and Hawkhurst, E.J., Fl. T.W.] Between High Halden and Woodchurch, B.D.J. (near Susans Hill, Woodchurch, 918342 cornfield, C. Skinner, E. Scott, 1955).
  - 15) Cornfield on alluvium, between B.2082 and Reading Sewer, 1956, Wittersham Parish, G.B., P.C.H. and F.R. **MNE**.
  - 16) [Cheriton, C.P.S.K.]
- Pas de Calais, very rare.

**E. serrulata** Thuill. Upright Spurge. [16.]

[13]] Established at Pembury 1988, R. Moyse & K. Friend.

<sup>676</sup> Genus and species given only in check-list.

<sup>677</sup> Name as per check-list; in the manuscript given as Warty Spurge.

**E. helioscopia** L. Sun Spurge. 15, 16. N or C.  
Native or colonist. Cultivated land, allotments, waste ground; common throughout Kent. Common in Surrey, Sussex, Essex and Pas de Calais.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) Shooters Hill, '54, GMB. 47 N. Cray tip, PCH.
- 2) 06 Field N. of Oare, 1961, C. Turner.
- 3) Whitstable Castle '52 REW.
- 4) Brambling, 1957, P Grattan.
- 5) 56 Chalky field, W. of Eynsford, PCH; FR **MNE**. 46 Chalky field, W. of Farnborough, PCH. 36 Stubble field nr Well Wood, 396642, '53 PCH. 46 Arable W. of Saltbox 1950 JD Lovis. 45 Potato field W. of Hogtough Hill, 1962. 55 Cornfield below Morants Court Hill '62.
- 6) 66 Cornfield, Buckland Rd, Luddesdown PCH. 55 Kale field ¼m NE of Kemsing Ch[urch] 1962.
- 8) 25 cornfields about Fredville DMCC.
- 10) Sevenoaks tip, 1958, CAS.
- 11) Sandling Wood, E.G. Philp, 1957, **MNE**. E. Malling, Weed, to 1962. Fairbourne Mill 1960 Mrs B Dodds.
- 12) Sandy verge N. of Potters Corner, E.S., 1956.
- 13) Cranbrook, Garden Weed and Field edge, 1956, D.S.

**E. lathyrus** [*sic*, for **lathyris**] L. Caper Spurge [15, 16.] N or H.

Almost certainly native in Kent, and in Surrey too.

1<sup>st</sup> record, 1836: abundant near Cobham, Pamplin, *N.B.G.*, p.78.

Dry Woods on base-rich soils; very rare but locally abundant; also as a casual escape.

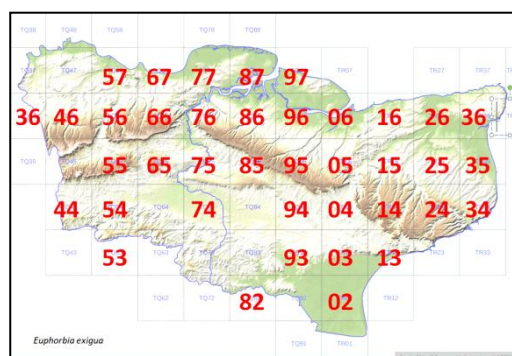
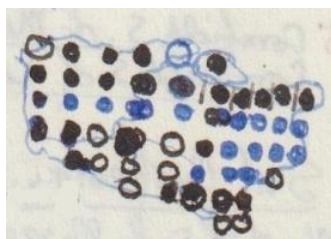
- [1] Wood near Bromley, Scargill.] ‡ Green Street Green near Farnborough, 1961, J.R. Palmer.
- 6) Randall Wood, Shorne, 1836, N.B.G., p.78: Lady E. Bligh; 1947-53, abundant in 2-3 year coppice! **MNE**. Wood E. of A.227, Nursted, 1956, JD. Stephen. [Hedgebank of wood E. of Dartford, C.E. Britton.] (Wall, Vigo Farm, Fairseat, C.A.S.)
- 7) Boxley Warren, E.M.A., *Phytol.* NS. VI p.188, 1860: in glade in yew wood, abundant 1942-54! **MNE**.
- 8) Larkey Valley Wood, Thanington, in coppiced areas on loam over chalk, abundant 1948-9; - Miss M.E.M., 1951: a[abundant] 1953 1954, R.E. Wood; 1956, E. Scott, F.R. **MNE**.

Casual records at:

- 2) Faversham, F.G.E.K.
- 4) Pegwell Bay, D. McC. 1947.
- 7) Cottage garden, Old Wives Lees, 1945, D.H.K. never cultivated there since 1897.
- 8) Railway cutting, Godmersham, Mrs. J. Russell, 1951. St Margarets at Cliffe, R.J.H.;
- 11) Ightham Place, Bailey: roadside S.E. of Cobtree, Sandling, 1943, F.R. Potato field on cleared woodland site, Hurst Wood, Comp Woods, G.H. Norton 59. Maidstone, 1882, H. Lamb **MNE**. Pizian Well, Mrs. Urmston, 1957.
- [12)] Wood E. of Mental Hosp[ital], Chartham, a few pl[ants], 1955 Mrs B.
- 13) Monson Road, T[unbridge] W[ells], K.E.B. 1952.
- 16) Sandgate, 1854, J.I. Brent, Hb. F.J.H.

**E. exigua** L. Dwarf Spurge . 15, 16. N. 41/51<sup>678</sup>

Native. Cornfields and waste ground, particularly on chalk; habitats such as open chalk, wher it occurs also in natural habitats such as open chalk screes round rabbit warrens, etc; quite widespread on other, mostly light soils, but absent from much of the Weald and from Romney Marsh, except on Lydd Common. Frequent on chalk in Surrey, and Sussex; rarer in Essex; common in N. France.



1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) 56 Fields N. of Swanley, 1945. Eden Park Station, 1905, Hb. Davis, **MNE**. Kent gate, 1915 Hb. Davis **MNE**.

<sup>678</sup> This total has been arrived at by double-counting hectads 25 and 36, and should be 39.



- 2) 97 Arable S.W. of Minster, Sheppey, 1958, **MNE**.  
 3) 16 Stubble N. of Hempshall Wood, Whitstable, REW 1950. 06 Garden Weed, Seasalter, HMW.  
 4) 25 W. of Ash, 1948.  
 5) 45 Cornfield W of Chevening Park, 1962. 36 cornfields 3961 E of Kennels, NW of Higham Hill, 1958 PCH. 45 Cornfields by Pilgrims Way, above Gaysham F[ar]m, Westerham, 1958, R. Clarke. 56 Farningham 1947. 55 Broken chalky ground, Morants Court Hill, 1946. 46 Potato field W. of Saltbox, 1950, JD Lovis. 55 Kale Field NE of Kemsing Church, 1962.  
 6) 57 Arable, Mounts Road, Greenhithe, 1954-1962. 57 Arable S. of Stone Castle, 1945 **MNE**. 66 Cornfields SE of Cobham. 66 Cornfields, Upper Halling. 56 Horton Kirby, PCH. 66 Arable, W. of Pilgrims Ho[use], Trottscliffe, 1958 **MNE**. 65 Arable W. of Wrotham Water 1958 **MNE**. 66/76 NW of Cuxton, S. of Great Wood, 1943-55, **MNE**. 66 Cornfield, Lads F[ar]m, Snodland, 1945 **MNE**. 67 Cornfield 628704 W. of Downs Rd., Northfleet Green, 1958 **MNE**. 66 Arable SE of Luddesdown, 1959, **MNE**. 67 Cornfield E of Claylane Wood Cobham 667704, 1958, PCH.  
 7) 76 cornfields N of Burham, 1960. 86 Cornfield N. of Guilsted, Stockbury, 1960 **MNE**. 95 Cornfield, Eastling, 1961, C Turner. 75 Cornfields N. of Boxley. 85 Cornfields NE of Hollingbourne. 94 Cornfields W. of Westwell.  
 8) 14 Field S.W. of S. Barham, 1956 **MNE**. 15 Marley Lane, Kingston, 1948 **MNE**. Cornfield below Gorsley Wood 164514, 1955. P. Furneaux. 14 Stowting Hill. 14 Elham Valley Rd, Kingston, 1958 **MNE**. 15 Cornfield S. of Milton, Chartham, 1960 **MNE**. Cornfield S. of Larkey Valley Wood 125547, 1955, P. Furneaux. 24 Cornfield S. of Barfreton, 1956, **MNE**. 25 Cornfield E. of Knowlton, 1958, **MNE**. 25 Cornfields Redville 12949 DMCC.  
 9) 26 Cornfield W of Plumstone F[ar]m, 1 mile NE of Monkton, 1958. 36 Cornfield, N. Foreland, 1954.  
 11) 15 arable 1 mile S.W. of Detling, 1958, E.G. Philp, **MNE**.  
 W) Cornfield 1m S. of Chiddingstone, 499442, CAS. 54 Tonbridge Meadows, Miss A. Graseman.  
 12) 93 By "Scotts Pond" in cornfield on Weald Clay, Stubbs Cross, Shadoxhurst, 1956 **MNE**. 94 Sandy verge N. of Potters Corner, 1956, E.S.  
 14) Cornfield on loam, by road W. of village, Wittersham, 1956, **MNE**.  
 15) 02 Lydd Common, on fixed dunes, 1946 **MNE**.  
 16) 13 cornfields above the scars W. of Hythe, 1958, LJM.

**E. peplus** L. Petty Spurge 15, 16. N or C.  
 Native. Cultivated and waste land, in gardens and allotments more common than in arable fields, very abundant throughout Kent. Common in Surrey, Sussex, Essex and Pas de Calais.  
 1<sup>st</sup> record, 1597: W. of Margate, Gerard, *Herbal*, p.407.

- 1) Pickhurst Common Hayes, 395668, 1958 PCH. N. Cray Tip PCH. Mill Pond, Bexley PCH. Joydens Wood PCH. By Dartford Heath, 1954, G.M.B.  
 2) garden weed, Sheerness, 1956, Mrs Bryson.  
 3) Whitstable Castle, 52, R.E.W.  
 4) Wingham House garden '57, P. Grattan. Sandwich Bay.  
 6) Paddlesworth PCH. The Thrift, Bean, PCH. Weed of cult[ivation], Gravesend, '60, HAS. Arable weed, Higham, 1956, PCH.  
 8) 25 Cornfields about Fredville DMCC. Lydden Spout, 1945 **MNE**. Ch[al]k arable, E of Knowlton 1958 **MNE**.  
 10) Sevenoaks tip, 1958, CAS.  
 11) Brenchley Gardens, Maidstone, 1955. E. Malling, weed to 1962. Fairbourne Mill, Harrietsham, 1960 Mrs B. Dodds. E. Peckham, 1956 **MNE**.  
 13) Garden Weed, Tun[bridge] Wells '55 KEB.

**E. paralias** L. [Sea Spurge. 15 N.]  
 Native. Sand-dunes; extremely rare and local, but locally very abundant at Sandwich Bay; elsewhere only a small colony at Shellness in Sheppey.  
 1<sup>st</sup> record, 1597: Whitstable, Gerard, *Herbal*, p.497.

- 2) Shellness in Sheppey, C. Pugh & G.E. Hutchings in Stockbury: a Regional Study in NE Kent; about 22 plants among *Ammophila* on the shell-sand beach 1959!-1962! **MNE**. 1963 etc.  
 4) Sandwich (Bay), Johnson, *Descriptio*, p.26, 1632; Sandown Castle, Petiver & Sherard; very abundant along the fore dunes from N. of the Guilford Hotel nearly to Shellness, 1945-57! **MNE**. Together with *Eryngium maritimum* and *A[gropyron] junceiforme*, this makes a most attractive association along 3 miles of sandy foreshore. Deal dunes, J.E.L., J.Bot., 1925, p.340 (the same stretch of beach). Old records exist for 2) Queenborough, Johnson, *Iter*; Sheerness, Martyn; 3) Whitstable, Gerard; 4) Reculver, Winch, N.B.G.; but the plant is apparently extinct in these places now. (The Records of this species for 8) The South Foreland and W.

of Shakespeare Cliff by Dillwyn in O.B.G. p.180, and for Lydden Spout ("within the path") by G.E.S. in C.P.S.K., p.59, appear to be errors for *E. amygdaloides*, which occurs on these cliffs in vast abundance in a very short, fleshy form, mimicking *E. paralias*.)

Rare in Sussex (Camber, Wittering, Thorney, Pilsey), absent in Surrey, v[ery] rare in Essex; abundant on the extensive dunes of the Pas de Calais, and generally from the Belgian coast south-westward on the continent. A Mediterranean species, very drought-tolerant; it extends into the sandy parts of the N. Sahara in Morocco.

**E. x pseudovirgata** (Schur) Soó<sup>679</sup> (*E. waldsteinii* x *E. esula*) [Twiggy Spurge] 15, 16

Naturalised alien. Waste ground, rough pastures, roadsides, railway banks, etc.

1<sup>st</sup> record, 1923: Greenhithe, Redgrove, B.E.C. Rep. 1923, p.210.

1) Bickley; Swanley, 1956, DMCC. R[ai]l[wa]y bank, Kidbrook Sta[tion], PC Hall. N[ea]r Woolwich Arsenal, 1932, Mrs M. Mallinson. 56 Roadbank, Farningham R[oa]d Sta[tion] Crossroad PCH.

2) Ham Marshes, S. of Ham Farm, 1950, REW.

3) 06 Seasalter, B.J. Brooke, 1958 **MNE**. Canterbury W. Station, AW Roberts.

4) 35 334588 & 337588, Stonar, R.A.G. 1956. 36 Richborough, 1949, LWW. Nr. New Power Station, 1961, Mrs. Perable, per Mrs. Brickenden. Red Lion, Pegwell Bay REW. 36 Backsand point, NE of Sandwich, 1949, LWW. Kingsdown Beach, 1950, L.W.W.

5) R[oa]dside, Pilgrims Way, W. of Polhill, PCH. Leaves Green, Hb. A.G. Davis, 1915 **MNE**.

6) 57 Mounts Road, Greenhithe, 1945. 57 Stone, 575743, in gravel pit, 1946 **MNE**; 1952, HMP. Waste ground, Northfleet, 1944; 1956 PCH. 57 R[oa]d verge, Green Street Green to Lane End, PCH. 57 R[oa]dside nr. Cotton F[ar]m, 57-749, Stone, Mrs. A.G. Side.

7) 96 Rough pasture on valley gravel, below Coxett Wood, Ospringe, 1956. 05 Roadside n[ea]r Selling Station, DHK 1946; J.H.P. Sankey 1954 – 1968! **MNE**.

8) 14 Roadside, Cobbs Hill, Stowting, 1952 ES; 1960, Miss B. Nash. 34 Cliffs E. of Dover, 1948. 35 Betteshanger 326526, 1948; 1958 KDR. 35 Between Betteshanger and Northbourne, 1958, Mrs K.D.R. **MNE**. 34 above Shakespeares cliff 387398, 1948 DMCC. Sibertswold, 1946, Miss DACL. 04 n[ea]r Wye, Miss Cobbe, B.E.C. Rep., 1924, p.595. 15 By Lower Hardres Church, L.W. Wilson; 1946 Miss DACL. 24 1m. N. of Sibertswold, 1958 **MNE**.

9) 36 Dumpton Gap, Manston; L.W. Wilson.

11) 75 Aylesford Sandpit, 1944. 75 Maidstone, E.G. Philp, 1960 **MNE**. 75 by Aylesford Station, 1947-1956. Langley, 1951, DMCC.

12) Hothfield Common 1938 F Hyland **BM**.

16) [13 Building site, Hythe, 1957; gone 1958, LJM]

**E. esula** [L. Leafy Spurge. 16.]

Reported at 1) Wood opp[osite] Forest Lodge, Fishponds R[oa]d, Keston, 1947, M.B. Gerrans.

**E. cyparissias** L. Cypress Spurge. 15. N (probably).

Native, almost certainly, in E. Kent, though possibly not so elsewhere in the British Isles. Rough chalk grassland and scrub, very rare, but known from at least five localities, in four of which it still exists.

1<sup>st</sup> record, as a native, 1876: W. of Dover, E. de Crespigny, in B.E.C. Rep., 1879, p.19.

8) Whinless Down, Elms Vale, Dover (E. de C's locality, below "Biggles Tower") c. 1898, Rev. J.G. Gilman; 1925, J.E. Lousley; 1958, Mrs. Rowlands; 1959, abundant in *Brachypodium pinnati* on a S. slope among native plants! **MNE**. Down S. of Langdon Barracks, Dover, on the cliff top, 1948-54 **MNE**, 1986; 1960 Mrs B. Dodds. Barham, 1912, J. Jacob in litt. to F.J.H. in Hb. F.J.H. ?= Chalk scrub near Gravel Castle, Barham, 1942, B.J.B. & F.R. **MNE** (destroyed since). [Juliberry Downs, Chilham, 1932 E.S.; 1943, D.H.K. 084531 (1945-59!) **MNE**]. Down Wood, Chilham, 082527, 1955, ES, & R.G. Williams (1959!) **MNE**. Scrub near Acrise, 1960, R. Gorer.

On Epsom Downs, Surrey, looking native, and less "natural-looking", in Berkshire, Bucks, and Sussex. Not recorded for the Pas de Calais, but widespread in France generally.

[Recorded as an alien at:

1) Crayford Gun Cub, 1955 G.M.B. 47 Elmstead Woods, 1950, Miss A. Mills: 1957! (*L. Nat.* 1956, 12). Laurie Park, Sydenham, 1859, Beisly in Phyt. N.S. III, p.336; extinct in 1884, W.W.R.; N of Grove Park Station 1938 KEB.

11) Leybourne, H. Lamb, 1898 **MNE**. Escape, Orchard E of Trottiscliffe, 1946, D. McC. Derelict field, Larkfield, 1962, R.D. English.

T. Pritchard (personal communication) reports that our wild Kent plant is [*manuscript blank*<sup>680</sup>]

<sup>679</sup> In the manuscript given as *Euphorbia uralensis* Fisch. ex Link (*Euphorbia virgata* Waldst. & Kit. non Desf.).

<sup>680</sup> This may have been var. *cyparissias*, as distinct from (introduced) var. *esuloides*.

**E. amygdaloides L.**

Wood Spurge.

15, 16.

N.

44/51

Native. Woodlands, both in coppice and in high canopy woodland, mainly on fairly well-drained relatively base rich soils; largely absent from wide areas of heavy ill drained gley soils of the London and Weald Clays, except where lighter drifts and alluviums overlie them; unrecorded in the low Weald between Hadlow and Smarden; absent from 15), and the woodless marsh regions of 2) and 4), unrecorded from Grain, Sheppey, and Thanet; very common on soils derived from the Thanet Sand, Woolwich Beds, chalk, clay-with-flints, Gault, Greensands, Wadhurst Clay, and rare in gill woods on the Tunbridge Wells and Ashdown Sands; generally more widely distributed and very common throughout inland Kent, with the exceptions mentioned above. In addition, a small, close-leaved set, rather fleshy-leaved form is abundant on the chalk cliffs and their landslips on ledges, grassland and scrub, from Folkestone (Eastwear Bay) by Abbots Cliff and Lydden Spout to Shakespeare's Cliff, Dover, and St Margarets Bay. This is the plant that I believe may have been mistaken by Dillwyn and G.E. Smith for *E. paralias*. It deserves critical study; it could be a distinct sub-species.

First record. 1632: E. of Canterbury, T. Johnson, *Descriptio*.

1) Roundabout Wood Crofton Heath PCH. High Wood, Crofton, PCH. Gattons Plant[atio]n PCH. Joydens Wood, on Wool[wich] Beds, PCH, FR. Farningham Wood, FR, PCH, on Thanet S[and] and Wool[wich] Beds, 82! Abbey Wood 1948, RAB. Shooters Hill Woods, 1954, GMB. Beckenham Place, Ash plantation.

2) Hawes Wood, Newington.

3) Clay Hill Wood, Dunkirk, 1955, 090613. North Bishopden Wood, Dunkirk, by stream on loam, 1955, 099605. Chequers Wood, Fordwich, on Thanet Sand, 1955, 177590. Shelving Wood, Hoath, 1962. 16 Honey Hill Wood, Bleawn, 1961, C Turner. Clowes Wood, 1950, RGW.

3) Trenley Park Wood. Mincing Wood, Blean.

5) Beech wood, Hogtrough Hill, Brasted, 1946, (very large) **MNE**. Pilots Wood, PCH. Beech wood, Polhill. Pilgrims Way, Polhill, PCH. Beech Wood W. of Shoreham PCH. Chevening Park PCH. 36 Copse W. of Highams Hill 397611, 1958 PCH. Darwins Bank Downe 1955 JEL '62.

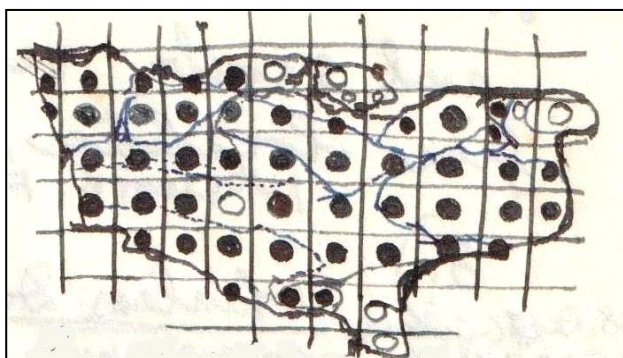
6) Darenth Wood, on Thanet S[and] and Wool[wich] Beds. Horton Wood PCH; 580662, 1961 HMP. Beech Wood, White Down, E of Shoreham, PCH. Swanscombe Wood,. Mounts Wood, PCH; FR. The Thrift, Bean, PCH. Preston Hill PCH. Randall Wood, Shorne. Crest of Trosley Downs. Magpie Bottom, PCH. Halling Woods, PCH; FR. Wingate Wood **MNE**. Below Great Wood, Cuxton **MNE**. North Wood Cuxton '44.

7) Monk Wood. 798611, Bredhurst Hurst, on chalk loam on valley side, 1955. N of Milsted.

8) Larkey Valley Wood. Upper Hardres Wood. Lady Wood, Capel, 56 RA Clarke. Cliffs, St. Margarets Bay, 1946 **MNE**- 1962. Shakespeare's Cliff, 1949 **MNE** -1962. Lydden Spout, 1949-53 **MNE**; 1962.

11) Holt Wood, Aylesford, 1955, on F[olkestone] Sand. Leybourne Wood, 1955, on F[olkestone] Sand. Oaken Wood, on cherty loam, by R[oa]d W. of Barming 1955. Mereworth Park, 1945 **MNE**. On W[eald] Clay, Starve Crow Hall, Tonbridge, 1955. R[ai]l[wa]y bank Edenbridge 440470, 1956, DPY. Wet wood on W[eald] Clay, N. of Four Elms 1955. R[ai]l[wa]y bank Hildenborough 563482 CAS. Dering Wood, Smarden, ES. R[ai]l[wa]y bank S. of Dering Wood.

13) Gill SW of Stone Cross, Ashurst CAS '59. Wood on loam, Bedgebury, n[ea]r Pinetum, 1955. On T[unbridge] W[ells] S[and], Wood NE of Cobham bury, 2m SE of Edenbridge, 1955. Blackbush Wood, SE of Goudhurst, 1956, D.S.

**[RHAMNACEAE]****Rhamnus L.****R. cathartica L.**

Buckthorn.

15, 16.

N.

Native. Open woods, scrub and hedges; frequent to locally common in the chalk districts, though very rare in Thanet; rare elsewhere, always on basic soils.

1<sup>st</sup> record, 1597: Farningham, etc., Gerard, *Herbal*, p.1154.

1) [Lewisham, Merrett. Plumsted; E.Wickham, M.L.G. Bexley EMH.] St Pauls Cray Common, W.W. Holwood Park PCH. Shooters Hill Woods, GMB. Abbey Wood, G.A.M. Hayes Common F Swain. Farningham Wood 82.

3) S. of Herne Bay, F.G.E.K. Clowes Wood. Hookham. Trenley Park Wood, L.W.W.

- 5) SE of Downe, E de C (1948!). near Keston, 1917, P.H.C. Biggin Hill. S. of Cudham. Chalk W. of Eynsford, PCH. 3964 Well Wood PCH. Chelsfield.
- 6) SE of Farningham GMB. Ryarsh Downs. Crookhorn Down, Snodland. Halling Downs. Cuxton. Meopham. Greenhithe sand pits. Kemsing Downs, T.R.W., 1938. Down E of Shoreham. Trosley ESM (FR!). Shoreham ESM. Darenth Wood, & N. of A2 here HMP. Red Wood Luddesdown 1947 **MNE**. Buckland Ch[urch] Luddesdown. Horton Kirby PCH. Down NE of Otford GMB. Preston Hill. 67 Gravesend, in scrub, 1962, W.A.S. L[owe]r Upnor Cliffs '51 DMcC.
- 7) Burham Downs, H. Elgar 1896 **MNE**; 1947 **MNE**! 1961 **MNE**. Bluebell Hill. Boxley Hills, 1850, Hb. Lamb **MNE**; 1885, H.L. **MNE**. Queen Down Warren. Thurnham Castle 1961 **MNE**. Wouldham Downs 1954 **MNE**. Syndale Wood, Ospringe, 1945, **MNE**. Putt Wood, J. Moor. Wood & Down opp[osite] Putt Wood, HMW. Scarp S. of Godmersham Park, P. le Brocq.
- 8) R[ai]l[wa]y N. of Woodvale, Lydden, B. Nash. Sutton Downs in scrub BN.
- 10) near Dartford Powder Mills, 1883, F.H.W.
- 11) hedge by ditch SE of Hartlake Bridge, Tudeley, 1952 **MNE**. Medway, Haysden, 1935, TWNHS.
- 12) Copse on Gault, SE of Lenham, 1944 **MNE**.

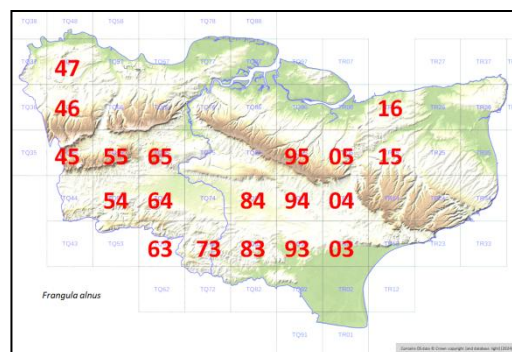
### Frangula Mill.

**F. alnus** Mill. Alder Buckthorn. 15, 16. N.

Native. Heaths, damp woodlands on acide, usually sandy soils. Locally common in the High Weald, locally frequent on the Tertiaries and Greensand, now rare elsewhere.

1<sup>st</sup> record, 1746: near Chislehurst, Blackstone, *Spec. Bot.* p.23. Fruit stone in Atlantic peat zone VII Betteshanger, Allison (Godwin p105).

1) [46 Petts Wood, Blackstone.] Chislehurst Common, W.W.; GMB; PCH. [46 St Pauls Cray Common, WW.] [47 Elmstead Wood, 1915, LJT.] 46 Hayes Common, Blackstone; WW; (1948! **MNE**). 46 Keston Common, Blackstone; 1916, Hb.Davis **MNE**; 1947, PHC (1955! Abund[ant]). 47 Abbey Wood, 1927, H.J.B.; A.A. **BM**; 1942 A.R. Gemmell. (57 Charlton Wood M&G.) 46 Bromley Common M&G, 1942 A.R. Gemmell. 46 Sparrow Woods Orpington, 1945 **MNE**. [47 Bexley, Glasspool.] Roundabout Wood, Pokeridden Wood, F Swain. 47 Shooters Hill, 1958, G.M.B. [47Sidcup E.M.H.] [Not seen at Erith, Sidcup, Petts Wood, Chislehurst C[ommon].]



3) 15 Bigberry Wood, 1875, H.&J.G.; 1942 AR Gemmell. East Blean Woods, F.M. Webb. Thornden Wood FJH. 16 West Blean Wood FJH. [Blean Wood, Boughton, FGEK.] 15 Church Wood, LWW, RGW. Woods N. of Blean village RGW. 05 Denstead Wood, 1950 **MNE**; 1958, B. Nash. 05 Fishponds Wood 1954 **MNE**. 16 Mincing Wood, N.R., W. of Blean, 1959 **MNE**. 16 Minteys Wood Blean REW. 16 Hemphall Wood REW. 15 Fordwich, JG.

[7] near Badging Ospringe, E. Jacob.] 95 Longreach Wood ES.

9) Extinct in Thanet. [36 Manston, Dr. Hunter (F.G.E.K.). 26 Acol, hedge, BD Wardale.]

10) 45 Hosey Common, 1936, P.H.C.; 1957, AGS. 55 Seal Chart, Roper; 1942, AR Gemmell. Hills Wood Kemsing 563585 (Gault) CAS. 55 Bog on Oldbury Hill 1945 **MNE**; 1962! 55 Bog by Ightham Common Ponds. Fawke Common, RAC. 45 Scords Wood. 55 Whitley Scrubs, Roper (1949!). 45 Brasted Chart! A[bundant], PWR.

11) 65 Comp Woods, 1893, H. Elgar **MNE**; 1942, AR Gemmell. 65 Mereworth Woods, HL; 1942, AR Gemmell. 65 Leybourne Wood, AR Gemmell, 1942. Wrotham Heath, Wood S. of Inn, 1948 **MNE**, 1961. 64 Ash Copse by R. Medway, Hartlake (with *S. neglecta*) CAS. 84 Denny Wood W side, 1962 ES.

12) 94 Hothfield Heath, ESM (1948!). 04 Willesborough Lees, CPSK (1946!). 93 Longrope Wood, PWR. 03 Carr, Sellindge 093396, 565, PCH. 83 Causton Wood, PWR.

13) 83 Chittenden Wood, ESM; abundant 1944 **MNE**; 1958. 73 Angley Wood. 73 Bedgebury Forest. 54 High Brooms, AR Gemmell. 73 Combwell Wood, 1897 TJS, **TLS**; 1954. 83 Sissinghurst Park Wood. 63 Kilndown Wood. 83 Roundshill Park Wood, 1950 **MNE**. 64 Brenchley Wood W. of Matfield, 1961 **MNE**. 63 Boggy Wood W. of Pembury 614395 CAS.

14) 83 Brogues Wood, Biddenden, 1950 **MNE**.

16) [13 Folkestone undercliff, G. Walton, Fl. Kent.]



## ‡ VITACEAE

**Vitis** L.

- ‡ **V. vinifera** L.<sup>681</sup> Grape-vine. H.  
 Naturalised esp[ecially] on river banks, etc.

‡ **Parthenocissus** Planch.

- ‡ **P. quinquefolia** (L.) Planch. Virginia-creeper. [16.] H.  
 Naturalised on old walls, hedges and tips.

1) Ruxley Pits.

13) On fence, North Farm, Tun[bridge] Wells, 1960, CAS.

- ‡ **P. inserta** (A Kern.) Fritsch<sup>682</sup> False Virginia-creeper. [15.] H.  
 Naturalised on old walls, hedges and tips.

15) 13 Garden relic on ruins, Palmarsh, 1958, LJM.

## LINACEAE

**Linum** L.

- L. bienne** Mill. Narrow-leaved blue flax<sup>683</sup> 15, 16. N. 11/51

Native. Dry banks, pastures, rough grassland, cliff tops, mainly on chalk and clay; locally common on and near the E. Kent coast from East Sheppey round to Lympne, v[ery] rare elsewhere. Almost certainly indigenous in dry pastures and cliffs on the coast and the Thames estuary.

1<sup>st</sup> record, 1597: Isle of Sheppey, Gerard, *Herbal*, p.447.

2) Eastchurch in corn fields, AJ [*sic*, fo rAG] Davis, 1918 **MNE**.

3) 16 grass bank on clay 123660, Chestfield, H.M. Wilks, 1960.

16 London Clay Cliffs, Bishopstone, 1955, **MNE**. 06.  
 Faversham 1957; Whitstable 1960; Reculver 1955.

4) 35 waste g[roun]d, N. of Sandwich, 1946. Ebbsfleet 341624 near River, Mrs T.B. 36 Richborough, 1946, abundant.

6) Downs at Trottiscliffe, DVS Woods. R[ai]l[wa]y Bank, Northfleet, 1887, AHWD **BM**. Pilgrims Way, Wrotham, GE Shaw.

7) Darland Banks, 784661, B.C.

8) 34 Arable on chalk, Free Down, Ringwould, 1962, abund[ant], **MNE**. 34 Chalk Downs on cliff-top, S. of Oldstairs Bay, Kingsdown, 1850, Hb. Lamb **MNE**; 1946 **MNE**. 34 Cliffs S. of Walmer; and 34 N. of St. Margarets Bay, 1946. 24 S facing Downs, Coombe Vale, Dover, 1955 **MNE**. 34 Dover Eastcliff, Mrs. B. Dodds.  
 Alkham 1955; Dover; Thanet E.

9) [Ramsgate, 1851, T.M., **BM**.] 36 Chalk turf, N. Foreland, 1954, **MNE**. 36 Abundant on Thanet Sand on cliffs, Cliffend, Pegwell, 1946 **MNE**. 26 Minnis Bay, L.W.W.; grassland, 50 REW; 1960, EGP.

11) 65 Trosley, Shepherd (hedgebank of lane from Wrotham Heath to Trosley, 1945!).

Malling.

12) 04 bank of A.20, 2 miles E. of Ashford, C.N.P.

Ashford

13) [footpath from Gibbs Farm to Parsonage Lane, Lamberhurst, JRW, 1936, since destroyed.]

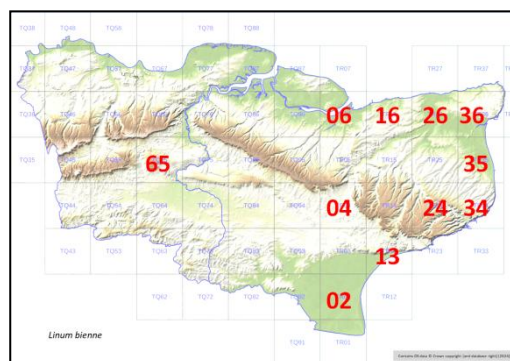
Lamberhurst

14) Sandy bank, Tenterden, 1909, J. Ridley ex Hb. Lamb, **MNE**.

15) 02 Roadside N. of Lydd, 1946.

Romney; Hythe 57.

16) 13 on sandy soil of scarp S. of Port Lympne, 1958, L.J.M.



- ‡ **L. usitatissimum** L. Flax, Linseed. [15, 16.] H.

A casual, sometimes persisting from cultivation, or appearing where seed has been accidentally dropped.

1) Plumstead, 1880, H & JG **BM**.

2) Beckenham, Hb. Davis, 1915 **MNE**. B[ritish] O[il &] C[ake] M[ills] Erith DMcC. Swanley 1877; Hayes, 1878; H & JG **BM**. Lewisham by R[ai]l[wa]y, DPY.

6) "Linum vulgare sativum" near Gravesend, 1632, Johnson, *Descriptio*, p.38. Longfield tip, 1956.

<sup>681</sup> In check-list; no account in the manuscript.

<sup>682</sup> Given as *P. tricuspidata* (Sieb. & Zucc.) Planch. in the manuscript.

<sup>683</sup> Pale Flax in the check-list.



- 11) Platt, DMcC, 1949.  
 12) Ashford GMB.  
 13) R[oa]dsides, Lamberhurst, 1943, H.W.P. **BM**. High Rocks Lane, T[unbridge] Wells, 1959, CAS.  
 14) Appledore area, 1957.

**L. catharticum** L. Fairy Flax. 15, 16. N. 42/51

Native. Chalk grassland and scrub, very common and a characteristic species of these habitats; old quarries and grassland on ragstone, frequent; on open roadsides, quarries, clay pits, occasional in various parts of Kent.

1<sup>st</sup> record: 1597; Isle of Sheppey, Gerard, *Herbal*, p.447

Seed, L[ower] Bronze age, Minnis Bay: Conolly, 1941 (Godwin. P.100).

- 1) Holwood Park, DMcC. Keston Common. Ruxley Pits.  
 (Blackheath U[n]R[ecorded]); Bexley; Sheppey; (Grain U[n]R[ecorded]).
- 3) open grassland on clay S. of Dunkirk, 1946. Grassland on L[ondon] Clay, Whitstable, 1961, H.M. Wilks. Thanet Way, Whitstable S., REW 1950; E of Borstal Hill HMW. E part Church Wood REW.  
 Faversham; Whitstable; Sandwich; (not Chisle).
- 5) (Halstead, A.A.) Darwin's Bank, Downe. Chevening Park. The Larches, W. of Farnborough PCH. NW of Biggin Hill. Polhill. W of Hogtrough Hill, JDL. Chalk W. of Eynsford PCH. Down W. of Shoreham, PCH; FR. Scrub, Hill Park, W of Westerham Hill, very large, 1949.  
 W. Wickham; Keston.
- 6) L[ondon] Clay: Northward Hill; High Halstow; Lodge Hill, Cooling; Cliffe chalk pit; Upnor. Green St[reet] Green. Greenhithe (Mounts Road). The Thrift, Bean. Horns [Cross] pit Stone HWP. Whiting Pit. SE of Eynsford. Trosley Downs. Kemsing Downs. Otford Downs. Whitehill, Shoreham. Preston Hill. Upper Halling Downs 1943 **MNE**. Ryarsh Downs. Birling Downs. Crookhorn Downs, Snodland. Cuxton. Halling Warren. Magpie Bottom '80. Crookhorn '80.  
 Farningham;  
 Cobham; Chatham; Stockbury; Teynham; Gravesend; Dartford; Westerham; Sevenoaks; Malling; Cliffe.
- 7) Burham Downs. Wouldham Downs. Detling Coombe '44. Bluebell Hill Hb. Davis 1918 **MNE**; '62. [Three] Squirrels Down '44. Queen Down Warren 62. Hollingbourne Hill 62. Foxbury Down 45. Berengrave pit Rainham. Park Wood Molash. Simia Down '80.  
 Maidstone; Hollingbourne; Doddington; Hothfield.
- 8) Julibery Downs. Down above Winchcombe F[ar]m. Down N of Crundale Ch[urch]. Down E of Longport. Wye Crown Down. Broad Downs Brook. Brabourne Downs. Stowting Chalk pit and Downs to W and E, RAC. Postling Downs. Downs E of Etchinghill. Downs N of Cheriton. N of Newington. Castle Hill. E of Castle Hill. Sugar Loaf. The Warren. Abbots Cliff. Lydden Spout. Shakespeares Cliff. Parkgate '80. Shuttlesfield '80.  
 Wye; Elham; Alkham; Dover; Chilham; Canterbury; Wingham.; Thanet E.
- 10) Borough Green Ragstone quarries. Rooks Hill.
- 11) Swanton Valley, Mereworth Woods, in grassland on ragstone. The Mote, Maidstone, ex Hb. Lamb, 1840, **MNE**. Leybourne Gravel Pits, 1960, EGP. Railway Bridge, Snarkhurst Wood. R[ai]l[wa]y bank, Warren Wood, Leeds, on Gault. Quarry Wood, W Farleigh. R[ai]l[wa]y Hildenborough, 563482, CAS. Pluckley Brickworks on clay. Derry Wood.  
 (Marden U[n]R[ecorded]; Headcorn U[n]R[ecorded]).
- 12) Hothfield Heath, on clay patch, 1948. Chylmington quarries (ragstone). Fen meadow, Stowting, 1954 **MNE**. Fen meadow, Cuckoldscoomb, Brook, 1944.
- 13) (Stone Cross Ashurst CAS??) Southborough Common. Rare, HNC. R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], 1960, CAS. Roadside, Hawkenbury Cemetery, Tun[bridge] Wells, 1943, HWP **BM**. (Pembury U[n]R[ecorded]); (U[n]R[ecorded] Eden[bridge]); Tonbridge; 57; T[unbridge] Wells- 58-60; Lamberhurst; Cranbrook; Hawhurst S '56; Tenterden 56; Woodchurch 56; (W&E Oxney U[n]R[ecorded]).
- 14) Cherry G[ar]d[e]n Woodchurch by R[oa]d, ES.
- 15) Romney Warren.
- 16) Lymnpe scars. Hythe scars. Gault N of Cheriton. Dungeness rare 54; Romney; Aldington Hythe; Folkestone.

#### Radiola Hill

**R. linoides** Roth Allseed. 15, 16. N. 5/51

Native. Damp open loamy soil in woodland rides, often with *Centunculus*. Almost confined now to the central High Weald of 13) and 14) where it is still locally common: formerly possibly in 16) outside the High Weald, it should occur in the Tonbridge–Penshurst–Cowden and the Hawkhurst–Rolvenden–Tenterden areas. Not infrequent in 12) on the Folkestone Sand and on the Eocene Sand, but only recently seen.

1<sup>st</sup> record: Johnson, *Descriptio*, 1632, p.31, "*Millegrana minima*".

- 1) [Chislehurst, Gerard em; Ray Syn. to 1930s, W. Watson. Keston, 1836: Cooper Fl. Met. St Pauls Cray Common W.W.R.]
- [2] Ore/Luddenham, E. Jacob, 1777: Extinct, if correctly named.]

3) [E. of Canterbury, Johnson, *Descriptio*, 1632.]

12) [Hothfield Common, H. Lamb, 1902 **MNE**: not seen for many years.] [Willesborough Lees: Brabourne Lees C.P.S.K.]

13) W) Pembury Wood, 1952. Combwell Wood, 1943, 1946, 1954 **MNE**, 1979! Kilndown Wood. Chingley Wood 1949. Bedgebury Wood, abundant in many rides 1944 **MNE**, 1945 **MNE**, 1952 **MNE**. Oaks Wood, Cranbrook, 1944 **MNE**. Angley Wood, 1946 **MNE**, 1954 **MNE**. Brewers Wood 1949. Bayham, Lamberhurst 1945; Sandhurst Wood, 1956 **MNE**. Dandle Wood, 1946.

Pembury

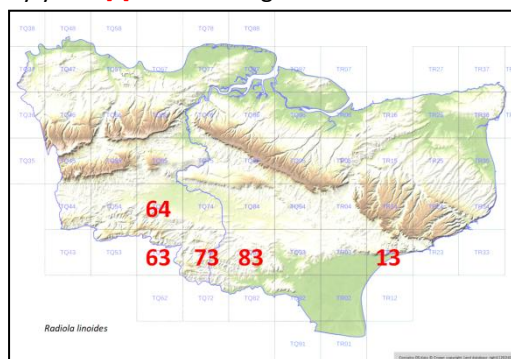
E) Sissinghurst Park Wood, 1948 **MNE**. Roundshill Park Wood 1947. Chittenden Wood 1946 **MNE**. Copden Wood, E. of Sissinghurst, 1954, **MNE**.

14) E) Brogues Wood, Biddenden. Wood E. of Clapper Hill, S. of Biddenden.

Lamberhurst,; Cranbrook; Tenterden.

16) Copse in Sandling Park, E.S.M. Kiln Wood in a ride, 1958! **MNE**.

Hythe.



## POLYGALACEAE

### Polygala L.

#### **P. vulgaris** L.

Common Milkwort.

15, 16.

N.

*Native.* Very common and general in chalk grassland, both old and of recent origin, including old ex-arable sites; open places in woodland on chalk; and, more rarely, in grassland on London clay and Gault clay, in old ragstone quarries, and on hedgebanks on Hastings loams.

1<sup>st</sup> record: 1629: Between Gravesend and Rochester, Johnson, *Iter*, p3.

*P. vulgaris* is a very variable species in size of plants, size of flowers, and in flower colour. Pink, white, mauve and purple-blue flowered plants are in general all quite common, but in east Kent, (mainly as it happens, in the areas where *P. calcarea* is absent) the flowers are often bright gentian-blue like those of *P. calcarea*, and the plants are often very robust. *P. calcarea* can always be distinguished from it by its more obtuse, narrower sepals; the basal rosette leaves which are longer and wider than the stem leaves; by the fact that the stem leaves are sub-obtuse and widest above, not at the middle, hence obovate; and by its more shrubby habit.

1) Hayes, 1899, L.B.H.: Hb. H.

4) Fixed sand dunes at Sandwich Bay **MNE**.

5) Morant's Court Hill. Pilots Wood, PCH. W. of Shoreham, 1945. 36 Downe, 1945. 36 Biggin Hill, 1946. Hogtrough Hill, 1946. Polhill near Tunnel, 1946. Chalk W. of Eynsford, PCH. The Larches, W. of Farnborough PCH. Lusted 409584, 59, RAC. Mollards Wood 402591, 59, RAC. W of South Street RAC. Downe Golf Course. Berry's Green Wood. S. of Cudham. NW of Cudham. Down NW of Pilgrim Ho[use] Westerham. SE of Keston Common. Saltbox Down. Shoreham, 1911, A.J.W., 211c.

6) Otford. Kemsing. Wrotham. Trosley. Ryarsh. Birling. Below Crookhorn Wood, Snodland, 1980. Halling Downs. Wrotham, N. of A20, below Wingate Wood 44 **MNE**. Pilgrim Ho[use] pit, '51 **MNE**. Magpie Bottom '52 **MNE**, 1980! Bush Valley. Eynsford SE. Greenhithe. Below G[rea]t Wood, Cuxton 44 **MNE**. Longfield, 1946. SE of Westerham 1956. Below Downs E. of Shoreham PCH. Preston Hill PCH. In grassland, Lodge Hill, Cooling, on London Clay, abund[ant], 1944. Stone HMP. Swanscombe HMP. S of Pratts Bottom, 468601. W of Newyears Wood 453609. Gravesend, 1837, E.B. Cobham, 1855, A.B. Slope of North Downs, Kemsing, 1937, J.B.M. No. 392. Darenth Wood. Steels Wood, Meopham.

7) Hill Wood Stockbury. Kings Wood Molash. Morning Dawn [Plantation] to NE. Wood W of Wormshill. Wood above Milsted. Boxley, 1939, J.B.M. No. 922, 922A (1945). Bluebell Hill, Burham, 1939, J.B.M. No. 870 (1955!). Burham Down. Boarley Warren. Wouldham Downs. Detling. Hollingbourne Hill. Thurnham Castle, '49 **MNE**. Kemsley Street. Near Bredhurst Hurst. Queen Down Warren **MNE**. Stockbury Valley. Three Squirrels 194[?] **MNE**. Magpie Farm Bredhurst 1960 **MNE**. Purple Hill. N. of Hucking '52 **MNE**. Harrietsham Down. Cobham F[ar]m, Lenham N.E. '45 **MNE**. Chilham, N. of. Timbalds Hill. Newnham. W. of Worms hill. Filmer Wood Wichling. Ospringe Down. Charing Hill. Above Westwell. Berengrave pit Rainham. Park Wood, Molash. Belmont G[olf] C[lub] E&W sides. Putt Wood.

8) Dover, 1901, A.B. (1954!). St. Margaret's, 1914, T.J.F. (1945!). Downs Wood Chilham. Longport, Crundale '51 **MNE**. NE of Adisham WW. Allye Downs. Downs at Pickersdean. Below Brook tumulus, 45 **MNE**. Crundale Downs '50 **MNE**, '53 **MNE**. Chartham Downs, 49 **MNE**. E. of Chilham, Juliberry. N of Crundale. SW of Petham.

Larkeyvalley Wood. Postling Downs. Stowting Downs. Bavinge F[ar]m. Podlinge F[ar]m, 48, 51 **MNE**. Yockletts Bank, and S of. Elmsted (Maxted St[reet]). Terlingham. G[rea]t Shuttlefield F[ar]m 1980. "var grandiflora", cliffs near Dover, 1876, 1878, 1879 A.B.; 1883, CS (F.H.W.) in Hb. **BM**. Brambly pit Larkey Valley Whitehill Wood. Arpinge Downs. Barham Downs. E of Etchinghill. Kingsdown. Shuttlesfield E. of Lyminge, '49 **MNE**. Park gate, Elham 1980. ½m. E. of Elham. (FolkestoneDowns, 1881, H. & J.G.) Folkestone Warren 1961 **MNE**. Browns Wood T[emple] Ewell. Whinless Down Maxton. N of Alkham. Poulton Valley S side. NE of Wolverton Alkham '49 **MNE**. S. of Chilton Alkham '49 **MNE**. Top of E Cliffs Dover '49 **MNE**. Lydden Spout '45 **MNE**. Woodville Downs '49 **MNE** 52 **MNE** 55 **MNE**. Larkey Valley '49 **MNE**. Beech Wood NE of Coldred Court. Caesars Camp Folkestone '49 **MNE**. Folkestone Warren '50 **MNE**. Abbots Cliff '53 **MNE**. Duskins F[ar]m Kingston. S. Burham. St Margarets N & S. W of Shakespeare Cliff. W of Wadden Hall. Winchcombe Downs. Temple Ewell Down. Downs near Langdon Abbey. Coombe F[ar]m Dover. & to W. S side Poylton [Poulton?] Valley. Elms Vale, S side.

11) Maidstone, P.B. **BM**. H. Lamb, 1880 **MNE**. Railway bank W of Kemsing Station, 1946 **MNE**. R[ai]l[wa]y, Hildenborough 563482 CAS.

12) Wye, 1875, J.F.D. Brabourne Downs, 1875, CAW. Charing, 1891, E.S.M.

13) Bedgebury, r[oa]side by Pinetum GMB. Roadside and hedgebanks near Windmill, Kippings Cross, 1953 (robust plant with narrow sepals) **MNE**. Hedgebanks, Bayham abbey entrance and Timberlog Wood, Lamberhurst, J.R.W., 1938: det. by A.J. Wilmott as *P. oxyptera*, but clearly only a form of *vulgaris* with sepals narrower than the ripe fruit. It is a large plant with pale lilac-blue flowers. BEC Rep., 1939-40, p.270, 1944! 1946 **MNE**. Weir field, Lamberhurst, 1943, JRW. E of Ashurst, M. Mallinson.

15) Dungeness, 1886, R. Paulson **BM**.

16) Abundant W. of Hythe, on ragstone scarp, 1949, 1955 **MNE**.

**P. vulgaris** ssp. **collina** (Rchb.) Borbás<sup>684</sup>  
(*P. oxyptera* auct. non Rchb.)

[15, 16.]

N.

Native. In chalk (and rarely sandy) grassland, especially in exposed place near the coast. A rather unsatisfactory species<sup>685</sup>, at times resembling small white flowered forms of *P. vulgaris* [ssp. *vulgaris*]; sometimes appearing more distinct. It is best distinguished from [sssp.] *vulgaris* when in fruit. [Ssp. *collina*] has white flowers, rather smaller than typical flowers of *P. vulgaris* [ssp. *vulgaris*], and they are normally tipped with pink; the sepals are much narrower than the ripe fruit; and the plant has a prostrate habit. There is a very ill marked basal rosette, but the basal leaves are shorter than the stem leaves, and the stem leaves are acute and widest at the middle.

1<sup>st</sup> notice: Deal, J.S. Mill, 1863, in his MS. Fl. Kent.

1<sup>st</sup> record: 1876: Wye Downs, Duthie, BEC Rep. for 1875 p16.

[1] Dartford Heath, F.J.H.; probably a form of *P. serpyllifolia* Hosé.]

3) Oldridge Wood, in turf by Sewage Dump entrance, Miss B. Nash, 1957, conf. DACL.

4) Sandhills at Deal, J.S. Mill, 1863.

6) Wrotham Hill, H. Elgar & H. Lamb, 1899 **MNE**. Magpie Bottom, 1911, A.J. Wilmott **BM**.

7) Downs near Cobham F[ar]m, E of Lenham, 1945, **MNE**. Burham Downs, 1946.

8) Broad Downs, Wye, 1899, C.E.B., **BM**. Near Wye 1888, ESM. Coldharbour Farm, Wye, 1900 CES, Hb. **BM**. Wye, 1934, AHG Alston **BM**. Free Down near Ringswold, 1874, J.F.D. **BM**. Chartham, A.H.E. **BM**. On anthills above the Crown, Wye Downs 1943-46, **MNE**. Julibery Downs, Chilham, FR, DHK, 1945. Downs, Pett Street, Crundale. Downs NW of Stowting 1953 **MNE**. Tolsford Hill '45 **MNE**. Postling Downs, 1945 **MNE**. Chalk pit Brambling, 1945-55 **MNE**. Downs N of Adisham 1955 **MNE**. Cliffs between Folkestone and Dover, HWP 1899 **BM**, JEL: Abbotscliffe 1945 **MNE**. St Margarets Bay, 1945. Top of Woodville Downs, Temple Ewell, 1949-53 **MNE**.

11) S. of Sutton Valence, 1934, AHG Alston, **BM**.

12) Ashford Warren, 1945.

[13] Field near Horsmonden Vicarage, 1897, JS **TLS**.]

**P. vulgaris** x **calcareae**

6) Magpie Bottom, near Shoreham, 1947, A.J.W. **BM**.

**P. serpyllifolia** Hosé

Heath Milkwort.

15, 16.

N.

<sup>684</sup> Given as *Polygala oxyptera* Rchb., syn. *Polygala dubia* Bellynyck.

<sup>685</sup> Reference to species being *P. oxyptera*, as this taxon was then known.

Synonyms:- *Polygala serpyllacea* Weihe

Native. In heathland, grass-heath, and woodlands on acid soils with raw humus; very common in suitable places, but naturally absent from the marsh districts and most of the chalk and clay areas. The subopposite stem leaves form a distinctive character.

1<sup>st</sup> record 1861: Sandwich, Phyt. N.S. v, p210.

1) Near Gravel Pit, Dartford Heath, Dartford, 1947, J.B.M. No. 1520 (1946!) 1960! Hayes Common DMCC (1946!). Keston Common, 1946. Chislehurst Common, 1946. Joydens Wood, 1948. Farningham Wood, 1950. Hollows Wood, 1946. St Pauls Cray Common. Dartford Heath GMB.

3) Bysing Wood, 1946. Grass-heath N of Dunkirk 1947, **MNE**. Thornden Wood, 1945. Golf Course, Old Park Canterbury, 1948. Church Wood, RGW. W of Roughcommon. Clowes Wood, 1947. West Blean Wood, RGW.

5) Mollards Bank, Biggin Hill 402591, 1960, RA Clarke.

6) On the Blackheath Beds, Darenth Wood, 1946; Shorne Ridgeway, 1946; by A2 N of Cobham Park, 1945. Magpie Bottom on drift in wood, 537607<sup>686</sup>, GMB.

7) Heath S. of Keycol, Newington, 1958 **MNE**. W. of Chestnut Street, 1957 **MNE**. On gravel capping the chalk, above Charing, E.S.M. Kings Wood, Molash, 1947.

8) Wye Downs, Duthie (leached area on plateau, 1943!). WestWood, Stowting, 1948 **MNE**, 1960 **MNE**. Between Ringwold and St Margarets, F.J.H. (1948, L.W.W. in leached chalk heath).

10) Crockham Hill Common. Whitley Forest, 1950 **MNE**. Bitchet Common. Ightham Common. Oldbury Hill. Brasted Chart. SE of Sundridge, 1958 **MNE**. Wildernes Park. S. of Sundridge 486536 R.A.C. Knole Park, GMB. Seal Chart.

11) Wrotham Heath. Roughetts, Ryarsh. Holt Wood, Aylesford. Oaken Wood, Barming, H. Lamb 1898 **MNE**, 1956! Mereworth Woods: Comp Wood. Hoads Wood. Penenden Heath, 1945.

12) edge of bog on Hothfield Common, Westwell, 1939, J.B.M. No.959 (1944-1954!) **MNE**. Ashford Warren, '45 **MNE**. Willesborough Lees. Mersham le Hatch. Gibbons Brook '56 LJM.

13) Stone Cross Gill, Ashurst 518381, CAS. Rusthall Common. Shadwell Wood, Rusthall, CAS. Ellis' Wood, Lamberhurst, JRW (1944!). Tongs' Wood, Lamberhurst, JRW (1944!). Kenward Green, Pembury, CAS. Pembury Woods. Wood N. of Kippings Cross. Combwell Wood 79. Sissinghurst Park Wood 1948. Oaks Wood; Angley Wood, Cranbrook '55 **MNE**. Bedgebury Forest, frequent '54 **MNE**. Chittenden Wood, 1947 **MNE**.

16) Kiln Heath, Sandling Park, 1958 **MNE**.

**P. calcarea** F. Schultz

Chalk milkwort.

15, 16.

N.

Native. In ancient chalk grassland, mostly in short *Festuca ovina* turf, occasionally with *Bromus erectus*. 60 localities known, abundant from the Surrey border eastwards, in suitable places, to Filmer Wood, Doddington, and Westwell chalk pit, as a robust suberect plant, normally with stems 3-5 ins. high, and lapis-lazuli blue flowers, rarely pink or white. It is absent on the northern part of 6), north of Farningham, Meopham and Cuxton, and east of a line from Doddington to Westwell in 7). In the east of 7) and in 8) apparently suitable localities abound for this species, but it seems to be absent from a stretch of chalk country 18 miles long from W. to E., between Westwell and Alkham. About Alkham and Dover *Polygala calcarea* is known in four stretches of downland, and is locally very abundant; but here it is a small, more or less prostrate, plant, with stems 1½ to 3 inches long, and smaller, paler, though still bright blue flowers, though white forms are rather common. The leaves are also smaller and thinner in texture than those of the mid- and west-Kent plant. It seems possible that this east Kent plant has been isolated for a long time, and is in the process of subspecific differentiation. It may have been derived from a population isolated on the coastal cliffs during the phase of maximum forest development.

Pink flowered forms occur at: 7) Burham Downs; 6) Paddlesworth. White flowered forms occur at: 6) Trosley; 7) Burham; and 8) abundantly at Woodville Downs.

Common on the N Downs Surrey in a range of colours; on the South Downs of Sussex as far west as Wolstonbury, white-lilac being the commonest colour. Unknown in Essex. Rather rare in Pas de Calais, where it is normally blue like the Kent plant.

1<sup>st</sup> record, 1834: Cuxton, Cobham, etc., D. Don in *Eng. Bot. Suppl.* p.2764.

5) Darwins Bank, Downe, 1945. Below Hazel Wood, Cudham, 1947. Nr. The Saltbox, Biggin Hill, 1945 **MNE**. Downs N. of Pilgrim House, Westerham, 1955, **MNE**. Downs in Chevening Park, 1954, **MNE**. Downs below Polhill Arms, near the tunnel mouth, 1946. Morants Court Hill chalk pit, 1946 **MNE**. Downs W. of Shoreham **MNE**; Timberden Bottom, 1951. The Nower, Brasted, 1958 **MNE**. E. of Lattice Coppice, Pratts Bottom, 1954. Betsoms Hill scarp, RAC. Knockholt, 1909, H. & J.G. (below Lattice Coppice, Rushmore Hill, 1947).

<sup>686</sup> This gridreference is some way from Magpie Bottom.



6) Down E of Meopham **MNE**. Steels Wood/Downs SE of Meopham **MNE**. S. of Beesfield, Farningham. Paddlesworth Birling 1946 **MNE**. S. of Meopham Green 55 **MNE**. High Castle Wood. Magpie Bottom (Pink fl[owere]d) AJW, 1947. SE of Luddesdown. Coomb Hill, Meopham. Shoreham Rifle range. Cuxton, E.F.; 1835, Campbell (Herb. R.J.S.); chalk turf S. of Great Wood, Cuxton, 1944! 1946! **MNE**. [Southfleet, 1837, J.F.Y.] Cobham, 1855, A.W.B. Otford and Shoreham, 1891, E.S.M. (1956!). Magpie Bottom, Shoreham, 1911, A.J.W. 211b; 1948, J.B.M. No. 1541 (1956!) **MNE**. Mount Ephraim, Snodland. Upper Halling Downs. Downs N of Crookhorn Wood, Snodland. Holborough Knoll, Snodland **MNE**. Downs above Birling. Ryarsh. Near Pilgrim House, Trosley **MNE**. E. of Wrotham **MNE**. W of Wrotham, 1944-7. Downs N. of Kemsing village **MNE**. Downs NE of Otford **MNE**. E. of Shoreham Station. Magpie Bottom **MNE** (1980). Preston Hill **MNE**. E of L[owe]r Austin Lodge, Eynsford. Round Hill, Romney Street. Wrotham By Pass **MNE**.

7) Rainham, 1868, W.W.N. (in Rainham Park Wood 1952!). Queendown Warren c.1880, Fawcett Osborne **MNE**. Hartlip, 1939, J.B.M. No. 925 (v[ery] a[bundant] 1956!). Near Bredhurst Hurst, 1939, J.B.M. No. 926 (1955!). Bluebell Hill, Burham, 1939, J.B.M. No. 936 (1955!). Wouldham Downs. Burham Downs, v[ery] a[bundant], 1947-56 (blue, pink and white) **MNE**. Boarley Warren. Boxley Warren. Thurnham Castle **MNE**. N.W. of Broad Street. Hollingbourne East Downs **MNE**. Downs near Cobham Farm, Lenham **MNE**. Downs NE of Lenham village 56 **MNE**. Downs, Allington, Hollingbourne **MNE**. 1m E of Lenham 58 **MNE**. Horsted Valley **MNE**. Walderslade Bottom **MNE**. Purple Hill, Bredhurst **MNE**. Magpie F[ar]m, Bredhurst, 1959 **MNE**, 1960 **MNE**. Stockbury Valley, near Three Squirrels **MNE**. Valley SW of Worms hill '56 **MNE**. Above Bottom Pond, Milsted 56 **MNE**. S. of Timbolds Hill. Filmer Wood S. of Doddington. Pilgrims Road Westwell, 1891, E.S.M., Hb. Mus Brit (old chalk pit, 1946-56!) **MNE**.

8) Langdon Barracks, E of Dover, 1951, S. Davey. Cliffs near Dover, E. de Crespigny. (Downs at S. Foreland / S of St Margarets, C.C.T., 1949. Woodville Downs, Temple Ewell to Lydden, abundant, 1949-1959 (blue and white) **MNE**. Downs E of Little London, Lydden, 1950-55-1993! **MNE**. NE of Wolverton, Alkham valley, 1949-55 **MNE**.

**P. amarella** Crantz<sup>687</sup> (*P. amara* L. p.p.) Kentish Milkwort 15, 16 N.

Native. In short, often rather open, but very old, chalk turf. Confined now to Kent in the British Isles; formerly in Surrey. Rare in Kent, but widely distributed on the chalk; nine localities known at present.

First record: 1871, Wye Downs, Duthie, in J. Bot., 1871, p.212.



*Polygala amarella* site, Purple Hill, Bredhurst, 1986. Photo by Rosemary FitzGerald.

<sup>687</sup> Given as *P. austriaca* Crantz, followed by the check-list, which calls it Dwarf Milkwort. The use of *P. austriaca* rather than *P. amarella* (as in Stace's *New Flora*, 2<sup>nd</sup> edition) meant that it could fairly be described as confined to Kent.



5) (i) 460571 Chalk turf at the Nower, Brasted, R.A. Clarke<sup>688</sup>, 1957 **MNE**; over 100 plants, 1958! **MNE**; not seen 1986. (ii) In dense chalk scrub, Berry's Green Wood, 442593, Cudham, R.G. Spooner, 1962; (1962! loc[ally] abund[ant]); 1964!; seen 1980; >200, 1984. (iii) Polhill tunnel, 505603, c.1960.

6) (iv) Magpie Bottom, Shoreham, 545612; many other observers: GCD **BM**; 1899, E.S.M. & A.H.W.D.; (in *Festucetum* in valley, and by old pit, 1946); about 50 plants, 1956! **MNE**; 1980! 1992. (v) About 20 plants, on side of ancient chalk pit, W. of 635608 Pilgrim House, Trosley, D.P. Young (1952!).

7) (vi) About 1m W. of Queendown Warren, Toynbee Hall NHS in Fl. Kent, p.433; Purple Hill, 1966!; Chalkpit N. of Magpie F[ar]m, Bredhurst, evidently same loc[ation] 813621 over 50 plants, 1959! 1960! **MNE**, 1965, 1977! one 1984 l[ocally] e[xtinct]; 100, 1986! (vii) Queen Down Warren 830629, 1979, F.F. & KFC. (viii) (Down E. of Cobham Farm, Lenham, 1945, 1946; ploughed 1958.) (ix) Pilgrims Road, E of Lenham, H. Elgar & H. Lamb, 1906 **MNE**. (x) Down E. of Rumsted Court, Hucking, 1952, 847599. (xi) Godmersham Downs, Mrs J. Pitt, c.1993, 057501.

8) (xii) 104467. Wye, 1875, J.F. Duthie **BM**. Wye; 1897, Mrs Young **MNE**. Bavinge Farm, 3 miles East of Wye, 1875, 1883, 1888, 1892, 1894, 1897, FJH **BM**, (1948!) **MNE**. Wye Downs, 1883, F.J.H. & A.B. Wye Downs, 1898, G.C.D. Near Wye, 1901, C.P.H. Bavinge Farm, Wye, 1922, T.J.F. (xiii) [Hastingleigh Combe, Wye Downs, 1871, 1874, 1876, J.F.D. Near Hastingleigh, 1900, C.E.S.] (xiv) 0814741 Pett Street Down, Wye, 1946, a few plants. (xv) Whiteacre F[ar]m, Waltham, LWW. ( <sup>689</sup> ) 074487, down by road, N. of Longport Farm, (1964, 1981) E. Glendenning [sic, for D.R. Glendenning]<sup>690</sup>; abundant (over 150 plants seen in several years) on strip of E. facing downland at Longport W, of Crundale, 1950-64, with a few white flowered plants, **MNE**. (xvi) 127462 Lit[tle] Gains, Elmsted, Ray Clarke, 1954, fide RAC.



*Polygala amarella* site, Magpie Bottom, Shoreham, 1986. Francis Rose with James Teacher, Joyce Pitt and Jo Weightman. Photo by Rosemary FitzGerald

## STAPHYLEACEAE

(*Staphylea* L.

‡ *S. pinnata* L.

Bladdernut.

[[15],16.]

H.

Naturalised n[ear] Otford. Mentioned in Fl. Wrotham as doubtfully wild, and by Parkinson at Ashford ("Nux vesicaria"), p.1417.)

<sup>688</sup> Corrected from R.C. Clarke.

<sup>689</sup> FR has numbered the various sites through out this account, given here as roman numerals so as not to confuse with the botanical district paragraph numbering, although the manuscript has Arabic numbers for both. No site number was given here, but it looks as though it should have been treated as a separate site.

<sup>690</sup> E. Glendenning is given in the manuscript, but elsewhere in this Flora given as D.R. Glendenning under which name he published on *Polygala* cytology in 1955.

## ‡ HIPPOCASTANACEAE

**Aesculus L.**‡ **A. hippocastanum L.** Horse-chestnut. [15, 16.] H.

Well-naturalised and self-sown.

Planted frequently throughout the County. There seems to be no point in giving a detailed distribution.

- 1) Farningham Wood. Holwood Park. S. of Bexley. N. Cray, wood by river.
- 2) Love Lane, Minster, 1958, OD.
- 5) The Larches W of Farnborough. Chevening Park.
- 7) Tonge, DMCC. There is a planted wood or grove of this tree of many acres along the road between Newnham and Doddington.
- 10) Franks Park, N. of Farningham.

## ACERACEAE

**Acer L.**‡ **A. platanoides L.** Norway Maple [16.] H.

Naturalised from seed in woods, etc.. Alien.

- 1) Lessness, St.J.M. Hayes Common self-sown, 1938, D.McC. Ruxley Pits. Keston.
- 5) Cuckoo Wood Down, F.H.B.
- 7) Wood by Q[ueen D[own] W[arren], HMP.
- 11) many saplings, R[ai]l[wa]y, Hildenborough – Tonbridge, CAS.
- 13) Bayhall Road, T[unbridge] Wels, 1960: many seedlings CAS.

**A. campestre L.** 15, 16 Field Maple. N

Native. Woodlands, especially abundant on chalk and ragstone, quite common on sand and clay; hedges, common throughout the county, except in Sheppey, Thanet, and Grain, where it is rather rare.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, Descriptio, p.21. Crossness, in Bronze Age and Roman occupation levels, Spurrell, 1889; Reid, 1899 (Godwin, p.105).

- 1) Beckenham Place Park '55. Erith, Herb. T. Farningham Wood. S of Bexley by Rd, PCH. Shooters Hill Woods, GMB. Crofton Heath. Abbey Wood GAM. Ruxley Pits. Scadbury Park.
- 2) Love Lane, Minster (near Hosp[ita]l) 1958, O.D.
- 3) Strode Park, Herne.
- 5) A21, Polhill. Darwin's Bank, Downe. 396611 hedge Highams Hill PCH. Andrews W[ood] S. of Badgers Mount PCH. Chalk W of Eynsford PCH. Polhill Pilgrims Way PCH. Pilots Wood, PCH. Farningham R[oa]d Sta[tion] app[roach] PCH.
- 6) Darenth Wood. Dartford 1881, H.&J.G. Tower Hill, Upnor. Chattenden Wood. Cookham Wood, Upnor. Great Crabbles Wood, Shorne. Otford. Wingate Wood Halling **MNE**. Shoreham (juniper Hill). Crookham Wood, Snodland. Cuxton. Red Wood, Luddesdown. Mounts Wood, Greenhithe. Birling Downs. S of Dode. Woods at Upper Halling Downs. Horton Kirby PCH. Whitehill, Shoreham. Claylane Wood Cobham 61 HAS. Kemsing Downs. Magpie Bottom. Preston Hill. Cobham Park S.
- 6E) Cookham Wood, Upnor (glabrous fr[uits]) 1960, **MNE**. Northward Hill 1968. (var. lasiocarpum) Trottiscliffe Downs, 1893, ESM.
- 7) E of Morning] Downs. Roadside, Hartlip Hill, 1955. Wood above Q[ueen] D[own] warren, 1955. Bredhurst Hurst, 1955. Burham Downs E, 53. Hollingbourne Hill 1962, Lees Court P[ar]k. Park Wood Molash. Chilham Park '67. Godmersham Park '67. Detling Hill. Detling NW Downs 1944. Church Wood, Stockbury. Squirrels Wood. Eastwell Park near Challock Ch[urch] '68. Simia Wood, Ospringe HMW. Belmont Park '67. Aymers P[ar]k, Lynsted 67.
- 8) Bridge Hill N, 1955. Olantigh Park. Swarling Farm. Sibton Park. Postling. Acrise Park. Wye Downs. Broad downs. Hastingleigh Ch[urch] y[ar]d. Denton Court Park. Alkham Ch[urch] y[ar]d and woods about. Sladden Wood, Alkham. Goodnestone P[ar]k. Fredville P[ar]k. Bourne P[ar]k. Etchinghill Downs 1960 **MNE**. Postling 1948 **MNE**. Sladden Wood Alkham 1955 **MNE**.
- 10) Rooks' Hill, ([locally] a[bandant]) 1955. Scords Wood. Brockhoul Mount. Westerham Wood 82. E Sutton Park. Fairlawne Park. Leeds Park. Sandling Wood, '55. Goddington, Harrietsham '68. Mereworth Park. SW of E. Malling. Horish Wood. Snarkhurst Wood. Ryarsh Wood. Mereworth (Swanton Valley).

**11)** A21 S.E. of Hildenborough, 1955. Hildenboro[ugh] R[ai]l[wa]y 563482 CAS. Barming Quarries (Rag[stone]). Tonridge Castle '55. N. of Bough beech '55. Wood by stream, 1m N of Bough beech '55. Roadside, Whetsted '45. Leybourne Wood '55. Swanton Valley N of Cott[age] (Woods) (Rag[stone]). SE of W. Farleigh Chequers (rag[stone]). ½m S of Dunks Green (W[eald] C[lay]). ½m E of Vitters Oak Mote Park. Oaken Wood (Rag[stone]). (Maidstone 1882 Hb. L[amb] **MNE.**) B.2063, S of Langley. N. of E. Sutton. Platts Heath.

**12)** Copse SE of Lenham on Gault. Hothfield Park & Goddington Park. Mersham Park. Oxenhoath. Chilston Park. SE of Kingsnorth 1948 **MNE.**

**13)** ½m S of Upper Haysden (T[unbridge] W[ells] S[and]). NE corner Ashour Wood. Wood ½m E of Horseshoe Green (Wad[hurst] C[lay]). W of Southborough. Vauxhall Lane. S of Somerden, Chiddingstone. 63 Wood 1m SW of Pembury New Ch[urch], PCH. Bayham Park. Stonewall Park. Rectory Park Horsmonden. Freq[uent], T[unbridge] Wells, CAS.

**14)** Lords Wood, Stone in Oxney, 1964. 1½ m. S of Hawkhurst '55. Newenden Ch[urch]y[ar]d.

**16)** Aldrington Knowle. Hythe W Scars. Lympne P[ar]k W[oo]d. Beachborough P[ar]k.

‡ **A. pseudoplatanus** L. Sycamore. 15, 16. D.

Alien, completely naturalised. Woodlands, especially on chalk, ragstone and sand; spreading freely from seed and common in many parts of Kent; also widely planted.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, *Descriptio*, p.21.

**1)** Beckenham, Hb. D. 1915 **MNE.** Beckenham Place Park '55. Hayes. Bickley. Abbey Wood. Holwood. Holwood Park, PCH. Ruxley pits. Blackheath GMB. Sewerbank, Plumstead, PCH. Bexley Village PCH. N.Cray Wood PCH. Dartford Heath GMB. Hayes Common PCH. Farningham Wood PCH. (W. of Dartford Heath (var. hebecarpon) 1892, AHWD **BM.**) Shooters Hill GMB.

**2)** Scrub, S. of Scrapsgate, 1955. 87 Grain, 890769, A.G. Side.

**5)** Halstead, AA, **BM.** 396611 PCH. Wood W. of Shoreham PCH. Pilots Wood PCH.

**6)** Tower Hill, Upnor. Cookham Wood, Upnor. Northfleet, Stone;Greenhithe pits. Mounts Road PCH. Regenerating, Ashenbank Wood Cobham 61 HAS. Above Halling. Wrotham Downs. Rd. E of Kemsing, PCH. Downs E of Shoreham PCH.

**7)** Roadside, Hartlip Hill, 1955. Wood above Q[ueen] D[own] Warren, 1955. Burham Downs, E '55. Wouldham Downs. Boxley Warren, v[ery] abund[ant] and increasing after felling of many beeches, 1948-57.

**8)** Wye.

**9)** Minster, copse to SE.

**10)** Sevenoaks. One Tree Hill. Scords Wood. Bayleys Hill. Brockhoult Mount.

**11)** Wood, S.W. of Mereworth, '55. Tunbridge Castle '55. Maidstone Hb. L[amb] 1884 **MNE.**

**12)** Mersham, CNP. Hothfield Common.

**13)** Wood by R. Teise, Hoathly, 1955. Bedgebury Forest. 64 R[oa]dside 1m SW of New Ch[urch], Pembury, PCH. 64 Pembury Woods PCH.

**14)** 1½ m. S of Hawkhurst '55.

‡ **A. saccharinum** L. Silver Maple. [16.] H.

Planted, but self-sown seedling recorded.

**13)** N. of Penshurst Park, HJMB.

[‡] **A. candensis**<sup>691</sup>

Angley Wood, nat[uralise]d DS.

‡ **A. negundo** L. Ashleaf Maple. H.

Naturalised in one place.

[This is as far as the check-list goes, typed out in 2002. The remaining species accounts are in given in the order in which they appear in Stace's New Flora, 2<sup>nd</sup> edition, which was current at the time of the check-list preparation.]

## [ANACARDIACEAE]

**Rhus typhina** [L.] [Stag's-horn Sumach. 16.]

<sup>691</sup> It is unclear to what this taxon relates. It is not in the check-list.

13) R[ai]l[wa]y between Central and West Stations, T[unbridge] Wells, 1960, several saplings, CAS.

## SIMAROUBACEAE

**Ailanthus** Desf.

**A. altissima** (Mill.) Swingle [Tree-of-Heaven. 16.]

6) Green Street Green, Darenth, PCH.

## OXALIDACEAE

**Oxalis** L.

‡ **O. corniculata** L. [Procumbent Yellow-sorrel.] 15, 16 21/52

Alien, S. Europe, etc., naturalised in many places. See BEC. 1934, p.823.

1) 47 Hall Place, Bexley, H.M.P. 47 Ruxley Pits, S&S. [Locks Bottom, 1917, P.H.C.] [Beckenham, 1919, A.G. Davis **MNE**.]

2) 06 Whitstable Road, Faversham, HMW.

3) 16 Whitstable Castle Grounds, REW. 15 St Martin's Ch[urch] Y[ar]d, Canterbury, J. Codrington (var. *atropurpurea* Van Houtte ex Planchon).

4) Wingham, L.W.W.

6) 77 Cookham Woods, Upnor, 1951, DMcC (var. *atropurpureum*). 67 Shorne, D.McC. 56 Eynsford, H.M.P.

7) 05 Selling, L.W.W.

8) 24 Kearsney Abbey walls, 1957, KDR.

10) 55 Waterden, Seal Chart, 1947, M.W. Zambra **MNE**. 56 Shoreham Village, GMB. 55 Chipstead, E. Armstrong.

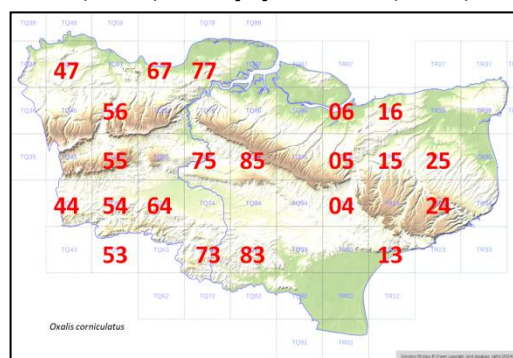
11) (W) 54 Dry Hill Road, Tonbridge, 589473, CAS. 44 Hever Castle Grounds, 1958, P.C.H. 64 Medway S. of Yalding, GE Shaw.

(E) 75 Lit[tle] Buckland Avenue, Maidstone, 1960, E.G.P. 78 E. of "Chiltern Hundreds", Maidstone, 1961, E.G.P. 35 Fairbourne Mill, Harrietsham, Mrs. B. Dodds

12) 04 Ashford, G.M.B. Sturry, J.O.

13) 53 Gravel Road verge, Bishop's Down, Tun[bridge] Wells, KEB & DPY (var. *microphylla* Hooker). 53 Pavement weed, Calverley Park Crescent, Tun[bridge] Wells, 588395 CAS. 54 Ferndale, T[unbridge] Wells, 1960, CAS. 53 Stone Cross, Ashurst, CAS. 54 Bidborough Church Yard, 1960, CAS. 73 Cranbrook Church Yard, D.S. 83 Sissinghurst Castle, garden weed, 1957, V. Sackville-West (and var. *microphylla*).

16) 13 Garden Weed, Brockhill, L.J.M.



‡ **O. stricta** L.<sup>692</sup>

[Upright Yellow-sorrel.]

15, 16

6/52

Alien, Europe. Naturalised in several places, but still rare.

1) 47 Hayes Old & New Rectories, 1938, DMcC. 46 Oakley House, Bromley Common, DPY.

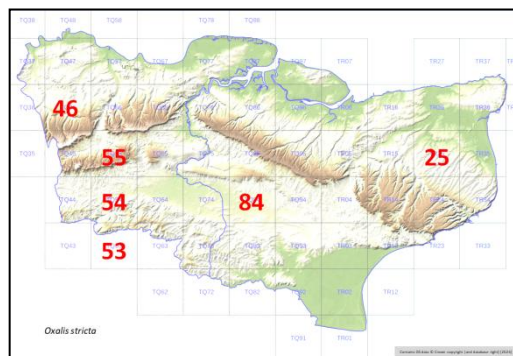
8) 25 Little Fredville, DMcC.

10) 55 Bessel's Green, E. Armstrong.

11) 54 Cage Green, Tonbridge, 1958, KEB. 84 Weed, Headcorn, Ch[urch] Y[ar]d, 1962, CAS.

12) 15 Sturry, J.O. & DMcC.

13) 53 Tunbridge Wells (Broadwater Lane, KEB; 53 5, Western Road, 1958, CAS). 53 Cambridge gardens allotments, KEB; 53 Hawkenbury Rubbish dump, KEB. 53 Groombridge Hill, on wall, CAS.



‡ **O. articulata** Savigny (*O. floribunda* Lehm.) [Pink-sorrel.]

15, 16

4/52

Alien, naturalised in several places, but rare. This plant has pink flowers and fibrous roots.

1) 51/36 old gravel pit, Hayes, 1912, W.H.G. (**OXF; SLBI**).

9) 61/36 Minster Church yard, 1963. 61/36 North Foreland, 1948, DMcC (& var. *hirsuta* Progel).

<sup>692</sup> Given as *O. europaea* Jord. sec. Weigand (*O. stricta* auct. ang., non L.).



11) 75 Sandling Wood road verge, 1960, E.G.P., **MNE**.

15) 13 Hythe front, L.J.M.

16) 13 Saltwood, L.J.M.

**O. acetosella** L.

Wood Sorrel.

15, 16.

Native: dry woods and shaded banks, on loam, sand, gravel, more rarely on shallow chalk rendzinas; very common in all wooded districts (absent from the Hoo peninsula, 2) Grain, Sheppey, 9) Thanet, 4) the Lower Stour Valley, and 15) Romney Marsh.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p31.

1) Spring Park, W. Wickham, 1918 Hb. D[avis] **MNE**. Moor Grove, Bickley, 1957 **MNE**. Abbey Wood, PCH, RAB. Petts Wood. Farningham Wood, PCH, (82!). Joydens Wood, TH Angel 1952. Shooters Hill Woods, GMB. "Sira", Elmstead Woods, 1956, Miss A. Mills.

3) Trenley Park Wood. Pine Wood, L.W.W. Denstead Wood, L.W.W. Bigbury Wood (near Alder carr). Clowes Wood rare REW. Thornden Wood rare REW. West Blean Wood rare REW. East Blean Wood rare REW. Cane Wood, Tyler Hill, REW. Church Wood Harbledown, REW. Old Park, REW. Bysing Wood: REW. Copse on sand, ¼m. S. of Church, Hernhill, 1958.

5) Halstead, A.A. **BM**. 396611 Highams Hill, PCH.

6) Woods above Halling. Darenth Wood, PCH. Beechy Lees, Kemsing, PCH. Thong: Shorne, R. Pocock, **BM**. Gravel pit Wood Kingsdown. Wood 583615 S. of W. Kingsdown. Broomfield Wood, Kingsdown. Ridley Wood. Bush Valley PCH. High Wood, Shoreham PCH.

7) Valley wood W. of Worms Hill. Bredhurst Hurst. Westfield Wood, Boxley. Divan Wood CT. SquirrelsWood (clay loam).

8) Wood W. of S. Alkham. Reinden Wood, 58, B. Nash. Winterage Wood, Acrise, DACL 1953. Iffin Wood, C. Haes. Yockletts Bank '84. Lynsore Bottom, 84.

10) Scords Wood Brasted 1954 **MNE**. Knote Park. Westerham Wood PCH; 82!

11) Oaken Wood, E. Malling, 1880 Hb L **MNE**; 1945 **MNE**! 1960. Larkfield Heath. Warren Wood. Sandling Wood, 1880, H. Lamb **MNE**; 1961, E.P. Mereworth Park 1952 **MNE**.

12) Bybrook N. of Ashford, ES. E end Hothfield Lake RGW.

13) Wood S. of Highfield Rocks. Wood ½m E of Horseshoe G[ree]n (Wad[hurst] C[lay]). Southfield Common / Brookhurst Wood, HNC. 63 W of Lamberhurst. 63 S. of Pembury New Ch[urch] '44. 63 High Wood, T[unbridge] Wells, PCH. 64 Pembury Woods, PCH. Combwell Wood, 1979. 63 Bayham CAS. 53 Stone [Cross] Ashurst CAS. 73 Old Park Wood. 73 Bedgebury. 74 Hartsheath, by r[oa]d. Blackbush Wood, DS. ["Bottoms", Appledore (Finchbourne Wood Tenterden) 1908 J. Ridley **MNE**.]

14) Robins Wood. 50 Acre Wood; Cole Wood, Woodch[urch], ES.

var. "**sub-purpurascens**" DC.<sup>693</sup>

3) Blean Woods 'reserve edge'. Mrs B.

5) Brasted Hill, W.W.

7) Challock. HL Green (BEC, 1921, p377).

8) Reinden Wood, 1958, B. Nash.

10) Whitley Forest RAC.

11) Amiston Woods Tonbridge, McTaggart Cowan, 14.5.1910 **BM**.

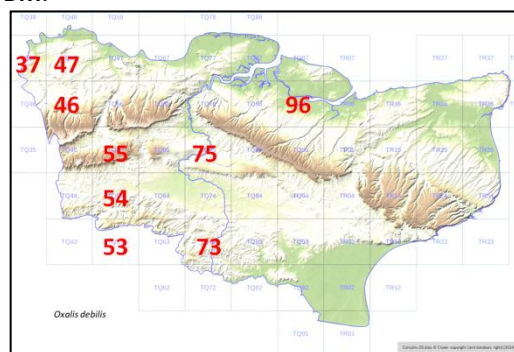
12) Bybrook, 014443, Ashford, C.N.P. & ES: 20 yrs to 1957; comes true from seed, ES.

**O. debilis** Kunth<sup>694</sup>

[Large-flowered Pink-sorrel.] 15, 16 9/52

Alien, Brazil, naturalised in several places, but rare. This plant has pink flowers and bulbous roots.

1) 37 Greenwich Park, in dell, A.D. Webster, 1901; 1909, Woolwich Surveys; det. DPY. 47 S[cientific] I[nstrument] R[esearch] A[ssociation], Elmstead Woods, Chislehurst, 1957, DMCC. 46 419665, weed, Oakley House, Bromley



<sup>693</sup> This taxon is covered in two different sections in the manuscript, due to the rewriting of several of the *Oxalis* accounts; the sections do not duplicate each other and so are combined here.

<sup>694</sup> Given as *O. corymbosa* DC (*O. martiana* Zucc.).



Common, R. Woodell, det. DPY.

2) 47 Crossness, P.C.H.

7) 96 Highsted pits, 1958, DMcC.

10) 55 Sandpit, Riverhead, CAS.

11) 55 Fairhill, Shipbourne, 1946, DMcC, spreading over half a mile radius, det. D.P.Y.

12) 15 Sturry, J.O. & DMcC.

13) 73 Weed, Cranbrook, D.S. 53 Tunbridge Wells, many places, KEB. 54 & CAS, a rampant weed (at least 6 places).

‡ *O. latifolia* Kunth [Garden Pink-sorrel. 16.]

1) Naturalised by new road to reservoir, Farnborough, FHB, 1960.

‡ *O. incarnata* L. [Pale Pink-sorrel. 16.]

Weed, 51/53 St Johns Rd, T[unbridge] Wells, 1958, C. Stace. 15, M[oun]t Sion, T[unbridge] Wells, 1958, C. Stace.

## GERANIACEAE

*Geranium* L.

‡ *G. endressii* J. Gay [French Crane's-bill. 16.]

13) North side of stream, between the lakes, Bayham Park, J.R.W., det. Kew; BEC Rep. 1939-40, p.272. 648366, (Sussex) 1957, CAS. R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], 1960, CAS (VC14). Roadside W. of Lamberhurst Down, 1947; 1960 CAS.

*G. endressii* x *versicolor* [*G. x oxonianum* Yeo 16.]

13) edge of stream by R[ai]l[wa]y W. of West Sta[tion], Tun[bridge] Wells, 1960, CAS; (VC14) 1956, DMcC; 1961, EG Philp, det. DMcC, **MNE**. Near stream in Field, High Rocks Rd 1957, CAS.

‡ *G. versicolor* L. (*G. striatum* L.) Pencilled Cranesbill. 15, 16.

Alien, established in a few places.

3) Hoath Court, Canterbury, 1897, Upcott. ES.

5) Rushmore Hill, H.D. Hewitt, 1909; Halstead, Miss Burnaby Atkins; 1947!) **MNE**.

7) Charing Hill, ES, 1956, in wood.

10) Brasted Chart, RAC. Froghole, E. Armstrong.

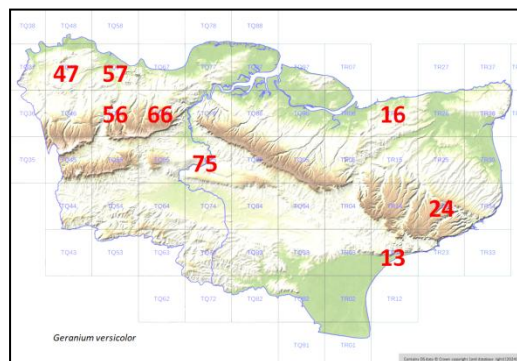
11) Tonbridge, 1941, H. Kewey.

12) Smeeth [cross]r[oad]s

13) Roadside, Matfield, W.H.P., 1932, **BM**; **TLS**. Roadside bank, Hever, 1943, H.W.P. **BM**. High Rocks La[ne], 567385, T[unbridge] W[ells] CAS.

14) Tenterden, 1897, 1902 RRH in Hb Croydon NHS. High Halden Ch[urch] Y[ar]d, RAC.

(VC16 – BEC rep. 1932, p.92.)<sup>695</sup>



*G. rotundifolium* L. Round-leaved Cranesbill 15, 16 8/51

Native, mostly on chalky, sandy or gravelly hedgebanks, rare and scattered.

1<sup>st</sup> record, 1836: Dartford, Cooper, *Fl. Met.*, p.61

1) [Blackheath, 1855, E.J.. 47 Bexley, 1871, FJH **BM**; 1950, G.C.D., GMB. Charlton JSM. Kidbrook. Eltham. Plumstead, AHWD. Charlton High Road, 1861 (?Pryor), ex Hb. Lamb **MNE**. St Johns Park, Blackheath, GMB. Bromley, Scargill.] Chislehurst Common, S.E.O. 47 near Kidbrooke Sta[tion] GMB. Albany Park G [sic, for C?] Swain.

2) 47 Erith Marshes, 1951, JEL, etc.

3) 16 Westbere, R.G. Williams, abundant on hedgebanks, 1956; J.O.

4) [Walmer, Miss L. Day.] Sandwich Bay, 1951, P. le Brocq.

<sup>695</sup> This note is placed at the end of the account, but is the publication detail for W.H. Pearsall's Matfield record above.

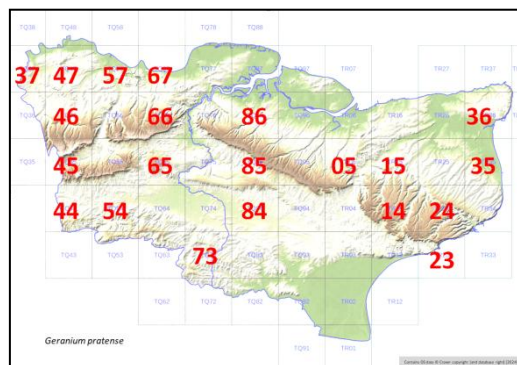
- 5) 56 R[ai][wa]y Bank, Sepham Farm, Shoreham, B. Senitt. Sidings, Farningham R[oa]d Sta[tion], 1964, C.A. Lister.
- 6) Between Dartford and Greenhithe, J.S.M. 57 Stone, 582744 and 574742 by R[oa]d, in Gravel pt S. of Horns Cross, 1946!; 1943-50, H.M.P. 57 R[oa]dside, Green St[reet] Green to Bean, PCH; Darenth, WCRW. Allotments, Northfleet 516274, HMP, 1956. 66 Below Upper Halling, at edge of chalk pit, 1943 **MNE**; 1946 **MNE**; 1953 **MNE**.
- 8) 24 Kearsney, Mrs. D. Rowlands, 1960 **MNE** = 295435, River, Mrs. D. Rowlands, 1962, slip to railway.
- 10) Twitton, hedgebank 506598, 1955, JEL. [Chevening, Miss Worship.] [57 Lane by Dartford Gravel pit, 1890, A.H.W.D. **BM**.]
- 11) [Trosley, Shepherd.] [Lane from Aylesford to Eccles, AHWD & ESM; H. Lamb, 1902 **MNE**; AHWD, 1894 **BM**; apparently extinct, F.R.] [Sutton Valence, Mrs Petley: dubious.] 75 Sandpit at Forstal, Aylesford, 1961, E.P.
- 13) [Goudhurst, Clarke.]
- 15) [NW of New Romney, FJH.]
- 16) Abundant below and W. of Lympe Castle on the ragstone cliffs, 1946, and on Stutfall Castle 13.

**G. pratense** L. Meadow Cranesbill 15, 16 21/52 [22/52]

A doubtful native of Kent except perhaps formerly near the Medway at Aylesford. It is widespread in the county on roadsides and waste ground, though rare; but it never seems to occur in the abundance in which it is seen on calcareous clay or limestone in the midlands and mid-west of England.

1<sup>st</sup> record, 1836: W. of Eltham, Cooper, *Fl. Met.*, p.74.

- 1) [47 Lee to Eltham, Cooper, 1836.] Hayes (roadside) 1938; 46 Holwood Park 1898, BTL; DMCC: not looking native. 37 E end of Blackheath, 1855, EJ; GMB. 46 Plentiful, meadow by railway NW of Chislehurst Station, 1944 FR, 1945 **MNE**; apparently destroyed, 1957. 47 Chislehurst Common GMB. Ruxley Pits. Joydens Wood AGS. [57 Wilmington, near A225, GMB; now gone.]
- 2) [75 by the Medway, Aylesford, W.W. Reeves: not now visible.]
- 3) 15 Harbledown, by stream beside school at 125579, RGW. M[oun]tEphraim, Hernhill, DMCC, 1948. Stodmarsh Rd, Canterbury Golf Links, R. Gorer.
- 4) 35 St Georges Links, Sandwich, a colony in a dry hollow of the dunes, 1950, L.W.W.; 1956 **MNE**! To 1964.
- 5) 45 on Chalk, path of Betsoms Hill, 1958, RA Clarke.
- 6) 57 Stone; by A.2 N. of Darenth Wood, 582732, 1950, H.M.P. [57 Dartford, B.D. Jackson] 67 Cobham Park, 1 pl[ant] PCH. Cobham Village HMP. 66 Meopham Green, escape, K.E.B., 1951. East Hill, Kingsdown, 556612, B.G. Rogers. 614595 Wrotham Hill P[ilgrims] Way, 1956, HMP.
- 7) 05 Chilham Castle, by lake, 1950. 86 Stockbury, Mrs R. Begg, 1962. [75 Roadside N. of Detling, E.M.H.]
- 8) 14 R[oa]dside NW of Elham, 1950. 23 in A.A. Camp, Lydden Spout, 1950; 1951 **MNE**; 1955 **MNE**. 23 Folkestone Waterworks, Miss V. Day; DMCC. River House Orchard, Mrs. B. Dodds. 35 Ham, E. Robinson.
- 9) [36 Shortenden, in meadows, Dr. Hunter, Fl. Thanet.] Escape on waste ground near Margate, LW Wilson.
- 10) [45 Chevening, Miss Worship.] 45 Chipstead, 1948, DMCC.
- 11)G) [75 By Allington Castle, Hb. Lamb, 1848, **MNE**. Allington Lock, Dr. J. Evans Smith, 1870 **MNE**; H. Lamb, 1883 **MNE**; F. James, 1893 **MNE**. 65 By the brook, Blacklands, East Malling, possibly native here. 65 Roadside, Wrotham Water, 1954 **MNE**.] 65 Roadside 1m W. of Offham, 1951. Platt Brickfields, DMCC. N of Ightham DMCC, 1948. 85 Arnold Court, Otham, 1949, **MNE**. [75 Maidstone, W.W.R. by Medway.] 84 Roadside verge, Hearnden Green 1½ m. NW of Headcorn, 1958 **MNE**. [65 Escape, Trosley, Shepherd.] 44 Edenbridge, riverbank below bridge, escape, 444459, 1957 DPY.
- 12) Best Lane Canterbury, Miss M.E.M. Chilham Castle, by Lake RGW.
- 13) [54 Redleaf (Penshurst) C.Cox.] Near Tonbridge, H.S. de Vere Hodge. 54 Sacred Heart Convent, T[un]bridge Wells, 1959, P.A. Lane. [73 Cranbrook, Crowden.] Brenchley War Memorial, 1953, KEB.



‡ **G. sanguineum** L. [Bloody Crane's-bill. 15, 16.]

Garden escape in Kent.

- 1) Ruxley Pits (and var. *lancastris*) Spooner & Stoyel.

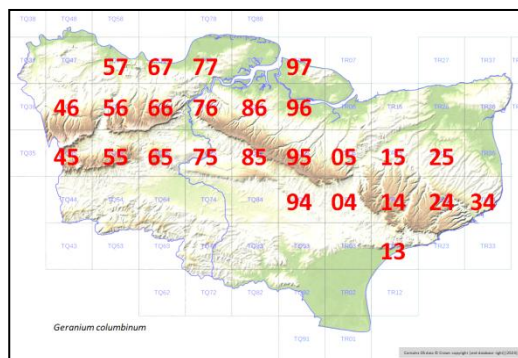
- 5) Meadow between Downe and Cudham, established, 1906, (a mile from the nearest garden where it is grown) WHG.  
 6) Darenth Wood, Cooper 1836.  
 8) [Petham, Linford.] Plantation by allotments, Bishops-bourne, 1962, BJB.  
 11) Platt Brickfield, DMCC.  
 13) Redleaf, Cox.

**G. columbinum** L. Long-stalked Cranesbill. 15, 16 25/51

Native. Frequent in scrub, hedgebanks and open woods on chalk and ragstone, rare in Thanet and Folkestone Sand; absent elsewhere.

1<sup>st</sup> record, 1670: Swanley, Ray, *Cat. Ang.* P.266.

- 1) [Hayes and W. Wickham, 1897, Scargill.] Keston, 1900, B.T.L. 56 Farningham Wood. Chislehurst, W.W. Bexley, 1917 B.T.L. [Wood, E. Wickham, **BM** AHWD, 1889.] Kent Gate, W. Wickham, 1915, Hb. Davis **MNE**. Chelsfield F. Swain.  
 3) Perry Woods; Bysing Wood, REW, 1953.  
 4) Sandwich F. Swain?  
 5) 46 Between Keston and Downe, 1906, W.H.G. 46 Darwins Bank, Downe, 1948-1955 JEL. 56 Downs SW of Farningham. 46 Halstead, 1938, B.T.L. 45 Down W. of Hogtrough Hill J.D. Lovis 1951. 56 Chalk W. of Eynsford, PCH. Timberden Bottom BENA. 55.  
 6) Bush, Cuxton, 1881, H.N.R. **BM**. 66 NW of Cuxton (edge of G[rea]t Wood) 1952 **MNE**. 66 Up[per] Halling Downs, 1961 **MNE**. 66 Ryarsh Downs. 66 Pilgrim Ho[use] Trosley Downs 1946 **MNE**. 66 Meopham. 65 Wrotham Down. 77 Shorne, G[rea]t Crabbles Wood. 57 Greenhithe (edge of Mounts Wood) 1954 **MNE** and M[oun]ts Rd. 57 Green St[reet] Green, 1950 **MNE**. 66 By wall near Vigo Inn, CAS. Fawkham / Hartley, F. Swain. 67 Randall Wood, R. Pocock **BM**; 1957, PCH.  
 7) Burham chalk pits. 76 Bluebell Hill, 1944 **MNE**. 85 Deans Bottom, Bredgar, 1958. 86 Three Squirrels Wood. 75 Boxley Warren. 75 Detling. 86 Bredhurst. 86 Stockbury Valley, '44. 75 Boarley Warren. 86 Hill F[ar]m Wood, Stockbury, 1958 **MNE**. 94 Westwell, E. Scott. Bassiline Wood, Milsted, HMW. 95 Kettle Hill Eastling C. Turner. Badgen Wood, Ospringe, REW. 96 "Simia" Wood, Ospringe. Putt Wood! ES.  
 8) 04 Wood N of Crown, Wye Downs. 04 Crundale. 04 Coombe Grove Farm, E of Wye. 04 Brook Downs 1954 **MNE**. Bridge JG. 05 Downs E of Chilham. W of Penny Pot, FR DHK. 15 Bishopsbourne. 15 Larkey Valley Wood, 1945 **MNE**. 15 Whitehill Wood, L[owe]r Hardres, 1955 **MNE**. 14 Scrub, Claridge Wood, Elham, 1956 **MNE**. Temple Ewell, JG. 29 Sladden Wood, Alkham, 1955 **MNE**. Woolwich Wood. 25 Ileden Wood, Kingston, 1950 **MNE**. Fredsville. 15 Marley Lane, Kingston, 1950 **MNE**. 14 Covert Wood, Kingston, 1956 **MNE**. 14 N end Atchester Wood '54, DACL. 34 N. of Lit[tle] America, Waldershare, 1954 **MNE**. 34 Abundant on side of grubbed hedge, Free Down, 1962. 13.  
 10) 55 By wall, Ivy Hatch, 587543, CAS.  
 11) 75 Holt Wood, Aylesford. 75 Wood S of Ditton. 75 by path over R[ai]l[wa]y, E Malling, 1946 **MNE**. Near River, Allington, A. Graseman. [Penenden Heath, Ex Hb Lamb, 1848 **MNE**.] [Sittingbourne Rd., Maidstone, ex Hb Lamb, 1850 **MNE**.] [Offham, H. Lamb, 1882 **MNE**.]  
 12) Sellindge → Smeeth, 1875, FJH; Hb FJH.  
 13) Goudhurst, 1899, JS, **TLS**.  
 16) W of Sandgate, 1945, DHK. Hythe W Scars, F Swain.



**G. dissectum** L. Cut-leaved Cranesbill. 15, 16.

Probably native on chalk and on the coast, at least; rough fields, banks, roadsides, waste ground, cultivated land, on well-drained soils; common throughout the county.

1<sup>st</sup> record, 1629: Erith, Johnson, *Iter*, p.10.

- 1) Eltham, 1888, AHWD. Elmers End, Hb Davis, 1915 **MNE**. Fields by Farningham Wood, PCH. Near R[ai]l[wa]y, N. Cray, PCH. Ruxley Pits. Blackheath GMB. Chislehurst, H.W.P. 1902 **BM**.  
 2) Edge of Holborough Marshes '44. Plumstead Sewer Bank. Cuxton, near river; Cuxton R[ai]l[wa]y bank. S. Minster Marshes, 1955. Scrapsgate 1955. Scrub S. of Scrapsgate 1955. East End Minster on Bagshot S[and]. Sheerness Canal. Corn, Thistle Hall Minster.  
 3) Arable E. of Seasalter Church, 1065, 0965, H.M.W., 1958.

- 5) 36 W of Biggin Hill 3961, PCH. Darwin's Bank Downe JEL.  
 6) Chalk W. of Eynsford PCH. Mounts Wood edge, Greenhithe. Longfield. Cuxton. Cobham. Otford PCH. Stone HMP. Near Gravesend, R.P. **BM**. Wrotham. Watling St[reet], Swanscombe Wood PCH. Meopham. SE of Farningham. Halling Downs. Romney St[reet] PCH. Preston Hill PCH.  
 7) 05 Chilham. 75 Boxley. 76 Burham Downs, N spur. 86 Hollingbourne. 86 S. of Key Street by r[oad], 1955. 76 Grove Wood, Darland, 1938, JBM **BM**. 94 Westwell.  
 8) 04 E. of Wye. Arable, Fredville. Arable, Chilverton Elms. Arable Ch[urch] Hougham. Coldred Village. St Mary, at Cliffe. Wood Ville Downs. Coldred Wood. Woodville Park.  
 10) 56 Pastures N. of Farningham PCH. 55 Field NW of Ightham. 57 Darenth Meadows, PCH.  
 11) 75 E. Malling. 65 Ryarsh. 65 Wrotham Heath. 54 Tonbridge. 55 R[oad]side Ightham. 35 Fairbourne Lane Mrs B Dodds. Maidstone Hb.L., H. Lamb, 1882 **MNE**. 75 Sandpit E of Forstal, 1955. Marden Village. 54 R[ail]wa[y], Hildenborough 563482 CAS.  
 12) 94 Hothfield. 04 Ashford.  
 13) 63 High Wood, T[unbridge] Wells, PCH. Bidborough Path Southborough HNC.  
 15) 02 S. of Dymchurch, J.F.D.P. **BM**. Sandhurst Levels. Dungeness, J.Hubbard.  
 16) Aldergate 096351 on rag[stone] scarp. Rag[stone] scarp W of Hythe.

‡ **G. ibericum** [Cav. Caucasian Crane's-bill. 16.]

- 10) Bank of r[ail]wa[y], near Sevenoaks Sta[tion], 1961, CAS.  
 11) Bourne F[ar]m, near Plaxtol, 609547, 1960, DMCC.  
 13) Allotments, Claremont Rd., T[unbridge] Wells, 1962, CAS.

‡ **G. platypetalum** [Fisch. & C.A. Mey. Glandular Crane's-bill. 15.]

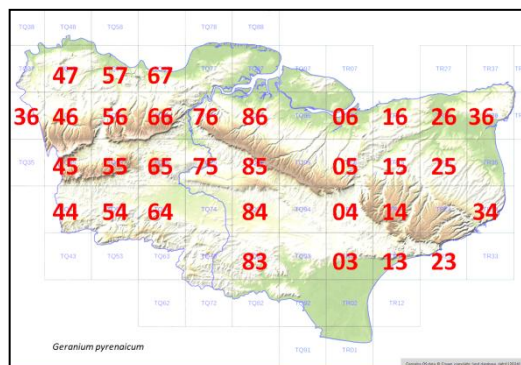
- [8] St. Marg[are]ts Bay DMCC.

**G. pyrenaicum** Burm. fil. Pyrenean Cranesbill. 15, 16 32/51

Naturalised alien. Locally frequent: railway banks, roadsides, etc. This plant has spread rapidly in Kent in several parts.

1<sup>st</sup> record, 1847: Dumpton Gap, Fl. Thanet, p.13. Blackheath 1840, H.N. **BM**.

- 1) Lee, Cracknell in Phyt. N.S. vi 448. Chislehurst; Bickley, Wollaston. 36 Beckenham Junction on R[ail]wa[y] banks, 1885, E. de C. **BM**. 47 Elmstead Woods '56 Miss A Mills. 46 Hayes Common, gravel pit E. de C.; 1915, Davis, **MNE**; 1944, DMCC. 46 R[ail]wa[y] NW of Orpington 1959→ CAS. N of Dartford Heath AHWD. Orpington GMB. Ruxley pits.  
 2) 47 Plumstead Sewer bank, PCH. Crossness St J M. Canal bank W. of Higham, FJH. 76 R[iver] by Snodland 1870 Dr Evans Smith **MNE**. Sheppey, A.K. Davis. 76 Cuxton Station, 1943; 1945 **MNE**. 57 Dartford Marshes, 1931, PHC. 612565 Swanscombe Marshes PCH. 47 Erith Marshes, 1937, PHC. Newington Sta[tion], DHK. 76 Snodland Churchyard, A Beadell.  
 3) 16 S. of Dengrove Wood, Sturry, 1955 **MNE**. 15 Railway Bank, St. Stephens, Canterbury. Hales Place DACL.  
 4) 36 Richborough. [Stourmouth, Dowker.] W. of Ash, Phyt. NS v 182, JS Mill; J. Oldaker. 26 Chislet Halt, 1958, Mrs. B; 1950 REW. 26 Preston, Mrs B. Dodds. 25 N. & E of Wingham, REW.  
 6) Green Street Green Road, SE of Dartford HMP. Darenth GMB. (SE of Dartford, AHWD) 57 Lane End, ESM (PCH; 1945!). 76 Rede Court, Strood. 57 Stone, Gravel pits HMP. 66 Long field Hill, Meopham. 56 Knockmill (Kingsdown) C.E. Britton. 66 Upper Halling. 67 Northfleet, 1963, W.A.S. Luddesdown.  
 7) Below Burham Downs, 1955 **MNE**. Connebanks, Chatham BC. 86.  
 8) r[oad]side Nackington, Mitchinson; JS Mill; RGW. 14 Bossingham, 1939, Miss Milward. Near Kingsdown, Mrs. K.D. Rowlands, 1958, **MNE**. L[owe]r Hardres Ch[urch]y[ar]d RGW. Aylsham Sta[tion], KDR. Martin Mill, K.D.R.  
 9) (Dumpton Gap, Fl. Thanet.) 36 Westgate, L.W.W.  
 10) 55 Newington Borough Dump, N of Sevenoaks, D.McC, 1951. Chevening, 1913, EBB. Westerham, RAC. 45 Brasted, 1924, RWR. 55 Kemsing Sta[tion], on r[ail]wa[y] track, B Sennitt. 55 Riverbank, Otford, PCH. 55 Dunton Green Brickfield, A. Beadell. Dunton G[ree]n St[atio]n E Armstrong.  
 11) 66 Trottiscliffe, F.R. 65 Ryarsh on garden bank W.W.R. (1947!). 75 Medway bank, W. of Barming, 1959, E.G.P. **MNE**. Near Ditton Laboratory CW. 84 R[ail]wa[y], Headcorn Station, KEB. 75 W. Farleigh. Tovil by





R[ai]l[wa]y, H. Lamb. Pluckley, V Day. 44 Edenbridge, on R[ai]l[wa]y and church y[ar]d, K.E.B. 34 R[ai]l[wa]y, Kelsham, W of Headcorn, 1956 **MNE**. 84 Road 1m E of Headcorn, 1962. 85 R[oa]dside, Harrietsham, 1959, Mrs B. Dodds **MNE**. 54 R[ai]l[wa]y NW of Hildenborough and by Station, 1962, CAS. 54 R[ai]l[wa]y W of Tonbridge, 1960, C.A. Stace; E of, KEB. 64.

12) 04 Willesborough Lees. 04 Brabourne Lees. 04 R[ai]l[wa]y, Sevington, W.R. Jeffrey; E. Scott, 1939; CNP. 15 Canterbury Precincts, 151579 Miss E.M. St Augustines C[anter]bury, V Day. 13 Hope F[ar]m, Sellinge, 56 LJM. 05 Chilham, F.H. Perring. 03 Stonehill, Sellinge RAC.

14) 83 Tenterden Sta[tion] ES.

16) [Cheriton, G. Walton; Hythe Station, CES.] 13 Shornecliffe, KD, 1957. 13 Sandpit, Stone F[ar]m, Newington, LJM. 23.

### **Geranium pusillum** L.<sup>696</sup> Small-flowered Cranesbill

Native. Sandy and gravelly grassland, sandpits and hedgebanks. Widespread, and locally frequent on the Tertiaries, the Folkestone Sand, and near the coast; and confined to superficial in the chalk districts. Very rare in the Weald, except in the towns of Tonbridge and Tunbridge Wells.

1<sup>st</sup> record, uncertain.

Readily distinguished from *G. molle* even when not in flower by the dense close pubescence of the stem: in *G. molle* the stem has lax long hairs, 1mm long or more.

1) [37 Blackheath, A.A. **BM**.] 46 Hayes Common, [D]McC, 1934. 46 Keston Common, 1902, W.H.G. [Birchwood Corner, 1899, CHG.] 47 Bexley, dry sandy g[roun]d S. of Village, 1955 MNE. R[ai]l[wa]y Petts Wood GMB. Joyce Green GMB. 36 Elmers End, 1915, Hb. Davis, **MNE**.

2) Dartford Marshes, PHC, 1931. 57 Erith, 1948, R.A.B. 06 Ham Marshes REW. Oare Ch[urch]y[ar]d '60 REW. 97 E. End, Minster.

96; Teynham sq[uare]; Faversham sq[uare]; W. Sheppey sq[uare]

3) 05. 15. 16. Canterbury sq[uare]; Chilham sq[uare]; Whitstable sq[uare].

4) 35 Dunes near road, Sandwich Bay 1954, **MNE**. 26. absent, Wingham sq[uare]; Sandwich sq[uare]; Chislehurst sq[uare].

5) 45 Hogtrough Hill, 1960, R. Clarke. Farningham R[oa]d Sta[tion], CA Lister.

6) 76 E of Ranscombe F[ar]m, Cuxton, 1950, G.O.P. 76 Cuxton Station. 57 Stone, 1886, FJH; pits, 1947 HMP. 57 Mounts R[oa]d bank, S. of Greenhithe, 1954 **MNE**. 77 Higham Upshire, on gravelly bank 1955 **MNE**. 77 Sandy ground, Upnor, 1949 **MNE**. 57 Greenstreet Green to Lane End, PCH. 66. 67.

Cobham sq[uare]; Gravesend sq[uare]; Higham sq[uare].

7) Putt Wood 1980.

8) 15 Chartham Downs chalk pit, 1960, **MNE**. 24 pit, Haynes Farm, Sibertswold, DACL & B. Nash. 34 Sutton Downs 330479 KDR.

Alkham-Temple Ewell sq[uare]; Dover sq[uare].

9) [Margate to Nash, Johnson, *Descriptio*.] 36 Margate, 1905, E.M. Treves.

Thanet E. sq[uare]

10) 56 Shoreham, B.T.L. 55 Kemsing Sta[tion] DMCC, 1948. 45.

Westerham sq[uare].

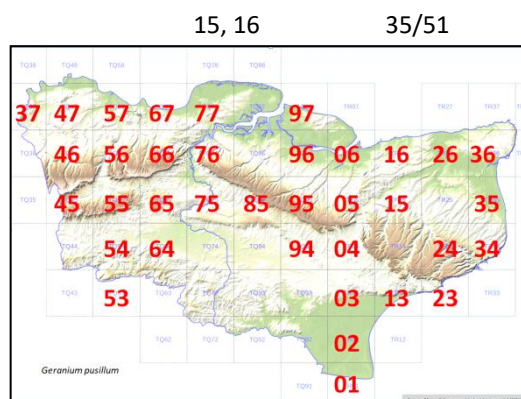
11) 65 Larkfield Heath, E. Malling, in glade, 1959 **MNE** on F[olkestone] S[and]. Addington. 65 Piney Toll, W. of E. Malling, 1943-61 **MNE** on F[olkestone] S[and]. 608536 Basted DMCC. 65 Wrotham Heath, on F[olkestone] Sand. 75 Aylesford pits, EGP, 1958. 85 by A20 W. of Hollingbourne. 85 field (F[olkestone] Sand), Sandway, Lenham 1960 **MNE**. 54 Bordyke Tonbridge 593407, 55, CAS. 85 Fairbourne Mill, Harrietsham, Mrs. B. Dodds. (Absent about Marden, Staplehurst and Headcorn.) 64.

12) 94 Ashford Warren, 1945 **MNE**. 94 Sandpit, Charing Heath, E. Scott, 1954! **MNE**. Warren Wood, ES. 04 Willesborough Lees. 04 Bradbourne Lees. 95 Sandy bank, Chapel Farm, SE of Lenham, 1958. Vauxhall Lakes, Canterbury, 1958, H.M.W.

13) 53 Toad Rock, Rusthall, Tunbridge Wells, 1950, KEB. Absent from Pembury to Woodchurch.

15) 01 Dungeness shingle beach. 02 Lydd Common, on old sand dunes.

16) 13 Scars, W. of Hythe. 13 Lympne near castle. 03 Aldergate, Aldington. SE of Court at Streete 096351, 1958, **MNE**; 097350. Honeypot 089353. 23 Folkestone Leas, 1957, K.D.R. 13 Field S. of Newington, on F[olkestone] S[and], 1954 **MNE**.



<sup>696</sup> Authority cited as Burm. f.



**Geranium molle** L.

Dove's-foot Cranesbill.

15, 16.

Native. Hedgebanks, roadsides, waste ground, dry pastures, cultivated land: very common.

1<sup>st</sup> record: 1632, S. of Margate, Johnson, *Descriptio*, p.18("pes columbinus Dod.") or else 1777; Faversham, E. Jacob, *Pl. Fav.*, p.41.1) Bromley, 1900, T.H., **BM**. Keston Common, 1954, **MNE**. Holwood Park. Abbey Wood, GAM. Ruxley pits. Keston Park Estate. Dartford Heath. Blackheath, GMB. Elmers End, 1915, Hb Davis **MNE**. Shooters Hill, GMB. Farningham Wood 82,

4) Sandwich Bay.

5) Well Wood, W. Wickham 396642 PCH.

6) Chalk W. of Eynsford PCH. Stone. Mounts Road, Greenhithe. Higham. Green St[reet] Green. Sandpit E Shooters Hill 61 HAS. Cobham. Swanscombe Wood. Cuxton, r[oad]side PCH. Meopham. Halling.

7) Newnham. Putt Wood.

8) Shatterling. Fredville.

9) 26 Brooksend, Birchington, 1955, **MNE**. Minster Ch[urch]y[ar]d, '63.

10) 56 Cornfield by Shoreham Ch[urch] PCH. 56 S. Darenth meadows to S, PCH. 57 St Johns Jerusalem, PCH. Sevenoaks tip CAS.

11) 65 Piney Toll, E. Malling 1943-60 **MNE**. 65 Sandpits, Ryarsh. 65 by castle, Leybourne! 65 Wrotham Heath. Allington 1882 E. Bartlett **MNE**. 65 W. Malling. 75 Aylesford, 1894, E.S.M. **BM**. Allington, '54, A Graseman. 85 White House, Sandway, Mrs B. Dodds. 75 Bearsted. Edenbridge tip DPY. 54 R[ail]wa[y], Hildenborough 563481, CAS. 84 Ride, Dering Wood, W. side, 1962, E. Scott.

12) St Augustines Abbey '54, DACL.

13) 63 near Lamberhurst Church, JRW 1938. Bayham CAS. Southborough Common HNC. 73 Roadside in Forest, Bedgebury, 1958, WJ Davies.

15) By Lighthouse, Dungeness, 1938, S.E.C. Lydd Common. Airport, Lydd, DMCC.

16) 03 Aldergate 097350 Lympne, on ragstone cliff, 1958 **MNE**. Shorncliffe. Postling Green scarp. F[olkestone] sand N of Seabrook. Rag[stone] Scars W of Hythe.**G. lucidum** L.

Shining Cranes bill.

15, 16.

14/52

Native. Hedgebanks on sandy or gravelly soils; and on old walls and on rocks on the ragstone, rare and local. A characteristic, though rarer, species of the ragstone in Mid and West Kent, probably an escape in most localities elsewhere. Locally common on the Bargate Beds in SW Surrey, very rare in Sussex and Essex, and in Pas de Calais almost confined to the Carb[oniferous] limestone of the Boulonnais.

1<sup>st</sup> record, 1802: Dover to Folkestone, Dillwyn, *Trans. Linn. Soc. VI*, p.180.1) 46 Gravel pit, Hayes Common, E. de C., 1888 **BM**; Hb Davis 1916 **MNE**; 406658 D.McC; (1946! **MNE**). [36 Hayes Station gravel pit, 1907, WHG; 1926, JEL.] [36 Beckenham, E. de C.; 1916, ASK] WHG, 1906; CW, 1910-1920.<sup>697</sup> 47 Abbey Wood, FJH. Erith, A.A. 1839 **BM**. [36 W.

Wickham, 1899, BTL.] 46 Keston Common opp[osite] Mill, WWR; 1950, DPY; 1950, J.D. Lovis.

2)E 86 Hedgebank S.W. of Hawes Wood, Newington, 1957, **MNE**.

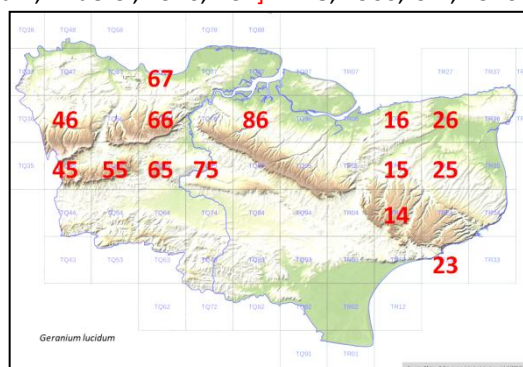
3) 16 Westbere, R.G. Williams, 1956. 15 Hedgebank, Canterbury Cemetery, C.A. Roberts. 25 Ellridge Cross roads, on dump of rubbish, 1957-8, B. Nash.

6) 57 Johns Hole, Dartford, 1811, R. Pocock, **BM**. Lanes between Dartford and Greenhithe JSM 1863; 1886, FJH, **BM**. [Stone, Tagg.] 67 Chalk Gravel pit, abundant, 1946, **MNE**. 76 [Strood, Miss Young.] 66 625658, N. of Elbows Wood, Ridley, Mrs Woods.

7) [76 Luton, Miss Young; Sittingbourne, Grayling].

8) [23 Beach between Dover and Folkestone, O.B.G.] 23 Sugar Loaf Hill, Folkestone, L.W.W. 14 West Wood, Stowting, KDR.

9) 26 Monkton, on Railway Ballast, L.W.W.

10) 45 Lane, Froghole, Chipstead, E Armstrong, 1943. 45 on stoneSand bank on ragstone, Mariners, Crockham Hill, R.C., 1959; RAC; 1960! **MNE**. 55 Grassy Lane off South Park, Sevenoaks, 1962, K.E.B.<sup>697</sup>

It is unclear whether these relate to the Beckenham entry or to a deleted entry for Keston Common.

**11)** 65 on old ragstone walls, Watery Lane W. Malling, 1944-60 **MNE**. 75 Loose, DMcC. 75 Otham, H. Lamb, 1880 **MNE**; 1950! **MNE**. 75 old wall, Dean Street, W. Farleigh, R.G. Williams, 1957; 1958! on rocks and walls. 75 Boughton Quarries, 1884, H. Lamb, **MNE**; 1949! 65 Yalding churchyard, KE Bull, 1955; 1959! **MNE**; 1960, H.M.P.

**13)** 53 Groombridge, 1911, EC Gilbert, **TLS**.

**14)** Tenterden 1897 RRH.

[**16)** The Record (OBG) from Lympne Castle probably refers to *G. rotundifolium* which is common there; the same may be true of the Saltwood record (Ibid.).]

**G. robertianum** L.

Herb Robert.

15, 16.

Native. Hedgebanks, woodland on well-drained base rich soils, abundant throughout Kent. The ssp. *maritimum* (Bab.) H.G. Baker on shingle beaches, rare but locally common.

1<sup>st</sup> record, 1632: Margate to Nash, Johnson, *Descriptio*, p.17.

**1)** Hayes (white) Scargill 1896. Farningham Wood, PCH. Hayes Common, PCH. Abbey Wood, GAM. Ruxley Pits. Ravensbourne, 1916, Hb. Davis **MNE**. Dartford Heath GMB. Wood, N. Cray, Tip, PCH. M. Cray, PCH. High Wood, Crofton PCH. Blackheath ECW. Elmstead Woods by road. Chislehurst.

**2)** Tonge Carr, J.M. 804759 S of St Mary Hoo. 795741 Sharnel St[reet].

**3)** Chequers Wood, Fordwich, 1955. (white fl[ower]s) Perry Wood, Selling, 1943, DHK. Dengrove Wood.

**4)** Kingsdown shingle beach, 1945 (var. *maritimum*) **MNE**. Wenderton Manor Wood, '59, B. Nash.

**5)** R[oad]side, Washneys F[arm], Cudham, PCH. 396611 Highams Hill PCH. Polhill, Pilgrims Way PCH. Wall, Chevening Ch[urch] y[ard], PCH. Chevening Park, PCH. Pilots Wood, PCH.

**6)** Below Crookhorn Wood (some white flowered). S. of Dode. Up[per] Halling Woods. Trottscliffe. Wrotham. Cuxton. Romney St[reet] PCH. Mounts Wood, PCH. Dunstall Woods, Shoreham PCH. Preston Hill, P.C.H. Wingate Wood, Halling.

**7)** Shorne Hill in wood clearing 61 HAS. Beacon Hill Upnor. Hawkins Wood Chilham (some white), 1944 DHK. Lower Bell (white) B.C. Lidsing, Boxley (white) JBM, 1938 **BM**. Burham Downs Ch[urch] Lane. SW of Doddington. Hartlip Hill R[oad]side 55. S. of Q[ueen] D[own] W[arren] in lane '55. Bredhurst Hurst '55. Simia Wood. Queendown Warren '55. Copse below Purple Hill '55. Stockbury Church Wood. Charing Heath.

**8)** Sutton Downs. Junipers Wood N of Wye Crown. S. side Poulton Valley. Woodville. Wood NW of S Alkham 1955. S. side Coombe Vale. N. side Coombe Vale 2 woods. Copse Hougham SW 61/23. NE of Alkham. Sladden Wood. Wolveton Wood. S of Alkham. Elms Vale N. Reinden Wood, B Nash '58. Shingle near Dover, 1876. A.B.

**9)** Durlock, Minster, in copse.

**10)** Ide Hill. Rooks Hill. Ightham Mote. Westerham Wood, PCH (82!). Sevenoaks by ....(alba) KEB. Otford, PCH. R[oad]side, Eynsford PCH. Pastures N of Farningham PCH. St John Jerusalem PCH. Darenth meadows PCH. S. Darenth meadows PCH.

**11)** E. Malling (Well St[reet]) **MNE**. Oaken Wood. Ryarsh. Platt. Plaxtol. Maidstone Hb. Lamb 1881 **MNE**. Larkfield Heath (white). W[ood] SE of L[owe]r St Clere 1955. Leybourne Wood. Sandling Wood 55. {Cross} R[oad]s N of Sutton Valence. S of Stile Bridge Marden. R[ail]wa[y] Hildenborough 563482 CAS.

**12)** Hothfield Heath. Brook. Lenham Hill.

**13)** Ashour Wood NE (Wad[hurst] C[lay]). R[oad] ½m W Chidd[ingstone] Hoath (T[unbridge] W[ells] S[and]). Wood E of Horseshoe G[ree]n (Wad[hurst] C[lay]). T[unbridge] W[ells] West Sta[tion] (white fl[ower]s). Lamberhurst Quarter Wood. Bayham, CAS. Pembury Woods, PCH. N. of Friezley. Vauxhall Lane and Bidboro[ough] path, Southborough HNC. Combwell Wood, 1979.

**14)** Stone in Oxney, in village, 1949 **MNE**; Church Wood, Wittersham. Cranbrook Wood, Swattenden.

**15)** Dungeness beach, abundant, WRS, **BM**, 1925; F.R. 1945-57 (var. *maritimum*) **MNE**.

**16)** Lane to Hythe, west Rag[stone] scarp – Shorncliffe. Saltwood. Folkestone. Aldington Knowle.

ssp. *maritimum* (Bab.) H.G. Baker

Shingle beaches on the east and south coasts of Kent, locally common.

**4)** Walmer, 1863, JSM; 1888, E.S.M. **CGE**; 1903, G.C.D. **OXF**; 1907, Foord Kelcey **CGE**. Kingsdown Beach, J.B. Syme, Eng. Bot.; 1901, J. & A. Bennett **BM**; 1907, Foord-Kelcey **OXF**; 1915, Fox, **OXF**; 1946! **MNE** 1959!

**8)** Beach between Dover and Folkestone, A. Bennett in Hb. Geldart, teste Fl. Kent. Folkestone, 1869, J.B. Syme **BM**.

**15)** Hythe, Duthie in *Fl. Kent*. Lydd, J.S.M., 1863. Dungeness, F.J.H.; 1945-58, abundant from Midrips to Greatstone! **MNE**.

The old records are given in Fl. Kent under var. "*purpureum* auct. angl." All Kent material examined appears, however, to be ssp. *maritimum*: *G. purpureum* Vill. does not, apparently, occur E. of Littlehampton in W. Sussex (see H.G. Baker, *Watsonia*, **3** (1955) p.160-167, and (1956) P.270-279, for evidence and full discussion on these plants).

‡ **G. phaeum** L. Dusky Cranesbill. 15, 16.

Garden escape, sometimes naturalised.

- 1) Farnborough, W. Watson; 1932, PHC; 1959, 445636, in nettle bed, M. Swain.
- 2) near Crossness Sewage Works, 1927, H.J.B.
- 3) N of Canterbury, Mitchinson, 1873; FJ H. in Hb.
- 4) Stourmouth, Dowker.
- 5) Brasted Hill top, by road, Miss Burnaby Atkins; (1947! **MNE**).
- 7) Path to Downs from Otford GMB. Rochester St. Brody (in woods); Maidstone Road, Chatham, Miss Young.
- 8) S. Alkham, cornfield edge, 1957, LJM.
- 10) Shoreham R[ai][wa]y Station, 1935, F.R. Browning. Escape, Oldbury, E. Armstrong, 1944
- 11) escape, between Penshurst and Maidstone, J.E. Little. Valley by the Fulling Mill, Tovil, Ray in O.B.G.
- 13) Rusthall, 1950 KEB.

[*Erodium* L'Hér.]

‡ **E. maritimum** (L.) Hér.<sup>698</sup> [Sea Stork's-bill.]

Sandy dunes and old walls near the sea. Formerly very rare, and now extinct.

1<sup>st</sup> record, 1777; last 1802.

- 4) Sand dunes near Deal, not common, J. [sic, for E.] Jacob, 1777. Not reported since.
- 11) Casual in garden, E. Malling, 1945 **MNE**.
- 16) Walls of Sandgate castle. Dillwyn in O.B.G. 1805.] Dungeness, RSPB 'view area', scrapes on Hamilton F[ar]m, 1999 v[ery] a[bundant].

‡ **E. botrys** (Cav.) Bertol. [Mediterranean Stork's-bill 15, 16.]

- 1) "Shoddy" alien, Hextable, 148, DMcC (Lond. Nat. (1951) 30, 4).
- 2) Motney Hill '51 DMcC.
- 11) (Shoddy alien) Offham, 1960, DMcC **MNE**. Yalding Station (Shoddy alien) 1961, DMcC.

‡ **E. brachycarpum** (Godr.) Thell.<sup>699</sup> [Hairy-pitted Stork's-bill. 16.]

- 11) Shoddy field, Comp, 1960, D.McC, **MNE**.

‡ **E. crinitum** Carolin [Eastern Stork's-bill. 15, 16.]

- 4) Shoddy field, Sandwich, 1959, D.McC., **MNE**.
- 11) Shoddy field, Comp, 1960, DMc.C. **MNE**. Shoddy alien, Yalding Station, 1961, DMcC.

‡ **E. cygnorum** Nees [Western Stork's-bill. 16]

- 1) "Shoddy" alien, Hextable, 1948, DMcC (Lond Nat (1951) 30, 4).

‡ **E. moschatum** (L.) Hér.<sup>700</sup> [Musk Stork's-bill. 15, 16.]

Alien, very rare and casual.

- 1) [Bromley Common; Wickham Park, Irvine.] Probably errors or escapes. Hextable, 1949, JEL, introduced with "shoddy".
- 2) Motney Hill, '57, DMcC.
- 4) Ash crossing, Sandwich (Sh[oddy]), 1959, D.McC., **MNE**.
- 6) Longfield Tip D.McC. 1956, **MNE**.
- [9] Nash and Street Green in Pastures, Dr. Hunter.] Probably errors or escapes.
- 11) W. Orchard near Marden, Dr. C. West, 1946. Basted, Shoddy field, 1960, D.McC, **MNE**. Yalding Station, Shoddy alien, 1961, DMcC. E. Malling, Orchard, 1949, C.W.

<sup>698</sup> Cited as (L.) Ait. This taxon has since been found no longer to be extinct, and is spreading, as recognised by the final entry.

<sup>699</sup> Cited as *E. obtusiplicatum* (Maire Weiller & Wilzek) J.T. Howell.

<sup>700</sup> Cited as (L.) Ait.

[13] Mount Sion and Rusthall Common, etc., an escape from cottagers' gardens, E. Jenner; Rusthall Common, W.W.R.]

[14] Rolvenden, F.M. Webb.]

[16] Sandgate near Turnpike: GE Sm[ith] in FIGEK; Dibgate to Ham Street, Hythe, Drew, 1888.]

**E. cicutarium** L.

Hemlock Storksbill<sup>701</sup>

15, 16.

ssp. **cutarium**

Native: sand dunes, sandy beaches, banks, open commons, and cultivated land on sand or gravel, or more rarely on chalk; frequent on the coast, the tertiary, and the Folkestone sand; rare elsewhere and absent from most of the Weald.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, *Descriptio*, p.19.

1) 46 Hayes Common, WHG; 1923, JEL; DMCC, FR. Gravel Pit, Belvedere 1903; Holly Hill, 1905, RHC. Beckenham Place. Avery Hill, 1907, LCC Botany Dept. 47 Abbey Wood, St.J.M., BEC, 1922, p.722 **BM**. 46 Keston Common, 1916 HRP **MNE**; WHG; 1948! **MNE**. 57 Dartford Heath, 1919, E.B.B. Elmstead Woods GMB. 47 Shooters Hill, AHWD, 1901. 56 Sandy W. border of Farningham Wood 1945 **MNE**, (82!). 57 Plaxdale, N.W. of Swanley, 1948 **MNE**. 57 Dartford Heath, H.M.P. Arable, Hawkwood Chislehurst GMB.

2) 67 Swanscombe Marshes, 1938, PHC. Higham Marshes, 1931, Miss Pearce. 06 Shellness, Sheppey, 1959 **MNE**. Shellness (Bartons p[oin]t) 1932-1947, Mrs Bryson. Seasalter, AHWD, 1894, (as "*E. Baltii*"), ESM 1894 (var. "*chaerophyllum*"). Sportsman, Seasalter, '59, HMW.

3) Dengrove Wood. Blean Woods SE of Boughton, Mrs.B.

4) 35 abundant from N. of Deal; to 35 N. of Sandwich Bay 1950, **MNE**. 26 arable on gravel, N. of Preston Church, 1958. 36 Richborough sidings, 1946, FR; 1962, R Gorer. 25 Field near Little Wenderton, Wingham, 1961, Miss B. Nash.

6) 57 Sandpit W of Greenhithe GMB. S of Mounts Wood, Greenhithe, Tagg (1946!). 57 Chalky wasteland SE of Dartford, 1944. 57 village, Stone, H.M.P.; Cotton La[ne], Stone H[ou]s[e]! 66/76 Arable on chalk, S. of Great Wood, Cuxton, 1943-55 **MNE**. Bean, 1926, StJM. 57 Green Street Green, 1899, C.H.G. 67 Shorne Hill, sandpit 1961 HAS. On Thanet S[and], A.2, N of Cobham Park, 1945. (on dump of sand on downs, from sandbags, N of Pean 1948 Mrs BW.)

8) 34 Dover, Miss T. Webber!

10) 45 Westerham, 1924, R.W.R. 56 Gravel pits S. of S. Darent PCH. 56 Riverhead Sandpit by R[ai]l[wa]y CAS.

11) 65 Wrotham Heath, 1943 **MNE**→1960! 65 Ryarsh Sandpits. Barming, 1882, H. Lamb **MNE**. 65 Addington Roughetts, 1894 H.L. **MNE**. Crouch DMCC, 1951. 75 Copse N. of Penenden Heath, E. Philp. 65 Yalding Station, shoddy alien, 1961, DMCC. 85 Sandpit, Harrietsham, E.P. 85 Clarkshill by A20, W. of Harrietsham, Mrs B. Dodds (F[olkestone] Sand). 85 Sandpit, Lenham, E.P. by Medway Tonbridge, GE Shaw. 64 By River, E. Peckham CAS. 54 By R[ai]l[wa]y, Hildenborough, 563482, CAS. R[ai]l[wa]y, Leigh, H.V. Wood.

12) 94 Ashford Warren, 1944. 94 Hothfield Common, 1945-60. Willesborough Lees. Chapel F[ar]m Lenham.

13) 53 Tunbridge Wells Common, 1944 (pale flowered); 1946 **MNE**; 1958 CAS; also white fl[owere]d, '62, CAS. 53 Rusthall Common (pale flowered) 1944.

15) 02 Romney Warren, 1947. 02 Golf Course NE of Littlestone, 1947 **MNE**.

16) 03 Ragstone cliffs Aldergate, E. of Aldington, 1958 **MNE**.

ssp. **dunense** Andreas (=ssp. *neglectum* Baker [f.] & Salm.) Sand dunes, locally common.

3) gravelly field by Bigbury Wood 1950 **MNE**.

4) Sandwich Bay, 1946-'55, **MNE**. Deal, 1880, J.G. Baker, **BM**.

12) Hothfield Common 1952 **MNE**.

15) Littlestone dunes, 1930, ECW **BM**, det. E.G. Baker as ssp. *neglectum*. Romney Warren 1946 **MNE**.

ssp. **arvale** Andreas

1) Hayes Common, 1902, E.D. )

4) Deal, 1881, H.E. Wilkinson (Hb. E. & H. D.). ) det. Andreas **BM**.

6) Cobham, 1816 (v. "*maculatum*"). )

11) Wrotham Heath 1939, JBM (v. "*maculatum*"). )

**E. lebelii** Jord.<sup>702</sup>

Sticky Storksbill.

15, 16.

<sup>701</sup> Common Stork's-bill in Stace's *New Flora*, 2<sup>nd</sup> edition.

<sup>702</sup> Given as *E. glutinosum* Dum.

Native. Sand dunes, v[ery] locally common, and local on the coastal dunes in Sussex, and Pas de Calais.

1<sup>st</sup> record, 1899: E.S.M. in *Flora of Kent*, p.79 (as *E. cicutarium* var. *glandulosum* Bosch).

4) locally common on the dunes at Sandwich Bay; ESM: Sandwich Bay; 1923 A.H. Carter **BM**; 1929 TJF: det. Andreas; 1946 **MNE** -55, FR.

15) Dunes, Littlestone, ESM 1893 **BM**, det. Andreas; 1930, E.C.W. (det. EG Baker) **BM**. Widespread N. Romney Golf Course, 1945 **MNE**, 1946 **MNE**, 1947 **MNE**; 1950, Dunes at Greatstone, 1946, **MNE**.

## BALSAMINACEAE

### *Impatiens* L.

‡ *I. noli-tangere* L. Touch-me-not [Balsam.] 16.

Alien in Kent, though established for many years (possibly native on the Surrey-Sussex border at Felbridge).

1) ["Mr. Jeremys Wood", Chislehurst, T.F. Young, Cooper, Fl. Met., 1836.] Bank of the Ravensbourne, Bromley Hill, Scargill; 1901, Dr.D.T. Playfair **BM**, **CGE**. Kelsey Park entrance, Beckenham, per Dr. D. Coombe. Ravensbourne Estate, Keston, 1955, in wet wood not far from the stream, **MNE**.

[13] Tunbridge Wells, 1838, ex Hb. Lamb **MNE**.]

‡ *I. capensis* Meerb. Orange Balsam, Jewel-weed. 15, 16.

*I. biflora* Walt.; *I. fulva* Nutt.

Alien, now completely naturalised on the Medway, and to a less extent on banks of the Darent; formerly on the Ravensbourne.

1) On banks of the Ravensbourne; Scargill. Catford Bridge, 1837, WWR. L[owe]r Sydenham, Scargill; Britton; 1897. Southend Village, 1898 H.F.P.; 1905, WHG.

2) Tidal osier bed by Medway, S. of Burham, 1950. Dartford Marshes in ditch 542 763, 1960 H.M.P.; 1962! Abund[ant] 1959, PCH, not in 1957, GMB. Aylesford, by Medway, CAS.

10) Darenth banks, S. of Darenth, M'Lachlan. Millpond, Dartford Station 1948; 1955, GMB. Dartford, Hb. Davis 1917 **MNE**. [Dartford, Tagg.] Gravel pits, Central Park, Dartford, 1948; 51, H.M.P., GMB.

11) Penshurst by R. Medway, P. Greenfield. Watlingbury to Yalding occasional, 1949, **MNE**. Tonbr[idge] ditch by Castle 1950 KEB. E Farleigh, 1950, 2 plants. Hartlake Br[idge], 1952 **MNE**. By 1954 this was abundant by the Medway banks on both sides, along most of its course from Ashour Wood, Penshurst, to E. Farleigh (Leigh; above Tonbridge **MNE**; Tonbridge to E. Peckham; Yalding; Watlingbury; Teston; Tovil 1960 EGP: it was not seen anywhere on this stretch of the river in 1944-45. Medway S. of Penshurst, 533420, '53, P. Greenfield. Ringlestone by Medway 1954, LRA **MNE**. Teise, Yalding, 1962 WAS.

13) Ashurst to Groombridge by stream, 1954, CAS.

‡ *I. parviflora* DC. Small Balsam [16.]

Alien, naturalised locally.

1) Garden weed, Catford, 1905, WHG. Beckenham, Hb. Davis, 1915 **MNE**. Kelsey Park, 1953, A.P. Hughes, **CGE**. Waste g[roun]d, Kidbrooke Grove, Blackheath, 1952, PCH; and Langton Way GMB. Harrington estate 1955 JM Sherwood. By pond, Chislehurst, 1955, G. Coxhead. Well Wood, W. Wickham, 1958, M. Chalmers Hunt.

10) Dartford, 1930; Westerham, 1942 PHC; 1960 RAC. Newington Dump, N. of Sevenoaks, 1951, D.McC. Dunton Green R[oa]d verge, 1962, Mrs Spear. Crockham Hill, roadside, 1948. Cutting, Sevenoaks Sta[tion], 1960, CAS. Sevenoaks School, Mrs. Hewson.

11) Wrotham Heath, 1896, W.M. Rogers; DMcC, 623579. Ford Place Addington and Addington Place DMcC, 1958. Tonbridge, Brenan, *BEC Rep* XI, p.26. Dry Hill Rd Tonbridge 55 CAS.

13) Denny Bottom, T[unbridge] Wells, 574396, 1960, ES Horrocks. Bishops down, Tunbridge Wells, 1895, Miller; Hb. Miller **BRIST**; 1948, L.W.W., M. Mallison. Hurst Wood, T[unbridge] W[ells], M.S. Moon, 56. Near the Common, Tunbridge Wells, 1929, N.M.; 1961, E.G. Philp, **MNE**. Wood, Chiddingstone, alien, 1957, T.D. Pennington. Pembury Miss V Day. 583405 Skinners School, T[unbridge] Wells, CAS. 575397 Lake Road, T[unbridge] Wells, CAS. 594401 Roundabout Woods, T[unbridge] Wells CAS. Ferndale, T[unbridge] Wells CAS. 595408 Hilbert Rec. T[unbridge] W[ells] CAS. Wood near Rusthall, B. Sennitt.

‡ *I. glandulifera* Royle Himalayan Balsam 15, 16.

Alien, now well naturalised on river banks.

1<sup>st</sup> record: [sic]



- 1) Ravensbourne banks, E. of Ravensbourne Station, Scargill; 1904, WHG. Lewisham; Catford; 1938 D.McC.; Bellingham to Lewisham, by the Ravensbourne, abundant, 1958!-62! by stream, Eden Park; Sydenham, 1938, D.McC, *BEC Rep XI* p471.
- 2) Waste ground, Uralite Halt, Higham, H.W.P. & E.C.W., 1933, **BM**, *BEC. Rep X* p.522.
- 3) By R[ai][wa]y, Sturry, 1962, planted, Miss M.E. Milward.
- 5) Knockholt, escape '57 RAC.
- 8) Naturalised in garden, Swingfield, P. Wilberforce. R[oa]dside, Ham, C.T.
- 10) Bessels Green, E. Armstrong.
- 11) E. Malling, escape, 1948. S.E. of Maidstone, D.H. Kent. Loose, J.D. Stephen. S. of Little Cheveney, Marden, 1942, J.R.W. *BEC Rep XII*, p.845. Yalding, CAS. By the Medway, Ashurst, 1954, Miss A. Graseman; 1 p[ant]1947, A.E. Richardson. Medway above Tonbridge 1961, HMP. Abundant by the Medway, below Penshurst (Penshurst 1953, P. Greenfield), below Tonbridge, and at E. Peckham, 1954, **MNE**; not seen 1944-45. By the Medway Tovil 1960, E.P.; 1961 EGP. Platt, D. McC. Loose, by Pond, 1958, EGP, **MNE**. Hartlake Bridge 1952, **MNE**. Medway Maidstone, 1961, E.P. Teise, Yalding, 1962 WAS.
- 12) By Stour, Canterbury, 1949, E. Robinson. Brabourne, C.N.P.
- 13) Hurst Wood, Tunbridge Wells, 1954, by stream, CAS, 1958. Rusthall a[bandant] in wood by stream B. Sennitt. Stream, Glassenbury Park, Goudhurst, 1948, *Watsonia* I, 247. Medway, Ashurst→Groombridge, CAS. Ferndale, T[unbridge] Wells, 51/53, CAS.
- 14) Roadside, Sandhurst Kent, CAS. Tun[bridge] Wells Common, W. end, 1963, KEB.
- 16) Bombed sites, Folkestone, 1947, Miss V. Day. (Brockman R[oa]d; Morrison R[oa]d.)  
VC16; *BEC rep.*, 1933, p.522.

## ARALIACEAE

### *Hedera* L.

**H. helix** L. Ivy. 15, 16.

Native. Woodlands, hedges, on walls and trees; old quarries, etc; rare in the alluvial marshes, otherwise abundant throughout Kent. In dense beechwoods on chalk, particularly in plantations, it is often dominant in the bottom layer, being very shade-tolerant; but it normally only flowers when it has succeeded in climbing up a support to a place of better illumination. The flowering shoots have ovate-rhomboid leaves, quite unlike the palmate ones of the prostrate shoots.

1<sup>st</sup> record, 1632: S. of Margate, Johnson, *Descriptio*, p.18.

Pollen in (Neolithic?) peat sealing a Mesolithic occupation site at Addington, Burchell & Erdtman (1950).

- 1) Joydens Wood. Farningham Wood 82! Hayes Common. Holwood Park. Keston Common. Shooters Hill GMB. Ruxley pits. Chislehurst Common, PCH. Abbey Wood. Bexley Ch[urch] y[ar]d and village. By R[iver], N. Cray. High Wood, Crofton.
- 2) Grain, PCH. Haws Wood. Tonge carr, J Moor.
- 5) Wood on chalk W of Eynsford PCH. Wood W. of Farnborough, PCH. Downe Bank Downe. 396611 PCH. Pilgrims Way, Polhill PCH. Pilots Wood PCH.
- 6) T) Shorne Warren. Chattenden Wood. Ladies Close Wood. Swanscombe Wood. Mounts Wood. Darenth Wood. Lords Wood. Darenth. Kemsing, wood and downs PCH. Mounts Road. The Thrift, Bean. Dunstall Woods; Whitehill, Shoreham. Claylane Woods Cobham '61 HAS, a[bandant]. Wingate Wood, Halling. Upper Halling Hangers, '53 **MNE**.
- 7) Lane ¼m NW of Chartham 54. Church Wood, Stockbury. '54. S. of Hill F[ar]m., Stockbury '58 **MNE**. Simia Wood Ospringe HMW. Coxett Wood FR. Charing Hill by A252 '54. Longbeech Wood by A252, '54. Challock Lees by A252, '54.
- 9) Copse SE of Minster AG Side.
- 10) Westerham Wood, PCH; 82! Shoreham village PCH. R[iver] above S. Darenth PCH. St Johns Jerusalem PCH.
- 11) E) E. Malling (Well St; Rocks; village) **MNE**. W. Malling (St Leonards St). R[oa]dside NW of E Barming. Wall SE of Chequers W. Farleigh 54. Platts Heath 54.
- 12) Wall, E. Stour F[ar]m Godmersham '54.
- 13) Ashour Wood, (T[unbridge] W[ells] S[and]), 1954. ½m W. of Chiddingstone Hoath on sandstone walling, 1954. Wood ½m SW of Chiddingstone Hoath 1954. Bedgebury Pinetum 1948 **MNE**. Combwell Wood 1979.

[APIACEAE]<sup>703</sup>**Hydrocotyle** L.**H. vulgaris** L.

Marsh Pennywort, White-rot

15, 16.

Native. Valley bogs, fens, borders of ponds on peaty soils, dune-slacks, boggy alderwoods; usually on peat, but tolerant of a fairly wide range of acidity.

1<sup>st</sup> record, 1632: Marshes W. of Sandwich, Johnson, *Descriptio*, p.25.

1) 46 Bog on Keston Common, 417642, 1944-57. 46 Holwood Park, by lakes. 47 Round the western pond, Chislehurst Common, 442701, 1945-7; 1957 PCH, HMP. [on a common at Locks Bottom, 1838, AA **BM**.]

3) boggy ground in grassland N. of Dunkirk, 1945. By pond near Blean Church, 1955, R.G.W.

7) Ham Fen; Hacklinge; Worth Minnis, 1948. Sandwich Bay, in dune slacks. Wingham SE Fen. Below Little Britton Fam, Wingham. Marsh, Brooksend, Birchington, 1947, LWW.

10) Ponds, Ightham Common, 44-62. Oldbury hill bog, 1945 **MNE**. Pond, Knole Park, CAS.

11) Pond 1 m E of Headcorn, in fl[ower], 850440, 1962.

W) Pond NW of Buckhall, W of Bethersden, '54, 915400.

12) Hothfield Common. Ashford Warren, on Golf Course in small boggy copse. Willesborough Lees 1944-55, **MNE**. Gibbons Brook. Small bog ½m. N.W. of Sellindge Church. Mersham le Hatch Park, bog in N.E. 1960 **MNE**.

13) Brighton Lake, Tun[bridge] Wells, 1960 CAS. Pond, Broadwater Lane, T[unbridge] Wells, CAS. Hawkenbury Bog 44→. Pembury Wood, bog near pond, 1952; 1961, CAS. Scotney Castle gates, on wall, 1944-6 **MNE**. Boggy wood SW of Pembury, 614395, PCH. Combwell Wood; Bedgebury Forest, Pinetum; and Louisa Lake. Chingley Wood. Chittenden Wood, Cranbrook. Brewers Wood, Cranbrook. Sissinghurst Park Wood. Roundshill Park Wood, Cranbrook. Frie[z]ley Bog, Cranbrook, 44-49. Crevices of damp sandstone wall by A.21, ½mile SE of Lamberhurst, 1944.

14) Marshes by Breeches Pond, N. of Tenterden, 1947.

15) In all the fens of the Hoppen pits, Dungeness; and in damp disused shingle workings. Damp hollows of dunes, Greatstone; and Romney Warren, 1947. Wet hollows on shingle beach W. of Hythe.

**Sanicula** L.

270

**S. europaea** L.

Wood Sanicle

15, 16.

Native. Old woodlands; abundant in the chalk woodlands, especially in dense beechwoods on slopes, where it is often dominant in the herb layer; frequent on base-rich clays and loams on the Gault, and on the Hastings Beds; plentiful in woodlands on ragstone soils; less common on sands and heavy clays, avoiding base-poor soils; extremely shade-tolerant, in fact shade-demanding.

1<sup>st</sup> record, 1632: Nash to Qiex, Johnson, *Descriptio*, p.20.

1) Holwood Park. W.Wickham, 1916, Hb. Davis **MNE**.

2) Farningham Wood, PCH; (82!). Joydens Wood, PCH, FR, 1954.

3) Blean Woods, N. of Dunkirk. Near Reservoir, Thornden Wood, 1954, REW.

5) Beechwoods SE of Downe. Saltbox, 1933, AFG Kerr **BM**. Wood S, of Cudham Ch[urch]. Newyears Wood, Cudham PCH. The Larches, W. of Farnborough, PCH.

6) Beech wood W. of Shoreham. Lords' Wood, Darenth PCH. The Thrift, Bean PCH. North Wood Cuxton '44 **MNE**. Darenth Wood, PCH. Woods above Kemsing PCH. Beechwood Whitehill, E of Shoreham **MNE**. Dunstall Woods NE of Shoreham. 66 Crest of Downs, Trottiscliffe, 1961 HAS. North Wood, Cuxton, '44. [*sic*, entry repeated]

7) Boxley Hill **MNE**. QueenDown Warren Woods **MNE** '98. Bridge Woods '98. Pilgrims View '98. Hoath Wood, Ospringe, RGW. R[oa]dside Stalisfield to Otterden RGW 1980. Beech hanger NW of Westwell '62.

8) *Corylus*/*Q[uercus]* robur coppice Wood NW of Podlinge 1962. Coppice N. of Wolverton 1962. Plants W. of Lit[tle] Mongeham 1962.

10) Ragstone escarpment woods, Scords Wood **MNE**; Rooks Hill. Below Broadhoath Wood '50 **MNE**. Westerham Wood, '82.

11) Floor Swanton Valley, Mereworth Woods, on ragstone, '54. Quarry Wood, W. Farleigh. N. edge of Oaken Wood, E. Malling. W. Malling, copse by station. Boot Wood, Sheet Hill, Plaxtol. On gault, Ryarsh Wood. Riverside copse, S. of Yalding, 1934 WNHS.

12) Cadmans Wood, E. of Brook; Nackholt Wood.

<sup>703</sup> Apiaceae was subsumed into Umbelliferae in Stace's *New Flora* edition 2, with which the manuscript begins.

**13)** Gill SE of Ashurst Mrs M. Mallinson 1955. Matfield roadside and copse, 1944. Wood N. of Lamberhurst Quarter. Parsonage Lane, Lamberhurst. Colebrook Park, NW of Pembury. Wood SW of Kippings Cross. Wood on T[unbridge] W[ells] S[and], S. of Highfield Rocks, Chiddingstone, '54.

**14)** Copse on calcareous Wadhurst Clay, Ockley, Hawkhurst.

**16)** Copse on gault NE of Asholt Wood 1948 B Welch. Escarpment Postling Wents 1949 ES Edees.

**Astrantia L.**

**[‡] A. major L.** Astrantia.

Alien in Kent.

**11)** "Maidstone", Mrs. Seemark, 1907, **MNE**.

**Eryngium L.**

272

**[‡] E. planum [L.]** [Blue Eryngo. 15, 16.]

**6)** Hedge Place Road, Stone: several plants naturalised on verge – a garden escape, 1961, HMP, 578742.

**15)** waste ground by sea wall, N. of Littlestone, Mrs J. Rix, det. D.McC, 1957.

**E. maritimum L.**

Sea Holly

15, 16

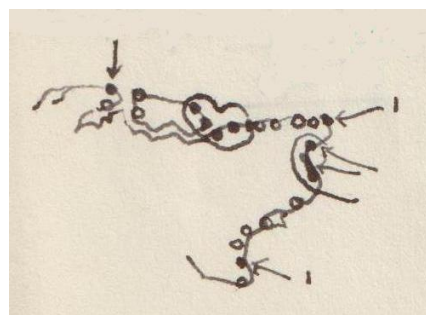
7/51

Native. Sandy and shelly beaches, young sand dunes; now rare and very local, but in great quantity still N. of Sandwich Bay, and quite plentiful at Shellness, Sheppey.

1<sup>st</sup> record, 1597, Whitstable, Gerard, *Herbal*, p.100.

**[1]** Casual on waste ground, Chislehurst, Miss Henley, teste W. Watson.]

**2)** Grain, B.D. Jackson, Fl. Kent. 87 S. Beach, I[sle] of Grain, loc[ally] abund[ant], 1946 **MNE**, destroyed by sea floods and sea-wall rebuilding, 1953. 87 Beach ½m. N.W. of Grain, 1958, Mrs Side; 1959! **MNE**; abund[ant], SR Devey, 1990; c.1000 l[ocally] d[ominant], 1999! 97/07 N. of Leysdown, rare, 1947; not seen, 1956 **MNE**. Abundant N. of Shellness, on shell-sand-beach, 1945-62 **MNE**; O. Davis, several, 1994/2000. 06 Beach, Castle Coot, Graveney Marshes, R.E. Wood, 1951; 1962, C. Alister several pl[ants]; 1983! 1986! [Whitstable, Gerard; Queenborough, Johnson, *Iter*, p/7; Sheerness, Martyn *Pl. Cant.*] 06 ...pl[ants], Beach W. of Seasalter, 1959; HMW & F.F. 1986! [Beach opp[osite] Boating Lake, Whitstable, 1950 REW.] 16 1944.



**[3]** Swalecliffe, Linford.] 06 Beach, Seasalter, 086653, 1958, HMW; 1 plant.]

**4)** 35-36 Sandwich Bay, Dillwyn, OBG; in immense abundance for three miles along the fore dunes from N. of Guilford Hotel to Shellness at the mouth of the Stour, 1945-54! **MNE**. 36 Pegwell Bay, H. Trimmen (1957, S. of Sportsman on shell beach!) **MNE**. 35 Dunes N. of Deal F.G.E.K.; **MNE** 1947, about 2 miles N. of Sandown Castle!

**[8]** Below Abbots Cliff, E. de C.]

**9)** [36 Minnis Bay, one plant, 1947; gone, 1950, L.W.W.] 36 Joss Bay, 1958, HMW; rare. 36 Below the cliffs, Pegwell Bay, 1947, **MNE**.

[Westgate Bay, Johnson; Margate Brooks, on the beach, Hunter.]

**15)** [Hythe, FJH; Dymchurch C.P.S.K.; Dungeness, Hb. Sim.] 02 New Romney, Baker; 1 plant left, Greatstone, 1946-50, **MNE**, several plants, 1970s, E. Philp.

**[16)** Sandgate, G. Walton.] One plant, S and below Copt point / Folkestone, for c.8 y[ea]rs to 1960, Miss V. Day.

Nowhere else have I seen it as abundant as it is N. of Sandwich Bay.

**[Eryngium campestre L.**

Field Eryngo.

[15, 16.]

Native. Sand dunes, rough chalk downs; very rare, and apparently recently extinct.<sup>704</sup>

1<sup>st</sup> record, 1873: Romney, F.J. Hanbury, in Watson, *Top. Bot.*

**[1]** Reported as an alien, waste ground, Chislehurst west, c.1938, Miss G. Heeley.]

<sup>704</sup> This note was evidently written before the listed discoveries of 1968 and 1984.

6) In grassland, at the foot of the chalk downs, ½m. W. of Wrotham, F. Druce, 1929, *B.E.C. Rep.* 1922, p.728; *J. Bot.* LXVIII (1930) p.250; 1946-49! Now destroyed by ploughing-up. W of Darenth Wood, 1968, in gr[ass]land (now by motorway).

7) Bredhurst Hurst, E. Philp, in open grassland area; 1984! c.100 plants; l[ocally] a[bundant] 2000, O. Davis; J. Pitt.

15) Dunes, Romney Warren, near the Targets, with *Ammophila*, F.J.H.; 1880, J.G. Baker, apparently destroyed by alteration of the ground, 1892.

16) Brookmans Road and Herdson Road Shornecliffe: waste ground and bombed site, 1946-1947, Miss V.P. Day.

(Very common on dunes at Sandgatte, W. of Calais, and on the chalk inland from Cap Blanc Nez, so probably native in Kent; it is only surprising that it is so rare with us.)

## Chaerophyllum L.

273

### C. temulentum L.

Rough Chervil.

15, 16.

Native. Hedgebanks, wood borders, waste ground, especially on the drier soils; very common generally, but rare locally, as in parts of the Weald.

1<sup>st</sup> record, 1777: Faversham, E. Jacob.

1) 46 Hayes, D.McC. 47 N. Cray Village, 1945. 37 Beckenham Place, 1956, PCH. 57 Dartford Heath, 1954, GMB.

2) 75 New Hythe. 37 Grain 1958, Mrs AG Side.

3) 15 Harbledown Village.

4) 35 Sandwich, E. of Town. Sandwich Bay.

5) 45 Hogtrough Hill, N. of Brasted. Darwins Bank, Downe, '55 JEL. Halstead, 1852, AA BM.

6) 57 Darenth Rd SE of Dartford. 77 Higham Church Street. 67 Shorne Village. Ryarsh, Pilgrims Way. 57 Mounts Rd Greenhithe, '44 PCH. S. of Spindrifft, Cooling 44.

7) 76 Bluebell Hill. By roadside. 76 Lane up downs from Burham.

8) Base of Downs, Brook, '44. Wolverton Wood borders / Woverton [cross]R[oads], Alkham '62.

11) East Malling. Larkfield Heath. Pendenden H[ea]th '44. Pit W. of Wrotham Heath '44. Ryarsh, on F[olkestone] Sand. Lunsford Lane. W. of Sandling, by B.2011. Birling, on F[olkestone] Sand. Plaxtol. Mereworth.

12) Orlestone.

## Anthriscus Pers.

274

### A. sylvestris (L.) Hoffm.

Cow Parsley, Queen Anne's Lace

15, 16

50/51

Native. Roadside verges, hedgebanks; open woods, especially of Ash or *Ulmus procera*, on damper loams and clays, often along the river valleys. One of the commonest and most abundant of all Kent plants, as in S. England generally, ornamenting the roadsides everywhere inland in May. Absent from Dungeness area. It is almost certainly native in the woodland habitats of the type named above.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

1) Hayes, BM Kerr 1933. Keston. Sidcup. Green St[reet] Green (Farnborough). Farnborough. Beckenham Place Park 1955. Abbey Wood. Farningham Wood; (82!). Bexley Village, R[oad]side PCH. Elmers End, Davis, 1918 MNE. Shooters Hill 54 G.M.B. Dartford Heath, 54, GMB.

2) Marshes S. of Minster 1955. Scrub S. of Scrapsgate 1955. Brambledown 1955. Copse NE of Brambledown F[ar]m, 1955. Ash copse, Warden, 1955. Woolwich Arsenal, PCH. Plumsted Sewer Bank PCH. Sheerness, Canal Dump, 57, OD. By A249 1m N of Iwade, 1954.

3) Hernhill village 1955. Whitstable Castle, 1953, RGW. R[oad]side Canterbury Golf Course, 1955. Churchyard, Hoath, 1962. Shelving Wood, Hoath, on Wool[wich] Beds, 1962.

4) Sandwich Bay.

5) 397612 W. of Highams Hill 1958 PCH. 463625 Drive to Northstead, Pratts Bottom, 1956.

6) Darenth Wood '44. R[oad] S. of Cooling '44. Woodlands Hill, Wrotham 1955. Wrotham Village, 1955. Pilgrims Way, E. of Kemsing. Romney Street.

7) L[owe]r Bell 1955. Upper Bell 1955. R[oad]side Hartlip Hill 55. Hartlip village. Copse ½m S. of Hartlip. Lane SW Q[ueen] D[own] Warren '55. By A249, Primrose Cafe, Stockbury, 1954. Bredhurst Hurst 55. Stockings Wood Detling 55. Top of Detling Hill 55. Copse below Purple Hill, 55. Chatham Station 1938 JBM BM.

8) Wood NW of Podlinge F[arm] '62. Hedgebanks, Wolverton [cross] r[oads] 1962,. Bourne Park, Bridge '55. Copse, Half-way House, Wootton '55. R[oad]side, Kearsney '55. Alkham 55.

9) Copse SE of Durlock, Minster, 1959.

10) Lullingstone Castle. Sevenoaks tip, 1958, CAS. Westerham Wood, 82.

11) **G** Ightham village '55. E. Malling. R[oa]d S of Aylesford Bridge '55. Allington Lock by R[iver] '55. Sandling Wood, 55. R[oa]dside E of Mereworth 55. Larkfield Heath 55. Leybourne Wood 55. W of Wrotham Heath 44. Coxheath, 54. E of Quarry Wood W Farleigh by B2163, 54. [Cross] R[oa]ds N of Sutton 54. R[oa]dside Platts Heath 54. R[oa]d W of Bearsted by A.20, '55. Copse Willington St[reet] by Len 55.

**W**) R[oa]dside, Leighbridge, 54. 1½ m. WNW Headcorn '54. 1½ m N. of Hildenborough 55. SE of Hildenborough 55. R[ai]l[wa]y bank Hildenborough 563452 CAS. Lane Hadlow to Starvecrow 55. Tonbridge Castle 55. W of Bough Beech 55. Wet wood by R[oa]d N of [Four] Elms '55. A28 R[oa]d Moat F[ar]m G[rea]t Chart, 54.

12) Sandy R[oa]dside, Lenham Heath '54.

13) Wood by R. Teise, Hoathly 55. Pinetum Bedgebury 55.

14) Lit[tle] Pyx Hall, Hawkhurst '55., 1½ m S of Hawkhurst, '55. Wood SW of Lit[tle] Conghurst Hawkhurst, '55.

15) Plantation by Ch[urch], Old Romney, 1962.

‡ **A. cerefolium** (L.) Hoffm. Chervil.

[15, 16.]

Alien, in hedgebanks and on roadsides, very rare.

1) Eltham, W.W.R.

11) Addington, Gray.

13) Fishers Castle, Tun[bridge] Wells, T. Walker.

14) Roadside, Small Hythe, S. of Tenterden, 1949, P.R. Bell and F.R. **MNE**.

16) Cliffs near Folkestone, G. Walton.

**A. caucalis** M. Bieb. (*A. neglecta* Boiss. & Reut.) Bur Chervil, Beaked Parsley. 15, 16. 27/51

Native. Sandy banks, dunes, sand and shingle beaches, river- and sea-walls; common on the coast and by tidal estuaries, very rare inland.

1<sup>st</sup> record, 1777: Faversham, E Jacob, *Pl. Fav.*, p.71

1) [Catford Bridge, WWR. NE of Beckenham, E. de C. Woolwich, AHWD.] Greenwich, **MNE** 1839.

2) Plumstead Marshes AHWD (1944!). Erith to Cross Ness on bank, PCH. [Dartford Creek, 1899 TS Goff **MNE**.] 57 Riverwall, Stone Marshes. 57 Swanscombe Marshes. 67 Northfeet. Riverwall, Denton; Chalk; Higham; 77 W. of Cliffe. 77 banks, Upnor. 87 Grain. 87 All Hallows Beach. 86 NE of Otterden Quay 1960 **MNE**. Bank, Slayhills Wash, 1957, EGP & GM. 76 by Cuxton Station. 97 E of Sheerness. 07 N. of Leysdown. 06 Shellness. 06 Banks about Oare, 1946. Fields by Faversham Creek 1946 DHK. Queenborough, E.S.M. 97 Sheerness Canal Dump, '57, O. Davis. (Sheppey Hb Davis 1908.) 06 Seasalter, AHWD; 1948! **MNE**. [Faversham, E. Jacob.] 86 E. of Newington, sandy bank of A.2, 1946.

3) [Swalecliffe FJH. Whitstable, FJH.]

4) Sturry Village, 1958, R.G.W. 36 Pegwell Bay, 1946. 35 Sandwich Bay, plentiful on the older dunes in disturbed sand, **MNE**. Links N. of Deal, 1947-61. 26 Grove Ferry, L.W.W. 25 Lit[tle] Wenderton, Wingham, 1961, Mrs B. Nash. 34 Kingsdown, Mrs KD Rowlands 1958 **MNE**.

5) Salt Box, 1933, AFG Kerr **BM**.

6) 57 bank by road, Horns Cross, 1947. 57 Gravel pit E. of Dartford, A.H.W.D. 77 Cliffe.

6) **E** 67 Chalk Village, 1946 **MNE**.

8) 34 St Margarets Bay, 1946.

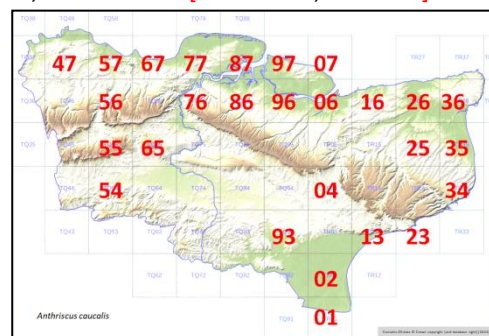
10) 57 Track below Darenth Church, PCH. 55 530579 waste g[roun]d, Otford R[oa]d, Sevenoaks, 1962, D.McC. (not 45)

11) (65 Bank on Folkestone Sand, Lunsford Lane, E. Malling, 1946 **MNE**.) 54 R[ai]l[wa]y Bank, Hildenborough, 563482, CAS.

12) Bank, Ashford Station, 1956, ES. (not 75) (not 85)

15) 01 very common at 01 Lighthouse; 01 Hoppen pits; 01 Boulderwall; Dungeness, 1946-54, **MNE**. 02 Romney Warren. 02 Dymchurch, 1947; 1950 LWW. Lydd, RGW. 13 Beach W. of Hythe, 1947. 13 Seabrook.

16) 23 Folkestone Leas 1946.



**Scandix** L

275

**S. pecten-veneris** L.

Shepherd's Needle.

15, 16.



Colonist. Arable land and waste open ground, especially on sand and chalk: not very common, but well distributed.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) 56 Old Swanley, in fields, 1948.
- 2) 76 Railway Bank, Cuxton, 1944, 1946. 96 Sandy banks by A.2, S. of Green Street, Teynham. 77 Minster, Sheppey, A.G. Davis, 1917, **MNE**.
- 3) 06 094647, etc., cornfields on L[ondon] C[lay], E. of Seasalter Church, 1958, H.M.P. Graveney, farm weed, R. Theobald, 1956.
- 4) Field at Hacklinge, 1946. Field S. of Sandwich, 1948, **MNE**.
- 5) 56 Cornfields W. of Shoreham, F.R., 1945. 55 Dunton Green, 1916, Hb. Davis, **MNE**. 45 Cornfield E. of Westerham Hill, 1958, R.A. Clarke. 46 arable, Leaves Green, 1956, Miss A. Mills.
- 6) 57 Greenhithe, 1946. 66 605666, Hartley, Mrs Woods. 67 Shingle Well, 1912, C.E.B. **BM**. 76 Cuxton, 1939, J.B.M. **BM**.
- 7) Cornfield, Westwell, E. Scott. Magpie Farm, Bredhurst, 1960 **MNE**.
- 8) Coombe Vale, Dover, 1945. Bishopsbourne, 1946 **MNE**. Bossingham, Miss Milward, 1959. E. of Dover, 1948 **MNE**. Cornfield, Stelling Minnis, Mrs M.J. Comyn. Sibertswold, Cornfield, D.P.Y.
- 10) Cornfield, Dunton Green station, P.C.H.
- 11) 85 Stubble field, Fairbourne Lane, 1960, Mrs B.Dodds. Field by R. Eden, W. of Penshurst, 1944 **MNE**. By Medway, Tonbridge, E. of Cannon Bridge, C.A.S. Platt, D. McClintock, 1959 **MNE**. [Edenbridge 1906 D. Smith **MNE**] Arable near Marsh Green, Edenbridge 439448, 1958, PCH.
- 13) Sandy arable land S.W. of Pembury, 1944, J.R.W. & F.R.

#### [‡ Myrrhis Mill.]

276

‡**M. odorata** (L.) Scop.

[Sweet Cicely.]

16.

Alien, very rarely naturalised.

- 11) By road in Honnors' Nurseries, Allington. Mote Park, L.R.A.G., 1957 **MNE**.

#### Coriandrum

279

‡ **C. sativum** L.

Coriander.

[15, 16.]

Casual alien.

- 1) Thames side below Greenwich, Syme. Elmers End, Hb. Davis, 1914 **MNE**.
- 2) Woolwich Arsenal, Casual, 1888, A.H.W.D. Upnor, Miss Young. Greenhithe, Hb. Lamb, 1871 **MNE**. Leysdown, Sheppey, Hb. Davis, 1918 **MNE**.
- 4) Sandwich Bay, Miss [blank]
- 6) Longfield tip, 1957, PCH.
- 8) By path in field, N. of Sugar Loaf, Folkestone, B.D.J. N[ea]r River, Wild Fl[owers of] Dover, p.26.]

#### Smyrniun L.

280

**S. olustratum** L.

Alexanders.

15, 16.

Probably native; banks, cliffs and roadsides on the coast and n[ea]r tidal water; a relic of cultivation, elsewhere; very common all round the coast; rare inland.

1<sup>st</sup> record, 1632: Westgate Bay, Johnson, *Descriptio*, p.22.

- 2) Path N.W. of Erith to Crossness PCH, 1954. River Walls, Stone; Dartford, Swanscombe; Northfleet; Gravesend; Denton; Shorne; Chalk, Higham. Frindsbury, chalk pits and waste ground n[ea]r the Medway; by the River, Snodland; Halling; Burham; Wouldham; Upnor; Aylesford; Cuxton r[oa]dside. Seasalter. Minster in Sheppey churchyard
- 3) Harbledown, roadside. Whitstable. Boughton Street. Hedgebank S. of Highstead, Hoath, 1962.
- 4) 35 N. of Sandwich. Richborough. Worth. 25 Wenderton, Wingham, 1958, Miss B. Nash. Ash, RGW, and E of Sandwich to sea and behind dunes.
- 6) Cliff chalk pits. Mounts R[oa]d, 1955. Strood and Frindsbury, by railway and chalk pits. Roadbank, Cobham, '61, HAS. R[oa]dside, Upper Halling, 1957, PCH.
- 7) L[owe]r Bell. Burham; Wouldham, roadsides. Detling, by Pilgrims Way. Stockbury Village, 1953 **MNE**.
- 8) Extremely abundant at the rear of Folkestone; all round Dover, v[ery] a[bundant]; a[bundant], St Margarets Bay; Kingsdown.
- 9) Hacklinge chalk pits. Minster. Monkton. Ramsgate. Pegwell Bay. Margate. Broadstairs.
- 11) Abundant, Aylesford village and by road to Eccles; Eccles.
- 12) Hothfield Common, N. of A.20, E.S., 1955. By A20, opp[osite] Charing Sewage F[ar]m, 1956, ES.

- 14) Appledore.  
 15) Hythe. New Romney. Lydd. By main A259 S of Brookland.  
 16) abundant on the ragstone scars, W. of Hythe.

(**Bunium** [L.] 292

[**B.**] **bulbocastanum** L. occurs no nearer in Britain than Herts. and Camb., but it is rather frequent on the chalk grasslands of Pas de Calais up to the coast at Cap Blanc Nez!)

**Conopodium** W.D.J.Koch 293

**C. majus** (Gouan) Loret Pignut, Earthnut. 15, 16.

Native. Woodlands, and occasionally in pastures, grass-heaths and scrub, on light sandy or loamy soils in most cases; common in wooded parts of the county, particularly on the Greensand and in the Weald.

The tuberous root is about the size and shape of a hazel nut and is very pleasant to eat, raw or cooked.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.16.

1) Abbey Wood, 1948, RAB. Meadow, Hayes, 1933, AFB Kerr **BM**, 1946! Keston Common, 1961, HAS. [Plumstead, 1881, H. & J.G.] Farningham Wood PCH. Elmstead Woods 1956 Miss A Mills. Shooters Hill Wood '54, GMB. Dartford Heath, 54, GMB. W. Wickham, Hb. Davis, 1916 **MNE**.

5) 397612, copse W. of Highams Hill on drift, 1958, PCH. Pilots Wood, PCH.

6) **E**) Lords Wood, Darenth, PCH. Great Crabbles Wood, Shorne, 1955, **MNE**. 67 Claylane Wood, 1960, HAS. Wood on top of downs W. of Kemsing PCH.

7) Top of Bluebell Hill 1959 AF Musselwhite. 111 Marshal[**I**] Rd, Rainham, O. Davis! Wood (on Pliocene?) Stede Wood, Harrietsham 1960 Mrs Dodds. Longbeach Wood, NE of Charing, on Pliocene loam, 975505, '62.

8) grassland on Pliocene loam, top of Abbots Cliff **MNE**, 1947. Elms Wood, Hougham.

10) Wilderness Woods, Seal.

11) **G**) Ryarsh Roughetts, Ryarsh Wood, SE corner on Sand. Addington Scrubs. Larkfield Heath. [Penenden Heath, 1849 **MNE**.] Warren Wood, E. Malling.

**W**) Tonbridge Meadows. Hever. W. of Penshurst in meadows by R. Eden; S, by Medway.

12) Roadside, Hothfield.

13) Gill SW of Stone Cross, Ashurst, 522388 CAS. Hungershall Rocks. Gilridge, Penshurst. Hoathly; Bayham; Tongs Wood, Lamberhurst. Pastures N.W. of Goudhurst. Ford Combe green. Saints Hill. Langton Green, **MNE**, 1944. Mount Pleasant, Lamberhurst 1946 **MNE**.

**Pimpinella** L. 294

**P. major** (L.) Huds. Greater Burnet-Saxifrage. 15, 16.

Native. Woodlands on base-rich loams, and clays, and on chalk, wood borders, roadside verges and hedge-banks; abundant in the chalk districts of mid and east Kent, becoming much less common westward; most abundant throughout the ragstone districts; common on the Gault, frequent on Weald clay and locally on the Hastings Beds on lane sides; scarce in the Blean and in N.W. Kent.

This plant is probably more widespread and abundant in Kent than in any other part of England. This is not due to any particular soil occurrences, apparently, as it occurs on a fairly wide range of soils, appearing to need only moderate base-richness, good drainage, and some shelter. In Surrey it is locally frequent only on the chalk of the east, and it is, strangely, very rare in Sussex, occurring only on the Chalk near Eastbourne, apart from a solitary record at Robertsbridge: it is frequent, nevertheless, in the High Weald of Kent within a mile or two of the border, occurring at Penshurst, Cowden, and Kildown. Its distribution suggests that local climate factors may be important; it is as common in the woods on the chalk S.E. of Boulogne as it is about Dover.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

2) 06 Beach by Sportsman 1958, Mrs Brickenden.

3) Roadside S. of Littlebourne. Brotherhood Wood, N.W. of Canterbury.

4) Roadside hedgebank by A.257, on Thanet Sand, ¾ mile E. of Ash.

5) Pilgrims Way E. of A.21, SW of Twitton, Otford.

6) Wood N.E. of Otford, on plateau. R[oa]dside n[ea]r Romney Street, PCH. Roadside E of Poundgate, 1962.

6T) Hedgebanks below Lodge Hill, N. of Chattenden Wood, S. of Cliffe 1954 **MNE**. Cockham Woods, Upnor, 1951, DMCC.

7) 75 Boxley Warren, 1961, C. Turner. Bridge Woods 1998. 85 Gorham Wood, Bicknor. Stockwood, Frinstead, 1986. Longbeech Wood, verge of A252, '54. 95 Divan Wood, Eastling, **MNE**. Whitehill, NW of Wye, 1986.

8) foot of Broad Downs, '44. Brabourne Downs foot 44. R[oa]dside Hastingleigh **MNE** on drift. Down / wood border NW of Podlinge, 1962. Yockletts Bank, [→]1995. Swanton Banks, Lydden. Stafflands Wood. Sladden

Wood, Alkham →1995. Wood border N. of Wolverton, Alkham, 1962. Larkey Valley Wood **MNE**. West Wood Stowting **MNE**.

**10)** Roadside, A25, between Westerham and Surrey border, 1950. Otford village, r[oa]dside W of Darent. R[oa]d by R[ai]l[wa]y, Sevenoaks Sta[tion] CAS. Wood S of Montreal Park 1950(rag[stone]). R[oa]dside, Ivy Hatch – Ightham Mote 584540 CAS. Bitchet Green **MNE**. Rooks Hill. Wood on scarp.

**11)** Ryarsh Wood, on gault **MNE**. Border Horsh Wood, on gault. E. Malling Heath road. 1m WNW of Leeds MNE. Brickfield on gault N of Platt 620575 1956 DMcC. New Hythe Lane **MNE**. Allington Wood **MNE**. N of Teston. Road W of Kent Street N of Mereworth 54. By B2063, Linton; Coxheath; Chart Sutton 54; Sutton Valence 54; E. Sutton 54; S. of Langley 54; Kings Wood, Ulcombe 54; ½m SW of Lenham at Platts Heath 54; Fairbourne Heath 54, all by verges of plateau top roads.

**W)** R[oa]dside Dunks Green 615527 CAS. R[oa]dside Shipbourne 591519. Verge, Frittenden Rd Headcorn 1944. R[oa]dsides S.W. of Frittenden. Roadside scrub by Beult N of Buckmans Green, Headcorn, 1962. Hedges Castweazel SW of Biddenden, on W[eald] Clay **MNE**. Roadside verge W. of Chiddingstone Causeway. N. of Sissinghurst→Frittenden. R[oa]d 1m N. of Hildenborough. R[oa]dside 1m W. of Shipbourne. Daniels Water, G[rea]t Chart **MNE**. ½m E of Vitters Oak, 2m ENE Bethersden. Vitters Oak 1½m E of Bethersden. Yardhurst G[rea]t Chart. Hoads wood roadside. R[oa]d E of Buckhall ½m W. of Bethersden. R[oa]d Harnden SE of Smarden. R[oa]d ½m NW of Marden.

**12)** N.E. of Hinxhill West Well. Willesborough Lees. Newinngreen. Bullstown Wood, gault. Wood on gault by stream, Stowting. Cuckoldscomb 1986. N. of Orlestone by B2070. Harringe Brooks Wood '86.

**13)** 1 mile N. of Goudhurst and 1 mile E. of Horsmonden, on banks of r[oa]d up hill from Teise Bridge. R[oa]dside N. of Kilndown. R[oa]dside, Nevergood, Horsmonden **MNE**. 2½ m. N. of Horsmonden by Yalding Rd, n[ea]r Teise Br[idg]e. R[ai]l[wa]y Crossing, Horsmonden, 1898, JS, **TLS**. Cranbrook. Penshurst.

**16)** Asholt Wood. Lympe. N of Seabrook 54 **MNE**. Saltwood. Postling Wents.

var. **dissecta** N.E. Brown. [Not as common now as stated in Fl. Kent, but scattered on the chalk of E. Kent. Not uncommon on chalk in the Bas de Boullonais, Pas de Calais, just across the straits of Dover.](#)

**7)** Rainham, 1868 W.W.N., **BM**. Westfield Sole, Boxley, 1939, J.B.M., **BM**. Kettle Hill, Eastling, in chalk copse by lane, 1958.

**8)** Reinden Wood, on loam, 1962. Larkey Valley Wood, 1938, Miss J Nisbet.

var. **orientalis**

**3)** Swanton Banks, Mrs. B Welch, 1951.

## **P. saxifraga** L.

Lesser Burnet-saxifrage.

15, 16.

[Native. Dry pastures on sand and loam, old sand dunes, chalk grassland \(of high constancy\), dry roadsides and hedgebanks, churchyards and old walls; very common in suitable places throughout Kent.](#)

[1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, Iter, p.3.](#)

**1)** Hayes Common 1956. Keston Common. Chislehurst Common. [Elmers End, Hb. Davis 1915 **MNE**.]

**4)** Dunes, Sandwich Bay, **MNE**; N. of Deal. Sandy field S.W. of Preston Church, 1948 **MNE**. Track bank to sea, N. of R[ai]l[wa]y N of Stuart St. Nicholas at Wade, 62, 271690.

**5)** Darwins Bank, Downe. Downe Golf Course. Downs W. of Shoreham. Belowe Polhill. Pilgrims way, Chevening PCH. Chalk W. of Eynsford. Great pit N of Horns Cross 1962.

**6)** Cliffe chalk pit **MNE**. Downs E of Shoreham PCH. Preston Hill, PCH. Cuxton 1938 JBM **BM**. Otford Mount. Halling Downs, **MNE**. Downs below "Vigo", E. of Wrotham. Mounts Rd, Greenhithe PCH. Upper Halling Downs '44.

**7)** By A249 on chalk bank below Stockbury Church, '54. Chalk glade at Base of Woods NW of Westwell '62. Charing Hill, by A252, 1954. Challock Lees, by I252, 1954. Border of Park Wood Molash) by A252 1954.

**8)** Larkey Valley Wood REW '53. Abbotts Cliff. Chalk Down NE of Giddy Horn, 1962. Down NW of Podlinge, 1962. Track NE of St Margarets at Cliffe, '62. Free Down 1962, **MNE**. Devils Kneading Tr[ough]. Brook Downs **MNE** 1944. Brabourne Downs, 44. Spong Wood, Mrs MJ Comyn. Lydden Spout '45 **MNE**.

**9)** N. Foreland Golf Course 1954 **MNE**.

**10)** Shoreham Ch[urch] Y[ar]d, PCH. Darenth Meads '44. "Seseli pratense" (Crockham Hill 1748, Benjamin Wilkes, 120 copper plates Brit[ish] Butterflies & Moths, p.47-8).<sup>705</sup>

<sup>705</sup> The reference should have been to the 120 copper plates of English Moths and Butterflies by Benjamin Wilkes, and the text refers to *Seseli pratense* (as Meadow Saxifrage) at a meadow near Cookham near Westram [Westerham] in Kent (which may have been at Crockham Hill; a Cookham Lodge Farm was known in the Westerham area).

**11)G)** Valley S, of Mill St, E Malling, 1962. Leybourne Castle Field '44. Cox Street by B.2163 N of Boughton Mon[chelsea] '54. R[ai]l[wa]y bank Edenbridge 440470, 1956, DPY.

**W)** ½m. NW Marden. E of Collier St[reet]. Bethesden Village (on Paludina bed?). R[oa]dside Vitters Oak 1½ m ENE Bethersden. By Pond E of Hale St[reet] 683403, CAS, 1957. R[oa]dside E. Peckham 676493 CAS. R[oa]d NW of Marden Thorn 1962.

**12)** Egerton. Chylmington quarry. R[oa]dside Milton Bridge, Chartham 54.

**13)** Dry pasture NE of Highfield Rocks Chiddingstone 495446, '54. Kilndown, by r[oa]dside **MNE**. R[oa]dside copse, Matfield, 1944. Hawkenbury Cemetery CAS. Bayham Abbey grounds CAS. Holy Trinity Ch[urch] Y[ar]d T[unbridge] W[ells] CAS. Speldhurst Rd., Southborough CAS. Bidborough Ch[urch] Y[ar]d, CAS.

**16)** Scars W. of Hythe; below Lympe Castle.

## ‡ **Aegopodium** L.

295

### ‡**A. podagraria** L.

Bishops' weed; Goutweed; Ground Elder.

15, 16.

Denizen, long and completely naturalised. Roadsides, Hedgebanks, wasteground, borders of woods near houses and gardens; nowhere in completely "natural" habitats.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Fl. Fav.*, p.6.

**1)** Keston Common, WWR (1955!). Abbey Wood, FJH, 1948! Upper Hockenden, PCH. Lower Pond, Keston, PCH. Bexley ch[urch] y[ar]d, PCH. High Wood, Crofton, PCH. Shooters Hill Woods 1954 GMB. [Old records at Eltham; Deptford; Charlton Wood; M&G. N. of Eltham, Cooper. Beckenham; W. Wickham, E de C. Belvedere; Queens Wood Welling; St Pauls Cray AHWD.]

**2)** Higham, 1938, JBM **BM**. 87 R[oa]dside, Grain Church, 1958, Mrs AG Side. Garden weed, Sheerness, 1956, Mrs Bryson.

**3)** by Boughton Church, in hedges, E. Jacob (1947!). R[oa]dside, Chartham Hatch, 1954.

**4)** Walmer, Miss L. Day. Sandwich Bay.

**5)** Halstead, A.A. **BM**. 397612, R[oa]dside W. of Highams Hill, 1958, PCH.

**6)** SE of Dartford. Gravesend, garden weed, 1960, HAS. v[ery] a[bundant] R[oa]dside, Holly Hill, 674624, 1959, HMP.

**7)** Stockbury. Detling Hill. Upper Bell, Bluebell Hill 55. W. of Chilham.

**8)** E. of Wye.

**10)** Brasted. Sundridge. Riverhead. Sevenoaks town. Seal. S.WE. of Ightham. A.25, Oldbury Hill. Sevenoaks tip 1958 CAS.

**11)** Leybourne. Snodland. Aylesford. Ryarsh. Ditton. Watlingtonbury. E. Malling. W. Malling. Mereworth. S. of Boxley. Harrietsham. Tonbridge Castle '55. R[oa]d, Beltring '44. E. of Marden. Hadlow.

**12)** Ashford. Chilham Village.

**13)** Penshurst. Goudhurst. Bedgebury Pinetum 55. Wood NE of Cobhambury '55. Broadwater Down T[unbridge] Wells 1958 KE Bull.

**14)** Hawkhurst Green '55. Wood SW of Lit[tle] Conghurst, Hawkhurst, '55. Wittersham Village 62.

**16)** Saltwood, ESM. Folkestone F.J.H.

## **Sium** L.

296

### **S. latifolium** L.

Greater Water-parsnip.

15, [16.]

[There are two account versions in the manuscript. The first is in standard format, presumably prepared in the 1950s/60s. The second is a sheet prepared probably in the 1990s in which the older records are assembled and assessed, and post-1945 records are listed with gridreferences, mostly monads; this may have been in preparation for a 2000 survey, rather than for the Flora.]

#### **Version 1:**

Native. Marsh dikes; rare and very local; at the present day nearly confined to Romney Marsh and its adjacent alluvial levels (district 15) ), where, however, it is still widespread, frequent, and locally plentiful. There is one outlying locality at Willesborough, but it appears to be extinct in the Thames, Ravensbourne, and Cray Marshes and about Faversham, in which areas there are numerous old records. Forster's record at Tonbridge is unconfirmed, though possibly correct.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.107.

**[1)** W. of Deptford, Doody, not actually Kent. Lewisham; Rushy Green Milne & Gordon, 1793. Between Eltham and Lee; by Cray, St Mary Cray; Cooper, *Fl. Met.*]

**[2)** Between Gravesend and Woolwich; Northfleet, Cooper, *Fl. Met.* Dartford, E. de C. Faversham, E Jacob, 1777; common, Rope Walk ditches, and stream, Cowell, *Fl. Fav.*]

**[11)** Tonbridge, Forster, *Fl. Tonbr.* P.36.]

**12)** Ditches by railway, S. of Willesborough, 1950, **MNE**; not now (1990s). [Stour valley above Canterbury 1863, J.S.M.]

**15)** Shirley Moor, abundant **MNE**. Tenterden "Bottoms", Prebble. Reading Street. S.W. of Appledore. R[oyal] M[ilitary] Canal, S. of Appledore 1990. S. of Smallhythe 894298. Levels S. of Wittersham Road Station. S. of The Stocks, Wittersham. Hexden Levels. Ditches by Romn[ey]. E. of Appledore. S. of Kenardington. S. of Warehorn. Snargate. Hook House, Brenzett **MNE**. S. of Ivychurch. S. of Ham Street, plentiful, by ^ N. of Old Romney. 1 mile W. of Dymchurch on St. Marys road. 1 mile S. of Bilsington 58 **MNE**. Orgars Wick. S. of Ruckinge. E. of Sherlocks Bridge. S. of Bonnington. [TR]13 Dike SE of Burmarsh, 1958 LJM, 102317.

#### Version 2:

(1) Old records in Hanbury & Marshall, *Flora of Kent*, 1899 – Some of these are probably errors, as the plant was confused by earlier botanists with *Berula erecta*, etc.; others will be genuine but these have become extinct due to changes in environment,

Between Redriff and Deptford, Doody, 18<sup>th</sup> century

Lewisham; Rushy Green; Mile & Gordon, 1793.

Gravesend to Woolwich )

Eltham to Lee )

Cooper, *Fl. Metropolitana* 1837

By river Cray, St Mary Cray )

Northfleet )

Dartford, E. de Crespigny, mid 19 cent., *New London Flora*, 1877.

Faversham, J. [sic, for E.] Jacob 1777; & Cowell, 1839.

Tonbridge, Forster, 1816.

Stour above Canterbury, J.S. Mill, 1863 (he was very reliable).

(2) Records 1945 – 1965 (or earlier) F Rose and his co-workers (most records 1958-62).

Ditches by railway S of S. Willesborough, FR 1950 – not seen since c.1960 (area changed); 017 403 etc., but worth a look! extinct now?

Shirley Moor – abund[ant] 1945-50, 9332, etc.

Reading Street – 9230.

SW of Appledore by R[oyal] M[ilitary] Canal – to 1990! – 9528; 9426.

SW of Small Hythe – 894298.

S. of Wittersham Road Station – 8628.

S. of the Stocks, Wittersham, 9126.

Hexden levels near A.28 – 8328.

E of Appledore by B2080 – 9629.

S of Kenardington – 9831.

S of Warehorne – 9931.

Snargate – 9928.

W of Brenzett – 001 283 (etc.) 1945-60.

S of Ivy church, 0226.

S of Hamstreet in 1960s 0032 (not seen in 1990s!).

N of Old Romney – 0325.

1 mile W of Dymchurch by Rd to St Marys.

c. ½ mile S of Orgarswick, 1958, LJ Margetts, - 102317.

S of Ruckinge – 0232.

E of Sherlocks Bridge, 0733.

S of Bonnington – 0533.

S of Bilsington, 1958, 0434.

Dike SE of Burmarsh, 1958, LJ Margetts – 102317.

**Berula** [Besser ex W.D.J.] Koch

297

**B. erecta** (Huds.) Coville

Lesser Water-parsnip.

15, 16.

Native. Marsh Ditches, streams, and fens, usually where the water is base-rich or calcareous; widespread and locally common, but absent from the chalk districts and from much of the High Weald.

1<sup>st</sup> record, uncertain; but known by 1777 to E. Jacob; the record in Gerard *emac[ulatus]* 1633 p.257, between Rotherhithe and Deptford, was probably in Surrey.

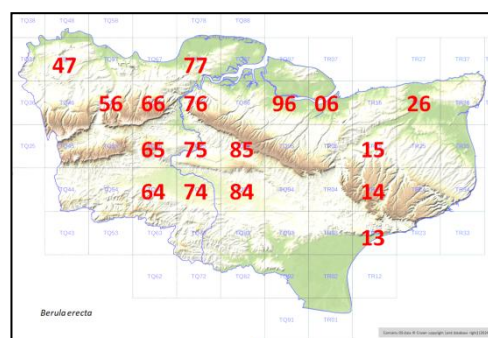
**1)** 47 By R[iver] Cray7, N. Cray, 1955 **MNE**. 47 Ruxley P its, 1955, TH Angel. Ravensbourne, Bromley, 1915 **MNE**.

**2)** 77 Uralite Works, Higham, 1938, J.B.M. BM; 1956, PCH. 77 Cliffe Marshes, 1961, HAS. 76 Dikes, Marshes S. of Snodland, 1943 **MNE**. 66 Ham Hill, Birling 1956 PCH. 96 Marsh dike E. of Conyer Creek 1956 **MNE**. 06 Meadow by Oare Creek, 1961, C. Turner; 1962 H.M.W. 06 Dike W. of Seasalter 1957 HMW.

**4)** 26 Dikes of Marshes W. of Preston, 1962. 15 Fordwich Marshes 1955 **MNE**. Hacklinge Marshes, 1946.

**10)** 56 R[iver] Darent S. of Lullingstone Castle '56 **MNE**.

**11)** 75 Stream, Boxley Abbey, 1958, E.G.P. 64 Gravel pits E of E. Peckham, CAS. 74 Cheveney, 1m. SE of Yalding, by R[iver] Beult





'55 **MNE**. 65 Leybourne Pits, 1955 **MNE**. 65 Pond, Wateringbury, 1956 **MNE**. 85 Priory Pond, Leeds, 1959 **MNE**. 84 old moat, Moatenden 1944.

12) 14 Stowting springs, 1944 **MNE**. Stour W of Hothfield 1948 RM Payne.

15) 13 Dike below The Roughs, W. of Hythe, 1958, L.J.M. S of Ham Street → Snave, 1986.

### **Crithmum** L.

298

#### **C. maritimum** L.

Rock Samphire.

15, 16.

Native. Chalk sea cliffs, shingly and sandy beaches, sea-walls; abundant on the cliffs from Folkestone to Kingsdown, rare and much more local elsewhere. Very tolerant of salt-spray, but it requires a well drained, fairly stable, substratum.

1<sup>st</sup> record, 1548: Dover, Turner, *Names of Herbes*.

2) Between the stones of the sea wall, N. coast of Isle of Grain, 1945; on N. Beach, 1949, **MNE**. Shellness in Sheppey, 1990. (Halstow, Miss Young ? correct or error for *Salicornia*?)

4) Walmer Beach, L.W.W. Sandwich Bay on foredunes, NE of Princes old Club House, 1986, l[ocally] a[bandant].

8) The Warren **MNE**; Abbots cliff; Lydden Spout **MNE**; Shakespeares cliff; Dover E. Cliff; Langdon Bay; S. Foreland; St Margarets Bay; Hope Point; S. of Oldstairs Bay, Kingsdown. Samphire Hoe 1998.

9) Cliffs, Dumpton Gap, 1948; Cliff by Grand Hotel, Broadstairs, L.W.W.

15) Shingle Beach 2 miles W. of Hythe, 1947, **MNE**. Seabrook, 1955, **MNE**. n[ea]r Midrips, on Shingle, Miss E. Burrows; c.1935, R.G.W.; (EP). Also S Brooks, EP. [N.E. of Romney, one plant F.J.H., Fl. Kent; EP.]

16) Dungeness, EP.

### [**Seseli** L.

299

#### **C. libanotis** L. W.D.J. Koch

[Moon Carrot.]

In Herb. F.J. Hanbury, according to *Fl. Kent* (p.168) is a specimen of this species labelled "Kent, Mr. Barry". This has never been confirmed, and as Kent is such a well-worked county, it is unlikely to have been overlooked; though there appears to be no ecological reason why it should not occur. It must be regarded as a probable error in labelling the specimen. It occurs in chalk grassland in E. Sussex, and in the Somme valley in N France, on the chalk; but not in Pas de Calais; a markedly "Continental" species.]

### **Oenanthe** L.

300

#### **O. fistulosa** L.

Common Water Dropwort.

15, 16.

Native. Marshes, fens, swamps, ditches and ponds; widespread, but only locally common. In brackish, calcareous and weakly acid waters, usually in stagnant conditions.

1<sup>st</sup> record, 1632: W. of Sandwich, Johnson, *Descriptio*, p.28; still there.

1) [Greenwich; Deptford; W. of Woolwich, M&G; S. of Bromley, Cole; Hayes Ford, Scargill.] Sundridge Park golf course in marsh, 1947, P.H.C.

2) Plumstead Marshes, A.H.W.D. Northfleet, A.H.W.D. Higham, 1938, J.B.M. **BM**. N[ea]r Stoke Junction Halt, Grain, in brackish marsh **MNE**. Ditches, l[sle] of Grain. ¾m. S. of Cliffe Station, 1944. Hoo St Mary Marshes. High Halstow Marshes S. of Egypt Bay. Minster Marshes, 1917, Hb. Davis **MNE**. Marshes S. of Snodland, '44. Ditches, Harty. Ditch, Blacketts, Tonge, 1958, DMcc. 06 Dike, old Brickworks, Graveney, HMW.

4) Hacklinge, in dikes, 1946 **MNE**. Worth Minnis 1950 **MNE**. Northbourne Fen. Dikes, Marshside Chislet, 225661. Dikes N. of Shuart, St. Nicholas, 270686. Wantsunt [sic] sewer, W. of St. Nicholas, 1946, E. of Reculver, 1946. Wingham Fens. Preston Marshes, 1946 **MNE**. Fordwich Marshes, 1954 **MNE**. Plucks gutter, 1955 **MNE**. Westbere Marshes, RGW. Ash Marshes.

10) Sundridge, P.H. Cooke. [Noahs Ark Pond, Kemsing, 1823, R. Pocock.]

11) 75 Horish Wood Pond 44. Medway, Tonbridge 579467 CAS. Medway E Peckham, 675486 CAS. Pond 1m. S. of Yalding '44. (Wateringbury [18]82 **MNE**. Yalding [18]97 **MNE**.) Pond 1½ m SW of G[rea]t Chart 963486 CAS.

12) Hothfield Common, swamp at N. Side 1891 ESM; 1947, FR. Gibbons Brook, G Walton; in acid valley fen, 1954! **MNE**. Nackholt, 058425, ES, **MNE**. Spiders Castle 048445, ES. Scotts Pond 936394, ES. Shoddington W[ater] W[orks] 997463, ES **MNE**. N. of Rowling St[reet], Bilsington 023370, E.S. S. of Westwell, 988465, ES. By R[iver] Stour between Chilham and Chartham, 1943, D.H.K. NE of Tut Hill, 975467, ES.

15) Shirley Moor, 938320, ES. S. of Ham Street. Brenzett '45 **MNE**. Ivychurch. Snargate. Old Romney. R[oyal] M[ilitary] Canal. Sandhurst Levels, 1954, **MNE**. S. of Kenardington. The Dowels, Appledore 1959 **MNE**. Dungeness, dikes S. of Boulderwall Farm; by Galloways road. Ruckinge. N[ea]r Selby F[ar]m S. of Lympne 1958 **MNE**.

**O. silaifolia** M. Bieb. [Narrow-leaved Water-dropwort.] [15,] 16. 2/51

Native. Alluvial hay-meadows or pastures by inland rivers; rare, but plentiful along the course of the River Eden from Cernes, E. of Lingfield (across the Surrey border) to Penshurst, and, above Tonbridge by the Medway. This species is strictly confined to this type of habitat in Britain at least.

1<sup>st</sup> record, 1899: Chiddingstone, E.S. Marshall, Fl. Kent; (1894, E.S.M. **BM.**).

2) Minster, Sheppey, in meadow to W. n[ea]r Sea, A.G. Side,

11) Meadows by the Eden, above Edenbridge N of Marsh Green **MNE**, 1947, plentiful!. Meadow by Memorial Hosp[ital], Edenbridge, 1960, R.A.C. E. of Delaware, below Edenbridge., abundant, 1950 **MNE**. W. of Hever. N. of Chiddingstone. 1 mile E.N.E. of Chiddingstone. ¼m W. of Penshurst **MNE**. ½m S. of Penshurst. Meadow 551460 S of Leigh CA Stace 1954 **MNE** & 1960. Rare, 1 mile W. of Tonbridge by ditch, 1944 **MNE**. Barden Park above Tonbridge, J.E. Lousley. Meadows E of Tonbridge EP. E of Hale Street 1982-.

The other records for this species in *Fl. Kent* are almost certainly errors for *Oe. lachenalii*. *Oe. silaifolia* has narrow lanceolate leaflets to both root- and stem- leaves, and rather open umbels.

**O. pimpinelloides** L. [Corky-fruited Water-dropwort] 15, 16

Native. Neutral pastures, old claypits, alluvial meadows; usually drier places than its relations; very rare, though sometimes plentiful where it occurs, and with an odd scattered distribution, showing no particular pattern.

1<sup>st</sup> record, 1943: Bickley Golf Course, R.W. Hale.

1) abundant in rough grassland on London Clay, disused Golf Course, S.E. of Bickley, 1943, R.W. Hale; 1944-1954! **MNE**.

2) abundant in pasture and edge of Ash coppice, on London Clay, S. of Warden Point, 1955, **MNE**.

10) one large plant, alluvial meadow S. of Darenth Church 1944; **MNE** 1954.

12) Fairly plentiful on roadside and adjacent meadow on Weald Clay, N. of Stubbs Cross, Kingsworth, CN Pope & E. Scott, 1952; (1954!) **MNE**.

[13) Formerly by A.21, Hook Green turning, Lamberhurst, 653385, C.A.S.]

14) On disused damp claypits, abundant. Potmans Heath, W. end of Isle of Oxney, 1955, P. & J. Hall, G. Brown, & F.R. **MNE**; destroyed 1961; still there c.1980!

The root-leaves of this species have broad, cuneate, two-toothed leaflets, and the umbels are very dense.



**O. lachenalii** C.C. Gmel. {Parsley Water-dropwort.} 15, 16. 19/51

Native. Borders of dikes in alluvial marshes, brackish marshes and meadows, fens, dune slacks; always in either calcareous or brackish water, not in waters of full salinity; common locally in 2) and 4) on the north coast and in the estuaries, in 15) Romney Marsh, and inland in the fens fed by chalk springs between Wingham and Deal, absent elsewhere.

1<sup>st</sup> record, 1632: N. of Sandwich, Johnson, *Descriptio*, p.23.

2) [Plumstead Marshes, W.W.R.] 57 Tidal brackish marsh by Thames, below Erith, R.A.D. 57 Dartford Marshes. [Northfleet Brooks, AWHD: apparently extinct through pollution.] 67 Shornemead Marshes, AWHD (1945!). 77 Higham Marshes, 1944→ **MNE**. 87 All Hallows, in brackish marsh, 1954 **MNE**. Cliffe. Chalk Marshes, 1817, R.P. **BM**. 77 Brackish marsh S. of Upnor '49 **MNE**. 74 Holborough Marshes, abundant in meadows 44→ where calcareous and brackish waters meet **MNE**. 76 Marshes S. of Snodland, 1943→**MNE**. 76 Reed swamp, W. of Burham church. 76 Meadows S of Burham Church, **MNE**. 96 East Church Marshes, A.G. Davis Hb. **MNE**. 97 Ditch 942735 Ripney Hill F[ar]m, Minster, 1955, O. Davis. 06 Brackish meadow, between Creek head and Mill Pond, Oare, 1957-1960.

4) 35 Hacklinge Marshes, DACL **MNE** 1956; (1946!). 35 Worth Minnis, 1946-56 **MNE**. 26 Dikes N of Shuart, St Nicholas, 1962, 270686. N. of R[ai]l[wa]y, 271692. 26 Dikes Marshside, Chislet, 225661. 35 Dune slacks, Sandwich Bay; 36 and 2 miles to N, **MNE**. Dikes NE of Sandwich 1954 **MNE**. 25 Fen N. of Wingham. 36 Minster Marshes, 1955 **MNE**. 26 W. of Minnis Bay, L.W.W. 26 Stodmarsh, in meadow, 1955 **MNE**. E of Reculver, 1953, REW.

14) 82 old clay pits, with *O. pimpinelloides*, Potmans Heath, W. Oxney, 1958, **MNE**. 92 marsh by spring below Stone Cliff, Oxney, 1958, **MNE**.

15) 93 Shirley Moor 1954 **MNE**. S. of Ham Street. Snave. W. of Brenzett. 92 S.W. of Appledore. 03 S. of Ruckinge 1956 **MNE**. 02 Ivychurch. 13 Hollows of shingle beach, W. of Hythe, n[ea]r "Prince of Wales" 1947. Brackish marsh N. of Redoubt, 2½ miles W. of Hythe. Hollows of Romney Warren. Brackish marsh on site of old estuary, S. of Littlestone, 1950. Sandy area behind sea wall 1½ m. NE of Dymchurch, 1947, **MNE**. Dikes S., W. of Boulderwall Farm, Dungeness. South Brooks, S. of Lydd.

**O. crocata** L.

Hemlock Water Dropwort.

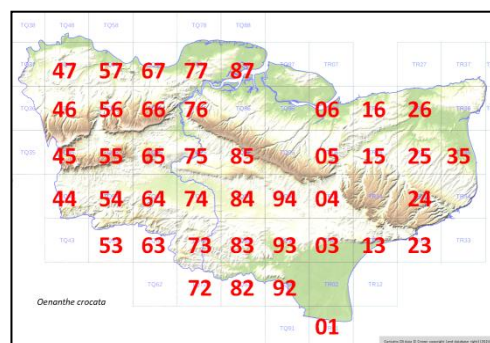
15, 16

42<sup>706</sup>/51

Native. Ditches, riversides, pond margins, marshes, fresh and brackish, wet woods, alderswamps; abundant throughout the Kent Weald (as it is in that of Sussex and Surrey) and on the gault and greensand; common in the Blean and the upper tidal Medway; rather rare on the N. coast, and absent from the Chalk districts and from Thanet and Sheppey. The rarity of this species in N. Kent is of interest; it may be that the N coastal marshes are too exposed for it, as it tends to occur most abundantly where there is shelter from trees. On the other hand, it is almost absent from E. Anglia and not common even in S. Essex, so climatic factors may be responsible for its distribution. It is a markedly "Atlantic" species, common in western Britain, and may be intolerant of E. Anglian winters. In France, it is found along the Channel coast N.E. of Normandy only at one site in Pas de Calais.

1<sup>st</sup> record, 1666: Thameside, C. Merrett, *Pinax*, p.84.

2) 47 Woolwich Arsenal PCH. 67 Northfleet Brooks, 1944. 77 Medway bank, below Cookham Woods, Upnor, 1960. Wet copse between Fenn Street and St Marys Hoo, 1955. 76 Holborough Marshes. 76 S. of Snodland, 44. 76 N of New Hythe by Medway, '54. Wouldham. 76 S. of Burham in tidal carr by Medway. 76 W. of Eccles. 75 Medway Banks, Aylesford. Apparently absent from N. Kent coast between Northfleet and Hernhill. 06 Wet copse W. of Waystreet Farm, 1m. NW of Hernhill 1955. 06 S.W. of Sportsman Seasalter, in marsh by r[oa]d, 1960 HMW.



3) 16 Denstrode, ditches by road, 1957. Fox Cross Lane, Seasalter. Pye alley Lane, Clapham Hill Whitstable HMW.

4) 26 Reculvers, 1946. 35 Ditch bank E of Tollbridge, Sandwich, 1960, Mrs. K.D.R. (S. Side river, W. of foot br[idg]e to marshes).

8) 24 By the Nailbourne (opposite Petrol Sta[tion]), Barham, 1959, B.J. Brooke, **MNE**.

10) Darenth, copse S of Church 1954! **MNE**. R[iver] Darent by Roman Villa, Darenth, 1957. Otford, by Darenth [sic]. St Johns Jerusalem PCH. Brasted. Eynsford, by R[iver] Darent PCH. Lullingstone PCH.

11G) 65 Leybourne. 75 E. Malling. 66 NE part of Ryarsh Wood. Plaxtol. 85 By the Len. 85 N. of Leeds. 85 Chegworth. 85 Polhill, Harrietsham.

11W) 54 By the Eden, Chiddingstone. Penshurst. Leigh. W. of Tonbridge. Beltring. Yalding. Teston. Barming Bridge. Stream, Ramchids, Harrietsham, 1960, Mrs B Dodds. 683493 Pond E of Hale St[reet], 1954. Pond ½m. N. of Marden 1954. By R[iver] Beult, NE of Staplehurst 1954. Ditch 1m E of Headcorn, 849438, 1962. Moatenden 44. Ditch, Leigh Bridge to Headcorn, 1954, 813454. Beult below Birch wood, Bethersden. ½m S. of Smarden 1954. Pond N.W. of Buckshall Betersden '54. Pond 1 m E of Vitters Oak. Ditch Woolpack, S. of Biddenden. Hartsap[?] Pond Biddenden.

12) R[oa]dsides N. of Ham Street. Kingsnorth. By the Stour, Bowley F[ar]m, SE of Lenham. Charing Heath. Canterbury to Sturry in ditches, Herb S. Dale, 1659-1739.

13) 53 Gill SW of Stone Cross Ashurst 581381 CAS, 63 Boggy Wood SW of Pembury 614395, PCH. 63 Ditch S. of Lamberhurst Ch[urch] 684365 CAS.

14) 83 Cranbrook Road, 1 m. W. of Tenterden. 93 R[oa]dside, G[rea]t Heron Wood, '62. L[i]t[t]le Heron Wood '62. Reading Street, by Tenterden Road.

15) S of R[oyal] M[i]litary C[anal], S of Kenardington, 1999, ditches by road to S. 01 Dungeness, J. Hubbard, 1957.

16) 13 Wet copse by Ashford Road, Hythe. 13 Postling Wents.

**O. fluviatilis** (Bab.) Coleman

River Water-dropwort.

15.

7/51

Native. Running water of rivers and streams; very local, and confined to 12) the R[iver] Stour from above Hothfield to Stodmarsh and its sidestreams and to streams and dikes in the fens and marshes from Sandwich to Hacklinge, in which localities it is abundant.

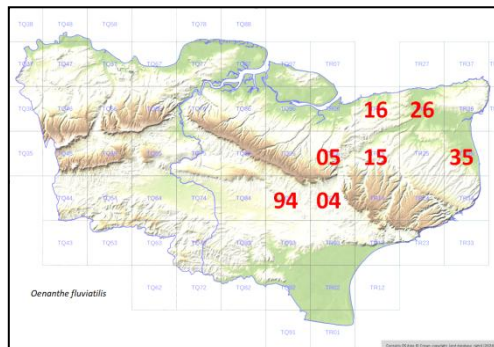
This plant was first found in Kent by W. Borrer, as a young botanist, mistakenly reported by him as *Cicuta virosa*, and published in O.B.G., 1805, as that plant. In 1844 C.C. Babington corrected this in his *Annals*, Vol XIII, p.191.

<sup>706</sup> Should be 41; square 57 was doubled-counted.

4) In calcareous waters, North stream, 35 Hacklinge, FJH (1947!); 35 Ham Fen FJH, (1947!); 35 Dike, Worth Minnis FJH, (1947!); 35 Sandwich Town ditch, ESM (1946!); 26 Stour, Stodmarsh, FJH; 1950, R.E. Wood.

12) 94 G[rea]t Stour, W. Of Hothfield, 1943. 04 Stour, Ashford, W.R. Jeffrey. Stour, 04 Wye Bridge; 05 Godnersham; 05 Chilham; 05 R[iver] Stour, Shalmsford Street 1960 **MNE**. 15 Chartham; 15 Milton Br[idge], Thanington; 15 by the Weavers, Canterbury city. 16 Stour, Sturry, L.W.W.; 1951, Miss MEM. 15 Vauxhall Lakes, 1958, HMW.

It does not flower freely everywhere, but usually does so in the shallow slow-moving parts of the Stour at Shalmsford Street and at Milton Bridge.



**O. aquatica** (L.) Poir.

[Fine-leaved Water-dropwort.]

15, 16.

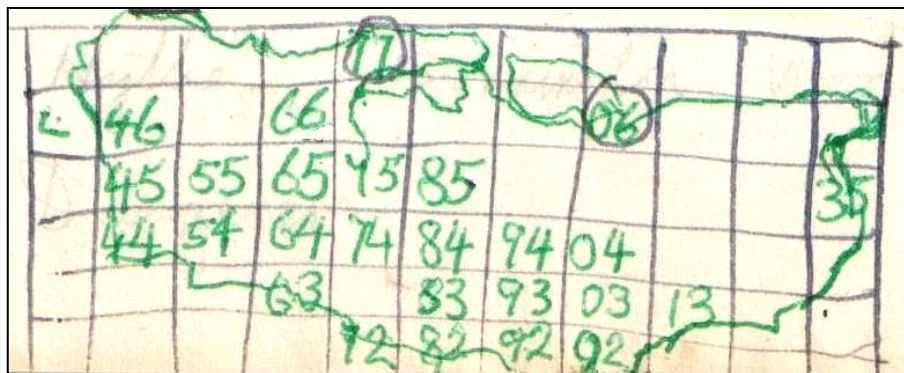
26/51

Native. Ponds, dikes, and swamps, normally in stagnant water; common in the Weald and in Romney Marsh district, also locally on the Gault clay; very rare indeed N. of the chalk downs.

1st record, 1632: N. of Sandwich, Johnson, *Descriptio*, p.23.

1) [Ponds n[ea]r Lee;] pond E. of Eltham, A.H.W.D.. 46 Petts Wood, 1954 **MNE**.

2) 77 N of Higham church, A.H.W.D.; J.B. Marshall, 1938. [Ditches n[ea]r Erith, E. De C.] [Snodland Marshes, 1896, H. Elgar **MNE**.] Uralite works, 1956, PCH. [Marsh ¼ m. S. of Hernhill Church, E. Jacob, 1777.]



[Dyke N. of Graveney, Stowell.] 06 Dike N.W. of Seasalter Cross, HMW, 086647.

4) 35. [Minster in Sheppey Marshes, J.S. Mill (Hb. Mill). Deal Marshes, F.J.H. N.E. of Stodmarsh, F.J.H.]

10) Westerham Wood, 82.

11) 64 n[ea]r Hartlake Bridge, J.R.W., 1943. 75 Horish Wood Pond. 75 Pond W. of Bearsted. 66 Ponds on Gault, S. of Ryarsh Wood, Trottscliffe 1878; 1946! **MNE**. 65 Pond on Gault, S. of Ryarsh Wood, Ryarsh. 85 R[oa]dside pond on Gault, 849536, SW of Greenway Court, Hollingbourne, 1959; 1860 Mrs B Dodds. 64 Pond 683493 E of Hale St[reet] E Peckham 1954 **MNE**. 74 Elphicks F[ar]m, Hunton. 1955 **MNE**. 94 Great Chart New St[reet] F[ar]m 973407. 1m S of Yalding 45-62. Moatenden 1944. Sherway SE of Headcorn '44. SW of Leigh 540458, DMCC 1946. Abundant 2m S. of Yalding in ponds 1944-62. 84 Leighbridge, Headcorn, 813454, 1962. 84 Pond 1 m E of Headcorn, 849438, 1962. 74 Ponds N. of Collier Street. 74 Pond ½m W of Marden 1956 **MNE**. 44 Edenbridge, n[ea]r Eden, W... Pool. 704493 Ditch S. of Cheveney Yalding '62 HMP. 93 May Farm, Woodchurch 961353. 94 Bethersden N, 935410. Bethersden E. 947407; 953407; 952407; 955403. 93 Pond E of Buckhall, Bethersden 1954. 94 Pond ½m NE of Vitters Oak 1954. 94 Pond ½m E of Vitters Oaks 1954. 84 Pond ½m E of Frittenden 820411, 1954.

12) 04 Pond on Gault, E. of Plumpton's Farm, N.E. of Hinxhill, 1956 **MNE**. 94 Pond S. of Hothfield Common. 94 Pond 1 mile Westwell, E.S. 04 n[ea]r Stour, Wye, RGW. 93 Coldblow, Woodchurch, 961353, ES. 33 pond SW of Biddenden 1954. 93 Scotts Pond, Kingsnorth 985394 ES. 03 Kingsnorth E, 010388 ES. 03 Cheesemans Green 028388 ES. 03 Colliers Hill 033380 ES. 03 Rowling St[reet], 020370 ES. 93 Shadoxhurst 970375 ES. 04 Goodcheap F[ar]m Hinxhill 046433 ES.

13) 63 Magpie Shaw, Lamberhurst, 1939; 63 ponds, Lamberhurst Quarter, 1943; 64 Pond n[ea]r Castle Hill, Brenchley, 1939, J.R.W. 54 pond by R[oa]d ½m. N. of Penshurst. 54 Gilridge, W. of Penshurst.

14) 93 Appledore Heath 950303 ES. 82 Pond, Palstre Court F[ar]m, Wittersham, 1958 **MNE**.

15) 03 S. of Ham Street. Hexden Channel. Dyke S. of Smallhythe, 894298, 1952, DMCC. 93 Shirley Moor 935322, ES. 92 Snargate. 02 Brenzett. 92 Ivychurch. 92 Appledore. 93 R[oyal] M[ilitary] Canal Kenardington 980315. 03 Dike 1 m. S. of Bilsington 1958 **MNE**. 13 n[ea]r Selby's F[ar]m, S. of Lympne, 1958 **MNE**. Dike E of



Burmarsh, 1948, RM Payne. 93 The Dowels, NE of Appledore, 1959 **MNE**. 02 Dike NE of Old Romney 1959 **MNE**. 13 Dike S of Burmarsh, 1947. 03 Orgarswick 1947.

### **Aethusa L.**

301

#### **A. cynapium L.**

Fool's Parsley.

15, 16.

Probably native. Waste ground, arable fields, allotments, gardens; common through most of Kent  
1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*, p.14

1) Hayes, 1933, AFG Kerr, **BM**. Shooters Hill Woods, 1954 GMB. N. Cray tip, PCH. Bexley Village PCH.

2) Oare, n[ea]r Old Mill Pond, 1954 **MNE**. 87 Roadside, Grain by cult[ivated] field, 1958, Mrs AG Side. Seasalter.

5) Halstead A.A. **BM**. 36 Cornfields on chalk, n[ea]r Greyhound Kennels, 1m W. of Leaves Green, 3961, 1958, PC & JF Hall.

6) R[oa]dside W of Stone Ch[urch], 1962. Arable between Bush and Cobham, PCH. Upper Halling, in arable, 1958 **MNE**. SE of Eynsford, PCH. The Thrift, Bean PCH. Cornfield, Buckland R[oa]d, Luddsdown PCH.

7) Hempstead, 1938, JBM **BM**.

8) arable, Wo[o]llage Green, 1956 **MNE**. arable, E. of Knowlton, 1958 **MNE**. Woodville: Dover E Cliff, KDR 57. 25 arable about Fredville DMCC.

9) arable on chalk, NE of Monkton, W. of Plumstone F[ar]m, 1958 **MNE**.

10) Cornfield by Shoreham Ch[urch], PCH. Eynsford PCH. R[iver] Meadow S. of S. Darenth, PCH.

11) East Malling. Maidstone Museum garden, H. Lamb, 1883 **MNE**. Sandy Field N. of Chegworth N of A20, 1958 **MNE**. n[ea]r R[iver], field W. of Tonbridge, 1955, **MNE**.

12) Westwell. Hothfield.

13) (Stair House Garden), Lamberhurst, 1938, J.R.W.; 1956, PCH.

### **Foeniculum Mill.**

302

#### **F. vulgare Mill.**

Fennel.

[15, 16.]

Native, near the sea and tidal rivers, where it is very common on waste ground, consolidated beaches, fixed dunes, cliffs, sea walls, dry banks, etc; an escape inland, on roadsides and waste ground near villages and farms,

1<sup>st</sup> record, 1696: between London and Gravesend, Ray, *Synopsis*, ed.2, p.344.

1) 36 Tip by Hayes Station, 395660, 1958, PC & JFH. W. Wickham dump, 1955, JM Sherwood. Hayes Common, 413649, H.M.P., 1960. E of Dartford Heath, 520754, HMP, 1960.

2) Northfleet Marshes. Shorne Marshes, on River wall. Higham. Marshes, Cliffe creek. By Medway, Aylesford: New Hythe. 87 Stoke Junction, 1958, Mrs AG Side. Sheerness; n[ea]r Royal Oak, Minster **MNE**.

3) Boughton Street. 16 Whitstable golf course, '57 HMW.

4) Pegwell Bay, abundant on the beach. Ebbsfleet, on ancient dunes and beach. Abundant on waste ground between Richborough Port and Sandwich. Walmer Beach. Sandwich Bay. Trackbank N. of Stuart, St Nicholas, 271692, 1962. Bank, Grove Ferry, 1950, REW.

6) Railway cuttings, E. of Dartford; Swanscombe; Northfleet. Chalkpits, Northfleet HAS. By A.2, Northfleet HAS. Gravesend by R[ai]l[wa]y. About Strood Station, very abundant, **MNE**. Mounts Rd, Greenhithe, PCH. N. of Halling. Frin[d]sbury, 19838 JBM **BM**; 1949!

7) Rochester, abundant. Gillingham. Rainham. Bluebell Hill. 05 Cutlers F[ar]m, Chilham ES.

8) Dover. Kingsdown. 24 Edge of arable above Crabble, Miss B Nash, 1958. St Margarets Bay.

9) Thanet Sand Cliffs, Pegwell Bay, abundant.

11) A26 R[oa]dside, Barming, 736550, CAS. R[oa]dside, Vintners Park, 1960, EGP.

12) 15 Canterbury, RGW.

13) 54 Waste g[r]oun[d by R[ai]l[wa]y, High Brooms, KEB: CAS. [Albion Rd., Tunbridge Wells, CAS; destroyed.] **MNE**. 34 Grosvenor Rd, T[unbridge] Wells, CAS. Dorking Rd., T[unbridge] Wells, KEB.

15) Hythe Beach, M.E. Allwood, 1859, Phyt. N.S., III, p.384.

16) Lympe, n[ea]r Castle on scarp, 1946, DMCC.

### **Silaum Mill.**

303

#### **S.silaus (L.) Schinz & Thell.**

Pepper saxifrage.

[15, 16.]

Native. Pastures, damp meadows, roadsides, rough grassland, scrub, railway banks, nearly always on heavy clay soils with poor drainage; locally very common on the Weald Clay of 11) and 12), and on the Gault in (10, 12) and 16); London Clay of 3), the Blean in 6E), the W. part of the Hoo Peninsula, frequent on the London Clay



in Sheppey; locally frequent in damp meadows of the upper tidal Medway area; rare elsewhere even on the Wadhurst Clay of 14), and absent in the chalk districts 5)–9) and most of 13) and 14).

1<sup>st</sup> record, 1777: Hernhill and Sheppey, E. Jacob, *Pl. Fav.* p.105.

**1)** R[ai]l[wa]y bank on London Clay NW of Orpington Station, 1948. On clay, Shooters Hill Woods, 1954, G.M.B. Meadows at N. Cray, 1955 **MNE**.

**2)** Marshy fields S. of Cliffe Station 1958. 76 Holborough Marshes 1945. NE of Frindsbury 1949 **MNE**. 86 Bank by Funton Creek, 1962, **MNE**. 76 Marshes S. of Snodland. 76 New Hythe Marshes, 1946 **MNE**. Oare Creek 97 East Church. 07 Warden. S. of Minster. 97 Brambledown. Minster Furze hill '59. 07 Harty turning. 06 Harty isle.

**3)** 16 Tankerton slopes. 16 Swalecliffe. 16 East Blean Wood, SE corner, FR 54; AHG Alston 50 **BM**. 16 Pastures and roadsides, Calcott, N. of Sturry. 16 N. of Westbere. 16 Herne Common. 16 S. of Herne Bay.

**4)** 26 Marshy meadow, Plucks Gutter, 1958, Miss B Nash; 1962, Miss DACL. 26 Sarre Marshes, L.W.W. 26 Stodmarsh, in meadows, L.W.W. Chislet sq[uare]v 1955. (not in Wingham, Canterbury or Chilham or Sandwich sq[uares])

**6)T)** 77 Scrub on London Clay Lodge Hill Cooling 1954, **MNE**. Beacon Hill, Frindsbury 1949. 77 Northward Hill, scrub on London Clay, 1958. Cliffe Pits 1950.

**10)** 57 Meadows S. of Darenth Church. Lane N of Brasted, 1951.

55 Pastures and Railway banks on Gault, R[ai]l[wa]y E. of Kemsing Station. 55 S. of Kemsing Village, towards Seal, 560578, CAS; FR.

not in Eynsford sq[uare]; @Kemsing, Westerham sq[uare]; Malling, Maidstone; Hollingbourne (1955); SE of Lenham, 1953; Stowting; Ashford; Hothf[iel]d; Headcorn; Marden; Pembury; Tonbr[idg]e; Edenbr[idg]e.

**G)** 65 Lunsford meadows. 66 Birling Marshes.

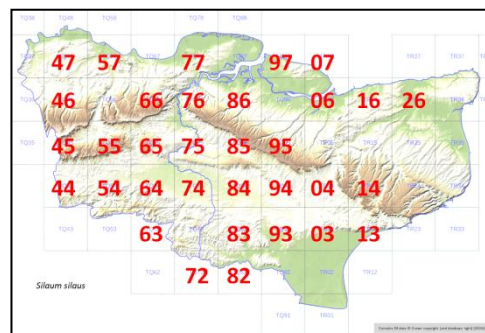
**11)G)** Woodgate, Ryarsh, '46. 75 Bearsted Golf course, on Gault.

**W)** by Pond S of Sutton Valence 44. Moatenden Headcorn '44. Frittenden R[oa]d (Brook Wood) Headcorn 44. 74 Collier Street. 74 S. of Yalding Woolpack '44. S of Hunton P[ost] office 55. 54 Meadows above Tonbridge. N & S of Frittenden. 54 W of Penshurst Meadows by R Eden. Meadows E of Hever Park '53. 54 Chiddingstone NE of. 64 Gravel pits by Medway E Peckham CAS. 55 R[oa]dsides Hildenborough Shipbourne 570050 CAS. 54 By R[ai]l[wa]y, Hildenborough 563482, CAS. 74 SE of Stile Bridge '62. 74 R[oa]d S. of Marden Thorn '62. 74 R[oa]d NW of Marden Thorn '62. 74 R[oa]d SW of Marden 62. R[ai]l[wa]y 1½m. E of Marden, plentiful, 1954. Marshy scrub n[ea]r Beult N. of Buckmans Green 889418, '62. R[oa]dsides Leigh Br[idg]e 1½ m WNW of Headcorn 813454, 1954, 1962. R[oa]dsides ½m. W. of Headcorn 1954. R[oa]d Sweetlands C[or]n[e]r A229, N. of Staplehurst. 1 mile E of Headcorn, 849437, 1962. 84 n[ea]r Pond NW of Buckhall ¾m W. of Bethersden, 1954. 94 n[ea]r Pond E of Buckhall ½m W. of Bethersden 1954. 94 R[oa]dsides Bethersden Village 1954. 94 Road ½m SW of New St[reet] F[ar]m G[rea]t Chart 1954. 85 Railway cutting, Warren Wood, N. of Leeds, on Gault. 85 Harrietsham S l[ocally] a[bandant] Mrs B Dodds 1960. (Harrietsham, HL, 1895 **MNE**. Boxley H. Lamb 1895 **MNE**. Yalding H Elgar 1896 **MNE**.) 94 Hoads Wood. 74 W of Staplehurst. S. of Staplehurst. Meads by R[iver] Beult S. of Burford (Hunton) 54. 44 damp pastures, S of Hever Church 1953. 44 R[oa]d, Pigdown Hever, 482441 CAS. 54 Field n[ea]r Haysden by R[iver] 575467, CAS. Purchase F[ar]m, NW of G[rea]t Chart 1946 **MNE**. S of Pluckley Sta[tion] 1949 Miss V Day. 84 B2078 Hearden Green 2m NW of Headcorn. 84 Golden Sq[uare] Smarden 885414, '62. 84 Gladdish S.E. of Sutton Valence. 84 Path S. of Ch[urch] Headcorn 831441, 1962. 83 Castweazel SW of Biddenden 1954. 94 R[oa]d NE of Mill F[ar]m, 1m NE Bethersden 1954. 94 n[ea]r Pond ¾m. NE Vitters Oak 2m ESE Bethersden 1954. 94 by Pond Vitters Oak, 1½m ENE Bethersden 1954. 95 Meadow S.E. of Lenham 1958. ½ m S. of Smarden '54. 1m WSW of Smarden '54. Hamden SE of Smarden 54. Haffenden quarter 1m S of Smarden 1954. Pluckley SW.

**12)** 64 R[oa]dsides on Gault N.E. of Hinxhill. Rippers Cross 1959. Orlestone. 14 Stowting Meadows, '55. Wet meadow S of Brabourne Ch[urch] 1954. W of Kingsnorth; roadsides at Stubbs Cross, 1952. Bromley Green S of Kingsnorth. G[rea]t Chart; Kingsnorth; Shadoxhurst SW (FR); Ham St[reet]; Bilsington, ES.

**13)** 63 N[ea]r Great Bayhall, Pembury, 1941, J.R.W. Cowden Pound (Wadhurst Clay g[rass] h[ea]th) 1947.

66, 65, 75, 85, 44, 54, 64, 74, 84, 83, 95, 94, 04, 14, 93, 03 (not 05), (not 15), 63, (not 53), (not 73), 72, 82, 13, (not 23), (not 92, not 02, not 01), not Dungeness, not Romney, not E Oxney-Fairfield, W. Oxney 1956, Sandhurst 58.



**Conium L.**

**C. maculatum L.**

Wild Hemlock.

15,16.

282

Native. Waste ground, roadsides, riverbanks, scrub on chalk, sand and clay; common, except in parts of the Weald.

It occurs mostly on base-rich, fairly light soils, where initially there is not severe competition.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

2) Northfleet. Stone Marshes. Higham Marshes. Cliffe. Cuxton, n[ea]r R[iver] PCH. Holborough. Upnor. Funton Creek '62. Sheerness, Canal Dump '57, O.D. Tonge, 1958, DMCC. Seasalter.

3) Swalecliffe Brickfield R. Theobald.

4) Sandwich. Waste ground N. of Sandwich. Worth.

6) Wingate Wood, Halling. Track up downs, Upper Halling PCH. Cobhambury Wood, a[bandant] in 1 y[ea]r coppice 1961, HAS.

E) Northward Hill, High Halstow, abundant in scrub on London Clay. Cliffe Chalk pits. (Paddlesworth, Hb Lamb 1870 **MNE**.)

7) 1m E of Molash by A252. Hawkins Wood Chilham DHK 1945.

8) Cross R[oa]ds, A.2 E of Barham Ch[urch] 1960, Mrs KDR.

10) Sevenoaks tip 1958, CAS.

11) Stream, Addington Place, DMCC, 1958. Medway banks, Maidstone, by R[ai]l[wa]y bridge; Barming; Teston **MNE**; Watlingtonbury. N[ea]r Len by Fairbourne Mill 1960 Mrs Dodds. Tonbridge; Straight mile, Leigh **MNE**; Penshurst. Medway Bank, Ashour Wood 1954. River Eden, W. of Penshurst; Hever; Chiddingstone. R[iver] Teise, W of Marden Beech; N of Goudhurst Station.

12) Westwell. R[iver] Stour, Chilham; Milton Bridge.

13) Teise banks, E. of Lamberhurst, 1941, JFW. Ditch S. of Lamberhurst Ch[urch], 684365 CAS.

15) Dungeness, 1950, P le Brocq. Dymchurch, Mrs M.J. Comyn.

16) Sandgate 1815 Hb. J.F.Y. **BM**.

## **Bupleurum L.**

283

### ‡ **B. fruticosum L.**

[Shrubby Hare's-ear.

15,] ‡ 16.

Naturalised alien: very rare.

6) Railway bank, 570693, N. of Horton Kirby, A. Beadell: C.E. Britton, *J. Bot.* LXXIV (1936), p.355; abundant, 1946 **MNE**; 1957, PCH: →1962! Many observers.

9) Ramsgate, A.A. **BM**.

(**B. falcatum L.** [Sickle-leaved Hare's-ear] has its sole modern British locality in Essex (scrubby grassland on clay, Norton Heath!). It formerly occurred in Surrey (Reigate). In N France it comes as near as the Somme, where it occurs on very dry chalk downs above Amiens.)

### **B. tenuissimum L.**

[Slender Hare's-ear.]<sup>707</sup>

15, 16.

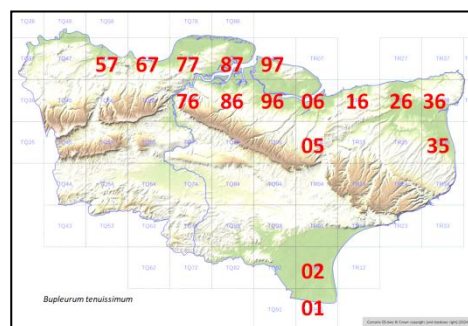
16/61

Native. Banks, seawalls, dry grassland, and uppermost zones of salt marshes, near the sea and tidal waters. Very common in the Thames and Medway estuaries, rare by the Stour and on the Romney Marsh coast.

2) 57 Seawall, Stone Marshes. Northfleet Marshes River Wall SE corner 613754 1946 **MNE**; 1958 HMP. 67

600760 Swanscombe Marshes 1954 DE Kimmins. 77 Seawall, Higham Marshes, C. West. 77 Cliffe Creek **MNE**. 77 N. of Cliffe, 1950; 734774 1958, J. Hall. 07 N of Leysdown Davis 1918, **MNE**; 1956 **MNE**. Seawall, Middle Stoke Halt 1960 JD Lovis. 77 Riverwall, L[owe]r Stoke, 1959 **MNE**. 77 Egypt Bay '46 **MNE**. 87 W. side Isle of Grain, B.D.J.; (1945!) **MNE** 857755. 76 E of Frindsbury, 1945, **MNE**. 87 N sea wall Grain, 1948 **MNE**, 870784; 892758 near Fort DMCC. 77 S. of Hoo, 1945. Grass S of R[oa]d W of Seasalter LWW; 079649 HMW 1958; 060647 HMW W of Sportsman 1959. 06 Oare Creek, 1957. 06 Faversham Creek, 1954, near Nagden; and above, **MNE**. 06 Harty Ferry, S. side, 1957 **MNE**. 96 Conyer Creek, 1961 C Turner. N. of Blacketts, Tonge, 1958, **MNE**. 06 Shellness, 1946-1962 **MNE**. 06 Sea Wall and Banks, Harty, 1947-55. 96 Elmley sea wall, 1950-54, abundant **MNE**. (L[owe]r Halstow Miss Young.) (Upchurch, FM Webb.) 96 East Church Marshes, AG Davis. 86 Chetney Marshes, 62.

3) 16 Swalecliffe, H.M.W.; turf by shore, LWW about 1960; REW 50. 16 Whitstable Harbour, 1958 HMW. 16 Deck House, Island Wall, Whitstable, 103664, 1958, H.M.W. (Whitstable 1883 H & JG.)



<sup>707</sup> In the manuscript given as Narrow-leaved Hare's Ear.

4) 26 E. of Reculver, '50 REW; Dowker; by seawall, 1960, HMW. 35 River wall of Stour, below Sandwich, FJH; 1957! **MNE**.

8) 05 Bank at Chartham, E. Robinson.

9) 36 Pegwell Bay, 1838, AA **BM**; 1935 MS Campbell **BM**. 26 Minnis Bay, 1960, Mrs B Dodds.

15) [Dymchurch, CPSK; S. of, 1863, JSM. NE of Romney; W. of Hythe, F.J.H.] 01 South Brooks, by saltings, 1947, JH Lavinder. 02 Littlestone promenade, 1950, **MNE**.

(**B. baldense** Turra [Small Hare's-ear] occurs on the cliffs of Beachy Head, Sussex.)

**B. rotundifolium** L. [Thorow-wax.]<sup>708</sup> [15, 16.]

Extinct. Formerly an abundant colonist in the chalky cornfields from 16<sup>th</sup> to 18<sup>th</sup> centuries in the district between Crayford, Wilmington and Swanley on the west, and Higham, Shorne, Cobham, Longfield and Kingsdown on the east, S. to Eynsford; also in Thanet, about Chatham, Ospringe, and near Tunbridge Wells. 16<sup>th</sup>—18<sup>th</sup> Centuries. Not recorded since F.J. Hanbury's record at Swanley in *Fl. Kent* (1899). Improved agricultural methods and cleaner seed appear to be responsible for its disappearance, as in other counties.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

**B. subovatum** Link ex Spreng.<sup>709</sup> [False Thorow-wax. 15.]

8) 1 plant in neglected, but recently dug over, garden at Westwell 1960 ES.

**Apium** L. 285

**A. graveolens** L. Wild Celery. 15, 16.

Native. Ditches, and marshes, usually in brackish water, by tidal rivers high up the estuaries; very common locally near the coast, and on Romney Marsh, very rare inland, where it was probably always an escape from cultivation. It does not occur in *tidal* marshes where the salinity is as high as that of seawater.

1<sup>st</sup> record, 1629: Stoke, Johnson, *Iter*, p.8.

2) Plumstead Marshes. Erith Marshes. Below Crayford (Barnes Cray) in ditches '44. 57 Stone Marshes. 57 Swanscombe; and 67 Northfleet Marshes. 67 Shornemead. 77 Higham Marshes, in dikes. 87 Grain **MNE**; 1958, Mrs AG Side. 76 Cuxton. 76 Halling Marshes, Ditch by Medway '44. 76 by Medway, New Hythe **MNE**. 76 S. of Snodland '44. 75 Aylesford, by Medway. 76 Rose Cottage Pits Eccles EG Philp, 1960. 06 Faversham Creek (dikes near to), 1961, C. Turner. 96 Minster Marshes, Hb. AG Davis, 1917 **MNE**. 06 Isle of Harty. 06 N. of Oare Mill Pond '59 **MNE**. 97 Ditches by canal, Sheerness, 1955, O.D.

4) E. of Reculver, 1953, R.E.W. 35 Dikes of Marshes below Sandwich, **MNE**. 35 Shellness, Sandwich, 54 **MNE**. 26 Dike N. of Stuart, St Nicholas at Wade, 1962. 36 Minster Marshes, Thanet, 1955 **MNE**. 26 Dikes, Marshside, Chislet, 1962.

8) 23 brackish lagoon behind beach, below Abbotscliff.

11) 55 Roadside ditch near Shipbourne, R.G.W. Also reported inland on good authority, formerly in ditches W. of Edenbridge; ½ mile SE of Four Elms, E.S. Salmon; N. of Marden by road, FJH. Headcorn, F.J.H.

15) 02 Lydd. 02 Ivychurch. 02 Old Romney. 02 Dymchurch, **MNE**. 13 Brackish Sewer 2m W. of Hythe, L.J.M. 1957.

**A. nodiflorum** (L.) Lag. Fools watercress, Marshwort. 15, 16.

Native. Streams and ditches, especially where the water is moving and base-rich, very common.

1<sup>st</sup> record, 1629: Stoke to Cooling, Johnson, *Iter*, p.8.

1) Holwood Park. 46 Crofton Heath PCH. 46 High Woods, Crofton PCH. 47 Bexley Mill Pond PCH. 47 R[iver] Cray, N. Cray, PCH.

2) 57 Dikes, Dartford Marshes, 1962. 97 Brambledown Pond, '55. 97 Oakwood, N of Brambledown 1955. 06 Oare Meadow, S. of Creek, 1959 **MNE**, '62. 06 Dikes W. of Seasalter 57 HMW. 16 Ditch, golf links, Whitstable '57 HMW.

3) 15 Canterbury Old Park '55.

4) 35 Hacklinge Marshes. Ditches behind dunes, Sandwich.

6) 67 [locally] a[bundant] in ponds in chalk pit, Swanscombe, '60, HAS.

8) 24 stream, Kearsney '55. 24 Crabble Pond, Dover, E G Philp 1960.

<sup>708</sup> In the manuscript given as Round-leaved Hare's Ear.

<sup>709</sup> In the manuscript given as *B. lancifolium*.

**10)** R[iver] Darent; Otford PCH. N. of Shoreham, PCH. Eynsford, PCH. E. of Darenth PCH. St. John's Jerusalem PCH. N[ea]r Darenth ch[urch] PCH.

**11)** Gilletts Hole and Spring Head East Malling. Stream, Addington Place, 1958, DMCC. West Malling, St Leonards Lake. Leybourne Stream. Ditches by Medway, Teston. Marsh W. of Sandling '44. Sandling Wood 55. E end of Mote Park '55. Leeds, 1959 **MNE**. Headcorn (Moatenden) 1944. 676493 Ditch E of Hale Street 1957 CAS.

**12)** Hothfield Common, by stream in NW corner. Cuckoldscoomb springs. Stowting springs 1944. Gibbons Brook, 1938, HEG Emmett.

**13)** Ditch S. of Lamberhurst Ch[urch], 684365 CAS.

**var. ochreatum** Dr.

**12)** Hothfield 1891, ESM **BM**. Westenhanger, 1893, ESM **BM**.

**A. inundatum** (L.) Rchb. F. {Lesser Marshwort.} 15, 16.

**Native.** Shallow ponds, and ditches, on clay, sand or gravel, usually where competition is slight; rare, much more so than formerly.

<sup>1st</sup> record, 1777: Nagden Marsh, E. Jacob, *Pl. Fav.*, p.108.

**1)** Chislehurst Common, W. Pond, AHWD; 1946! **MNE**.

**11) W)** 683493, pond on gravel, E. of Hale Street, E. Peckham, plentiful, 1954, **MNE**. [formerly common about Tonbridge, W.W.R.; not so now!]

**12)** Farmyard pond n[ea]r Godmersham, 1944, D.H. Kent. Muddy borders of pond, E. of Plumpton Farm, N.E. of Hinxhill, 1956, F.R. & ES **MNE**. [Hothfield Common, W.R. Jeffrey; not seen by me.]

**13)** Ditch near R[iver] Teise, S. of Lamberhurst Church, plentiful, 1938, J.R.W.; abundant and flowering, 1956, F.R. & D.S.! **MNE**.

**15)** Pond on New Romney Warren Golf Course, 1950 [Dungeness Ponds, F.J.H.] Woodchurch 93L EP. Appledore 93Q EP.

**Petroselinum** Hill

**P. crispum** (Mill.) Nyman [ex A.W. Hill] Parsley. [15, 16.]

**Naturalised Alien**

**1)** Grove Park, Cole.

**2)** Faversham, Ch[urch]yard wall, E. Jacob; Abbey Walls, Cowell, *Fl. Fav.* One plant on shingle beach behind huts, Whitstable, 1961, J.R. Palmer.

**6)** Chalk-pit cliffs, Northfleet, E. de C. (n[ea]r the Church, 1946!). Mounts Road, Greenhithe, on chalk banks and cliffs, 1946; 1954, PCH; 518746 1957 HMP.

**7)** Rochester Castle, W.W.R.; JBM, **BM**; 1949!

**8)** St Margarets Bay, Fl. Kent. Cliffs by path above car ferry, Dover, E Cliff, 1960, Mrs B Dodds; 1962, H.M.P.

**9)** Thanet, Aubrey Moore. Pegwell Bay cliffs, L.W.W.

**11)** Gravel pits by Medway, S of Yalding, CAS. By Medway, Maidstone, 1938, E.D. Morgan **TLS**. Ditton S. Quarry 715566 '57 CAS.

**15)** Dungeness, on shingle near "Pilot" Inn, 1946.

**P. segetum** (L.) W.D.J. Koch "Corn Caraway". 15, 16.

**Native.** Sea walls, dry banks and roadsides, and arable land, on chalk, clay, ragstone and sand; common on the coast and near tidal rivers, rarer on banks and in cornfields inland. It occurs in habitats that are dry, exposed and warm in summer, where competition, except from grasses, is slight; often found associated with *Bupleurum tenuissimum*, which it superficially resembles, and *Torilis nodosa*.

<sup>1st</sup> record, 1629; Grain to Cliffe, Johnson, *Iter*, 8.

**1)** [Foots Cray; St Mary Cray, 1852, J.B. Syme in Hb FJH. Charlton, E. Edwards, Phyt. 1 (1842) p.428: 1852, J.B. Syme in Hb. FJH.] [Plumstead Marshes, 1885, FJH in Hb FJH.]

**2)** 57 dry bank, Dartford Marshes, 1962. Banks and river walls near the Thames, at 57 Stone; 67 Swanscombe; 67 Northfleet; 67 Denton; 67 Chalk; 67 Shorne **MNE**; 77 Higham; 77 Cliffe; 87 Grain; 77 near the Medway at Upnor; 76 Holborough Marshes; 76 Snodland Marshes; Burham **MNE**; Halling; n[ea]r Cuxton Sta[tion] on R[ight] bank. Banks and Sea walls by the Swale, 96 Elmley, abundant; 06 Harty **MNE** abundant; 06 Shellness, abundant; 06 Graveney sea wall; Sheerness.

**3)** 16 Swalecliffe, n[ea]r Sea, L.W.W. 16 Whitstable, 1961, C. Turner.

- 4) 35 Waste ground N. of Sandwich. 35 Roadside bank, Woodnesborough, 1945. 36 n[ea]r Castle, Richborough **MNE**. 26 Grove Ferry.
- 6) 57 Greenhithe, 1946. 76 Hedgebank of A.228, N. of Halling, 1956 **MNE**. 66 Hedgebank SE of Cobham. 57 Bank E. of Darenth.
- 7) 76 Rochester Stadium, 1939, JBM **BM**.
- 8) St Margarets Bay Cliffs, 1956, RD Murray. 34 St Margarets at Cliffe village, 1955. 15 R[oa]dside Bishopsbourne 1946 **MNE**. 24 Hedgebank, Chilverton Elms, W. of Hougham, 1955.
- 9) 36 Near Manston, L.W.W. 26 Minnis Bay, 1960, Mrs. B Dodds. 26 By A.28, St Nicholas at Wade 1935, C.N. **BM**; 1958, Miss M.E.M. N. Foreland, 1948, DMcC.
- 10) 57 Darenth Village & to N., '44. Farningham, 1880, H&JG **BM**; c. 1933, A. Beadell.
- 11) 74 Loamy bank of road ¼m. E. of Hunton Church, 1954, **MNE**. 94 Green lane on clay, N. of Purchase Farm, Great Chart, 1946, 967418, **MNE**. 54 Medway banks W. of Tonbridge, 1961, H.M.P.
- 12) 94 Great Chart, 976417, E.S. 04 Mersham S. Ragstone Quarry, E.S. 106548, Shalmsford Street, Chartham, Mrs. B 1955, conf. R.G.W.
- 15) 01 Dungeness, N.Y.S. & J.P.M.B. **BM**; 1945, near Lighthouse, **MNE**. R[ai]lw[a]y Br[idg]e, Lydd Sta[tion], 1952, KEB. 13 Beach W. of Hythe, 1954. 92 Roadside, Appledore Sta[tion] to Snargate, 1959 **MNE**.
- 16) 03 on ragstone bank by roadside, with *Astragalus*, Copperhurst, Aldington, 1956 **MNE**.

# Sison L.

## S. amomum L.

Stone Parsley, Hedge Stonewort.

15, 16.

Native. Roadside verges, hedgebanks, railway banks, and rough old pastures and open scrub, mainly on heavy soils; common in many districts, especially on the N. Kent coast and on the Weald Clay, but local and absent over wide areas.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, *Descriptio*, p.21.

- 1) 47 Meadows by Cray, N. Cray, 1945. 36 Pickhurst Common, Hayes, 395668, 1958, PC & JFH. 36 Harvington estate, Beckenham 1955 JM Sherwood. 36 Laurie Park Rd, Sydenham, 1946 S.E. Chandler. Elmers End, Hb AE [sic, for A.G.] Davis, 1915 **MNE**.
- 2) 77 Higham Marshes, 1944. 77 g[ras]s[an]d, Cliffe Marshes, '61, HAS. 76 Snodland Marshes, 1943 **MNE**. [Northfleet 1835 J.F.Y. **BM**.] 77 Cooling Marshes '44. 77 Meadow, Buckhole, E of Cooling, '44. 07 Warden Point. Clay slopes, Isle of Harty. 96 R[oa]dside 1 m N of Iwade 1954. Oare Pond Meadow 1962, HMW. 96 Teynham. 06 Faversham.
- 3) 16 Tankerton slopes. 16 Tylerhill. 16 N. of Herne. 16 S. of Herne. 26 Reculvers. 15 Fish pool Hill, n[ea]r Dameria 1956 Miss M.E. Milward. '1
- 4) 25 Roadside, W of Ash, RGW. 25 Roadside S of Wingham, RGW.
- 6) 66 Longfield Hill 621679 by Dump, Mrs Woods.
- 8) Kearsney Abbey, by R[iver] Dour, Mrs [K.]D. Rowlands.
- 9) Ramsgate, 1857, T.M.; 1921, G.A. Bristow **BM**.
- 10) Otford. Darenth, 1913, R.H. Compton, **BM**.
- 11) G) Barming. Birling, 1938 J.B.M. **BM**. R[oa]dside Heath Rd, E Malling (n[ea]r Ledgers) TQ701565 CAS. 75 Aylesford, C. Turner, 1961.
- 11) W) R[oa]dside, Dunks Green CAS. R[oa]dside, Hever CAS. Hadlow. R[oa]d S of Yalding, '44. E of Marden. N. of Staplehurst. S. of Sutton. Valence. N.W. of Headcorn. Frittenden Rd, S.W. of Headcorn '44. N. of Marley F[ar]m, 863438, E of Headcorn 62. N[ea]r Ch[urch], Hever, 1955. Grass Track E. of Headcorn 849437, 1962, Leighbridge, Headcorn, 813464, 1962. Headcorn Ch[urch] y[ar]d 1962. Headcorn Station y[ar]d 1962. R[oa]dside 1¼m SW Great Chart, '54. ½m NE Vitters Oak, 2m ENE Bethersden '54. By Vitters Oak Pond, 1½m ENE Bethersden '54. R[oa]d 1 m WSW Smarden 62.
- 12) Roadsides, Orlestone. Kingsworth. NE of Woodchurch. Shadoxhurst. N of Hinxhill. R[oa]dside, Brook, '44. Stowting. Brabourne, Miss B Nash, 1961. Canterbury West Station Miss ME Milward.
- 13) Curtisden Green, N. of Goudhurst. Cowden. Hedge ½ mile SW Chiddingstone Hoath '54. Pembury. Open coppice E of Horseshoe Green ½m SW Chiddingstone Hoath 54. R[oa]dside, Vauxhall Lane, Southborough. E of Bayham, R[oa]dside 44. Brenchley Hb Lamb 1885 **MNE**.
- 14) Ch[urch] y[ar]d & Lane by Church, Wittersham 1962.
- 15) 138340 by R[oyal] M[ilitary] C[anal], Burmarsh Road, W of Hythe, 1958, LJM.

# [Cicuta L.

288

## C. virosa L.

[Cowbane.]

The Kent records for this are errors: see Fl. Kent, 1899, for discussion of the evidence.



It is still locally common in the Broads district of E. Anglia, but no recent workers have been able to confirm it in Kent or anywhere in S.E. England, except Burton Park Lake, W. Sussex.]

‡ **Ammi** L. 289

**A. majus** L. [Bullwort. 15, 16.]

Casual alien.

1) Fallow field Swanley, 1884, H. & J.G.

4) Ash, DMcC, 1960, **MNE**. (2 plants n[ea]r Sandwich, 1877, Dowker.)

6) Lucerne Field, Cuxton, Miss C. Stevens, *B.E.C. Rep.*, 1926, 115. The old Greenhithe record (see Fl. Kent) was probably a mistake.

11) Edenbridge: Mr. Justice Talbot, *BEC Rep*, 1926, p.115.

13) Falconbridge (?Falconhurst) Cowden, Mr. Justice Talbot, *BEC Rep* 1926, p.115.

16) In Lucerne field, Salt Wood, Mrs. Gibbings, *B.E.C. Rep.*, 1923, p.185

**A. visnaga** (L.) Lam. [Toothpick-plant. 15, 16.]

Casual alien

1) Ruxley gravel pits, 1958, TH Angel, det. Kew.

7) Westwell, in arable land, E. Scott.

‡ **Falcaria** Fabr.<sup>710</sup> 290

‡ **F. vulgaris** Bernh. Longleaf. 15.

Alien, but completely naturalised; in chalk grassland; very rare and local, confined to Thanet and neighbouring parts of East Kent.

1) [Hayes Place, D.Mc.C.; extinct by 1937.]

4) N. of Wingham\*, 1858; G. Dowker, *J. Bot.* 1889, p.272; 1890, *Fl. Kent*.

8) On Chalk, Otty Bottom, S.W. of Kingsdown, Mrs G. Foggitt, 1926 **BM**.

9) Birchington, 1886. A. Moore: 1946, Walter Johnson (*Roch. Nat.* p.12 1946). Westgate, Druce, 1887, *J. Bot.* p.182. Chalk grassland, N. outskirts of Broadstairs, J.E.L.; L.W.W.; 1947!-1950 **MNE**. Abundant in chalk grassland, North Foreland Golf Course, **MNE**, 1934, J.E.L. **BM**; L.W. Wilson, 1947; 1954! In *Brometum erecti* with a typical chalk grassland associated flora. 1956, Miss B. Nash, 396703, N.W. side Road under thorns.

[11] Field near Maidstone, 1912, M.L. Wedgewood in Hb. F.J.H.]

This plant is locally abundant on calcareous pastures in S.W. France, S. of the Loire. Its absence further north (i.e. in Normandy, etc.) is evidence against it being native in Kent, though from its habitats and distribution in the county one might have supposed that it was indigenous.

**Carum** L. 291

‡ **C. carvi** L. [Caraway.]

Reported to have occurred as a casual escape "here & there" in *Fl. Kent*.

[**Selinum** L.] 305

(**S. carvifolia** (L.) L. [Cambridge Milk-parsley.]

occurs in the fens in the Pas de Calais; in Britain no nearer than Cambs.)

**Angelica** L. 307

**A. sylvestris** L.<sup>711</sup> Wild Angelica. 15, 16.

Native. Fens, damp meadows, stream- and ditch sides, wet woods, coppice woods on chalk; very common over the whole of the Weald, also the Gault and Greensand, and in the Medway valley down to Snodland, in the Stour Valley to below Canterbury, in the fens about Wingham and Ham, and locally in coppice woods on chalk and on the clay-with-flints plateau, in E. Kent, between Wye and Dover; absent from most of the N. coastal plains of Kent (not known between Northfleet Brooks and Tonge, E. of Sittingbourne) from the Hundred of Hoo, Grain, Sheppey, Thanet; and very rare in Romney Marsh. It requires, apparently, some shelter, like *Oenanthe crocata*, which is similarly, absent or very rare in much of the N. Kent coastal plains and marshes.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p.31.

<sup>710</sup> Author citation given as Bernh. in the manuscript.

<sup>711</sup> The manuscript includes a deleted version of some of the records; additional or alternative readings from this have been carried through into this transcript.

- 1) Keston (det. CEB (var. *decurrens* Fischer) B.E.C. Rep 1920, p.23.) 36 Shortlands. 46 Meadow by stream, Hayes 1933 AFG Kerr **BM**. 46 Holwood Park. 46 Ravensbourne Estate, Keston 55. 47 Woods, Shooters Hill, 1819, R. Pocock **BM**; 1954 GMB. 47 R[iver] Cray, St Mary Cray 55. 47 R[iver] Cray, N. Cray 55. 47 Wood by Cray N. of N Cray 55. 47 R[iver] Cray below Bexley 55. 47 Mount Mascal, Bexley PCH. 46 High Wood, Crofton, PCH. 47 Gattons Plant[atio]n N. Cray PCH. 46 Crofton Heath.
- 2) 67 Northfleet Brooks, 1944. 76 West Wood SE of Snodland, '55; 56 New Hythe; 56 W. of Eccles; 56 by the Medway, above and below Aylesford; Forstal. 96 Alder Swamp carr S. of Tonge Pond, 1956. 06 Oare Mill Pond, 1957. 06 Wet Wood W. of Waystreet Farm, Hernhill, 1955. 06 Wet Wood S. of Oare Mill Pond, 1957. 06 Davington Osiers, 1956.
- 3) 15 Old Park, Canterbury, '55. 15 Chequers Wood, 55. 16 Dengrove Wood, Stream, '55. 06 Damp scrub SE of Holly Hill 078602, 55. 05 Stream E. of Fishponds Wood, '55. 15 Bigberry Wood, Alderswamp, '55.
- 4) 25 Ditches in fen N. of Wingham, E. of Little Britain. 35 Ham Fen, abundant. 35 Hacklinge Fen. 35 Stuarts Folly, Sandwich, PC Hall, 55. 35 Great Wood, Worth Minnis, 55. 25 Stream N. of Wingham Well, PCH, 55.
- 5) Downe, Hb. SLBI, det. C.E.B. (as var. *vulgaris* Fischer BEC Rep 1920, p.23.)
- 7) Centre of Kings Wood, Challock, E.S. Spuckles Wood, Stalisfield, valley floor (ch[al]k) '62. Kennelling Wood Stalisfield, valley floor (ch[al]k) 62.
- 8) Bossington Wood, Adisham, PC Hall 55. Yocketts Bank 1962. Copse SE of Coldred '55, c[lay] w[ith] f[lints]. Stafflands Wood, 55. Browns Wood Temple Ewell Mrs KDR. Sladden Wood, Alkham, 55. Ewell Minnis '55. Wolverton Wood, 1962. Woods S. of Chilton, Alkham 49. Copse S. of S. Alkham [on slope] '55, JGD '62. Reinden Wood Hawkinge valley bot[tom] on ch[al]k and on loam 62. Elms Wood, Hougham. Copse WSW of Elms F[ar]m, Dover '55. Wood on S. Slope NE of Bulton [Poulton] F[ar]m, Dover, 55. Copse SE of Swingfield, '55. Hall Wood, Springfield, chalk loam 62. Copse NE of Eastling Wood '55. Swanton Banks by R[oa]d, 55. Clavertye Wood, valley on chalk 55.
- 10) Path by R[iver] N. of Shoreham, PCH. Wet copse by river, S. of Darenth Church 1944-58; Darenth Water Meadows PCH. Wet copse by river Roman Villa Darenth. By R[iver] above S. Darenth PCH. Westerham Wood, 1982. Alderswamp S. of Greatness, '55. Darenth copse, '54. Wood by stream NE of French St[reet], Westerham, '54. By stream in copse on Gault, NW/Brasted, '54. Scords Wood, Alnetum, 54.
- 11) Stream, Addington Place, 1958, D.McC. Birling Marshes. Leybourne. Ryarsh Wood. Lunsford Osiers. Kiln Wood Lenham (Sandgate [Beds]) '62. 607513 Shipbourne Forest, N end, W side Plaxtol Rd, 1954. Marsh SW of Gover Hill E of Dunks G[ree]n, 1954, 615527. Ditch Leigh Bridge 1½m WNE Headcorn 1954. Ditch Hamden SE of Smarden 1954. Hoads Wood, R[oa]dside 1954. P... ~~Ditch~~ Yardhurst, G[rea]t Chart. Beult S. of Headcorn Ch[urch] 831440. Marsh by Beult N of Buckmans Green, Smarden, 889418. Hamden NE of Smarden '54. Roadside, Leighbridge, Headcorn 54. R[oa]dside W of Berford {sic, ? for Burford in Brickyard Lane}, Hunton '54. R[oa]d bet[ween] Marden and Marden Thorn '54. Ditch, Hoads Wood, '54. Marsh E of Dunks Green '54. By Main R[oa]d S of W Peckham '54. R[iver] Beult ¼m E of Yalding '55. E. end of Mote Park, 1955. Wood, S.E. of L[owe]r St. Clere. Allington Lock by R[iver] 1955. Sandling Wood, 1955. Wet Wood SW of Mereworth + [Herb] Paris, '55. Tonbridge Castle Ditch '55. Wet Wood NE of [Four] Elms, '55. R[oa]dside ditch, Whetsted, 45, JHL.. Pond Wood, High Halden '55. ¼m below Barming Br[idg]e '55. Hobbs Wood, Marden Thorn, '55. 522505, Wood SW of Sevenoaks Weald '55. R[oa]dside pond S. Burdon Farm, S[even]oaks Weald '55. Nr. Mount Joy Farm, in lane ditch, S. of S[even]oaks Weald 55. Beult S. of Headcorn Ch[urch], '54. Park Wood, Boughton Monchelsea, '55, by B.2378 (Ragstone). Warren Wood, Hollingbourne, '55, (on Gault). Lunsford Osiers '55. ½m W of Tonbridge by Medway '55. 1m W of Tonbridge by Medway '55. Ditch, 1m N. of Marden by R[oa]d '54. Pond, Marden Mill 54. Pond ½m. S. of Biddenden '54. Valley in Mereworth Woods SW of St Leonards St[reet] '54. St Leonards St[reet] Pond '55. Snoad Wood, Marden Thorn, '54. Ride in Wood, S. of Grafty G[ree]n 54. 1m. W of Jubilee Corner, '54. Shipbourne Forest W side r[oa]d, 54. R[oa]d E of Beltring Halt 54. R[oa]d N' of Railway S of Fowlhall, Laddingford, '54. R[oa]d W. of Pearsons Green and E of Mile oak, 54. R[iver] Teise, Lit[tle] Cheveney 54. N of Collier St[reet] 54.
- 13) Gill SW of Stone Cross Ashurst 518381 CAS. Wood by R. Teise, Hoathly, 1955. Wet copse NE c[or]n[e]r of Penshurst Park, '55. Gill NE of Cobham bury, Edenbridge '55. Greybury Gill, Edenbridge '55. Winchet Hill by R[oa]d, '54. Boggy Wood SW of Pembury 614395, PCH '56. Pembury Woods, 45, JHL. R[oa]dside 1m. SE Colliers G[ree]n, Cranbrook '55. Tuckers mill Pond, Angley Wood, Cranbrook '55. Roundabouts Wood, 54. Hurst Wood, 54. Combwell Wood, E ghyll alnetum, 54. Combwell Wood, E flush '54. R[oa]dside Ditch W of Folly Hill, Colliers Green. Frizley Bog 1944-49. SE corner Ashour Wood, '54. Gill Wood E of Horseshoe G[ree]n 54. S.W. of Lock Skinners '54. Wet W[ood] N. of Highfield Rocks 495446, '54. W. end Rogers Wood in flush, '54. R[oa]dside SW of Sissinghurst P[ar]k W[oo]d, 2 places '54. Wet Wood ½m. E of Horseshoe Green, Cowden (Wad[hurst] Clay) 486423, 1954. Wood NE of Furnace Pond Horsmonden '54.

**14)** Mopesden Gill '55. By Main R[oa]d on stream (co[unty] boundary) 1½m S of Hawkhurst '55. Copse N. of Cherry Garden Woodchurch, '55. Knock Woods bog, Tenterden, '56. Great Heron Wood, Kenardington, 1959 **MNE**. N[ea]r. Tanyard Gill, '55. Upper Tanyard Gill, 55. Outside S end Allwaters Gill '55. Bedgebury Pinetum Lake '54. Gill W of Iden Green '54.

**15)** Dike Shirley Moor 940320, '55.

**16)** Whiting Brooks Wood '55. Paraker Wood, '49. Newington Moor '55. Fen, Darnley Vale, Cheriton, 55.

The occurrence of this species in some quantity in many coppice woods with *Deschampsia caespitosa* and *Orchis purpurea* in sheltered dry valley sides on chalk in E. Kent 8) is interesting: it is probably connected with the high rainfall and humidity of the valleys of the E. Kent chalk. A similar climate prevails in the Bas de Boullonnais, Pas de Calais, where *Angelica* is similarly frequent on the chaok, with *Orchis purpurea*, and *Deschampsia caespitosa* and *Pimpinella major*.

[‡]**A. archangelica** L.

Garden Angelica.

**2)** Woolwich Arsenal, plentiful by a ditch, J.F. Hall. Medway banks above Aylesford, Miss Bacon.

**Peucedanum** L.

309

**P. officinale** L.

Hogs Fennel, Sulphur wort.

15

Native. Banks by tidal creeks above normal spring tide level; rough banks by the sea and scrubland on London Clay; very rare but locally abundant at Faversham Creek and about Whitstable. Otherwise only occurs in Britain in similar habitats, W. of Walton-on-the-Naze and N. of Thorpe-le-Soken in N. Essex. In central Europe, it occurs on warm sunny banks on clay (e.g. W. of Tübingen in S.W. Germany, on steep slopes of calcareous Keuper Marl above the River Neckar, among vineyards, associated with *Bupleurum falcatum*, *Linosyris vulgaris*, *Aster amellus*, etc! Facts of this kind may indicate that many of our rare plants, confined with us to certain restricted types of habitats, are really represented with us only by certain ecotypes of narrow ecological tolerance.

1<sup>st</sup> record, 1597; Faversham Creek and Whitstable, Gerard, *Herbal*, p.86.

**2)** Faversham Creek, Gerard (locally dominant for over ¼ mile along the east side of the creek, from about ½ mile N.E. of the church, and along a side stream, 1954!) **MNE**.

**3)** Whitstable, Gerard; = Tankerton slopes, abundant on slipped cliffs on London clay with *Genista tinctoria* and *Ononis spinosa*, 1944! 1950! **MNE**. R[oa]dsides E of Seasalter 1986. 1 pl[ant] by A.290, Roadside on London Clay, Pean Hill, 109630, 1 mile S. of Thanet Way, H.J. Wilks, 1957. Rough pastures on clay, ½ mile S.W. of Swalecliffe church, E.C.W. (1945!) **MNE**. [Cliff by sea, N. of Herne (=site of Herne Bay) Mr. Crow, in *Engl Fl* ii **BM**; extinct here.] Salting N. of Kite Farm, Swalecliffe, 1960; 2 clumps, H.M.W.

Reported by the "Thames in many places" in Ray, *Cat. Angl*, p.240. This has never been confirmed. Like so many other species, it may have grown by the Lower Thames and been destroyed by embanking, drainage of marshes, building, pollution, etc. (cf. *Althaea officinalis*, *Sonchus palustris*, *Leucojum aestivum*, *Schoenoplectus triqueter*, *Sium latifolium*, *Fritillaria*, etc. all formerly by the tidal Thames in Kent and now apparently extinct.

1 mile SE of Faversham 1830, Pamplin, **BM**. Sea-bank Whitstable, 1922, T.J.F., **BM**. Hearn, about 6 miles from Whitstable, 1806, Sowerby **BM**. Herne Bay, 1838, W.W.N. **BM**. Below Faversham, 1774, Lightfoot in Hb. Banks **BM**.

**Pastinaca** L.

310

**P. sativa** L.

Wild Parsnip.

15, 16.

Native. Banks, roadsides, waste ground, ragstone and chalk pits, rail way banks, consolidated beaches, chalk grassland and scrub. Abundant in the chalk and ragstone districts, and quite frequent throughout most of the Weald and the coastal districts. Not a very strict calcicole, but it is not found in acid and waterlogged soils.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

**2)** 47 Woolwich Arsenal '44. 47 Ruxley Pits, TH Angel, '58. 67 Edge of Northfleet Brooks '44. 87 Grain, 1956, P.C.H.

**3)** 16 R[ai]l[wa]y, Whitstable Golf Links '57 HMW. 15 Gravel pit, Bigberry Wood top, 1954.

**4)** Sandwich Bay.

**5)** 36 Well Wood, 3964, W. Wickham, 1958 PCH. 46 Darwins Bank Downe. 46 Rushmore Hill, PCH. 55 Pilgrims Way, Polhill PCH. 56 Pilots Wood, PCH. 56 N of Farningham, on A.20, PCH. 56 Chalk W. of Eynsford PCH.

**6)** Horns Cross great pit 1962. Higham Station. Northfleet pits. Gravesend pits. Greenhithe. Darenth Wood, PCH. Mounts Rd, Greenhithe PCH. Swanscombe Wood PCH. Swanscombe pits, 60 HAS. S of G[rea]t Crabbles Wood 44. Otford Mount. Kemsing Downs. Halling Downs. Greenhills Wood, Otford. Downs E of Shoreham. Preston Hill PCH

- 7) Bluebell Hill. Burham Downs. Newnham Gravel pit REW. Stalisfield By R[oa]d REW. Charing Hill, E of Molash, Park Wood Molash, Challock Lees [all] by A.252, 1954. Glade below hanger NW of Westwell 1962.
- 8) Track NE of St. Margarets, 1962.
- 10) E of Farningham R[oa]d St[at]io[n] PCH. Sevenoaks tip, 1958, CAS.
- 11) East Malling, 53. Cobtree Hill, W of Aylesford 54. Boughton Quarries, 1949. R[ai]l[wa]y bank, Edenbridge 440470, DPY. R[ai]l[wa]y bank, Hildenborough, 563482, CAS. R[oa]dside, Hoads Wood 1954. R[oa]dside NE Mill F[ar]m Bethersden, 54.
- 12) R[oa]d, 1 m SW Ashford 54. E of Charing H[ea]th by "Red Lion" 1954.
- 13) North Farm R[oa]d, T[un]bridge Wells, 51/54, CAS. R[ai]l[wa]y, n[ea]r High Brooms, CAS. Glassenbury R/T Sta[tion]., Cranbrook, 1955, D.S.
- 15) Dungeness, 1959, AF Mussellwhite.
- 16) Folkestone Warren.

## Heracleum L.

311

### H. sphondylium L.

Hog weed; Cow Parsnip.

[15, 16.]

**Native.** Roadsides, hedgebanks, rough meadows and pastures, dry fens, open woods, scrub; exceedingly abundant throughout the entire county on a very wide range of soils.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) Wood edge, Hayes 1933, AFG Kerr **BM**. Hayes Common. W. Wickham. Holwood Park PCH. Abbey Wood, PCH. High Wood Crofton PCH. Farningham Wood 82. Wood by R[iver], N. Cray. Joydens Wood, PCH. Shooters Hill Woods, '54, GMB. Ruxley Pits, 58 TH Angel. Farningham Wood PCH.
- 2) Woolwich Arsenal. Plumstead Sewer Bank PCH. Dartford Heath, 1954, GMB. Plumstead Marshes, 1943 **MNE**. Scrub S. of Scrapsgate, Sheppey '55. Oak Wood N. of Brambledown '55. Warden Ash copse '55.
- 3) 06 Waste g[r]ound, Seasalter, 1957 HMW. Shelving Wood, Hoath, on Woolwich Beds, 1962.
- 4) Sandwich Bay.
- 5) Halstead, PCH. Pilgrims Way Polhill, PCH. Darwins Bank, Downe, '55 JEL, '62.
- 6) Strood Station. Ebbsfleet path, Northfleet, HAS, 61. Darenth Wood PCH. Mounts Wood PCH. The Thrift, Bean, PCH. Wingate Wood, Halling PCH. Pilgrims Way, Wrotham ACH. Downs E of Shoreham PCH. Preston Hill PCH.
- 7) R[oa]dside Hartlip Hill '55. Copse ½m S of Hartlip 55. Wood above Q[ueen] D[own] Warren, 55. Lane SW of Q[ueen] D[own] Warren 55. Primrose Cafe Stockbury. Ride Squirrels Wood Stockbury. Park Bottom Wood E of Newnham '62. Copse below Purple Hill '55. Bredhurst Hurst '55. Stockings Wood, Detling, '55. Top of Detling Hill, 55. W. Coombe, Detling, '55. A252 ½m W. of Chilham.
- 8) Foot of Broad Downs, Brook, '44. Calc[areous] scrub ½ m N of Bavinge F[ar]m '62. Coppice on ch[a]k NW of Podlinge F[ar]m, 1962. Wood W. of Misling F[ar]m Elmsted (loam) 62. Ch[al]k Wolverton Wood, Alkham '62. Wolverton [cross]roads, Alkham '62. Ch[al]k copse S. of S. Alkham. Hall Wood Springfield calc[areous] 62. G[rass]l[an]d, Free Down 62.
- 9) Copse S.E. of Durlock, Minster 1959, Mrs. AG Side.
- 10) Westerham Wood, PCH; [FR] 82. Sevenoaks tip 1958 CAS. Darent village copse, 1944. Water meadows, Darenth, PCH. St John's Jerusalem PCH.
- 11) E[ast] Malling Village. West Malling. E of Offham. SE Oaken Wood Barming in copp[ice]. Street, Ditton. S of Aylesford by r[oa]d. St Leonards St[reet]. R[oa]d SE of Chequers W. Farleigh. {Cross}Roads 1 m N of Sutton Valence. R[oa]d Fairbourne Heath. Kiln Wood Lenham 62. Wood SE of L[owe]r St Clere, Kemsing, '55. Holt Wood, Aylesford '55. Sandling Wood '55.
- W**) R[oa]dside ½m W. of Shipbourne. R[oa]dside ½m E of Dunks Green. ½m S. of Dunks Green. Yardhurst G[rea]t Chart. Scrub NE of Buckmans Green, Smarden '62. Bethersden Village. E of Buckhall Bethersden. 1m WSW of Smarden. Leigh Br[id]ge 1½m WNW Headcorn.
- 12) Bilting by A.28. Boughton C[or]n[e]r by A28. R[oa]d by Stour 1m NE of Chilham.
- 13) Stone Cross Ashurst 523388 '59 CAS. R[oa]dside S. Park Penshurst. R[oa]dside, Chiddingstone Hoath. Wood by R[iver] Teise, Hoathly.
- 15) Knock Wood, E of Tenterden, R[oa]dside on clay 62.

‡ **H. mantegazzianum** Somm. & Levier {Giant Hogweed.

15, 16.}

**Naturalised alien:** waste ground, plantations, river banks; occasional.

- 1) The Tarn, Mottingham 428733, 1956, PCH & JFH; 1957, H.M.P.
- 3) Vauxhall Lakes, 1958 RGW.

- 11) E. Malling R[ai]l[wa]y Sta[tion], H Barlow. Preston Hall, H. Barlow, FR. Ightham Mote, approach drive, 585535, 1961, H.M.P. W. Malling, 1948, D.McC. Nettlestead Ch[urch]y[ar]d, H. Barlow. Wateringbury by stream near church, probably planted. Nr Pond SE of Sutton Valence, 1948, D.McC.
- 12) By Hospital entrance, Hothfield Common, 968465, 1945-61.
- 16) 13 path by Saltwood Church, 1958 LJM.

**Tordylium L.**

312

**[T. maximum L.**

Great Hartwort

Former Denizen or possible native, now apparently extinct

- 6) Bushy places between the church and the entrance to Swanscombe Wood, 1839, E. Edwards, *Phyt.* II, 1843, p.581.

This plant occurs in Essex on a bank by a marsh dike at Tilbury, only 3½ miles from the Swanscombe locality, and abundantly in 1950's [in] grassy escarpment scrub on London Clay near S. Benfleet in Essex, where it has every appearance of being native. It may well have been native formerly on both the Kent and Essex sides of the Thames estuary, though its rather southern European distribution is against this hypothesis. *Fl. Kent* (1899) overlooks this record. (Loire near Angers, 1972!)]

**Laser Borkh.**

**L. trilobum** (L.) Borkh. (*Siler trilobum* (L.) Crantz) [Laser.]<sup>712</sup>

**Torilis Adans.**

277

**T. japonica** (Houtt.) DC.

Upright Hedge-Parsley.

15, 16.

Native. Hedgebanks, roadsides, borders of woods, scrub; recently coppiced woods; very common throughout Kent.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) Hayes Common, PCH. Holwood Park, PCH. Farningham Wood, PCH. Roadside S. of Bexley.
- 2) Upnor. N. of Higham JBM **BM**. By A249 1m N of Iwade, 1954. Faversham Creek.
- 3) On Wool[wich] beds, Shelving Wood, Hoath, 1962.
- 4) Sandwich Bay.
- 5) A.20 N. of Farningham PCH.
- 6) Great chalk pit N of Horns [Cross] 62. Mounts Rd, Greenhithe. Swanscombe Wood. The Thrift, Bean. Preston Hill. Halling Downs.
- 7) By A249 by Primrose Cafe Stockbury. Ospringe Down HMW. By A252, Charing Hill, '54. Glade base of Beech hanger, NW of Westwell 62.
- 9) Plant[atio]n W of Lit[tle] Mongeham, '62.
- 10) Otford, AA **BM**. River path below Shoreham PCH. W. of S. Darenth, PCH.
- 11)G) Wrotham Heath. E. Malling. Aylesford. Birling. Ryarsh Village. Offham Village. SE Oaken Wood, in coppice, Barming '54. Roadside, Horish Wood.
- W) by Pond N.W. of Buckhall, Bethersden. R[oa]dside E of Dunks Green. 849437 Track to pond 1m E of Headcorn 1962. Frittenden Rd / SW Brook Wood, Headcorn 44.
- 12) R[oa]dside, Lenham Heath '54. N. of Criol F[ar]m Shadoxhurst 1952 D.McC.
- 13) Goudhurst. Tun[bridge] Wells. Angley Wood entrance. Ride in Wood ½m SW Chiddingstone Hoath '54 (Wadhurst Clay).
- 14) Quarry N. of Brook Street, Woodchurch, 1955 **MNE**.

**T. arvensis** (Huds.) Link

Corn Bur-parsley.

15, 16.

Colonist. Cornfields: once rather frequent in Kent, to judge from old records, which cover all our districts except 10). Now very rare, though still plentiful S. of Nash in 5).

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.23.

- 2) Sheppey, Hb. Davis, 1918 **MNE**.
- 4) Fields N. of Wingham, R.G. Williams.
- 5) 46 Cornfield on chalky loam, S. of James Wood near Nash, S.W. of Keston, 1954, F.R. & G. Brown, **MNE**. 36 Cornfields on chalk, near Greyhound Training Kennels, c. 1 m W. of Leaves Green, 1961, 1958, plentiful, P.C. & J.F. Hall.
- [6) Near Wrotham, 1774, Hb. Banks **BM**.]

<sup>712</sup> No record details in the manuscript.



- 8) 1 plant, Turnip field, Wingham, 1951, R.G.W.  
 11) Near Maidstone, Rev. Fielding, 1893 **MNE**.  
 16) Cornfield, above North Road West, Hythe, Miss J. Gibbons.

**T. nodosa** (L.) Gaertn. Knotted Bur-parsley. 15, 16.

Native. Dry banks, especially river- and sea-walls, and waste ground on dunes, shingle beaches, and dry cliffs; nearly all its localities are close to the sea or tidal water, and it is v[ery] common in such habitats; very rare inland on dry, sunny banks.

1<sup>st</sup> record, 1629: Dartford, Johnson, *Iter*, p.9.

- 1) Bickley, FRB.  
 2) Erith Marshes, PCH. Dartford Marshes, 1962. Stone Marshes, river wall. Greenhithe, river wall. River walls and waste ground at Swanscombe **MNE**; Northfleet; Gravesend; Chalk; Shorne; Higham 1938 JBM **BM**; Cliffe; All Hallows; sea wall, Grain **MNE**. Harty **MNE**. Leysdown, Shellness; Upnor. Rochester, 1881, G.N. **BM**. N side Kings Ferry 1948 Miss DACL. Faversham Creek, 1945 DHK. Ham Marshes 1950, REW. W of Seasalter. Elmley. Graveney Marshes, 1954, R.W. Butcher.  
 3) Herne Bay 1868, H.T. **BM**.  
 4) Waste ground, N. of Sandwich **MNE**. By Sandown Castle, Deal, REW 1950. Deal beach. Richborough. Pegwell Bay. E. of Reculver. Dike bank, Marshside, Chislet, 1962. Chislet E. Marshes 1958 Miss M.E. Milward.  
 6) Bank S. of Mounts Wood, Greenhithe. R[oa]d N. of Halling, 1956 **MNE**.  
 7) Chestnut Street, Newington (valley gravel) 1957 **MNE**.  
 8) Abbots cliff, 1945. Cornfield E of Knowlton, on chalk, 1960 **MNE**. Inland by roadsides on chalk, E. of Bekebourne; W, of Adisham, 1948.  
 9) Brooksend, Birchington, 1955 **MNE**.  
 11) Headcorn ch[urch] y[ar]d, 1962.  
 12) Longport Bridge, by Stour, 1954 CNP. Orchard, Mersham, 1954, CNP. Chilham, FRB. Canterbury Dane John RGW.  
 13) Old Pembury, FRB.  
 15) Hythe Shingle Beach. Sea wall, Dymchurch. Romney Warren. Lydd Common. R[oa]dside near Selby F[ar]m. S. of Lympne 1958 **MNE**. Appledore 1890 ESM / New Romney 1891 ESM var. *pedunculata*. Car park, Ferry field, Lydd, 1955, DMcC. Warehorne Bridge; Shirley Moor, ES, 1956.  
 16) Dry Ragstone scars, W. of Hythe; and below Lympne Castle. Dungeness **MNE**.

**Caucalis** L. 278

[‡ **C. platycarpus** L.<sup>713</sup> [Small Bur Parsley.]

Apparently extinct; 1<sup>st</sup> record, c.1680, cornfield 2 miles S. of Rochester, by Maidstone Road, Newton MS; last, Cobham, F.J. Hanbury in Fl.; Kent, also formerly in chalky cornfields about

- 6) Gravesend, Northfleet, and Dartford.]

[**Turgenia** Hoffm.<sup>714</sup>

‡ **T. latifolia** (L.) Hoffm. [Great Bur Parsley. 16.]

Casual alien.

- 1) Garden weed, Bromley, Scargill.]

**Daucus** L. 314

**D. carota** L. ssp. **carota** [Wild Carrot. 15, 16.]

Native. Grassland on chalk and sand and other well drained soils, banks, quarries, cliffs, fixed dunes, waste ground of various kinds; very common throughout Kent, except in some parts of the High Weald, where is occasional only; particularly common on chalk and ragstone.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) 36 Tip, Hayes Station, 1958, PCH, 395660. North Cray tip PCH. Ruxley Pits, '58, TH Angel.  
 2) Woolwich Arsenal. Crossness, waste g[roun]d, PCH. Stone Marshes. Bank above River, Cuxton, PCH. N of Leysdown. Farm Wood Graveney, R. Theobald 1956.  
 3) Reculvers. Arable Rough Field below Shelving Wood, Hoath, '62.  
 4) Fixed dunes, Sandwich Bay, very frequent. Pegwell Bay beach. N. of Shuart, St Nicholas, 271692, '62.

<sup>713</sup> Given in the manuscript as *C. daucioides* L. 1767 = *C. platycarpus* L..

<sup>714</sup> Given in the manuscript in genus *Caucalis*, species *C. latifolia* L.

- 5) Darwins Bank, Downe. Downe Golf Course. Downs S. of Saltbox, N.W. of Biggin Hill. Chalk W of Eynsford, PCH. Waste g[roun]d, Orpington by-Pass, PCH. Pilgrims Way Polhill PCH. A.20, W. of Farningham, PCH.
- 6) Horns Cross G[rea]t Pit 62. Field Swanscombe 61 HAS. Mounts Rd., Greenhithe, PCH '54; [FR] '44. Swanscombe Wood PCH. The Thrift, Bean, PCH. Gravesend Golf Course. Halling Downs. Roadsides and banks N. of Halling. Longfield.
- 7) Burham Downs. Bank A249 below Stockbury Ch[urch] 44. Three Squirrels Down, 44. Charing Hill, A.252, 54. E of Park Wood Molash by A.252, 54.
- 8)<sup>715</sup> Folkestone Warren **MNE**. Abbots Cliff **MNE**. Lydden Spout. Shakespeares Cliff. E. Cliff, Dover **MNE**. Langdon Bay. S. Foreland. St Margaret's Bay. Hope Point. By Dover Patrol memorial **MNE**. Golf course S. of Kingsdown. Free Down. Down NE of St Margarets '62. Kingsdown cliffs, '46 **MNE**.
- 9) Acol 58. Birchington 55. N. of Broadstairs '50. N. Foreland Golf Course '54 **MNE**. Kingsgate cliffs, 1959 **MNE**.
- 10) E of Kemsing Sta[tion] by R[ai]l[wa]y on Gault cutting 54. Sevenoaks tip, 1958, CAS. Shoreham Ch[urch] y[ar]d PCH. E of Farningham R[oa]d Sta[tion], PCH.
- 11)G) R[oa]dside N of E. Barming 54. Boro[ugh] Green R[ai]l[wa]y bank, 54. 831440 by R[iver] Beult S. of Headcorn Ch[urch] '62.
- W) E of Dunks Green by R[oa]d 54. R[ai]l[wa]y bank Edenbridge, 440470, 1956, DPY. 1m E of Vitters Oak G[rea]t Chart, 54. Headcorn Sta[tion] y[ar]d, '62. Bethersden Village 54. 1m WSW Smarden 54. Hamden SE of Smarden 54. Haffenden Quarter S of Smarden 54.
- 13) Tunbridge Wells 583374, 578384, E. Shorrock, '62.
- 15) Dungeness, 1950, P. Le Brocq. Car Park, Ferry field by Lydd, 1955, DMcC.
- 16) 23 Folkestone Leas 1957, F. Ambrose.

**D. carota** L. **ssp. gummifer** Hook f., *D. gingidium* auct. [Sea Carrot. 15.]

Native. Cliffs by the sea; very rare, but locally in some quantity.

1<sup>st</sup> record, 1724: Dover, Sherard & Rand, Ray, *Syn.*, ed.3, p.218.

8) Dover, Ray, *Syn*; A M Bernard in Hb. A.A. **BM**; RGW.

16) Sandy ground behind the beach, below Leas Cliff, Folkestone, 1950. Warren, Folkestone, 1960, E.G. Philp.

## GENTIANACEAE

[*Cicendia filiformis* (L.) Delarbre [Yellow Centaury] occurs at Turner's Hill in St Leonard's Forest in Sussex: this Atlantic species might well occur on wet sandy rides in the High Weald in Kent.]

### Centaureum Hill

**C. erythraea** Rafn (*Centaureum minus* Moench) Common Centaury. 15, 16. 50/51

Native. Dry open grasslands, on chalk, sand and clay; rides and open ground in woods; sand dunes, waste ground; very common on chalk and on the coastal dunes, quite common elsewhere. White-flowered forms occur occasionally.

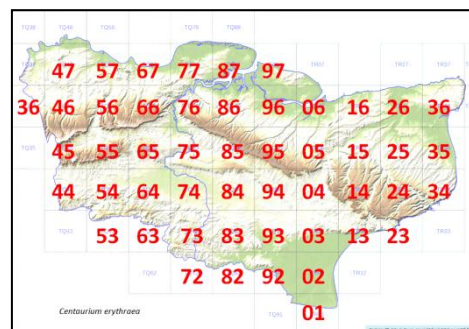
1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

1) 47 Chislehurst Common. 47 Gattons Plant[atio]n, PCH. 57 Joydens Wood. 47 Elmstead Wood, 1956, Miss A. Mills. 56 Farningham Wood, PCH; 82! 87 Isle of Grain 1956 PCH.

W. Wickham 57, Bexley 55, Keston

2) 97 Warden Point. 06 Shellness, '56, '60 **MNE**. Grain 56, Sheppey (Warden & Minster), Faversham (Shellness) 55.

3) 06 On grassland on clay, NW of Dunkirk. 16 Whitstable Gas Works grounds H.M.W. 16 Grassland N. of Benacre Wood, Whitstable, 1961, HMW. Oldridge Wood. Trenley Park Wood.



Whitstable, Chislet '55

4) Sandwich Bay, St Georges Links 46-59 **MNE**. Princes Links 54. Shellness 54. Pegwell Bay. By sidings, Richborough 1945 **MNE**.

5) Rushmore Hill PCH. Chalk W. of Eynsford, PCH. Below Jewells Wood, 1915 Hb Davis **MNE**. Westerham

<sup>715</sup> Several of these locations appear to have yielded specimens of subsp. *gummifer* in **MNE** collected by Francis Rose, although not listed under the subsp. *gummifer* account below.

6) Roadside Down, Woodlands Hill, N. of Ightham 55 **MNE**. Kemsing Downs. Otford Mount, PCH. Rifle Range Shoreham PCH. Preston Hill PCH. Downs E of Shoreham. Mounts R[oa]d PCH. Mounts Wood, PCH. Horton Wood PCH. Swanscombe Wood. Swanscombe chalk pits '61 HAS. Halling Warren. Cuxton Downs PCH.

Sevenoaks, Malling, Eynsford, Dartford, Gravesend, Cobham, Cliffe

7) Burham Downs '55. Boarley Warren '59. Roadside, Hartlip Hill, 55. 96 Ospringe Down HMW! Pett Bottom (by Simia) Ospringe, 1958, H.M. Wilks. Burham, Stockbury, Ospringe, Maidstone, Hollingbourne, Addington, Westwell

8) Ileden Wood 1958, Mrs KDR. Abbots Cliff 1956 **MNE**. Lydden Spout '45 **MNE**. Hawkshill Down, Walmer, 1946 **MNE**. St Margarets Bay cliffs '53 **MNE**. Dover, E Cliff '55 **MNE**. The heath, Ringwould '57 **MNE**. Free Down 1962.

Chilham, Wye, Elham, Canterbury, Alkham, Wingham, Hythe, Dover, Folkestone

9) Chalk turf on top of cliffs, Kingsgate, Broadstairs, 1959 **MNE**.

Thanet

10) Westerham Wood '82.

11)

Marden, Headcorn

12)

Woodch[urch], Bilsington

13) Shernden Wood, Edenbridge, 1955 **MNE**. Gill SW of Stone Cross, Ashurst, CAS. On T[unbridge] W[ells] S[and], South Park, Penshurst, 1962. Sissinghurst Park Wood. Wood S. of Roundhill Park, Sissinghurst 1954 **MNE**. Combwell Wood, 79. {T[unbridge] W[ells] S[and]} Wood W. of Folly Hill. Colliers Green, 1962

Edenbr[idg]e '55, Tonbr[idg]e, Pembury, T[unbridge] Wells, Cranbrook, Lamberhurst

14) College Wood, Wittersham, on Ash[down] Sand and Wadhurst Clay, 1962.

Tenterden, Hawkhurst

S., W. Oxney 56, E Oxney 58.

15) Romney Warren 45-, **MNE**. St Mary's Bay 47 **MNE**. NE of Dymchurch behind sea-wall. Greatstone dunes. Littlestone beach. Railway bank n[ea]r Wittersham Station with white flowers, J.R.W., 1940. Dungeness, Romney

16) Copse on gault NE of Asholt Wood Newington, 1948, Mrs B. Welch.

Common in all the neighbouring counties and in north France.

var. **fasciculare** (Duby) Ubsdell<sup>716</sup> This very distinct variety has a stiffly erect habit, is branched only from the base, has dense capitula-like inflorescences of rather broad-petalled deep pink flowers, and broad leaves. It is a plant of sand dunes, found also on the dunes of the Pas de Calais.

4) fixed Dunes, Sandwich Bay; Shellness, 1947, FR, det. JEL, 1949.

15) Romney Warren.

16) Folkestone Warren, 1930, ECW, det JSL Gilmour.

[var. **capitatum**. (Willd.) Melderis<sup>717</sup> occurs in Sussex on the chalk cliffs at Cuckmere Haven and Beachy Head; it has not been detected on the chalk cliffs of Kent so far. It occurs on the coast of Normandy but is unrecorded for the Pas de Calais.]

[**C. littorale** (Turner [ex Sm.]) Gilmour [Seaside Centaury] occurs in abundance locally on the dunes of the Pas de Calais (Berck, 1959! Ambleteuse, 1956!) and Somme, but not in England nearer to Kent than South Wales and Northumberland, except for one isolated colony at Sinah Common in Hants.)

**C. pulchellum** (Sw.) Druce<sup>718</sup>

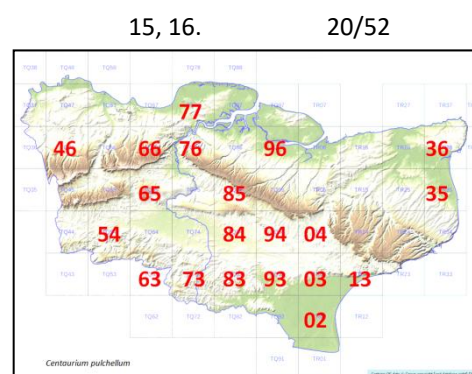
Slender Centaury.

Native. In open, usually somewhat damp, habitats; in damp sandy or clayey woodland rides, in sand-dune slacks, bare clayey soil near the seashore, and in old chalk pits; rare but widely distributed in the Weald and on the coast. 22 modern localities. "Inland in cornfields", CPSK; not recently found in this type of habitat.

1<sup>st</sup> record, 1805: n[ea]r Sandwich, J. Woods, in *Botanists' Guide*, p.341.

1) 46 near Orpington, H. Groves, BEC. Rep. 1880; 1948, on damp clay soil of railway bank N. of Railway Station!

2) [Between Kings Ferry and East Church, Hb. Winch.]



<sup>716</sup> In the manuscript, var. *fasciculare* (Duby) Gilmour

<sup>717</sup> In the manuscript given as *C. capitatum* (Willd.) Borbás.

<sup>718</sup> Cited in the manuscript as (Sw.) E.H.L. Krause.

- 4) 35 Sandwich, J. Woods; abundant in damper hollows of the dunes at intervals from Sandown Castle, Deal to 1958; to near Shellness, 1946-54, **MNE**. [Pegwell Bay, on clay, C.P.S.K.]
- 6) 77 Cliffe chalk pit, 1945-58, **MNE**. Cliffe, West Court pit, abund[ant], 1963. 76 Eccles chalk pits, KFC.
- 7) 96 Putt Wood Gravel pits, abund[ant], 1965.
- 8) 04 On bare chalk in scrub, Downs above Pickersdean, E of Wye, 1952 **MNE**. On moist chalk between Folkestone and Lydden Spout, CPSK; not recently observed.
- 11) 66 Ryarsh Wood, W.M.R.; 1946! on gault. 85 Snarkhurst Wood, on gault, C. West 1948; 1954! **MNE**. 94 On Weald Clay at Hoads Wood, 953423 & 951418, Great Chart, 1946 **MNE**. 84 Dering Wood, 1949. 65 Shipbourne (Golden Stable Wood) 1954 **MNE**. 74 Widehurst Wood, Marden, 1958. **MNE**. Pluckley Brickworks, 919435, E.S. & FR.
- 12) 04 On gault in ride, Nackholt Wood, Brook, 1952 **MNE**. 93 n[ea]r Scotts Pond, Kingsnorth, 986395, ES. 93 Wood S. of Shadoxhurst, 968368, E.S., **MNE**. 03 Bourne Wood, 005340, ES.
- 13) 54 In rides on Hastings Sands and clays: Ashour Wood, W. of Bidborough, 1954, **MNE**. Great Sandhurst Wood, Lamberhurst, JRW; 1943!; 1944! 73 Angley Wood, Cranbrook, 1945, **MNE**. 83 Park Wood, Sissinghurst, 1948-1957, **MNE**. 83 Wood S. of Roundshill Park Wood, Sissinghurst, 1954 **MNE**. 73 Combwell Wood, Goudhurst, 1959 **MNE**.
- 14) S edge of The Brogues, S. of Biddenden, 1947.
- 15) 02 Damp dune slacks, Greatstone, 1947. 13 Sandy brackish marsh behind sea wall, 1 mile NE of Dymchurch, 1947, **MNE**.
- 16) Kiln Wood, Sandling Park, on Folkestone Sand, E.S.M.; not seen, 1958.

Occasional in Surrey and Sussex; very rare in Essex; in Pas de Calais and Somme, frequent on the coastal dunes, rare inland.

#### **Blackstonia** Huds.

##### **B. perfoliata** (L.) Huds.

Yellow-wort.

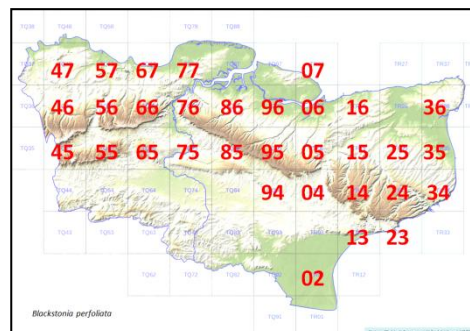
15, 16.

32/52

Native. Chalk grassland and bare ground on chalk, abundant; old grassland over ragstone quarries, rare; calcareous sand dunes, very locally common; clay cliffs and a shingle beach, very rare. A calcareous species, one of the comparatively few annuals occurring in chalk grassland. Common on chalk in Surrey and Sussex, rare in Essex, only locally common in Pas de Calais.

1<sup>st</sup> record, 1597: Greenhithe, Gerard, *Herbal*, p.437.

- 1) 47 Abbey Wood, 1954, G.A. Matthews.
- 2) Shellness, Sheppey, on fixed shell-sand dunes. 07 on bare clay on slipped cliffs, W. of Warden Point, Sheppey, locally abundant.
- 3) Waste ground E of Oare Creek, S. of Faversham Road, 1951 REW. 16 old Railway bank of imported chalk, 111670, ¼m SE of harbour, Whitstable, H.M. Wilks, 1957.
- 4) 34 Somewhat chalky shingle beach, Kingsdown to Walmer Castle, 1946. 36 Fixed calcareous dunes, Shellness n[ea]r Sandwich, locally common, 1946 **MNE**. 35 Sandwich Bay, 1950 **MNE**.
- 5) 55 Polhill, **MNE**. 56 Ploughed chalk Down, S. of Timberden Bottom PCH. Darwins Bank, Downe, 1955 JEL.
- 6) Chalk pits, Greenhithe. Kemsing Downs. Shoreham Rifle Range PCH. White Hill Shoreham. Downs N of Shoreham. Preston Hill on scarp PCH. Chalk pits, Swanscombe. Mounts Rd, PCH. 55 Downs 1m. W. of Wrotham 47 **MNE**. Fawkham Wood 50 **MNE**. Mounts Wood border 45 **MNE**. Cliffe chalk pit 45 **MNE**. 66 Halling Warren. 66 Upper Halling Downs '43 **MNE**. 77 Cliffe chalk pits.
- 6E) 77 Northward Hill, on 200' terrace gravel, 1958 **MNE**.
- 7) 76 Borstal, on chalk bank, 1953. 76 Burham Downs. 76 Bluebell Hill **MNE**. 75 Boarley Warren. Ospringe Down HMW. 86 Queen Down Warren.
- 8) 64 Brook hillock '53 **MNE**. Wye Crown pit. Longport Downs Crundale Down N of Church. Yocketts Bank. 13 Downs N of Newington, 55 **MNE**. Valley 182387 NW of Pean '48 Mrs B Nash. 24 Woodville Downs, T[emple] Ewell 55 **MNE**. 23 AbbotsCliff 1956 **MNE**, 23 East Wear Bay **MNE**.
- 11) 65 Old ragstone quarry, S.W. of Offham, 1954. 75 old ragstone quarry, Fant Woods, Barming.
- 12) 04 Ragstone quarry W. of Mersham, 1946.
- [13) n[ea]r Cranbrook J. Ridley, 1909 **MNE**.]
- 15) Sand dunes, New Romney.





**Gentianella** Moench

**(G. campestris** (L.) Börner<sup>719</sup> [Field Gentian] ‘has been reported from time to time in Kent, but there is no satisfactory evidence that it has ever occurred within the historical period.)  
The var. **baltica** occurs on chalk in E. Sussex.

**G. germanica** (Willd.) Börner<sup>720</sup> [Chiltern Gentian] has never been reported for Kent. It occurs in N. Hampshire (Sydmonton), Middlesex (Harefield) and in Hertfordshire on the Chilterns, though not in Surrey, Sussex nor Essex; but on the chalk downs of the Pas de Calais it entirely replaces *G. amarella*, occurring within about 23 miles of the Dover cliffs on the chalk downs above Cap Blanc Nez (1959!); *G. amarella* in N. France is confined to calcareous sanddunes. It is therefore most remarkable that *G. germanica* is absent from SE England, S. of the Thames. Pritchard (Watsonia<sup>721</sup>) reports that as a result of his studies of Kent populations of *G. amarella*, he finds evidence of past introgressive hybridisation by *G. germanica*.)

**G. amarella** (L.) Börner<sup>722</sup> Felwort 15, 16 21/59

Native. Old chalk grassland, very common and very general; a species of “high fidelity” in this habitat in Kent; unknown off the chalk, except for an ancient record from Sheppey. Not recorded recently for Thanet, nor for the northern parts of district 6).

1<sup>st</sup> record, 1629: Chalkdale near Dartford, Johnson, *Iter*, p.9.

[2] Sheppey Island, John Hill, *Flora Britannica*, 1760.]

5) Downs above the tunnel mouth, Polhill. Bank, Hazel Wood, Downe, 1948, J.B.M. Darwins Bank, Downe. Morants Court Hill, 1946 **MNE**. The Nower, Brasted Downs, 1954 **MNE**. Downs W. of Shoreham.

Westerham, Downe

6) Downs E. of Otford **MNE**. Downs N. of Romney Street 1946 **MNE**. White Hill, Shoreham, 1939. Shoreham Rifle Range PCH. Downs NE of Shoreham PCH. Kemsing Downs. Downs NW of Kemsing. Downs N. of Trottscliffe, PCH. Scarp, Preston Hill, PCH. Down ½m. S. of Luddesdown Ch[urch] ’50 **MNE**. Down E of Red Wood, Luddesdown, ’50 **MNE**. Upper Halling Downs **MNE**.  
Sevenoaks, W. Malling,

Eynsford, Cobham

7) Wouldham Downs. Darland Banks, Chatham ’61 **MNE**. Burham Downs. Bluebell Hill **MNE**. Boarley Warren, 1959. Boxley Warren, N. of Village, 1962. Belmont Park Golf Course, 1947, Mrs W. Verschoyle. Cobham F[ar]m, Lenham ’50 **MNE**. Chilham Park, 055523, ES. Godmersham Down, ES. Charing to West Well, freq[uent]. Snoad Street, 995528, ES.

Maidstone,

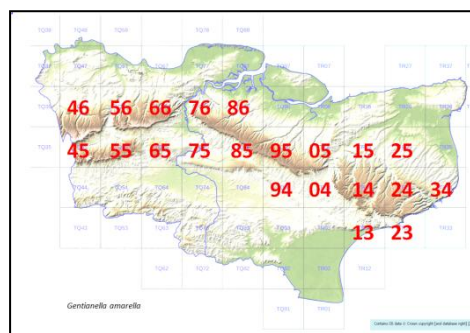
Hollingbourne, Doddington, Burham, Stockbury

8) Crown Downs, Wye. Crundale Downs, N. of ch[urch]. Pickersdenn. Down N of Brabourne. Down N. of Clavertye Wood 51 **MNE**. Down S. of Oldstairs Bay 56 **MNE**. Kingsdown Cliffs

**MNE**. Walmer Downs **MNE**. E of Eggerton Manor Godmersham, 1951 **MNE**. SW of Petham 1951 **MNE**. Burstled, SW of Bishopsbourne ’46 **MNE**. Downs S of Etching hill ’58 **MNE**. St Margarets Bay ’58 **MNE**.

Westwell, Chilham, Wye, Elham, Alkham ’55, Canterbury, Hythe ’55, Folkestone ’55, Wingham

Common on the chalk in Surrey and Sussex; very rare in Essex, where the extent of uncultivated chalk is minute; in Pas de Calais confined to damp calcareous sand dune slacks, and even there very rare.



**G. anglica** (Pugsley) E.F. Warb. [Early Gentian.] 16.

Native. On a chalk down, extremely rare.

6) Shoreham Down, J. Pitt. 2 plants, Kemsing Downs, at about 51/558591, 12<sup>th</sup> May, 1946 **MNE**. F.R. & D. McClintock, **MNE**, found again, 1998!, the plants agreed well with this species.

*G. anglica* occurs in Surrey and Sussex, but not apparently on the Continent; indeed, it appears to be endemic to Britain.

<sup>719</sup> In the manuscript cited as (L.) H. Sm.

<sup>720</sup> In the manuscript cited as (Willd.) E.F. Warb.

<sup>721</sup> Not completed, but is presumably: PRITCHARD, N. M. (1961). *Gentianella* in Britain. III. *Gentianella germanica* (Willd.) Börner. *Watsonia* 4: 290–303. This paper refers to a *G. amarella* population at Crowell Hill, East Woodhay, Kent as showing distinct traces of past introgression, but this is a Hampshire location.

<sup>722</sup> In the manuscript cited as *G. amarella* (L.) H. Sm.





**13)** Castle Hill Brenchley. R[oa]dside E of Capel, 1945 **MNE**. Top of Clay Hill, Lamberhurst JRW. Between Tibbs Court and Cryalls Farm, Brenchley, JRW. Lane E. of Sandhole JRW. N[ea]r Hillcrest, Lamberhurst Quarter, JRW, **MNE** 44! Roadside N. of Flimwell JRW. R[oa]dside E of Glassenbury, 1944 **MNE**. R[oa]dside, Angley F[ar]m N. of Cranbrook Station. By Scarletts Pond, Cowden. Winchet Hill. By Cottages at top of Pullins Hill, Horsmonden JRW. Roadside W. of Horsmonden JRW. Kippings Cross to Pembury JRW. N. of Horsmonden. S of Matfield. N. of Matfield. E. entrance to Angley Wood, Cranbrook. A21 Roadside 1 mile SE of Lamberhurst. Roadside E. of Sissinghurst JRW. Roadside W. of Biddenden JRW.

**14)** Hawkhurst (white Fl[ower]s) JRW. Stone in Oxney. Roadside, W. of Wittersham. N (Tenterden.) (Rolvenden.) N. of Sandhurst.

**16)** [Bombed site, Hythe, 1847, Miss V. Day.]

Locally plentiful in Surrey and Sussex, particularly in the Weald; very local in Essex; very common indeed in woods and hedges in the Pas de Calais; the Continental distribution suggests that it is native in Britain, at least in the S.E.

‡ **V. major** L. Greater Periwinkle. 15, 16

Alien, planted or escaped from gardens, but naturalised on hedgebanks in many places in Kent; it never occurs in semi-natural vegetation and is always near homes and in villages and towns.

1<sup>st</sup> record, 1715: between Knowlton and Deal J.Sherard, in Ray, Synopsis, 1724 (ed.3), p.268.

**1)** 97 Abbey Wood, 1954, G.A. Matthews. 46 SE of Chelsfield, 1930, P.H.C.

**2)** 67 R[ai]l[wa]y Crossing, W. of Shorne 695737, 1961, H.M.P.

**3)** 06 Church La[ne], Seasalter, 1958 HMW. Thickets, Perry Wood, 1946, DHK.

**6)** 77 R[oa]d S. of Cliffe, 1944 **MNE**. 77 Waste ground, Upnor, 1944. 57 Beechwood, Stone, 1948, H.M.P. 57 Lane's End, Darenth, PCH. 67 Disused chalkpit, Northfleet, '61, HAS. Great Wood, SW of Roadgate, 1955, DMcC. Cockham Woods, Upnor 51 DMcC. By Fawkham Ch[urch], Mrs D Woods 1956.

**8)** 14 Lane W. of Lyminge, 1949 **MNE**.

**10)** 57 Copse at Darenth 5671, 1956, HMP; 1961, J.R. Palmer.

**11)** 66 Birling village, 1943. 75 Hedgebank S.E. of E. Malling. 64 Hedgebanks Beltring; 65 Nettlelead; 74 S. of Collier Street. 66 Trottiscliffe, 1948. 65 Skeet Hill N. of Plaxtol 1957 **MNE**.

**12)** 94 Hothfield! **MNE**; 1903 A.G.D.

**13)** 63 Escape from Court Lodge Grounds, Lamberhurst JRW. 64 Lane W. of Matfield Old Church, JRW. By cottages n[ea]r top of Pullens Hill, Horsmonden JRW. Combwell Wood 1896 JS **TLS**.

## SOLANACEAE

‡ **Nicandra** Adans.

**N. physaloides** (L.) Gaertn. [Apple-of-Peru. 15,. 16.

Casual.

**1)** Erith, c.10 plants on spread ashes, 1951, B.W., J.C.C. & J.E.L. (Hb. Lousley).

**6)** Northfleet, Syme.

**8)**

Elham sq[uare] '55

**9)** Margate, Syme.

**10)** Bed of Zinnias, High St[reet], Sevenoaks, 1958 (photo in *Sevenoaks Courier*).

**11)** E Malling R.S., 1943, F. Forsyth, det. C. West.

**Lycium** L.

‡ **L. barbarum**<sup>723</sup> L. {Duke of Argyll's Teapant. 15, 16.] 19/51

Naturalised in hedges and waste ground, especially near the sea.

**1)** W. Wickham sq[uare] 1956, Woolwich sq[uare] 1955

**2)** 67 Denton, R[iver] wall, 1959, HAS. 97 Minster (Sheppey) AG Davis 1917 **MNE**; abund[ant] in lanes near sea, 1944, D.H.K. E of Oare Creek 1950 REW. 87 Fenn St[reet], St Mary Hoo, 1955 **MNE**. 77 High Halstow, 60, HAS. Tinbridge R[ai]l[wa]y Br[idge] Faversham Mrs Bickenden '59.

**3)** Reculver fort, 1950 REW. Swalecliff Brickfield 1950 REW. W. of Whitstable 102660 on Golf Links HMW. 103664 Deck House, Island Wall, Whitstable, 1958, HMW.

<sup>723</sup> Given as *L. halimifolium* Mill. In the manuscript. It is not clear whether there was any intention to map this species and the next, or whether mapping might be applied to the aggregate. Hectad numbers are listed against *L. barbarum* (*sensu stricto*) which appear to include records which are given in the text for the aggregate, rather than either species.

- 6) Dartford sq[uare] 1956, Gravesend sq[uare] 1955, Higham 1955  
 7) Newington sq[uare] 1956, Teynham 1954.  
 8) W. of Dover, 1956 10 km square. Wingham sq[uare] 1955  
 10) Escape, Sevenoaks, 1957 PCH.  
 11) Naturalised, Edenbridge, DPY 1957. By Medway, Maidstone, 1960, EGP.  
 12) Path hedge, St Stephens, 1958, Miss M.E.M.  
 16) Folkestone 1955.

[‡] *L. chinense* Mill. (*L. barbarum* auct.)

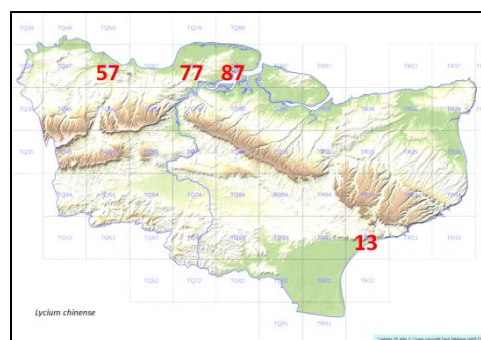
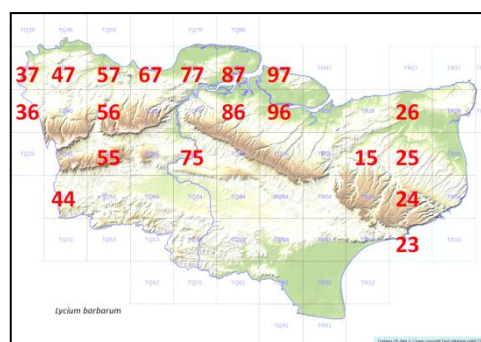
Naturalised in hedges and waste ground, especially near the sea.

- 2) E. of Lower Sfoke, Mrs. A.G. Side, 1958, **MNE**. Village, Grain, 889769, Mrs AG Side, 1958. Grain 1958?  
 6) Dartford sq[uare] 1957, Higham sq[uare] 1954  
 16) Hythe, 1956?

[There are many old records for *L. barbarum* auct. and for *L. chinense* auct: most of these probably refer to *L. barbarum* Mill.<sup>724</sup>

[‡] *L. chinense* Mill. agg. 1<sup>st</sup> record, 1899: Fl. Kent.

- 1) R[ai]l[wa]y bank, Charlton to Westcombe Park, 1918, E.B.B. South Eden Park, Beckenham, 1919, L.J.T. Farningham, by A.20, 1949.  
 2) Conyers Creek, F.R. & C.W. 1943. Northfleet; Swanscombe; Cuxton Station; Upnor.  
 3) Whitstable.  
 4) Sandwich Bay. Kingsdown Beach.  
 6) Stone; Greenhithe; Dartford, 1948-51, H.M.P.  
 7) Near Rainham, E.S.M.  
 9) Frequent in Thanet, L.W.W.  
 11) Birling; W. Malling, W.M. Rogers. E. Malling.  
 16) Folkestone, L.W.W.]



*Atropa* L.

*A. bella-donna* L. Deadly Nightshade, Dwale.

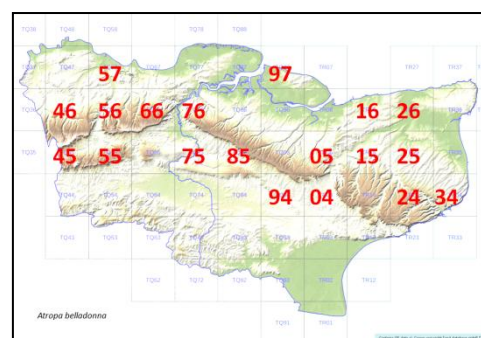
15, 16.

18/51<sup>725</sup>

Native, in scrub and open woodlands on chalk, where it is widespread and locally common in districts 5)-7); much more local in 8); it also occurs on the Thanet sand in woodlands and scrub in 4), where it may also be native; probably a naturalised alien on waste ground elsewhere. Often planted in the past by herbalists, teste A.S. Kennard.

1<sup>st</sup> record, 1632: Margate to Sandwich, Johnson, *Descriptio*, p.24.

- 1) 57 Slades Green, by road to Crayford Ness, 1949. [four old records.] [Sydenham SE Chandler.]  
 2) 97 Sheerness Dock yard, O. Davis.  
 3) 16 Old R[ai]l[wa]y track ¼m S. of Whitstable Harbour HMW, naturalised here. Whitstable  
 4) 26 Wood on Thanet Sand, S.W. of Preston Church, L.W.W. 26 On Lampen Wall, Stodmarsh L.W.W. ‡ Shrubberies, Sandwich Sta[tion] KEB. 26 Back at Grove Ferry, L.W.W.; REW.  
 5) 56 old chalk pit, Farningham R[oa]d Sta[tion] PCH. 46 Jewells Wood, 1916, AG Davis **MNE**. W of Saltbox, Biggin Hill in chalk scrub @ 500', 1956, R.A.C. 46 Downe, 1956, R.A.C. 56 Lullingstone Park, in beechwood, 1954, abundant. 55 Beech wood above tunnel mouth, Polhill, abundant, 1949, **MNE**. 55 chalk pit, Morants C[our]t Hill, 1946 **MNE**.



Chisle

Orpington, Westerham, S[even]oaks

<sup>724</sup> Given as *L. halimifolium* Mill. In the manuscript.

<sup>725</sup> The total of 18 hectads appears to have computed by omitting TQ94.

- 6) 56 Chalk scrub E. of Lower Austin Lodge, Eynsford, 1950 **MNE**. 57 small beechwood on chalk, 553729, ½ mile S.E. of Dartford, 1944; 1948, HMP. 57 Chalk pit S. of A.2, The Thrift, Stone, 1945 **MNE**. 57 Darenth Wood, on chalk, 1945. [Stone House, 562742, 1948, HMP.] 56 Beechwoods, White Hill, Shoreham, 1958. 56 Dunstall Woods, Shoreham. 55 Greenhill Wood, Otford 1949 **MNE**. 55 Kemsing. 66 Wrotham Water Downs. 66 Trottscliffe Downs. 66 Ryarsh Downs. 66 W. of Snodland. 66 Pilgrims Way E of Wrotham. 66 Beechwoods above Halling. 66 Scrub above Halling Warren Maidstone, Farningham, Cobham, Chatham, Dartford.
- 7) 76 Burham. 85 Hollingbourne. 94 Westwell. 76 Bluebell Hill. 75 Boxley Warren, FGEK; 1954 **MNE**. 75 Boarley Warren. 05 Park Wood, Molash, 1949 **MNE**. Chilham, Hollingbourne, Westwell, Ashford square
- 8) 15 Bridge Hill, a[bandant]. 15 Bourne Park, Bishops bourne, F.G.E.K.; 1949! 15 Whitehill Wood, Nackington, 1957 **MNE**. 15 Burstled Wood, L[owe]r Hardres, 1949, LWW. 15 Wood by Westwood Farm, Bishopsbourne, abundant, L.W.W. 13 Beechborough Woods, Mrs Walton, 1939. 24 Hillside above A2, Mrs KDR, 1960. 25 Brambling chalk pit. 24 Lousy berry Wood, T[emple] Ewell, 292443 Mrs KDR, 1959-60. 34 Chalk Banks, scrub and woodland around Dover Castle, abundant, 1946-62. Canterbury, Wingham, Sandwich, Dover
- 10) 57 scrub n[ea]r R[iver] below Darenth, 1954 **MNE**. 55 Knole Park, l[ocally] a[bandant] on ragstone, 1955. 57 Central Park, Dartford by R[iver], 546733, 1954, HMP.

### Hyoscyamus L.

**H. niger** L. Henbane 15, 16

18/51<sup>726</sup>, possibly native 7/51

Native. Open scrub, stony ground and rabbit warrens on the chalk downs; sandy and shingly waste ground near the sea; rare. Also found as a casual alien in waste ground inland. This rather sinister-looking plant has a most unpleasant musty odour. The seeds were formerly used in Kent as a cure for toothache, teste A.S. Kennard.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

1) [Several old records for the suburban areas, out to Dartford Heath and gravel pits.]

2) [Plumstead Marshes, A.H.W.D.] 77 one plant near Canal, Higham, 1943. [Grain, B.D.J.] [Old records about Faversham and Minster.] 06 Harty, n[ea]r the Ferry, 1946. 06 Seasalter, waste g[roun]d 1957 HMW. Higham, Faversham

3) 16 Beach W. of Whitstable RGW; by Boating Lake HMW. 06 Field, Hernhill, 1946-7, C.R. Theobald. 06 Seasalter Parade 1950 REW.

4) 35 Gravel pits by Ramsgate Road, N. of Sandwich, Fl. Thanet; 1946! Sandwich Bay. 1962, Mrs R. Begg.

Sandwich

6) 57 Darenth Rd., Dartford, 547737, HMP 1958. Stone Lodge F[ar]m yard, Stone 563742, HMP, 1952-58. ‡ 66 Ryarsh Downs, by rabbit warren, locally abundant, 1945, **MNE**. ‡ 66 Halling Downs, E.S.M. & A.H.W.D.; in chalky sunken lane, PCH. 57 Garden and allotment weed, Stone, 1948-52, H.M.P. Cobham, Dartford

7) ‡ 75 Boxley Warren, F.G.E.K.; 1887 **MNE**; F. Forsyth, c.1930. ‡ 85 Down W. of Hollingbourne Hill, 1887 **MNE**; around rabbit-warren, 1947. 95 Newnham gravel pit, 1950, REW. 94 abund[ant], arable field, Eastwell Park, PCH. [94 Westwell, E. Scott.] 05 field above Chilham Corn Mill, 1959, Mrs Brickenden. Burham, Hollingbourne

8) ‡ 13 Downs above Postling, abundant in places, 1942-47, **MNE**. 24 Whinless Down, Elms Vale, Dover, 1961, Mrs K.D.R.. [Below Shakespeares cliff, several old records.] [Folkestone Warren, G. Walton.] [14 Casual, Denton, pre-1956, Miss DACL.] Hythe

[9] Extinct.]

10) 55 on ashes, Kemsing Station yard, 1946, DMCC.

Sevenoaks

[11] 75 casual, James Street Maidstone, 1959, E.G.P., **MNE**. [85 Fairbourne Mill, 1960, Mrs B Dodds.]

[12] [old records at Ashford.] 85 Canterbury Stadium, 1957, Miss MEM.

15) ‡ 13 Hythe beach, Duthie; 1949! 02 Littlestone beach, E.S.M.; 1950! 01 Midrips, 1951, P le Brocq. [Romney Warren NE of Dymchurch, etc., F.J.H.] Hythe, Romney

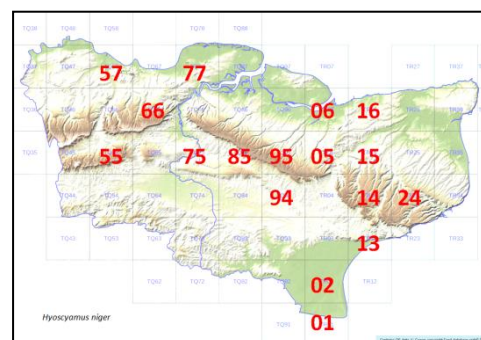
[16] Sandgate, G. Walton.]

[‡] *Salpichroa* Miers

[‡] *S. oranifolia* (Lam.) Thell.<sup>727</sup> [Cock's-eggs.]

<sup>726</sup> This total should be 17, hectad TQ75 having been double-counted.

<sup>727</sup> No records cited for this entry.; author citation given as (Lam.) Baill.





‡ **Physalis** L.‡ **P. alkegeni** L. [Japanses-lantern. 16.]

Garden escape.

1) waste land, Keston, P.H.C. (Hb. LNHS).

11) Platt Brickfield 620575, DMcC.

‡ **P. ixiocarpa** Brot. [ex Hornem.]11) Comp, in "shoddy" field, D.McC., 1960 **MNE**.‡ **Lycopersicon** Mill.<sup>728</sup>‡ **L. esculentum** Mill. {Tomato. 15, 16.]

A frequent casual; often established for some years at a time on beaches near sewage effluents, its seeds [apparently] being derived from sewage.

1) Dartford Heath 519735, 1956, HMP.

2) Established on beach, St Marys Bay, High Halstow, 1958 **MNE**.

8) Beach, Lydden Spout.

10) Sevenoaks tip, 1958, CAS.

**Solanum** L.**S. nigrum** L. [Black Nightshade. [15, 16.] 51/51<sup>729</sup>

Native. Waste and cultivated ground, sea shores and dunes; very common all over Kent, especially in highly cultivated areas.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.1) Shooters Hill, 54, GMB. 36 Tip n[ea]r Hayes Station, 395660, 1958 PCH. Elmers End 1915 AG Davis **MNE**. Bexley Ch[urch] y[ar]d, PCH. Farningham Wood PCH.

2) Waste g[roun]d, Crossness PCH. Garden weed, Sheerness, O Davis.

5) Field W. of Eynsford PCH. Pilgrims Way Polhill PCH.

6) S. of Mounts Wood PCH. The Thrift, Bean, PCH. Wingate Wood edge, PCH.

8) Ringwould; Martin; Ripple, E. Langdon, Mrs B Nash 1957. Arable S. of Barfreton DMcC.

9) 55 Sevenoaks tip 1958 CAS.

10) St Johns Jerusalem, PCH. S. Darenth, waste g[roun]d, PCH. Wall, Shoreham Village, PCH.

11) Edenbridge rubbish tip 451455, 1956, DPY.

13) Wood SW of Pembury, 614395, PCH.

14) R[ai]l[wa]y Station, Tenterden, 1959 **MNE**.

15) Dungeness beach, 93 Shirley Moor ES. Romney Warren.

**var. miniatum** Bernh.<sup>730</sup>3) Beach W. of Whitstable (with typical *S. nigrum*, plentiful) 1875, F.M. Webb; not noted since.**var. luteo-virescens** (Gmelin)<sup>731</sup>

2) Faversham, Waste ground, T.B. Blow BEC Rep (1875), p.21.

11) Tonbridge, Doody, MS, p.149. Field, Addington, DMcC, 1948; 1950!

**S. dulcamara** L. [Bittersweet 15, 16] 51/51<sup>732</sup>

Native. Open woods, hedgebanks, waste ground, fen carr, shingle beaches; very common throughout the county, absent only from highly saline and highly acid soils.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.1) Hayes Common. Holwood Park, PCH. 47 Shooters Hill Woods '54, GMB. 47 Elmstead Woods, 1956, Miss A. Mills. 57 Dartford Heath, '54, G.M.B. 36 Elmers End, 1915, AG Davis **MNE**. 47 N. Cray Wood PCH. 47 Bexley Ch[urch] y[ar]d, PCH. 46 Crofton Heath, PCH. 57 Joydens Wood, PCH. 56 Farningham Wood PCH; 82!<sup>728</sup> Given in the manuscript as *Lycopersicum*, without authority cited.<sup>729</sup> The total is not fully evidenced by the records<sup>730</sup> Given thus, but better cited as (Bernh. ex Willd.) Hartm. and is a synonym for *S. villosum* Mill.<sup>731</sup> Given thus, but better cited as (C.C. Gmel.) Kirschl.; also a synonym for *S. villosum* Mill.<sup>732</sup> The total is not fully evidenced by the records.



- 2) 47 Woolwich Arsenal PCH. 47 Sewer Bank, Plumstead, PCH. 67 Denton Marshes f[requent], 1960 HAS. 97 Sheerness Canal Dump '57, OD. Oare Pond Meadow 62 HMW.  
 4) 35 Ham Fen, abundant locally in carr. 35 Deal Links, 1954 **MNE**. Sandwich Bay.  
 5) 36 Copse W of Highams Hill, 397612, PCH. Darwins Bank, Downe, '55 JEL.  
 6) 65 Wrotham, r[oa]dside PCH. 57 Mounts Rd PCH. 57 Mounts Wood, PCH. 56 Romney St[reet]. 66 Halling Warren, PCH.  
 7) 95 Belmont Park, D.McC., '58, **MNE**.  
 9) 55 Sevenoaks tip 1958 CAS. Westerham Wood 82. 57 St. Johns Jerusalem PCH. 56 W. of S. Darenth, PCH. 56 R[iver] Path below Shoreham PCH.  
 11) 44 Edenbridge rubbish tip, 451455, 1956 DPY. 54 R[ai]l[wa]y, Hildenborough, 563482, CAS.  
 13) 53 Lamberhurst, 1956, PCH.  
 15) 01 Dungeness beach, **MNE**. 13 Hythe N. Beach **MNE**.  
 16) 23 Sea front, Folkestone→Seabrook + white fl[ower]s 1944 DHK.

**var. marinum** Bab. (is this a good var?)

- 2) 87 Isle of Grain beach, BDJ; 1959!  
 4) 35 N. of Deal, E.S.M; 1949!  
 15) 01 Dungeness, F.J.H.; (1959!). 13 Hythe, C.E.B. (1947!). 02 Romney, FJYH; (1947!). 02 Dymchurch, F.J.H.

**var. vil[il]osissimum** {Desv.]

- 8) 23 Sugar loaf, Folkestone, 223378, 1948, D.McC.

[‡] **S. tuberosum** [L.] [Potato. 16.]

- 10) Casual, Sevenoaks tip, 1958, CAS.

‡ **S. rostratum** Dunal<sup>733</sup> {Buffalo-bur. 15.}]

- 11) Langley, D. Grant, 1958 **MNE**.

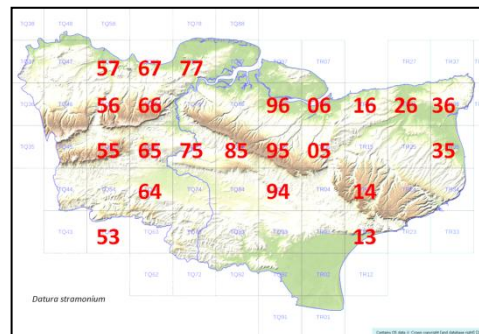
**Datura** L.

**D. stramonium** L. Thorn Apple. 15, 16 22/51

Introduced, seldom persistent in any one place, but occasional in waste ground and highly-manured fields. In the hot summer of 1959 it appeared and flowered and fruited well in a large number of places. The var. *tatula* occurs occasionally.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.* p.108.

- 1) Garden Weed, Hayes Old Rectory, 1933-36, D. McC. Many old localities.  
 2) 96 Naval Air Station, East church, Sheppey, 1917 AG Davis **MNE**. 57 Field, Dartford Marshes, 1957 PCH; by r[oa]d S. of Longreach Tavern 1962. 05 Waste g[roun]d, Boughton Street, 1961, Joe Gurr.  
 3) 16 Whitstable, 1957, HMW. 06 Seasalter, market garden, 1959, HMW.  
 4) 26 Sarre, 1962, Mrs R Begg. 26 E. of church, Stodmarsh, 1950, REW.  
 6) 57 Cotton Lane, 1951. N. end, 582730, Darenth Wood, 1952, H.M.P. 67 Ashenbank Wood, 1961, abund[ant] on tip heaps, HAS. 57 Rubbish tip, Stone, 562742, 1 plant, 1948-51, H.M.P. 57 Bow arrow lane, Stone, 1959, HMP. 66 Hartley, 1959, HMP. 57 Stone Lodge F[ar]m y[ar]d, 1959, HMP.  
 6E) 77 Sharnal Street Sta[tion] siding, 1958, PCH, JFH.  
 7) 95 Field, above Cobham Farm, Lenham, 1950, **MNE**.  
 8) [between Walmer and Kingsdown, Syme (var. *tatula*(L.)).] Denton, casual, pre 1956, Miss DACL. 35 G[rea]t Mongeham, Miss J. Moore, 1960.  
 9) 36 Stone gap, Broadstairs, 1947, L.W.W. 36 Margate, 1949, L.W.W. Old records in Fl. Thanet.  
 10) [Greatness, potato field, (var. *tatula* (L.)) Rudge BM.] 56 Lullingstone Castle garden weed, 1952, HAS. 55 Sevenoaks gas works, 1957, K.E.B.



<sup>733</sup> Erroneously cited as Duval.

**11)** 95 S. of the Rocks, E. Malling, in fields covered with “shoddy”, also var. *tatula* (L.), 1945, J.E.L. & F.R. 65 The Dene, Borough Green, '57. Miss C. McD. E. Malling Research Station, **MNE**. 75 Hermitage Farm, Barming, 1945. 75 Gravel pit E of Aylesford Bridge, R. Hardwick, 1959. Stone House, Boxley 1959, J.F.D. Frazer. 55 Fairhill, 1948, DMCC. 75 M.20, N. of Maidstone, 1960, EGP. 75 Ditton Quarry, 1959, C. West. 64 Farm, Paddock Wood, 1953, Miss J. Wright. 35 Leeds, 1959, AF Musselwhite. 65 ...cleared area, Hurst Wood, Comp., 1959, GH Morton. 35 Fairbourne Mill, 1960, Mrs B. Dodds.

**12)** 94 Camp, Hothfield Common, 1945. 94 Chylmington quarry, 1957, E.S.

**13)** 53, 589386 T[unbridge] Wells, 1960, E. Shorrocks.

**16)** 13 Hythe Brewery, 1947.

**Nicotiana** L.

**N. rusticana** L. [Wild Tobacco. 15.]

**12)** Street House, Willesborough Lees, Miss V.M.P.Day, 1953 **MNE**.

## CONVOLVULACEAE

**Convolvulus** L.

**C. arvensis** L. Bindweed. 15, 16 51/51<sup>734</sup>

Native. Fields, hedgebanks, waste and cultivated ground of all kinds, sand-dunes, beaches; abundant on all except waterlogged soils throughout Kent. A noxious weed of gardens in Kent. Common in all adjoining counties and in N. France.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

**1)** Farningham Wood, S bank, '82. Bexley → N. Cray by R[oa]d PCH. Shooters Hill Woods, GMB '54. Ruxley pits '58, TH Angel. Dartford Heath, 54, G.M.B.

**2)** Woolwich Arsenal PCH. Plumstead Sewer Bank. Sheerness Canal Dump, '57, OD. Garden Weed, Sheerness 56 Mrs Bryson.

**3)** Weed Murtons F[ar]m Graveney '56 R Theobald. Seasalter, in gardens, 1959 **MNE**. Cornfields E of ch[urch], Seasalter, 094647 – 100651, 1958, HMW.

**4)** Sandwich Bay.

**5)** Field W of Farnborough PCH. Pilgrims Way Polhill PCH. 36 W. of Highams Hill, 397612, 1958 PCH.

**6)** Pilgrims Way, Wrotham PCH. Mounts Rd PCH. Cornfield Buckland Rd, Luddesdown PCH.

**10)** R[oa]dside, Eynsford PCH. Sevenoaks tip, 1958, CAS. St Johns Jerusalem PCH. W of S. Darenth PCH. R[iver] path below Shoreham PCH.

**11)** 593573 SW of Ightham Court (on F[olkestone] Sand) '51 DMCC. E Malling – v[ery] a[bundant]. Chegworth, Harrietsham, 1960, Mrs B Dodds. R[ai]l[wa]y bank, Edenbridge, 1956, DPY. R[ai]l[wa]y bank Hildenborough CAS.

‡ **C. sabatius** ssp. **mauritanicus** (Boiss.) Murb.<sup>735</sup> [Great Blue Convolvulus. 15.]  
Alien, N. Africa.

**15)** With *Althaea officinalis*, seafront, Seabrook, 1944 (“prob a garden escape”) DHK.

**Calystegia** R. Br.

**C. soldanella** (L.) R. Br. Sea Bindweed. 15, 16.

Native. Sand dunes and sandy beaches, usually in *Ammophiletum*; rare, but locally abundant in suitable habitats in 2), 4) and 15), though it has disappeared from districts 3), 8) and 9).

1<sup>st</sup> record, 1597: Isles of Thanet and Sheppey, Gerard, *Herbal*, p.690.

**2)** Beach near London Stone, Isle of Grain, 1949, R.A.B. & F.R. Beach ½ mile N. of Grain Church, 1958, Mr. & Mrs. Side (1959, frequent locally!). Beach W. of Scrapsgate, Minster, 1947 **MNE**. Shellness in Sheppey, 1777, E. Jacob; 1946-62 locally abundant in *Ammophiletum*! **MNE**. Deadmans Island, W. of Queenborough, on cockleshell beach, O. Davis.

[**3)** Swalecliffe Beach, L.W.W., c.1949; now gone.]

**4)** Patch 4' x 5', Reculver Beach, 1964, J Gurr. Dunes, Sandwich Bay, Jacob, 1777; abundant from N. of Deal nearly to Shellness point, 1946-59, among *Ammophila*! **MNE**.

<sup>734</sup> Note the lack of evidence for ubiquity.

<sup>735</sup> Given in the manuscript as *C. mauritanicus* Boiss.

[8] Shore below cliffs W. of Dover, Petiver & Sherard; SidneyWebb; extinct. Lydden Spout, CPSK. Folkestone Warren, Miss Young.]

15) New Romney beach C.P.S.K. (Greatstone dunes, locally abundant, 1946-58!) **MNE**.

**C. sepium** (L.) R. Br.<sup>736</sup> Hedge Bindweed. 15, 16 51/51<sup>737</sup>

Native. Hedges, Wood-borders, scrub, Alder carr, drying out fens and waste ground, and gardens. Very common throughout Kent. Common in all adjoining counties and in N. France.

1<sup>st</sup> record, 1629: Gillingham, Johnson, *Iter*, p.5.

1) 46 Hayes Common. 46 Keston Village. Shooters Hill Woods 1954 GMB. Beckenham AG Davis 1914 **MNE**. 57 Joydens Wood. 57 SW of Dartford. 56 Farningham Wood; 82! 47 Ruxley pits, 58 TH Angel. 46 Crofton Heath PCH. 56 Upper Hockenden, Swanley, PCH. 47 By R[iver], N. Cray, PCH. 36 Pickhurst Mead, 395668, Hayes, '58 PCH.

2) 47 Sewer bank, Plumstead, PCH.

3) Chislet, Miss M.E.M.

4) 34 Kingsdown Beach, 1946, **MNE**. 26 Plucks Gutter, Miss M.E.M. Sandwich Bay. Ham Fen.

5) Pilgrims Way, Polhill PCH.

6) 55 Wood Beechy Lees, Kemsing PCH. 57 Mounts Road, PCH. 66 Buckland Rd, Luddesdown PCH.

10) St John's Jerusalem PCH. S. Darenth, PCH. R[iver] path below Shoreham PCH. Lullingstone, 1956 **MNE**. Sevenoaks tip, CAS, 1958.

11) (gault) Platt Brickfield, 620575, DMcC. Penenden Heath EG Philp.

13) 63 Lamberhurst 1956 PCH.

16) Court-at-Street, 1958 **MNE**. Hythe Hill, (pink flowered) Miss V. Day, det. CAS.

Common in all adjoining counties and in N. France.<sup>738</sup>

#### **C. sepium x silvatica**

13) Hedges and fences, Hilbert R[oa]d Tun[bridge] Wells, CAS.

51/53, 54, 63, 64.

**C. pulchra** [Brummitt & Heywood Hairy Bindweed. 15, 16.]

3) Bysing Wood, Oare, 1959 **MNE**.

8) Between Up[pe]r Hardres and Bossingham, 1962 Mrs B.

10) Sevenoaks Station 1960, CAS.

11) Brungers F[ar]m S. of Ulcombe, 1958 **MNE**.

12) Chartham, Mrs B., 1961-62.

13) Hedge, Bopeep, Pembury, 51/64, CAS. Hedge, Western Rd., Tun[bridge] Wells, 51/54, CAS. By Culverden arms, T[unbridge] Wells; Hedge opp[osite] Cross Keys, Southborough; Waste ground, Caley Rd.; and n[ea]r Gas Works, High Brooms, all 1950, KEB.

**C. silvatica** (Kit.) Griseb. Large Bindweed<sup>739</sup> 15, 16 38/51

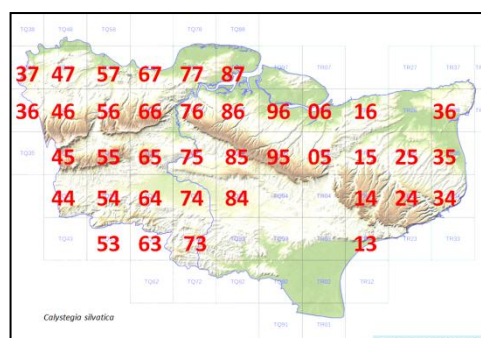
Alien, completely naturalised in hedgebanks and waste ground; abundant in the metropolitan area 1) and in N.W. Kent generally; scattered and locally frequent through the rest of the county except for 2) Sheppey, 15) Romney Marsh, Dungeness and 14) the S.E. part of the High Weald, in which areas it is so far unrecorded.

1<sup>st</sup> record, [no entry]

1) West Wickham on rubbish JM Sherwood. Upper Hockenden, Swanley, PCH. R[oa]dsides, Bexley Village, PCH. N. Cray Wood, PCH. Beckenham, 1915, AG Davis, **MNE**. 37

Blackheath 56, 47 Bexley 55, 57 Dartford 54, 36 W Wickham 1956, 46 Orpington 1954.

2) Plumstead Marshes, 1951 (rose-coloured fl[ower]s) JEL et al.



<sup>736</sup> Given in the manuscript as *C. sepium* (L.) Rosem. & Schut. Great Bindweed, "Bell bine", "Granny jump out of bed; Granny's nightcap" (Folkestone).

<sup>737</sup> Note the insufficiency of evidence of ubiquity.

<sup>738</sup> Repetition.

<sup>739</sup> In the manuscript given as Large white Bindweed.

- (Hb. L.). Waste G[roun]d, Crossness, PCH. 87 Grain 54
- 3) 06 Seasalter, waste g[roun]d 57. 16 golf course, Whitstable, 1957 HMW. ....Whitstable 57
- 4) Kingsdown beach, 1946 **MNE**. Sandwich 1954, 25 Wingham 1958, 35
- 6) Hedges, Northfleet. The Thrift, Bean. 56 Eynsford 1954, 66 Cobham 1955, 67 Gravesend 55, 77 Higham 54
- 7) R[oa]dside N. of Putt Wood, 1956, ES 95 Doddington, 76 Chatham 54, 86 Stockbury 54, 96 Teynham 56
- 8) 15 Bishopsbourne, 1960 **MNE**. 24 Chilton F[ar]m, Alkham 1958 Miss B Nash. 25 Barham Downs, 1958, Miss B Nash. 14 Chilham 1954, 24 Elham 1956, 34 Alkham 1958, 05 Dover 1954. 15, 25
- 9) 36 E Thanet 55
- 10) Sevenoaks tip, 1958, CAS. Sevenoaks Brickworks 1951 DMcC. Eynsford PCH. Waste g[roun]d, S Darent PCH. 45 Westerham 1954, 55 Sevenoaks 1955
- 11) Borough Green DMcC. Platt Brickfield 629575 DMcC. 65 Borough Green sandpits 1946 **MNE**. 64 Hale Street, E Peckham 1948 **MNE**. 65 Hedge n[ea]r "Startled Saint" Inn W. Malling 1960 **MNE**. 85 E. Street, Harrietsham, 1960, Mrs B. Dodds. 75 By Medway, Maidstone, 1960 EGP. 75 Pendenden Heath EGP. 44 Edenbridge rubbish tip 451455, 1956, DPY. Edenbridge 1955, Tonbridge 1955, Pembury 1956, Marden 1954, Headcorn 1956, Malling 1954, Maidstone 1954
- 12) 04 Ashford, 1954
- 13) 594428, Old Forge F[ar]m, Southborough, 1955, CAS. 53 Tunbridge Wells. 63 Lamberhurst. Garden, Cornwallis House, Cranbrook Town, 1956, **MNE**, DS. Tun[bridge] Wells, Lamberhurst 56
- 16) Canal Bank Seabrook Miss V Day 1960. Folkestone Town centre Miss V Day 1960. Hythe 1956

### **Ipomoea L.**

- ‡ **I. purpurea** Roth<sup>740</sup> [Common Morning-glory. 15.]
- 16) Climbing over hedges, Coolinge Lane, Folkestone, 1944, D.H.K.

### **CUSCUTACEAE**

#### **Cuscuta L.**

- ‡ **C. campestris** [Yunck] [Yellow Dodder. 15.]
- 3) Clover field, Sturry, Mrs J. Oldaker, det. Youncke.

#### **[C. europaea L. Greater Dodder. [15, 16.]**

Native. Parasitic usually on nettles, mostly by riversides; apparently long extinct in Kent. Some of the old records given under this species probably refer to *C. epithymum*; earlier writers did not always clearly distinguish them. The seven records that appear to indicate this species are given below.

1<sup>st</sup> certain record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.31

- 7) Faversham, E. Jacob, loc. cit.
- 7) on Furze and nettles between Key Street and Stockbury Valley, J Newton, MS notes, p.85 (c.1611-1689).
- 8) Roadside, Barham to Kingston, FGEK (the Nail Bourne flows along these).
- 9) Hedges near Cheesmans, Nash Court, and Nash, Fl. Thanet: probably this species, as i) *C. epithymum* is unlikely to be found in a hedge; and ii) *C. trifolia* is also recorded in Fl. Thanet.
- 11) Bank of the Medway, Waterringbury, H. Giraud, F.G.E.K. Vetch-field near East Malling, 1864, J.S. Mill (Hb. Mil).
- 12) Water Lane, St. Stephens, Canterbury, J Dix, in Baxter's Brit. Phaenogamous Botany, 1834-43.
- 13) Field n[ea]r Combwell, 1902, on *Vicia sativa*, JS, **TLS**.
- Johnson records (*Descriptio*, 1632, p.15) "*Cuscuta*, Matth. Androsace, Trag." between Margate and Nash. This may have been this species, but *C. epithymum* seems likely. Records also exist for
- 1) between Keston Mark and Caear's Camp bog, Mile & Gordon;
- 8) Coombe and Poulton Valleys, Mrs. Sankey in F.G.E.K.; Nackington, Miss Anderson;
- 10) Crockham Hill, Dickinson; and
- 13) Cranbrook, Crowden:

it appears much more probable to me that these refer to *C. epithymum*.

Very rare and decreasing in Essex, in Sussex (now only at Grantham, R.A. Boniface); very local in Surrey (confined to the valleys of the Thames, Mole and Wey), very rare in the Pas de Calais.

#### **[‡ C. epilinum Weihe [Flax Dodder.]**

<sup>740</sup> Cited as (L.) Lam.

A rare casual, not [recently] observed for generations.

1) Flax-field, Bromley, W.W.R.; Phyt. N.S. IV, p.319.

13) Cranbrook, Crowden (?correct).]

**C. epithymum** (L.) L.<sup>741</sup> Lesser Dodder, Common Dodder 15, 16 16/51

Native. Parasitic on *Calluna* and *Ulex* on heathlands, on various Labiatae and Papilionaceae on chalk grassland, and on a range of plants on shingle beaches; widespread and locally abundant, but not common. Local in Surrey and Sussex, rare in Essex, frequent in Pas de Calais.

1<sup>st</sup> certain record, 1640; "(Epithymum or 2 Cuscuta)"<sup>742</sup> Blackheath, Parkinson, *Theatrum*, p.11.

1) [Blackheath, Parkinson. One Tree Hill, Greenwich, Engl. Bot. p.55.] Keston Common, Pamplin in N.G.B. suppl.; 1946 on *Calluna*! Hayes Common, Irvine, 1838; W.C.R.W. St Pauls Cray Common, E. de C.; W.C.R.W. 57, 5275 Dartford Heath GE Frisby 1916; PHC, 1933; 1950, HMP; **MNE** 1954, G.M.B. Chislehurst (Common?) Bradford N.H.S. *Nature Trans.*, 1883, p.91. Foots Cray, Hb Sim (t[rifolii]). Keston 54, Farningham 55

2) Sheerness to Minster, F.J.H. (t[rifolii]).

4) N. of Sandwich, H. Trimen (t[rifolii]).

5) Chalk grassland, Morants C[our]t Hill, 1948. 430560, Betsoms Hill, chalk g[ras]s[an]d, 1956-1958. RA Clarke.

6) By railway bridge, Galley Hill, A.H.W.D. Eynsford, 1930, R.W.R. Pigrims Way, Otford, 548593, 1952, H.M.P. Downs above Trottscliffe 644610→646610, **MNE**, E of Pilgrims House 1946. Upper Halling, Downs, on *Thymus pulegioides*, *Teucrium scorodonia*, and *Origanum* 1948 **MNE**. Downs S. of Red Wood, Luddesdown, 1950. Ryarsh Downs, 1946. Merralls Shaw, Cuxton, 1954 **MNE**. Northfleet to Gravesend B.D.J. ((t[rifolii])). Greenhithe, Syme (t[rifolii]). Cooling, ESM (t[rifolii]).

7) W. edge of Bridge Woods, F.M. Webb. Charing, ESM (t[rifolii]). N. Wilberton, E. of Belmont Gof Course, 1950, REW. Bexley 54, Boxley 54, Chilham 56

8) Clearing in Denge Wood, near Penny Pot, Mrs B, 1955. Downs by Gravel Castle, Barham. Down, Whitewell Wood, Nackington, 1955 **MNE**. Downs W of Woodville, Temple Ewell, 1955 **MNE**. Langdon Bay, Dover, Mrs. B. Dodds. Deal, H.C. Watson (t[rifolii]). Ripple, Duthie (t[rifolii]). Walmer, Miss L. Day (t[rifolii]). Kingsdown, Mrs. Benson (t[rifolii]). Dover, Miss Anderson (t[rifolii]). Adisham, F.M. Webb (t[rifolii]). Lyminge, ESM (t[rifolii]). Wye, C[anterbury] 55

9) Margate, H. Trimen (t[rifolii]).

10) Fawke Common; Riverhead, Miss Worship Bitchet Green, Roper (t[rifolii]). Westerham, Miss Peers (t[rifolii]). Westerham 56, S[even]oaks 54

11) "nr Tonbridge", Miss Peers. [Penenden Heath, F.G.E.K., on *Ulex*.] [Allington 1887 **MNE**.] [3 miles N. of Tonbridge, Miss Peers (t[rifolii]).] [Maidstone, WWR (t[rifolii]).] [Barden, Tonbridge, 1842, E. Jenner, Fl. Tun[bridge] Wells (t[rifolii]).] [Staplehurst Mrs Petley (t[rifolii]).] [Ashford, Baker (t[rifolii]).]

12) Hothfield Common, G.E. Smith in F.G.E.K.; 1954! **MNE**. [Willesborough Lees, on *Ulex*, C.P.S.K.]

Westwell

13) Cranbrook, A.W. Hudson. Hogshole Common, 1939, J.R.W. Tunbridge Wells Common, E. Forster, *Fl. Tonbr.*; 1891 **MNE**.

14) Heath by Breeches Pond, Tenterden, 1947. Tenterden

15) Dungeness, Dowker (abundant over several square miles of "fixed" shingle beach, on *Teucrium scorodonia*, *Ulex*, *Sarothamnus*, and other plants, 1945-59!) **MNE**; 094168, etc. Dungeness, Romney

## MENYANTHACEAE

**Menyanthes** L.

**M. trifoliata** L. Bogbean<sup>743</sup> 15, 16 11/52

Native, edges of ponds and lakes, swamps, wet bogs and fens, preferring base-rich water, and locally important in hydrosere; formerly fairly common in Kent, now rare and very local; most frequent in district 4). 18 localities. Now only locally common in Surrey and Sussex, very rare in Essex, rather rare in Pas de Calais.

1<sup>st</sup> record, 1629: Erith, Johnson, *Iter*, p.10.

<sup>741</sup> Given as *C. epithymum* (L.) Murr. The references in this account to trifolii are to records originally determined as *C. trifolii* Bab., since treated as synonymous with *C. epithymum*.

<sup>742</sup> This rather odd 'quotation' appears to be a reference to the plates in *Theatrum*, the first of which is labelled "1. *Epithymum*. The Dodder of Tyme" and the second, "2. *Cuscuta*. Dodder".

<sup>743</sup> Also given in the manuscript as Buckbean.



1) 46 Between Farnborough and Keston Mark, Milne & Gordon; By the lakes, Holwood Park, 1938, DMCC; 1947! 1954! **MNE**.

Keston

4) Ham Ponds, F.G.E.K.; 1946! **MNE**. Hacklinge Marshes, 1946. Worth Minnis, 1856. Stodmarsh to Grove Ferry, F.J.H.; abundant, in swamp, L.W.W.; F.R., 1955! 1960! Deerson Marshes, Wingham, FGEK; L.W.W., 1949. Preston Marshes, F.J.H. (1962!). 15 Bretts Lakes, Sturry, Mrs Brickenden 1959. Fordwich Marshes 187604, Fordwich Marshes, D. Stainer; 1962 Mrs KDR.

Sandwich, Chislehurst, Canterbury

11) 93 Pond SE of High Oak, 2½ m. N. of Woodchurch, ES. [Kings Wood, Leeds, E. Bartlett, 1886 **MNE**.] 84 Carr by Pond, W of Leighbridge, Headcorn, 1962, **MNE**.

12) 94 Hothfield Common, W.R. Jeffrey; 965456 (1962! **MNE** abundant in poor fen). Gibbon's Brook, G. Walton; 1954!, **MNE**. 93 "Scott's Pond" at Stubbs Cross, Kingsnorth, E. Scott, (1952!). 93 Pond, N end, Birchett Wood, Orlestone, E. Scott, 1960.

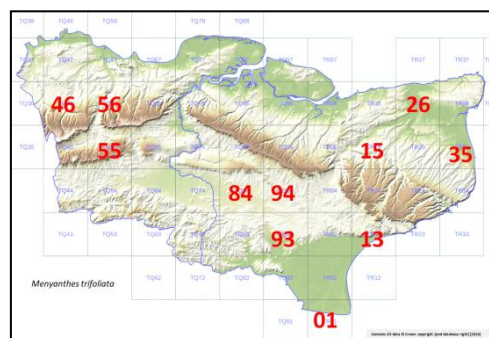
Hothfield, Hythe, Woodchurch

13) Swampy fen, Tuckers Pond, Angley Wood, Cranbrook, D. Streeter & S.M. Walters 1955; (1961!) **MNE**. Dunorlan Lake, Tunbridge Wells, C. Stace, 1956. Camden Park, Tunbridge Wells, 1952, K.E.B.

Cranbrook '55, Tunbridge Wells '56

15) Dungeness, Dowker; By the smallest pond, Hoppen Pits, Dungeness, abundant, 1959! **MNE**. Dungeness  
Old records are as follows:

- 1) Bromley Common; Hayes Common, Milne & Gordon.
- 2) Erith; Snodland Marshes, F.G.E.K. (S. of Snodland, F. Forsyth, to about 1930, not since). Faversham Abbey Meadows, Jacob. Swamp near Bysing Wood, FGEK.
- 4) Minster, Monkton and St Nicholas Marshes, FGEK. Ickham FGEK. Sturry Marsh, Hookham.
- 8) n[ea]r Dover, Miss Anderson.
- 11) near Maidstone H Lamb. Kings Wood, H. Lamb.
- 12) Willesborough Lees, CPSK.
- 14) Hawkhurst, Melville.
- 15) near Lympne, Biron.



## Nymphoides Hill

**N. peltata** Kuntze<sup>744</sup>

Fringed Water-lily.

[15], 16.

Probably native, but also introduced: ponds, very rare.

1<sup>st</sup> record, 1899: near Tunbridge Wells, Wollaston, in Fl. Kent.

7) Pond, at Paddock F[ar]m, Challock, 1954 CNP.

11) W) Pond, Fairhill Park, Hildenborough, Miss H. Turnbull (?introduced).

11) G) Castle Lakes, Leybourne, abundant, 1955, **MNE**. In these worked-out flooded gravel pits it was probably introduced by one of the numerous waterfowl which frequent this locality. Hever Park Lake, 1955, CAS.

12) Pond, Kingsnorth, CNP, 1954.

13) Upper Lake, Bedgebury, 1946, **MNE**; probably introduced. (Lake, 648365, Bayham Park, just into Sussex, C. Stace.)

15) R[oyal] M[ilitary] Canal, Appledore, abundant, 1960 Mrs B Dodds, C A Lister; 1962!; 1992.

Rare but probably native, in and near the Thames in Surrey; in the Ouse levels in Sussex; and in Pas de Calais (plains of Flanders only). Extremely rare and possibly extinct in Essex.

## POLEMONIACEAE

[**Polemonium** L.

‡ **P. coeruleum** L.

[Jacob's-ladder.]

Alien. Formerly abundantly naturalised in 1) about Shooters Hill, Foots Cray, Lewisham, and New Cross, accordingly to Milne & Gordon, p.305; 10) Farningham 1850 **MNE**, 11) on a bank above the Medway between Penshurst and Maidstone, J.E. Little; one recent record as a naturalised alien, in 1) gravel pit, Hayes, St.J.M., B.E.C. 1927 Rep., p.311 (1928).

<sup>744</sup> In the manuscript cited as (S.G. Gmel.) O. Kuntze.

This species, now found very locally on limestone in N. England, was widespread in Southern England in the late- and early Post-Glacial, as pollen records in peat show.]

‡ **Phlox** L.

‡ **P. paniculata** [L.

Phlox.

16.]

‡ **10)** Sevenoaks tip, 1958, CAS.

## BORAGINACEAE

**Lithospermum** L.

**L. purpureocaeruleum** L.<sup>745</sup>

Purple Gromwell.

[16.]

Native. Coppiced woodland and scrub on chalk soils; extremely rare.

1<sup>st</sup> record, 1793: Dartford, in *Engl. Bot.*, p.117.

**6)** Darenth Wood, numerous records from 1797 (loc. cit.); 1821, Hooker, *Fl. Lond.*; Syme, *Engl. Bot. Ed. III*, vol.VII, p.95; Edwards, *Phyt. I* (1843) p.580; to 1866, *Report of the Society of Amateur Botanists*, in *Nature*, III, (1866) p.19. It has not been reported in this district since 1866.

Hedge near Stone Castle, between Gravel Hill Wood and Darenth Wood, E. Forster in **BM**; Lane by Darenth Wood behind Stone Castle, 1832, Hb. Borrer **K**; Swanscombe Wood, Pocock, *Nat. Hist. Kent*, p.217.

Careful search by A.H.W.D. in 1893, and by many botanists since, including myself, of Darenth Wood, Mounts Wood, Swanscombe Wood, and The Thrift, has failed to rediscover this species, although there are still considerable areas of Darenth Wood (at the N. and S.E. ends) which remain apparently suitable for it. It must be remembered i) that Darenth Wood is much less extensive than it was; ii) that the Mental Hospital grounds covered a large part of the W. side of the Wood.

"near Halling", Mr. Carrington Ley, teste Rev. C.H. Fielding in *Memories of Malling*, 1893.

Other records, probable or certain escapes from cultivation or introductions are:

**3)** naturalised in shrubbery, M[oun]t Ephraim, Hernhill, 064602, 1956, D.McC.

**7)** [Reported in chalk scrub, Burham Downs (Scarborough Spur), 1959, R. Hardwick: doubtful.] [1 plant in gravel pit, Newnham, 963583, J. Gurr & Mrs. Brickenden, conf. Dr. E. Scott.] [Escape at Harrietsham, 1958, A.D. Harrison.]

**11)** [Bearsted, Miss M. Goslin, 1910 **MNE** – no doubt a garden escape.]

**L. officinale** L.

Common Gromwell.

15, 16.

27/51

Native. Open woodland, coppice, and scrub on chalk and on Thanet Sand; frequent in districts 5)-9), unknown elsewhere. The nutlets of this species, which resemble pieces of shiny white porcelain, are remarkably beautiful structures.

1<sup>st</sup> record, 1597: Southfleet, Gerard, *Herbal*, p.487.

**5)** 403591, W. of Norheads, Biggin Hill, 1957, R.A.C. open beechwoods above the Tunnel mouth, Polhill. Edge of Andrews Wood, PCH. Cuckoo Wood edge, Downe, 446623, 1956, D.P.Y. Hogtrough Hill, Brasted, H.M.W., 1935. Lullingstone Park, 1933, PHC.

Westerham, Downe '56

**6)** On Thanet sand, Brewers Wood, Shorne, 1946. Great Crabbles Wood, Shorne, 1946. Swanscombe Wood, 1945 **MNE**. By A2 Darenth Wood, N. end 579731, HMP, 1956, and in wood F.R. (Greenhithe 1938 PHC.)

On chalk, S.E. of Eynsford, 1934, R.W.R.; by L[owe]r Austin Lodge, 1946! Romney Street, W.C.R.W. Kemsing Downs, A Beadell. Downs N of Trottiscliffe! 637619, 1942 **MNE**; 1957 HMP. Red Wood, Luddesdown, 1947. Merrels Shaw, Cuxton, 1954 **MNE**. Downs above Upper Halling. Scrub, Halling Warren, 1959.

Sevenoaks, W. Malling (Wrotham), Eynsford ^54, Cobham ^54, Dartford ^54, Higham 55

**7)** Chalk scrub, Boarley Warren, 1959. Queen Down Warren, wood by pub, 1962. Longreach Wood, 828600, 1956, D.McC. Chalky wood border, Timbolds Hill, Wichling, 1945 **MNE**. Chalk scrub, S. of Torry Hill, SW of Doddington REW. 030555, 022547, Badlesmere Woods, 1959, C. Turner. Wood N of Milsted, 1998.

Burham, Maidstone, Hollingbourne, Doddington, Stockbury 54, Ospringe 54

**8)** chalk woodland, SE end of Larkey Valley Wood, Thanington 1955 **MNE**. Bank N. of Broadway Green F[ar]m, Pelham, 1951, P le Brocq. Ileden Wood. Woolwich Wood, 1955 **MNE**. Roadside ½m. S.W. of Lydden. Down 278427 S. of Chilton, 1948 D.McC. Langdon Bay, Dover, 1960, Mrs B Dodds. Frandham Wood, River, 1957 KDR. Tappington Valley, Denton, 1960, Miss DACL. Clavertye Wood, NW of Elham, 1957 **MNE**. Folkestone Warren. Castle Hill, Folkestone. 223378, base of Sugar Loaf, 1948, **MNE**. 35 Wood, Betteshanger, 1957, Miss

<sup>745</sup> In the manuscript given as *L. purpureo-coeruleum*, Blue Gromwell.

B. Nash. Swingfield Valley. St Mary Bay 1891 Plumpton.

Westwell,

Canterbury, Wingham, Sandwich 58, Chilham, Hythe, Folkestone, Wye, Elham, Alkham, Dover 55.

9) N. Foreland LWW. Sarre: St Peters, L.W.W.

W Thanet LWW, E Thanet LWW

[13] casual, Rusthall Common, 1950, KEB.]

**L. arvense** L.

Corn Gromwell.

15, 16.

16/51

Native or colonist. Arable land on chalk, occasional; on other dry soils, very rare. Apparently decreasing, probably due to modern farming techniques.

1<sup>st</sup> record, 1597: near Reculver, Gerard, *Herbal*, p.487.

1) [Bromley 1839 **MNE**]

2) Arable, Ham Marshes, Faversham, 1950, RE Wood.

Sheppey,

(?Grain?),

Faversham '56

3) 091648, Seasalter, in arable land on London Clay, H.M. Wilks 1956, **MNE**.

5) W. of Eynsford 1923, WCRW. 46 Arable W. of Halstead, 1947 **MNE**. 46 Downe, 1935, M.M.W.

Orpington sq[ua]re, Downe ^54

6) n[ea]r Dartford, 1876, F.J.H. **BM**. 67 Cornfield W. of Downs R[oa]d, Northfleet Green, 1956 **MNE**. 66 Cornfield on chalk, N. of Cuxton.

Eynsford 54, Cobham ^54, Gravesend 58

7) 76 Cornfield below Wouldham Downs, 1956 **MNE**. 75 Cornfield above Waterworks, Boxley, 1954. 04 Cornfield at Soakham Downs, above Bilting, 1949.

Burham ^54

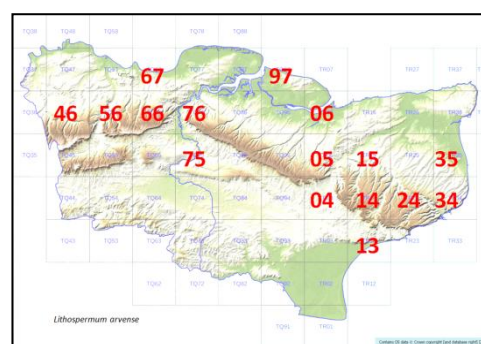
8) 15 Cornfield, Boonnybush Hill, Kingston, 1946, **MNE**; 1957, KDR. 04 Crundale, 1938, Miss J. Nisbet. 35 field above Barville Farm, Tilmanstone, 1957, Miss B. Nash. 34 Arable by old Mill, Ringwoud, 1957, Miss B. Nash. 14 Cornfield, S. Barham, 1957, Miss B. Nash.

Chilham F Perring, Alkham '57, Dover 57, Canterbury ^54, Sandwich 58

11) [65 Borough Green, D.Mc.C., casual.]

12) Waste ground, R[ai][wa]y sidings, Ashford, 1955, Mrs. N. Baker, det. Mrs. Farquarson. Loose 1885 **MNE**.

Hythe '55, Ashford, Maidstone



**Echium** L.

**E. vulgare** L.

Viper's Bugloss.

15, 16

37/51

Native. Dry open grassland and bare ground on chalk and sand, especially by former rabbit warrens; dunes, cliffs, and shingle beaches; common on chalk and greensand, abundant on the coast, especially on the chalk cliffs; v[ery] rare in the Weald, common locally in Surrey and Sussex (rare in the Weald); local in Essex, frequent in Pas de Calais.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

1) Woolwich Arsenal, 1956, J.F.H. Chalk bank, Birchwood R[oa]d, Joydens Wood PCH. Railway bank, St Mary Cray, on imported Chalk. Railway cuttings, Bickley; Chislehurst; Swanley.

2) Graveney (Castle Coot) Seasalter Beach, 1961, C Turner. Beach, Shellness, 1956.

Grain, Warden, Shellness

4) Fixed dunes, Sandwich Bay. Walmer shingle beach.

Shellness/Thanet E, Sandwich

5) 46 Chalk bank, Broom Wood, Cudham, PCH. The Nower, Brasted. 45 Ploughed Down S. of Timberden Bottom, PCH. Darwins Bank, Downe, 1955, JEL.

Downe, Westerham

6) 55 Kemsing Downs. 66 Downs above Wrotham Water 627605, **MNE**. 66 Trottiscliffe Downs. 66 Trottiscliffe chalk pit PCH. 66 Ryarsh Downs **MNE**. 56 Chalk scrub, Pennes Wood, Fawkham, 1950 **MNE**. 56 Railway cutting, Eynsford. 57 Greenhithe R[ai][wa]y cutting. 57 579731, A2 N. Darenth Wood border H.M.P. 1948-57. 57 Mounts Wood border, H.M.P., 1948-50. 57 Mounts R[oa]d, PCH. 57 Stone Cotton Lane, 563750, 1957, HM[P]. On chalk, Tower Hill, Upnor 1960 **MNE**. Upper Halling Downs **MNE**. Halling Warren PCH.

Dartford, Cobham, Eynsford, Malling, Sevenoaks

7) Burham Downs. Ospringe Down, HMW. Soakham Down above Bilting, P. le Brocq 1949. Chalk Pits NW of Charing. E. side Eastwell Park; White Hill; above Bilting; Godmersham Downs; NW of Westwell; Scott's pit, Westwell.

Maidstone, Hollingbourne, Doddington, Chilham, Burham, Stockbury, Ospringe/Teynham, Westwell

8) Wye, Crown pit. Above Amage Farm. Wye, Cuckoldscomb limeworks, KEB. Newington chalk pit. Cheriton Downs. A[bundant], Folkestone Warren **MNE**. Abbotscliff (also white [flowered]). Lydden Spout. Shakespeares Cliff. Dover E. Cliff. Langdon Bay. S. Foreland.

Wye, Elham, Alkham, Dover, Chilham, Canterbury 55, Wingham, Folkestone

10) Whitley Scrubs.

11) R[ai][wa]y bank, Hildenborough 563482, CAS.

Tonbridge 55

12) Hothfield Common.

14) R[ai][wa]y track, Tenterden Sta[tion], 1956-1959. E.S.

Woodchurch 56, E Oxney 58, Tenterden

15) Dungeness, **MNE** abundant, from the Lighthouse to Greatstone, Bou[l]derwall and Galloways. Hythe shingle beach. Fixed dunes, Romney Warren, abundant. Littlestone beach.

Dungeness, New Romney

16) Aldington. Hythe.

Aldington '56. Hythe

**E. plantagineum** L.<sup>746</sup>

[Purple Viper's-bugloss.]

4) Ash, 1960, DMcC.

**Pulmonaria** L.

‡ **P. officinalis** L.

[Lungwort.

15, 16.]

Alien, naturalised in a few places, but always, apparently, an escape from cultivation

5) ("Woods between Chevening and Knockholt, abundant; and between Cudham and Downe, sparingly", Milne & Gordon, p.243. No subsequent observer has reported this species in this district; it seems possible to me that in the former locality, at least, it may have been confused with *Myosotis sylvatica* which is still, very locally, plentiful in this area.)

6) Stone, H.M.P., 1948 **MNE**.

7) Kettle Hill, Eastling, 1961, C. Turner.

9) Hedgebanks, Minster, 1957, teste EG Philp.

11) Wood, Trenley Lodge, Shipbourne, N. of Tonbridge, Mrs. D. Warnett; a little, 1947, FR & DMcC. Boxley Abbey, 1849, Slater, **MNE**.

13) Old Park Wood, Goudhurst, F.H. Burgess, c1940; F.H. Burgess, C. West, and myself searched for this in 1944 without success. Wood Flimwell, 1899, JS **TLS**.

14) ‡ Appledore Village, 1949 **MNE**.

**Symphytum** L.

**S. officinale** L.

Comfrey.

15, 16.

Native. Stream- and river banks, marshy meadows, and grassy roadsides; frequent and locally common.

1<sup>st</sup> record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.29.

1) Elmers End, Hb Davis 1915 **MNE**. By R[ver] Cray, N. Cray, PCH, FR, 1954.

2) Snodland S. Marshes. Aylesford **MNE**. Higham Marshes, 1956, PCH. E of Murton F[ar]m, Graveney, REW. Ham Marsh, Faversham REW.

4) R[oa]dside S of Preston, 1960, Mrs B. Dodds. Ham Fen. Fordwich Marshes, NE Corner Trenley Park, 1950, R.E.W.

6) Colony by R[oa]dside, Cobham, 60, HAS.

7) R[oa]dside, between Selling Sta[tion] and village, 1950 REW.

8) 24 Tappington Valley, Denton, Miss DACL, 1960. 35 R[oa]dside meadow, Eastry, Miss B. Nash, 1959.

10) Darenth Water Meadows, PCH. St John Jerusalem PCH. N. of Westerham, 1958, R.A.C.

11) Borough Green 1956, D.McC. By the Medway: Ensfield, Leigh 43 **MNE**. Tonbridge. Watlingbury. Teston. Yalding. Allington **MNE**. Brandbridges, EGP, 1960 **MNE**. Medway, E. Peckham, 1957 (white) CAS. (With yellow flowers, by Medway above Tonbridge, C. Stace.) Watlingbury. Teston. Yalding. Allington **MNE**. Maidstone, by Foster Clark's Factory, 1959, E.G.P. **MNE**. Loose Valley, by the stream. By the Leybourne, Ryarsh. By The Teise. By the Len, Mote Park, 1959, E.G. Philp **MNE**. By The Beult. Headcorn. By Black Horse, Thurnham, 1958, LRA **MNE**. ½ mile E. of Pluckley ES. ½m. S. of Surrenden Dering ES.

12) N. end of G[rea]t Chart, ES. R[oa]dside NW of Ruckinge ES.

13) Tunbridge Wells. 1956 DMcC. R[ai][wa]y W. of T[unbridge] W[ells] West Sta[tion] 1960, CAS.

T[unbridge] W[ells], Lamberhurst, Cranbrook, Tenterden

14)

S. Hawkhurst, W. Oxney

15)

Not on Romney Marsh or Dungeness

‡ **S. officinale x asperum**<sup>747</sup> (= *S. x uplandicum* Nyman)  
(*S. peregrinum* auct.)

[Russian Comfrey]

15, 16 16/52

<sup>746</sup> In the manuscript given as *E. lycopsis* L.

<sup>747</sup> Order of parents reversed in transcript; and sequencing of hybrids *S. officinale* regularised.

Alien, now widely naturalised in Kent in open woods, hedgebanks, and waste ground. Reported to have been first cultivated at Cobham Hall.

2) <sup>748</sup>Faversham sq[ua]re 1957, Chilham sq DHK, Sandwich sq '55, Gravesend sq '57, Higham sq 49, Stockbury sq 1954, Doddington sq C Turner, Westerham sq 57 RA Clarke, Sevenoaks sq., Maidstone 1958, W. Malling 1958, Tonbridge sq 1956, Edenbridge 1956 DPY, Cranbrook 1956 DS, Palstre Court W. Oxney, 1958, S. of Hawkhurst 1954.

6)E) Roadside S. of Cliffe, Railway Station, E.S.M.; 1949! Scrub and woodland rides, Northward Hill, High Halstow, 1949-58, **MNE**. Springhead, Northfleet, 1958, **MNE**.

7) Chestnut Street, Newington, 1957 **MNE**. roadside, 029544 Badlesmere 1959 C. Turner.

8) St. Margarets Bay, 1955 **MNE**. Bishopsbourne, 1957, BJB.

10) Otford, 1909, D. Smith **MNE**; 1957 DMCC. Brasted, PH Cooke; Brook N. of Ch[urch], RAC, det. DPY. Allotments Bank, Westerham Station, 1957, R.A.C.

11) Roadside between Wrotham and Village, E.S.M. (as *asperrimum* Bieb.). Teston, R. Hardwick, 1959. Sandling, 1960, E.G. Philp. 581464, Medway Bank, Barden Rd., Tonbridge, 1961, H.M.P. Medway below Tonbridge CAS. N[ea]r Paddock Wood, 1884, Hb. Lamb **MNE**. Medway, E. Peckham, CAS. Maidstone, E.G.P., 1958, **MNE**. Allington, E.G.P., 1958/59 **MNE**. R[iver] Eden, 1955, DPY. Ragstone scarp S. of Amberfield, Boughton Monchelsea, 1959 **MNE**.

13) R[ai]l[wa]y W. of T[unbridge] W[ells] West Sta[tion], 1960, CAS. Lamberhurst, J.R.W. 1943 **MNE**. Pembury Waterworks, 1959, CAS. Groombridge by stream, C.A.S. Medway, Ashurst, CAS. Waste g[roun]d, Cornwallis Ho[use], Cranbrook, 1956 D. Streeter.

16) Railway bank near Sandling junction, E.S.M. (as *asperrimum* Bieb.). Canal bank, Twiss Rd., Hythe, 1948, Mrs B. Welch.

#### **S. officinale x S. x uplandicum** (back cross)

11) :Plaxtol, JH Allchin, 1897 **MNE**. E. Peckham, 1956, **MNE**. Above and below Tonbridge, CAS 1957-60, conf. EB Bangerter. Stone F[ar]m, Borough Green, 1960, CAS conf. E.B. Bangerter.

14) R[oa]dside W of Rolvenden, 1949, **MNE**.

#### **S. officinale x S. tuberosum**

13) Tunbridge Wells Common, 1961, K.E. Bull, det. Wade.

#### **S. officinale x orientale** <sup>749</sup>

11) with parents, in disused gravel pit, Aylesford, 736588, C Stace, 1957. "Leaves slightly decurrent; flowers very pale; calyx teeth just less than length of tube, not accrescent."

‡ **S. aspersum** Lepech. <sup>750</sup> (*S. asperrimum* Donn ex Sims) [Rough Comfrey.]

**S. tuberosum** L. [Tuberous Comfrey. 15, 16.] 9/51  
Alien in Kent, though regarded as native in Scotland. Naturalised in about 18 places, 9 of them n[ea]r Tunbridge Wells.

1) [Near Keston Common, Dickinson in Fl. Kent.]

3) Ditch to N.E. of Trenley Park Wood, L.W.W. N[ea]r Grove Ferry, REW. Roadside, Bigbery Wood, 1956. Whitstable sq 1957, Canterbury sq[ua]re] 54.

4) Ditch by Chislet Colliery Station, L.W.W. S. of R[ai]l[wa]y Line Westbere, L.W.W., 1950. Chislet sq 1956, Chilham sq. DHK.

6) waste ground by Thames, Greenhithe, 1931, PCH; Hb. LNHS. Lane between Cobham Terrace and Mounts Road 588744 Greenhithe, 1948-53, H.M. Pratt; 1955, GMB. Dartford sq

11) By A.229, S.E. of Loose, E. Philp, 1958. Loose Maidstone sq 1958

13) Roadside verge, Forest Road, Tunbridge Wells, J.R.W., 1938; (1960!). Weed in Shrubberies, Grove Hill Gardens, T[unbridge] Wells, 1950-3, K.E.B. Patch by path, Cumberland Yard, T[unbridge] Wells, 1949-53, K.E.B. Cranbrook, D. Streeter, 1956. High Rocks Lane, T[unbridge] Wells, among nettles, 1951-55, K.E.B. Allotments,

<sup>748</sup> These hectad names are entered in pencil down the manuscript margin alongside the district records but not accurately aligned with or in order of the districts, so they are here transcribed together. They illustrate a process which Francis Rose went through in order to identify the total number of hectads where the plant was present, the pencilled list apparently having been compiled before many of the district records were entered but paradoxically including records which did not ultimately get entered under their districts.

<sup>749</sup> This hybrid does not seem to be recognised as part of the British flora.

<sup>750</sup> Name given in manuscript, but no records cited.



Hilbert Rec[reation] G[roun]d, Tun[bridge] Wells, CAS, 1956. Large patches, top of Bayhall Rd., Tun[bridge] Wells, 1960, CAS. Connaught Rd., KEB '55. Clarence Road, KEB '55. Tun[bridge] Wells Common, n[ea]r Charlton Nurseries, 1956, KEB. Tun[bridge] Wells 1946, Cranbrook 1956

**14)** N of Hawkhurst, 1956, D. Streeter.

Tenterden 1958

‡ **S. grandiflorum** DC. 16

Alien, rarely naturalised.

**1)** Abbey Wood, 1953, G.A. Matthews; **BM**. West Wickham Common, n[ea]r Hayes Station 1958, CAS, det. E.B. Bangerter.

‡ **S. orientale** L. [Eastern Comfrey. 15, 16] 4/51<sup>751</sup>

Alien, rarely naturalised.

**1)** Chislehurst Common, 1961, J.R. Palmer.

**2)** Powderworks, Faversham, 1957, J. Gurr, det. CNP & DMCC. Sheppey.

**6)** 57 Mounts Road, near Greenhithe, 588744, 1945, J.E.L.; Hb. L.N.H.S.; PCH; 1955, HMP. 57 Empire paper mills, Swanscombe, by path between pits, 598748, 1955, HMP.

**10)** Darenth Lane, Dunton Green 1961 KEB. Otford Village, 1946 **MNE**; PCH. Abund[ant], Clarendon Road, Sevenoaks, 1962, KEB. Ivy Hatch, 589443, 1957, CAS. Between Sevenoaks station and tunnel, 1960, a large patch, CAS.

**11)** Smith's Hall, S.W. of W. Farleigh, 713525, 1956, D.McC. Aylesford gravel pit, 1957, CAS. Plaxtol, 604533 and 603537, 1957, **MNE**. Churchyard, E. Malling, R. Hardwick, 1959. Loose Village, E. Philp, 1959. Knowl Hill, Ulcombe, Mrs B. Dodds, 1960. Ewell Manor, E. Farleigh, 1957 **MNE**. R[ai]l[wa]y bank S. of Sevenoaks Tunnel, 1962, KEB.

**12)** Deserted garden, Precincts, Canterbury, 1955, Miss M.E.M. R[oa]dsides, Pluckley to Egerton, 1950, EH Bowles, 1950, det. **BM**.

**13)** Medway, S. of Ashurst (S[usse]x) side, CAS, 1956. Medway, Ashurst – Groombridge, 1954, CAS. Shrubbery, Boyne Park, Tunbridge Wells, 1955, KEB.

### **Brunnera** [Steven]

[‡] **B. macrophylla** [(Adams) I.M. Johnst. Great Forget-me-not. 16.]  
Garden throw-out, Ightham, C. Stace.

### **Anchusa** L.

‡ **A. officinalis** L.<sup>752</sup> [Alkanet. 15, 16.]

**1)** Railway bank, Elmstead Woods, Casual, W.C.W.R.

**4)** waste ground on dunes behind Hotel, Sandwich Bay, 1951 Mrs Moore-Brabazon; 1951!→.

**6)** [Cornfield at Gravesend, one plant, E.M.H.]

**8)** Naturalised escape, Kingsdown Golf Course, 1950, Miss M.E.M.

**A. arvensis** (L.) M. Bieb.<sup>753</sup> Small Bugloss. 15, 16. 30/51

Native. Arable land and fallows on sandy and chalky soils, sand dunes, open ground on sandy heaths; widely distributed, but rather rare and local, and absent from nearly the whole of the Weald.

**1)** Keston, C. West. 47 Chislehurst; St Mary Cray, W.C.R.W. 46 Locks Bottom, P.H.C., 1917. 47 sandy field, Bexley, 1955 **MNE**. 56 Rough field N. of Farningham Wood, abund[ant], PCH; 82! W.

Wickham 57, Bexley 55, Farningham 54

**2)** 66 Motley Hill, Rainham, 1950 **MNE**.

Faversham 58,

Teynham ^54

**3)** 96 Beacon Hill, Norton. 96 edge of Bysing Wood. 65 N of Dunkirk. 15 Oldridge Wood. 15 Trenley Park Wood. Fordwich L.W.W. 15 Sandy field, Canterbury Golf Links.

Canterbury ^54

<sup>751</sup> This assessment of hectad distribution was evidently made before all records, which are much more extensive, were set out in the account. There is also some confusion in that there are two listings of district records, both different, and these are conflated in this transcript.

<sup>752</sup> The manuscript includes a pencilled note, 'Have all these been seen? It is much misrecorded.'. However, evidently Francis Rose saw the Sandwich Bay plant(s).

<sup>753</sup> Given in the manuscript as *Lycopsis arvensis* L., under genus *Lycopsis* L.

4) 35 N[ea]r Hotel, Sandwich Bay, 1948 **MNE**; 1960 Mrs KDR. 35 n[ea]r Princes Club House, Sandwich, 1956 **MNE**. 25 Field, Little Wenderton; 25 Shatterling, Wingham, 1961, Miss B. Nash. Sandwich<sup>54</sup>, Wingham<sup>61</sup>

5) Lullingstone, 1952, T.H. Angel. 36 Arable S.W. of W. Wickham, 1956, RAC.

6) 57 waste ground on chalk SE of Dartford, 1946, F.R. & C.W. 57 Greenhithe, in cornfield by Mounts Wood, 1851 Hb Glennie; 1944; 1955, PCH; 1962! 57 Horns Cross Pit 570745; 57 Stone; 57 Darenth; 57 Swanscombe 1948-51, H.M.P. Cornfields on chalk 66 N.W. of Cuxton, S. of Great Wood, frequent, 1946-55 **MNE**.

6E) 67 S of Shorne, 1948, **MNE**. 67 chalky cornfields 628704 W. of Downs Rd., Northfleet Green, 1958 **MNE**.

Dartford 54, Cobham 55, Gravesend 58

7) 05 Fields, Old Wives Lees, 1943, D.H.K.

Burham 55, Stockbury<sup>54</sup>, Chilham<sup>54</sup>

8) 24 Field NE of Sibertswold 263487, Mrs K.D. Rowlands 1962.

9) Cliftonville, waste ground on chalk, L.W.W. Thanet 58

10) Brasted, 1945, P.H.C. Lullingstone, 1952, TH Angel. 530577, waste ground, Otford Rd., Sevenoaks, 1962, DMCC. Gravel pits E of Riverhead 1957 FSEF. Westerham 54/5, Sevenoaks 55

11) Wrotham Heath, 1946. Ryarsh Roughetts, Adington Common, Platt, Borough Green, Ightham. [Sandy Lane, Boxley, 1848 **MNE**.] Sandy field, Bearsted, 1945 **MNE**. Sandpit, L[owe]r Runham, 1960, Mrs B Dodds. Penenden Heath, EG Philp, 1957. W. Malling<sup>54</sup>, Maidstone 57, Hollingbourne 58

12) 95 Lenham Forstal, kakefield on Folkestone Sand, 1958 **MNE**. 94 Hothfield Common. 04 Ashford Warren. Crouchers, N of Potters Corner on verge (F[olkestone] Sand) 1956 ES. Hothfield<sup>54</sup>, Ashford<sup>54</sup>, Doddington<sup>54</sup>

13) 53 High Street, Tunbridge Wells, KEB, 1955. 73 Bedgebury, overgrown garden, 1958, WJ Davies.

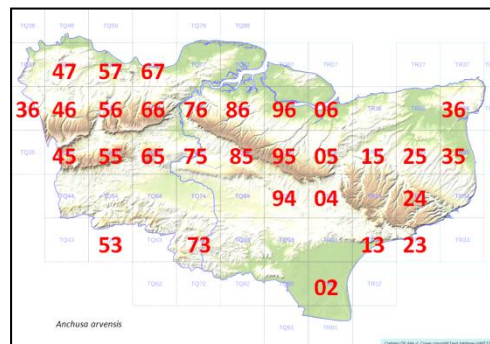
T[unbridge] Wells 55, Cranbrook 58

15) 02 Romney Warren.

Romney 55

16) Sandgate, 1852, Papillon in Hb B. Glennie (**BRIST**).

Folkestone 56, Hythe 54



### Pentaglottis Tausch

**P. sempervirens** (L.) Tausch Green Alkanet.<sup>754</sup> 15, 16 26<sup>755</sup>/51

Denizen, long naturalised in hedgebanks and about old buildings; rare, but scattered over the county, particularly the northern and central parts, and locally frequent.

1<sup>st</sup> record, 1724: Whornes Place, Cuxton, J. Sherard, in Ray, *Synopsis*, Ed.3, p.227.

1) R[ai]l[wa]y Bank E of Blackheath 1957 PCH. [Blackheath 1836 Hb Glennie **BRIST**.] Green Street Green, 1937, P.H.C. 36 Langley Park, Beckenham, 1957 JM Sherwood. Chelsfield, 1937, P.H.C. Farningham 58

2) (By Preston Churchyard, E. Jacob.) 96 Bombed site, Sittingbourne, 1961, C. Turner. Dark Hill: Powderworks, Faversham, 1958, Mrs Brickenden. R[ai]l[wa]y Bank, Teynham, 1946, DHK

Faversham 58, Teynham 58, Sheppey 58

3) (Boughton Hill, O.B.G.) Swalecliffe Sewage works REW. Chestfield REW. 15 Rough ground by Oldridge Wood, Littlebourne, Mrs Brickenden, 1962. E Cliff, Beltinge, REW.

4) Walmer, Miss I. Moore, 1960. Stodmarsh Village, 1950, REW.

5) Sparepenney Lane, Farningham, 1952, T.H. Angel.

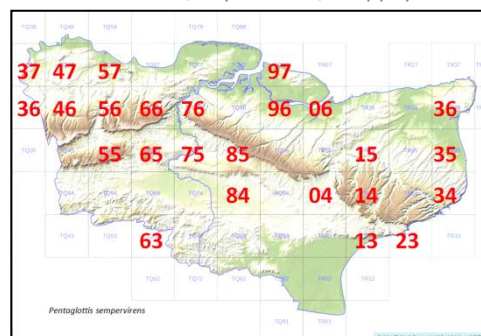
6) 76 About Whorne's Place, Cuxton, Sherard, 1724; Irvine; still there, on roadside and railway bank, 1944-58! 57 Railway Tavern, and Cobham Terrace, Greenhithe, 536744, H.M. Pratt, 1948-50. 57 Darenth Village 559713, H.M.P., 1948-50. 65 Pilgrims Way, N. of Wrotham Water, 625598 D,McC.

Dartford 57, Cobham 55, Chatham<sup>54</sup>

7) Lower Ensden, Selling, 1945, DHK.

8) 35 Hacklinge Holes, by Badger's earth, L.W.W. 1949. 15 Lane to R[ai]l[wa]y, Bishopsbourne, 1961, B.J.N. St Margarets Bay, 1946, W.J.L. Sladen. Elham 56, Dover 58, Sandwich 56

9) 36 Old chalk pit, Sacketts Hill, St Peters, L.W.W. Thanet 55



<sup>754</sup> In the manuscript, given as Evergreen Alkanet.

<sup>755</sup> Sic, but one square was double-counted, so this should have been 25.

- 10) Eynsford, 545662, 1957. 55 Roadside, Ightham common. 55 Sevenoaks Rubbish-tip, 1951, D.McC. S[even]oaks 58.
- 11) 65 Frog Lane, near the Abbey, West Malling. 75 In the village, in 65 Clare Lane, and in 65 Heath Road, east Malling **MNE**. 65 Offham Village. [Chatham Rd, Sandling, E. Bartlett 1882, **MNE**.] 65 Plaxtol, 1944 **MNE**. 55 E. of St Clere, 583588, Kemsing, DMcC, 1946. 85 The Quest, Harrietsham, 1960, Mrs B. Dodds. Malling, Maidstone
- 12) Bombed sites, Canterbury, 1946 DHK. M Headcorn 58, Canterbury, Ashford 56.
- 13) f[requent] about Hever Sta[tion], 1957, K.E.B. Lamberhurst Churchyard, 1936, J.R.W. Spa Golf Course, T[unbridge] Wells, 1950, KEB. Bull's Hollow, Rusthall, 1950, KEB. High Rocks Lane, T[unbridge] Wells, 1950, KEB
- 16) Hythe 55, Folkestone 55.

### Borago L.

- ‡ **B. officinalis** L. {Borage. 15, 16.]  
 Ancient relic of cultivation, long naturalised in a few places. "I, Borage, bring courage".<sup>756</sup>  
 First record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.15
- 1) Beckenham, 1915, Hb. Davis **MNE**. Blackheath sq[uaire] '56
- 2) Faversham, E. Jacob. Minster in Sheppey 1957
- 3) Reculver, Roman fort, 1950, R.E.W..
- 4) On the beach, Walmer, L.W.W., c.1949. Deal Road, Sandwich, O.B.G.
- 8) [Tye Wood, Fredville, 1888, Plumptre.] Roadside, Stubblefield, Thanington, 1875, FJH; Hb. FJH.
- 10) Eynsford, 1945, P.H.C.; Hb. L.N.H.S.
- 11) By M.20, N. of Pendenden Heath, 1960, E.G.P. Hedgebank, Elmstone Hole, Ulcombe, 1950.
- 16) about Lympne Castle with white flowers, O.B.G.; abundant below the castle, 1946! **MNE**. Folkestone, 1864, J. Boswell-Syme in Hb. F.J.H. ("fl. alba").

### Trachystemon D.Don

- T. orientale** [(L.) G.Don Abraham-Isaac-Jacob. 15, 16.]  
 Alien, naturalised in a number of places in woods and on hedgebanks.
- 1) Barnehurst, Crayford, 1950-53, G.A. Matthews.
- 2) Hales Place, Canterbury, Miss E. [sic] Milward, 1962.
- 7) Chilham, Mrs Bramby.
- 10) near Shoreham, 1950, D.H.K.
- 11) Holt Wood, Aylesford, 1943, C. West; 1954! **MNE**. Roadside, W. of Sandling, n[ear] Aylesford, 1954. Preston Hall, DMcC. Roadside copse, N. of Bearsted Green, 1954.
- 12) Precincts Wall, Canterbury, 1956, Miss M.E. Milward.
- 13) Roadside E. of Swaylands, Penshurst, 1957, 536429, Miss A. Graseman.

### Asperugo L.

- [‡ **A. procumbens** L. Madwort. [16.]  
 Alien formerly; now extinct.
- 1) Lane near Plumstead Church, Edwards, *Phyt.* I, p.651; near Woolwich, 1846, MacIvor in Hb.York.]
- [2) Casual n[ear] Snodland, Hepworth, 1913.]
- 11) derelict cottage garden n[ear] New House F[ar]m, Pluckley, 1948, Miss V Day.
- 13) chicken run, G[reat] Bounds Southborough, pre 1937, Miss H.M. Crampton.

### Myosotis L.

- M. scorpioides** L. (*M. palustris* (L.) Hill) Water Forget-me-not. 15, 16 37/51<sup>757</sup>  
 Native. River- and stream- sides, ditches, pond borders; locally common in the Weald, in the main-river valleys, but unrecorded from the chalk districts, Romney Marsh, the Hundred of Hoo, Grain, Sheppey, and Thanet, and rare in the north Kent marshes generally.  
 Locally frequent in Surrey, Sussex and Essex, common in the Pas de Calais; in all these areas however *M. caespitosa* appears to be the commoner species.  
 1<sup>st</sup> record, 1829: by the Stour, G.E. Smith in C.P.S.K., p.13.

<sup>756</sup> Cf. Gerard's *Herball* (1597): *Ego Borago, Gaudia semper ago*.

<sup>757</sup> The hectad total should have been 36; a square was double-counted.

1) 46 Keston Ponds. 46 Holwood Park Lakes. Eden Park, 1915 Hb Davis **MNE**. 47 N[ea]r Elmstead Woods, 1956, Miss A Mills. 47 R[iver] Cray, N. Cray, FR & PCH, **MNE**. 47 Ruxley pits, '58 TH Angel. R[iver] Cray, Bexley, R.G.W. Orpington, Bexley 55

2) 57 Barnes Cray. 57 Stone Marshes. 67 Northfleet Brooks. 76 Marshes S. of Snodland. 86 Newington, 1956. Burham, Newington, Gravesend, Faver[sham] 56.

4) Ham Ponds. Wingham. Worth Minnis. Chisle 55, Sturry 55, Wingham 56, Sandwich.

10) 57 Darent Water Meadows, PCH; FR. 57 St John's Jerusalem PCH. 56 R[iver] path below Shoreham, PCH; 1954 **MNE**. 55 Otford Water Meadows PCH. 55 R[iver] Darent, Chipstead, 1944 **MNE**. Bradbourne gravel pits, Riverhead, FSEF, 1957. 45 Darent Marshes, 1m E. of Westerham, 1955 **MNE**.

T[emple] Ewell, Westerham 55,

Sevenoaks, Dartford, Farningham.

11) 65 By the Leybourne, Leybourne – Addington Place '58, DMcC; below Ryarsh Church 1962 **MNE**. Meadows W of Edenbridge, 1957, CTP & DPY. Tonbridge. above Hartlake Bridge, 1939, JRW. Pond E. of Hale Street, 683493, 1957, CAS. R[iver] Beult S. of Headcorn Church '62. Pond, Leighbridge, Headcorn, '62. Pond 1m E of Headcorn Ch[urch], '62. Pond ± [apparently sic] m SE of Smarden 62. R[iver] Beult Buckmans Green, Smarden '62.

Maidstone, Hollingbourne, Edenbr[idge], Tonbr[idge], Paddock W[oo]d, Marden, Headcorn.

12) Hothfield, by R[iver] Stour. SE of Westwell, 1955 **MNE**. Stowting.

Hothfield, Ashford, Stowting, Chilham, Canter[bury]

13) Gill SW of Stone Cross Ashurst CAS, 518381. Pond, Broadwater Lane, T[unbridge] Wells, CAS. S. of Lamberhurst Church in ditch 684365 and by Teise CAS. Pembury Wood, n[ea]r Pond, 1961, CAS.

T[unbridge] Wells 55, Lamber[hurst] 56, Cranbrook.

14) Penhill.

Tenterden 54.

15)

W. Oxney 54, Woodch[urch] 55.

16)

Bilsington 54, Hythe 54.

Not common in the Sussex High Weald, but locally frequent in Surrey, Sussex, Essex and the Pas de Calais.

var. **laxiflora** (Rchb.) [DC]

13) Backwater of Teise n[ea]r Lamberhurst, 1938, JRW, det. A.E. Wade.

var. **strigulosa** (Rchb.) [Mert. & Koch]<sup>758</sup>

11) Staplehurst, E.S.M.

12) Charing; Ashford, E.S.M.

13) Tunbridge Wells, 1851, F.C. Townsend in Hb. Druce, det. A.E. Wade, B.E.C. Rep., 1926, p.125.

**M. secunda** Al. Murray Creeping Forget-me-not.<sup>759</sup>

15, 16

8/51

Native. Acid peaty swamps and valley bogs, avoiding base-rich waters; rare, but locally frequent on the Folkestone Sand and in the High Weald.

1<sup>st</sup> record, 1837; Kent, D. Don, in *Engl. Bot. Suppl.*, p.2703.

[1] Keston Common, 1831, D. Don, in Hb. E. Forster, **BM**; no recent record: I cannot find it there now.]

[2] Reported by Stowell in marsh-dikes near Graveney and at Uplees, n[ea]r Faversham (Phyt. N.S. II, p.153); but it appears much more likely that *M. caespitosa* K.F. Schultz was actually observed.]

11) Headcorn, F.J.H.; an unlikely locality. E of Hale Street, E. Peckham, pond on gravel, 1956 **MNE**.

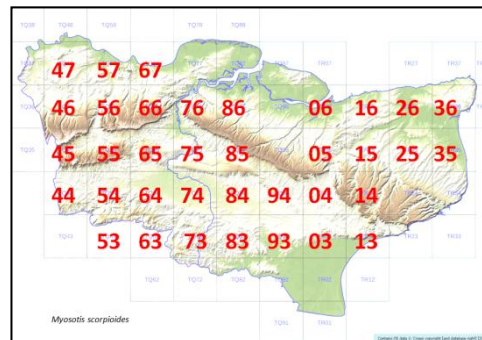
12) Hothfield Common, in valley bog no. V, 1946-54, **MNE**. Valley bog, Gibbons Brook, Sellindge, 1945, **MNE**; 1954.

Hothfield, Hythe

13) Small valley bog W. of Marden Farm, N. of Penshurst, 1944, **MNE**. Small bog S. of Hawkenbury, J.R.W. 1943 (1946!). Boggy hollows in field W. of Ellis' Wood, Lamberhurst, J.R.W., 1943 **MNE**; (1946!). Bog by Furnace Pond, Horsmonden, 1954. Pembury Wood, bog n[ea]r pond, 1961, CAS. Floating Bog by Louisa Lake, Bedgebury Forest, 1946 **MNE** (Bedgebury, E.S.M.). Upper lake, Bedgebury Pinetum, 1946 **MNE**; 1954, Miss DACL. Peaty, boggy ditch on T[unbridge] Wells Sand, Chittenden Wood, S.W. of Benenden, 1944 **MNE**. Frizley

<sup>758</sup> In the manuscript cited as plain Reichb., as also the previous variety.

<sup>759</sup> In the manuscript, Creeping Water Forget-me-not.



Bog, N. of Cranbrook. Bog at bottom of Angley Woods, Cranbrook, E.S.M.; 1955! **MNE**.

Tonbr[idge], T[unvridge] Wells, Lamberhurst, Pembury, Cranbrook, Tenterden

**14)** [Near Hawkhurst, J.C. Melvill.]

**16)** [Near Folkestone, B.D. Jackson.]

Locally common in bogs in Surrey, Sussex, and Essex; not recorded for N. France.

**M. laxa** Lehm.<sup>760</sup>

Tufted Forget-me-not.

15, 16.

34/51

Native. Marshes, riversides, streams, dikes, and ponds; locally common, except on the N. coast and in the almost waterless chalk districts; much more plentiful in the Weald than *M. [scorpioides]*<sup>761</sup>, but unrecorded for Sheppey, Grain, the Hundred of Hoo, and the Swale coast in 2), and for the chalk districts 5)-9). Common or locally common in Surrey, Sussex, Essex, and the Pas de Calais.

1<sup>st</sup> record, 1816: near the great rocks, Tunbridge, Kent, E. Forster, *Fl. Tonbr.*, p.25.

**1)** Chislehurst common WCRW (1946!). Hayes Common. Keston Lake, Holwood Park 1948, FR & E.B.Ba. Southborough WCRW. Darrack [*sic*, for Darrick] Wood, Orpington, WCRW.

Orpington '57

**2)** Dartford Marshes, 1933, P.H.C. Cooling. Northfleet. Holborough Marshes. Snodland S. Marshes.

Burham '55, Faversham '55, Gravesend '55.

**3)**

Whitstable 56.

**4)** Ham Fen. Worth Minnis, 1956 **MNE**. Preston. Wingham. Sandwich Bay.

Chislet 55, Ash level 56,

Wingham 55, Sandwich 54.

**10)** Westerham Wood, Pond on gault, 1946. Chipstead. Darenth. Stream, Whitley Forest 59 RA Clarke. Meadow W. of Darent S. of Eynsford Sta[tion] 1955, G.M.B. Westerham 55, Sevenoaks 55, Farningham 56.

**11)** Pond E of Hale St[reet] 683493, 1957, CAS.

**E)** Leybourne Lakes. Ryarsh Wood, in pond on gault, **MNE** 1943. Marsh, Sandway, SW of Lenham, 1954, **MNE**.

**W)** E. of Tonbridge. W. of Tonbridge. Straight Mile, Leigh. By the Medway, above Hartlake Bridge, 1939, J.R.W. R[iver] Beult, S. of Headcorn Ch[urch], 1962. Pond 1 mile E. of Headcorn 1962.

W. Malling, Maidstone, Hollingbourne, Tonbr[idge], Paddock Wood, Marden, Headcorn.

**12)** Hothfield. Marshes N. of Blackwall F[ar]m, Willesborough, 1955 **MNE**. Stowting. Gibbons Brook.

Hothfield, Ashford 56, Stowting '55, Canterbury 55.

**13)** 54 Pond ½m. N. of Penshurst, by roadside, 1944, **MNE**. 53 Below Hungershall Rocks. 63 Ditch below Lamberhurst Church, 1943, J.R.W.; 1956 PCH. 64 Colebrook Park NW of Pembury, 1956 **MNE**. 73 Frizley Bog, Cranbrook

q

Lamber[hurst] 56, Cranbrook 57.

**14)**

Tenterden 54, Woodch[urch] 54.

**15)** 02 Brenzett, 1945 **MNE**. 02 Old Romney. 13 Dike n[ear] Selby F[ar]m, S. of Lympne, 1958, **MNE**.

Bilsington 54, Dungeness 56, Romney 54, E. Oxney 54, W. Oxney 54.

**16)**

Hythe 54.

Common in Sussex, Surrey, Essex and the Pas de Calais.

**M. sylvatica** Hoffm.

Wood Forget-me-not.

15, 16.

4/51

Native, though in many places a garden outcast (*M. dissitiflora* has been recorded under this name); very rare, but locally abundant in a few scattered woods on heavy clay soils. In Kent and Surrey the truly wild plant has many pale whitish-blue flowers, unlike the deep blue flowers of the selected horticultural strains. Its Chevening locality links up with the more continuous area of distribution on clay-with-flints and gault in E. Surrey. It appears to have been commoner formerly than it is now.

1<sup>st</sup> record, 1666: Charlton Wood, etc., C. Merrett, *Pinax*, p.82.

Only apparently native populations are cited below.

**[1)** Charlton Wood, Merrett.]

**3)** [Byssing Wood, F.G.E.K.. Blean Woods, G. Dowker.] Thornden Wood, RGW.

**5)** (Rides in coppice-with-standards woodland on Clay-with-flints.) Chevening Park, Miss Worship, Fl. Kent; locally abundant, 1955, 1958! **MNE**. Waterworks corner, by B.2024, Westerham 1960, RAC. [Brasted, M.M.W., 1935; not refound here.]

Westerham

**6)** Darenth Wood, Fl. Met. (a little, 1945, but status doubtful!). Cobhambury Wood, Cobham, o[ccasional], 1961; prob[ably] native, HAS.

<sup>760</sup> In manuscript, given as *M. caespitosa* K.F. Schultz.

<sup>761</sup> In the manuscript, *M. palustris*, which was the original heading for *M. scorpioides* before being updated.



7) [Coxeth and Syndale Woods; The Oaks, Ospringe, Cowell, Fl. Fav., 1839.] Stalisfield, abundant on clay soil in dry valley wood ½m. S.E. of the church, (grid.ref. 51/970518) 1948; 1958 **MNE**.

8) Wood n[ea]r Cooks F[ar]m, L[ower]r Hardres, R.G. Williams.

Doddington

10) on Atherfield Clay below Ragstone scarp, Quinton Wood, S. of Toys Hill, 1960, **MNE**. Crockham Hill Common, 1960, R.A.C.

11) Ride in Horish Wood, Detling, on gault, 1958, **MNE**.

Maidstone

12) Abundant in copse on Gault (S.W. of E. Lenham Farm), E.S.M. & A.H.W.D.; 1945, **MNE** abundant! E.S.M. reports some white flowered plants; none of these were seen in 1945. Potters' Corner Woods, Ashford, F.M. Webb: not refound. Mersham, C.N.P. 1957 **MNE**.

13) abundant near streamside, Angley Woods, Cranbrook, 1955, **MNE**, the native form.

Cranbrook

Locally plentiful in Surrey in the Titsey-Warlingham area and again on Weald Clay about Ockley; in Sussex it is probably only native on the Weald Clay about Kingsfold and Warnham, and by R[iver] Rother n[ea]r Rogate; very rare in Essex; not recorded for the Pas de Calais.

## **M. arvensis** (L.) Hill

Field Forget-me-not.

15, 16.

48/51

Native. Dry open pastures, cultivated land, roadsides and hedgebanks, rides and open areas in woods on dry soils, sand dunes, beaches; very common throughout the county, but without modern records for Thanet.

1<sup>st</sup> record, 1816: (about Tonbridge) common in cornfields, E Forster, *Fl. Tonbr.*, p.24

1) Keston Hb Davis 1916 **MNE**. Farningham Wood, PCH; 82! Ruxley pits, 58 TH Angel.

W. Wickham, (abs[ent] Blackheath), Bexley.

2)

Grain, Sheppey

3)

Faversham 1956, Whitstable 1955, Chislet 1957

5) Chalk, W of Eynsford PCH. Wood on chalk, W. of Shoreham, PCH. Pilots Wood PCH. Darwins Bank, Downe, '55 JEL. Below Jewells Wood, AG Davis, 1915. Well Wood W. Wickham, PCH.

Orpington

6) Lords Wood Darenth, PCH. The Thrift, Bean. Shoreham Rifle Range, PCH. Preston Hill PCH. Shorne Hill, '61 HAS. Downs above Trottisccliffe '43 **MNE**. Halling Warren, PCH. R[oa]dside, Wrotham PCH.

Farningham, Cobham, Chatham, Stockbuty, Ospringe 1955, Dartford, Gravesend, Higham

7)

Doddington, Chilham

8) Arable about Fredville DMCC.

Elham, Alkham, Dover, Canterbury, Wingham, Sandwich R.

9) abs[ent]

10) Westerham Wood, 1982.

Westerham, Sevenoaks

11) Meadows W. of Edenbridge 1957, CTP & DPY. Edenbr[idge], Tonbr[idge], Marden '56, Headcorn, Malling, Hollingbourne

12)

Hothfield, Ashford

13) SW of Stone Cross, Ashurst, CAS. Pembury Wood, 1961 CAS. Pembury Lower Green in gooseberry field 634425, 1945, CAS. T[unbridge] Wells '55, Lamberhurst 56, Cranbrook, Tenterden, Tonbr[idge], Pembury.

14) Stone in Oxney. S. Hawkhurst, W Oxney 1955, E Oxney 1958.

15)

Romney 1956, Dungeness 1955.

16) Lympe Park Wood. Ragstone Downs W. of Hythe. Postling Wents. Copse on gault, NE of Asholt Wood, 1948, Mrs BW. Hythe, Folkestone.

## **M. discolor** Pers.

Changing Forget-me-not.<sup>762</sup>

15, 16

30/51

Native. In open grassland communities, mostly on light sandy soils; locally common near the coast and on sandy soils inland, rare elsewhere.

1<sup>st</sup> record, 1816: (about Tonbridge) in cornfields and gardens, common, E. Forster, *Fl. Tonbr.*, p.24.

1) 47 Abbey Wood, 1954, G.A. Matthews.

Keston, Farningham, Bexley

2) 87 All Hallows, 1960, HAS.

Teynham, Whitstable

3) 05 Dry grassland N. of Dunkirk. Perry Wood, 1946 DHK. 15 Rides in Trenley Park Wood. 15 Abundant in fields NE of Trenley Park Wood, L.W.W.

Chilham, Canterbury

4) 35 Dunes, Sandwich Bay, 1946 **MNE**.

Wingham, Sandwich

6) 66 Sandy roadside bank of A.2, N. of Cobham Park, 1946. 67 Shorne Warren.

Dartford, Gravesend, Higham

8) (Dover cliffs, Mrs MJ Comyn.) 24 Walderslade Wood, Denton, 1958, Miss DACL.

Alkham

10)

Westerham, Sevenoaks

<sup>762</sup> In the manuscript, given as Yellow and blue Forget-me-not.

**11)** Wrotham Heath 43 MNE. Larkfield Heath. Leybourne Wood, 1955 **MNE**. Warren Wood, by A20, Leeds, 1944 **MNE**. Ryarsh. Eccles. Bearsted. Edenbridge, Tonbridge, Pembury, Malling, Maidstone, Hollingbourne, Doddington.

**12)** Hothfield common. Little Chart, E.S. Ashford Warren. Grass-heath, Mersham le Hatch Park (on Folkestone Sand) 1960 **MNE**. Gibbons Brook, 1938, HEG Emmett. Hothfield, Ashford

**13)** Sandy arable fields E. of High Wood, Hawkenbury, JRW & FR, 1944. Pembury Wood, 1961, CAS. Pembury Lower Green in gooseberry field 634425, 1956, CAS. On sandy soil in Forest nurseries, Bedgebury, J.P.M.B.; Pinetum, 1954, **MNE**. Angley Wood, Cranbrook (Tonbridge Wells Sand), 1955 **MNE**. Lamberhurst, Cranbrook

**14)** Tenterden. Tenterden, Woodchurch square

**16)** Hythe, 1955, **MNE** Hythe, Folkestone

**var. fallacina** (Jord.) Crep.

**1)** Abbey Wood, Herb, Druce, det. A.E. Wade.

**M. ramosissima** Rochel Early Forget-me-not. 15,16. 27/51  
(*M. collina* auct., *M. hispida* Schlecht.)

**Native.** Dry open shallow habitats, including wall-tops, sand dunes, beaches, sandy grass-heaths, ant hills on the chalk; locally common, but absent from wide areas.

<sup>1st</sup> record, 1839: Walls, Faversham churchyard, etc., Cowell, Fl. Faversham.

**1)** Keston Common! By war memorial 416642, HMP. Crofton Heath, W.C.R.W. Abbey Wood, 1954, GA Matthews. Hayes Common. W.Wickham Court, 1916, Hb Davis **MNE**. W. border Farningham Wood, in sandy heath on Thanet Sand, 1950. Orpington, Farnborough, Bexley

**2)** Bank by Frindsbury Creek. Seasalter Beach, HMW, 1957. Teynham

**3)** Dry grassland, N.W. of Dunkirk, 1945. Old Wives Lees, 1946 DHK. Chilham, Canterbury, Faversham

**4)** Fixed dunes, Sandwich Bay, L.W.W.; 1946-53! Sandwich

**5)** Lullingstone Park, 1930, P.H.C.

**6)** Darenth Wood, HMP, 1951 **MNE**. Stone Lodge Farm, 565744, HMP. Green Street Green. Shorne Warren. 695695 Cobham Park Golf Course, Mrs Woods. Cobham, Dartford, Gravesend, Higham, Stockbury

**7)** Chilham, DHK, 1946.

**8)** Ant hills above the Crown on top of Wye Downs, 1954 **MNE**. Alkham square  
**9)** abs[ent] E & W Thanet

**10)** Sandy bank, E of Coombe Bank, Sundridge, 1949 **MNE**. 55 Whitley Forest, 1959, RA Clarke.

**11)** Ragstone pit, Basted, Boro[ugh] Green, 1960, CAS. S. of Inn, Wrotham Heath, 1943 **MNE**. Ryarsh sand pits. Larkfield Heath. Sandy verge of A.20, W. of Hollingbourne, 1944 **MNE**. Snarkhurst Wood. Sandpit near Sewage Works E. of Bearsted. Eccles, W. of Aylesford 1951 **MNE**. Wall top, Preston lane, S. of Aylesford Bridge, 1952 **MNE**. Sevenoaks '55, Malling, Maidstone, Hollingbourne, Chatham

**12)** Hothfield Common. Ashford Warren. Grass Heath on Folkestone Sand Willesborough Lees, 1945 **MNE**. Chilham. Gibbons Brook, Sellindge, L.W.W. Hothfield. Ashford

**13)** E. of High Wood, Hawkenbury. Bedgebury. Tonbridge, Cranbrook

**15)** Dungeness. Romney Warren. Shingle Beach W. of Hythe. (Var. *mittenii*, Littlestone, 1909, B.E.C. 1909) Romney, Dungeness

**16)** Ragstone scars, W. of Hythe. Folkestone. N. of Seabrook, Hythe, 1848, Mrs B Welch. Hythe, Folkestone

‡ **Lappula** Gilib.<sup>763</sup> [Bur forget-me-not. 16.]

‡ **L. squarrosa** (Retz.) Dumort.<sup>764</sup>

**Casual.**

**1)** Beckenham Place Park, 1934, E.J.B.; Hb Lousley. Gravel pit, Hayes, AG Davis 1915 **MNE**. Beckenham, AG Davis, 1934, **MNE**.

**Omphalodes** Mill.<sup>765</sup>

‡ **O. verna** Moench Blue-eyed Mary

**Naturalised alien.**

**8)** Kingston, 1937, F. Hyland.

<sup>763</sup> Entered in two different places in the manuscript, in one of which it is cited as *Lappula* L. The two accounts are here amalgamated.

<sup>764</sup> In the manuscript, given as *L. myosotis* Moench.

<sup>765</sup> In the manuscript, cited as *Omphalodes* Moench.

**Cynoglossum L.****C. officinale L.**

Hound's-tongue.

15, 16

29/51

Native, grassland, scrub and bare ground on chalk, in 5)- 8) generally common, but unrecorded in the Dover area; and on ragstone in 10), 11) and 16) local; sand dunes, banks, and shingle beaches by the sea, in 2), 3), 4) and 15) locally common; not found elsewhere. Particularly common up to 1954 around rabbit-warrens on the chalk; it appears to be unpalatable to rabbits. Unrecorded in 1) [*sic*], locally frequent in Surrey and Sussex, rare in Essex, local in Pas de Calais.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

2) Grain. Sheerness, Sheppey. Cliff edge by copse, Warden, 1933; now gone, Mrs Bryson.

Faversham 55, Grain ^54, Warden 56.

3) (Whitstable area)

Whitstable 55

4) Fixed dunes, St Georges Links. Sandwich Bay, very common, **MNE**. S. of Sandwich Bay. Prince's, Sandwich Bay. 26 Seawall E. of Reculver 1950, REW.

Sandwich ^54.

5) Chalky bank, Broom Wood, Cudham, PCH. Edge of Andrews Wood, S. of Badgers Mount PCH. Pilots Wood PCH. Lullingstone Park, 1954 **MNE**. W. of Shoreham 1950, PHC. Lullingstone Park, CSN; Abundant, 1954!

Downe ^54, Westerham ^54

6) Pilgrims Way NE of Otford 1922 WT; 1933 A Beadell. Eynsford, 1929, R.W.R. Roadside S.E. of Farningham, 1948, H.M.P. Downs E of Shoreham PCH. Ryarsh Downs **MNE**. A225 S. of Eynsford 534644 opp[osite] castle drive, 1955, HMP. Cliffe Chalk pits. Kemsing Downs.

Farningham

^54, Higham ^54, Cobham ^54, Sevenoaks 54, W Malling ^54.

7) Wouldham Downs, side of lane below Ringshill House, 1952 **MNE**. Boarley Warren. Boxley Warren **MNE**. Thurnham **MNE**. Westwell.

Burham ^54, Stockbury 54, Maidstone ^54, Hollingbourne ^54, Westwell

^54.

8) Larkey Valley Wood. Unrecorded about Alkham, Dover, St Margarets, and Kingsdown.

Chilham 54, Canterbury 55, Wingham 56, Wye ^54, Elham ^54, Folkestone Downs 54

9) Minnis Bay cliffs, L.W.W. 1946.

10) Pastures on river gravel, N of Farningham PCH.

12) Hothfield Common, 1960, Mrs B. Dodds.

14) E. Oxney.

E. Oxney 58

15) Romney Warren. Greatstone. Dungeness.

Romney 55, Dungeness 56

16) Ragstone escarpment, Aldington; Lympne **MNE**; W. of Hythe, **MNE**. Cliffs of Folkestone Sand, Folkestone Leas. Grassland on Folkestone Sand N. of Seabrook.

Hythe ^54, Aldington ^59.

**[C. germanicum Jacq.**

Green-leaved Hound's Tongue.

**[15, 16.]**

Native, open woods and shady hedgebanks on chalk, ragstone and on Tertiary strata; very rare formerly and now apparently extinct. Also too often erroneously recorded.<sup>766</sup>

First record, 1724: Southend, near Eltham, plentifully, J. Sherard in Ray's Synopsis, Ed.3, p.226.

1) See first record. Farm yards, Keston: half a mile S.E. of Bromley, Milne & Gordon, 1793.

4) Near Sandwich, 1777, E. Jacob.

6) Lane near Northfleet, Milne & Gordon, 1793. Reported in a shaw S. of Crookhorn Wood, Snodland, c.1930, F. Forsyth, but not refound.

7) Reported on Burham Downs, Hepworth: not refound and doubtful (*Rochester & Dist[ri]ct: a sketch guide to the Geology, Flora & Fauna*, 1913).

8) Hedge on the Roman Road (Stone Street) near Stowting, C.P.S.K. I have searched all likely habitats here in vain.

10) One Tree Hill, J.E. Little (*Gard[en]ers Chron[icle]*, 1879). The steep ragstone escarpment here, wooded with beech, ash and Wych elm, still appears to be a very suitable habitat for this species, but my searches have so far been in vain.

13) (Reported from the lane between High Rocks and Rusthall Common, Forster, Fl. Tonbr., p.25; W. Borrer regarded this as an error, see Bot. Gaz. 2, p.97.

This species has decreased greatly in this country, and is only now known for certain in Oxfordshire (Woodstock and Wychwood) Suffolk (near Woolpit) and in Surrey, where it seems to be maintaining its numbers well in at least one of its localities near Mickleham. In order to try and obtain some information on its powers of establishment, and on the possible reasons for its decrease at the present time, in Sept. 1958 I

<sup>766</sup> This sentence is in pencil and may not be intended for inclusion.

sowed seed of this plant for experimental purposes from Mickleham, Surrey, at two points on the sides of the Pilgrim's Way in 6) between Wrotham and Ryarsh, in open ash-hazel-woodland on chalk (grid references 51/634607 and 51/656613), localities where the plant was certainly absent prior to sowing.

In Sept. 1959 eight first-year leaf-rosettes were detected at the second site. In 1960, no plants flowered, possibly due to the drought of 1959, but eight sterile plants were seen. In 1961, several plants produced inflorescences. Seen v[ery] f[requent] 1987, R. Fitzgerald. If the plant becomes established here, this could be regarded as evidence suggesting that failure of seed dispersal to new habitats when older ones become unsuitable is a factor of significance in the present rarity of the plant; if on the other hand the plant fails to become established, this could be regarded as evidence for a low reproductive capacity under natural conditions being a significant factor in the plant's present rarity.]

## VERBENACEAE

### Verbena L.

444.

#### V. officinalis L.

Vervain.

15, 16

35/51

Probably native, at least on the chalk and ragstone; roadsides, dry grassland and scrub, particularly on chalk, ragstone and on sandy and gravelly soils; common.

Common in all the adjoining counties and in the Pas de Calais.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

1) Farningham Wood, PCH; 82! 47 Ruxley pits, 58, TH Angel.

2) R[ai][wa]y line Abbey F[ar]m, Faversham, 1960 HMW. Oare Pond Meadow '62 HMW. Faversham Town 1950 REW.

4) R[oa]dside by Ch[urch], Stodmarsh, 1950, REW.

6) 65 Wrotham 1936 JRW. 55 Kemsing Downs PCH. 57 Lane End – Green St[reet] Green by r[oa]d, PCH. 66 Ryarsh, 66 Birling. 56 Downs E. of Shoreham; Preston Hill, PCH. 66 Halling Warren. 76 R[oa]dside, Cuxton, PCH.

7) 95 Eastling village, 1961, C. Turner. 96 Ospringe Down, HMW. 94 Pilgrims Way, NW of Westwell, 1962.

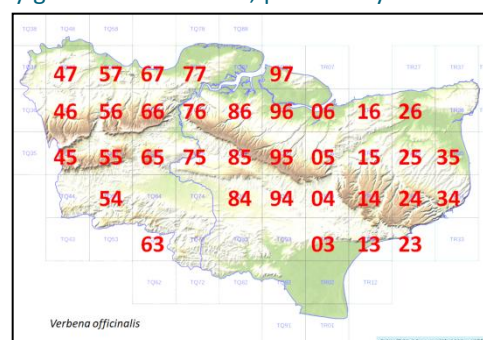
9) Brooksend, Birchington, by lane, 1947, LWW.

10) 56 By R[iver] below Shoreham; Eynsford; W. of S. Darenth, PCH. 45 Pond S. of A2, Dartford, PH Cooke. Farningham TH Angel, '52.

11) 75 East Malling. 65 West Malling. 65 Leybourne. 85 Harrietsham, 1960, Mrs. B. Dodds.

13) 54 R[ai][wa]y bank S. of High Brooms, 1950, K.E.B. 63 Arnolds Mill, Lamberhurst, JRW.

16) 23 Cheriton CC Townsend.



#### ‡ V. salvinia<sup>767</sup>

2) Higham Marshes, 1947, W.R.S., BM.

## LAMIACEAE<sup>768</sup>

### Stachys L.

#### S. officinalis (L.) Trevis.<sup>769</sup>

Betony.

15, 16.

39/51

Native. Dry hedgebanks, wood-borders, heathland and heathy woodland on acid clays, loams and sands; not on chalk in Kent; widespread and locally common on the Eocene in 1) and 3), on the Folkestone Sand and the acid plateau soils of the Hythe Beds, and throughout the High Weald; not infrequent on Weald Clay and on woods on pliocene sands and clay with flints on the chalk plateau; unrecorded from the open alluvial districts of 2), 4) and 15), and from Grain and Sheppey; extinct in Thanet.

Locally common in the adjacent counties and in the Pas de Calais. In Sussex and westward this species occurs in chalk grassland; possibly a different ecotype is concerned.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

<sup>767</sup> Name as given.

<sup>768</sup> Given as Labiatae in the manuscript.

<sup>769</sup> Given under genus *Betonica* in the manuscript, hence *B. officinalis* L. This is replaced in this transcript so as to accord with the convention of naming after the second edition of Stace's *New Flora*; but the name has reverted to *Betonica officinalis* in the fourth edition.

- 1) Keston Common, 1945 **MNE**. Chislehurst Common. Petts Wood. Crofton Heath PCH. Joyden's Wood. Farningham Wood. Bexley, 1955 **MNE**. Farningham Wood, PCH. Dartford, Bexley, Blackheath, Keston, Farningham
- 3) Trenley Park Wood. Dargate 1955 R. Theobald. Oldridge Wood. Fishponds Wood, Dunkirk, 1953 **MNE**. Chilham, C[anter]bury 55, Faversham 55, Whitstable
- 5) Cudham, 1902 AG Davis **MNE**. Jewells Wood, 1915, AG Davis **MNE**.
- 6) Swanscombe Wood. Beechy Lees Wood, Kemsing PCH. Randall Wood, Shore 607633 Wood edge Stansted Mrs Woods. Preston Hill, PCH. Cobham
- 7) King's Wood, Challock. Stockbury
- 8) Covert Wood. Paddlesworth. Ileden Wood, Kingston, 1960 **MNE**. Western Heights, Dover, 1956 **MNE**. Stowting, Alkham 55, E of Dover 55, Wingham, Sandwich 55
- 10) Whitley Scrubs. Seal Chart. Marsh 1m. E. of Westerham, 1955 **MNE**. Westerham Wood 82. Westerham, S[even]oaks
- 11) Park Wood, Boxley, 1960, EGP. R[ai]l[wa]y bank Edenbridge, c.1956, DPY. Malling, Maidstone, Marden, Headcorn, Hollingbourne
- 12) Roadside (on F[olkestone] Sand)\_ W. of Charing Heath, 1954 **MNE**. Heath, Gibbons Brook, 1957, L.J.M. Hothfield. Willesborough
- 13) Roadside bank on T[unbridge] W[ells] S[and] (with *Calluna*, *Serratula*, *Solidago*, etc.) N. of Combwell Wood. Chittenden Wood, 1946 **MNE**. T[unbridge] Wells 55, L[amber]hurst, Cranbrook, Tenderden, Edenbr[idge], Tonbr[idge], Pembury
- 14) Woodchurch, Hawkhurst S, W Oxney 1958, E Oxney 58
- 16) Aldington, Hythe 57, Folkestone

#### [**S. germanica** L.

[Downy Woundwort.]

[16]

Possibly native at one time, or else a naturalised alien, in fields and banks on chalk; extremely rare and long extinct. It is still known, very rarely, in open limestone grassland in Oxfordshire, and formerly occurred in calcareous grassland and banks in a number of other counties, including Hants, Bucks, Northants and Lincoln. It has occurred rarely but widely scattered in the past on dry banks on chalk in the Pas de Calais and I have seen it myself at Saily-le-sec (n[ea]r Amiens) in Somme, in dry chalk grassland. Thus it is quite likely to have been native in Kent.

6) Field beside Darenth Wood, 1857; since gone, after ploughing up, Syme VII, p.56.

8) Earthiot, Lyminge, Rev. R. Price (C.P.S.K., 1829, p.31; the first record).

10) Sevenoaks station, alien, B.D.J.]

#### **S. sylvatica** L.

Hedge Woundwort.

15, 16.

49/51

Native. Woodland and hedgebanks on a wide range of soils other than waterlogged ones and podsols; very common throughout Kent except in the marsh districts; it is unrecorded for Dungeness and Romney Marsh 15) and the alluvial marshes of the Lower Stour and the Swale-Medway estuary, but is present in Thanet (Minster only, rare) and in Sheppey and Grain.

Common in all adjacent counties and in N. France.

1<sup>st</sup> record, 1629: Grain to Cliffe, Johnson, *Iter*, p.8.

1) 46 Hayes Common PCH. 46 Keston Common PCH. 46 Holwood Park PCH. 47 Bexley Ch[urch] y[ar]d, PCH. 47 N. Cray Ch[urch] y[ar]d, PCH. 47 Wet Wood by River N Cray PCH. 46 Crofton Heath PCH. 46 High Wood, Crofton PCH. 57 Joydens Wood PCH. 56 Farningham Wood PCH; 82! 47 Shooters Hill Woods '54 GMB. 37 Beckenham Place Park, 1956, PCH. Abbey Wood 1948, RAB. [Elmers End A.G. Davis, 1915 **MNE**.] 47 Ruxley Pits '58 TH Angel.

3) Golf Course, Whitstable, 57 HMW. Perry Wood, Selling 1945 DHK.

5) 56 Chalk W of Eynsford, PCH. 56 Wood W. of Shoreham PCH. 46 Halstead, PCH. 36 Copse W. of Highams Hill 397612 1958 PCH.

6) 57 Mounts Wood, PCH. 57 Swanscombe Wood PCH. 57 The Thrift, Bean PCH. 67 Swanscombe (Ebbsfleet by channel) 1961, HAS. 67 Gravesend freq[uent] HAS. 55 Beechy Lees Wood, Kemsing. 56 Dunstall Woods, Shoreham PCH. 56 Preston Hill PCH. 66 Halling Warren PCH.

9) 36 Copse S. of Durlock, Minster!; 1959, Mrs AG Side.

10) 57 Darenth Meadows PCH. 55 Sevenoaks tip, 1958, CAS. Westerham Wood 82! 57 St. John's Jerusalem, PCH. 56 R[iver] above S., Darenth PCH. 56 E of Farningham R[oa]d PCH.

11) 44 R[ai]l[wa]y bank Edenbridge, 1956, DPY.



**13)** 53 Gill SW of Stone Cross, Ashurst CAS, 518381. 54 Roundabout Woods, T[unbridge] Wells, CAS. Combwell Wood 79.

**S. sylvatica x palustris**<sup>770</sup> = *S. x ambigua* Sm.

**10)** 441537 streamside Westerham + palustre 1955 DPY. N. of Ightham on Gault, FR.

**11)** Roadside Paddock Wood 1960 CAS.

**13)** Roundabout Woods Tun[bridge] Wells with the parents, CAS.

**S. palustris** L. Marsh Woundwort. 15, 16 43/51

Native. Stream- and ditch-sides, marshes, wet meadows; also in quite dry cultivated land. Generally common, except in the dry chalk areas, but unrecorded for Grain, Sheppey, Hundred of Hoo, and the whole of the Swale lower Thames and Medway estuary below Aylesford and Gravesend, nor for the Len valley.

Common in the adjacent counties and the Pas de Calais.

1<sup>st</sup> record, 1597: Southfleet, Gerard, *Herbal*, p.852.

**1)** Marsh, Ravensbourne Estate, Keston, 1955 **MNE**. Ruxley Pits 58 TH Angel.

Orpington, W Wickham, Gravesend 56

**2)** Dartford Marshes in ditch, 544754, 1961 HMP. Eastchurch, 1918, AG Davis **MNE**. Harty, 1955, **MNE**.

Teynham, Faversham 55

**3)** Trenley Park Wood, Ward, 1955.

**4)** Ham Fen, 1955 **MNE**. Blackburn, Pluck's Gutter, Miss M.E.M.

Sandwich 55, Wingham 58, Chislet

57, E Thanet 55

**5)** 46 Cornfield on chalk n[ea]r Orpington, 1959, F.A. Swain. 46 cornfield, Downe, 1956, Miss A. Mills. 36 Barley field, N. of Blackmans, 397604, NW of Saltbox, 1958 PCH.

**7)** Hucking, H. Elgar, 1904 **MNE**. Arable Belmont Park, 1958, DMCC.

**8)** 14 Arable (Brassica) between Wingmore and Elham, n[ea]r old r[ai]l[wa]y br[idge], 1958, Miss D.A.C.L. 15 Cornfield, Kingston, 1941, J.F. Hyland. 34 Pond sides, E Langdon, Miss B. Nash. 23 Rifle range, Lydden Spout, 1957, KDR. 34 Damp arable, Guston, 1959, Miss B. Nash. 34 Arable above Fan Bay, 1959, Miss B. Nash. Lit[tle] Maydekin, Denton, 1955, Miss DACL.

Dover E, Alkham 56

**9)** St Peters, in dry arable land, L.W.W.

**10)** Darent bank, Sutton at Hone, 562706, HMP. Westerham 441537 1955 DPY. R[iver] bank above S. Darent PCH, 51/562692. Darent, W. of Westerham PCH. Darent E of Westerham GMB.

Farningham,

Sevenoaks, Westerham 55, Dartford

**11)** Roadside ditch on Gault, 1 m. N. of Ightham, New Road, East Malling, by stream. By stream below church, Ryarsh. Hollingbourne, 1961, LRA **MNE**. Fairbourne Mill, Harrietsham, 1960, Mrs.B. Dodds. Teston, by Medway, 1944 **MNE**. Hartlake Bridge 1952 **MNE**. Fowl hall, S. of Laddingford, 1954 **MNE**. Ditch 1m N of Marden, 1952 **MNE**. Marshes W. of Tobridge 1954 **MNE**. By Eden, Marshes E. of Edenbridge, 1955 **MNE**. Handcocks F[ar]m, N of Shadoxhurst. ¼m W. of Bethersden. E. of Vitters Oak.

**12)** 1m. SE of Charing. NE of Shoddington Eastwell. SE of Boughton Lees. Lenacre. W. of Goat Lees. Stour E. of Bybrook. N. of Willesborough Lees. Godmersham, by Stour. S.E. of Shadoxhurst. Goss Green NW of Ruckinge. N. of Dickers Wood, Ruckinge. Stour S. of Willesborough.

Stowting, Willesborough, Hothfield, Chilham, Canterbury 55, Doddington 58, Sturry 55.

**13)** 54 Roundabout Woods, T[unbridge] Wells, CAS. 63 Ditch S. of Lamberhurst Church, 1956 **MNE**. 73 Whitelimes orchard, Bedgebury, 1958, WJ Davies.

Cranbrook 57, Lamberhurst 56, T[unbridge] W[ells] 55

**14)** 82 Pond, Palstre Court, Wittersham, 1958 **MNE**.

**15)** 93 Shirley Moor. 82 Dikes N.W. of Wittersham, W of Small Hythe, 1956 **MNE**. 92 R[oyal] M[ilitary] C[anal], SW of Appledore. 03 S. of Canal, Ham Street. 03 S. of Canal, Bilsington.

Tenterden. S Hawkhurst

56, W Oxney 55, E Oxney, Romney 59, Woodch[urch], Aldington, Dungeness 56, Folkestone 56, Hythe

**[S. annua (L.) L.**<sup>771</sup>

[Annual Yellow-woundwort.]

[16]

Formerly occurred as a colonist (or even a possible native) on chalk, in cornfields and rough ground in 5) and 6), but no recent records. A rare alien in Surrey and Sussex, unrecorded for Essex, but not uncommon in cornfields and rough ground on chalk away from the coast in Pas de Calais and in Somme.

1<sup>st</sup> record, 1830: NW of Rochester, J. Woods in Eng. Bot. Supp., p.2669.

**5)** Sevenoaks, Bab. Man., ed. 8, p 284.

<sup>770</sup> Order of parents reversed in transcript and position regularised.

<sup>771</sup> Cited in manuscript as plain L.

6) Gadshill to Rochester, J. Woods, 1830 Hb. Borrer **K**; Cornfields and hill above Strood, JB Salmon, 1855; Syme VII, p61, Downs at Trottiscliffe, J. Fletcher, 1873, see Sci. Gossip., IX (1873) p.209.

13) Rubbish heap, Royal Chase, T[unbridge] Wells, 1938, L.B. Langmead **TLS**.]

**S. arvensis** [(L.)] L.<sup>772</sup> Field Woundwort 15, 16 38/51<sup>773</sup>

Native, or perhaps colonist. Cultivated fields on a variety of soils, particularly on chalk and sand: widespread, but sparsely distributed and only common locally, particularly in the eastern Weald about Ashford in 12) and 14), and the east Kent chalk of 8), rather rare in W. Kent. Local in Surrey and Sussex, common in Pas de Calais.

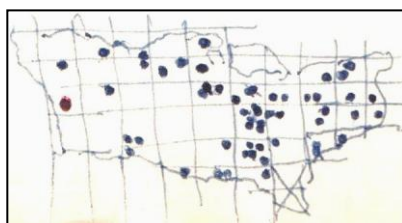
1<sup>st</sup> record, 1632: S. of Margate, Johnson, *Descriptio*, p.23.

2) 87 Arable, Barn Street F[ar]m, St Mary Hoo, 1958, Mrs. A.G. Side, **MNE**. Arable fields between Bysing Wood and Oare, 1960, HMW. Faversham, Stowell, *Phyt. N.S.* 1857. Grain 58

3) 16 Field behind Cemetery, Sturry, 177182, 1961, Miss E. Milward. Cornfields, Upstreet, L.W.W. Gravelly arable, W. of Shelving ford Wood, Hoath, 1962.

5) Orpington, Sevenoaks

6) Peafield NW of Cobham, S. of A.2, 665702, 1958, JF & PCH. 66 Arable S. of Great Wood, Cuxton, 1943, **MNE**.



Dartford, Gravesend, Cobham

7) 85 Arable, 1m NE of Hollingbourne, 1947 **MNE**. 95 Cornfield, Otterden, 1961, C. Turner. 94 NW of Westwell, ES; E.G. Philp 1958 **MNE**. 05 Kings Wood E of Challock Lees, ES. 05 Challock Lees, ES. 94 Frittenfield, ES.

Stockbury, Chatham (Burham), Aldington 56, Hollingbourne, Westwell

8) 15 arable, Pett Bottom, L[owe]r Hardres, 1958, **MNE**. 14 Arable SW of S Barham, 1956 **MNE**. 14 Arable E. of Station, Elham, 1956 **MNE**. 15 Cornfield opp[osite] Iffin Wood, 1958, Miss DACL. 25 Arable, Snowdown, 228508 DMcC 1950. 25 arable about Fredville DMcC. 34 Stubble field, S. Foreland, 1960, Mrs B. Dodds. 24 arable, Sibertswold, 1957, KDR. 25 arable, Nonington ES. Sandwich '56, Wingham, Canterbury 55, Dover E 56, Alkham 55, Elham, Wye, (not 36) W Thanet '55

10) 45 side of Dry Hill Lane, Sundridge, 1957, RAC. Ightham, 1950, Hb. Gardiner.

11) Snarkhurst Wood, 1954 **MNE**. 85 Sandy cornfield N of Chegworth, Harrietsham 1958 **MNE**. 85 cornfield SW of Fairborne Lane, Harrietsham, 1960 Mrs B. Dodds. 95 Arable Great Chart, 1950 **MNE**.

Yalding '56 (PLP), (not 65, not 75), (not 44, not 54), (not 74, not 85)

12) 04 E. of Hernhill ES. 94 N. of Tuthill ES 973468. 94 W. of Westwell ES. 94 ½m N of Potters Corner on sandy verge, ES, 1956. 04 Kennington ES. 93 Arable Field by "Scotts Pond", W of Kingsnorth, 1956 **MNE**. 94 E. of Chilmington ES. 95 Lenham Forstal, in vegetable field, 1958 **MNE**. 93 E of Bromley Green ES. 04 Willesborough ES.

Woodch[urch] 55

13) 63 Field by High Woods, Hawkenbury CAS. 64 Field Kippings Cross, 1957 CAS, 643402. 64 Hubbles Farm, 634425, Pembury, Lower Green, 1956, CAS.

14) 93 Kenardington ES. 92 Appledore ES. 93 918342 Cherry Gardens Woodchurch, ES; 1955! **MNE**. 93 Boldshaves, Woodchurch ES. 82 Arable ½m. W. of Wittersham 1956 **MNE**. 82 Arable, Palstre Court, 1½ m W. of Wittersham, 1958 **MNE**.

not 53 or 73, L[amberhurst, Tenterden, E Oxney 57, W Oxney, S Hawkhurst

16) 13 Sandy arable 165372 SW of Newington, 1954 **MNE**. 13 arable above Gossy Banks, 172362, Hythe, 1958, LJM. 23 Folkestone Brick field, 1948, DMcC.

Hythe, Folkestone 56, Aldington

**Ballota** L.

**B. nigra** L. Black Horehound. 15, 16 48/51

Native. Roadsides and hedgebanks, and waste ground, on well drained soils of all kinds; very common throughout nearly all of Kent, especially near villages in the densely-settled areas of the north coastal plain;

<sup>772</sup> Cited in manuscript as plain L.

<sup>773</sup> The number of hectads which Francis Rose identified in the text is 33 rather than 38. His workings comprised some notes in pencil of the names (and sometimes the numbers) of the hectads which contributed records. Then there was an overlay of hectad numbers in square boxes, assembled as a marginal list which can be used to compute the total. At some stage, a sketch map was produced. For this transcript, the boxed numbers have been brought together to produce a composite hectad map.

widely but more thinly distributed in the Weald, and not so far recorded about Tunbridge Wells, Lamberhurst and Hawkhurst. Common...<sup>774</sup>

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*. P.2.

1) Upper Hockenden, Swanley, PCH. Crofton Heath PCH. Farningham R[oa]d Sta[tion] approach, PCH. R[oa]dside, Bexley Village PCH. 36 Tip by Hayes Sta[tion], 395660, PCH. Shooters Hill, 54, GMB. Beckenham, AGD, 1916 **MNE**.  
Beckenham, Orpington, Farningham, Blackheath 55, Woolwich 55

2) Woolwich Arsenal PCH. Plumstead Sewer Bank PCH. S. Minster Marshes '55. Minster Ch[urch] y[ar]d, '55. Scrub S. of Scrapsgate '55. Copse S. of Brambledown '55. Leysdown Village 55. R[oa]dside Key St[reet] '55.  
Teynham, Faversham, Grain, Sheppey

3) Hernhill Village '55. Canterbury golf course by A257, '55. Canterbury, Whitstable

4) Sandwich Bay. Chislelet

5) Pilgrims Way. Polhill PCH.

6) Mounts R[oa]d, PCH. Gravesend freq[uent] HAS. Stonyfield Wood, Halling, PCH. Cobham,  
Gravesend, Higham

7) Upper Bell '55. Hartlip Hill by A.2, '55. Chatham, Stockbury, Doddington

9) 36 Copse S. of Durlock, Minster, 1959. Mrs AG Side.

9) Elham, Alkham 55, Wingham, Sandwich, Thanet E

10) Otford Village PCH. Sevenoaks tip, 1958, CAS. Bessells Green A Beadell (white). River path below Shoreham PCH. Roadside, Eynsford, PCH. St John Jerusalem PCH. N[ea]r Darent Ch[urch], PCH.

Westerham 55, S[even]oaks, Dartford

11) Otham, 1949 **MNE**. Hartlake Bridge, 1943, J.R.W. Malling, Maidstone, Hollingbourne, Edenbr[idg]e 55,  
Tonbr[idg]e 55, Paddock W[oo]d, Marden, Headcorn 55

12) Hothfield, Woodch[urch], Ashford, Chilham

13) near Goudhurst, 1943, J.R.W. Cranbrook 56

14) Witterham Ch[urch] y[ar]d, '62. Tenterden, W Oxney 56, E Oxney

15) R[oyal] M[ilitary] Canal W of Hythe (white fl[ower]s) 1950, Miss DACL. Dungeness, Romney

16) Aldington, Hythe, Folkestone

**var. ruderalis** Koch

1) Chislehurst, 1838, Powis in Hb. F.A. Hanbury.

10) E. of Westerham, B.D.J.

**Leonurus** L.

**L. cardiaca** L. [Motherwort. 15, 16.]

2) 87 By the Medway, Stoke, Miss Stevens. [06 Waste ground, Faversham, Mrs. Brickenden; destroyed 1960, HMW.]

8) Bank at Ske[e]te n[ea]r Lyminge, Mrs MH Walton, 1939. [stream, Ottinge, Lyminge, E. Solley, 1939; site cleared out, plant replanted in Solley's garden.]

16) [Bank by road, Saltwood, Miss V. Day, formerly; destroyed by roadwidening.]

**Lamiastrum** Heist. ex Fabr.<sup>775</sup>

**L. galeobdolon** (L.) Ehrend. & Polatschek<sup>776</sup> Yellow Archangel. 15, 16.

Native. Woodlands and shady hedgebanks, especially on soils of moderate to high base-status; very common in the chalk districts, abundant in the Low Weald on the Greensand and the Eocene districts of 1), 6a) and 3); unrecorded from the marsh districts 4) and 15), where there are no woodlands, and likewise unknown in Grain and Thanet; very rare in Sheppey, where it is known only in one shady hedgebank.

Common in the adjoining counties and in Pas de Calais.

1<sup>st</sup> record, 1597: Woods belonging to Lord Cobham in Kent, Gerard, *Herbal*, p.568.

1) Abbey Wood, still l[ocally] a[bundant], 1961, HAS. West Wickham Wood, AG Davis 1915 **MNE**. Farningham Wood, PCH; 82!

3) Chequers Wood, Fordwich, 1955.

5) Broom Wood, Cudham, PCH. Pilots Wood, PCH. Beechwood, Darwins Bank, Downe, 1955, JEL. 36 Copse W. of Highams Hill 397612, 1958, PCH.

<sup>774</sup> If completed, this would have dealt with occurrence in adjacent counties and N. France.

<sup>775</sup> In the manuscript given as *Galeobdolon* Adans.

<sup>776</sup> In the manuscript given as *Galeobdolon luteum* Huds.

- 6) Darenth Wood PCH. Lords Wood, Darenth PCH. Dunstall Wood PCH. Greenhills Wood, Otford, PCH. Wingate Wood, Halling PCH.  
 7) 86 copse below Purple Hill on Coombe deposit '55. 85 Stockbury Wood Detling (c[lay] w[ith] f[lints]) '55. 95 Eastling, 1961 C Turner. 96 Judds Wood, Syndale Ospringe, 1945 **MNE**.  
 8) 24 Wood NW of S. Alkham '55.  
 10) Westerham Wood 82. 55 Rooks Hill '55 (rag[stone]).  
 11) 73 Sandling Wood '55 (F[olkestone] Sand).  
 13) 53 Gill SW of Stone Cross, Ashurst, 518381, CAS. 63 Wood by Teise Hoathly, Lamberhurst, '55 (alluv[ium]).  
 14) 92 Gill W. of Acton, Wittersham, Oxney, 1949 **MNE**. Comb Wood Wittersham 1996.

### Lamium L.

#### L. album L.

[White Dead-nettle.]

15, 16

- 1) 47 Shooters Hill '54, GMB. 56 R[oa]dside Up[pe]r Hockenden PCH. 46 Crofton Heath PCH. Farningham Wood, 82. Elmers End, AG Davis 1915 **MNE**. 47 Elmstead Woods 56 Miss A Mills. 47 Ruxley pits, 58 TH Angel. 47 N Cray Wood PCH. 47 Bexley Ch[urch] y[ar]d PCH.  
 2) 47 Sewer Bank, Plumstead PCH. 57 River wall Dartford Marshes 1962. 47 Woolwich Arsenal PCH.  
 5) 56 Field W. of Shoreham PCH. 36 W. of Highams Hill 397612 PCH 1958. 46 Halstead PCH. 56 Pilots Wood, PCH.  
 6) 57 Mounts R[oa]d PCH. 65 R[oa]dside, Wrotham Hill. 66 Cornfield, Buckland R[oa]d, Luddesdown PCH.  
 9) 36 Copse E. of Durlocks, Minster, 1959, Mrs AG Side.  
 10) 57 R[iver] Path below Shoreham PCH. 56 R[oa]dside Eynsford PCH. 56 W of S. Darenth PCH. 57 St Johns Jerusalem PCH. 57 Darenth Meadows PCH.  
 11) 65 Larkfield Heath 1947 **MNE**. 65 S. of Basted, 1957 **MNE**.  
 13) 53 Stone Cross, Ashurst, CAS.

(63) Not about Lamberhurst; 53, NOT 63

#### \* L. maculatum L.

[Spotted Dead-nettle.

16.]

- 2) 67 Ditch, West Court, Shorne, PCH.  
 5) 46 Rubbish tip, Downe, 1956, D.P.Y.  
 11) Clare House shrubbery, E. Malling, 1870 Hb. Lamb, **MNE**. Platt, DMCC.

#### L. purpureum L.

Red Dead Nettle.

15, 16.

Native. Waste ground, hedgebanks, cultivated land, roadsides, etc., abundant.

Common in all the adjoining counties and in N. France.

1<sup>st</sup> record, 1632: Thanet, Johnson, *Descriptio*, p.12.

- 1) Bostall Heath PCH. Farningham Wood, PCH. Bexley ch[urch] y[ar]d PCH. Elmers End AG Davis, 1915 **MNE**. Shooters Hill '54 GMB.  
 2) Sewer bank, Plumstead PCH. Sheerness, Canal Dump, 57, OD. Sheerness garden Weed, 56, Mrs Bryson.  
 5) 36 W. of Highams Hill, 397612 1958, PCH.  
 6) R[oa]dside, Wrotham PCH. Cornfield, Buckland R[oa]d Luddesdown, PCH.  
 7) Roadbank, Mulberry Hill, Chilham (white flowers) 1945, DHK. 96 Ospringe Down HMW.  
 8) 25 Arable, Fredville DMCC.  
 10) Otford, PCH. R[oa]dside Eynsford PCH. W. of S. Darenth PCH. St John's Jerusalem PCH. Sevenoaks tip, 1958, CAS.  
 11) Lunsford Lane (many white fl[owered] plants) 1958. Fairbourne Mill, 1960, Mrs B. Dodds.  
 12) Field E. of Charing n[ea]r A.20 (white flowers dom[inan]t) Miss V. Day.  
 13) SW of Stone Cross, Ashurst, CAS. Hubbles F[ar]m, Pembury, CAS.

#### L. hybridum Vill.

[Cut-leaved Dead-nettle.

15, 16.]

- 1) Several old records near London in Fl. K. 47 Cabbage Field, Farnborough, 1954, PCH.  
 2) 96 Blacketts, Tonge, 1957, DMCC.  
 3) (Reculvers, A. More. N[ea]r Canterbury F.M.W.) 16 Former cornfield, Homewood R[oa]d, Sturry, 1962, Miss M.E.M.  
 4) 26 Field, West Stourmouth, 1956 **MNE**. 25 Nash Court Farm, Ash, R.G.W.  
 5) 56 Between Crockenhill and Eynsford, L.R.A. Grove, 1935 **MNE**. 36 Nash.  
 6) 66 Cornfield S. of Great Wood, Cuxton, 1952 **MNE**.  
 8) (Dover, Miss Anderson.) Walls of Woodville Park, 1960, Mrs. K.D.R.  
 9) Ramsgate, St Peters, F.J.H.; not recently reported.

10) Bi[t]chet Green, Roper.

11) 75 Garden weed, Teapot Lane, Aylesford, 1946 **MNE**. Cemetery R[oa]d, Maidstone, 1883 **MNE**. 54 Bank by Hildenborough Station 1955 **MNE**. 85 Eythorne Street, Hollingbourne, 1960, EGP. (Cornfields, Fant, W.W.R.) (Leybourne, F.J.H.) (Penenden Heath, F.M.W., Fl. K.)

12) 04 (Ashford, J.G. Baker, Fl. K.) (Allotments off Essella R[oa]d Ashford Mrs. N. Baker, 1960, **MNE**. Willesborough E.S.

13) 54 Bank by Bidborough Church, C.W., 1945; 1957, CAS. 64 Hubble's F[ar]m, Bo-peep, Pembury, CAS.

14) 93 Copse n[ea]r Robhurst, Woodchurch, 1962, ES.

16) below Postling Green, Aldington, 1946, **MNE**. SW of Newington, in sandy arable, 1954 **MNE**. [Cliffs W. of Folkestone, G. Walton.]

### **L. amplexicaule** L.

[Henbit Dead-nettle.

15, 16.]

1) 47 Elmstead Woods, A Mills 56. 47 N. Cray tip, PCH. 56 Orchard N.E. of Farningham Wood PCH ('82, by wood!).

2) 57 Arable land N. of Dartford. 87 Grain, 889770, Mrs AG Side 1958. 77 n[ea]r Westcourt F[ar]m W. of Cliffe 1945 **MNE**. 77 Higham Church Street. 67 N. of Shorne.

4) 25 Weddington F[ar]m, N. of Ash, 1957, Miss B. Nash.

5) 56 Chalky field W. of Eynsford PCH.

6) 57 ch[alky] Field W. of Mounts Wood. 57 S. of Greenhithe, F.R. 1945 **MNE**; PCH. 76 rough field S.W. of Cuxton, ch[al]k, 1945 **MNE**. 67 Shorne. 57 E. of Dartford, ch[al]k. 76 W. of Halling village, arable on chalk, 1949 **MNE**. 66 Arable S. of Great Wood, Cuxton, ch[al]k, 1945 **MNE**; 1955. 66 Cornfield, Lads Farm, Snodland, ch[al]k, 1960 **MNE**.

7) 76 Arable on chalk, above Burham. 76 Arable on chalk, Borstal, 1953. 86 Arable S.W. of Stockbury, ch[al]k, 1953 **MNE**.

8) 15 Cornfield S. of Milton, Chartham, {ch[al]k}, 1960 **MNE**.

9) E Cliff Dover, 1957, Mrs K.F.R. 26 Between Acol and Brooksend, 1955, **MNE**. 36 Ramsgate, L.R.A. Grove, 1958 **MNE**.

11) 65 Field SE of Borough Green 1960, CAS. 85 Harrietsham Sta[tion] 1960, Mrs B. Dodds. 75 East Malling Research Station 1957 CAS. Fields W of Edenbridge 1957 CTP & DPY. (Hadlow 1879 FWES **TLS**.)

12) 04 Field n[ea]r Willesborough Ch[urch] 1946 **CNP**.

13) 73 old compost heap pf bracken, Bedgebury Pinetum, 1958, W.J. Davies.

### **Galeopsis** L.

**G. segetum** Neck.<sup>777</sup>

{Downy Hemp-nettle.}

### **G. angustifolia** Ehr. [ex Hoffm.]

Red Hemp-nettle .

15, 16

19/51

Native. Shingle beaches, open chalky ground on downland, cornfields on chalk, rather rare but locally frequent in 6), 8) and 15); very rarely in cornfields on other soils.

1<sup>st</sup> record, [blank]

3) 15 Roadside, Trenley Park Wood, 1951, REW.

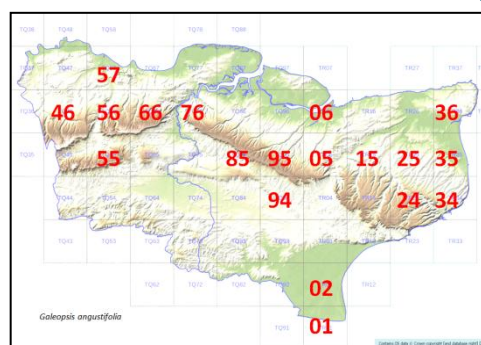
4) 34 Shingle beach, Kingsdown, WWR; 1945!

5) 56 chalk W of Eynsford PCH & FR, 1954 **MNE**. 46 Chalk scrub W. of Saltbox 1950 JD Lovis. 57 Rough gravelly ground, Stone House, 562742, 1947, H.M.P.

6) 66 Halling Warren, PCH. 66 Downs above Upper Halling. 66 Ryarsh Downs by rabbit warren. 66 White Pit, Upper Halling, on bare chalk, 1943, **MNE**. 66 Chalky cornfields S. of Great Wood NW of Cuxton. 57 Chalky cornfield, Mounts Road, Greenhithe. 56 Cornfield, Dunstall Priory, PCH.

7) 76 above Boxley, 1885, Hb Lamb **MNE**. 76 Chalky Cornfields, above Burham. 85 1m N.E. of Hollingbourne, 1947 **MNE**. 05 Hawkin's Wood, Chilham, 1944, DHK.

8) 15 Chalky cornfields, Bonny Bush Hill, Kingston. Brabourne Downs 1957 P. Grattan. 25 Barham Downs. 25 chalk arable 2650, Fredville, DMCC, 1957. Bekesbourne, RGW. 34 Whitfield, 1957, Mrs KDR. 34 Kingsdown, on cliff top in open chalk soil, 1946 **MNE**. 24 Down S. of Lousyberry Wood, Kearsney, 1949 **MNE**. 34 Cornfields SE



<sup>777</sup> Given as *G. dubia* Leers., Downy Hemp-nettle, in the manuscript, but no account provided. Hanbury & Marshall (1899) give an 1836 record and state that it had not been seen recently.



of Ringwould, 1959. 34 NE of St. M[argaret's] Bay (S. of Free Down) 1962. 35 arable, Mongham; 35 Eastry, 1957, Miss B. Nash.

9) 36 Cornfields in Thanet, *Fl. Thanet*; LWW.

11) n[ea]r T[unbridge] Wells, 1906, EC Gilbert **TLS**.

15) abund[ant] on shingle beach, Lydd H. Elgar 1897 **MNE**; Halfway Bush, 1947 **MNE**; 1950 **MNE**; Lighthouse 1950 **MNE**; Hoppen pits 1947 **MNE**; SE of Hamilton F[ar]m 1953 **MNE**.

**G. speciosa** Mill. Large-flowered Hemp-nettle.

16 4/51

Colonist and casual, waste ground, cornfields; very rare in Kent, and hardly established; it has a similar status in most southern counties.

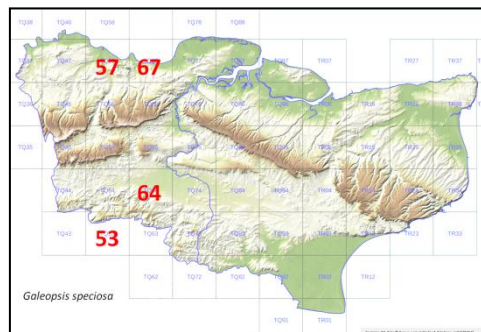
6) 67 East fence of Swanscombe Wood, 1950, H.M.P., 606730.

10) 57 By ponds S. of Central Park, 547733, Dartford, 1949-56, H.M.P. 57 By Roman Vila, Darenth, 565702, 1950, HMP.

11) 64 cornfield by S. side Medway, 605470, K. Atkinson & C.A.S., 1956.

12) [Introduced with peat, Crumps nursery, Canterbury, 1952, 1 pl[ant]; 1958, 1 pl[ant], probably from N. England.]

13) 53 Eridge R[oa]d, Tun[bridge] Wells, on abandoned allotment 1962, KEB (VC14, Kent.)



**G. tetrahit** L. sensu lato Common Hemp-nettle. 15, 16.

1) 47 Ruxley pits, TH Angel. 47 E. of Bexley, '55 t[tetrahit]. 47 below N. Cray Wood PCH bif[ida].

2) 97 East Church Sheppey AGD **MNE** bif[ida].

3) 75 Bysing Wood, '59 t[tetrahit]. 05 Perry Wood coppice 1959 **MNE** bif[ida].

5) 95 Knockholt PCH t[tetrahit]. 36 Well Wood, W. Wickham, 1958, PCH. Arable W of Saltbox 3964, 1950 JD Lovis.

6) Romney St[reet] PCH t[tetrahit]. 77 Peartree Wood Higham 1957 PCH t[tetrahit]. 66 Bush Valley PCH t[tetrahit]. 66 Upper Halling Down 1960 t[tetrahit].

7) 76 West field Wood, 1944. 76 Keycol (Thanet S[and]) 1958 t[tetrahit]. 96 Putt Wood in coppiced area, HMW. N. of Westwell ES. Challock Woods 1954 CNP.

8) 04 Crundale, Wood W. of church, CNP 1954. 24 Frandham Wood River, KDR '53. 25 Brambling quarry 57 P Grattan. 04 Ewell Minnis, KFR '53 bif[ida]. 24 Chilton, KDR '58. 15 Covert Wood KDR 1957; 1941 JH Hyland.

9) n[ea]r Winterham, North Down, St J.M. BEC Rep. 1922.

10) 57 Darenth water meadows PCH t[tetrahit].

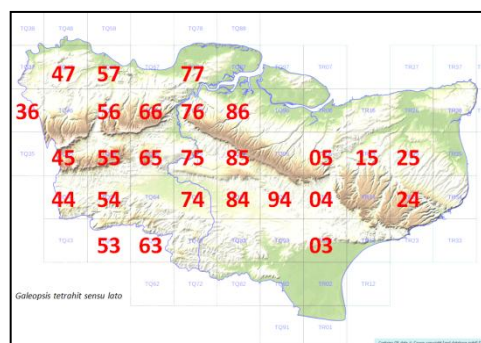
11) 75 Newgates Shaw, Ditton. 65 Leybourne Wood. [Yalding 1896 H Elgar **MNE** t[tetrahit]] Arable, Crouch, DMCC. 85 Fairbourne Mill, 1960, Mrs B. Dodds. 54 Medway bank by Bridge, W of Tonbridge, 577460, 1961, HMP t[tetrahit]. 74 Teise S. of Cheveney Br[idg]e Marden, 1956 t[tetrahit]. 85 Coppice S. of Fairbourne Heath '59 t[tetrahit]. 84 W. part of Dering Wood, E. Scott, 1962. 94 Arable on W[eald] C[lay], G[rea]t Chart, 1950, FR, ES (& bif[ida]).

12) 03 *Castanea* Coppice, Brabourne Lees, 1950. 05 Chilham Mill 1954 by Stour bank t[tetrahit]. 94 Westwell leacon 1956 bif[ida]. 04 Goose Green N. of Willesborough; 04 Mersham; 94 Warren Woods; 94 Little Chart, 1954, C.N.P.

13) 44 Greybury Gill, Edenbr[idg], 1954 **MNE** bif[ida]. Gill SW of Stone Cross, Ashurst, CAS. 63 Boggy Wood, SW of Pembury, 614395, 1956 PCH t[tetrahit]. 54 Ashour Wood, coppice on T[unbridge] W[ells] S[and] 1954. 63 Teise Bank S. of Ch[urch], L[amber]hurst 1956 t[tetrahit]. 63b N side Timberlog Wood, Lamberhurst, 1439 JRW bif[ida].

14) W Oxney. E Oxney.

16) Sandling Park, ESM bif[ida].



**G. tetrahit** L. s.s.

1) E. of Bexley in wood on Thanet Sand '55 **MNE**.

- 3) Bysing Wood, coppice on Thanet Sand '59 **MNE**.  
 5) 45 Knockholt PCH. 36 Well Wood, W. Wickham, 3964, '58 PC & JFH.  
 6) 56 Romney St[reet] PCH. 66 Upper Halling Down, disturbed chalky soil 1960 **MNE**. Peartree Wood Higham 706710, PCH, 1957. 66 Bush Valley PCH.  
 7) 86 Keycol, in coppice on Thanet Sand, 1958 **MNE**.  
 10) 57 Darenth Water Meadows PCH.  
 11) Maidstone, 1881, Hb Lamb **MNE**. 85 Coppice S. of Fairbourne Heath (chert drift) 1959 **MNE**. Yalding, 1896 H. Elgar **MNE** (white fl[ower]s). 54 all[uvium] Wood by Medway W of Tonbridge **MNE**. 74 all[uvium] by Teise, S. of Cheveney Br[idge] Marden, 1956 **MNE**. 94 Great Chart, arable on W[eald] Clay, 1950 **MNE**.  
 12) Chilham Mill, shady bank of Stour (on alluvium), 1954 **MNE**. 54 Ashour Wood, coppice on T[unbridge] W[ells] S[and], 1954 **MNE**. 63 Teise bank (alluvium) S. of Church, Lamberhurst 1956 **MNE**. 63 Boggy Wood S.W. of Pembury, 614395, 1956, PCH.

**G. bifida** Boenn. [Bifid Hemp-nettle. 15, 16.]

- 1) N. Cray Wood, PCH.  
 2) East Church, Sheppey, AGD 1918 **MNE**.  
 3) Perry Wood (1 y[ea]r copp[ice] on Thanet S[and]) 1959 **MNE**.  
 8) 24 Ewell Minnis, a[bundant] 1958, Miss B. Nash.  
 11) Great Chart (arable on W[eald] Clay) 1950 **MNE**.  
 12) Westwell Leacon (arable on F[olkestone] Sand) 1956 **MNE**.  
 13) N. side Timberlog Wood, Lamberhurst, 1939, JRW. Greybury Gill, Edenbridge (open woodland on T[unbridge] W[ells] S[and]) 1955 **MNE**. n[ea]r Tonbridge, Hb. Dill. teste G.C.D.  
 16) Copses, Sandling Park, ESM.

**Melittis** L.

**M. melissophyllum** L.<sup>778</sup>

**Marrubium** L.

- M. vulgare** L. White Horehound. 15, 16  
 2) 87 Dry ground behind sea wall, c.1 mile N. of village, Grain, 1945-48 & → **MNE**. Cliffe Marshes, 1898, H. Lamb **MNE**; 1985, R.F. Frindsbury, n[ea]r Medway, RGW.  
 4) 35 Sandwich Bay, N. of Princes Club House, 1946; 1950 LWW. 25 Shoddy field, Ash, 1960, DMCC **MNE**.  
 11) E. Farleigh 1883, H. Lamb **MNE**. Marden Miss E. Brooks, 1912 **MNE**.  
 13) 54 Waste Ground by Christ Church, Southborough, 1950, K.E. Bull. T[unbridge] Wells, W.W.R., **TLS**.  
 15) 02 Lydd Common, old dune, 1946; 1952; **MNE**. 02 By rabbit burrows on fixed dunes, Romney Warren, 1930, E.C.W.

**Scutellaria** L.

**S. galericulata** L. Skullcap. 15, 16.

Native. Riverbanks, pond, stream and ditch-sides, marshes, fen carr, fens, on base-rich substrata; common in [blank]

- 1) Crystal Palace grounds, Penge, 1916, A.G. Davis **MNE**.  
 2) Dartford marshes, in ditch, 544754, 1961, H.M.P.  
 4) Ham Fen, 1946 **MNE**. Marsh, Plucks Gutter 1955 **MNE**. Stodmarsh, 1950, REW. Preston Marshes, 1960, Mrs. B. Dodds.  
 10) Ditch in pasture above S. Darenth, PCH. Hawley, AC Tagg 1938. Darenth E. of Brasted, 1958, R.A.C. Darenth W. of Brasted GMB. Marsh 1m E. of Westerham 1955 **MNE**.  
 11) By Medway, Allington, 754580, 1961, H.M.P. Pond E of Hale Street 685493, 1957 CAS. Pond 1m E of Headcorn, S. of R[ai]l[wa]y, 1962. Medway Bank, Leigh, 1943 **MNE**. Medway E of Brandbridges, E. Peckham, 1952 **MNE**. By Medway, W. of Tonbridge, 1961, H.M.P. By Medway, E. of Tonbridge, 1956, 605470, CAS. Teston.  
 12) NE of Hatch Park, 067415, E.S. Cradle Bridge, ES. Chilham, Mill Meadows. W. of Kennington, 019445, ES. S. Willesborough, 020405; and 016403, ES. W. of Chilmington Green 976403, ES. Handcocks Farm, Shadoxhurst, 965386 ES. Marshy field, Monks Horton 1953 **MNE**.  
 13) Ditch S. of Lamberhurst Church, 1956 **MNE**. Wood N of Penshurst Park 1959 HJM Brown.

<sup>778</sup> No records or account. Kent records are in error.

# 15) Dungeness. Kenardington Bridge.

## **S. x hybrida** Strail<sup>779</sup>

**13)** Redleaf Wood, N. of Penshurst Park, 1950 **MNE**. Ashour Wood, Bidborough, 1954 **MNE**. Open wood in NE part of Penshurst Park, 1953 **MNE**. Pembury Wood, 1952. Sandy Ride, Kildown Wood, 1945-46 **MNE**. Roundabout Park Wood, 1949, P.R.B. & F.R.

## **S. minor** Huds.

Lesser Skull-cap.

15, 16.

21/51

**Native.** Flushed *sphagnum* bogs, both in the open and in alder carr; damp acid sandy rides in woods; rare generally, but locally common in the High Weald from Penshurst to Biddenden and Sandhurst, in the woods on Tunbridge Wells Sand. Locally common on the Greensand and the High Weald in Sussex, and on Greensand and Bagshot Sands in Surrey; very rare in Essex (Galley wood! Woodham Walter!); very rare in Pas de Calais (Helfaut plateau).

<sup>1st</sup> record, 1829: Brabourne; Willesborough Lees, etc., G.E. Smith in CPSK, p.32.

**1)** 46 Keston Common, 1944 **MNE**; 1959 HMP. 46 Holwood Park. 46 N.W. of Crofton Court, 1954 **MNE**. Roundabout Wood 1960, FM Swain. W of Sparrows Wood, 1954 PCH.

**3)** 06 M. Bishopsden Wood, R.E. Wood, 1950; 1954. 15&16 Stream, Church Wood, 1955, R.G.W. 05 Stream in Wood E. of Rhode Common, Selling, E. Scott 1957; 1959! **MNE**; 1962, Mrs B. & J Gurr. 45 Alder carr at Darent source, Squerries Park, Westerham, 1960, R.A.C.

**10)** 55 Oldbury Hill, bog by pond.; 55 Ightham Common, boggy pond borders.

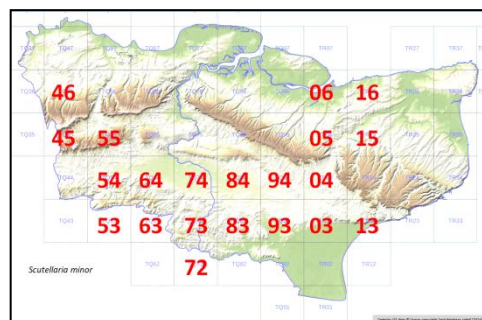
**11)** 34 Dering Wood, in rides on Weald Clay, 1949 **MNE**; 1962, ES. 94 Weald Clay, Centre of the Forest, ES. 74 Widehurst Wood, SE of Marden Beech, 1958 **MNE**. 94 W[eald] Clay, Hoads Wood, S.E. side, E.S. E of Headcorn EP. Grafty Green EP. [Willesborough Lees, CPSK; not recently.]

**12)** 94 Hothfield Common, FMW; 1944-62! **MNE**. 94 Wood by Hothfield Lake RGW. 13 Gibbons Brook, Sellindge. 04 Mersham le Hatch Park, bog in NE part, 1960 E.S. & FR, **MNE**. 03 Bourne Wood, Orlestone, E.S. (W[eald] clay). 93 N.W. part of Faggs Wood, E.S. (W[eald] clay). 93 In wood ½m. S. of Shadoxhurst, E.S. (W[eald] clay).

**13)** 54 Wood on T[unbridge] W[ells] S[and], 1m. W. of Leigh, 1950 **MNE**. 54 Redleaf Wood, M. of Penshurst. 64 Pembury Woods, 1952 **MNE**. 63 G[rea]t Sandhurst Wood 1956. 63 Ellis's Wood, Lamberhurst, 1944. 63 Timberlog Wood, Lamberhurst, 1936, J.R.W. 73 Angley Wood. 73 Brewers Wood, 1960 **MNE**. 83 Chittenden Wood. 83 Wood 1m. S. of Biddenden, T[unbridge] W[ells] S[and]. 83 Sissinghurst Park Wood 1948-61 **MNE**. 83 Roundhill Park Wood 1949-1954 **MNE**. 83 Wood S. of Roundhill Park, 1954 **MNE**.

**14)** 83 Penhill. 83 Brogues Wood, Biddenden. 72 Hurst Wood, Sandhurst.

**16)** 13 Copse in Sandling Park, E.S.M.; 1958! **MNE**.



## **Teucrium** L.

### **T. scorodonia** L.

Wood Sage; Germander.

15, 16.

**Native.** Dry woods, scrub, hedgebanks, heaths, downs, and fixed shingle; generally common in Kent on dry soils, both calcareous and acid, but absent from the alluvial marsh areas, and unrecorded from Sheppey and Grain; extinct in Thanet.

Common in Surrey and Sussex, more local in Essex; locally common in the Pas de Calais.

<sup>1st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

**1)** 36 W. Wickham Common 397653, PCH. 46 Keston Common, P.C.H. 46 Hayes Common PCH. 47 Abbey Wood PCH. 56 Farningham Wood PCH; (82!). 57 Joydens Wood, P.C.H. 46 Holwood Park PCH. 46 Crofton Heath PCH. Shooters Hill Wood, GMB '54. 56 Upper Hockenden, Swanley, PCH. 47 Gatton Plant[atio]n, PCH. 47 N. Cray Wood, PCH. 36 Spring Park W. Wickham, 1915, AG Davis **MNE**. Dartford Heath '54 GMB.

**3)** 16 Golf Links, Whitstable, 1957, HMW. 05 Perry Wood, Selling, 1945 DHK; 1959! 26 Shelvingford Wood, Miss M.E.M. E. side Clay Hill Wood RGW. Holly Hill Wood REW.

**5)** 46 New Years Wood, Cudham PCH. 56 Wood W. of Shoreham PCH. 56 Pilots Wood PCH.

<sup>779</sup> Given in manuscript as *S. galericulata minor* (= *S. x nicholsonii* Taub., *S. x hybrida* Strail).

6) 57 Darenth Wood, PCH. 57 Lords Wood, Darenth PCH. 57 Mounts Road, PCH. 55 Kemsing Downs PCH. 56 Magpie Bottom PCH. 56 Downs E. of Shoreham PCH. 56 Preston Hill PCH. 57 The Thrift, Bean, PCH. 66 Pilgrims Way E of Wrotham PCH. 66 Paddlesworth Downs PCH. 66 Halling Warren PCH.

10) W. of S. Darenth PCH.

11) Swanton Valley, Mereworth 1943-1960. R[ai]l[wa]y, Hildenborough, 563482, CAS.

13) Gill SW of Stone Cross, Ashurst, 518381 CAS. Combwell Wood, 1979!

14) (On Ash[ford] S[and]) College Wood, Wittersham. 1962.

15) Shingle beach, W. of Hythe. Dungeness Beach.

**\*T. chamaedrys L.**

Wall Germander.

[15, 16.]

Alien in Kent. Naturalised on old walls; very rare.

8) Old wall E. of Ottinge, Lyminge; B.E.C. 1931, p.665; Miss D.A.C. Long, 1948.

11) old ragstone wall of garden, Boxtree House, East Malling, 1956-62 **MNE**. (It occurs on the walls of Camber Castle, and at Cuckmere Haven, in Sussex.) This "Continental" calcicole species is native and not infrequent on dry S. facing chalk slopes inland in the Somme department, east of Amiens, and first reaches the SE of the Pas de Calais; it can only however be regarded as a native of Britain in E. Sussex.

In Somme, N. France, *T. chamaedrys* is frequently accompanied by the yellow flowered *T. montanum*; this is another "Continental" species also common in central Europe, which is not found at all in Britain.

**(T. scordium L.**

[Water Germander.]

This species, which occurs in Britain in the fenia of E. Anglia and in dune slacks in the Pas de Calais (e.g. N. of Berck!) but has not been recorded for Kent; it may have occurred on the Sandwich dunes before their extensive drainage during last century.)

**T. botrys L.**

Cut-leaved Germander.

15, 16.

Native. Open stony chalky ground and scree in chalk pits; extremely rare.

This species occurs in similar localities in Surrey (e.g. about Boxhill and Chipstead) though not yet found in Sussex; in N. France, it is known in a number of places in similar habitats in Pas de Calais, Somme, and in Normandy.

6) Rough ground by White pit, and on chalk scree in White Pit, Upper Halling Downs, A.H.W.D. 1894; J. Bot. 1895, p.85, the 1<sup>st</sup> record; 1946-1960, abundant some years!; floor of pit, PCH; cleared woodland above pit, 1960. Rough field, E. of Luddesdown, F. Forsyth.

7) 1 plant, Horsted Valley, before 1913, J. Hepworth (Rochester Nat. & District Sketch guide); 1946 12 pl[ants].

8) Godmersham, 1905, Hammond = field near Crundale, J. Jacob; fide J.E.L., J. Bot., 1925; shown, 1939 to Miss ME Millward = rough ex-arable field on chalk downs above Eggarton Manor, Godmersham, 085 503, 1949, E. Robinson; 1949! Rare! **MNE**; 1951 E Robinson; not seen 1960.

**Ajuga L.**

**A. reptans L.**

Bugle.

15, 16.

Native. Woodlands, hedgebanks, meadows, and scrub, on a very wide range of soils, from moist peats in alder carr and stiff clays to chalk and Thanet Sand; but not found on markedly acid or extremely dry soils; very common throughout Kent.

Common in the adjoining counties and in N. France.

1<sup>st</sup> record, 1597: near Charlton, Gerard, *Herbal*, p.422.

1) Farningham Wood PCH; 82! Roundabout Wood, Crofton H[ea]th, PCH. Joydens Wood, PCH. High Wood Crofton, PCH. North Cray Wood PCH. Spring Park, W. Wickham, 1915 AG Davis **MNE**.

2) Ash copse on London Clay, Warden, Sheppey, 1959 **MNE**.

3) Thornden Wood, Blean, 1945 **MNE**. N. Bishopsden Wood '55. Fishponds Wood Dunkirk, 1960. Wood on Thanet Sand, above Iron Hill Broughton 1960.

5) Wood W. of Shoreham PCH. Pilots Wood PCH. Chevening Park PCH. Wood Darwins Bank Downe '55 JEL; 62! 36 Copse W. of Highams Hill 397612, 1958, PCH.

6) Darenth Wood PCH. Lords Wood Darenth PCH. Horton Wood, PCH. Mounts Wood PCH. The Thrift, Bean PCH. Top of Downs E of Shoreham PCH. Preston Hill PCH. Greenhills Wood PCH. Beechylees Kemsing PCH. R[oa]dside E of Kemsing PCH. Cobhambury Wood copp[ice] '64 HAS.

7) wood on c[lay] w[ith] f[lints], N. of Allington, Hollingbourne, 1949 **MNE**. Copse below Purple Hill '55. Bredhurst Hurst '55. Ospringe Down, H.M.W.



8) Pickersdean, Brook, in scrub at foot of Down, 1955 **MNE**. Clavertye Wood, Elham, in flower, 23.9.1956 **MNE**. Wood N. of Alkham '55.

10) ragstone wood by stream, Dibden, Riverhead, 1960. Rooks Hill 55. Scords Wood. Westerham Wood 82.

11) Wood SE of L[owe]r St Clere '55. Ryarsh Wood. Holt Wood, Aylesford '55. Wood SW of Mereworth '55. Leybourne Wood '55. Oaken Wood, by R[oa]d, W of Barming '55. S'enacre Wood, valley floor loam, 1960. Park Wood, Boughton Mon[chelsea], '55. Starve Crow Woods, and by Str[eam], 1955. N. of Bough Beech '55. Copse, Hever, 1955.

13) Wood N.E. of Cobhambury, Edenbridge, '55. Gill SW of Stone Cross, Ashurst, 518381, CAS. Wood SW of Leigh '55. G[rea]t Sandhurst Wood 634383, 1961. Colebrook Park, Pembury, 1950 **MNE**. NW gill, Combwell Wood 1960; NE 1979! Forest R[oa]d, Tun[bridge] Wells, PA Lane, 1959.

14) Gill NE of Benenden 1960. Mopesden Gill '55.

#### **A. chamaepitys** (L.) Schreb.

Ground Pine.

15, 16

9/51

Native, Bare broken stony ground on the downs, and cornfields on chalk; locally frequent in mid-Kent from Dartford and Eynsford in the west to Harrietsham Downs eastward; very rare elsewhere, but with a few outliers in extreme east Kent.

Locally frequent in the North Downs of Surrey, very rare on the downs in S. Essex, this is a species of markedly S.E. distribution in Britain; it occurs on similar bare broken chalk downs in Pas de Calais (very rare) and in Somme (locally common).

1<sup>st</sup> record, 1597: Kent, Gerard, *Herbal*, p.422.

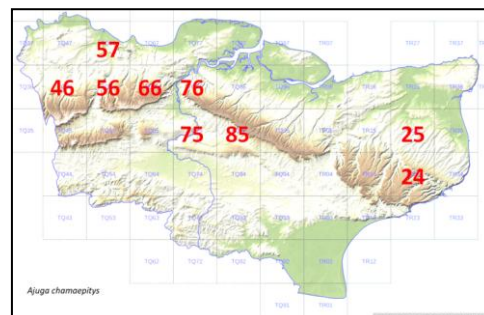
1) [Erith, Hb. Lamb 1860 **MNE**.]

5) S. of Swanley, 1906, C. West. 46 n[ea]r Orpington, 1943, D. Stoyel, per F.R.B

6) 56 Field edge by Rifle Range, Shoreham, PCH, 1954. 56 Rough down above L[ower] Austin Lodge, Eynsford, 1949 **MNE**; 1950. 57 Arable on chalk, ¾m. S.E. of Dartford, 1945. Knatts Valley, W. Kingsdown, 1847, Miss E Bunyard. Rough field N. of A2, N. of NW corner Darenth Wood 1955, 578734, H.M.P. 57 Cornfield W. of Mounts Wood, Greenhithe, 1945; 1962. 66 Down, Foxendown, E of Meopham 1946 **MNE**. 66 Cornfields S.E. of Cobham Park, 1946. 66 Cornfields S. of Great Wood, Cuxton, 1943-55 **MNE**. 66 Halling Warren down below Wingate Wood, N.E. of Up[pe]r Halling, 1944-45 **MNE**. 66 Upper Bush Valley, in open chalk turf, 1945-55. 66 down S. of Red Wood, Luddesdown, 1950-1951, **MNE**. 66 Cornfields W. of Snodland, 1945. 66 Ryarsh Downs, by rabbit Warren, H Lamb 1896 **MNE**; 1943-61; 1949, E.S. Edees. 66 Trottiscliffe E. Downs, 1942. 66 foot of Wrotham Water Down, Mrs AG Side. 66 Corn field above Birling, 1945-53 **MNE**.

7) 76 Cornfield by Kit's Coty, 1945. 76 Cornfields above Burham, 1945. 76 Cornfields above Wouldham. 1946; 75 above Boxley, 1848 **MNE**; 1890 **MNE**; 1947! Boarley Warren, E. Philp 1960; CAS. Burham Downs N[ature] R[eserve] 1998, after scrub clearance. 75 Detling Downs, 1906, H. Lamb **MNE**; E. Scott, 1954. Cornfields above Thurnham, 1948. 85 E.N.E. of Hollingbourne, 1947; **MNE**. 85 Downs N.W. of Broad Street, 1950; 85 Cornfield N. of Goddington/Harrietsham, 1950; 1960, Mrs B.D.

8) Fredville, Tye Wood, 1888, Plumpton. 25 Arable E of Fredville, 2650, N of Barfreton, 1950 Miss DACL; 1957, D. McC, 269513. 25 Cornfield E. of Knowlton, Miss B Nash; 1958, abundant and very large! **MNE**. 24 Cornfield, Ruberry Downe, 2449, 2549, 1957, D.McC. Betteshanger, up to 1939, Misses Plumpton.



#### **Nepeta L.**

**N. cataria** L.

Catmint.

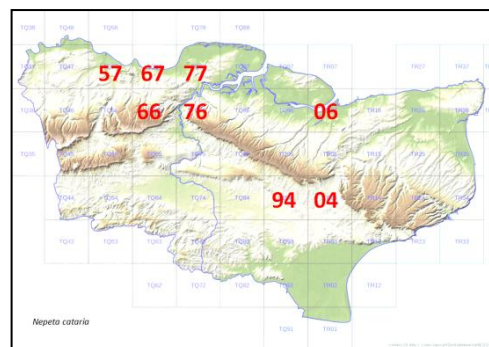
15, 16.

1) Belvedere, Erith, 1861, MNHS **MNE**. Sandpit, Charlton, 1894, AGD **MNE**. Hawley, 1938, AC Tagg. Bank by Farningham R[oa]d Sta[tion], PCH, 1954. 57 Crayford Ness, 1961, J.R. Palmer.

2) 06 Oare. 67 Swanscombe Marshes, 604752, 1950, HMP. Ham Marshes, Faversham, 1950, REW.

5) Highams Hill, W. of Saltbox, Cudham, A Beadell, c.1936-39.

6) 76 Roadside NE of Cuxton, 1950; 1954→ **MNE**. 66 Roadside, Halling to Upper Halling; 1946 **MNE**. 76 S. of Upnor. 57 By Mounts Wood, Greenhithe; 1948, 588734, H.M.P.





- 7) Thurnham 1885 H. Lamb **MNE**. Borstal, 1959, A.F. Musselwhite. Eastwell.  
 8) 04 Foot of Downs in hedge N.E. of Brook, 1947, 1952, **MNE**. Chartham, 1965, Mrs B.  
 [9] Hengrove, 1905, Ethel M. Treves, teste L.W.W.. Nash, Fl. K.]  
 11) Lane by Boxley Abbey, 1887, H. Lamb **MNE**.  
 13) T[unbridge] Wells, W.W. Reeves, **TLS**.

### **Glechoma** L.

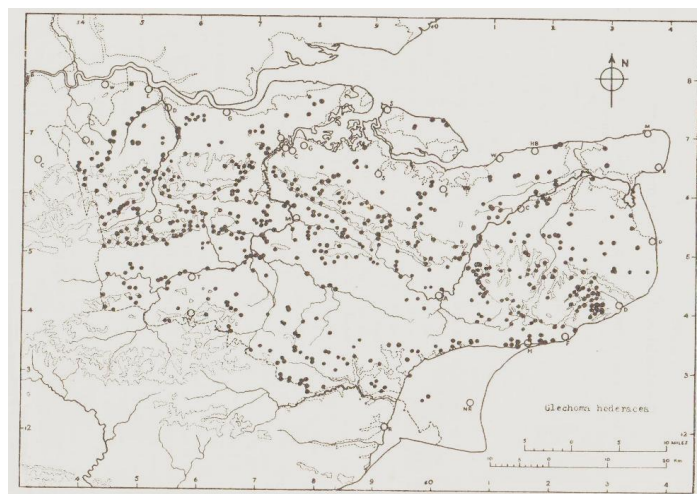
#### **G. hederacea** L.

[Ground Ivy.]<sup>780</sup>

[15, 16]

There is a pink, large flowered form at Mounts Wood, Greenhithe, and Swanscombe Wood, (1947 **MNE**.)

- 1) Abbey Wood PCH. High Wood, Crofton, PCH; FR. Bexley Ch[urch] y[ar]d PCH. By R[iver], N. Cray, PCH. N. Cray Wood, PCH. Shooters Hill Wood, 1954, GMB. Moor Grove Bickley 57 **MNE**. Joyden's Wood. Farningham Wood; 82! Holbrook Wood (Black[heath] Beds/ E. Valley, Scadbury P[ar]k, Chislehurst 59. Wood S. of Skeet Hill, Chelsfield (Terti[ary] S[and]) 498647, 58.  
 2) Copse S. of Brambledown F[ar]m '55. Brambledown Wood, 967720, 1955-58. Hawes Wood, Newington (Wool[wich] Beds) 863658, 59. Sharnal Street, St Mary Hoo (copse on sand) 1955 **MNE**. S. of Norwood Farm, 1959. Warden Wood, l[ocally] a[bundant], 1955-59 **MNE**. Under Elms above Boarers' Run, and in copse below, 1959. East Church Church y[ar]d, 1957. Old R[ai]l[wa]y, Stickfast Lane, Minster, 1958, 962722. E. End Lane, Minster, 1958, 966731. Hedge, Kingsborough, W of East Church, 977722, 1958. Norwood Springs, Brambledown, 873716, 975717, 1958. EastChurch Cliffs, 1955.  
 3) Alder Carr, E. end Trenley Park Wood.  
 4) Copse N of Preston Ch[urch] 1958. Copse SW of Preston Ch[urch] 1958.  
 5) Hedge, Norheads<sup>781</sup>, Biggin Hill, 407587, 1958. 36 copse W. of Highams Hill, 397612, 1958, PCH. Wood on hill W of Shoreham (c[lay] w[ith] f[lints]) PCH. The Larches Wood, W. of Farnborough PCH. Pilots Wood PCH. Darwins Bank, Downe  
 6) Mounts Wood, 1947 **MNE**. Thanet S[and], Darenth Wood 1954 **MNE**. Swanscombe Wood. Southfleet Ch[urch] y[ar]d 1958. Beechylees Wood Kemsing PCH. Greenhills Wood PCH; FR. Dunstall Woods PCH. Preston Hill PCH. Pilgrims Way N of Ightham 1958. R[oa]dside Wrotham PCH. Woodlands Hill, Wrotham, 1955. C[hal]k, Cox's Wood S of Stansted 606613, 1959. C[hal]k, White Ash Wood, Ash, 611645, 1959. Horton Wood (Drift) PCH. The Thrift, Bean, PCH. 77 Northward Hill, H[igh] Halstow; 60, HAS. 66 Scalers Hill, Cobham, '61 HAS. Springhead, copse, 618725-616730, 58. Cliffe Chalk Pit, 725765, 58. Beacon Hill Woods Frindsbury 756715, 1958.  
 7) R[oa]dside Hartlip Hill 55. Hartlip Village 55. Lane SW of Q[ueen] D[own] Warren 55. Bredhurst Hurst 55. Stockings Wood Detling 55. Scragged Oak on c[hal]k loam in Wood, 807613, 1959. Chalk valley Wood E of Badlesmere Lees, 615539, 1959. Ospringe Down HMW.  
 8) copse W of Kingsmill Down F[ar]m, 1959, 103440. Bourne Park Bridge 55.  
 9) Dane Court, Broadstairs 1958.  
 10) Westerham Wood PCH; 82! Rooks Hill '55. R[iver] path below Shoreham PCH. W. of S. Darenth PCH. St Johns Jerusalem PCH. Darenth Meadows PCH.  
 11) Wood SE of L[owe]r St Clere Kemsing '55. Loose 1885 H.L. **MNE**. Towpath Allington Lock '55. Copse by Len, Willington St[reet], 55. R[iver] Len N of Leeds Aldercarr, 58. NW chalk stream Harrietsham, 58. Leeds Ch[urch] y[ar]d, 1959. Chegworth Aldercarr 850528, 58. R[oa]d, Hildenborough 563482, CAS. Yalding Ch[urch] Y[ar]d, 1959. N. of Collier St[reet] by R[oa]d 715469, 58. Path S. of Ch[urch], Headcorn, 1962. Smarden Ch[urch] y[ar]d, 1960.  
 12) Rooting Alders, Alder Carr, 955452, 1959. Copse by Beult, Rooting Manor, 946445, 1959. Wood E of Ruckinge, 1958, 053345.



<sup>780</sup> Map taken from Rose, F. (1955) The new Flora of Kent. *The South-Eastern Naturalist and Antiquary* 60: 9-19.

<sup>781</sup> Given as Norsteads in the manuscript, but that is a placename between Cudham and Pratt's Bottom.

**13)** Gill E of Crundalls F[ar]m, Brenchley, 1958. Wood by R[iver] Teise, Hoathly, Lamberhurst, '55. Gill NW of Brenchley 1958. Combwell Wood, S end, by *Tilia*, 1959-79! Aldercarr 1 m E of Curtisden Green, 58.

**14)** Bank, St. Michaels, 1908, J Ridley **MNE**.

**16)** Kiln Wood Sandling Park 133365, 58. Ragstone Scarp: Aldergate 096351, 58 / Honeypot 088352.

### **Prunella L.**

**P. vulgaris L.** Self-Heal. 15, 16.

Native. Pastures, roadsides, downland, open places on paths in woods, heaths, etc.; very common throughout Kent on all types of soils. Good (Geog[raphical] Handbook Dorset Flora) found this the commonest plant in Dorset in his survey of that county.

Very common in all adjacent counties and in north France.

<sup>1st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

**1)** Hayes Common PCH. Shooters Hill Woods, 1954, GMB. Pickhurst Green, Hayes, 1915, A.G. Davis, **MNE**. Crofton Heath PCH. Joydens Wood PCH. Farningham Wood PCH; 82! Bexley Churchyard, PCH.

**2)** Weed, Murtons F[ar]m Graveney '56, R. Theobald.

**4)** Meadow ½m. N. of Wingham, 1956 **MNE**. 26 n[ea]r Stodmarsh, Miss M.E.M. Sandwich Bay.

**5)** Halstead, PCH. Wood W. of Shoreham, PCH. Chalk W. of Eynsford, PCH. Chevening Park, PCH. 36 Well Wood W. Wickham, 3964, '58 PCH.;

**6)** Pilgrims Way E of Wrotham PCH. Birling Downs, 1946 **MNE**. Kemsing Downs, PCH. Horton Wood PCH. Mounts Wood PCH. Swanscombe Wood PCH. The Thrift, Bean, PCH.

**7)** Ospringe Down, H.M.W.

**8)** Downs E. of Etchinghill, 1959 **MNE**.

**9)** Churchyard, St Peters, 1958, teste D.W. Bloodworth.

**10)** St John Jerusalem PCH.

**13)** Stone Cross Gill, Ashurst, c.518381, 1959, CAS. Combwell Wood 1979.

**15)** Pastures on alluvium, Ethnam, Sandhurst Levels, 1954 **MNE**.

### **P. vulgaris x P. laciniata**

N[ea]r Hatch Hill, S. of Red Wood, Luddesdown, with parents, PCH; 1959, F.R. **MNE**.

**P. laciniata (L.) L.**<sup>782</sup> Cut-leaved Self-heal. 15, 16.

Possibly native, though it may be an introduction. Dry grassland, mainly on chalk; very rare. Very rare in Surrey and Sussex, and not yet reliably reported from Pas de Calais.

<sup>1st</sup> record, 1920: Herne Bay, Sherrin, *B.E.C. Rep.* 1920, p.146.

**2)** locally abundant in Sandpit, Motley Hill, Lower Rainham, 1950, **MNE**.

**3)** Downs near Herne Bay, W.R. Sherrin (vide supra) ; probably on the cliff tops to the E.

**6)** one plant on downs N. of Paddlesworth, Birling, 1946 **MNE**. N[ea]r Cobham, Miss Bacon, probably = Downs S. of Red Wood, Luddesdown, loc[ally] abund[ant], 1950; 1959 **MNE**. Downs opposite Luddesdown Church, 1932, Miss K. Green, **MNE**. Downs above Trottscliffe, 1961, Mrs. A.G. Side. [Formerly at 643637, SE of Meopham, C.M. Baker.]

**8)** Elham valley, Miss J. Peploe.

### **Melissa L.**

‡ **M. officinalis L.** Balm. [15, 16.]

Alien, naturalised on roadsides, etc., as a garden escape.

<sup>1st</sup> record, 1777: Davington, etc., E. Jacob, *Pl. Fav.*, p.67.

**1)** [n[ea]r Bromley, Scargill.]

**2)** [Higham Church Street, F.J.H.] [Davington; Boughton, E. Jacob.] 77 Upnor, 1960, Mrs. B. Dodds.

**5)** 77 Hedges W. of Saltbox, 1950, JD Lovis.

**6)** 67 Northfleet, PCH, 1956.

**7)** 86 Roadside ½m. W. of Queendown Warren, ESM; 1944!

**8)** 25 Barfreston, 265511, 1936 PHC; 1958, Mrs. K.D. Rowlands, **MNE**. 35 Eastry, C Turner '61. 14 Barham, WH Pearsall senior.

**9)** [Margate, H. Trimen.] Cliftonville, L.W.W.

**10)** 57 Darenth village, 559713, verge, 1948, HMP.

<sup>782</sup> Cited as plain L. in the manuscript.

- 11) 54 Roadside, Lyons Crescent, Tonbridge, 1941, J.R.W. [Medway bank, below Tonbridge, 1870, J.S.M.] [Aylesford, W.M.R.] [N[ea]r Boxley, n[ea]r a garden, F.M.W.] 75 Barming, E.G. Philp, 1960, **MNE**.  
 12) 15 Canterbury bombed sites C Turner.  
 14) [Tenterden, Hb. Willsher.]  
 15) 92 Roadside, n[ea]r Appledore Station, 1959 **MNE**.

### **Clinopodium** L.<sup>783</sup>

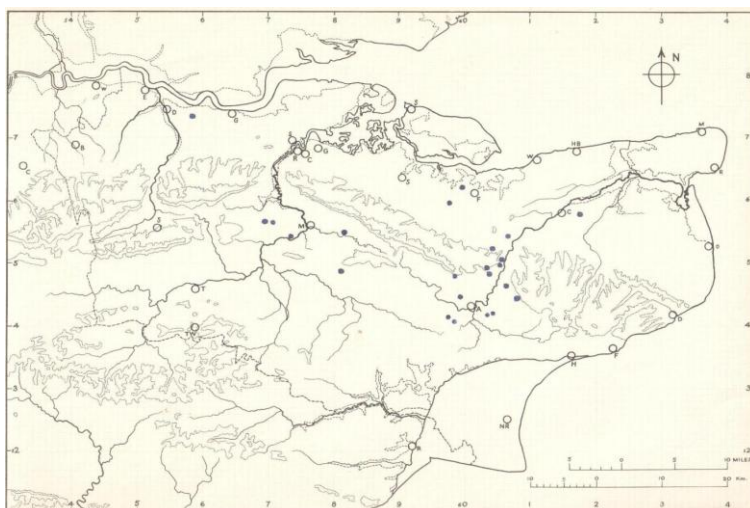
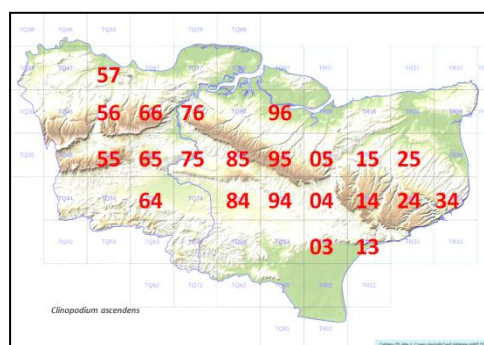
**C. ascendens** (Jord.) Samp.<sup>784</sup> Common Calamint. 15, 16 22/52?<sup>785</sup>

Native. Dry banks, rough dunes, wood-borders; locally frequent on chalk, ragstone, Folkestone Sand, and Thanet Sand; rare elsewhere, and absent from the marsh districts, Sheppey, and nearly the whole of the Weald.

Occasional in Surrey and Sussex, rare in Essex, rare in Pas de Calais.

1<sup>st</sup> record, 1632: Margate to Nash, Johnson, *Descriptio*, p.16.

- 1) Hawley, AC Tagg, 1938.  
 3) 96 SE facing roadside bank, E. border of Bysing Wood, 1957 **MNE**, 1959. 15 Roadside of A.257, near Golf Club House, Old Park, Canterbury. 15 Border, Hospital Wood, Fordwich, 1950, **MNE**. R[oa]dside, Chislet Colliery, 1950, REW.  
 5) 56 Chalk W. of Eynsford, PCH & FR. 56 Farningham R[oa]d Sta[tion] approach, PCH.  
 6) 57 Turning off Mounts Road, S. of Greenhithe; PCH 1954, **MNE**. 66 Cobham. 66 Red Wood, Luddesdown. 66 Halling, bank by r[oa]d to Upper Halling, abundant **MNE**. 66 Snodland Downs. 66 Ryarsh Downs 663617, 1944, DMCC. 76 Merralls Shaw, Cuxton, 1943 **MNE**; 1945. 57 Darenth R[oa]d, Dartford, 1948 HMP. Darenth Village 1948 HMP. 56 Longfield, A. Beadell c.1936. 66 Hartley Church, A. Beadell c.1936. Ride, Stoneyfield Wood, above Halling PCH. 76 Chalky bank of R[oa]d, Cuxton, PCH; 1943-58 **MNE**. 66 Pilgrims Way, Upper Halling, 1958 **MNE**. 66 Paddlesworth Downs 682627 1946 DMCC. 76 Bluebell Hill A. Beadell c.1936.  
 7) Borden; Stockbury; Green Street, RGW. 95 Kettle Hill, Eastling 1961 C Turner. 76 Burham. 75 Detling. 96 Border of Putt Wood, Ospringe; 1960, HMW. 05 N. of Ch[urch], Chilham, 1067542, ES. 05 Mulberry Hill, Chilham, 076538, DHK, 1943. 95 Belmont Park, D.McC., 1958 **MNE**. R[oa]dside, Badging Wood 1951 REW. 04/05 Godmersham Downs, 057497; and 060505, ES. 04 E. side of Whitehill, 036492, ES. 94 W. of Dunn Street, Westwell, 985480, ES. Park Wood edge, Chilham 042524, ES.  
 8) 04 Roadside bank, on chalk, ½m. E of Wye, 063465, ES. 14 Roadside N. of Atchester Wood, E of Bossingham, 1951 **MNE**. 04 R[oa]dside, Cuckoldscoomb, 080445, ES. 24 River, slip road, 1957, Mrs KDR. 25 Barfreton. 15 Bekesbourne, Miss E Milward. 34 above St Margarets Bay 1953, D.P.M.  
 10) 55 Rooks Hill escarpment. 65 Well Street n[ea]r Gilletts Hole, East Malling; 1979!



<sup>783</sup> In the manuscript given as *Calamintha* Moench. *Clinopodium* as a genus is applied there only to *Clinopodium vulgare*.

<sup>784</sup> In the manuscript given as *Calamintha ascendens* Jord. The first map has been prepared for this transcription from batches of hectad numbering entered in the manuscript margin. The second map is Part of a series of maps from Francis Rose's folder marked Kent Flora Maps which are generally incomplete as regards the distribution dots; but this is one of the better ones, albeit apparently incomplete towards the west.

<sup>785</sup> Francis Rose has queried this total, but it appears accurate.

**11)** 75 Roadside banks, The Rocks, East Malling 1943-62. 65 Watringbury. 75 Teston. 65 Plaxtol. 65 Frog Lane, West Malling. 65 Addington, 1945 **MNE**. 75 Hedgebanks, Barming. 75 Boughton Quarries. 85 By A.20, Woodcut Hill, W. of Hollingbourne, on Folkestone Sand, 1950 **MNE**. 84 By A.274, Sutton Valence Hill. 64 Lane E. of Hale Street, E. Peckham, 1956 **MNE**. 85 Wall, Knowl Hill, Ulcombe, 1960 Mrs B Dodds.

**12)** 04 NW of Boughton Corner 039483 ES. 94 Hedgebanks on F[olkestone] Sand, N of Potters Corner 993448 ES. 04 R[oa]d, Willesborough to Hernehill, 044422 ES. 04 Main Road, A20. By A20, Willesborough 1948 **MNE**; 035419 ES. 94 A28, SW of G[rea]t Chart, 975417, ES. 04 Mersham; 94 Chylmington Quarry on Ragstone, 982409.

**16)** 03 Aldington, Copperhurst, 1947, **MNE**. 13, 1 pl[ant], old track, Hythe Sta[tion], 1958, LJM.

**var. Briggsii** Druce

**6)** n[ea]r Dartford, G.C.D., *B.E.C. Rep.*, 1923, p.206.

**C. calamintha** (L.) Stace<sup>786</sup> L.

Lesser Calamint.

15, 16.

**Native.** Dry hedgebanks, roadside verges and pastures on base-rich gravelly soils, frequently associated with *Rumex pulcher*: rare, but scattered along the valley- and river terrace-gravels of the N. Kent coastal plain, from Abbey Wood, Plumstead to Faversham, where it is locally abundant, formerly more widespread, from Charlton to Thanet; an outlying locality exists at Leybourne on the Medway gravels. This interesting and pleasantly-scented plant is a drought-resistant "Southern-Continental" species: it remained fresh right through the great drought of 1959. In Kent it appears to be on the edge of its range, being very common in parts of Essex, Suffolk and Cambridge. In the past it occurred very rarely in Surrey and Sussex, but there are no recent records. It occurs in similar gravelly places at the mouth of the Somme, but not in Pas de Calais.

**1)** Dry grassland on Roadside and banks, Lessness Abbey, AHWD; 1948, R.A.B. ; (1949!): [Charlton: Plumstead: Belvedere.]

**2)** Roadside of A.249, between Key Street and Bobbing, abundant, 1945-62 **MNE**. Dry pasture opposite Davington Priory, 1839, Cowell; L.W.W.; 1955-1959! **MNE**. Davington Churchyard, H.M. Wilks, 1960. Roadside bank between Teynham and Conyer, 1955. By A2, Norton Cross roads; by A2, Syndale Bottom turning, R.E.Wood, 1950. E. side A.249 S of Kings Ferry Bridge, abund[ant], 1986!

**6)** By Darenth R[oa]d, S.E. of Dartford, H.M.P., 1961.

Stone Church Yard, 1948, H.M.P. Abundant in dry gravelly pastures and r[oa]d verges about 584741 Stone Castle, 1945 **MNE**; 1948-1961, H.M.P. [Darenth, Syme.] [Cobham, Ridley.] Green Street Green, in dry turf near the Inn, Cooper, Fl. Met.; 1947 **MNE**; - 1961, H.M.P. R[oa]dside, Green Street Green to Longfield 1960 F.M. Swain.

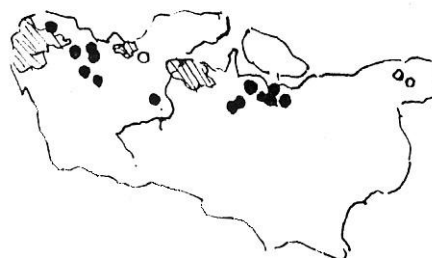
**7)** Roadside of A.249, between Key Street and Chestnut Street, 1986!; S.W. of Chestnut Street, 1945-62, **MNE**, abundant.

**[9)** Dry banks at Westwood; Upton; and Nash, Fl. Thanet.]

**[10)** R[oa]dside N. of Eynsford, 1863, J.S.M.]

**11)** Dry pastures around Leybourne Church and Castle; and in the Churchyard, W.M.R; 1944-1961, **MNE**.

1<sup>st</sup> record, 1629: Gravesend to Rochester and Gillingham to Sheppey. Johnson. *Iter*, p.5.



**C. vulgare** L.

Wild Basil.

15, 16.

**Native.** Rough grassland, scrub, hedgebanks and roadsides; very common on chalk, common on ragstone, occasional elsewhere, but scattered on dry sunny banks throughout most of Kent. It occurs widely on non-calcareous soils (except podsol) in dry, sunny habitats.

Very common in Surrey and Sussex on chalk, occasional throughout the Weald; not uncommon in Essex; common in Pas de Calais.

1<sup>st</sup> record, 1597: Longfield Downs, Gerard, Herbal, p.549.

**1)** Kent Gate, W. Wickham, AG Davis, 1915 **MNE**. R[oa]d, E. border of Joydens Wood, PCH.

**3)** Dry ground, Seasalter, 1957, HMW.

<sup>786</sup> In the manuscript given as *Calamintha nepeta* (L.) Savi.



- 5) Cudham, PCH. Larches Wood W. of Farnborough PCH. Pilgrims Way, Polhill, BCH. Pilgrims Way Chevening PCH. Farningham R[oa]d Sta[tion], PCH. S. edge of Well Wood, W. Wickham, 396642, '58 PCH. Darwins Bank, Downe, 1955, JEL. Down W. of Salt box 1950, JD Lovis.
- 6) Swanscombe Wood, PCH. Swanscombe pits 1961 HAS. Horton Kirby PCH. Kemsing Downs PCH. Otford Mount PCH. Preston Hill PCH. Downs E of Shoreham. Rifle Range, Shoreham PCH. Halling Warren, PCH.
- 7) 95 Belmont Park, by *Verb[ascum] lychnitis*, '59, HMW. 96 Ospringe Down, HMW.
- 10) 55 Sevenoaks.
- 11) 75 E. Malling freq[uent]. Ditton S. Quarry 1954; 1957 CAS. 75 old ragstone quarry ½m. N. of Yalding, '62. 85 R[oa]dside, Kings Wood, Ulcombe, 1960, Mrs. B. Dodds. 44 on chalk, R[ai]l[wa]y bank Edenbridge, 1956 DPY. 54 R[ai]l[wa]y, Hildenborough 563482, CAS.
- 12) 94 Chylmington Quarry. 94 Egerton. 94 Pluckley. 04 Sevington Quarry.
- 13) 63 R[oa]dside S. of Horsmonden. Lit[tle] Scotney, JS, **TLS**.
- 14) 83 R[ai]l[wa]y Bank, NE of Station, Tenterden, 1959 **MNE**.

**C. acinos** (L.) Kuntze<sup>787</sup>

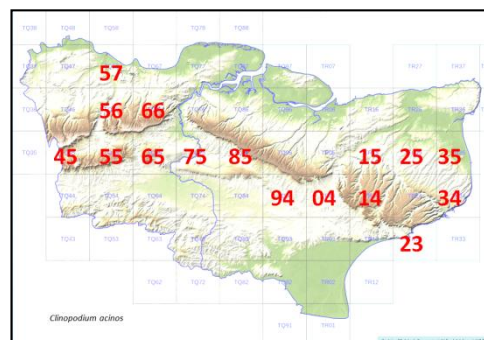
Basil Thyme.

15, 16.

*Native. Rough ground, open grassland, and arable land on chalk, frequent; very rare elsewhere.*

*Not very common in Surrey on chalk. Rather rare on the chalk in Pas de Calais.*

- 1) 57 on imported chalky soil on marsh by R[iver] Darent, 1m. N of Dartford, 1 plant, 1962.
- 2) 57 chalky bank, Birchwood Road, W. of Swanley, PCH. 56 S. Edge of Farningham Wood, on Thanet Sand, 1950 **MNE**. Hawley, 1938, AC Tagg.
- 5) 45 W. side Morants Court Hill PCH. 56 On chalk, W. of Eynsford, PCH. Potato field W. of Saltbox 1950. J.D. Lovis.
- 6) 57 Roadside N of Blackdale F[ar]m, SE of Dartford, 1957 **MNE**. 55 Kemsing Downs, PCH. 55 N.W. of Wrotham, 1947 **MNE**. 66 Field below Downs above Trottiscliffe, PCH. W of Pilgrims House, Trottiscliffe, 1950 **MNE**; 1958. 66 Rough open ground on Downs above Ryarsh. 66 Halling Warren, PCH. 66 Upper Halling Downs, 1943 **MNE**. 66 White pit, Halling, 1958 **MNE**.
- 7) 75 Boarley Warren, E.G. Philp, 1958, **MNE**. 85 Down 1m. N.E. of Hollingbourne, 1947, **MNE**. Chalk scrub S.W. of Doddington '59 REW. 96 Highsted chalk pit, 1958 DMCC. 94 glade above Pilgrims Way, 1m NW of Westwell, 1962. 95 R[oa]dside, Badging Wood, Throwley, 1951, REW.
- 8) 04 Brook Downs, Pickersdean, 1945 **MNE**. 04 Brook Hillock, 1955 **MNE**. 04 N of Winchcombe F[ar]m, Godmersham, 1960, **MNE**. 14 Arable, Stowting Hill, 1958 LJM. 25 Bonny Bank Hill, Kingston, 1960, **MNE**. Wootton Hill DACL. Laneside, Broome Park to A.2, DACL. 15 Edge of Whitehill Wood, Nackington, 1955 **MNE**. 15 Chartham Downs, AW Roberts. 15 S.W. of Larkey Valley Wood, AW Roberts. Brambling Pit RGW. 25 Old R[ai]l[wa]y Track, Knowlton, 1958, Miss B. Nash. 35 Arable 308502 N. of West Studdal F[ar]m, Sutton, 1960 Miss B Nash. 13 Downs E. of Etchinghill, 1959, **MNE**. 23 Folkestone Downs, 1961 **MNE**. 34 Langdon Bay, 1957, KDR. 34 St. Margarets Bay, 1958 **MNE**.
- 10) 56 on old wall, Farningham Village, PCH.
- 11) 65 Ragstone wall top, East Malling.



‡ **Hyssopus** L.

‡ **H. officinalis** L.

Hyssop.

15.

*Alien. Naturalised on an old wall.*

- 2) Shurland House, East Church, abundant on an old garden wall, 1959, **MNE**.

**Origanum** L.

**O. vulgare** L.

[Wild Marjoram.]

[15, 16.]

*Native. Rough grassland, scrub, dry banks, wood borders, quarries, and roadsides; on chalk, abundant, and on ragstone, frequent; widely distributed but rare elsewhere. White-flowered plants are not rare. This plant behaves as a weak "calcicole" in Kent.*

*Common on chalk, rare on other soils, in Surrey and Sussex, rare in Essex, except on chalk; common in Pas de Calais.*

<sup>787</sup> In the manuscript given as *Acinos arvensis* (Lam.) Dandy.



1<sup>st</sup> record, 1629: [Gravesend to Rochester, Johnson, Iter, p.3.](#)

- 1) E of Farningham R[oa]d Sta[tion], PCH. Chalky bank, Birchwood R[oa]d, W of Swanley PCH. Edge of Dartford Heath '54 GMB.
- 2) Old Railway Stickfast Lane, SE of Minster, Sheppey, 1958 **MNE**.
- 3) 16 R[ai]l[wa]y Bank Whitstable 1950, REW. 06 R[ai]l[wa]y Bank Seasalter 1957 HMW.
- 4) R[oa]dside, Grove Corner to Preston, 1950, REW.
- 5) Halstead PCH. Cuxton PCH. 36 S. edge of Well Wood, 396642, W. Wickham PCH '55. Edge of Andrews Wood, Badgers Mount PCH. Chaslk W. of Eynsford, PCH. The Larches Wood W. of Farnborough, PCH. Pilgrims Way Polhill, PCH. Chevening Park, PCH. Darwins Bank, Downe, '55 JEL.
- 6) Swanscombe pit (white) HMP. Kemsing Downs, PCH. Otford Mount, PCH. Horton Kirby, PCH. Mounts R[oa]d PCH. Down E of Shoreham PCH. Preston Hill PCH. Paddleworth Downs PCH. Halling Warren PCH, Chalk bank by R[iver] Bank Cuxton PCH.
- 7) Ospringe Down, H.M.W.
- 8) Larkey Valley Wood, 1950 REW. Iffin Wood, 1950 REW. Whitehall Wood, 1950 REW.
- 11) 75 Roadside, E. Farleigh. Ditton quarries, N 714575; S. 715566. 85 Roadside, King's Wood, Langley. Aylesford gravel pits 735 888 CAS, '57. 65 Spring head, E. Malling, on ragstone, 1962. 44 R[ai]l[wa]y bank, Redhill line, Edenbridge 1956 DPY. 54 R[ai]l[wa]y S. of Hildenborough Station, CAS, 563482.
- 12) 94 Egerton, roadside. 94 Chylmington quarry. 04 Mersham quarry. 03 Roadside, Claphill. 03 Roadside, Aldington Corner.
- 13) R[ai]l[wa]y bank 300 yds SE of Tonbridge Sta[tion] on imp[orted] chalk, 1950, KEB; 1956, CAS. Old wall, High Rocks Lane, K.E.B., 1950.
- 14) Tentereden, on r[ai]l[wa]y bank NE of station, 1959 **MNE**.
- 16) Ragstone scarp at: 03 Aldington Knowl; 03 Aldersgate, Aldington, 1958 **MNE**; Lypne, below Castle; 13 W. of Hythe; 13 Saltwood.

#### Thymus L.

‡ **T. vulgaris** L.

[Garden Thyme.

15.]

- 2) abundantly naturalised on the old wall round the gardens of Shurland House, East Church, 1959, det. D.McC.

#### T. pulegioides L.

{Large Thyme.]

[15, 16.]

**Native.** Dry banks, heathland, grassland on chalk and on acid sands and loams; abundant on chalk, widespread and frequent elsewhere.

[Common in Surrey and Sussex, rare in Essex. In Pas de Calais, at Cap Blanc Nez and Ambleteuse.](#)

1<sup>st</sup> record (as *T. chamaedrys*) 1855; [Rusthall Common, A.G. More in Phyt. N.S. I, p.295.](#)

- 1) Chislehurst Common, 1885, F.J.H., **BM**, det. D.H.K.; 1945! Hayes Common, 1953, D.H.K. Keston Common, 1953, D.H.K. Dartford Heath, 1948, H.M.P.; 1954, GMB.
- 5) W. of Pilgrim Ho[use], Westerham 1955. Brasted Downs, 1927, JEL Hb. L. det. CDP. Chevening Park, 1951. Polhill Down. Darwins Bank, Downe, 1947.
- 6) Butts, Shoreham Rifle Range PCH. Whitehill Shoreham. Darent Wood. S of Greenhithe. Kemsing Downs.. Birling Downs, Hb. IB Hall, det. C.D.P., 1950. Cliffe chalk pit. Downs above Wrotham 1948 **MNE**. +Ryarsch Downs 1945. +Down S. of Cobham Park 1945. W. of Red Wood, Luddesdown, 1950 **MNE**. Upper Bush Valley, 1954 **MNE**. Upper Halling Downs, 1950, 1953 **MNE**. M[oun]t Ephraim, Snodland Downs, 1954 **MNE**. Cuxton.
- 7) Burham Downs. Boarley Warren. Downs W of Detling. Queendown Warren. Hollingbourne Downs. +Down NW of Harrietsham, 1950. +Foxbury Down, E of Lenham 1950. 96 Down opp[osite] Putt Wood, Ospringe 1945; HMW. Kettle Hill Eastling C Turner '61. Chalk slope Stockbury 1924 Miss MW B.... Hb SLBI. Suomi, Westwell, ES. Godmersham Down 1946.
- 8) Wye Crown. Broad Down. Crundale Down. Stowting Down. Chilham. Downs E. of Egerton Manor, Godmersham, 1951 **MNE**. Down N. of Atchester Wood, Up[pe]r Hardres 1951 **MNE**. Down N. of Maxted Street, Elmsted, 1951 **MNE**. Brambling Pit, S. of Whitehill Wood. Brabourne E. Downs, 54. Park gate Down. Down E of Elham. Alkham. Abbotscliff 1951. Newington Downs 1955. Lydden. Kingsdown Golf Course 1954 **MNE**. Folkestone Downs 1961 **MNE**. Hacklinge. Kearsney. 35 Tilmanstone, R[oa]d bank SE of Village, 1960, Miss B. Nash
- 9) 36 Chalk turf on cliffs, Kingsgate, 1959.
- 10) 55 Bank on sandy loam W. of Stone Street, Seal, 1949. 45 Hosey Common, 1942, P.H.C., Hb. LNHS; det. DHK.
- 11) 65 Swanton Valley, Mereworth, 1943. 75 Bank by Isolation Hosp[ital], E. Malling, 1944.
- 12) 13 Roadside verge W. of New Inn Green, 1947. 94 Roadside, Hothfield Common, 1946.

**13)** 53 Bank, Rusthall Common, 1948. 53 Tunbridge Wells Common, 1948. (Horsmonden 1896 JS **TLS**.) 64 Lane NE of Kippings Cross 1944. 64 Brenchley 1952. 63 Lamberhurst, Bank (Scotney gate), 1945. 73 Forest plots, Bedgebury Pinetum WJ Davies 1958 (as *T. drucei*).

**14)** 83 Peahill, Tenterden (Wad[hurst] C[lav]) 1947.

**15)** 02 Fixed dune pasture, Romney Warren, 1950.

**16)** 03 Aldington Frith, 1950, on Folkestone sandstone rocks. 23 Folkestone Leas cliff, 1950.

**T. polytrichus** A. Kern. ex Borbás<sup>788</sup> [Wild Thyme. 15, 16.]

**5)** Darwins Bank, Downe, 1955, JEL.

**6)** Downs E of Shoreham PCH. Downs NW of Church, Kemsing, 1954 **MNE**. Ryarsh Downs, 1945 **MNE**. Birling Downs, C.D.P. Halling Warren PCH.

**7)** 76 Burham Downs, 1954 **MNE**. 75 Boarley Warren, EGP, 1958. 95 Downs ½m. E of Lenham, 1956. 94 n[ea]r Suomi, Westwell, E.S. 05 Godmersham Down, F. Perring. Down in Challock Woods 1956, ES.

**8)** (Brambling Pit RGW?) (Nonington RGW?) 15 Barham Downs, R.G.W. Cheriton Downs, 1960 **MNE**. Folkestone Waterworks Downs, 1954 **MNE**. Postling Downs 1956, LJM. Woodville Downs, Temple Ewell, 1952. Kingsdown Golf Course, 1954 **MNE**. St. Margarets Bay. Walmer WR Sherrin 1907 Hb SLBI.

‡ **T. citriodorus** (Pers.) Schreb. [Lemon Thyme. 16.]

**1)** Hayes Common, 1942, CEB, det. C.D. Pigott, 1960.

### **Lycopus** L.

**L. europaeus** L. Gypsywort. 15, 16.

Native. Ditches, streamsides, marshes; common, except in districts 5)–9), where it is unrecorded.

Common in Surrey, Sussex, Essex and the Pas de Calais.

1<sup>st</sup> record, probably 1629, “*Calamintha aquatica* Belgarum, Lob.” Grain to Cliffe, Johnson, Iter, p.8.

**1)** 46 Hayes Comon, PCH. 46 Crofton Heath, PCH. 47 R[iver] Cray, N. Cray. 47 N.Cray Wood. R[iver] Cray, Old Bexley, RGW. 47 Ruxley pits, TH Angel '58. 36 Wood N. of Langley Park Golf Course J.M. Sherwood.

**2)** 47 Erith Marshes. 87 Ditch, 805790, St Marys Marshes, 1958, Mrs AG Side. 36 Oare Meadows, 1961, C. Turner; 1962 HMW.

**3)** Trenley Park Wood.

**8)** 14 Bed of Nailbourne, Elham, 1960, Miss B. Nash.

**10)** 56 R[iver] path below Shoreham, PCH. 56 R[iver] Darent, Eynsford, PCH. 56 R[iver] bank above S. Darent. 57 Darent Meadows, PCH. [Sepharn, Otford 1906, D Smith **MNE**.]

**11)** 65 Stream, Addington Place, 1958, DMCC.

**13)** 53 Pond, Broadwater Lane, Tun[bridge] Wells, CAS. 74 Pond, Gatehouse Farm, N. of Horsmonden, 1959, **MNE**. 63 Wood SW of Pembury 614395, PCH. 63 Ditch S. of Church, Lamberhurst, 684365, CAS. Dundle Wood, Lamberhurst 1944.

**14)** 92 Pool, E. Oxney, 1958, **MNE**.

**Mentha** L. 445.

I am greatly indebted to the late Mr. R.A. Graham for naming specimens in this genus.

**M. arvensis** Corn Mint. 15, 16.

Native. Damp paths and glades in woods, pond borders, streamsides, arable land, mostly on rather heavy soils; common.

Common in Surrey and Sussex, frequent in Essex, common in the Pas de Calais.

1<sup>st</sup> record, [ ]

**1)** 57 Joydens Wood, 1948; 1954. 47 Castle Wood, Shooters Hill, 435763, 1958. 56 Farningham Wood.

**2)** 87 Arable fields, Hoppers Farm, St Mary Hoo, 1958, Mrs AG Side.

**5)** 55 Woods on plateau, Chevening Park, PCH.

**6)** 57 The Thrift, Bean, PCH. 66 Cornfield S. of Great Wood, Cuxton, 1952 **MNE**. 66 Cornfield, Buckland R[oa]d, Luddesdown, PCH.

**7)** Cornfield, Eastling, 1961, C Turner.

**8)** Cornfields, Lydden; n[ea]r Walderchain, Barham; Hazling Down, Sibertswold; Alkham. 25 Arable, Fredville, D.McC.

<sup>788</sup> Given in manuscript as *T. drucei* Ronn. There is no initial account, and the records begin with district 5), ending with 8), as transcribed.

**11)** 66 Ryarsh Wood. 65 Mereworth Woods. 74 W. of church, Boughton Monchelsea, 1959 **MNE**. 75 By Medway, Teston, 1942 **MNE**. 85 Fairbourne mill, '60, Mrs B. Dodds. 64 Tonbridge Marshes. 44 Meadows W. of Edenbridge, 1957, C.T.P. & D.P.Y. 94 Hoads Wood 1946 **MNE**. 84 Dering Wood.

**12)** Hothfield Common. 03 Ride, Great Priory Wood Bilsington 1956 **MNE**.

**13)** 63 Ride, Dundle, G[rea]t Sandhurst Wood 1944 **MNE**. 63 Kippings Cross. 73 Combwell Wood; '79! 73 Bedgebury Forest. 83 Sissinghurst Park Wood, 1960 **MNE**.

**16)** cornfield, Hythe, 1955, Mrs M.G. Comyn.

**var. allionii** Briq.

**11)** Tonbridge, 1919, J. Fraser, *BEC Rep.*, 1924, p.625.

**var. praecox** Sole

**11)** Medway below Tonbridge, 1919; Yalding, 1921; J. Fraser, *B.E.C. Rep.*, 1926, p.245.

**M. x verticillata** L. (*M. aquatica* x *arvensis*) (*M. sativa* L.) Whorled Mint. 15, 16.

Native. Ditches, pond sides, wet meadows, arable land margins; not uncommon in the Weald on clay soils.

Locally frequent in Surrey, Sussex, and Essex.

First (printed) record, 1816: on the Medway, E. Forster, *Fl. Tonbr.*, p.69.

**2)** Cliffe, F.J.H. Sheppey Cliffs, Miss Young. Below Bysing Wood, Stowell.

**3)** Rhode Common, 1962, Mrs Brickenden. Canterbury to Herne Common FJH. N[ea]r Cane Wood, Tylerhill, E.S.M.

**6)** Darenth Wood, E. de C.

**11)** Medway Banks above Aylesford, Buddle MS; 1943! Tonbridge, by Medway backwater, J.S.M.; 1944! Teston to Wateringbury. Pond ¾m E of Hale Street, E Peckham, 1954 **MNE**. On Weald Clay verge, Hoads Wood, Bethersden, 1946 **MNE**. Staplehurst to Headcorn F.J.H. SE of Marden F.J.H. Green lane on Weald Clay, Purchase Farm, Great Chart, 1946 **MNE**.

**12)** (Westenhanger to Postling FJH.) Mersham ES. Hothfield Common, 967464, HMP, 1960. Nackholt Wood, 1948, DMCC. (Ashford, W.R.J.)

**13)** 44 R[oa]dside, Markbeech, 1957, T.D. Pennington. 63 Hogshole Lane, n[ea]r the Manor, Lamberhurst, 1938, J.R.W.

**14)** 82 Wittersham, 1956 **MNE**.

**15)** S. of Ham Street, F.J.H.

**var. acutifolia** (Sm.) Fraser

**11)** R[iver] Medway, E. Barming and Wateringbury (3 colonies) 1919; J. Fraser, *BEC Rep.*, 1926, p.237 (f. *albiflora*). R[iver] Medway, Yalding, 1919 (f. *deflexa* Fraser), J. Fraser, *BEC Rep.*, 1926, p.237. R[iver] Medway, Rand & Buddle, 1724-1743, det. J. Fraser, *BEC Rep.*, 1926, p.236 (f. *hirsutipes* J. Fraser). R[iver] Medway, Nettlestead, J. Fraser, *B.E.C. Rep.*, 1924, p.734; 1926, p.237 (f. *plicata* Fraser).

**M. x smithiana** R.A. Graham [Tall Mint. 15, 16.]

(*M. aquatica* x *arvensis* x *spicata*) (*M. rubra* auct. pl.)

?Native. Ponds, ditches and roadsides; rare.

1<sup>st</sup> record, 1837; Keston, Pamplin in NBG suppl[ement] p.578.

**1)** Keston Common, Peete, fide Pamplin.

**2)** Ditch in copse ¼m. N. of Cold Arbour Farm. W. of Stoke, 1959, K.F.C. Excur[sion], det. F.R. Waste ground, Faversham, 1 plant, A.H.W.D. & E.S.M. Ditch, S. of Burham old church, 1953.

**5)** Roadside, Morants Court Hill, Dunton Green, 1946, F.R., det. R.A.G. **MNE**.

**6)** Greenhithe, Hb. Lamb, 1872 **MNE**.

**8)** by Pond, Gate Inn, N. of Rhodes Minnis, 1955, Miss DACL; 1956! **MNE**.

**10)** By R[iver] Stour, W. of Sturry, F.M. Webb.

**11)** n[ea]r Falconhurst (var. *rari-pila* Briq.) Mr. Justice Talbot, det. J. Fraser, *B.E.C. Rep.*, 1925, p.889.

**12)** Vauxhall Lakes, Sturry, 1954, Mrs. G. Oldaker. Pondsides, Blackwall Farm, Willesborough Lees, 1946, 1954 F.R., det. R.A.G. **MNE**.

**13)** [Spa Golf Course, Tun[bridge] Wells; gone in 1955, K.E.B.]

Uncommon in Surrey, rare in Sussex and Essex; unrecorded in Pas de Calais.

**M. x gracilis** Sole<sup>789</sup> (*M. arvensis* x *spicata*) [Bushy Mint. 16.]

Native or denizen. Ditches, etc., very rare.

Occurs rarely in Surrey, Sussex and Essex; not noted for Pas de Calais.

1<sup>st</sup> record, 1899: Fl. Kent.

1) Dartford Heath, 513735, two plants, 1947, H.M.P.; Hb. L.; 1 plant, 1948, H.M.P.

11) Medway bank below Tonbridge, 1970, J.S.M.; Hb.M.

**M. aquatica** L. Water Mint. 15, 16.

Native. Fens, marshes, alder carrs, wet woodlands, ditches, streams, and pond-sides; very common except in the dry chalk districts. Abundant throughout the Weald.

Common in the adjacent counties and the N. of France

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.68.

1) 46 Keston Upper Pond, PCH. 46 Keston Bog. 47 Chislehurst Common. 46 Holwood Park. 37 Beckenham Place Park, 1956, PCH. 47 Ruxley pits, '58, TH Angel. 46 High Wood Crofton PCH. 47 N. Cray Wood. 47 R[iver] Cray, N. Cray, 1945; 1954 **MNE**. Farningham Wood 82. 57 Joydens Wood PCH.

2) Snodland, 1919, J. Fraser (type) *BEC Rep.*, 1926, p.227. Roadside ditch (Scrapsgate, Minster) 1955, O.D. 96 Tonge, 1958, EG Philp **MNE**.

3) 16 Pond, Blean Village.

4) 25 Wingham Fen, 1946 **MNE**. 15 Fordwich Marshes 1956 **MNE**.

5) 36 Well Wood, W. Wickham, 3964, 1958, PC & JFH.

6) 67 Disused chalkpit, Swanscombe, 1961, HAS.

9) 36 Copse S. of Durlock, Minster! 1959, Mrs AG Side.

10) 56 R[iver] path below Shoreham, PCH. 56 By R[ive r] above S. Darenth, PCH. 57 St John Jerusalem. PCH.. Westerham Wood 82.

11) 94 n[ea]r Purchase F[ar]m, Great Chart, 1946 **MNE**. 65 Leybourne Lakes, GH Morgan 1959 **MNE**. 84 Denge Wood 1962, ES.

12) 04 Willesborough Lees, 1946 **MNE**.

13) 53 Brighton Lake, Tun[bridge] Wells, 1960, CAS. 63 Ditch S of Church, Lamberhurst, CAS, 684365. Hawkenbury Bog 1954 A. Grasemen. Dundle, Great Sandhurst Wood, Lamberhurst, 1944. Lane N.E. of Kippings [Cross] 1944.

**var. nicaeensis** Briq.

11) R[iver] Medway, Maidstone, 1919, J. Fraser, *B.E.C. Rep.*, 1924, p.617.

**var. pedunculata** Pérard

10) n[ea]r Westerham, 1937, D.B.F., Hb. G.

**var. lobeliana** Beck

11) [River] Medway, below Tonbridge, 1919, J. Fraser, *BEC Rep.*, 1924, p.615.

**var. ovalifolia** Briq. (= *M. x verticillata* L., var. *ovalifolia* H. Brown)

2) New Hythe, 1919, J. Fraser, *B.E.C. Rep.*, 1924, p.621.

11) R[iver] Medway, Yalding, 1919, J. Fraser, *B.E.C. Rep.*, 1924, p.621

**var. lupulina** Briq.

11) E. Barming, 1919, J. Fraser, *B.E.C. Rep.*, 1924,<sup>790</sup> p.616.

**M. x piperita** L. (*M. aquatica* x *spicata*) Peppermint. 15, 16.

Naturalised alien, damp waste ground, roadsides, wet copses; very rare. I have not seen this in Kent myself.

It occurs rarely, as a possible native or denizen, in Surrey (Broadham Green, Oxted!), Sussex, and Essex; not recorded in Pas de Calais.

1<sup>st</sup> record, 1899: Fl. Kent.

2) Waste ground S. of Faversham R[oa]d, E. of Oare Creek, 1951, R.G.W.

4) [Marshes near Deal, S.H. Cooke.]

<sup>789</sup> In the manuscript given as *M. x gentilis* (incl. *M. gracilis* Sole and *M. cardiaca* (Gray) Baker).

<sup>790</sup> Given incorrectly as 1926 in the manuscript.

6) 66 Longfield tip, 598694, 1960, H.M.P.

7) [Luton, Miss A. Young.]

11) **G**) 75 Roadside Ditch, S. of Boxley, F.M. Webb; H. Lamb, 1899 **MNE**; 1919, 1920, J. Fraser, *B.E.C. Rep.*, 1926, p.225, **K**; conf. R.A.G. ("var. *piperita*").

11)**W**) [In swampy copse S. of railway, E. of Headcorn, F.J.H.] 74 "var. *officinalis* Sole" Roadside c.2m. S. of Staplehurst, n[ea]r Knox Bridge, W side road, R.A.G., c.1930.

14) [Rolvenden Hill, Hb. Willsher.]

**M. aquatica x longifolia** (= *M. dumetorum* Schult.<sup>791</sup>)

12) Willesborough Lees, F.R., det. R.A.G.; "very unlike *M. palustris* Sole of W. country", RAG; 1962, J.V. Morton.

‡ **M. spicata** L.<sup>792</sup> (*M. viridis* L.) Spearmint. 15, 16.

Alien. Naturalised in a few places; rare.

The most commonly cultivated species. It occurs also as an escape in Surrey, Sussex, Essex, and the Pas de Calais.

1<sup>st</sup> record, 1816: Tonbridge, *Fl. Tonbr.* p.69.

4) Stour banks, Sarre, Minster, Monkton and St. Nicholas, Fl. Thanet (?correct).

6) Colony on waste land, Gravesend, '61 HAS.

7) Field and hedge at the foot of Boxley Hills, 1919, F. Fraser, *B.E.C. Rep.* 1926, p.223. The Lines, Chatham, 1961, C Turner.

8) 15 Roadside between Upper and Lower Hardres, F.J.H. 354 East Cliff, above Dover Harbour, L.W.W.

10) Sevenoaks tip, 1958, CAS.

11) 54 Tonbridge, 1938, GE Shaw, **TLS**. 53 well naturalised by Stream n[ea]r High Rocks, 1950, KEB.

13) 63 Lamberhurst, J.R.W. 1943, **MNE**.

**M. longifolia** (L.) Huds.<sup>793</sup> Horsemint. 15, 16.

Possibly native; though more probably an ancient introduction and hence denizen. Stream- and ditch sides; widely distributed, though rather rare.

Rare in Surrey, Sussex, Essex, and the Pas de Calais.

1<sup>st</sup> record, 1666: Dartford, Merrett in *Pinax*, p.77.

1) Keston, C.E.B., Hb. S.L.B.I. [Old records for Lewisham, Cray valley, Bromley, E of Crayford.] Tip, Ruxley gravel pit, 1960, GMB.

2) Snodland, W.M. Rogers. [By the river opp[osite] Faversham powder mill, E. Jacob.] Conyer Creek, 1960, Mrs. B. Dodds; 1961, C. Turner.

3) Wood, Hernhill, Stowell.

4) Minster Marshes, Fl. Thanet. Deerson Marshes, F.G.E.K.

6) Roadside, Cuxton, towards Bush, 1947, G.C. Pownall.

7) Stream above Ospringe Church, E. Jacob; Cowell.

8) Swamp n[ea]r the River; Dover, E. de C.; [The] Wild Flowers [of] Dover [and its Neighbourhood].

[9) Margate Brooks, F.G.E.K.]

10) Dartford, Merrett. Darent Meadows, A.C. Tagg. R[iver] Darent Banks above Farningham, J. Groves, 1886; E.S.M., 1894, det. J. Fraser, *B.E.C. Rep.* 1926, p.215; 1934, J.E.L., Hb. L; 1947, DMCC. 526637 n[ea]r R[iver] Darent, Shoreham Castle F[ar]m, DMCC det. R.A.G. (var. *pulverulenta*). [Otford, Miss E.F. Worship.] [N[ea]r Bridge, Riverhead, A.G. More. Ditch W. of Otford, FJH.] Sevenoaks tip 1958 CAS.

11) Roadside, Ditton Laboratories, C. West; 1957, CAS. Streamside near Church, Leybourne, C. West. [Medway above Aylesford, F.G.E.K.] Plaxtol, F.C.S. Roper; 1948, DMCC, det. RAG. Trottiscliffe, C.W. Shepherd. Platt, 1948, DMCC. [Penshurst, Cox. Ryarsh, W.M. Rogers. N[ea]r Boxley Abbey, AHWD & ESM.] E. Farleigh, Hb. Lamb, 1882 **MNE**. Cossington, Aylesford, Hb. Lamb 1897 **MNE**. Ford Place NE of Wrotham Heath 1958, DMCC, **MNE**. Damp roadside S.W. of Leadingcross Green, Lenham, 1946 **MNE**.

12) Willesborough Lees, 1944, 1946 det. R.A.G. ("male sterile, with branched hairs like *rotundifolia*; tetraploid; prob[ably] of garden origin," R. Harley.) **MNE**. By Stour, Swinford, WRJ. Streams S. of Sellinge, E.S.M.

15) St Mary's Bay, R.G.W.

16) Folkestone, B.D.J.

<sup>791</sup> This taxon has since been regarded as the subject of mis-identifications in the British Isles.

<sup>792</sup> The manuscript adds "em. Huds." to the citation.

<sup>793</sup> It is since reckoned that *M. longifolia* has been misdetermined for pubescent *M. spicata* or *M. x villosanervata*.



R. Harley considers that the tetraploid forms of *M. "longifolia"* have originated from hybridisation of the (native?) diploid *longifolia* with *M. rotundifolia*.

‡ **M. x niliaca** Jacq.<sup>794</sup> (*M. longifolia* x *rotundifolia*) (incl[udes] *M. nemorosa* Willd., *M. alopecuroides* Hull)

Naturalised alien: roadsides and damp waste ground; rare.

Rare in Surrey, Sussex, and Essex, not recorded in Pas de Calais.

1<sup>st</sup> notice, 1798, Both Kent and Essex, Aiton in Sole, *Menthae Britannicae*; 1881 Eynsford, J. Groves, det. J. Fraser, B.E.C. Rep., 1926, p.217.

1) Waste ground, Woolwich Arsenal, 1949. Langton Way, Blackheath, 1960, G.M.B.

8) Base of Cliffs, n[ea]r bathing place, St. Margarets Bay, D.P. Murray, 1953 **MNE**.

11) 613542, NE of Plaxtol, 1946, 1946, D.McC. Roadside, W. of Platts Heath, S.W. of Lenham, 1946 **MNE**.

12) Hothfield Heath, 1945-6, on roadside near Hospital entrance, **MNE**.

13) Road verge, Parsonage Lane, Lamberhurst, 1938, 1942, J.R.W., **MNE** det. J.F.G. Chapple & A.L. Still; 1944! 1946! **MNE**.

**var. nemorosa** Willd.

10) Eynsford, 1881, J. Groves, det. J. Fraser,

11) Aylesford Potteries; Medway above Maidstone, 1919; Leybourne, 1919, J. Fraser;

12) Smeeth, J. Fraser,

all recorded in *B.E.C. Rep.* 1926, p.217,

‡ **M. rotundifolia** (L.) Huds. Apple-scented Mint [15, 16.]

Denizen. Roadsides and damp waste ground; very rare.

Rare in Surrey, Sussex, and Essex; not infrequent in Pas de Calais, where it appears to be native (Masclef); it is regarded as native by Wolley-Dod in Sussex.

1<sup>st</sup> record, 1696: Halling, Ray, *Synopsis*, ed.2, p.342.

1) [Lewisham; Greenwich to Woolwich; Crayford to Dartford, *Fl. Met.*]

2) Kings Mill, Faversham, E. Jacob. [Medway bank above Aylesford, F.G.E.K.]

4) Minster, Fl. Thanet. Fordwich, F.M. Webb.

[6] Halling, Ray.]

7) Roadside of A.252, by Park Wood corner, E. of Molash, 1945, **MNE**; 1962.

8) Roadside, Bushy Rough, W. of Kearsney, 1949 **MNE** (first collected by me here in 1929!). [Lane on Dover side of Buckland Church, [The] Wild Fl[owers of] Dover [and its Neighbourhood].. Pond at foot of cliffs E. of Folkestone, E. de C.]

9) [Margate Brooks, Fl. Thanet.]

11) Ditch n[ea]r Wrotham, O.B.G.

13) London R[oa]d, Tunbridge Wells, E Forster, *Fl. Tonbr.*

(*M. rotundifolia* x *spicata* = *M. cordifolia* Opiz)<sup>795</sup>

**M. pulegium** L. Penny-royal. 15, [16].

Native. Damp, usually gravelly open ground by ponds on commons, and in a gravel pit; extremely rare and now confined to one locality as a wild plant. Very rare now in Surrey, Sussex and Essex, formerly common locally.

[1] Chislehurst Common, very plentiful, O.B.G.; Damp hollow, 1885, F.J.H., **BM**. A garden weed, originally planted, Hayes Old Rectory, D.McC.; 1946!; formerly at Lewisham and Bickley.]

[2] Dartford, Fl. Met.]

3) Damp hollow in Gravel pit, Bigberry Wood, Harbledown, D.Mc.C., F.R. & T.D.V.S., 1954 **MNE**; not seen 1959; 4 clumps 1960, Mrs B; abund[ant], 1962, Miss M.E.M.

[6] Pond, Elverland, Os[pringe], E. Jacob.]

1<sup>st</sup> record, 1777: Ospringe, E. Jacob, *Pl. Fav.* p.91.

This plant has decreased nearly everywhere, in S.E. England at least, as most of the ponds on commons around which it grew have either been filled in or are now overgrown owing to lack of grazing or trampling by animals. Its phase of abundance appears to have coincided with a type of rural economy now past, namely, the regular use of commons and village greens as pasture by the local commoners.

<sup>794</sup> Likely to be covered by subsequent use of the names *M. x villosa* and/or *M. x rotundifolia*.

<sup>795</sup> Given in the manuscript with no account.

The cultivated form occurred as an escape at

**10)** Sevenoaks tip, 1958, CAS.

‡ **M. reliquienii**[i] Benth. [Corsican Mint.] 16.

Alien, naturalised in damp woodland rides in a few places.

**13)** Damp ride on T[unbridge] W[ells] sand, Redleaf Wood, N. of Penshurst, 1950 **MNE**. Paths, Hever Castle Park, 1960, K.E.B.

**Salvia** L.

‡ **S. sclarea** L. [Clary. 16.]

**11)** waste ground, Tonbridge Gasworks, 1950, KEB.

**S. pratensis** L. [Meadow Clary. 15, 16.]

Native: banks and rough grassland on chalk; very rare. Certainly native on the chalk in 6) and 7) near Cuxton and Boxley, possibly elsewhere; also as an introduction on waste ground and in pastures on other soils. Extremely rare in Surrey, but probably native on chalk near Reigate; very rare, but possibly native on chalk in Sussex; not recorded for Essex; rare in Pas de Calais, but common on chalk in Somme. This is a Continental species which does not seem able to multiply freely under British conditions, but merely to hold its own in a few places on our downs; yet it spreads readily in a garden

1<sup>st</sup> record, 1699: Hedges at Cobham, D Watts, in R. Morison, *Plantarum Hist. Oxon[i]ensis*, III, p.393. Also first for British Isles.

**4)** Sandwich Bay behind Hotel, 1951, P. le Brocq; 1960, Mrs KDR.

**5)** [Field by Farnborough Churchyard 1936, H.W.M.; FJ Epps; 1944!; extinct by 1946.] Meadow, Biggin Hill, 1950, DPY.

**6)** [Downs above Otford, F. Godwin; since destroyed.] [Trottiscliffe, by Pilgrims Way, A. Beadell, c.1930.] Cobham, see 1<sup>st</sup> record: specimens from here are in all the main British herbaria, collected over a long period up to the present; the locality is no doubt the same as Chalky banks (and chalk grassland!) on South side of Great Wood, N.W. of Cuxton, 1889, A.H.W.D.; 1943-1955! **MNE**. It is still abundant in rough chalk grassland here for about half a mile along the edge of the wood! N[ea]r Brickhouse F[ar]m, Cobham, Bossey.

**7)** Queendown Warren, F.G.E.K.; W.W.R., etc.; F.F., circa 1930; now gone! (it was by the chalk pit at the N.E. end). Thurnham Hills, n[ea]r Castle, 1904, Mrs. Silcoe **MNE**. Boxley Warren, in chalk grassland at lower edge of woods, C.W., 1944; 1944-55! Detling Downs, c.1935 H. Gray; not seen here by me. (One pl[ant] in field, Stalisfield, 1945-6, R. Theobald.

**8)** Meadow, Nonington, 249516, 1950, D.McC. [Chalk scrub N.E. of Gravel Castle, Barham, BJB & F.R. 1939 **MNE**; ploughed up 1950.] Chalk grassland on top of cliffs, below Langdon Barracks, 335422; 1949; 1959 Mrs KDR. Langdon Bay, 1954 **MNE**; 1960 Mrs B. Dodds. [Kingsdown, 1953; long known to the Misses Schön, Miss DACL; destroyed 1960, Miss B. Nash.]

Also reported off the chalk, probably introduced accidentally, at

**1)** Rough field, Green Street Green, 1937, JEL, Hb. L.

**2)** (near Faversham, Dickson in Baxter's Brit[ish] Pha[e]n[ogamous] Bot[any].)

**11)** (W. of W. Malling, Shepherd.) Langley, R[oa]dside, 805514, 1948 DMcC. (Ryarsh, 1 plant in hay field, W.M.R.)

**12)** (Mersham, in meadow, W.R.J.)

**S. verbenaca** L.<sup>796</sup> [Wild] Clary [15, 16] 28/51

Native. Dry pastures, roadsides, churchyards, and banks, especially on sandy, chalky or gravelly soils; fixed dunes and shingle beaches; rather common on and near the coast and near tidal estuaries, rare inland.

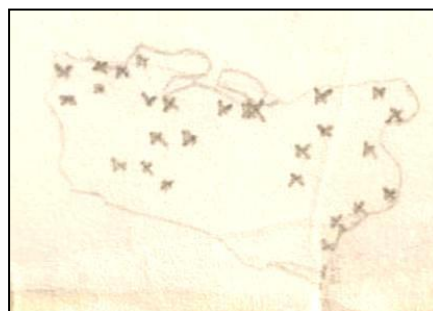
Widespread but not common in Surrey, but locally common in Essex and Sussex on dry ground near the coast. Not recorded for Pas de Calais or Somme: its French distribution is mainly western and southern.

1<sup>st</sup> record, 1601: Greenwich, Clusius, *Rariorum Pl[antarum] Hist[oria]*, p.581.

**1)** Above Charlton chalk pits, 1918, E.B.B. Crayford, PHC. Hayes Common edge, PHC.

**2)** Churchyard, Minster-in-Sheppey, 1917, AG Davis **MNE**; 1945! Gravelly meadow W. of Oare Creek, H.M.W. Oare Ch[urch] y[ard],

<sup>796</sup> In the manuscript given as *S. horminiodes* Pourr.



1950, REW. By Canal Dock, Gravesend, 1946, **MNE**. Cuxton, R[ai][wa]y bank, 1944 **MNE**.

3) Blean Churchyard, RGW. Upstreet, RGW.

4) Sandwich Bay, near Guilford Hotel, frequent]. Grove Ferry L[evel] C[rossing], 1950-51, REW.

5) Knockholt Station, W.W.

6) Roadsides and pits on chalk, Swanscombe; W. of Northfleet. R[oa]dside, Cobhambury, 675676, Mrs Woods. Lane End, Darenth, PCH. Stone churchyard, 1938, P.H.C. W of Stone Castle, 1948 **MNE**. Horns Cross, 1952, H.M.P. Road verge/Bank above River, Cuxton, PCH.

7) R[oa]dside, A.28, Chartham, 1960, Mrs B Dodds.

8) E of Chilham, RGW. Chartham, RGW.

9) 36 Bank N. of N. Foreland Golf Course, 1954 **MNE**. 26 R[oa]dside, Monkton (Thanet Sand), Miss M.E.M.

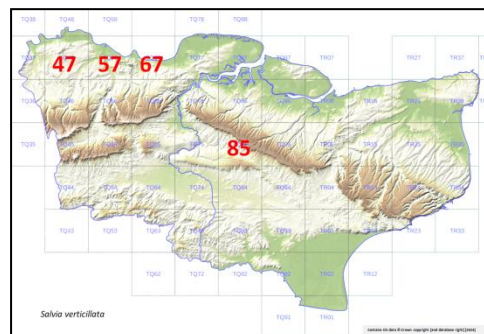
10) Bank by Darenth Church, W.W.; 1943-1954! **MNE**. Shoreham Churchyard, 1922, L.J.T.

11) Maidstone, 1959, E.G. Philp **MNE**. Medway, Tovil, 1960, E.G.P. Pluckley Village, E.S. 676493, Bank of lane, E. of Hale Street, E. Peckham, 1956 **MNE**. Waste ground, Tonbridge Gasworks, 1950-3, K.E. Bull.

15) 02 By canal, St. Marys Bay, 1959, LJM. Romney Warren, 1986.

16) 13 Saltwood, by roadside, 1948 **MNE**. Sandgate to Hythe, 1945 D.H.K.

Blackheath 56, Keston, Farningham, Higham 55, Faversham '56, Dartford, Gravesend, Sheppey, Cobham 55, Chatham, Teynham 58. Sandwich, Whitstable, W Thanet 56, E Thanet, Maidstone '55, Malling, Dover & E, Canterbury 55, Hothf[iel]d, Chilham, Tonbridge 55, Paddock W[ood] 56, Folkestone '55, Hythe, Lamberhurst 56, Romney, Dungeness



**S. verticillata** L. [Whorled Clary.] 15, 16.

Introduced; naturalised in several places, particularly near the Thames.

1<sup>st</sup> record, 1899: Fl. Kent.

1) [Garden escape, Bromley, Scargill.]

2) 47 Woolwich Arsenal, on waste ground, 1894, A.H.W.D.; 1944! **MNE**. 57 Darent Creek, 543746, Dartford, 1947-1948, H.M.P. [W. of Erith, casual n[ea]r Thames, 1889, AHWD.] 67 By Canal Dock, Gravesend, 1945. 67 old gravel pit E. of Chalk, 1945.

6) 57 Greenhithe, 1939, P.H.C., Hb. LNHS!

7) 85 Chalk Bank, Thurnham Castle, Miss Green, 1931; D.McC; 1961! **MNE**.

## HIPPURIDACEAE

**Hippuris** L.

**H. vulgaris** L.

[Mare's-tail.]

15. 16

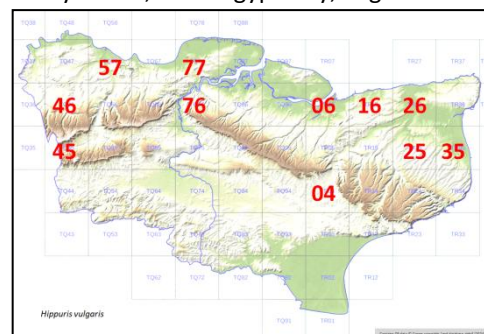
11/51

Native. Marsh dykes, ponds and streams fed by chalk springs, usually in highly calcareous water; rare and very local though usually forming a pure community where it occurs. Teal, Mallard, and Shoveller feed on the seeds, teste P. Olney.

1<sup>st</sup> record, Fruit at Roman level, Crossness, Spurrell, 1889; Reid, 1899 (Godwin, p.124).

2) [Northfleet Meadows, A.H.W.D., 1925, St. J. M. Hb; extinct, 1944; '58.] [Strood; Cuxton; Frindsbury, Miss Wickham -? correct identification? no other observers.] [Snodland Marshes, P. Jacob FGK; H. Lamb 1898 **MNE**; extinct.] 57 Stone Marshes 1947, H.M.P. 77 Still water, Decoy Creek, S. of Egypt Bay, High Halstow, 1946; 1958 **MNE**; 1962, CA Lister. 77 Cliffe Marshes, 1962, W.A.S., l[ocally] d[ominant] in dikes. 06 Oare Mill Pond, Stowell; 1959! **MNE**. 06 Stonebridge (Davington) Pond, at head of Faversham Creek (freshwater springs) Cowell; 1954! Bysing Wood Gravel pit Mrs B. Powder Mill Works, Faversham, 1777, E. Jacob; 1954, R.W. Butcher. 06 Dike W. of Seasalter, Mrs B Dodds.

4) 16 Fordwich Marshes, B. Nash. Sturry Marshes, F.M. Webb; W.W.R. 26 E. end of Stodmarsh swamp, 1959, PJ Olney. 26 Brooksend / W of Birchington, FGK; L.W. Wilson, 1948; 1957, B. Nash. 35 Dikes, behind dunes, between Downs Farm and Princes Club House, Sandwich, 1956 **MNE**. 35 Sandwich town dike, P. & J Hall. 1955 (1956!). 25 In Lit[tle] Stour, Littlebourne; Mitchinson (1956!). 25 Lit[tle] Stour, Wickham breaux, 1956! 35 Worth Minnis, FJH;



- (1956!) 1960! **MNE**. 26 Preston, F.J.H.; Dikes SW of church, B Nash 1957. 35 Dike E of Hacklinge, Duthie; 1946! 1960! **MNE**. [Patricbourne Stream, 1939 Miss J Nisbet.] [Wingham, Miss Sankey, FGEK.]  
**7)** 96 flooded chalk pit NW of Burham, Mrs. M.H. Dolling.  
**10)** 45 Chevening Park Lake, R.A. Clarke.  
**12)** [Ashford, W.R. Jeffrey.] 04 Eastwell Lake, E.G. Philp.  
**13)** [Goudhurst, Clarke.]

## CALLITRICHACEAE

### Callitriche L.

There has been much confusion in this genus in Britain and Europe until recently; work by D.H.D. Schotsman in Holland (*Acta. Bot. Neerl.* **3** (1954) pp. 313-384) has however made the picture greatly clearer; and Dr. J.P. Savidge of Liverpool University has done much to work out the British distributions. Dr. Schotsman's key is reprinted in *Proc. B.S.B.I.* **1**, pp340-341 (1955): all *Herb[ariu]m* spp. cited are det. J.P. Savidge.

**C. truncata** Guss. [Short-leaved Water-starwort.] 15, 16.

**Native.** In clear, well-oxygenated water, running or stagnant; very rare, but locally abundant. A southern species.

- 10)** In R[iver] Darent, E. of Westerham, 1837\*, G.E. Smith; 1955 RW David **LIVU**. In River Darent, Chipstead, 1943, JR Wallis; 1933, ECW **NMW**, **BIRM**; and many other observers; 1945! F.R. plentiful and since, **MNE**. R[iver] Darent, Sundridge, Hb. Bedford College; 1905, H.&J. Groves, **BRIST**, **BIRM**, **NMW**. R[iver] Darent, Brasted, 1886 W.H. Beeby / J. Groves, **LIVU**, **OXF**, **BIRM**, **CGE**, **NMW**, **S**.  
**15)** Plentiful in the long gravel pit lake, W. of "Pilot" Inn, Dungeness, 1947, F.R. **MNE**.

**C. stagnalis** Scop.<sup>797</sup> [Common Water-starwort.] 15, 16.]

**Native.** Ponds, streams, ditches, and wet rides in woods; common all over the country, except on the chalk, where it is apparently absent.

**1<sup>st</sup> record, 1632: Woods W. of Canterbury: Johnson, *Descriptio*, p.34.**

- 1)** Chislehurst Common. Joydens Wood, 1901, BT Lowne **K**; PCH & FR. Keston Upper Pond, PCH. Ravensbourne, Bromley, Hb. Davis 1919 **MNE**. Ruxley pits. 3754661, Pond, W Wickham, PCH.  
**2)** Pond, East Church, Sheppey, Hb. Davis, 1916 **MNE**. Faversham; Graveney, REW. Higham Marshes, PCH. Dikes, Nagden, 1951, REW.  
**3)** Trenley Park Wood, 1947. Pond by Blean Church. Hempshall Wood, REW.  
**4)** Lampen stream, Stodmarsh, REW.  
**5)** Rides on c[lay] w[ith] f[lints], Chevening Park PCH.  
**7)** Berengrave pit Rainham (prob[ably] this FR) PM Roberts.  
**10)** Old gravel pits, S. Darent PCH. Westerham Wood, 82! Darent W. of Brasted, G.M.B.  
**11)G)** Ruts, Gover Hill top, Mereworth Woods '54. Mote Park, Maidstone, E.G. Philp 1958 **MNE**.  
**W)** Pond, Vitters Oak, 1½ m. ENE Bethersden, 1954. Straight Mile, Tonbridge, CAS, det. Savidge. Stream, Mockbeggar, N of Collier Street, Yalding, 1958 **MNE**. Medway, Groombridge, CAS, '56.  
**12)** Boggy Wood, Willesborough Lees, 1946 **MNE**, 1955 **MNE**. Stream SW of Sellenge, S of Water F[ar]m, RAC. Acid Boggy field, Monks Horton, 1953 **MNE**. Hothfield, 1891, ESM, **BM**.  
**13)** Stone Cross Gill, Ashurst, CAS, 518381. Ditch S of Lamberhurst Church, FR, CAS. Ditch below Timberlog Wood, Lamberhurst, 1942, J.R.W. Combwell Wood. Bedgebury Forest. Colebrook Park, Pembury, 1950 **MNE**. Sissinghurst Park Wood. Bayham, CAS.  
**16)** Sandling Park.

**C. platycarpa** Kütz. [Various-leaved Water-starwort.] 15, 16.]

**Native.**

- 1)** Crofton, Orpington, 1901, B.T. Lowne **K**.  
**2)** Hoo Marshes, 1m. S. of Kingsnorth, E.G. Philp, 1958 **MNE**.  
**12)** Ditches, Willesborough Lees, 1893, E.S.M., **NMW**.  
**14)** Pond, Palstre Court, Wittersham in Oxney, 1958 **MNE**.  
**15)** Dike to S. of Aldington Knowle near Sherlock's Bridge, Romney Marsh, 1958, **MNE**.  
**16)** Folkestone, 1890, F.R. Tennant, det. J.P. Savidge.

<sup>797</sup> Author citation of L. in the manuscript.

**C. obtusangula** Le Gall [Blunt-fruited Water-starwort.] 15,16.

Native. Ditches and streams, often near the sea, particularly in calcareous or base-rich water; common in the peaty fen-dikes of 4), rarer elsewhere.

1<sup>st</sup> record, 1874: Near Hythe, Duthie, *J. Bot.*, 1874, p.280.

2) Ditch near Nagden Farm, 1949. Stone Marshes, G.M.B., conf[irme]d Westrup. Higham Marshes, 1923, H.S. Redgrove, **BM**. Stream, Oare Mill, 1962, det. Dr. Savidge.

4) Marshes between Deal and Sholden, etc., J.F. Duthie, 1874-5, **CGE**, **EBH**<sup>798</sup>. In the stream, Ham Fen, 1947 **MNE**, 1955, 1956 **MNE**. Dikes E. of Lit[tle] Britain Farm, N. of Wingham, 1938, F. Hyland **BM**; 1947! 1963!. Dikes, Worth Minnis, 1956 **MNE**. Bekesbourne, 1882, H. Groves **S**. Pegwell Bay, 1874, J.F. Duthie, **K**. Minster, 1890, H. Groves **S**.

10) Darenth, 1924, St J Marriott, **SLBI**.

11) Ditch by Railway at road crossing E. of Penshurst Station, CAS. R. Beult, S. of Headcorn Church, 831440, 1962. R[iver] Sherway, Sherway Br[idge], Smarden, 867447, 1962.

13) R[iver] Teise, near Hoathly, Lamberhurst, 1943, J.R.W., det. ipse.

15) Dike on Romney Marsh, near Selby Farm, Burmarsh, 1958, **MNE**. Ditches, Lydd, 1891, ESM, **SLBI**, **OXF**.

16) Pools, Folkestone Warren, 1878, A. Bennett, **SLBI**, **OXF**.

**C. hamulata** Kütz. ex W.D.J. Koch / **C. brutia** Petagna<sup>799</sup>

[Intermediate or Pedunculate Water-starwort.] 15, 16

Native. Alluvial Marsh, dikes, rivers, streams, and ponds; tolerates base-poor acid waters; very common.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.111.

1) Chislehurst Common, 1947. Orpington, 1907, WHG. Crofton, 1901, BT Lowne **K**. Keston Ponds, D.P.Y.

2) Snodland, brook S. of town. Dartford Marshes, 541761, 1962.

4) Ham Fen, 1945. Dikes N. of Wingham, 1947; 1962, DACL. Worth Minnis. Hacklinge. Preston Marshes.

6) Stream in Ospringe village, H.J. Wilks, 1958 (sp.!).

10) Darent, near Mill, Westerham, 1957, AGS; RAC. Birling Marshes, PCH.

11) R[iver] Beult S of Headcorn Ch[urch], 831440, 1962. 889419, R[iver] Beult, Buckmans Green, Smarden, 1962, 867447, R[iver] Sherway, Sherway Br[idge], Smarden, 1962. R[iver] Medway, Tonbridge.

**W**) Pond E of Buckhall, Bethersden, '54. Straight mile, Tonbridge, CAS, det. Savidge.

**G**) Ruts, Gover Hill top, Mereworth Woods, '54.

12) Chartham, Watercress Beds, H.M.W. Vauxhall Lakes, HMW.

13) Ditch, and in R[iver] Teise, S. of Lamberhurst Church, 1942, JRW. Angley Lake, DS.

15) Brenzett. Shirley Moor. Ditch, Burmarsh R[oa]d, Hythe, LJM.

16) Pond below Tolsford Hill, 1959, LJM.

## PLANTAGINACEAE

**Plantago** L.

**P. coronopus** L. [Buck's-horn Plantain. 15, 16.]

1) 37 Blackheath 1907 **MNE**; 1952! 46 Keston Common, FR; PCH, **MNE** 1946-62. 46 Hayes Common 1945 **MNE**. 37 Lee, old churchyard, 1957 RC Wingfield. 36 W. Wickham, bare g[roun]d on clay, 1955 HM Sherwood. 47 Bexley Ch[urch] y[ar]d, PCH. 56 Farningham R[oa]d Sta[tion] approach PCH. 57 Dartford Heath, 1954, GMB. 2) 57 Dry gravelly pasture, N. of Dartford 1962. 97 Leysdown, A.G. Davis, 1913 **MNE**. 96 By Conyer Creek, Teynham 1943 **MNE**. Oare Pond Meadow '62 HMW.

4) 35 Sandwich Bay, 1954 **MNE**.

6) **E**) Green Steeet Green, PCH, 1951, FR **MNE**. Heath, Higham Upshire (Blackheath Beds) 1956 **MNE**. Gravelly bank by Windmill, Shorne, 1946.

8) E. Cliff, Dover, 1950-54 **MNE**. Oldstairs Bay Kingsdown 1956 **MNE**. Shakespeares Cliff 1955-58 **MNE**. Lydden Spout Cliffs 1955 **MNE**.

9) 26 Minnis Bay, Miss M.E.M.

11) Wrotham Heath, by A.20, 1942- **MNE**.

12) Hothfield Commobn 1945-62 **MNE**.

<sup>798</sup> Herbarium given as **EDIN**.

<sup>799</sup> The manuscript account is for *C. intermedia* Hoffm., which covered two subspecies, since separated as species, but it is not possible to tell to which of these each record relates.



- 13) Chiddingstone, A Beadell c.1936-9.  
 14) Stone Cliff, Oxney, 1949 **MNE**.  
 15) Dungeness, 1945-62 **MNE**. Romney Warren.  
 16) Folkestone Leas, 1945: 1957 F. Ambrose.

**P. maritima** L. [Sea Plantain. 15, 16.]

- 2) 47 Erith Marshes PCH. 47 By Thames, Crossness, PCH 1954. 57 Saltmarsh by Thames N. of Dartford 1962. 57 Stone, saltmarsh, 1945 **MNE**. 67 Shornemead fort Saltings '60, HAS. 77 St Marys Bay Saltings 61, HAS. 76 Mudflats n[ea]r River, Cuxton, PCH; FR 1943-1954 **MNE**. 06 Sheerness Saltmarsh, 1960. 86 Funton Marshes, 1962. 96 Fowley Island, 1960, EGP. 96 Conyer Creek. 06 Faversham Creek. Oare Creek, '62 HMW. Oare Meadow (brackish) '62 HMW. 06 Marsh W. of Seasalter.  
 4) 36 Saltmarsh, Bloody Point, N. of Sandwich 1954 **MNE**.

**P. major** L. [Greater Plantain. 15, 16.]

- 1) Crofton Heath PCH. Millpond, Bexley PCH. N. Cray Wood, PCH. Farningham Wood 82. Elmstead Woods 56 Miss A Mills. Shooters Hill 54 GMB. Dartford Heath '54, GMB. Sheerness, Canal Dump, '57, OD.  
 2) Oare Pond Meadow '62 HMW. Weed, Murtons F[ar]m Graveney R. Theobald 56.  
 5) 697612 W. of Highams Hill, 1958 PCH. Darwins Bank Downe.  
 6) The Thrift, Bean PCH. Darenth Wood PCH. Shoreham Rifle Range PCH. Preston Hill PCH. Greenhills Wood PCH. Kemsing Downs PCH.  
 10) Sevenoaks tip 1958, CAS. Shoreham Ch[urch] Y[ar]d PCH. Eynsford PCH. By R[iver] above S. Darenth PCH. St Johns Jerusalem PCH.  
 13) Stone Cross Gill, Ashurst CAS. Combswell Wood, 1979!  
 15) Carpark, Ferry field, Lydd, DMCC '55.

**P. media** L. [Hoary Plantain. 15, 16.]

- 3) grassy waste land, Westgate Terrace, Whitstable, HMW.  
 5) Chalk W. of Eynsford PCH. Darwins Bank, Downe, '62. Jewells Wood, 1916, AG Davis **MNE**.  
 6) Mounts R[oa]d, PCH. Pilgrims Way E. of Wrotham PCH.  
 7) Down W. of [Three] Squirrels, Stockbury, 1944 **MNE**. 96 Ospringe Down HMW.  
 9) Chalk grassland on cliff top, Kingsgate, Thanet, 1959 **MNE**.

**P. lanceolata** L. [Ribwort Plantain. 15, 16.]

- 1) Bexley Ch[urch] y[ar]d PCH. Elmstead Woods, '56 Miss A Mills. Shooters Hill, 54 GMB. Dartford Heath, '54, G.M.B. Farningham Wood 82.  
 2) Sewerbank. Plumstead PCH. Woolwich Arsenal PCH. Sheerness, Canal Dump, '57 O.D.  
 3) Oare Pond Meadow '62 HMW. Weed, Murtons F[ar]m. Graveney, '56, R Theobald.  
 5) Halstead PCH. Chalk W. of Eynsford, PCH. Pilgrims Way. Polhill PCH. Pilots Wood PCH. Chevening Park PCH. 36 W. of Highams Hill PCH. Darwins Bank Downe, '62.  
 6) Lords Wood, Darenth PCH. Mounts Road PCH. Greenhills Wood PCH. Downs E of Shoreham PCH. Preston Hill PCH. Kemsing Down PCH. Halling Warren PCH.  
 7) Ospringe Down HMW.  
 10) Sevenoaks tip, 1958, CAS. R[iver] above S. Darenth PCH. St Johns Jerusalem PCH.  
 11) R[ai]l[wa]y, Hildenborough, CAS.

**P. afra** L.<sup>800</sup> [Glandular Plantain. 15.]

*Alien.*

- 15) Railway ballast, Lydd, 1 plant, 1891, ESM.  
 16) waste ground by roadside, N. of Copt Point, Folkestone, J.P.M.B., *B.E.C. Rep.*, 1939-40, p.290.

**P. sempervirens** Crantz (*P. cynops* L. 1962, non L. 1753) [16.]

*Alien, naturalised formerly on the chalk.*

- 6) Field on chalk, formerly arable, on hillside between Cobham and Luddesdown, 1902-04: "one old shrubby plant and several others...seen", C.E.B., see *B.E.C. rep.* 1920, pp.35-36. (also reported as gathered on a rough

<sup>800</sup> In the manuscript given as *P. indica* L. (*P. psyllium* L., nom ambig.; *P. arenaria* Walldst. & Kit.; *P. ramosa* Aschers.).

bank near Cobham, Miss Ridley). Downs E of Meopham, H.N. Ridley, *J. Bot.*, 58, p.271, 1920: formerly at 653659 Foxendown, Meopham, C.M. Baker, before 1946, per DMCC.

### **Littorella** Berg.

**L. uniflora** (L.) Asch. (*L. lacustris* L.) Shoreweed. 15.

Native, margins of ponds on sandy or gravelly substrata; extremely rare.

15) in shallow water at E. edge of smallest lake, Hoppen Pits, Denge Beach, 1953.

### **BUDDLEJACEAE**<sup>801</sup>

#### ‡ **Buddleja** L.

‡ **B. davidii** Franch. [Butterfly-bush. 15, 16.]

Alien. Naturalised on waste ground, bombed sites, etc.; locally common.

1) 36 West Wickham, tip, 1955, JM Sherwood. 46 Hayes Common. 46 Waste G[roun]d, Orpington by-Pass, PCH. 47 Ruxley pits TH Angel. 57 Joydens Wood PCH. 36 Tip by Hayes Station, 345660, 1958 PCH. 47 N. Cray Tip PCH.

2) 47 Woolwich Arsenal.

3) Old R[ai]l[wa]y n[ea]r Whitstable Harbour HMW.

5) 55 Morants Court Hill Pit, 1956, PCH.

6) R[oa]dside Green Street Green to Lane End PCH. Abund[ant] as early colonist of disused chalk pits: Horns Cross, Stone! Greenhithe HMP. V[ery] a[bundant] Mounts R[oa]d pit PCH.

7) 96 Highsted Pit, Tunstall, 1958, DMCC.

10) Sevenoaks tip, 1958, CAS.

12) Bombed sites in Canterbury, very common in 1945 and onwards.

13) Hawkenbury, 597383, 1959, E. Shorrocks.

16) Bombed sites, Hythe, Folkestone, 19947, Miss V. Day.

### **OLEACEAE**

#### **Fraxinus** L.

**F. excelsior** L. Ash. 15, 16. 51/51

Native. Woodlands, especially on base-rich soils, often locally dominant on damper, especially N-facing, sites on chalk, and on ragstone soils; an important local dominant also of seral stages in the development of beechwoods on chalk; very common throughout Kent. It also occurs extensively associated with oak, both as standards and as a coppiced shrub, in woodlands on ragstone, loams over chalk, Thanet Sand and Gault, and just above the Alder zone (i.e., on moist but not waterlogged soils) in the gills of the High Weald. It is widespread as a planted tree in hedges and parks. Common in all the surrounding counties and in the woods of North France.

\* Bronze Age, Roman, Crossness (wood) Spurrell 1889; Reid 1899.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.39.

1) Scadbury Park, - Holbrook and Icehouse Woods. Beckenham Place Park. Bickley, Elmstead Lane. Holwood Park PCH. Shooters Hill Woods 1954, GMB. Sim, Chislehurst. Crofton Hearth PCH. Bexley – N Cray by R[oa]dside PCH. N. Cray Wood PCH. High Wood, Crofton. Petts Wood, on Woolwich Beds by stream. Joydens Wood, coppice on loam. Farningham Wood, coppice on Thanet Sand; 82! Dartford Heath '54, GMB.

2) Brambledown, by R[oa]d A250, 966714. '55. Oak Wood NE of Brambledown, 1955, 967719. Warden Ash Wood, (Plenty) 1955, 020721, 0177720, **MNE**.

3) N. Bishopden Wood '55. By stream, Church Wood, 1¼m. W. of Blean '55.

4) Ham Fen. Hackling.

5) Pilgrims Way, Polhill, PCH, FR. Pilots Wood PCH. Darwins Bank, Downe 55 JEL, 62. 36 Hedge and copse W of Highams Hill 397611, PCH.

6) Copse SE of Dartford on chalk '44. Mounts Road PCH. The Thrift, Bean PCH. On scarp Woodlands Hill N of Ightham '55. Greenhills Wood. Beechy Lees, Kemsing PCH. Magpie Bottom. Dunstall Woods. Preston Hill. Horton Wood PCH. Wingate Wood Halling PCH.

6E) Ladies Close Wood, Cliffe '44. Chattenden Wood. Cockham Woods Upnor DMCC 51; 1961!

<sup>801</sup> In the manuscript, LOGANIACEAE.

- 7) Bluebell Hill 44. Copse S of Hartlip 835635, '53. Wood on loam above Q[ueen] D[own] W[arren] '55, 830632. Copse below Purple Hill, Bredhurst, 810621, 55. Bredhurst Hurst '55. Detling Hill top, '55. Squirrels Wood Stockbury 44.
- 8) Bourne Park, Bridge. '55. Bridge Hill N, 1955. By A2, copse on loam by Halfway Ho[use] Denton, 55. Wood N.W. of S. Alkham, 1955.
- 9) Copse S.E. of Durlock, Minster, 1959.
- 10) Westerham Wood; 82! Scords Wood, Brasted. Ide Hill. Brockhoul Mount. Hill Water Bottom Wood, Sundridge. Bayleys Hill. Hubbards Hill. Riverhill. St Julians. One Tree & Rooks Hill. Wilmott Hill. Martins Wood, Ightham Mote. W. of S. Darenth PCH. St. John's Jerusalem PCH.
- 11) Horish Wood. Snarkhurst Wood. Swanton Valley, Mereworth Woods. Oaken Wood, E. Malling on ragstone loams. Brook Wood, Headcorn, '44; '60.
- 13) Gill SW of Stone Cross, Ashurst, CAS. Combwell Wood '79.
- 15) In Ridges on Romney Marsh; 2 saplings n[ea]r Old School, Dungeness, E Scott, 1960.
- 16) Wood on ragstone E of Saltwood. Lympe Place Wood. Aldington Knowle. W. Hythe Downs. S of Court at Street. Port Lympe Postling Wents, on Gault.

### ‡ *Syringia* L.

‡ *S. vulgaris* L. Lilac. [16.]  
 Alien

- 1) Waste g[roun]d, Beckenham, 1955, JM Sherwood. Semi-naturalised, Farningham R[oa]d Station, 1914, E.B.B.
- 6) semi naturalised in hedge at Darenth, 1914, E.B.B.
- 10) Sevenoaks tip 1958, CAS.

### *Ligustrum* L.

*L. vulgare* L. [Wild] Privet. 15, 16.

Native in Chalk scrub in open woodlands on chalk and ragstone; abundant; also widespread in hedges and copses elsewhere, but probably mostly planted off calcareous soils; it is probably native on the Gault and Thanet Sand. Common, especially on chalk, in Surrey and Sussex, locally frequent and probably native on chalk and Boulder clay in Essex; common in the Pas de Calais, where it is locally co-dominant with *Hippophae* on the fixed dunes.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, p.59.

The usual hedging shrub nowadays planted is *L. ovalifolium* Hassk., with elliptic-oval leaves.

- 1) R[oa]dside, Bexley-N Cray, PCH. Wet Wood by R[iver], N Cray, PCH. Farningham Wood 82. Joydens Wood PCH.
- 2) Woolwich Arsenal PCH. Grain, Mrs AG Side 1958.
- 3) 26 Upstreet; Hersden, RGW.
- 4) Preston.
- 5) Chalk W of Eynsford PCH. Darwins Bank, Downe. :The Larches" Beechwood, W. of Farnborough PCH. Well Wood, W. Wickham PCH. Edge of Andrews Wood, S of Badgers Mount PCH.
- 6) Lords Wood, Darenth PCH. Mounts R[oa]d, PCH; FR. The Thrift, Bean, PCH. Downs W of Kemsing. Downs E of Shoreham. Preston Hill, PCH. Gravesend, in hedges and scrub, '60, HAS. Halling Warren PCH. R[oa]dside bank Cuxton PCH. Up[pe]r Halling Downs, 1943-'54 MNE. Cockham Woods Upnor '51 DMCC.
- 9) Copse SE of Durlock, Minster, 1959, Mrs A.G. Side.
- 10) St John's Jerusalem PCH. W of S. Darenth.
- 11) Rooks Hill. R[ai]l[wa]y bank Edenbridge 440470, 1956 DPY. R[ai]l[wa]y S. of Hildenborough Station CAS. Planted about Marden & Headcorn, Smarden, Staplehurst. Hedges at Shipbourne.
- 13) Planted about Goudhurst, Cranbrook & Tenterden. ‡ Dunorlan, T[un]bridge Wells, CAS.
- 15) Dungeness.

‡ *L. ovalifolium* Hassk. {Garden Privet. 16.]

- 10) Roadside, Brasted to Toys Hill, 466528, 1961, HMP.

### SCROPHULARIACEAE

#### *Verbascum* L.

*V. blattaria* L. Moth Mullein. 15, [16.]

Probably native on the chalk, denizen or casual alien elsewhere. Never recorded as really common, but formerly widespread in Kent; now extremely rare.

1<sup>st</sup> records, 1632: “*Blattaria flo. albis*, Lob. Woods near Faversham, Johnson, *Descriptio* (see below); & 1629: “*Blattaria flo. albis*”, near Dartford Heath, Johnson, *Iter*, p.10.

[1] Six old localities, 1640-1846.]

[4] Near Stourmouth, Dowker.]

6) [4 old localities, 1629-1836.] Holly Hill, above Birling, c.1930, F. Forsyth, det. C. West. N[ea]r Dartford, Tagg, 1938. [Longfield, Kent CGE, no date or finder.]

7) near Faversham, Johnson, 1632: chalky bank in old gravel pit, among scrub of native vegetation, Putt Wood, Ospringe, 1950, R.E. Wood; many plants, all white-flowered, 1951-58! **MNE**. Johnson records *Solidago virgaurea*, *Ophrys insectifera*, *Galeopsis tetrahit*, *Melica uniflora*, *Ajuga reptans*, *Primula vulgaris*, *Teucrium scorodonia* and *Ilex* in his wood; these all still grow in or near Putt Wood, and while it is improbable that the present locality was Johnson’s exact spot, the evidence is strongly in favour of the present colony being the descendant of the original, probably indigenous, stock of Johnson’s time; his locality cannot have been far away. Also in Putt Wood at 978598, 1958, HMW. [Rochester, Sherard; Wouldham, N.B.G.; Detling, F.G.E.K.]

8) 3 pl[ants], Crown Chalk pit, Wye, 1950, 2 white, one yellow, E. Scott and C.N. Pope **MNE**; since disappeared.

11) [E. Farleigh, H. Lamb. Ightham, Mrs. Benson. W. Malling Brickfield, 1944, Dr. H Gray.]

12) Bombed site, Canterbury, 1950 Miss Spillett; 1952 Miss E. Milward; RGW. [Hothfield Common, W.R. Jeffrey.]

13) rubble, Connaught Way, T[unbridge] Wells, 1930, ED Morgan.

15) [Ivychurch, 1880, W.R. Jeffrey.]

16) Folkestone (pink), waste ground in the Warren, 1954, Miss V. Day.

#### **V. virgatum** Stokes

Twiggy [Mullein].

[15, 16.]

Former denizen or perhaps even native, now only a casual, on roadsides and waste ground, and in chalk pits.

1<sup>st</sup> records, probably

1632: “*Blattaria flo. luteis vulgaris*” (near Quex), Johnson, *Descriptio*, and

1629: “*Blattaria vulgais, flo. luteo*” Erith, Johnson, *Iter*, p.10.

The yellow flowers suggest *V. virgatum* rather than *V. blattaria*.

1) [Several old records, 1629-1899, Erith, Charlton, W. of Dartford, Forest Hill.]

3) Fordwich, rough ground below road, 181592, 1955, A.W. Roberts.

6) Magpie Bottom, c.1936, A. Beadell.

8) [Kingsdown to Walmer, Duthie.]

13) Waste ground, High Brooms, J.M.P.B., B.E.C. Rep., 1939-40, p.287.

14) R[ai][wa]y bank, Tenterden, 1962, R Elphick.

Only casual in Surrey, Sussex, and Essex; regarded as native in Cornwall and S. Devon; not quoted for Pas de Calais.

#### **V. bombyciferum** Boiss.

[Broussa Mullein.

15.]

(*Diag. Pl. Orient.*, 52, 1844) (= *V. lagurus* Boissier *Fl. Orient.* IV, 302, 1879.)

4) Ruins of house, Sandwich Bay, 1948, JEL, DMcC, & RAB.

#### ‡ **V. phlomoides** L.

[Orange Mullein.

15, 16.]

Casual alien.

1) Tip, Green St[reet] Green(Farnborough) 1950, D.P.Y.

Orpington sq[ua]re ‘56

8) St. Margarets Bay Cliffs, 1958 **MNE**.

10) Rubbish-tip, Sevenoaks, 1951, D.McC.

11) Brickfield on Gault N of Platt, 620575, 1956, DMcC.

12) Canterbury 1948 DMcC, det. JEL. Sturry, Mrs Oldaker.

13) Claremont Rd., Tun[bridge] Wells, 1957, KEB.

16) Folkestone, old B[rick]works, 1949, JEL 1954, Miss V Day.

#### ‡ **V. densiflorum** Bertol.<sup>802</sup>

[Dense-flowered Mullein.

15, 16.]

Casual alien, formerly naturalised on the downs at Brook.

1) Bickley, 1946, DMcC.

<sup>802</sup> In the manuscript given as *V. thapsiforme* Schrad.

8) Brook, 1863, J.S. Mill & Irvine; in Hb. J.S. Mill K, is thapsiforme, teste N.Y. Sandwith; though labelled *V. nigrum* x *thapsus*, it is not this “pedicels not ob[viously] adnate to infl[orescence] axes: is decurrent”, confirmed by Sv. Murbeck in 1936 (the 1933 monographer of the genus). See Phyt. N.S. V, p.362 (1861) JS Mill. Also found in Quantocks (see E.S.M. in J. Bot 1918).

10) Bombed site, Canterbury, 1950, L.W.W.

Pas de Calais, rare.

# **V. thapsus** L.

[Great Mullein], Common Mullein, Aaron’s Rod.

15, 16.

43/51

Native. Dry sunny banks, including railway banks, rough grassland, scrub and wood-borders, coppiced woodlands, usually flowering the second year after the coppice is cut; very common on chalk and ragstone, frequent on other dry sandy or gravelly soils, rare on clay; occasional near the sea. Unrecorded for Grain, inland Romney Marsh and the Oxney, Woodchurch, Hawkhurst and Sandhurst areas. Common in Surrey and Sussex, except in the Weald; local in Essex; common in Pas de Calais.

1<sup>st</sup> record, 1597: Blackhearth by a lime kiln, etc., Gerard, *Herbal*, p.629.

1) Railway banks at 46 Bickley; 46 St Mary Cray. 36 Rubbish dump, W. Wickham 1955, JM Sherwood. Abbey Wood, 1948, R.A.B. 47 N. Cray Tip PCH. Farningham Wood PCH; 82! 57 Joydens Wood PCH. 47 Ruxley Pits, ’58, TH Angel. W.

Wickham, Blackheath 56, Bexley

2) 47 Waste g[roun]d, Crossness, PCH. O6 R[ai]l[wa]y bank, Rose in Bloom, Seasalter, HMW. (not in Grain, Sheppey)

3) Trenley Park Wood, 1950, REW.

Faversham 58

4)

Chisle 55

5) 55 Chalk pit, Morants Court Hill. 45 Chalky bank, Broom Wood, Cudham PCH. 56 Ploughed Down S. of Timberden Bottom PCH. 56 Chalk W of Eynsford PCH. 55 Morants Court Hill Chalk pit, 1960, CAS. Darwins Bank Downe, 1955, JEL.

Westerham, Downe

6) Eynsford. Otford. 66 Downs above Trottscliffe PCH. 57 Mounts Wood PCH. Gore F[ar]m, N. of Darenth, 564724, 1948, EMcC. 66 Ridley. 66 Upper Halling Downs. 76 Cuxton.

Eynsford, Sevenoaks, Halling, Cobham, Dartford, Gravesend, Meopham

7) 86 on chalk, Stockbury Hill Wood, 1958, 835607. Putt Wood, Ospringe, 1950, REW.

Maidstone, Hollingbourne, Doddington, Chatham, Stockbury, Ospringe

8) 34 Langdon Bay to St Margarets, Miss B Nash. 25 Knowlton, 1958, Miss B. Nash.

Westwell, Folkestone, Wye,.... Dover 56, Chilham, Canterbury, Wingham 1958, Sandwich

9)

E Thanet 59

10) 55 Sevenoaks tip, 1958, CAS.

11) 65 Ragstone Quarry, N of A.20, Ryarsh. 55 Station yard, Kemsing, 1945. 65 Borough Green, Ragstone Quarries. 75 East Malling. 75 Oaken Wood, Barming, in coppiced area. 44 Meadows W. of Edenbridge, 1957, C.T.P.& D.P.Y. 54 R[ai]l[wa]y bank, Hildenborough, 563482 CAS.

Edenbridge 57, Tonbridge 56, Pembury 56, Headcorn 56

13) 53 Tunbridge Wells, 1955, KEB. 73 old R[ai]l[wa]y n[ea]r Broadford, SE of Horsmonden, Dr W B Williams 1962. Cranbrook, 1946, Miss W. Crowhurst.

T[unbridge] Wells 55, Cranbrook, Tenterden

15) Dungeness. New Romney.

Dungeness, Romney 46, Aldington, Hythe

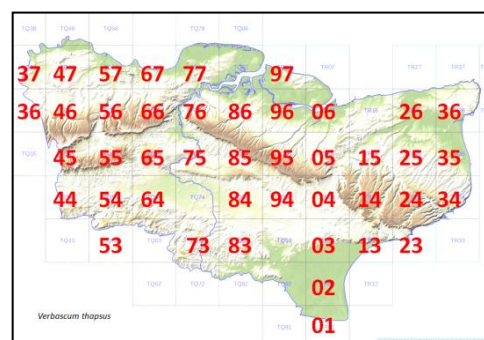
# **V. thapsus** x **nigrum** = **V. x semialbum** Chaub.<sup>803</sup>

1) N[ea]r Charlton, Hb Buddle. Scrub between Layhams F[ar]m and Leaves Green, 1 m SW of Keston Ch[urch]!; 404622, a[bundant] 1955, F Swain.

5) n[ea]r Farnborough, Syme, VI, p.117.

# **V. thapsus** x **lychnitis** = **V. thapsi** L.

Frequent where the parents grow together.



<sup>803</sup> Order of parents reversed, and position of entry regularised. Similarly as regards next entry.



- 1) Railway bank, St. Mary Cray, C. & N. Sandwith, (B.E.C. Rep. 1926, p.126); 1944! R[ai][wa]y bank, Bickley, 1946, **MNE**. Elmstead Wood Station, by railway, JEL. Slades Green, F.R.
- 2) E. of Denton, 1946, 1946.
- 5) Downe, Darwin.
- 6) Rugby Cement Works, Halling, 1944. Near Darenth Wood, 1948-50, H.M.P. Halling Downs, 1945; PCH. Green Street Green, Syme. Magpie Bottom, ESM.
- 7) Hangers, Westwell Downs, Misses Jeffrey & Cobbe, (B.E.C. Rep. 1933, p.202); 1962, Miss E. Millward.

It appears that this hybrid has been many times in the past mistaken for *V. thapsiforme*; the localities in some cases produce today the hybrid.

### **V. nigrum** L.

Dark Mullein.

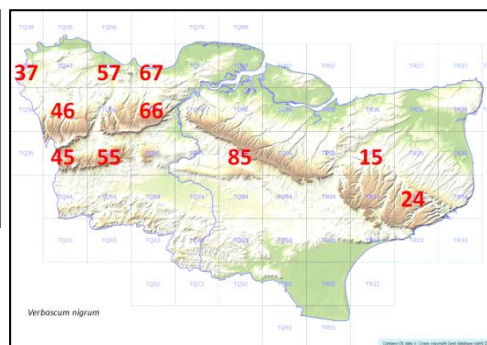
15, 16

11/51<sup>804</sup>

Native. Roadsides, hedgebanks and wasteground on chalk and sand; formerly widespread and locally common and recorded from over 40 localities, now quite rare, and confined to the outskirts of London in 1), 2) and 5). Its apparent enormous decrease is difficult to explain, particularly as it is in the more rural, less "developed" parts of Kent that this decrease has been greatest. The spread of enclosure and cultivation may have assisted in the decrease.

1<sup>st</sup> record, 1640: many places in Kent, Parkinson, *Theatrum*, p.61.

- 1) 46 Chalk railway bank, St. Mary Cray, 1955, G.M. Brown & F.R. **MNE**. NW part of Joydens Wood, PH Cooke. Kent Gate, 1915, AG Davis, 1915 **MNE**. 37 Greenwich Park, 1903, AD Webster; 1960, G.M.B. 57 Slades Green, G.M. Brown. 46 Green Street Green, 455642, n[ea]r Farnborough, Burnett, 1926; 1946 DMcC; 1951!; G.M. Brown, 1954. Many old localities throughout this district.



- 2) 57 Landward face of river wall. E. of Longreach Tavern, Dartford Marshes, 20 pl[ants], 1961, 1962!; 544779, HMP. 57 Riverwall, W. of Littlebrook, 567762, 1956, HMP. 67 R[ai][wa]y bank by canal E of Gravesend, 1955 PCH.
  - 3) 15 One plant, Oldridge Wood, in clearing, 1950, RE Wood; (1950! **MNE**).
  - [4] N. of Sandwich, F.M. Webb. Walmer Beach **MNE** 1850.]
  - 5) 46 Hedgebank of footpath on chalk, between Keston Windmill and Nash, 1954, G.M. Brown & F.R. **MNE**. [Formerly at Halstead, A.A.; Knockholt, A. Bennett; and Farningham FM Webb.] 46 Cuckoo Woods, Downe. PB Graham & RE Edwards, 1957. 45 Biggin Hill, A. Beadell; 1952 Miss J Davison. 46 Scrub on chalk, 1 mile SW of Keston Church, 1955 v[ery] a[bundant]; 404622 F. Swain. 45 chalk slope, NW of Lusted, 1959 RA Clarke.
  - 6) [Many old localities.] [Hartley, Northfleet, Greenhithe, Otford, Dartford.] 57 Gore Farm, N. of Darenth, 564724, DMcC 1948. 66 Halling chalk put, 1962, C.A. Lister. [Green Street Green, Syme.]
  - 7) [formerly at Ospringe, Bateman, 1746; Jacob, 1777.] 15 verge, NW side of By Pass, Chilham, 1960, Mrs B. Dodds.
  - 8) Lydden, O.B.G.; 24, 1955, at base of downs N. of R[ai][wa]y halt, E. of Lydden, N.D. Simpson. R[ai][wa]y cutting W. of Shakespeare Cliff 1961 Miss Hackney. 15 Glade in Beechwood, S.E. of Patricxbourne, 1958. [Formerly about Folkestone and Brook.] St Augustines Abbey Canterbury J. Pitt.
  - 10) 55 Bitchet Green, 1 plant, 1954; 6 plants, 1956; 1957 **MNE**. [formerly at Westerham, Riverhead and Ightham.]
  - 11) [formerly at Aylesford.] 85 Manor Wall, Hollingbourne, 1962, Mrs B. Dodds.
  - [12] near Ashford, W. Jeffrey.]
  - 14) ["Common about Hawkhurst", J.C. Melvill in Fl. Kent; no modern records.]
- Fairly common in Surrey on the chalk and locally on Greensand; frequent on chalk and Folkestone Sand in W. Sussex, only casual in E. Sussex; very rare in Essex; rather rare in Pas de Calais and not in the Boullonnais.

### **V. nigrum x lychnitis = V. x incanum** Gaudin<sup>805</sup>

<sup>804</sup> The mapping for this species given here comprises the manuscript original, which appears to be of most or all records, and a construction from what are listed as current records through marginal assembly of the hectad numbers and perhaps destined for the final mapping. The latter shows that the hectad total was added up incorrectly and should be ten; TR15 was double-counted.

6) Green Street Green, near Darenth, Syme, Eng. Bot., VI, p.117.

(**V. pulverulentum** Vill. [Hoary Mullein] appears to be native in E Anglia and occurs in Essex (r[ai]l[wa]y bank W. of Colchester! It is reported as a casual of bombed sites at Folkestone by Miss V. Day (1949-50 *Trans. Folkestone N.H.S.*)).

**V. lychnitis** L. var. **album** (Mill.) Dr.,

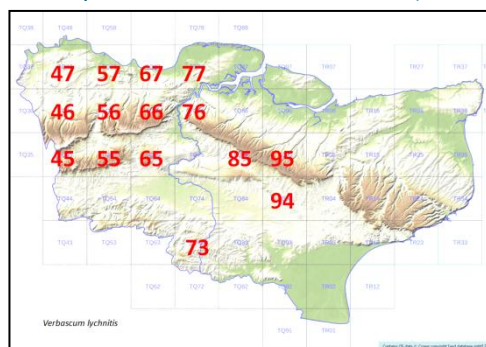
White Mullein.

15, 16

15/51

Native. Banks, scrub, and open woods on chalk, frequent to locally common in West Kent, in 5) and 6), scattered in 7), not recorded in 8); locally frequent on tertiary sands and on imported chalk on railway banks, waste ground and quarries in 1); rather rare on banks, and in old quarries on ragstone in 2), 10) and 11; on an old railway in 13); casual elsewhere. Commoner in Kent than in any other part of England. The yellow flowered type has only been found as a casual at 10) Kemsing Station, D.McC.

Rare in Surrey and confined to the eastern part near the Kent border; in Sussex only on the western South Downs and rare there; not in Essex; very rare in Pas de Calais, commoner in Central Europe.



1<sup>st</sup> record, 1597, Blackheath, by a lime kiln, etc., Gerard, *Herbal*, p.6299.

1) 46 Railway bank, Bickley, AHWD; 1947! MNE. 47 Railway bank, Elmstead Woods Sta[tion], JEL etc.; 1958 KEB. 46 Railway bank, St. Mary Cray 1945, KE [*sic*, for JK?]Spearing; 1955! 47 Railway bank, n[ea]r Chislehurst Station, 1953, Rev J.G.G. 57 Wilmington, 1946, P.H.C. 46 Green Street Green (Farnborough) 1946, PHC. 57 Joydens Wood. '46 MNE; 1948 DMcC. 57 Slades Green, F.R. Many old localities.

Bexley, Orpington, Farningham, Cobham, Chatham

2) 77 Filled in Canal, W. of Uralite Halt, 1945. 47 Plumstead Marshes, 1943. 67 Railway bank E. of Denton, 1946. 76 Railway bank, Cuxton. 06 1 pl[ant] top of wall, Davington Priory, 1958, Mrs. Brickenden.

Faversham, Higham

5) 46 Leaves Green, chalk pit to N. 46 Darwins Bank, Downe, 1955, JEL. 46 Cuckoo Wood Downe, 1959, PB Graham, R. Edwards. 55 Chalk pit, Morants Court Hill, 1946; 1956, KEB; 1960, CAS. 45 Biggin Hill, 1931, Burnett. 46 Chalk cutting Knockholt St[at]ion 1957 PW Wilberforce.

Westerham, Sevenoaks, Malling, Hollingbourne

6) 57 Chalk scrub, ¼m. S.E. of Dartford, 1944. 57 Princes Rd Dartford, 555735, HMP, 1958. 67 Swanscombe HMP. 57 Bank, Stone Lodge F[ar]m 563742, HMP, 1958. 57 Hornsross gravel pit, Stone, 576744, 1958, HMP. (Stone, 1938, Tagg.) 57 Darenth Wood. 57 Field N. of Darenth Wood 578734, 1953, HMP. 56 Railway cuttings, Eynsford; and N of Shoreham. 56, A225, R[oa]d verge, N. of Shoreham, E. of Preston F[ar]m, 529626, 1961, H.M.P. 58 Preston Hill, Shoreham, PCH. 66 Birling Downs. 66 Downs W. of Snodland, 1943. 76 Bank by Rugby cement works, Halling, 1944. 66 Edges of beechwood, Halling Downs, 1945-1960 MNE. 66 White pit, Upper Halling, 694651, 1958 MNE. 76 Cuxton Chalk pit.

Dartford, Gravesend

7) 76 Burham Downs. [Bluebell Hill, H. Lamb.] 95 Gravel pit NE of Newnham, 1945; 1950, REW. 95 Stalisfield, 1958, Mrs. Brickenden. 95 roadside glade in beechwood, ¼m N. of New York, Belmont Park, 982565, 1937 JRW; 1959! MNE. 94 N.W. of Westwell, edge of beechwoods, Miss Cobbe; E. Scott; 1962!

Newnham, Belmont

10) 55 sandpit and railway embankment, Riverhead, N. of Sevenoaks Station, J.M.P.B. (B.E.C. Rep. 1939-40, p.287); 1960, CAS. 55 R[ai]l[wa]y E of Kemsing Station, 1958.

11) 65 Ragstone pit, E. of "Wheatsheaf", N. of A.20, Leybourne (=Welling, B. King in Hb. Palmer). 85 Sandy bank N of A.20, Clarks Hill, Chegworth, 1953, Miss M.E.M.; 1958, Mrs B. Dodds; 1958-62! MNE. Near Tonbridge, Hb. Borrer K.

[12] Chantry Lane, Canterbury, waste ground, RGW.]

13) 73 SE of Horsmonden, on disused railway, S. of Br[id]ge between Rectory and Broadford, 1962, Dr. W.B. Williams.

**Scrophularia** L.

424

The two native Kent species show specialised protogyny and are normally wasp-pollinated.

**S. nodosa** L.

Common Figwort, Knotted Figwort.

15, 16

47/51

<sup>805</sup> In the manuscript given as *V. x schiedeana* Koch. Order of parents has been reversed and position of entry regularised.

Native. Woodlands and hedgebanks, except on highly acid soils; very common generally, but unrecorded for 15) (Romney Marsh and Dungeness), 8) Thanet, and the Isle of Sheppey in 2), and probably absent in these areas almost without woodland.

1<sup>st</sup> record, 1632: Nash to Quex, Johnson, *Descriptio*, p.19.

1) Gattons Plant[atio]n, PCH. Joydens Wood, PCH. North Cray Wood, PCH. Farningham Wood, PCH; 82! Shooters Hill Woods, '54, GMB. Abbey Wood, 1948, RAB

Bexley, Beck[enham] Pl[ace] Park, Orp[ington], Beck[enham]/W. Wick[ham]

2) 87 foot of Sea wall, 2 m. W. of All Hallows, 1958, Mrs AG Side.

Grain

3) Pine Wood, Littlebourne, Sandy Cross, 198577, 202581, 1958.

Faversham 56, Whitstable, Teynham 55

4)

Chisle 57/8, Sandwich

5) Wood W. of Shoreham, PCH. Beechwoods, Darwins Bank, Downe, '55, JEL.

6) Mounts Wood PCH. Horton Wood PCH. Wingate Wood PCH. On c[lay] w[ith] f[lints] Ingram Wood, Stansted 611616, 1959. Preston Hall PCH. 67 Claylane Wood, Cobham, 1961, H.A.S. 66 SE of Cobham HAS.

Dartford, Gravesend, Higham, Farningham, Cobham

7) Wood NE of Primrose Cafe Stockbury, 833607, 1958. On Thanet Sand in copse, Keycol, Newington, 866641, 1958. 048497 Kings Wood above Bilting 1949 P le Brocq.

Stockbury, Chatham, Hollingbourne, Doddington

8) Hedge, Parkgate F[ar]m Elham, 172452, 1958.

Chilham, Wingham, Canter[bury], Elham, Alkham, Dover ES,

10) Westerham Wood 82.

Westerham, Sevenoaks

11) Kings Wood, on stony chert head, S. of Chegworth '59. R[ai]l[wa]y bank, Hildenborough, CAS 563482. Copse E. of Maplehurst, Staplehurst on "Paludina" loam 1959.

W. Malling, Maidstone, Edenbr[idge], Tonbr[idge], Pemb[u]r[y], Marden, Headcorn

12) Wood E. of Ruckinge, on W[eald] C[lay] 032342, 1958.

Ashford, Hothf[ield], Woodch[urch], Ham

St[reet] E

13) Gill SW of Stone Cross, Ashurst, CAS. S. of Lamberhurst Church, 684365, CAS. Coppice Wood W. of Horsmonden Church 1959, 701384. Combwell Wood, flood pl[ain] of stream, 703339, 1959. On clay, Ride in Ashour Wood, Bidborough.

T[unbridge] Wells, Lamberhurst, Cranbrook

14) N. end Hurst Wood, Sandhurst, 791295, 1 y[ea]r copp[ice], 1959.

Tenterden, E Oxney, W Oxney, Hawkhurst S

15)

Hythe, Folkestone

16) Kiln Wood, Sandling Park, 1958, 133365.

Common in Surrey, Sussex, Essex and the Pas de Calais.

**S. auriculata** L.<sup>806</sup>

Water Figwort, Water Betony.

15, 16

46/51

Native. Stream- and river-sides, ditches, wet alderwoods, fens and fen carr, pond borders; also occasionally in open glades in woodlands on chalk; very common generally, though unrecorded from 15) (Romney Marsh and Dungeness) which appears remarkable; from 9) Isle of Thanet, which is dry and almost devoid of woodland; from the eastern part of the Isle of Oxney and about Appledore; and from the chalk country E and NE of Dover to Deal.

1<sup>st</sup> record, 1629: Erith, Johnson, *Iter*, p.10.

1) Holbrook wood Alder carr, Scadbury Park, Chislehurst 59. (Pickhurst Green, Hayes, 1915, AG Davis **MNE**.) By R[iver], N. Cray PCH. Farningham Wood, PCH. High Wood, Crofton PCH. Crofton Heath PCH. Joydens Wood PCH. Ruxley Pits, 58, TH Angel.

Bexley, Orpington, Beckenham

2) Marsh on Bagshot [Sands]/ L[ondon] C[lay] springline, Boarers Run, Minster, 1959. Ditch W. of B.2000, 1¼m. S. of Cliffe, 1958, 734740. In fen by stream S. of L[owe]r Halstow, 1962. 06 Dike W of Seasalter 1957 HMW.

Teynham 56, Grain '59, Chatham, Fav[ersham] 55, W Sheppey 55, Whitstable

3) Alder carr, E end Trenley P[ar]k Wood, 201594, 1958.

4) Ham Fen, 1955 **MNE**. Marsh E of Copse N. of Preston Church, 1958, 243607. Alder carr S of Preston Ch[urch], 1958, 242605.

Chisle 55, Minster Marshes 55, Sandwich, Wingham

6) Pondside, Disused chalkpit, Swanscombe, 61, HAS. Wood border, Kemsing Downs, on chalk. By sunken lane up downs, in beech-yew wood glade, above Wrotham Water. Preston Hill, PCH. Wingate Wood, Halling, on chalk, PCH.

Cobham, Dartford, Gravesend 56, Higham

7)

Stockbury

8) In Woodland by Pilgrims Way, on chalk, Westwell. Edge of Woods on chalk, Beachborough.

Alkham

10) Riverbank, Shoreham, PCH. W. of Brasted GMB. Riverbank, Otford, PCH. Riverbank, Eynsford, PCH. Riverbank above S. Darenth, PCH. St Johns Jerusalem, PCH. Water Meadows, Darenth, PCH. Westerham Wood '82.

Farningham, Westerham, Sevenoaks.

<sup>806</sup> Given in the manuscript as *S. aquatica* L.

**11)** Stream, Addington Place, 1958, DMCC. Entrance, Park Wood, Sissinghurst, 1948 **MNE**. By Medway, below Ashour Wood, Bidborough. Ditch by R[oa]d ½m N. of Collier St[reet], 1958, 715469. Teise bank S. of Collier St[reet] by B.2162, 714439. Widehurst Wood Marden, on W[eald] clay, 1958, 745420. Alder carr Chegworth, Harrietsham 1958, 850528. Lake below Polhill, Harrietsham on Len, 859515, 1958. Marsh, meadow by Len, S. of Harrietsham 865522, 1958.

W Malling, Maidstopne, Hollingbourne

**12)** Pond border in marshy meadow, SE of Lenham church, 901520, 1958. Alder carr, Rooting Alders, Lit[tle] Chart, 1959, 955452.

Doddington,

Canterbury, Chilham 55, Stowting/Elham, Ashford, Hothfield, Ham St[reet] E, Woodchurch 55.

**13)** Gill SW of Stone Cross, Ashurst, 518387, CAS. Combwell Wood by E stream 1979. 749409, Castanea copp[ice] on T[unbridge] W[ells] S[and], E of Curtisden Green 1958. R[iver] Teise, Goudhurst Bridge, 706373, 1959. Pond in Gill NNW of Brenchley, 677426, 1958. Gill E of Crundalls F[ar]m, Brenchley, 672427, 1958. Ditch S. of Lamberhurst Ch[urch], 684365, CAS.

T[unbridge] Wells, Cranbrook, Lamberhurst

**14)**

Tenterden, S of Hawkhurst, Newenden/W Ox[ney]

**16)** Springs below ragstone scarp, Honeypot, Court at Street, 1958, 089353.

Hythe, Folkestone

Common in Surrey and Sussex (where, as in Kent, it occurs in woods on chalk, as well as in wet places), Essex, and in the Pas de Calais.

(*S. umbrosa* Dumort. [Green Figwort] has occurred, very rarely by the Mole at Norbury Park, Surrey (R.W.R. 1934) and as a native near Willingdon in E. Sussex and at Hermitage in West Sussex, but has not been seen in the county recently. In view of these facts this species might well occur in damp woods in Kent, or possibly at the base of the Downs.)

‡ *S. vernalis* L.

[Yellow Figwort.

15, 16.]

A rare alien, rarely persistent.

**1)** Several places near Chislehurst, W.W.R.; Wollaston in Phyt. N.S. VI, p.63.

**10)** Mount Harry R[oa]d, Sevenoaks, in walled garden, 1947, F. Waley.

**12)** Hospital Grounds, Canterbury, Bishop Mitchinson; Bishop Mitchinson, Precincts, Canterbury, 1938, 1947, 1955, 1956, 1960, Miss E. Milward, a persistent small colony, not appearing every year, behind Norman staircase (poss[ibly] introd[uced] with shrubs planted 1937).

‡ *Mimulus* L.

425

‡ *M. moschatus* Douglas ex Lindl.

Musk.

15, 16.

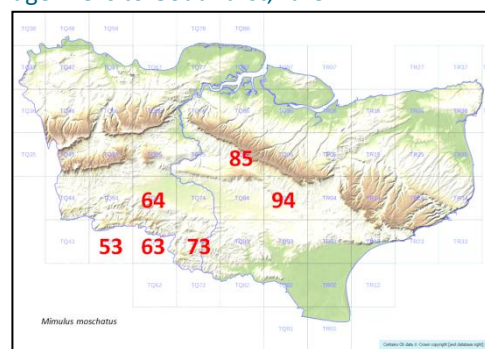
6/52

Alien, naturalised in several places in the High Weald from Tunbridge Wells to Goudhurst; rare.

**11)** 85 Leeds Castle, ditch by golf course, 1960, Mrs. B. Dodds.

**12)** 94 Hothfield Common, a few plants in valley bog V, 1943, F.R. & J.H.L.

**13)** 53 Stream N. of High Rocks, 1952, M. McF. 64 Pembury Woods, Miss D. Baylis, 1957 **MNE**. 64 Wood S. of Pembury Old Church, 1957, C Stace, 625427, 1960, F.R.B. 53 Under a grating, London R[oa]d, T[unbridge] Wells. 1951-53, KEB. 53 Hawkenbury, 595388, 1960, E. Shorrocks. 73 Bedgebury Forest, in sandy rides, 1943. 53 Wet field below Nevill Court, Tunbridge Wells, 1949-53, K.E.B., 1960 CAS. 63 S of Lamberhurst Church, 684365 CAS. 63 Near Lamberhurst Manor, 1943, JRW. 63 By the Lake, Bayham Abbey, 1950, K.E.B.; 648366 (S[ussex]x) CAS. 73 Angley Park Lake 1955 D. Streeter.



‡ *M. guttatus* DC.

Monkey-flower.

15, 16

25<sup>807</sup>/51

(*M. langsdorfii* Donn. ex Greene; *M. luteus* auct.) Alien, completely naturalised. Streamsides and springs, widely scattered over Kent, and now rather frequent.

1<sup>st</sup> record, 1882: N[ea]r Wrotham, Rev.J.W. Ewing in *Fl. of Wrotham*.

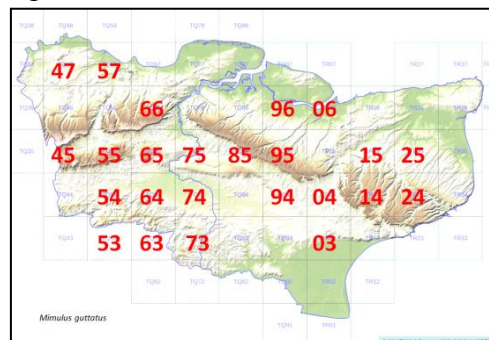
**1)** 47 By the Cray, North Cray, Wollaston (1955!); St Mary Cray, A.H.W.D.; 57 By Cray, Bexley, H.M.P., 501741. 46 Ravensbourne, Bromley, 1919 **MNE**, A G Davis.

**2)** Meadows below Crayford, A.H.W.D. 57 Stone Marshes, 5575, 1948-50, H.M.P.

<sup>807</sup> The total should be 24; square 54 was double-counted.



- 4) 06 Stream below Oare Mill pond, 1950 REW; 1958; 1962. 25 By the Little Stour, Littlebourne, 1958, Miss B. Nash. 25 Wickhambreaux, L.W.W. By the Stream below Wenderton. 25 N. of Wingham, L.W.W.; REW 1980.
- 8) 24 R[iver] Dour, Kearsney, 1956; 24 River, 1962, Mrs Carlton. Bridge RGW; REW.
- 10) 45 R[iver] Darent, W of Westerham, 1921, RWR; 1955! 55 Springs in wood, W. of Ightham Mote, 1955. 55 Ditch, Otford, 524595, HMP, 1959. 543585 W. of Kemsing 57, CAS. Stream, Chevening, A. Beadell, 1933.
- 11) 65 Stream above Ryarsh Mill, M. Rogers. 85 Hollingbourne, 1954. 75 In the stream, East Malling, 1943. 66 Chalk stream below Birling Place, 1939. 75 Stream, Loose, 1962, R.D. English. 85 Goddington, Harrietsham, 1960, Mrs B Dodds.
- 12) 95 R[iver] Stour, by Bone Mill S of E Lenham 1958. R[iver] Stour, Chapel F[ar]m, S. of Lenham 1958. 14 Chalk stream, Stowting, 1954. 94 R[iver] Stour, S. of Hothfield. 03 Sellindge, 1956.
- 13) 53 Stream in Wood N of High Rocks, Kent side, 1943, JRW. Stream, High Rocks Lane, KEB 1950, CAS, 1960. Stream by road 1 mile SE of Horsmonden, 1943, F.R. 63 Ditch near Lamberhurst Church, 684365, 1937, J.R.W.; 1957, CAS. 63 Bank of stream near Bewlbridge, S.E. of Lamberhurst 1939, J.R.W. 54 Penshurst (Moorden), 1949, MNE. 73 Angley Park Lake, 1955, D.S.
- 16) Saltwood, in stream, 1955, Mrs M.J. Comyn.



**M. luteus** L. [Blood-drop-emlets . 16.]  
Garden escape. Bexley sq[uare]

(*Limosella aquatica* L. [Mudwort.] occurs in a few ponds in Surrey and Sussex; it may well appear in Kent eventually, but has never been recorded.)

**Antirrhinum** L. 418

‡ **A. majus** L. Snapdragon. 15, 16.

Alien, but completely naturalised on old walls, cliffs and rasilway cuttings in many places, especially on the chalk and ragstone.

1<sup>st</sup> record, 1762: Northfleet to Gravesend, Hudson, *Fl. Anglica*, Ed. 1, p.239.

1) Wall at Hayes, 1917, P.H.C. Ruxley pits, '58, TH Angel.

2)

Teynham sq[uare] '57

4) wall of S. Aisle ruins, St. Peters ch[urch], Sandwich, LWW, 1950.

5) Railway cuttings, Orpington; Chelsfield; Knockholt, 1943-53, DHK.

6) Railway cuttings and chalk pits: Dartford; Greenhithe; Swanscombe; Northfleet; Gravesend. Chalk cutting, Mounts Road!; PCH, 586746; HMP, 1957.

7) Rochester Castle. Highstead Pits, D.McC.

8) St Margarets Bay Cliffs, 1960, E.G. Philp, MNE.

10) Sevenoaks tip, 1958, CAS.

11) Old walls, W. Malling; E. Malling MNE. Old wall, Maidstone, Chatham R[oa]d, 1958.

12) Old walls, Charing Palace. Canterbury, on old walls.

13) Garden walls, Cranbrook, 1956, D.S.

Cranbrook 1956

Naturalised on old walls in Surrey, Sussex, Essex, and the Pas de Calais.

**Chaenorhinum** (DC. ex Duby) Rchb.<sup>808</sup> 421

**C. organifolium** (L.) Kostel.<sup>809</sup> (*Linaria organifolia* (L.) DC.) [Malling Toadflax. 16.]

Alien, long naturalised on a few old walls; very rare.

11) W) Wall at West Malling, Shrivell (Hb Pharmaceutical Society); Leybourne 1893, Hb Lamb MNE; Between Malling and London R[oa]d, Mr Selcock, 1906 MNE; Walls of Malling Abbey, F. Clarke, BEC Rep. 1924, p.586; on old wall, Frog Lane, West Malling, 1942-59! MNE. Possibly formerly cultivated by the monks (for what?).

**C. minus** (L.) Lange Small Toadflax. 15, 16. 29/51

<sup>808</sup> In the manuscript cited as (DC.) Lange.

<sup>809</sup> In the manuscript cited as *C. organifolium* (L.) Fourr.



Probably native, but more often a colonist. Arable land, railway ballast, and bare places on chalk downs; widespread but only locally frequent.

#### Fossil record.

1) 47 Eden Park, Beckenham, 1917, P.H.C. 46 Keston, 1956, Miss A. Mills. Orpington

2) 96 Track, E. Elmley, Sheppey, 1954 **MNE**. Teynham

3) 16 Old r[ai]l[wa]y, Whitstable, E of R[ai]l[wa]y Sta[tion], REW, 1950; HMW, 1960. Old r[ai]l[wa]y, Tyler Hill, RGW. Whitstable Harbour, 1953, REW. Whitstable 58

4) Staple, 1957, P Grattan. Sandwich 56

5) 56 Ploughed down S. of Timberden Bottom, PCH. Potato field W of Salt Box, 1950, JD Lovis. 46 Leaves Green, 1915, AG Davis **MNE**. Darwins Bank, Downe, 1955, JEL.

6) 57 Stone, 1948-51, H.M.P. 55 Otford Mount, P.C.H. 55 Kale Field ¼m NE of Kemsing Ch[urch], 1962. 66 Cornfield below Great Wood, Cuxton. 66 White pit, Upper Halling, 1958 **MNE**. 67 W. of Downs R[oa]d, Northfleet Green, 1958 **MNE**. 66 Luddesdown Miss Barnsdale 1954.

Cobham, Farningham, Dartford 55, Gravesend 58, S[even]oaks

7) 76 Cornfield below Bluebell Hill. Garden, Concord Ave[nue], S. of Chatham, 1959, OD. 76 Walderslade, 1951, LRA **MNE**. 75 Arable, Eastling, 1961, C Turner. Arable, Hollingbourne, 1951, Gard.

Chatham, Hollingbourne, Doddington 56, Westwell

8) 15 Cornfield S. of Milton, Chartham, 1960 **MNE**. 15 Cornfield, Marley Lane, Kingston, 1948 **MNE**. 14 Elham Station, 1956 **MNE**. 25 Cornfield E of Knowlton, 1958-60 **MNE**. 25 Cornfield, Little Fredville, 1955, DMCC. Sibertswold 1957 K.D.R. 34 Walmer; Martin; Guston, 1957, Miss B Nash.

Chilham 56, Canterbury 58, Wingham 56, Ashford, Elham 54, Alkham 55; Dover 57

10) Sevenoaks

11) 65 Fallow field N. of West Malling Aerodrome, 1942. 75 Railway ballast, E. Malling. Allotments, Maidstone, E.G. Philp, 1958 **MNE**. 85 Harrietsham Sta[tion], 1960, Mrs B. Dodds. 44 Fields W. of Edenbridge 1957 C.T.P. & D.P.Y. W. Malling, Maidstone, Marden 56, Edenbridge 57

12) 15 Canterbury West Sta[tion], RGW.

13) 53 R[ai]l[wa]y W of Tunbridge Wells West Sta[tion], 573384, ES; CAS.

14) 83 Railway tracks by station, Tenterden, 1956-9, **MNE**.

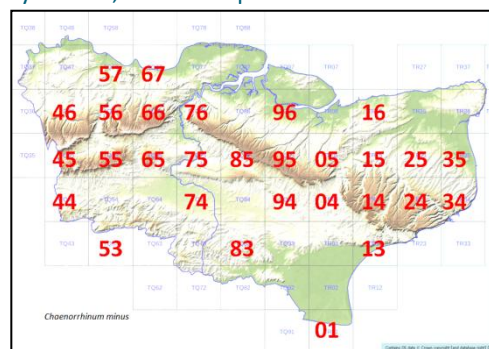
Tenterden 56

15) 01 Dungeness! 1856 **MNE**. By pond, 078188 HMP.

Dungeness

16) Hythe 55

In Surrey (rather frequent), Sussex (common), Essex (uncommon?) and Pas de Calais (locally common).



Westerham 55

#### Misopates Raf.

417

**M. orontium** (L.) Raf. (*Antirrhinum orontium* L.)

Weasel snout.

15, 16

4/51

Colonist. Arable land and gardens, usually on sandy soil; formerly widespread and frequent, now very rare, and apparently confined to 11) and 12).

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

Many old records for 1,2,3,6,7,8,9, 10,. 11, 12, 13, 14, and 16; modern ones for 11 and 12 only.

1) [Bromley; Plumstead Common, AHWD.] Holwood Park, W.C.R. Watson.

2) [Luddenham, E. Jacob; n[ea]r Chatham, FJH; Upchurch, FM Webb.]

3) [Hatch Green, F.M. Webb.] 1 plant, waste ground, Sturry, Miss E. Millward, c.1960; 1962.

4) Bretts Lakes, Fordwich, 1955, Mrs. Brickenden.

6) [Gravesend, Pocock. Snodland, F.G.E.K. N[ea]r Dartford, Cole.]

7) [E. of Rochester, Johnson, *Descriptio*, p.37. Luton, Miss Young. Boxley Hill, **MNE**.]

8) [Chillenden, FGEK. Dover, Miss Anderson. Walmer, Miss Day.]

9) [Margate church, FGEK.]

10) [Sundridge, Miss Worship. Brasted, E.M.H. Westerham, B.D.J.]

11) [Aylesford to Leybourne; N. of Leybourne FJH. Larkfield, K. Peters, 1913 **MNE**. Maidstone, in corn, W.W.R., TLS. Ryarsh, M. Rogers. Harrietsham, F.M. Webb.] Garden Weed, the Rocks, East Malling, 1942. Weed, E[ast] M[alling] R[esearch] S[tation], H. Barlow. Plentiful in fallow land N. of the Aerodrome, West Malling, 1942 (also seen by Gray near here). Weed of Gardens, Hall Place, Leigh, 1943, H.V. Wood. Cornfields, Coxheath, abund[ant], 1947, M. Paffard.

12) Lenham Forstal, kale field on Folkestone Sand, 1958, **MNE**. Hothfield, ESM. Cornfields on Folkestone Sand, by Leda Cottages, Hothfield. Cornfield and r[oa]dsides, Crouchers F[ar]m, 993453, N. of Potters Corner, 1954,

1956, C.N.P.; ES; 1952, E. Scott, **MNE**; 1954! Roadside on Sand, SE of Potters Corner, Ashford Warren, 1954, **MNE**. [Smeeth, E.S.M.] [Burton ([=]Boughton Aluph?); Kennington, W.R. Jeffrey.] Chartham, 1958, Mrs Brickenden.

13) [Cranbrook, Crowden.]

14) [Hawkhurst, JC Melvill.]

16) [Cliffs W. of Folkestone, G. Walton.] Potato field, Cheriton, 1955, Miss V. Day.

Rare in Surrey, and Essex, very rare or casual in E. Sussex, locally frequent on greensand in W. Sussex; rare in Pas de Calais.

### **Cymbalaria** Hill<sup>810</sup>

423

‡ **C. muralis** P. Gaertn., B. Mey. & Scherb. Ivy-leaved Toadflax. 15, 16 44/51

Alien, but for a long time completely naturalised on old walls, and on ragstone rock outcrops; very common in suitable habitats throughout Kent except in 15) (Romney Marsh and Dungeness), about Paddock Wood and Pembury, north of Canterbury in 3), and in the Hawkhurst-Sandhurst-Newenden area, in which areas it is so far unrecorded. Occasionally it is white flowered ( 8) Bishops bourne, Miss Palmer, B.E.C. Rep., 1923, p.202). Frequent in Surrey, Sussex, Essex and the Pas de Calais.

1<sup>st</sup> record, 1762: about London, frequent on old walls, Hudson, *Fl. Angl.*, Ed1, p.237.

1) 47 Kidbrooke Grove, Blackheath PCH. 47 Wall, Bexley Village, PCH. W. Wickham Court, 1915 AGD, **MNE**.  
Bexley, Blackheath 55, Orpington 55, W. Wickham 56

2) 06 Orpington Church, 1950 REW. Old wall, Faversham 1951 REW. Faversham 55, Sheppey 59

3) 05 Boughton Church; 16 Whitstable Castle, 1950, R.E. Wood. 06 Seasalter H.M.W. 1957.

4) Flint wall, Wingham village, 1958. Fordwich Church 1952 REW. Sandwich Bay. Sandwich 55

5) 36 Wall, Wickham Court, 3864, PCH '58.

6) 67 Shorne, old walls, '61 HAS. Cobham, Dartford, Gravesend 56, Higham 55

7) 86 Wall, Hartlip, 1958, **MNE**. Chilham Castle and Ch[urch], RE Wood, 1951.  
Chatham 55, Stockbury 55, Teynham, Doddington

8) 15 with white flowers, Bishopsbourne, Miss Palmer (B.E.C. Rep., 1923, p.202); 1947, BJB.  
Wingham 55, Dover, Alkham 55, Wingham 56

9) E Thanet, W Thanet-Preston 55

10) 56 old wall, Farningham Village, 1958, 548669. 56 old wall Lullingstone, 1956 **MNE**.  
Farningham, Sevenoaks, Westerham

11) W. Malling, Maidstone, Hollingbourne, Marden, Headcorn, Tonbr[idge], Edenbr[idge]

11)G) 75 Walls, E. Malling (Heath Road; The Rocks (also on natural rock)); 65 Mill Street, 1959. 65 W. Malling 1959. 65 Ch[urch] y[ar]d wall Yalding 1959. 85 Ch[urch] y[ar]d wall Leeds, 1958. 85 Wall, Fairbourne Mill, Harrietsham, 1960, Mrs. B. Dodds.

11)W) 74 old wall, Marden 1959. Wall, Leigh, 1947 HV Wood. 74 Ch[urch] y[ar]d wall Staplehurst 1959.

12) 85 Ch[urch] yard wall, Lenham, 1958. Canterbury, Chilham, Ashford, Westwell, Wood church 56

13) Walls, Tunbridge Wells, 1955, K.E.B. 63 Walls at the Grange, 1936; and at Arnolds Mill, 1941, Lamberhurst, J.R.W. Tun[bridge] Wells 55, Lamberhurst 56, Cranbrook 55

14) Tenterden, Appledore

15), 16) Aldington, Hythe, Folkestone

### **Kickxia** Dum[ort]. 422

**K. spuria** (L.) Dumort. Round-leaved Fluellen. 15, 16. 35/51

Native. Cornfields and waste ground, frequent to locally common on the chalk, widespread but rare and very scattered elsewhere; unrecorded for the Hoo peninsula in 6) and 2), 10) Romney Marsh, and without recent records for the High Weald of 13) and 14). Formerly apparently much commoner than now, to judge from old records.

1<sup>st</sup> record, 1597: Southfleet, Gerard, *Herbal*, p.501.

1) Chislehurst Common, W.C.R.W. Bromley, 1946, P.H.C. (Hb. LNHS). (Keston, formerly, CW.) Hawley, AC Tagg, 1938. 47 Field W of Joydens Wood, PCH. Bexley 55

2) 97 Cornfield S. of Thistle Hill, Minster in Sheppey, 26.10.1958, on London Clay. 96 Blacketts, Tonge, 1958, DMCC. Sheppey 58, Teynham '58, Higham 56

<sup>810</sup> Cited in the manuscript as *Cymbalaria* Baumg., and the species similarly as *C. muralis* Baumg.

3) Stubble N. of Hempshall Wood, Whitstable, 1950, REW.

5) 45 Cornfields on chalk: W. of Chevening, 1962; N. of Gaysham F[ar]m, R.A. Clarke, 1958; N. of Westerham, R.A. Clarke, 1958. 56 Chalky Field W of Eynsford, PCH. 46 Downe, 1904, A.G.D., **MNE**. 46 Cudham, 1915, AGD, **MNE**. 46 Cornfield W. of Saltbox, 1950, JD Lovis.

Westerham

6) 57 Cornfield 578734 N of Darenth Wood, abundant, 1951, H.M.P. 57 Cornfield opp[osite] Mounts Wood, S. of Greenhithe, 1946 **MNE**, 1954. 66 Cornfield on chalk, below Pilgrims Way W. of Pilgrims Ho[use] Trosley, 635607, 1958. 67 Stubble field, 694724, Chalkpit Cott[age]s, N. of Shorne, 1958, JF & PCH. Cornfield W. of Downs Rd., Northfleet Green, 1958 **MNE**, 628704. 66 Cornfield on chalk, Halling. 66 Field E. of Luddesdown, 1946 **MNE**. 66 Cornfield below Great Wood, S. of Cuxton, 1943-55.

(6E Chattenden W[oo]d H Elgar 1899 **MNE**.)

Dartford, Gravesend, Cobham, Farningham

7) 76 Cornfield E of Burham 1960, **MNE**. 75 Cornfield above Boxley. 75 Cornfields above Detling. 85 Cornfields, NE of Hollingbourne, 1947 **MNE**. 85 Cornfields above Harrietsham. 95 Cornfields 2m E of Lenham, 1950 **MNE** (Cobham F[ar]m). Wrinsted Court, fields, 1952, K.S. Jelley. 95 Field NE of Throwley Ch[urch], 994559, 1960, GL Davidson. 95 Cornfield, Eastling, C. Turner.

Westwell, Hollingbourne, Doddington 59, Chilham, Stowting 56, Chatham

8) 04 Cornfield S. of Crundale, 1952. 15 Cornfield opp[osite] Iffin Wood, 1958, D.A.C.L. N[ea]r Snowdon Colliery, 228508, in stubble, 1950 D.McC. 19 Cornfield SW of Barham, 1956 **MNE**. Soles F[ar]m Barfreton 57 P Grattan. 25 Arable about Fredville, DMcC. 25 Cornfield E of Knowlton, 1958 **MNE**. 34 Cornfield NE of St Margarets at Cliffe, 1962. 34 Cornfield, Freedown, 1962. 34 Cornfield S Foreland, 1960, Mrs. B. Dodds. 35 Cornfields, **Mongeham**, 1958; Easry, 1957, Miss B. Nash. 24 Cornfield, Sibertswold, D.P.Y. Wye, Elham, Alkham, Dover, Wingham 56, Canterbury 56....Folkestone 56

9) 26 Field Brooksend 1947 LWW. 36 Chalky Cornfield above North Foreland, Broadstairs, 1954, 410700, **MNE**. 26 Cornfield on chalk, NW of Plumstone F[ar]m, Monkton, 1958, 298665, **MNE**. 36 Cornfield on chalk, St Peters R[oa]d SE of Margate, 1958, 369691, **MNE**. Chisleat, E Thanet.

10) 56 Cornfield by Shoreham Church PCH.

11) 65 Fallow field N. of Aerodrome, W. Malling, 1943. 75 Ivy Farm, E. Malling, 1943. Cornfield 1m. S of Chiddingstone 499442, 1956, CAS. Edenbr[idge] 56, Tonbridge 55, Marden 56, W. Malling

12) 94 Arable N. of Hothfield Common, 1958, EGP, **MNE**.

13) 64 Kippings Cross Farm, CAS, '57.

15) Arable E. of Appledore, JPMB.

Appledore JPMB

16) below Postling Green, Aldington, on Ragstone scarp, 1947.

Aldington 1947, Hythe

Frequently associated with the next species. "Rather local" in Surrey and mostly on the chalk, "rather common" in Sussex, present in Essex, and common on the chalk in the Pas de Calais.

**K. elatine** (L.) Dumort.

Sharp-leaved Fluellen.

15, 16

45/51

Native. Cornfields and waste ground, frequent to locally common on chalk, often with the last species; less common on other soils, but widespread and occasional on the lighter soils in the Weald and on the Ragstone, having been recently recorded in all the 10km. squares covering the Weald except the Headcorn square (51/94) which consists very largely of Weald Clay terrain; recently unrecorded only from Romney Marsh and the built-up suburban area near London.

1<sup>st</sup> record, 1597: Southfleet, Gerard, Herbal, p.501.

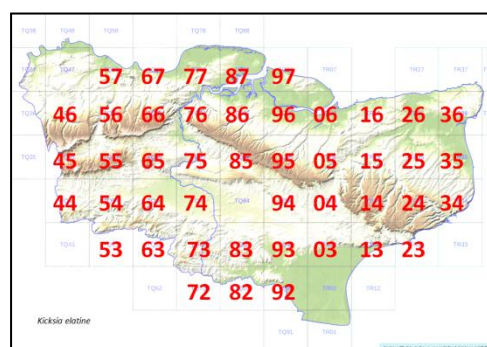
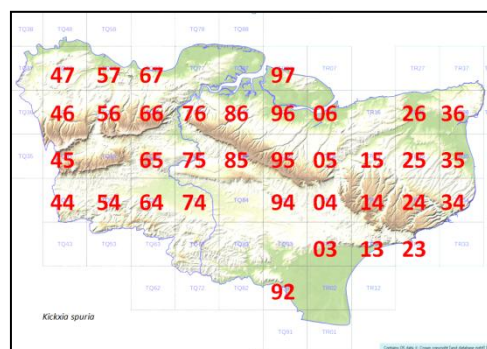
1) [Hayes; Keston, C.W. formerly.] Eden Park, Beckenham, AGD, 1905, **MNE**.

2) 97 Field, Bell F[ar]m, Minster, O. Davis, 1958. 97 Cornfield S. of Thistle Hill, Minster in Sheppey, 1958, **MNE**. 87 Cornfield AllHallows, 1958, Mrs. A.G. Side, **MNE**.

Sheppey 58, E Grain Mrs S.

3) 16 Arable, 109650, Seasalter, 1957, H.M.W. 16 Sturry, Mrs Oldaker. 26 gravelly Arable W of Shelving W[oo]d, 1962. 16 NW of Duncan Down, Whitstable, 1961, HMW. Stubble N of Hempshall Wood, Whitstable, 1950, REW. 76 field by E. Blean Wood 1947 LWW. Whitstable 55, Faversham 57

Whitstable 55 Mrs O



5) 46 Cornfield W of Farnborough, PCH. 46 cornfield W. of Saltbox, 1950, JD Lovis. 45 Arable on chalk N. of Gaysham F[ar]m, Westerham, 1958, RAC. 45 Arable on chalk W of Chevening Park, 1962.

Westerham 55, Downe 59

6) 57 Cornfield opp[osite] M[oun]ts W[oo]d, Greenhithe, 1945-62 **MNE**. 57 Stone. 57 Field N of Darenth Wood, 19521-52, H.M.P. 578734. 66 Cornfield. Buckland Rd, Luddesdown, PCH. Arable field, Romney St[reet], PCH. 56 S.E. of Shoreham, 1953, AWJ. 66 Cornfield W of Pilgrims Ho[use] Trottiscliffe 58 **MNE**. 65 Arable on marl, and chalk W. of Wrotham Water, 1958, 624595. 65 Arable on chalk ¾m. E of Wrotham, 1958, 619595. 55 Arable on chalk by Pilgrims Way N. of Ightham, 1958, 592595. 67 Cornfield W. of Downs Rd., Northfleet Green, 1958 **MNE**, 628704. 66 Cornfields below Great Wood, NW of Cuxton, 1943-55. 66 Field S.W. of Cuxton. (77 Chattenden Wood H. Elgar 1899 **MNE**.) 66 Cornfield E. of Luddesdown 46 **MNE**.

Farningham

55, Dartford, Gravesend 53, Cobham, Sevenoaks, Higham

7) 76 Cornfield above Burham. 76 Cornfield below Bluebell Hill. 75 Cornfield above Boxley. 85 Cornfields NE of Hollingbourne, 1947. 85 Arable, Downs N. of Goddington 1960 Mrs B. Dodds. 95 Cornfield, Eastling, 1961, C. Turner. Garden, Concord Avenue, S. of Chatham, 1959, O.D. Cornfield by Hoath Wood, Ospringe, 1950, REW.

Chatham, Stockbury 56, Teynham 56, Hollingbourne, Maidstone 55, Doddington, Westwell

8) 04 Cornfield S. of Crundale, 1952. 14 Cornfield SW of Barham 1956 **MNE**. 25 Cornfield E. of Knowlton 1958 **MNE**. 15 Cornfield opp[osite] Iffin Wood, Miss DACL, 1958. 35 Cornfields, Mongeham; Eastry, 1957, Miss B. Nash. 24 Cornfield, Sibertswold, D.P.Y. 34 Cliffs S. of Kingsdown 1946 **MNE**.

Chilham,

Canterbury 58, Wingham 58, Sandwich 58/9, Wye, Elham 56, Alkham, Dover 56, Folkestone 56

9) 36 Cornfield above North Foreland, Broadstairs, 1954. 26 Cornfield on chalk, NW of Plumstone Farm, 1958, 298665 **MNE**.

W Thanet 58, E Thanet 58

11) 65 Fallow field N. of Aerodrome, W. Malling, 1952 **MNE**. 714575 N. Quarry, Ditton, 1957 CAS. 94 Arable, G[rea]t Chart, 1949 **MNE**. 75 n[ea]r Maidstone, E.G. Philp, 1958 **MNE**.

W. Malling, Edenbr[idg]e 55,

Tonbr[idg]e 55, Pembury 57/8, Marden 56, Woodchurch 55 ES

12) 95 Pasture Field SE of Lenham Church, 1958, EG Philp, **MNE**.

13) Broadwater Down, Tun[bridge] Wells, 577382, 1958 K.E.B.; 1962, E. Shorrocks. 64 Pembury Court F[ar]m, 633417, CAS 1957. Kippings Cross F[ar]m, 643402, CAS 1957.

Tun[bridge] Wells 58, Lamberhurst 56

14) 73 Cornfield on sandy loam, Tanyard Farm, Hawkhurst, 1965 **MNE**. 72 Cornfield N.W. of Sandhurst village, 1952. 82 Arable, Palstre Court, Wittersham, 1958 **MNE**. 83 R[ai]l[wa]y Sta[tion] Tenterden, 1959 **MNE**. 118342, Cherry Garden, Woodchurch, 1955, ES.

Cranbrook, Tenterden 59, Sandhurst

15)

Appledore

16)

Aldington, Hythe

“Rather local” in Surrey, rather common in Sussex, present in Essex, and rather common on chalk in the Pas de Calais.

## Linaria L.<sup>811</sup>

420

**L. vulgaris** Mill.

Common Toadflax.

15, 16

49/51

Native. Roadsides, banks, chalk downs, waste ground, dry pastures, fallow arable land; very common throughout Kent on a wide range of soils, only unrecorded from highly acid, waterlogged and saline soils. Unrecorded only from a small area from Wittersham through Newenden and Sandhurst to Hawkhurst. Common in Sussex, Surrey, Essex and the Pas de Calais.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.60.

1) Hayes Common PCH. 36 N[ea]r Hayes Sta[tion], 395661, 1958, PCH.

W.Wickham DPY, Orpington, Blackheath 56, Bexley 55

2) Woolwich Arsenal PCH. Sewer bank, Plumstead, PCH. 37 R[ai]l[wa]y line, Stoke, Mrs AG Side. 06 Shellness Beach, 1956, FR & ES. R[ai]l[wa]y bank Cuxton PCH.

Faversham, Grain, Sheppey

3)

Whitstable

4) Gravel pits N. of Sandwich. Richborough.

Sandwich, Chislet

5) Chalk, W. of Eynsford.

Farningham

6) Darenth Wood A2 bank (peloric form) 1962. Rough chalk g[rass]l[an]d ¼m SE of Fawkhams Ch[urch], 1959, 598677. Bank ¼m W. of Fawkhams Ch[urch]. 1959, 594682. Pilgrims Way, E of Wrotham. Red Wood Luddesdown 1950 **MNE** (prostrate form). Gravesend '60 f[requent] r[oa]dsides HAS. Horton Kirby PCH. Mounts Rd, PCH. Swanscombe Wood, PCH. Shoreham Rifle Range PCH. Preston Hall PCH.

Cobham, Dartford, Gravesend, Higham 56

<sup>811</sup> Given as *Linaria* Mill. in the manuscript.



## 7) Wood NE of Primrose Cafe Stockbury 1958.

Chatham, Stockbury, Teymham, Doddington, Chilham, Canterbury, Wingham 55

## 8) 15 Down SE of Petham 137508 Miss MEM 1956.

Elham 56, Alkham 55, Dover

## 9)

Thanet

## 10) W. of S. Darenth PCH.

Westerham, Sevenoaks

## 11) R[ai]l[wa]y bank, Edenbridge, 1956, DPY, R[ai]l[wa]y Bank, Hildenborough, 563482 CAS.

Edenbr[idge] 56, Tonbridge, Pembury, Marden, Headcorn, Malling, Maidstone, Hollingbourne

## 12)

Westwell, Ashford

## 13) Goudhurst R[ai]l[wa]y Yard, 1959, 708373. River bank near Lamberhurst church, 1939, JRW; 1960 CAS 684365.

Tun[bridge] Wells, Lamberhurst 56, Cranbrook, Tenterden, Woodchurch 56

## 14)

E Oxney, (W Oxney 50), (Hawkhurst 50)

## 15) Dungeness, Romney Warren.

Dungeness, New Romney

## 16)

Aldington '56, Hythe 55, Folkestone 56

## Peloric forms at

## 3) Whitstable Castle grounds, 1950, REW.

## 6) Darenth Wood, 1962.

‡ **L. purpurea** (L.) Mill.

Purple Toadflax.

15, 16

14/57

Alien, naturalised on old walls in many places.

1<sup>st</sup> record, 1837: Eltham; Canterbury, Pamplin in *New Bot. Guide Supp.*, p.578.

## 1) [Eltham; Mottingham (Hb Borrer). Beckenham, Irvine.] 46 [ Bombed site, Bromley, 1946, P.H.C. (Hb. LNHS).]

36 Tip, W. Wickham, 1955, JM Sherwood.

## 2) [Faversham, Stowell.] 06 Davington, old walls 1950 REW.

Faversham sq[uare] '56.

## 3) 16 Old R[ai]l[wa]y E of Whitstable Sta[tion], 1950 REW; HMW. Whitstable Harbour n[ea]r Gas Works HMW. 16 Verges, Seasalter 1956 H.M.W.

## 4) 34 Kingsdown Beach; Lady Stanley, 1922, BEC Rep. 1922 p.739; 1946! 36 Richborough, 1946. 35 Sandwich Sta[tion] KEB. 35 Sandwich, on R[iver] Bank, 1950, L.W.W. 15 Gravel pit, Fordwich, 1950, REW. 35 1 mile N of Sandwich 1946. Chislet Halt 1958 Mrs B.

## 6) 67 Echo Sq[uare], Gravesend, 6572, 1956, H.M.P.

## 7) [Wall S. of Faversham F.G.E.K.] 95 Highstead Pit, 1958 DMcC. Rochester Cath[edral], 517463, 1956, H.M.P.

## 8) 24 Wollage [sic, for Woolage] 1951, D.McC (var rosea). Dover on wall, 1948, DMcC. Bishopsbourne, Rectory wall, 1947, BJB. Walmer Sta[tion] KEB.

9) 36 St Johns Church, Margate, 1863, W.T. Dyer **BM**.

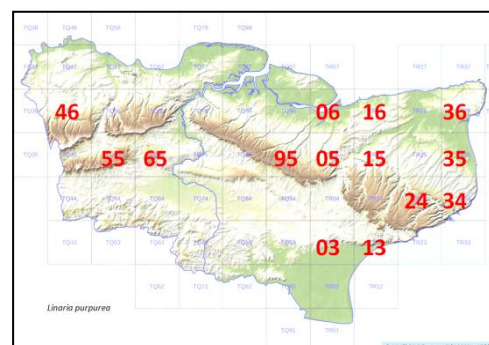
## 10) 55 Rubbish-tuip, Sevenoaks, 1951, D.McC; 1958, CAS. 55 Sevenoaks Sta[tion] by R[ai]l[wa]y, CAS. 56 Wall, Farningham 548668 1955 HMP.

## 11) 65 Walls, West Malling Abbey. 65 Clare Lodge, East Malling.

## 12) [Wye Churchyard, 1863, Hb. J.S.M.] [Ashford, F.G.E.K.] 05 Chilham, by Railway, F.R. &amp; D.H.K. 15 old walls, Canterbury, RGW.

16) 13 Hythe, D. Smith 1907 **MNE**; 1959, HM Wilks. 03 Ragstone bank Copperhurst, Aldington, 1958. 13 Casual, Twiss Rd, Hythe, 1948, Mrs B.W. 13 Sand quarry, Stone F[ar]m, N of Saltwood, LJM, 1958.

Hythe, LJM, 1958

**L. vulgaris** x **L. repens**<sup>812</sup> = **L. [x] sepium** Allman

## 4) Richborough, J.P.M.B.

## 5) Farningham, J. Groves, J Groves, [sic] B.E.C. Rep. 1880, p.33.

**L. repens** (L.) Mill.

Pale Toadflax.

15, [16]

6/51

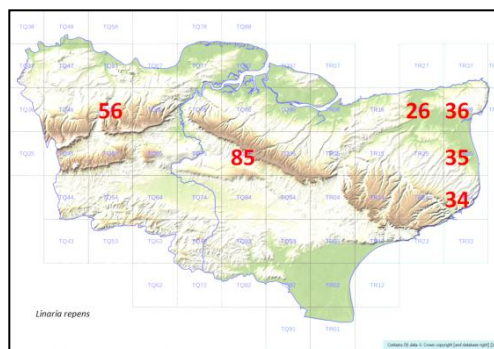
Possibly native; but probably only an alien in some of its localities; very rare and decreasing in Kent; banks and open woods on chalk, waste shingly ground near the sea. Rare in Surrey and Sussex, unrecorded for Essex; occasional in the Pas de Calais (on carb[oniferous] limestone near Marquise!).

1<sup>st</sup> record, 1762: Gad's Hill, Hudson, *Fl. Angl.*, Ed.1, p.238.

<sup>812</sup> Order of parents reversed, and position of entry regularised.



- 1) [with white fl[ower]s, Chislehurst Church yard, Rev. J. Gilman, 1953 **MNE.**] [Old wall between Foots Cray Church and Hurst, Mile & Gordon, 1793.]
- 4) 35 Gravel Pit, N. of Sandwich, J.P.M.B., **MNE**; 1946! 36 Ebbsfleet, Richborough, JPMB; Miss H.T. 1958 **MNE**.
- 5) Farningham, 1880, J. Groves **MNE**; = Dartford Road, JPMB; N. of Farningham on chalky bank, 1915, J. Gilman.
- 6) [Chalky banks near Gravesend, Fl. Met., p.70, 1836; Gads Hill, Hudson, 1762.] 56 Near Romney Street, 1933, P.H.C.; Hb. LNHS. (reported at chalk bank N of Halling Rugby Cement Works, Miss Baylis.?)
- 7) 85 Gorham Wood, Bicknor, on chalky path, 1957 **MNE**; rumoured to have been planted here by a local resident. N[ea]r Lenham 1931, H. Peters **MNE**.
- 8) 34 Radar Sta[tion] St Margarets Bay, 1954 Rev. D Murray; 1957 KDR; 1961, C. Turner.
- 9) Brooksend; Birchington 26 Roadside bank above arable, 1957, Miss B. Nash.
- 11) (Reported in Fl. Kent at Hadlow: unlikely.)
- 12) Casual, Wickens Manor, Charing, 1948 L Hawkins.
- 16) [Wall by road E. of Hythe, G. Walton.] [Bombed site, Stonecliffe, Miss V. Day, 1947.]



## Digitalis L.

429

### D. purpurea L.

Foxglove.

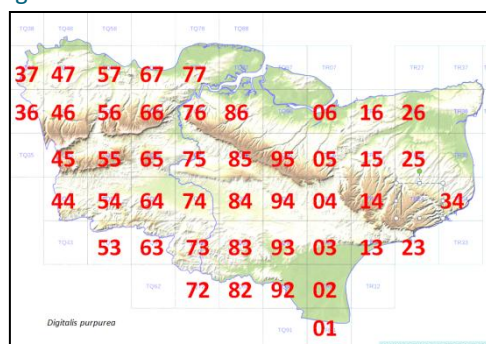
15, 16

46/51<sup>813</sup>

Native. Open woods, especially in the years after coppicing, hedgebanks and scrub on acid loams, sands and gravels; also on turfed shingle beaches in the Dungeness area; very common in most parts of Kent, but avoiding calcareous soils and those liable at times to waterlogging. Common in the woods on acid loams and sands on the plateau of the chalk districts 5) – 8), except that from east of the Elham Valley by Dover to Deal and Sandwich, where it is unrecorded except at Eastling Wood, Waldershare; unrecorded from Thanet, Grain, Sheppey, and the Romney marsh alluvial silts. An “Atlantic” species, much commoner with us than in N. France, where it is extremely local. Common in Surrey and Sussex, locally common in Essex; only in the S.W. part of the Pas de Calais.

1<sup>st</sup> record, 1632: W. of Canterbury, Johnson, *Descriptio*, p.33

1) 37 Beckenham Place Park, 1956, PCH. 36 Hayes Gravel Pit 1915, AG Davis **MNE**. 47 Shooters Hill Woods, '54, GMB. 46 Hollows Wood. 56 Farningham Wood.



Beck[enham] Place, Bexley, W. Wickham, Orp[ington], Farningham

3) 96 Bysing Wood, 995620, H.M. Wilks, 1958. Kemsdale Wood, Hernhill, 1956, Mrs B. 25 Copse on Thanet Sand, N. of Swanton F[ar]m, Littlebourne, 201591, 1958. 25 Swanton gravel pit, 202589, 1958.

Teynham 58, Chilham, Canterbury, Wingham (SW corner), Faversham 55, Whitstable

5) 36 Copse W of Highams Hill 397612 PCH. 56 c[lay]-w[ith]-s. Wood on c[lay] w[ith] f[lints] W. of Shoreham, PCH.

6) 57 Darenth Wood. 57 Swanscombe Wood. 67 Shorne. 66 Holly Hill. Cobham, Gravesend, Higham

Dartford,

7)

Doddington, Chatham 55, Stockbury 57.

8) Petham. Waltham. 14 West Wood, Stowting. 34 Oxney Court, rare, 1957, Miss B Nash. Walderchain Wood, Denton Wood, Denton Court Wood, Willow Wood, Miss DACL. Elham (West Wood), (Eastling Wood) Dover sq[ua]re]

10) Westerham. Knole Park PCH. Westerham, S[even]oaks

11) 66 Ryarsh Wood. 85 Warren Wood, Leeds. 75 Oaken Wood, Barming; **MNE**. 85 E end of Kings Wood, Harrietsham on chert “head”, 858505, 1958. 85 Upper Runham, 1960, Mrs B Dodds. 84 Dering Wood. 94 The Forest, Pluckley. 74 Copse E. of Maplehurst, Stasplehurst on “Paludian” loam 1959. 74 N. facing bank by R[oa]d, Widehurst Wood, Marden, 746418, 1958. Headcorn, W. Malling, Maidstone, Hollingbourne

12)

Hothf[iel]d, Ashford

<sup>813</sup> This should have been 45/51, square 75 having been double-counted.

**13)** Greybury Gill, Edenbridge, 1954. Gill SW of Stone Cross, Ashurst, CAS. Woods N of Penshurst Park (T[unbridge] W[ells] S[and]), 1944 **MNE**, 1961. Tunbridge Wells. Ballards Stores, Langton (white) 1950, KEB. Birch Wood, Bidborough. Wood 2m. S.E. of Tonbridge, 1950 **MNE**. Bedgebury Forest. Brewers Wood, Cranbrook. Frizley Wood, Cranbrook, 780385, 1958. 74 Wood on T[unbridge] W[ells] S[and] 749409 1m E of Curtisden G[ree]n S. of Hartsheath F[ar]m 1958. 701384, Copp[ice] on T[unbridge] W[ells] S[and] W. of Old Horsmonden Ch[urch], 1959. 703339, Combwell Wood, flood plain of str[eam] in coppice, 1959, '79.

Edenbr[idge], T[unbridge] Wells, Lamberhurst, Tonbr[idge], Pembury, Marden

**14)** Hawkhurst. 791295 N. end Hurst Wood Sandhurst, 1 y[ea[r] copp[ice] on T[unbridge] W[ells] S[and], 1959. Newenden. Rolvenden. Tenterden, Woodchurch, W. Oxney, E Oxney, Hawkhurst S.

**15)** Dungeness, 1947 – abundant from W. of Pilot and N of Lighthouse to Boulderwall, Dengemarsh sewer, Holmstone, and Midrips. Dungeness, Romney

**16)** Hythe, Folkestone, Aldington

‡ **D. lanata** Ehrh. [Grecian Foxglove 16.]

Alien, naturalised in fields about Dartford, probably a crop relic.

**6)** Neglected field near Dartford, 1947, JEL, etc (Hb. Lousley); cornfield, Temple Hill, Dartford, 1951, in field formerly used by Burroughs Wellcome (probably grown formerly as a crop), H.M.P.; 1952, F.A. Swain.

**Erinus L.** 428

‡ **E. alpinus** L. [Fairy Foxglove. 16.]

Alien, naturalised on old walls.

Probably now established on a wall at **10)** Kemsing, D.McC. & F.R., 1946 **MNE**.

**13)** Naturalised on walls, Scotney Castle ruins, 19650, KEB.

**Veronica L.** 430

**V. serpyllifolia** L. Thyme-leaved Speedwell. 15, 16 47/51

Native. Damp meadows and pastures, paths and open spaces in woodland, heaths, waste ground, etc.; very common throughout Kent, except in 15) Romney Marsh, in Grain 2) and 9) Thanet, where it is unrecorded at the present time, and in Sheppey in 2), where it is very rare and known only in one locality.

Common in Surrey, Sussex, Essex and the Pas de Calais.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p.29.

**1)** 37 Beckenham Place Park, 1956, PHC. [Kelsey Park, Beckenham, AG Davis, 1915 **MNE**.] 46 Holwood Park. 46 Crofton Heath. 57 Joydens Wood PCH. 56 Farningham Wood PCH. 57 Dartford Heath, '54 GMB.

Bexley, Blackheath, Orpington, W Wickham 56, Farningham

**2)** 86 Hawes Wood Newington Woolwich Beds, 863658, 59. 97 Planted Ash Wood on London Clay, Warden, Sheppey, 1959, **MNE**. Sheppey 59

**3)** 15 Ride, Pine Wood, Littlebourne, 61/15, 1958. 25 Ride, Pine Wood, Littlebourne, 61/25. 1958.

Chislest 58, Whitstable 55, Faversham 55, Teynham 55, Canterbury, Chilham

**4)** 26 N[ea[]r Stodmarsh, Miss M.E.M.

**5)** 46 Jewells Wood, AG Davis 1916 **MNE**. 45 Chevening Park (on c[lay] w[ith] f[lints] PCH. 36 W of Highams Hill 397612, 1953 PCH.

**6)** 37 The Thrift Bean PCH. 56 Horton Wood PCH. 56 Downs E of Shoreham PCH. 56 Preston Hill PCH. (Lane End 1894 AHWD **BM**.) 67 Copse E. of Red Street, Southfleet, 1958. 66 Ingram Wood, Stansted, c[lay] w[ith] f[lints] 1959, 611616. 66 Stonyfield Wood, Halling PCH. Cobham, Gravesend, Dartford, Higham.

**7)** 95 Eastling, 1961, C. Turner. Stockbury, Chatham 55, Doddington

**8)** Elham 55, Ashford, Alkham, Dover, Wingham, Sandwich

**10)** Westerham, Sevenoaks

**11)** Ryarsh Wood (gault) 1943 **MNE**. Comp Woods, 1954 **MNE**. Kings Wood, S. of Chegworth, on stony chert head '59. Ride on W[eald] Clay, Widehurst Wood, Marden, 1958. Copse E. of Maplehurst Staplehurst, on Paludina loam, 1959. Leigh HV Wood. W Malling, Maidstone, Hollingbourne, Headcorn, Marden, Woodchurch

**12)** Wood on W[eald] C[lay], E of Rucking, 1958, 032342. Hothfield Common, 1960 **MNE**.

Hothfield, Aldington

**13)** Gill SW of Stone Cross 518381, Ashurst, CAS. Combwell Wood, 79. Gill ½m. NNW of Brenchley 1958. Pembury Woods, 1944 **MNE**. Tonbr[idge], Pemb[u]r[y], Edenbr[idge], Cranbrook, Lamber[hurst], T[unbridge] Wells 55

**14)** Wood SW of Sandhurst Cross, 1957 Tenterden, E Oxney 57, W Oxney 56, Hawkhurst S 58

**16)** Kiln Wood rides, Sandling Park, 1958. Hythe 55, Folkestone 56

‡ **V. repens** Clarion ex DC. [Corsican Speedwell. 16.]  
 10) Russell House School, Otford, 1957, DMCC.

‡ **V. austriaca** L.<sup>814</sup> [Large Speedwell. 15, 16.]

Alien in Britain, but rather common on the dunes of the Pas de Calais, and on chalk inland in N. France, (Ambleteuse! Abbeville! Amiens!)

1) Hayes Common dump, 1946 **MNE**.

9) On the clifftop, Broadstairs, S. of Joss Bay, 2 clumps in chalk turf, 1949, L.W.W.; (specimen sent to me, correctly named!).

**V. officinalis** L. Common Speedwell. 15, 16 41/51

Native. Dry woodland on a variety of soils, heaths, dry grassland. Common in all wooded parts of Kent, on the Tertiaries, the plateau soils of the chalk districts 5)-8), the Greensand, and the Low and High Weald; unrecorded in Grain and Sheppey in 2), in 9) Thanet, in 15) Romney Marsh, about Folkestone, and in the eastern part of Oxney.

1<sup>st</sup> record, 1777, Faversham, E. Jacob, *Pl. Fav.*, p.121.

1) Elmstead Woods, Miss A Mills, 1956. Shooters Hill Woods, 1899 AHWD **BM**; 1954 GMB Holwood Park PCH. Crofton Heath PCH. Joydens Wood, PCH. Farningham Wood 82.

O[ccasional] W Wickham, O[ccasional] Ravensbourne, Bexley, Orpington

2) Hawes Wood, Newington, on Woolwich Beds (863658) '59. Abs[ent] Sheppey. Abs[ent] Grain

3) Loamy ride, Pine Wood, Littlebourne, 61/15, 1958. Loamy ride, Pine Wood, Littlebourne, 61/25, 1958. Perry Wood, Selling, 1946, DHK. Whitstable 55, Faversham E

5) Jewells Wood, A.G. Davis 1916 **MNE**. Wood, Darwins Bank, Downe, JEL 55.

6) Horton Kirby PCH. Downs above Trottiscliffe, PCH. Higham, Gravesend, Dartford, Cobham, Farningham

6E) On Blackheath Beds, Court Wood, Higham, 1958. Stonyfield Wood, Halling PCH. Preston Hill, PCH.

7) 866341, Heath on Thanet Sand, Keycol, Newington, 1958. Squirrels Wood, Stockbury, on loam, 1945 **MNE**. Kings Wood Plateau above Bilting, P le Brocq. Teynham 58/9, Stockbury, Chatham 55, Doddington

8) Hawkins Wood Chilham 1946 DHK. 96 Putt Wood; Ospringe Down, HMW. Coombe N.W. of Pean, 182387, 1948, Mrs B. Welch. Sandwich 56, Wingham, Canterbury, Chilham, Dover NE, Alkham 55, Elham, Ashford

E, (abs[ent] Thanet)

10) Knole Park, PCH. Sandpit E of Riverhead, CAS. Westerham Wood 1982. Westerham, Sevenoaks

11) Warren Wood, East Malling, on chert, 58. Oaken Wood, Barming, on chert 59. Kings Wood S. of Chegworth on chert head, 59. R[ai]l[wa]y, Hildenborough, 563482, CAS. Birch Wood, 1m W of Betersden, 1962. W. Malling, Maidstone, Hollingbourne, Headcorn, Marden 56

12) 032342, Wood on W[eald] C[lav], E of Ruckinge 1958. Hothfield, Woodchurch

13) Gill SW of Stone Cross, Ashurst, 516381, CAS. Wood on T[unbridge] W[ells] Sand, S. of Hartsheath F[ar]m, 1m NE Curtisden Green 1958. Ride, Friezley Wood, Cranbrook 1958. 701384 Wood on T[unbridge] W[ells] S[and] (copp[ice]) W. of Old Horsmonden Ch[urch] 1959. 702339 T[unbridge] W[ells] S[and] plateau soil Oak w[oo]d, Combwell W[oo]d, 1959; 79. Pembury, Tonbridge, Edenbridge 55, Cranbrook, Lamberhurst, T[unbridge] Wells 55

14) College Wood, Wittersham (Ash[down] S[and]) '62. Tenterden, (E Oxney 0), W Oxney 56, Hawkhurst S

16) [locally] d[ominant] *Callunetum*, Kiln Heath, Sandling Park, 1958. (Dungeness 0), (New Romney 0), (Folkestone 0), Hythe 55, Aldington

**V. chamaedrys** L. Germander Speedwell. 15, 16 49/51

Native. Hedgebanks, dry pastures, chalk downs, wood borders, open woods; extremely common throughout Kent except in 15) Romney Marsh, where it is unrecorded (not in 01 or 02) (except Littlestone). Extremely tolerant of a wide range of soils, as long as the drainage is good.

1<sup>st</sup> record, 1629: Gillingham to Sheppey, Johnson, *Iter*, p.5.

with violet Fl[ower]s at 8) Wye, HWP, 1899 **BM**.

1) Open bank (Thanet S[and]) Scadbury P[ar]k Chislehurst '59. W. Wickham Wood, AG Davis 1916 **MNE**. Abbey Wood, 1887 AHWD **BM**; 1948! Shooters Hill Woods '54 GMB. Dartford Heath '54 GMB. Farningham Wood '82. Bexkley Ch[urch] Y[ar]d PCH. North Cray Wood, PCH. W Wick[ham], Bexley, Orpington, Blackheath

<sup>814</sup> In the manuscript given as *V. teucrium* L.

- 2) Hawes Wood Newington on Woolwich Beds 863658, '59. Farm Weed, Murton F[ar]m Graveney, 1956 R. Theobald. Churchyard, Eastchurch, 1958. Oakwood NE of Brambledown Farm, Minster, 1958. Grain, Sheppey  
3) ride, Pine Wood Littlebourne, 61/15, 1958. Pine Wood Littlebourne 61/25 1958. 085575 Fishponds Wood AW Roberts. Whitstable, Chislet 55, Faversham, Canterbury  
4) wall of churchyard, Preston, 1958. Sandwich Bay. Sandwich  
5) scrub on Down, 404592, W. of Norheads, 1958. 36 copse W. of Highams Hill 397611, PCH. Wood, Darwins Bank Downe 53 JEL. Wood W of Farnborough, PCH. Pilots Wood, PCH.  
6) 65 Lords Wood Darenth PCH. Darenth Wood. Romney St[reet] PCH. On clay, Preston Hill PCH. Horton Wood PCH. Downs E of Shoreham. Copse E. of Red Street Southfleet, 1958. Red Wood Luddesdown '46 **MNE**. Chalk field W. of Ingram Wood Stansted, 59, 611615. White Ash Wood, Ash 1959, 611645. 594682, ¼m W. of Fawkham Ch[urch] chalk bank, 1959. Greenhills Wood, PCH. Magpie Bottom PCH.  
E) The Thrift, Bean, PCH. E) 77 Northward Hill, H[igh] Halstow 60 HAS. Dartford, Gravesend, Higham, Cobham, Farningham  
7) *Botrychium* field, Detling Hill 1959, 804587. E of Scragged Oak, in chalk valley '59, 807613. Down by chalkpit, Magpie F[ar]m Bredhurst 813621, '59. On chalk loam Valley Wood ¼m E of Badlesmere Lees, 016542, 1959. Chatham, Stockbury, Teynham 55, Doddington  
8) Denge Wood, Chilham, 1959 **MNE**. 137508 Down SE of Petham Miss MEM. Elmsted ch[urch] y[ar]d wall 1959. 173449 H[e]dgeb[an]k NW of Elham 1958. Chilham, Wingham, Ashford, Elham, Alkham, Dover  
9) Damp wood SE of Durlock, Minster, 1959. Thanet E  
10) By R[iver] above S. Darenth PCH. Westerham Wood 82.  
11) Fulling Pits Wood W of Bearsted 1959, 781567. Yalding ch[urch] y[ar]d 1959. R[ai]lw[a]y, Hildenborough, 563482, CAS. W Malling, Maidstone, Hollingbourne, Tonbr[id]ge, Pembury, Marden, Headcorn  
12) Ash copp[ice] Rooting Alders, Lit[tle] Chart, 1959. Hothfield, Woodchurch, Aldington  
13) gill, Stone Cross, Ashurst, 518381, CAS. (Pink fl[ower]s) Bedgebury 1941, JRW. Gill ¼m NNW of Brenchley 1958. Edenbr[id]ge, T[un]bridge Wells, Lamberhurst, Cranbrook  
14) Tenterden, Hawkhurst S, W Oxney, E Oxney  
15) Beach, Littlestone, 1956, BSBI maps recorder 2823, 02.  
16) Kiln Wood, Sandling Park, 1958. Hythe, Folkestone

**V. montana** L. Wood Speedwell. 15, 16. 46/52

Native. Woodlands on base-rich soils, on chalk loams, on the Thanet Sands and other Tertiary strata, on Gault, Folkestone Sand, and ragstone, and in the Weald; common in all wooded parts of Kent, though uncommon on the stiff clays of the Low Weald, and unrecorded for 9) Thanet, Lower Stour 4), Sheppey in 2), and 15) Romney Marsh. It flourishes best on moist but well drained, somewhat calcareous soils in woodlands of Ash, Oak, Alder and Wych Elm. Possibly commoner in Kent than in any other county.

1<sup>st</sup> record, 1724: Charlton Wood, J. Sherard, in *Ray's Synopsis*, Ed.3, p.281.

- 1) Moor Grove, E of Bickley, 1957 **MNE**. Holbrook Wood, alder carr on Woolwich Beds, Scadbury P[ar]k Chislehurst 1959. Icehouse Wood, alder carr Scadbury P[ar]k 59 **MNE**. E valley Scadbury '59. Roundabout Wood, Crofton Heath, PCH. High Wood, Crofton, PCH. Farningham Wood 1962. Joydens Wood, PCH. 06 Wood below Waystreet F[ar]m, Hernhill, 1955 **MNE**. Bexley, Orpington, W Wickham DPY  
2) 87 copse NE of Fenn St[reet], St. Marys Hoo, 1956. Grain 56  
3) Alder carr, Bigberry Wood, Harbledown, 1954. Loamy Ride, Pine Wood Littlebourne 61/15, 1958. Loamy Ride, Pine Wood Littlebourne 61/25, 1958. 078605, Wood on Dargate Hill n[ea]r Tower, on gravel, 1959 H.M.W. Church Wood, Blean, 1953, REW. Whitstable, Chilham, Canterbury, Teynham, Faversham 55, Chislet 55  
5) 36 Well Wood, W. Wickham, 3964, 1958, PCH.  
6) Darenth Wood. Lords Wood, Darenth, PCH. 589757, Mounts Wood!; H.M.P., 1948. Randall Wood, Shorne. Thanet Sand loam, Court Wood Higham, 1958. Wood S.W. of Cuxton. Cox's Wood S of Stanstead 606613 (c[lay] w[ith] f[lints]) 1959. Ryarsh Downs (Lit[tle] Commodity), 1946, D.McC. Horton Wood, a[bundant], 580662, 1961, H.M.P. Cobham Wood, 674697 1961, HMP. Red Wood, Luddesdown, 1947 **MNE**. Dartford, Gravesend, Hihjam, Cobham, Farningham  
7) Valley floor, Bredhurst Hurst. Squirrels Wood, Stockbury. Trundle Wood, Milsted 1956 **MNE**. Deep chalk loam, wood ¼m E of Badlesmere 016542, 1959. Hawkins Wood, Chilham 1945 DHK. Old Wives Lees DHK. Westwell. Chatham 55, Stockbury, Doddington  
8) Wye. Penny Pot Wood, Chilham. Wood S. of Crundale (Longport) REW 1953. Wood S of Wolverton, Alkham 1949 **MNE**. Lady Wood, Capel le Ferne, 1956, R.A.C. Wingham, Sandwich, Elham, Alkham, Dover, Folkestone 59 R



**10)** Quinton Wood, S. of Toys Hill, 1960 **MNE**. Westerham Wood 1962. Alder carr, Squerries Park, Westerham, 1960, RAC. Westerham, S[even]oaks

**11)** Ryarsh Wood. Snarkhurst Wood. Boot Wood, Plaxtol, 591545, 1961, HMP. Millbay Wood. Copse E. of Maplehurst, Staplehurst, on "paludina" loam, 1959.

W Malling, Maidstone, Hollingbourne, Edenbr[idge], Marden, Headcorn

**12)** Copse at source of Beult, Rooting Manor, Lit[tle] Chart, 1959. Ash copp[ice], Rooting Alders, n[ea]r R[iver] Stour, Lit[tle] Chart, 1959. Hothfield, Ashford, Aldington, Woodchurch

**13)** Cowden. Goudhurst. By West Pond Clatfields, Edenbridge, 1960, RAC. Gill E of Crundalls F[ar]m Brenchley, 1958. Somerhill Park, CAS 1955. Hurst Wood, T[unbridge] W[ells] CAS 1955. Tun[bridge] Wells 55, Lamberhurst, Cranbrook, Tonbr[idge], Pembury

**14)** Both branches of Gill NE of Dingleton (823315) Benenden 1959. Gill 1m E of Rolvenden 1954 **MNE**. Gill NW of Rolvenden 1950 **MNE**. Gill SW of Sandhurst 1950 **MNE**. Tenterden, Hawkhurst S, W Oxney, E Oxney

**16)** Hythe

Reported as rather "uncommon" in Fl. Sussex (but in my experience very common there on base rich soils); frequent in Surrey; in Essex, not uncommon; and locally common in the Boulonnais in the Pas de Calais, though v[ery] rare in N France as a whole.

**V. scutellata** L. Marsh Speedwell. 15, 16 13/51

Native. In fens, base rich flushes in valley bogs, ponds and marsh dikes, more restricted to peat than the last two species<sup>815</sup>: widespread but rare.

1<sup>st</sup> record, either 1629: "Anagallis aquat. angustioribus foliis, flo. albidis", Erith, Johnson, *Iter*, p.10; or else 1777: "Veronica aquatica angustifolia minor", Faversham, E. Jacob, *Pl. Fav.*, 120.

**1)** [Keston Common, Cooper Fl Met; c.1920, C West; 1921, E.B. Bishop.] Pond, Chislehurst Common, W.W.R.; W.C.R.W.; 1946!; G.M.B., 1954; **MNE**; not since. Bexley 54

**2)** [Ditches n[ea]r Dartford, 1850, L.T. Powis in Hb FJH; Faversham, 1777, E. Jacob.]

**3)** Clowes Wood, Hookham. By Canterbury-Whitstable Rd., Bishop Mitchinson. Blean gate, E Blean Wood L.W.W.

**4)** Minster & Monkton Marshes, F.G.E.K. Stourmouth, G. Dowker. Ham Ponds, CPSK. Deal Marshes, F.J.H. Hacklinge Marshes, 1945. Fen, N. of Wingham 1947. Sturry, Sandwich 57/8

**10)** Pond SE of Sundridge, 1955, **MNE**. Marsh 1m. E of Westerham 1955 **MNE**. Westerham 55

**11)** [Kings Wood, Ulcombe, H Elgar 1897 **MNE**.] Marsh ditch 1m. W. of Tonbridge, rare, 1944, F.R. & J.H.L. **MNE**. Pond, Leighbridge, Headcorn, 1962, **MNE**. Pond ½ mile E. of Hale Street, E. Peckham (683493), 1954 **MNE**; 1956. Birling 54, Tonbr[idge] 54, Pembury 54

**12)** Hothfield Common, W. Jeffrey; 1954! 991397 Willowbed F[ar]m Kingsnorth ES. 967374 SW of Shadoxhurst by Up[pe]r Tokes Wood ES. [Brabourne Lees; Willesborough Lees, C.P.S.K.] Gibbons Brook, 1945 **MNE**. Eastwell Lake, ES. Pond, Castle Farm, West Well, ES. Nakholt Ponds, ES, 1951, DACL; 1956! **MNE**. Pond, Shoddington Waterworks West Well, ES. Scotts Pond Shadoxhurst on Weald Clay, E.S.

Hothfield 54, Ashford E 56, Woodchurch 56, Sellindge 54, Hythe 58/9

**15)** Dungeness, fen by Hoppen pits, G. Dowker; Fen V, SE of Hamilton F[ar]m, 1945-58! **MNE**. Ditch S of Boulderwall F[ar]m, 1961, **MNE**. Long Ballast pit N. end, 079187, 1952, DMCC. Dungeness 55

**16)** Wood, Sandling Lodge, C.P.S.K.

Rather rare and local in Surrey and Sussex, very rare in Essex, rare and local in Pas de Calais. A species decreasing with the drainage of bogs and fens.

**V. beccabunga** L. Brooklime. 15, 16 46/51

Native, ditches, shallow streams, and marshy meadows, pond borders, particularly in rather open communities on relatively base-rich substrata; common throughout Kent, except on the chalk in 5)-9) where it is very rare; in the Thames Marshes from below Gravesend to Grain 2) where it is strangely very rare; and in 15) Romney Marsh, whence there are no records.

1<sup>st</sup> record, possibly 1629: "Anagallis aquat. latioribus foliis, flo. caeruleis" Johnson, *Iter*, p.10. A much more certain record is 1632: "Anag. aquat. vulgaris foliis rotundioribus floribus caeruleis, sive Becabunga Offic."<sup>816</sup>, Johnson, *Descriptio*, between Sandwich and Canterbury.

<sup>815</sup> In the manuscript, the original order of species placed *V. catenata* and *V. anagallis-squatica* immediately before *V. scutellata*.

<sup>816</sup> Some minor corrections are introduced here to Francis Rose's manuscript version of Johnson's published text.



- 1) 46 Keston Upper Pond PCH, '61 HAS. 47 N. Cray, 1955 **MNE**. 46 High Wood Crofton, PCH. Shooters Hill Woods, GMB 1954. 36 Pickhurst Common, Hayes, 395668, 1958, PC & JFH. [Hanging Wood Charlton 1886 AHWD, **BM**.] Beckenham 57, Orpington ^54, Bexley 55
- 2) 67 West Court Marshes, Shorne 1957 PCH. 97 Marsh by stream on Bagshot/L[ondon] Clay springline, Boarers Run, 976727, Minster 1959. 06 Meadow below mill Pond, Oare, 1959 **MNE**. Abbey F[ar]m, Faversham 1960 H.M.W. Bur[ham]/Snod[land] 55, Newington 56, Grain 54, Gravesend 57, W Sheppey 55, O Higham, Faversham 55, Tonge 56
- 3) 15 Alder copse, E end Trenley Park Wood 61/25, 201594, 1958 Faversham 55, Tonge 56, Whitstable 54
- 4) Hacklinge, 1945 Miss DACL. Sandwich ^54, Wingham 55, Chislet 55.
- 5) 45 Pond, 407587, SW of Norheads, Biggin Hill, 1958.
- 6) 66 Marsh by pond, Cobham, 1960, HAS.
- 8) Temple Ewell ^54
- 10) 57 Wet Meadow, St Johns, Sevenoaks, 1950 **MNE**. Bradbourne Gravel pits, Riverhead, 1957, FSEF. 56 R[iver] Darent, below Shoreham, 1954 **MNE**; 56 Lullingstone; 56 above S. Darent, PCH. Darent W. of Brasted GMB. Westerham 55, S[even]oaks 55, Farningham ^55, Dartford
- 11) 65 Spring E of Little Wrotham, 1954 **MNE**. 65 Stream, Addington Place, 1958, DMcC, 865552, marshy meadow by R[iver] Len, S. of Harrietsham 1958. 850528 Alder carr by R[iver] Len, Chegworth, Harrietsham, 1958. 861529 chalk stream, N.W. of Harrietsham, 1958. Ditches, Leigh HV Wood. Stream S. of Widehurst Wood, Marden, 1958, 744419. Teise bank W. of Bridge S. of Collier St[reet] 713439, by B.2162 1959. W. Malling, Maidstone, Hollingbourne, Edenbr[idge] ^54, Tonbr[idge] ^54, Pembury ^54, Marden ^54, Headcorn ^54
- 12) Marshy meadow SE of Church, Lenham, 1958, 901520. Marshy meadow Bone Mill, E. Lenham 1958, 905516. R[iver] Stour, Chapel F[ar]m Lenham, 1958, 904505. Alder carr, Rooting Alders, Lit[tle] Chart, 1959, 955451. Godmersham, 1955, Mrs. Brickenden. Gibbons Brook. SE of Lenham ^54, Hothfield 54, Ashford 54, Stowting 54, Aldington 54, Chilham 54, Canterbury 54
- 13) Stream by R[oa]d, 801402, S.W. of Frittenden, 1959. Ditch S. of Lamberhurst Ch[urch], CAS, 684365. (Finchcocks 1878 JS **TLS**.) T[unbridge] Wells 55, Lamberhurst 56, Cranbrook 55
- 14) Tenterden 54, Hawkhurst S, Newenden/W Oxney 54, Oxney, Appledore 59
- 15) Ditch, Sandhurst Levels, 1954 **MNE**. Cherry G[ar]d[ens] Corner, Woodchurch ES. Woodchurch 56
- 16) Spring from ragstone, below Honeypt, Court at Street 1958, 089353. Stream, Asholt Wood, Newington, 1954 **MNE**. Hythe 54, Folkestone 55

Common in Surrey, Sussex, Essex, and in the Pas de Calais.

Its rarity in the Lower Thames Marshes and in Romney Marsh is hard to explain, but in part at least it may be due to the brackish nature of the water in the marsh dikes in those areas, and the constant cleaning out of dikes.

#### V. *anagallis-aquatica* agg. Water Speedwells. 15, 16.

Native, frequent in alluvial marsh dikes, by stream, in ponds, and in marshy meadows in the coastal marshes and in the low Weald and in the vale of Holmesdale. Only recently<sup>817</sup> have the two segregate species been clearly separated in Britain, largely due to the work of J.H. Burnett.

1<sup>st</sup> certain record, 1632: Johnson, *Descriptio*, "Anag. Aquat. major foliis acutioribus, floribus alb[id]is" N of Sandwich. This certainly refers to the agg. Also in Johnson, *Iter* (1629) p.10, the following are recorded as occurring in a marsh at Erith: (i) "Anagallis aquaticum tertiam."<sup>818</sup> (ii) "Anagallis aquat. latioribus foliis, Flo. coeruleis". (iii) "Anagallis aquat. angustioribus foliis, flo. albidis". Fl. Kent regards (iii) as the present (aggregate) species, and (ii) as *V. beccabunga*. It seems to me rather more probable that (iii) is *V. scutellata*, which agrees more closely with the description; and (i) probably *V. anagallis-aquatica*, but certainty is impossible (see above).

Records for the aggregate:

- 1) Lewisham; Keston; Deptford; Hayes.
- 2) Cliffe; Snodland, Browning, W. & RW; Snodland Marshes; Dartford Marshes; Stone Marshes, single plant; Holborough Marshes; Thames Marshes E. de C.; Greenhithe; Cooling; Faversham.
- 4) Ham; Hacklinge; Wingham; Minster; Monkton.
- 10) Lullingstone; N. of Eynsford; Darent, HMP.

<sup>817</sup> Burnett, J.H. 1950. The correct name for *Veronica aquatica*. *Watsonia* 1: 349-353.

<sup>818</sup> The 1972 facsimile reprint of *Iter* shows in the photographed facsimile *Anagallidem aquaticam tertiam*, Lob.(i.e. in the accusative case), while the transliteration in the same work gives *Anagallis aquatica tertia*, Lob.(nominative case). The Flora manuscript mixes these up.

- 11) East Malling. Headcorn.  
 12) Wye; Chartham.  
 16) Eastwear Bay; Westenhanger. Dover to Alkham.

**V. anagallis-aquatica** L. Blue water speedwell. 15, 16 24/51

Native. Streams, ditches, and wet meadows; widespread, but not very common generally, most frequent in the alluvial marshes of 2) and 4) and scattered in the Weald and apparently the Darent and Stour valleys. Apparently rather commoner than *V. catenata* in Kent.

1<sup>st</sup> definite record for segregate: [ ]

- 1) 47 R[iver] Cray, N. Cray, 1955 MNE. Ravensbourne, Bromley, AG Davis, 1914 MNE. Pond n[ear] Hayes Sta[tion], 1917, S.E. Chandler conf. D.P.Y. Hb. Croydon N.H.S.

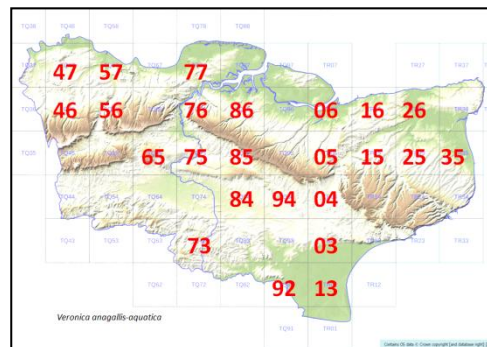
Bexley 55, Orpington 57

- 2) 76 Holborough Marshes, 1945. 77 Cliffe Marshes. (Oare Meadow Pond HMW 1962.) 77 Ditch, High Halstow Marshes, 1958. 66 Ham Hill, Birling, 1956, PCH.

Burham/

Snod[land] 54, Halstow 58, Newington 56, Faversham 57

- 4) 16 Westbere Marshes, RGW. 25 Fen Dike ½m. N of Wingham, 1956 MNE. 25 Dikes E of Little Britton, Wingham, 1960 MNE. 25 Littlebourne, RGW. Ham Brooks, CC Townsend.



Sturry 55 Mrs D, Chislet 55, Wingham 54, Sandwich 54

- 8) 15 Lit[tle] Stour, Partixbourne and Bridge RGW.

- 10) 57 St Johns Jersulaem, PCH. 56 old gravel pits above S. Darenth, PCH.

Farningham 54, Dartford 54

- 11) 65. 75 Pond, Boxley, 1958 E.G.Philp MNE. 85 Chalk stream, Goddington; and at junction with Len, 1962, Mrs.B. Dodds. 84 .

Headcorn 54, W Malling 54, Birling 56

- 12) 04 Eastwell Lake, ES. 94 Crouchers F[ar]m, N. of Potters Corner. 94 Millpond ½m. E of G[rea]t Chart 989422 ES. 04 S. Willsborough Marshes ES. 03 E of Mersham Mill ES. 04 Spiders Castle ES. 05 E of Ch[urch] Godmersham ES. 05 N of Village, Godmersham ES. 05 W. of Pope St[reet] F[ar]m, Godmersham, ES. Ford S. of Hurst F[ar]m, Godmersham ES. 05 Chilham Mill Marshes, 1955 MNE. 05 R[iver] Stour, Shalmsford Bridge, 1960 MNE. 15 R[iver] Stour below Milton Br[id]ge 1956 Miss ME Milward. 13 Stream, Westenhanger Castle, 1958, LJM.

Hothfield 56, Chilham 54, Canterbury 56

- 13) 73 Bedgebury, GMB.

Cranbrook 57

- 15)

E. Oxney/Appledore 58/9, Aldington 54, Hythe 57/8

Apparently rare in Surrey, Sussex, and Essex, though scarcely studied enough yet to give an accurate picture; the aggregate is frequent in those counties and in the Pas de Calais.

**V. anagallis-aquatica x catenata**

- 2) Stone Marshes, 1939, P.H.C.; Hb. L.N.H.S.

**V. catenata** Pennell Pink Water speedwell. 15, 16 18/51

Native. Streams ditches and wet meadows, in similar places to *V. anagallis-aquatica*, but apparently rather less common; only recorded in 2), 4), 11), 12), and 15), whereas *V. anagallis-aquatica* is recorded in addition in 1), 10), and 13).

1<sup>st</sup> definite record for segregate, 1899: "flowers white, tinged with pink", Headcorn and Westenhanger, E.S. Marshall in *Fl. Kent*.

- 1) Hayes Gravel pit, AG Davis, 1915 MNE. 46 Pond, Bromley Common, 1954 MNE. Orp[ington] 54

- 2) 77 Fresh Marsh, Decoy Creek, S. of Egypt Bay, High Halstow, 1958 (782786) MNE. 06 Ditch S. of Harty Ferry 1957 MNE. 06 Marsh dikes W. of Seasalter, 1957, H.M.W. 06 Gravel pits NE of Oare Creek 1959 MNE. 06 Marshy meadow N. of Mill Pond Oare, 1959-62 MNE.

Halstow-Higham (Cliffe) 54, Burham/Snod[land] ^54,

Faversham 56

- 4) 35 Marsh behind dunes, N. of Sandwich Bay, 1946 MNE. 25 River n[ear] old mill, Littlebourne, 1958, Miss B. Nash; 1962, Miss R. Begg. 25 Marsh, Wingham Well, 1949 MNE. 26 Marsh ditch, Newborns Farm, Stodmarsh, 1955 MNE. 26 Brooksend, Birchington, 1956 MNE.

Chislet 55, Wingham 58, Sandwich 54

- 6) 67 Pond margin, old chalk pit, Swanscombe, 61, HAS.

- 11) 65 Spring stream E of Little Wrotham 1954 MNE. Maidstone, 1882-84, MNE. 75 Pond, Bearsted, 1954 MNE. 64 Ditch E of Branbridges, E. Peckham, 1952 MNE. By R[iver] Beult, S. of Headcorn church, 1962.

(Headcorn 1893, ESM, det. JH Burnett, 1950, Hb. FJH.)

W. Peckham 56, Headcorn ^54, W Malling

^54, Maidstone 58

**12)** By Stour, N.E. of Forstal, L[it]t[le] Chart, E.S.. 958460. 963479 Pond, Wootton Manor, Charing, 1957, ES. 964457 Stour S.W. of Hothfield Common, ES. 1954, CNP, Mersham Mill, ES, 1956 **MNE**. 058426 Nackholt Pond, Hinxhill, ES, 1956 **MNE**.

Hothfield 56, Ashford E 56, SE of Lenham 58

**15)** Ditch N.E. of Old Romney,. 1959, **MNE**. Ditch S. of Small Hythe, 894298, 1952, DMcC.

Aldington 56, Hythe 56, Romney 59

Regarded by the authors of the Floras of Surrey and Sussex as probably the commoner species of the two water speedwells In N. France I have only observed *V. catenata* of the two myself.

(**V. acinifolia** L. [French Speedwell] has several old records for Pas de Calais.)

(**V. praecox** All. [Breckland Speedwell] has several old records for Pas de Calais; it occurs in the Breckland but may be an introduction.)

(**V. triphyllus** L. [Fingered Speedwell] occurs in sandy fields near Byfleet in Surrey, in E. Anglia etc., and has one ancient record for the Pas de Calais.)

**V. arvensis** L. Wall Speedwell. 15, 16 50/51

Native. Dry grassland on sand and gravel, bare ground on chalk, hedgebanks and cultivated land on dry soils, wall tops, sand dunes and shingle beaches; very common almost throughout Kent, but so far unrecorded from the Edenbridge area. Less abundant on the Weald Clay and inland Romney Marsh than elsewhere. Common in Surrey, Sussex and Essex, and in the Pas de Calais.

1<sup>st</sup> record, 1629: Gillingham to Sheppey, Johnson, *Iter*, p.5.

**1)** Shooters Hill Woods 1894 AHWD **BM**. 47 Bexley churchyard and walls. 46 Holwood Park.

Blackheath 56, Bexley 55, W. Wick[ham] 57, Orp[ington], Farningham

**2)** 87 Arable, Tudor F[ar]m, Stoke, 817742, 1958, Mrs AG Side **MNE**.

Grain 58/9, Sheppey

**3)** 26 Grassland on Sand (Thanet) Ford, Hoath, 1959. 26 Chislet, Miss M.E.M.

Faversham, Whitstable 55, Teynham 58, Cantebury, Chilham

**4)** 35 Dunes, Sandwich Bay, L.W.W.

Sandwich

**5)** 45 Cornfield on chalk W. of Chevening Park, 1962. 36 Stubble field n[ea]r Well Wood 396642, '58 PCH.

**6)** 55 Arable on chalk below Pilgrims Way, Ightham, 1958. 66 Arable on chalk below Pilgrims Way W. of Pilgrim Ho[use], Trosley, 1958, 635607 **MNE**. 55 Arable on chalk below Pilgrims Ways NE of St Clere, 1962. 56 Horton Wood PCH. 57 Mounts R[oa]d PCH. 66 Cornfield Buckland R[oa]d, Luddesdown PCH. 56 Downs E of Shoreham PCH. 56 Preston Hill PCH.

Higham 55, Dartford, Gravesend, Cobham

**7)**

Stockbury 55, Chatham, Doddington, Hollingbourne

**8)** 15 Down 137508 SE of Petham 1956 Miss MEM. 14 Arable, Stowting Hill, 1954 **MNE**. 25 Arable, Fredville, DMcC.

Wingham 55, Elham, Alkham, Dover 55

**9)** Broadstairs, L.W.W.

Chislet 58, E Thanet 58

**10)** Sandpit E of Riverhead, CAS.

Westerham, Sevenoaks

**11)** Ch[urch]y[ar]d wall, E Sutton, 1960 **MNE**. East Sutton Ch[urch] y[ar]d Wall, 1960. Cornfield on F[olkestone] Sand N. of A.20, Chegworth, Harrietsham 1958. Brick churchyard wall, Yalding 1959.

W Malling, Maidstone, Tonbr[idg]e 56, Pembury, Marden 56, Headcorn 56

**12)** Path, Hothfield Common, 1945 **MNE**.

Hothfield, Ashford, Woodchurch

**13)** Garden Southborough 1946 Miss H M Crampton.

T[unbridge] Wells 55, Lamberhurst 56,

Cranbrook 57

**14)** Tenterden R[ai]l[wa]y Sta[tion], 1959, ES. Arable, Wittersham, 1956 **MNE**.

Tenterden 56,

Hawkhurst S 56, W Oxney56, E Oxney

**15)**

Dungeness 56, New Romney 56

**16)**

Aldington, Hythe, Folkestone 56

(**V. verna** L. [Spring Speedwell] has one old record for Pas de Calais; it occurs in the E. Anglian Breckland as a native.)

‡ **V. peregrina** L. [American Speedwell.]

**13)** Garden weed, Flissinghurst, Cranbrook, Miss Forrest.

**V. agrestis** L. Green field Speedwell. 15, 16. 37/51

Native. Cultivated fields, waste ground; frequent and widely distributed, but hardly common. Smaller than *V. persica* in all its parts, it has a white lower lip to the corolla, or the whole corolla pale, and bright green leaves, unlike *V. polita*. The globular carpels have spreading glandular hairs and the sepals are obtuse (acute in *V. polita*).

1<sup>st</sup> record, 1629: "Alsine foliis trissaginis." Gillingham to Sheppey, Johnson, Iter, p.5. This could be *V. polita* equally well but that is less likely on the sands near the Swale than *V. agrestis*.

Not very common in Surrey or Sussex, though widespread; scattered in Essex, common in the Pas de Calais.

1) 47 Abbey Wood, 1954, G.A. Matthews. Eltham (J. Bot. 1931, det. Drabble & Little). 36 Eden Park, Beckenham 1950, JD Lovis. Beckenham Place Park, 1956, PCH. Orpington 55, Blackheath 56, Bexley 56, Farningham 56.

2) 96 Beacon Hill, Norton, 1947, in arable field N. of A.2. 97 Cornfield on London Clay, S. of Thistle Hill, Minster in Sheppey, 1956 **MNE**. Sheppey 58, Teynham

3) 15 Rough Common, garden, 1958 RGW. 06 Arable, Graveney, 1951, REW. 06 Arable, Seasalter, 1957, H.M.W.

Faversham 55, Whitstable 55, Chilham 56, Canterbury 56

4) Sandwich 56

6) Southfleet, 1919, P.H.C. 57 n[ea]r Cotton Lane, Stone, 563746, HMP. 66 E of Ash Place 605645 Mrs Woods.

Cobham 55

7) 95 waste ground Eastling 1961 C. Turner.

Chatham 56, Hollingbourne 56, Doddington 56

8) n[ea]r Snowdown Colliery in stubble, 248508, 1950, DMcC Sibertswold KDR det. DMcC, '57.

Wingham 56, Sandwich 55, Elham 56, Alkham 56, Dover 59

10) 56 Lullingstone Castle 1956 **MNE**. 45 Field N. of Goodley Stock, Westerham, 1957, R. Clarke.

Sevenoaks 55

11) 65 Basted, .608536, 1960, DMcC. 65 Platt, in gardens, 1946, D.McC. 65 Allotment, Wrotham Heath, 1946 **MNE**. Langley (Pink fl[ower]s) 1952 DMcC. 85 The Quest, Harrietsham, 1960, Mrs. B. Dodds. 84 Brungers F[ar]m, Headcorn 1958 **MNE**. 85 Cornfield on F[olkestone] Sand N. of A20, Chegworth, Harrietsham 1958 **MNE**. 84 Headcorn Ch[urch] Y[ar]d, 1962. Tonbridge J. Bot 1931 Drabble & Little.

W Malling, Edenbr[idg]e 55, Headcorn 56

12) 94 Charing Churchyard, 1955 **MNE**. Canterbury, RGW. Bilsington, ES.

Hothfield 55, Ashford 57

13) 54 Garden, Southborough, 1946, Miss H.M. Crampton. 63 Cornfield n[ea]r Little Scotney; / 63 Pepper Mill; / 63 fields E of Hoathly, Lamberhurst, 1941-2, J.R.W. Garden weed, Cranbrook, D.S. T[unbridge] Wells, WWR, **TLS**.

T[unbridge] Wells, Lamberhurst JRW, Cranbrook 56, Tenterden 56, E Oxney, Dungeness 56,

Hythe 55, Folkestone 56

## **V. polita** Fr.

Grey Field Speedwell.

15, 16

25/51

Native. Cultivated land, bare soil and old walls; frequent on chalk, rare elsewhere. A smaller plant than *V. persica*, and grey-green in foliage, unlike *V. agrestis*; the corolla is wholly blue and the fruit has globular carpels with *crisped* hairs.

Not infrequent in Surrey and Sussex; it occurs in Essex; frequent in Pas de Calais.

1) St Pauls Cray; W. Wickham P.H.C. Bromley to Hayes, L.J.T. N[ea]r Elmstead Woods '56 Miss A Mills. Shooters Hill, 1954, GMB. Keston, 1898, H.W.P. **BM**.

4) 25 Flint wall, Wingham village, 1958.

5) Leaves Green, 1917, P.H.C. 36 Arable n[ea]r Kennels, NW of Highams Hill, 398620, '58 PCH. 45 Cornfield W. of Chevening Park 1962. 45 Potato field W. of Hogtrough Hill 1962.

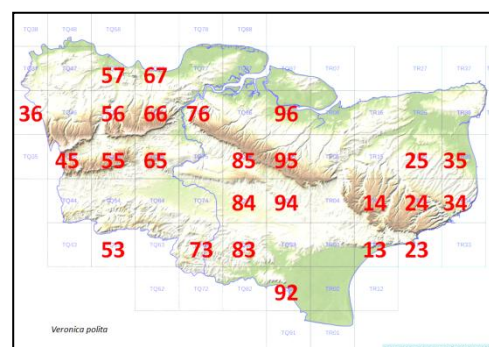
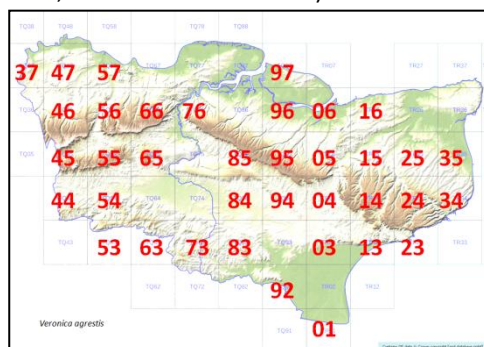
W. Wickham 1957, Farningham 55

6) Dartford, P.H.C. Arable on chalk, below Pilgrims Way, N of Ightham, 1958. Arable on chalk NE of St Clere 1962. Arable on chalk S. of Wrotham Water, 1958 **MNE**. Arable on chalk S. of Fawkham Church 1959. 67 Arable E of Claylane Wood, 667704, 1958, PCH. S. of Bush n[ea]r Luddesdown '46 **MNE**. S. of G[rea]t Crabbles Wood Shorne 1953c **MNE**. Lads F[ar]m, Snodland, on chalk, 1960 **MNE**. 66 Cornfield on chalk, below Great Wood, Cuxton, 1952-55 **MNE**.

Dartford 57, Sevenoaks

58, W Malling 58, Gravesend 58, Cobham

7) 76 By Upper Bell, Aylesford, 1956 **MNE**. 76 Cornfields E of Burham 1960 **MNE**. 76 Above Burham Ch[urch] 1960 **MNE**. 85 Cornfield on chalk, N.E. of Hollingbourne, 1947, **MNE**. 95 Eastling 963566 C Turner 1961. 85





Cornfield W. of Thurnham Castle 1961 **MNE**. 96 Tunstall, DMCC 1958 **MNE**.

Hollingbourne, Doddington 56, Chatham, Teynham 55, Hothfield

8) 25 Cornfield on chalk, W. of Pitt Wood, Adisham, 1955 **MNE**. 14 Cornfield on chalk, SW of Barham 1956 **MNE**. 35 Cornfield, Eastry, 1957, Miss B. Nash. 14 Cornfield on chalk, Clavertye Wood, Elham, 1956 **MNE**. 34 Cornfield on chalk, SW of Eastling Wood, Whitfield 1959 **MNE**. 24 Haynes F[ar]m, Sibertswold, 1957, Miss B Nash. 34 Kingdown / 34 Ringwoud / 34 Martin, 1957 Miss B Nash.

Wingham 55, Sandwich 58, Dover 57, Alkham 56/7, Elham 58/9, Folkestone 56, Hythe 55

10) 65 E of Riverhead in sand[pit, CAS.

11) 85 Cornfield on Folkestone Sand N. of A20, Chegworth, Harrietsham, 1958. 85 Fairbourne Mill, 1960, Mrs B Dodds.

13) 53 Wall, Groombridge Hill, 1956, CAS. 53 Wall, Nevill Park, Tun[bridge] Wells, 1958, CAS. 73 Cranbrook, garden weed, 1956, D.S. 53 wall, Cabbage Stalk Lane, Tun[bridge] Wells, 1960, CAS.

Headcorn 55, T[unbridge] Wells, Cranbrook 56, Tenterden 56, E Oxney 58

‡ **V. persica** Poir.

[Common Field Speedwell.]

[15, 16]

51/51

Alien, now completely naturalised; cultivated and waste ground, roadsides; abundant throughout Kent (but not yet recorded for Lamberhurst). Introduced into England about 1825 (H.C. Watson); a native of Central and S. Europe. Very common in Surrey, Sussex, Essex and the Pas de Calais.

1<sup>st</sup> record, 1837: Hayes and Keston, Peete, teste Pamplin, *New Bot. Guide suppl.* p.578.

1) Beckenham AG Davis 1915 **MNE**. N Cray Tip PCH. Cornfield, Bexley PCH. Farningham Wood PCH.

36 W. Wick[ham] 56, 46 Orp[ington], 37 Blackheath 56, 47 Bexley 55, 56 Farningham

2) Cornfield on London Clay S. of Thistle Hall Minster, 1958 **MNE**. Pasture S. of Scocles F[ar]m, Minster, 1958. Sheerness, Canal Dump '57, O.D. Garden weed, Sheerness, 1956 Mrs Bryson. 77 Higham, 87 Grain, 97 Sheppey (07 Warden), 96 Teynham

3) Rough Common 1958 RGW. 06 E of Seasalter Ch[urch] 094647 etc., 1958, HMW. Whitstable a[bundant] / Herne Bay a[bundant] in fields REW, 1951. Blean Village REW 1953. 16 Whitstable, 05 Chilham, 06 Faversham 55

4) Sandwich Bay

26 Chislet

5) Potato field W. of Hogtrough Hill '62. Corn field W. of Chevening Park '62. Confield below Morants C[our]t Hill '62. Stubble field n[ea]r Well Wood 396642 '58, PCH. Chevening Park PCH. Chalk W of Eynsford PCH. Field W of Farnborough PCH. Valley S. of Timberden Bottom, PCH.

6) Arable on chalk NE of St Clere, 1962. Arable on L[owe]r chalk, W of Wrotham Water, 1958 Mounts R[oa]d PCH. The Thrift, Bean, PCH. Great Wood, Poundgate, 1955, DMCC. Below Pilgrims Way E of Wrotham, 1958. Arable below Pilgrims Way N. of Ightham, 1958. Cornfield on chalk W side Downs R[oa]d, Northfleet Green 1958. Hedge of Downs R[oa]d, Northfleet Green 1958. Arable on chalk, S. of Fawkham ch[urch]y[ard] 1959. Arable on chalk below Pilgrims Way W of Pilgrims Ho[use], Trosley 1958 635607 **MNE**. Arable Below Wingate Wood, Halling, PCH. Arable NW of Cuxton 1958 **MNE**. 66 Cobham, 57 Dartford, 67 Gravesend

7) Cornfield E of Burham 1960 **MNE**. 85 Hollingbourne, 95 Doddington 55, 76 Chatham, 86 Stockbury 56

8) Arable, Fredville DMCC. Temple Ewell KDR. Cornfield NE of St Margarets at Cliffe 1962.

15 Canterbury, 25 Wingham, 35 Sandwich, 14 Elham, 24 Alkham, 34 Dover 55

9) Cornfield on chalk NW of Plumstone F[ar]m, Monkton, 1958, 61/25. Cornfield on chalk SE of Margate by St Peters Road, 1958, 61/35. 36 E Thanet 55

10) Waste g[rou]nd S. Darenth PCH. St Johns Jerusalem PCH. Sevenoaks tip, CAS. Sandpit E. of Riverhead, CAS. 45 Westerham, 55 Sevenoaks

11) Cornfield on F[olkestone] Sand N. of A20m Chegworth, Harrietsham 1958. Edenbridge 451455 rubbish tip 1956 DPY. Leigh, HV Wood. Headcorn Churchyard, 1962. 65 W Malling, 75 Maidstone, 44 Edenbr[idge] 55, 54 Tonbr[idge] 55, 64 Pembury 55, 74 Marden, 84 Headcorn 55

12) 94 Hothfield, 04 Ashford, 93 Woodchurch

13) Garden, Southborough, 1946, Miss HM Crampton. 53 T[unbridge] Wells 55, 63 L[amber]hurst, 73 Cranbrook 55

14) N end Hurst Wood Sandhurst, 791295, 1 y[ea]r coppice on T[unbridge] W[ells] S[and] 1959.

83 Tenterden, 72 Hawkhurst S 56, 82 W Oxney 56, 92 E Oxney

15) Arable ½m W. of Dymchurch 1958. Arable 1 m W. of Dymchurch 1958. 01 Dungeness 56, 02 New Romney 55.

16) Allotment, Court at Street, 1958. 03 Aldington, 13 Hythe, 23 Folkestone 55

var. **kochiana** Godr.

6) L[ower] Halling, J.P.M.B., *B.E.C. Rep.* 1939-40, p.287. S. of Cliffe, 1932, J.E.L. **BM**.



var. **corrensiana** E.B.J. Lehm.

1) St. Mary Cray, A.O.H., (as *agrestis*) in Hb. SLBI, det. C.E.B., *J. Bot.*, 1928, p.42.

‡ **V. filiformis** Sm.<sup>819</sup> [Slender Speedwell.]

15, 16.

24/51

Alien, now widely naturalised in Kent, as in SE England generally; lawns, churchyards, waste ground, hedgebanks; widespread and locally abundant, though not yet a common plant of Kent.

3) 16 Garden weed, Canterbury R[oa]d, Whitstable, 1957, HMW. Castle grounds, Whitstable, 1950, LWW. Medina Ave[nue], Seasalter 095654<sup>820</sup>, HMW 1956. R[oa]d verge S. Whitstable 108655, HMW 1956.

6) 67 Shorne, in village, 1950 **MNE**.

7) 86 Naturalised in garden, 111, Marshall R[oa]d, Rainham, 1958. 76 Bluebell Hill by L[owe]r Bell, 1959, G. Philp. [sic]

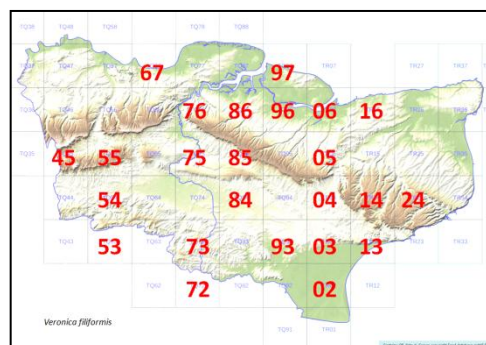
10) 55 By path ½m. SW of Sevenoaks Parish Church 1950. 55 Otford, 1953, N.L.Kimmins; 1956, DMcC.

11) Basted, D.McC. 75 E. Malling, 1944 **MNE**. 85 Leeds Park, abund[ant] by R[iver] Len and in grassland, 1959, E. Philp.

12) Barnfield, 2m SW of Charing by stream 1958 Mrs B. In grass by Riverbank, Chilham Mill, 1962, Mrs B. 05 Ditch bank, N. of Godmersham Bridge, W of R[oa]d 1954 ES. 04 Garden weed, Essella R[oa]d, Ashford, Mrs N. Baker, 1959.

13) 53 St Marks Rec[reation] G[roun]d, T[unbridge] Wells, 1950, KEB. 53 St Pauls Churchyard, Rusthall, 1950 KEB and Bulls Hollow, 1951. 53 Grassy bank, Bishopsdown, T[unbridge] Wells, 1950, KEB. 54 Rectory garden, Speldhurst 1956, Mrs M. Mallinson. 54 Speldhurst Ch[urch]y[ar]d; Southborough Playing fields, Yew Tree R[oa]d, 1950 KEB.

Shorne, Faversham, Whitstable, Sheppey, Bluebell Hill, Rainham, Teynham, Westerham, Sevenoaks, Chilham, Ashford, E Malling, Leeds, Headcorn, T[unbridge] W[ells], Hawkhurst, Cranbrook, Woodch[urch], Bilsington, 14 ('56), 24 ('56).



**V. hederifolia** L.

Ivy-leaved Speedwell.

15, 16.

46/51

Native. Dry, usually loamy or sandy, cultivated ground, dry hedgebanks, dry woods, walls, open grassy ground, sand dunes; very common all over Kent except in 15) Romney Marsh and in the S.E. part of the High Weald, most of 14) in which areas it is so far unrecorded. A characteristic spring ephemeral.

Common in Surrey, Sussex, and Essex, and the Pas de Calais.

1) Elmsted Woods, '56 Miss A Mills. Abbey Wood, 1954, G A Matthews.

Blackheath 56, W Wick[ham] 56, Orpington, Bexley 56, Farningham

2) Sea wall, All Hallows, 1945 **MNE**. Copse on Thanet Sand, S. of Holywell, 1959. On Bagshot sand, copse in ravine W. of Bells F[ar]m, Minster, 1959.

Grain, Sheppey 55, Teynham 55

3) Sandy bank on gravel drift, Ford, N. of Hoath 1959. Copse by stream S. of Ford, N. of Hoath 1959.

Faversham 55, Canterbury, Chilham, Whitstable 55

4) Sandwich Bay.

Sandwich, Chislet 55

5) W. of Highams Hill 397612, 1958 PCH. Valley S. of Timberden Bottom.

6) Maple Hazel wood, chalk scarp, W of Ingram Wood, Stansted, 609613 1959. Cornfield W of Mounts R[oa]d, Greenhithe, 1954 **MNE**. Cornfield, Lads F[ar]m, Snodland, 1960 **MNE**. 685678, Cobham Warren, arable, Mrs Woods.

Cobham 55, Dartford, Gravesend, Higham 55

7) Wood on calc[areous] loam ¼m E of Badlesmere Lees, 015539, 1959. Eastling C. Turner 1961.

Chatham, Stockbury 55, Doddington 56

Elham, Alkham, Dover 55, Wingham 56

8) Arable, Coombe Vale, W. of Dover 1955 **MNE**.

9) 36 Copse S., of Durlock, Minster, 1959, Mrs AG Side.

E Thanet 55

10)

Westerham, Sevenoaks

11) In grass, Yalding Churchyard, 1959. Watlingbury. Bank, E. Malling **MNE**. Bank, W. Malling **MNE**. Leybourne. Holt Wood, Aylesford 1955 **MNE**. Hollingbourne. SW of E. Peckham. Leigh HV Wood. Staplehurst

<sup>819</sup> The map provided here for this species follows the layout given by Francis Rose, although he labelled TR02 as TR04 (in addition to labelling the latter in its rightful place).

<sup>820</sup> Gridreference corrected.

ch[urch] y[ar]d 1959.

W. Malling, Maidstone, Hollingbourne, Edenbr[idge], Tonbr[idge], Pembury 56, Marden, Headcorn 55

**12)** 963458 “C[hrysosplenium] alt[ernifolium]” copse by Stour on Folkestone Sand/Sandgates, W. of Hothfield Common, 1959. Hothfield, Ashford

**13)** Lamberhurst. Horsmonden. Pembury. Tunbridge Wells. Hawkenbury. Goudhurst. Cranbrook. Penshurst. Groombridge. Chiddingstone. Southborough Miss H M Crampton. T[unbridge] Wells, Lamberhurst, Cranbrook 55

**14)**

Tenterden, Hawkhurst S 56

**16)**

Aldington, Hythe 55, Folkestone 55

‡ **V. spuria** L.<sup>821</sup>

**7)** Godmersham, P. Le Brocq, 1954 **MNE**.

**8)** Bishopsbourne allotments, 1957, Miss MEM.

‡ **V. longifolia** L.

[Garden Speedwell.

15, 16.]

*Alien.*

**1)** Langley Park, Hb AG Davis **MNE**.

**8)** St. Margarets Bay, S. Foreland cliffs, 1957, **MNE**. By allotments (and in spruce plant[atio]n also, Miss MEM (as *V. spuria*), Bishopsbourne, 1962, BJB and D. Cattlin.

**10)** Brasted, PHC; Hb LNHS, det. DHK.

**12)** R[ai]l[wa]y W of T[unbridge] Wells West Sta[tion], CAS.

‡ **V. spicata** L.

[Spiked Speedwell.

15.]

**7)** R[oa]dbank n[ea]r Faversham, 1943, DHK, *alien in Kent*.

(**Sibthorpia europaea** L. [Cornish Moneywort] 427 occurs abundantly in several places about Heathfield and Dallington, Sussex, on rocky and peaty banks in deep wooded gills on Ashdown Sand. It might have been expected in the circumstances to occur in the ecologically similar gills of the High Weald of Kent, but has never been recorded.)<sup>822</sup>

**Melampyrum** L.

434

(**M. cristatum** L.

[Crested Cow-wheat.]

*This occurs on calcareous soils on wood borders in N. Essex, and, very rarely, in the Pas de Calais.)*

(**M. arvense** L.

[Field Cow-wheat.

15.]

*Casual in Kent; reported in*

**7)** L[owe]r Bell; F. Forsyth and Hartlip, Rochester N.H.S..

**8)** cornfield n[ea]r Dover, Mrs Sankey in Fl. Kent (identification confirmed by an accurate drawing sent to the authors of Fl. Kent); n[ea]r Dover, Miss Anderson.

*Unrecorded in Surrey, a rare casual in Sussex, not uncommon in the Pas de Calais.)*

**M. pratense** L.

Cow-wheat.

15, 16

36/51<sup>823</sup>

Native. Dry woodlands on gravel, sand and chert; scrub and wood-borders on chalk; locally common; common on the Tertiaries of 1), 3), and 6a), frequent on the chalk in 8), occasional on the Folkestone sand and on Hythe Beds chert plateau soils in woods in 10), 11) and 12), occasional on the Weald Clay and on the Tunbridge Wells Sand in the High Weald 13) and 14), unrecorded from the marsh districts 2), 4) and 15), and from 9) Thanet, and probably absent from these areas without woodland; unrecorded too for 16). Parasitic on woody plants.

There are at least two well-marked forms or varieties of this plant in Kent; one with relatively narrow leaves with a strong tendency to anthocyanin pigmentation, and deep yellow flowers, is common in dry woodlands on acid soils -1), 3), 10), 11), 12), 13), 14); the other (appearing to correspond to the var. *latifolium* of Babington) with relatively broad leaves, little anthocyanin pigmentation, and paler yellow flowers, is apparently the only

<sup>821</sup> Given thus, but may have been error for *V. longifolia*, as appears from one of the entries which also features under the latter, below.

<sup>822</sup> It was eventually discovered in 2017 in Chingley Wood, on the Tunbridge Wells Sand Formation.

<sup>823</sup> Only 35 hectads appear to be listed, however.

form in scrub and woodland on chalk 5)-8). Mr A. Smith is at present<sup>824</sup> working on the experimental taxonomy of *M. pratense* at Oxford University Botany School; until his studies are more advanced it is not possible to make more definite statements about the taxonomy of this complex species.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

1) Shooters Hill Woods 1954, GMB. 46 Keston Common, 1949-54; '61, HAS. 46 Hollows Wood, SE of Chelsfield 1946. 57 Joydens Wood. 56 Farningham Wood.

Orpington 54, Bexley 55, Farningham 54

3) 16 Mincing Wood, Blean, 1957. 15 Bigberry Wood. 26 Shelvingford Wood, Miss M.E. Milward. 96 Bysing Wood, S. end in dry oak chestnut wood on Thanet Sand, 1959. 05 Perry Wood, Selling, on Pebble Beds and Thanet Sand, 1959.

Faversham 55, Teynham 54, Whitstable 54,

Canterbury, Chilham

6) Great Park Wood, Snodland, 1945 (commutatum). Edge of road and beechwoods on chalk above Blackboy Inn, Halling Downs (commutatum<sup>825</sup>). Trottiscliffe above Pilgrims way (commutatum).

6a) 57 Darenth Wood, Sessile oak coppice on Blackheath Beds 1959. 57 Lords Wood, Darenth, on plateau, PCH. 67 Randall Wood, Shore. Shoreham E.S.M. (commutatum). 56 Romney St[reet], commutatum? 56 Horton Wood Edge PCH. 57 Mounts Wood PCH. Swanscombe Wood PCH. Dartford, Gravesend, Cobham

7) 76 Path in Woodland on chalk, E end of Burham Downs, 1956. 75 Boxley Warren, Beeby (latifolium). 86 Rainham Park Woods (commutatum), 1961 MNE. Purple Hill (commutatum) 1965. Burham 54, Srockbury 54, Doddington 54

8) 25 Coppice on chalk W of Ackholt, Aylesham 1954 (commutatum), 239514. Scrub on chalk, Spong Wood, Mrs MJ Comyn, commutatum; N of Maxted Street, 1954 (commutatum) 126451. Chalk scrub, Yockletts Bank, Waltham, 1959 (commutatum) 127471. Lynsore Bottom at edge of wood on chalk, (commutatum). Ash-hazel copse on chalk, Wolverton, Alkham, 1962. N[ear] Penny Pot 093520, 1959, H.M.W. Swanton Banks. Whitehall Woods, L[owe]r Hardres, by r[oad], 1960 MNE (commutatum). Larkey Valley Wood, Thannington by r[oad]side 1960 MNE, commutatum. Lane E of Ruberry Down, D.P.Y. (commutatum). Wollage Wood (commutatum). Wingham 54, Sandwich 55, Elham 54, Alkham 55, Ashford 54, Dover E 54

10) Crockham Hill. 45 Brasted Chart. Scords Wood. Parsons Marsh. Ide Hill. Whitley Forest. 55 Seal Chart, abund[ant], 1952. 55 Oldbury Hill, abund[ant] 1958. 55 Ightham Common, 1958. Westerham 54, Sevenoaks 54

11) 65 Wrotham Heath (Valley Wood) sbund[ant] in Sessile oak-chestnut wood on F[olkestone] sand, 1959-'61. Copse on Gault, S.W. of Trottiscliffe, 637593, 1954, Miss K. Smith. 75 Oaken Wood, Bottom Common; and NE of North pole Inn, 1962, 85 Kings Wood, S. of Harrietsham, Mrs. Dodds, 1959, on chert "head". (Shipbourne Hill P Grattan 57.) 85 Roadside, Fairbourne Heath, 1960, Mrs. Dodds. W Malling 54, Maidstone 54, Hollingbourne 54

12) 04 Ashford Warren.

Hothfield 54, Woodchurch 54

13) 73 Angley Wood. Wood, Speldhurst, Mrs M. Mallinson 1956. 64 Pembury Woods. 73 Combwell Wood. 73 Bedgebury Forest. 63 Chingley Wood, Goudhurst, 1960 MNE.

Pembury 54, Tonbridge 54, Lamberhurst 54, Cranbrook 54, T[unbridge] Wells 55

14) 83 Sandpits Wood, Biddenden.

Tenterden 54, W Oxney 56

## Euphrasia L.

## Eyebrights

435

1<sup>st</sup> record, for aggregate officinalis, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

## E. anglica Pugsley

## [English Eyebright.

15, 16]

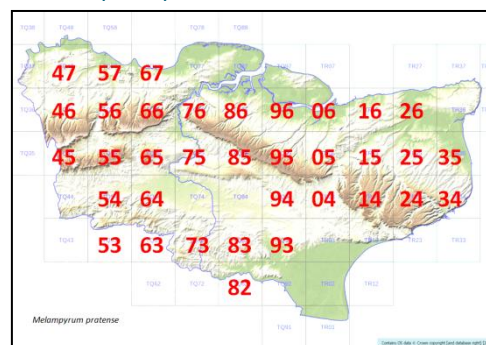
16/51<sup>826</sup>

Native. Chalk grassland, rare; acid heathland, damp acid sandy or loamy rides in woods; locally frequent in the High weald 13) and 14) and on the Folkestone sands in 12) and 16); elsewhere only known from Aldington in acid grass-heath on Atherfield Clay and on the Tertiary sands at Shorne 6a) and at [blank ] in 1).

<sup>824</sup> This work was published as Smith, A.J.E. (1963) Variation in *Melampyrum pratense* L. *Watsonia*, 5: 336-367, which provides the latest date for Francis Rose having written this account. Tipped into the Flora manuscript is an undated letter from Smith expressing his view that there are two subspecies of *M. pratense* in Britain, subsp. *commutatum* and subsp. *pratense*, and stating 'With the exception of some populations from Kent the two ssp are quite distinct in Britain. In Kent ssp. *commutatum* is less well defined and in some instances it is not possible to name plants and this may be due to hybridisation and introgression of ssp. *commutatum* by ssp. *pratense*'.

<sup>825</sup> This and many subsequent entries were originally entered as lat[ifolium] and over-written as com[mutatum].

<sup>826</sup> Should be 15/51, square 13 was double-counted.



Endemic. Frequent on acid heaths in Surrey and Sussex; rare in Essex (Epping C.S.N.).

1<sup>st</sup> record, [blank]

1) Meadow on acid soil, Holwood Park, 1948, E.B.Ba, Hb. PC Hall. Orpington 57

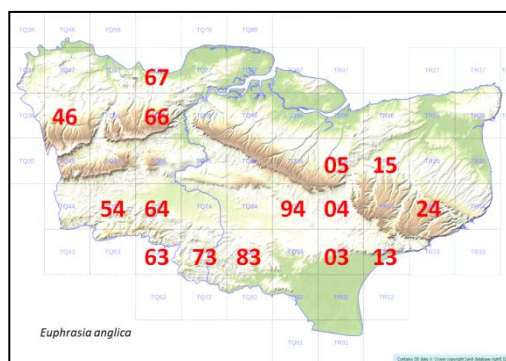
6A) 67 Randall Wood, Shorne, 1957 PCH. Gravesend 57

6) Downs S. of Great Park Wood, Snodland, 1950 MNE.

7) Downs, Park Wood, Molash, 1954 MNE.

8) Covert Wood, Kingston, on loam, 1950 MNE. Woodville Downs 1952 MNE. Folkestone Warren, 1952 MNE.

12) Hothfield Common, on grass-heath near the hospital end, 1946. Willesborough Lees, in damp grass heath, 1950. Brabourne Lees, 1950 MNE.



Hothfield<sup>54</sup>, Willesborough<sup>54</sup>

13) Pasture NE of Bayham, 1943, J.R.W., det. H.W.P. Tunbridge Wells, Miss Palmer in Hb. Druce, teste Lumb, B.E.C. Rep., 1922, p.740 (as *E. Rostkoviana* Hayne)?<sup>827</sup> W. of Furnace Wood, Bayham, 1956 MNE. Bedgebury Pinetum, by track on sandy soil, 1947 MNE; 1955, '56. Open grass heath, Chittenden Wood, S.W. of Biddenden, 1950. Combwell Wood. Kilndown Wood 1946 MNE. N. of Kippings Cross. Woodland ride on T[unbridge] W[ells] Sand, E of Redleaf Park, N. of Penshurst, 1950. Angley Wood. Tonbridge,

Pembury, Lamberhurst

14) open grass-heath, S. of Robins Wood, Cranbrook, 1951. Knockheath, Tenterden, 1956 MNE.

Cranbrook, Tenterden

16) Grass heath on clay, Aldington Frith, 1950. Kiln Heath and NE of Pedlinge, Sandling Park! 1957; 1959, LJM, det. P. Yeo. R[ail]w[ay] track n[ear] church, Saltwood, 1956, L.J.M., MNE, spp. det. E.F.W. 1957; 1961.

Aldington 54, Hythe 58

("E. campestris Jord." was recorded at

8) Chilham Downs, Miss M. Cobbe, det. Lumb & W.H. Pearsall, B.E.C. Rep., 1925, p.888.)

**E. tetraquetra** (Bréb.) Arrond.<sup>828</sup>

[Coastal Eyebright.]

15.

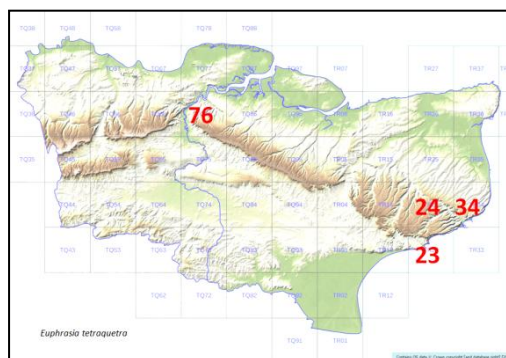
Native. On coastal chalk cliffs and on inland chalk downs, very local and rare.

In E. Sussex, very local on the chalk cliffs; on the continent only recorded for Ashant, Brittany.

1<sup>st</sup> record, [blank]

7) 76 Wouldham Downs, 1953 MNE. 24 Woodville Downs, Temple Ewell, 1952 MNE.

8) 23 Folkestone Warren, on chalk cliffs, 1947 MNE. 23 Cliffs, Lydden Spout, 1946, MNE. Tracks from monument, N. of St Margarets Bay 1957, B Nash. 23 Abbots cliff, 1956. 34 Cliff edge towards lighthouse by track, S. of St. Margarets Bay, 1957, B Nash.



**E. nemorosa** (Pers.) Wallr.

[Common

Eyebright.]

15, 16

39/51

Native. Chalk grassland and scrub, sandy grassland and grass-heath, open woodland, woodland rides, sand-dunes, cliffs; very common throughout Kent, except in the eastern High Weald in 14), where it is rare; in 15), where it is only recorded on the sand-dunes near Romney; on the Weald Clay of 11) and 12), where it is very rare; in Grain, where it is unrecorded; in the Hoo Peninsula, where it is very rare; in 4) where it is only recorded on the sand hills; and Thanet, where it is very rare.

Common in Surrey and Sussex, local in Essex, frequent in Pas de Calais.

1<sup>st</sup> record, 1899: Halling Downs and Dartford Heath, A.H.W.D. in *Fl. Kent*, p.263

1) Foxbury Park, Chislehurst, 1946 MNE.

Bexley 56

2) Clay and Bagshot Sand landslips on cliffs in scrub, East end, Minster, 1959. E. of Boarer's Run, Minster, 1959.

Sheppey (Minster) (Warden) <sup>54</sup>

<sup>827</sup>

Francis Rose's query here as regards an attribution of *E. rostkoviana* to Kent is understandable in that its distribution is not recognised as extending to SE England: *E. anglica* is most likely in terms of habitat and distribution.

<sup>828</sup>

In the manuscript given as *E. occidentalis* Wettst.



- 3) E-W Heathy ride, Church Wood, Up[pe]r Harbledown, 1953, R.E.W. (det. Kew). Whitstable 57/8
- 4) Dunes, Sandwich Bay, 1951-60 **MNE**. Sandwich (dunes) 54
- 5) Downe, AG Davis **MNE**. Down W. of Norheads, 402591, 1957, R.A.C. chalk g[ras]sl[an]d, Downe Golf Course, 428608, 1958. Chalk W of Eynsford, PCH. Morants Court Hill 1946 **MNE**. Down W.N.W. of Norheads, Biggin Hill, 404592 and 403591, 1958. Mounts R[oa]d, PCH. Orpington^54, Westerham^54
- 6) Juniper Hill, Shoreham, 1929 JCR; 1959! Magpie Bottom, 1948 **MNE**. Shoreham Range, PCH. Preston Hill, PCH. Cliffe chalk-pits, 1954. Downs W of Wrotham 1947 **MNE**. Trottiscliffe Downs. Halling Warren, PCH. Upper Bush Valley, 1954 **MNE**. Red Wood, Luddesdown, 1950 **MNE**. Upper Halling Downs, 1945 **MNE**, 1960 **MNE**. Farningham^54, Cobham^54, Dartford^54, Higham^54, Sevenoaks^54, Malling (Wrotham) ^54
- 7) 76 Wouldham Downs, 1953 **MNE**. 86 Queendown Warren. 76 Old cement works, S. of Burham, 1956 **MNE**. 75 Boarley Warren. 95 E. Lenham Downs. 85 Downs E of Hollingbourne, 1947 **MNE**. 85 Downs NW of Harrietsham 1950 **MNE**. Wrinsted Court Downs KS Jelley 1952. 96 Tunstall, 1958, DMCC, **MNE**. S. of P[ublic] H[ouse]. Throwley Forstal, 1954 REW. Belmont Pit, Ospringe, 1954 REW. Putt Wood, Ospringe, 1954 REW. W end Badging Wood Throwley, 1954 REW. 94 Westwell Downs, E.G. Philp, 1958 **MNE**. Burham^54, Stockbury (QDW) ^54, Teynham (Ospringe^54), Hollingbourne^54, Doddington^54, Maidstone (Boarley) ^54, Westwell^54
- 8) 04 Crundale Downs, 1952 **MNE**. Hackling Holes chalk pit 1954 REW. Wye Downs REW 1954. Newington chalk pit REW 1954. Folkestone Warren REW 1954. 24 Downs N. of Kearnsey. 24 Woodville Downs, Temple Ewell, '52 **MNE**. 34 Dover E cliff, 1954 **MNE**. 34 NE of St Margarets at Cliffe, 1962. 25 Brambling pit, REW. 34 Free Down, 1962. 35 Lit[tle] Mongeham, in copse, 1962. 34 Kingsdown Golf Course 1954 **MNE**. 34 Downs NE of St. Margarets Bay, 371447, 1958, **MNE**. 34 Cliffs S. of Kingsdown 1956 **MNE**. Chilham^54, Wye^54, Elham^54, Alkham^54, Dover^54, Canterbury^54, Wingham^54, Folkestone^54, Hythe^54
- 9) Minnis Bay, 1954, REW. N. Foreland. E Thanet^54
- 10) Fawke Common chert pits, 1954 **MNE**.
- 11) Dering Wood, E.S., 1962. Hoads Wood, 1946, **MNE**.
- 12) Hothfield Heath, 1944 **MNE**. Woodch[urch] '55
- 13) Rear Wood, and Great Sandhurst Wood, N. of Bayham, in rides, Lamberhurst, 1943, J.R.W., det. H.W.P.. Chittenden wood, 1946 **MNE**. Old Park Wood, Goudhurst, 1954 **MNE**. Edenbr[idg]e ^54, Tonbr[idg]e ^54, Pembury^54, T[unbridge] Wells 55, Lamberhurst^54, Cranbrook^54
- 15) Fixed dune Grassland, Romney Warren, 1950. Greatstone, 1950 **MNE**. Romney^54
- 16) Kiln Heath, Sandling Park, 133365, 1959, F.R., E.P. & L.J.M., on Folkestone Sand, Grass-heath on clay, Aldington Frith, 1950, **MNE**. Old railway bank, Saltwood, LJ Margetts 1958 **MNE**, "var. *Transiens*" det. EFW. Tenterden^54, Aldington^54

**E. pseudokernerii** Pugsley [Large-flowered Eyebright. 15, 16.] 18/51  
(*E. kernerii* auct. angl., non Wettst.)

Native. Chalk grassland, especially in *Festucetum* on shallow immature scarp soils; frequent to common in districts 5) – 8), unknown elsewhere. Apparently endemic to England; frequent in Surrey and Sussex on chalk, not recorded in Essex.

1<sup>st</sup> record, 1897: Upper Halling 1894, A.H.W.D., teste F. Townend in J. Bot., 1897, p.470 (as *E. kernerii* Wettst.).

- 5) 403591, Down NNW of Norheads, Biggin Hill, 1958. Westerham^54
- 6) Downs, W of Romney Street, E. of Shoreham, 1929, R.W.R.; 1946 **MNE**. Downs NE of Wrotham, 1953 **MNE**. Trottiscliffe Downs. 690647 Upper Halling Downs, 1943; '50; 54 **MNE**. 681636 Downs, M[oun]t Ephraim, W. of Snodland, 1950. 669656 Downs S. of Luddesdown Church, 1950. 686655 Bush Valley, N.W. of Halling, 1954 **MNE**. Sevenoaks^54, (Wrotham) ^54, Farningham^54, Cobham^54
- 7) 725626 Burham Downs (Scarborough Spur) 1950-57 **MNE**. 765599 Boarley Warren 1954 **MNE**. Downs 1m. NE of Thurnham 1950 **MNE**. 827576 W, Broad Street Downs, W. of Hollingbourne, 1950. Down E. of Hollingbourne, 1947 **MNE**. Downs above Cobham Farm, Lenham, 1950. Maidstone (Boxley) ^54, Hollingbourne^54, Doddington^54, Burham^54, Westwell^54
- 8) Wye Downs 1946. 84 Downs Winchcombe F[ar]m Crundale 1957 **MNE**. 14 Maxted Street, Elmsted, 1951. 24 Rubery Downs 1951, DMCC. 13 Chalk Scrub, Coombe Wood, Newington, 1958, LJM. 24 Downs below Lousyberry Wood, Kearsney, 1949, **MNE**. 34 Downs N.E. of St. Margaret's Bay, 1958, 371447 **MNE**. 34 Free Down, 1962. 34 S. of Oldstairs Bay, Kingsdown 1956 **MNE**. 34 Walmer Downs 1946 **MNE**. 23 Folkestone Hill 1958 **MNE**. 23 East Wear Bay, **MNE**. 23 Abbots Cliff 1956 **MNE**. 34 Kingsdown Downs 1946 **MNE**.

Hythe 56, Folkestone^54, Wye^54, Elham^54, Alkham^54, Dover^54, Chilham^54, Canterbury^54

**E. confusa** Pugsley [Branched Eyebright. 15.]



Native.

Very rare in Sussex; not recorded for other adjoining counties.

11) Hoads Wood, G[rea]t Chart, 1954, **MNE**.

16) Grassy Banks, 168362, NE of Saltwood, LJM, 1956, 59 **MNE**, det. E.F.W., also P.Yeo. Ride, Folks Wood, Pedlinge, 1959, L.J.M., det. P. Yeo. Kiln Heath, 134364, Sandling, L.J.M., 1958! **MNE**. Sandling Park, NE of Pedlinge, 1959, LJM, det. P. Yeo.

**E. stricta** [D. Wolff ex J.F. Lehm.

Sharp-toothed Eyebright.]

5) chalkpit, Keston Limeworks, W.B. Turrill, 1931, **K**, det. Yeo; he could not refind it in 1955.

**E. micrantha** Rchb. (*E. gracilis* Fries.) [Purple-stemmed Eyebright. 16.]

Native. Acid heathland, damp acid sandy rides, very rare.

Scattered in the High Weald of E. Sussex (Eridge Deer Park! Crowborough Common!); very rare in the Weald of W. Sussex; not infrequent in Surrey.

5) Morant's Court Hill, A.G. More, Phytol. N.S. Vol 1, p295.

**Odontites** Ludw.<sup>829</sup>

436

**O. vernus**<sup>830</sup> (Bellardi) Dumort, agg.

Red Bartsia.

15, 16

41/51

Grassland and scrub, wood borders and rides on chalk, clay and loam, cultivated land, roadsides; frequent and widely distributed throughout Kent, and locally common; rather rare in the southeastern part of the High Weald in district 14), and local on the Weald clay; not recorded for the Isle of Grain nor the eastern part of the Hoo peninsula. Divided into two subspecies in this country, whose records are detailed after those of the aggregate.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

1) Holwood Park, 1949. Railway Bank, Orpington. Joydens Wood. Ruxley pits, '58, TH Angel. (Chelsfield, 1913, E.B.B.) Orpington, Bexley, Farningham

2) Rough pasture on London Clay, S. of Halfway Houses, Minster in Sheppey, 1959, **MNE**. Clay cliffs, Warden, '55. Teynham 54, Faversham 56, Sheppey 55 (Warden too 55), Whitstable^54

3) Pean Hill, Blean, 1954, A.W. Roberts.

Chilham^54, Canterbury 55

4) Fordwich Marshes, v[ery] a[bundant] 1950, A.W. Crump & REW. Fens N of Wingham. Worth Minnis, 1950 **MNE**. Hacklinge Marshes. Behind coast N. of St Nicholas, 1963, v[ery] a[bundant]. Sandwich Bay N to Shellness 1954 **MNE**. Chislet 57/8, Wingham, Sandwich, Thanet 57/8

5) (Knockholt, 1925, L.J.T.)

6) (n[ea]r Eynsford, 1916, E.B.B.) Swanscombe Wood, 1945. Dartford; Stone, H.M.P., 1948-51. Otford Mount PCH. Green St[reet] Green – Lane End, PCH. Mounts Wood, PCH. Preston Hill PCH. Up[pe]r Bush Valley, l[ocally] a[bundant], chalk scrub, 1950-54. S. of Lydden down 1950. Stoneyfield Wood, Halling Down, PCH. M[oun]t Ephraim, Snodland, 1954 **MNE**. S. edge of Great Wood, NW of Cuxton, 1960 **MNE**.

6E) Northward Hill, High Halstow, 1958 **MNE**.

Cobham 54, Dartford 54, Gravesend^54, Higham^54

7) Hemsted Valley, Walderslade, 1952. Longreach Wood, Stockbury, 1957 **MNE**. Rainham Park Wood, 1961 **MNE**. Burham^54, Stockbury 56, Doddington 55

8) Branbling pit, 225561, A.W. Roberts, 1952. Whitehill Wood, Nackington 1955 **MNE**. S.W. of S. Barham 1956 **MNE**. Clavertye Wood N.W. of Elham 1956 **MNE**. Elham^54, Alkham^54, E of Dover^54

9) W of Minnis Bay, Miss M.E.M.

10) (Brasted; Chevening 1930, PHC.) (Force Green, 1932, on Gault, BTW.

Westerham 55, Sevenoaks 55

11) By Horish Wood, 1m. SW of Detling, on Gault E.G. Philp 1958 **MNE**. W of Bethersden 1954 **MNE**. Drove N of Wicks F[ar]m 1m E of Headcorn, 1962. Grassy drove, Purchase F[ar]m, G[rea]t Chart, 1946. W Malling 54, Maidstone 58, Hollingbourne 56, Tonbr[idge] 55, Headcorn^54, Edenbr[idge] ^54

12) Meadows by Chilham Mill, 1955 **MNE**.

Hothfield^54, Ashford^54, Ham St[reet] Aldington '54, Woodch[urch] '54

13) Between Clay Hill and Skiffs Cottages, Lamberhurst, 1940, J.R.W. SW of Cowden, in pastures. Penshurst. Cranbrook '46, Miss W. Crowhurst. Cranbrook 55, T[unbridge] Wells 57/8

14)

Tenterden^54

15) Dungeness, 1950, P. Le Brocq.

Dungeness 55

16) Aldington Frith, 1950 **MNE**.

Hythe 57, Folkestone 56

<sup>829</sup> Cited as *Odontites* Gilib. In the manuscript.

<sup>830</sup> Given as *O. verna* in the manuscript, here and in subsequent references.

The aggregate is common in the adjoining counties and in the Pas de Calais.

ssp. **vernus**

- 2) Minster in Sheppey F.J.H.
- 4) Ham Ponds, F.J.H. Sandwich Bay.
- 6) Stone, Syme.
- 7) Wood 2m. S. of Rochester, F.M.W. Above Hollingbourne ESM.
- 8) S. of Ringwould; NE of St Margarets F.J.H. Elham; Lyminge, E.S.M.
- 16) Saltwood, E.S.M.

ssp. **serotinus** (Syme) Corb.<sup>831</sup>

- 1) 46 Orpington sq[ua]re 57)
- 6) 57 Swanscombe; Stone; Darenth Parishes, 1952, H.M.P.
- 13) 518381, Gill SW of Stone Cross, Ashurst, CAS, 1953.
- 16) 13 Edge of Scene Wood, Hythe, L.J.M. 1958. (Hythe LJM, 1957.)

**Parentucellia** Viv.

437

**P. viscosa** (L.) Caruel [Yellow Bartsia.] 15, 16.

2n=48 (Sandwich material, teste Dr. D. Hamblar.)

Native. Damp pastures and dune slacks; extremely rare.

The Cowden locality, which I have so far been unable to refind, appears to resemble that at Park Wood near Bexhill, where it grows in a wet grassy ride in a wood on Wadhurst Clay; the Sandwich one is very similar to localities in dune slacks and other damp sandy ground near the sea in S.W. England (e.g. Dawlish, Slapton). There appears to be no reason to doubt the native status of the species in Kent.

In E. Sussex only of the adjacent counties; in W., but not in N. Franxce; an Atlantic and Mediterranean species.

1<sup>st</sup> record, [blank]

4) Damp Dune slack, S. end of St. George's Links, Sandwich, 1952, Miss B. Gore, det. Miss DACL; 1951, over 100 plants **MNE** 1960!

10) ‡ Roadside in sown grass, N of Crockham Hill, 1952, Mrs. L.M.P. Small; *Lond. Nat.*, 1952, p.79.

13) n[ea]r Edenbridge, Mr. Justice Talbot, Mr Meade Waldo, BEC Rep. 1927, p.293; p.411. =Rough pasture n[ea]r Cowden, many plants, Mr Justice Talbot, fide F.J.H., J. Bot. 1927, p.319.

**Rhinanthus** L.

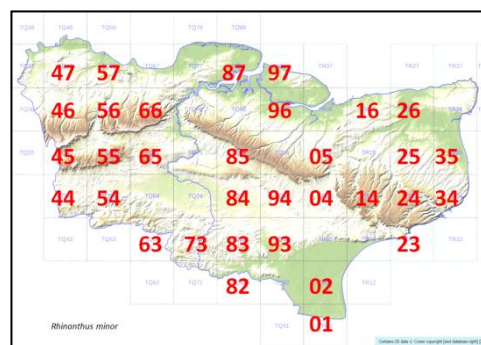
433

**R. minor** L. Yellow Rattle 15, 16 33/51

Native. Meadows, pasture land, fixed sand dunes, road verges, on moist clay or loam soils, chalk grassland ("*R. calcareus* Wilm."); widely distributed, but not very common generally, though locally frequent; rather rare and scattered in the Weald; here and there on the chalk downs; locally abundant on the dunes and cliffs of the coast and in meadows and fens of the main river valleys. Parasitic on various grasses.

Several subspecies of *R. minor* L. were formerly recognised, but the work of D.J. Hamblar (1958, *Watsonia*, vol 4, pp101-116) has shown that these plants represent only minor genetic taxa, and should all be regarded as belonging to the species *R. minor* L. Most of the so-called specific characters are inconsistent, overlapping, and not genetically linked in any way as might have been suggested by the descriptions of the taxa previously published. It is worth placing on record, however, that very narrow leaves with more or less parallel sides and a slender habit are characters usual in the chalk grassland populations of *R. minor* L. in Kent: these populations have previously been regarded as falling within Wilmott's *R. calcareus*. *R. minor* is frequent in the adjacent counties and in the Pas de Calais. (*R. serotinus* (Schönh.) Oborny (*R. major* Ehrh., non L.) has been reported from Kent in error; it occurs abundantly in dune slacks and fens on the coast of the Pas de Calais so might be expected to occur in Kent.)

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.



<sup>831</sup> Cited in manuscript as ssp. *serotina* (Wettst.) E.F. Warb.

- 1) 47 North Cray, in Meadow, 1955 **MNE**. Bexley 55, Orpington 54
- 2) 87 Slipped clay and Bagshot sand cliffs, E. of Boarer's Run, Minster 1959; ditto, 37, E. of E. End, Minster 1954 **MNE**. 97 clay cliffs, W. of Warden Point, 1955, **MNE**. Sheppey
- 3) 16 R[oa]dside, Chestfield, 1950, R.E.W. Whitstable ^54
- 4) 16 SW corner of Bretts' Lakes, Sturry, Mrs.B., 1958. Abundant on fixed dunes and in dune slacks, 35 Deal links; and Sandwich Bay **MNE** for several miles, 1946-56. 35 Hacklinge Marshes '46, '54 **MNE**. 35 Worth Minnis 49 **MNE**. [Ham Ponds, 1913, GL Davidson.] 25 Fen N. of Wingham '47, '49 **MNE**. 26 marsh W. of R[oa]d S. of Chislet, Miss M.E.M. Chislet 57, Wingham ^54, Sandwich^54
- 5) 46 Darwins Bank, Downe, 1955, JEL. Downe Golf Course (chalk grassland) 1958, 428608, (c[alcareus]). [Downe, 1916 AGD, **MNE**.] 46 Downs S.W. of Saltbox, Biggin Hill, 1955, 407605, (c[alcareus]). 46 Chalk scrub in valley bottom, 1 mile NW of Leaves Green, 1955, 404621, (c[alcareus]). 45 Down NW of Lusted, 409584, 1959, R.A.C. Westerham
- 6) 55 Chalk earthwork E of Otford Station, 1952, (c[alcareus]). 56 Magpie Bottom 1956 **MNE**. 66 White pit, Halling Downs, 1950 (c[alcareus]); 1953.
- 7) Teynham 58
- 8) Down W. of Maxted Street (c[alcareus]) 1954, **MNE**. Langdon Bay Dover, 1952 **MNE**. Above Shakespeares cliff, LJ Margetts, 1958 **MNE**. Dover (E. Cliff, on artificial ramp up cliffs) '54-55 (c[alcareus]) **MNE**. Cliff top S. of Oldstairs Bay, Kingsdown, 1956 **MNE**. Dover 54, Elham ^54, Alkham 55
- 9) absent from Thanet.
- 10) 45 Puddledock, SW of Toys Hill, A. Beadell (as *R. stenophyllus* – NCR, det. CEB). 55 Meadows and gravel pits E. of Riverhead, 1944 **MNE**; 1957, FSEF. Dartford^54, Eynsford 56, Sevenoaks
- 11) 66 Birling Marshes. 85 Goddington, Harrietsham, 1960, Mrs. B. Dodds. 54 Meadows W of Penshurst, 1944 **MNE**. Meadows, Leigh, 1947, H.V. Wood. Meadows, Tonbridge 1934 GE Shaw. 84 Meadow on Weald Clay, 2m. NE of Headcorn, '54. Birling^54, W Malling, (NE of) Headcorn 54, Tonbr[idge]^54, Edenbr[idge]^54
- 12) 04 fen-meadow, Cuckolds comb, Brook, 1946-1954 **MNE**. 14 fen-Meadows S of Stowting, 1954 **MNE**. Chilham 55, Ashford 54, Hothfield^54, Woodch[urch] 55
- 13) 63 Marden, S. side Teise, below Lamberhurst Church, 1939, JRW. 63 Hook Green Common, 1939, JRW. 73 Bedgebury Pinetum, 1952-6 **MNE**. Cranbrook, Lamberhurst
- 14) 83 Meadow on Wadhurst Clay, S of Halden Place, Rolvenden, '54. 934360 old pasture on clay, Beals F[ar]m, Redbrook Street, 1960, C.A. Lister. Tenterden 54, W Oxney/...55
- 15) 02 slacks behind Greatstone dunes. 02 Romney Warren. 01 old shingle workings, Dungeness, 078188. Folkestone 55

**Pedicularis L.**

432

**P. palustris L.**

Red Rattle.

15, [16]

Native. In wet base-rich fens and swamps, fen dikes, and flushed base rich parts of valley bogs; now extremely rare, and nearly if not quite extinct; 18 old records exist.

1<sup>st</sup> record, Black Brooks, East Malling, J. Mount. 1629: *Alectrophos*, Plin. sive *pedicularis rubra*, Erith, Johnson, Iter, p.10.

[formerly in 1) [Keston; and St Pauls Cray, Fl. Met; C. West; Hb Sim.]

2) [Northfleet water-meadows, AHWD. O[a]re Powdermills, E. Jacob.]

4) Ham Ponds; abund[ant] G.L. Davidson 1913-20; 1939, Miss E. Milward. Wingham; Ickham; FGEK.

10) Greatness Moor, Rudge BM.

11) E. Malling J. Mount.

12) Westwell, Miss D'Ombrian.

13) Redleaf, Cox; Goudhurst, Clarke; Chittenden Wood, ESM. In 13) these records may really represent *P. sylvatica*.

16) Aldington Park; Sandgate, below the Artillery Barracks; N of Beachborough and Lyminge (= the Lince, Etchinghill) C.P.S.K.]

Only recently reported in 4):

Ham, Fen E of Ham-Worth R[oa]d, 1921 G.L. Davidson; 1937, Miss E. Milward.

Borders of a fen dike between Hacklinge and Worth Minnis, Miss E. Day: 1947-54! **MNE**. In 1956 the ditch was dug out and widened and the species has not been observed since.

Sturry Marsh, [P.] Hookham; reported here about 1948 by M. Chalmers-Hunt, but the area has been quarried away for gravel. It is likely to be re-found in district 4), either in the Ham-Worth-Hacklinge area, near Wingham, or about the Stour between Sturry and Grove Ferry, where suitable habitats are still present.

It has been confused with *P. sylvatica* but has a pubescent calyx and 4 teeth to the upper lip of the corolla.

This species appears to be extremely sensitive to drainage, requiring permanently wet conditions, and to water pollution, which may have destroyed it since 1894 at Hothfield.

It still occurs in the bogs of western Surrey (Lightwater Bog and West End Common, near Bagshot, 1953! Thursley Common (Pudmoor Bog) 1959!) though apparently extinct elsewhere in the county; the latest Sussex records are at Maresfield Millpond, High Hurst Wood and Lewes Levels, but I am not aware that it has been seen since the war in Sussex, and it is almost certainly extinct in Essex.

It is still to be found in fens at Dannes and Condetta (1959!) in the Pas de Calais.

### ***P. sylvatica* L.**

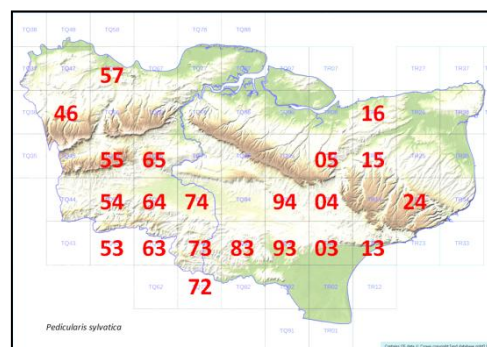
Lousewort.

15, 16

21/51

Native. Dry and wet acid heaths, pastures and heathy woodland rides on acid ill-drained sandy or loamy soils; locally frequent in the High Weald, in several places on the Greensand (Folkestone sand and chert-covered plateau of the Hythe Beds) and on the pliocene loams, sands and gravels of the chalk plateau, also on the tertiary sands and gravels in 1) and 3), widespread but not a common plant.

1<sup>st</sup> record, 1777: Jud's Wood, Ospringe, E. Jacob, Pl. Fav., p.80. Fl. Kent quotes as a first record for this species that given in the present work for *P. palustris*; I consider the Thames Marshes at Erith in 1629 as far more likely to have produced *P. palustris* than *P. sylvatica*.



1) 46 Keston Common 1916 AG Davis **MNE**; W.W.R. 46 Hayes Common, C.W.; 1948! Chislehurst Common, W.C.R.W. 46 Holwood Park, 1932, P.H.C. 57 Dartford Heath, 528724, 1947, J.B.M.; 1948-52, H.M.P.; 1954, G.M.B. Orpington, Dartford

3) [Chartham Hatch, [P.] Hookham; F.M. Webb. Bysing Wood, Stowell. West Blean Wood, JFH. Wood n[ea]r Hoath, F.M. Webb.] 16 Heathy Ride, Mincing Wood, Blean, 1957. 15 N[ea]r Park Cottage, Church Wood, Blean, RGW. 05 E of Boughton under Blean, 1946 **MNE**. 05 Rhode Common Wood, E of, RS, 1957. 16 Tyler Hill, RGW. Chilham 57, Canterbury 1958, Whitstable 57

7) [Juds Wood, Ospringe, E. Jacob. Syndale and Coxett Woods, Cowell. Plateau (on gravel) N. of Charing E.S.M.]

8) 24 Field n[ea]r St Radigunds Phyt. N.S. V, p.33; 1958 Mrs. K. Rowlands. E. of Wye, F.J.H. Covert Wood, P. Grattan, 1957. 24 Acid Heathy pasture on Pliocene loam, N.W. of Browns Wood, Lydden, 1959, **MNE**.

T[emple]. Ewell

10) [Riverhead, Miss Worship.] [Sevenoaks JSM.] [Knole, Roper.] Fawke Common, A.H.W.D. Hosey Common, 1913, E.B.B. W. of Oldbury Hill, 1944, in damp grass-heath by lane N. of Crown Point. Sevenoaks

11) 65 Mereworth Woods, ride on stony chert drift of plateau, 1954. 74 Ride on Weald Clay, Widehurst Wood, Marden, 1959, 745 420. [Penenden Heath Hb. Lamb, 1885 **MNE**.] [Langley Heath, 1949, **MNE**.]

W Malling, Marden

12) 94 Hothfield Common, W.R. Jeffrey (1954!) **MNE**. 93. 13 Gibbons Brook, J. Walton; 1945! **MNE**. 13 Boggy field, Monks Horton 1953 **MNE**. 03 Valley by NW of Stone Hill, Sellindge, 1954 **MNE**. 04 Bog, Mersham le Hatch Park, 1969 **MNE**.

Hothfield, Ashford, Aldington

13) [Tunbridge Wells Common, Miller, etc.] 53 Hawkenbury Bog, 1943, JRW (1946!); 1954 A. Graseman. 63 W of Elks Wood, Lamberhurst 1957 **MNE**. 63 Hook Green, Lamberhurst, 1938, J.R.W. 34 Bog, Moorden, Penshurst, 1949 **MNE**. Penshurst Park, HV Wood. 73 Rides, Combwell Wood 1897 JS **TLS**; 1948! **MNE**; 79! 73 Bedgebury Forest, Goudhurst. 63 Kilndown Wood, Goudhurst. 53 Heathy Ride, Sissinghurst Park Wood, 1948. Wood S of Roundhill Park Wood, Sissinghurst, 1954 **MNE**. 83 Heathy rides, Chittenden Wood, SW of Biddenden, 1944-58. Hythe (Gibbons B[rook], Tonbridge (pre54), ...Pembury 1954, ....Cranbrook, Tenterden, Woodch[urch], Ham St[reet], Hawkhurst S

14) Wood SW of Sandhurst 1949; '72.

Fairly common still on the Greensand and Bagshot Sands in Surrey, in the High Weald of Sussex (Ashdown Forest especially); rare in Essex and the Pas de Calais.

## **OROBANCHACEAE**

### ***Lathraea* L.**

439.

### ***L. squamaria* L.**

Toothwort.

15, 16

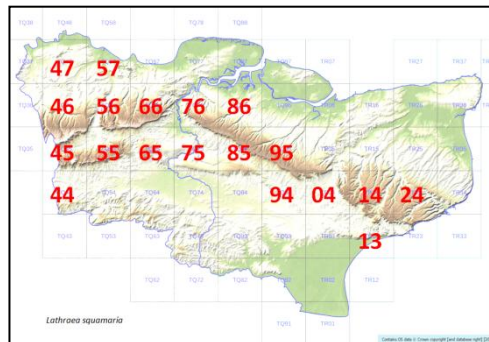
19/51



Native. Wholly parasitic on various trees, mostly *Corylus avellana* and *Ulmus* spp., also on *Ilex*, *Syringa*, *Ligustrum*, *Acer campestre*, *Crataegus* with *Prunus* spp. Woodlands on basic soils, chiefly on chalk and ragstone and their associated valley deposits; local; widespread, but hardly more than locally frequent, in districts 5)-8), (on chalk), 10)-11) (on ragstone); rare in woods on Thanet sand in 1). In some localities large numbers of inflorescences may appear in some years. Less recorded in the Weald, 11W), 13), 14) and in the Marsh districts 2), 4) and 15), and the Blean 3), commonest in 5).

1<sup>st</sup> record, 1597: Half a mile S. of Maidstone; and near Crayford, Gerard, *Herbal*, p.1387.

1) [Bickley, W.C.T.W., 1932, on *Ilex*, *Corylus*, *Ulmus* and *Syringa*, PHC. St Paul's Cray, WCRW.] 46 Keston. WCRW; CW; Foxlane, Keston, 1954,



GM Brown. 47 Elmstead N of Chislehurst, WCRW; 1956. Miss A. Mills, on Elm. Spring Park, W. Wickham AG Davis 1916 **MNE**. Nash, 1919, A.S. Kennard.

Bexley 56, Orpington 54

5) 46 n[ea]r Holwood Farm, Farthing Street, S.E. of Keston, WCRW; 1947, JBM. 46 Roadside ¼ m. SE of Downe, WW; on *Ulmus*, abund[ant], 1959! 46 Darwins Bank, Downe. 45 (Cudham, on *Ilex*, *Crataegus*, *Acer*, *Prunus avium* and *Ulmus*, 1937, PHC. 45 Chevening Park, Miss Worship; abund[ant] on *Corylus*, 1949, 1950! Westerham, 1936, PHC, on *Ligustrum*. 46 Pratts Bottom, by Road, G.M. Brown. 46 Lattice Coppice, Rushmore Hill, 1954, F.R. 1956 **MNE**. 45 Knockholt, P.C. Hall. 46 S. of Farnborough Ch[urch] F.J. Epps. 45 Knockholt Pound, PCH. 45 High Wood Cudham, PCH. 45 Chevening P[ar]k by Church, 488577, 1962, H.M.P. Between Down and Leaves Green, 1957, M.C. Hunt (on *Acer* and *Sambucus*).

Westerham^54

6) (Shoreham, 1932, P.H.C.) = 56 Lane E of Magpie Bottom, abundant, Prof. C.T. Ingold. 55 n[ea]r Kemsing, W.C.R.W. [St Clare, Jenner Fl. Tunbr[idg]e Wells.] (Eynsford 1938 AC Tagg.) 66 Cobhambury Wood, 1 pl[ant], host unknown, 1960, HAS. 57 Darenth Wood, 580728, N end, 1957, H.M.P. 66 Luddesdown, 1921, A S Kennard. 66 On *Corylus*, Buckland valley, 1946!

Farningham^54, Cobham^54

7) Wood above Boxley Warren (Hazel) 780600, HMP, 1958. 76 West field Wood, E of Bluebell Hill, 1945 ( on *Corylus* on clay with flints). 95 Foxen Wood, Newnham, 950564, 1961, C Turner. 76 Coal Bottom Tunbury Wood, Walderslade, abund[ant], 1955, P. & J.H. & F.R. **MNE**. Belmont Park, 1951, REW. 85 ¼m NW of Pond F[ar]m, Hucking, 1960 **MNE**. 85 Hucking Valley, on *Corylus*, 1950, **MNE**. 95 Wichling, 925568, in hedgbank on *Corylus*, 1949. 85 Wooded bank, Bedmorton, Wormshill, 1964, B Dodds; CA Lister. 94 E. of Westwell, 995474, ES. 94 SE of Westwell, 993472, ES. 94 Chalky Lanebanks, N. of Westwell, on *Corylus*, WR Jeffrey; E Scott, 1947! 94 Shaws to N, 991478; 993478; Lane, 992488; Shaw, 987487; Suomi, 986483. 94 Eastwell, 003467. (Lenham 1916 AS Kennard.)

Burham^54, Stockbury 56, Hollingbourne, Doddington, Westwell ^54, T[unbridge] Wells^54

8) 04, 079444 Hastingleigh Ch[urch] copse 1939 P. Furneaux. 24 on *Corylus* on chalk, Reinden Farm, Hawkinge, 1962. 14 Spong Wood 1959 on Ash, John N. Mead. 04 Cuckolds coomb, E. of Wye, P.R.B., 1947. 04 Fanscombe Wood, 077470, ES. 04 Hurst Wood N. of Big Coombe F[ar]m, 086467, ES. Beechy Wood, Wye, 071475, ES. On Hazel above Wood n[ea]r Crown, Wye, RGW; Miss MEM '52. 14 Ash-hazel Wood N. of Bavinge Farm, Waltham, 1962. Park Wood, Crundale, 1957 Mrs Brickenden. Clavertye Wood, 1956, Miss B. Nash. 24 in wooded valley on chalk on *Corylus*, S.W. of Little London, Lydden, 1955, BSBI Excur[sion] **MNE**. NW edge, Postling Wood, O.B.G.; 1950! 145403 1958 BJB. Hedge to E 1955 Miss DACL. 14 Sibton Wood, Lyminge, 1956 **MNE**. 14 Wood S. of Lynsore Court Up[pe]r Hardres on chalk 163486, AW Roberts 1956; 1959 BJB.

Wye 54, T[emple] Ewell 55, Elham 55

10) (Brasted, F.J.H.) 45 Scords Wood, Brasted, on *Ulmus glabra*, 1950, **MNE**. 55 Wilderness, Sevenoaks, B Sennitt.

Sevenoaks 56, Malling 54, Maidstone^54

11) 65 S. of Pizien Well, Mereworth, 1953. 65 On Hazel n[ea]r Stream, Mereworth Park, 1943-1948. 65 S of Basted, 1956. 65 N[ea]r N. Pole, Teston, on *Corylus*, 1942, **MNE**. 55 Boot Wood, Skeet Hill, Plaxtol, 1956. 65 E. of Skeet Hill, Plaxtol, on *Prunus*, 1956. 65 Copse W. of Gover Hill, 1959. 65, 610522 10 infl[orescences] W side R[oa]d N. of Tonbridge 1957 P Scott. 85 on *Corylus*, Fulling Mill, SW of Hollingbourne, 1954, n[ea]r R[iver] Len. 95 Stoneacres, Otham, 1948. Mote Park, on *Ulmus*, 1960, EGP.

Edenbridge 56

16) Aldington Knowl, F.G.E.K.

Hythe



Locally frequent in Surrey, rare in Sussex, extremely rare in Essex; rare in Pas de Calais.

‡ *L. clandestina* L. [Purple Toothwort. 16.]  
13) Earls Road, Tunbridge Wells, 1947, A. Graseman.

*Orobanch* L. 440

[*O. ramosa* L. [Hemp Broomrape. 15.]

Alien, parasitic on hemp (*Cannabis sativa*), formerly occurring in hemp fields; hemp is no longer cultivated and the species has not been reported in Kent for over 150 years.

2) Sheppey; near Faversham, Hudson, *Fl. Angl.*, Ed. 2, (1778) p.266.

6) N[ea]r Rochester, Hudson, *Ibid.*; Field S. of Rochester by Maidstone Road, O.B.G., 1805.

8) Hougham, O.B.G.]

*O. purpurea* Jacq. Blue Broomrape 15. 1/51  
Native. Parasitic on *Achillea millefolium*; extremely rare.

8) Bishopsbourne, Anon., *Ann. Mag. Nat. Hist.*, III (1830) p.435. Plentiful on *Achillea*, on neglected allotments, Bishopsbourne village, 1955, B.J.B.; 1955! 1958 980 pl[ants]]! **MNE**. Part of the rough field was ploughed in 1958; afterwards in 1958 and in 1959 the plant was much more abundant in the part that had been ploughed than in the part that was left! 1960, not seen (field grassed). 1961, one only by hedge. 1962, not visible.

Not certainly recorded for Sussex, not at all for Surrey: one ancient record (near Bethune) for Pas de Calais. It still occurs on the cliffs of the coast of N.E. Norfolk and has records for Hampshire, chalk river scarp S. of Rouen, Seine-Maritime, 1961!

*O. rapum-genistae* Thuill. Great Broomrape. 15, [16]. 5/51

Native. Parasitic on *Sarothamnus scoparius*, more recently on *Ulex europaeus*: formerly not uncommon, now very rare in a few bushy places and woodland rides.

1<sup>st</sup> record, 1597: (On broom) Shooters Hill, Gerard, *Herbal*, 1597.

[1] Old records for Shooters Hill: Charlton Wood, Curtis: Eltham, *Fl. Met. Supp.* W. Wickham, 1888, A. S. Kennard.]

[2] Gillingham to Sheppey, Johnson, *Iter*, 1629, p.5.] Broom above Boughton Street 1958 Mrs B., 3 spikes in flower.

3) N[ea]r Ellbridge, plentiful, F.J.H.; on broom, Gravel pit, Swanton Farm, Littlebourne, 1956, E. Scott, Mrs B. Nash et al.: probably the same locality. Old Park, Canterbury, F.G.E.K. [Bigberry Wood, Mitchinson (as *O. elatior*).]

[4] Preston, F.J.H. Near Sandown Castle, F.G.E.K. Upper Deal, Miss L. Day.]

[6] S. end of Darenth Wood, 1861, J.S.M. (Hb. Mill). Cuxton, Bossey.]

[7] Newnham Road, in gravel pit: Coxett Wood, *Fl. Fav.*] [Path, Lordswood Lane Walderslade to Gibraltar farm 1917, S. Andrews.]

8) [Covert Wood, on Broom, F.G.E.K. Between Dover and Folkestone, E. de C.] [By Crete Road, Folkestone, on *Ulex*, Miss Day, formerly.] West Wood, Stowting, 137424, on broom in ride on Pliocene sand, 1958 Mrs. D. Rowlands, 1960 Miss D.A.C.L.

[10] Field by Sevenoaks Gas works, F.J.H.]

11) Offham, C.A. Stevens **BM**. Barming Heath, E.M.H. On Broom and Gorse on heathy ridge on Folkestone Sand N. of A.20, 1m W. of Hollingbourne 1951, E. Scott, c.100 spikes, 1951; c.70 spikes, 1952; c. 150 spikes, 1953! 1962! **MNE**.

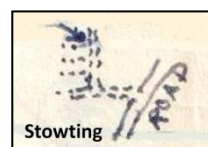
12) Edge of Bourne Wood, Orlestone, 1946 C.N.P. & E.S. Ashford Warren, W.R. Jeffrey, 1901, Lady Davy; c.1930; Miss West. Ride at S. end Horns Wood, E. of Ruckinge, 1957, E. Scott; 1958!

13) On way to High Rocks, Forster, *Fl. Tonb.* (as *O. elatior*).

Rare and not recently reported in Surrey, now very rare in Sussex, no recent record for Essex: very rare in Pas de Calais.

*O. caryophyllacea* Sm. Clove-scented Broomrape . 15. 3/51

Native. Parasitic on *Galium mollugo* on fixed calcareous sand-dunes, in chalky s[outh]-facing hedgebanks, and on chalk cliffs near the sea in East Kent; rare and extremely local, in seven localities from Folkestone to Sandwich Bay; at the last locality it is, however, abundant.



Confined in the British Isles to East Kent; frequent on the fixed coastal dunes of the Pas de Calais (Sandgatte! Ambleteuse!).

1<sup>st</sup> record, 1828; Folkestone, G.E. Smith in Loudon's Mag. Nat. Hist., I, p.398. See C.P.S.K. (1829) pp.34-6 for valuable remarks on this species.

4) St George's Golf Links, Sandwich Bay, FJH; 1946-56 **MNE**; abundant over a wide range of fixed dunes from 362578 to 358588. [Sandhills, Deal, Duthie.]

8) [Undercliff E. of St. Margarets Bay, FGK; 1939, Hb. F.A. Hanbury; Syme.] On lower part of Cliff (above railway east of Abbots Cliff Tunnel) E of Lydden Spout c.285389; C.P.S.K. site: 1945! 1949! **MNE**. East Wear Bay c.243372, C.P.S.K.: JEL, 1925; 1950! **MNE**. [Formerly too, n[ea]r Warren Halt, Miss V Day.] Sugar Loaf Hill 223378, C.P.S.K. (hedge at base, 1939, B.J.B.; 1948! **MNE**) **MNE**: R[oa]d to E, 1951, Miss DACL. Hedge at base, Caesars Camp, Folkestone, 214377, JEL, 1948; 1948! **MNE**. Hedgebank of A.2, SE of Kearsney, 1953, 23 spikes, **MNE** 295437. Hedge S.W. of Chilverton Elms Farm, Hougham, 1955, B.S.B.I. Excur[sion]! 282407. W Hougham, on *Galium*, 1948, CH Hornsey – prob[ably] another site.

[16] Sandgate, G.E. Sm. (BM). Shorncliffe, 1985, FR & RoF, S. side r[oa]d, 191351.

#### **O. elatior** Sutton<sup>832</sup>

Tall Broomrape

15,16.

7/51

Native. Parasitic on *Centaurea scabiosa* on grassy banks, scrub, and old pits on chalk: very rare.

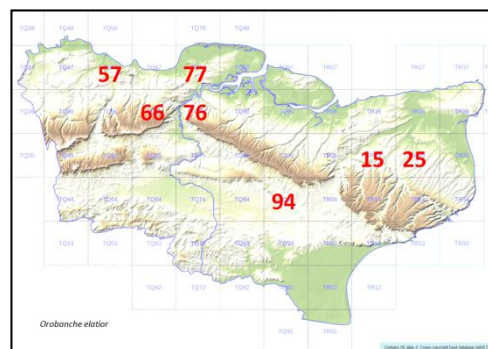
In Surrey and in Sussex, rare on the chalk: rare in Essex but locally common on chalk in the N.W. of the county: very rare in the Pas de Calais.

1<sup>st</sup> record, uncertain: none of those in Fl. Kent are very satisfactory, and may all refer to *O. rapum-genistae* or some other species.

6) 66 Pilgrim's Way, N. of Trottscliffe Church 644610 to 646612: 1915, H. Elgar **MNE**; 1945! 1 spike; 29 spikes, 1955; many spikes, 1957; O. Davis: 1958-61! **MNE**. 57 S. of Stone, Field N. of A2, opposite Darenth Woods, 578734, H.M.P.: dozens of plants 1955-56. Bean, Rev. B. Glennie: Hb. Glennie (**BRIST**). 57 Field N of A2, opp[osite] Darenth Wood, S. of Stone, 578734, H.M.P.; dozens of plants 1955-56. 77 Chalk pits, W. of Cliffe, 1958 **MNE**. Halling Downs; Roadside, Cuxton, M. Atkins.

Pilgrim's Way, between Detling and Boxley, 1913, H. Elgar **MNE**. 94 Pilgrim's Way, Westwell, Miss M. Cobbe, B.E.C. Rep. 1923, p.204; E. Scott, 1947. 76 Rectory Chalk pit Wouldham, 1938, J.B. Marshall. 15 Bank, Bonnybush Hill, Kingston, 199518–200517, 1939, B.J.B.; 1946-62! **MNE**; and Charlton Park edge, Mrs KDR. 25 Roadside Chalk banks, E. of Bekesbourne, 212547, 1948, B.J.B. 21 Roadside S. of Adisham, 210551, 1962, B.J.B. & R.G.

(Reported "nr. Woolwich" in Fl. Met.; at Bigberry Wood by Mitchinson; and near High Rocks, by Forster in Fl. Tonb. —probably all really *O. rapum-genistae*.)



#### **O. hederæ** Duby

Ivy Broomrape.

15, 16.

4/51

Native. Parasitic on ivy, only recorded on chalk in Kent; extremely rare.

Extremely rare in Surrey (Kew Gardens, Betchworth and Witley), unrecorded in Sussex, Essex and the Pas de Calais.

1<sup>st</sup> record, 1873: Kent east, Borrer, in *Top. Bot.*: the locality is not known.

This species has very short rootlets which form no secondary attachments, unlike *O. minor* (teste A.D. Greenwood in litt.).

6) Wood on the side of the chalk hills, near Shoreham, 1868, J.S. Mill in Hb. **Mill**. By Mounts Road, Greenhithe, 1948, one spike.

8) Among Ivy in woods E. of A.2, Kearsney, 1928, Miss J. Gibbons. Chalk hedgebank, one spike on Ivy, Knowlton, 1949, P.R. Bell & F.R.: 1950, F.R. **MNE**. One spike among Ivy, 313506, Willow Wood, N. of Sutton, 1955, B.J.B. & F.R.

#### **O. artemisiae-campestris** Vaucher ex Gaudin<sup>833</sup>

Picris Broomrape.

15

2/51

<sup>832</sup> Although the records in this account begin with botanical district 6) (the Chalk between Darent and Medway), their subsequent layout is somewhat confused by the abandonment of references to districts 7) and 8), leaving one to follow the 10km square grid references, where given.

Native. Parasitic on compositae, chiefly *Picris hieracioides*, near the sea, mostly on chalk cliffs; very rare.

Very rare in Surrey (3 records only): unrecorded for Sussex, Essex, or the Pas de Calais.

1<sup>st</sup> record, 1866: N. of St Margaret's Bay, Syme, *Eng. Bot.*, ed. 3, VI, p.198.

4) On waste ground, E. of A.256, S. of Ebbsfleet H[ou]s[e], Richborough Port, 1949, L.W.W.; 1962, B.J.B. & R. Gorer.

8) Undercliff between St. Margaret's Bay and Kingsdown, abundant, Syme, *loc. cit.*; rare ¼ mile NE of St. Margaret's Bay, 1946, 1947!; 1952, 5 pl[ants]; not seen, 1953; abundant at St. Margaret's Bay, 1957! **MNE**; 1959; 1960; 1961; 1962; -1986 **MNE**. Still at St Margarets 1997, teste Paul Stanley. Dover E. Cliff, near sloping path, B.J.B. 1947; L.W.W. 1948; a few plants, 1954-55! **MNE** -1986.

In Kent, I have only seen this plant myself on the ledges of steep chalk cliffs.

#### **O. minor** Sm.

Lesser Broomrape.

15, 16 .29/51<sup>834</sup>

Native. Parasitic upon Papillionaceae, more rarely on other families: scattered through the county and not uncommon on chalky or sandy soils; sometimes abundant in sown clover fields.

Frequent in the adjoining counties and locally so in the Pas de Calais.

1<sup>st</sup> record, 1724: Cuxton, Rand, in Ray, *Synopsis*, ed. 3, p.288.

1) [56 Formerly about Charlton, O.B.G.] 56 Rough sandy field W. of Farningham Wood, PCH. Beckenham 56

2) 06 Old Brickworks near old Workhouse, Faversham, 1954, REW. 06 Murtons Farm, Graveney, 1956, R. Theobald. Faversham 56

3) 06 By Thanet Way on clover (and ? wild carrot?) 200 yds N. of Brenley Corner, 1959, H.M.W.

4) 35 Princes Golf Links, Sandwich Bay **MNE**. 35 Hacklinge, 1946 **MNE**. Stone Cross, Sandwich, C.C. Townsend. 36 Ash, 1948. 26 Stodmarsh, in clover field 1949 **MNE**. 35 Track to Downs Farm E. of Sandwich, 1954 RGW. 25 Staple, a clover field, 1949. Preston ESM. Sandwich, Chislet 55

5) Jewells Wood, Saltbox, A.G. Davis, 1910 **MNE**. R[oa]dside S. of W. Wickham, 3864, 1956, R.A.C.

Westerham 56

6) 57 E. of Dartford, 1946, J.E.L., R.L. & D.H.K. 67 Northfleet 1946. 66, 665636, Dode Church, Mrs Woods. Eynsford R[ai]l[wa]y bank, F.J.H. 57 on clover, S. of Greenhithe, 1946 **MNE**. 67 S. of Wombwell, Gravesend, 1946. Swanscombe Wood by A2, KEB, 1955. Hatch Hill, Luddesdown, 1951, DMCC. 76 Cuxton, Lower Bush, r[oa]dside, 1953, RGW.

56, Teynham 58, Doddington 58

7) 76 Bluebell Hill, A.G. Davis, 1918 **MNE**.

8) 05 E. of Chilham, RGW. 15 Bourne Park, Bridge, RGW. 15 Bonny Bush Hill, Kingston, 1955 **MNE**; 1958 D. Stainer **MNE**. 25 Barham Downs, 1939; 1946; 203520, 1958. 25 Fredville, D.McC. 25 Adisham, 1948. 25 R[oa]d near Denne Court S.W. of Woodnesborough, 1962. a[bundant], Cloverfields, Tilmanstone, 1957, R. Gorer, yellow variety. 34 Kingsdown golf course, 1954 **MNE**. Denton, 1956, Miss DACL. 34 N.W. of St Margarets, 1946; in cloverfield 1954 D.P. Murray. 24 River, Mrs. E. Carlton, 1960 **MNE**. Kingsdown Hb JSM. Ringwould Mrs Benson. Chilham 58/9, Canterbury 55, Wingham, Dover 54, Thanet E 57/8, Alkham 56, ...58

9) 36.

10) 55 One plant, Oldbury Lane, Ightham, 1945, app[arently] on *Anthriscus sylvestris*. **MNE**. 1 plant, Toys Hill, near *Pyrola* site, C Stace. Sevenoaks, W Malling, Hollingbourne 59, Maidstone

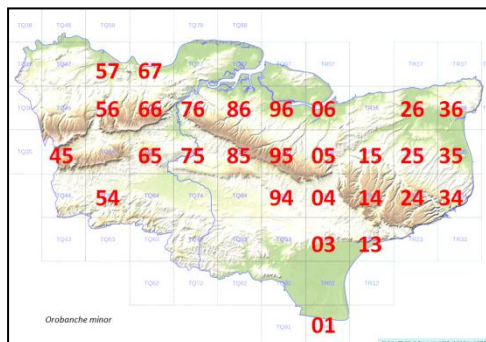
11) 75 E. Malling, J.S.M.; F.R.! 75 W of Sandling, 1943, on roadside. 75 Aylesford Gravel pits 736588, 1957, CAS; E.G. Philp, 1959 **MNE**, 1960. 85 Leeds village, 1959 **MNE**. 85 Langley, 1951. DMCC.

12) 05 R[oa]dside verge, E. Stour Farm, Chilham, R.G. Williams. [Charing Heath. H. Lamb, 1901 **MNE**.] 04 Quarry at Sevington, 1946. Ashford, Hothfield

13) 54 Bidborough, 1958, on zonal *Pelargonium*, F.R.B. [T[unbridge] Wells, Hb. Lamb, 1870 **MNE**.]

15) 01 N[ea]r School, Dungeness, 1955: 1958, E. Scott. Dungeness 55

16) Hythe 56, Aldington 56



<sup>833</sup> This name is as provided in Stace edition 2, which is followed in this transcript, but the manuscript gives *O. picridis* F.W. Schultz ex Koch, to which subsequent Stace editions have reverted, also mentioning *O. lorica*.

<sup>834</sup> Only 28 squares were identified for mapping purposes.

**O. maritima** Pugsl.<sup>835</sup>

Seaside Broomrape.

15. 3/51 [?4/51]

Native. Parasitic on *Eryngium maritimum* on sand dunes and on *Daucus carota* on sea cliffs: very rare, but locally abundant on the coast from Folkestone to Pegwell Bay, also reported at Dungeness.

Only detected in Sussex of the neighbouring counties (West Wittering, on *Eryngium maritimum*, 1938!): mainly southwestern in Britain. Foreign distribution not known: not in Pas de Calais.

1<sup>st</sup> record, 1866 (as *O. amethystea* Thuill.): St. Margarets, Syme in *Eng. Bot.*, Ed.3, Vol. II, p.200.

4) On *Eryngium maritimum* on foreshore of dunes, Princes links, Sandwich Bay, L.W.W.; very abundant 1950-52! det. E.B. Bangerter; re-appeared after flood Sept. 1953; very abundant, thousands of plants, 1954-1962, increasing enormously, 100,000s, 1962, for 2 miles **MNE**. Behind Guildford Hotel, 1953, R.E.W. On *Eryngium*, Pegwell Bay, 1947.

8) Base of cliffs S. of Oldstairs Bay, Kingsdown, 1956 **MNE**. Undercliff, E. of St. Margarets Bay, Syme; 1946-47 **MNE**. St Margarets Bay, 1957-62 **MNE**. Dover East Cliff, 1954. Langdon Bay CCT. Undercliff and lower slopes of cliff, by Lydden Spout, F.J.H.; 1945!-1962! **MNE** (From the Shrimpers Steps, W. of Dover, westward to Abbots Cliff abundant, 1871-1878, A. Bennett, and in *J. Bot.*, 1928, p.168.). Folkestone Warren on *Daucus*, c.7 spikes, 1959, P.W.W. Pett Bottom, fallow field, 1916, G.L. Davidson, det. Kew as *O. amethystea* Thuill.

[15) On *Chrysanthemum leucanthemum*, Dungeness, L.W. Wilson (unconfirmed).]

The British plant was formerly regarded as identical with *O. amethystea* Thuill. Pugsley (*J. Bot.* 1926 p.18) cast doubt on this, but C.E. Salmon reported that Beck had confirmed plants from E. Kent as *O. amethystea* Thuill., though the corolla was less bent and the bases of the filaments more hairy than in the type (*J. Bot.* 1927, p.117). Pugsley has since erected the British plant into a separate species, as *O. maritima*.

**ACANTHACEAE****Acanthus** L.

443

† **A. mollis** L.

[Bear's-breech.

15.]

9) waste g[roun]d, St. Mildred's Bay, Westgate, 1950, LWW.

**LENTIBULARIACEAE****Pinguicula** L.

441

**P. vulgaris** L.

Butterwort

[15.]

Naturalised in the main valley bog at Hothfield Common, **MNE**.

12) Among *Sphagnum tenellum* and *rubellum* near the S. margin of the bog in 1943 (BEC Rep. 1943-44, p.745); it disappeared after the fire of 1948, but was refound by Dr. Scott who showed it to me on the side of a flooded bomb-crater nearby in 1954. [Marginal note: reported 1997.] Dr. Scott informed me that he knows it to have been intentionally introduced originally. Although the first locality did not appear entirely suitable (*P. vulgaris* is normally found in more base-rich habitats than acid *Sphagneta*) it appears to have successfully established itself in the more base-rich area where the bomb-crater is. It was formerly planted at Shooters Hill, Charlton, and Chislehurst, according to Merrett (*Pinax*, p.94) and Ray (*Synopsis*, ed 3, p.281).

**Utricularia** L.

442

**U. vulgaris** L.

Common Bladderwort.

15, 16.

10/51

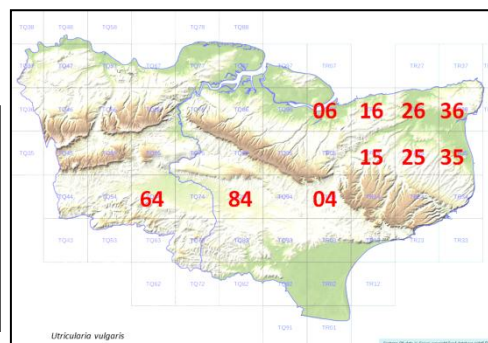
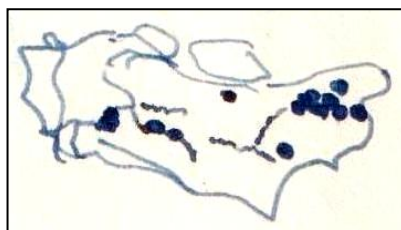
Native. Marsh and fen ditches, ponds, flooded gravel pits; generally, but locally frequent and even abundant in district 4); unlike *U. minor*, it is a species of base-rich habitats.

Very rare in Surrey (only near the Thames); rare but locally abundant in Sussex; v[ery] rare in Essex, uncommon in Pas de Calais (Cucq, 1962!).

1<sup>st</sup> record, 1816: Langton Green, E. Forster in *Fl. Tonbr.* p.4.

[1] Beckenham → Bromley, WWR.]

2) [Dikes, Whitstable, Mitchinson.] [Ditches,



<sup>835</sup> Plants in Kent thus named are currently treated as a subspecies, formerly a variety, of *O. minor* and the Sandwich plants are separated from the Folkestone-Dover ones.



Oare, Turner.] 06 Marsh ditch, n[ea]r Creek, N.E. of Faversham, 1949. Ditch by Stour opp[osite] Chislet Colliery REW 1951.

4) 26 Brooksend, Birchington, 1947, L.W.W. [Minster, Monkton, Sarre, Fl. Thanet.] 35 Ditches W. of Sandwich, 1946, **MNE**. [Ham Ponds CPSK.] 35 Worth Minnis, 1947, plentiful **MNE**; 1956-1960. [Deal Dunes, C.P.S.K.] 25 Marsh dikes E of Little Britain, Wingham, CPSK; 1946! **MNE**; 1956-1960! 35 Hacklinge, CPSK; F. Hyland; 1954! [Sholden, CPSK.] Marshes NE of Wickhambreaux, 1948, LWW. 26 Preston Marshes, E.S.M.; abundant, 1947-1962! **MNE**. Plucks Gutter 1960, Mrs KDR & Miss DACL. 26 Marshes, Stodmarsh; Grove Ferry, F.J.H.; 1947; REW 1950; 1962 abund[ant]! In flower **MNE**. 15 Fordwich marshes, CPSK; 1950 + REW!; 1956! **MNE**. Sturry Marshes, 1950, LWW. 36 Ditches, Ash Level, 1956.

Sandwich, Wingham, Fordwich

Ash Level, Stodmarsh, Sturry, Faversham,

[9] The Brooks, Margate, FGEK.] [Westgate, 1905, WH Day **MNE**.]

11) 64 Pond W. of railway, E of Hale Street, 1948. Brickyard Pond, Leigh, 1943, HV Wood. 64 Pond and Gravel pits by Medway E. of E Peckham, 1952; 54 **MNE**. 84 R[iver] Beult, S. of Headcorn Church, 1962, **MNE**. S.W. of Brandbridges, 1956, C.A.S. 84 Pond at Leighbridge, Headcorn, 1949; 1961 **MNE**. [N[ea]r Maidstone, H. Lamb.] Paddock Wood, F.J.H.

Mersham, Headcorn, E Peckham

12) 04 Lake, Mersham-le-Hatch, 1949, **MNE**, 1961. 15 Vauxhall Lakes, 1954 E.S.; 1958, H.M.W.

[13] Langton Green; Bidborough, E.F. in Fl. Tonbr.]

[15] Ditches on Romney Marsh, FGEK.]

[**U. australis** R. Br.<sup>836</sup> [Bladderwort.] 15.

Native. Ditches and ponds; extremely rare and not recently observed.

This species is only certainly distinguishable from *U. vulgaris* when in flower; herbarium specimens, unless the cotollas have been very carefully pressed, are difficult to determine. The lower lip of the corolla in *U. [australis]* is flat and horizontal, not as in *vulgaris*. Very rare in Surrey, rare in Sussex, very rare in Essex; recently found in Pas de Calais at Cucq fen, n[ea]r Le Touquet, Géhu (1962!).

1<sup>st</sup> record, 1876: Faversham, F.M. Webb in J. Bot. p.142.

2) Dike n[ea]r Shipwrights' Arms, Ham Marshes, Faversham, 1875, F.M. Webb.

4) Dikes, Ham Ponds, F.J.H., Fl. K.

11) Pond by railway, Headcorn, F.J.H., Fl.K.]

[**U. minor** L. Lesser Bladderwort. [15.]

Native. Peaty dikes, rivulets and pools in bogs, usually though not always in base-poor habitats: extremely rare and not necessarily observed.

Rare in Surrey, though still locally abundant in a few bogs (e.g. Thursley Common! SW of Pirbright); very rare in Sussex (Amberley, 1962); not recorded for Essex; very rare in the Pas de Calais (Cucq! (1962) Géhu, Philere).

1<sup>st</sup> record, 1839: Ham Ponds, F.G.E.K., p.75.

4) The Brooks, Ham Ponds, FGEK; F.J.H. in Fl. K., not refound. Reported at Grove Ferry by Miss Cloke.

15) Marsh dikes by towing path, near Eldergate (Aldergate) n[ea]r Aldington, FGEK. Reported n[ea]r Burmarsh, B. Nash, 197-.]

## CAMPANULACEAE

**Campanula** L.

‡ **C. patula** L.<sup>837</sup> [Spreading Bellflower.]

[‡ **C. rapunculus** L. [Rampion Bellflower. 16.]

Denizen or naturalised alien, now extinct near Bexley.

1) Wood at Bexley, 1848, Joseph B. French, Hb. F.J.H. SE of Old Bexley, 1860; 1970, Hb. Lamb, **MNE**.

10) Naturalised n[ea]r Lullingstone Castle, teste K.E.B.]

‡ **C. persicifolia** L. [Peach-leaved Bellflower. 15, 16.]

Alien, naturalised in a few places.

13) 53 R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], CAS. 53 Grassy banks, Bishopsdown, T[unbridge] Wells, 1950, K.E.B. 53 In long grass, St Pauls ch[urch] y[ar]d, Rusthall, 1950, KEB.

<sup>836</sup> In the manuscript given as *U. neglecta* Lehm.

<sup>837</sup> Listed, but no account provided in the manuscript.



16) 13 Garden escape, R[ai][wa]y track, Saltwood, 1958, LJM.

**C. medium** L. Canterbury Bell. 15, 16.

Alien. Naturalised on Railway cuttings on chalk and ragstone; now locally frequent.

5) Railway cuttings, Knockholt Station. E of Swanley Junction, 1948.

6) Railway cuttings, N. of Otford; N. of Shoreham; S. of Eynsford, 1948. Cutting of R[ai][wa]y, Meopham, DPY.

8) R[ai][wa]y cuttings, Bishopsbourne; Aylesham; Snowdown, 1942: Adisham, 1948. Sibertswold, DPY.

11) R[ai][wa]y cutting on ragstone, E. of Maidstone E. Station.

**C. alliariifolia** [Willd.] [Cornish Bellflower. 15.]

8) bank by Grammar School, Elms Vale, Dover, 1961, Mrs K.D.R.

**C. glomerata** L. Clustered Bellflower. [15], 16 2/51

Native. Chalk grassland, in both *Festucetum* and *Brometum erecti*; rare; locally common west of the Medway gap from Cuxton to Ryarsh and Luddesdown; formerly in scattered localities thence westwards to Dartford and the Surrey border; absent east of the Medway gap. The distribution of this plant in Kent is very strange; it is widespread and general on the chalk in Surrey and Sussex. Very rare in Essex, and nearly confined to the N.W. of the county on chalk and on boulder clay. Very rare in Pas de Calais. 1<sup>st</sup> record, -

5) [Westerham, L.N.H.S.] [Downe, W.H.G.] Down near Norheads, Biggin Hill, 1935, CE Britton, Hb. ECW. [Grassy bank below Farningham Wood, St.J.M.] [Morants Court Hill, Jenner, *Fl. Tun. Wells.*] [Greenhithe, 1861, Hb. Lamb **MNE.**]

6) Ryarsh Downs, D.McC., 1946; 1881, Hb Lamb. Birling Downs, by chalk pit, 1849 **MNE**; W.M.R.; 1936, J.R.W.; 1946! Downs S. of Great Park Wood, Snodland; Mount Ephraim, Snodland Downs, 1950 **MNE**. Downs above Black Boy Inn, Upper Halling, 1945-50, **MNE**. Upper Halling Downs, AHWD & ESM; abundant, 1943-1958 **MNE**. Halling Warren, PCH. White pit, Halling, 1958 **MNE**. 76 Cuxton Church yard, J.B.M. (1948!). Railway bank, L[owe]r Bush, Cuxton, A.H.W.D.; P.R.B., RGW. North Wood Halling 693656, 1946 DMCC. North Wood Cuxton 695680, 1946 DMCC. Down ½m. S. of Luddesdown Church, 1950, **MNE**. [Reported formerly at Greenhithe, Dartford, Darenth, Chelsfield, Northfleet, Gravesend, Cobham, W. of Wrotham, and Trottiscliffe.] [Reported, in error, for Ramsgate (Fl. Thanet) and at Dover.]

[11) Otham Lane, **MNE.**]

‡ **C. latifolia** L. Throatwort, Giant Bellflower. [16.]

Almost certainly an alien in Kent; its range as a native species in Britain appears to end north of the Thames; apparently native in Herts.

1) Keston Church, A.G. Davis, 1916 **MNE**.

6) Horn's Cross chalk pit, 567742, 1962, H.M.P.

13) Redleaf, N. of Penshurst, 1949 **MNE**; probably planted here.

**C. trachelium** L. 15, 16 Nettle-leaved Bellflower.

Native. Dry woodlands, hedgebanks, wood-borders, and scrub, common on the chalk in districts 5)-8); locally frequent on the ragstone in 10), 11), 12) and 16); rather rarely on Thanet Sand (which is calcareous) in 1), 6A), and 3); absent east of Adisham, Barfreston and Dover on E. Kent chalk.

Common on chalk in Surrey and in West Sussex, very rare in East Sussex east of Glynde; occurs also on the calcareous Bargate Beds in West Surrey and West Sussex; in Essex rare but locally frequent in woods on chalky Boulder Clay in the north of the county; common in Pas de Calais.

First record, 1597: Canterbury...Cobham, etc., Gerard, *Herbal*, p.365.

1) 55 Farningham Wood, 1957; (82!). 57 Joydens Wood. 37 Greenwich Park, 1903, RD Webster; 1960, G.M.B. 46 Elmstead Lane, Bickley, 1944, on Thanet Sand. 47 Castle Wood, Shooters Hill, 435763, 1958.

3) on Thanet Sand, at 15 Oldridge Wood; Fishpool Hill '51 REW. 15 Trenley Park Wood, 1951 REW. Bigberry Wood '51 REW. Wood, Elbridge, '51 REW.

5) 45 Waterworks Corner, B.2024, Westerham, 1960, RAC. Beechwood, Darwins Bank, Downe, 1955, JEL. Woods, Brasted Hill, 463574, CAS.

6) White Hill, E of Shoreham. Darenth Wood. S. edge of Great Wood, Cuxton, 55 **MNE**. Upper Halling Downs, by tracks etc. 1954 **MNE**. Snodland Downs. By Dode Church. Ryarsh Downs. Trottiscliffe Downs. Otford Mount PCH. Mounts Wood, The Thrift, Bean. Wrotham Downs. Kemsing Downs CAS. S edge of Cobham Park. Claylane Wood / Cobham / Cliffe, 1961, HAS. Copse 1 m NW of Cuxton in valley bottom.

6)A) Swanscombe Wood. Court Wood, Shorne, 1958. Northward Hill, High Halstow.

7) Burham Downs. Bluebell Hill. Boxley Warren. Bredhurst Hurst. Pigrims Way. Harrietsham, 1960, Mrs B. Dodds. Wichling Wood. Soakham Down. Hangers NW of Westwell. Hill Farm Wood, Stockbury, 1958 **MNE**. SW of Doddington 1950 REW. 95 Otterden, 1961, C. Turner. Hoath Wood, Ospringe 977587, 1949, JEL, DMCC. Putt Wood, '51 REW.

8) Wye. Crundale. Larkey Valley Wood 1953 **MNE**. Whitehill Wood, 1955 **MNE**. Folkestone Warren, 1952, Miss V Day. Copse N of Wolverton, Alkham, 1962. Wood S of Chilton 1955. Swanton Banks, locally abundant, 1955; 1960, B. Nash. Ileden Wood in cut coppice, v[ery] abundant 1960 **MNE**. Minnis Lane, River 57 Mrs KDR. Browns Wood, Temple Ewell. Wood W of Church Hougham, 274403, 1955, BSBI. Wollage Wood. Barfreston.

10) Riverhill. Rooks Hill.

11) NE valley of Mereworth Woods, SW of West Malling, 1954 **MNE**. Swanton Valley, Mereworth, 1943. Quarry Wood, W. Farleigh. Sutton Valence. High Road, Larkfield, 1944. Woods S. of Ditton. Holt Wood, 1944. Allington Wood. Roadside, N.W. of Teston at border of wood on ragstone loam, 1960.

12) Chylmington, 1947.

16) Lympne Park Wood.

var. **urticifolia** [(Dumort.) Klett & Richt.]

1) Farningham, St J.M., with the type (BEC Rep. 1926 p123).

### ‡ **C. rapunculoides** L.

[Creeping Bellflower.

15, 16.]

Alien, naturalised in a number of places.

1) Greenwich Park, 1903, AD Webster; G.M.B., 1960.

3) Milner Court, Canterbury, 1962, Miss M.E. Millward.

4) Edge of St. Georges links, Sandwich Bay, 1960, E.G.P.

5) On rubbish, Leaves Green, 1953, DPY.

6) Garden Weed, Stone House, 556744, 1955; Green Street Green freq[uent] 574712, 1948, HMP.

8) Roadside, Elvington Park, Elmstead; an escape, 1947-49 **MNE**.

9) Beech Plant[at]io]n by Lane W. of Bishopsbourne, 1962 B.J.B. Garden weed, freq[uent] in Margate, 1950, LWW.

10) Sidings Kemsing 1947 DMCC.

11) R[oa]d bank E. Malling Heath, 696552, 1962, H.M.P. Lane above Fairbourne Mill, 1960, Mrs. B Dodds.

13) M[oun]t Ephraim, Tun[bridge] Wells, as a garden weed, K.E.B.

### **C. rotundifolia** L.

Harebell.

15, 16.

33/51

Native. Dry grasslands, on chalk, and on sandy and gravelly soils, including fixed dunes; common locally on the chalk in 5) – 8) (very rare in 9)), less common but widespread elsewhere; absent from 15), very rare in the High Weald of 13) and 14), absent from the Weald Clay in 11) and 12), local in 1) and on the Folkestone Sands of 11) and 13). It is not found on strongly acid soils. Frequent on chalk and grassland in Surrey and Sussex, rare in the Weald in these counties. Rare in Essex; locally common in Pas de Calais.

1<sup>st</sup> record, -

1) 46 Hayes Common, 1915, AG Davis; 1945! PCH. 47 Bexley Ch[urch]Y[ar]d, PCH. 46 Keston Common. 57 Joydens Wood. 56 Farningham Wood. 57 Dartford Heath, 1954, G.M.B.

3) 05 Sandy grassland ½m. NW of Dunkirk, 1945. Canterbury golf course (Thanet S[and]) W. of Chequers Wood, Fordwich, 1950 REW.

4) 35 Fixed dunes, St George's Links, Sandwich Bay.

5) Down, Norheads, Biggin Hill, 1962. 55 Polhill.

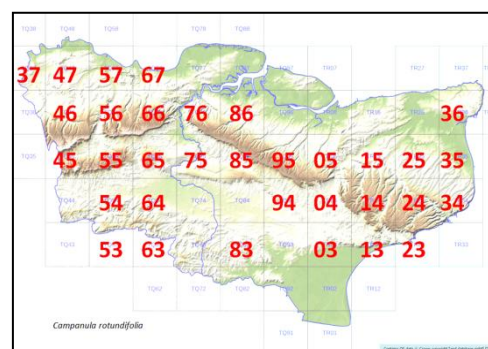
6) 57 R[oa]dside, Green St[ree]t Green to Lane End, PCH. 55 Kemsing. Downs W of Wrotham, 1947 **MNE**. 66 Trottiscliffe.

66 Halling Downs. 66 Halling Warren PCH. 56 Shoreham Rifle Range and Downs, PCH. 56 Preston Hill, PCH. 55 Otford Mount, PCH.

7) 95 Belmont Park, 1958, DMCC. 94 Burnt Ho[use], Charing, 967492, ES. N. of Westwell, 993487, ES. 94 "Suomi" Pit, Westwell, 985483, ES.

8) 04 Crown Downs, Wye. Mystole, on bank, Mrs B. Bank opp[osite] Gate Inn, Rhodes Minnis, Miss DACL, 1956. 24 Down, Golgotha, Sibertswold, 1958 **MNE**. 24 Woodville Downs, Temple Ewell, 1955, abundant **MNE**.

34 Free Down, Ringwould, v[ery] abundant 1962 **MNE**, 34 S. Foreland 1958 **MNE**. 34 R[oa]d Banks, 330480



Sutton Downs, 1960, B. Nash. 34 Kingsdown Cliffs 1946 **MNE**. 34 Kingsdown golf course, 1954. Shakespears Cliff '57 KDR.

9) 36 Down, Kingsgate, N. Foreland, 1959.

10) 55 On Folkestone sand by railway S. of Otford. 55 R[ai][wa]y cutting, Sevenoaks Station, CAS.

11) Ightham. 65 Wrotham Heath. [E. Malling E. Bartlett 1882 **MNE**.] 85 Bank by E. end of By-pass, Hollingbourne, 1960, Mrs B Dodds.

12) 94 Hothfield Common, 966462, ES. 94 N. of Potters Corner by R[ai][wa]y 993453, ES. 04 The Warren, Ashford 002445, ES. 94 R[oa]d bank, Charing Heath, (F[olkestone] Sand) 1954 **MNE**.

13) 53 Tun[bridge] Wells common, 1950 KEB, l[ocally] a[bundant] 1957. 54 Southborough Common, 1950, KEB. 53 St Pauls Ch[urch] y[ar]d, Rusthall, 1950, KEB.

14) 63 Hogshole Lane; Free Heath; 83 Lamberhurst Down; Hook Green (43), 1940 JRW.

15) abs[ent].

16) 03; 13 old golf course, Hythe, 1958, LJM.

### **Legousia** Durande<sup>838</sup>

**L. hybrida** (L.) Delarbre<sup>839</sup> [Venus's-looking-glass.] 15, 16. 18/51

Colonist. Cornfields on chalk; occasional to locally frequent in 6), 7) and 8); becoming more frequent eastwards; not recently recorded for Thanet 9).

Local on the chalk in Surrey and Sussex.

[First record:] Gerard, 1597, Greenhithe.

5) [Grain, B.D.J.] 56 Farm track N. of Franks F[ar]m, Farningham, 552682, PCH.

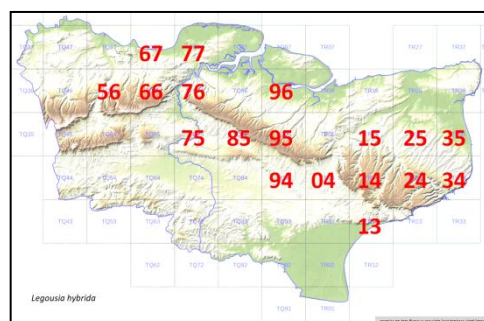
6) 66 Cornfields on chalk, below Great Wood Cuxton, 1943-55, **MNE**. 77 Cornfield W. of Mounts Road, S. of Greenhithe, 1945-54 **MNE**. 57 Cornfield W. of Downs Road, Northfleet Green, 528704, 1958 **MNE**. [Northfleet; Fl. Met.] [Gravesend, Fl Met.] [Dartford, Parkinson.] [E of Shoreham E de C.]

[Chalk, R.P.] 66 Cornfield S. of Pilgrim House, Trottisccliffe, 1958 **MNE**. 66 Upper Halling, 1905, A Golding **MNE**. 66 Cornfield, Buckland R[oa]d, Luddesdown, PCH.

7) 76 Cornfield above Wouldham, 1946. 76 Bluebell Hill, east of Lower Bell, 1945. 85 Cornfield NE of Hollingbourne 1947, **MNE**. 94 Cornfield N of Harrietsham, 1957. 75 Cornfield above Boxley, **MNE**, 1948. 95 Cornfield, 818575, Thurnham, 1948, DMCC. 96 cornfield NE of Ospringe Down, 1958 HMW.

8) 04 Cornfield on chalk Westwell, 985484, 1956, E.S. 15 cornfield S. of Milton, Chartham, 1960 **MNE**. 14 SW of S. Barham, 1956 **MNE**. 14 Stowting Hill, 1954 **MNE**. 24 Sibertswold, 1946, D.P.Y. 15 Bishopsbourne, 1946 (61/15). 25 Adisham, 1948. 25 Bonny Bush Hill, n[ea]r Kingston, 1961, Miss B. Nash (61/25) **MNE**. 35 Eastry 1961 Miss Nash. 35 Little Mongeham, 1961 (61/35) Miss Nash. 25 Barfreton, 1956, **MNE**. 25 E of Knowlton, 1960, (61/25) **MNE**. 34 Sutton Downs 330430, 1958, Miss B. Nash.

11) [Appeared in Garden of Boxtree House. East Malling, 1944.] Gravel pit E of Aylesford, 736588, 1951, E.S.



[‡ **L. speculum-veneris** (L.) Chaix<sup>840</sup> [Large Venus's-looking-glass. 16.]

6) foot of Hills, Trosley, 1906, Rev. C.W. Shepherd in Hb. F.J.H.]

### **Wahlenbergia** Schrad. ex Roth<sup>841</sup>

**W. hederacea** (L.) Rchb. Ivy-leaved Bellflower. 15,16

Native. Boggy streamsides on acid soils in light shade; damp acid rides on loamy sand; extremely rare, and now confined to three localities in the High Weald 13), and one on a sandy seam in the Weald Clay of 11), where its localities continue those of the Sussex High Weald. Formerly also in 1) in boggy ground about Keston and Bromley.

Widespread and locally abundant in the Sussex High Weald from St Leonards Forest to south of Tunbridge Wells; rare on the Lower Greensand of West Sussex; now very rare on the Lower Greensand in S.W Surrey; extinct in Essex (Epping Forest). Recorded at Condette in Pas de Calais but not observed recently in France NE of Normandy.

<sup>838</sup> In the manuscript given as *Specularia* L. (*Legousia* Durande) with *Legousia hybrida* (L.) Delarbre in synonymy.

<sup>839</sup> In the manuscript given as *Specularia hybrida* A.DC.

<sup>840</sup> In the manuscript given as *Specularia speculum* D.C.

<sup>841</sup> In the manuscript cited as Behrad.

1<sup>st</sup> record, 1793: near Bromley, Milne & Gordon, *Indigenous Botany*, p.342.

[1] Bogs, Caesars Camp (=Holwood Park, Keston); bogs, Hayes and Bromley Common, Mile & Gordon. Bog near Keston Cross, Irvine. Border of lower pond, Keston Heath, Hb. J.S.M. At Keston until about 1880, fide C. West, whose schoolmaster knew it there until then.]

10) [Seal Chart, E.S.M. in V.C.H.]

11) Ride on sandy soil, Birch Wood, Bethersden, 19623, KFC Excur[sion] **MNE**: apparently on an outcrop of Sandstone in the Weald Clay.

13) By small stream in young conifer plantation, ¼m. S.W. of Louisa Lake, Bedgebury Forest, F.R. & C.W. 1944 **MNE**; J.E.L., 1944; FR, 1946; spot has since become overgrown by brambles and conifers and plant is not now visible. Sissinghurst Park Wood, abundant in damp ride on sandy loam, 1948→1962 **MNE**, associated with *Radiola*, *Centunculus*, *Centaurium pulchellum*, *Mentha arvensis*, *Atrichum angustatum* and *Thelypteris oreopteris*. Orig[inally] ride, now gravelled – but further to S. 1979! Roundabout Park Wood, 1949, in damp ride; 198-, J. Pitt. Scotney Castle, in grassy glade, 1968→.

### Phyteuma L.

#### **P. orbiculare** L.<sup>842</sup>

Round-headed Rampion.

15, [16.]

5) Morants Court Hill, Jenner, *Fl. Tun. Wells*. "North Downs, near Sevenoaks," E. de C.

6) Downs above Ightham and towards Wrotham, "common on the chalk", Jenner, *Fl. Tun. Wells*.

8) Cliffs between Walmer and St. Margarets, F.J.H. Kingsdown, E.M. Plumptre 1874. Free Down. "E. Kent Cliffs" Miss Plumptre. c.1900-1910 – could not remember more in 1952.

### Jasione L.

#### **J. montana** L.

Sheeps' Bit.

15, 16

Native. Dry open turf on sandy or gravelly non-calcareous soils; rare and extremely local. On the shingle beaches of Hythe and Dungeness in 15) it is plentiful over wide areas on turf over shingle and on old fixed dunes; otherwise nearly confined to a few places on the Folkestone Sand in 10) and 11) in mid and west Kent, where it is increasingly rare; and to one railway bank on the Tertiary gravels in 1). Formerly much more common, it occurred widely near London in 1), and also in 3), 4), 13), and 14). Common locally on the Folkestone Sand in Surrey and Sussex; very rare in Essex; not common in the High Weald of Sussex. On fixed decalcified dunes in the Pas de Calais.

1) Railway cutting, W. of Bromley South Station, 1946 **MNE**. [Formerly reported at Bexley; Blackheath; Locks Bottom; Lee; Charlton; Hayes Common; E. of Plumstead Common; between Hurst and Bleadon Halt; and about Bromley.]

[3] Waysides, Dunkirk, E. Jacob, p.95.]

[4] Sandwich, C.P.S.K.]

10) [Sevenoaks, Hb. J.S.M.; Ightham Common, A.H.W.D. Stone Street, Roper.] 517561, Railway Bank on Folkestone Sand, by Shoreham Lane, Riverhead, P. Greenfield, 1958. =Riverhead Sandpit, CA Stace.

11) Railway cutting W. of Wrotham Heath, 1942-7 **MNE**. Sand pit by railway, east of Platt, 1942→1960 **MNE**. Platt brickfield, on sand, 1848-62, DMcC; Miss C. McDermott. Addington, WM Rogers (1946! on small heath east of village) **MNE**. [Leybourne, F.J.H.] =? Larkfield Heath, in sandpit, 1959 **MNE**. [Bearsted, P. Jacob, in F.G.E.K.] Roadside on sand, Parkgate, 1888, H. Lamb, **MNE**.

13) [Tunbridge Wells Common 1870 **MNE**; Rusthall Common, Forster, *Fl. Tonbr.* Redleaf, Cox. Southborough; Speldhurst, F.J.H.] Bank S. of Convalescent Home, Cranbrook Common A.W. Hudson; on sandy bank in Frizley Wood, E.C.W. & F.R., 1949! **MNE**.

14) [Hawkhurst, J.C. Melvill.]

15) Shingle Beach W. of Hythe, F.G.E.K.; 1947! 1958, BJB & RG. Dec[a]l[cified] fixed dunes, Lydd common, CPSK; 1955! Dungeness beach, W.R. Jeffrey; common, 1945-62! **MNE**. [Dymchurch, F.J.H.] The plant in 15) has been identified as var. *littoralis* Fries.

[16] Sandgate, G. Walton.] Folkestone, 1901-02, Lady Davy.

1<sup>st</sup> record, doubtful: that of Johnson (1629) quoted in *Fl. Kent* probably refers to *Scabiosa columbaria*. The earliest may be 1763: Bexley, Martyn, *Pl. Cantabrigienses*, p.51.

### Lobelia L.

#### **L. urens** L.

Acrid Lobelia.

[15], [16.]

Native? Sandy woods, very rare.

<sup>842</sup> Given in the manuscript as *P. tenerum* R. Schulz.

VC.15

**12)** In a chestnut wood near Ashford (Kent), Rev. J. Dix, reported by W. Thomson in *Phytol.* III, p.1051, and in Syme, *Eng. Bot.* VI, p.3; apparently only one plant was observed, and there is no later record here.

VC.16

**13)** (now in Sussex.) Flimwell, Mrs. E.E. Johnson, 1922: recorded in *Journ. Bot.* 1925, p.26; East Sussex, E.J. Bedford, *fide* A.J. Wilmott. This well-known locality, though now in Sussex, is actually in V.C. 16, teste J.E. Dandy.

The species is abundant in damp sandy rides in heathy woodland in some seasons, scarce in others. An essentially western species.

The records quoted are the only ones west of Hampshire in England; it occurs at Hinton Admiral near Christchurch in a locality very like the Flimwell one, in damp sandy ground and on paths in open heathy woodland. Not recorded for N. France.

## RUBIACEAE

**Sherardia** L.

**S. arvensis** L.

Field Madder.

15,16

Native. Rough fields and arable land on chalk, very common; occasional in arable and waste land elsewhere.

Common in suitable places in the adjoining counties and in N. France.

1<sup>st</sup> record, 1629: "Rubia sil: purpureis parvis floribus, forte stellaria Lugd.", Gravesend to Rochester, Johnson, *Iter*, p.2. Fl Kent gives Johnson's 1632 record as the first for Kent.

**1)** West Wickham, 1915, A.D. Davis, **MNE**.

**2)** Higham, by canal. 87 Waste land, Oil Refinery, Isle of Grain, Mrs AG Side, 1958 **MNE**.

**3)** Oldridge Wood. 26 Weed, Murtons F[ar]m, Graveney, 1956 R Theobald. R[oa]dside, Upstreet, Miss M.E.M.

**5)** Old chalk pit, Farningham R[oa]d Sta[tion] PCH. Darwins Bank, Downe, 1955, JEL. 36 cornfields n[ea]r kennels, 3961, NW of Highams Hill 1958 PCH.

**6)** Field below Downs above Trottiscliffe PCH. Ryarsh Downs. Halling Warren PCH. Cobham Warren, PCH; FR. Cornfields E of G[rea]t Wood, Cuxton 43-60 **MNE**. Below Wingate Wood 43-48 **MNE**. Playing field, Stone House, 558743, 1961, HMP. Downs E of Shoreham PCH. Preston Hill, PCH.

**7)** Charing Hill, 1961, C. Turner.

**8)** Stowting Hill '54 **MNE**. cornfield opp[osite] Iffin Wood 1958, Miss DACL. S. of Milton, Chartham 1960 **MNE**. 25 Arable, Fredville, D.McC. Adder Down, T[emple] Ewell Mrs KDR.

**9)** cornfield 1m NE of Monkton, 1958 **MNE**.

**10)** Garden of Haresfield, Bessels Green, 1959, F.S.E.F.

**11)** Fairbourne Lane, Harrietsham, '60. Mrs B Dodds. Ditton S. Quarry 715566. East Malling by Railway.

**13)** waste ground n[ea]r Combwell Wood, 1908, JS **TLS**. Tun[bridge] Wells Common opp[osite] "Swan" 1958 KEB.

**14)** R[ai]l[wa]y Sta[tion], Tenterden, 1959, E.S.

**15)** Dungeness, 1957, J. Hubbard. Shingle W. of Hythe, 1948, Mrs B Welch.

**Phuopsis** (Griseb.) Hook f.

**P. stylosa** (Trin.) [Benth. & Hook. ex] B.D. Jacks. [Causacian Crosswort. 15, 16.]

**6)** n[ea]r Tollgate by A2 S. of Gravesend, Mrs. Denton, 6.1958 **MNE** per K.E.B.

**7)** Roadbank, Lower Ensden, Chilham, large patch, 1945 DHK; 1954, Mrs E. Brickenden **MNE**.

**Asperula** L.

**A. cynanchia** L.

Squinancy-Wort.

15, 16.

Native. Old chalk grassland, especially in short *Festucetum ovinae*, very constant and of high fidelity to this association in Kent. It also occurs on the chalk cliffs, and on chalk cuttings. Not found off the chalk. Common on the Chalk of Surrey and Sussex, very rare in Essex; common in Pas de Calais.

1<sup>st</sup> record, 1632: Faversham to Gravesend, Johnson, *Description*, p.38.

[Greenhithe, 1861, Herb. **MNE**.]

**5)** Darwin's Bank, SE of Downe. Downs above Polhill Tunnel. Downs W. of Shoreham 1945 **MNE**. Chevening Park, N.E. coombe 1951 **MNE**. [Dartford to Darenth, JB Syme, 1886, Hb. F.B.H. **BM**.]

**6)** Magpie Bottom PCH; FR. E of Otford 548596 HMP. White Hill, Shoreham, 1956 **MNE**. Kemsing Downs, PCH, FR. Birling Downs. Halling Downs. Halling Warren. Downs below Vigo, E. of Wrotham. By A20, 606595, Wrotham Hill, 1947 **MNE**. N[ea]r Wrotham, 1774, Hb Banks **BM**.



7) Wouldham Downs. Burham Downs, Scarborough spur; Church spur. W. of Bluebell Hill. Boarley Warren. Detling Downs. Thurnham Castle '61. Hollingbourne Hill, 62. Queen Down Warren 1962. Down above Magpie Farm, Bredhurst, 1962. West border of Park Wood, Chilham. Chalk pits N. of Charing. Chalk pit "Suomi", Westwell. Pilgrims Way W. of Westwell.

8) Broad Downs, Brook **MNE**. Wye Crown Downs. Hastingleigh. Kingston, 1946 **MNE**. Chartham Downs 1954 **MNE**. R[oa]d SE of Iffin Wood. Postling Downs. Adderdown, T[emple] Ewell, Mrs KDR. Dover East cliff 1955 **MNE**. Langdon Bay. S. Foreland to St. Margaret's Bay. Downs S. of Kingsdown. Hawkshill Downs, SW of Walmer. The Lince, Ringwould, 1954 **MNE**. 1<sup>st</sup> spur of Down N.W. of Peen[e], 1948, Mrs B Welch. Downs W. of Woodville, Temple Ewell, 1952-60 **MNE**.

9) Chalk g[ras]l[an]d on cliff top, Kingsgate, 1959 **MNE**.

### **Galium L.**

**G. odoratum** (L.) Scop.<sup>843</sup> Sweet Woodruff. 15, 16.

Native. Dry woodlands and shaded hedgebanks, usually on base rich soils; common in the chalk districts 5)-8), frequent on the Greensand and in the High Weald, rare elsewhere, and absent from the Marsh districts and the Weald Clay. A characteristic species of beechwoods on base-rich soils. Frequent on chalk and sandy soils in Surrey and Sussex, v[ery] local in Essex, frequent in the Pas de Calais.

1<sup>st</sup> record, 1763: Charlton Wood, Martyn, *Pl. Cant.*, p.52.

1) (Ashley Wood 1866, H. Trimen, **BM**.) Farningham Wood, PCH; 82! Joydens Wood, 1952, TH Angel.

2) Clay Hill Wood, N. of Dunkirk, 1959, Mrs. Brickenden. 16 NE corner of Church Wood '53 REW. Mintey's Wood, Blean, 1950, REW. 16 SW c[or]n[e]r, Minching Wood, Blean, 1957. 15 Homestall Wood, N. of Upper Harbledown '53 REW.

5) Jewells Wood, 1916 AG Davis **MNE**; 1945! Woods N.W. of Shoreham (Chelsfield R[oa]d) 1945. Cuckoo Wood, Downe, PCH. Wood W. of Shoreham PCH. Beechwood, Darwins Bank, Downe.

6) Lords Wood, Darenth PCH. Mounts Wood PCH. Vigo Hill Beechwoods. Swanscombe Wood, R.P. **BM**. Darenth Wood, PCH. Beech Wood, White Hill, Shoreham. Beech Wood, Otford Mount. Dunstall Woods, PCH. Hangers E of Wrotham 1951 **MNE**. Wingate Wood, Halling **MNE**, Merralls Shaw.

7) Boxley Warren. Westfield Wood, on c[lay] w[ith] f[lints]. Bredhurst Hurst. Squirrels Wood, Stockbury 43 **MNE**. Trundle Wood, Milsted, 1956 **MNE**. Copse at Whitehill, Ospringle 1945 **MNE**. Stalisfield. Woods, Aylesford Common, on c[lay] w[ith] f[lints] 1955 **MNE**. L[owe]r Cox Street Detling 1950 **MNE**. Wigmore. Lidsing. Wood above Queen Down Warren. Hill Farm Wood, Stockbury, on chalk 1960. R[oa]d bank 031554 Badlemere Woods, 1959, C Turner Woods NW of "Suomi", Westwell, ES. Wood N. of Beltring, ES. Wood S. of Park Wood, ES. N end Park Wood, ES. Dean Court, Chilham, ES.

8) Coombe Wood, E. of Wye. Top of Fancombe Wood on c[lay] w[ith] f[lints]. Denge Wood, E of Chilham 1951 **MNE**. N edge of Iffin Wood, 1958, D.A.C.L. Stilton Wood, Lyminge, 1956 **MNE**. Lords Wood, 260440, P.W. Wilberforce, 1958. Lynsore Bottom. Covert Wood. Gorsley Wood.

10) Scords Wood, on ragstone. Rooks Hill.

11) Ryarsh Wood. Horish Wood. Snarkhurst Wood. Elmstone Wood.

13) Wood bank of lane S. of Kippings Cross 1940 JRW.

**G. uliginosum** L. Fen Bedstraw. 15, 16.

Native. Fens, marshes, and meadows, on peat or alluvium, always on base-rich, usually on calcareous, substrata; rare as a whole, and only locally common; absent from the chalk and from nearly all of the Weald, frequent locally in Surrey, in Sussex, rare in Essex, local in Pas de Calais.

1<sup>st</sup> record, 1724: Chislehurst, J. Sherard, Ray, *Synopsis*, ed.3, p.225.

1) 46 Marsh, Ravensbourne Estate, Keston, 1955 **MNE**.

2) 76 Holborough Marshes, fen-meadow, 1946. 76 S. Snodland Marshes, 1946.

4) 25 Wingham (Little Britton Marshes; 25 below Great Wenderton Farm) 1945-60, **MNE**. 25, ½m. N of Wingham 1956 **MNE**. 35 Ham Fen, 1945-60 **MNE**. 35 Hacklinge Marshes, 1945-50. 35 Worth Minnis, 1946-60. 26 Preston Marshes, 1947.

10) 45, 1m W. of Brasted (Meadows by R[iver] Darent) 1945. 56 Meadow N. of Shoreham 1954 **MNE**. 56 Meadow S. of Lullingstone 1956 **MNE**. 55 Meadows, St. Johns, Sevenoaks, 1950. 57 St John's Jerusalem, Sutton, PCH.

<sup>843</sup> In the manuscript given as *Asperula odorata* L.

**11)** 65 Meadows SW of Mereworth, 1944; 65 by Leybourne Castle Lakes, 1944; 1960 Mrs B Dodds. 84 E. of Headcorn, 1947, DMcC. In marsh N of R[ai][wa]y 863438. 84 Ditch SE of Hamden, Smarden 893406, 1949, DMcC.

**12)** 94 Meadow at Westwell on Gault, 1948. 04 Cuckoldscoomb fen-meadow, Brook, 1954.

**13)** 73 Tuckers Pond, Angley Wood, Cranbrook, 1955.

**G. palustre** L. ssp. **palustre** Marsh Bedstraw. 15, 16.

Native, marshes, streamsides, fens, wet meadows and damp places in woods on non-calcareous soils: abundant throughout, except on the chalk and in dry soils. Common in Surrey, Sussex and Essex and in N. France. 2n=24.

1<sup>st</sup> record, 1632: Margate to Sandwich, Johnson, Descriptio, p.24.

**1)** Keston Bog. Chislehurst Common Ponds. Holwood Park Lakes. North Cray Marshes.

**2)** Ditch below Barnes Cray '44. Northfleet Brooks. Meadows S. of Cliffe Station. Cooling Marshes. Blacketts, Tonge, 1958, DMcC. Snodland Marshes. Meadows N. of Lunsford Lane 44.

**3)** Pond NE of Dunkirk.

**4)** Hacklinge. Ham Ponds. Worth Minnis 1950 **MNE**. Fordwich Marshes. Stodmarsh, 1949 **MNE**. Cottingham Court, Sholden Marshes RGW, 1950. Dune Slacks Sandwich Bay.

**6)** Clay pits, Swanscombe Wood, 1946.

**10)** Darenth Meadows 1944. Riverhead 1948. 1m W of Brasted in Meadows 1945. Westerham Wood 82.

**11)** Mereworth. Leybourne Marshes '44. Pond by Horish Wood, '44. Marsh W of Sandling '44. Teston Meadows. Tonbridge Marshes. Pond E of Hale St[reet]. E Peckham 683493, 1954; 1957 CAS. Moatenden, Headcorn, 44. Pond ¼m SE of Smarden Ch[urch], 1962. 863438 Pond 1½ m E of Headcorn N of R[ai][wa]y 1949 DMcC.

**12)** Hothfield bogs, flush areas, **MNE**. Willesborough Lees bog.

**13)** below Moorden F[ar]m, Penshurst. Hawkenbury Bog 1954, A Graseman. Gill SW of Stone Cross, Ashurst, CAS. T[unbridge] W[ells] Brighton Lake, CAS. Ditch, 684365, S. of Lamberhurst Ch[urch], CAS. Pond, Broadwater Lane, T[unbridge] W[ells], CAS. Bedgebury Pinetum. Combwell Wood, 1979.

**15)** Dungeness, n[ea]r old School; Hoppen Pits 1953 **MNE**. Marsh by Boulderwall, on shingle, 1956 **MNE**. (agg. certainly at Brenzett, Snargate, Shirley Moor.)

ssp. **elongatum** (C. Presl) Arcang.<sup>844</sup> 15, 16 2n=96

Native. Marshes and fens. Frequent in suitable places.

1<sup>st</sup> record, 1899: Fl. Kent.

**4)** Ham Fen. Preston Marshes, E.S.M.

**11)** R[iver] Beult, S. of Ch[urch], Headcorn, 1962, 831440. Pond W. of Leighbridge, Headcorn, 1962, 813454. Pond E of Headcorn, 1962, 849437.

**12)** Willesborough. Ashford, F.G. Baker. Chartham, J.S.M. (Hb. JSM).

var. **witheringii**

**1)** Chislehurst Common, 1912, A.J.W. 405, **BM**.

**G. verum** L. Ladies Bedstraw (originally Our Lady's Bedstraw). 15, 16.

Native. Dry grasslands on chalk and sand, grass-heaths, fixed dunes; abundant in E. and N.E. Kent, much less common westward, and rare in West Kent, south of the chalk downs.

Frequent to common in Surrery and Sussex, occasional to frequent in Essex, frequent in Pas de Calais.

1<sup>st</sup> record, 1629: Dartford, Johnson, Iter, p.9.

**1)** 46 Hayes Common. 56 Farningham Wood. Shooters Hill Common '54, GMB. 46 Keston Common 1946 →. Greenwich Park, 1903, AD Webster; 1960, G.M.B. 57 Dartford Heath PCH. 47 Chislehurst Common.

**2)** 67 Shorne Marshes in dry turf, l[ocally] a[bundant], 1961, H.A.S. 06 Damp grassland on clay, Harty, 1955 **MNE**. Higham Church Street, 1944. Uralite Works, Shorne, 1938, JBM. 57 Pasture on gravel, Dartford Marshes '62, 541761. 87 Grain, 1956, PCH.

**3)** 26 Pasture on gravel, S. of Highstead, Hoath 1962. 15 Canterbury, Old Park Golf Course. 16 Tankerton Cliffs. 16 Swalecliffe. 16 Golf course, Whitstable 1957 H.M.W.

**4)** 35 abundant on the dunes, N. of Deal; St Georges; Princes Links; Shellness, **MNE**.

<sup>844</sup> In the manuscript cited as (C. Presl) Lange.

- 5) 46 Down NW of Saltbox 1955 **MNE**. 46 Jewells Wood, 1915, AG Davis **MNE**; 1945! 56 Chelsfield Church yard. 46 Leaves Green. Down by Newyears Wood, Knockholt. Halstead PCH.
- 6)A) 77 Lodge Hill, S. of Cooling. 77 Northward Hill, High Halstow. 57 Gravelly turf, Green Street Green. 67 Old gravel pit at Chalk. 578 Darenth Wood. 66 Cobham Park Golf Course 693693, Mrs Woods.
- 7) turf at foot of Queendown Warren, 1955, PCH. 95 Down 1m. E of Lenham, 1956 **MNE**. 95 Down by Club Ho[use] Belmont Park, 1959, **MNE**.
- 8) 04 Bank below Pilgrims Way, Brook, 1945 **MNE**. 24 Adder Down, Temple Ewell, Mrs K.D.R. 23 Cliffs, Lydden Spout, 1955 **MNE**.
- 9) 26 Minnis Bay, Miss M.E.M.
- 11) 55 Hoads Common, Shipbourne. 85 By A20, Hollingbourne. Medway S. of Yalding. 65 Roydon Hall Park E Peckham, 1943. 64 Lane E of Hale Street, E. Peckham 1954 **MNE**. By pond E of Hale Street, 1954!; 1957 CAS. Bearsted. (Barming H[ea]th 1881 **MNE**. E Farleigh 1885 **MNE**.)
- 12) 94 Hothfield Common. 04 Willesborough Lees.
- 13) 53 Lamberhurst Golf Course, 1939, JRW.
- 15) 02 Romney Warren, abundant.

**G. verum x mollugo** = **G. x pomeranicum** Retz.<sup>845</sup>

- 4) with the parents, on fixed dune grassland, St. George's and Prince's Links, Sandwich Bay, 1946-62 **MNE**; 1907, H. & JG **BM**.
- 8) Between Lyminge and Paddlesworth, 1894, ESM **BM**.

**G. mollugo** L. Hedge Bedstraw. 15, 16.

Native. Hedgebanks, scrub, grasslands, fixed dunes, on all except wet or acid soils; common.

Common in all adjacent counties and in the N of France,

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

- 1) Hayes Common. Joydens Wood. Crofton Heath PCH. R[oa]dside, Bexley to N Cray PCH. Shooters Hill, '54, GMB.
- 2) Woolwich Arsenal PCH. Sewer Bank, Plumstead, PCH. 87 R[oa]dside, Hoppers F[ar]m, St Mary Hoo, 1958, Mrs AG Side. Sheppey, AG Davis 1918 **MNE**.
- 3) Dunkirk. Tankerton Cliffs. Fishponds Wood. Trenley Park Wood.
- 4) Wingham. St Georges Links; Princes Links; Sandwich Bay. Bank N. of Stuart, St Nicholas, 1962, 271690.
- 5) Chalk W. of Eynsford PCH. Pilgrims Way, Polhill, PCH. Chevening Park PCH. Pilots Wood PCH. Darwins Bank Downe '62. 426577 Down W of South Street RAC. 36 Cross R[oa]ds W of Higham Hill 1958 PCH, 397612.
- 6) Mounts R[oa]d PCH; 1945, FR **MNE**. Rifle Range, Shoreham and Downs above, PCH. Preston Hill PCH. Romney St[reet] PCH. Greenhills Wood PCH. Lane S. of G[rea]t Crabbles Wood. Valley S. of Bush. Halling Warren, 1944; PCH. Wingate Wood, 1944.
- 7) Detling, Coombe NW of, 1944. Juliberry Downs, Chilham 1945 **MNE**. Ospringe Down HMW.
- 8) Pickersdean, Brook, '44.
- 9) Acol. Birchington. Minster. Cliffsend.
- 10) Brasted. Otford Village PCH. R[oa]dside, Eynsford PCH. Horton Kirby PCH.
- 11) Aylesford, 1958 EG Philp, **MNE**. Boxley, 1958, EG Philp **MNE**. Pendenden Heath '44. Leybourne Meadows '44. Roydon Hall, E. Peckham. Banks, Plaxtol, '44. Scrub on clay by Beult, N. of Buckmans Green Smarden, 889419, 1962. 863438 E. of Headcorn N of R[ai]l[wa]y 1949 DMcC.
- 13) Goudhurst.
- 15) Romney Warren. Shingle beaches at Hythe and Dungeness, abundant.

subsp. **erectum** Syme<sup>846</sup> Upright Hedge Bedstraw. 15, 16.

Native. Chalk grassland, occasional; rarely in other dry grasslands. Rare in the adjoining counties and in N. France.

1<sup>st</sup> record, 1835: Dover, Trevelynn in N.B.G., p.72.

- 4) Deal dunes, RGW.
- 5) Darwin's Bank, Downe, ch[alk] gr[ass]l[an]d, 1945, **MNE**; 1962. Polhill Downs, 1951 **MNE**. (Sundridge RAC.)
- 6) S. of Mounts Wood, 590732, Greenhithe, 1945 **MNE**; 1952, HMP. Chalk, gravel pits, 1946 **MNE**. Above L[owe]r Austin Lodge, S.E. of Eynsford, 1949 **MNE**. Field 566744 E of Cotton Lane, Stone, 1959, HMP. NW of

<sup>845</sup> Parents given in reverse order in manuscript, as *G. verum* followed *G. mollugo* in the species accounts.

<sup>846</sup> This was originally begun as a separate species account when known as *Galium erectum*, but was revised to the subspecies.

Trottiscliffe, on the Downs, 1945. Wrotham, Hb Banks **BM**. Kemsing Downs, c.1933 A. Beadell. Green Street Green, 1958, DMCC.

7) Burham Downs, 1947 **MNE**. Boarley Warren (by Rifle butts) 1945. Belmont Park, 1958, DMCC. Thurnham Castle downs 1945 **MNE**. Downs 1½m. E. of Thurnham, 1961 **MNE**.

8) Juliberry Downs, Chilham, 1945, D.H.K. & F.R.; 1955 E.S. **MNE**; 1959 **MNE**. Cuckoldscoomb, Brook, 1950 **MNE**. Paddlesworth, 1893, ESM **BM**. Gravel Castle, Barham, 1845. Marley Lane, Kingston, 1948 **MNE**. Downs W. of Shuttlesfield Farm, Lyminge, 1946 **MNE**. By Pitt Wood, Adisham, 1955, PC Hall **MNE**. Dover E. Cliff, C.P. Hurst, 1901 **MNE**. Langdon Bay, 1954 **MNE**. Denton, RGW. Coombe Vale, Dover, 1959 **MNE**. Downs E. of Etchinghill, 1959, **MNE**.

var. **Bakeri**

6) Greenhithe, Trottiscliffe.

8) Brook.

**G. pumilum** Murray [Slender Bedstraw.] 15, 16

Native. Chalk grassland; rare but widely distributed through the chalk districts, and locally frequent between Chilham and Dover. Very rare in Surrey and Sussex, unrecorded for Essex; locally common in chalk grassland in Pas de Calais and Somme in N. France.

1<sup>st</sup> record, [blank]

5) Downs N of Pilgrims House, Westerham, 1955 **MNE**.

6) Grassy scrubland on non-calcareous loam over chalk, N. of Romney Street, 1952 **MNE**.

7) Down (*Brometum*) above chalk pit, Magpie Farm, Bredhurst, F.S.E.Fawkes, F.R., etc., 1960 **MNE**.

8) [8 loc[atations] in 8)] Juliberry Downs, E. of Chilham, 1945, -D.H.K. & F.R. **MNE**. Below Downs Wood, Chilham, D.H.K., 1947. Downs above Cliffs, below Langdon Barracks, Dover, 1948-54 **MNE**. Downs above Cheriton, Folkestone, N.Y.S., E.M.-R., & V. S.S., 1935, K. Downs W of Coombe Farm, Dover, 1955, **MNE**. Parkgate Down W of Elham Park Wood, 1950-1960 **MNE**; 1992! Down in Covert Wood, Kingston, 1950, **MNE**. Woodville Downs, Temple Ewell, 1952-60 **MNE**; 1995 l[ocally] a[bundant]!

**G. saxatile** L. Heath Bedstraw. 15, 16.

Native., grasslands and heaths, ride and open areas in woodlands on the Tertiaries, the Greensand and in the High Weald, i.e. wherever acid soils occur in Kent. Common in the High Weald and on the Greensand in Surrey and Sussex; local in Essex, rare in Pas de Calais (acid soils very limited in extent).

1<sup>st</sup> record, 1777: Ospringe, Jacob, *Pl. Fav.*, p.70.

1) 36 W. Wickham Common, 397653, 1958 PCH. Hayes Common **MNE**. Keston Common. St Pauls Cray Common. Chislehurst Common 1946-58. Joydens Wood. Farningham Wood. Camden Park Golf Course. Dartford Heath, 54, GMB; '60! Kent Gate, 1915, AG Davis **MNE**.

3) Bysing Wood. Grassland N. of Dunkirk. Trenley Park Wood. Dunstead Wood. Bigberry Wood. Scotland Hills, Canterbury, RGW. Church Wood. Minching Wood. Chilham, Canterbury

4) Little Wenderton, Wingham, 1961, Miss B. Nash. Wingham

5) Plateau Wood W. of Timberden Bottom, 1946. Andrews Wood, S. of Badgers Mount PCH.

6)E) Darenth Wood. By A.2, N. of Cobham. Grass heath, Cobham Park, 1944. Shorne Windmill 1945. (Randall Wood, R.P. **BM**.)

7) King's Wood, Molash, 1947.

8) Whitehill Wood, PRB. West Wood, Stowting on Pliocene sand. Paddlesworth Wood. Grass Heath on Plateau drift, SW of Lydden, 1959 **MNE**.

10) Knole Park PCH; FR. Oldbury Hill, 1945 **MNE**.

11) Penenden Heath 1944. Grass heath W of Hollingbourne. Addington, 1938, JBM.

12) Birch Wood W. of Bethersden, on sandy bank 1962. Hothfield Common 43 **MNE**; 62. Gibbon's Brook. Ashford Warren, 44. Willesborough Lees '44. Brabourne Lees.

13) Friezley Bog. Angley Wood. Oaks Wood Cranbrook. Bedgebury pinetum. Bedgebury Forest. Ellis' Wood, Lamberhurst. Hook Green. Free Heath JRW. Brewers Wood. Chittenden Wood. Combwell Wood 1979. Sissinghurst Park Wood 1979. Tunbridge Wells Common. Rusthall Common.

14) The Brogues, Biddenden.

15) by old Lighthouse, Dungeness, 094168, 1960, HMP.

**G. aparine** L. Goosegrass, Cleavers. 15, 16

Native. Hedgebanks, rough fields, damp woodlands, waste ground, fens and meadows, arable land, abundant everywhere in Kent, and one of our commonest plants. Equally common all over S.E. England and in N. France.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.* p.7.

- 1) North Cray. Holwood. Abbey Wood PCH. High Wood, Crofton PCH. Farningham Wood 82. By R[iver], N. Cray PCH. N. Cray Wood PCH. Dartford Heath '54 GMB.
- 2) Sewer Bank, Plumstead PCH. Sheerness, Canal Dump, '57, OD. Scrapsgate 55. S Minster Marshes 55. Scrub S of Scrapsgate 55. Brambledown scrub 55, old r[ai][wa]y 55. Brambledown copse S. of F[ar]m 55. S of Leysdown 55. Shellness 55. Ash copse Warden 55.
- 3) Hernhill Village 55. Canterbury Golf Course 55. Old Park, C[anter]bury '55. Chequers Wood '55. 001651, 094647, E. of Seasalter Ch[urch] in cornfields on L[ondon] C[lay], 1958 HMW. Weed Murtons F[ar]m Graveney '56 R Theobald.
- 4) Sandwich Bay. N. of Deal.
- 5) Halstead PCH. Field W of Shoreham, PCH. 36 W of Highams Hill 1958 PCH. Darwins Bank, Beechwood, Downe '62. Leaves Green 1931, M Rathbone **BM**.
- 6) Darenth Wood PCH. Lords Wood, Darenth PCH. Mounts R[oa]d, Greenhithe 54 **MNE**. Swanscombe freq[uent] HAS. R[oa]dside Romney St[reet] PCH. Dunstall Woods PCH. Magpie Bottom PCH. Greenhills Wood PCH. R[oa]dbank, Foxenden Hill Meopham 62. Cornfield W of Wrotham Water 1958 **MNE**. Cornfield, Lads Farm, Snodland, 1960 **MNE**. Wingate Wood, Halling, PCH.
- 7) A2 R[oa]dside Hartlip Hill '55. Hartlip Village 55. Lane SW of Q[ueen] D[own] W[arren] 55. Queen Down Warren 55. Arable S. of Purple Hill, Bredhurst 1962. Copse S of Purple Hill, Bredhurst 55. Bredhurst Hurst, 55. Stockings Wood Detling 55. Top of Detling Hill 55. Ospringe Down HMW.
- 8) Cornfield S. of Milton, Chartham 1960 **MNE**. A2 SE of Canterbury 55. Bourne Park, Bridge 55. Copse by A2, Halfway Ho[use], 55. Kearsney R[oa]dside 55. Arable S of Barfreston DMCC.
- 9) 36 Copse SE of Durlock, Minster, 1959, Mrs AG Side.
- 10) Westerham Wood PCH; 82! Sevenoaks tip 1958 CAS. Darenth copse '44. S Darenth PCH. St Johns Jerusalem PCH.
- 11) Leybourne Marshes '44. Ightham 55. E end of Mote Park. Copse by Len Willington St[reet]. G[ra]v[e]l Pit E of Aylesford 55. R[oa]dside E of Forstal 55. Sandling Wood, 55. R[oa]dside N. of Hildenborough. '55. Moatenden, Headcorn, '44. 863438 1½ m E of Headcorn 1949 DMCC.
- 13) Stone Cross, Ashurst, CAS. Combwell Wood, 1979. Copse by Teise, Hoathly, Lamberhurst, '55. Tuckers Pond, Angley Wood, '44.

#### **G. spurium** L.

[False Cleavers.]

16.

Colonist or alien. Cultivated land; extremely rare.

- 11) Allotments, East Malling, 1945 **MNE** C. Watt (1946! **MNE**). The first record.

#### **G. tricornutum** Dandy (*G. tricorne* Stokes)

[Corn Cleavers.]

15, 16

Colonist. Cornfields and waste ground, mostly on chalk; formerly widely spread and rather frequent, but not reported for about 30 years and apparently nearly or quite extinct. Now very rare in the adjoining counties and in N. France.

1<sup>st</sup> record, 1778: Thanet, Hudson, ed. 2, p.68.

- 1) n[ea]r Eltham Palace (on walls) Winch, N.B.G. Lee to Eltham, Cooper, Fl. Met.
- 2) Cliff edge, E. of Sheerness, FJH. N[ea]r Faversham, F.J.H.
- 3) Herne Bay, Trimen. Coast E. of Whitstable; Fields N. of Canterbury, FJH. Sturry to Stodmarsh, F.J.H.
- 5) Swanley, Hb. F.J.H. 1883 **BM**.
- 6) S.E. of Dartford, in cornfields, W.W.R. Greenhithe; SE of Gravesend, JSM; 1853 JB Syme, Hb. FJH **BM**. Snodland; Luddesdown, F.M.W. Cobham Bury, AHWD; Cobham, 1837, NB Ward **BM**.
- 7) Rochester FMW. Above Aylesford, A.H.W.D. & E.S.M. Boxley, A.H.W.D. S. of Faversham, FJH. Field by Borstal Prison, 1875, FJH **BM**.
- 8) Wye, W.R.J. Paddlesworth; Lyminge, ESM. Folkestone, B.D.J. N[ea]r Canterbury, F.M.W. Adisham, FMW. S. of Ringwoud FJH. East Cliff, Dover, 1901, C.P. Hurst **MNE**.
- 9) Margate, Trimen. Dumpton Gap; Sarre, Fl. Thanet. Minster, Phytol. NS VI, 53. Thanet, Hudson. Broadstairs, Hb. Carroll **BM**.
- 11) Sutton Valence, Mrs. Petley.
- 12) E. of Brabourne Lees, F.G.E.K.
- 15) Newchurch, 1901-2, Lady Davy.



This species is one of several cornfield weeds which have decreased enormously under modern agricultural regimes, though in this case the precise reasons are not clear.

### **G. parisiense** L.

[Wall Bedstraw.]

15, 16

ssp. **anglicum** (Huds.) Clapham

Native. Old walls in North-West Kent, rare; as an alien on railway tracks, rare and scattered.

1<sup>st</sup> record, 1724: Eltham, J. Sherard, in Ray's *Synopsis*, ed. 3., p.225.

- 1) [Wall near Eltham Court, Sherard; 1863, Hb **MNE**; 1879, E de C., Hb. FJH, **BM**; 1894, AHWD.] Hall Place, Crayford, on old wall. [Wall in Bromley, Milne & Gordon.] [Crayford to Dartford, Cooper, *Fl. Met.*] Old wall, Wilmington 1890, AC Tagg.
- 2) Railway siding, Snodland, Miss Bacon, B.E.C. Rep **\***; 1935, Miss MS Campbell, **BM**; Rev. G.C.P. before 1947.
- 3) Disused R[ai][wa]y bank, Tyler Hill, 1952-3, A.W. Roberts **\***.
- 4) Railway Station, Sandwich! J.P.M.B.; 1946-56 **MNE** **\***.
- 5) Chelsfield churchyard 479643, on old wall A. Beadell, 1938 (Hb. C.E.B.); 1945 **MNE**; 1959, HMP.
- 6) [Cobham, Irvine, New London Flora.] Field between Greenwich and Dartford, Hb. S. Dale (1659-1739) **BM**.
- 8) Railway Station, Elham, 1956 **MNE** **\***. [Lydden Spout, CPSK.]
- 10) [Dartford Priory Walls, Pamplin in N.B.G.; Dartford 1858, J Powis in Hb FJH **BM**; Dartford, 1877, H. & J.G.] Old wall, Farningham Village, Hudson, 1778; 1938 JBM; C.W. 1943; 1958! **MNE**. Old wall, Lullingstone, 1954, D Kimmins; (1956!) **MNE**.
- 11) prope Wrotham, 1774, Hb. Banks **BM**.
- 12) Railway Station, Chilham **\***, D.H.K. 1945 (*G. spurium* L. var. *leiospermum* (Wall.) Hay det. JEL).

### **Cruciata** Mill.

#### **C. laevipes** Opiz<sup>847</sup>

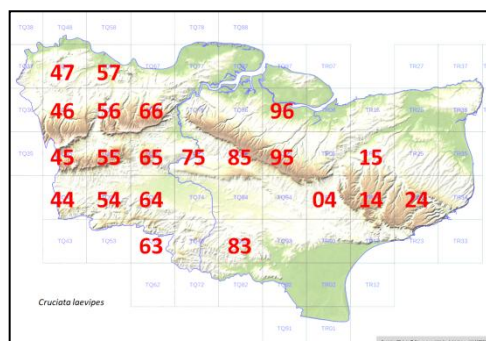
[Crosswort.]

15, 16.]

Native, grassland and scrub, roadverges and hedgebanks on calcareous and other base-rich soils: abundant on the chalk and ragstone, occasional on soils derived from other strata, as far east as Wye, Monks Horton[;] very rare in or absent from most of NE Kent.

1<sup>st</sup> record, 1597: Charlton, Gerard, *Herbal*, p.965.

- 1) 47 Abbey Wood, 1954, G.A. Matthews. Hayes Common, CW. W. Wickham, C.W.
- 5) Halstead, AA; FR; PCH. 46 Broom Wood Cudham, PCH. Down W of Shoreham, PCH. 56 Pilots Wood, PCH. 55 Chevening Park, PCH. 409584 Down NW of Lusted 1959 R.A.C. 36 W side Jewells Wood, Biggin Hill, 399609, 1958, PCH. 426577, 45 Down W. of South St[reet], Biggin Hill RAC.
- 6) 57 Lane End, Darenth, PCH. 57 Darenth Wood, PCH. 56 R[oa]dside, Romney St[reet], PCH. 56 Rifle Range and Downs NE of Shoreham, PCH. 56 Preston Hill, PCH. 55 Greenhills Wood, PCH. 55 Kemsing Downs. 65 Pilgrims Way, Wrotham PCH. 66 cornfield Buckland R[oa]d, Luddesdown PCH. 66 Trottiscliffe downs (scarp in g[ras]l[an]d and scrub) 61 HAS. 57 Stone, R.P., 1823 **BM**.
- 7) 75 Boarley Warren, 1961. 75 Coombe NW of Detling 1944. 85 Valley W. of Wormshill. 95 Downs ½m NE of Lenham, 1956 **MNE**. 96 Base of Ospringe Down, HMW.
- 8) 04 E of Wye. 04 Top of Broad Downs, Brook. 04 Hastingleigh Downs. 14 Stowting Downs. 14 Downs N. of Monks Horton. 14 Down, Shuttlesfield, E of Lyminge, 1951 **MNE**. 04 Crundale, 1939, Mrs J Nisbet. rare, Wootton, DACL. 24 Bank, Lower Eythorne, 1960, KDR. 24 Common at Denton 1960 Miss DACL. 24 Tappington Valley, 1960 Miss DACL. 15 E side Denge Woods, 1958, Mrs Brickenden. 15 Down by Whitehill Wood, RGW. Verge of Stone Street, 136403, 1958, Mrs K.D.R. Stafflands Wood, Sibertswold, KDR, 1957.
- 10) Horton Kirby PCH. Water Meadows, Darenth, PCH.
- 11) 65 Leybourne Meadows 1944. 64 Gravelly bank by Pond 683493, E of Hale Street, 1954; 1957 CAS. 54, 563482, R[ai][wa]y, Hildenborough, CAS. 54 Hartlake Bridge, JRW, 1943.
- 13) 63 trackside, Lamberhurst Grange, 1942, JRW; 1944! 54 Between Leigh and Bidborough, 1942, JRW.
- 14) 83 R[ai][wa]y bank, Tenterden Sta[tion], 1959, E.S.
- 16) R[ai][wa]y track, Saltwood, 1959, LJM.



<sup>847</sup> In the manuscript placed under *Galium* and given as *G. cruciata* (L.) Scop.

**Rubia L.****R. peregrina L.**

Wild Madder.

15.

Native. In scrub, with *Ligustrum* and *Rubi*, on chalk sea cliffs, very rare, but locally common between Folkestone Warren and Dover East Cliff. Unrecorded for Surrey or Essex, very rare in West Sussex on the chalk. Absent from France NE of Normandy.]

1<sup>st</sup> record, 1805: Langdon Bay, Bot. Guide.

8) E end of Folkestone Warren 1956-1962 **MNE**. Lydden Spout, Bot. Guide; 1945-60. Below Abbots Cliff 1947-62 **MNE**. Cliffs above Railway E. of Lydden Spout, 1945 **MNE**. Cliff E. of Dover Castle below Langdon Barracks, 1950-55 **MNE**. [Plateau above Shakespeares cliff, a[abundant], 1863, JSM.] [Langdon Bay: n[ea]r Langdon church, Bot. guide; Caesars Camp, Folkestone, G. Walton.]

[15] Between Dymchurch and Hythe, F.J.H.] Hedge of R[oyal] M[ilitary] C[anal], W. of Hythe, 1903, SE Chandler.

The Kent localities are the most north-easterly up the channel, and represent the limit of its European range in this direction. The chalk cliffs of Cap Blanc Nez face north and are much eroded, so that no suitably sheltered S. facing habitats exist in Pas de Calais for this Mediterranean- and SW European species.

**CAPRIFOLIACEAE****Sambucus L.****‡ S. racemosa L.**<sup>848</sup>

[Red-berried Elder.]

**S. nigra L.**

[Elder.]

15, 16.

Native. Woodlands, especially on base rich soils; hedges, and scrub; abundant, particularly on chalk and ragstone. It often occurs with nettles on soils rich in nitrogen from organic sources. Common throughout S.E. England and N. France.

1<sup>st</sup> record, 1679: n[ea]r Maidstone, Plot, *Nat. Hist. Staffordshire*, p.206.

1) Abbey Wood PCH. Hayes Common PCH. Farningham Wood PCH; 82 [!]. High Wood, Crofton, PCH. Holwood Park PCH. R[oa]dside, Bexley Village, PCH. N. Cray Wood PCH. Shooters Hill Woods '54 GMB. Dartford Heath 54 GMB.

2) Woolwich Arsenal PCH. Sewer Bank, Plumstead PCH.

5) 36 Hedge W of Highams Hill 397611, PCH. Darwins Balk, Downe, JEL. 56 Chalk W. of Eynsford PCH. 55 Pilgrims Way Polhill PCH. 56 Pilots Wood PCH. 45 Pilgrims Way Chevening PCH.

6) 57 copse on ch[al]k, SE of Dartford. 57 The Thrift, Bean. 57 Mounts R[oa]d '44. 56 Downs E. of Shoreham PCH. 56 Magpie Bottom PCH. 56 Preston Hill PCH. 55 Greenhill Wood PCH.

7) 76 Ospringe Down, HMW.

8) 36 Copse SE of Durlock, Minster, 1959, Mrs. AG Side.

10) 55 Sevenoaks tip, 1958, CAS. 55 Otford PCH. 56 R[iver] path below Shoreham PCH. S. Darenth PCH. 57 St Johns Jerusalem PCH.

13) 53 gill SW of Stone Cross, Ashurst, CAS.

15) 01 Dungeness, scrub n[ea]r Boulderwall.

**var. laciniata L.**

[Cut-leaved Elder.]

15, 16.]]

Not very common; recent records are from

6) Springhead, Northfleet, 1946; 1961; by dry Ebbsfleet, H.A.S.

7) Wood above Queen Down Warren, Mrs Walton, 1954. P[ilgrims] Way, Westwell, E.S.

12) Canterbury, RGW.

13) Clatfields, Edenbridge, 1960, RAC.

**S. ebulus L.**

Danewort.

15, 16

9/51: [18/51]<sup>849</sup>

Denizen, long established. Roadsides, hedges, and waste ground, often near ancient buildings; rare.

1<sup>st</sup> record, 1597: Sutton-at-Hone, Gerard, *Herbal*, p.1238.

2) 17 By Queenborough castle ruins, J. Moor. [[06] Preston, Cowell, *Fl. Fav.*]

<sup>848</sup> No account given.

<sup>849</sup> The figure in brackets, presumably intended for all records, including those extinct, seems to have involved some double-counting, with some extinctions also in hectads containing more recent records.

3) 05 Stream between Boughton Street and Nash Court, RGW. [[96] Radfield n[ea]r Bapchild, Childrey, 1661; Miss E.M. Burrows, 1932; app[arently] gone 1938.] [[26] Hoath, Browne.]

4) Reculvers, Phyt. NS VI, p.56.

6) 76 Roadside by houses, Halling, 1944!

6a) 77 Roadside S. of Cooling Castle, E.S.M.; 1944! 1961!

7) [76 Gillingham churchyard, Johnson, *Iter*, p.4.] 05 Boughton under Blean! Petiver & Sherard; E. Jacob. 1777; E, Scott, 1956; n[ea]r church, E.S.

8) 24 St Radigunds, FGEK. Ewell, Irvine.

9) 26 Brooksend, Birchington, F.G.E.K.; by roadside, 1957, Miss B Nash.

10) 57 St Johns, Sutton at Hone, Gerard; A.H.W.F.; F. Forsyth, c.1926.

11) 44 Roadside W. of Hever Church, E.S.S.; 1953! **MNE**. [74 Staplehurst, Mrs Petley.]

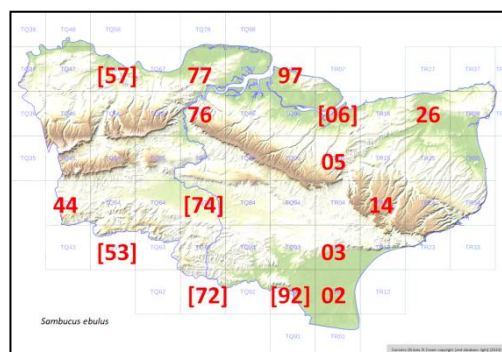
12) 14 Stowting, F.G.S.K.; 1947, abund[ant] near Church!

13) [[54] Hastings R[oa]d, Tonbridge, *Fl. Tonbr.*, p.39. [53] Tunbridge Wells, Hb. Woodward.]

14) [[12] S. of Hawkurst, Jenner; J.C. Melvill. [12] Appledore, W.R. Jeffrey.]

15) 02 Between Woolpack Inn, Brookland, and Lydd, FGW.

16) 03 Court at Street, 1946-58, abund[ant] **MNE**.



### **Viburnum L.**

**V. opulus L.** Guelder-rose. 15, 16

Native. Damp woods, fen-carr, streamsides, common in such places; scrub on chalk, occasional. Very common in the High Weald. Frequent in the Weald of Sussex and Surrey, more local in Essex, locally common in N. France.

1<sup>st</sup> record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.31.

1) Abbey Wood, 1948, R.A.B. Joydens Wood, PCH & PHC, 1954. Gattons Plantation PCH. Wet Wood by R[iver], N. Cray PCH. R[iver] Cray, N Cray PCH. Shooter's Hill Woods '54 GMB. Chislehurst 1891 CEB **BM**.

3) Woods NW of Dunkirk. Perry Wood, Selling, 1945, DHK. Fen N. of Wingham, 1945.

5) Andrews W[oo]d S. of Badgers Mount PCH. Pilots Wood PCH. Pilgrims Way, Polhill PCH. Down E of Mollards Wood (N aspect) 402591, 1959, RAC, Halstead, 1842, AA **BM**. Wood, Darwins Bank, Downe, S Edge, 1955.

6) Wood at Knock mill on c[lay] w[ith] f[lints].

7) Burham Downs, 1956 **MNE**. Murrain Wood, Detling 1945 on c[lay] w[ith] f[lints] **MNE**. Chilham. Molash. Westwell 1915 GAB **BM**.

8) Lynsore Bottom. Dover, Coombe Vale. Wye. Lords Wood, Temple Ewell, on chalk 1959 **MNE**.

9) 36 Damp copse S. of Durlock, Minster, 1959, Mrs AG Side.

10) Westerham Wood, 82. Oldbury Hill. Ightham Common. S. Darenth PCH.

11) N. of Marden. R[ai]l[w]ay yard and tracks, Edenbridge, 1956, DPY.

12) Ashford Warren. Stour, SE of Mersham-Sellindge, 1959 LJM.

13) Gildridge, Penshurst, 1944, **MNE**. R[ai]l[w]ay W. of Tun[bridge] Wells West Sta[tion], CAS, 1960. 589384 SE T[unbridge] Wells, E Shorrocks. Combwell Wood, 1979. Bayham. Capel. Brenchley. Roundabout Park Wood, 1950 **MNE**.

14) Benenden. Sandhurst.

16) Postling Wents. Wood below Lympne Castle.

**V. lantana L.** Wayfaring Tree. 15, 16.

Native. Open Woodland, scrub, and hedges on chalk and ragstone, very common; rare elsewhere. Common on chalk, rare elsewhere, in Surrey and Su[ssex]; very local in Essex; common in the Pas de Calais chalk districts.

1<sup>st</sup> record, 1597: Cobham, etc., Gerard, *Herbal*, p.1305.

1) Farningham Wood 82.

3) Pine Wood Littlebourne, P Grattan. 36 Copse W. of Highams Hill, 397611, PCH.

5) Darwins Bank, Downe. Chalk W. of Eynsford, PCH. W. of Shoreham. The Larches Wood, N of Farnborough PCH. Pilgrims Way, Polhill PCH. E of Farningham R[oa]d Sta[tion] PCH.

6) Darenth Wood, PCH; FR. Mounts Wood. Mounts Road. The Thrift, Bean, PCH. Horton Kirby PCH. White Downs E. of Shoreham. Preston Hill. Shoreham Rifle Range Downs. G[rea]t Crabbles Wood 44-'54. North

Wood, Bush 44. 67 Claylane Wood, Cobham, 61 HAS. 67 Gravesend, hedges, 61 HAS. Up[pe]r Halling Downs. Wingate Wood, 1945 **MNE**. Halling Warren PCH.

7) Wouldham Downs. Burham Downs; Church Spur; Scarborough Spur; Bluebell Hill. Boarley Warren. Boxley Warren. Coombe NW of Detling 44. Bredhurst Hurst. 96 Ospringe Down HMW.

8) 04 Broad Downs, Brook, 44. 34 NE of St Margarets at Cliffe, 1962. 34 Free Down, 1962.

9) 36 Copse S. of Durlock, Minster, 1959, Mrs AG Side.

10) 55 Rooks Hill.

11) 75 Horish Wood, '44. 65 Mereworth Woods, Swanton Valley. 75 Ditton Ragstone Quarries. 75 Quarry Wood, W. Farleigh.

12) n[ea]r Stour, Mersham-Sellinfe LJM 1959.

‡ **V. tinus** L. [Laurustinus. 16.]

6) Mounts Road, Greenhithe, N. end, in old shrubbery, 1955, 587746, HMP. Horns Cross Sandpit, Stone, 574744, 1957, H.M.P.

**\*Symphoricarpos** Duhamel

**S. albus** (L.) S.F. Blake<sup>850</sup> Snowberry. 15, 16.

Alien, commonly planted and now widely naturalised in hedges, shrubberies, copses and waste ground.

1) By Pond, W of W. Wickham, 375661, PCH. Shooters Hill Woods, 1954, G.M.B. Up[pe]r Hockenden, Swanley PCH. R[oa]dside, N. Cray, PCH.

2) Cuxton, n[ea]r Station 1946.

4) Hedge, Stodmarsh, G.L. Davidson.

6) Greenhithe, G.C. Druce (B.E.C. Rep. 1921, p.383); Mounts R[oa]d, PCH. Cobham Terrace, Greenhithe, 586746, 1955, HMP. Green St[reet] Green Common PCH. Gravesend, naturalised, 61, HAS.

7) N. of Westwell, 1947. Eastwell Park, by A.257, Mrs. B. Dodds, 1960. Belmont Park, 1958, DMCC.

10) Sevenoaks tip, 1958, CAS.

11) Basted, DMCC. Heath R[oa]d, E. Malling, 1962.

13) By R[iver] Teise, n[ea]r Golf Course, Lamberhurst, 1941, JRW. Tun[bridge] Wells Common; High Brooms; Matfield, CAS. Dunorlan, CAS.

**Lonicera** L.

**L. nitida** [E.H. Wilson Wilson's Honeysuckle. 15.]

16) One bush, Folkestone Warren, an escape, 1959, H.M.P.

**\*L. xylosteum** L.

Alien in Kent, but native in open woodland on chalk in Sussex and in N. France (e.g. woods in Somme Valley below Abbeville).

1) Outskirts of Ninham Wood, A.D.W. in his "Flora of Kent", 1893. Shooters Hill, Hb. **MNE**, 1878. Roadside, Locks Bottom to Farnborough Hosp[ital], 1959, J.R. Palmer, per DMCC.

5) near Surrey boundary, E of Fairchild's, A Beadell, c.1936.

16) Folkestone Warren, Miss V. Day, 1960, on N. side railway cutting n[ea]r W. end.

**L. periclymenum** L. Honeysuckle (never woodbine in Kent) 15, 16.

Native. Dry woodland, on neutral to acid soils, hedgebanks; very common. Common throughout S.E. England and N. France.

1<sup>st</sup> record, 1632: S. of Margate, Johnson, *Descriptio*.

1) Shooters Hill Woods '54 GMB. Joydens Wood PCH; FR. Chislehurst Common. Hayes Common. Keston Common FR; PCH. Farningham Wood PCH; FR; (82!). Abbey Wood PCH. Crofton Heath PCH. Gattons Plant[at]io[n] PCH. High Wood Crofton PCH. Dartford Heath, 1954, GMB.

2) Sewerbank, Plumstead, PCH. Copse by stream, Bell Farm, Minster, 1958, O. Davis. Ravine on clay cliffs, W. of Warden point, 1955. Warden Ash copse '55.

3) NW of Dunkirk, 1945. Thornden Wood 1945.

5) 36 Hedges W. of Highams Hill, 397611, PCH. Wood W of Shoreham PCH. Pl[j]ilots Wood PCH.

<sup>850</sup> In the manuscript given as *S. rivularis* Sukesdorf.

- 6)a) Great Chattenden Wood. Lords Wood Darenth, PCH. Darenth Wood PCH. Mounts Road and Wood, PCH. Horton Wood PCH. Downs E of Shoreham PCH, FR. Preston Hill PCH. Greenhills Wood PCH. Beechy Lees Wood, Kemsing, PCH. Bush Valley.
- 7) Lane SE of Q[ueen] D[own] Warren 55. Potters Wood, Q[ueen] D[own] Warren '55. Bredhurst Hurst '55. Stocking Wood Detling 55.
- 9) 36 Copse SE of Durlock, Minster, 1959, Mrs AG Side.
- 10) W. of S Darenth PCH. Wood W. of Kemsing Station, 1954, (gault) **MNE**. Westerham Wood, PCH,; 82!
- 13) Gill SW of Stone Cross, Ashurst CAS. Combwell Wood, 1979.

‡ **L. caprifolium** L. Perfoliate Honeysuckle. [16.]

Alien, rarely naturalised.

- 1) Bromley, Shortlands, Cole.
- 5) Knockholt, A.A. **BM**.
- 6) Horseholders Wood, Upper Halling, A.H.W.D.; 1893, E.S.M. **BM**.

## ADOXACEAE

### Adoxa L.

**A. moschatellina** L. Moschatel. 15, 16

Native. Woodland on moderately base-rich sands and light loams or chalky soils, often where moisture content is high but always where aeration of the root system is good; frequent and locally abundant throughout Kent, but absent from the Marsh districts, from the Weald Clay, and from much of the High Weald, except in base-rich or flushed sites. It is more often found in coppice than in high forest, and never in excessively dry, or acid, soils, or on stiff sour clays, but it occurs on the gault. Its map<sup>851</sup> is complex in pattern and shows well the interaction of a complex set of factors in the environment. Locally common in Surrey and Sussex, local in Essex, frequent in Pas de Calais.

Where it occurs in the High Weald it is mostly on alluvia of streams or in association with calcareous seams in the Wadhurst Clay.

1<sup>st</sup> record, 1763: Charlton Wood, Martyn, *Pl. Cant.*, p.52.

- 1) Abbey Woods 1948, PCH. Joydens Wood, 1948. Copse by Sheepbell F[ar]m, E of St Mary Cray, 1954, **MNE**. Copse at Kevington, St Mary Cray, 1954, Rams Wood, S.E. of old Swanley, 1951 **MNE**. Hollows Wood, Shoreham. Farningham Wood PCH; 1956 **MNE**. Copse SW of Keston Common 1947. [Charlton Woods, J. Dickson (1793-99) **BM**.] [W. Wickham 1915 AG Davis **MNE**.]
- 2) Copse on Thanet Sand S. of Holy Well, Upchurch, 848668.
- 3) 26 Copse on Thanet Sand, Ford, Hoath, 201653, 199652, '59. 26 Marly pits, Chislet, (chalk) 220653/59. 06 Kemsdale Wood, Hernhill 1955 **MNE**. 15 Old Park, Canterbury, 1955 **MNE**. 15 Trenley Park Wood '56 **MNE**. 15 Bigberry Wood, 54. 16 Dengrove Wood Sturry, 1954 Mrs. Oldstair; 1955!
- 5) 36 Well Wood, W. Wickham, 1958 PCH. Wood opp[osite] Hollows Wood, Shoreham, 500626, 1960, H.M.P. Rushmore Hill, PCH. Lattice Coppice, Pratts Bottom 56 **MNE**. on drift, Hang Grove, Downe, 1962. 426577 Wood W. of South Street Biggin Hill RAC. [Knockholt, AA **BM**.]
- 6) Copse NE of South Street, Meopham 1956 **MNE**. Ingram Wood, Stansted, 611616, basic loam, '59. 609613 Scarp Wood SE of Stansted (Ch[al]k, Acer camp[estris], Fagus, Corylus). 608614 Cox's Wood Stansted ch[al]k and clay, Carp[inus betulus]/Frax[inus excelsior] /59. R[oa]dside, Magpie Bottom PCH. 561617 East Hill W Kingsdown 1956, J.A. Field. Ash scarp copse, Woodlands hill, W of Wrotham 1955. N end Ashen bank Wood, Cobham Lady Baker 1958.
- 6E) G[rea]t Crabbles Wood Shorne, 1955, **MNE**. Copse NW of Higham Upshire, on Thanet S[and], 1956 **MNE**. [Swanscombe Wood R.P. **BM**.]
- 7) N.W. of Charing Hill. Between Charing and Burnt House, 5 loc[ation]s, 963493. Between Burnt House and Westwell, 8 stations, 965488. Frittenfield. Bredhurst Hurst '54 **MNE**; '55. Copse below Purple Hill '55. Copse ¾m SSW of Ch[urch] Hartlip 1955 **MNE**. ¼m NW of Pond F[ar]m Hucking 1960 **MNE**. Stockings Wood Detling '55. Top of Detling Hill '55. Ash copse W Coombe Detling, '55. Shaw E. of Dunn St[reet] W[est] Well 3 sta[tions]). Woods S. of Paddock, Challock Lees (2 loc[at]ions)). Challock Lees, SE of Rattle Hall. Valley between Whitehill and A251. ¼m E of Badlesmere Lees (ch[al]k loam valley bot[tom of] Wood) 016542. Copse ¼m S. of

<sup>851</sup> The manuscript contains no map, nor the preparation of hectad grid-references which might indicate that one was intended; but unusual care has been taken to identify the geology of sites.



Lidsing on loam 785616. Bilting N of. Bilting W. of. Head of Godmesham Pasrk. Wood SE of Park Wood Chilham. W of Oldwives Lees (By lane bank) 065553, /43, DHK.

**8)** NW of Pickersdean. Staple Lees. Head of Cuckolds coomb. Olantigh Park W of R[oa]d; E of R[oa]d. Wye downs Saxifrage copse on Pliocene 54. Elms Wood Hougham 1950 **MNE**. Wood NW of Coombe F[ar]m Dover 1955 **MNE**. Frandham Wood River Mrs KDR '57. Head of Fanscombe Wood. 2 places E. of Race course Valley Wye. W. of Brabourne. Wood on clay above Brabourne 1959 (102427). 145402 NW of Postling Wood on ch[al]k, HMW. Copse by Halway [*sic*, for Halfway] House. Copse NW of S Alkham 55. Acrise. Reinden Wood Hawkinge. Wood, Bladbean, W of Wingmore. 178414 G[rea]t Shuttlesfield Miss V Day. 103440 copse W. of Kingsmill Down F[ar]m Hastingleigh 1959. 092493 W of Sole St[reet], loam over ch[al]k, 1959. 107435 copse Hastingleigh (Frax[inus] comm[on]) '59. E.S. Bossington Wood, Adisham. PCH '55. Gorsley Wood P Grattan 57. Martin Mill; Sutton Downs Wood '55.

**10)** Westerham Wood, on Gault, PCH. Bottom of Scords Wood Brasted, on ragstone loam 1957 **MNE**. Copse E of French Street Brasted '54. Brockhoul Mount '55. 543585, Wood on Gault, Childsbridge Lane W of Kemsing '57 CAS. Wood by Seal Hollow R[oa]d, S[even]oaks, Marjorie Devereau. Copse NW of Ightham on F[olkestone] S[and], '55.

**11)G)** Snarkhurst Wood, Hollingbourne (G). Warren Wood, E. Malling **MNE**. 781567 Fulling pits W[oo]d, W of Brasted. Mereworth Park 51 **MNE**. Basted, in pollard willow, DMcC. Highlands, copse on golf course (F[olkestone] S[and]) '54. Ryarsh Roughills 54. SE end Ryarsh Wood 1954, (F[olkestone] Sand). Leybourne Wood 55 **MNE**. Larkfield Heath 45 **MNE**. Holt Wood Aylesford 55 **MNE**. Sandling Wood 1925, H Elgar **MNE**; 1955! **MNE**. Stoneacre, Otham (rag[stone]) 1950 **MNE**. Copse E of Chegworth (rag[stone]) 1954 **MNE**. Willington St[reet], copse by Len 55. [*"W Farleigh Kent" 1774 BM.*] Millbay Wood Nettlestead 1945 (B[rick] earth) **MNE**. Wood 1 mile N. of Tonbridge on loam (Starve Crow Hill), 1958, W.G. Breed. On Paludina loam on W[eald] C[lay] E of Maplehurst, Staplehurst, 801420. On alluvium by R[iver] Eden ½m. above Eden bridge 1956 **MNE**. On alluvium by Medway, ½m above Tonbridge 56 **MNE**. On alluvium by Medway, SW of E Peckham 1956 **MNE**. S. of Yalding 1934 AHWd. 93 By Beult, 939392 Brissenden Green, ES.

**12)** Park Ho[use], Westwell G. Ram Lane, Hothfield F[olkestone] S[and]. Stoddington G. Eastwell Church G. S. of Eastwell Court G + All[uv]ium. Bybrook F[olkestone] S[and] 014443. Ashford Warren Woods, S. part F[olkestone] S[and]. Lane SE of Pett Place 962485 ES. Copse SW of Pett Place 957490 ES. N. of Wotton Manor, Westwell G. R[oa]dside N of Godington Park F[olkestone] S[and]. R[oa]dside NW of Hurst Hill F[olkestone] S[and]. Cole Wood, Woodchurch W[eald] C[lay]. SW Valley, Bourne Wood, Orlestone 004337 Weald Clay. Copse by R[ai]l[wa]y 1m SE of Kingsnorth NE of R[oa]d to R[ai]l[wa]y Weald Clay. Flint F[ar]m, Ruckinge Weald Clay. Foxglove copse, Willesborough ES. N of Blackwell F[ar]m 043441 ES. E of Wye Brick Works. Copse, W side Willesborough – Hinxhill R[oa]d F[olkestone] S[and]. Lane N. of A20 Sevington (3 loc[ation]s) F[olkestone] S[and]. Hatch Park S of Quarrington F[olkestone] S[and]. Copse W of Brook Church G. Troytown Wood G. Copse, Stonehill, Sellindge F[olkestone] S[and]. NE of Park Wood, Bonnington W[eald] C[lay]. Horns Wood, N of B.2067 ½m W of Bilsington W[eald] C[lay]. Copse by Stour (F[olkestone] Sand. W of Hoth[field] Common 963458. SW end Horns Wood Ruckinge ES.

**13)** E of Hawkenbury, by boundary stream, 1945. Lamberhurst: Brick Kiln Wood, SW of Hook Green, 1958, CA Stace; ½ m W of Lamberhurst by Teise on alluvium 1956 **MNE**; copse R[iver] Teise Hoathly 1955 (all[uvium]). Gill NW of Ash F[ar]m Horsmonden 1959, 719411 (basic loam) **MNE**. Finchcocks, 1904, JS **TLS**. Speldhurst 1946 W Crowhurst.

**14)** Cranbrook: Robins Wood SE end 1949. Rolvenden: Gill 1 m E of Rolvenden 1954 **MNE**. Benenden: Gill S of Ramsden, 1959. Oxney: Owley, Gill Wood, Wittersham 1954 **MNE**. By stream Huntbourne Bridge W of Woodchurch 913341 ES. By convalescent home Cranbrook 1946 W Crowhurst. Copse 1½ m S of Hawkhurst by A229, '55.

**16)** Hythe. Aldington. Saltwood.

## VALERIANACEAE

**Valerianella** Mill.

**V. locusta** (L.) Laterr.<sup>852</sup>

Lambs Lettuce, Corn Salad.

15, 16

31/51

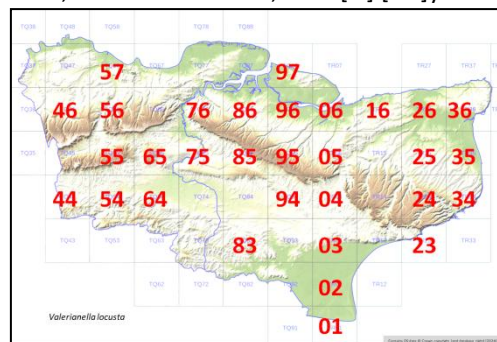
Native. Fixed dunes, wall tops, light cultivated land, sandy hedgebanks, railway banks; locally common, though very patchily distributed, and absent from the Marsh lands (except on their coasts) and most of the Weald. Its main centres are the coastal dunes and the ragstone wall country about Maidstone.

Locally frequent in Surrey and Sussex, rather rare in Essex, local in Pas de Calais.

<sup>852</sup> Cited as (L.) Betcke.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.118.

- 1) 46 Hayes. 46 Keston. 56 Farningham Wood.
- 2) 06 On shell sand beach, Shellness, Sheppey, abundant 1950 **MNE**; 1955. 76 Cuxton, on R[ai]l[wa]y Bank 1945 **MNE**. 06 Beach, Seasalter, 1952 **MNE**. 97 Leysdown Beach – *when?*
- 3) wall, Tollgate Whitstable, HMW.
- 4) 35 abundant on the fixed dunes N. of Deal; 35 Sandwich Bay **MNE**; and N. towards 35 Shellness. 34 grassy shingle, Kingsdown Beach, 1948 **MNE**; 1957 Miss B Nash. 35 Walmer Beach, 1956, Miss B. Nash. 26 Sea wall E of Reculver LWW. 26 S. side R[ai]l[wa]y W. of Grove Ferry, 1950, REW.
- 5) 56 Cross R[oa]ds N. of Farningham on A20, PCH.
- 6) 76 Cuxton, 1938, J.B.M.; cornfield NW of Cuxton 1951, 704673, RW Westrup. 57 Arable NW of Darenth Wood 1955, 576726, HMP. 57 Greenhithe, Mounts R[oa]d, 54 **MNE**. 57 Copse SE of Dartford 533728, 1955, HMP. 57 Cotton Lane Stone 564748, 1955, HMP.
- 7) 05 Chilham Castle grounds, 1957, E.S. 86 Wall, Yelstead, Stockbury, 1960.
- 8) 24 Kearsney Station, Mrs K.D. Rowlands 1960 **MNE**.
- 11) **G** 65 Medway R[iver] Bank, S. of Yalding, 1934, AHWD. 65 Ragstone pit, Basted, Borough Green 1960. DMcC; LAS. 65 Ragstone Walls, East Malling, **MNE**. 64 N. of Beltring, 1944 **MNE**. 85 R[oa]dside W of Hollingbourne. 1944-52 **MNE**. 54 Hildenborough R[ai]l[wa]y bank, CAS. 75 Wall, Preston Lane, Aylesford 1952 **MNE**. 64 River bank SW of E Peckham 1956 **MNE**. 54 R[ai]l[wa]y br[idge] W of Tonbridge, HS Vere Hodge. 54 N. Bank, Westway, Cannon Br[idge] Tonbridge, 1955, CAS, 599467. 54 R[ai]l[wa]y Halt, Leigh, H.V. Wood.
- 12) Mersham to Sellindge, LJM, 1959.
- 13) 63 Scotney Castle, 1899, J.S., **TLS**.
- 14) 83 R[ai]l[wa]y Sta[tion], Tenterden, 1959, E.S.
- 15) 02 Romney Warren. 02 Greatstone. 02 Lydd Common. 01 N. of Dungeness.



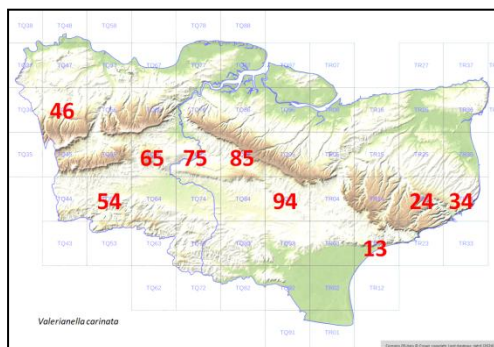
var. **lasiocarpa** Reichb.

- 11) **W** 64 Medway bank, Branbridges, 1939, JRW, det. B.L. Burt, BEC Rep. 1'939-40, p281.

**V. carinata** Loisel. [Keeled-fruited Cornsalad.] 15, 16 9/51  
Native. Old walls, allotments, railway banks of loamy ragstone material; locally frequent in a few areas, but rare generally.

1<sup>st</sup> record, 1893: Boughton Quarries, E.S. Salmon, *J. Bot.*, p.56.

- [1] Rubbish Heaps, Erith, 1900, H&JG.]
- 5) 46 Railway cutting, Knockholt, CA Stace.
- 7) Wall, Yelsted F[ar]m, Bredhurst, 1961 **MNE**. 94 Bank NW of Westwell, 1952, **MNE**.
- 8) 24 Flint wall of Park, Woodville, Temple Ewell, 1952-60 **MNE**. Allotments, St. Margaret's at Cliffe, 1955 **MNE**. 34 Kingsdown, 1957. 24 Alkham Valley, W. of Chilton, Mrs D. Rowlands, 1960, **MNE**. [Upper Deal, Duthie.] 34 n[ea]r Car Park, Kingsdown, 1958, Mrs K.D.R.
- 11) 54 Railway Banks, Hildenborough, Miss H. Turnbull; 1955 **MNE**. [65 near Wrotham Heath, W.M. Rogers.] 65 & 75 East Malling, cult[ivated] ground 1943 C.W.; on ragstone walls, 1952! 75 Ditton Quarry, F. Forsyth. 75 Aylesford Priory walls, 1952. [Sutton Valence, Mrs. Petley.] 75 Wall N. of East Barming, 1958-62 **MNE**. [Boughton Quarries, E.S. Salmon, before 1893.] 75 Maidstone, EG Philp, 1958 **MNE**. 85 Harrisons Nurseries, Harrietsham, 1962, Mrs. B Dodds.
- 16) 13 Railway Arch N. of Newington Moor, L.J. Margetts, 1956, **MNE**.



**V. rimosa** Bastard [Brooad-fruited Cornsalad.] [15], 16 3/51  
Colonist. Cornfields, usually on chalk, extremely rare.  
[2] cornfields between Oare and Harty Ferry, 1724, S. Dale.]  
[5] Between Keston Church and West Wickham J.S.M., 1863.]

6) [Near Cobham, Dr St. Brody.] 75 Cornfield 704673, N.W. of Cuxton, J Westrup, 1951. 66 cornfield below Pilgrims Way, W. of Pilgrim House, Trottiscliffe, abundant, 1958 **MNE**. 66 N. of Middleton Barn, Longfield 621671, Mrs Woods.

7) Cornfield on chalk 818 575, Thurnham, 1946, DMcC.

8) 15 Kingston, 1937, F. Hyland.

1<sup>st</sup> record, 1724: Oare, Dale, in Ray, *Synopsis*, ed.3, p.201.

**V. dentata** (L.) Pollich

[Narrow-fruited Cornsalad.]

15, 16

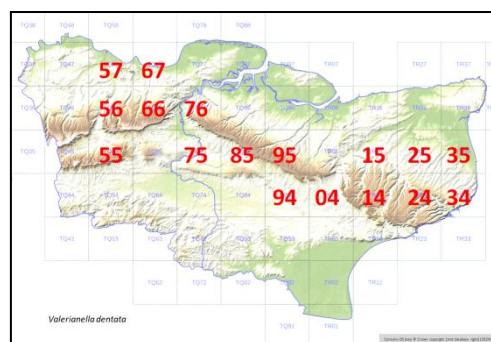
17/51

Native or Colonist. Cornfields on chalk; locally frequent and widely distributed in the chalk districts, not recently recorded in any other soils, though Fl Kent says "on chalk and clay".

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.52 (? correct).

5) Swanley, 1878, H. & J.G. **BM**. 55 Field by Chalk pit, Morants C[our]t Hill, 1956, P.C. & JFH.

6) 56 S.E. of Eynsford. 57 Cornfield N. of A2 N. of Darenth Wood, 582732, 1958, HMP. 66 Cornfield ¼ [m] W. of Pilgrims House, Trottiscliffe, 1958 **MNE**. By Mounts Road, 1m S. of Greenhithe, 1946-1954. 67 Cornfield W. of Downs R[oa]d, Northfleet Green, 628704, 1958 **MNE**. 66 cornfield, Upper Halling, 1943 **MNE**. 76 Cornfield, NE of Cuxton, 1955 **MNE**. 66 Cornfields on chalk, SE of Cobham, 1946. 66 Cornfield, Buckland R[oa]d Luddesdown, PCH.



7) 76 Cornfields on chalk, above Burham; 1947; 1955 **MNE**. 75 Boarley, 1958 EG Philp **MNE**. 76 Darland Valley, F. Forsyth. 76 above Wouldham 1946-54 **MNE**. 75 above Boxley. 76 Cornfield, n[ea]r Lower Bell, 1945. 85 Cornfields 1m NE of Hollingbourne, 1947 **MNE**. 94 cornfield NW of Westwell 985484, 1956, E.S.; 1958, EG Philp **MNE**. 95 cornfield, Eastling, 1961, C. Turner. 04 Cornfield, Soakham Down, 1949. 95 Field behind Putt Wood, Ospringe, 1950, REW.

8) 15 cornfield by Whitehill Wood, L[owe]r Hardres, 1949, L.W.W. 14 Cornfield SW of Barham 1956 **MNE**. 15 Kingston, cornfield by Bonny Bush Hill. 25 Adisham, S. of Station. 25 cornfield N of Barfreton, 1956 **MNE**. 25 cornfield E of Knowlton 1958 **MNE**. 15 cornfield S. of Milton, Chartham, 1960 **MNE**. 15 cornfield W of Marley Lane, Kingston 1948 **MNE**. 24 Cornfield 279432 S. of Chilton 1948 DMcC. 24 arable Wolverton 1957 KDR. Arable Lydden KDR 57. 34, 35.

11) 75 Gravel pits E of Aylesford, 736588, 1956, ES.

**V. eriocarpa** Desv.

[Hairy-fruited Cornsalad.]

15, 16

3/51

Alien, at least so in Kent. Waste ground; very rare.

?8) Near Wye, Miss Cobbe, *B.E.C. Rep.* 1923, p.187.

11) 65 Ryarsh Sandpits, 1946 **MNE**. 64 Gravel pit S. of Medway W. of Brandbridges, 673482, 1956, CAS.

15) 01 Old shingle workings, Dungeness, C.A. Stace.

**Valeriana** L.

**V. officinalis** L.

Valerian.

15, 16

Native. This species consists of two cytological races in Britain (Skali[n]ska & Sprague, Linn. Soc.<sup>853</sup>): the tetraploid form (2n=28), which corresponds largely to what has been called *V. milanii* Syme, is apparently confined to woodlands and scrub on chalk and limestone in southern England; the octoploid form (2n=56) which corresponds largely to what has been called *V. sambucifolia* Mik., is confined in S. England to fens, riversides, marshes, and damp alder carrs. According to the authors quoted above, it is not possible to distinguish between the two cytological forms by morphology in every case, so they do not recommend the use of the two separate specific names for the two cytological races; it appears, however very probable that in Kent, for example, the plant of the chalk is nearly always the tetraploid, and the wet habitat plant nearly always the octoploid. In Kent, the plant of scrub and wood borders on chalk is small and slender, with narrow leaflets. The occurrence on chalk is as follows:

5) E. of Downe, W.H. Griffin/E.B. Bishop ?=Roadside on chalk, S. of Green Street Green on Cudham Road, 1947.

<sup>853</sup> Provided as an incomplete reference. Skalinska published three papers 1945-47 through the Linnean Society; Sprague published one in 1943.

6) Stone, H.M. Pratt, 1957 **MNE**. N. border of Crookham Wood, Snodland, abundant, 1944, **MNE**. Birling Downs, Dr. H. Gray. Trosley Downs, Dr. H. Gray. Upper Halling, H. Elgar, 1904 **MNE**; H. Lamb 1901 **MNE**. Wingate Wood, 1953! **MNE**.

8) E. Court Farm, Godmersham, on old flint wall, 1947, **MNE**. Near Wye, F.J.H. (as *V. mikanii* Syme).

1<sup>st</sup> record (for *V. mikanii* Syme) 1899; Wye, 1875, F.J. Hanbury In *Fl. Kent*, p.183.

The occurrence of the species in wet habitats in Kent is as follows: it occurs as a large plant with broader, more deeply toothed darker green leaflets than the form on chalk; probably nearly all these locations are for the octoploid plant.

1) Holwood Park 1954 **MNE**. N. Cray Brooks, 1945. Alnetum, Petts Wood, 1947; 1954. Wood by Crofton Church, 1944. Stream, Darrick Wood, Orpington, 1948, Mrs M. White.

2) Northfleet Brooks, 1944. Cliffe Marshes, 1944. Snodland S. Marshes. Holborough Marshes, 1944. R. Medway banks, Aylesford '43 **MNE**. New Hythe.

4) 35 Ham Fen. 35 Hacklinge Marshes. 26 Marsh W. of Brooksend, 1947, LWW. 25 Fens N. of Wingham. Plucks Gutter, 1957 KDR.

9) 36 Copse SE of Durlock, Minster, 1959, Mrs AG Side.

10) 55 River Bank, Otford, 1853, A.A. **BM**; 1955, PCH. 57 Ditches by Meadows S. of Darenth, 1944; 1954 **MNE**. 55 Whitley Forest (Spring Hill) 1959, RA Clarke. Marshes W of Brasted GMB.

11)G) 65 Marshy wood by stream S. of Mereworth. 25 by R. Medway, Teston. 66 Birling Marshes.

11)W) 54 By R[iver] Eden, Chiddingstone. 64 Paddock Wood; 64 Tudeley, JRW, 1939. Hoads Wood 1958, M.C[halmers]-Hunt.

12) 05 By R. Stour, Chilham. [Merham D. Smith 1907 **MNE**.]

13) Furnace Road, Cowden. 53 Gill SW of Stone Cross, Ashurst, CAS, 518381. 44 Lock Skinners, Chiddingstone, 1943. 63 Ditch S. of Lamberhurst Ch[urch], 684365, CAS.

Locally common in the adjacent counties and in N. France.

1<sup>st</sup> record (for the aggregate species, probably *V. sambucifolia*) 1629: Erith, Johnson, *Iter*, p.9.

#### **V. dioica** L.

Marsh Valerian.

15, 16.

21/51

Native. Marshy meadows, fens, flushes in woodland on base-rich or calcareous soils; locally frequent in the High Weald, 13) & 14), and in the fens of 4), rare elsewhere. Rather rare but locally frequent in the Weald, in Surrey and Sussex, rare in Essex, local in Pas de Calais and largely confined there to the fens and dune slacks near the coast.

1<sup>st</sup> record, 1763: Charlton, Martyn, *Pl. Cant.*, p.52.

1) [Bexley, E.M.H.; n[ea]r Abbey Wood station, AHWD.] 46 Petts Wood, 1954, **MNE**. 46 High Wood, Crofton, J.E.L.; 1954! **MNE**. [Charlton Wood, 1777, Banks, **BM**.] Ninhams Wood, Locks Bottom, WCRW.

2) [[66] Marshes S. of Ham Hill, Birling, 1951; now destroyed in this area.] [76 Marshes S. of Snodland, 1946.] Several old records for Faversham area.

3) 15 Marshy Alder carr, Trenley Park, 1949 **MNE**.

4) Ham Ponds F.G.E.K. (=Ham Fen, 1947!). 35 Hacklinge Marshes. 35 Worth Minnis, 1946. 25 Fens N. of Wingham, FEGK; 1947! 26 Preston Marshes ESM; (1947!). 35 Northbourne Fen, 1947. [Deal Marshes FJH.] Stourmouth, Dowker.

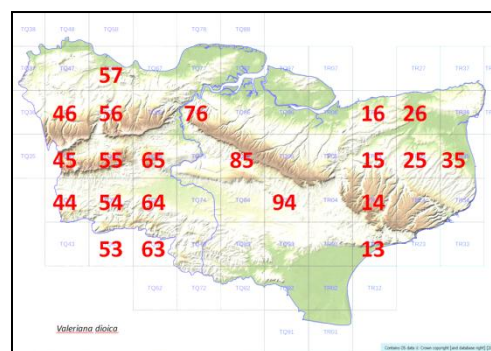
10) 55 Bradbourne Meadows N.E. of Riverhead, Miss Worship; 1944!; 1957, F.S.E.F. Westerham Wood, 1982. 56 Meadow N of Shoreham 523626, 1954, GMB. 55 Meadow N. of Bat & Ball, Sevenoaks 1950 **MNE**. Meadow S. of Otford 1956 **MNE**. 57 Darenth Meadows, A.H.W.D.; here, above village PCH, c.1955. 45 flush in alder carr, Scords Wood, Brasted, 1950-57, **MNE**.

11) 65 Marsh by pond SW of Mereworth, H. Gray; 1944! **MNE**. 65 Leybourne Marshes, 1944. [Birling Marshes, 1943 **MNE**, 1951 **MNE**, now drained.] [[75] S. of Barming Church, H. Lamb 1900; H Elgar, 1905 **MNE**.]

12) 14 Stowting Meadows, 1944, 1954, **MNE**. 94 Charing Heath, 916485 in meadow, 1954; C.N.P. & ES. 13 Gibbons Brook bog, G. Walton; 1945! **MNE**.

13) 54 Shadwell Wood, Speldhurst, 1934, G.E. Shaw. 44 Greybury Gill, SW of Edenbridge, in calcareous flush, 1954, **MNE**.

64 Cinderhill Wood, Brencley, in alder carr flush, J.R.W. 1942; 1944! 54 Roundabouts Wood, Tun[bridge] Wells 1954 **MNE**. 64 Swampy flush in alderwood ½m W of Matfield Green, 1954 **MNE**. 44 By





Scarletts Pond, Cowden, E.S.S. (1944!). 54 Moorden, N. of Penshurst, 1944 **MNE**. 63 Boggy Wood SW of Pembury, 614 395, 1956, PCH. 53.

16) Newington Moor; Cheriton CPSK.

**Centranthus** Neck. ex Lam. & DC.<sup>854</sup>

**C. ruber** (L.) DC. [Red Valerian. 15, 16.]

Denizen. Chalk cliffs and pits, railway cuttings, old walls, waste ground, seashores, now very common in N.W. Kent, widely scattered elsewhere. It has spread extensively along the railway banks and into chalk quarries and on to waste ground, all the way from London to Rochester and widely outwards from this line.

1<sup>st</sup> record, 1793: Eltham, etc., etc., Milne & Gordon, p.53.

1) Orpington R[ai][wa]y bank, FJH. Chalky R[oa]d bank, Birchwood R[oa]d, N.W. of Swanley, PCH.

2) Davington Churchyard, Cowell. 87 Stoke Junction, 1958, Mrs AG Side. By Uralite Works, Higham. Old cement works, Burham.

4) 34 Shingle Beach, Kingsdown, H.E. Fox, 1921; abundant, 1946, 35 Walmer to Kingsdown! 36 Richborough, 1946. 25 Wickhambreaux, RGW.

5) Chalkpit SW of Biggin Hill, 1957, R.A.C. R[ai][wa]y cutting, Knockholt. R[ai][wa]y cutting, Chelsfield. Old chalk pit, Farningham R[oa]d Sta[tion], PCH.

6) Horns Cross chalk pit, 1962. Mounts R[oa]d, PCH. Gravesend M&G; 1944-59! Stone. Greenhithe chalk pits, M&G; ED [sic, for Ed[ward]?] Forster **BM**; 1840 Sansom **BM**; 1944-59! Strood, M&G; 1959! By R[ai][wa]y, Dartford; Northfleet (M&G); Swanscombe; Denton. Chalk. Eynsford. Shoreham (E of). Otford Sta[tion]. Higham Tunnel. Frindsbury. Halling Chalk pits. Cuxton by R[oa]d. Snodland. Pilgrims Way, Wrotham, PCH.

7) Chatham, A.H.W.D.; 1950! Rochester, M&G; (1960!). Wouldham. Burham. Eccles. Bluebell Hill. Borstal.

8) Dover to Canterbury, common by railway. Folkestone Warren. Aylesham. Snowdown. Light R[ai][wa]y [cross]ing, Sibertswold, Miss B Nash 1957. St Margarets Bay **MNE**. Dover, E. Cliff; W Cliff.

9) Cliffs, Ramsgate. Broadstairs. Margate.

10) R[oa]dsides, Chilham R[ailway] Sta[tion], DHK.

11) 75 Aylesford station. 75 Allington quarries. 75 Railway, E. Malling. 65 W. Malling abbey M&G; (1960!). 75 Maidstone church M&G; (1960!). 75 Bearsted R[ai][wa]y. [44] Edenbridge, BDJ. [Palace wall, Maidstone R.P.]

12) 05 Chilham castle grounds, ES. 15 Canterbury Cathedral M&G; (1956!). Bombed sites, abund[ant], 1944 DHK.

13) Garden Walls, Cranbrook, 1956, DS.

16) Sandgate, J. Walton.

(**C. calcitrapae** (L.) Dufr.<sup>855</sup> [Annual Valerian.]

Alien, formerly naturalised about Eltham churchyard and elsewhere in the village; now extinct. Probably originally a native of S.W. Europe.

An escape from J. Sherard's garden. First recorded in 1835, by Pamplin in New Bot. Guide, p.72; last reported in 1884, W.W.R. See also W. Iott, Phyt. I, 1843, p.616. There are specimens in the National Herbaria and in **MNE**.

1836 D. Cooper etc in **BM**. Many sp[ecimens] in Hb. **BM** etc.)

## DIPSACACEAE

**Dipsacus** L.

**D. fullonum** L.

ssp. **syvestris** Huds. Wild Teasel. 15, 16.

Native. Coppiced woodland and glades in woods, scrubland, riverbanks, hedges, roadsides, railway banks, waste ground; very common. Equally common in all adjacent counties and in N. France.

First record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.28.

1) Green Street Green, Farnborough. Abbey Wood, 1954, G.A. Matthews. Kent gate, AG Davis, 1915 **MNE**. [Lewisham, 1837, Herb. JFY **BM**.]

2) Farningham Wood, PCH: 82! Ruxley Pits, '58. H Angel. Erith Marshes, PCH. Sewerbank, Plumstead, PCH.

4) 1m. N of Sandwich 1946 **MNE**. Richborough.

5) chalky bank, Broom Wood, Cudham PCH. Chalk W of Eynsford PCH. Pilots Wood PCH.

<sup>854</sup> In the manuscript given as *Kentranthus* DC.

<sup>855</sup> Given in manuscript as *Kentranthus calcitrapa* Dufr.



6) Mounts R[oa]d and Wood PCH. Swanscombe Wood PCH. Swanscombe pits, in scrub, '621, HAS. Preston Hill, PCH. Downs above Upper Halling PCH. Bank above River, Cuxton PCH.

7) Ospringe Down HMW.

10) W. of S. Darenth PCH. Water meadows, Darenth, PCH. [Lullingstone, 1887. J Guardia & J Groves, Hb. F.J.H. BM]

11) 75 Horish Wood, 1960, E.G.P. R[iver] Teise, Capel manor, Horsmonden, JRW 1941. 451455 Edenbridge R[ai]l[wa]y y[ar]d and rubbish tip, 1956, DPY. By Pond E of Hale St[reet], E Peckham 693483, 1957, CAS.

13) Teise bank, Lamberhurst, JRW 1936. S. of Church, Lamberhurst, 684365, CAS.

**D. sativus** (L.) Honck.<sup>856</sup> [Fuller's Teasel. 16.]

1) Lewisham, Fl. Met.

6) Halling, Hb. Geldart.

11) Maidstone (old London R[oa]d) **MNE**.

13) Hilbert Recr[eation] G[roun]d, T[unbridge] Wells, 1962, CA Stace.

**D. pilosus** L. Small Teasel. 15, 16 16/51

**Native.** Riverbanks and adjacent damp woodlands, hedgebanks, coppiced woodland and woodland glades on chalk and ragstone; widespread but very local and nowhere common; most frequent by the Medway and its tributaries.

Similarly thinly scattered in Surrey, very rare in the Pas de Calais (Forêt de Boulogne, 1959!).

1) Many old localities, now extinct, except in the lane S.W. of 46 the "Fox", Keston, C.W.; G.M. Brown.

2) 57 Cray bank, above Long Reach Tavern, 1957, P.C. Hall.

4) 26 Damp alder coppice ¼m N.W. of Preston Church, 1958, **MNE**.

5) Formerly frequent S. of Keston, C. West; now rare. 45 Wood S. of Cudham, 1947 **MNE**. SE of Cudham, A. Beadell c. 1936.

6) 66 Hedge of Pilgrims Way E of Pilgrim Ho[use], Trottiscliffe, JE Woodhead; A. Gray; 1946! **MNE**. Magpie Bottom, c.1936, A Beadell.

7) {Wouldham, Pratt; S. of Faversham, E. Jacob, *Pl. Fav.*].

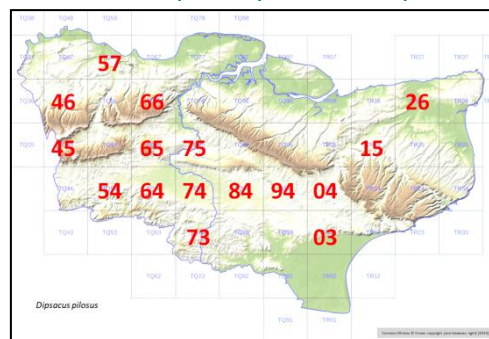
8) 15 Larkey Valley Wood, 1949. [Waldershare, F.G.E.K.]

[9] Old records only.]

11) 54 R[ai]l[wa]y Bank, Tonbridge to Southborough, 1951, KEB. [Kings wood Langley, E Bartlett 1886 **MNE**.] [Loose Valley 1885 Hb Lamb **MNE**.] 64 R[iver] Medway, Brandbridges / E Peckham, 1946 **MNE**; 65 n[ea]r Medway, S. of Watlingbury, J.E.L.; 75 n[ea]r R[iver] Medway, Bydews Wood, Tovil, 1958. 74 By the R[iver] Teise, Laddingford, 1946; 74 wood by the R[iver] Teise, Capel Manor, Horsmonden, J.R.W., 1941. 74 R[iver] Beult, E. of Cheveney, Yalding, 1955 **MNE**. 74 R[iver] Teise, near brifge of B.2162, 1½m. S. of Collier Street, 1948; 1959, **MNE**. 74 Marden Mill, 1958 **MNE**. Wood n[ea]r Allington Lock, H. Lamb. 84 Knowle Hill, Ulcombe, in coppice on ragstone, 1959, **MNE**.

12) 94 Potters Corner, W.R. Jeffrey; roadside here, E. Scott. 94 By R[iver] Stour W. of Hothfield, ES. Stour by Lit[tle] Chart Mill Pond, 1960, CNP. 04 Roadside N. of Hinxhill, F.J.H., etc., E.S., 1947. Several old records. 03 Alder carr, 095396, Stonehill, Sellindge, 1955, P. Furneaux; P.C. Hall & O. Buckle.

13) 73 Roadside track S of Goudhurst, 1949.



[**Cephalaria** Schrad.]

‡ **C. gigantea** [(Ledeb.) Bobrov Giant Scabious. 16.]]

13) R[ai]l[wa]y W. of T[unbridge] W[ells] W[ert] Sta[tion], 1960, CAS.

**Knautia** L.

**K. arvensis** (L.) Coult. Field Scabious. 15, 16.

**Native.** Roadsides, grassland, scrub and wood borders, abundant on chalk and ragstone, rare elsewhere. Locally common in Surrey and Sussex, more local in Essex, common in Pas de Calais.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

<sup>856</sup> In the manuscript given as *D. fullonum* subsp. *fullonum*, which was the treatment at the time of Clapham, Tutin & Warburg's *Flora of the British Isles* (1952), with the consequence that the Wild Teasel was referred to as subsp. *sylvestris*.

- 2) River bank, Aylesford, 1947.
- 3) 26 Hoath, Miss M.E.M. 96 R[ai]l[wa]y Bank, Seasalter '57 HMW.
- 4) Sandwich Bay.
- 5) Morants Court Hill. Polhill, above Tunnel. 36 Well Wood, 3964, W. Wickham 1958 PCH. Halstead, AA **BM**. Down .W. of Farningham 1946. Chalk W of Eynsford PCH. Pigrims Way, Polhill PCH. Chevening Park PCH.
- 6) Mounts Road, Greenhithe, PCH; FR. 67 Gravesend 60, HAS. Horns Cross chalk pit, 1962. Horton Kirby PCH. Shoreham Rifle Range PCH. Preson Hill, PCH. Downs W. of Kemsing PCH. Otford Mount. Cornfield, Buckland R[oa]d. Luddesdown, PCH. Upper Halling Downs, 1943 **MNE**; 1960.
- 7) Down N. of W[ater] Works, Boxley, '62. 96 Ospringe Down HMW, 1956. "Double" form (all florets tubular), by road ½m. N. of Stalisfield Church, 970533, 1961, R. Theobald.
- 9) Chalk grassland on clifftop, Kingsgate, Thanet, 1959 **MNE**.
- 10) By R[iver] above S. Darenth PCH.
- 11) E. Malling, the Rocks. W. Malling. Quarry S. of Ditton, 1954 **MNE**, 715566; 1957, CAS. Ragstone Scarp, East Hall, Boughton Monchelsea, 1959-1960 **MNE**. R[ai]l[wa]y S. of Hildenborough Sta[tion], CAS.
- 12) Chylmington, Great Chart. Mersham quarry.
- 16) Aldington, Copperhurst; Aldington Knoll. Lympe castle, Ragstone scarp. Sandgate, 1816, Hb JFY **BM**.

### **Succisa** Haller

**S. pratensis** Moench Devil's-bit Scabious. 15, 16.

**Native.** Chalk grassland, frequent in less dry places; meadows, grasslands, scrub, open woodlands and woodland paths on clay and Hastings Sands, very common; fens, meadows and valley bogs on peat, locally common.

Common in Surrey and Sussex, frequent in Essex, common in Pas de Calais.

1<sup>st</sup> record, 1640: Appledore, Parkinson, *Theatrum*, p.491.

- 1) Chislehurst Common, near SW Pond. Crofton Heath, PCH. Holwood Park, PCH. Keston Common, PCH. Shooters Hill Woods '54, JHB. Hayes Common, 1956, Miss A. Mills. Roundabout Wood, Crofton, 1960, F.M. Swain.
- 2) Joydens Wood, PCH. Farningham Wood, PCH. Dartford Heath, 1954, GMB.
- 3) Grassland on London Clay, NE of Boughton Street. Wood S. of A2 Boughton Hill 1959 HMW. By pond, Denstroude, 093603, 1959, HMW. Thornden Wood, 1946.
- 4) Worth Minnis, 1946. Ham Fen, 1946 **MNE**.
- 6)A) Darenth Wood. Mounts Wood. Swanscombe Wood.
- 10) St John's Jerusalem, in Meadow, PCH. Westerham Wood, '82.
- 11) NW of Bearsted, 1956 (F[olkestone] Sand). 85 Kings Wood, Ulcombe (a[bundant] chert dr[ift]) 1960, Mrs B. Dodds. Hoads Wood, 1946 **MNE**. 84 Rides, on W C[lay], Denge Wood, 1962, ES.
- 13) BirchWood, Bidborough 540430 (Wad[hurst] C[lay]), 1955, GE Hutchings. Combwell Wood, 1979. Sissinghurst Park Wood, 1979. 73 (T[unbridge] W[ells] S[and]) Bank W. of Folly Hill, Colliers Green, 1962.
- 15) Reported to occur near Dungeness school c.1928 by Head mistress to A.M. Morley & E.C. Joy.

### **Scabiosa** L.

**S. columbaria** L.<sup>857</sup> Sheep's Scabious. 15, 16.

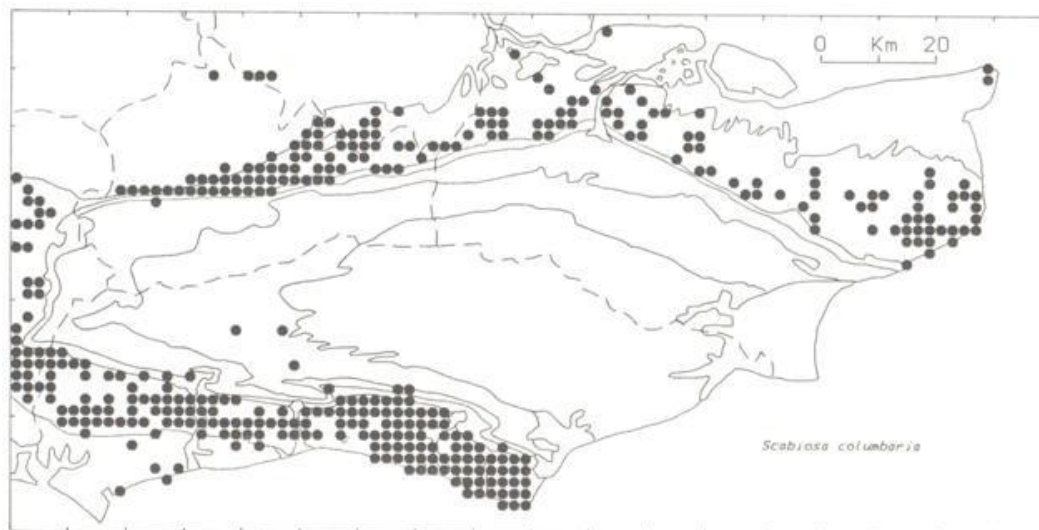
**Native.** Chalk grassland and banks on chalk, abundant and very constant in old turf; occasional on ragstone, Thanet Sand, and on the coastal beaches; unrecorded elsewhere.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.3.

- 1) Pastures N. of Farnborough PCH.
- 4) Shingle beach, between Walmer and Kingsdown, 1946 **MNE**.
- 5) Cudham, 1949 44/'59 Berry Green. Below Jewells Wood, Saltbox, AG Davis, 1915 **MNE**, 4660. Darwins Bank, Downe, 1947; 4360. N of Cudham 4461. Down SW of Farningham, 1946, 5366 = Chalk W. of Eynsford PCH. Polhill chalk pits; Polhill, above Tunnel 5060. W Chevening P[ar]k 4758. Brasted Nower 4656. Pilgrim House 4456.
- 6) Bank on Thanet sand, S. of Mounts Wood, Greenhithe, 1954 **MNE**; Mounts R[oa]d, PCH. Cliffe chalk pits, Hb Gravesend (1945!). Chalk b[an]k, N end of Mounts R[oa]d, Greenhithe, 1956, 587745, HMP. White Downs E of Shoreham PCH; FR. Downs 1 m NW of Wrotham, 1947 **MNE**. Wingate Wood, Halling, PCH. Up[pe]r Halling Downs, 1945 **MNE**; 1960.
- 7) Wouldham, Downs. Burham Downs. Down N. of W[ater] Works, Boxley, '62.

<sup>857</sup> Map found with Francis Rose-related papers, but may not have been intended for the Flora.

- 8) Downs NW of Pean, 1948, Mrs.B. Welch. Woodville Downs, Temple Ewell 1955 **MNE**. Downs S. of Oldstairs Bay, 1946 **MNE**. Golf Course, Kingsdown, 1954. Hawkshill Down, Walmer, 1955 **MNE**. Free Down, 1962. 1m SE of St Margarets at Cliffe, 1962. Downs above S. Foreland, St Margarets Bay, 1958 **MNE**.  
 9) N. Foreland Golf Course, 1954 **MNE**. C[hal]k g[ras]s[an]d on cliff top, Kingsgate, 1959 **MNE**.  
 15) N[ea]r R[omney] H[ythe] & D[y]mchurch Station, and Bird Observatory, Dungeness, 1957, D.P. Murray.  
 16) Leas Cliff, Folkestone.



\***S. atropurpurea** L. [Sweet Scabious. 15.]

Alien, fully naturalised at Folkestone Leas Cliff. Probably a garden escape.

- 9) R[ai]l[wa]y cutting, Ramsgate to Broadstairs, abund[ant], RGW.  
 16) In quantity on the cliff at Folkestone, 1890; seen annually since 1862, J.C. Melvill, *BEC Report*, 1890, p.301; Folkestone Leas, H. Lamb 1885 **MNE**; 1945→ locally abundant!; 1957, F. Ambrose. Folkestone Brickfield, 1948, D.McC.

## ASTERACEAE<sup>858</sup>

‡ **Echinops** L.

‡ **E. sphaerocephalus** L. [Glandular Globe-thistle. 16.]

Alien, completely naturalised near Maidstone and Aylesford.

- 11) old gravel pits N.W. of The Friars, Aylesford, 1932 I.A. Williams; 1945-62! Maidstone, bank n[ea]r High Level Bridge over Medway, 1960, E.G. Philp, **MNE**.

**Carlina** L.

**C. vulgaris** L. Carline Thistle. 15, 16.

- 1) [Charlton, 1835 Hb F.J.H.]

2) Edge of marshes, Northfleet, 1946. Cliffs, W, of Warden point. On shell beach, Shellness, Sheppey, 1946-62 **MNE**.

3) Tankerton cliffs, 1944.

4) Richborough – Shellness point.

5) Chalky bank, Brown Wood, Cudham PCH. Darwins Bank Downe, '55 JEL. Chalk W of Eynsford PCH. Pilots Wood PCH.

6) Horns Cross great Chalk Pit, 1962. Mounts R[oa]d, PCH. Swanscombe Wood, PCH. 773715 Cockham Woods, Upnor, '51 D.McC. Shoreham Rifle Range PCH. White Hill, Shoreham, 1960. Magpie Botton PCH. Preston Hill, E. scarp, PCH. Otford Mount PCH. Kemsing Downs PCH. Trottiscliffe Downs PCH. Old ch[al]k pit, above Paddlesworth, PCH. Halling Warren PCH.

7) Burham Downs. Wouldham Downs. Bluebell Hill **MNE**. Boxley. Belmont Park, Throwley, 1947, Mrs W. Verschöyle. Newnham Gravel pit, 1950, R.E.W.

<sup>858</sup> Given in the manuscript as COMPOSITAE.

8) Adder Down, T[emple] Ewell Mrs KDR. Folkestone Warren, 1907 **MNE**; 1962! R[oa]dbank, Willow Wood, Tilmanstone, 1960, B Nash.

9) North Foreland, Kingsgate, 1959 **MNE**.

11) Ragstone:

Offham quarry, 1954. Preston Hall Quarries. 715556, Ditton S. quarry, 1957, CAS. 714575 Ditton N. quarry, 1957, CAS.

12) Chylmington quarry, Great Chart.

13) n[ea]r Stone Cross, Ashurst, CAS.

14) Stone Cliff, 1958.

15) Dungeness, RGW.

#### **Arctium** L.

**A. lappa** L. [Greater Burdock. 15, 16.]

2) Higham, 1938, J.B.M.

3) Whitstable, Canterbury R[oa]d R[ai]l[wa]y Br[idge] HMW.

4) By Delf Stream, Sandwich, 1960, Miss B. Nash. Trackside, Woodnesborough, 1960, Miss B. Nash. Farm track, Worth, 1960, Miss B. Nash.

5) Wood on c[lay] w[ith] f[lints], W of Shoreham PCH.

6) Wasteland, Gravesend, '61 HAS. Springhead, Northfleet, by A2, 618724, HMP, 1955. Bank, Buckland R[oa]d, Luddesdown, PCH.

8) 24 Chilton n[ea]r Alkham, 1957, Miss B Nash.

10) 563706 S. of Roman Villa, Darenth, 1955, HMP. Waste g[rou]nd, S Darenth, PCH. Sevenoaks tip, 1958, CAS.

11) Medway bank below Maidstone 1939 AHWD **BM**. R[iver] Teise NE of Capel Manor Horsmonden, JFW. Edenbridge, rubbish tip 1956 DPY.

13) Fields, Tollslye, Lamberhurst 1940 JRW. Bank E. of Sta[tion], Goudhurst.

#### **A. "pubens"** Bab.

11) Addington, Ford Place, 1958, DMCC.

**A. minus** [(Hill.) Bernh. [Lesser Burdock. 15, 16.]

1) 36 Tip n[ea]r Hayes Station, 395660, 1958, PC&JFH. Farningham Wood 82. 57 Dartford Heath, 1954, GMB. 47 R[oa]dside, Bexley – N Cray PCH.

2) Waste g[rou]nd Seasalter HMW 57. Canterbury R[oa]d, Whitstable HMW.

4) 35 By Delf Stream, Sandwich, 1960, Miss B. Nash. 25 Deerson F[ar]m, Preston, 1957, Miss B. Nash.

5) 56 Farningham R[oa]d Sta[tion] Cross Roads PCH.

8) 34 Ringwould, 1960 Miss B Nash. 34 E. Langdon by Pond, 1960. 35 R[oa]dside, Eastry, 1959 B. Nash. 34 R[oa]dside W. Langdon 1957, Miss B Nash,

10) 56 Waste g[rou]nd, S Darenth, PCH.

11) 25 Littlebourne, RG Williams.

16) [Sandgate Park, 1816, Hb JFY **BM**.]

**A. nemorosum** Lej.<sup>859</sup> Common Burdock. 15, 16.

1) Shooters Hill Common GMB '54. Track S. of Joyden's Wood, PCH. Ruxley Pits, TH Angel, '58.

2) Sheerness Canal Dump, '57 OD. Bank by Funton Creek, 1962 **MNE**.

3) Blean, RGW.

7) Downs E of Thurnham 1894 ESM **BM** (pynocephalus<sup>860</sup>).

8) Chartham, RGW. Copse SW of Hawkinge, 1893, ESM **BM** (as pynocephalus).

11) Maidstone, 1960, E.G. Philp **MNE**. Edenbridge, Rubbish tip, 1956 DPY.

13) Winbridge, Lamberhurst, 1942, JRW.

14) College Wood, Wittersham.'62.

15) New Romney, RGW.

#### **Carduus** L.

**C. tenuiflorus** Curtis<sup>861</sup> [Slender Thistle.] 15, 16.

<sup>859</sup> In the manuscript given as *A. vulgare* (Hill) A.H. Evans (*A. nemorosum* Lejeune).

<sup>860</sup> *Pycnocephalum* was subsequent to the date of this record used as a subvarietal name within *Arctium vulgare*.

Native. Seawalls, and dry banks and cliffs near the sea and tidal rivers; common in 2), 4) and 15) in these habitats; on cliffs, frequent in 8) and 9); also on chalk downs inland especially near old rabbit warrens, scattered along the escarpment of 7) and 8) on ragstone on ancient sea cliffs from Lympne to Hythe in 16); on dry open grassland on sand and gravel occasionally in 6); rare and usually casual elsewhere inland.

- 1) Orpington, 1852, AA **BM**.
- 2) Higham, 1938, JBM. Greenhithe, 1881, H&JG **BM**. All Hallows, on beach and sea wall, 1945-6 **MNE**. Oare Creek, 1960, Mrs B. Dodds; 1961, C. Turner. Graveney beach, 1945, DHK.
- 4) Bank on sandy soil, n[ea]r Lit[tle] Britton, Wingham 1946 **MNE**. Sandwich – Deal.
- 5) Jewells Wood, AGD, 1918, **MNE**.
- 6) Green Street Green, Darenth, 1839, H.C.W. **BM**; 1947! **E**) Shorne Warren 1946, DMcC. [Northfleet, RP **BM**.]
- E**) Cockham Woods, 773715, 1951, DMcC.
- 7) Downs N. of Bluebell Hill, 1945 **MNE**. 809582, Thurnham Castle, 1948, DMcC. Downs W. of Hollingbourne, by rabbit warren. Burham old pit, 1951 Hb Gard.
- 8) Downs SW of G[rea]t Shuttlefield Farm, E. of Lyminge 1946 **MNE**. Downs SE of Etchinghill. Summerhouse Hill, Newington. Downs NW of Pean, 182387, 1948, Mrs B Welch.
- 9) Minnis Bay.
- 11) Hartlake Bridge, 1943, JRW.
- 15) Shingle by car park, Ferryfield, Lydd, 1955, DMcC.
- 16) Ragstone cliffs, below Lympne, 1947 **MNE**. (Sandgate, 1816, Hb JFY **BM**.)

‡ **C. pycnocephalus** L. [Plymouth Thistle. 15, 16.]

- 1) Shoddy alien, Plaxdale Green, Hockenden, 1948, **MNE**, det. JEL.
- 4) Shoddy alien, Sandwich, 1960, DMcC. **MNE**.

**C. crispus** L. (*C. acanthoides* L., sec. Dandy) Welled Thistle. 15, 16.

- 1) Keston Common, 1915, AGD **MNE**. R[iver] Cray, N. Cray, PCH. Abbey Wood, 1948, R.A.B.
- 5) Chalk W of Eynsford PCH. Ploughed Chalk Down S. of Timberden Bottom PCH. Sta[tion] approach, Farningham R[oa]d, PCH. Beechwood, Darwins Bank, Downe, '55 JEL.
- 6) Mounts R[oa]d, PCH. Ebbsfleet, Northfleet, 1961, HAS. Pilgrims Way, E of Wrotham, FR; PCH. Halling Warren PCH.
- 7) Belmont Park 1959 HMW.
- 8) Cliff top, Corn Hill, Dover, 1960. Mrs. B. Dodds.
- 9) 36 St. Lawrence, Ramsgate, RGW.
- 10) Wasrt ground Otford R[oa]d, Sevenoaks, 530577, 1962, D.McC. R[iver] path below Shoreham PCH. Horton Kirby PCH.
- 11) Addington Place 1958 DMcC. N[ea]r Green E. Malling, 1943→ **MNE**. 715566 Ditton S. Quarry, 1957, CAS. E. Peckham 1939 JRW. By pond E of Hale St[reet], 683493 CAS 1957.
- 13) R[oa]dside E of Goudhurst 1943 JRW.
- 14) R[ai]l[wa]y bank NE of Station, Tenterden, 1949 **MNE**.
- 16) W. of Hythe.

**C. crispus x nutans** = **C. x stangii** H. Buek<sup>862</sup>

- 2) Riverbank of Thames, PCH.
- 6) E of Shoreham 1898, ESM **BM**.
- 7) Boxley Warren 1894, ESM **BM**.

**C. nutans** L. [Musk Thistle. 15, 16.]

- 1) Wall, Lessness abbey, 1948, RAB.
- 2) 87 Is[le] of Grain, 1956, PCH. 06 Beach and waste ground n[ea]r Red Sluice, Seasalter HMW, 1957.
- 4) 35 Sandwich, 1946.
- 5) 55 Polhill, 1946, 46 Leaves Green, 1915, AGD **MNE**. 46 Salt Box, 1916, AGD, **MNE**. [Rushmore Hill, AA, 1838 **BM**.]
- 6) 57 Green Street Green, 1946; PCH. 67 Gravel pit N. of Shorne, 694735, PCH. 66 Downs W of Wrotham, A Beadell c.1933. 66 Red Wood, Luddesdown, 1950 **MNE**.

<sup>861</sup> In the manuscript with author citation L.

<sup>862</sup> In the manuscript given as *C. acanthoides x nutans* = *C. x orthocephalus* Wallr.



7) Burham Downs. Boxley Warren. Hollingbourne Downs 1946. Newnham Gravel Pits, 1949. Soakham Down, 1949.

8) Pickersdean, 076451, ES. Wye Crown pit, 072466, ES. Brook Hillock, 1949, E.S. Edees. Winchcombe Downs, Crundale, 083497, ES. Whitehill Wood, 1955 **MNE**. 25 Field border, Bonny Bush Hill, Kingston, E.G.P., 1960. Cheriton Downs, 1961. Cliff top, Corn Hill, Dover, 1960, Mrs B. Dodds. E Cliff, Dover KDR.

9) 26 Monkton, RGW.

11) [Barming Heath 1882, MNHS **MNE**.]

12) Mersham Quarry, 1946. Warren Woods, Ashford, 998444, ES. Chartham, 1958, Mrs. B.

15) N. of Romney Warren, 1946.

16) W. of Hythe.

[*Cirsium* Mill.]

**C. eriophorum** (L.) Scop. [Woolly Thistle.] 15. 2/51

Native. Chalk grassland, rare; grassy banks on ragstone, very rare; confined to the chalk escarpment between Postling and Folkestone in 8), and a few places on ragstone in 16). The Kent area of this species is very disjunct and isolated; apart from one locality on chalk at Coulsdon in Surrey of doubtful status, it occurs no nearer than mid Hants and N. Essex, and is mainly midland in its British distribution. It occurs however on calcareous dunes W of Calais and on Carb[oniferous] limestone near Marquise in P[ar] de C[al]ais.

8) Postling Downs, N. of Church! 1946-61 **MNE**. Folkestone Warren, Miss J. Moore, 1960. Castle Hill, Folkestone. Downs N. of Cheriton, 1949-61 **MNE**. Beachborough Hill, L.J. Margetts.

16) Pedlinge chapel, L.J. Margetts; 1958! Roadbank on ragstone, Copperhurst, Aldington, 1959 **MNE**. Between Lympne Church and West Hythe, 1823, Mr. Peen, Hb. R.P. **BM**.

**C. vulgare** (Savi) Ten. [Spear Thistle. 15, 16.]

1) Shooters Hill Common '54 GMB. Hayes Common PCH. Holwood Park PCH. Crofton Wood PCH. Keston 1911 AGD **MNE**. Ruxley pits TH Angel '58. Joydens Wood PCH. Farningham Wood PCH. Mount Mascal, Bexley PCH. N Cray PCH. Dartford Heath, '54, G.M.B.

2) Sewerbank, Plumstead PCH. Woolwich Arsenal PCH. Pasture Murtons F[ar]m Graveney '56 R Theobald.

4) Sandwich Bay.

5) Chalk W. of Eynsford PCH. 36 Well Wood, 3964, W. Wickham 1958 PCH. Pilots Wood, PCH. Pilgrims Way, Polhill, PCH.

6) Mounts R[oa]d, PCH. The Thrift, Bean, PCH. Kemsing Downs PCH. Trottscliffe Downs PCH. Halling Warren, PCH.

7) Ospringe Down, HMW.

10) Sevenoaks tip, 1958, CAS. R[iver] path below Shoreham PCH. St Johns Jerusalem, PCH. W of S. Darent PCH.

11) Teise bank, 1½m S of Collier St[reet], 1959 **MNE**.

**C. dissectum** (L.) Hill [Meadow Thistle.] 14, 15, 16.

Native. Fens, fen-meadows, and flushed areas of valley bogs; always local, now extremely rare and almost exterminated in Vcc. 15 and 16 by drainage.

1) Keston Common 1863 JSM; 1944!not since. [(Ninians Wood) W of Locks Bottom, 1863, JSM.]

4) S end of Worth Minnis! Miss DACL, 1946; not there, 1956. Worth Minnis, 1950-56 **MNE** in fen meadow with *C[arex] lepidocarpa*, *C. panicea*, *A[nagallis] tenella*, and *Festuca pratensis*, etc; not found in 1960, the meadow being then much drier.

13) [Hawkenbury Bog, JRW; 1946! **MNE**.] Boggy field W. of Ellis' Wood, Lamberhurst, JRW; 1944-47! **MNE**; not seen in 1957, the bog being nearly dried up; still l[ea]f[ing], 1979!

**C. acaule** (L.) Scop. [Dwarf Thistle. 15, 16.]

Caulescent plants are common: Dover; Thanington; Q[ueen] D[own] W[arren]; Frindsbury; Ashford Warren; Lamberhurst.

5) Jewells Wood 1918 AGD **MNE**. Chalk W. of Eynsford PCH. Darwin's Bank, Downe, 1962.

6) Frindsbury RGW. Rifle Range and Downs, Shoreham PCH. White Hill, Shoreham 1960. Magpie Bottom PCH. Preston Hill, E scarp, PCH. Otford Mount PCH. Kemsing Downs PCH. Halling Warren PCH. 686708 Bank opp[osite] Ifield Place, Shorne, Mrs AG Side; PCH.

7) Boxley, Down above W[ater] works, 1962. Purple Hill. Queen Down Warren. Hollingbourne (Downs 1m E. of) 1947 **MNE**. Belmont Park, Throwley, 1958, D.McC. Ospringe Down.

8) Thanington RGW.

9) chalk turf, N. Foreland, Kingsgate, 1959, **MNE**.

11) Clare Park, East Malling, 1946. Ragstone escarpment, Elmstone Hole, 1959.

12) Ashford Warren, 1894, ESM **BM** (caulescent). Mersham Quarry, 1946.

13) Field N. of Gill, SE of Ashurst, Mrs M. Mallinson 1955. Field on Wadhurst Clay, W. of Ellis' Wood, Lanberhurst, 1941 JRW; 1944, FR & JFW (caulescent).

14) Field on Wadhurst Clay, N.W. of Breeches Pond, Tenterden, 1947.

16) Fostums Land, Aldington. W. of Hythe. N. of Hythe station. Folkestone Lees.

**C. palustre** (L.) Scop. [Marsh Thistle. 15, 16.]

1) Crofton Heath PCH. Gattons Plant[atio]n PCH. Joydens Wood PCH. Farningham Wood PCH. Ruxley pits TH Angel '58.

2) Minster, Sheppey, 1917 **MNE**.

4) Sandwich Bay. Worth Minnis. Ham Fen. Wingham Fen.

5) 36 W of Highams Hill 1958 PCH. Pilots Wood, (c[lay] w[ith] f[lints]) PCH.

6) Mounts Wood PCH. Swanscombe Wood PCH. Horton Wood, drift, PCH. Preston Hill, on c[lay] w[ith] f[lints], PCH.

10) Westerham Wood 82. St Johns Jerusalem, PCH. Darenth Meadows PCH.

13) SW of Stone Cross, Ashurst, CAS, 518381. Combwell Wood 1979. Ditch and R[iver] Teise, S. of Lamberhurst Church, 684365, CAS. Wood SW of Pembury 614395 PCH.

**C. arvense** (L.) Scop. [Creeping Thistle. 15, 16.]

1) Shooters Hill Common 1954 GMB. Hayes Common PCH; gravel pit, 1915 **MNE** AGD. Holwood Park PCH. Abbey Wood 1861 **MNE**; 1949! Bexley Village, 1955 **MNE**. Farningham Wood 82. Ruxley pits, TH Angel '58. Bexley ch[urch] y[ar]d PCH. N. Cray, PCH. M[ount] Mascall, Bexley PCH. Joydens Wood PCH.

2) Woolwich Arsenal PCH. Sheerness Canal Dump '57. O Davis. Weed, Murtons F[ar]m, Graveney, R Theobald. 56.

3) 094647 – 100651 E of Seasalter Ch[urch] 1958 cornfields on L[ondon] C[lay] HMW.

5) Wood W. of Shoreham c[lay] w[ith] f[lints] PCH. Field W. of Farnborough PCH. Pilots Wood PCH. 36 W of Highams Hill, PCH 1958. Darwins Bank Downe '55 JEL.

6) Horns Cross Great Pit, 1962. Mounts R[oa]d PCH. Horton Wood PCH. Greenhill Wood edge, PCH. Kemsing Downs PCH. Halling Warren, PCH. Downs E of Shoreham PCH. Preston Hill PCH.

8) Barfreston (6' 6" high) DMCC.

10) Knole Park PCH. Cornfield n[ea]r Shoreham Ch[urch], PCH. Sevenoaks tip, 1958, CAS. R[oa]dside Eynsford PCH. St Johns Jerusalem PCH. Darenth Meadows PCH.

11) 64 Teise bank 1½m S of Collier St[reet] 1959 **MNE**. 54 Hildenborough, R[ai]l[wa]y to S, CAS.

13) 63 Lamberhurst 1956 PCH. Combwell Wood 1979.

15) St Marys 1881 JFDP **BM**.

var. **setosus**

1) Locks Bottom, 1933, A.H. Carter **BM**.

2) by A.249, S. of Bobbing.

5) Leaves Green, 1929, Mr. Rathbone **BM**.

**Onopordum** L.

**O. acanthium** L. "Scotch Thistle", Cotton Thistle. 15, 16.

1) Farningham Wood, PCH. Dartford Marshes, 1957, G.M.B.

2) Stone Marshes, 1945; 557753, 1957, HMP. L[owe]r Stoke, 1949 **MNE**. Northfleet, 1946. Grain, 1946. Faversham, 1943. 06 Seasalter, 078657 etc. waste g[roun]d n[ea]r Sea, near Red Sliuice, 1957 HMW.

3) 16 Whitstable Beach, RGW, n[ea]r Boating Lake 1951.

4) 1 mile N. of Sandwich, on Stonar beach shingle pits, 1946 **MNE**.

6E) Tower Hill, Upnor, 1951, DMCC.

6) Green Street Green. Greenhithe 1947; 1953 TH Angel. Northfleet, 1944. NW of Cuxton, 1955 **MNE**. R[ai]l[wa]y cutting E of Dartford, 1944. Frindsbury. Stone Lodge Farm pit 565244, 1948 HMP; 1957. Scrub on chalk track above Up[pe]r Halling, PCH. Buckland R[oa]d, Luddesdown, PCH.

8) field edge, S of White Hill, 3½m. S. of Canterbury 1956, A.W. Roberts.

9) Margate, 1905, teste LWW.

- 10)** Sevenoaks Gas Works, 1957, KEB. Garden Weed, Sutton at Hone, 557704, 1950, H.M.P. 75 R[oa]dside, Sandling Wood, 1960 E.G.P. 75 R[oa]dside, Aylesford to Sandling, on disturbed g[roun]d, 1961, 754584, HMP.
- 11)** 65 Mereworth, Cross Roads S of Village on A26, E Shorrock; 1960, Mrs B. Dodds.
- 12)** 04 Lane E of Ashford Warren, 1946, **MNE**. 15 Canterbury (bombed sites and waste ground, RGW; Miss DACL; Roper R[oa]d, c.1945, AW Roberts). By Vauxhall Lakes, 1954, E.S. & P. Furneaux.
- 16)** Sandgate, 1945. 13 Hythe, 1945. 23 Coolidge Lane, Folkestone, 1950, AW Roberts.

### **Silybum Adans**

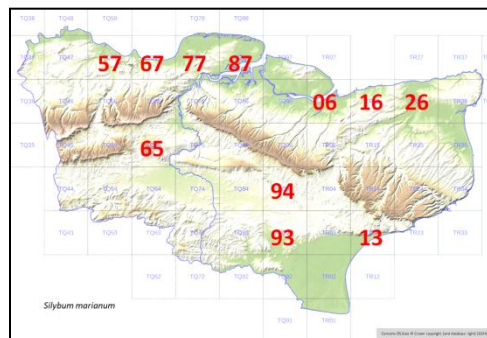
**S. marianum** (L.) Gaertn.

[Milk Thistle.]

15, 16.

8/51

Fully naturalised alien, or possible native: rough ground on ragstone and chalk, banks and waste ground near the sea and estuaries; local and uncommon, but abundant in several localities where it has the appearance of a native species, particularly west of Hythe to Lympne on the ragstone escarpment, at Upnor and at Higham Marshes.



**1)** [Orpington, 1852, A.A., **BM**.]

**2)** 67 Thames River Wall, E. of Denton, 1945. 67 Chalk, 1945. 67 Shornemead, 1945 **MNE**. 77 Higham, 1938, JBM; 1944! abund[ant]. 06 N side Harty Ferry **MNE** P.R. Bell, 1947. 06 Graveney Marshes, 1950, R.E.W. By road, Isle of Grain, 1946. 06 Ham Marsh F[ar]m, Faversham, 1950, REW.

**3)** 16 Cliff top E of Tankerton, 1950, R.E. Wood. Cliff, Swalecliffe, 1953, REW.

**4)** 26 one pl[ant], Stodmarsh, by track, 1950, R.E.W. Sea wall, Reculver, Miss DACL.

**6)** 57 Gore Hill, Dartford, 1946. 57 Hedge of Green Street Green, towards Lane End, 1945 **MNE**. 67, 618724 by A.2, E. of Springhead, Northfleet, 1945; 1957, H.M.P.

**6E)** 77 Cockham Wood, Upnor, 773715, on sandy banks by the Medway: 1945; 1951 D.McC. ;1960! **MNE**.

**7)** [Boxley, E Bartlett 1882 **MNE**.]

**11)** [65 S. of W. Malling, Gray.] 65 1 plant, Bracken Hill, Platt, 1949, D.McC. Sutton Valence, D.McC.

**12)** [94 casual, Westwell, E.S., 1947.] [Casual, Canterbury, R.G.W.]

**14)** [93 Appledore Heath, Asparagus estates, 1955, E.S.]

**16)** Abundant on Ragstone scarp, W. of Hythe, 1949. W. of Lympne Castle, abundant on ragstone, 1946-55 **MNE**.

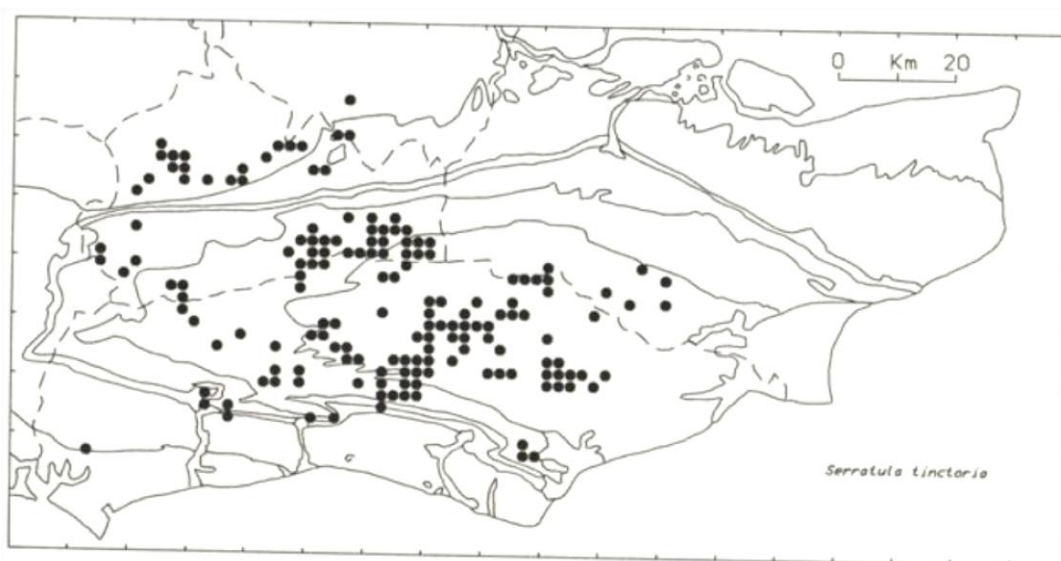
### **Serratula L.**<sup>863</sup>

**S. tinctoria** L.

Saw-wort.

15, 16.

Native. Heathy roadside banks and wood-borders, rare; now almost confined to the High Weald of 13) and 14), where it is locally frequent; still existing at single localities on clay soils in 1) and 6a).



<sup>863</sup> Map found with Francis Rose-related papers, but may not have been intended for the Flora.

- 1) Rough g[ras]l[an]d (on London Clay) E. of Bromley Common, 1954, G.M.B.; FR 1954! **MNE**.  
**6a)** Scrub and wood borders on London Clay, Lodge Hill, Great Chattenden Wood, FJH; 1899, H. Elgar **MNE**; 1954! **MNE**. [Woods in Hoo Peninsula, 1863, JSM.]  
**13)** R[oa]dside on T[unbridge] W[ells] S[and] S. of High Wood, Hawkenbury, 605382<sup>864</sup>, CAS. Old Park Wood, E. Border, 1945-55 **MNE**. Combwell Wood, N. Border, on heathy land, S aspect, 1945-59, **MNE**. SE of Kilndown, 1946, **MNE**. Rosemary Lane, Flimwell, 1940, J.R.W. Chittenden Wood, 1943 JRW; 1944-59! **MNE**. Hedgebanks E. of Chittenden Wood, 1946.  
**14)** Lane bank SW of Mopesden, 1950 **MNE**. Lane near Siseley, 1949. Path bank S.W. of Hawkhurst 753303, 1955, Miss V. Nunns.

### **Centaurea L.**

- C. scabiosa L.** Greater Knapweed. 15, 16.  
**3)** old R[ai]l[wa]y track ¼m. S. of Harbour, Whitstable HMW.  
**4)** Walmer – Kingsdown, on Shingle Beach. N of Deal.  
**5)** Farmtrack W. of A. [sic] N. of Franks F[ar]m, Farningham, PCH. 36 Cornfield edge, Well Wood, W. Wickham, 3966642, 1958 PCH. Chalk W. of Eynsford PCH. Pilgrims Way, Polhill, PCH.  
**6)** Northfleet R[ai]l[wa]y cutting 1887 AHWD **BM**. Horton Kirby PCH. Rifle Range, Shoreham, PCH. Otford Mount PCH. Trottiscliffe (Pilgrims Way N of Ch[urch]) 1955 **MNE**. Cornfield, Buckland R[oa]d, Luddesdown PCH.  
**7)** Ospringe Down, HMW.  
**8)** Cheriton Downs. Folkestone Warren 1950 **MNE**. St Margarets Bay, S of, 1958 **MNE**.  
**9)** North Foreland, 1959.  
**11)** East Malling, Isolation Hospital, by R[oa]dside. M.20 n[ea]r Pendenden Heath EG Philp.  
**12)** Chylmington. Mersham Quarry.  
**15)** Dungeness, 1949. Romney Warren.  
**16)** Ragstone Scars, W of Hythe. Aldington. [Sandgate, 1816, J.F.Y. **BM**.]

### **C. montana L.** [Perennial Cornflower. 15, 16.]

*Alien from Central Europe; barely naturalised from gardens.*

- 1)** N of Petts Wood Station, 1957, DMCC.  
**4)** Deal, Mrs Rowe, 1960 **MNE**.  
**7)** by A.252 opp[osite] Park Wood, Chilham.  
**13)** R[ai]l[wa]y W of T[unbridge] W[ells] Sta[tion], 1960 CAS.

### **C. cyanus L.** Cornflower. 15, 16.

- 1)** [Ruxley pits, 1958 T.H. Angel; escape?]  
**2)** Mangoldfield, Graveney — 1 pl[ant], 1952, R. Theobald.  
**3)** Cornfield by A28, Hersden, 1954, RGW.  
**5)** [W. of Farningham, 1948, C.W. **MNE**.]  
**6)** [N.W. of Wrotham, 1 plant, Mrs Tatton Brown.] near Dartford, 1931, PHC. Pitside, Cotton Lane, Stone, — escape, 562748, 1955, H.M.P.  
**7)** Boxley, 1882, E. Bartlett **MNE**. Cornfield, Belmont Park, 1958, DMCC. Near Doddington, before 1958, B. Keane.  
**8)** Cornfield, G[rea]t Watersend Farm, below Lords Wood, Lydden, 1961. Cornfields Little Mongeham, 1960, Miss J. Moore (vidi sp.); abund[ant] 323517, 1961.  
**10)** Sevenoaks dump, 1951, DMCC.  
**11)** [Farleigh Station, Railway siding, one plant, 1946.] [Newly sown grass by A.20 garage, Harrietsham, 1961, B. Dodds.] [Malling 1896, H. Elgar **MNE**.] [Yalding, 1960, E.G. Philp.] [Riverbank, Edenbridge, 1930, JEL, **BM**.]  
**12)** [St Pauls Church Street, Canterbury, Miss M.E.M., 1958.]  
**13)** Old cornfield, Dodhurst F[ar]m, SW of Pembury, 1940, JRW.

### **C. calcitrapa L.** Red Star-thistle. [15, 16.]

*Probably native. Dry grasslands and banks on chalk, near the Thames, Medway and Stour estuaries and in Thanet; rare, but still very locally plentiful, though less frequent than formerly. It occurs in similar habitats*

<sup>864</sup> This appears to be in vc14, East Sussex.

near the Sussex coast and in the Somme estuary, and in these areas is probably native; formerly more widespread in the London area.

1<sup>st</sup> record, [near Cooling, 1629, Johnson]

[4] Several old records about Deal and Sandwich; JSM 1863 etc.]

6) Rough grassland opposite Plough Inn, Northfleet, R. Pocock **BM**; 1945! **MNE**; 613746, 1956, HMP; still there, to 1958! Lucerne field, Stone, 562745, 1956, HMP. Denton, on heaps of chalk N. of Railway, 1945, **MNE**.

7) The Lines, 766680, Chatham, H.L., 1887 **MNE**; →1945, C.W. **MNE**; 1954 **MNE**; 1958, Mrs AG Side. Borstal, near wharf, 1953; not seen, 1960. Coney Banks, S. of Chatham, Mrs.V. Brumby; 1952! Darland Banks, Chatham, white; 1961, above gipsy camp! **MNE**.

9) Cliftonville, 1947, L.W.W.; 1949! **MNE**. [Several old records.]

[16] Between Sandgate and Hythe, 1850, MNHS **MNE**; T. Walker, **BM**.]

**C. solstitialis** L. [Yellow Star-thistle. 15, 16.]

Alien. Lucerne fields, and waste ground; very rare and usually sporadic, but fairly persistent in SW Thanet 9).

1) [W. Wickham, DMCC.] [Wilmington, 1828, R.P. **BM**.]

2) Ham Marshes, Faversham, Joe Gurr.

3) R[ai][wa]y land W. of old R[ai][wa]y, Whitstable, 1950, RGW; 1961.

5) Arable, Sepham, W. of Otford, 1901, D.Smith **MNE**. Rubbish tip, Downe, 1955, DE Kimmins Lond. Nat. '55, [vol.] 35[:3].

6) n[ea]r Hartley Church, D.McC. & J.E.L., 1949, **MNE**. Lucerne Field E. of Cotton Lane, Stone, 561745, 1956, H.M.P. [Greenhithe, 1861, MNHS **MNE**.] [field above Cuxton, 1911, EC Gilbert **TLS**.]

7) Concord Avenue, Chatham, O.D., 1960, **MNE**. Bluebell Hill, 1918, Rev. Hale **MNE**. Soakham Down, in rough chalk grassland, 1948, 15-20 pl[ants], R. Theobald; not seen, 1949!

9) West of Birchington, 1940, L.W.W. Westbrook, L.W.W., 1949. [Margate, 1868, H.T. **BM**.] Hengrove in lucerne, 1911, teste LWW. E. of Sarre, in Lucerne fields, E. Robinson; 1949!

11) n[ear] Larkfield, K. Peters, 1900, **MNE**. Carrot field, Borough Green, 1944, Miss Nisbett.

12) Westwell, ES.

‡ **C. diluta** Aiton [Lesser Star-thistle. 16.]

1) Wickham Tip, Mrs Small.

6) Longfield Tip, 1956, PCH.

10) West Kent Cold Storage Works, Dunton Green.

**C. jacea** L. [Brown Knapweed. 15, 16.]

2) Woolwich Arsenal, 1893, AHWD **BM**. Faversham Brickfield, 1893, AHWD, **BM**. Motley Hill, Rainham, 1950.

6) Downs by N. side of A.20, Wrotham, 1948; 1949, JEL & DMCC (a hybrid swarm with *nemoralis* and *nigra*) (probably destroyed by M20).

11) By path W. of Aylesford Sewage Works, 1949.

var. **fimbriatisquama**

11) West Malling, A.H.W.D., BEC Rep. 1922, p.732.

**C. jacea x nigra** (= **C. x moncktonii** C.E. Britton)<sup>865</sup>

6) Luddesdown, 1921, CEB, **BM** (2401). Ifield, 1921, CEB, **BM** (2406).

**C. "pratensis"** Thuiller<sup>866</sup>

2) Belvedere Marshes, 1911, J. Groves, **BM**. Crossness, AHWD, det. C.E.B., BEC Rep. 1926, p.152 **BM**. Shorne Marshes, W.R.S., det. C.E.B. BEC Rep. 1926, p.152.

6) Upper Halling, A.H.W.D., det. C.E.B., BEC Rep. 1926, p.152 **BM**. Trottiscliffe, A. Beadwell, det. CEB.

**C. nigra** agg. [Common Knapweed. 15, 16.]

1) Ruxley Pits, TH Angel 58. Shooters Hill Common, G.M.B., '54.

2) Crossness, 1893, AHWD **BM**. Dartford Heath, '54 G.M.B.

3) Pasture, Murtons F[ar]m Graveney '56 R Theobald.

<sup>865</sup> In the manuscript given as *C. x drucei* C.E. Britton.

<sup>866</sup> Synonyms *C. thuilleri* J. Duvign. & Lambinon; and *C. debeauxii* var. *thuilleri* (J. Duvign. & Lambinon) P.D. Sell.



5) 36 Highams Hill 1958 PCH.

10) Sevenoaks tip 1958 CAS.

**C. nigra** L. (*C. obscura* Jord.)

1) Crofton Heath PCH. Holwood Park PCH. N. Cray PCH. Bexley Ch[urch] y[ar]d PCH.

2) Woolwich Arsenal PCH. Crossness, AHWD, 1893, **BM**.

5) R[oa]dside, Cudham, 1927, JEL. Old hayfield, Biggin Hill, 1951, E. Marsden Jones & WB Turrill (Brit. Knapweeds, p.58).

11) Liverton Hill, Lenham, 1960, Mrs. B. Dodds. R[ai]l[wa]y Bank, Edenbridge, 1956, D.P.Y. R[oa]dside NW of Marden Thorn (W[eald] Clay), 1962. Headcorn.

13) Goudhurst, 1960 **MNE**.

14) R[oa]dside W of Palstre Court, Wittersham, 1962. NW of Flimwell 1960 **MNE**.

**C. nemoralis** Jord. (*C. nigra* ssp. *nemoralis* (Jord.) Gugler)<sup>867</sup>

1) Hayes Common PCH.

2) Empire Paper Mill, Swanscombe, 592752, edge of Marshes, 1961, H.M.P. Woolwich Arsenal PCH.

5) Halstead PCH. Farningham By pass PCH. Darwins Bank Downe. Pilgrims way, Polhill PCH.

6) 638682, N. of Meopham, 250' on chalk, H.M. Pratt, 1961. 563746 Stone Lodge farm, Stone, on gravel terrace 100' over chalk H.M. Pratt, 1961. Cotton Lane verge, Stone, 100' gravel terrace, HMP, 1961. 558743 Stone House grounds, Stone, 100' gravel terrace, 1961, H.M.P. R[ai]l[wa]y crossing, Stone, 561750, 1961, H.M.P. 529634, 250', R[oa]dside E. of Castle F[ar]m, Shoreham, H.M.P. Mounts R[oa]d PCH. Swanscombe Wood PCH. Shoreham Rifle Range PCH. Otford Mount PCH. 66 White pit, Upper Halling, 1960, E.G.P., **MNE**. Chalk pit by A.20, Wrotham, 1949, DMCC & JEL. Ospringe Down, RGW.

9) N. Foreland, 1960, Mrs. B. Dodds.

10) Shoreham Ch[urch] y[ar]d, PCH. Sutton at Hone, on alluvium, 5606704, 150', 1961, H.M.P. St Johns Jerusalem PCH. S, Darenth PCH.

11) R[ai]l[wa]y bank Edenbridge, 1956, D.P.Y. Tonbridge, on alluvium, 578466, 100', 1961, H.M.P. Plantation at Hildenborough (W[eald] c[lay]) 573484, 100', 1961. H.M.P. R[ai]l[wa]y, Hildenborough, 565482, CAS.

13) Tun[bridge] Wells common 1959, E Shorrocks, 578389.

‡ **Carthamnus** L.

‡ **C. tinctorius** L. [Safflower. 15.]

Casual.

16) Copt Point, Folkestone, 1953, Miss V.P. Day.<sup>868</sup>

‡ **C. lanatus** L. [Downy Safflower. 16.]

1) Stonehill Green, 1949 DMCC.

**Cichorium** L.

**C. intybus** L. Chicory. 15, 16.

Native. Roadsides, scrub, and waste ground, particularly in the parts of Kent north of the low Weald.

1) Bexley, 1955 **MNE**. Waste g[roun]d, St Mary Cray, PCH. Stonehill Green, Hextable, PCH.

2) Woolwich Arsenal; FR, PCH. Oare Church y[ar]d, 1950, REW.

3) 26 Upstreet, R.G.W. Denstroude F[ar]m, Blean REW 1953. 05 R[oa]dside S. of Brenley Corner 1958 HMW. Fields, Seasalter, H.M.W., 1956.

4) Walmer, Miss J. Moore. 25 Staple, Miss B. Nash 1958.

5) 55 Morants Court Hill Pit, 1956 PCH. Chevening, 1849, A.A. **BM**.

6) Upper Halling. S. of Mounts Wood PCH. The Thrift, Bean, PCH. Green St[reet] Green, PCH. Longfield, by R[oa]d to Meopham, 1962. Lane N. of Lodge Hill, Cooling, 1954 **MNE**. Pit W. of Longfield, (some white) A Beadell 1933→.

7) 76 Burham. Bluebell Hill 1883 **MNE**. Chatham Cemetery 1903 D Smith **MNE**. By Hoath Wood 1950 RGW. Field between Throwley Ho[use] Sheldwich and Wilgate Green, 1950 RGW.

<sup>867</sup> In Stace's *New Flora*, 2<sup>nd</sup> edition, not maintained as separate from *C. nigra*, but subsequently treated as *C. debeauxii* Gren. & Godr.

<sup>868</sup> This species appears twice, in different parts of the manuscript, at one of which the record is said to be det. Kew.

8) 25 Bekesbourne Downs, R.G.W. Woolwich Wood '57 KDR. Larkey Valley Wood 125552, 1955, P. Furneaux. Gorsley Wood 165514, 1955, P. Furneaux. Pelham 129522, 1955, P. Furneaux. 34 Knight's Bottom, Kingsdown, 1957, Miss B. Nash.

10) 56 Horton Kirby PCH. 56 S, Darenth, Waste g[roun]d, PCH.

11) 75 Roadsides, East Malling. 75 S. of Ditton. 85 Greenway Forstal, Hollingbourne, 1960, Mrs B. Dodds.

13) 54 R[ai][wa]y, High Brooms, CAS. 54 Rough Ground, Culverden F[ar]m, T[unbridge] Wells, 1950, K.E.B.

**Arnoseris** Gaertn.

**A. minima** (L.) Schweigg. & Körte [Lamb's Succory.] [16]

Colonist or native. Sandy arable fields; always extremely rare, and now apparently long extinct.

1) Bexley, 1843, Hb. H. Ibbotson, **BM**; JSM 1963; near the Church in strawberry fields, Bexleyheath, M.N.H.S., 1867 **MNE**.

**Lapsana** L.

**L. communis** L. Nipplewort. 15, 16.

Native.

1) Shooters Hill Common, 1954, GMB. Beckenham 1916 AGD **MNE**. Crofton Heath PCH. Holwood Park PCH. Bexley ch[urch] y[ar]d PCH. N Cray tip, PCH.

2) 87 Grain, 1956. PCH. Sheerness, Garden Weed, '56 Mrs Bryson.

3) n[ea]r Hoath, Miss M.E.M.

4) Sandwich Bay.

5) Chalk W. of Eynsford PCH. 36 W. of Highams Hill, 1958 PCH.

6) Mounts R[oa]d, PCH. 67 Gravesend, 1960, HAS. Frindsbury Extra, 1938, JBM. Beechy Lees, Kemsing, PCH. Wingate Wood, Halling, PCH.

8) Arable, Fredville, DMCC.

10) Sevenoaks tip, 1958, CAS. R[iver] path below Shoreham PCH. R[iver] above S. Darenth, PCH. St. Johns Jerusalem PCH.

11) 44 Station Road, Edenbridge, 1951, KEB.

13) Lamberhurst a[bundant] 1936 JRW.

15) Dungeness, P. Le Brocq, 1950.

**Hypochaeris** L.

**H. radicata** L. Long-rooted Cats' Ear. 15, 16.

1) Shooters Hill Common '54 GMB. Hayes Common PCH. Crofton Heath PCH. Keston 61, HAS. Elmstead Woods, 1956, Miss A. Mils. Joydens Wood PCH. Bexley ch[urch] y[ar]d PCH. N. Cray Wood, PCH. Farningham Wood PCH; 82! Dartford Heath '54 G.M.B.

2) Woolwich Arsenal PCH. Waste G[roun]d, Crossness PCH. 37 Grain, 1956, PCH. Pasture Murtons F[ar]m Graveney '56 R Theobald.

5) 36 Highams Hill, 1958, PCH.

6) Mounts R[oa]d, PCH. Horns Cross Great Chalk pit, 1962.

7) Ospringe Down, H.M.W.

10) Westerham Wood 82. Sevenoaks tip, 1956, CAS. St Johns Jerusalem PCH.

13) Stone Cross, Ashurst, CAS. Tunbridge Wells Common 1958, KEB, **MNE**. Combswell Wood, 1979.

**H. glabra** L. Glabrous Cats'-Ear. 15, 16 6/51

Native, grass-heath, on sand and gravel soils, fixed dunes; always in open vegetation. Rare; 4 inland and 5 dunal localities.

1) open grass-heath on Blackheath Beds, S.W. of Joydens Wood, 1948, **MNE**. Grass-heath on Thanet Sand, W. border of Farningham Wood, 1945-1956, **MNE**. [Bexley Heath JSM, 1863.]

4) Fixed dunes c.1 mile N. of Sandown Castle, Deal, 1863, JSM; 1949!, **MNE**; 1961.

12) Hothfield Common, on dry bank by Froghole Cottage, 1948-1960, **MNE**.

15) Romney Warren, NW side of A.259, 1946 **MNE**. S. of Greatstone, 1950, **MNE**. Lydd Common, 1863, JSM; 1954 ! **MNE**. Turf S.E. of Boulderwall, Dungeness, 1957, J. Hubbard.

16) Gossy Banks, Saltwood, on sandy grass-heath, 168365, 1951, 1955 F.A. Swain.

**Leontodon** L.

**L. autumnalis** L. Autumnal Hawkbit. 15, 16.

**Native.** Roadside verges, hedgebanks, pastures, waste ground, dunes, etc.; very common.

- 1) Shooters Hill Common, 1954 GMB. Blackheath, 1946, ECW **MNE**. North Cray, 1955 **MNE**.
- 2) St Mary's Marshes, 61, HAS Pasture, Murtons F[ar]m Graveney '56 R Theobald.
- 5) Halstead, PCH.
- 10) Sevenoaks tip, 1958, CAS. Shoreham Ch[urch] y[ar]d PCH. Pastures N. of Farningham PCH.
- 13) Brighton Lake, Tun[bridge] Wells, CAS.

**L. hispidus** L. Rough Hawkbit. 15, 16.

**Native.** Chalk grassland and scrub, very common and constant; grassland in old quarries on ragstone, frequent; occasional on dry banks elsewhere.

- 1) Field W. edge, Farningham Wood, PCH. Beckenham, 1889, E. de C. **BM**.
- 3) Chalk of R[ai]l[wa]y Bank, Seasalter, Joy La[ne], HMW.
- 4) Sandwich Bay.
- 5) Chalk W. of Eynsford PCH. Darwins Bank, 1962.
- 6) Mounts R[oa]d, PCH. Cliffe chalk pit, 1945 **MNE**. White Downs, E of Shoreham, FR; PCH. Preston Hill, PCH. Otford Mount, PCH. Wingate Wood, Halling.
- 7) Ospringe Down.
- 8) 14 East Brabourne Downs, 1954 **MNE**. 34 Kingsdown Golf Course, 1954 **MNE**.
- 9) 36 North Foreland.
- 10) 56 R[iver]side above S. Darent PCH.
- 11) 85 Harrietsham Station 1960, Mrs B Dodds. 85 Warren Wood R[ai]l[wa]y cutting (Gault). 74 Roadside bank, Hunton, (ragstone derived soil) 1954 **MNE**. 44 R[ai]l[wa]y bank, Edenbridge (on imp[orted] chalk) 1956, D.P.Y. 54 R[ai]l[wa]y Bank, Tonbridge, 1960, EGP. [Barming, 1882, HL **MNE**.] [Maidstone, 1883, HL **MNE**.]
- 13) 53 n[ea]r Stone Cross, Ashurst, CAS. 53 R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], CAS. 74 New Church yard, Horsmonden, 1945.
- 14) 73 Bank N of Hawkhurst 1955 **MNE**.
- 15) Car Park, Ferry Field, Lydd, 1955, DMCC.
- 16) 13 W. of Hythe.

**L. saxatilis** Lam.<sup>869</sup> Small Hawk bit. 15, 16.

**Native.**

- 2) 87 All Hallows Beach, Mrs AG Side, 1958. [Erith Marshes 1883 HL **MNE**.] 87 Grain. 06 Shellness in Sheppey 1945-62. 97 N. of Leysdown, 1956 **MNE**. 06 Castle Coot, Graveney. 06 W. of Seasalter on Beach. 77 n[ea]r Higham Church St[reet] 1956 PCH.
- 4) 35 Fixed dunes, Deal Links. 35 Sandwich Bay; 35 St Georges Links; 35 Princes Links.
- 6) 57 Green Street Green, 1945, **MNE**. 57 Playing field, Stone, 562746, 1959, HMP. 56 Rifle Range, Shoreham, and downs above, PCH.
- 8) 25 Wingham Village, RGW. 25 Barham Downs, 1958, Miss B Nash. 14 R[oa]dside, Walderchain Wood, Barham; Shelvin, Denton, 1957, B. Nash.
- 10) 45 Several Fields S. of Westerham, 1957, Mrs. AG Side. 55 Fawke Common, by chert pits on bank, 1934 **MNE**.
- 11) 75 East Malling, on ragstone Walls 64 Hedgebank on sand E of Hale Street, E. Peckham 1954 **MNE**.
- 15) 02 Romney Warren. 02 Greatstones. 13 Sandy ground behind Wall NE of Dymchurch 1947 **MNE**. 92 Field N. of Station, Appledore, 1959 **MNE**.
- 16) 13 Ragstone Scars W. of Hythe.

**Picris** L.

**P. echioides** L. Prickly Ox-tongue. 15, 16.

**Native.** Grassland, roadside verges, cliffs, waste ground, etc., on heavy clay soils, very common; not common on lighter soils except on disturbed chalk soils in N. and NW Kent.

- 1) Park Langley, Beckenham, 1915m AGD, **MNE**. N. Cray tip, PCH. Ruxley pits, 1958, TH Angel. Sewerbank, Plumstead PCH.
- 2) Erith Marshes, PCH. Dartford Marshes, by ditches, 1962. 67 Swanscombe waste g[roun]d and marshes 61 HAS. 67 Denton Marshes 59, abund[ant] HAS. Sheerness, Canal Dump '57, O. Davis. Brambledown. R[ai]l[wa]y bank Cuxton, FR; PCH. Pastures Murton F[ar]m Graveney 56 R Theobald.

<sup>869</sup> In the manuscript given as *L. taraxacoides* (Vill.) Mérat (*L. leysseri* G. Beck).

- 3) 099647 – 100651, cornfields E of Seasalter Ch[uch] on L[ondon] C[lay], 1958, HMW.  
 5) Chalk W. of Eynsford PCH.  
 6) Mounts R[oa]d PCH. The Thrift Bean PCH. A2 cutting, Swanscombe Wood, 1955, KEB. Wingate Wood edge, Halling, PCH.  
 7) Simia Wood, Ospringe 1959 HMW. Highsted chalkpit, 1959, H.M.W.  
 10) Sevenoaks tip, 1958, CAS.  
 11) Ryarsh, 1881 **MNE**. 714575 Ditton N. quarry, 1957, CAS. Swanton Valley, 1947, D McC. W of Halt, Teston, dry pasture (on atherfield clay/Rag[stone] mixture) 1942 **MNE**.  
 12) Brabourne, 1961, Miss B. Nash (61/14).  
 13) 44 S of Edenbridge 1955 **MNE**. 63 Stammerden Wood, Lamberhurst, 1937, JFW.  
 14) College Wood, Wittersham, by track, '62. R[ai]l[wa]y Bank, Tenterden, 1959, ES.  
 15) W. of Dymchurch, 1882, JFDP **BM**.  
 16) W. of Sandgate, 1816, JFY **BM**. Folkestone Leas. 1957 F Ambrose.

**P. hieracioides** L. Hawkweed Oxtongue. 15, 16

Grassland and scrub on calcareous soils; frequent on chalk, locally frequent on ragstone; rare elsewhere.

- 1) N Cray tip PCH. Chalky Bank, Buckland R[oa]d, PCH. Ravensbourne, Keston, 1955 **MNE**. Dartford Heath, 1954, GMB.  
 2) Old R[ai]l[wa]y, SE of Minster Sheppey 1958 **MNE**. Seasalter RGW.  
 3) R[ai]l[wa]y, Whitstable, P.R.B. By Boating Lake, Whitstable Beach, RGW, 1951.  
 4) Kingsdown Beach, RGW.  
 5) Chalk bank N.W. of Eynsford, 1954, PCH & FR **MNE**. Sepham, Polhill, 1905 DS **MNE**. E of Farningham R[oa]d Sta[tion], PCH. Chalky Waste g[roun]d, Orpington bypass, PCH.  
 6) Great Chalk pit, Horns Cross, 1962. Green St[reet] Green to Lane End by r[oa]d, PCH. Mounts R[oa]d, FR, PCH. Swanscombe Wood, PCH. The Thrift, Bean, PCH. Otford Mount PCH. Pilgrims Way, Otford, PCH. R[ai]l[wa]y bank, Cuxton, PCH. Cobham Warren PCH. Horton Kirby 1946 **MNE**. Rifle Range, Shoreham, PCH. Up[pe]r Halling Downs, 1954 **MNE**. Gravesend, waste g[roun]d, '61 HAS. By Strood Station 1943, **MNE**. [Whitehill, Gravesend 1823 RP **BM**.]  
 7) 76 chalk scrub below Borstal, 1960. 86 Queen Down Warren 1961. 85 Belmont Park, 1937, JRW. 05 Park Wood E of Molash, 1954 **MNE**.  
 8) 13 chalk Scrub S. of Etchinghill, 1958 **MNE**. 34 Cliff, Oldstairs Bay, Kingsdown 1956 **MNE**. 34 Cliff above St Margarets Bay 1958 **MNE**. 34 Dover E. Cliff 1955 **MNE**.  
 10) 57 St John's Jerusalem PCH. [n[ea]r Sevenoaks, Hb Rudge **BM**.] E. Farleigh, 1882 HL **MNE**.  
 11) 75 Ditton N. Ragstone Quarry 714575, 1957, CAS. 75 Aylesford gravel pits 736588 '57 CAS. 75 on Ragstone, 715566, Ditton South Quarry 1954 **MNE**. 74 Rag[stone] Scarp of East Hill, Boughton Monchelsea, 1959 **MNE**  
 13) T[unbridge] W[ells] (Royal Chase) 1930 ED Morgan. Connaught Way, J Wills; 1950 KEB; 1959 KEB. Station Yard, Goudhurst, 1959 **MNE**.  
 14) R[ai]l[wa]y ½m N of Tenterden Sta[tion], 1959 **MNE**.

var. **spinulosa**

- 6) By pit, Grubb St[reet], W of Longfield, 1935, 1936, A. Beadell **BM**. Horton Kirby, 1936, CEB, **BM**. Pit beyond school, Fawkham, A. Beadell, c.1933.

**Tragopogon** L.

**T. pratensis** L.

ssp. **pratensis** [15, 16.]

Native. Grassy Roadside verges and paths in full sun, infrequent but locally in some quantity, Very local in Britain, probably only native in SE England and E. Anglia.

"Kent", J. Rayer, Ed., Hb. Forster, **BM**.

- 1) Maryan Wilson Park (Charlton Wood), 1958, G.M.B.  
 2) Lower Stoke, 1959 **MNE**.  
 3) Blean, RGW. Seasalter, RGW. R[oa]dside NE of Graveney 058639.  
 6) Roadside SE of Eynsford, 1950 **MNE**. Strood Hill, 1927, F.D. **BM**. A2 W. of Strood GC Pownall, c.1948.  
 10) By A.25 (N. side) ½m. W. of Westerham, 1962.

**11)** R[oa]dside verge, between “The Chequers” and the Green, W. Farleigh 1961. [Maidstone, 1881, H.L. **MNE.**] West Malling Station approach, '60. Verge of Maidstone R[oa]d, S.W. of Detling, '48. R[oa]dside towards Sandway, 1m. SW of Lenham, '62. Medway towpath, Maidstone, EG Philp.

**12)** Chilston Park N edge of R[oa]d, 1963.

ssp. **minor** (Mill.) Wahlenb. Common Goats' beard. [15, 16.]

**Native.** Roadside verges, grassland, waste ground; very common throughout Kent.

**1)** Shooters Hill Common, '54, G.M.B. Dartford Heath, '54, GMB.

**2)** Woolwich Arsenal PCH. Waste g[roun]d, Crossness PCH. 87 Grain, 1956, PCH. Canal banks, Sheerness, a[bandant], 1955, OD.

**4)** Sandwich Bay – Deal.

**5)** Field on chalk, W. of Shoreham, PCH.

**6)** Mounts Road PCH. Lane End, PCH. Downs E. of Shoreham PCH. Upper Halling 1954 **MNE.**

**8)** Parkgate Down, Elham, 1958 **MNE.**

**10)** W. of S. Darenth, PCH. Darenth Meadows, PCH.

**11)** E. Malling. R[ai]l[wa]y bank Edenbridge 1956 D.P.Y. Hildenborough R[ai]l[wa]y 563482, CAS.

**15)** 079187 Dungeness, 1954, **MNE.**

ssp. **orientalis** (L.) [Celak.] [15.]

**Alien in Britain.**

**8)** waste ground, former kitchen garden, St Margarets at Cliffe, Mr. Codd, 1960 **MNE.**

**T. pratensis** ssp. **minor** x **T. porrifolius**<sup>870</sup>:

**2)** canal Banks, Sheerness, 1955, OD.

**9)** Cornfield, Sandwich R[oa]d, Ramsgate, 1939 (*T. porrifolius* in nearby garden) R.A. Graham.

**T. porrifolius** L. Salsify. 15, 16.

**Fully naturalised alien.**

**2)** Erith, 1949. Stone Marshes, on River Wall, 1945 **MNE.** All Hallows, on River Wall, 1945. Canal Banks, Sheerness, a[bandant], 1955, O.D.

**3)** Whitstable Harbour, 1958, HMW; 110670 ES, Whitstable, 1950 REW. R[oa]dsides E and W of Upstreet LWW. Rough grassland on clay, Shamrock avenue, Seasalter, 1960, HMW. Roundabout, Thanet Way verge S. of.

**4)** Walmer Beach!; 1947 EM Broduck.

**6)** R[ai]l[wa]y crossing Stone, 551748, H.M.P.

**9)** Minster, Thanet, 1939, Miss M. Ashbee, Hb. J.D. Grose.

**11)** [Maidstone, 1883, H.L. **MNE.**]

**16)** Folkestone Brickfield, 1948, DMCC.

**Sonchus** L.

**S. palustris** L. Marsh Sow-Thistle. 15, 16.

**Native.** Tidal reed swamps along the upper part of the tidal R[iver] Medway, rare and extremely local but locally abundant: also in freshwater reed swamps in a disused gravel pit. Now confined in the British Isles to the tidal Medway and the Norfolk-Suffolk Broadlands (from Minsmere, Blythburgh, and the Waveney Valley to the Yare, Bure, Ant and Thorne Broadland rivers).

**2)** From ¼ mile below Allington lock, to Aylesford Bridge, frequent, 1942-1945 **MNE.** Aylesford Bridge to Mill Hall, 1945, L[eft] bank **MNE.** The Friars. Ditch bank, 1m NW of Aylesford below Maidstone Sewage Works, 1962. Left bank, below New Hythe, l[ocally] a[bandant] towards Snodland, 1945, 200 spikes **MNE.** (1895, H.L. **MNE.**) Right bank, below New Hythe, v[ery] a[bandant] (>500 spikes, 1945-1953, **MNE.**) Right bank, 50 plants above New Hythe, 1945. Wet copse, S. of Snodland, 1955 **MNE.** West of Eccles, 20 spikes, 1945. Island W. of Burham Cement Works, 2-300 spikes, 1945. Burham Marshes by river, frequent, 1909 (H.L. **MNE**) - 1953! 1 plant by roadside, Wouldham, 1946 **MNE.** By river below Dartford, P.C. Hall.

**11)** Leybourne Castle Lakes, 1958.

**S. arvensis** L. Corn sow-thistle. 15, 16.

<sup>870</sup> Order of parents reversed and position of entry regularised.



- 1) Shooters Hill Common, '54, G.M.B. Crofton Heath PCH. Joydens Wood PCH. Farningham Wood PCH. Mount Mascall, Bexley, PCH.
- 2) Woolwich Arsenal PCH. SewerBank, Plumstead, PCH. Sheerness, Canal Dump, '57, O.D. Snodland Marshes, 1897, H. Elgar **MNE**; 1945! New Hythe 1946 **MNE**. Weed Murtons F[ar]m Graveney 56 R Theobald.
- 3) Marsh dikes W of Seasalter. Seasalter Beach HMW. Thanet Way, Seasalter, HMW. Garden, Medina Av[enue] Seasalter HMW.
- 5) Chalk W. of Eynsford, PCH. 36 Well Wood 3964 W. Wickham 1958 PCH. Chevening Park, PCH.
- 6) Mounts R[oa]d, PCH. Pilgrims Way E. of Wrotham PCH. Old pits Swanscombe '61, HAS. Cornfield, Buckland Rd, Luddesdown, PCH. R[ai]l[wa]y bank, Cuxton, PCH.
- 10) Sevenoaks tip 1958 CAS. R[iver] path, Shoreham PCH. By R[iver] above S. Darentth. PCH.
- 13) 53 Lamberhurst 1956 PCH.

**S. oleraceus** L. Common Sow-Thistle. 15, 16.

- 1) Shooters Hill Common, '54, GMB. Farningham Wood 82. Crofton Heath, PCH. Bexley Mill Pond PCH. Dartford Heath, '54, G.M.B.
- 2) Woolwich Arsenal PCH. Sewerbank, Plumstead, PCH. Garden weed, Sheerness '56. Shellness, Sheppey, 62. Weed Murtons F[ar]m Graveney 56 R Theobald.
- 5) 36 W of Highams Hill, 1958 PCH.
- 6) Mounts R[oa]d, PCH. The Thrift, Bean PCH. Preston Hill, PCH. Pilgrims' Way E. of Wrotham PCH. Waste g[roun]d Gravesend, '61 HAS.
- 8) 25 Fredville, arable, DMCC.
- 10) 55 Sevenoaks tip 1958 CAS. 56 Eynsford PCH. 56 W. of S. Darent PCH. 57 St. Johns Jerusalem PCH.
- 11) 75 East Malling 1943-62 **MNE**. 44 R[ai]l[wa]y bank Edenbr[idg], 440470, 1956, DPY. 54 R[ai]l[wa]y S. of Hildenborough CAS.
- 13) 63 Lamberhurst, 1956, PCH.

var. **lacerus** (Willd.) Wallr.<sup>871</sup>

- 6) Greenhithe, G.C.D., B.E.C. Rep. p.388, 1921.

**S. asper** (L.) Hill Rough Sow Thistle. 15, 16.

- 1) 37 Beckenham Place, 1956, PCH. Mount Mascall, Bexley, PCH. Upper Hockenden, PCH. Farningham Wood PCH; 82!
- 2) Shellness, Sheppey, 62. Weed Murtons F[ar]m Graveney 56 R Theobald.
- 5) Halstead PCH. 36 Well Wood, 3964, W. Wickham, 1958 PCH. Chalk W of Eynsford, PCH.
- 6) Shoreham Rifle Range, PCH. Wrotham PCH.
- 7) 95 Gravel path Eastling C Turner 1961.
- 8) Fredville, Arable, DMCC.
- 10) Sevenoaks tip 1957 CAS. Shoreham Ch[urch] y[ar]d PCH. By R[iver] abpve S. Darent PCH. St John Jerusalem PCH. Darent Meadows PCH. Westerham Wood 82.
- 11) R[ai]l[wa]y bank Edenbridge 440470, 1956, DPY.
- 15) Car park Ferry field 1955 DMCC.

**Lactuca** L.

**L. serriola** L. Prickly Lettuce. 15, 16.

*Native.*

- 1) Lewisham. Deptford. Woolwich. Abbey Wood. Blackheath, 1946, ECW, **MNE**. 51.3571 Lawrie Park Sydenham 1946 SE Chandler. Farningham Wood, S. border, 1982. R[oa]dside Bexley – N. Cray, PCH. Tip n[ea]r Hayes Sta[tion], 395660, 1958, PC&JFH. Ruxley pits, '58 TH Angel.
- 2) Woolwich Arsenal. Erith marshes. Shornemead fort, 1895, H&JG **BM**; 1944!; 1949 E.S. Edees. Sittingbourne, 1958, Mrs KDR. Sheerness, Canal Dump, 57, O Davis. Conyer, 1960, Mrs. B. Dodds. Wouldham 1913 J Holmes. Aylesford Station, 1943 **MNE**. S. of New Hythe by Medway, 1945 **MNE**. Weed, Murtons F[ar]m Graveney '56 R Theobald.
- 3) Behind Beach W. of Whitstable, 1947, Mrs. W. Verschoyle.
- 4) 1m N of Sandwich, 1946 **MNE**. Sandwich Bay. Ebbsfleet.
- 9) Great Chalk pit, Horns Cross, 196 2. Mounts Road, PCH. Gravesend, waste g[roun]d, 61, HAS.

<sup>871</sup> Cited in the manuscript as plain Willd.

8) Chalk downs St Margarets Bay, 1953, DP Murray.

10) Riverhead Sandpit by R[ai]l[wa]y, CAS. W. of S. Darenth, PCH. St Johns Jerusalem PCH.

11) Ditton Ragstone Quarry. Aylesford Sand pit. East Malling Research Station. Sandling. Piggery S of Pollhill, Harrietsham, 1962, Mrs. B. Dodds. Rubbish tip, Edenbr[idg] 451455 DPY. R[oa]dside, Paddock Wood CAS.

12) R[ai]l[wa]y, High Brooms, CAS. Tip, High Brooms (runcinate leaves) 1944 JEL; 1950, KEB.

### **L. virosa** L.

Great Lettuce.

15, 16.

1) Shooters Hill Common, '54, G.M.B. By R[iver] Cray, N. Cray, PCH. Dartford Heath, '54, G.M.B.

2) Stone Marshes. Dartford Marshes. Swanscombe Marshes. Northfleet Marshes. Higham, n[ea]r Uralite Halt. Shornemead river wall 1949 ES Edees. Hoo Brickworks. Stoke, 1946. Sea Wall W. of St Marys Bay, St Mary Hoo, 1958 **MNE**. 1 plant in Grain, 1946. N. side Kings Ferry, 1948 DACL. By Medway, above Aylesford; below Aylesford; 1945 **MNE**. New Hythe. Shellness, 1962.

3) 15 Waste g[roun]d, Upper Harbledown, RGW. 26 R[oa]dside, Hersden to Upstreet, Miss M.E.M.

4) R[oa]dside N. of Wingham CCT. Pegwell Bay, 1960, Mrs B Dodds.

6) Mounts Road, PCH. Strood Station. Green Street Green, 1946. R[oa]dside above Trottiscliffe. Tower Hill, W. of Upnor. Chalk pit, the Thrift, Stone, 1945. Halling, near River, 1944,. N[ea]r Springhead 1901, CEB **BM**.

7) Burham Cement Works, 1945.

8) Dover Road, Canterbury, 1961, Mrs. Brickenden. Bridge, RGW. Snowdown Colliery, 1937, F.Hyland. Langdon Bay, old cutting, C.C.T.

10) Railway, S. of Kemsing, 1947. 530577 waste g[roun]d, Otford R[oa]d, Sevenoaks, 1962, DMcC.

11) Borough Green, 1962, DMcC. Ditton Ragstone Quarry. Cobtree, Aylesford. Wall, old Mill F[ar]m., Hollingbourne, 1962, Mrs. B. Dodds. Haysden, Tonbridge, Mr H. de Vere Hodge, 1957.

12) Westwell, 1 pl[ant] in quarry, 1950, ES.

var. **integrifolia** Gray

1) Dartford Heath, Redgrove, BEC Rep. 1922, p734.

### **L. saligna** L.

Willow Lettuce [or Least Lettuce]

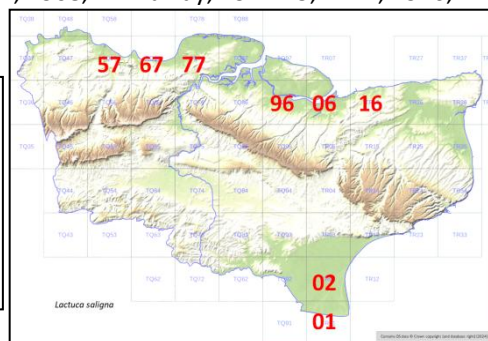
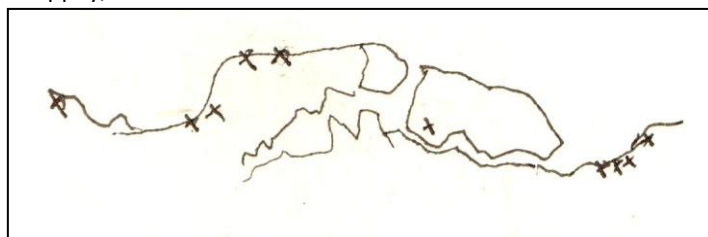
15, 16

8/51

**Native.** Sea walls and shingle beaches; rare and local; formerly frequent down the Thames / Swale estuary in 2) from Woolwich to Seasalter, but since the 1953 sea flood it has become much harder to find.

Rare in Sussex, [blank] Surrey, [blank], Essex.<sup>872</sup>

2) 57 Dartford, 1898, S. Goff **MNE**. [Charlton, 1845, Bossey, Hb. Woodward. Erith Marshes, Ray, *Synopsis*, ed. 2, p.70, 1696. Woolwich Marshes, MNHS 1850 **MNE**. Plumstead Marshes MNHS, 1846 **MNE**; Dennes **BM**; 1887, F.W. Ward, **MNE**. Greenhithe, 1862, MNHS, **MNE**.] 57 Riverwall Stone Marshes, JEL. Miss H. Turnbull. 67 Riverwall, Shornemead Fort, AHWD; 1945! **MNE**; 1949 ES Edees. 77 Riverwall, Higham Marshes, CW, 1944→. 77 Riverwall, Cliffe, NBG; 1945, **MNE**; 1974, Dr Prince; 1980. Cooling 1980. [Sheerness Blackstone; E Jacob, *Pl. Fav.*] [Chatham Dock yard, 1913, J Hepworth.] 06 Seawall, N. of Graveney, 1945, **MNE**. 06 Seawall, W. of Seasalter (E. of "Sportsman" behind bungalows) FJH in Fl.K.; 1908, D. Murray; 1944-45, **MNE**; 1946, Mrs W. Verschoyle; 1952, F.R. 96 Roadside NE of Kings Ferry, Sheppey, 1948.



3) 16 Beach, n[ea]r boating lake, West of Whitstable, 1945 **MNE**; 1947, f[requen]t, Mrs W. Verschoyle. [E of Whitstable FGEK.] [Swalecliffe FJH.]

15) 02 Greatstone, 1954, J.P.M.B. 01 on disturbed shingle at N. end of Long Pit, Dungeness, 1947, DMcC & FR **MNE**.

**Cicerbita** Wallr.<sup>873</sup>

<sup>872</sup> Incomplete.

- C. macrophylla** (Willd.) Wallr. [Common Blue-sow-thistle.]  
**C. bourgaei** (Boiss.) Beauverd [Pontic Blue-sow-thistle.]

**Mycelis** Cass.

- M. muralis** (L.) Dumort. Wall Lettuce. 15, 16.  
 (*Lactuca muralis* (L.) Gaertn.)

*Native. Dry woods on light or basic soils, especially beech woods' shaded hedgebanks; and walls in sheltered places, common except in the marsh districts, along the coast, and on the Weald clay.*

- 1)** Bomb site, Eglinton R[oa]d, Shooters Hill, 438771, 1949. West Wickham Common, Keston. Elmstead Lane, Chislehurst, 1944-56. Joydens Wood. Hollows Wood, Shoreham. Bexley Ch[urch] y[ar]d, PCH. Abbey Wood, RAB, 1948-50.  
**3)** Lane Bank (Thanet S[and]) S. of Fordwich, 1947. Stocks Wood, Rough Common, 1950, REW.  
**5)** Beechwood, Darwin's Bank, Downe, JEL '55; 1962.  
**6)** Beechwood, White Hill, Shoreham, 1960. Pilgrim's Way, E of Wrotham, PCH. Wingate Wood, Halling, PCH.  
**7)** Lenham Hill 1960 Mrs B Dodds. (Throwley to Stalisfield 1950 REW) Syndale Wood border, 1950, REW; 1962!  
**8)** Woodland, Cuckoldscoomb, Brook, 1945 **MNE**. Eastry 61/35 Miss B. Nash, 1961.  
**10)** Wall of Chevening ch[urch] y[ar]d, PCH. Wall, Shoreham Village, PCH.  
**11)** Clare Lane, E. Malling, 1945 **MNE**.  
**12)** old wall, Precincts, Canterbury 1955, P. Furneaux.  
**13)** Shaded Rocky Road bank, Stonewall, Chiddingstone, 1954. Banks, Stone Cross, Ashurst, 523 588, CAS. By A.264, E of Langton, 552391, E, Shorrocks 1958. Parsonage Lane, Lamberhurst 1945 **MNE**. R[oa]d N of Kilndown, Goudhurst, 1946, **MNE**. Combwell Wood, Goudhurst, 1946, **MNE**.

**Taraxacum** F.H. Wigg.<sup>874</sup>

- T. officinale** agg. Dandelion. 15, 16.  
**1)** Abbey Wood, PCH. Hayes, 1915, AGD **MNE**. Shooters Hill Woods, '54 GMB. Crofton Heath PCH. Up[pe]r Hockenden, PCH. Bexley Mill Pond PCH. Farningham Wood PCH. Dartford Heath, '54, G.M.B. N. Cray Wood PCH.  
**2)** Plumstead Sewer Bank PCH. Woolwich Arsenal PCH. Dump, Sheerness Canal, 57, OD. Garden Weed Sheerness 1956 Mrs Bryson. Weed Murtons F[ar]m Graveney '56 R Theobald.  
**5)** Halstead PCH. Chalk W. of Eynsford PCH. Pilots Wood PCH. 36 n[ea]r Highams Hill, 1958 PCH. Darwins Bank '53 JEL.  
**6)** Mounts R[oa]d PCH. Lords Wood, Darenth PCH. Dunstall Woods PCH. Preston Hill PCH. Greenhill Wood PCH.  
**7)** Ospringe Down HMW.  
**9)** 36 Copse SE of Durlock, Minster, 1959, Mrs AG Side.  
**10)** Westerham Wood PCH. Sevenoaks tip, 1958, CAS. Cornfield by Shoreham Ch[urch], PCH. Eynsford, PCH. Waste g[roun]d, S. Darenth PCH.  
**11)** Larkfield Heath, 1947 **MNE**. S. of 'Startled Saint', W. Malling 1958 **MNE**. R[ai]l[wa]y yard and banks, Edenbridge 1956 DPY.  
**13)** Stone [Cross], Ashurst, CAS.

**T. palustre** (Lyons) Symons<sup>875</sup> Fen Dandelion. 15.

*Native. Marshy meadows, flushes; very rare.*

- 4)** Fordwich Marshes, 1949 **MNE**; 1951,  
**14)** Boggy meadow E. of lower part of Robins Wood, Cranbrook, 1949, **MNE**.

**T. laevigatum** agg.<sup>876</sup>

- 2)** 87 Grain. 06 Shellness.  
**3)** 16 n[ea]r cemetery, Homewood R[oa]d, Sturry, Miss E. Millward.  
**4)** 35 Sandwich Bay.

<sup>873</sup> No accounts were given for the two species listed.

<sup>874</sup> Author citation of Weber in the manuscript.

<sup>875</sup> In the manuscript cited as (Lyons) DC.

<sup>876</sup> This aggregate covers species in Sections *Erythrosperma* and *Obliqua*.

- 6) 621679 Longfield Hill Mrs Woods. 66 Scalers Hill, Cobham, in short turf on Eocene sands and gravels, 1961, HAS. Kemsing Downs 1956 **MNE**.  
 7) Detling Downs, NW Coombe, 1955 **MNE**.  
 8) 14 Parkgate Down, Elham (seeds pale brown) 1960, Miss B Nash.  
 11) Walls, E. Malling. Wrotham Heath. Larkfield Heath 1944 **MNE**.  
 12) Ashford Warren.  
 13) High Rocks Lane, T[unbridge] Wells, 1944 **MNE**. Rusthall Common. Redleaf.  
 15) Dymchurch, Mrs Walton, 1950, det. Kew. Romney Warren. Littlestone, G.C.D. (as *T. lacistophyllum* Dahl J 1910, det. Dahlstedt, BEC. Rep. 1922 p.735.  
 16) Ragstone Scars, W. of Hythe.

### Crepis L.

#### C. biennis L.

Rough Hawk's-beard.

15, 16

29/51<sup>877</sup>

**Native.** Rough grassland, woodborders, and scrub on chalk and ragstone, hedgebanks, road verges, mainly but not only on calcareous soils; widespread in Kent, and locally common along the base of the chalk escarpment from the Surrey Border in 6) to Wingham and Hacklinge in 8), widespread and scattered on the chalk N. of the escarpment; plentiful on the Ragstone and gault in 11) 12) and 16), and scattered sparsely over the Weald Clay in 12) and Hastings Beds in 13) and 14). Probably commoner in Kent than in any other British County.

1) 47 Abbey Wood, 1954, GA Matthews. S border Farningham Wood 82. Chelsfield, 1945, JK Spearing.

3) R[ai]l[wa]y embankment, Seasalter, HMW. 06 opp[osite] Rose in Bloom. 16 Seawall by Boating Lake Whitstable HMW.

4) 26 Preston Marshes, 1960, Mrs. B. Dodds. 26 Chislet, Miss M.E.M.

5) 45 Pilgrims Way, N. of Westerham. 45 Hogtrough Hill, 1951 **MNE**. 55 Pilgrims Way, below Polhill, 1946. Pilgrims Way, E. of Otford. 55 Pilgrims Way, E of Kemsing. 65 Wrotham By Pass 1959 **MNE**.

6) 66 Pilgrims Way, Trottiscliffe 1946 **MNE**. 65 Ryarsh. 66 Road to Upper Halling, 1946 **MNE**. 76 Cuxton. 56 Meenfield Wood Shoreham, PCH. 77 Cliffe chalk pits. 67 old chalkpit, Northfleet, GMB. [Greenhithe, 1861, MNHS **MNE**.]

6E) 71 Spendiff, Cooling, 1946, **MNE**. 77 R[oa]dsde S. of Cliffe. 75 Field border on chalk, Boxley, 1960, E.G.P. 75 Boarley, Pilgrims Way, 1956 E.G. Philp **MNE**. 76 Borstal, n[ea]r Medway in chalk scrub 1960 **MNE**.

7) 95 Pilgrims Way, Lenham. 94 West well, E.S., at foot of Downs. Charing Hill, 1950 **MNE**. Foot of Burham Downs, by Pilgrims Way. 1998. [not 56]

8) 04 Wye. 04 Hastingleigh. 04 above Brook. 14 Brabourne. 14 Stowting. 14 Elmsted. 15 Hedge, Petham, 1949 **MNE**. 14 SE of Waltham, below Yockletts, 1949. 14 Elham. 14 Lyminge. Bishopsbourne. 35 Ham. 35 Hacklinge. 35 Northbourne. 34 Ringwould; St. Margarets, 1951, B. Nash. 25 S. of Wingham (Neavy Downs, by R[oa]d),

9) [not 36]

10) 55 R[oa]dsde W. of Otford, 1946.

11) Barming 1859, E M Attwood, Phyt. (N.S.) III, p.260. 94 Stone Hill, Egerton, 1959 **MNE**. 93 R[oa]dsde by Beult Bridge, E of Buckhall, Bethersden, 1962, **MNE**. [not 54, not 64, not 74]

11W) 55 Tonbridge, GE Shaw. 45 S. of Ide Hill.

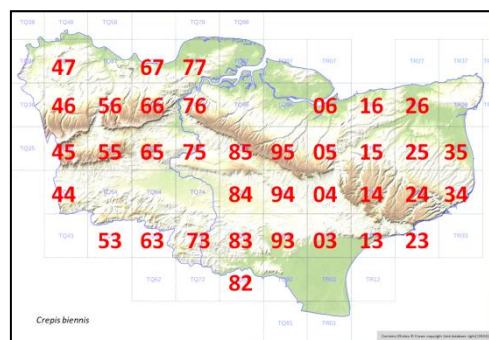
12) 94 Westwell. 04 Brook. 04 Brabourne Lees. 04 Brabourne, foot of Downs, 1946 **MNE**. 14 Stowting. 94 Great Chart. 03 R[oa]dsde, Ruckinge. 03 Bilsington. Canterbury bombed site Miss DACL, 1946 **BM**.

13) 63 R[oa]dsde S of Kippings Cross, 1950, **MNE**. 53 R[ai]l[wa]y W. of T[unbridge] Wells W[est] Sta[tion], CAS. Quakers Lane, Cranbrook, 1954, DS, det. F.R.

14) 82 R[oa]dsde S.W. of Small Hythe, 1958, **MNE**. 82 R[oa]dsde, NW Oxney, 1956.

15) [not 92]

16) 03 verges, Clap Hill, Aldington 1950 **MNE**. 13 Lympe. 03 Road verges, Court at Street. 03 Copperhurst, Aldington, 1956 **MNE**. 13 W. of Hythe. 13 Salt Wood 1950 **MNE**. 23 on Gault, N of Cheriton.



#### C. nicaeensis Balb.

[French Hawk's-beard.]

16.

<sup>877</sup> Actually 36/51, entries on a page of manuscript were overlooked.

13) Roadside, Speldhurst, 1931, AHWD; 1935, GE Shaw.

**C. capillaris** (L.) Wallr. [Smooth Hawk's-beard.] 15, 16.

1) Shooters Hill Wods, '54 GMB. Farningham Wood 82. Crofton Heath PCH. Bexley ch[urch] y[ar]d PCH. Joydens Wood PCH. 57 Dartford Heath '54, G.M.B.

2) Woolwich Arsenal PCH. 87 Grain, 1956, PCH. 06 Shellness, Sheppey, '62. Weed Murtons F[ar]m Graveney 56 R Theobald.

4) R[ai]l[wa]y E of Reculver RE Wood 1953.

5) Halstead, PCH. Chevening Parkl PCH. 36 Well Wood 3964, W. Wickham, 1958, PCH.

6) Mounts R[oa]d PCH. Green St[reet] Green, PCH. Preston Hill, c[lay] w[ith] f[lints], PCH. HallingWarren, PCH.

7) 95 Eastling 1961, C Turner. 96 Ospringe Down, HMW.

10) Sevenoaks tip 1958 CAS. Shoreham Ch[urch] y[ar]d, PCH. St Johns Jerusalem PCH. R[iver] above S. Darenth PCH.

11) Ryarsh Sandpits, 1944 **MNE**.

**C. vesicaria** L. ssp. **taraxacifolia** (Thuill.) Thell. [ex Schinz. & R. Keller]

[Beaked Hawk's-beard.] 15, 16

1) Lessness Abbey Walls '48, RAB. Ravensbourne, 1915, AGD **MNE**. W. Wickham Court, 1916, AGD **MNE**. Elmstead Woods, 1956, Miss A. Mills.

2) Woolwich Arsenal, PCH.

6) [Greenhithe, MNHS, 1862 **MNE**.] R[oa]dside E of Stone, 1946 **MNE**. Below Great Wood, Cuxton, 1944 **MNE**.

7) Pilgrims' Way, Thurnham, 1960, Mrs. B. Dodds.

11) Hildenborough R[ai]l[wa]y, CAS. Edenbridge R[ai]l[wa]y bank 1956, DPY.

12) Mersham Mill, 1956 **MNE**.

13) R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], CAS.

**C. setosa** Haller f. [Bristly Hawk's-beard.] 16.]

[1] waste ground, Swanley, 1883, Hb. F.J.H.]

**C. foetida** L. [Stinking Hawk's-beard.] 15, [16]

several old records only:

6) Dartford, 1885, W.R. Linton, Hb FJH.

15) Dungeness, 1932, C.E. Sandwith:

on shingle by railway track N. of Long Pit, Dungeness, 1946, R. David; 1947, **MNE**; r[oa]d jubction W of Pilot Inn, 1946, R. David.

on shingle between Britannia Inn and the Lighthouse 1952-58, **MNE**.

**Hieracium** L.<sup>878</sup>

All records quoted (except for those of *H. perpropinquum*, *H. umbellatum* marked \*, and those of *H. pilosella*) are based on specimens determined by Mr. P.D. Sell and Dr C. West, to whom I am greatly indebted for help in preparing this account.

Sect[ion] **Vulgata** Fries

‡ **H. scotostictum** Hyland. (*H. praecox* sensu Pugs.) [Dappled Hawkweed.] 16.

Naturalised alien.

1) Library Grounds, Bromley, C.W., 1956.

5) On chalk at southern mouth of Polhill Tunnel, J.E.L., F.R. & C.W., 1946. Copse near Polhill, F.R.B. & C.W., 1956.

10) Chipstead Gravel Pit, near Riverhead, L.H.J. Williams, 2/8/1960 (det. C.W.).

11) Maidstone Cemetery, H. Lamb, June 1900 (det. C.W.) **MNE**.

**H. exotericum** agg. 15, 16

Locally common in scrub, wood borders and rail and roadsides banks, especially on the chalk.

<sup>878</sup> The account of this genus has undergone extensive revision, with many deletions. Exceptionally, for presentation of this transcript, I have not attempted to convert nomenclature and sequencing into that of Stace (1997) *New Flora of the British Isles* (2<sup>nd</sup> edition), which itself in any event does not give all *Hieracium* species names, and which separates the Mouse-ear Hawkweeds into the genus *Pilosella*.



\*The records for the segregate microspecies have not been distinguished below.

- 1) Sundridge Park, Chislehurst, F.R.B. & C.W., 1957.
- 4) Beach, S. of Deal, Mrs. B. Dodds, 1960.
- 5) "Westerham", CGE, 1903. Timberden Bottom, Shoreham, F.R.B. & C.W., 1956.
- 6) Whitehill, E. of Shoreham, F.R., 1954. Railway bank on chalk, S. of Shoreham, FR, 1954. Magpie Bottom, E. of Shoreham, F.R.B. & C.W., 1957.
- 7) Burham Downs, by a shady track up Scarborough Spur, C.W., 1949.
- 10) Dunton Green, F.R.B. & C.W., 1957. Bitchet Common S. of Seal, F.R., 1944- MNE, 1959! Stone Street, C.W., 1955. Ightham Common, C.W., 1955; FR. Ivy Hatch, C.W., 1955 (common by lanes in this area!).
- 11) West Malling, near Aerodrome, C.W., 1957. Near Rats' Castle, Mereworth, C.W. 1957. On basic soil, Oaken Wood, SE of E. Malling, F.R., 1957. Roadbank in Wood W. of Barming, F.R. & C.W. 1960. N[ea]r Preston Hall, F.R.B., 1956.
- 13) Bullingstone Lane, Langton, 1949, F.R. Langton Rocks, F.R. Capel Place Park, Horsmonden, F.R., 1948. Bidborough, FRB & CW 1960.

‡ **H. vulgatum** Fries [16.]

There is a specimen in CGE collected by W. Peete in 1845 on an old wall at Woolwich Common. It was almost certainly a casual.

**H. pollichiae** Schulz.-Bip. (H. roffeyanum Pugsl.) [Roffey's Hawkweed] occurs just across the border in Surrey, SW of Edenbridge, E. of Dormansland in Surrey.

- 11) Kings Wood SE of Langley, Mrs. B. Dodds, det. C.W.

**H. maculatum** Sm. [15, 16.]

Probably always introduced.

- 1) Chislehurst Common, J.E. Woodhead, 1950: C.W., 1952. Bromley, F.R.B., 1957.
- 7) Chalky bushy bank of Lane, 025482, near Boughton Aluph, E. of Eastwell Park, F.R. & C.W., 1953.

**H. lepidulum** (Stenstr.) Omang [15, 16]

Local on roadside banks; possibly introduced in some localities.

- 1) Chislehurst Common, F.R.B., 1956.
- 8) West Wood, Stowting, roadside bank on Lenham Beds, F.R. & C.W. 1956.
- 10) N[ea]r Bitchet Green, near Seal, F.R., C.W., 1952. Crockham Hill, FRB & CW, '57.
- 13) Roadsides, Pembury Walk, C.W., 1956, 1957. Bayham, roadside bank, F.R., 1953. Cross R[oa]ds at Colts Hill, Capel, F.R.B. 1957.

‡ **H. diaphanoides** Lindeb. (H. megapodium sensu Pugsl. pro parte) [15, 16.]

In seeded grassland at

- 13) Ashurst Park, near Langton Green, H.W.P.; C.W., 1952; and in
  - 8) Roadside bank on Lenham Beds, West Wood, Stowting, F.R.B., 1953; F.R. & C.W., 1956,
- In both of which it [was] probably introduced.

‡ **H. diaphanum** Fries

- 1) Grassy banks, Sundridge Park, C.W., 1957, probably introduced. [16.]

**H. tunbridgense** Pugsl. [Cher Hawkweed. 15, 16.]

Sandy banks by lanes and wood borders, widely distributed; banks on chalk, rare.

- 1) Railway bank, Sundridge Park, F.R.B., 1954.
- 3) Vill of Dunkirk, WH Hind, 1859. Steep bank of lane on Thanet Sand, N.W. of Patricxbourne, 185556, F.R., 1944; ("near Bokesbourne" of Herb[ariu]m label); F.R. & JE Woodhead, 1950 ("between Canterbury and Bokesbourne" of Herb[ariu]m label).
- 5) Roadside bank, near Shoreham, F.R.B., 1953.
- 6a) Darenth Wood, H.M. Pratt, 1953.
- 7) Longreach Wood, Stockbury, FR, CW, 1957. Chalky bank, with *H. maculatum*, near Boughton Aluph, 1953, F.R. & C.W.
- 10) Lane bank, Whitley Scrubs, S. of Bessels Green, Sevenoaks, F.R., 1950. Lane S.W. of Sevenoaks Church, F.R., 1950. Bitchet Common, F.R., 1944.

- 11)** Larkfield Heath, C.W., 1946; 1960. Roadside bank, W. of Bearsted, C.W., 1951. Ragstone Wall, Boughton Monchelsea quarries, F.R., 1949. By A.20, Leeds, F.R. & C.W., 1953. Kings Wood, Langley, F.R. & C.W., 1950; F.R., 1954.
- 12)** Roadside of A.20, W. of Kew Inn Green, F.R., 1947.
- 13)** Langton, CW, 1950. Blackhurst Lane, SW of Greggs Wood, Pembury, C.W., 1950; F.R., C.W., 1956. Fairthorne, Pembury, C.W., 1957. Pembury Walk, C.W., 1952.
- 14)** Sandy lane bank, near Penhill, Tenterden, F.R., 1947.

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**H. strumosum** (W.R. Linton) A. Ley (*H. lachenalii* auct.) 15, 16

- 1)** Joydens Wood, J.S. Henslow in 1827 **CGE**.
- 5)** Wilmington, Kent, C.A. Stevens, 1837.
- 8)** Roadside, West Wood, Stowting, F.R. & C.W., 1956: rare.
- 11)** near Rats' Castle, Mereworth, C.W., 1957. Kings Wood, Leeds, Mrs B. Dodds, 1959.

#### Section **Tridentata** Fries

**H. cambricogothicum** Pugsl. 15, 16

- 10)** Walls at Riverhead, (~~since destroyed~~) F.R. & C.W., 1951.
- 11)** King's Wood, Langley, F.R. & C.W., 1950.

**H. cantianum** F.J. Hanbury [Kent Hawkweed. 15, 16.]

*Sandy banks and clearings in woods. In Kent common in the High Weald but rare elsewhere. Confined to Kent, Surrey and Sussex.*

- 11)** King's Wood, Langley, F.R. & C.W., 1950.
- 13)** Roadside near Pembury Old Church, N.D. Simpson, 1938; C.W., 1955; Kent College, Pembury, F.R.B. & C.W., 1957. Yewtree F[ar]m, Pembury, F.R.B., 1953. Parsonage Lane, Lamberhurst, F.R. & J.R. Wallis, 1944; C.W., 1950. Kilndown, F.R.B. & C.W., 1959. Bedgebury Forest, F.R. 1945. Combwell Wood, F.R., 1945. Birchwood Farm, Biddenden, F.R., 1949. Angley Wood, Cranbrook.
- 14)** Sandpits Wood, Biddenden, F.R., 1946. Brogues Wood, Biddenden, F.R., 1950. Standen Wood, Benenden, F.R., 1950.

**H. trichocaulon** (Dahlst.)Johansson [Hairy-stemmed Hawkweed. 15, 16.]

(*H. rigidum* sensu Hanbury & Marshall pro parte; *H. tridentatum* sensu Pugsl. pro parte.)

*Sandy banks by lanes and wood borders and sandy heaths. Locally frequent in the High Weald but local elsewhere. This species, which is widespread in southern England, is elsewhere only known from Sweden. This suggests that either our plant is a different species (which is not apparent from material examined) or that it was introduced to the country many years ago.*

- 1)** Keston Common, C.W. 1911. Hayes Common, C.W. 1911. Chislehurst Common, C.W., 1957. Elmstead Woods Station, F.R.B., 1956.
- 10)** Fawke Common, S.E. of Sevenoaks, F.R., 1956.
- 11)** Mereworth Woods, C.W., 1950; (S. end, C.W., 1957; Rats' Castle, C.W. 1957). King's Wood, Langley, F.R. & C.W., 1950; F.R., 1956.
- 13)** By A.20, NW of Pembury, C.W. 1952; (=Fairthorne, Pembury, F.R.B., 1953); Pembury, near Old Church, C.W., 1957. Roadside, Griggs Wood, Pembury, F.R. & C.W., 1956. Knowles Bank, Capel, F.R. & C.W., 1956. Hog Hole Common, Lamberhurst, J.R. Wallis, 1943. Chittenden Wood, F.R., 1950.

**H. eboracense** Pugsl. [Northern Hawkweed. 15, 16.]

*Sandy banks by lanes and wood-borders; rare. Endemic.*

- 12)** Roadside bank on Folkestone Sand, Charing Heath, F.R., 1954.
- 13)** Roadside, Pembury, C.W., 1950. Blackhurst Lane, by Griggs Wood, Pembury, F.R. 1956. Knowles Bank, Capel, CW, 1956.
- 16)** Near Saltwood, E.S. Marshall, 1894, **CGE**.

#### Section **Umbellata** Fries

<sup>879</sup> Here, *H. cheriense* Jord. ex Boreau with its various records has been deleted.

**H. umbellatum** L. [Umbellate Hawkweed.] 15, 16

Shaded and open sandy banks, heaths, sandy woodland, wall tops, railway banks, etc. Common in suitable places in 1), 3), 10), 11), 12), 13) and 14).

1) Hayes Common, C.W., 1911. Blackheath, H.S. Redgrove, 1936. Holwood Park, F.R., 1949. R[ai]l[wa]y bank, Bromley South Station, F.R.B., 1956.

3) Bigbury Wood, Harbledown, J.E. Woodhead, 1950: Miss D.A.C. Long, 1958.

10) Dunton Green, C.W., 1955.

11) n[ea]r Borough Green, on R[ai]l[wa]y bank, D.McC. & C.W., 1957. Wrotham Heath, F.R. & C.W., 1946. Heath E. of Addington, F.R., 1947. Lunsford Lane, Larkfield, F.R., 1943. Watery Lane, W. Malling, F.R., 1944. Wall E. of Chiltern Hundreds, Maidstone, F.R. & C.W., 1947. W. of Bearsted, CW, 1955. Sandy bank by A.20, W. of Hollingbourne, F.R., 1946. Harrietsham, Mrs B. Dodds, 1960.

12) Lenham Heath, F.R., 1954. Charing Heath, F.R., 1954.

13) Hook Green, J.R.W., 1937, det. H.W.P. Bedgebury Forest, 1945, FR. Angley Wood, F.R., 1946. Free Heath, JRW, 1943, det. H.W.P. Chittenden Wood, Biddenden, F.R., 1946.

14) Sandpits Wood, Biddenden, F.R., 1946.

Section **Sabauda** Fries**H. perpropinquum** (Zahn) Druce [Autumn Hawkweed.] 15, 16

(*H. boreale* sensu Hanbury & Marshall pro parte)

Sandy banks, wood borders, heaths, railway banks; very common in suitable places throughout Kent, but not found in the marsh districts or on chalk or clay. Common in England and Wales, rare in Scotland and E. Ireland; widespread in Continental Europe.

1) Joyden's Wood, J.S. Henslow, 1827 CGE; FR, 1954. Farningham Wood, R.C. Hall, 1954. Keston Common, CW, 1911. Hayes Common, C.W., 1911. Bromley, R. Pryor, 1839. Holwood Park, F.R., 1949.

3) Lane S. of Fordwich, F.R., 1949. Bigbury Wood, Harbledown, C.W., 1954; Miss DAC Long, 1958. Beacon Hill, Faversham, HS Redgrove, 1920. Canterbury, J. Cryer, 1910.

6a) Swanscombe Wood, H.M. Pratt, 1955.

7) Heath, Keycol, Newington, FR & CW, 1958.

8) Elham Park Wood, F.R., 1956.

10) near Sevenoaks, C.W., 1950. Fawke Common, F.R., 1956. Bitchet Common, F.R., 1949. Ivy Hatch, C.W., 1955.

11) G) Wrotham Heath, C.W., 1950. Mereworth Wood, C.W., 1950 (Rats Castle, C.W., 1957). Sandling Wood, Maidstone, E. Philp, 1957. Roadside bank W of Bearsted, C.W., 1951. Roadside bank, W. of Hollingbourne, F.R., 1946. Bank by A.20, E. of Hollingbourne, 1948. Kings Wood, Langley, F.R. & C.W., 1950.

11)W.) Railway bank, Hildenborough, Miss H. Turnbull, 1932. Roadbank W. of Bearsted, C.W. 1951. Harrietsham, B. Dodds, 1960. E. of Fairbourne Heath, B. Dodds, 1960.

13) Speldhurst, F.J. Hanbury, 1874 CGE. Tunbridge Wells, N.D. Simpson, 1938; C.W., 1956. Knowle Bank, Capel, C.W., 1956. Bank E. of Hook Green, Lamberhurst, F.R., C.W., 1956 \*. Bank W. of Gore Court, Goudhurst, F.R., C.W., 1956. Bedgebury Forest, J.E. Woodhead, 1950. Pembury Walk, C.W., 1957. Sandhurst Lane, T[unbridge] Wells, FR, CW, 1956\*. Griggs Wood, Pembury, F.R., C.W., 1956\*. Folly Hill, 3m. S.W. of Staplehurst, S.J. Chamberlain, 1907.

14) Hawkhurst, Miss D.A.C. Long, 1956.

15) Dungeness, E. Philp, 1959.

**H. virgultorum** Jord. [Long-leaved Hawkweed.] 16

11) at the South-West end of Mereworth Woods, C.W., 1950. This plant which occurs in a few places in southern England seems to be referable to *H. virgultorum* Jord., but no authentic material of this species has been seen.

**H. rigens** Jord. [Rigid Hawkweed.] 15, 16.]

Wood borders, roadside banks and heaths on sand and gravel; local and almost confined to the Eocene strata of N. Kent.

1) Plumstead, A.H.W.D. Mottingham, C.W., 1956. R[ai]l[wa]y bank, Sundridge Park, F.R.B., 1954.

3) Perry Wood, F.R., 1950. Bigbury Wood, Harbledown, J.E. Woodhead, 1950; C.W., 1951; Miss D.A.C. Long, 1958; F.R. 1958.

6a) Road cutting of A.2, Swanscombe Park, H.M. Pratt, 1955.

7a) Heath and wood-border, Keycol, Newington, F.R. & C.W., 1956.

**13)** Sandhurst Lane, Tunbridge Wells, F.R. & C.W., 1956.

**H. vagans** Jord.

There is a specimen of this species in Herb. Leicester collected by H.H. Haines near Canterbury in 1897. Probably casual.

Subgenus **Pilosella** S.F. Gray

Sect[ion] **Pilosella** Fries

**H. pilosella** L.<sup>880</sup> Mouse-ear Hawkweed. 15, 16.

**Native.** Very common throughout the county on dry banks, heaths, cliffs, chalk grassland, grassland on sand and gravel, fixed-dunes and shingle beaches. Common in all adjacent counties and in North France.

<sup>1<sup>st</sup></sup> record, [sic]

**1)** Bromley Kent, C.W., 1957.

**6)** Whitehill, Shoreham, 1960. S.W. of Meopham Green, F.R. 1955.

**8)** Dover East Cliff 1955, FR. St Margarets Bay cliffs, 1955, FR.

**11)** Ditton, C.W., 1956.

**13)** R[oa]dside, Hawkenbury Cemetery, H.W.P., 1943.

**16)** Folkestone Leas cliff, 1955, FR. Addington Knowle FR, '56. Ragstone scars W. of Hythe, FR, 1955.

var. **tricholepium** [Nägeli & Peter]

Kent. sp. In Hb. H.W. Pugsley. correct.

var. **concinatum** F.J. Hanbury

In similar localities to the type.

**1)** Gravel pit, Hayes, Hb. Davis **MNE**, 1915. Bromley, Kent, F.R.B., 1953.

**13)** Tunbridge Wells Common, H.W. Pugsley, 1943. Bank below Pembury Old Church, H.EW. Pugsley & M.P., 1943.

**H. peleterianum** [(Mérat) F.W. Schultz & Sch. Bip.]<sup>881</sup> [Shaggy Mouse-ear-hawkweed.]

There is a specimen of this species collected by J.C. Melvill at Undercliff, Folkestone in 1891 in Herb. Harrow School. Another in Herb. [CGE] collected by F.R. Tennant at Folkestone in 1890 seems to be a hybrid between this species and *H. pilosella* L. Attempts to refine the species have failed.

**16)** Undercliff, Folkestone, J.C. Melvill, 1891, Herb. Harrow School. Not yet rebound

Sect[ion] **Collinia** Nägeli. & Peter

**H. brunneocroceum** Pugsl. (*H. aurantium* auct.) [Fox-and-cubs. 15, 16.]

Naturalised at

**4)** near Ebbs fleet, J.E. Woodhead, 1938.

**10)** Brasted, J.B. Marshall, 1959.

Native of C. Europe.

**H. lanatum** Vill. [Woolly Hawkweed. 15.]

Naturalised on

**12)** old walls, St. Augustine's Abbey, Canterbury, F.R. & C.W., 1956.

**Filago** L.

**F. vulgaris** Lam.<sup>882</sup> Common Cudweed. 15, 16 21/51<sup>883</sup>

<sup>880</sup> The records given are from the main sequence of pages in the manuscript. There is, however, bound into the manuscript a small, non-standard page headed *Hieracium pilosella* which lists the following: Field on W. edge Farningham Wood; Darenth Wood; Pilgrims Way Wrotham; Knole Park; Halling Warren; Pilots Wood; Magpie Bottom; Mounts Road; Swanscombe Wood; Bexley churchyard; Down E of Shoreham; 47 Shooters Hill Common, '54, GMB; 57 Dartford Heath '54, G.M.B.; 63 Lamberhurst PCH, 1956; Darwins Bank Downe '55 JEL, '62; Pastures Murtons F[ar]m Graveney R Theobald 56.

<sup>881</sup> Cited as plain Mérat in the manuscript.

<sup>882</sup> In the manuscript given as *F. germanica* (L.) L., to which it has reverted after the edition of Stace's *New Flora* on which this transcript is based.

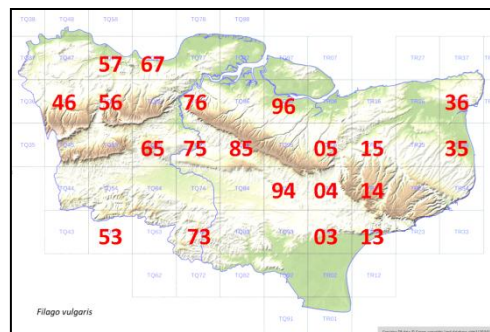
<sup>883</sup> Should have been 20/51, square TQ57 was double-counted.

Native. Open ground on heaths, dry grassland, dry banks, arable fields, quarries, fixed dunes, on sand or gravel soils, or more rarely on chalk, frequent in North and central Kent, much rare in the Weald, and absent from heavy soils.

Frequent locally in Surrey, Sussex and Essex and in the Pas de Calais.

1<sup>st</sup> record, 1629?: Gravesend to Rochester, Johnson, Iter, p.2.

- 1) 46 Hayes Common. 46 Keston Common, 1910 AGD **MNE**; 1945! 57 Dartford Heath. 56 Farningham Wood. 36 W. Wickham Common 1916 AGD **MNE**.
- 2) 96 Sandy ground E. of Conyer Creek, 1943.
- 3) 15 Bigberry Wood 1950 **MNE**. Sturry pits 1947 L.W.W. 15 Fishpool Hill, Littlebourne, 1957 **MNE**.
- 4) 36 Shellness, N. of Sandwich, 1946. 35 Deal Links, 1954 **MNE**.
- 5) [Halstead, 1837 AA **BM**.]
- 6) A) field, Stone House, 560737, 1947, H.M.P. 67 Gravel pits, Chalk. 67 Swanscombe Wood. 57 Darenth Wood. [Fawkham 1881 H. & J.G. **BM**.] [Luddesdown, 1881, H.N.R. **BM**.]
- 7) 76 Pits at Wouldham, H.L. 1895 **MNE**. 76 Burham pits, 1895 H Elgar **MNE**; 1946! **MNE**. 76 bank S. of Burham 1956.
- 8) 14 West Wood Stowting, 1956 **MNE**. 15 cornfield opp[osite] Iffin Wood, 1958, Miss DACL. 14 old railway track N. Elham, 1960, Miss B Nash, **MNE**. 11+ 65 Wrotham Heath, Sandpits, 1942. 65 Addington. 65 Platt. 65 Ryarsh. 75 R[oa]dside Sandling, 1948 **MNE**. 85 Hollingbourne. 85 Sand pit 1m S of Harrietsham, EGP 1958 **MNE**. 75 Barming, 1894, H.L. **MNE**. 75 Boughton Quarry, 1909, H. Elgar **MNE**.
- 12) 94 Hothfield Common, 1945-54 **MNE**. 04 Willesborough Lees. 94 Ashford Warren. 94 R[oa]dside, Potter's Corner, Ashford. 94 Charing Heath Sandpit, 1954 **MNE**. 05 Stony ground by R[iver], Shalmsford Street, R.G. Williams.
- 13) 53 Tunbridge Wells Common. 73 C[om]p[ar]tment 16, Stone Hole, Bedgebury Forest, W.J. Davies, 1961. (Goudhurst, JS **TLS**.)
- 15) Dymchurch 1823, J.F.Y., **BM**.
- 16) 13 Newington, by A.20 on bank. 13 Sandling Junction. 03 Ragstone rocks, Postling Green, Aldington, 1947.



#### **F. lutescens** Jord.<sup>884</sup>

[Red-tipped Cudweed.]

[15], 16

Native. In a dry open sandy grass-heath; very rare. Rare in Surrey, Sussex and Essex; unrecorded for Pas de Calais.

- 1) Open grass-heath on Thanet Sand, W. border of Farningham Wood, 1945 **MNE**; 1950 **MNE**.
- [6] gravel pits, Chalk, R. Pocock, **BM**.]
- 12) Westwell Leacon, E. Scott, c.1958.

#### **F. pyramidata** L.<sup>885</sup>

[Broad-leaved Cudweed.]

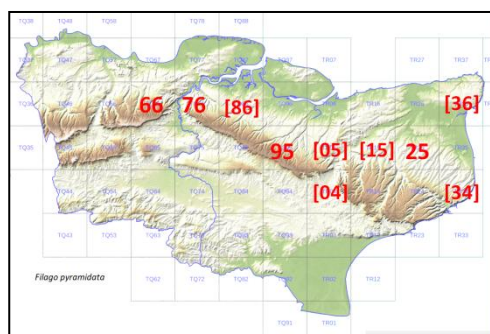
15, 16

4/51 [10/51]<sup>886</sup>

Native. Arable fields on chalk, gravel pits; rare and local. Rare in Surrey, Sussex and Essex; very rare in Pas de Calais.

1<sup>st</sup> record, 1866: Kent, Syme, *Eng. Bot.*, V, p.69.

- 1) Swanley 1883, H. & J.G. **BM**.
- 2) 86 Towards marshes, Rainham; n[ear] Faversham, F.M. Webb.
- 3) 05 Between Canterbury and Selling, F.M. Webb.
- 4) 35 Between Ramsgate and Sandwich, F.M.W.
- 6) n[ear] Dartford, F.J.H. 66, 76 Cornfields on chalk, S. of Great Wood, Cuxton, 1943-55 **MNE**. 66 Plateau above Halling Downs, 1942. 66 Cornfields E. of Luddesdown; FMW; 1946! 66 Cornfield S. of Bush.
- 7) 95 Newnham gravel pits, 1945. S. of Selling Lees, F.J.H.



<sup>884</sup> In the manuscript given as *F. apiculata* G.E. Sm.

<sup>885</sup> In the manuscript given as *F. spathulata* C. Presl.

<sup>886</sup> Five, not four, hectads are listed with recent presence (TQ66, 76, 95 and TR25) and six older ones (TQ86, TR06, 36, 04, 34, 15).



**8)** 04 n[ear Wye, Mis E. Day; Miss V. Day; 15 n[ea]r Canterbury; 25 n[ea]r Adisham, FMW. 34 Cornfields S. of Ringwold, abundant, F.J.M. 15 L[owe]r Hardres, F.M.W. 25 Fredville, in arable on chalk, DMcC.  
**11)** Ightham, Mrs. Benson. [Casual in garden, E Malling 1944 **MNE**.]

**F. minima** (Sm.) Pers. Least Cudweed. 15, 16.

Native. Open ground on heaths, dry fields, quarries, banks, etc. on sandy and gravelly soils; calcifuge; locally frequent on the Tertiaries, the Greensand, and the coast, but absent from the chalk and clay soils. Similarly locally frequent in Surrey and W., Sussex, very rare in E Sussex, very local in Essex, rare in Pas de Calais.

1<sup>st</sup> record, 1632?: “*Gnaphalium mimimum*, Lob.” Sandwich to Canterbury, Johnson, *Descriptio*, p.31, but this could from the context and other synonyms equally well be *Gnaphalium uliginosum*, I consider.

**1)** 46 Keston Common, Fl. Met; 1901 AGD **MNE**; 1946! [Blackheath, Fl. Met.] 46 Hayes Common, E. de C.; 1945! Bexley, E.M.H. [Bromley, Cole.] 55 Heath, W. Edge of Farningham Wood, 1945 **MNE**-50; PCH 1954. 57 Dartford Heath, E de C; AHWD.

**2)** 96 Sandy ground, E. side Conyers Creek, Teynham, 1943 **MNE**.

**3)** 96 Open area, Bysing Wood, 1946. 16 Sturry, L.W.W. 25 Gravel pit, Swanton, Littlebourne, L.W.W. 15 Oldridge Wood, RGW.

**6a)** 57 Green Street Green, 1945. 67 Shorne, gravelly ground by Windmill.

**10)** 55 Sandpit by R[ai]l[wa]y, Riverhead, CAS.

**11)** 65 Sandpit by R[ai]l[wa]y W. of Wrotham Heath. 75 Gravel pit near Eccles. 65 Ryarsh Sandpits, 1945. (Boxley, H. Lamb.) 75 Sandling. (E. Peckham 1877 FWES **TLS**.)

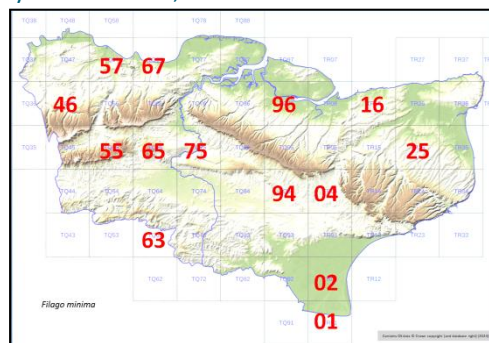
**12)** 94 Hothfield Common 1945 **MNE**. 04 Brabourne Lees. 84 Ashford Warren ESM; 1945! 94 Potter’s Corner, Ashford. 94 Sandpit, E of Charing Heath, 1954 **MNE**.

**13)** Tun[bridge] Wells Common, Fl. Ton. 63 By Chapel, Bayham Abbey, 1958, CAS.

**14)** Hawkhurst; Sandhurst, J.C. Melvill.

**15)** Romney Warren, 1945. Dungeness, 1946. Lydd Common, F.J.H.

**16)** Sandgate, GC Walton.



**F. gallica** L. [Narrow-leaved Cudweed. 16.]

Probably an alien, formerly naturalised; dry sandy fields, very rare, and now probably extinct.

**6a)** N[ea]r Dartford, 1738, Mr. Pain, Hb. Rand, **BM**. Cornfield on edge of Darenth Wood, towards Green Street Green, 1813, Woods in Hb. Borrer **K**.

An unlocalised Kent specimen exists in Hb. ED [*sic*, for Ed[ward]?] Forster **BM**.

‡ **Antennaria** Gaertn.

‡ **A. dioica** (L.) Gaertn. [Mountain Everlasting.] ‡15

Alien in Kent, formerly naturalised at

**11)G)** Maidstone Cemetery, 1880; 1896; 1900, Hb Lamb **MNE**; no recent records.

‡ **Anaphalis** DC

‡ **A. margaritacea** (L.) Benth. [Pearly Everlasting.] [‡ [15,] 16]

Alien. N. America.

**8)** S. Foreland Lighthouse, 1850, M.N.H.S. **MNE**.

**10)** Seal Chart, 1874, Roper; Fl. Kent, 1899; no recent records.

This species is not found well naturalised in S.E. England as it often is in parts of Wales.

**Gnaphalium** L.

**G. sylvaticum** L. Wood Cudweed. 15, 16.

Native. Dry open woods, heaths, grass-heaths, dry fields, old quarries, on sand and gravel and on gravelly “loamy” soils; locally common on the Eocene deposits, the Pliocene, and the L[owe]r Greensand (Folkestone Sand and cherty plateau soils of Hythe Beds); rare in the High Weald, absent from the Weald Clay, the marsh districts and the coast. Uncommon and local in Surrey, and Sussex, rare in Essex and in Pas de Calais.

1<sup>st</sup> record, 1632: E. of Canterbury, Johnson, *Descriptio*, p.30.

- 1) 57 Joydens Wood, 1948-54 **MNE**. 56 Farningham Wood, 1957. [Several old records, Chislehurst; Eltham; Charlton; Bexley; Swanley. Pauls Cray Common 1885 Hb FJH.]
- 3) 96 Bysing Wood, *Pl. Fav.*; 1946! 15 Trenley Park Wood, 1949. 15 Oldridge Wood 1949. 25 Swanton pits, L.W.W. 15 Pine Wood, Littlebourne, L.W.W.; 1958! **MNE**. 15 Bigberry Wood, 1954. 15 Howfield Wood, 1954, **MNE**.
- 5) 45 Wood N. of Morants Court Hill, on loam over chalk.
- 6)A) 57 Darenth Wood, E. de C.; 1945! **MNE**. 57 The Thrift, Bean 1945 **MNE**. N[ea]r Gads Hill, Ward in Hb. Moore. 665635 Wood S. of Dode Ch[urch], Mrs Woods.
- 7) 76 Hempstead, 1938, J.B.M. 76 West field Wood, N.W. of Boxley, 1942. 05 Kings Wood, Challock, N. Centre, 035515, ES; S. Centre, 034500, ES. 95 Long beech Wood, 987506, ES. Cherry Hill top in Wood, L. Hawkins 1948. [Rodmersham 1918 AGD **MNE**.] 05 Park Wood, Molash 1947. 94 Frittenfield Woods, 980497, ES.
- 8) 74 Wood on pliocene Sand, Hastingsleigh, 1946 **MNE**; on pliocene Sand. 74 West Wood, Stowting, 1949. Covert Wood. (Paddlesworth, E.S.M.) Upper Hardres Wood Miss MEM 1956. 25 Pitt Wood, Adisham, 1955, P.C. Hall. 34 Eastling Wood, 1959, Miss B. Nash. 15 Whitehill Wood, L[owe]r Hardres, F.M.W. 14 Clavertye Wood, Elham 1956 **MNE**. Wood, Barfreton, D.McC. Walderchain Wood, Barham, 1957, Miss B Nash.
- 10) (Brasted Chart, B.D.J.) 55 Fawke Common, in Chert pits, 1945-56 **MNE**.
- 11)G) 65 W. of Wrotham Heath. 65 Leybourne Woods. 65 Larkfield Heath. Bracken Hill, Platt (F[olkestone] sand) DMcC. 65 Ryarsh, W.M.R.; 1943! [Penenden Heath 1850 **MNE**.] 65 Mereworth Woods 1947 **MNE**. S. of W. Malling, A. Gray. 75 Oaken Wood, S. of E. Malling, 1885 H.L. **MNE**; 1943! 75 W. of Barming; N. of Teston 1958 **MNE**. 85 Kings Wood, SW of Harrietsham, 1959, Mrs. B. Dodds **MNE**.
- 12) 94 Warren Woods, Ashford 997445, E.S.
- 13) 54 Wood E. of Moorden, N. of Penshurst, 1950 **MNE**. 54 Ashour Wood. T[unbridge] Wells, W.W.R. **TLS**. 53 Gill SW of Stone Cross, Ashurst, CAS.
- 14) (n[ea]r Hawkhurst, Melvill.) 92 Wood, NW of Wittersham, Oxney, 1956 **MNE**.

**G. uliginosum** L. Marsh Cudweed. 15, 16.

Native. Bare damp ground, moist arable land, marshy fields, wet paths and open places in woods, waste ground; very common.

Common in all adjacent counties and in N. France. Usually associated with places where water stands in winter.

1<sup>st</sup> record, probably 1632: Margate to Nash, Johnson, *Descriptio*, p.15.

- 1) 46 Holwood Park. 46 Keston Common. 47 Chislehurst Common. 57 Joydens Wood, PCH & FR. 47 Gattons Plant[at]io]n PCH. 46 Hayes Common PCH. 46 Crofton Heath PCH. 37 Beckenham Place Park 1956, PCH. (Blackheath 1907 D Smith **MNE**.) W. Wickham Wood, AGD 1916 **MNE**. Farningham Wood PCH.
- 2) 76 Marshes S. of Snodland.
- 3) 96 N edge Bysing Wood 1959 **MNE**. 26 Shelvingford Wood, Miss M.E.M.
- 4) 35 Dune hollows, N. of Deal;. 35 Sandwich Bay.
- 5) 36 Field edge, 1m NW of Saltbox, 398611, 1957, PC&JFH.
- 6)A) 57 Darenth Wood. 57 The Thrift, Bean PCH. 57 Swanscombe Wood. 57 Mounts Wood, PCH.
- 7) 95 Belmont Park, 1958, DMcC. Cornfield on chalk N of Putt Wood HMW.
- 8) Eastling Wood 1957, B. Nash. Napchester Wood 1957, B. Nash. 35 Willow Wood, Tilmanstone, damp areas, 1960, Miss B. Nash.
- 11) 75 Sandling Wood, Maidstone, 1958 EGP. 75 Oaken Wood 1882 **MNE**; 1962!
- 13) 73 Combwell Wood, 1957 **MNE**; 79! 73 Bedgebury Forest. 83 Sissinghurst Park Wood. 73 Angley Wood.

**[G. luteo-album** L. Jersey Cudweed occurs apparently native on dunes and elsewhere in the Pas de Calais, as it does in Norfolk; unrecorded for S.E. England.]

**Inula** L.

**I. helenium** L. Elecampagne 15, [16]. 8/51

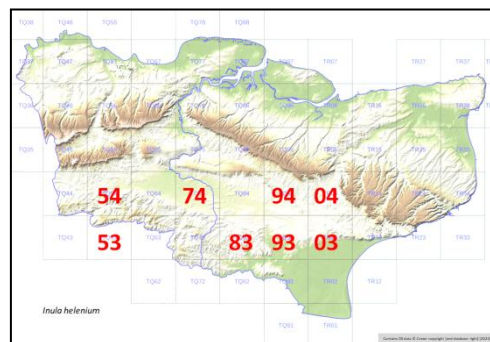
Probably alien, but long-established on roadsides as an escape from ancient culture, by ditches and in waste ground, rare, but in several places in the East Weald in 12). Rare in Surrey, Sussex and Essex, and unlikely to be native in Britain or continental Europe, though widely naturalised in France; probably native of Central Asia (C.T.W.).

1<sup>st</sup> record, 1597: Lydd, Folkestone, Dover, Gerard, *Herbal*, p.649.

1) [Erith, Johnson, *Iter*.]

2) [Pond east of Minster, Sheppey, F.J.H.]

- 3) [(n[ea]r Dunkirk) E. Jacob, 1777.] 16 Meadow, Blean, 1961, C Turner.  
 4) [Meadows in Thanet (Minster to Sarre) Fl. Thanet.]  
 8) [Dover, Gerard; Miss Anderson, Fl.K.] 04 Staple Lees, Hastingsleigh, ES.  
 10) Naturalised in rough ground N. of Lullingstone Castle, 1956, KEB.  
 11) 74 Roadside verge, Ely Place Farm, S.W. of Staplehurst, F.R. & D. McC., 1946, **MNE**. 93 Redbrook Street, Woodchurch, C.A. Lister, 1960. Frightsbridge F[ar]m, Shadoxhurst, 962377, 1957, E.S. 93 R[oa]dside 1m. W. of Shadoxhurst, 957375, GC Pownell & ES.  
 12) 04 By Pond, S. of Wye, near Brickworks, C.N.P. & E.S., 1946; 1946! **MNE**. Canterbury, Hb. E.B., **BM**. 94 Chylmington, E.S. 94 n[ea]r Brisley F[ar]m, 1m NW of Kingsnorth Ch[urch], ES.  
 13) [Somerhill Park garden, Fl. Tonbr.] 54 Sandhurst Park, High Brooms, established, 1950-,KEB. 53 R[ai]l[wai]y W. of Tun[bridge] Wells West Sta[tion], 1960, CAS.  
 14) 33 Rolvenden Layne, Miss E. Burrows.  
 15) [Lydd, Gerard.]  
 16) [Folkestone, Gerard.]



- I. conyzae** (Griess.) Meikle<sup>887</sup> Ploughman's Spikenard. 15, 16.  
 Native. Rough grassland, banks, scrub, woodland glades and borders and old quarries on chalk and ragstone, very common; rare and scattered on other soils.  
 Common on chalk, rare on other soils, in Surrey and Sussex; rare in Essex, common on chalk in Pas de Calais.  
 1<sup>st</sup> record, 1597: Greenhithe, Gerard, *Herbal*, p.391.  
 1) Shooters Hill Common, 1954, G.M.B.  
 2) Drier upper parts of marshes on dumped material, Swanscombe Marshes, 1946. Grassland at upper edge of saltings, Frindsbury, 1945. Pit S. of R[oa]d E of Oare Creek, 1950 REW.  
 3) Fordwich Gravel pit, 1950, REW.  
 4) Chalky Shingle beach, Walmer Castle.  
 5) Downs by Polhill Tunnel mouth. Down W. of Salt box 1950 JD Lovis. The Larches Wood, W. of Farnborough, PCH. Downe. By Farningham R[oa]d Sta[tion], PCH.  
 6) Horns Cross Chalk pit, 1962. Greenhithe chalk pits. Mounts R[oa]d PCH. 67 Northfleet pits, HAS, '61. White Down E of Shoreham PCH; FR. Preston Hill, PCH. Halling Warren PCH. R[oa]dside, Cuxton, PCH. Upper Halling Downs 1943-60 **MNE**.  
 7) Wouldham Down. Burham Downs. Rose Cottage pit, Burham. S of Borstal, 1955 **MNE**. Boxley Warren **MNE**; 1961. Newnham Gravel pit 1950 REW. Ospringe Down. Scrub SW of Doddington 1950 REW.  
 8) Clavertye Wood Elham 1956 **MNE**. Stafflands Wood. East Wear Bay 1907 **MNE**. Lydden Spout 1945-62 **MNE**. Cliffs, St Marg[are]ts Bay ('56, D. Murray).  
 10) Rooks Hill.  
 11) Aylesford Gravel pits 730588 1952 CAS. Borough Green Ragstone quarries. Swanton Valley; Mereworth Woods; Watery Lane, W. Malling. Well Street and Isolation Hospital, E. Malling. Ditton quarries 714575 to 715566, 1952. Preston Hall quarries. Allington quarries. Fant Woods site, Barming. Quarry Wood, W. Farleigh. Loose. 44 Meadow W. of Edenbridge, 1957, CTP & DPY.  
 12) Chylmington quarry, Great Chart. Mersham quarry.  
 13) Roadside verges, Pinetum, Bedgebury, 1952-54 **MNE**.  
 16) Ragstone escarpment, W. of Hythe, Copperhurst, Aldington. Saltwood Castle, 1816, JFY **BM**. On Folkestone Sand, Leas Cliff, Folkestone.

- I. crithmoides** L. Golden Samphire. 15, 16.  
 Native. Well-drained upper parts of salt-marshes, both on firm alluvial mud and on sand, usually with *Halimione*, *Agropyron pungens* and *Festuca rubra*, and on stone-faced sea walls, common and abundant locally in the Thames – Medway – Swale estuarine system from High Halstow on the Thames and above Upnor on the Medway, to Seasalter; chalk cliffs, very rare and only known at Minnis Bay and Folkestone Warren. Unrecorded for Surrey; very local in Sussex and confined to the Chichester Harbour region; locally common in

<sup>887</sup> In the manuscript given as *I. conyza* DC.

the Essex salt-marshes; unrecorded for N. France east of Normandy. This species is usually confined to spray- or tide-washed rocks on our western coasts; its salt marsh habitats in S.E. England are exceptional.

1<sup>st</sup> record, 1597: Sheppey, Gerard, *Herbal*, p.428.

2) High Halstow, Miss E. Burrows Hb. **G**. Sea wall W. of Egypt Bay, 1950. Egypt Bay, 1950, **MNE** 1958. St Mary's Bay, 1958 **MNE**, salt marsh W. of All Hallows, 1945, 1954. E. of All Hallows, 1945. Isle of Grain, E.C.W., BEC Rep., 1939 (north coast **MNE** and Yantlet 856756, 1946 DMCC; S.E. coast, plentiful in saltings, 1945-1949!; Grain Crossing 1945 **MNE**.) Stoke Junction, E.S.M. in V.C.H. 1906 (1945-59!). Stoke saltings, 1959. Hoo Marshes, 1945. S. of Upnor, 1944-9 **MNE**. Horrid Hill, L[owe]r Rainham F.G.E.K.; 1848 JBF **BM**; 1951! **MNE**. Funton. Chetney Marshes G. Morgan. Ham Green F.M. Webb. Upchurch Marshes, 1918, Miss Tapsfield **MNE**. Greenborough Marshes G.M. Hoo Island. Nor Marsh Island. King's Ferry. Sea Wall, N. of Tonge, 1958. **MNE**. Conyer Creek, 1895, Hurst; 1943-58! v[ery] a[bundant] **MNE**. ½m E of Conyer Creek 1956 **MNE**. Oare Creek, 1946-59. Faversham Creek, AHWD; Nagden, D.H.K.; FR, 1949. Castle Coot saltings, 1960. W. of Sportsman, Seasalter, Miss DAC Long, 1946; 1960! [Sheerness Ray *Syn.*; 1871 **MNE**; Queenborough, Johnson; 1949!] Elmley Marshes, abundant 1954 **MNE** Windmill Creek. Harty (W. of Ferry; E. of Ferry) **MNE**. Shellness, F.J.H.; behind shell sand spit 1945-60 **MNE**; W. of Dune beach 1962. N. of Leysdown, 1918 AGD **MNE**; 1945. [1½m. E. of Sheerness on N shore 1863 JSM.]

4) Sandwich, 1959, DMCC.

8) on chalk cliffs, Abbotscliff, J.P.M. Brenan; = east end of Folkestone Warren 1947 **MNE**; 1948 RM Payne; now abundant, 1960!

9) Minnis Bay, cliff top W. of Hotel, L.W.W. 1950.

**Pulicaria** Gaertn.<sup>888</sup>

**P. dysenterica** (L.) Bernh.

Fleabane.

15, 16.

Native. Damp meadows, grassland on clay, roadside verges, marshy fields, wet rides in woods, stream- and ditch-sides; very common on wet or heavy soils throughout the county; scarce in the chalk districts 5)-9) through lack of suitable habitats. Common in Surrey, Sussex, Essex and the Pas de Calais.

1<sup>st</sup> record, 1629: Grain to Stoke, etc., Johnson, *Iter*, p.8.

1) Shooters Hill Common, 1954, GMB. Joydens Wood. Meadows S. of Bexley. R[iver] Cray, N. Cray PCH. Crofton Heath PCH. Elmers End AGD 1915 **MNE**. Bickley. Orpington. Ruxley pits TH Angel. 35 Bare clay, W. Wickham, 1955 JM Sherwood.

2) 87 Grain, 1956, PCH.

4) Sandwich Bay. Marshside Chislet.

6)A) Swanscombe Wood. Chattenden Wood. On clay bank, Cockham Wood edge, Upnor, 773715, 1951, DMCC. Northward Hill.

6) Southfleet.

7) Challock Lees.

8) 34 Eastling Wood, Waldeshare, 1957, Miss B. Nash.

10) Sevenoaks tip, 1958, CAS. Westerham Wood 1982. R[iver] bank above S. Darenth PCH. St. Johns Jerusalem PCH.

11) Platt Brickfield (Gault) 629575, DMCC. Birling 1938, JBM. Leeds, 1959 **MNE**. Harrietsham Sta[tion], 1960, Mrs B Dodds. R[ai]l[wa]y bank Edenbridge DPY 1956. R[oa]d SE of Marden, NW of Marden Thorn.

12) 53 Stone Cross, Ashurst, CAS. 63 Lamberhurst PCH 1956.

14) 82 Palstre Court, Wittersham '62,

15) W of Dymchurch 1884 JFDP **BM**.

16) 13 Postling Wents.

[**P. vulgaris** Gaertn.

Small Fleabane.

[15, 16].

*Inula pulicaria* L.

Native, but apparently now extinct. Moist sandy or clayey pastures, pond-margins, where water stands in winter; always apparently rare, and now apparently exterminated by destruction or modification of such habitats. Still persisting in Surrey, in one place; very rare and possibly now extinct in Pas de Calais.

This species is decreasing everywhere in Britain through changes in land use; the ponds on grassy commons and village greens, which formerly had bare muddy, sandy or stony margins, due to grazing by cattle, horses or geese and ducks, are now either overgrown in most cases with rank vegetation or else the ponds have been

<sup>888</sup> In the manuscript cited as *Pulicaria* L.

mostly filled in. New gravel-pits offer possible habitats but the species has been so largely exterminated that colonisation of new habitats appear difficult or impossible. It is still in several New Forest sites.

1<sup>st</sup> record, 1777: n[ea]r Faversham, E. Jacob, *Pl. Fav.*, p.29.

1) By Ravensbourne, Lewisham, Fl. Met.; E. de C. Opposite Porcupine Inn, Mottingham, Fl. Met.

2) Conduit-Row Faversham; Downe's Forstal, Hernhill: E. Jacob. Wet field ½m S. of Snodland; (Birling) Common field, Ham Hill, near Snodland 1875, F.M. Webb in Hb. F.J.H. (I have searched about here repeatedly in vain),

4) "near Deal", F.G. Baker.

13) "Redleaf", C. Cox: an unreliable record.]

[‡ *Calotis* R. Br.]

‡ *C. cuneifolia* R. Br. [Bur Daisy. 15, 16.]

1) Stonefield Green 503707, 1949, DMcC, det. JEL.

4) Sandwich, 1960, D.McC., **MNE**.

‡ *C. hispida* [(F. Muell.) F. Muell.] [Hairy Bur Daisy.]

1) Stonehill Green, 1949, D. McC.

*Solidago* L.

*S. virgaurea* L. [Golden-rod. 15, 16.]

Native. Dry woods and hedgebanks on various non-calcareous soils; chalk grassland and cliffs near the sea. Very common in most parts of Kent, but absent from the Marsh districts 2), 4), and 15), and never found on calcareous soils inland, though on the chalk sea-cliffs and adjacent downlands, it occurs as a small form; this form may be a result of exposure, or it may be a different ecotype; the matter requires investigation. Common on non-calcaerous soils in Surrey and Sussex, and Pas de Calais, rare in Essex.

1<sup>st</sup> record, 1597; Southfleet, Swanscombe Wood, Gerard, *Herbal*, p.349.

1) Shooters Hill Woods, '54, GMB. 47 Abbey Wood, 1954, G.A. Matthews. 46 Keston Common 1915 AGD **MNE**; PCH & FR, 1959. 46 Petts Wood. 56 Farningham Wood PCH & FR **MNE**; 82! 46 Hollows Wood, 56 N.W. of Shoreham. 47 Holwood Park PCH & FR. 46 Roundabout Wood, Crofton Heath PCH. Crofton Heath PCH. 57 Joydens Wood 1954. 47 Chislehurst Common. Spring Park AGD 1915, **MNE**. Dartford Heath, 1954, G.M.B.

3) 96 Bysing Wood. Holly Hill RGW. 15 Trenley Park Wood. 15 Oldridge Wood. Wood Boughton Hill S. of A2, 1959 HMW. E slope, Clay Hill Wood, RGW. 15 Church Wood, Blean. Perry Wood, Selling. 05 Fishponds Wood. 16 E. Blean Wood 1947 LWW. 16 Thornden Wood. Minteys Wood, Blean.

5) 46 Pratts Bottom. 46 New Years Wood, Cudham PCH. [Halstead, 1864, AA **BM**.] [Otford, 1840, A.A. **BM**.]

6) 56 Wood by A.20, S.E. of Kingsdown. 56 SE of Eynsford. 66 Copse NE of Harvel 655635 Mrs Woods. 77 R[oa]dbank, Peartree Wood, Higham, 706710, 1957, PCH.

6a) 57 Darenth Wood. 57 The Thrift, Bean 1945 **MNE**. 67 Randall Wood, Shorne, PCH, 1957. 67 Swanscombe Wood, 1946; PCH.

7) 76 West field Wood. Long beech Wood, Stockbury, 1958 **MNE**. on drift, Sharsted Wood, Newnham, 1961, C Turner. Wood by Isol[ation] Hosp[ital], Belmont, 1947, Mrs W. Verschoyle.

8) 125553 Larkey Valley Wood, 1951, P. le Brocq. Browns Wood, T[emple] Ewell Mrs KDR. Adder Down, T[emple] Ewell Mrs K.D.R. 34 Downland 1m NE of St Margaret's Bay, 1962. 23 on the coast at Abbots Cliff 1956 **MNE**. 23 Lydden Spout 1945 **MNE**. 34 St. Margarets Bay, S. cliffs 1958 **MNE**. 34 Langdon Bay 1949 **MNE**.

10) 55 Fawke Common.

11) 65 *F[olkestone] Sand*, Wrotham Heath, 1944 **MNE**; 1961. *Hythe Beds*, 85 Fairbourne Heath, 1959 **MNE**. *W[erald] Clay*: 94 Hoads Wood, 1946 **MNE**; 84 Denge Wood, 1962, ES.

13) Birch Wood, Bidborough, 540430, (Wad[hurst] C[lay]) 1955 GE Hutchings. R[oa]dside W. of Folly Hill, Colliers Green, 1962. Combwell Wood 1959 **MNE**.

‡ *S. canadensis* L. [Canadian Goldenrod. 15, 16.]

3) Denstroude Road, Boughton, 1958, AW Crump.

10) Sevenoaks tip, 1958, CAS. Addington Place, 1957 DMcC. Maidstone East Station, EGP 1960.

11) Rubbish tip, 451455, Edenbridge, 1956, D.P.Y.

‡ *S. altissima* L.<sup>889</sup>

1) Dartford Heath, 520734 HMP, 1985.

<sup>889</sup> Either to be equated with, or treated as a subspecies of, *S. canadensis*.



6) Northfleet, n[ea]r football g[roun]d 1959, HMP. Cliffe, n[ea]r chalk pit 1959, HMP. Swanscombe Wood 6073, 1955, HMP.

8) S. Foreland, 1960, Mrs. B. Dodds.

‡ **S. gigantea** Aiton [Early Goldenrod. 16.]

1) Waste ground, Bromley Common, 1961, J.R. Palmer. Ravensbourne Bank, Lewisham, 1957, R.C. Wingfield.

6) Waste ground behind Down Platform, Otford Sta[tion], D..McC, 1948→.

11) R[oa]d-fork N. of Hale Street, D.McC.

var. **leiophylla** [Fernald]

11) Tonbridge Gasworks, 1950, KEB.

‡ **S. graminifolia** (L.) Salisb. [Grass-leaved Goldenrod. 15.]

12) Hothfield Common, 1960 MNE.

**Aster** L.

‡ **A. schreberi** Nees<sup>890</sup> [Nettle-leaved Michaelmas-daisy.]

‡ **A. novae-angliae** L. [Hairy Michaelmas-daisy. 15.]

7) Challock Lees (var. *roseus*) D.McC.

‡ **A. laevis** L.<sup>891</sup> [Glaucous Michaelmas-daisy.]

‡ **A. x versicolor** Willd. (*A. laevis* x *novi-belgii*) [Late Michaelmas-daisy. 16.]

10) Well naturalised at Dry hill, 1961, J.R. Palmer.

‡ **A. puniceus** L.<sup>892</sup> [Red-stalked Michaelmas-daisy.]

‡ **A. longifolius** Lam.<sup>893</sup>

10) River bank, S. Darenth, 565692, 1955, H.M.P.

‡ **A. novi-belgii** L. [Confused Michaelmas-daisy. 15, 16.]

1) Dartford Heath, 524727, 1956, H.M.P.

6) Mounts Road, Greenhithe, 585734, 1956, H.M.P.

7) Berengrave pit, Rainham, 1952, KS Jeffrey.

10) Sevenoaks tip, 1958, CAS.

13) Pond, Broadwater Lane, T[unbridge] Wells, 1960, CAS.

‡ **A. lanceolatus** Willd. [Narrow-leaved Michaelmas-daisy. 16.]

1) Shooters Hill, 1954, G.M.B.

11) Edenbridge rubbish tip 451455, DPY, 1956.

‡ **A. ericoides** L. [Heath Aster. 16.]

5) rubbish tip, Downe, 1956, DPY.

**A. tripolium** L.<sup>894</sup> Sea Aster. 15, 16 19/52

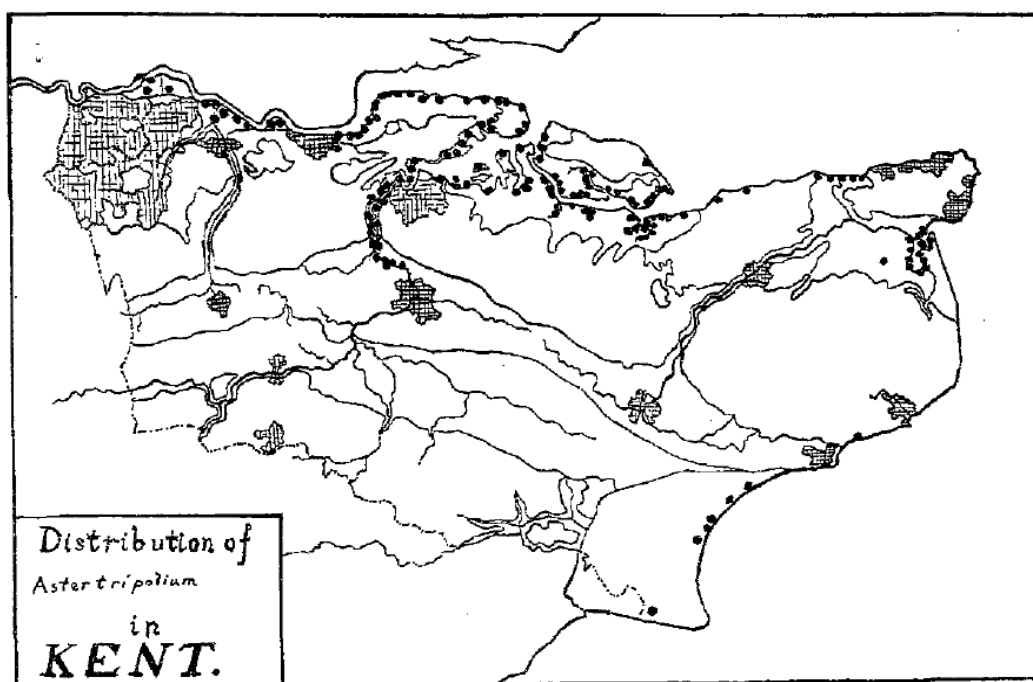
<sup>890</sup> Given as *A. macrophyllus*, but without an account.

<sup>891</sup> Named, but no account given.

<sup>892</sup> Named, but no account given.

<sup>893</sup> May be the same taxon as the next.

<sup>894</sup> Drawn map is reproduced here from Rose, F., Distribution maps of Kent Plants (Exhibit), in Lousley, J., ed. (1951) *The Study of the Distribution of British Plants* (1950 conference report), B.S.B.I., Arbroath. The hectad map is provided for the transcript by using a list of hectad numbers in the manuscript.



Native. Muddy salt-marshes, frequently dominant in the lower parts of the general salt-marsh community; also in sandy salt marshes and on sea walls; common on the north coast and in the Thames, Medway, Swale, and Stour estuaries, up to Plumstead Marshes, Aylesford, and Sandwich; less common south of the Stour estuary, but occurring below the chalk cliffs E. of Folkestone and on the coastline of Romney Marsh in suitable saline habitats behind the sea-walls and beaches. The rayless form (var. *discoideus*) is very common.

Extremely rare on the tidal Thames in Surrey. Common along the coasts of Sussex, Essex and Pas de Calais in suitable places.

1<sup>st</sup> record, 1597: Sheppey, Gravesend, etc., Gerard, *Herbal*, p.353.

2) Plumstead, by Thames and in Arsenal grounds. Below Erith. Crayford Ness. Dartford Marshes, 1962. Stone Marshes. Swanscombe and Northfleet Marshes. Denton. Shornemead. Higham Marshes. Cliffe Creek and sea wall. Egypt Bay. St Marys Bay. W. of All Hallows. E of All Hallows. Grain, N. coast; S. coast; Stoke Junction. Stoke saltings. Hoo. Upnor. Frindsbury. Temple Marsh, Strood. Cuxton saltings **MNE**. Halling. By R[iver], Snodland Marshes. New Hythe. Aylesford. Burham. Wouldham. Borstal. L[owe]r Rainham. Funton. Fowey Island, 1960, E.G.P. Tonge. Conyer's Creek. E of Conyers Creek **MNE**. Oare Creek. Faversham Creek. Nagden. Castle Coot. W. of Seasalter. Kings Ferry. Queenborough. Elmley. Harty. Shellness 1962. N of Leysdown **MNE**.

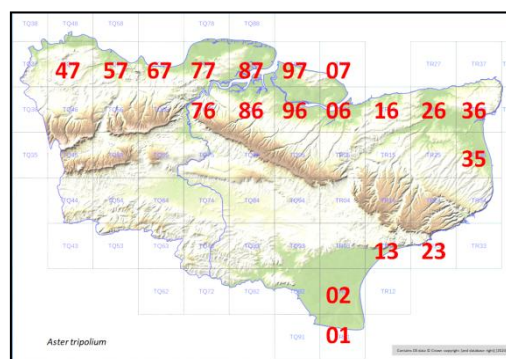
3) Swalecliffe.

4) Reculvers (Dike N. of Stuart, and salting behind Shingle beach), St. Nicholas at Wade, 1962. W. of Minnis Bay. Pegwell Bay. Shellness, 1954 **MNE**. Richborough. R[iver] Stour to above Sandwich.

6) Flooded chalk pit Swanscombe, 1961, HAS; in poor condition.

8) Saline lagoon behind beach, below Abbots cliff.

15) Saline gravel pits 2m. W. of Hythe, behind A.259, 1956, LJM; ES. Marsh NE of Dymchurch. Marshes between Dymchurch wall and A.259, S.W. of Dymchurch. N.E. of N. Romney. Salttings, South Brooks, 1947, JHL. The Wicks.. The Midrips.



var. *discoideus* Rchb. is rayless, and is common on the lower levels of the salt marshes.

**Erigeron** L.<sup>895</sup>

<sup>895</sup> In the manuscript, *Erigeron* covered *Conyza* as well.

‡ **E. philadelphus** L. [Robin's-plantain. 15.]  
2) n[ea]r Faversham 1937 Mrs Pencott **BM**.

‡ **E. karvinskianus** DC.<sup>896</sup> [Mexican Fleabane. 15, 16.]  
4) Derelict garden on wall Statenborough 1960, A.L. Miller.  
13) Wall n[ea]r Spa Hotel, T[unbridge] Wells, 1952, KEB.

**E. acris** L.<sup>897</sup> Blue Fleabane. 15, 16.

Native. Dry grassland, banks and cliffs, sand-dunes, wall-tops, railway lines, waste ground, quarries, very common on chalk and ragstone, frequent on neutral to calcareous sandy soils, absent from acid or clayey soils. Frequent in Surrey, rather rare in Sussex off the chalk, rarer in Essex, rather rare in Pas de Calais.

1<sup>st</sup> record, 1632: E. of Gravesend, Johnson, *Descriptio*, p.38.

This species is tetrasporic.

- 1) W border Farningham Wood, (on Thanet S[and]) 1945 **MNE**. Elmers End 1915 AGD **MNE**. Elmstead Wood 1956 Miss A Mills. Dartford Heath, '54, GMB.
- 2) Woolwich Arsenal PCH. S side of Oare R[oad], Faversham, 1951 REW; 1960, Mrs B. Dodds.
- 3) Gravel pit S. of Fordwich 1950 RGW. Wilks' garden, Seasalter, 1956, HMW.
- 4) Wall by stream n[ea]r Station, Sandwich, 332577, 1956, R.A.G. Richborough.
- 5) Chalky balk, Farnborough by Pass, PCH. Down W. of Saltbox 1950 JF Lovis.
- 6) Horns Cross, Stone, in Great pit, 1962. Mounts R[oad], Greenhithe, PCH. On chalk, Tower Hill, Upnor, 1951, DMCC. Swanscombe. Preston Hill PCH. Halling, chalk rubbish near river. R[oad]side, Cuxton PCH. Downs W of Kemsing PCH. 1½ [m] NW of Wrotham 1947 **MNE**. Halling Warren PCH.
- 7) Burham old Cement Works, 1945-56 **MNE**. Newnham Gravel pit 1950, R.E.W. Ospringle Down, HMW. Glade below Beech hanger, NW of Westwell, 1962. Kings Wood edge, Bilting, 048497, 1949, P. le Brocq.
- 8) Cliffs E. of Dover, 1950 **MNE**. Adder Down T[emple] Ewell Mrs KDR. Denton Village, Miss DACL, 1956. 25 Old Rail track, Knowlton, 1958, Mrs B Nash. Down 1m NE of St Margarets at Cliffe, 1962. Hacklinge chalk pit 1953 REW. Bank, Finglesham, 1950 REW.
- 9) [Margate, 1868, H.T. **BM**.]
- 10) Sandpit by R[ail]w[ay], Riverhead CAS.
- 11) Borough Green Sandpit, D.MCC. Birling, 1938, JBM. Gravel Pits E of Aylesford 736588, '57. Ditton N. Quarry 714575. Ditton S. Quarry 715566, 1957 CAS. Allington quarries **MNE**. Boughton quarries, 1949 **MNE**. Orchard, Coxheath, 1947, M. Paffard. Leybourne Castle Lakes, on bare sand, 1957 **MNE**. R[ail]w[ay] S. of Hildenborough Station, 563482, CAS. Terrace above Lake, Hever Castle, 1960, K.E.B.
- 12) Meresham quarry.
- 13) Pembury Court Farm, 1955, 633417, CAS. Bedgebury Woods, roadside bank, 1 plant, J.R.W., 1943: Pinetum 1948!; 1955 CAS. Combwell, 1907, JS **TLS**.  
With white pappus at Greenhithe, G.C. Druce, BEC Rep. 1921, p.384.

**Conyza** Less.<sup>898</sup>

**C. canadensis** (L.) Cronquist<sup>899</sup> Canadian Fleabane. 15, 16.

Native of N. America, naturalised in England since the time of Ray. In waste ground, arable land, waysides, railway banks, dunes, walls, etc., mostly on light soils; very common in the London area along the north coastal plains of Kent, east to Thanet; more local though widespread elsewhere.

This species is monosporic.

First record, 1836: Northfleet, Cooper, *Fl. Met. Add.*, p.118.

- 1) By R[ail]w[ay]: Bromley, Beckenham, Hayes. Chislehurst. Crofton Heath, PCH. Shooters Hill, 1954, G.M.B. Abbey Wood, 1860 **MNE**. Kelsey Park, Beckenham 1915 AGD **MNE**. Ruxley Pits, TH Angel. Elmstead Woods, 1956, Miss A Mills. 395660, Tip n[ea]r Hayes Station, 1958, PC & JFH. Dartford Heath, 54, GMB. Bexley Mill Pond PCH. Joydens Wood PCH. Farningham Wood, PCH. Up[pe]r Hockenden, Swanley PCH.
- 2) Plumstead Marshes. Woolwich Arsenal 1849 AA **BM**; FR, PCH. Sewerbank, Plumstead PCH. Stone. Greenhithe. 87 car park, Oil Refinery, Grain, Mrs. AG Side. Shellness. Faversham Creek 1956 D. Murray.

<sup>896</sup> Given as *E. muconatus* DC. In the manuscript.

<sup>897</sup> *E. acris* L. in the manuscript.

<sup>898</sup> This transcript follows Stace's *New Flora* second and third editions in separating out *Conyza*; but the fourth edition reverted to the same treatment as Francis Rose's.

<sup>899</sup> *Erigeron canadensis* L. in the manuscript.

- 3) 05 Boughton Street, C. Turner.  
 4) Sandwich.  
 6) 57 Mounts Wood. 57 The Thrift, Bean, PCH. 67 Gravesend, weed, 1960, HAS.  
 7) 76 Burham Cement Works, 1945-56 **MNE**.  
 8) 24 Denton, Mrs DACL, 1958. 25 Old wall, Wingham, 1960, Miss B. Nash.  
 10) 56 W. of S. Darenth PCH. 56 S, Darenth PCH. 55 Sevenoaks tip, '58. CAS. 55 Riverhead Sandpit by R[ai]l[wa]y, CAS. Parkfield Corner, S[even]oaks, 1962.  
 11) 65 Borough Green. 75 E. Malling. Ditton quarry (N, 714575; S, 715566), 57 CAS. 75 Bearsted 1957. 75 New Hythe. 73 Aylesford; pits 736583 CAS 57. 65 Leybourne Lakes, 1957 **MNE**. 75 Allington. 75 Boughton quarries, 1909, H. Elgar **MNE**; 1949! 44 Edenbridge Rubbish tip, 451455, 1956, DPY. 54 Tonbridge, common weed, 1953, K.E.B.  
 13) 53 Tunbridge Wells (Lonsdale Gardens; show ground) K.E.B.  
 14) 83 Tenterden, R[ai]l[wa]y Sta[tion], 1959, ES.

‡ **C. bonariensis** (L.) Cronquist<sup>900</sup> [Argentine Fleabane. 15.]  
 4) Sandwich, DMCC., 1960 **MNE**.

**X Conyzigeron huelsenii** (Vatke) Rauschert<sup>901</sup>

This hybrid has occurred in at least six places with the parents; it has been regularly found at Burham on chalky rubble for many years.

- 1) Sandy ground, W. side of Farningham Wood, 3 plants, 1945, **MNE**.  
 6) chalk rubble n[ea]r R[iver] Medway, Halling, 2 plants, 1945.  
 7) Cement Works ruins, S. of Burham old church, frequent, many plants, 1945-56 **MNE**.  
 11) Borough Green, Garden, 3 pl[ants] 1946; 1 plant 1948, DMCC. 000502, Kings Wood, 1949 P. le Brocq. Allington Ragstone quarry (between railways) one plant. Leybourne Castle Lakes, 1958, on bare sand, several plants. **MNE**.

**Bellis** L.

**B. perennis** L. Daisy. 15, 16.

Native. Short grassland, lawns, banks; abundant throughout Kent in all except saline, very acid, very wet, or heavily shaded places.

Equally abundant throughout S.E. England and N. France.

1<sup>st</sup> record, 1629: Grain to Stoke. etc., Johnson, *Iter*, p.8.

- 1) Abbey Wood PCH. Bostall Heath PCH. Hayes Common PCH. Holwood Park PCH. Woods, Shooters Hill, 1954, GMB. Elmers End 1916 AGD **MNE**. Bexley Ch[urch] y[ar]d PCH. Farningham Wood PCH. Dartford Heath, '54, GMB.  
 2) Sewerbank, Plumstead PCH. R[oa]dside Key Steet 55. Dump Sheerness Canal O.D. Minster Village '55. Minster ch[urch] y[ar]d, '55. S. Minster Marshes 55. Scrub S. of Scapsgate 55. Branbledown 55. Ciose S. of Brambledown f[ar]m 55. Warden Ash copse '55. Eastchurch Cliffs '55. Sheerness garden Weed, 56 Mrs Bryson. Pasture Murtons F[ar]m Graveney R Theobald.  
 3) N. Bishopsden Wood 55. Canterbury Golf Course 55.  
 4) Sandwich Bay.  
 5) Rushmore Hill, Halstead, PCH. 36 Well Wood, 3964, W. Wickham 1958 PCH. Darwins Bank Downe. Pilots Wood PCH. Chevening Park PCH.  
 6) Lords Wood, Darenth PCH. Mounts Wood PCH. Swanscombe Wood PCH. Horton Wood PCH. Rifle Range, Shoreham PCH. Preston Hill PCH. Greenhill Wood PCH. Kemsing Downs PCH. Wingate Wood, Halling.  
 7) Burham Downs E, '55. R[oa]dside Hartlip Hill, '55. Hartlip Village '55. Q[ueen] D[own] W[arren], '55. Bredhurst Hurst '55. W. Coomb Detling '55. Ospringe Down and Wood HMW.  
 8) Bourne Park Bridge '55.  
 10) Field NW of Ightham '55.  
 11) St John Jerusalem PCH. Darenth Water Meadows PCH. S of Aylesford Br[idg]e 55. Gravel Pit E of Aylesford 55. Sandpit, Forstal '55. E.Malling, 1943 **MNE**. Maidstone **MNE**. S of Ditton, Ragstone Quarry 1945 **MNE**. W. of Bearsted by A20 '55. Park Wood Boughton Mon[chelsea] 55. R[ai]l[wa]y, Hildenborough, 1955; CAS. A.21 SE of Hildenborough 55. Tonbridge Castle '55. Hever n[ea]r Ch[urch], 55.

<sup>900</sup> In the manuscript given as *E. bonariensis* L.

<sup>901</sup> In the manuscript given as *Erigeron acris* x *canadensis* = *Erigeron huelsenii* Vatke.

- 12) Hayton Wood, Monks Horton '55.  
 13) Wood NE of Cobhambury, Edenbridge, '55. SW of Stone Cross, Ashurst CAS. Bedgebury Pinetum '55.  
 14) Hawkhurst Green '55.  
 15) St Marys 1882, JFDP **BM** (Fasciated). Carpark Ferry field, Lydd 1955, DMCC. Romney Warren. Dungeness.  
 16) Sandgate, Mrs. R. **BM**. Scars W. of Hythe.

#### **Tanacetum** L.

- T. parthenium** (L.) Sch. Bip.<sup>902</sup> Feverfew. 15, 16.  
 1) Beckenham AG Davis 1915 **MNE**. 47 Bexley ch[urch] y[ar]d PCH. 57 Dartford Heath, '54 GMB.  
 2) 47 Woolwich Arsenal, 1966. 87 Grain 1956, PCH.  
 3) Whitstable Castle 1951 REW.  
 4) Sandwich Bay.  
 6) 57 Mounts R[oa]d PCH.  
 7) 86 Hartlip, 1943.  
 8) 24 foot of wall, Kearsney Abbey, 1959, Mrs KDR. Kingsdown, KDR. Kingston KDR.  
 9) 36 E. of Birchington, R.G.W.  
 10) Sevenoaks tip, 1958, CAS. 56 Farningham Village PCH. 57 Sutton Corner, Darenth PCH. (Darenth, 1913, RH Compton **BM**).  
 11) 65 W. Malling. 75 E. Malling. 65 Leybourne. 65 Ryarsh. 85 West Street, Harrietsham 1950, Mrs B. Dodds. 44 Old walls, Edenbridge, 1957, DPY. 54 Leigh.  
 13) 53 n[ea]r Stone Cross, Ashurst, CAS. 63 Arnolds Mill, Lamberhurst JRW, 1941. 73 Sandpit in lane n[ea]r Goudhurst, JRW, 1941. 73 Roadside between Four Wents and Wilsley Pound, Cranbrook, JFW, 1941.  
 16) 13 Hythe Town, by path, HMW. Shornecliff KDR '57.

forma **breviradiatum** Schultz

- 6) Greenhithe, G.C.D., BEC Rep, 1922 p610.

#### **T. vulgare** L.

Tansy.

15, 16.

- 1) 47 Plumstead Sta[tion], PCH. 36 W. Wickham, rubbish dump, 1955, J.M. Sherwood. 46 Hayes. 47 N. Cray tip, PCH.  
 2) 76 Strood, below Station. 67 Shorne Marshes, in g[ras]s[lan]d, 61, HAS. 76 Snodland Marshes. 76 Burham. 76 New Hythe 75 Meadow below Aylesford, 1962. 75 By Medway, Aylesford Village.  
 3) Goods St[reet] Whitstable RGW. 16 R[oa]dside, Whitstable, RGW. 15 Harbledo wn. 05 Boughton Street. 05 W of Upper Harbledown by A2, RG Williams.  
 4) 35 Walmer, Miss J Moore. W of Newborns F[ar]m, Stodmarsh edge, RGW 1950.  
 6) 67 Swanscombe 1944 AS Kennard. 66 Meadow, Cobham Village, 670683, 1952 HMP. 66 Cobhambury, Mrs Woods. 76 R[oa]dside, Cuxton, PCH.  
 7) 76 Rochester Esplanade, 1959, AF Mussellwhite. 05 R[oa]dside 027545 Badlesmere, 1959, C. Turner.  
 10) 57 Darenth S. of Ch[urch], 1955 HMP. 56 Horton Kirby. 55 Otford. 55 Sevenoaks tip, 1958, CAS.  
 11) Aylesford, 1955 **MNE**. 85 Whiteheath Lane, Hollingbourne, 1962, Mrs. B. Dodds. 75 Allington by Medway, 1958 H.M.P. 84 Headcorn. 75 Marden. 74 Staplehurst. 65 Yalding. 65 Wateringbury. 64 Branbridges, R[iver] Medway, JRW, 1939. 75 By Teston Bridge. 75 Allington.  
 12) 94 Woolpack, Hothfield ES. Vauxhall Lakes Sturry 1955 P Furneaux. 94 West Well, ES. 04 Goats Lees, ES. 94 n[ea]r Hothfield Halt, ES. 04 N of Willesborough, ES. 04 Blackwall Road, ES. 04 by A.20 on W. edge of Ashford, ES. 05 Shalmsford Street, RGW.  
 13) 63 Teise bank below Lamberhurst Golf Course, JFW, 1940; 684365, CAS.  
 14) 63 Rosemary Lane, Flimwell, JRW 1940.  
 15) 01 R[oa]dside N of Dungeness, 1946 WJLS; RGW. 01 Long Pit, N. end, 072188, HMP.

#### **Seriphidium** (Besser ex Hook.) Fourr.

**S. maritimum** (L.) Polj.<sup>903</sup>

Sea Wormwood.

15, 16.

Native. Drier upper parts of muddy and sandy saltmarshes, and on sea and tidal river walls, coastal beaches at salting edges; common from Swanscombe to Seasalter and up the Medway to Cuxton in 2); Whitstable and

<sup>902</sup> In the manuscript given as *Chrysanthemum parthenium* (L.) Bernh.

<sup>903</sup> In the manuscript given as *Artemisia maritima* L.



Swalecliffe in 3); frequent in the Stour estuary and E. of Reculver in 4); Dymchurch and W. of Dungeness in 15). Locally common in similar places in Sussex, Essex, and Pas de Calais.

2) 6175, by sea wall, Swanscombe Marshes. Northfleet Marshes. Denton. Shorne Marshes. Higham Marshes. Cliffe Marshes 1945 **MNE**. All Hallows. Grain 1959 **MNE**. Hoo. W of Upnor 1949 **MNE**. Strood. Cuxton **MNE** 1890; 1943-51! Funton Creek, 1962. Creek, Sittingbourne, Mrs KDR. Conyers Creek. Oare Creek '62. Elmley '54. Harty '61. Shellness, 1945-62. Faversham Creek '62. Castle Coot, Graveney, 1960. Seasalter, 1960. SE of Elmley 1954 **MNE**. Harty. Shellness 1945 **MNE**. N. of Leysdown 1917 **MNE**; 1956! East Elmley 1954 **MNE**. Sheerness Hb Banks.

3) Swalecliffe, 1945 **MNE**. Whitstable, 1902, H.&J.G.; RGW.

4) Stour Marshes, Sandwich. Saltmarshes and beach, Pegwell Bay, 1838, Hb AA **BM**; 1959! Shellness, mouth of Stour 1954, **MNE**. Minnis Bay LWW '47. Reculver LWW '47.

15) Dymchurch, AA **BM**; 1947! Lydd, 1897, H. Elgar **MNE**. South Brooks, Dengemarsh. Pool W. of Galloways, 1947, JHL.

The var. **gallica** Willd. Is found as commonly as the type.

### **Artemisia L.**

#### **A. vulgaris L.**

Mugwort.

15, 16.

1) Shooters Hill Common, '54. GMB. Eden Park 1915 AGD **MNE**. Crofton Heath PCH. Up[pe]r Hockenden, PCH. Bexley Mill Pond PCH. N. Cray PCH. Ruxley pits TH Angel '58. Dartford Heath, '54, G.M.B.

2) Woolwich Arsenal FR. Sewerbank, Plumstead, PCH. Medway Bank Aylesford Br[idge] 55. N[ea]r River, Cuxton, FR, PCH. Dump. Sheerness Canal '57, OD. Minster Village, '55. Leysdown to Shellness '55. Shellness beach, 1956. R[oa]dside Key St[reet], '55.

3) Canterbury Golf C[ourse] by A.257, '55.

5) R[oa]dside, Washneys F[ar]m, Halstead, PCH. 36 W. of Highams Hill 1958 PCH. Farn[ingham] R[oa]d Sta[tion] approach, PCH. Northfleet R[oa]dsides, 1960 HAS.

6) Mounts R[oa]d, PCH. Darenth Wood PCH. Cliffe Chalk Pit, 1950 **MNE**. Buckland R[oa]d, Luddesdown PCH.

7) R[oa]dside, Hartlip Hill, '55.

10) Eynsford PCH. Horton Kirby PCH. Sevenoaks tip 1958 CAS. [Shoreham 1840 AA **BM**.]

11) R[oa]dside E. of Forstal, '55. Edenbridge R[ai]l[wa]y Bank 1956 DPY. N[ea]r Tonbridge, JRW. N[ea]r Medway Bridge, Ensfield, Leigh, 1954. R[ai]l[wa]y, S of Hildenborough, 565482, CAS. Wet Wood by R[oa]d N. of [Four] Elms '55.

12) By A.20 n[ea]r "Olive Branch". 94 Westwell Leacon, E. Scott, 1959.

13) 54 R[ai]l[wa]y, High Brooms, CAS. Lane of [f] Eridge R[oa]d Tun[bridge] Wells 577384, E Shorrocks 1959. 63 Lamberhurst Village, 1956, PCH.

15) Hythe **MNE**.

var. **coarctata** [(Forselles) Besser.]

2) Medway, Aylesford, 1939, Miss E M Child, det. AHWD.

#### **A. verlot[i]orum Lamotte**

[Chinese Mugwort.

15, 16.]

*Alien, China. Becoming widely naturalised, but still rare.*

1) [47 Waste ground, S. end Luddesdon R[oa]d, Erith PCH **MNE**, 1955, 1956; destroyed 1957, PCH.] (See BSBI Proc 1955, p.329.)

4) 25 Vegetable field, Wingham Well, 1958, **MNE**. 67 Galley Hill, edge of chalk pit, 608743, 1958, PC & JFH.

6) 57 Casual, by canal Gravesend, G.M. Brown, 1958.

9) Margate goods yard, abund[ant] on bank, 1954, DHK.

10) Darenth Lane, Dunton green 1961 KEB. 55 By Sevenoaks Tip, 1956, DMcC **MNE**; 1958 CAS.

11) 54 Waste ground, Station; Adlards Building Yard, Tonbridge, 1955, K.E.B.

12) 15 Canterbury (Kingsmore Road) 1957, DMcC.

15) 01 Dungeness n[ea]r Lighthouse, J.P.M.B., 1954.

#### **A. absinth[i]um L.**

[Wormwood.

15, 16.]

*Naturalised alien. Roadsides, chalkpits, waste ground; rare, but not uncommon in Thanet 9).*

1) 47 Ruxley pits, 1958, TH Angel.

2) 47 Woolwich Arsenal, 1947. 47 Plumstead Marshes, 1949 **MNE**. Crabtree Manor Way, Belvedere, 1957, PCH. 06 Aylesford by Medway, 1934, AHWD. Bank at Head of Oare Creek, 1959 **MNE**.

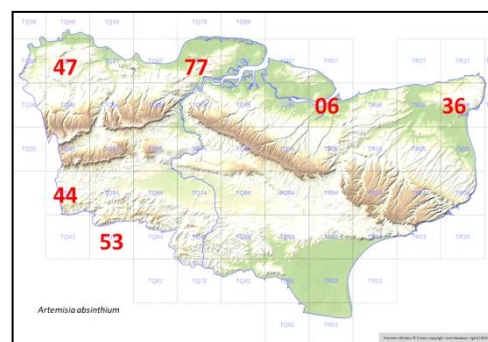
6) 77 Cliffe chalk pit, plentiful at N end, 1950-62 **MNE**. [Northfleet chalk pit, 1835, Hb JFY **BM**.]

9) 36 St Peters, L.W.W.; 1947! 36 Behind Broadstairs, 1950 **MNE**. 36 Old railway cutting, S. of Nash, N. of Ramsgate, 1959 **MNE**. 36 Pegwell Bay beach, 1947. 36 Ramsgate station RGW. 36 Bombed site, Ramsgate. 36 field track NE of Ramsgate, 1957, Miss B Nash.

11) [Pendenden Heath, 1849, M.N.H.S., **MNE**.] 44 Edenbridge R[ai]l[wa]y Bank D.P.Y., 1956.

13) 53 Broadwater Lane, Tun[bridge] Wells, 1958, K.E. Bull.

16) [Sandgate, 1816, Hb J.F.Y. **BM**.]



‡ **A. pontica** L.

1) Hayes, Mrs. Wedgewood, BEC Rep, 1922, p.731.

**Otanthus** Hoffmanns. & Link

**O. maritimus** (L.) Hoffmanns. & Link [Cottonweed.]

[15]

Extinct. Formerly in Sheppey, Hudson.

Reported at 15) Hythe Beach, 1931, Mrs. J. Hardy, but unconfirmed.

**Achillea** L.

**A. ptarmica** L.

Sneezewort.

15, 16

15/51

Native. Roadside verges, rough grassland, scrub, and wood borders, usually on heavy, rather base-deficient soils; very local; rather frequent in the High Weald of 13) and 14), and on the Weald clay of S.W. 11); rare elsewhere, in scattered localities on London clay in 1), near the Darent in 10), along the Medway in 11), and in 12) (Hothfield Common) and 15) Dungeness.

Frequent to locally common in the Weald of Surrey and Sussex, and on Eocene clays in N. Surrey and S. Essex; rare in Pas de Calais, comm[on]er in Nord.

1) 46 Scrubby grassland on London Clay, E. of Bromley Common! G.M. Brown 1954; **MNE**. Shooters Hill Common, 1954, GMB. 46 Keston Common, 1915 AGD **MNE**; not since! 46 Bank of R[iver] Cray, St Mary Cray! 1955 GMB, **MNE**, Double fl[ower]s; PCH, single fl[ower]s.

[9] Monkton, 1911, Ethel M. Treves, teste L.W.W.]

10) 95 Marshy meadow, 1 m E of Westerham, 1955 **MNE**. (Garden escape with double flowers, marsh by brewery, Westerham, 1962 HMP.)

11) W) 54 S. of Sevenoaks Weald, 1950 **MNE**. 54 N of Chiddingstone Causeway. 54 1m. E. of Leigh, 1947. 55 Nizells, Misses Turnbull.

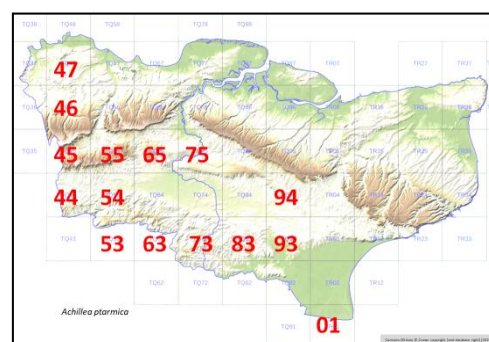
11)G) [E. Farleigh, 1881, MHNS **MNE**.] 65 Meadow S. of Medway, S.E. of Watlingtonbury, 1957 **MNE**. 75 Holt Wood, Aylesford, 1945, C. West **MNE**. 75 Gravel pits, Aylesford, 1960, E.G.P. 93 Bank of track, 960373, 1m SW of Shadoxhurst Ch[urch], 1955, E.S.

12) 94 Hothfield Common, W.R. Jeffrey; 1960, Dr. E. Scott.

13) 44 Cowden Pound, 1943. 44 SW of Hever Church, 1902 AGD **MNE**; 1953! 44 E. of Markbeech. 94 Chiddingstone Hoath. 54 1 mile W. of Smarts Hill, 1947. 44 1½m. NW of Cowden, 1947. 53 Brighton Lake, Tunbridge Wells Common, 1947; 577386, 1958 CAS. 54 Wood, N.E. of Bidborough, 1957. 63 Wood S.W. of Pembury, 614395, PCH. 73 Rough field, NW corner of Old Park Wood, Goudhurst, 1960. 83 Chittenden Wood **MNE** 1946. 83 Roadside E. of Gelford, Sissinghurst, 1946 **MNE**. Hawkenbury Bog<sup>904</sup> 1956 CAS. 63 Dunorlan 601395 CAS 1956. 54 Hilbert Rec[reation] G[r]oun[d], T[unbridge] W[ells] 595408, 1956 CAS. 54 Sherwood Park T[unbridge] W[ells] 598413, CAS. 63 Bayham Lake, 642367 CAS. (not 64)

14) 83 Lane W. of Penhill, 1947, **MNE**. 73 Pasture N.W. of Flimwell 1960 **MNE**. 33 R[oa]dside SE of Biddenden, 1947.

15) Dungeness, 1948, C.N.P. & Dr. E.S.



**A. millefolium** L.

[Yarrow.

15, 16.]

<sup>904</sup> Strictly, this is not a Kent site.

- 1) Shooters Hill Woods '54, GMB. Abbey Wood PCH. Lessness Abbey Pond, RAB. Crofton Heath PCH. Farnborough PCH. Bexley Ch[urch] y[ar]d PCH. N. Cray PCH. N. Cray Wood, PCH. Ruxley Pits TH Angel. Beckenham 1915 AGD **MNE**. B[eckenham] Place Park, 55. Edge of Joydens Wood PCH. Farningham R[oa]d Sta[tion] Approach PCH. Dartford Heath '54 GMB.
- 2) Woolwich Arsenal PCH. Sewerbanks, Plumstead, PCH. N[ea]r R[iver], Cuxton PCH. Medway Bank above Aylesford Br[idg]e '55. Dump, Sheerness Canal, O.D. '57. Scrub S. of Scapsgate 55. MinsterVillage '55. S. Minster Marshes 55. Branbledown old R[ai]l[wa]y 55. East Church Cliff 55. Weed Murtons F[ar]m Graveney '56 R Theobald.
- 3) Hernhill Village '55. Clay Hill Wood, 55. Swalecliffe R.E.W. 1951.
- 4) Sandwich Bay.
- 5) 36 W. of Highams Hill, 1958, PCH. Pilots Wood. Pilgrims Way, Chevening.
- 6) Horns Cross Chalk pit, 1962. Mounts R[oa]d PCH. Swanscombe Wood PCH. Green St[reet] Green Common (rose fl[owers]) PCH. Rifle Range, Shoreham PCH. Kemsing Downs PCH. Downs W. of Woodlands Hill, E of Kemsing 1955. Strood R[ai]l[wa]y Sta[tion] **MNE** 1943-62.
- 7) Upper Bush 55. Lower Bell 55. R[oa]dside Hartlip Hill '55. Ospringe Down HMW.
- 8) A2m SE of Canterbury '55. Bourne Park, Bridge '55. Bridge Hill North '55. Copse by A2, Halfway Ho[use], '55.
- 10) Sevenoaks tip, 1958, CAS. R[oa]dside, Eynsford PCH. St Johns Jerusalem PCH.
- 11) Ightham Village '55. Gravel pit E. of Aylesford 73658, 55. A20 W. of Bearsted '55. Hever 55. N. of Bough Beech 55. R[ai]l[wa]y, Hildenborough, CAS, '55. R[oa]dside Whetsted '55.
- 13) N. end of Penshurst Park '55.

#### ‡ **A. macrophylla** L.

- 11) Roadside, Wrotham Water, 1954 **MNE**.

#### **Chamaemelum** [Mill.]

##### **C. nobile** (L.) All.<sup>905</sup>

Chamomile.

[15], 16.

Native. In short turf on commons on acid soil, now very rare; formerly more frequent, but exterminated by enclosures, lack of grazing, and re-seeding of commons in several places. Still locally common in Surrey and in the Weald of Sussex; very rare in Essex.

1<sup>st</sup> record, [blank]

- [1] No recent records. Blackheath, Eng. Fl. Chislehurst Common, E. de C. Dartford Heath, A.H.W.D.]
- 2) [Introduced with turf, Burndept Electronic Co., Erith, 1955, GMB.]
- [4] Sturry Marshes, Hookham. Stourmouth, Dowker.]
- [11] Barming Heath, Hasted. Penenden Heath, F.G.E.K.]
- 12) Charing Heath, E. Jacob, *Pl. Fav.*
- 13) Rusthall Common, Forster, *Fl. Tonbr.* Tunbridge Wells Common, Forster *Fl. Tonbr.*; MNHS, 1882 **MNE**; abundant on higher cricket ground, 1952 K.E.B.; 1960, Miss J. Moore. Southborough Common, Miss H. Crampton; 1946! (east of church 577428) **MNE**; 1956, CAS. "Cranbrook", J.C. Melvill.
- 14) "Hawkhurst", J.C. Melvill.

#### **Anthemis** L.

##### **A. arvensis** L..

[Corn Chamomile.

15, [16].

Cornfields, usually on chalk; formerly fairly frequent, now rare.

- 3) Cornfield border, Blean, W. of Church, R.G. Williams, 1958.
- 6) Rough chalky field N. of A2, Darenth Wood, 578732, 1955, H.M.P. Field S. of Darenth Wood, 572717, 1948, H.M.P. Cornfield, The Warren, S.E. of Cobham, 693677, Mrs Woods. N.W. of Cobham, 1810, NBW, **BM**.
- 8) Between Bishopsbourne and Kingston L.W.W. Cornfield n[ea]r station, Adisham, 1949, L.W.W. Cornfield, L[it]t[l]e Mongeham, 323517<sup>906</sup>, Miss Ida Moore, 1960 (vidi sp.!) **MNE**.
- 11) Field by A.20, garage, Harrietsham, 1962, Mrs B. Dodds (sp!) **MNE**. Arable Field on Weald Clay, New Street F[ar]m, G[rea]t Chart, 972407, 1952, DMCC.
- 12) R[ai]l[wa]y sidings, Ashford, 1955, Mrs. N. Baker, det. Mrs. Farquarson.

#### **A. cotula** L.

Stinking Mayweed.

15, 16.

<sup>905</sup> In the manuscript cited as plain L.

<sup>906</sup> This gridreference was given incorrectly as 323317.

Colonist. Arable land, frequent on chalk, less frequent elsewhere, and unrecorded from wide areas.

First record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2

- 3) Arable S of Tyler Hill, 1948 **MNE**. Weed, Murtons F[ar]m Graveney '56 R Theobald.
- 4) Deal Marshes, Miss J. Moore, 1960.
- 6) Greenhithe 1946. Cornfield on chalk W of Halling HMP 1958. Dartford to Greenhithe 1886 Hb FJH. Cornfield, Buckland R[oa]d, Luddesdown, PCH.
- 7) 95 cornfield, Eastling, 1961, C. Turner. Cornfield N. of Putt Wood, Ospringe, 1950, REW.
- 8) arable Wye Downs, 1943 **MNE**. Coombe F[ar]m, Wye, 1946. Kingston (Marley Lane) 1948 **MNE**. Arable SW of S. Barham, 1956 **MNE**. By R[ai]l[wa]y, E of Elham, 1956 **MNE**. Cornfield E of Knowlton 1960 **MNE**. E of Godmersham 1960 **MNE**. Cornfield Temple Ewell Mrs KDR. Stubble W Snowdown Colliery 228508, 1950, DMCC. Cornfields, Ripple; Ringwould, LWW, 1950.
- 11) M.20, n[ea]r Sandling, 1960, E.G.P. Arable on F[olkestone] Sand, Chegworth. Harrietsham, 1958 **MNE**. [1843 **MNE**.] Fairbourne Mill, Harrietsham, 1960, Mrs B Dodds. [Hadlow 1878 FWES **TLS**.]
- 12) Lenham Forstal (sandy veg[etable] field) 1958 **MNE**.
- 14) N. of Sandhurst, 1946.
- 16) 13 Arable on loam W of Hythe, 1952 **MNE**. 03 Aldington HJM 1958.

‡ **A. tinctoria** L. [Yellow Chamomile. 15, 16.]

- 2) Snodland Marshes, on rubbish tip, 1955 **MNE**. [Cuxton, 1912, H. Elgar **MNE**.]
- 3) Rough Grass opp[osite] Star House, West Beach Whitstable, f[requent], H.M.W.
- 10) {S.Darenth, 1881, H. & J.G. **BM**.}
- 11) gravel pit 736588 E. of Aylesford 1956, E.S.

### **Chrysanthemum** L.

**C. segetum** L. Corn Marigold. 15, 16.

- 1) Beckenham, 1934, AGD **MNE**. Ravensbourne N. of Bromley 1910, HJ Sutton **MNE**.
- 3) Sturry, 1947, LWW. Cornfield by main R[oa]d, Hersden, 1954 RGW.
- 4) abundant in arable fields on Thanet Sand, Gilton, W and NW of Ash, 1948. Also just E. of Wingham, 1955, Mrs Brickenden. Fordwich Marshes, 1 pl[ant], 1950, REW.
- 7) Field, top of Charing Hill, ES.
- 8) Arable field on loam, Swingfield, 1957 Miss B Nash **MNE**; 1958. P.W.W.. [Cross] r[oa]ds casual on rubble, S. of Iffin Wood, 1962, Mrs Brickenden.
- 10) Arable on sandy soil ¾m. S. of Brasted 1955 **MNE**.
- 11) Arable fields on Folkestone Sand, E. of Lunsford Lane, East Malling, 1913, K. Peters; 1943! **MNE**; 1946! **MNE**. Harrietsham, 1843 MNHS, **MNE**. Ditton, 1883, H Lamb **MNE**. Aylesford, 1901, H Elgar **MNE**.
- 12) Fields NW of Hothfield Station, 1946. Arable Fields on Folkestone Sand, N.W. of Hothfield Common, ES; 1956! **MNE**. Field N. of Willesborough Lees, ES.
- 16) Folkestone, 1815, Hb. JFY **BM**.

### **Leucanthemum** Mill.<sup>907</sup>

**L. vulgare** Lam.<sup>908</sup> Moon-Daisy, Ox-eye Daisy. 15, 16.

- 1) W. Wickham 1915 AGD **MNE**. Ruxley Pits, TH Angel, '58.
- 2) Woolwich Arsenal PCH. Sewerbank Plumstead PCH. Pasture Murtons F[ar]m Graveney '56 R Theobald.
- 3) Whitstable Castle 1951, REW.
- 4) Sandwich Bay.
- 5) Chalk cutting, A20, Farningham. PCH. 36 Well Wood, 3964 W. Wickham 1958 PCH. Darwins Bank, Downe, 1962. Pilots Wood PCH. Pilgrims Way, Polhill, PCH.
- 6) Mounts R[oa]d, PCH. White Down, E. of Shoreham PCH, FR. Disused chalk pit, Swanscombe, '61, HAS. Romney St[reet] PCH.
- 10) Darenth Water Meadows, PCH.
- 11) R[ai]l[wa]y bank Edenbridge 1956 DPY. R[ai]l[wa]y S. of Hildenborough, 563482, CAS.
- 13) R[ai]l[wa]y cutting, Tun[bridge] Wells. Dunorlan Park, T[unbridge] W[ells] CAS.

**L. x superbum** (Bergmans ex J.W. Ingram) D.H. Kent<sup>909</sup> [Shasta Daisy. 16.]

<sup>907</sup> Treated under *Chrysanthemum* in the manuscript.

<sup>908</sup> Given as *Chrysanthemum leucanthemum* L.

2) Stream bank, Recreation Ground, Northfleet 616744, 1956 HMP.

10) Sevenoaks tip, 1958, C.A.S.

### **Matricaria** L.

**M. recutita** L. (*M. chamomilla* L.)

[Scented Mayweed.

15, 16.]

1) 37 Blackheath, 1955 PCH. [37 Catford 1882 J Britton **BM.**] Field W of Farningham Wood, 82. Cornfield, Bexley, PCH.

2) waste ground, Upnor, 1949 **MNE.** 87 Grain, 1956, PCH.

3) E. of Seasalter Cross, 1957, HMW. Sturry, DMcC.

4) Arable on Thanet Sand, Stodmarsh, 1949-55 **MNE.** Edge of Ham Fen, 1947 **MNE.** Arable, Ash, 1960, Mrs. B. Dodds.

5) 36 Field n[ea]r Bradmanshill Wood, W. Wickham, 397634, PCH & JFH.

6E) Hoo Brickworks, 1951, DMcC.

7) Cornfield, Belmont Park, 1958, DMcC.

8) Rough g[roun]d, Wye Downs, 1943 **MNE.**

10) Waste g[roun]d Otford R[oa]d, Sevenoaks, 1950 **MNE;** 1958, CAS.

11) Tonbridge. 75 Gravel pits, Aylesford, 1958, E.G.P.

12) Field on W[eald] Clay New Street F[ar]m, G[rea]t Chart 972407, 1952, DMcC. N. of Criol F[ar]m, Shadoxhurst, 1952, DMcC. Stowting village, 1956 ES.

13) Great Swifts, Cransbrook, edge of arable, 1955, E.S.

14) Arable land, Rolvenden, 1949 **MNE.**

15) car park, Ferryfield, Lydd, DMcC '55.

16) Cornfield, Hythe, Mrs M.J. Comyn.

**M. discoidea** DC.<sup>910</sup>

[Pineappleweed.

15, 16.]

1) Shooters Hill Common, '54, GMB. Elmstead Woods, 1956, Miss A. Mills. W of Farningham Wood 82. Crofton Heath PCH. R[oa]dside, Up[pe]r Hockenden, Swanley PCH. Millpond, Bexley, PCH. Dartford Heath, '54 GMB.

2) Waste g[roun]d, Crossness, PCH. Behind River Wall, Dartford Marshes, 1962. Weed Murtons F[ar]m Graveney '56 R Theobald.

5) Field W. of Farnborough PCH. Cross R[oa]ds, Farningham R[oa]d Sta[tion] approach PCH.

6) Mounts R[oa]d, PCH. Claylane Wood, '60, HAS. Swanscombe, waste g[roun]d, 61, HAS. Romney St[reet] PCH. Cornfield, Buckland R[oa]d, Luddesdown PCH.

8) Arable S of Barfreton, DMcC.

10) Sevenoaks tip 1958 CAS, R[oa]dside Eynsford PCH. St Johns Jerusalem PCH. Waste g[roun]d, S Darent PCH.

11) SW of Ightham C[our]t, 593573, sandy field 57, DMcC. Fairbourne Mill Harrietsham 1956, A Mills. Edenbridge R[ai]l[wa]y bank 1956 D.P.Y.

13) 63 Lamberhurst, PCH '56.

**Tripleurospermum** Sch. Bip.

[Sea Mayweed.

15, 16.]

**T. maritimum** (L.) W.D.J. Koch<sup>911</sup>

1) Elmers End, AGD 1915 **MNE.**

2) Grain, N. Beach; S. Beach **MNE.** Shellness, Sheppey, **MNE.** Sheerness Canal (dump) O. Davis. Seasalter.

3) Beach opp[osite] Rose in Bloom, Whitstable, RGW; HMW. Swalescliffe, 1951, REW.

4) Pegwell Bay Beach. Kingsdown. Shellness. Sandwich Bay. N. of Deal.

8) below Abbots Cliff. Folkestone Warren Beach.

15) Dungeness Beach, n[ea]r sea 1947-62 **MNE.** Shingle, Coast Path, Ferry field, Lydd, DMcC. '55.

**T. inodorum** (L.) Sch. Bip.

[Scentless Mayweed.

15, 16.]

1) Shooters hill Common, '54, GMB. Field by Farningham Wood PCH; 82! Crofton Heath PCH. N. Cray tip, PCH. [Bexley, D.Cooper **BM.**] Tip n[ea]r Hayes Station 395660, 1958, PC & JFH. Dartford Heath, '54, GMB. Woolwich Arsenal PCH. Waste g[roun]d, Crossness, PCH.

<sup>909</sup> In the manuscript given as *Chrysanthemum maximum* Ramond.

<sup>910</sup> In the manuscript given as *Matricaria matricarioides* (Less.) Porter.

<sup>911</sup> This, and the following taxon are in the manuscript treated as *T. maritimum* subsp. *maritimum* and subsp. *inodora* [sic].



- 2) Bank above R[iver], Cuxton PCH.  
 3) Weed, Murtons F[ar]m Graveney '56 R. Theobald.  
 4) Stodmarsh arable 1950, REW.  
 5) Field W. of Farnborough PCH.  
 6) Mounts R[oa]d, PCH. Swanscombe Wood PCH. R[oa]dside Northfleet, '61, HAS. Cornfield, Buckland R[oa]d, Luddesdown PCH.  
 8) Wye, in arable on chalk, 1943 **MNE**.  
 10) Cornfield by Shoreham Ch[urch], PCH. R[oa]dside, Eynsford, PCH.  
 11) Sandy field SW of Ightham Court 593573, '51, DMcC. (Penenden Heath 1849 **MNE**. Ditton 1883 **MNE**.)  
 15) (Sandgate 1813 Hb JFY **BM**.)

# Senecio L.

\* **S. cinerea** DC. [Silver Ragwort. 15.]

Alien, naturalised at:

- 4) Shingle Beach, N. of Kingsdown, 1946, **MNE**; Walmer, 1946, Miss V.L. Gower **MNE**.

‡ **S. fluviatilis** Wallr. [Broad-leaved Ragwort.] 15

Alien.

- 10) Crockham Hill 1946, Mrs. Bingley.  
 11) Brooklyn, Sandling, 1899, K. Peters, **MNE**.

**S. jacobaea** L. Ragwort. 15, 16.

Native. Roadsides, banks, pastures, open ground in woods, on a wide range of soils; very common, though less abundant since the reduction of rabbits by myxomatosis; this plant is not relished by rabbits and while they were abundant, this fact appears to have given it an advantage in competition with other plants, since lost.

Very common in Surrey, Sussex and Essex and N. France.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.1.

In flower April 7<sup>th</sup> 1948 at Tonbridge, Mrs. B. Warnett.

- 1) 46 Keston Common. 46 Holwood Park. 47 Ruxley pits TH Angel. 46 Hayes Common PCH. 46 Crofton Heath PCH. 57 Joydens Wood, PCH; FR. 56 Farningham Wood, PCH. 46 Hollows Wood, PCH. 47 Mount Mascall, Bexley PCH. 47 R[iver] Cray, N. Cray PCH. 47 N. Cray Wood, PCH. Dartford Heath, '54, G.M.B.  
 2) 87 Grain! 1956 PCH. 97 Shellness, Sheppey, '56. 07 Warden Beach,  
 3) 15 Trenley Park Wood. Weed Murtons F[ar]m, Graveney 1956 R. Theobald.  
 4) 35 Sandwich Bay. Princes Links. St Georges Links. Deal Links. 36 Pegwell Bay. 34 Kingsdown Beach. 35 Walmer Beach.  
 5) 56 Chalk W. of Eynsford PCH. 36 W. of Highams Hill, 1958 PCH. 46 Rushmore Hill, PCH. Darwins Bank, Downe, 1955 JEL. 56 Pilots Wood, PCH.  
 6) 57 Horns Cross chalk pit, 1962. 67 Swanscombe Wood, 1945 **MNE**. 57 Mounts Road, PCH. 57 The Thrift, Bean, PCH. 56 Horton Wood, PCH. 56 White Downs E of Shoreham PCH; FR. 56 Preston Hill, PCH. 55 above Kemsing PCH. 65 n[ea]r Wrotham, PCH. 66 Halling Warren, PCH.  
 7) Bluebell Hill.  
 8) 96 Ospringe Down HMW.  
 10) Sevenoaks tip 1958 CAS. Westerham Wood 82. R[iver] path below Shoerham PCH. W. of S. Darent PCH. St Johns Jerusalem, PCH.  
 11) 714575 Ditton N. Quarry, 1957, CAS. Rooks Hill. Mereworth Woods. Dering Wood. Headcorn. The Forest.  
 13) Gill SW of Stone Cross, Ashurst, CAS.  
 15) Hythe Shingle Beach. Romney Warren. Dungeness Beach.  
 16) Ragstone Scarp W of Hythe.

**S. aquaticus** Hill Marsh Ragwort. 15, 16 22/51

Native, wet meadows on alluvium and on peat, locally common, but absent from wide areas. Frequent in the Thames and lower Medway meadows in 2), the lower Stour Marshes in 4), the Darent meadows in 10); sparsely scattered elsewhere in 1), 11), 12), 13 and 15). Locally common in Surrey, Sussex, and Essex and in Pas de Calais.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.50.

- 1) 46 by Brook SE of Bromley 407677, 1956, D.P.Y.

2) 67 Northfleet Brooks, 1944. 77 Wet meadow S. of Cliffe, 1944. 77 Higham Marshes. 66 Meadows at Ham Hill, S. of Snodland; 1888 **MNE**; 1955 **MNE**. 76 Holborough Marshes. 77 High Halstow Marshes. 78 Cooling.

4) 25 Peaty marshy meadows, Little Britton, 1m W. of Wingham 1946. 25 S.E. of Wingham, 1947 **MNE**. 25, ½m N of Wingham Ch[urch], 1956 **MNE**. 26 Grove Ferry meadows, Miss E. Millward, 1939; 1950, REW. 16 Westbere Marshes, 1958, Mrs. Brickenden. 16 Marsh below Higham F[ar]m, Fordwich, 1950, REW. 35.

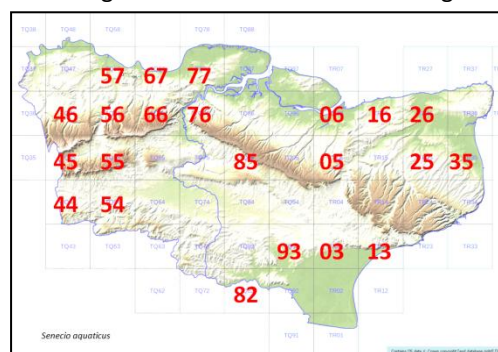
10) 57 Darenth meadows, FR; PCH. 56 Meadow N. of Shoreham 1954 **MNE**. 55 Meadows NE of Riverhead, 1954 **MNE**; 1957 FSEF. 55 Meadows S of Otford, 1956 **MNE**. 45 Meadow NE of Sundridge, 491558, 1957, F.S.E. Fawkes. V[ery] a[bandant] W. of Brasted, G.M.B.

11) 85 Meadow by fen, Ramchild, Harretsham, 1962, Mrs B Dodds.

12) 05 Meadows near Chilham Mill, 1955 **MNE**. 03 Meadows SW of Cheesmans Green, Kingsnorth, 025384, ES, 1954. 13 Gibbins Brook, 1957, L.J.M.

13) 44 By Furnace Pond, Cowden, 1947.

15) 82 Sandhurst Levels, 1954 **MNE**.



### **S. erucifolius** L.

Hoary Ragwort.

15, 16.

Native. Banks, roadsides, grassland asnd scrub; common throughout Kent on chalk and clay soils, rare on sandy soils. Abundant on the alluvial soils of N. Kent near the estuaries and on the chalk and Weald clay.

1<sup>st</sup> record, 1597: Margate, etc., Gerard, Herbal, p.219.

1) 46 Bickley. 37 Beckenham Place Park 1956 PCH. W. Wickham Woods 1915 AGD **MNE**. 46 R[ai]l[wa]y bank, Orpington Station. Beckenham (Harrington Estate) 1955 JM Sherwood. 46 Crofton Heath PCH. 47 R[iver] Cray N. Cray PCH. 56 Farningham Wood PCH.

2) 47 Woolwich Arsenal, 1944. 77 Frindsbury. 87 Grain. 76 Cuxton Station. 97 Minster. 97 East Churrah. 97 Warden Cliffs. Shellness beach and sea walls, '56. 06 Faversham Cteek. 06 Graveney. 06 Seasalter. 96 Conyer Creek.

3) 06 Seasalter on L[ondon] Clay in fields etc, HMW. 16 Tankerton cliff. 16 Swalecliffe.

4) 35 Ham, 1949 **MNE**.

5) 56 Chalk W. of Eynsford PCH. 55 Pilgrims Way, Polhill PCH. Darwins Bank Downe '55 JEL.

6) 57 Horns Cross Chalk pit 1962. 57 Darenth Wood, PCH. 57 Lords Wood, Darenth, PCH. 57 The Thrift, Bean PCH. 67 Gravesend. 66 Swanscombe. 77 Frindsbury. 57 Rifle Range, Shoreham PCH. 76 Cuxton near Church. 66 Meopham. 76 Chalk Banks above River, Cuxton FR PCH.

7) 95 Burham Downs. 75 Bluebell Hill **MNE**. 06 Edge of Park Wood, W of Chilham 1954 **MNE**.

8) Hacklinge chalk pit. 23 Abbots Cliff 1956 **MNE**.

11) Ditton N. Quarry, 714575, 1957, CAS. 44 R[ai]l[wa]y bank Edenbridge 1956 DPY. 54 R[ai]l[wa]y W. of Hildenborough CAS. 84 Road sides N.W. of Headcorn. 84 W. of Headcorn. 74 N. of Staplehurst. 74 W. of Staplehurst. 74 N.W. of Marden. 74 E. of Marden. 74 Lane n[ea]r Teise W of Marden, 1956 **MNE**.

13) 53 R[ai]l[wa]y W. of Tun[bridge] Wells West Sta[tion], '60, CAS.

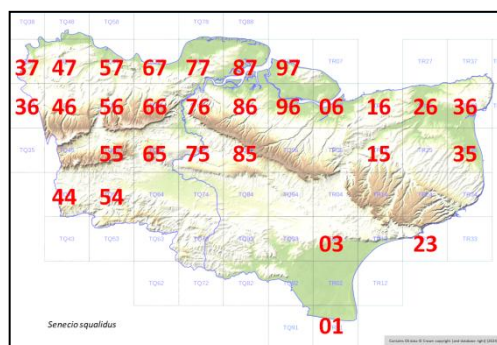
### **S. squalidus** L.

Oxford Ragwort.

15, 16.

Alien, now completely naturalised, waste ground, old walls, railway banks, etc.; very common in North Kent from London to Rochester and frequent eastwards to Thanet along the coast and estuaries, and up the Medway valley to Maidstone; widely scattered elsewhere, but still rare in the Weald and in the rural areas of the chalk districts.

It has become similarly common locally in Surrey in the country near London, and down the Thames estuary in Essex; still rare in Sussex. Discovered in the Pas de Calais, 1956, by J.E. Lousley, at Calais. A native of M[oun]t Etna. For an account of the history of this species in Britain, see D.H. Kent<sup>912</sup>



<sup>912</sup> No reference given, but D.H. Kent published a series of papers 1956-64 regarding the spread of this species in the British Isles.

1<sup>st</sup> record, not 1875 walls at Canterbury, Gulliver *in litt.* to F.J. Hanbury, but 1819, Gravesend Canal, R. Pocock, **BM** (introduced to the walls of Canterbury by Dr. Maxwell Masters).

- 1) 37 Deptford; Lewisham; Greenwich. 47 Woolwich; 47 Erith; 57 Slades Green. 47 Bexley Mill pond PCH. 47 N Cray tip PCH. 47 Ruxley Pits TH Angel. 47 Abbey Wood, St. J. Marriott & Poore, B.E.C. Rep., 1922, p.73 (plentiful by 1925, St.J.M.); 1948, RAB on walls of Abbey. 47 Elmstead Woods, 1956, Miss A Mills. 36 Tip n[ea]r Hayes Station, 395660, 1958, P.C.& J.F.H. 47 Shooters Hill '54, GMB. 57 Dartford Heath 54, GMB. 46 Green Street Green (Farnborough).
- 2) Sewer Bank, Plumstead, PCH. Woolwich Arsenal, 1944; 1949, PCH. 57 Stone; 65 Swanscombe Marshes; 77 Higham; 67 Shorne mead; 77 Cliffe; 76 Strood, near river 1943→; 87 Grain. 97 Sheerness town. 96 Ridham Dock. 06 Faversham. 97 Sheerness canal dump, O Davis 57. 86 R[ai]l[wa]y. Teynham Sta[tion] 1946 DHK. 96 R[ai]l[wa]y, Sittingbourne Sta[tion] 1946 FHK. 06 Seasalter Beach 1950 REW. 86.
- 3) 16 W. Clowes Wood, Blean Village, N.R. entrance, 1950 REW. 15 Wood edge, Fishpool Hill, 1950 REW.
- 4) 26 Chislet Colliery 1955 DHK. Sandwich Bay.
- 5) 56 Wood W of Shoreham, 1 plant PCH.
- 6) 57 Horns Cross pit 1962. 57 Mounts R[oa]d, PCH & FR. 57 Stone 1962. 57 Greenhithe pits. 57 Swanscombe pits. 77 Cliffe chalk pits. 77 Northfleet pits. 77 Gravesend railway. 67 Chalk. 77 Higham Sta[tion]. 76 Strood Station 1943-62, **MNE**. 76 Cuxton. 76 Halling. 76 Snodland. 66 Longfield tip Mrs Woods.
- 7) 76 Rochester, frequent, 1946→. Chatham.
- 8) 34 Bombed sites, Dover, 1947, Miss V. Day; 1955!
- 9) 36 Ramsgate, Margate goods yard 1955 DHK.
- 10) Westerham Wood 82. Sevenoaks tip, 1958, CAS. Dunton Green, RC Palmer. Riverhead Sandpit CAS.
- 11) Tonbridge Sta[tion] 1955 KEB. Edenbridge tip 1956 DPY. Platt Brickfield 620575 DMCC. Addington Place 1958 DMCC. Old retaining wall E. of W. Malling. E Malling 1962. Bank by high level bridge, Maidstone. N of Leybourne, 1956. Ditton N Quarry 714575, 57, CAS. R[ai]l[wa]y Hildenborough 563482, CAS. Rubbish tip Edenbridge 451455 1956 D.P.Y. Clarks Hill Harrietsham by A20, 1962, Mrs B Dodds.
- 12) R[ai]l[wa]y N[ea]r Stour Mersham to Sellinge 1959, LJM. Canterbury bombed sites, 1946, DHK; common, 1956. Hothfield Common, 1945 DHK; 1946!
- 13) High Brooms Brickworks 1950, KEB; 1955.
- 15) Dungeness R[oa]dside to N 1946 WJLS.
- 16) Folkestone Junction Sta[tion], 1947, Miss V. Day. Bombed sites Folkestone, V Day.

#### **S. squalidus x vulgaris**

- 10) Dunton Green, 1961, RC Palmer.  
(Hb. Dr[u]ce, Ox[ford])

#### **S. squalidus x viscosus = S.[x] londinensis** Lousley

- 11) Yalding Station, 1961, D.McC. et al., K.F.C. Excur[sion].

#### **S. vulgaris** L.

Groundsel.

15, 16.

Native. Waste ground, cultivated land, beaches; abundant throughout Kent, and all the adjoining counties and N. France.

1<sup>st</sup> record, 1629: Gravesend to Rochester, Johnson, *Iter*, p.2.

- 1) 46 Keston village. Shooters Hill Woods, '54 GMB. 47 Elmstead Woods, 1956, Miss A Mills. 46 Crofton Heath PCH. 47 Millpond, Bexley, PCH. 56 Farningham Wood PCH.
- 2) 47 Sewer Bank, Plumstead PCH. 47 Woolwich Arsenal, 1944; PCH. Garden Weed, Sheerness '56 Mrs Bryson. Shellness, Sheppey, '56. 97 Dump, Sheerness Canal O. Davis. Weed Murtons F[ar]m, Graveney, 1956, R. Theobald.
- 5) 56 Timberden Bottom PCH. 36 Well Wood, W. Wickham, 3964, 1958, PCH.
- 6) 57 Darenth Wood PCH. 66 Cornfield Buckland R[oa]d, Luddesdown PCH.
- 8) 25 Arable, Fredville. DMCC.
- 10) Sevenoaks tip CAS, 1958. Otford PCH. Eynsford PCH. W. of S. Darenth PCH.
- 11) East Malling. West Malling. Ditton N. Quarry 714575, 1945; 1957, CAS.
- 12) Hothfield.
- 15) Romney Warren. Ferryfield Car Park, 1956, DMCC.
- 16) Folkestone Harbour (Radiate heads) 1950 Mrs V. Day.

#### **S. sylvaticus** L.

Heath Groundsel.

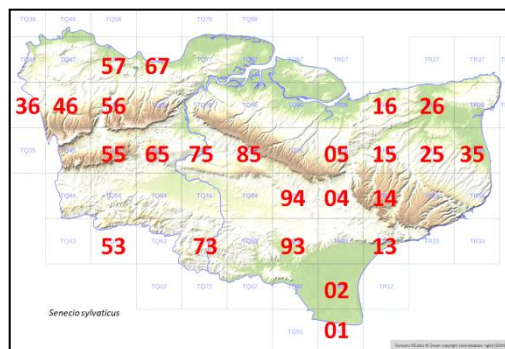
15, 16.

Native. Heathland, coppiced woodlands on sandy soils in the years following coppicing, shingle beaches, fixed dunes; locally common, but absent from wide areas.

Frequent on suitable soils in Surrey and Sussex, rather rare in Essex. Rare and local in Pas de Calais

1<sup>st</sup> record, 1632? Thanet, Johnson, *Descriptio*, p.14

- 1) 46 Hayes Common 1915 AGD **MNE**; D.McC. 1956. 46 Keston Common. 36 W. Wickham Common 1915 AGD **MNE**. 57 Joydens Wood, PCH. 56 Farningham Wood PCH. 46 Bourne Wood, by r[ai]l[wa]y W. of Swanley. 46 Petts Wood, on r[ai]l[wa]y bank. 46 Crofton Heath PCH. 57 Dartford Heath, '54, GMB. 56 N Cray Wood, PCH.
- 3) 05 Perry Wood, Selling, DH.K. 05 Dunkirk, RGW. Bysing Wood, Cowell. 15 Oldridge Wood, RGW. 15 Church Wood, RGW. 25 Pine Wood, R.G.W. 15 Bigberry Wood, RGW. 26 Shelvingford Wood (Old[haven] Beds) Miss M.E.M.
- 4) 35 Sandwich Bay, 1954. 26 Wood border S.W. of Preston Ch[urch], 1958, Miss B. Nash. 16 Sandpit, Westbere, 1950 LWW.
- 6)A) 57 Darenth Wood. 67 Shorne, 1838, JBM. [Gravesend, R.P.]
- 8) 14 Covert Wood, Miss DACL, 1958. 04 Grass Heath 099451 E of Hastingleigh (Pliocene sand) 1946 **MNE**.
- 10) Riverhead, Sand pit by Railway, CAS.
- 11) 65 Wrotham Heath AA **BM**; 1945 **MNE**. 65 Ryarsh Roughetts. 65 Leybourne Wood. 65 Larkfield Heath, 1959 **MNE**. 85 By A.20, Leeds castle Park. 75 Penenden Heath. 85 Kings Wood, Ulcombe, 1960, Mrs. B. Dodds. 65 Field N. of Aerodrome, W. Malling. 94 Dering Wood ES.
- 12) 94 Hothfield Common, 1945. 94 Ashford Warren. 04 Willesborough Lees. 04 Brabourne Lees. 04 Hinxhill, E.S., '47. 93 E of Shadoxhurst ES.
- 13) Roads in Stile Forest, Bedgebury, 1943 JRW; 1946. 53 Rusthall Common 1950 KEB. Birch Wood, Bidborough, 1955 (on Wad[hurst] C[lay]) G.E. Hutchings.
- 14) 93 50 acre Wood Woodchurch.
- 15) 13 Hythe Shingle Beach. 02 Romney Warren, 1946. 02 Greatstone dunes, 1946. 01 Dungeness 1946-62 **MNE**. 01 Midrips 1946 WJLS.
- 16) 13 Sandling Junction, ESM; 1946!



### **S. viscosus** L.

Sticky Groundsel.

15, 16

Native, on the coast, where it is locally abundant on shingle and on shell-sand beaches; it has spread to waste ground, railway banks, quarries, etc., inland, and is now widespread in North Kent and up the Medway to Maidstone.

1<sup>st</sup> record, 1791: Dartford, in *Engl. Bot.*, Ed.1, p.32, **BM**.

- 1) [St Johns Station; New Cross to Thames Tunnel, FJH; Lee Station, Hb JSM; Bexley, Blackheath, WWR, etc.] 46 Hayes Common, Cole; 1956 Miss A Mills. Plumstead, ESM. 47 Woolwich Arsenal, AHWD (1944! 1949!). 46 Hayes Gravel Pits, AGD 1915 **MNE**. Bromley; Beckenham, Scargill. Tip n[ea]r Hayes Station 395660, PC & JFH 1958. 46 St Mary Cray R[ai]l[wa]y bank. G[rasslan]d by Pond, Lessness Abbey, 1948, RAB. 47 Ruxley pits TH Angel. 47 N. Cray tip PCH. 56 Farningham Wood PCH.
- 2) 87 Grain N. Beach 880780, 1959 **MNE**. 06 Shellness in Sheppey, abundant on shell sand, 1939, J.E.L. (on B.E.C. Excursion); 1946-1960, abund[ant]! 07 Beach N. of Leysdown. 06 Castle Coot Beach, Graveney. 06 Seasalter Beach; 1922 TJF **BM**; 1959! 06 Faversham Creek, AHWD; 1946! By Canal at Higham. 75 R[ai]l[wa]y, New Hythe. 76 R[ai]l[wa]y, Snodland. 75 By Medway, Aylesford, 1942.
- 3) 16 Whitstable Beach. 16 Swalecliffe Beach. 26 Upstreet, RGW. Seasalter RGW.
- 4) 36 Richborough, on waste ground, 1946 **MNE**. 36 Pegwell Bay beach, on shell-sand. 34 Kingsdown Beach.
- 6) 76 Halling, F.R. 76 R[oa]dside, Cuxton PCH. 67 Shorne Marshes, 1 pl[ant], 1961, HAS. 77 Frindsbury, 1938, JBM.
- 8) 25 Stubble, Fredville, 2650, 1957 DMCC. 24 Shingle heaps, Lydden Hill, Miss B. Nash, 1957.
- 10) 55 Riverhead, Sandpit by R[ai]l[wa]y, CAS. 57 Dartford, 1860, HT. 55 Park Wall, Montreal, 1955. 57 Gravel pits, Sutton at Hone, 562706, 1961, H.M.P. 56 W of S. Darenth PCH. 56 Gravel pits D. of S Darenth, abund[ant], PCH.
- 11) 65 Addington Place 1958 DMCC. (Sta[tion] Tovil 1887 **MNE**.) 75 Ditton Quarry 714575 1943; 1957 CAS. 65 Sandpit, Wrotham Heath 1942. 84 R[ai]l[wa]y, Headcorn, ESM.
- 12) 94 on ballast, Westwell. 94 Field on We[ald] Clay, New St[reet] F[ar]m, G[rea]t Chart 1952 DMCC

**13)** 63 A.21 N. of Lamberhurst 1936 JRW. 54 Roadside W. of Leigh. 54 High Brooms Gas Works 150 KEB. 64 Kippings Cross Farm, CAS.

**14)** 93 {Fifty} acre Wood Woodch[urch] ES. 83 Ruts in woodland ride, N. of Benenden, 1949. 83 Tenterden R[ai]l[wa]y Station 1959 **MNE**.

**15)** 01 Dungeness, Dowker; E.S.M.; 1959, abund[ant] over a wide area! **MNE**. 078158; 094168 L[ight] Ho[use]. R[ai]l[wa]y Wittersham Sta[tion] JRW. 02 Littlestone, ESM (1946!). 02 Lydd Common, 1937 AJW **BM**; 1946! 13 Hythe Beach, 1946. 02 Dymchurch. 02 Orgarswick. 13 Burmarsh, on roadsides.

**16)** 23 Sandgate. 23 Beach, Eastwear Bay, 1945 DACL; 1952 Miss V. Day.

**Tephroseris** (Rchb.) Rchb.

**T. integrifolia** (L.) Holub<sup>913</sup> Field Fleabane. 15.

Native. Old chalk grassland, extremely rare; confined to one restricted locality, the only one on the North Downs today. It is now apparently extinct in Surrey, where it occurred in at least two localities, and in the sole Essex locality; but it is still abundant in a number of localities on the South Downs. This is a species of remarkably disjunct distribution in Britain. It does not appear in N. France, where however the somewhat similar but much larger and paler-flowered *S. spathulaefolius* occurs locally in scrub at wood borders on chalk; it occurs however in the Jura.

It varies greatly in abundance in its Kent locality in some years, few; plants flower; in others, as many as 150 inflorescences have been counted. With the reduction in numbers of rabbits through Myxomatosis in 1954 and the years following, this plant appeared to benefit and many inflorescences were seen; but since 1957 growth of scrub and spread of the coarser grasses such as *Bromus erectus* appear to be restricting it to move more to the edges of pathways.

1<sup>st</sup> record, 1839: Downs leading to Bluebell Hill, Pamplin in F.G.E.K., p.84.

**7)** Burham Down, 1894, A.H.W.D. & E.S.M., probably the same spot as the first record; **BM** 1913, Hepworth; 1930, SE Chandler; 1947-1960! **MNE** (actually on the spur N.W. of Burham village over an area of only about 50 x 50 yards). This locality is now the subject of intensive ecological study by Mr. G. Morgan of the Kent Field Club<sup>914</sup>. Figures of numbers of inflorescences notes year by year: 1947 50 plants; 1948 [*etc. to 1957 – no entries*]; 1958 2; [*etc. to 1962 – no entries*].

**Sinacalia** H. Rob. & Brettell

**S. tanguitica** (Maxim.) B. Nord.<sup>915</sup> [Chinese Ragwort. 16.]

**13)** Cambridge Gardens, Tun[bridge] Wells, 1957, K.E.B.

‡ **Doronicum** L.

‡ **D. pardalanches** L. [Leopard's-bane. 15, 16.]

Alien, naturalised in a few places.

**8)** Kingsdown, Mrs Rowe, 1960 **MNE**.

**10)** Oldbury Hill, Ightham, by roadsides and in woodland, 1946, and Styants Bottom.

**11)** Platt, 1946, DMCC, in sandy woodland.

**16)** Brockhill Park Saltwood, naturalised, 1955, LJM.

‡ **D. plantagineum** L. [Plantain-leaved Leopard's-bane. 15, 16.]

Alien.

**1)** Wood near Chislehurst, 1821, Hb J.S.M. Wood (behind) Shooters Hill, 1848, Luxford, Phyt 3, p.453.

**8)** 256425, Naturalised in shrubbery N. of Alkham, 1955, D..P.Y.

**Tussilago** L.

**T. farfara** L. Coltsfoot. 15, 16.

Native. Damp grassland, roadsides, cliffs, quarries, open waste ground; very common throughout Kent. This species is one of the first angiosperms to colonise newly-bared ground or quarries, especially on chalk and clay, and on damp sand. Common throughout southern England and N. France.

1<sup>st</sup> record, 1629: Grain to Stoke, Johnson, *Iter*, p.8.

<sup>913</sup> In the manuscript treated as *Senecio integrifolius* (L.) Clairv.

<sup>914</sup> Undertaken 1957-63 and published in *Kent Field Club Transactions* (1965) 3: 26-49.

<sup>915</sup> In the manuscript treated as *Senecio tanguiticus* Maxim.



- 1) Eltham. Orpington. Lewisham. Shooters Hill, '54 GMB. Elmstead Wood 1960 Miss A Mills. Crofton Heath PCH. Joydens Wod PCH. Wickham Lane, Plumstead PCH. By R[iver], M. Cray, PCH. Mount Mascal, Bexley PCH.
- 2) Woolwich Arsenal. Plumstead Sewer Bank, PCH. Erith. Dartford Marshes. Clay Cliffs, Minster; East Church; Warden.
- 3) Tankerton Cliffs. Weef, Murtons F[ar]m, Graveney '56 R Theobald.
- 5) [Halstead AA **BM**.]
- 6) Mounts R[oa]d PCH. Swanscombe Wood 1945; PCH. [Lit[tle] Hermitage Higham 1838 SB **BM**.] Cobham, 1939, JBM. Rifle Range, Shoreham, PCH.
- 8) Whitehill Wood, 1955, Miss M.E.M.
- 10) Sevenoaks tip, 1958, CAS. Eynsford PCH. E of Farningham R[oa]d Sra[tion], PCH. St Johns Jerusalem PCH.
- 11) E. Malling. Ditton Quarry. Aylesford, sand pits and river banks. Mereworth. Leybourne. Ryarsh. Birling. Hildenborough, by R[ai]l[wa]y, CAS.

#### Petasites Mill.

**P. hybridus**<sup>916</sup> (L.) Gaertn., Mey. & Scherb.

Butterbur.

15, 16.

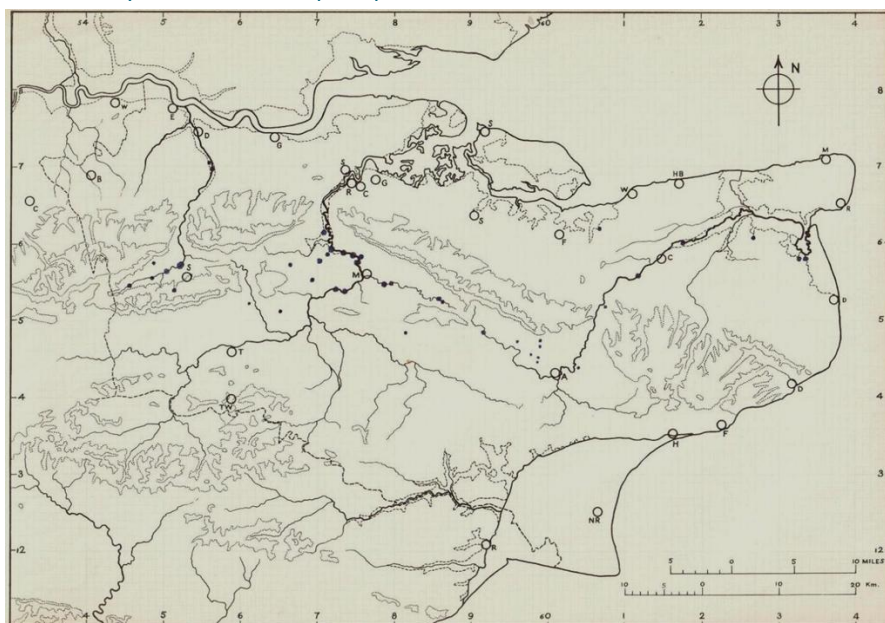
**Native.** Stream banks, swampy aldercarrs by springs, roadside verges; locally common, especially along the Darent, middle Medway, and Stour rivers and the spring lines on the Greensand; rare elsewhere, and absent from wide areas. Local in Surrey, Sussex and Essex; rare in Pas de Calais. Only the male planr occurs in Kent, Surrey, and Sussex.

1<sup>st</sup> record, 1632: Sandwich to Canterbury, Johnson, *Descriptio*, p.29.

- 1) [Greenwich to Woolwich Marshes, Fl. Met.] [Pickhurst Green, Bromley, Cole; extinct 1958, PCH.]

- 2) R[iver] Medway Banks, above Aylesford 1885 **MNE**, 1943-59; below Aylesford to New Hythe, 1943. Stream at Snodland, 1945. By A2 Beacon Hill, Faversham RGW. By roadside pond, Langdon Court, Goodnestone, 1950 REW. Ditch. Waterham, near Hernhill, E Jacob 1777; 1958, C. Turner.

- 4) [Preston, Miss Sankey FGEK.] Spring meadow, Elmstone, 1956. Sandwich, E.S.M.: the town ditch, on western side, 1950 LWW; 1955-56, P.C. & J. Hall & F.R.!



- 10) (Darent, from below Westerham to Sutton at Hone.) Stream, Sutton Corner, Darent, 1956, PCH. St Johns, Sutton at Hone, 1954, P.C. Hall. Stream junction, S. Darent, A.H.W.D. (P.C. Hall, 1954). W. of S. Darent, PCH. Springs at Dibden, S. of. Darent, Farningham, F.M. Webb. Darent, Riverhead, 1954. Riverhead, 1954. Chevening by roadside 1943, J.R.W.; F.S.E. Fawkes; 1955! **MNE**. Chipstead, F.S.E. Fawkes. E. of Sundridge, 1955, by R[iver] Darent. E. of Brasted, 1958, RAC. W. of Brasted, 1949.
- 11) East Malling, Stream N. of Village, 1942-60. Roadside, E. Malling Heath, 1942-60, and at "Woodman" 1962. Bradbourne Lake 57 CAS. Stream N. of Ditton Corner. Medway bank, Maidstone to Allington, 1954; and by sidestream, Sandling, 1955 **MNE**. By Medway, Barming, 1954. Medway, E. Farleigh, F.J.H.; 1885-1902 **MNE**; (1954!). Roadside E. of Offham, 1954. Damp roadside verge, 1½ m. NE of Hadlow, 1955 **MNE**. Boxley, 1945. Ramchild, H[arriet]sham 1960 Mrs B Dodds. R[iver] Len, Polhill, Harrietsham 1898 HL **MNE**; 1954 **MNE**. Otham, 1955. Mote Park, 1956. Sandling Wood, 1881 F. James **MNE**; 1955! **MNE**. Stream W. of Harrietsham, 1954. Pond E. of Sutton Valence, 1944-54. Roadside Dunks Green, 1954.

<sup>916</sup> This account includes part of a series of maps from Francis Rose's folder marked Kent Flora Maps; the distribution dots may be incomplete.

**12)** Woods E of Hothfield Lake, 1946; 986446 ES, 1954. 916485, Charing Heath, E. Scott. Blackwall F[ar]m, N. of Willesborough Lees, 040440, ES. Yonse Mill 989451, ES. E. Stour Farm, Godmersham, 075579, R.E. Wood. 16 Stour bank, Milner C[our]t, Sturry, 1954, Mrs. Oldaker. 990475 springs, Westwell mill, E. Scott. Wood S. of Westwell, 990467 ES. R[oa]dside S. of Westwell 990467 ES. S. of Hothfield Halt by r[oa]d, 979457, ES. R[iver] Stour, Lenham Heath to Godmersham.

**16)** (Saltwood, F.J.H.; 1945? [sic])

‡ **P. japonicus** (Siebold & Zucc.) Maxim. [Giant Butterbur.] 16.

Alien, completely naturalised; very rare.

**11)** By lake in park, Hever, 1956, CAS.

**13)** Groombridge, D.McC., 1945; 1954! **MNE**; 1956 CAS; on both banks of the boundary stream between Kent and Sussex.

‡ **P. palmatus** [(Aiton) A. Gray]

**13)** Naturalised in shrubbery, Carlton R[oa]d, T[unbridge] Wells, 1956, CAS.

‡ **P. albus** (L.) Gaertn. [White Butterbur.] 16

**11)** R[oa]dside at 594537, ½ m W of Plaxtol, 1956, C.A.D.; 1960, E. Shorrocks; Miss C. McDermott 1961. Bradbourne Lakes, 1957, CAS.

**P.fragrans** (Vill.) C. Presl [Winter Heliotrope. 15, 16.]

**1)** Hayes. Corkscrew Hill, W. Wickham, 387654, DPY, 1956. Erith. Shooters Hill '54 G.M.B. Elmstead Woods, 1956, Miss A Mills. Footh Cray Place, RB Ling 1958. N. Cray tip, n[ea]r River, PCH.

**2)** Sewerbank, Plumstead, PCH. 86 R[oa]dside, Bobbing Court, 1960, EGP. R[oa]dside n[ea]r Cuxton Sta[tion], PCH. By Stonebridge Pond, Faversham, 1950, REW.

**3)** Rhode Common by r[oa]d, 1959, HMW. Kite Farm Corner, Swalecliffe, 1950, REW. Bartletts Corner / castle grounds, 1950, REW.

**4)** Deal, 1946.

**5)** R[oa]dside, Holwood F[ar]m, PCH.

**6)** Frindsbury Extra, 1938, J.B.M.

**7)** Milsted, JRW, 1939 (sub-male). N[ea]r Brenley Corner, by A2, 038600, 1958, HMW. By A.251, Sheldwich, 1951, REW. Old Wives Lees to Selling Sta[tion], R[oa]dside, 44, DHK.

**8)** Dover Castle. St Margarets Bay. Barfreton, 1948, Miss JE Hibbard. Kearsney.

**9)** Westgate, LWW, 1946.

**10)** 486573 Sundridge, 1957, F.S.E. Fawkes. R[oa]dside, Grubb Street, Farningham, 1957, PCH. Kemsing Churchy[ar]d, 1956, CAS. Chevening Park, 486573, 1955, FSEF. By A.25, W. of Ightham. By A.[227] S. of Ightham.

**11)** **G)** West Malling (Abbey; New Barns). East Malling, village. Bradbourne Lake. East Street, Harrietsham, 1960, Mrs. B. Dodds. Linton. Loose.

**W)** Whetsted. Marden Beech. Staplehurst. Heacorn. Beltring. Leigh.

**12)** Chilham Station, R[oa]d bank, 1945, DHK.

**13)** Hill NE of Groombridge, JRW, 1943. N[ea]r Lamberhurst Church, JRW, 1937. S. of Matfield, JRW, 1938. Pembury, JRW, 1943. Tunbridge Wells. 1m. N of Goudhurst. E. of Goudhurst. Horsmonden. Wilsley Ho[use], Cranbrook, 1956, DS.

**14)** n[ea]r London Beach, N. of Tenterden, 1943.

**16)** Lympe. Sandgate. Hythe, in town, H.M. Wilks. Folkestone.

**Calendula** L.

**C. officinalis** L. [Pot Marigold. 15, 16.]

**2)** Cleve Marsh, 1953, REW.

**10)** Sevenoaks tip 1958, CAS.

**11)** Platt Brickfield 620575 D McC.

**12)** Ashford dump D McC.

**Ambrosia** L.

‡ **A. artemisiifolia** L. [Ragweed. 16.]

1) Hop garden, between Chislehurst and Foots Cray, 1836, Rev. A.E. Eaton; 2 plants, Rubbish tip n[ear] Wilmington, 1891; one plant, Woolwich Arsenal, 1892, A.H.W.D.

‡ **A. trifida** L. [Giant Ragweed. 15.]

4) Gravel pit, Preston 1955 REW (opp[osite] Sandwich Fruit Packers sheds). Birdtrap, Sandwich Bay, 1955, REW.

12) By grain mill by R[iver] Stour, Wye, J.P.M.B., BEC Rep. 1939-40, p.282.

**Xanthium** L.

[‡] **X. strumarium** L. [Rough Cocklebur. 16.]

"Kent", Syme, Eng. Bot., ed.III, 1863-71, p.214.

2) 1 plant, Grain, North Beach, 1949.

‡ **X. spinosum** L. [Spiny Cocklebur 15, 16.]

1) Several plants in field treated with "Shoddy", Hockenden, near Swanley, 1948-9 **MNE**.

3) coast, Whitstable, WH Hammond, 1899, Hb FJH **BM**.

11) Comp (sh[oddy]) 1960, DMcC **MNE**. Langley (sh[oddy]) 1958, D. Grant & EG Philp, **MNE**. Yalding Station (shoddy) 1961, DMcC et al.

**Guizotia** Cass.

**G. abyssinica** (L. f.) Cass. [Niger. 16.]

6) Longfield tip, 3657, PCH.

**Helianthus** L.

‡ **H. annuus** L. [Sunflower. 15, 16.]

2) Brit[ish] Oil & Cake Mills Erith, 1956, DMcC.

4) Coldharbour Sluice Reculver, 1953, REW.

7) Cobham F[ar]m, Lenham, DMcC.

10) Sevenoaks tip 1958 CAS.

11) Rubbish tip, Edenbridge, 1957, DPY.

**H. perennis**<sup>917</sup>

3) Whitstable Harbour, 1953, REW.

‡ **H. x laetiflorus** Pers.<sup>918</sup> [Perennial Sunflower. 16.]

10) Sevenoaks tip, 1958, CAS.

‡ **H. tuberosus** L. [Jerusalem Artichoke. 16.]

6) Garden escape, Gravesend, 61, HAS.

10) Sevenoaks tip, 1958, CAS.

**Galinsoga** Ruiz & Pav.

**G. parviflora** Cavanilles "Gallant Soldier".

15, 16.

22/51

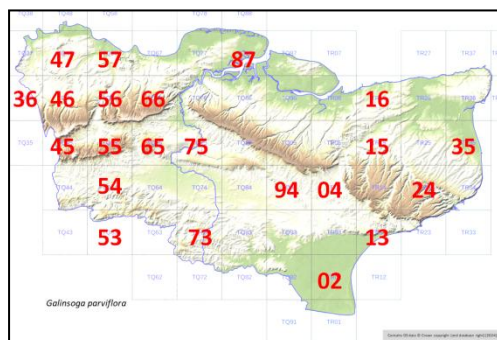
Alien, now widely naturalised in Kent; waste ground, neglected gardens, arable land, etc. A native of Peru.

1<sup>st</sup> record, 1892: Woolwich Docks, A.H.W.D., one plant; J. Bot., 1892, p.372.

1) 57 Stonehill Green, N.W. of Swanley, abund[ant] in vegetable fields, 1948-52 **MNE**; 515686 Cornfield Birchwood R[oad]d Swanley HMP 1958. 47 N. Cray tip PCH. 46 Bickley, 1935-39, F.R.B. 46 Widmore Road, Bromley, 1955, R.O.J. Day.

2) 87 Isle of Grain, 1958, Mrs AG Side **MNE**.

3) 16 Garden of House, Thanet R[oad]d, Sturry, 1962, Miss E.



<sup>917</sup> Given without citation, and not a recognised name. Perhaps intended for the next.

<sup>918</sup> Given in the manuscript as *H. rigidus* without citation.

Milward.

4) Flower bed n[ea]r Barbican, Sandwich, 1962, Mrs. Pemble.

5) 36 waste ground, 396612, 1m NW of Salt box, 1958, PC & JFH.

6) Longfield tip, P.C.H. '66.

8) 24 Garden, River, in Dover, Mrs KDR, 1960.

10) 55 Bus Station and Gardens in Sevenoaks, 1954, **MNE**. 55 High St[reet], [Seven]oaks KEB. 55 Sevenoaks Tip, 1956 DMcC **MNE**. 55 N of Bessells Green, 504557, 1953-'57, FSE Fawkes. 45 Westerham, n[ea]r Darent, 448540, 1952. HMP; 1955, BS Brookes. 56 Lullingstone, 1951, Hb. Gardiner **BM**.

11) 75 E. Malling Research Station; 75 Ditton, abund[ant], 1948. 54 Tonbridge, weed, Mr. H. de Vere-Hodge, 1957. 65 Platt Church yard, D.McC., 1946-49, 75 Maidstone, EG Philp 1960 **MNE**.

12) 04 Garden weed, Essella R[oa]d and Adult Education Centre, Ashford, 1959, Mrs N. Baker. 15 Garden weed, Salisbury R[oa]d, Canterbury, c.1954, Mrs. Roberts. 94.

13) 73 Public Ho[use] Garden, E. of L[evel] C[rossing], Goudhurst Station, 1956, CAS. 53 High Street, Tun[bridge] Wells, 1955, KEB.

15) 02 Lydd Common, on rubbish heap, 1946, **MNE**.

16) 13.

**G. quadriradiata** Ruiz & Pav.<sup>919</sup>

[Shaggy-soldier]

15, 16

10/51

Alien. Now becoming locally established in Kent.

1) 46 R[oa]dsides waste ground n[ea]r Keston Mark, 1958, F.H. Brightman. 47 By Elmstead Woods, 1956, Miss A. Mills.

6) Derelict Garden, Pier Hotel, 588753, Mrs J.K. McL.

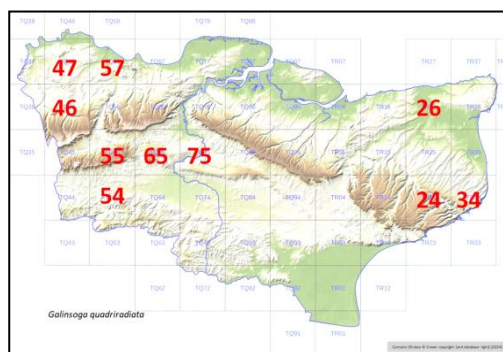
8) 34 St Mary Churchyard, Dover, 1954, Rev. JG Gilman; 1960, Mrs K.D. Rowlands **MNE**. 24 Runner Bean field, Denton, 1960, Miss DACL.

9) 26 Birchington Sta[tion], Mrs KDR, 1960.

10) 55 Sevenoaks Tip, 1956, DMcC **MNE**.

11) 65 1<sup>st</sup> y[ea]r coppiced area, Leybourne Wood, 1956, Miss P. Topham **MNE**. 75 Museum Gardens, Maidstone, 1956-57, LRAG, **MNE**. 65 Platt, 1960, Miss C.McD., **MNE**.

13) 54 Bidborough, 1960-62, F.R.B. 54 Adams Nursery tip, High Brooms, CAS, 1956.



**Bidens** L.

**B. cernua** L.

Nodding Bur-marigold.

15, 16.

27/51<sup>920</sup>

Native. Pond borders, stream and ditch banks, on mud, gravel, or sand; rare generally, though locally frequent in the low Weald; but absent from wide areas.

1<sup>st</sup> record, 1777: Faversham, E. Jacob, *Pl. Fav.*, p.120.

1) 46 Keston Common; Lower Pond 1948; PCH 1954. 46 Pond, Bromley Common, 1954, **MNE**. [Pickhurst Green, Hayes, 1915, AGD **MNE**.]

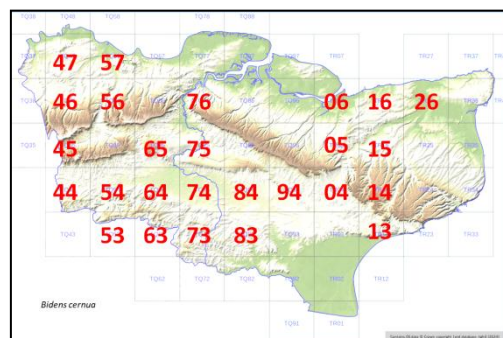
2) 57 Ditch side, Dartford Marshes, 1962. 76 Marshes n[ea]r Ley Bourne, Snodland Marshes, 1955 **MNE**. (abs[ent] 67, 77, 87, 97.)

4) 15 Fordwich Marshes Mrs KDR, 1957. 26 Stodmarsh, LWW; RGW. 16 Westbere Marshes, RGW. Not recorded about Wingham, Sandwich or Deal.

8) 14 Pond, Stelling Minnis, 1956 **MNE**.

10) 45 Darent, S. of Westerham, 445536, 1951, BS Brookes. By Darent Ch[urch] A Beadell, c1933. 56 By Darent between Shoreham and Lullingstone, P.C. Hall. Kemsing, 1893, CEB **BM**.

11) 65 Leybourne Castle Lakes 1959 **MNE**. Gravel pit E. of Aylesford, 736588, ES. 75 By R[iver] Medway, below Barming church, 1945. 75 Mote Park, 1950. Medway by Lock, Teston, 1959 **MNE**. Waterringbury, 1942. 64 Pond E. of Hale St[reet], 1954. 64 Medway 1 mile E of Tonbridge 1955 **MNE**. 54 Medway W of Tonbridge,



<sup>919</sup> Given in the manuscript as *G. ciliata* (Raf.) Blake.

<sup>920</sup> Actually 26/51; square 15 was double-counted.



1955 **MNE**. 74 By R[iver] Beult, n[ea]r Stile Bridge, Marden, 1945. 84 Headcorn, S. of Church, 1944. 74 Staplehurst, 1949. 74 Pond E. of Marden. 44.

**12)** 94 Pond W. of Great Chart. 04 Pond at Blackwall, N of Willesborough Lees, 1946; ES. 94 Lake N.E. of Hothfield, 1947; CNP, 1954. 94 Hothfield Common, 1891, ESM; swamp at N. end, 1946! 13 Gibbons Brook HEG Emmett 1938; 1955, P. Furneaux. 04 Eastwell Park Lake ES. 04 Cradle Bridge, ES. 94 Lit[tle] Chart Pond, ES. 04 Stream by Willesborough Ch[urch], ES. 94 Stour W. of Hothfield Common, ES. 94 Stour NW of Rippers [Cross], E.S. 94 Pond W. of Chilmington Green, RS. 05 Stour, Godmersham ES & FR 1955 **MNE**. 05 Stour, Chilham, ES. 15 Stour above Canterbury by Bathing pool, 1956, Miss E Milward. **MNE**.

**13)** 63 Ditch near R[iver] Teise, Lamberhurst Church, J.R.W. 1936. 73 Pond N. of Kilndown, 1946. 53 Kent side of stream, Groombridge, 1959, E Shorrocks. 54 Southborough, 1938, G.E. Shaw **TLS**.

**15)** 83 Dike E. of Freezingham, n[ea]r Windmill Channel, Rolvenden 1959 **MNE**.

#### **B. tripartita** L.

Trifid Bur-Marigold.

15, 16

31/51<sup>921</sup>

**Native.** Pond borders, stream- and ditch-banks; widespread but only locally common, particularly in 11) and 12) by the Medway and Stour systems and on the Weald Clay; more frequent as a whole than *B. cernua*.

1<sup>st</sup> record, ?1629: Grain to Stoke, Johnson, *Iter*, p.8 ("Eupatorium Cannabinū foem.").

**1)** Keston Ponds. 47 Chislehurst Common, N. Pond, 1946; 1958 **MNE**. 47 Pond by Lessness Abbey, 1949. [Blackheath, Mr. Children, Hb AA, **BM**.] 46 Lake, Holwood Park, 1948. 46 Bromley Common Pond, 1954. 36 bare clay soil of road cutting, W. Wickham, 1955, JM Sherwood, 3865. 47 R[iver] Cray, N. Cray, PCH. 47 Ruxley Pits, TH Angel.

**2)** 76 Snodland S. Marshes, 1946. 75 Dike n[ea]r Medway, Aylesford, 1961, C. Turner. 65 Dike NE of Lunsford, 1946 **MNE**.

**4)** 26 Wansunt Channel, W. of St Nicholas. 15 Fordwich. 35 Worth Minnis, 1947. 26 Stodmarsh 1955 **MNE**.

**[6)** Pond, Milton, Gravesend, J Hepworth.]

**8)** 25 Pond, Adisham, 1961, Miss B Nash. 14 Pond, Gate Inn, Rhodes Minnis, 1955, DACL; 1956!

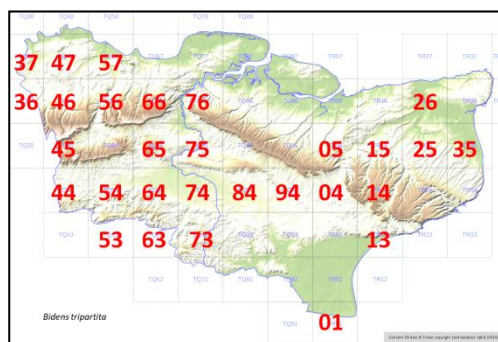
**10)** 56 W. of Darent, Wilmington, PHC. 56 above S. Darent, P.C. Hall. 57 St John's Jerusalem PCH. 57 Darent Water Meadows, PC Hall. 45 R[iver] Darent, S of Westerham 445536, 1951, BS Brookes.

**11)** 65 Stream, Addington Place, 1958, DMCC. 65 Leybourne, 1944. 75 Teston, 1945. 75 Medway, E Farleigh. [Maidstone **MNE**.] 54 W of Tonbridge, 1955 **MNE**. 54 S. of Leigh. 64 1m E of Tonbridge 1955 **MNE**; 605470, CAS. 74 Staplehurst, 1946. 74 Stile Bridge, 1945. 74 Collier Street, 1954 **MNE**. 84 Headcorn, 1944. 64 Pond E of Hale St[reet], East Peckham, 1954 **MNE**. 94 n[ea]r Daniells Water, Great Chart, 1946. 44.

**12)** 94 Lake E of Hothfield, 1947; C.N.P. 1954. 94 Hothfield Common, Swamp at W end. Hinxhill, 1944. 04 n[ea]r Blackwall F[ar]m, Willesborough, ES. 05 Stour, Godmersham, ES & FR, 1955 **MNE**. 05 Stour, Chilham ES. 15 Stour, W. of Chartham Mrs Brickenden. 04 Cradle Bridge, ES. 04 by Willesborough Church, ES. 13 Gibbons Brook, 1955, P Furneaux; Mrs B Dodds 1960. [Tuckers Pond, Angley Wood 1899 AWH.]

**13)** 73 Goudhurst, 1946! 54 Print Stile Pond, Bidborough. 63 53 Kent side of stream, Groombridge, 1959, E Shorrocks.

**15)** 01 Dungeness Gravel pits, 1947.



#### **B. pilosa** L.

[Black-jack.

15.]

**4)** Sandwich (shoddy) 1959 DMCC.

**7)** Cobham F[ar]m, Lenham, (Shoddy) DMCC.

**15)** Dungeness, Miss DACL.

#### ‡ **B. pinnata** L.<sup>922</sup>

**4)** Sandwich (Shoddy aliens) 1959, DMCC **MNE**.

#### ‡ **Cosmos** [Cav.]

#### ‡ **C. bipinnatus** [Cav.]

[Mexican Aster.

15, 16.]

<sup>921</sup> Actually 29/51, squares 15 and 73 were double-counted.

<sup>922</sup> It may be that *P. bipinnata* L. was intended; *B. pinnata* was not authored by Linnaeus.



5) Downe, 1951, DPY.

7) Shoddy field, Cobham F[ar]m, Lenham, DMCC, 1950.

### **Tagetes L.**

‡ **T. minuta** L. [Southern Marigold. 15.]

4) Sandwich, 1959, D.McC.

[‡ **Schkuria** Roth]

‡ **S. pinnata** (Lam.) Kuntze<sup>923</sup> [Dwarf Marigold. 15.]

4) Sandwich, 1959, D.McC.

### **Eupatorium L.**

**E. cannabinum** L. [Hemp-agrimony]<sup>924</sup> 15, 16.

Native. Marshes and fens, stream- and ditch banks; open woodland, scrub, hedgebanks and cliffs on chalk; common in the Weald.

1) R[iver] Cray, N. Cray PCH. Wet Wood by R[iver], N. Cray PCH. Joydens Wood PCH,

2) 87 Marsh Stoke Junction, 1958, Mrs A.G. Side.

3) Oare Pond, 1962 HMW.

4) Fen Little Britain, Wingham. Ham Fen. Worth Minnis. Hacklinge. NW of Sandwich Bay. Sholden Marshes 1950, REW. Stodmarsh!; 1950, REW. Below Highams F[ar]m Fordwich 1950, REW. Lit[tle] Stour S. of Wickambreaux 1950, REW.

6) 67 Swanscombe, freq[uent] in old chalk pits, 61, HAS.

8) Browns Wood T[emple] Ewell Mrs KDR. Folkestone Warren Cliffs. Abbots Cliff.

10) Greatness Moor, Hb. Rudge **BM**. Darent bank, Otford, A. Beadell c.1933. R[iver] Path below Shoreham PCH. St John's Jerusalem PCH. Water Meadows, Darenth PCH.

11) Addington Place stream, 1938, JBM; 1958, DMCC. Medway S. of Yalding, 1953, **MNE**.

13) Ford, Thanington, 127567, 1955, P. Furneaux. Vauxhall Lakes, 157595, 1955, P. Furneaux. Teise S. of Lamberhurst Ch[urch], 684365, CAS.

14) College Wood, Wittersham '62.

## **LILIIDAE (Monocotyledons)**

### **BUTOMACEAE**

#### **Butomus L.**

**B. umbellatus** L. Flowering-rush. 15,16. 24/51

Native. Rivers, marsh dikes and ponds; uncommon, but still locally frequent in the marsh districts 2), 4) and 15), and in the Medway and its tributaries in 11); rare in 12). Now uncommon and very local in Surrey, local in Sussex, Essex and Pas de Calais.

2) [57 Dartford Mill Pond, 1945.] [Stone Marshes, 1950, 5695: now gone, H.M.P.] 77 Higham Marshes, to 1962. 76 S. of Snodland, H. Lamb, 1870 **MNE**: 1944! 76 N. of New Hythe, 1945.

51/76 Medway, 51/57 Dartford, 51/77 Higham.

4) Marshes E of Chislet, REW. 26 Marsh Side, Chislet, 225661, 1962. 15 Fordwich Marshes, 1949, E. Robinson, 1965 MEM. 35 Dikes W. of Sandwich, 1946. 26 Preston Marshes, 1962, KFC. Stodmarsh (Grove) '63, PWW. E of Reculver, Mrs B. 26 North Stream, by A.299, SE of Reculver, 1955 **MNE**. 25 N. of Wingham. Plucks Gutter, P. Grattan. East Street Marshes, Ash, W. Towers. Grove Ferry, J Gurr & Mrs B., 1961. 36 Minster Marshes, 1963.

61/15, 61/25 Wingham, 61/35 S[and]wich, 61/26 Chislet, 61/36 Thanet.

10) [Darent, Dunton Green, 1933, A. Beadell.] [Darent, Hawley: Darenth, AC Tagg.] [Pit by Central Park, Dartford, before 1949, H.M.P.]

11) 65 Yalding Lees, F.W. Morris, 1868 **MNE**, H. Lamb, 1888 **MNE**. 84 Beult S of Headcorn church, 1962. 74 R. Beult, N. of Cross-at-Hand, Staplehurst, 1963. 75 Medway, above Teston. 64 Above Hartlake Bridge, 1939, JRW. 54 Medway above Tonbridge, n[ea]r Shallows, 572461, 1961, HMP. 54 Medway N. of Haysden, Tonbridge, 568459, M. Boyser. Medway below Tonbridge, 605470, 1944 FR, CAS & K Atkinson.

<sup>923</sup> In the manuscript cited as (Lam.) Thall.

<sup>924</sup> The manuscript here, in error, has Daisy.

51/54 Tonbr[idge], 51/64 Beltringe, 51/74 Staplehurst, 51/84 Headcorn, 51/94 Hothfield, 51/65 W[est] M[aidstone], 51/75 M[aid]stone, 61/04 Ashford.

**12)** Mersham Mill, 1907 D. Smith **MNE**, 1956 E.Scott. 04 S. Willesborough, E. Scott, l[ocally] v[ery] a[bundant]. 05 NE of Chilham, 085538, gravel pits, Mrs B., ES. Sevington, Stour, ES. 61/05 Chilham.

**13)** 63 Pond nr Bayham Abbey, 648365, CAS. 51/63 Bayham.

**15)** 92 Snargate, by B.2080. 02 Brenzett. 03 Ruckinge. R[oyal] M[ilitary] C[anal] N of Newchurch, DACL. 93 nr B2-8-, Shirley Moor, 1945 **MNE**, 1965. E of Reading Street. 83 Dikes E of Friezingham, E. of Rolvenden Layne, 1959 **MNE**. 01 Dikes SW of Boulderwall F[ar]m, Dungeness, 1962. 61/01 Dungeness, 51/92 Appledore, 61/02 Romney, 51/83 Tenterden, 51/93 Woodchurch, 61/03 Bilsingham.

## ALISMATACEAE

### Sagittaria L.

**S. sagittifolia** L. Arrowhead.

Native. Slow flowing rivers and marsh ditches: rare generally and decreasing, but still locally common in the Beult and Teise systems in 11) (apparently almost extinct in and by the Medway itself) and in 15). Very rare in 4), 2), 10) and 13). Rather rare in Surrey, local in Sussex and Essex and Pas de Calais.

**2)** [Stone Marshes, A.C. Tagg, H.M.P. c.1949; not now.] [Crayford, 1863, Hb. Lamb **MNE**.] 57 Ditch on Dartford Marshes, 1961, Mrs AG Side. [Ditch, Scrapsgate R[oad], Minster, formerly: now built on, Mrs Bryson.] 76 Ditch N. of New Hythe, 1946. 76 Snodland Marshes, 1946, in ditch by railway. 51/76 Medway, 51/57 Dartford

**4)** 25 Ditch below Little Britton, Wingham, 1960 **MNE**, 1962, DACL. 25 1 mile below Wickhambreaux, in Lit[tle] Stour, 1956 **MNE**. Wingham 61/25

**10)** 45 Westerham, Darenth pond, Squerries Park, D.P.Y. 51/45 Westerham

**11)** 65 Medway below Wateringbury, 1946; not seen since. 75 East Farleigh, Ms. V. Brumby. [Not observed in Survey on Medway-Eden section, W. of Yalding, 1942-62.] [Maidstone, Hb. Lamb 1885 **MNE**. Maidstone, E. Bartlett 1887 **MNE**.] 64 Beult under bridge, Yalding village, 698499, 1962, H.M.P. 74 R. Beult, above Cheveney, Yalding, 707496, 1955. 74 Beult NE of Cross in Hand, Staplehurst, 1955 **MNE**, v[ery] a[bundant] 1962, 63. 84 S. of Kelsham, Headcorn. 84 Beult S. of Headcorn Church 831440, 1962. 74 Marden Mill Pond, 735437. 74 Above Burford, Linton, 742483, 1954. 74 Ditch S. of Elphick F[ar]m, Hunton, 715483, 1955 **MNE**. 64 S. of Pike Fish, Laddingford, 695468, 1956 **MNE**. 84 W. of Frittenden Road Bridge, Headcorn. 74 Beult ENE of Staplehurst, abundant, 1963. 51/65 W[est] M[aidstone]. [NOT 51/44] Edenb[ridge], [NOT 51/54] Tonb[ridge], 51/64 E Peck[ham], 51/74 Marden, 51/84 Headcorn, 51/75 M[aid]stone, 51/94 Hothfield

**13)** 63 Ditch S. of Lamberhurst Church, 1936, JRW: 1956! **MNE**. 63 Bayham Abbey Lake, 1957, CAS. 61/63 Lamberhurst

**14)** Pond Palstre Court Oxney, 1958.

**15)** 02 W of Brenzett n[ear] Hook Ho[use], 1945. 92 E of Appledore. 93 R[oyal] M[ilitary] C[anal], S. of Kenardington, 1959 **MNE**. 93 Shirley Moor 1945 **MNE** / Dike n[ear] B.2080, 1965. 82 Dikes SW of Small Hythe, 1956 **MNE** 894298. 82 SW of Oxney, RGW. 82 Marsh Dikes, Ethnam, Sandhurst, 1954. 82 E of Newenden, C. Skinner. 83 Dikes E. of Friezingham, E. of Rolvenden Layne, 1959 **MNE**. 01 Dike E of Hamilton F[ar]m, J. Hubbard. 51/01 Dungeness, 51/82 Sandhurst, 51/92 Appledore, 61/02 Romney, 51/83 Tenterden, 51/93 Woodch[urch], [NOT 61/03], 61/13 Hythe W.

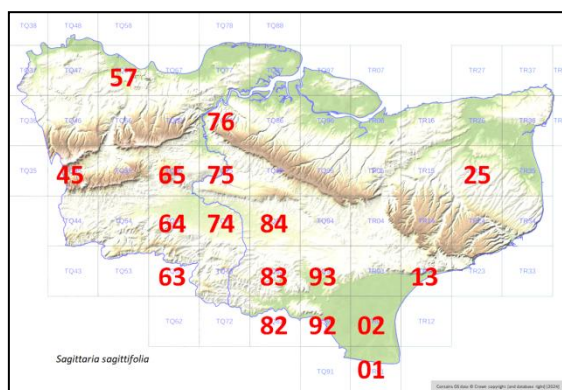
### [Baldellia Parl.]

[Apparently placed before *Alisma* in the manuscript and missing, together with the beginning of *Alisma*.]

**B. ranunculoides** (L.) Parl.<sup>925</sup> Lesser Water-plantain

In relation to district 15, recorded at Hoppen Pits (**TR0718**).

15,16.



<sup>925</sup> FR's annotated Hanbury & Marshall (1899) contains records as follows: Chislehurst Common – still there, '46!, '54 G. Brown; about Wingham, '46!; Ham Ponds, 46!; Hacklinge DAC Long, 55; Worth, 46!; Wingham, FR '45!; Ponds, Dungeness, 45, FR! The following historic H&M records were considered no longer extant: Northumberland Heath; Snodland; Margate; Ham Ponds to Eastry; Brabourne Lees; Jenner's Tunbridge Wells-related records.

**[Alisma L.****A. plantago-aquatica L.**

Water-plantain.

15, 16.]

[The beginning of this account up to records for botanical district 4 is missing. There are no records for districts 5, 6 and 7. For the earlier districts, Francis Rose's annotated *Hanbury & Marshall (1899)* shows him to be aware of the species in district 2) at *Birling M[arshes]; Snodland; and Halling.*]

8) Pond on c[lay-] w[ith-] f[lints] above Gutteridge F[ar]m, Denton, 1956, DACL

61/24 T[emple] Ew[ell]. NOT 61/34

10) R. Darent edge, S. of Darenth, PCH. Darenth Meadows, PCH. Pond in Knole Park, PCH. By Darent, W. of Brasted, G.M.B.

51/56 Farn[borough] '56. 51/45 W[ester]ham. ] 51/55 S[even]oaks

11) Leybourne Lakes. Tonbridge E. Marshes, '44. Pond W. of Leighbridge, Headcorn, 813454, 1962. R. Sheway, Sherway Bridge, Smarden, 867447, 1962. Pond ¼m SE of Church, Smarden, 1962. R[iver] Beult S. of Church, Headcorn, 831440, 1962. R[iver] Beult n[ea]r Cross at Hand, Staplehurst, 1963. R[iver] Teise W. of Marden 1956 **MNE**. Medway, Poundsbridge, 1963, RE Sh[orrock]. Pond E of Hale St[reet] 683493, 1957, CAS. Ditch E of Headcorn, 849437, S. of R[ai]l[wa]y, 1962. R[iver] Beult E of Buckhall, Bethersden, 917397, 1962. Pond E of Golden Sq[ua]re Smarden, '62. Pond by R[iver] ½m E. of Golden Square Smarden, '62.

65 W[est] M[aidstone], 75 M[aidstone]. 85 Holl[ingbourne]. NOT 51/95. 51/44 Edenbr[idge], 51/54 Tonb[ridge]. 51/74 Marden, 51/84 Headcorn. 51/66 Birling

12) Brabourne Lees RAC. Ashford JG. Gravel pit Lake E of Chilham, 084539, ES

61/05 Chilham, 61/15 C[anter]bury, 51/94 W Ash[ford], 61/04 E Ash[ford], 61/14 Stowting

13) Pond by Broadwater Lane, T[unbridge] Wells, 1960, CAS. Pond W of Speldhurst, GE Shaw. Chatfields W Pond, RAC. Boggy Wood W. of Pembury, 614395, PCH. Ditch S. of Church, Lamberhurst, 584365, 1960, CAS. Bottom Vauxhall Lane H.N. Crampton. Bayham Abbey Lakes, CAS. T[unbridge] W[ells] 51/53, L[amberhurst] 51/63, Cranbrook 51/73, Tenterden 51/83

14) Beals F[ar]m, Woodchurch, H.W. Adams

51/72 H[aw]khurst, 51/82 [?] 51/92 Appledore

15) Dymchurch, JG. Shirley Moor, Dike SW side, '65.

61.01 Dungeness, 61/02 Romney, 51/93

Woodchurch, 61/03 Bilsington, 61/13 Hythe, 61/23 Folkestone

16) Folkestone Warren, KDR.

**A. lanceolatum With.**

Narrow-leaved Water-plantain.

15, 16.

14/52

Native. Ponds and ditches; widespread but uncommon in districts 1), 2), 4), 11), 12), 14) and 15). It occurs in the alluvial areas and on the clay lands of the weald. Rare in Surrey, Sussex and Essex, unrecorded for Pas de Calais. 17 locations.

1) 46 Bickley, old Golf Course, 1956, C.A. Swain.

Orpington 51/46, '56

2) 77 Dikes, St Mary Hoo Marshes, 1958 **MNE**. 06 —.

Fav[ersham] 61/06, Cliffe 51/77, Chislet 61/26

4) Fordwich Marshes, '49, E. Robinson. 26 Grove Ferry, C.T.

11) 74 N. Bank of R. Beult, E. of Stile Bridge, Linton, 1945 **MNE**. 74 Teise, W. of Marden, 1956 **MNE**. 64 Pond E. of Rly, Hale St, 683493, E. Peckham, 1954-56 **MNE**. E Peck[ham] 51/64, Marden 51/74

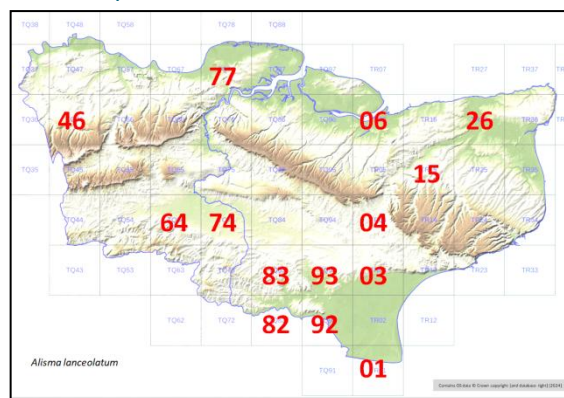
12) 03 Ditch E of Mersham Mill, 1956 **MNE**. 04 Hinxhill (Nackholt) 1956 **MNE**.

E Ashford 61/04, '56.

14) 82 Pond, Palstre Court, Wittersham, 1958 **MNE**. 92 —.

15) 82 Dike SW of Small Hythe, 1956 **MNE**. 03 R[oyal] M[ilitary] Canal, Ham Street, CAS. 93 Shirley Moor, dike on SW side, 1965, by B.2080. 83 Dike, Windmill Channel, E of Freezingham, Rolvenden, 1959 **MNE**. 01 Dungeness, F. & C.A. Swain.

W. Oxney 51/82, E Oxney 51/92, Tenderden 51/83, Bilsington 61/03

**[Damasonium Mill.****D. alisma Mill**

Star-fruit.

[15].

Former native, now extinct: recorded long ago in two ponds, one in Sheppey, one at Folkestone. Still exists, very rarely, in Surrey (three localities); in Sussex (one locality); extinct in Essex. Formerly recorded for Nord. Still in Herts. This species is dying out in Britain like *Pulicaria vulgaris* apparently because the ponds in which both formerly grew are disappearing or becoming overgrown. Formerly ponds on commons and village greens were kept open by the grazing of cattle, horses and geese.

2) Field pond at Eastchurch, Sheppey; *Pl. Fav*, 1777.

- [4] The records for Thanet (see Fl. K.) are almost certainly erroneous.]  
 [13] Tuckers Pond, Angley Wood, Dr Ranger, teste A.W. Hudson, c.1890.]  
 16) Pool below cliffs between Folkestone and Sandgate, FGEK: now lost, CPSK.]

## HYDROCHARITACEAE

### Hydrocharis L.

#### H. morsus-ranae L.

Frogbit.

15, 16.

23/51

**Native.** Marsh ditches and ponds: locally frequent to locally abundant in 4), 11), and 15); rare in, and absent from most of 2); very rare elsewhere. A plant of alkaline fresh waters. Now rare and very local in Surrey, local in Sussex and Essex and Pas de Calais.

2) rare. 57 Abund[ant] in ditches, Dartford Marshes, at 541761 and 543772, 1962. 539767 HMP. 06 Dikes n[ea]r Sportsman, Seasalter, P.R.B. Oare Marshes, C.T. N of Hernhill, 1957.

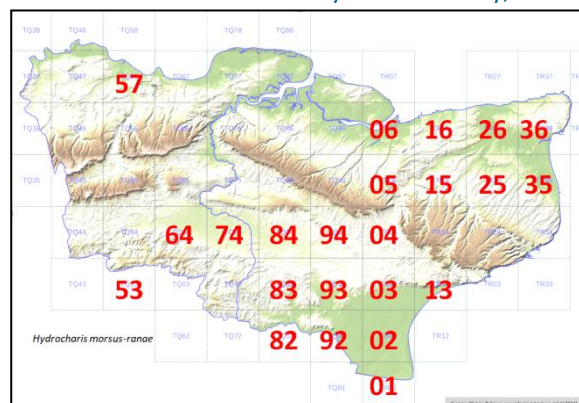
4) 26 Marsh Side, Chislet, 1962, 225661. Grove Ferry, Mrs B. 35 Dikes W. of Sandwich, 1946. 25 Dikes E of Little Britton, Wingham, 1960 **MNE**, 1963 DACL. 26 Preston Marshes, 1962. 25 Deerson Marshes, 1955 **MNE**. 26 Stodmarsh, E of Newbarns Farm, 1955 **MNE**. 26 Dike, West Stourmouth, 1956 **MNE**. W. of Brooksend, Birchington, 1947, L.W.W. Plucks Gutter, 1962, DACL. 35 Worth Minnis, 1956 **MNE**. Chislet Marshes, DHK. 35 E of Hacklinge. 36 Minster Marshes. 16 Westbere Marshes; to 1965, MEM. Sturry Marshes, Bretts Lakes, 1955 Mrs B. Fordwich Marshes, 1963, MEM.

11) Unrecorded from the Eden-Upper Medway area, but frequent in the Beult basin. 84 Pond W. of Longbridge, Headcorn, 813454, 1962. 74 Pond S. of R[iver] Beult, Cross-at-Hand, Staplehurst, 1963. Yalding, Miss Nisbett. Pond F[ar]m, Frittenden, RAC. 94.

12} 04, 05, 15

13) 53 Brighton Lake, Tun[bridge] Wells Common, 1960, CAS: 1 pl[ant].

15) Common. 02 Brenzett. Dymchurch '56. Kenardington. Snargate. 83 Dikes E. of Friezingham, Rolvenden, 1959 **MNE**. 82 Sandhurst levels, S of Ethnam, 1954. SW of Small Hythe, 894298, DMCC. Appledore. 01 SW Boulderwall, Denge Beach. 93 Shirley Moor, nr B.2080, 1965. 92 Stone Ferry, 1946. 03 Ruckinge. R[oyal] M[ilitary] C[anal] N of Newchurch, DACL. 13 W. of Hythe. S & SE of Lydd, R.M. Payne, 1948. Appledore.



### Stratiotes L.

#### S. aloides L.

Water-soldier.

15.

1) Keston, up[pe]r pond, introduced, 1924, ASK.

4) [Old records for Minster, Sarre and St Nicholas area, probably errors for Hydrocharis; see Fl.K.]

15) [Pond west of road between New Romney and Dymchurch, 1875, FJH: not recorded since.]

### Egeria Planch.

#### E. densa Planch.<sup>926</sup>

[Large-flowered Waterweed.]

### Elodea Michx.

#### E. canadensis Michx.

[Canadian Waterweed.

15, 16.]

**Alien, fully naturalised.** Ponds, streams and ditches: very common in 2), 4) 10), 11), 12) and 15), rare in 1), 3), 13), 14) and 16, where suitable habitats are scarce, absent in 5) – 9).

1) Pond, 375661, W of W. Wickham, PCH. Pond, Blackheath, GMB. Cray, Old Bexley, n[ea]r A2, GMB. Ruxley pits, S&S.

2) 47 Ditches, Erith Marshes, PCH. Pit N of Shorne, 693734, PCH. 57 Ditches, Dartford Marshes, 1962. 76 Ditches, Snodland Marshes, 1943. Gravel pits, Oare Creek, 1959 **MNE**. Seasalter Marshes, PRB.

4) 26 Marshside, Chislet, 225661, 1962. 25 NE of Wickhambreaux, 1956 **MNE**. 25 E. of Lit[tle] Britton, Wingham, 1947. Hacklinge. Fordwich, J.O. 35 W. of Sandwich.

<sup>926</sup> *Egeria densa* has a heading in the manuscript, but the only entry (for Hatch Park) has been deleted. There is no evidence that this is, or has been, a Kent plant.



8) Swimming pool, St. Margaret's Bay, B. Dodds.

10) N of Otford, D. Lang. Darent, Shoreham; Lullingstone; Eynsford, PCH. Hawley, AC Tagg. Westerham, AGS.

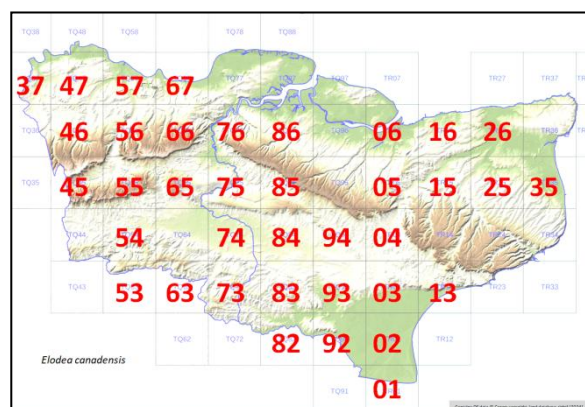
11) concrete pond, Forstal, Aylesford, 1962, E.G.P. Beult S. of Headcorn Ch[urch], 831440, 1962. Edenbridge, 1907, D. Smith **MNE**.

12) R[iver] Stour, SW of Hothfield, 1943. Beaver, Ashford, + flowers, 1950, E.S. New Lake E of Chilham, 084539, ES.

13) Brighton Lake, Tun[bridge] Wells, 1960, CAS. Ditch S. of Lamberhurst Church, 684565, 1939 JRW: 1960, CAS. 54 Pond SW Southborough Common, Crampton. Dunorlan, T[unbridge] W[ells], CAS. Bayham Lakes, CAS.

15) Shirley Moor, Dikes N. of B.2080, 1965.

16) Brockhill Lake, Saltwood, LJM.



‡ **Lagarosiphon** Harv.

[Curly Waterweed.

15, 16.]

‡ **L. major** (Ridl.) Moss

5) Pond, Downe village, FHB.

11) In flower, gravel pits S. of Yalding Sta[ion], 1961, CAS. Gravel pits, Aylesford, EGP.

12) Mersham-le-Hatch lake, 1959, DMCC **MNE**: 1960! **MNE**.

13) plenty in Brighton Lake, Eridge R[oa]d, Tun[bridge] Wells, 11.1959: evidently just arrived, K.E.B.: 1960, CAS.

[**Vallisneria** L.]

**V. spiralis** L.

[Tapegrass.]

"Kent", E.S. Marshall, J. Bot.

## APONOGETONACEAE

**Aponogeton** L.f.

**A. distachyos** L.f.

[Cape-pondweed.

16.]

1) Keston Upper Pond. Mrs M. Bostock, BEC Rep. 1924, p.200; 1952! 1954, PCH.

13) Pond n[ear] Bayham Abbey, 648365, CAS. And in Teise.

## JUNCAGINACEAE

**Triglochin** L.

**T. palustris** L.

Marsh Arrow-grass

15, 16.

21/52

Native. Calcareous spring-fens and fen-meadows; brackish meadows and ditches; widespread but uncommon: 30 localities. Locally frequent in 4), occasional in 2), 12) and 16), rare elsewhere, in 1), 10), 11) and 15). Usually in short vegetation of *Parvocaricetum* type. Now very rare in Surrey, Sussex, and Essex; local and sub-maritime in Pas de Calais.

1) 47 Meadows S. of N. Cray, 1955 **MNE**. Bexley /47.

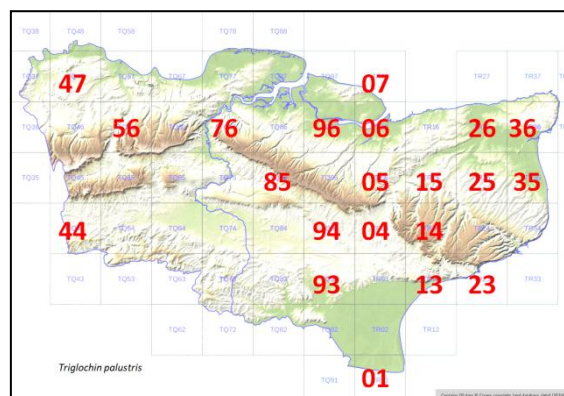
2) 47 Crossness, Erith Marshes, PCH. 96. 76 Marshes E of Halling, 1944. 76 Marshes S. of Snodland, 1895 H.L., 1943 abund[ant] **MNE**. 76 Holborough Marshes, 1947, abund[ant]. 06 Seasalter Marshes, 1958, H.M. Wilks **MNE**. 06 Calc[areous] spring, meadow below Mill Pond, Oare, 1959 **MNE**. 07 Warden, flush on cliffs.

Medway/76, Faversham /06, Teynham /96, Warden /07.

4) 25 Fens NW of Wingham, 1946 **MNE**, to '56; '63 DACL. 26 Preston Marshes 1946. 35 Hacklinge Marshes 1946 **MNE**. 35 Worth Minnis 1950. 26 Stodmarsh 1955 **MNE**. 36 W. of Brooksend, Birchington, 1947, L.W.W.

35 Ham Fen, S. part by dikes, 1946; 1991. 35 Slack, Deal Links, 1954 **MNE**. 35 Dikes NE of Sandwich, 1957. 35 F[resh] W[ater] Dikes W. of Prines Links, Sandwich Bay, 1962. 36 Minster Marshes, 1963.

Wingham /25, Sandwich /35, Chislet /26, Stour east /36.





- 10)** 56 Meadow S. of Castle, Lullingstone, 1956 **MNE**. [Hawley, Darenth, A.C. Tagg.] Farningham /56
- 11)** 85 Fen-meadow, the Brooks, Fairbourne Mill, Harrietsham, Mrs B. Dodds. 44 Hever, in calcareous flush in meadow SW of church, 1953 **MNE**. Harrietsham 85, Edenbr[idge] /44
- 12)** Calcareous fen-meadows, Stowting, 1946-54; and nr Castle Mound, RAC. 05. 15. 04 Alluvial meadows W. of Blackwall Farm, Willesborough, 1955, FR & ES **MNE**. 94 by stream, Popes copse, Charing Heath 917486, ES. /04, /14, /94 1956. Chilham /05, 1956. C[anterbury] /15 1956. Warden /93 1956.
- 15)** 01 In small fen SE of Hamilton F[ar]m, Denge Beach, JHL, 1946. 01 Dungeness
- 16)** 23 Calcareous flush, Darnley Vale, Coolinge, 1947-1955 **MNE**. 13 Newington Moor, 1956, L.J.M. 13 Calc[areous] fen-meadow, The Lince, SE of Etchinghill, 1958 **MNE**. Hythe /13, F[olke]st[one].

**T. maritima L.** Sea Arrow-grass 15, 16 18/51

**Native.** Tidal salt-marshes, mainly in the general salt-marsh association: more rarely by brackish dikes: vey common and locally abundant in 2) and 4) in these habitats, rare in 3) and 15), absent elsewhere.

- 2)** 47 Salting, Crossness, Erith W. Marshes, PCH. 57 Salting, Crayford Ness, 1949. 57 Salting by Thames, Dartford Marshes, 545777 – 541779, 1962. 57 Salting, Stone Marshes 1945 **MNE** →62, HAS. 57 Swanscombe Marshes →62, HAS. 67 Northfleet →62, HAS. 67 Shorne. Grain. 77 Higham. 77 Cliffe. 77 Upnor, 1944. 77 High Halstow (Egypt Bay). 77 St Mary Hoo. 87 All Hallows. Grain Marshes. Yantlet Creek. 76 Cuxton Salt Marsh, 1943 →53 **MNE**. 76 Halling Marshes. 76 Holborough Marshes. 76 S. of Snodland, 1944. 86 Funton Marshes, 1962. 96 Fowley Island, 1960, E.G.P. **MNE**. 96 Elmley. 06 Harty. Shellness. 07 N. of Leysdown, 1918 AG Davis **MNE**, 1956. 97 Minster S Marshes. Windmill Creek. 87 Greenborough Marsh, GHM & EGP. 86 W of Milfordhope, GHM & EGP. 96 Conyers Creek. 06 Faversham Creek. Oare Creek. Saline.....Oare Meadow. Nagden Marshes. Castle Coot. Seasalter n[ea]r Red Sluice, HMW. /47 Bexley, /57 Dartford, /67, /77, /87, /97, 07 Warden, Leysdown, /76 Medway, /86, /96, 06 Faversham, /16 Swalecliffe.
- 3)** 16 Swalecliffe, 1945.
- 4)** 26 Marsh behind sea wall N. of St Nicholas, 270686, 1962. 36 Stour estuary, Sandwich 1954-7. 35 Sandwich, by Stour. /26 Chislelet, /35 Sandwich, /36 Stour Est[uary]
- 15)** 02 Salting behind sea wall, SW of Dymchurch 1947. 13 NE of Dymchurch, 1947. 01 The Wicks, 1948. 01 South Brooks, 1948. /02 Romney, /13 Hythe, /01 Dungeness, NOT /23 F[olke]stone.

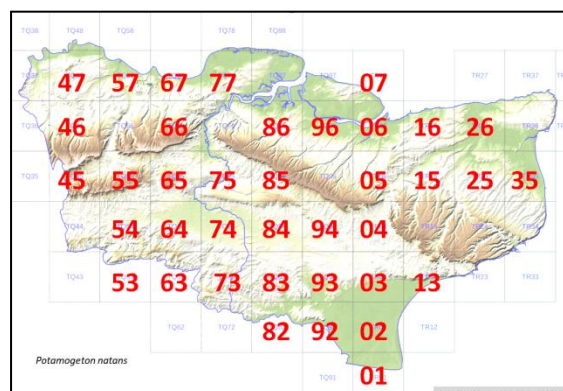
## POTAMOGETONACEAE

**Potamogeton L.**

**P. natans L.** [Broad-leaved Pondweed 15, 16 38/51]

**Native.** Rivers, ponds, and ditches, in fresh weakly acid to alkaline waters: widespread and locally common, particularly in 2), 4), 11), 12) and 15); unrecorded for 3)<sup>927</sup>, 5), 7), 8), 9) and 16). Frequent in the adjacent counties and in N. France.

- 1)** 46 Holwood Park Lakes. 46 Keston Common Ponds. 47 Chislehurst Common Pond, PCH.
- 2)** 57 Ditch, Dartford Marshes, 543772, 1962. 86. 77 Cooling Marshes, 1944. 07 Pond, Warden point. Luddenham Marshes, H.M.W.
- 3)** Pond, Kites F[ar]m, Swalecliffe, REW. Pond, Denstroude, HMW.
- 4)** Sturry. Preston Marshes. \*<sup>928</sup>Stodmarsh, by Newbarns Farm, F.R., E.G.P., 1958 **MNE**. Ditches W. of Sandwich, 1944. Fen Ditches, Little Britton, W. of Wingham. Fen ditches, Hacklinge 1991. Fen ditches, Worth Minnis, 1960. S. of Grove Ferry.
- 6)** 67 Chalkpit S. of Northfleet, 1945, J.E.L.
- 7)** Chalk pit, Rainham, OD.
- 10)** 45 Westerham. 55 pond, Knole Park, PCH. 55 Dunton Green, AG Davis, 1919 **MNE** \*.
- 11)** 65 Clare Park Lake, E. Malling. 66 pond W of Ryarsh Wood. Chilston Park Pond. 54 Leigh. 64 Ditch at Beltring. 84 R[iver] Beult, N of Buckmans Green, 889419, 1962. 84 R[iver] Sherway, Sherway Br[idge],



<sup>927</sup> However, records are given for district 3).

<sup>928</sup> This symbol marks several entries, but the intention is not clear, unless to indicate an introduction.

Smarden, 867447, 1962 **MNE\***. 84 Pond SE of Golden Square, Smarden, 887411, 1962. 74 R[iver] Beult, Cross at Hand, Staplehurst, 1963.

**12)** 94 R[iver] Stour, SW of Hothfield, 1943: E.G.P. **MNE\***. R[iver]. Stour, Godmersham Br[idge], E of Ch[urch], 1955, FR & E.S. 04 Dikes E of R[ai][wa]y, S. of Willesborough, 1950.

**13)** 63 Ditch S. of Lamberhurst Ch[urch], 684365, 1960, CAS. 63 Bayham, Pond E. of Lamberhurst Gate, 1944; Abbey Lakes CAS. 73 Bedgebury Pinetum, Marshall Lake, 1945 **MNE\***. 54 Penshurst Park, Pond 1 mile N. of Village, by B.2176, 1944 **MNE\***. 53 Pond by Broadwater Lane, T[unbridge] Wells, 1960, CAS. Dunorlan, T[unbridge] W[ells], CAS.

**14)** 83 Breeches Pond, 1947.

**15)** 01 Hoppen Pits, Dungeness, 1946 **MNE\***. 02 New Romney. Brenzett RGW. 93 Dikes, Shirley Moor, 1947 **MNE\***, 1965. Kenardington.

**P. polygonifolius** Pourr. [Bog Pondweed.  
15, 16 9/51

Native. In acid, often peaty and ferruginous water, in pools and rivulets in bogs, and in ponds on acid soils; locally plentiful in 12) and 13); rare in 1) and 10); unrecorded elsewhere. Locally common in the heath districts of Surrey and Sussex, very rare in Essex and in Pas de Calais.

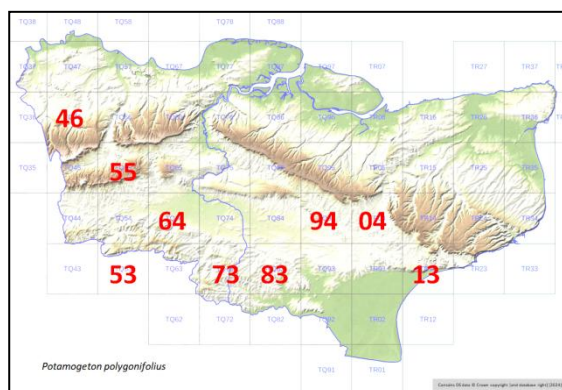
**1)** 46 Keston Bog, 1944-62.

**10)** 55 In Pond, Ightham Common, 1944-62, **MNE\***.

**11)** [n[ea]r. Hadlow, 1878, FWE Shrivell TLS]

**12)** 94 Valley bogs, Hothfield Common 1942-62 **MNE\***. 04 Ashford Warren. 04 Willesborough Lees 1945-54 **MNE\***. 13 Gibbons Brook, 1945.

**13)** 53 Hawkenbury Bog, JRW 1945-. 73 Boggy streamlet, Pinetum, Bedgebury, 1962. 73 Louisa Lake, Bedgebury Forest, JRW: 1944-51 **MNE\***. 73 Peaty stream, Angley Wood, 1945-61 **MNE\***. Boggy Valley, Brewers Wood, 1950. 64 Pool in Pembury Wood, 1952. 83 Chittenden Wood, 1944, in peaty ditch. 73 Combwell Wood, in acid flushes, 1945-54 **MNE\***.



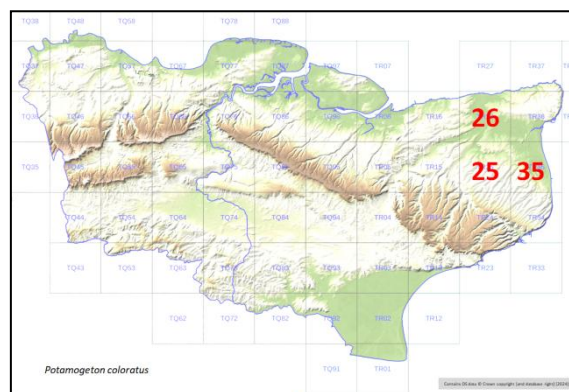
**P. coloratus** Hornem. [Fen Pondweed.]  
15 3/51

Native. Dikes in calcareous fens: very rare, and confined to 4), but locally abundant there. Very rare in Sussex (near Eastbourne); unrecorded for Surrey and Essex; locally abundant in Pas de Calais.

1<sup>st</sup> record, 1838: Ham Ponds, W.W. Saunders: Babington, *Ann. Nat. Hist.*, 2, p349.

**4)** 25 Fen dikes N. of Wingham, 1945→ **MNE\***. 35 Hacklinge, fen ditches, 1946→ **MNE\***. 35 Dike, Ham Fen, 1838, 1949-60 **MNE\*** not seen 1991: 1994! 35 Worth Minnis, 1946-60. 26 Preston Marshes, Dowker, det. E.S.M.

[The record for **12)** Hothfield in Fl.K. is surely an error.]



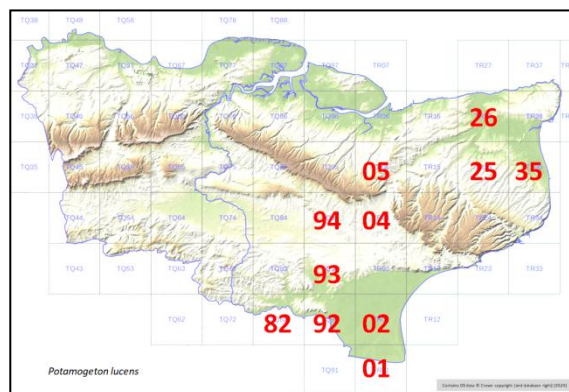
**P. lucens** L. [Shining Pondweed.]  
15, 16 11/51

Native. Dikes, canals, lakes, and rivers, in still or slow moving neutral or calcareous water: frequent in the alluvial marsh dikes of 4) and 15), and in the Stour in 12): formerly in 1), 2), 11) and 14), but apparently now extinct there.

**1)** Ravensbourne, Lewisham, Milne & Gordon.]

**2)** Greenwich Marshes; Deptford Creek, Milne & Gordon.]

**4)** 26 North Stream, E of Reculver, by A.299, 1946-. 26 Chislet Marshes. DHK. 26 Ditches S. of Grove Ferry, 1947.



35 Alluvial Marsh, Ditches W of Sandwich, 1946 **MNE**. 35 Dikes, Worth Minnis, 1956 **MNE**. 35 E. of Hacklinge, 1956. 26 Stodmarsh, E.G.P., P.W.W. 1958 **MNE**. 26 Sarre, Miss M.E. Milward, 1962 **MNE**. 25.

**11)** [Old records only for Tonbridge and Maidstone.] SW of Bethersden, 1955, ES.

**12)** Stour by Wye Station, 1939, J.P.M.B. Hb. J.P.M.B.). Vauxhall Lakes, Canterbury, 1954, ES.

**15)** 93 Ditch, Shirley Moor, 1945-52, by B.2080 **MNE**. 01 Hoppen pits, Dungeness, 1946 **MNE**. 02 82 Dikes, W. of Wittersham, 1956 **MNE**. 93 R[oyal] M[ilitary] C[anal] W. of Kenardington Bridge, 1959 **MNE**. 92 Dikes NW of Appledore Sta[tion], n[ear] B.2080, 1959 **MNE**.

**P. lucens x perfoliatus** (= **P. x salicifolius** Wolfg.) (**P. decipiens** Nolte ex Koch)

**4)** R[iver] Wantsum, n[ear] Chambers Wall, St. Nicholas at Wade, 1939, C. Norman **B**, det. D[andy] & T[aylor]. Dandy & Taylor, *J. Bot.*, 1939, p.255; BEC Rep., 1939-40, p.298.

**P. alpinus** Balb.

[Red Pondweed.]

15

3/51

**Native.** Slow flowing rivers, ditches and ponds; extremely rare and only recently observed in **11)** in the Beult and its tributary the Sherway.

**[4)** Ditches, Sholden, FGEK.]

**11)** R. Beult, ½m. W. of Bethersden, 917401, E. Scott: 1956! 1962! **MNE**. R[iver] Beult, 918397, S.E. of Buckhall, Bethersden, 1962 **MNE**. R[iver] Sherway, above and below Sherway Bridge, 867447, NE of Headcorn, 1962 **MNE**. [Tonbridge, A.G. More, Fl. K.: Hb. J.S. Mill.] [Pond between Marden and Marden Mill, FJH: between Staplehurst and Headcorn, F.J.H. I cannot refind it in these places.]

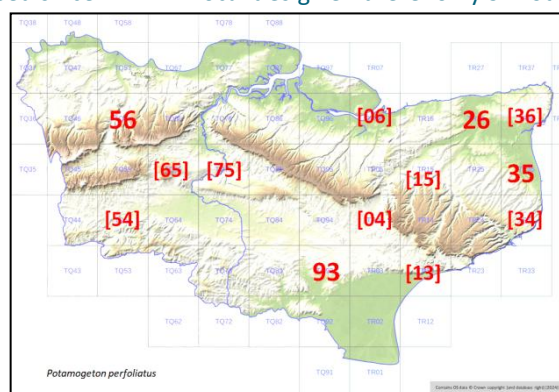
**P. perfoliatus** L.

[Perfoliate Pondweed.]

15, 16

formerly 13/51: now 4/51

**Native.** Rivers and canals: very rare, and much decreased since *Fl.K.* 24 localities given there: only 9 modern ones.



**[1)** Ravensbourne, Lewisham, M.& G. 1793.

**2)** Marshes ditches n[ear] the Thames, E. de C.]

**4)** 26 North Stream, E. of Reculver, by A.299, 1946 **MNE**. Stodmarsh, RGW. 26 Ditch S. of Grove Ferry, 1947 (Fl.K.). 35 Ditch, S. end of Worth Minnis, 1956 **MNE**. 35 Ditch E. of Sandwich (1m.) 1963, E.G.P. 26 Wantsum, n[ear] Chambers Well, 1962, H.M. Wilks. [W. of Sandwich FGEK.] [Brooksend FGEK.] [Sarre Fl. Th.] [Minster Fl. Th.] [Ham Ponds FJH.] [Fordwich FJH.]

**[6)** [06 Ospringe river, Pl. Fav., 1777.]

**[8)** 34 In the Dour FGEK.]

**10)** 56 In Darent, Horton Kirby, J.B. Marshall, 1938: 1962, l[ocally] d[ominant], H.A.S.: LMB, 560686. 56 In Darent, Eynsford, 1963, H.A.S.

**11)** [75 In R[iver] Medway, Teston, 1944 **MNE**.] [15 In Medway, Maidstone, 1895, H. Lamb **MNE**.] [Tonbridge, Fl. Ton.] [75 E. Farleigh: 65 Yalding FJH.] **[12)** In Stour, 15 Canterbury/ E. of Chartham, F.M.W.; 04 Wye, FJH.]

**15)** 93 R[oyal] M[ilitary] Canal, W. of bridge, Kenardington, 1959, **MNE**. [13 Hythe, Duthie. Seabrook, in R[oyal] M[ilitary] C[anal], FGEK.] [Lydd, Lady D., c.1902.]

**P. friesii** Rupr.

[Flat-stalked Pondweed.]

15

2/51

**Native.** Calcareous fen-dikes; very rare but locally abundant.

**1)** Cray tributary n[ear] Bexley M&G: 1963, G.M.B.

**4)** 26 Between Preston and Grove Ferry, 1949 **MNE**. 26 Preston Marshes, 1962 **MNE**. 26 Stodmarsh, E.G. Philp, 1958 **MNE**. 35 Fen dikes, Hacklinge, 1946 **MNE**.

**P. pusillus** L.

[Lesser Pondweed.]

15, 16

10/51



Native. Still or slow moving fresh water in streams, ditches, etc.: rare, and recorded only from the marsh districts 2), 4) and 15), and from the Medway valley 11) and Stour valley 12).<sup>929</sup>

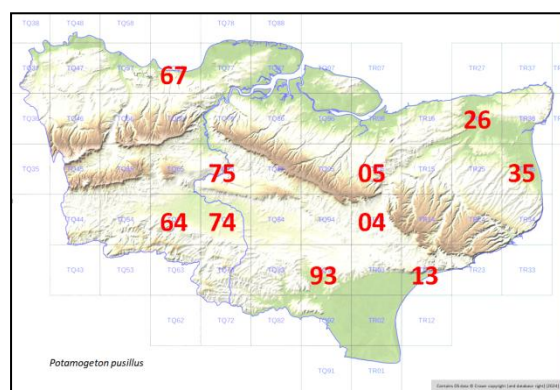
2) 67 Bomb-crater, Shornmead Fort, 1962 C.A.S. **MNE** (det. J.E.D., 1963). Higham Marshes, 1955, det. Dr. E. Taylor. Pit N. of Shorne, 693734, PCH.

4) 26 Dike, Stodmarsh, 1955 **MNE**, det. JED. J. Bot. 1940, BEC Rep. 1939-40, p.299. (Fordwich Marshes, 1949, E. Robinson, not confirmed.) 35 Ditch W of Sandwich, 1946 **MNE**.

11) 75 Gravel pits E of Aylesford, E.G.P. 1962 **MNE** (det. JED 1963). 74 Stream N of Collier Street, Yalding, 1958 **MNE**. 64 Gravel pit W. of Brandbridges, 1958 **MNE**.

12) 04 R[iver] Stour 1m. S. of Godmersham, 1956 **MNE** FR & R. Melville. 05 R[iver] Stour S. of Shalmsford Bridge, Chartham, 1960 **MNE** (JED det. 1963).

13) Dikes by Selby Farm, S. of Lympne, 3m. W. of Hythe, 1958 **MNE**. 93 R[oyal] M[ilitary] Canal W. of Kenardington Br[idge] 1959 **MNE**. Ditch near coast, South Brooks, Denge Beach, 1935, Hb. JPMB.



**P.pusillus** x **P. trichoides** = [**P. x grovesii**]<sup>930</sup>

11) Marden (as *P. berchtoldii*) E.S.M., BEC Rep., 1920, p.50.

**P. obtusifolius** Mert. & W.D.J. Koch [Blunt-leaved Pondweed.] 15, 16 4/51

Native. Ponds and ditches: now very rare, in a few ponds in the Weald.

[R[iver] Cray, Milne & Gordon. Deptford, Buddle, MS6, p.13. Greenhithe, Fl. Met.]

2) Luddenham Marshes, 1961, H.M. Wilks, det. DMCC.

4) [Ham, H.C. Watson. Stourmouth, Dowker.]

11) [n[ea]r Medway above Tonbridge, Hb. J.S. Mill.] Pond at Leighbridge, W.N.W. of Headcorn, 1935 J.P.M.B. Hb.; 1949, FR & CW, **MNE**. Two ponds 1m. N. of Marden, Fl. Tun. Wells: 1952! FR & RAB **MNE**.

12) [Stour n[ea]r Wye, F.J.H.]

13) Pond N. of Scarletts, Cowden, 1949, ECW.

The wide blunt leaves, close branching habit, and very fine lateral nerves distinguish this species when sterile.

**P. berchtoldii** Fieb. [Small Pondweed.] 15, 16 13/51

Native. Freshwater dikes, streams and lakes, in base-rich water: rare in 2) and 13); widespread and locally frequent in 4), 11) and 12).

First record, 1881: see Dandy & Taylor's paper in *J. Bot.*, **72** (1940) p.56.

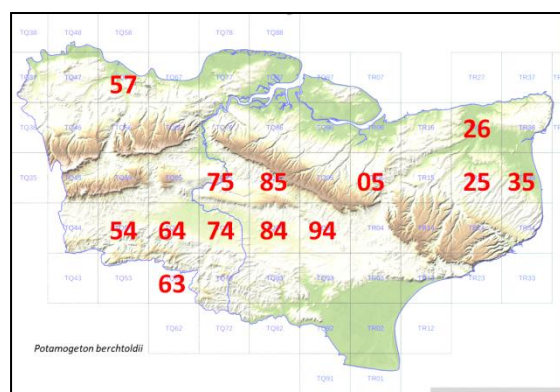
1) Danson Park, GMB. Ruxley pits, S&S.

2) 57 Dartford Marshes, 541761, 1962 **MNE** (det. JED 1963).

4) 26 Preston Marshes, 1949 **MNE**: 1962 **MNE**. 25 Lit[tle] Stour, Wickhambreaux, 1956, **MNE**. 25 fen Dikes, Little Britton, N of Wingham, 1947 **MNE**; 1960 **MNE**; 1962 DACL. 35 Dikes, Worth Minnis, 1950: 1960 **MNE**. 26 Chislet Marshes (Marshside) 1962 **MNE**. 35 Dikes E of Hacklinge, 1956 **MNE**.

10) R[iver] Darent, Squerries Park, Westerham, R.A.C. R[iver] Darent, Dunton Green (W. of), Hb. J.P.M.B. 1946.

11) 85 Pond by R[iver] Len, Pollhill Ho[use], Harrietsham, 1962, Mrs. B. Dodds (sp[ecimen]!). 75 Langley Park Lake, EGP, 1960 **MNE**. 84 R[iver] Sherway, Shrway Bridge, Smarden, 867447, 1962 **MNE**. 64 Gravel pit by Medway, SW of Brandbridges, CAS: 1958! 673482: & to E., 682487 **MNE**. 64 Gravel pits S. of Yalding Station, 1961, CAS. 74 Ditch by Teise, Elphicks, Hunton, 1955 **MNE**. 74 Stream N. of Collier Street, 1958 **MNE**. 54 Castle Moat,



<sup>929</sup> This account has been amended more than usual, with a number of records from district 4) queried and then deleted (so not included here).

<sup>930</sup> Name supplied here, not in the manuscript. In the BEC Report cited, it was *P. x franconicus*, a re-determination by C.G. Druce.

Tonbridge, EGP, **MNE**. R. Beult N of Cross at Hand, '63. 75 Ditch by Medway, Teston, 1955 **MNE**. 64 Stream, Pikefish, S. of Yalding, 1956 **MNE**.

**12)** 05 R[iver] Stour near Church, Godmersham, FR & ES, **1955 MNE**. 94 R[iver] Stour, Hothfield, 1959, G. Morgan **MNE**.

**13)** 63 Ditch S. of Church, Lamberhurst, 1956 **MNE**.

In this species there is a strong lateral nerve on each side of midrib at some distance from it.

**P. trichoides** Cham. & Schltdl. [Hairlike Pondweed.] 15 4/51

Native. Freshwater ditches and lakes: very rare and confined to 4) and 15).

**4)** 26 Ditch E. of B.2046, S. of Pluck's Gutter, DACL & Mrs. A.G. Side, 1962 **MNE**; det. JED, 1963.

**15)** 01 In long shingle pit, Dungeness, E. of old school, **B**: 1946-62! **MNE**. 02 or 03 Ditch between Ham Street and New Romney, 1952, I.A. Williams **B**. 92 Drain by R[oyal] M[ilitary] Canal n[ear] Knock Farm, 1959, **B**.

**P. acutifolius** Link [Sharp-leaved Pondweed.] 15, [16]

[4/51]: 2/51

Native. Alluvial dikes in calcareous water; very rare, and only seen recently in 4) and 15).

**[1)** 37 Marsh ditches, Deptford, Hb. Buddle.]

**4)** [25 Wickhambreaux, W. of Little Stour, Dowker, Fl.K.] 26 Fen Dike, Preston Marshes, 1962, Mrs A.G. Side, 1962! abundant **MNE**, det. J. Dandy. Dike, E. side road, 240624, Grove Ferry, 1950, L.W.W.; needs confirmation but probably correct.

**15)** 92 Roadside dike between Appledore Station and Village, ESM: J.P.M.B, Hb. J.P.M.B., 1935: C. Norman, 1938 **BM**.

**P. crispus** L. [Curled Pondweed.] 15, 16 38/52

Native. Freshwater streams, ditches and ponds: widespread and locally frequent in 2), 4), 10), 11), 12), and 15); unrecorded for 3), 5)-9). Frequent in the adjacent counties and in N. France.

1<sup>st</sup> record, 1632: W. of Sandwich, Johnson, *Descriptio*, p.30.

**1)** 47 Cray, n[ear] A.2, Old Bexley, GMB. 46 Keston Ponds, 1949, DPY, Hb. DPY.

**2)** 47 Erith Marshes, Kent. 57 Pond, Stone Marshes, H.A.S., 1962. 67 Stream Northfleet, 615749, PCH. 76 Holborough Marshes. 76 Dike on Marshes S. of Snodland, 1944. 76 Burham, in dike, 1945 **MNE**. 06 Dike N of Hernhill, n[ear] Waystreet Farm, 1955 **MNE**. 77. 66 Leybourne Brook, N. of Lunsford, 1944 **MNE**. 67 Dikes, Stone Marshes, HAS. 96 Tonge in ditch, DMCC. 06 W. of Seasalter, 1947, B Welch. 07 Warden.

**4)** 35 Dike at Hacklinge, 1946. 26 Dike, Stodmarsh, 1955 **MNE**. 16 Fordwich Marshes, 1949, E. Robinson. 25 Dikes, Little Britton, Wingham, 1963, DACL. 26 Preston Marshes, '62, Mrs. B. Dodds; KFC. 26 Shuart, St Nicholas at Wade, 1939, JPMB Hb.

**10)** 45 Stream, Westerham, 441537, 1955, DPY. 55 R[iver] Darent, Chipstead, 1943, J.R.W. **MNE**. Pond Westerham Wood, 1982! 56 Darent.

**11)** 54 Tonbridge Marshes. The Moat, Ightham Mote, 1955, Mrs. M. Mallinson. 75 R[iver] Medway, Maidstone, 1957, E.G.P., **MNE**. 85 Fairlawne Mill pond, Mrs. B. Dodds. 84 Pond W. of Leighbridge, Headcorn, 813454, 1962. 84 R[iver] Sherway, Sherway Bridge, Smarden, 861447, 1962 **MNE**. 74. 44.

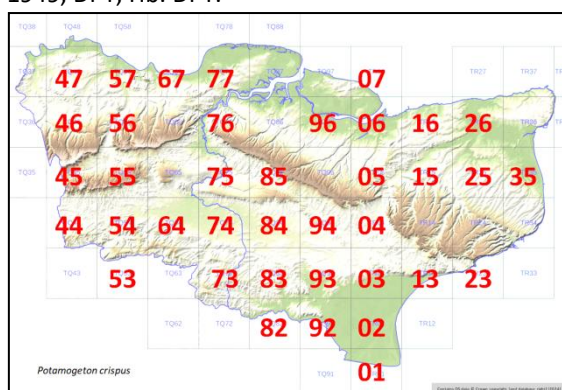
**12)** 94 Stour SW of Hothfield, 1943. 05 R[iver] Stour, Godersham, 1955, **MNE**. 05 R[iver] Stour, Godmersham, 1955 **MNE**. 05 R[iver] Stour, Shalmsford Bridge, Chartham, 1960 **MNE**. 04 R[iver] Stour, Olantigh Park, 1m S. of Godmersham, FR & R. Melville, **MNE**, 15

**13)** 74 Pond, Horsmonden, 1899, J. Stirling Hb. **TLS**. 73 Bedgebury pinetum Lake GMB. 53 Dunorlan, T[unbridge] W[ells], CAS.

14) Breeches Pond, RAC. 83 Pond E of St Michaels RAC.

**15)** 02 Near Romney. 02 Brenzett. 13 Dike, Palmarsh / R[oyal] M[ilitary] C[anal], Hythe, 1958, L.J.M. 01 Dungeness. 02 Lydd, Lady D., c.1902.

**16)** 23 Gault pond, Folkestone Warren, 1965, BN.



**P. crispus x friesii = P. x lintonii** Fryer



**10)** Stream in village, Riverhead **BM**. R[iver] Darent, by r[ai]l[wa]y. between Dunton Green and Riverhead, 1946, JPMB, in Hb. JPMB **BM**.

**P. pectinatus** L.

[Fennel Pondweed.]

15, 16

24/51

**Native.** Streams, ponds, canals and ditches, in fresh and brackish waters: very common in the districts 2), 4) and 15), less so in the Stour in 12), rare in 1), 3), and 11).

**1)** 46 Keston Ponds, C. West.

**2)** 47 Plumstead Marshes, 1944. 57 Dartford Marshes, 543772, 1962. 77 Bucks hole, Cooling Marshes, 1944. 57 Stone Marshes, pond →'62 HAS. 67 Bomb craters, Shornmead Fort, 1962, CA Lister. 77 Fleet S. of Egypt Bay, High Halstow, 1962, CA Lister **MNE**. Ebbsfleet, Northfleet, stream, 615746, PCH. 67 Swanscombe Marshes. Shorne Marshes. 77 Higham Marshes. 87 Grain. St Mary's Marshes, HAS. 96 Elmley. 97 Minster S. Marshes. 06 Harty. 06 Dike, 046648, W of Sportsman, Seasalter, HMW. 86 Dikes, S. Chetney Marshes, 1962. 76 Burham, dikes W. of Church. 76 Cuxton.

**3)** 16 Swalecliffe, 1944.

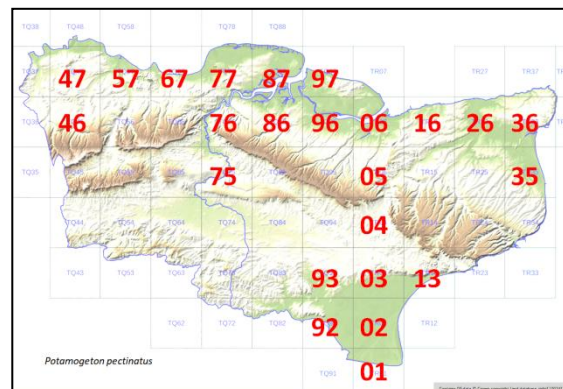
**4)** 26 Marshside, Chislet, 225661, 1962. 26 Dikes N. of Shuart, 270686. 26 Dikes W. of Grove Ferry. 36 Minster Marshes, '63. 35 Dike 1m. N. of Sandwich 1946 **MNE**. NE of Sandwich, PWW, JPMB. Stodmarsh, 1958, E.G.P. **MNE**. 36 Dike NW of Princes Links, Sandwich Bay, 1962 **MNE**. Pegwell Bay, RGW. Fordwich Marshes, 1949, E. Robinson. Plucks Gutter, DACL. NW Hacklinge 1991.

**6)** Chalkpit, Northfleet, HAS.

**11)** 75 Maidstone, in R[iver] Len, E.G. Philp, 1958 **MNE**.

**12)** 04 R[iver] Stour, Wye, 1952 **MNE**. 04 N. of Olantigh Park, 1956 **MNE**. 05 Shalmsford Bridge, 1960 **MNE**. Pits ENE of Chilham St[atio]n, 086539, ES.

**15)** 92 Appledore, 1949 **MNE**. 01 Dungeness, Ditches S. of Boulderwall, 1962. 01 Long pit, Dungeness, 1962, **MNE**. 02 Ponds NE of New Romney, 1955 **MNE**. 03 Dikes S. of Ham Street. Behind shore S. of Dymchurch, 1935 Hb. JPMB. 13 R[oyal] M[ilitary] Canal, Hythe, 1955 **MNE**. 03 Ditch S. of Aldington Knowle, 1958 **MNE**. 93 R[oyal] M[ilitary] Canal, W. of Kenardington Bridge, 1959, **MNE**. Lydd to Hope & Anchor Road, 1936, JPMB Hb.



**Groenlandia** J. Gay

**G. densa** (L.) Fourr. (*Potamogeton densus* L.)

[Opposite-leaved Pondweed.]

15, 16

16/51

**Native.** Freshwater dikes, streams and ponds; rare and unrecorded from most of S. Kent but locally frequent in the dikes of 2), 4), in the Darent in 10) and in the Stour in 12); rare in 8), 11), 13) and 15).

**1)** Cray, Old Bexley, GMB (n[ea]r A2).

**2)** Plumstead Marshes, W. Biddiscombe, 1892 **MNE**. Stream n[ea]r Stone Crossing Halt, GMB. Erith Marshes, PCH. Cliffe. Dartford Marshes, 543772, 1962 **MNE**. 76 Holborough Marshes. 76 Snodland Marshes, 1944. Luddenham Marshes, HMW.

**4)** 35 Hacklinge, 1946. 26 Dike N. of Preston, 1949 **MNE**. Preston Marshes, 1962, B. Dodds; KFC. Fordwich Marshes, 1949, E. Robinson. 25 N. of Wingham, Lit[tle] Britton F[ar]m. S. of Grove Ferry, L.W.W. 35 Worth Minnis, 1956 **MNE**; 1960 EGP **MNE**. 35 Ham Fen.

**8)** 24 R. Dour, Kearsney, KDR.

**10)** Chipstead

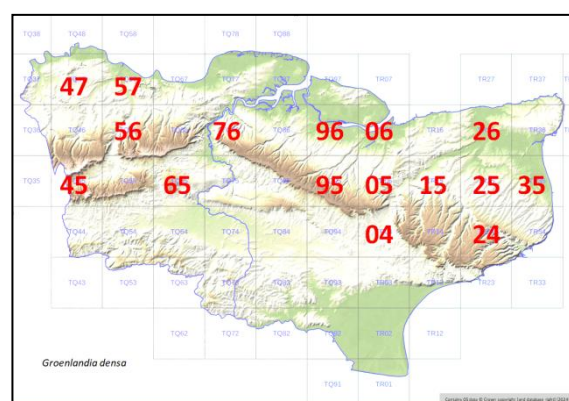
45, 56

**11)** Tonbridge. 65 Clare Park, E. Malling.

**12)** R. Stour, Chilham, 1945, DHK.

**13)** Tunbridge Wells, W.W.R. **TLS**.

**15)** Lydd, Lady D. c.1902. No recent records.



**RUPPIACEAE**

**Ruppia** L.

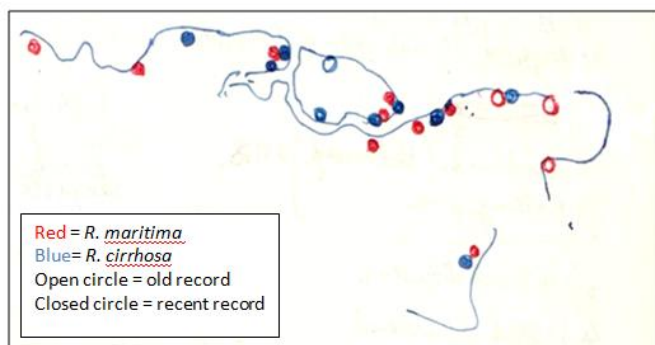
**R. maritima** L.

[Beaked Tasselweed.

15, 16.]

4/51

Native. Brackish ditches and fleets: rare, but locally frequent in the Thames estuary. In Sussex, Essex and Pas de Calais.



\*1724: Sheppey, Dillenius in Ray, Syn., ed.3, p.135.

2) Woolwich Marshes, E. de C. NE of Cuxton, WWR; FJH. Frindsbury, F.M. Webb. Stone Marshes, 1945, F.R & J.E.L. **MNE**. Higham, 1944, FR & CW. Grain, 1959? Dikes, Harty, W.J.L. Sladen. Shellness, Sheppey, 1956 **MNE** Dikes below Faversham, FJH, Fl. K.: DHK, 1945. ½m S W of Sportsman, W. of Seasalter, HM. Wilks **MNE**.

3) Whitstable Boating Lake, 1959, HM. Wilks

51/57 Stone, 51/76 Medway to

**MNE**. Brook, Swalecliffe, FJH, Fl. K.; REW 1950.

'54, 51/85 Grain?, /06 Shellness/Seasalter, 16 Whitstable 54:59.

4) Reculver, in saline ponds, J.S.M. (Hb. JSM). [Margate, FGEK.] N. of Sandwich, FMW, Fl. K.

15) Dikes and pools n[ea]r sea, Dymchurch, CPSK; FJH, Fl. K. (1947, sterile plants seen of a *Ruppia*)

**R. cirrhosa** (Petagna) Grande<sup>931</sup>

[Spiral Tasselweed.

15, 16.]

3/51

\*Sheerness, Hb. Dillenius, teste G.C. Druce.

2) Grain, B.D. Jackson; Port Victoria, AHWD & ESM, Fl. K. Saline pool behind N. beach, I. of Grain, 1959 **MNE**. Cliffe, L.N.H.S. Harty, B.D. Jackson, Fl.K.; 1938, DMcC. Elmley, 1949? Shellness, Sheppey, 1956 **MNE** [Coastal pools E. of Sheerness, FJH, Fl. K.] Saline pool behind beach, W. of Seasalter, 1959, H.M. Wilks & FR, **MNE**. W. of "Sportsman", HMW.

/87 Grain, /06 Harty/Seasalter/Sheerness

3) E. of Whitstable (=Swalecliffe) FJH, Fl. K.

4) /35 – to 1954 – Richborough?

/35, Sandwich to 54.

15) Dymchurch, FJH, Fl.K.; 1947 (sterile plants of a *Ruppia* seen).

**ZANNICHELLLIACEAE****Zannichellia** L.**Z. palustris** L.

Horned pondweed

15, 16.

32/51

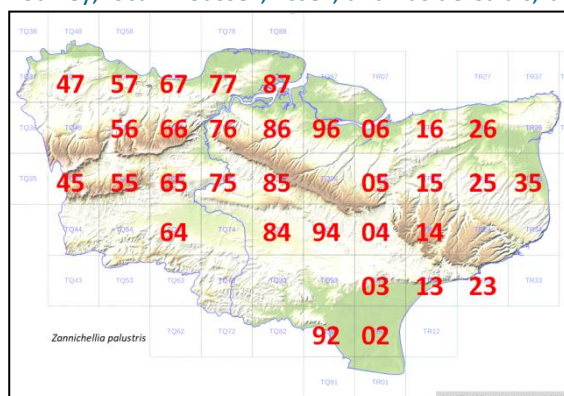
Native. Ditches, streams, and ponds, in still and running fresh or brackish water, not in acid water: frequent to locally common in 2), 4), and 15), in the Darent and Stour in 10) and 12) and in the northern part of 11); rare elsewhere, and absent from 5)–9) and 13) and 14). Rare in Surrey, local in Sussex, Essex, and Pas de Calais, but commoner in the coastal marshes.

2) 67 [ocally] d[ominant] in chalkpit lake, Northfleet, 1962, HAS. 77 Fleet S of Egypt Bay, High Halstow, 1962, CAS. 47 nr Crossness, Plumstead, 1944. 57 Pond, Swanscombe marshes, 1962, HAS. Ebbsfleet HAS. 67 Shorne. Denton. 77 Cooling. 66 Birling Marshes PCH. 86 Stream S. of L[owe]r Halstow, 1962, 857669. 76 Snodland (Holborough) →1978. 76 Halling, 1943. 77 Higham. 77 Cliffe. 87 Grain. Pond behind All Hallows Saltings, AGS, '58. 06 Harty. 96 Elmley. Luddenham Marshes KDR. 06 Brackish dike by seawall, S. side Harty Ferry, 1961, HMW. Faversham Creek, '57, ES. 06 Seasalter. N[ea]r P[ublic].H[ouse] Ham Marshes, 1954, RWB. Oare Meadow, 62, HMW.

3) 16 Swalecliffe, 1944.

4) 35 NE of Sandwich. 26 Grove Marshes, P.W.W. 25 Lit[tle] Britton, Wingham, DACL, '63. 26 Pluck's Gutter, '62, DACL. 15 Fordwich Marshes, 1949, E. Robinson 26 Brook's End, Birchington, 1957, BN. Hacklinge (SE of Ham Fen) 1991.

6) Flooded chalkpit, Northfleet, HAS.



<sup>931</sup> Given in the manuscript as *R. spiralis* L. ex Dumort.

- 10) 55 Chipstead, 1945. 57 Darenth, 1954. 45 Brasted, 1945. 56 Darent at Lullingstone, 1956 **MNE**.  
 11) 66 Pond in Ryarsh Wood. 66 Leybourne Brook, S. of Ham Hill. 84 R[iver] Sherway, Sherway Bridge, Smarden, 867447, 1962. 65. 75 Forstal Pond, Aylesford, EGP, 1962. 85 R[iver] Len, Fulling mill, W. of Hollingbourne, 1958. Fairbourne Mill Pond, Mrs. B. Dodds. 75 Boxley, E.G.P., 1958, **MNE**. 75 R[iver] Medway, Maidstone, 1957, EGP **MNE**.  
 12) 94 R[iver] Stour SW of Hothfield, 1943 FR: 1959, EGP **MNE**. 03 Ditch E. of Mersham Mill, 1956 **MNE**. 14 Stream S of Stowting 1953, **MNE**. n[ea]r Stour in gravel pits E of Chilham Sta[tion], 084539, 1957, ES.  
 15) Hythe, J.E.L. 02 Lydd. 92 Appledore. 13 Dike n[ea]r Selby F[ar]m S. of Lympe, 1958 **MNE**. 92 Dike, Fairfield, 1952, **MNE**.  
 16) 23.

## ZOSTERACEAE

### Zostera L.

**Z. marina** L. [Eelgrass.] 15.

Native. In estuaries on mud near low-water mark: very rare, and not confirmed by specimens.

Zosteretum submerged:emerged ratio 0.628 – 282/732 hrs per month.

2) Mudflats near LWMOT [Low Water Mark of Ordinary Tides], NW of Seasalter; reported, local fishermen, to REW and Prof. GE Kewell, 1950. From the description and the habitat this was probably *Z. marina* L. Older records for this species cannot be accepted in the absence of specimens (see Fl. K.).

**Z. angustifolia** (Hornem.) Rchb. [Narrow-leaved Eelgrass.] 15, 16 2/51

Native. Mud flats below the general salt-marsh level, but far above low-water mark of ordinary tides (often over low water reefs!); very rare, but locally abundant in at least three places. Rare in Essex, very rare in W. Sussex. Not reported from Pas de Calais; nor are the other two species.

2) Mudflats off North Beach, Grain, 1959, Mrs A.G. Side. NW of Seasalter, 065656, on sandy mud n[ea]r low water neap, 1957, HMW. Mudflats N. of Castle Coot, Graveney, 1960, H.M. Wilks **MNE**. Mudflats N of "The Sportsman", W of Seasalter, 1950 REW, H.M. Wilks 1960: 1960! **MNE**, det. T.G.T. "Ditches between Garrison Point to E. Cliff", Cooper in *Mag. Nat. Hist.*, and "Harty Ferry", *Pl. Fav.*, probably refer to this species.

4) "Salt-water ponds at Reculver", Hb. J.S. Mill, probably refer to this species: I have not seen the specimen.

"A Mallard shot off Milford hope Island in Sept. 1958 had 170 seeds of this species in its food tract, in perfect preservation: it had probably fed just prior to being shot": P. Olney *in litt.*, 1962.

**Z. noltii** Hornem. [Dwarf Eelgrass.] 15 1/51

Native. Mud-flats, with *Z. angustifolia*: very rare but plentiful in at least two places.

2) Mud-flats close to beach, W. of Sportsman, Seasalter, 1960, H.M. Wilks., 1960! **MNE** "may well be this, but sterile", T.G.T. Mud-flats close to beach, Castle Coot, Graveney, 1960, H.M. Wilks.

## ARACEAE

### Acorus L.

**A. calamus** L. Sweet Sedge 15, ‡ 16 1/51 [3/51]

Alien, probably introduced into Britain, but appearing quite native in dikes about Plucks Gutter.

1) Pond SE of Bickley, W.C.R.W.: 1946! probably planted here **MNE**. Holwood Park Lake, 1954 **MNE** planted. Beckenham Place Park PCH.

4) Abundant along dykes S. of Plucks Gutter, Stourmouth, 1949, R.A.B. & F.R.; 1955! **MNE**, appearing native here.

11) Mote Park, Maidstone, 1950; E.G. Philp, 1958; apparently planted.

13) Spa Golf Course, T[unbridge] Wells, KEB.

### Calla L.

**C. palustris** L. [Bog Arum.] 16.]

Alien. Naturalised in a swamp at:

13) Kenward Green, 633409, Pembury, 1956: flowering 1962, CAS, det. **BM**.

### Arum L.

**A. maculatum** L. Wild arum, Lords and Ladies, Cuckoo-pint 15, 16 [37]/51

2n=56

Native. Woodland on all except highly acid soils, hedgebanks; abundant throughout Kent except in the marsh districts 2), 4) and 15) where it is, locally, very rare or absent; it is also rare in the acid sandy plateau woods of 13), but even here occurs on hedgebanks where the soil is somewhat base-enriched. Common throughout the adjoining counties and N. France.

1) Shooters Hill Woods, GMB. Abbey Wood PCH. Ruxley pits, S&S. Beckenham Place Park 1955. Ravensbourne, 1916, AGD **MNE**. High Wood, Crofton PCH. Petts Wood. Bourne Wood, E. of St Mary Cray. Kevington. Joydens Wood PCH. Bexley Ch[urch] Y[ar]d PCH. Farningham Wood.

2) R[oa]dside Key St[reet] 1955. Brambledown old r[ai]l[wa]y 55. Brambledown oakwood 56. Rd W. of Eastchurch 55. Leysdown village 55. Ash copse Warden 55. Eastchurch cliffs 55.

3) 06 Hernhill village 55. 16 Canterbury golf course 55. 16 Old Park, Canterbury 55. 26 Shelving Wood (Wool[wich] Beds) '62.

4) Wenderton Wood, Wingham, BN.

5) Darwins Bank, Downe. Halstead PCH. Rushmore Hill PCH. Hedge 396611 PCH. Pilots Wood PCH.

6) Darenth Wood PCH. The Thrift, Bean, PCH. Hedge SE of Farningham 1950 **MNE**. Horton Wood PCH. 67 Claylane Wood, Cobham, HAS. Dunstall Woods PCH. Preston Hill PCH. Greenhill Wood! PCH; 62 FR. Magpie Bottom PCH. Kemsing Downs PCH. Ch[a]lk, Woodlands Hill, N of Ightham '55. Wrotham Hill NW of village 55. Wingate Wood, Halling, PCH.

7) R[oa]dside Hartlip Hill / Hartlip Village, 55. Wood above Q[ueen] D[own] W[arren] / Lane SW of Q[ueen] D[own] W[arren], 55. Copse on coombe dep[osits] below Purple Hill 55. Bredhurst Hurst 55. Stockings Wood, Detling 55. Top of Detling Hill 55. W. Coombe Detling '55. Boxley Hill. Spuckles Wood Stalisfield (loam-chalk) '62. Kenneling Wood Stalisfield (ch[al]k) 62. Filmer Wood (sandy loam valley bot[tom]) 62. Tassels Wood Norton (ch[al]k) 62. College Wood Norton (ch[al]k) 62. Park Cotton Wood Newnham (loam) '62. Wood E side Lees Park (ch[al]k and loam) '62.

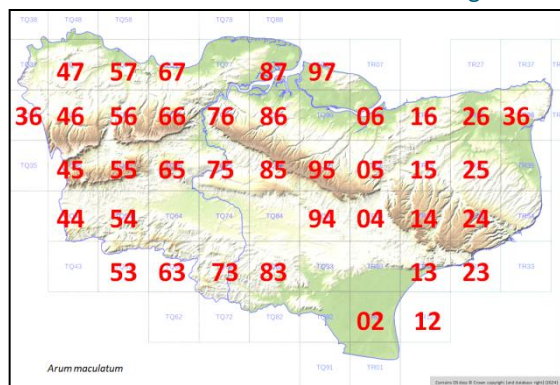
8) Foot of Broad Downs, Brook. Foot of Downs, Stowting. Foot of Downs, above Monks Horton. Tolsford Hill Postling **MNE** 1945. N of Beachborough. Hedge before Caesars Camp: Sugar Loaf, Holy Well, Folkestone **MNE** 1946. N of Bavinge F[ar]m (loam-chalk) 1947, 62 **MNE**. Hastingleigh, scarp foot, 1948 **MNE**. Copse N. of Bossingham '62. Lane N of Bossingham '62. Wood W. of Misling F[ar]m Elmstead (loam) 62. Dover R[oa]d C[anter]bury, '55. Bourne P[ar]k Bridge '55. Copse by Halfway Ho[use] by A2, '55. R[oa]dside Kearsney, '55. Alkham village, '55. Wood NW of S. Alkham, '55. R[oa]dside Paddlesworth, '55. R[oa]dside Hawkinge, '55. Copse S. of S. Alkham (ch[al]k) 62. Reinden Wood (ch[al]k) 62. Wolverton Cross R[oa]ds Alkham 62. Puckland Wood (ch[al]k) '62. Stafflands Wood (ch[al]k) 62. Oakwood on ch[al]k, E side Goodnestone P[ar]k '62.

9) Copse, Durlock, Minster, 1959, A.B.S.

10) Westerham Wood PCH 82. Scords Wood. Brockhoul Mount. Rooks Hill 55. One Tree Hill '55. R[oa]dside, Eynsford PCH. Hedge NW of Ightham (F[olkestone] Sand) '55. Wood SE of L[owe]r St Clere. Copse on Gault SE of Kemsing, FR, PCH.

11)G) Wood SW of Mereworth 55, Lane, Hadlow→Starvecrow 55. Tonbridge Castle 55. ¼m N. of Bough Beech 55. Wood by str[eam] 1m N of Bough Beech 55. S. of Ide Hill 55. Fairhill. Allington Wood 1880 **MNE**: 1958. W. of Bearsted by A20. E end of Mote P[ar]k. Copse, Willington St[reet] by R[iver] Len. Park Wood Boughton Mon[chelsea]. Kiln Wood Lenham, on clay and n[ea]r str[eam], 62. E. Malling 43 **MNE**. '55 Holt Wood Aylesford. R[oa]dside S. of Aylesford Br[idge] 55. Larkfield Heath 55. Leybourne Wood 55. Oaken W[oo]d R[oa]d, Barming 55.

12) Cadmans Wood. Brabourne Lees.



**A. italicum** Mill. ssp. **neglectum** (F. Towns. ) Prime<sup>932</sup>

15

1/52

2n=84.

Native: deep, well-drained banks on calcareous rocks: very rare and as a native only known in one locality in Kent so far. There are a number of old records from S.E. Kent quoted in Fl. K.: C.T. Prime and I have visited most of these, and C.T.P. has looked at the available herbarium material: he has concluded that all records

<sup>932</sup> In the manuscript with just Towns. as author citation.



prior to the one quoted below are errors (see Melvill's account of his reputed discovery of this at Folkestone in J. Bot. 1888, p.348, and T.R.A. Brigg's comment in Ibid. p.378).

It is locally common in sheltered localities on the chalk in W. Sussex, and westward from these; not recorded in any other adjacent county nor in France NE of Normandy.

**16)** Steep shaded and rocky banks of stream, in copse on Sandgate Beds, S. of Brockhill School 147357, Saltwood, 1960, I.J. Hughes, conf[irme]d C.T. Prime; 1961! **MNE**; 1962, D.A.C.L.

L= of leaves 3½" long, m= 4¾", 17.9.60. L= 4", m= 6", 15.10.60. L= 6½", m= 8", 13.11.60.



ssp. **italicum**

The type of this species (with white veins) occurs as escape at several places:

**7)** N[ea]r Bungalow by Pilgrims Way NW of Westwell, E. Scott, det. C.T.P.

**10)** E. side Hosey Common, n[ea]r French Street, Westerham, under Hawthorns, 1960, RAC, det. C.T.P.

**11)** Cobtree Hill, Aylesford, 1926, **MNE**.

**12)** By E. Stour, below Smeeth, 1957, L.J.M. **MNE**. Mersham Park, in woodland, 1960, Miss E. Davies.

†**A. dracontium** [(L.) Schott]

**11)** Appeared among rubbish in garden, Sutton Valence School, teste Mrs Oldaker, 1962.

[**Dracunculus** Mill.]

**D. vulgaris** Schott<sup>933</sup>

[Dragon Arum.

15.]

**16)** Old r[ai]l[wa]y bank, Shornccliffe, for 3 years to 1950, teste V.F.P.Day.

## LEMNACEAE

**Spirodela** Schleid.

**S. polyrhiza** (L.) Schleid.<sup>934</sup>

Greater Duckweed .

15, 16

23/51

Native. Ponds, and slow-moving rivers and ditches: very widespread and locally common in fresh base-rich waters. Surprisingly rare in 2); common in 4) and 15), and in the Medway-Beult system in 11) and in the Stour.

[old records for Plumstead, Northfleet and Harty Ferry, Fl.K.]

**2)** 06 Dikes NW of Waystreet F[ar]m, Hernhill, 055616, 1955 **MNE**.

**4)** Fordwich Marshes, 1949, E. Robinson; 1963 MEM. 26 Preston Marshes, 1949; 1962.; below the Church 1955 **MNE**. 25 Deerson Marshes, 1955 **MNE**. 26 S.of Plucks Gutter, 1949. Grove Ferry MrsB. Stodmarsh RGW. Chislet Marshes, LWW. R[iver] Wantsum by A.299, 1946.

**10)** 45 Westerham, R[iver] Darent AGS.

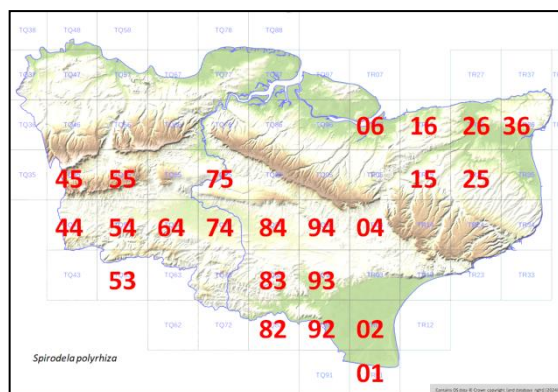
**11)** 64 Ditches N. of Medway, E of Tonbridge, 1952. 84 Beult, S. of Headcorn Church, 1962, 1954 **MNE**; 831440.

84 Kelsham, W of Headcorn, 1956 **MNE**. 74 Beult, N of Cross in Hand, Staplehurst, 1955 **MNE**. pond 535494, Fletchers Green, Weald, CAS. 74 Pond E of Mayden, 1946. Pond, Marden Mill, 1947 **MNE**. 75 Small concrete pond, Forstal, Aylesford, EG Philp 62. The Moat, Ightham Mote, 1955, M. Mallison. 44, 54, 64, 74, 84, 75

**12)** 94 Stour below Ashford, '49, E.S. 04 R[iver] Stour, Olantigh Br[idge], Wye, L.W.W.

**13)** 53 Tunbridge Wells, '55.

**15)** 01 Dungeness. 02 Brenzett. 93 R[oyal] M[ilitary] Canal, Kenardington, 1959 **MNE**. 83 Dike, Windmill Channel, E of Freezingham, Rolvenden, 1959 **MNE**. 82 Dikes SW of Small Hythe, 1956. 92 Appledore.



**Lemna** L.

**L. gibba** L.

Fat Duckweed.

15, 16

25/51

Native. Streams, ponds, and ditches in fresh and weakly brackish waters: common in the marsh districts 2), 4) and 15), in 12), 13) and in the Medway-Beult system in 11); rare elsewhere.

<sup>933</sup> Given as *Arum dracunculus* in the manuscript.

<sup>934</sup> In the manuscript, given as *Lemna polyrhiza* L.



**2)** 77 Higham Marshes, 1944-1956; flowering here, D.P.Y. 1947. 67 Northfleet Marshes, stream 615746 PCH. 76 N. of Burham Fl. K. 87 Dike, All Hallows, AGS. 06 By Waystreet F[ar]m, Hernhill. 96 Dikes, Blacketts Tonge.

**4)** Fen Ditches N. of Wingham, R[iver] Wantsum, by A.299. Fordwich Marshes, 1949, E. Robinson. Worth Minnis. S. of Plucks Gutter, 1962 DACL. W of Sandwich 1946. Preston Marshes, '62. Deerson Marshes, Preston, 1955 **MNE**. Stodmarsh, LWW: 1963, RWW. Ham Fen. Grove Ferry. Wenderton, BN.

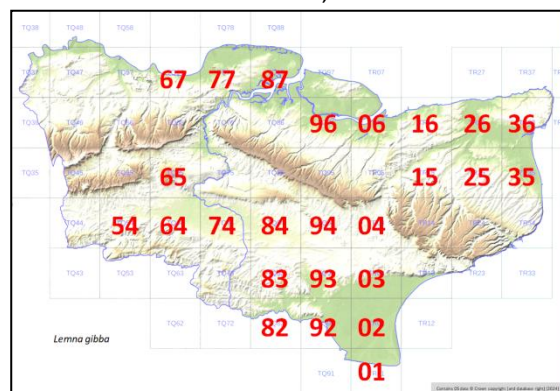
[10) unrecorded.]

**11)** 65. 54 Ditch near Medway, Tonbridge, GE Shaw. 64 Pond, Ploggs Hall, Whetsted, 657458, CAS, 1957. 84 R. Beult, 832440, S. of Ch[urch], Headcorn, '62. 74 E of Staplehurst, 1950. 74 R[iver] Beult, Cross in Hand, Staplehurst 1955 **MNE**. 94 Pluckley.

**12)** Ditches S. of Willesborough, E.S. N. of Willesborough. Near Ashford Sewage Works, 1949, E.S. Stour, Milton Bridge, MEM.

**13)** 64 pond, Kippings Cross, 644401, 1957, CAS.

**15)** 92 Appledore. 02 Brenzett! RGW. 02 New Romney. 02 Brackish Marsh (old estuary) SW of Littlestone 1950 **MNE**. 83 Windmill Channel, E. of Rolvenden Layne, 1959. 93 Shirley Moor. 03.



**L. minuta** [Kunth

Least Duckweed.

Now common.

**L. minor** L.

Common Duckweed.

15, 16

50/51

**Native.** Fresh and weakly brackish waters, in streams, ponds and ditches; abundant in such habitats wherever they occur; hence very rare in the chalk districts.

**1)** 36 Beckenham Place. Shooters Hill, GMB. 46 Keston Upper Pond PCH. Ruxley Pits, S&S. Bexley Mill pond PCH. R. Cray, N Cray, PCH. Pond S of Joydens Wood, PCH. Pond in Farningham Wood, PCH.

**2)** 47 Ditch below Sewer Bank, Plumstead, PCH. 57 Dike Dartford Marshes, 541761, '62. Swanscombe Marshes. Northfleet, Ebbsfleet, HAS. Stream, L[owe]r Halstow, 857669, '62. 96 Luddenham Marshes, H.M.W. Pond by Bysing Wood HMW. 06 Seasalter HMW.

**3)** Pond by Ch[urch], Blean.

**4)** Marshside, Chislet 225661, '62. Preston Marshes, 1947-62 **MNE**. Deerson Marshes 1955 **MNE**. Stodmarsh. Plucks Gutter. Ham Fen. Hacklinge. Worth Minnis. Fen N of Wingham. Grove Ferry. Fordwich Marshes. Sturry Marshes. Westbere Marshes. N of Sandwich Bay. Wenderton BN.

**7)** Pond, Eastling, C.T., 963566.

**8)** 24 Bushy Rough Lake. Pond, Coldred. 34 R. Dour, Kearsney. Gate F[ar]m Pond, Rhodes Minnis, ES. Pond, St Margarets at Cliffe DPY.

**10)** Seal Chart, 1946. River below Shoreham PCH. St. Johns Jerusalem PCH.

**11)** 75. 85. 66. 44. 54. 65 Leybourne Castle Lakes. 65 Platt, DMCC. 64 Pond E of Hale St[reet] CAS. 74 Beult, N of Cross in Hand, Staplehurst, 1955 **MNE**. E of Marden. Pond Haysden 568449. 84 Beult S. of Ch[urch], Headcorn, 831440, 62. 84 Pond W of Leighbridge, 813454, Headcorn, 1962. 84 Pond by River E of Golden Square, Smarden, 1962.

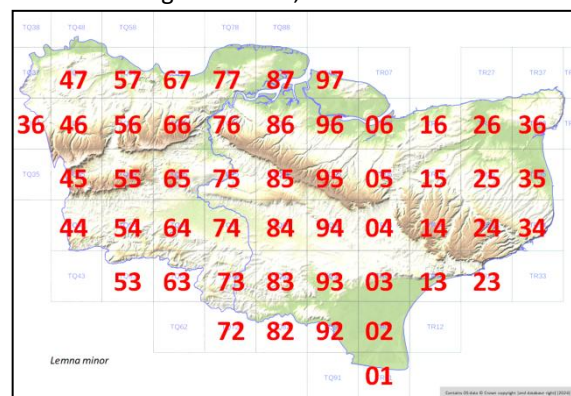
**12)** 14 Stowting stream.

**13)** Stone Cross Gill, Ashurst, 518381, 1959, CAS. 63 Ditch S. of Lamberhurst Church 684365, CAS. N of Kippings Cross, 644401, 1957, CAS. Dunorlan, T[unbridge] W[ells] CAS. Bayham CAS.3

**14)**

72

**15)** 93 R[oyal] M[ilitary] Canal, W of Bridge, Kenardington 1957 **MNE**. Shirley Wood. Stone Ferry. 83 Ditches, Windmill Channel, S of Rolvenden 1959 **MNE**.



**L. trisulca** L.

Ivy-leaved Duckweed.

15, 16

42/51

**Native.** Ponds and ditches, in fresh base-rich and in brackish waters; very abundant in the coastal marsh districts and estuaries of 2), 4) and 15), far less common than *L. polyrhiza* inland in 11) and 12); very rare in 13).

1) 37. 46 Pond, Bickley.

2) 57 Dike, 541761, Dartford Marshes, '62. Denton Marshes. Shorne. Cliffe Marshes. 77 High Halstow Marshes 1958 **MNE**. West Court Marshes, Cliffe, PCH. Sheppey, A.G. Davis 1917 **MNE**. Pond in Park by Bysing Wood, HMW. 96 Luddenham Marshes, HMW. 06 Oare Marshes, C.T. 96 Blacketts, Tonge. 06 Dikes W. of Maystreet Farm, Hernhill, 1955 **MNE**. 06 Seasalter HMW.

3) Kites F[ar]m, Swalecliffe; Swalecliffe Sewage Works, HMW.

4) Marshside, Chislet, 225661, '62. Deerson Marshes, Preston, 1955 **MNE**. Preston, Marshes to NW of Ch[urch], 1956 **MNE**. West Stourmouth, 1956 **MNE**. Grove Ferry, LWW. Sarre, LWW. Fordwich. Stodmarsh. S of Plucks Gutter. Wenderton, BN. SE Ham Fen 1991. Sholden (Cottington C[our]t) REW.

8) 24. 34.

10) 45. 55.

11) 75. 85. 74 Yalding. 84 Pond by River, SE of Golden Square, Smarden. 74 Marden, E of, 1946. 64 Below Tonbridge. Haysden, 568449, McFarlane.

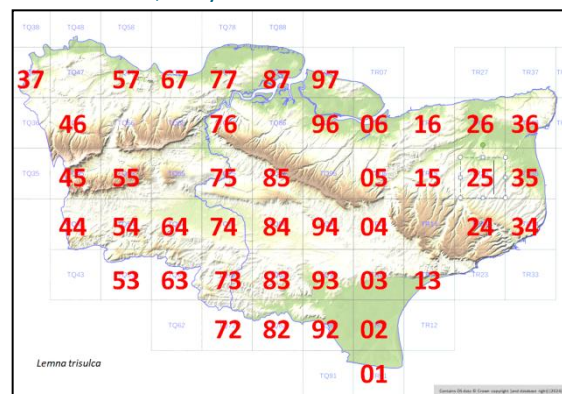
12) 04 S. of Willesborough. Ditch n[ea]r R[iver], Chilham / Chilham Castle Lake, ES.

13) Pond, Cornwallis Ho[use], Cranbrook, 1954, D.S. 63 Ditch S. of Lamberhurst Church, 1937, J.R.W.; 1960, CAS.

14) 72.

15) 93 Shirley Moor. 02 [Lydd, 1897, H. Lamb, **MNE**.] 13 Ditch, Burmarsh R[oa]d, Hythe, LJM. 82 Sandhurst Levels, 1954 **MNE**. 93 Appledore, 1954, **MNE**. 03 Ruckinge, 1956 **MNE**. 92 W. of Snargate, 1959 **MNE**. 83 Dikes E of Freezingham, by Windmill Channel 1959 **MNE**.

16) 13 Pond by Folks Wood, Pedlinge, LJM.



### **Wolffia** Horkel ex Schleid

**W. arrhiza** (L.) Horkel ex Wimm.

Least Duckweed

15, 16

7/51

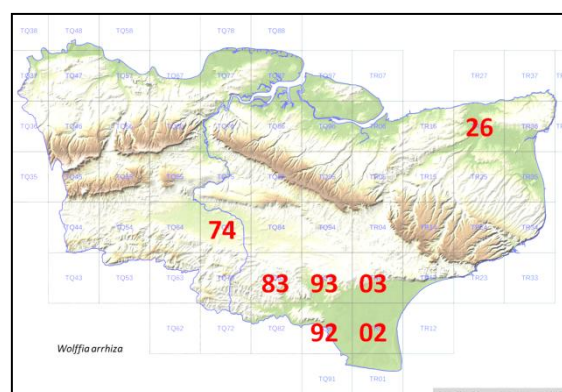
**Native.** Ponds and ditches: rare, but locally abundant in a few places in 4), 11) and 15): unknown elsewhere.

\* 1935: BEC, 1935, p.44.

4) Preston Marshes, 1947. Fordwich Marshes, 1963, M.E.M. S. of Plucks Gutter, 267630, 1949; 1965. Stodmarsh. Grove Ferry, C.T.; Mrs B, 1961-2.

11) JPMB, BEC '35 Rep, p44. Pond 1m E. of Marden, 1946, 1952.

15) 83 Dike by Windmill Channel, E of Rolvenden Layne, 1959, 867305. 93 S. of Kenardington. Shirley Moor, dike N. of B.2060, 1965. 03 Newchurch, E.S., 1956. 92 Snargate, E.C.W.: ES: (1959!). 92 E of Stone, E.C.W. Ditch S of R[oyal] M[ilitary] Canal, Ruckinge, 1956. E.S. N. of Arrowhead Bridge **MNE** W. of Snargate. (\* BEC Rep. 1939-40, p297.) 02.



### **JUNCACEAE**

#### **Juncus** L.

**J. squarrosus** L.

15, 16

Heath Rush

5/52

**Native:** dry- and wet-heaths; very rare, but still plentiful at Hotfield Common. Still very common on the heaths of Surrey and Sussex, very rare in Essex: very rare in Pas de Calais (3 localities only now).

1) 46 Keston Common, 1944-62, **MNE**.

10) [55 Rose Wood, Ightham Common, above highest pond, 1899, H. Lamb **MNE**: 1944!, not seen 1965-66.] 65 By A20, Wrotham Heath, 1944. Valley Wood, S. of Wrotham Heath, 1946-66 **MNE**. 85 Heath by Sandway Bog, Lenham, 1965, B. Dodds.

12) 94 Hothfield Common, 1943-62, abundant in wet-heath and damp heath communities, **MNE**.

13) [Southborough Common, Miss Crampton: gone by 1960, C.A.S.]

‡ *J. tenuis* Willd.

[Slender Rush.]

15, 16

11/52<sup>935</sup>

Naturalised alien, becoming widespread in damp paths in woods on acid soils, but still rare.

West Kent, St J. Marriott, BEC Rep., 1925, p899.

1) 56 Farningham Wood, PCH.

3) 15 Fordwich, DHK.

4) 35 Walmer Castle Field BN. 35 Sandwich Bay.

5) 45 Footpath through fresh coppice Newyear Wood Cudham 1956, 6 pl[ants]: 1961, 1 pl[ant] M. Swain; not found 1962.

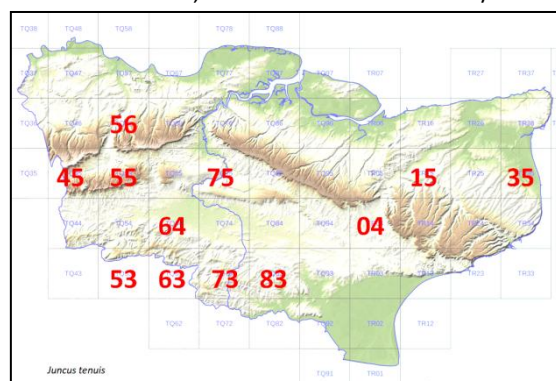
8) 04 Wood NE of Hastingleigh, on Pliocene Sand, 1946, **MNE**.

10) Sevenoaks, 1964, Mrs. Spear. Hosey Common, E side, 1957, RAC.

11) 75 Oaken Wood, SE of E. Malling, 1962.

13) Ferndale, T[unbridge] W[ells] Common, CAS. Lake R[oa]d, T[unbridge] Wells, 1957, KEB. 53 Rusthall Common, 1946. 63 Hook Green, 1941, JRW. 73 Angley Wood, P.W. Richards: 1956! In ride, **MNE**. 64 Path in wood SW of Pembury 614395 PCH. 83 Bayham, CAS. Bedgebury Pinetum, GMB. Combwell Wood, 1979.

14) 73 n[ea]r Mopesden, Hawkhurst, 1946.



*J. compressus* Jacq.

[Round-fruited Rush.]

15

6/51

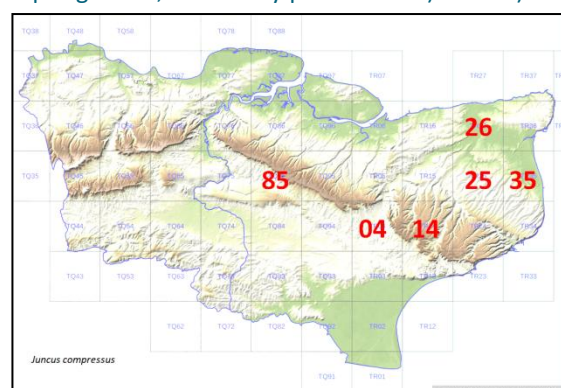
Native. Moist calcareous meadows, associated with chalk springs: rare, but locally plentiful in 4) and 12) and in one place in 11). Local in meadows by the Thames in Surrey; very rare in Sussex; unrecorded for Essex; frequent in the Pas de Calais. This is an inland freshwater species, in contrast to the next, and its globular fruits much exceed the perianth in length.

4) 35 Worth Minnis, 1947-51 **MNE**. 26 Plucks Gutter, FR. 35 Hacklinge Marshes. 25 Fen N. of Wingham, 1946-47 **MNE**.

11) 85 By entrance to the Brooks, below Fairbourne Mill, Harrietsham, 1961, 1962, B. Dodds; E. Philp.

12) 04 Fen Meadows, Cuckoldscomb, E of Brook, 1946-54 **MNE**; 1986!. 04 Fen Meadows, Brabourne Coombe, 1946. 14 Fen Meadows, Stowting, 1947-54 **MNE**. 04 Fen Meadows S. of Brabourne Church, 1954 **MNE**.

(Chilham, damp road verge n[ea]r gravel pits, 1960, BN.)



*J. gerardii* Loisel.<sup>936</sup>

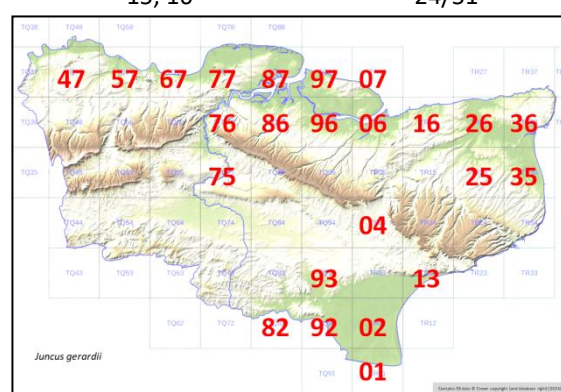
[Saltmarsh Rush.]

15, 16

24/51

Native. Brackish ditches and meadows: upper parts of tidal saltings: fresh meadows in former estuarine areas: common and general on these habitats in 2), 4) and 15). Inland at Swalecliffe in 3), in 12) at Sevington, E.S. In 15) it occurs well inland at Fairfield, Sandhurst Levels, Brenzett and Shirley Moors, probably as a relic of ancient brackish conditions. Probably now extinct by the tidal Thames in Surrey, but plentiful locally in its typical habitats in Sussex, Essex, and Pas de Calais.

2) Plumstead Marshes, 1862, Hb. Lamb **MNE**. Woolwich Arsenal, 1944. Erith Marshes, PCH. Stone Marshes. Swanscombe Marshes. Higham. Cliffe Marshes 1945 **MNE**. Upper Saltings Funton, '62. Dikes and Brackish



<sup>935</sup> The total should be 12/52, as hectad TR15 was overlooked.

<sup>936</sup> *J. gerardi* in the manuscript.



Creek, Chetney S., '62. W of Upnor. Elmley, 1954 **MNE**. Harty, 1955 **MNE**. N of Leysdown. Shellness. Brackish marsh by Stoke Junction 1945-59 **MNE**. All Hallows 1945 **MNE**. Marsh dikes, Grain 1945 **MNE** N coast, 1959 E coast. N of Blacketts, Tonge, 1958 **MNE**. Funton, '61. Conyers Creek. Oare Creek. Cuxton Saltings 1945, **MNE**. Halling Marshes 1944, **MNE**. W. of Conyer Creek. W. of Seasalter 1944: P.R.B. 1946: '60 **MNE**. Cleve Marshes, Graveney, 1945 **MNE**. Holborough Marshes. S. of Snodland 1943 **MNE**. Aylesford. Oare Meadow.

3) 16 Swalecliffe, REW.

4) E. of Reculver. N. of Shuart, St Nicholas, 270686, '62. By Stour, N. of Sandwich: Shellness, 1946 **MNE**. Stodmarsh, 1955, EGP 1958. W of Pegwell Bay, 1945 **MNE**. Plucks Gutter, in meadow, 1953 **MNE**. N of Wingham.

12) Road verge, Sevington 036404, 1957, ES.

15) Brenzett W of Ch[urch], 1945 **MNE**. Galloways, 1953. Sandhurst Levels, 1954 **MNE**. NE of New Romney. S. of Appledore **MNE**. South Brooks, 1945. Midrips. Dungeness n[ea]r School, 1953 **MNE**. Marsh behind Greatstone, 1950. S. of Lympne by dike, 1947 **MNE**. NE of Dymchurch, 1947 **MNE**. Fairfield, 1952 **MNE**.

### **J. bufonius** L.

Toad Rush.

15, 16.

51/51

**Native.** Bare, damp ground, such as pond banks, paths, track ruts, often in woods and on heaths on acid soils, but also in fens and marshy meadows: very common, except in the chalk districts, 5) – 9), where it is rare: common in the adjoining counties and in N France

1) Chislehurst Common. Hayes Common. Keston Common, by pond, PCH. Joydens Wood, PCH. Farningham Wood, PCH. Hayes gravel pit, 1915, A.G.D., **MNE**. Beckenham Place, PCH. Ruxley pits, S&S. Repository grounds, Woolwich, LRAG, 1934 **MNE**.

2) Higham Marshes. Holborough Marshes. Grain, 886774, AGS. Oare Meadow, H.M.W. Gravel pits E of Bysing Wood, HMW.

3) Trenley Park Wood REW. Church Wood, Blean (+ var. fasciculatus). Stodmarsh, 1948, LWW. Westbere Marshes, MEM. Ham Fen ... 1996./

5) Pond, Downe village, 1960, FHB.

]

6) The Thrift, Bean, PCH. Mounts Wood. Arable SE of Darenth Wood HMP. On c[lay] w[ith] f[lints] on path, Preston Hill, PCH. 24 Grabble Wood, N of Paddlesworth, 1956, BN.

8) Pond, Gate F[ar]m, Rhodes Minnis, 1955, DACL. Napchester Wood, in clearing, 1957, BN.

10) Darenth Meadows PCH, FR. Bradbourne pits, FSEF. Roadverge 1½ m N of Westerham RAC. Ightham Common. Seal Chart, SW part 1954 **MNE**.

11) Leybourne. Ryarsh Wood. Horish Wood. Sandhurst Wood. Platt. 683493, gravel pits E. of Brandbridges, 1952 **MNE**

12) Hothfield Common. Willesborough Lees. Ashford Warren. Gibbons Brook.

13) Stone Cross Gill, Ashurst, 518381, CAS, '59. Penshurst Park. Moorden, Penshurst. Ride, South Park Woods on T[unbridge] W[ells] S[and], '62. Modest c[o]r[ne]r, Southborough, HNC. Hawkenbury. Pembury Wood. Dingley Wood. Bedgebury. Combwell Wood, 1954 **MNE**. Brewers Wood.

15) Romney Warren, 1945. Greatstone, dune slack, 1950 **MNE**. Denge Beach shingle workings, J. Hubbard.

16) Folkestone golf course, VFPD.

### **J. subnodulosus** Schrank

[Blunt-flowered Rush.]

15, 16

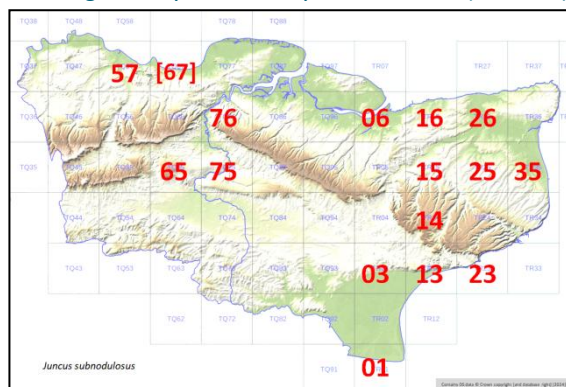
15/52

[16/52]

**Native.** Calcareous fens and fen meadows, usually on peat: rare generally, but locally common in 4) and 16); scattered elsewhere in 2), 11), 12), and 15). Very rare in Surrey, Sussex and Essex; locally common in fens in Pas de Calais.

2) Footscray Meadows, R. Burton. 57 Ditch, Barnes Cray, below Crayford, 1944 **MNE**. 76 Holborough Marshes, Snodland, abundant, 1944, **MNE**. 76 Snodland S. Marshes, one clump, 1943-44 **MNE**. 06 Gravel pits NE of Oare, 1959, **MNE**. [67 Northfleet Brooks, 1862, Maidstone NHS, **MNE**.]

4) 35 Ham Fen, abund[ant] 1946-62-96, **MNE**. 35 Hacklinge Fen. 35 Northbourne Fen. 35 Worth Minnis 1947-60 **MNE**. Wenderton Ditches BN. 25 Fen dikes N. of Wingham 1946-60 **MNE**. 35 Deal Links, in damp



hollows 1946 **MNE**. 35 behind dunes, N. of Sandwich Bay. 26 Stodmarsh! 1964, PWW. 16 Westbere M[arshes]. 15 Fordwich M[arshes].

11) 65 Leybourne Castle Lakes, 1958 **MNE**. 75 Mote Park Lake, Brian Woodham[s], 1964.

12) 14 Calcareous fen-meadow, S. of Stowting, 1954...1986.

15) 01 Old shingle workings NE of Bird observatory, Dungeness, 1953-62 **MNE**.

16) 03 flush, below Copperhurst, Aldington, 1946. 23 Darnley Vale, Cooling, [Folkestone], 1947. 23 Marshy flushes over Gault, The Warren, Folkestone, GPSR; H. Lamb 1899 **MNE**; 1947-58 **MNE**; 1965, BN.

### **J. articulatus** L.

[Jointed Rush.]

15/16.

43/51.

**Native.** Marshy meadows, swamps and fens on neutral to calcareous peat or alluvial soil; rather frequent in most parts of Kent except the dry chalk districts.

1) 57 Joydens Wood, 1954, FR & PCH **MNE**. 46 Keston Common, A.G. Davis, 1915, **MNE**. 46 Holwood Park Lakes, 1949 **MNE**. 47 Cray Meadows, 1955 **MNE**. Ruxley pits, S.&S.

2) 57 Barnes Cray, below Crayford, 1944, **MNE**. 77 Meadow ¾m. S. of Cliffe Station, 1944. 76 Holborough Marshes, 1944 **MNE**. 76 Snodland S. Marshes. 96 Luddenham Marshes, 1961, H.M.W. Sheppey, A.G. Davis 1918 **MNE**. 06 Meadow N. of Oare Mill Pond, 1959 **MNE**. 07 Warden cliffs, in ravine.

3) Gipsy Corner, Clowes Wood, 1953, REW. Church Wood NW of Rough Common REW.

4) 35 Ham Fen, [locally] a[bandant] 1991. 35 Worth Minnis, 1947-60 **MNE**. 16 Westbere Marshes '65 MEM. Sandwich Bay. Wenderton Meadows BN. 26, 225661 Dike Marshside Chislet '62. 26 Stodmarsh, 1955 **MNE**. W. of Birchington, LWW, 1947. Fordwich, JG. Minster Meadows JG.

10) 45. 55 Bradbourne Pits FSEF.

11) Addington Place, DMCC. 65 Leybourne Lakes. 65 Mereworth. 85 1m. S. of Harrietsham 1958 EGP **MNE**. 84 Pond 811454 W of Leighbridge Headcorn '62. 84 Pond E of Hale St. CAS 683493. 66 Ryarsh Wood. 75 Boxley, 1958, EGP, **MNE**. Pluckley Brickworks ES.

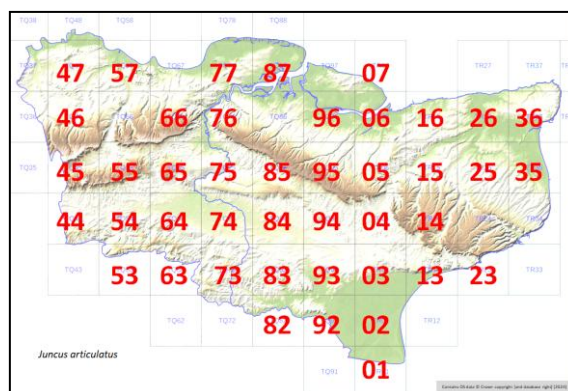
12) 04 Cuckoldscoomb Fen, Brook, 1946-54 **MNE**. 14 Stowting fen-meadows, 1954 **MNE**. 94. 95.

13) 63 Cocksbrook Wood, Lamberhurst, 1942, JRW. 73 Combwell Wood, 1959, **MNE**. Southborough HNC.

14) 93.

15) 01 Dungeness. 82. 92. 02 Romney.

16) 13 The Lince, Etchinghill 1958 **MNE**. 23 Gault, Folkestone Warren, in flushes, BN.



### **J. articulatus x acutiflorus = J. x surreyanus** Druce<sup>937</sup>

#### **J. acutiflorus** Ehr. ex Hoffm.

[Sharp-flowered Rush.]

15, 16

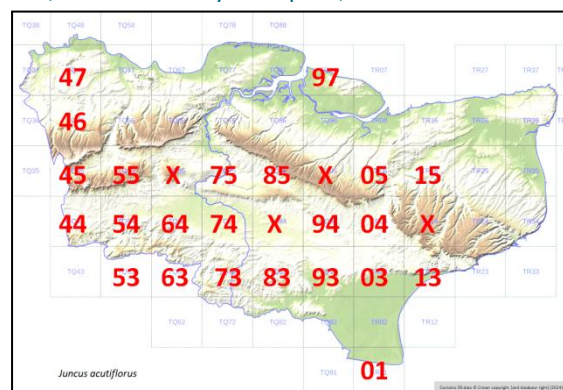
23/51

**Native.** Valley bogs and swamps on heaths or in woodland, on moderately acid peat; rare on the Eocene gravels and sands in 1) and 3), local on the Folkestone Sand heaths of 10), 11), 12), and 16); only common on the Hastings Sands of 13); very rare in 14); and Dungeness in 15). Usually associated with some degree of flushing with base-deficient water. Very common in the acid sandy areas of Surrey and Sussex on Bagshot Sands, Greensand and Wealden Sands; very rare in Essex and Pas de Calais where suitable habitats are few.

1) 46 Keston Bog, PCH, 1945 **MNE**. 56 wet pl[ace]s, Farningham Wood, GMB. 47 Chislehurst Common. Ruxley Pits, S&S.

2) Marsh on landslip on cliffs, E of Minster, 1954, on Bagshot Sands and London Clay.

3) Bigberry Wood, 1954 **MNE**. Church Wood, Harbledown (Rough Common) RGW. 05 Bog in Hunstead Wood, W of Chartham Hatch.



<sup>937</sup> Order of parents reversed and position of entry regularised; no records are given.



10) 55 Ightham Common. 55 Oldbury Hill. 45 Marsh 1m. E. of Westerham 1955 **MNE**. Westerham Wood 82. unknown in 65

11) 85 Sandway bog, Lenham. ~~75 Mote Park.~~

12) 94 Hothfield Common, 1900, H.L. **MNE**: 1943-62! 04 Ashford Warren. 04 Willesborough Lees. 13 Gibbons Brook. 03 Stonehill bog, Sellindge. 93 Ponds S. of Willowbed F[ar]m, Gr[ea]t Chart, 991397, ES.

13) 44 Hever. 54 Penshurst Park. 53 Hawkenbury Bog. 73 Bedgebury Forest (Louisa Lake: Pinetum). 73 Friezley Bog, N. of Cranbrook. 73 Angley Wood. Old Park Wood, PWR. 83 Chittenden Wood. 83 Causton Wood. 83 Rogers Wood. 83 Roundhill Park Wood. 54 Broke Wood, Southborough. 63 Owl House, Lamberhurst, JRW, 1942. 63 Mount Pleasant, Lamberhurst, 1944. 64 Hayes Wood, Pembury. 73 Combwell Wood. 63 Kilndown Wood. 73 Brewers Wood. 83 Sissinghurst Park Wood. Goudhurst Meadow PWR. 64 Boggy Wood SW of Pembury 614395 PCH. 74 Wood NE of Curtisden Green.

14) 93 ——. 83 Knock Heath, Tenterden.

15) 01 Hoppen pits, Denge Beach.

16) 13 Whitenbrooks Wood, Seabrook, 1947 **MNE**.

### **J. bulbosus** L.

Bulbous Rush.

15, 16

21/52

Native. Bog pools, bare wet heathy ground, ruts in woodland rides, nearly always on acid substrata; locally frequent in 1) and 3) on the Eocene, and in 12) on the Folkestone Sand; commoner in the woods on T[unbridge] W[ells] S[and] in 13); very rare in 10), 14, and 15. Common in the heath districts of Surrey and Sussex, rare in Essex and in Pas de Calais.

1) 57 Joydens Wood, PCH. 46 Keston Common, 1915 AGD **MNE**; 1945! **MNE**. 47 Chislehurst Common, 1946: 46, 1961, HMP, 445692. 46 Holwood Park. Roundabouts Wood, Orpington, F.M. Swain, 1960.

3) 05 Bog, Hunstead Wood, Chartham Hatch, 1956 **MNE**. 15 Bog, Bigberry Wood, Harbledown, 1954 **MNE**. 16 W. Blean Wood, in ride, 1953, R.E.W. Church Wood NW of Rough Common REW.

5) Pond, Downe Village, 1960, F.H.B.

10) 55 Ightham Common, 1944. Westerham Wood 82.

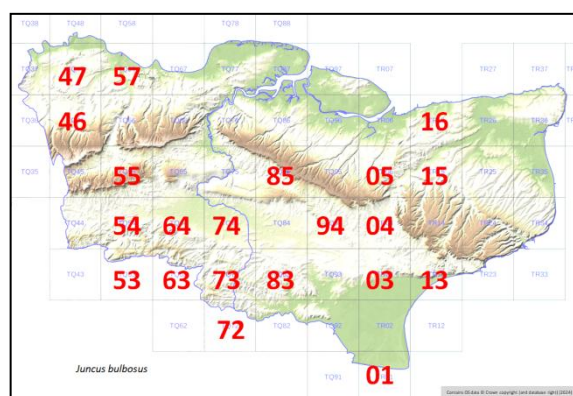
11) Sandway Bog, Lenham, 1965, B. Dodds. [Kings Wood (n[ea]r Langley), 1898, H, Lamb **MNE**]. Pond E of Hale St[reet] 689493 CAS, 1957.

12) 94 Hothfield Common, 1943-62 **MNE**. 04 Willesborough Lees. 13 Gibbons Brook, 1945-54 **MNE**. 03 Stonehill Bog, Sellindge.

13) 54 E of Moorden, N. of Penshurst, 1949 **MNE**. 53 Hawkenbury Bog. 64 Boggy Wood W of Pembury 614395 PCH. 73 Louise Lake, Bedgebury Forest. 73 Marshall Lake, Bedgebury Pinetum. 63 Chingley Wood. 63 Kilndown Wood. 63 Bayham. 73 Combwell Wood. 83 Chittenden Wood. 74 Wood on T[unbridge] W[ells] S[and], NE of Curtisden Green, 1958. 73 Brewers Wood. 73 Angley Wood.

14) 72 Sandhurst.

15) 01 Ballast pit, Dungeness.



### **J. kochii**<sup>938</sup>

1) Keston Common.

11) Oaken Wood, E. Malling, 59, B. Nash.

12) Birchett Wood, 992358, 1952, DMCC.

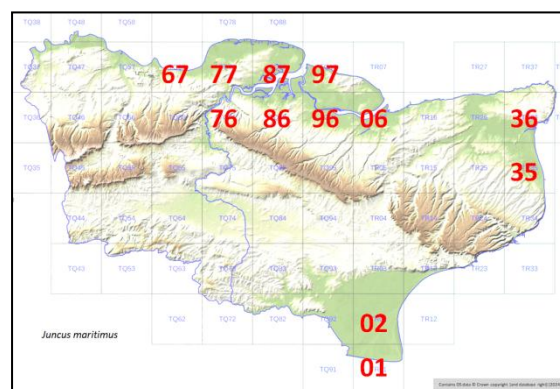
### **J. maritimus** Lam.

Sea Rush.

15, 16.

12/51

Native. Upper parts of tidal salt marshes: common in 2) from below Gravesend to Seasalter and up the Medway to Cuxton; in 4) in the Stour estuary below Sandwich; and in 15) rare, and only at Littlestone and SW of Lydd.



<sup>938</sup> Formerly treated as a separate species, but presumably would not have been maintained as such if Francis Rose had continued his revision of taxa covered by the Flora.

2) Saltings by Thames. Chalk. Shorne. Higham. Higham canal, '44. Grain 862752. S. of Hoo. Stoke. W and E of All Hallows. Cuxton. W of Upnor. [Snodland, 1890, H. Lamb **MNE**.] Upper Saltings, Funton, 1962. Faversham Creek, 1943-49 **MNE**. Graveney. Seasalter. N. of Kings Ferry. Elmley. Harty. Shellness.

4) N. of Sandwich by Stour, from Downs Farm to river mouth. Saline dune slacks S. of Shellness, Sandwich Bay **MNE**.

15) S of Lydd, H. Lamb 1897 **MNE**. Old Rother estuary S of Littlestone. S. of Dymchurch, RGW. South Brooks.

**J. acutus** L. Great Sharp Sea Rush. 15 2/51

Native. Dune slacks, both saline and fresh, and sandy salt-marshes; very rare, but locally abundant from Deal to the estuary of the R. Stour. Not known elsewhere in S.E. England, or in N. France E. of the Cotentin. It occurs very rarely in Norfolk, and is abundant in the dune slacks of N. Devon and Wales. It is an essentially Mediterranean species in Europe.

4) Pegwell Bay (Ebbsfleet), 1946-60. Very abundant at edges of saline dune slacks S. of Shellness, Sandwich Bay **MNE** 1945-62. Is locally dominant behind St. Georges Links, 1945 **MNE**. Behind Princes Links, 1962, slack W. of Princes Club Ho[use], 1963. Hollow behind Guilford Hotel, Sandwich Bay. E side of Stour 2 miles NE of Sandwich 1957 **MNE**. Deal Links.

**J. inflexus** L. Hard Rush. 15,16 51/52

Native. Meadows, alluvial grasslands, pastures and marshes on moist or heavy base-rich soils or on alluvial peat: very common and often abundant, except in the chalk districts 5) – 9). Particularly abundant in the marsh districts 2), 4), and 15), and on the Weald and Gault Clays in 10), 110, and 12); its local abundance in grasslands indicates poor drainage. Abundant throughout S.E. England and N. France.

1) R[oa]d cutting in clay, W. Wickham, 1955, J.M. Sherwood. Gattons Plantation, PCH. Shooters Hill, GMB. Ruxley Pits, S&S.

2) 857669, L[owe]r Halstow by str[eam], '62. Grain, PCH.

3) Luddenham Marshes, 61, HM Wilks.

4) Hacklinge. Ham. Wingham. Pegwell. Minster, waste g[roun]d, 1963. Westbere Marshes, MEM.

6) Darenth Wood, PCH. Swanscombe Park.

8) 24 Woolwich Wood, KDR. 34 Pond, E. Langdon, 1959, BN.

10) Knole Park, PCH. Above S. Darenth, PCH. St Johns Jerusalem, PCH. Darenth Meadows, PCH. Lullingstone PCH. Bradbourne pits FSEF.

11) Addington Place, DMCC. Claypit, Trottisciffe SW, HAS. Platt Brickfields, DMCC. Fairbourne Mill, Harrietsham BD. 683493, E of Hale St, 57, CAS. R[oa]dsides Leighbridge, Headcorn, 813454, '62. Green Lane E of Headcorn, 849437, '62. Pond ¼m SE of Smarden, '62. Lane E of Golden Sq[ua]re, Smarden, '62. Path 915405, Birch Wood, Bethersden, '62. Kiln Wood, Lenham (Sandgate), '62. Pluckley Brickworks .ES.

12) Cuckoldscoomb, Brook. Stowting.

13) By str[eam], High Rocks L[a]n[e], Tun[bridge] Wells, 1960, CAS. Ditch S. of Lamberhurst Church, 684365, 1960, CAS. Southborough, Pentecosts field & Vauxhall Lane, HWC.

16) below Lympne Castle: Aldington. Base of Hythe W. Scars. East Wear Bay, Folkestone Warren, & to E., on Gault v[ery] a[bundant]. Darnley Vale. Newington Moor. The Lince, Etchinghill. Asholt Wood. Beachborough.

**J. inflexus x effusus**<sup>939</sup> = **J. diffusus** Hoppe

11) Leybourne, 1962, Mrs. R. Begg.

13) Ashour Wood, CAS. By stream, High Rocks La[n]e, T[unbridge] Wells, CAS, 1962.

**J. effusus** L. Soft Rush. 15, 16 50/51

Native. Very common and abundant in damp grasslands, marshes, and open places in woods on a wide range of soils from weakly acid to calcareous and brackish types; rare only on the chalk in 5) – 9). Abundant throughout S.E. England and N. France.

1) Beckenham Place, PCH. Hayes Common, PCH. Abbey Wood, PCH. Crofton Heath: High Wood, Crofton, PCH. Joydens Wood, PCH. Mount Mascall, Bexley, PCH. North Cray Wood, PCH. Gattons Plantation, PCH. Farningham Wood, PCH. Ruxley pits, S&S. Keston Common.

2) 857669, L[owe]r Halstow Fen, '62. Holborough Marshes. Snodland S. Marshes. Luddenham Marshes, HMW. Oare Meadow.

3) R[oa]dsides Pond SE of Blean, CAS.

<sup>939</sup> Order of parents reversed, and sequence of entry regularised.

- 4) Wenderton, meadows BN. Westbere Marshes, MEM. N. of Sandwich Bay.  
 5) Andrews Wood, PCH. 396611, PCH.  
 6) Swanscombe Wood, **MNE**, 1945. On c[lay]w[ith]f[lints], Preston Hill, PCH.  
 8) Park Hill, Hougham, on c[lay]w[ith]f[lints], DPY, '55. Reinden Wood BN. Unrecorded in 34 from Dover to Kingsdown.  
 10) Westerham Wood PCH. Meadow n[ea]r Darent W of Brasted GMB. Knole Park PCH. Bradbourne pits FSEF.  
 11) Fairbourne Mill BD. E. of Hale Street 683493, CAS. Ditch E of Headcorn 849137, '62. Pond, Leighbridge Headcorn 813454, 62. Pond ¼m SE of Smarden, 62. Lane E of Golden Square, Smarden '62. Pluckley brickworks ES.  
 12) Hothfield Common. Warren Woods. Willesborough Lees. Mersham le Hatch.  
 13) Path, S. Park, Penshurst, '62. Stone Cross gill, Ashurst, 518381, 1960, CAS. Southborough HNC. Stream, High Rocks La[ne], T[unbridge] Wells, 1960, CAS. Boggy Wood W. of Pembury (T[unbridge]W[ells] S[and]) 614395, PCH. Ditch S of Lamberhurst Ch[urch], 684365, 1960, CAS. Bayham.  
 14) College Wood Wittersham 897265, '62. Rook Wood, Wittersham, '62.  
 16) Seabrook Whitenbrooks Wood, 1947 **MNE**. Copt P[oin]t, Folkestone Golf Course. Asholt Wood. Park Farm, below Shornecliffe, VFPD.

### **J. conglomeratus** L.

Compact Rush.

15, 16

44/51

Native. Damp grassland, marshes, rides and clearings in woods: not quite as abundant as *J. effusus*; though very well distributed; it is rare in 2) and the NE part of 4), rather more common on acid soils. Most easily distinguished from compact-headed forms of *effusus* by the stem, which has fewer and stronger ridges and feels fluted when rolled between finger and thumb (*effusus* feels smooth). Common throughout S.E. England and N. France.

- 1) Crofton Heath, PCH. Joydens Wood, PCH. Gattons Plant[atio]n, PCH. Farningham Wood, PCH. Chislehurst Common 1945 **MNE**. Shooters Hill GMB.

2)

(not rec[orde]d for 87, 97, 07, 96)

- 3) Marsh, Old Park, E of Canterbury 1947 **MNE**.

- 4) W of Minnis Bay, M.E.M. Westbere Marshes, MEM.

Not rec[orde]d for 26, 36

- 5) Andrews Wood S. of Badgers Mount PCH.

- 8) Eastling Woods, BN. Reinden Wood, 1959, BN.

- 11) King's Wood, Harrietsham, B.D. Kiln Wood, Lenham (Sandgate), '62. Pluckley brickworks, ES.

- 12) Hothfield Heath, 1947 **MNE**. Field SW of Sellindge Ch[urch] RAC.

- 13) By Stream, High Rocks La[ne], T[unbridge] Wells, CAS. Boggy Wood W. of Pembury 614395, PCH. Ditch S. of Church, Lamberhurst, 684365, 1960, CAS. Stone Cross gill, Ashurst, 518381, 1959, CAS. Tongs Wood Lamberhurst JRW. Bayham CAS. Chittenden Wood, 1946, **MNE**.

- 14) College Wood, Wittersham 897265, '62. Moor Wood, Benenden (T[unbridge]W[ells]S[and]), '62.

- 15) Bird obs[ervatory] area, Denge Beach J. Hubbard.

- 16) Copt Point, V.F.P.D.

(not rec[orde]d for 13)

### **Luzula** DC.

**L. forsteri** (Sm.) DC

Narrow-leaved Woodrush.

15, 16

34/52

Native. Dry woodlands, particularly of beech and oak, especially on banks, mainly on chalk, sand or gravel; rather common to locally very common over most well-wooded parts of the county, but rare in 12), unrecorded in the marsh districts of 2), 4), and 15), and absent from the heavy clay soils; common over much of Surrey and Sussex; the Weald and the North Downs seem to be the headquarters of this species in Britain. Very rare in Essex, unknown in Pas de Calais, or NE of Normandy in France.

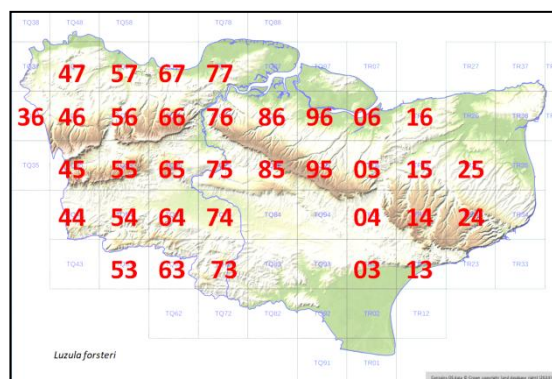
- 1) Holwood Park. Elmstead Lane, N of Bickley, 1944.

- Petts Wood. Hayes Common. Joydens Wood PCH: 1946.

- Poke Ridden and Sparrows Woods, Swain. Farningham

- Wood PCH. Keston Common 1940 **MNE**. Abbey Wood, 1862 **MNE**: 1944! R[oad]side S. of Chislehurst Station, 1944. R[oad]side W. of St Mary Cray, 1944. Hockendell Wood E. of St Mary Cray 1954 **MNE**. Hollows Wood, SE of Chelsfield, 1945.

- 2) Hawes Wood, Newington (Thanet S[and]) 1957 **MNE**.



- 3) Bysing Wood. Church Wood, SE part RGW. Thornden Wood, gravel drift 1945 **MNE**. Wood NW of Dunkirk 1945 **MNE** 1965. Dengrove Wood, 1955 **MNE** (Thanet S[and]). Wood E of Rhode Common ES. Trenley Park.
- 5) Darwins Bank Wood Downe, JEL. Wood W. of Shoreham PCH. 396611 Copse Highams Hill PCH. Beech Wood, Pratts Bottom, 1956 (ch[al]k).
- 6) Swanscombe Wood PCH. Mounts Wood. Whitehill, Shoreham. Horton Wood edge PCH. Darenth Wood, N side 581730, 1947 **MNE**. Lords Wood, Darenth. Shorne Hill HAS. North Wood, Cuxton 44 **MNE**. S edge Great Wood Cuxton 44 **MNE**. Cockham Wood Upnor (Than[et] S[and]) 1960 **MNE**. Chilton Hills Higham (Than[et] S[and]) 1956 **MNE**. Great Crabbles Wood, Shorne. Wood SW of Shorne, on Blackheath Beds. Court Wood, Higham. Hartley Wood 1956 **MNE**. Upper Halling Hangers 1953 **MNE**.
- 7) Potters Wood, Queen Down Warren. Wigmore. Bredhurst Hurst. Squirrels Wood Stockbury, drift, 1944 **MNE**. Coxett Wood (Thanet S[and]), '45, 62 **MNE**. Rainham Park. Filmer Wood (sandy loam) '62. Wood by Bottom Road Milsted (ch[al]k) 1956 **MNE**. Wood 1½m SW of Doddington, 1950 **MNE**. Kingsdown.
- 8) 04 E of Wye, RGW. Covrt Wood, W of S Barham KDR. Woolwich Wood KDR. 14 Up[pe]r Hardres Wood (loam) '62. 25 Pitt Wood Adisham (ch[al]k), 1955 **MNE**, 1966. 14 Wood N. of Elham Park Wood (ch[al]k) 1958 **MNE**. Whitehill Wood, E. Robinson: 1958 BN. Absent in the east of 8).
- 9) Unknown.
- 10) Westerham Wood PCH (gault). Goathurst Common. Fawke Common (chert). Bitchet Common (chert). Lane SW of Ightham (F[olkestone] S[and]) 1949. Broadhoath Wood, Stonestreet (chert drift) '50 **MNE**. Scords Wood (ragstone) 1954 **MNE**. Quinten Wood, S of Toys Hill (ragstone) 1960 **MNE**. Ide Hill. Whitley Forest.
- 11) Ryarsh Wood (F[olkestone] S[and]) SE corner. Ryarsh Roughetts. Mereworth Woods (ch[er]t). Comp Woods (chert). Oaken Wood (chert). E. Malling: and Barming. Warren Wood, E. Malling (chert). Snarkhurst Wood. Holt Wood, CW, FR (FS). Platt. Wrotham Heath. Maidstone (Simpsons Lane) **MNE** 1850: 1890.
- 12) Rare. 03?
- 13) Stone Cross Gill, Ashurst, 523 388, 1960, CAS. R[oa]dbanks S. of Horsmonden. Shadwell Wood, Speldhurst, GB Shaw. Parsonage Lane, Lamberhurst, JRW, 1944! **MNE**. Ellis Wood, Lamberhurst. Rocks, Langton Green, 1944 **MNE**. Greybury Gill, 1954. (Dry Hill CES 1898 **MNE**.) Halls Hole Lane 1961 CAS. Lane E. of Bayham JRW. Chiddingstone Hoath CAS. SW of Penshurst, CAS. Old Pembury Ch[urch] 1961 CAS. Southborough W. Ashour Wood. Scotney Castle PCH.
- 14) Mopesden Gill, Hawkhurst (T[unbridge] W[ells] S[and]) 1952.
- 16) Bargrove Wood / Asholt Wood VFPD.

13 Hythe

**L. forsteri x pilosa = L. x borrieri** Bromf. ex Bab.

Native. This hybrid can usually be detected where the parents occur together – and nearly always where *L. forsteri* occurs, *L. pilosa* is nearby or intermixed.

- 1) Abbey Wood, RAB. Farningham Wood, PCH. Joydens Wood '46 **MNE**. Hollows Wood, Chelsfield 1945.
- 3) Thornden Wood 1945.
- 5) Beech Woods, Pratts Bottom, Chelsfield, 1956 **MNE**.
- 6) Darenth Wood, ESM.
- 7) Squirrels Wood, Stockbury 44 **MNE**. Church Wood, Stockbury, PCH. Kingsdown, Fl K. (Thanet S[and]) Coxett Wood, 1945: 1962 **MNE**.
- 10) Bitchet Common. Lane SW of Ightham 1949 **MNE**.
- 11) Holt Wood, Aylesford, C. West. Oaken Wood. Warren Wood. Barming Woods 1961, EGP, **MNE**. Ryarsh Wood.
- 13) Stone Cross Gill, Ashurst 523388, 1960, CAS. Parsonage Lane / Ellis Wood, Lamberhurst 1944. Lane E of Bayham, 1942, JRW. Chiddingstone, CAS. Penshurst, CAS. Halls Hole Lane 1961, CAS. 14) Mopesden Gill, Hawkhurst 1952 **MNE**.

**L. pilosa** (L.) Willd.

Hairy Woodrush.

15, 16.

44/51

Native. Dry woods and shaded hedgebanks, more abundant on lighter soils: very common in all wooded areas of Kent, but absent from the marshland areas and from Sheppey in 2), and wholly from 4) and 15): rare on the Weald Clay in 11) from Tonbridge to Smarden. Common in the adjacent counties and in N. France.

- 1) Shooters Hill Woods GMB. Abbey Wood, 1862 M.N.H.S. **MNE**; PCH, 1954; RAB. Crofton Heath PCH. Hockendell Wood, St Mary Cray, 1954 **MNE**. Hollows Wood, Chelsfield. Joydens Wood PCH. Farningham Wood, PCH. West Wickham Woods AGD, 1915 **MNE**. Joydens Wood, GAM.

- 2) Hawes Wood

[not in 87, 97, 07]

- 3) Thornden Wood. Trenley Park Wood. Church Wood SE, RGW. Bysing Wood. Perry Wood.

- 4) Copse, Wenderton Manor, Wingham, BM.

[not in 26, 36]



5) Well Wood, 3964, PCH. Darwins Bank Wood, Downe JEL.

6) E) Darenth Wood PCH. Swanscombe Wood, Holly Hill 668629, Blackheath Beds, '62. Horton Wood PCH. Preston Hill, on c[lay] w[ith] f[lints], PCH. Dunstall Woods, Shoreham, PCH. On loam, Hartley Wood, 1956 **MNE**.

7) Squirrels Wood, Stockbury, 1944 **MNE**. Coxett Wood (Thanet S.), '62. Longbeech Wood (975505, Pliocene loam), 62. Challock Woods (+ var. *alba*) 1957, ES.

8) Larkey Valley Wood. Up[pe]r Hardres Wood (Pliocene) 62. Reinden Wood (Pliocene) 62. Wood on c[lay] w[ith] f[lints] S. of Chilton 1949 **MNE**. Wood, Wooton, 1950 **MNE**.

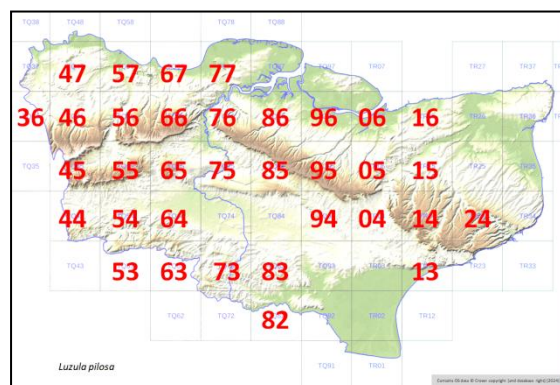
10) Westerham Wood PCH. Ide Hill. Scords Wood, Brasted (oak copp[ice] on chert) 1954 **MNE**. R[oa]dside Wood S of Brasted 1954 **MNE**. Parsons Marsh HMP. Fawke Common. Bitchet Common. Seal Chart, 1952 **MNE**. Goathurst Common & to S[outh].

11) Ryarsh Wood 1943 GL **MNE**. Longham Wood 1944 **MNE**. Platt Woods. Wrotham Heath. Warren Wood E. Malling. Oaken Wood. E. Malling – Barming 1950 **MNE**. Mereworth Woods. Comp Woods.

13) Stone Cross Gill, Ashurst, 523388, CAS, 1960. High Wood, Hawkenbury. Parsonage Lane, Lamberhurst, JRW, 1938: 1944 **MNE**. Hungershall Rocks Wood 1947 **MNE**. Halls Hole Lane CAS. Chiddingstone CAS. Penshurst CAS. Old Park Wood. Pembury L[owe]r Green, M. Mallinson.

14) Robins Wood. College Wood Wittersham 897265, 62. Moor Wood, Benenden, '62 (T[unbridge] W[ells] S[and]). Bottoms, Appledore, 1908 J. Ridley **MNE**.

16) Willow Wood, Saltwood / Kiln Wood, Sandling, LJM. Bargrave Wood / Asholt Wood, JFPD. **Not in 01, 02.**



**L. sylvatica** (Huds.) Gaudin

[Great Wood-rush.]

15, 16

25/52

Native. Dry woodlands, mostly of sessile oak or beech associations, on sandy or gravelly soils, but usually in sheltered humid situations: widespread in wooded areas, but rather local with absences over certain parts; frequent generally on the Eocene of 1), 3) and 6E), occasional and local on drifts over the chalk in 5), 6), 7) and 8). Common to abundant on the Lower Greensand of 10) and 11), scattered on the Hastings Sands of 13) and 14). Frequent in the High Weald and Greensand areas of Surrey and Sussex, rare and very local in Essex, very local in Pas de Calais and confined to the Wealden of the Boulonnais.

1) 57 Joydens Wood, 1946 **MNE**. 56 Farningham Wood! PCH.

3) 06 Blean Wood, Hernhill. 05 Denstead Wood, Chartham 1950 **MNE**. 05 Gill in S. Bishopsden Wood 1960 **MNE**. Church Wood, SE part, RGW 1965. 05 Perry Wood. 16 Thornden Wood 1947. 15 Bigbery Wood 1954. Clowes Wood, 1965.

5) 45 Wood 455594 S. of Cacketts Farm, Cudham, 1957 FR, 1961 F.M. Swain. New Years Wood, Cudham, 1961, 1962, F.M. Swain. 45 Wood N. of Cudham Grange, 1961, M. Swain.

6E) 57 Darenth Wood, 1947, PCH **MNE**. 67 Swanscombe Wood. 57 The Thrift. 66 Red Wood, Luddesdown, 1946, **MNE** on loam over chalk. 66 Cobham Great Wood. 67 Randell Wood, Shorne. 66 Holly Hill, J.B. Marshall.

7) 86 Bredhurst Hurst. 86 Squirrels Wood, Stockbury, 1944. [Syndale Park: Rodmersham: Milstead, FI K] Lords Wood.

8) Whitehill Wood, on sandy drift, 1966. W. side Covet Wood DACL. Garden Wood, Acrise, on loam, DACL. 14 West Wood, Stowting (Pliocene) 1959 **MNE**. 14 Upper Hardres Wood (Pliocene) 62. Woolwich Wood KDR,. 24 Lords Wood, Temple Ewell. Reinden Wood, BN 1959. 24 Wood S of Wootton, 235465, 1950 **MNE**. 24 Wood S. side Coombe Vale, Dove, JGD, 1955 **MNE**.

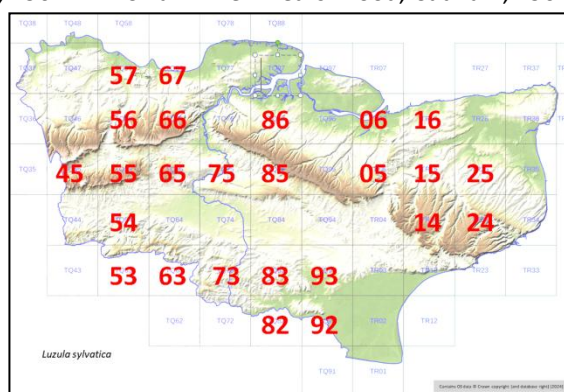
10) 45 Crockham Hill. 45. Ide Hill. 45 Goathurst Common S&S, RAC. 55 Everlands, 508518, RAC. 55 Bayleys Hill.

(g[reen]s[an]d), 45, 55

11) 65 Comp Woods. 65 Mereworth Woods. 75 Oaken Wood, Barming 1900 HL; 1945 **MNE**. 75 Oaken Wood, Ditton, 1946 **MNE**. 85 Kings Wood, Langley.

(g[reen]s[an]d), 65, 75, 85

12) unrecorded.





13) Stonewall Park, Chiddingstone. 54 South Park, Penshurst. 53 Hungershall Rocks 1947: '60 **MNE**. 63 Winbridge Lamberhurst 1944 **MNE**. Fishers Castle Rocks. 73 Old Park Wood. 63 Kilndown Wood. By drive, Tun[bridge] Wells 595400 CAS.

**14)** 93 Finchbourne Wood. 93 Gill S. of Pigeon Hoo, Tenterden, 1962. 82 Gill N. of Wittersham. 92 Gill Wood, Owley, Wittersham 1954 **MNE**.

**[16)** Aldington Common, FGEK.]

‡**L. luzuloides** (Lam.) Dandy & Wilmott [White Wood-rush.] 15

Alien; status uncertain.

**11)** Maidstone, 1890 H. Lamb **MNE**.

**L. campestris** (L.) DC. [Field Wood-rush.] 15, 16. 50/51

Native. Dry grassland, dunes and open places on heaths and in woods; very common throughout most of Kent but unrecorded recently for Thanet 9). Common in all adjacent counties and N. France.

**1)** R[oa]dside, Bickley. Hayes Common, 1945 **MNE**. Keston Common, PCH. Shooters Hill, GMB. Repository grounds, Woolwich, LRAG 1934 **MNE**. Ruxley pits, S&S.

**2)** Dartford Heath 516728, 1961, HMR.

**3)** 123660 track Chelsfield HMW.

**4)** Sandwich Bay.

**5)** Leaves Green. Rushmore Hill, PCH. Pilots Wood, PCH.

**6)E** Darenth Wood, PCH. Lords Wood, Darenth, PCH. Holly Hill top, 668628, '62. Scalers Hill, Cobham, on Thanet S[and], HAS.

Downs E of Shoreham PCH. Down SE of Meopham 1956 **MNE**. Great Wood, Cuxton, 1944 **MNE**.

**8)** SW of Lydden on downs DPY 53. Grass heath on Pliocene, Stelling Minnis, '62.

**10)** Knole Park.

**11)** Ryarsh Wood. Wrotham Heath. Ryarsh Roughetts. Comp Woods. Mereworth Woods. Clare Park, E. Malling.

**12)** Hothfield Common. Ashford Warren.

**13)** Stone Cross, Ashurst, 518381, CAS, 1960. Scotney, PCH. Southborough HNC.

**14)** [Tenterden, J. Ridley 1908 **MNE**.] Woodchurch, ES.

**15)** Romney Warren, fixed dune by R[oa]d, '62. NE of Littlestone ES.

**L. multiflora** (Erh.) Lej.<sup>940</sup> Heath Wood rush. 15, 16 36/51

Native. Dry open woods and heaths, usually on acid sandy or peaty soils; also in fens: widespread and locally common in such habitats. Common in Surrey and Sussex, more local in Essex and Pas de Calais. The two varieties of this species, var. *congesta* (DC.) Lej. and var. *multiflora*, have been recognised as species (see J. Buchanan, 1960, *Proc. Linn. Soc.* 171, pp126-128), but I have followed Dandy in regarding them as varieties. Their distribution, as far as it is known, is given below that of the aggregate.

**1)** 46 Keston Common, 1946 **MNE**. 57 Joydens Wood, PCH. 47 Abbey Wood, 1862 **MNE**. 36 W. Wickham Woods 1916 A.G.D. **MNE**. 47 Chislehurst Common 1954 **MNE**. 46 Holwood Park, 1954 **MNE**. 56 Farningham Wood. Sparrow Wood / Roundabout Wood, C.A. & F. Swain. 46 Hollows Wood, W. of Shoreham, 1945.

**3)** 16 Thornden Wood, 1945 **MNE**. 05 Hunstead Wood, Chartham Hatch, 1956 **MNE**. Bigberry Wood, 1954.

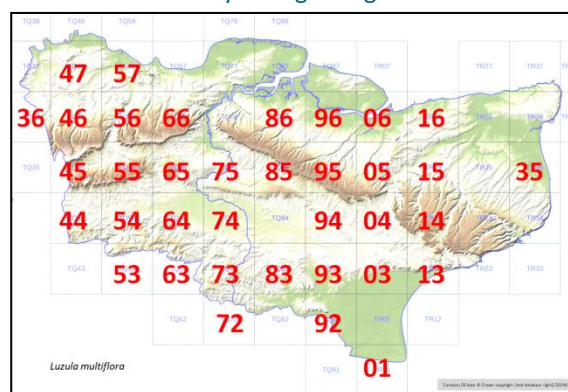
**4)** 35 Hacklinge Fen, 1946. Ham Fen.

**6)** 66 Darenth Wood.

**7)** 96 Coxett Wood, Thanet Sand. '62. 86 Danaway Heath, 1957. Rodmersham Wood, Fl K.

**8)** 14 West Wood, Stowting, **MNE**, 1956. Atchester Wood, B.N.

**10)** 45 Toys Hill, HMP. 55 Oldbury Hill. Whitley Forest RAC. Westerham Wood 1962.



<sup>940</sup> In the manuscript cited as (Retz.) Lejeune

- 11) 66 Ryarsh Wood. 65 Wrotham Heath 1950 **MNE** 1956. 75 Penenden Heath 1944 **MNE**. 85 Sandway Bog Lenham **1955 MNE**. 75 Maidstone (Sandling Wood) 1957 EGP **MNE**. Hoads Wood, 1946. 915405 Birch Wood Bethersden '62.
- 12) 94 Hothfield Common, 1903, HL **MNE** →1953! **MNE**. 13 Gibbons Brook 1954 **MNE**. 04 Ashford Warren. Willesborough Lees. Mersham Hatch Park. 03 Ham Street Woods. Field SW of Sellindge Ch[urch] RAC.
- 13) 44 R[oa]dside bank above str[eam], Greybury, Edenbr[idge], 438425, PCH '58. 54 Moorden, N. of Penshurst, 1944 **MNE**. 53 Stone Cross Gill, Ashurst, 518381, 1960, CAS. 54 Ashour Wood, Bidborough. 63 Tongs Wood, Lamberhurst. 63 Ellis Wood, Lamberhurst. 73 Combwell Wood. 83 Chittenden Wood. 73 Angley Wood 1955 **MNE**. 64 Pembury Woods. 74 Wood on T[unbridge] W[ells] S[and] NE of Curtisden Green 1958. 63 Timberlog Wood, JRW. 63 S. of Lindridge, JRW. 73 Bedgebury Woods, JRW. 73 Bedgebury pinetum 1954 T Tynan **MNE**.
- 14) 83 Knock Wood, Tenterden (Ash[down]. S[ands]) '62. Nr Penhill, 1947.
- 15) Fen SE of Hamilton F[ar]m, Denge Beach, 1954 **MNE**.

var. **multiflora** (**L. multiflora** (Retz) Lejeune s.s.)

Buchanan (see above) found  $2n=36$  consistently in material which she regarded as this taxon from Glen Lyon, Perthshire.

- 1) Abbey Wood, H.L., 1862 **MNE**. West Wickham Woods AG Davis 1916 **MNE**. Chislehurst Common, 1945 **MNE**.
- 3) Hunstead Wood, Chartham Hatch, 1956 **MNE**. Church Wood, SE part, RGW.
- 4) Ham Ponds, 1957, B.N.
- 8) The Roughs, Stowting, on sandy soil, 1956 **MNE**. Atchester Wood, BN. Whitehill Wood, L[owe]r Hardres, 1966.
- 10) Ightham, 1899, H.L. **MNE**.
- 11) Simpsons copse, Maidstone, 1850, **MNE**. Penenden Heath, 1944 **MNE**. Wrotham Heath, 1950 **MNE**. Sandway Bog, Lenham, 1965, B. Dodds.
- 12) Hothfield Common, 1943, **MNE**.
- 13) Bog W. of Moorden, Penshurst, 1944 **MNE**. Angley Wood, 1955 **MNE**.
- 14) Church Wood, Wittersham 1964.
- 15) Hoppen Pits, Denge Beach, 1954 **MNE**.

var. **congesta** (DC.) Lej. (**L. congesta** (Thuill.) Lej.)

Plants of this taxon cultivated from Glen Lyon, Perthshire were found to have consistently  $2n=48$  by Buchanan (see above), and she considers that on cytological grounds, as well as from biometrical morphological studies, this variety should be regarded as a good species. She measured morphological characteristics from over 1000 plants of the *campestris-multiflora* complex.

- 1) Keston Common, 1945, 1946 **MNE**. Holwood Park, 1954 **MNE**.
- 3) Thornden Wood, 1945 **MNE**.
- 7) Sandy loam of valley floor, Filmer Wood, 1962.
- 8) Whitehill Wood, L[owe]r Hardres, 1966, on sand.
- 11) Maidstone, 1890-, H.L. **MNE**. By Sandway Bog, Lenham, 1955, **MNE**.
- 12) Hothfield Common, 1903, H.L. **MNE**; 1953 **MNE**. Willesborough Lees. Gibbons Brook, 1954 **MNE**.
- 13) Tongs Wood, Lamberhurst. Timberley Wood, Lamberhurst, JRW, '41. Bedgebury Woods, JRW '41, 1954! **MNE**. Hawkenbury Bog CAS.

## CYPERACEAE

### *Eriophorum* L.

**E. angustifolium** Honck. Common Cotton Grass. 15, 16 9/52

Native. Fens, valley bogs and wet heaths in acid (pH3-5) to calcareous (pH7.5) waters; also in artificial ponds and ditches; rare and scattered (only eleven localities), but plentiful at Hothfield, Gibbons Brook, Dungeness and Keston. Probably once common on the L[owe]r Greensand bogs. Still locally common and abundant in W. Surrey and in Sussex (High Weald, and Greensand heaths in the west); rare in Essex and Pas de Calais where suitable habitats are few.

- 1) 46 Keston Bog 1916, AGD **MNE**; 1944-62! **MNE**.

4) Ham Ponds, 1898, C.S. Nicholson Hb **LNHS**. Rare by Fen Ditch, E of Hacklinge, 1954: **MNE**. 26 E end of Stodmarsh, 1949, L.W.W.5

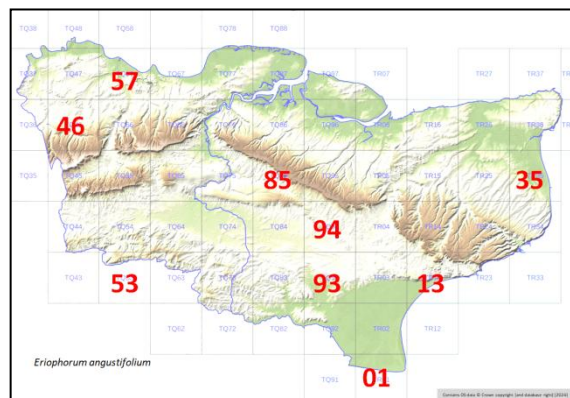
6E) 57 Old mineral R[ai][wa] cutting, Swanscombe Wood, 1946-47 **MNE**, H.M.P. c.1960.

11) 85 Sandway bog, Lenham, 1965, B. Dodds.

12) 94 Hothfield Common, 1903, H. Lamb **MNE**; 1943-62! **MNE**; 1980 FR. [Mersham, 1907, D. Smith **MNE**; not there now.] 93 Pond, Birchett Wood, E.S., 1950. 13 Gibbons Brook, GW: 1945-54, **MNE**.

13) 53 (vc 14) Hawkenbury Bog, J.R.W.; 1944-46!; C.A.S.; 1980 EP.

15) 01 Hoppen Pits, Denge Beach, 1945-62 **MNE**. 01 Shingle pit, Marsh E. of school, Dungeness, 1962.



[**E. latifolium** Hoppe

[Broad-leaved Cotton-sedge]

[15]

Calcareous marshes and open fens: now extinct.

12) Boggy meadow, Herringe, G.E. Smith, F.G.E.K.. Herringe, E. Kent, G.E. Smith, Ex Herb. Mrs Robinson Dec. 1847 **BM** (sp[ecimen] correct, teste P.C.H.). [Willesborough Lees, W.R. Jeffrey, doubtfully correct, the habitat is not very likely.]

Not in any adjoining county. The Surrey record at Cernes, Lingfield is an error for *angustifolium*; it occurs, however, rarely, in Hants and Norfolk and Pas de Calais.]

[**E. vaginatum** L.

[Hare's-tail Cotton-sedge.]

[15 error], [16]

Extinct native: formerly in 13) Bog at Fishers Castle Tunbridge Wells W.W.R. in Fl. T.W; extinct by 1884, W.W.R..

Tunbridge Wells (W.W.R., **TLS**), probably from Fishers Castle, the bog is now merely a marshy field.

The Thanet records are undoubtedly errors (see Fl.K.). still locally frequent on wet heaths in W. Sussex and W. Surrey. Not recorded from Essex or Pas de Calais.]

**Trichophorum** Pers.

**T. cespitosum** (L.) Hartm. ssp. **germanicum** (Palla) Hegi

[Deer-Sedge.]

[15], 16

1/51

Native. On wet-heath; extremely rare and probably extinct; confined now to the edge of the bog, Keston Common and last seen in 1962!, where only two plants still remained, not seen 1969; still common on the wet heaths of Ashdown Forest, rare elsewhere in E. Sussex; locally common on the wet heaths on Greensand and Bagshot Sand in West Surrey and in W. Sussex. Extinct in Essex and Middlesex: still at one locality (wet-heath at St Josse, 1962!) in Pas de Calais.

1) Wet-heath by Keston bog, Keston Common, 1916 A.G.D. **MNE**; E. de C.; 1946-62! **MNE**; 7 clumps 1946; 2 in 1962; not seen in 1969.

[12) Willesborough Lees, CPSK; extinct

13) about Tunbridge Wells, Forster Fl. Tonbr.: extinct now on the Kent side; but it probably occurred formerly.]

(The records at 2) Frindsbury, FGEK; 3) Hernhill, Stowell; 4) Thanet, Dr. Hunter; and Sandwich E.S.M. are certainly errors for another species. The Sandwich record of Marshall probably relates to *E[leocharis] quinqueflora*: these two have been confused in the past by excellent botanists.)

**Eleocharis** R. Br.

**E. palustris** (L.) Roem. & Schult.

[Common Spike-rush.]

15, 16 [29]/51

ssp. **palustris**

Native. Ponds, ditches and swamps, usually on inorganic mud or silt, in weakly acid to calcareous water. Very common in all suitable habitats throughout the county, but unrecorded from the chalk districts 5) – 9). Common in Surrey, Sussex, Essex, and Pas de Calais.

1) 37 Beckenham Place, pond, PCH. V 47 SW pond, Chislehurst Common, 1945 **MNE**. Ravensbourne, Bromley, AG Davis, 1919 **MNE**. Ruxley pits! S&S.

2) 47 Erith Marshes, PCH. 87 Dike, All Hallows, AGS. 96 Conyer, KDR. 95 Luddenham Marshes. 67 Northfleet. 57 Swanscombe. 67 Chalk. 77 Higham. 77 Cliffe. 76 Upnor. 76 Cuxton. 76 Halling. 76 Holborough Marshes. 76 S. of Snodland. 75 Aylesford. 06 Faversham Creek, Miss V. Day, 1957 **MNE** and ES.

4) Dike, 225661, Marshside, Chislet, '62. Wenderton Meadows, BN. Dike, 271692, N. of Shuart, St Nicholas, '62. Stodmarsh, REW. 36 Minster Marshes, 1964.

10) Pond, Wilderness Park, Seal.

11) Leybourne. R[iver] Len, Bearsted, EGP, 1958 **MNE**. Yalding, H. Lamb 1897 **MNE**. 54 Tonbridge. 64 Pond S of Hale Street CAS. 84 Pond ¼m SE of Marden, 62, 879417.

12) 94 Hothfield, H. Lamb, 1903 **MNE**. 14 Stowting Marsh, 1954 **MNE**. 94 WestWell pond by W[ater] W[orks], ES. 93 Scotts Pond 986395 ES. 03 S. of Water F[ar]m, Sellindge (W. of) 082387, RAC.

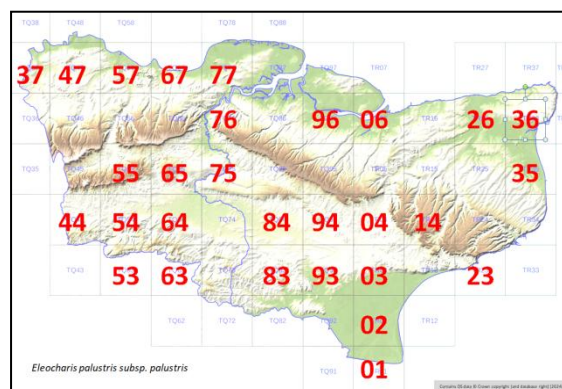
13) 44 Hever, marsh S. of Church, 1953 **MNE**. 54 Moorden, Penshurst. 53 Brighton Lake, Tunbridge Wells Common, 1960, CAS. 83 R[oa]dside pond E of Cranbrook DS. 63 Court Lodge pond, Lamberhurst, 1941, JRW. 53 Dunorlan Lake T[unbridge] W[ells], CAS.

14) 73 Pond S. of Cranbrook (Hartley).

15) 02 Brenzett. 01 Hoppen Pits, Dungeness 1959 **MNE**.

93 Shirley Moat Pond ES. 93 Kenardington, R[oyal] M[ilitary] C[anal] dikes, n[ear] Br[idge], ES. Shirley Moor, Dike N of B.2080, 1965.

16) 23 Darnley Vale, Cheriton, 1955 **MNE**.



ssp. **microcarpa** Walters<sup>941</sup>

15, 16. 5/51

**Native.** Brackish to calcareous meadows, often with *E. uniglumis*: apparently rare, but readily overlooked among *E. uniglumis* which it resembles superficially; it can be distinguished by the two sterile basal glumes to the spikelet: *uniglumis* has only one.

2) Higham Marshes, 1944-49, det. S.M.W. Cooling Marshes, 1944, **MNE** det. SMW. Graveney Marshes, P.R.B., 1946 **MNE**, det. SMW; SMW **BM**.

4) Stodmarsh, 1955 **MNE** det. SMW.

10) Meadow N. of Shoreham, 1955 **MNE**, det. SMW.

11) Birling Marshes, 1944, **MNE**, det. SMW.

77, 06, 26, 56, 66

**E. uniglumis** (Link.) Schult.

[Slender Spike-rush].

15, 16 12/51

**Native.** Somewhat brackish alluvial meadows in estuaries, and calcareous fen-meadows inland in short vegetation: rare but locally abundant in the Thames-Medway estuary in 2), more frequent in the Stour fen areas in 4): very rare elsewhere inland in 1), 6), 10), and 12): and formerly at least in 15). Very rare in Sussex, not recorded in Essex; rare in East Anglia and Pas de Calais in similar locations.

1) Marsh in Meadow N. of Fooks Cray, 1955, GMB and FR, **MNE**.

2) Northfleet Brooks, 1944. 67 Shorne Marshes. 77 Higham Marshes, 1944, **MNE** 1949. 76 Holborough Marshes, 1944 **MNE** 1949. 76 S. of Snodland, 1944.

06 Ditches near "Sportsman", Seasalter, PRB and SMW, 1946 **MNE**, **BM**.

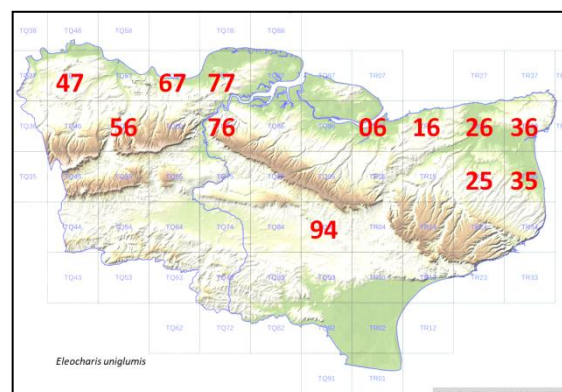
4) 35 Hacklinge Marshes, 1946 **MNE**, 1956 **MNE**. 35 Deal Sandhills / Ham Ponds, Duthie. 25 1m N. of Wingham, in relic of fen, 1947, **MNE**. 25 ½m N. of Wingham 1956 **MNE**. 25 Fen SE of Wingham, 1949 **MNE**. 16 Westbere Marshes. 26 Stodmarsh. W of Minnis Bay in Damp meadow BN 1958. 26 Plucks Gutter, 1953 **MNE**, 1955 **MNE**. 35 Worth Minnis 1960 **MNE**. 36 Minster Marshes, 1958, BN.

6) Swampy chalk pit SW of Cliffe, 1963.

10) 56 Water-Meadow N. of Shoreham, 1954 **MNE**.

12) 94 Meadow S. of Brabourne Church, 1954 **MNE**.

15) Denge Marsh, 1861, Hb. J.S. Mill.



**E. multicaulis** (Sm.) Desv.<sup>942</sup> Sm.

[Many-stemmed Spike-rush.]

15, 16. 3[4]/51

<sup>941</sup> This is currently treated as a synonym of subsp. *palustris*.

<sup>942</sup> In the manuscript cited as (Sm.) Sm.



Native. Pools of valley bogs and swamps, always in fairly acid waters (pH 4.5-5.5); very rare. In only three localities for certain now. Locally common in bogs in west Surrey, and in the High Weald and Greensand heath areas of Sussex: extinct on Essex: very rare (2 localities now) in Pas de Calais.

1) 46 Keston Common, Fl.K., 1963!

12) (vc15) 94 Hothfield Common, Fl.K., in three valley bogs, 1944-63! abundant **MNE**.

13) (vc14) 53 Hawkenbury Bog, JRW 1941; 1944-46! **MNE**. (vc16) 73 Bog around Louise Lake, Bedgebury Forest, 1943, JRW; 1945-51, abundant! **MNE**.

(Other records for coastal or estuarine habitats in Fl. K. (Greenhithe JSM, Hb **JSM**; Oare Creek; Faversham Brooks, Fl. Fav.; Ham Marshes, Stowell, *Phyt. N.S. II*, p.181) probably refer to *E. uniglumis*.)

[**E. quinqueflora** (Hartmann) O. Schwarz [Few-flowered Spike-rush.] [15.]

Open base-rich fens and mires among short vegetation; formerly very rare, and apparently now extinct<sup>943</sup>: no record since Fl. K.

4) Ham Ponds, Dillwyn, Fl. Brit; FGEK. Marsh 1 mile N. of Sandwich E.S.M. (as [S.] *caespitosus*, but almost certainly this.)

15) Dungeness, 1875, F.J.H.; Fl.K.]

(Reported at Keston by W. Griffin, 1903, *Woolwich Surveys* – probably *S. caespitosus* or *E. multicaulis* was intended.)

Still existed in Surrey (Bisley!) at least to 1951; extinct in Sussex; still plentiful in a fen (Cucq!) in Pas de Calais.

**E. acicularis** (L.) Roem. & Schult. [Needle Spike-rush.] 16 1/52

Native. On the gravelly bed and shores of a fresh water pond: extremely rare. Rare but widespread in Surrey, and Sussex, very rare in Essex: rare and sublittoral in Pas de Calais.

[1] reported by pond on Chislehurst Common by HMP, unconfirmed.]

11) 64 Abundant in and around pond on gravel, 1m E. of Hale Street, E. Peckham, 1954-1962 **MNE**.

**Bolboschoenus** (Asch.) Palla<sup>944</sup>

**B. maritimus** [Sea Club-rush.] 15, 16 27/51

Native. Brackish or saline marshes and fleets, dikes (usually brackish or saline) of alluvial flats, upper tidal river banks; abundant and fully distributed in these habitats in 2), 4) and 15); rare on the coast of 3) and 8); very rare in inland ponds, as in 11) (Harrietsham). Very rare in inland ponds in Surrey: common in the Sussex and Essex coastal marshes and in the estuaries of Pas de Calais.

2) 47 Plumstead Marshes, 1944. 57 Dartford Marshes 1930 PHC; 1962. 57 Stone Marshes 1938 PHC; 1945. 57 Swanscombe Marshes 1933 PHC; 1946. 67 Northfleet. 67 Denton. 67 Chalk. 67 Shorne. 77 Higham '44. 77 Cliffe HL 1898 **MNE**; 1950. 77 Cooling. 76 Wouldham. 76 above Burham Ch[urch]. 76 Halling. 76 Holborough Marshes. 76 S. of Snodland 1894 HL **MNE**; 1943. 76 Aylesford. 77 High Halstow. 87 St Mary Hoo. 87 All Hallows. 87 Grain. 87 L[owe]r Stoke 1959 **MNE**. 77 S. of Hoo. 77 Upnor, meadow SW of. 06 Harty Marshes. 96 Elmley. 96 Kings Ferry. 07 Leysdown. 06 Shellness, ditches. 97 Minster Marshes. 86 Brackish fleets, Chetney Marshes, 1962. 96 Conyer Creek. 06 Oare Creek and Meadow. 06 Ditches by Faversham Creek. 06 Graveney. 06 Seasalter. 96 S. of East Church, 1918 AGD **MNE**. 06 Near Harty Church. Luddenham Marshes, HMW.

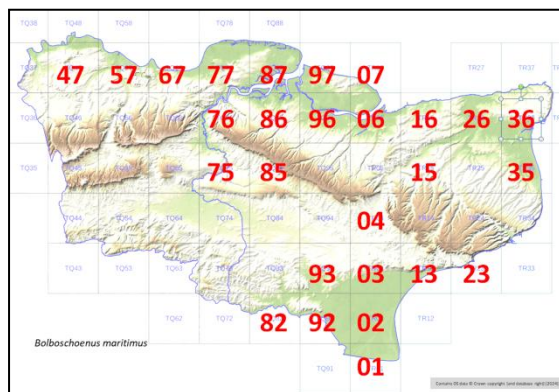
3) 16 Swalecliffe. Ditch 102660, W. Of Whitstable, HMW. R[oa]dside pond SE of Blean, '56 CAS.

4) 35 N. of Sandwich. 36 Pegwell Bay. 35 Slacks of Dunes N. of Deal. 36 Marshy slacks of dunes N. of Sandwich Bay. 36 Minster Marshes, 1963. 26 Brackish dikes N. of Shuart, St Nicholas, 271693 to 270686, '62. Grove, PWW. 26 Marshside, Chislet, 225661, '62. W of Minnis Bay, HMW.

6) Chalk pit SW of Cliffe, 1963.

8) 23 Lagoon behind beach below Abbots Cliff.

11) 85 Pond, Harrietsham, 1958, EG Philp **MNE**.



<sup>943</sup> Refound in 2017.

<sup>944</sup> Given as *Scirpus* L. in the manuscript., which genus accordingly begins with *B. maritimus* named as *Scirpus maritimus* L.



12) 04.

15) 93 Shirley Moor, 1942, JHL **MNE**. S of Wittersham. New Romney, Ch[urch] Lane, RAC. Dymchurch. South Brooks. Wicks.

### **Scirpus** L.

**S. sylvaticus** L. [Wood Club-rush]. 15, 16. 31/51

Native. Springs, swamps and flushes in woods, usually of alder: common in the High Weald in 13) and the western part of 14), and frequent in alder carrs on the greensand spring lines in 10), 11), 12) and 16; a few localities on the tertiaries in 1) and 3), and rare near the tidal Medway in 2); in one place in 4). Common in Surrey and Sussex, principally on the Weald; uncommon in Essex, very local in Pas de Calais.

1) Spring park Wood, W. Wickham, 1926, JEL, Hb L. A[bundant], by Ravensbourne, N of "Crown Inn" W of Locks Bottom, 1957, F. Swain.

2) 66 Birling Marshes. 76 S. of Snodland. 76 W. of Burham.

3) 06 Copse W of Waystreet F[ar]m, Hernhill, 1955 **MNE**. 05 S. part of Fishponds Wood, Charlton, Miss B. Nash, 1958 **MNE** at 097581 near R[oa]d. 16 Convicts and Longtye Woods by str[eam] S. of South Street REW, 1960 HMW. 15 Stream at Tyler Hill, RGW. Calcott Bridge, Sturry, 1955, RGW.

4) 26, 35.

10) 45 Near Source of Darent, W. of Westerham, GMB, 1954. 45 1 mile E. of Westerham, 1955 **MNE**.

11) 65 Leybourne Lakes, 1944. 75 Wood E of Bearsted, 1943 **MNE**. 75 Teston. 64 Below Tonbridge by Medway, 1961. 94 Pluckley. 75 Sandling Wood, 1939, EGP **MNE**. 85 Swamp, Fairbourne Lane, Harrietsham Mrs B Dodds. 66 Ryarsh Wood. 65 Mereworth, S of Village (abundant on Atherfield Clay). 54 Straight Mile, Leigh. 55 Underriver. New H[ou]s[e] F[ar]m, Pluckley VFPD. Bobhurst F[ar]m, Frittenden, RAC. 65 SW of Watringbury. 55 W. of Shipbourne. Medway, Poundsbridge, RGSH '68.

12) 94 Hothfield Mill! alder carr BN. 04 Cadmans Wood 1946. Smeeth. 04 Hinxhill, Oastley, 053423 ES. 94 N. of Yonse mill 991455. 14 Chalk springs, Stowting, 1944. 93 N. of Ham Street 997343 by B.2070. 05 Cudham, 1945. 04 Bybrook, 015441, ES.

13) 63 Pond near Ellis Wood, Lamberhurst 1937, JRW. 63 Pond near Bayham Chapel, 1940 JRW; CAS. Bayham CAS. 73 Alder Carr W. of Folly Hill, Colliers Green, 1962. 73 Angley Wood. 83. 44 W. of Chiddingstone. 53 Stone Cross Gill, Ashurst 518381, 1960, CAS. Pounds Bridge, Speldhurst 1963 CAS. 73 By lake, Pinetum, Bedgebury, 1962. 64 E of Moorden, N. of Penshurst, 1949 **MNE**. T[unbridge] Wells, WWR **TLS**. 54 Penshurst Park. Pentecosts field, Southborough, HNC. Boggy Wood, South Park, Penshurst, 1962. 63 Boggy carr SW of Pembury 614395 PCH. High Rocks Lane, 1959, R.E. Shorrocks. Shadwell Wood, Speldhurst, GE Shaw.

14) Hawkhurst.

16) 13 Stream by Westenhangar Castle.

### **Schoenoplectus** (Rchb.) Palla<sup>945</sup>

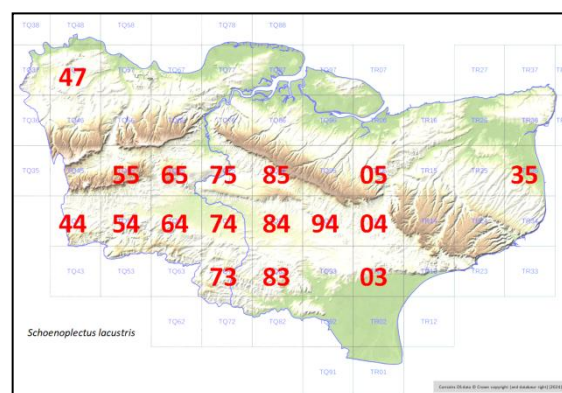
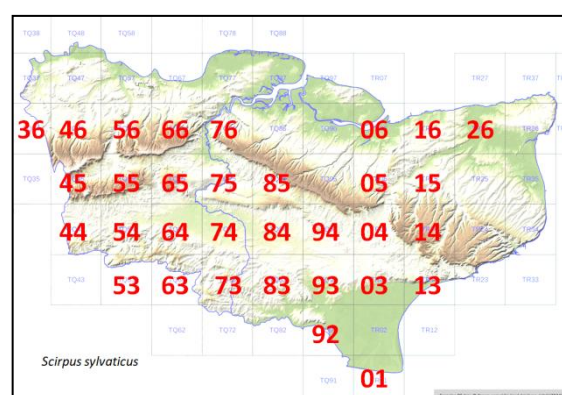
**S. lacustris** (L.) Palla [Bulrush].

15, 16 17/51

Native. Margins of rivers and lakes in base-rich water; very local; almost confined to the freshwater Medway and Stour and their main tributaries but frequent along these rivers in 11) and 12); rare elsewhere in a few isolated localities in lakes, ponds and ditches in 1), 4) 10), 13) and 14)<sup>946</sup>; in tidal waters and in alluvial coastal flats it is replaced by *S. tabernaemontani*.

\*Bronze Age: Crossness, fruit, Spurrell 1889, Reid 1899.

1) Pond, Hawkwood Lane Chislehurst, G.M.B. 1958.



<sup>945</sup> Treated as *Scirpus* in the manuscript; hence the following species all treated as *Scirpus*.

<sup>946</sup> There is a marginal note in the manuscript: 'single localities occur in the Darent near Sevenoaks, in 10), 13) – Cranbrook?, 14) – Breeches Pond, and in 4), in 1).

4) Hacklinge marshes, 1961, Miss B. Nash.

10) Bradbourne Gravel Pits, F.S.E.F., 1957.

11) 75 Lake, Mote Park, Maidstone, 1958, E.G. Philp **MNE**. 85 Leeds Castle Lake, 1959 **MNE**. 54 R[iver] Eden, Chiddingstone. R[iver] Medway. R[iver] Beult, S of Linton / Yalding. 54 W. of Penshurst. Watlingtonbury. Teston. E. Farleigh. Beult S of Headcorn Ch[urch], 831440, 1962. R[iver] Beult, Hunton, 1954 **MNE**.

12) R[iver] Stour: Hothfield, 1905, D. Smith **MNE**; Eyegate Mill, Smeeth, 1946 **MNE**, 1950 **MNE**; Mersham le Hatch E Lake, RAC. Chartham. Chilham Castle Lake, RAC. N. of Wye.

**S. tabernaemontani** (C.C. Gmel.) Palla<sup>947</sup> [Grey Bulrush. 15, 16. ] 21/51

**Native.** Tidal river banks, dikes and fleets, usually brackish, of alluvial coastal or estuarine flats: local; well distributed and fairly common in 2), 4) and 15); also in freshwater lakes on Denge Beach in 15), and very rarely, in inland ponds. Frequent locally in inland freshwater ponds in Surrey.

1) Ruxley pits, S&S, to 1965.

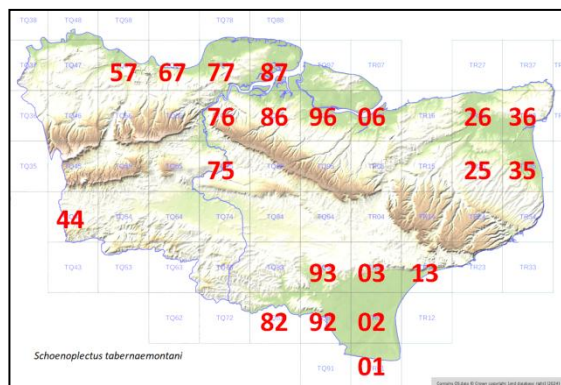
2) 57 Crayford Ness, 1951, JEL, etc. 67 Northfleet. 57 Dartford Marshes, behind River Wall '62. 76 Snodland Marshes 1944 **MNE**. 75 By Medway, R[ight] B[ank] Ayleford. 75 Right bank, New Hythe, 1950 **MNE**. 76. 77 Cliffe. 87 Grain, 805790 All Hallows, AGS. Conyer, KDR. Dike near Oare Creek, 1957 **MNE**. Pits E of Oare Creek. Luddenham Marshes HMW. Ham Marshes REW. Ditches by Faversham Creek ES. 96 Elmley. 06 Harty. Below Rainham OD.

4) E. of Sandwich 1945 **MNE**. N. of Sandwich. Hacklinge 1946 **MNE**. N. of Deal. W. of Minnis Bay, Mrs B. Dodds. Wingham Fen (Lit[t]le Britton). Brooks End, Birchington, LWW; BN. E. of Reculver. N. of Shuart, 270686 1962. N. of St Nicholas 1962. 36 Minster Marshes, 1963. Preston Marshes. Stodmarsh, REW; PWW. E. Stourmouth, J.O. Chislet Marshes MEM.

6)E) 71 Pond, Northward Hill, High Halstow 1958 **MNE**. Wet chalk pit SW of Cliffe 1963. Chalk pit, Swanscombe, H.A.S., det. JEL.

11) 44 Ditch in field, Hever, 1933, J.E.L. (Hb. JEL).

15) 93 Shirley Moor, ES. Snargate. Brenzett. S. of Ham Street. Dikes E of Appledore, 1954 **MNE**. Hoppen Pits, Denge Beach, 1946 **MNE**. Ditches to W. Palmarsh gravel pits LJM.



**S. tabernaemontani x triqueter = S. x kuekenthalianus** (Junge) D.H. Kent<sup>948</sup> 15, [16] 1/51

**Native.** This hybrid still persists on the tidal Medway although one of its parents, *S. triqueter*, seems to have gone. It also occurs still on the Arun in W. Sussex and on the Tamar on the Devon-Cornwall border, but appears to be extinct in Surrey and Middlesex on the Thames.

2) R[ight] bank of Medway, ¼m above Aylesford, 1942-45 **MNE**. By the Friars, Aylesford, 1946 **MNE**. Tidal creek of Medway, opposite New Hythe, 1948-53 **MNE**. Only seen by me on the right bank – i.e. in V.C.15.

**[S. triqueter (L.) Palla [Triangular Club-rush.] [15].[16]**

**Former native, now extinct, on the Medway above and below Aylesford on the tidal mud-banks. Probably now extinct too on the tidal Thames in Surrey and Middlesex; there are no recent reports of it either from the Arun in W. Sussex.**

2) Medway, Aylesford, 1924, Ex Herb T.J. Foggitt **BM**; R[ight] bank of Medway, above Bridge, Aylesford 1934, JPMB; 1939, J.E.L.; not refound, 1942-62! Apparently destroyed by dredging of the river channel, or possibly by pollution: its hybrid with *tabernaemontani*, however, still survives (see [above]).

4) Mouth of R. Stour, Sandwich Bay, 1932 – “very few plants – no leaves, stem triangular”; ex Herb. Col. R. Meinertzhagen **BM** teste PCH.<sup>949</sup>

**Isolepis R. Br.**

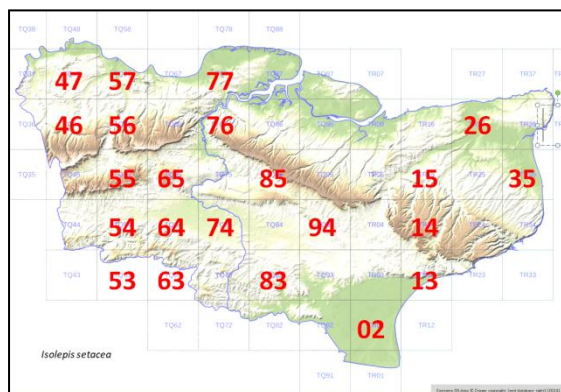
**I. setacea (L.) R.Br.** [Bristle Club-rush.] 15, 16. 21/51

<sup>947</sup> Treated as *Scirpus* in the manuscript; hence *S. tabernaemontani* given as *S. tabernaemontani* C.C. Gmel.

<sup>948</sup> Treated as *Scirpus* in the manuscript; hence hybrid given as *S. tabernaemontani x triqueter = S. x kuekenthalianus* (Junge).

<sup>949</sup> While this statement may be taken as it stands, Meinertzhagen's reputation of fraudulent claims for ornithological finds suggests that any claim for this species in this location should be treated as requiring confirmation.

Native. In bare, most places, such as pond borders, track ruts, ditch-sides, and meadows, often on peaty or sandy soils, both acid and calcareous: widespread, but only locally common [in] 1), 12), 13); rare in 2), 3), 4) 10), 11) and 15), unrecorded from 5) – 9), 14), 16). Rather common in Sussex in the Weald, locally so in Surrey, rare in Essex; and in Pas de Calais.



1) 57 Joydens Wood, in track ruts, 1954, PCH & FR **MNE**. 46 Petts Wood, G.M.B. 46 Edge of Keston Lower Pond, PCH; JBM 1955. 46 Ravensbourne Estate, Keston, by stream, 1955 **MNE**. 46 Holwood Park, D.McC. 47 Chislehurst Common, 1915, WCRW. 46 Derrack [sic, for Derrick] Wood Orpington, 1921, WCWR. Roundabout Wood, FM Swain.

2) 76 Snodland S. Marshes, 1946.

3) 15 Church Wood, Blean, LWW & RGW, 1950, v[ery] a[bandant] 1965, on field to E, RGW.

4) 35 Hacklinge, 1946, **MNE**. 35 Worth Minnis, 1960, **MNE**. Preston Marshes, SW of Ch[urch] on sandy soil '53 BN. Pit SE of Ham Fen, 1991.

6) Wet chalk pit, SW of Cliffe, 1963.

10) 55 Bradbourne Gravel Pits, FSEF, 1957.

11) 35 Sandway bog, Lenham 1954 **MNE**. 65 Leybourne Castle Lakes, on sandy shore, 1955-58 **MNE**; 1960, EGP **MNE**. 74 Ride, Widehurst Wood, Marden, 1958 **MNE**.

12) 94 Hothfield Common, 1944-47 **MNE**. 14 Stowting fen-meadows, 1946-54 **MNE**. Cuckolds coomb, 1986; 1995! 13 Monks Horton, boggy field, 1953 **MNE**. 94 Warren Woods, Ashford, 1955 **MNE**.

13) 53 Brighton Lake, Tun[bridge] Wells, 1960, CAS. 64 Pembury Woods in ride, 1952 **MNE**. 63 W. part of G[rea]t Sandhurst Wood (Dundle Wood), Lamberhurst 1943, JRW; 1944-. 63 Lamberhurst Quarter, 1946 **MNE**. 73 Oaks Wood, Cranbrook 1944. 73 Angley Wood, Cranbrook 1946. 83 Chittenden Wood, Cranbrook, 1943 JRW. 83 Causton Wood, 1946 **MNE**. 54 E of Moorden, N of Penshurst, in boggy wood, 1949 **MNE**. Whortleberry Wood, Southborough HNC. 73 Combwell Wood, 1945. 83 Sissinghurst Park Wood. 73 Bedgebury Forest. Tun[bridge] Wells WWR **TLS**. 648365 by Pond, Bayham, Sussex, CAS.

15) 02 Romney Warren, abund[ant].

16) Saltwood, NE of, in flush on slope (F[olkstone] Sand) 1959 F Swain. The Lince 1945- **MNE**, 1986.

(*I. cernua* (Vahl.) Roem. & Schult.<sup>950</sup> [Slender Club-rush] Formerly occurred in Surrey (Wimbledon Common), and may yet exist in littoral marshes in Pas de Calais.)

### Eleogiton [Link]

**E. fluitans** (L.) Link [Floating Club-rush.] 15, 16 7/51

Native. Ponds, lakes, streamlets and flushes, in peaty acid water; rare. In 1), 11), 12) and 13 sparsely: 8 localities. Commoner but still local in similar places in Surrey and Sussex, rare in Essex (Epping), very rare in Pas de Calais (Helfaut! St Josse!).

1) 46 Keston Common Ponds, A.G. Davis, 1915 **MNE**; 1945! 1950. Lake, Holwood Park, A.W. Jones, 1954.

11) 55 Ponds, Rose Wood, Ightham, 1944. 54 Pond Dry Hill Rd Tonbr[idge], 589474, CAS, '55. 64 Pembury Woods, 1953. [Tunbridge Wells, WWR **TLS**.]

[12] Brabourne Lees, FGEK. 93 Pond in field opp[osite] Spot House, Warehorne, 976353, 1955, ES.

(63 Free Heath, in Pond, JRW, 1940 (vc14))

13) 73 Louisa Lake, Bedgebury Forest, 1945. Bedgebury Pinetum 1962. 73 Angley Wood, 1947.

15) Marsh Dike, Appledore, 93Q.<sup>951</sup>

### Blysmus Panz. [ex Schult.]

**B. compressus** (L.) Panz. ex Link [Flat-sedge. 15, 16.] 4 or 5/51

<sup>950</sup> Given in the manuscript as *S. cernuus* Vahl., even though *Isolepis* has otherwise been used instead of *Scirpus*. Francis Rose missed the presence of this species in the Hacklinge area (found in 2003), despite his study of the East Kent fens and subsequent visits.

<sup>951</sup> A marginal note lists as follows: Keston 51/46; Tonbr[idge] 1955, 51/54; Woodch[urch] sq[uare] 1956, 51/93; S[even]oaks 51/55; Cranbrook 51/73; Lamberhurst 51/63; Pembury 51/64.

Native. Calcareous fens and wet meadows, in short vegetation; very rare, but abundant in its habitats. A species of *Parvocaricetum* associations in flushed calcareous mires and marshes. It was probably once more widespread in the E. Kent fen areas and in flushed turf communities by chalk and ragstone springs. Probably extinct in Surrey; very rare in Essex. Very rare in Sussex, but in at least two localities by chalk springs (Aldworth and Kingstone-next-Lewes). Rare in Pas de Calais in similar places.

1) Bexley, E.M.H. – probably = 47 Meadows N. of Foots Cray, in wet hollows of former stream bed, 1955, **MNE**, abundant, G.M.B. and F.R.

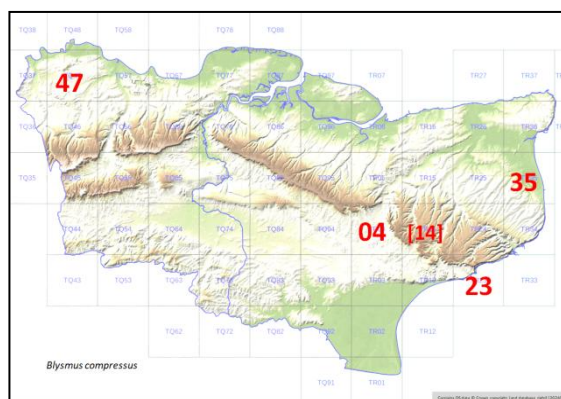
4) Fen-meadows, Hacklinge, OBG: abundant, JPMB: 1946, FR and DMcC, **MNE**.

12) 04 Calcareous flush meadows by chalk stream, Cuckoldscomb, Brook, FGEK: 1946-54 **MNE**, not found 1986. 14 Fen-meadows, Stowting, FGEK; F.J.H. (Fl. K.): not refound here, though habitat was still quite suitable in 1954.

16) Darnley Vale, Coolinge Folkestone, in flush fen meadow fed from calcareous L[owe]r Greensand, 1955, **MNE**.

“Salt Marshes, Kent” ex Herb. (G.) Francis, **BM**. “Bogs, Kent”, Herb. Roem. (er) **BM**.

(Several records quoted for this in Fl. K. are probably errors for *Carex divisa* or *C. disticha*: Thames below Woolwich; Brents, Faversham; Luddenham; Seasalter.)



## Cyperus L.

**C. longus** L. Galingale . 15 1 or 2 / 51

Native. Calcareous marshes near the S.E. coast, extremely rare, and possibly extinct in one of its two localities, though persisting in the other. A species of S.W. distribution in Britain and Europe, not otherwise known nearer than S. Hants and the Isle of Wight.

8) 35 Roadside Bank (by the course of a former stream from chalk springs), near station, Walmer, Miss B. Nash: 1958! **MNE**. 1958! 1962 C.A. Lister. Probably a survival of a very different former habitat here.

16) 13 Whitenbrooks Wood, Seabrook, near Hythe 197352<sup>952</sup> (peaty calcareous carr on Sandgate Beds) G.E. Smith, C.P.S.K.: **BM**. Ed. Forster **BM**, also Hb. J. Storey: the habitat is unchanged, except that it is overgrown, and a large cyperaceous species, which could be *C. longus*, still exists here, but never produces inflorescences.

As an alien, it occurs at:

10) “Westerham”, 1952, Mrs L.P. Small.

11) Wet field, Hever, E.C.W., B.E.C. (1933) p.547.

14) Pond by Hawkhurst Old Ch[urch], 1956, P.C.H.

‡ **C. eragrostis** Lam.<sup>953</sup> [Pale Galingale. 16.]

1) Gravel pit, Hayes, St.J.M., BEC Rep. 1926, p.138.

(**C. fuscus** L. [Brown Galingale] occurs by a muddy pond at Shalford, Surrey, and at Staines, Middlesex, and has old records for Pas de Calais, Nord, and Somme.)

## (Schoenus L.

**S. nigricans** L. [Black Bog-rush.] (15)

Reported at

4) “Boggy Places”, Fl. Thanet 1847, p.60; and

16) “Near Folkestone [...], plenty”, W. Pamplin in Irvine’s *London Flora*, 1838, P88: but there is no other evidence: some other sedge may have been found, though Pamplin is unlikely to have been mistaken. It may have occurred on the Warren at Folkestone and have been destroyed by coast erosion. It occurs in flushed valley bogs S of Bagshot, Surrey, but not in Sussex or Essex: it is, however, abundant in dune slacks and sublittoral fens in Pas de Calais.)

<sup>952</sup> Likely to be in error for TR17935.

<sup>953</sup> In the manuscript given as *C. declinatus* Moench.



**Rhynchospora** Vahl**[R. alba** (L.) Vahl [White Beak-sedge.] [16.]

Former native, now extinct; in *sphagnetum* of a valley bog. Still plentiful in Ashdown Forest, E. Sussex, and on the bogs of W. Surrey; and in one locality still (St. Josse!) in Pas de Calais.

**13)** (near Tonbridge, Ray, *Synopsis*, ed. 3, p.427: in Sussex?) Bog near Mr. Slopers, towards Tonbridge, Forster, *Fl. Tonbrigensis*, p.6. This record appears certainly to have referred to a site in Kent.]

**(R. fusca** (L.) Ait. f. [Brown Beak-sedge] occurs plentifully in bogs at Thursley, Surrey, but not in any other adjoining county to Kent. It also occurred in wet-heath at one place (St. Josse!) in Pas de Calais until c.1980.)

**Cladium** Browne**C. mariscus** (L.) Pohl Saw Sedge. 15. 2/52

Native. In two base-rich fens: very rare, but locally dominant. Unrecorded as a native from Surrey, Sussex, or Essex; but plentiful in the fens behind the coastline of Pas de Calais and Somme.

**4)** 35 Ham Ponds, OBG, 1802; CPSK; 1946-62! **MNE**, 1991! Locally dominant in patches, over about three acres of rough fen. Its remains occur at a considerable depth. In the peat of this ancient fen. This colony is the last relic of a species formerly widespread in the fens between Deal and Sandwich.

**15)** 01 Fen in natural shingle pit, S.E. of Hamilton F[ar]m., Dungeness, F. Swain, 1951; 1952-62! One patch about 20metres across, **MNE**, c.50m across 1997!

**Carex** L.**C. paniculata**<sup>954</sup> L. [Greater Tussock Sedge.] 15, 16 27/51

Native. Fens and Fen carr, Valley Alder carrs, Pond borders, in alkaline to weakly acid waters; widespread; locally common in the High Weald in 13), the Greensand of 10)-12) and 16), and the fen areas of 4); rare on the Tertiaries of 3).

**1)** Ruxley pits, S&S. E side R[iver], N. Cray, GMB.

51/47 Bexley

**2)** 67 Northfleet Brooks, abundant in fen, 1944; 1958, PCH. Wet Wood on W edge of Snodland Marshes. 857669, small fen S. of L[owe]r Halstow, 1962. 96 Swamp carr by Pond, Tonge.

51/67

Northfleet; 51/76 Medway; 51/86 L[owe]r Halstow; 51/96 Teynham; 61/06 Fav[er]sham '56, '55; 61/95 Chilham '55; 61/15 C[anter]bury

**4)** Relic of Fen, N. of Wingham. Preston Marshes, 1962.

Wenderton copses, BN. Ham Fen, 1946-62, abundant in several places. Hacklinge Fen, 1945 **MNE**. 15 Fordwich Marshes, 1949 **MNE**. Sturry Marshes, REW. W of Brooksend, IWW. Stodmarsh, REW.

61/25 W[ing]ham; 61/35 S[and]wich; 61/16 Fordwich; 61/26 Preston

**6E)** Randall Wood, Shorne, by Pond, 1954 **MNE**.

51/45 W[ester]ham; 51/55 S[even]oaks

**10)** The Moors, Bat and Ball, 530575 CAS. 45 Westerham, by R[iver] Darent.

**11)** 65 Marshy Wood SW of Mereworth. By Medway, S. of Station, Leigh, 1942, JRW. 85 Goddington, Harrietsham, BD.

51/65 W[est] M[alling]; 51/75 M[aid]stone; 51/85 Ha[rriet]sham

**12)** 94 Hothfield Common, in valley swamp at N. side of Common, 1943-62 **MNE**. 13 Gibbons Brook. 05 Near Stour, Chilham, 1945. 94 Carr N. of Hothfield Mill, N. of A.20, 1947. 94 E end Hothfield Lake, REW. 94 Charing Heath, alder carr, ES. 94 By Shoddington, W.W., Westwell, ES, 997463.

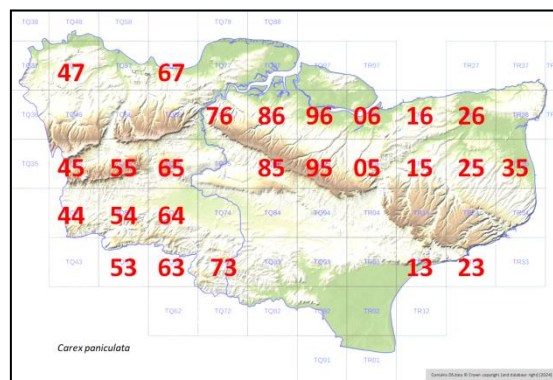
51/94; 61/04; 61/15 Hythe

**13)** 44 Scarletts Pond, Cowden. 54 Roundabout Wood, Tun[bridge] Wells, 1943, JRW; CAS. 64 Cinderhill Wood, in alder carr, 1953. 73 Bedgebury Park. 73 Bedgebury Pinetum. 73 Louise Lake, Bedgebury. 73 Frizley Bog, Cranbrook. 73 Swamp, Tuckers Pond, Angley Wood, 1945-61. 73 Kilndown Wood, 1946. 64 Corks Pond, Brenchley, WHP. 73 Horsmonden Mill Pond, 1939, JRW. 63 Scotney Castle, 1939, JRW; 1956 PCH and KEB. 53 Tun[bridge] Wells.

51/44 Edenbr[id]ge;

51/54 Tonbr[id]ge; 61/64 Br[ench]ley; 51/53 T[un]bridge W[ells], 56; 51/63 L[am]bur[hurst]; 51/73 C[ran]brook

**14)** not 51/83; not 51/93



<sup>954</sup> The total of hectads given in Francis Rose's rough draft map is 25, and this followed in the transcript map here.



15)

NOT 61/01 Dungeness

16) Pond Sandling Park DACL. Newington Moor, 1945-54. Darnley Vale, SW of Cheriton, 1955 **MNE**. Brockhill Park, Saltwood, '62, DACL.

61/23 F[olke]stone

**C. paniculata x remota** = **C. x boenninghausiana** Weihe

15, 16

2/51

12) Hothfield Common, Miss Cobbe, *BEC Rep.*, 1923, p.219. Marsh, alder carr, E. of Yonse, Hothfield, 1947, 1948, one big tussock 4' across, **MNE**.

13) Roundabout Wood, T[unbridge] Wells, 1943, JRW; WHP; not seen 1962 CAS. Wood, Ferndale, T[unbridge] Wells, 1943, H.W. Pugsley, **TLS**. Swamp, Angley Wood, Cranbrook, 1957, FR and DS **MNE**.

(**C. appropinquata** Schumach. [Fibrous Tussock Sedge] formerly occurred in Middlesex, and still occurs in Pas de Calais (Camblain-Chatelaine [*sic*, for Châtelain], 1956!.)

**C. diandra** Schrank (*C. teretiuscula* Good.)

[Lesser Tussock Sedge.]

15, [16]

1/51

Native. In short vegetation in rich fen: very rare, and only seen recently at Dungeness. Extinct in Surrey and Sussex, doubtfully recorded for Essex, but locally plentiful in fens in Pas de Calais (Cucq, 1962!). A decreasing species of rich fens.

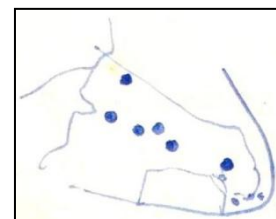
[4] Ham Ponds, FJH in Fl. K.; 1906, H.W. Pugsley **BM**; but appears extinct through lowering of the water table.]

[Boggy places, Brook, G.E. Smith in FGEK; probably correct but there is no later record.]

15) Hoppen Pits, Denge Beach, FJH on Fl. K.: A.M.G. Natal and ECW, 1934 **BM**; 1946-62! **MNE** → 1973! abundant in *parvocariceta* of the fen zones of all four pits.

Marsh E. of Old School, Dungeness, 1962. Marsh E of Boulderwall, Dungeness, 1961. Not seen since 1963 – water levels have fallen.

(recorded at 2) meadows at Upnor, FGEK; by Oare Creek, Cowell, *Fl. Fav.*; Dykes near the sea wall, Ham Marshes, Stowell, Fl.K.: these are almost certainly errors for *C. divisa* or *C. otrubae*: *C. diandra* is most unlikely to occur on the inorganic alluvial silts at these places.)



**C. vulpina** L.

[True Fox Sedge.]

15, 16

8/52

Native. Pond-borders, ditches and Sallow-carrs on the Weald Clay tract from S.E. of Ashford to the Surrey border, where it is frequent; unknown elsewhere in Kent. It occurs always in unflushed, weakly acid to neutral habitats on essentially inorganic substrata. Very rare in Surrey on the Weald Clay of the S.E., where its localities near the Eden are a continuation of its Kentish distribution: very rare in Sussex (Arun Valley) (Amberley area). Unknown in Essex or Pas de Calais.<sup>955</sup>

11) 44 By Eden above Edenbridge, c. 435450, F.R. 1947.

[Near Maidstone, E. Bartlett, 1882, **MNE**.] 54 By R[iver]

Eden N E of Chiddingstone, E.S.M. 1894, **BM** det. E.

Nelmes (B.E.C Rep. 1939-40, p.263); E.C.W., 1939: 1944!

J.H.L. and F.R. 54 Marsh c. 513457 below Gilridge, W. of

Penshurst, 1944 F.R. 515441. 54 R[iver] Eden, W. of Penshurst 1944-61, **MNE**. 521438, F.R. 1961 **MNE**. S of

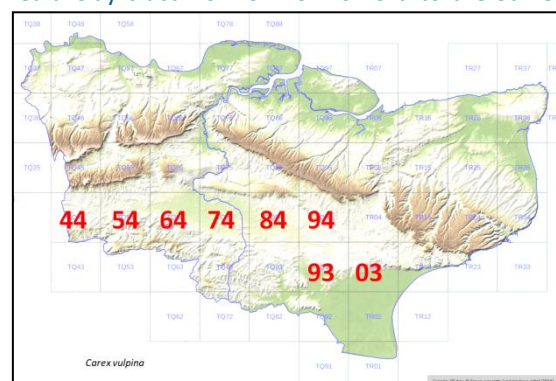
Leigh, N of Railway, 1991 J.Pitt, l[ocally] a[bundant] 550462. 54 R[iver] Medway, above Tonbridge, 1944-5,

557456, F.R. 1945. Below Tonbridge 604472 etc., by R[iver], and in lateral ditches, 1944-52 to c. 1950, also

599467. 64 Roadside ditch and hollow by Medway, J.P.M.B. 1939: Hartlake Br[idge], J.R.W. 1943, det. E.N.; F.R.

1952, 603473<sup>956</sup>; JPMB, 1959, K. 64 Ditch by B2015, N.E. of Whetsted 658462, 1944 **MNE**: 1963 FR to 1986!

64, Ditch, S. of Brandbridges 674482, 1944 **MNE**. 64 Medway E. of Brandbridges. 64 Gravel pits E. of



<sup>955</sup> In addition to a copy of the manuscript Flora account which bears cumulative revisions to 1985, there exist two very similar manuscript notes by Francis Rose headed **CAREX VULPINA L. Kent records held by FR**. These do not appear to be specifically intended for the Flora, but give information for records more or less corresponding to the Flora account, albeit sometimes with additional details. Those additions have been included above in the Flora account, but are given in green font, so as to distinguish. The notes are prefaced by introductory comments, of which one reads: 'The British headquarters of this species is clearly the Weald of Kent, on Weald Clay: habitats are river- and stream-sides, wet meadows, ditches and swampy woods'.

<sup>956</sup> Thus as written, but TQ 630473 may have been intended.

Brandbridges F.R. 1948: 677483<sup>957</sup>. ¾m S. of Hartlake Br[idge], 1962 C.A.S. 64 Pond and wet copse ½m E. of Hale Street, 1948 **MNE**, in wood 1985! 681495 etc. 74 Ponds by B.20162, S. of Yalding, 1944→ F.R. 709481 **MNE**. 74 Ponds 1m N. of Marden, F.R. 1952 739459<sup>958</sup>. 74 Ditch by A.229, S.E. of Stile Bridge, Marden, F.R. 1946. 770471. 74 Ditch by A.229, Sweetlands Corner, N. of Staplehurst: 1946→ F.R. 784455. 84 Ditch, Leighbridge, W. of Headcorn, F.R. 1962. 814454. 893406 E. of Langley Smarden, R.A.Clarke, 1956. 84 R[iver] Beult W. of Smarden, 877423, F.R. 1956 **MNE**. Ditch, Frittenden Rd. Headcorn 824433, R.A.Clarke. 863438 Roadside ditch N. of Marley Farm Smarden, 1949, D.McClintock. 94 Roadside ditch E. of Vitter's Oak, Bethersden, 952407, 1955, E. Scott.

**12)** S. of Bethersden E.Philp (Tetrad 9238 – probably by river SW of village/by R[iver] Beult SW of Br[idge] near Bridge Farm). 93 By (former) B.2070, N. of Orlestone 992358. 1945-6. **MNE**; still there 1985! 03 Ditch, Steeds Lane, SE of Kingsnorth, 019377-016377, E. Scott: 1956! **MNE**. (020377 – 016377.) 020350 ditch N. of Ruckinge, E. Scott.

Marsh W of St Michael's, Tenterden, N. of Breeches Pond, N. of Tenterden c.872353<sup>959</sup>, F.R. & J. Pitt 1987 (+ *Carex otrubae*, *Carex rostrata*).

### C. otrubae Podp.

[False Fox Sedge.]

15, 16

45/51<sup>960</sup>

Native. Pond borders, swamps, ditch and streamsides, on neutral to brackish, usually inorganic substrata; very common in 1)-4), 10)-16) (Blean, the river valleys and the coastal plains); absent from the chalk country 5)-9), except from springs on the cliffs in 8); very rare in Sheppey. Common throughout SE England and N. France.

Not in Warden, Alkham, Dover, Farningham, T[unbridge] W[ells], Hawkhurst S.

**1)** 47 N. side of Eltham Common, 1934, L.RAG. Ruxley pits, S&S.

**2)** 47 Woolwich Arsenal PCH. 47 Plumstead Marshes. 47 Erith Marshes, PCH. 57 Barnes Cray, Crayford. 67 Northfleet Brooks. 67 Shorne. 77 Higham Marshes, 1944 **MNE**. Cliffe Marshes. 77 Cooling Marshes. 76 Halling. 76 Holborough. 76 Snodland Marshes. 76 N. of New Hythe. 87 Grain. 77 Meadow W of Upnor 1944-60 **MNE**. 75 Above Aylesford, EGP, 1958 **MNE**. Conyer KDR. Luddenham Marshes, HMW. (Sheppey, 1917, A.G.D., **MNE**.) 97 Minster, DHK.

**3)** 16 Ditch W of Whitstable HMW.

**4)** 35 Sandwich Bay, in dikes, 1950 **MNE**. 35 Walmer Castle Meadow, 1957, BN. Fordwich Marshes, P. Furneaux. 26 Chislet Marshes MEM. 25 Elbridge 1926 JG. 36 Dikes W. of Princes Links 1962. R. Wantsum, Reculver, REW. Stodmarsh, P.W.W. Castle field, Walmer, BN.

**8)** 23 F[resh] W[ater] spring below AbbotsCliff: Lydden Spout.

**10)** Westerham Wood 1947 (82!). 57 S. of Darenth 1894 AHWD, **TLS**.

**11)** Birling Marshes, '44 **MNE**. 65 Ryarsh Wood. 65 Leybourne Lakes. 85 Snarkhurst Wood, 1944 **MNE**. 85 By Pond, Kiln Wood, Lenham, '62. (Gault) Greenway Forstal, Harrietsham BD.

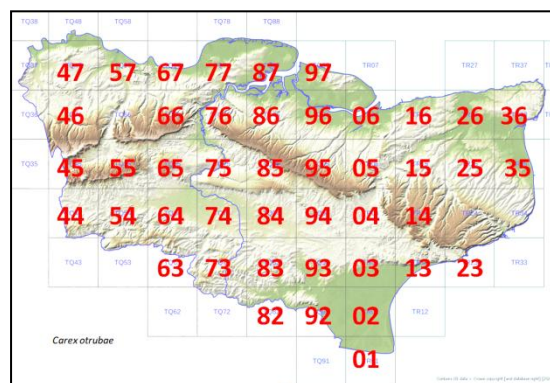
75 Chart Sutton pond. 54 R[iver] Eden, Chiddingstone. R[iver] Eden, Penshurst. 64 E of Tonbridge. 54 Pond E of Chiddingstone. 84 Ditch, Leighbridge, Headcorn, 813454, '62. 84 Ditch E of Headcorn, 849437, '62. 84 Beult bank, N. of Buckmans Green, 889419, '62. 863438 N of Marley F[ar]m, Smarden, DMCC. Pluckley Brickworks. 64 Beltring. Teston. 64 Pond E of Hale Street, 1952 **MNE**. 74 Ponds 1m N of Marden 1932. 74 Pond S of Woolpack, Yalding, 1962. 94 Pond, Birch Wood, Bethersden, 915405, '62.

**12)** 93 SE of Lenham. 887463 Westwell WW, ES. 84 R[iver] Stour, Ashford. 04 Cuckoldscombe, Brook. 14 Stowting. 93 Ditch, Birchett Wood, 992358, by B.2070, 1946, 1952 **MNE**. 93 Ponds, Stubbs Cross, Kingsnorth, 1953-54 **MNE**. 03 Ditch SE of Kingsnorth 1956 **MNE**. Wet Fields SW of Sellindge Ch[urch], RAC.

**13)** 54 Ashour Wood. Southborough Pentecosts Field HNC. 83 R[oad]side E of Cranbrook, D.S. 63 Marshy Roughet and shaw, Lamberhurst 1942 JRW. 73 Marshall Lake, Pinetum, Bedgebury, 1952 **MNE**.

**14)** 83 E of St Michaels, Tenterden, 1958, R. Clarke.

**15)** 93 Shirley Moor. 02 Canal St Mary's Bay, LJM. 02 Brenzett. 02 Romney Warren. 13 W. of Hythe. 01 Dungeness open pits. 03 Below Copperhurst, Aldington.



<sup>957</sup> Gravel pits do not appear to have existed at this grid reference 1940-60.

<sup>958</sup> TQ89459 in separate manuscript note.

<sup>959</sup> Thus as written, but 867349 is more likely.

<sup>960</sup> The total should be 44; hectad TR16 was double-counted.

**16)** 13 Postling Wents. Coombe Wood, Etchingill PW. 23 Holywell, Folkestone. Ponds/ Gault, Folkestone Warren, 65, B.N.

**C. otrubae x remota = C. pseudoaxillaris** K. Richt. (*C. axillaris* Gooden. non L.; *C. kneucheriana* Zahn)

\* *Top. Bot. Suppl.* 1.

**1)** Field by Burnt Oak Lane, Sidcup, 1894, AHWD **BM**. Darrack [*sic*, for Darrick] Wood, Orpington, E.B. Bishop (Hb. Bi)

**11)** 863438, E of Headcorn; 1949, DMCC; 1893 ESM **BM**. Ditch W. of Smarden, 1949 **MNE**. Haffenden Quarter 883406, '49, DMCC.

**12)** Ditch by R[oa]d N. of Stubbs Cross, Kingsnorth, 1952→54, **MNE**. Birchett Wood, Orlestone, in ditch by B.2070, 1946→ **MNE**.

‡ **C. vulpinoidea** Michx. [American Fox-sedge. 16.]  
*Alien*

**1)** Green St[reet] Green (Farnborough) 1937, J.E.L. in Hb.

**C. spicata** Huds. Spiked Sedge. 15, 16 /51

*Native. Hedgebanks, pond- and ditch banks, wood borders, scrub, old sandpits; very common on a wide range of soils in all districts except [sic]. Common in Surrey and Sussex, rarer in Essex: common in Pas de Calais.*

**1)** Keston, PCH. Hawkwood, Chislehurst, Swain. Sparrow fields, FM Swain.

**2)** N. of New Hythe, 1943 **MNE**. Below Aylesford, 1958 EGP **MNE**. ¾m S. of Cliffe Station.

**4)** Fen SE of Wingham 1949 **MNE**. Worth Minnis 1950 **MNE**.

**6)** Mounts Wood, PCH. Green Street Green. By Shorne Windmill. Pilgrims Way, 1m W of Wrotham, 1945 **MNE**. Cookham Woods DMCC. North Wood, Cuxton 1944 **MNE**.

**7)** Putt Wood, Ospringe, 1957 **MNE**. Belmont Park, 1958, DMCC **MNE**.

**8)** Reinden Wood, B.N.

**9)** Wood border, Wolverton, 1962. Ileden Wood, KDR. Eastling Wood, BN.

**10)** Sandpit E. of Riverhead by R[ai]l[wa]y CAS. Lullingstone, Swain.

**11)** Ryarsh Wood. Maidstone, 1897, H. Lamb **MNE**. R[oa]d bank, Hollingbourne, 1944 **MNE**. R[oa]d bank, Warren Wood, Broomfield 1945 **MNE**. Snarkhurst Wood. Warren Wood, Hollingbourne. Straight mile (W of Tonbridge), 1960 CAS. By Eden, W. of Penshurst, 1944. By Medway, W. of Tonbridge, by R[ai]l[wa]y Br[idge], CAS 1960. By Medway, E. of Tonbridge. Ditch by r[oa]d, Beltring, 1944 **MNE**. By Pond E of Hale St[reet], E Peckham 1954 **MNE**. 849437, lane 1m E of Headcorn 1962.

**12)** Willesborough Village, 1944 **MNE**. Marshes N. of Willesborough 1955 **MNE**. Cuckoldscoombe fen-meadows. Stowting Meads 1954 **MNE**. Rippers Cross 1954 **MNE**. Stubbs Cross, Kingsnorth 1952 **MNE**. S of Water F[ar]m, Sellindge, RAC.

**13)** By stream High Rocks La[ne], T[unbridge] Wells, CAS. Hayden Wood, 1942, Lamberhurst JRW. Field NE of Court Lodge, 1943, Lamberhurst JRW. Goudhurst, 1943 JRW. R[oa]dside, Pattenden, Goudhurst, 1909, JS **TLS**.

**14)** Robhurst F[ar]m., High Halden, RAC.

**15)** Dungeness, J. Harper.

**16)** R[ai]l[wa]y banks, Folkestone Cent[ral] Sta[tion], VFPD.

**C. muricata** L. (*C. pairaei* F.W. Schultz) [Common Prickly Sedge]. 15, 16. /51

*Native. Dry grassland, hedgebanks and roadsides on sandy soils; frequent and widely distributed in these habitats. On the Eocene in 1), 3) and 6E), and on the Folkestone Sand in 10)-12) and 16): very rare in 13) and 15). Common in similar habitats in Surrey, rare or under recorded in Sussex and Essex; not distinguished from *spicata* in Pas de Calais.*

**1)** Elmstead Lane, Bickley, 1945 **MNE**. Eden Park, AG Davis, **MNE**. Ruxley pits, S&S. Farningham Wood 82!

**3)** Trenley Park Wood. Canterbury Golf Course. Alcroft Grange R[oa]d, Tyler Hill 1949 **MNE**. Hernhill, bank near Waystreet F[ar]m on Thanet Sand 1955 **MNE**.

**6E)** Lane End to Green Street Green, 1946 **MNE**. Greenhithe GMB.

**10)** Bessels Green, 1949. Oldbury Lane, Ightham 1945 **MNE**. Eynsford, GMB. ¾m S. of Brasted 1955 **MNE**.

**11)** E. Malling Village. New Hythe Lane 1952 **MNE**. SW of Addington 1946 **MNE**. Wrotham Heath. Platt. Ditton. Bank, Aylesford, 1955 **MNE**. Eythorne Street, Hollingbourne, 1963. By A20, N of Chegworth, Harrietsham, 1944; 1960 **MNE**.

12) Potters Corner, by A.20, 1945. Ashford Warren 1944-5 **MNE**. Willesborough Village, 1s945. Willesborough Lees, 1944 **MNE**. Hothfield, by A.20 W. of Woolpack, 1947 **MNE**.

13) Postern Lane, Tonbridge, JPMB; 1944!

14) Lydd Common, 1954 **MNE**.

16) Folkestone Leas. Sandling Junction, 1961, **MNE**.

### C. *divulsa* Stokes

Grey Sedge.

15, 16.

q

38/51<sup>961</sup>

**Native.** Hedgebanks, woodborders and pastureland on dry soils, mostly on sand, but also on chalk-derived loams; widespread, and locally frequent in the chalk districts 5)-8), and on the L[owe]r Green Sand in 10), 11), 12) and 16); more scattered in 3), 4), 13) and 14) and on the Weald clay of 11) and 12). Frequent throughout SE England and N. France.

1) Hayes Common, 1931: W. Abbey Wood Sta[tion], 1936, PHC. North Cray, G.M.B. v[ery] d[ominant] bank W. Wickham, 387654, D.P.Y.

2) Dartford Marshes 1931, PHC. Faversham KDR.

3) 96 Bysing Wood. 05 N. of Dunkirk. Whitstable Castle REW.

4) 16 Westbere Mashas 1956 **MNE**. 26 E of Stodmarsh 1955 **MNE**.

5) 46 N. of Cudham, 1938, F.R.B. 46 R[oa]d bank, Halstead 1947 **MNE**. 55 Knockholt, 1951, **MNE**. 46 By James Wood, Keston 1954 **MNE**. 46 SW of Downe, 1958 **MNE**.

6) 56 R[oa]dside, Top of Greenhill Wood, Otford, 1950 **MNE**. 67 Shorne Warren. 77 Chattenden Wood, Cliffe (L[ondon] Clay) 1950 **MNE**. 77 Cockham Woods, Upnor, 1960 **MNE**.

7) 86 Heath (Thanet S[and]), Dannaway, Newington, 1957 **MNE**. 95 Belmont Park, DMCC, 1958 **MNE**. 86 Hedge by Magpie Farm, Bredhurst, 1960 **MNE**.

8) 04 ½m E of Wye on Roadside, 1953 **MNE**. 24 Lane W. of Denton, 1955 **MNE**. 25 Lane, Elvington, 1956 **MNE**. 14 Dane F[ar]m, NW of Elham, 1958 **MNE**.

10) 45 N. of Ide Hill. 55 Ightham. R[oa]dside near Ch[urch], Kemsing, '62, HMP. Darenth.

11) 65 Ryarsh Wood. 65 Offham, 1954 **MNE**. 65 E of Plaxtol. G[rea]t Fishall Farm, NE of Tonbridge, 1961, CAS. Edenbridge, J. Talbot, 1926. 74 S. of Yalding. 94 Pluckley Brickworks, 1943, 1845 **MNE**. Golden Green. 85 Snarkhurst Wood. Fairbourne Lane Harrietsham BD. 65 Pizien Well, Wateringbury. 75 Maidstone, 1958 EGP **MNE**. Kiln Wood Lenham BD. 54 E. of Haysden. 65 Wrotham Heath, 1945 **MNE**. 65 S. of Broadwater F[ar]m, E. Malling. 84 Sutton Valence, 1896, W. Whitwell **BM**. 54 Chiddingstone Causeway. 84 On clay, S. of Coldbridge Wood, Lenham, 1958, Miss E. Millward **MNE**.

12) 94 Potters Corner. Woolpack Chilham, 1957 ES. 04 Willesborough. 893406 E of Langley, Smarden, DMCC. 04 R[oa]dside (F[olkestone] Sand), Bybrook, Kennington, 1952.

13) Southborough Vauxhall Lane HNC. 54 Penshurst Place Wood. 53 Halls Hole R[oa]d, T[unbridge] W[ells], 1943, HWP. 54 Tonbridge Wood, W. of Bidborough, CAS. 53 Lane, Ashurst Park, T[unbridge] W[ells], 1943, HWP. N of Pembury waterworks, 1962 CAS. Lamberhurst JRW. 63 N of Hooks Green, 1947 **MNE**. Finchcocks 1897 JS **TLS**.

14) Benenden, DKR [*sic*, ?for KDR.

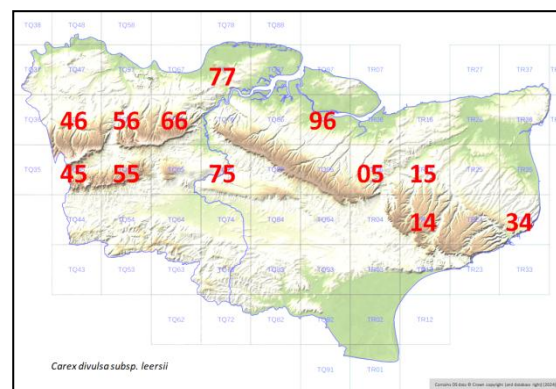
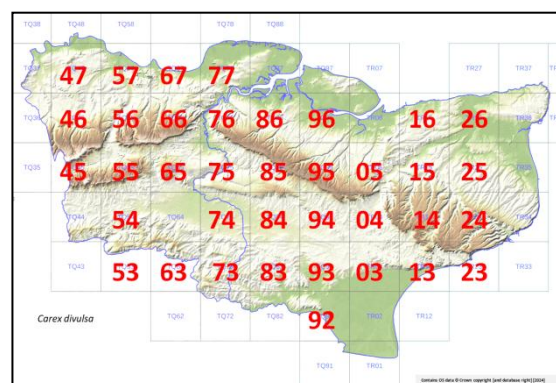
16) 23 Sandy bank E of Sandgate. 13 Bank by Newington Moor 1954 **MNE**.

[ssp. *leersii* (Kneuck.) W. Koch]<sup>962</sup> [Leer's Sedge.]

15, 16.

12/51

**Native.** Hedgebanks and wood-borders on base-rich soils, mainly on chalk: widespread but uncommon: 5)-8), 10), 11). I am not fully convinced that this species can always be distinguished from *C. divulsa*. Frequent in Surrey, very rare or unreported in Sussex and Essex: not



<sup>961</sup> The total should be 37; hectad 55 was double-counted.

<sup>962</sup> In the manuscript treated as *C. polyphylla* Kar. & Kir. (*C. leersii*).



yet detected in Pas de Calais.

5) 46 Hedge, Biggin Hill, 1949 **MNE**.

6) 56 Farningham, 1954, J. & P.V.H.. 66 Lane above Wrotham Water, near Vigo, 1962. 77 R[oa]dside to Cliffe, N. of Rochester 1949 **MNE**. 66 Lanebank, Upper Halling, 1953 **MNE**.

7) 96 Tunstall, 1958, DMcC **MNE**.

8) 15 Marley Lane, Kingston 1949 **MNE**. 14 Lyminge, 1954 **MNE**. 34 Waldershare (Eastling Wood) 1959 **MNE**. 05 E of Godmersham, 1960 **MNE**. Eastling Wood, B.N. 34 Roadside bank, Sutton, B.N., 1960. 24 By Crabble Mill Pond, Dover, EGP.

10) 55 One Tree Hill, 1952 **MNE**. 45 SE of Sundridge, 1955 **MNE**. 45 1m E of Westerham 1955 **MNE**.

11) 75 Allington, 1882, E. Bartlett **MNE**.

### C. arenaria L.

[Sand Sedge.]

15, 16.

11/51<sup>963</sup>

Native: open sandy habitats; local; abundant on fixed coastal dunes, locally abundant on roadside verges and banks inland on the Folkestone Sand from Wrotham Heath to Leeds in 11). Very local on the coasts of Sussex and Essex, very [sic] inland on open sandy heaths in W. Sussex and W. Surrey; abundant along the coast of Pas de Calais.

1) Ruxley pits, 1962, A.G. Spooner. 06 Shellness, Sheppey, 1946. 07 Beach N. of Leysdown.

2) 06 Beach W. of Seasalter, DHK, 1945. 87 Grain.

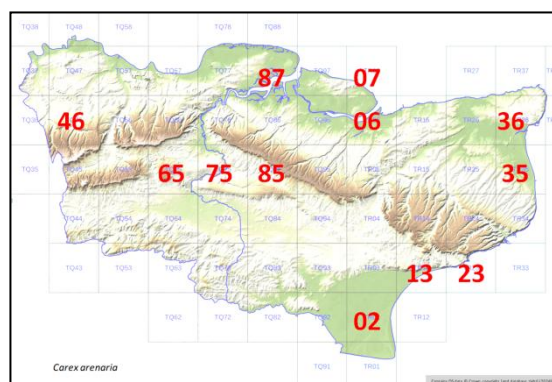
3) Shipyard, Whitstable town, on beach shingle, HMW.

4) 35 Abundant on the fixed dunes, from Deal Links; by Sandwich Bay; to 36 Shellness at the mouth of the Stour. Old dunes E of Downs F[ar]m 62. 36 Pegwell Bay beach.

11) 65 Wrotham Heath (on sandy verges of A.20 and in adjacent grass heath) 1944-60. 75 Roadbank near Bearsted Station. 85 Verges of A.20, 1 m. W of Hollingbourne, abund[ant], 1944-. 85 By A.20, on banks, Warren Wood, Leeds, 1944-62.

15) 02 Romney Warren, 1945-62. 13 Old Dunes S. of W. Hythe, '62. Greatstone dunes, 1946-60. NE of Littlestone, '62, ES. Hythe, 1955.

16) 23 Folkestone Lees.



### C. disticha Huds.

[Brown Sedge.]

15, 16.

19/52

Native. Base-rich or calcareous fens and fen-meadows, nearly always on peat; locally common in 2), 4) 10) 11), 12), 15) and 16); probably now absent elsewhere. Very local in Sussex, rare in Surrey and Essex; locally common in Pas de Calais.

1) Abbey Wood Sta[tion], GBB, '58.

2) Northfleet Brooks, 1944. ¾m S. of Cliffe Sta[tion], 1944. Holborough Marshes. Lunsford. [Stone Marshes, WCRW.] [Swanscombe Marshes, 1919, PCH.] Graveney Marshes, 1954, R.W.B.

4) Hacklinge, Marshy Meadows, 1945. Grove Ferry RGW. Chislet Marshes MEM. Fen N of Wingham, 1945. Preston Marshes. NE of Sandwich.

10) Meadow N. of Shoreham, 1954. Marsh NW of Brasted Sta[tion], RAC. S. of Darenth, 1894, AHWD **TLS**.

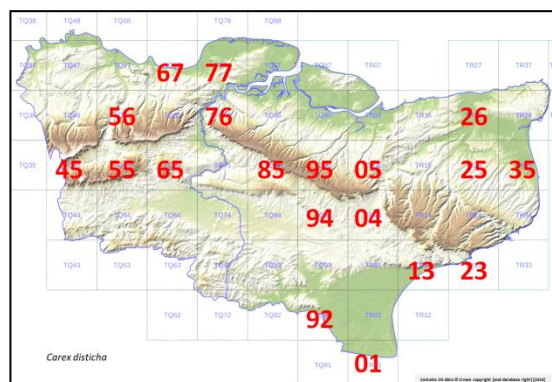
51/56 Shoreham; 51/45 Westerham; 51/55 S[even]oaks '56

11) Leybourne Marsh, 1944. Birling Marshes, 1943.

12) Brook, Cuckoldscombe. Chilham Marshes. Wet past[ure] near Wye 045460, 1958, PCH. 997463 Westwell, pond by W. Way 1955 ES.

[13] Southborough Common, in pond, JE little, J. Bot. 1926, p.250.]

15) Dungeness, abundant to l[ocally] d[ominant], in fens, Hoppen Pits, and 079187, DMcC. Marsh E. of old school, Dungeness. Marsh by R[oa]dside S. of Lydd, 1945.



<sup>963</sup> A total of 12 hectads is given in Francis Rose's rough map despite his text, and this transcript map corresponds.



**C. divisa** Huds.

[Divided Sedge.]

15, 16.

21/52

Native. Pastures and dike banks on the alluvial coastal and estuarial flats on soils derived from former saltings; abundant in such habitats, very rare elsewhere. Locally common in the coastal marshes of Sussex, Essex and Pas de Calais: very rare on dry grasslands near the Thames in N. Surrey.

[1] West Greenwich, J.T. Syme, 1852 **BM.**]

2) Plumstead Marshes, 1868 MA Lawson **BM**; 1944! Stone Marshes. Northfleet Brooks, 1946. Chalk Marshes. Shorne Marshes. Higham Marshes. Marshes W. of Cliffe. ¾m S. of Cliffe Station, 1944. E. of Cooling. Swanscombe Marshes, 1946. Erith Marshes. All Hallows. Grain. Stoke. W. of Upnor, in Meadows. Holborough Marshes. Burham Marshes. Marshes N. of Dartford, GMB. Kings Ferry. Near "Sportsman", Seasalter, on alluvial flats, PRB.

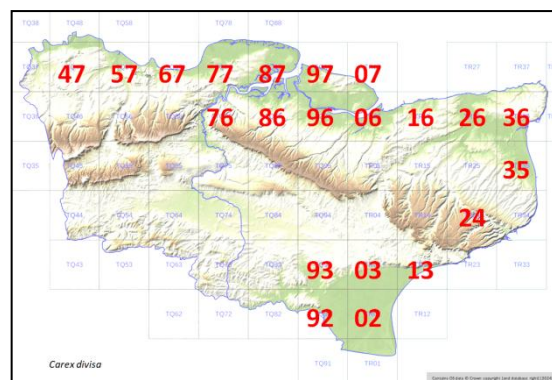
3) Edges of brook, Swalecliffe, 1946, P.R.B. Track, Seasalter, HMW.

4) NE of Sandwich. E of Sandwich. [T.B. Blow 1875 **BM.**] Chislet Marshes MEM. Minster Marshes JG. Meadows, Worth Minnis. W of Brooksend, LWW. Stodmarsh, REW. St Georges Links, W.J.L.S. 1946. Hacklinge Marshes. Salting edge, 266692 N of St Nicholas, 62. [Ramsgate 1837 W. Wilson **BM.**]

8) Chilton, Mrs K.D. Rowlands, on roadside bank near source of the Dour.

15) Brenzett, 1945. E. of Appledore. Dymchurch. Lydd. 93 Shirley Moor, by dike N of B.2080, 1965. Hythe, 1879, E.B. Clarke **BM**. SE of Ham Mill Green, Romney Marsh, 1952 DMCC. 02 St Mary's Bay by canal, LJM.

16) verge of A20 W. of Newington (Frogholt) B.N.

**C. remota** L.

Remote Sedge.

15, 16

/51

Native. Damp woodland, Alder carrs, ditch and stream banks, most often in shade: very common in the Weald in [sic]

1) Holwood Park. Eden Park, AGD, 1919 **MNE**. Shooters Hill Woods, G.M.B. Ruxley pits, S&S.

2) Northfleet Brooks, 1944. Higham Marshes, 1947. Holborough Marshes. S. of Snodland. N. of Lunsford.

3) Roadsides, Clowes Wood, PRB, 1946. Britton Court F[ar]m, Tyler Hill, REW. Perry Wood, Selling, DMCC. Blean Wood N of Dunkirk, 1955 **MNE**. 097581, Alder carr N of Chartham Hatch Mrs B Nash '55.

4) Ditch E of Ellbridge [sic] LWW. Elbridge JG.

10) Westerham Wood, 1947 (82!). Darenth copse, 1944-.

11) Ryarsh Wood. Addington Place DMCC. Horish Wood. Snarkhurst Wood. *Alnetum*, Kiln Wood, Lenham, '62. Eden, NE of Chiddingstone **MNE**. Eden, W. of Penshurst. Gilridge. Straight Mile, Leigh. Medway above Tonbridge. Medway below Tonbridge. Pond E of Hale St[reet] CAS. Beltring. Brandbridges. Teston. Yalding. Collier Street. 563482 R[ai]l[wa]y bank, Hildenborough, 1960, CAS. 1m E of Headcorn. Pond W. of Leigh Bridge Headcorn 813454, '62. Birch Wood, NW of Bethersden 915405, '62. 863438 N of Marley F[ar]m Smarden '49 DMCC. 893406 E of Langley Smarden '49 DMCC.

12) E. Lenham. Ruckinge 1906 H Elgar **MNE**. Cuckoldscoomb; 95. Brook. Ditch, Stubbs Cross, 1954 **MNE**. Ditch Birchett Wood 992358, 1952, DMCC. Mountain St[reet], Chilham, DHK.

13) Cowden. Redleaf Wood, Penshurst. Wood E of Penshurst Place. Horsmonden Furnace Pond JRW 1939. Roundabout Wood, T[unbridge] Wells, 1943, H.W.P. Timberlog Wood, Lamberhurst, 1941, JRW. Bayham Abbey CAS. Bedgebury Pinetum. Stone Cross Gill, Ashurst, 518381, 1959, CAS. Wet Wood, South Park, Penshurst, '62. Combwell Wood 1979. Boggy Wood SW of Pembury 614395 PCH.

14) Breeches Pond.

16) Coombe Wood Etchingill BW.

**C. ovalis** Gooden.

Oval Sedge.

15, 16.

/52

Native. Heaths, grass-heaths, and open places in woods on acid soils; fairly common on the Folkestone Sand in 12) and on Hastings Sands in 13); uncommon in 1), 3), 10), 11), 14) and 15). Rather common in Surrey and Sussex, rather rare in Essex, rare in Pas de Calais.

1) Chislehurst Common, 1945 **MNE**. Hayes Common, DMCC. Keston Common, 1949. Sparrow fields, Swain.

3) Grass-heath N. of Dunkirk, 1955 **MNE**. Minching Wood, Blean, 1957 **MNE**. Heathy edge Church Wood, REW.

4) Stodmarsh, 1950, LWW. Hacklinge.

10) Meadow 1m. E of Westerham, 1955 **MNE**. Knole Park, PCH. Meadow W. of Otford Road, N of Sevenoaks, 1950-**MNE**.

**11)** Addington Place, DMCC. 65 Leybourne Lakes, 1943. 85 Boggy field, W. of Sandway, 1954 **MNE**. 85 (Sandpits) Kiln Wood, Lenham '62. The Brooks, Harrietsham, Mrs B Dodds. 54 Straight Mile, Leigh 1944 **MNE**. 55 Hoads Common, Shipbourne. 64 Pond E of Hale Street CAS. 54 Riverbank, W. of Tonbridge. 84 W. Part of Dering Wood, 1962, E Scott.

**12)** Hothfield Common **MNE** 1962. Ashford Warren. Gibbons Brook, 1945-54 **MNE**. Marshy field E of Gibbons Brook, 1954. By Mersham E lake RAC. Grass-heath, Willesborough Lees, 1950. Boggy field by Stonehill, Sellindge, 1945 34. Fields SW of Sellindge Ch[urch] RAC. Bog ½m S. of Priory, Monks Horton 1953 **MNE**.

**13)** Hawkenbury Bog 1945: CAS, 1958. Gravel pit, Lamberhurst, 1940, JRW. Pembury Woods. By Lake, Kent College, Pembury 1956, F.R.B. Ferndale, T[unbridge] Wells CAS. Chingley Woods. Frizley, near the bog. Southborough, Pentecost field, HNC. Tun[bridge] Wells Common CAS 1961. Near Str[eam], High Rocks La[ne], T[unbridge] Wells, CAS, 1960. Swathlands Penshurst. Redleaf Wood, Penshurst. Ashour Wood, Penshurst 1944 **MNE**. E. of Penshurst place. Below Moorden, Penshurst. Bedgebury by Lake, 1897 JS **TLS**: GMB. Bayham CAS.

**14)** R[ai]lwa[y], High Halden, B.N. Robhurst F[ar]m, High Halden RAC. Near Penhill, 1947.

**15)** 079187 Damp shingle hollows Dungeness, E of School, 1946-62 **MNE**. Romney Warren.

**16)** Damp slope SW of Newington BN.

### ‡ *C. crawfordii* Fernald

[16.]

**1)** Pit, Green Street Green (Farnborough) 1937, J.E. Little in Hb.

### *C. echinata* Murr.

Star Sedge

15, 16.

/51

Native: moderately acid valley bogs, swamps, and carrs; among short-sedge vegetation; rare generally, but locally frequent in 13), and on the Greensand of 12). Locally frequent in Surrey and Sussex, very rare in Essex and Pas de Calais.

**1)** 46 Keston Bog, 414648, AGD, 1915 **MNE**: 1945 **MNE**! 1962, HMP. 46 St Pauls Cray Common, WCRW.

**3)** 15 Bigbery Wood, in Alder Carr, 1954 **MNE**. 05 Bog, Hunstead Wood, Chartham Hatch, 1956 **MNE**.

**4)** 35 Ham Fen, 1956 **MNE**. Ditch W. of Sandwich DHK.

**10)** Border of peaty ponds, Rose Wood, Ightham, 1944-62 **MNE**. 55 Boggy Alder carr, corner of Seal Chart, 1954, **MNE**.

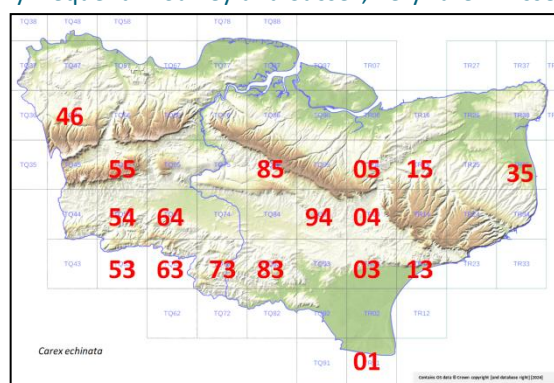
**11)** 85 Boggy meadow W. of Sandway, Lenham, 1954 **MNE**; 1965, B. Dodds.

**12)** 94 Hothfield Common, 1943-62, **MNE** -98. 13 Gibbons Brook, GW: 1945-54! **MNE**. 04 Willesborough Lees, 1944-54 **MNE**. 03 Bog, Stonehill, Sellindge, 1945-54, **MNE**. 13 Boggy field, Monks Horton, 1953 **MNE**.

**13)** 53 Hawkenbury Bog, 1943, JRW; 1944-48; 1958, CAS; 1965 R.E. Sh[orrocks]. 64 Pembury Wood, bog near pond, 1952: 1961, CAS. 64 by Lake, Kent College, Pembury, 1956, F.R.B. 83 Chittenden Wood, 1943, JRW; 1944-1958! **MNE**. 54 E of Moorden, Penshurst 1949 **MNE**. 614 Furnace Pond, Horsmonden, 1954 **MNE**. 73 Near Lake, Bedgebury Pinetum 1954 **MNE**, 1961 EGP **MNE**. 63 Bog in Chingley Wood, 1947 **MNE**. 73 bog in Angley Wood, 1945-61 **MNE**. [Bog opp[osite] Bedgebury House 1897 JS **TLS**.]

**14)** 83 near Penhill, 1947.

**15)** 01 Fen SE of Hamilton F[ar]m, Dungeness, 1946, JHL; 1953! **MNE**.



### *C. elongata* L.

[Elongated Sedge.]

15, 16.

3/51

Native. Swamps, sallow-carrs, river and ditch banks, in Kent always on the Weald clay: very rare. Very rare, in a few places by rivers in Surrey and Sussex; extinct in Essex: unrecorded in Pas de Calais but fairly frequent in the east of Nord (forêt de Wassigny!).

**11)** Marsh below Gilridge, W. of Penshurst, 1944 **MNE**. By R[ai]lwa[y] Br[idge], by Medway, W. of Tonbridge, 1944, **MNE**; 1960, CAS. Ditch 1m E. of Tonbridge, abund[ant], 1944 **MNE** 1952 **MNE**. Ditch E. of Beltring, J.E.L. Marshy wood E. of Hale Street, E. Peckham, 1952 **MNE**. [Near Maidstone, 1882, E.B., **MNE**]

**12)** "Scotts Pond", Stubbs Cross, Kingsnorth, E.S.; 1952 **MNE**.

### *C. curta* Gooden.

White Sedge.

15.

2/51

Native. Moderately acid swamps; extremely rare. In Surrey rare and nearly confined to the west; in Sussex in a few localities in the Weald and on the western Greensand; unrecorded for Essex and Pas de Calais.

**12)** 94 Boggy ditch and adjacent woodland, among *sphagnum*, Willesborough Lees, 1944-54! **MNE** 1978 EP.  
93 Swampy Pond on Weald Clay, SE of Spot House, 975348, Shadoxhurst, 1955, ES **MNE**. 93 Longrope Wood, 987354, ES, 1955.

**C. hirta** L.

[Hairy Sedge.]

15, 16.

43/51<sup>964</sup>

**Native.** Fens, meadows, pastures, sand dunes, roadside banks; on soils of a wide range of texture and water content, but commonest on peat, sand and alluvial soils; absent on typical chalk downland, and in very acid or saline habitats, or in heavy soils, but otherwise fairly common and widespread through the county. Common in Surrey, Sussex and N. France.

**1)** 47 By R[iver], N. Cray, PCH. 47 Mount Mascall, Bexley, PCH. 46 Keston Common. Blackheath, ECW, 1946. 47 Eltham Common, 1934, LRA **G**. 47 Woolwich Common, 1934, LRA **G**, **MNE**. Ruxley Pits, S&S.

**2)** 47 Woolwich Arsenal, PCH. 47 Northfleet. 57 Below Crayford. 97 Sheppey. 97 Upnor Marshes. 87 Grain. Newington, F.F. 76 Holborough Marshes.

**3)** 16 Thornden Wood. 05 Dunkirk. Church Wood, REW.

**4)** 35 Deal Links. 35 Ham Fen, 1954 **MNE**, 1991. Chislet Marshes, MEM. Wenderton Meadows, BN.

**6)** 57 Greenhithe. 67.

**7)** 95.

**8)** Winterage Wood, Acrise, 1963, DACL.

**9)** Pegwell Bay.

**10)** Darent water Meadows, PCH. 55 KNole Park. 55 Sandpit by R[ai][wa]y E of Riverhead, CAS. 56 Meadow N. of Shoreham. 55 Dunton Green, 1919, AGD, **MNE**. Brasted, marsh near Ch[urch], RAC. Bradbourne Meads FSEF. Westerham Wood 1947.

**11)** Addington Place DMCC. 66 Birling Marshes 1943 **MNE**. 65 Leybourne. 75 New Road, E. Malling. 65 Roydon Hall. 65 Ryarsh Wood. 85 A20, W. of Hollingbourne. 85 Kiln Wood, Lenham, on Sandgate loam, '62. The Brooks, Harrietsham, B.D.

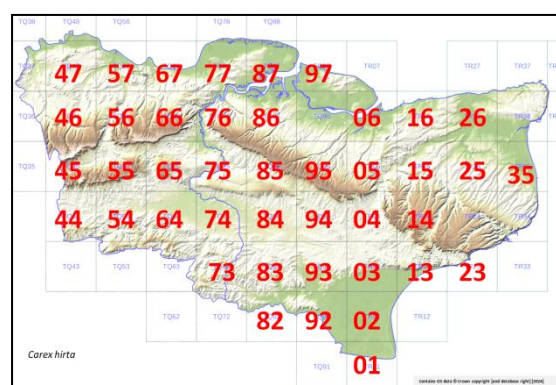
**12)** Stubbs Cross, 937393, 1952, DMCC. Criol F[ar]m Shadoxhurst, 1952, DMCC. Shoddington W[ater] Works ES. 14 Stowting Meadows, 1954 **MNE**. Hothfield Common, NW corner. Cuckoldscombe, to 1995.

**13)** Meadows NW of Chiddingstone 1944, 1947 **MNE**. Southborough cemetery, HNC. Finchcocks, 1896, JS **TLS**.

**14)** 83 Near Breeches pond, 1947. 73 Hawkhurst, DS. Knock Wood Tenterden RAC.

**15)** Dungeness, 1953, **MNE**. 02. 01.

**16)** Folkestone Warren KDR. 13. 23.



(**C. lasiocarpa** Ehrh. Slender Sedge occurs in valley bogs in the New Forest, Hants, in Suffolk, and in rich fen at Cucq, Pas de Calais, but is unrecorded for Kent, Surrey, Sussex and Essex.)

**C. acutiformis** Ehrh.

[Lesser Pond Sedge.]

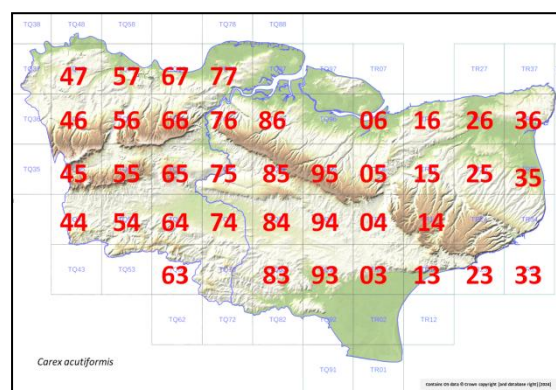
15, 16

37/51

**Native.** River and stream banks, ponds, fens and ditches in neutral or calcareous waters; widespread, and generally common and abundant in the basins of the Darent, Medway, Stour, and Thames, in 1), 2), 3), 4), 10), 11) 12): but very rare in the Thames-Medway estuary below Northfleet and Tochester, and unrecorded in the Stoke-Grain-Sheppey-Teynham areas: very rare in the High Weald (Lamberhurst only) in 13), rare in 16): absent from Romney Marsh 15), and the chalk districts 5)-9). Frequent in Surrey, Sussex, Essex, and Pas de Calais in suitable habitats.

**1)** Keston DMCC. Locks Bottom, near Keston, 1940 F.R.B. By lake, Holwood Park, 1954 **MNE**. N. Cray, by R. Cray, 1955 **MNE**. Ravensbourne, Bromley, AGD, 1919 **MNE**. Ruxley pits, S&S. Orp[ington]

**2)** Plumstead Marshes. Northfleet Brooks. Holborough Marshes. S. of Snodland. New Hythe. Medway banks,



<sup>964</sup> It has not been possible to reconcile this total with the mapping data.

above Aylesford. Waystreet F[ar]m, Hernhill, HMW. (Crayford, H. Groves **BM**.) Barnes Cray, 1944. Fen, 857669, L[owe]r Halstow '62.

3) Alnetum, Hunstead Wood, Chartham Hatch, 1956 **MNE**.

4) Hacklinge Fen. N. of Wingham. Wenderton, BN. Ham Fen, 1955 **MNE**. Stodmarsh REW. W of Brooksend, LWW. Sandwich, DACL. Westbere Marshes, MEM.

10) Darenth Water Meadows PCH. Shoreham, by R. Darenth, M. Horner, BEC Rep. 1923, p218 (var. *composita*). Riverhead. Meadow S. of Otford, 1956 **MNE**. Brasted, Marsh near church, RAC, '58.

11) Birling Marshes, 1943 **MNE**. Leybourne Lakes, 1960. Tovil. (Above Maidstone, 1902 JH Allchin **MNE**.) Farleigh. Teston. N of Beltring, in marsh by Medway, 1944, **MNE**. L[owe]r Haysden, above Tonbridge, 1944. Addington Place, DMCC. Horish Wood. Marsh W. of Sandling 1943 **MNE**. Edenbr[idge] v51/44, 1955; Tonbr[idge] 51/54; Pemb[ury] 51/64; Marden 51/74; Headcorn 51/84, 1955.

12) 14 Stowting Meadows, 1954 **MNE**. 04 Cuckoldscoomb, Brook. 95 SE of Lenham. 94 Charing Heath, Alder Carr, ES. 05 Chilham, by Stour, 1938 F.R.B.: 1959! **MNE**.

13) 63 Ditch S of Church, Lamberhurst, 684365, CAS, 1960.

14) In Tenterden, 51/83, 1965. Breeches Pond, RAC.

15) (not at Dungeness 61/01 nor Romney area 61/02) in Woodch[urch] 51/93; in Ham St[reet] 61/03; in 61/13 Hythe.

16) 23 Sandling Park RAC. Fen, Darnley Vale, Cheriton, 1955 **MNE**.

**C. riparia** Curt. [Greater Pond Sedge.] 15, 16 32/51

**Native.** Fens, swamps, riverbanks, ditches, in neutral, calcareous or brackish waters, and mainly on inorganic substrata; locally common, and widespread in 2), 4), 11), 12) and 15); unrecorded from 5)-9), from the High Weald 13) and 14), from 16) and the coastal parts of Romney Marsh. Commonest by the large rivers. A dominant of the "*Magnocaricetum*" association of base rich marshes with consistently high water-tables. Frequent in the river villages of Surrey, Sussex and Essex and N. France.

1) [Charlton Marshes, 1821, C. Johnson.] 51/47-'55.

2) Plumstead Marshes. Erith Marshes, PCH. Denton. 76 Holborough Marshes 1944 **MNE**. R[iver], N. of New Hythe, 1943 **MNE**. R[iver], Aylesford, 1958 EGP, **MNE**. 16 Luddenham Marshes, H.M.W. 06 Dikes, W of Waystreet Farm, Hernhill, 1955 **MNE**. 06 Seasalter, dikes, HMW. Ditches, Barnes Cray, 1944. Higham Marshes PCH. Eccles, by Medway '44. Northfleet Brooks. Dartford 1881 J Groves **BM**.

51/47-'55; 51/57 Dartford; 51/76 Rochester, 51/86 L[owe]r Halstow; 51/96 Teynham '56; 61/96 Fav[ersham]; 51/67; 51/77-'56; 51/87 Grain-'58?

4) Hacklinge Fens. Wingham N Fen, DACL. Preston Marshes, NW of Ch[urch], '62. River NE of Sandwich. 15 Fordwich Marshes, 1949, E. Robinson. Dikes, Wenderton, BN. Ham Fen, 1991.

W[ing]ham 61/25, 1986; S[t] Nich[olas] 61/35; 61/16 Sturry '56; 61/26; 61/36 recent.

9) 36 Copse, Durlock Minster, AGS.

10) The Moors, Bat & Ball, 530575, CAS. Chalk stream, Brasted Brook, RAC.

51/56 Farningham '56; West[er]ham 51/45; S[even]oaks 51/55.

11) Addington Place, DMCC. Maidstone 1848 **MNE**; 1878, E. Bartlett **MNE**. By R[iver], S. of Yalding 1953 **MNE**. Medway, W of Brandbridges, 1939 JRW. Medway, Hartlake Bridge, 1943 JRW. Medway, Poundsbridge, 1963, R.E.Sh. (not 51/44); Tonbr[idge] 51/54; Pemb[ury] 51/64; (not 51/74); Headcorn 51/85; 51/65 W[est] M[alling]; 51/75 Maidstone; 51/85; (not 51/95 Lenham)

12) Mersham Mill, 1956 **MNE**. Eastwell Lake, CT; ES. Brabourne Lane, Smeeth, RAC. Pond SW of Sellindge Ch[urch], RAC. (not Stowting 51/14); Hoth[field] 51/94; Ashford 61/04; Chilham 61/05; C[anter]bury 61/15.

13) (not near T[unbridge] Wells 51/53; nor L[amber]hurst 51/63; nor C[ran]brook 51/73.)

14) 83 Roadside ditch, Knock F[ar]m, Tenterden, 1958, RAC. 51/82 W. Oxney/Rolvenden; 51/92 E. Oxney/Appledore; 51/83 Tenterden; 51/93 Woodch[urch]; 61/03 Ham St[reet]/Bilsington

15) Dungeness, near old school, 1953 **MNE**. Sandhurst Levels, 1954 **MNE**.

(not in 61/02 Romney; not in 61/13 Hythe; not in 61/23 Folkestone)

**C. pseudocyperus** L. [Cyperus Sedge.] 15, 16. /51

**Native.**

1) Hayes, DMCC. Abbey Wood, 1927, H.J.B. Pokeridden Wood, F. and C.A. Swain. Crofton Wood, 1955, GMB.

2) Higham Marshes, 1944. Marsh E. of Cooling, 1944.

4) Fordwich Marshes, 1949 E. Robinson. Minster Marshes, 1963. Ditches, Wenderton, B.N. Ham Fen dikes, 1991.

6E) Pond, Randall Wood, Shorne, 1954 **MNE**.

10) Wilderness Park Pond, Seal, 1944. Seal Chart Pond, 1944. Westerham Wood, 1947. Dunton Green, WCWR.



**11)** E of Tonbridge by Medway 1961, CAS. 1½ m S. of Headcorn, 1944. Pond 1m E. of Headcorn, 1962. 2½ m N. of Staplehurst. E of Marden. S. of Yalding. Mockbeggar, Collier Street. Pond in Kiln Wood, Lenham '62. Pond E of Hale St[reet] CAS, 683493, 1957. Smarden. Leighbridge Pond Headcorn 813454, '62. Pond 1m E of Headcorn 849437, '62. New Ho[use] F[ar]m Pluckley, V.F.P.D.

**12)** 04 Mersham-le-Hatch, E lake. 14 40 Acre Wood, Monks Horton, ES. Pond near Spot House 975348, 1955, ES. Birchett Wood, 992358, DMCC, 1952.

**13)** Ditch in fields below Lamberhurst Ch[urch], 1941, JRW: 1960, CAS, 684385. Kilndown Wood, 1946. [Tun[bridge] Wells WWR **TLS**.] Pond by B.2176, 1m N. of Penshurst 1944 **MNE**. Penshurst Park Pond, M. Mallinson. Pembury Woods, 1959, CAS. Calla Wood, Pembury, 1962, CAS. Angley Wood swamp / Cranbrook, 1955 **MNE**. Bayham Lakes CAS.

**14)** Breeches Pond, 1947.

**15)** Largest 2 lakes, Hoppen Pits, Dungeness 1947-1953 **MNE**; H. Lamb, 1901 **MNE**. Dike, Windmill Channel, E of Freezingham, Rolvenden, 1959 **MNE**.

### **C. rostrata** Stokes

[Bottle Sedge.]

15, 16.

11/51

Swamps, ditches, and lake borders, usually on peaty organic substrata, in calcareous to flushed weakly acid waters; it forms a pioneer stage in the hydrosere leading to the formation of fens. Now rare and local in Kent, though still frequent in 4). Local and scattered in Surrey and in Sussex, extinct in Essex, very local in Pas de Calais.

**3)** 05 Sphagnum bog in Alder carr, Hunstead Wood, Chartham Hatch, 1956 **MNE**.

**4)** 25 Fen ditches N. of Wingham, 1945-63 **MNE**. 25 Fen E. of Wingham, 1945 **MNE**. 35 Hacklinge Fen, 1946 **MNE**. 35 Worth Minnis, 1960, **MNE**. 25 NE of Wickhambreaux, 1956 **MNE**. 16 Westbere Marshes, 1956 **MNE**. Stodmarsh, Miss E. Milward, 1958 **MNE**. 15 Fordwich Marshes !1949, E. Robinson.

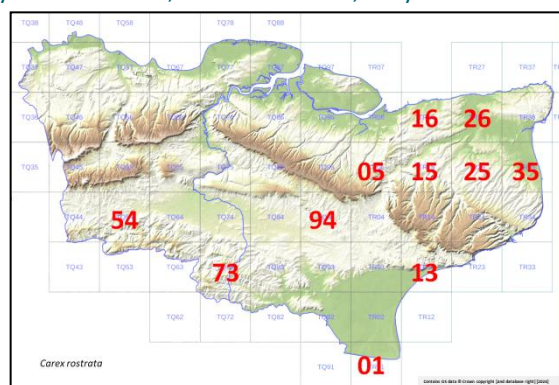
**11)** 54 Marshes above Tonbridge, c.1944, H.W. Pugsley: not seen by me.

**12)** 94 Hothfield Common, 1903, H. Lamb **MNE**; 1943-62 **MNE**. 13 Gibbons Brook, 1954 **MNE**. (Pl[ant] with forked spikelet, 1943.)

**13)** 73 Frizley Bog, 1909 JS **TLS**; 1944! 1949! FR and ECW **MNE** (vc16). [T[unbridge] Wells, WWR **TLS**.]

**14)** [Reported from Breeches Pond, Tenterden, in Fl. Kent.]

**15)** 01 Hoppen Pits, Denge Beach (I, II, III and VI) 1946-62 **MNE**.



### **C. vesicaria** L.

[Bladder Sedge.]

15, 16

13/51

Native. River- and stream-banks and pond margins, usually on clayey inorganic substrata of non-calcareous, neutral to weakly acid water. Very local: almost confined to the Weald, where it is frequent on the Weald Clay of 11) and 12), and in the High Weald occasionally in 13), rare in 14). It is rare lower down the Stour in 12) and unknown today elsewhere in the County. Distribution-pattern similar in Surrey and Sussex; very rare in Essex and Pas de Calais.

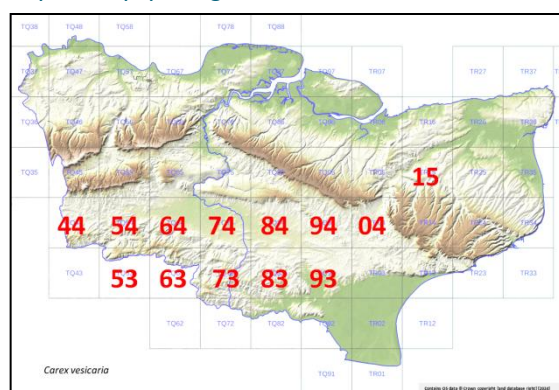
**1)** Sparrow Fields, F. & C.A. Swain.

**4)** Fordwich Meadows, 1949, E. Robinson.

**10)** Westerham Wood, 82!

**11)** 54 R[iver] Eden NE of Chiddingstone. 44 W. of Chiddingstone, 1947. 44 Edenbridge, 1947. 54 By Eden, W. of Penshurst 1944 **MNE**. 54 Straight Mile, Leigh. 54 Marsh ditches W of Tonbridge 1944 **MNE**. 64 E of Tonbridge, 1944 **MNE**. 74 Pond S. of Yalding, by B2162. 64 N. of Beltring, 1944 **MNE**. 64 Pond ¾m E. of Hale Street, E Peckham, 1952 **MNE**. 84 In Sallow carr round Pond 1m E of Headcorn, 849437, 1949 **MNE**, 1962. 84 Smarden. 84 Beult S. of Ch[urch], Headcorn, 831440, '62. 84 W Leighbridge Pond Headcorn, 813454, '62. Beult W of Cross at Hand, 1963. 94.

**12)** 93 Pond, Stubbs Cross, E.S., 1952 **MNE**. 04 By Lake, Mersham Le Hatch, 1960, FR and ES **MNE**. W of Kingsnorth. 04 N. Smeeth RAC.





**13)** 53 Stone Cross Gill, Ashurst, 518381, 1960, CAS. 54 Gilridge, W. of Penshurst, in small swamp, 1944. 63 Field opposite Manor, Lamberhurst, 1940, JRW. 73 By lake, Bedgebury Pinetum, 1961, E.G.P. **MNE**. 44 Furnace Pond, Cowden, 1895, **MNE**. 73 Angley Wood, in swamp 1955 **MNE**. 63 (vc14?) Bayham Abbey, by Teise, F.R. Browning 1938, JRW 1941, CAS 1960.

**14)** 83 Breeches Pond, Tenterden, 1947, RAC. Robhurst F[ar]m, High Halden, RAC.

### **C. pendula** Huds.

{Pendulous Sedge.}

15, 16

36/51

**Native.** Deciduous woodland, mainly of oak, alder or hornbeam, on heavy, mostly non-calcareous, clay soils, usually gleys; abundant through the High Weald of 13) and 14), the Weald Clay areas, and the spring lines of the L[owe]r Greensand, and on the Gault in 10), 11), 12) and 16); locally common on Eocene clays and loams in 3): now rare in 1): a solitary locality on Woolwich Beds in 2) (Newington, Hawes Wood); absent elsewhere, in the chalk districts 8)-9) and the marsh districts 2), 4) and 15). It has a similar distribution pattern in Surrey and Sussex. In Essex it is widespread on the clays throughout the inland parts. In Pas de Calais it is largely confined to the Boulonnais and the NE.

**1)** 47 Kennel R[oa]d, Sidcup, RM Burton. 47 Abbey Wood, G.M. Brown, 1958. [Moor copse, Bickley, to 1957 **MNE**: then destroyed.] [Hayes, DMcC, destroyed.] 36 Spring Park Wood, W. Wickham, D.P.Y. Old R[oa]d cutting on clay, W. Wickham, 1955, JM Sherwood. Ruxley Pits, S&S.

**2)** 86 Hawes Wood, Newington, 1959, on Woolwich Beds **MNE**.

**3)** 05 Hawkins Wood, Chilham 1944 DHK. 15 Brotherhood Wood. 16 Thornden Wood. 16 Clowes Wood. 16 Dengrove Wood. 15 Bigbery Wood. 15 Canterbury Golf Links. 05 N. of Dunkirk. 15 Oldridge Wood. 15 Trenley Park Wood. 05 Fishponds Wood 097581. S. of Stodmarsh Court F[ar]m, REW. 16 Chestfield, PRB. 06 Blean Wood N of Dunkirk '55. 25 Pine Wood, Littlebourne '58. 26 Wood N of Hersden '55. 25 Hill n[ea]rby Elbridge Cross R[oa]ds, B.N.

**5)** Betsoms Hill on clay, RAC.

**8)** Reinden Wood, 1959, B.N. and DACL, on clay with flints.

**10)** 45 Westerham Wood, 82! 55 W. of Kemsing.

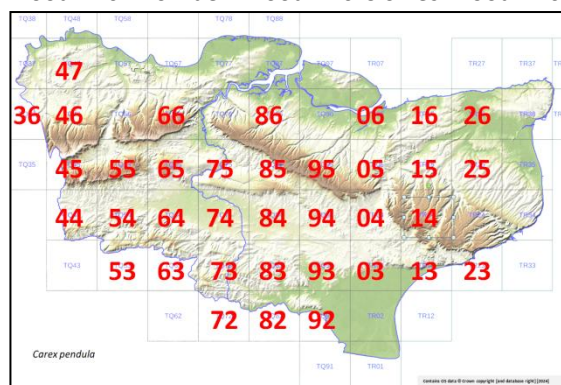
**11)** 66 Ryarsh Wood. 66 Birling Place. 66 In Birling Village, 1943 **MNE**. 85 Sandhurst Wood. 85 Kiln Wood, Lenham (Sandgate loam) '62. 65 Wood on Ath[erfield] Clay SW of Mereworth '55. 64 Starve Crow Woods Tonbr[idg]e by str[eam] '55. 54 Tonbridge Castle grounds 55. 922430 The Forest, Pluckley DMcC. 64 Ditch in Marshes E of Tonbridge, 1944, **MNE**. 893406 Handen, Smarden, DMcC.

**12)** 04 Below Cuckoldscoomb, Brook. 04 Cadmans Wood. 04 Brabourne Coomb. 13 Hayton Wood Monks Horton (gault) '55. 14 Stowting Meads, 1954 **MNE**. 03 R[oa]d ½m N. of Ham St[reet]. Wood SW of R[ai]l[wa]y W of Sellindge RAC. Chilham Castle, Wood, by lake RAC.

**13)** 44 Wood NE of Cobhambury, Edenbridge, 55 (clay). 54 Ashour Wood. 54 Redleaf, N. of Penshurst. 63 Bayham Abbey, FRB. 64 Pembury Wood, Wet area near Pond. 64 Cinderhill Wood. 63 Copse R. Teise (alluvium) Hoathly 55. 53 Stone Cross Gill, Ashurst, 518381, 1960, CAS. 56 Wet Wood, South Park, Penshurst, 62. 54 Bidborough FRB 1962. Shadwell Wood, Bullingstone, 1966. W of Bidborough Ch[urch], HNC. 54 R[oa]dside copse, The Grove, Penshurst 1944 **MNE**. Birch Wood Bidborough 540430 (Wadhurst Clay) CEH. 74. 1961, CAS. 64 Boggy Wood SW of Pembury (clay) 614395 PCH. 63 Reise S. of Lamberhurst Church 684365, 1960, CAS. Combwell Wood 1979.

**14)** Robins Wood, Cranbrook, 1944. 73 Parsonage Wood, Benenden. Breeches Pond RAC. Moor Wood, Benenden in valley on clay, 62. 72 Copse SW of Lit[tle] Conghurst, Hawkhurst, '55 (alluvium). 72 Wood W of Sandhurst Cross (Wad[hurst] C[lay]). 72 Gill wood NW of Sandhurst Cross (Wad[hurst] C[lay]), 1958. 72 Gill W of Down gate, Sandhurst. 82 College Wood, Wittersham 897265, '62 (Wad[hurst] C[lay]). 92 Rook Wood, Wittersham in gill bottom on clay, '62. 92 Shaw by B2082, Underhill, Wittersham, on loam, 62. 93 By Str[eam] in Gill W of Tophill F[ar]m, Wittersham 62. Alder carr (Wad[hurst] C[lay]), Farnell Wood, SW of Rolvenden '62. 83 Knock Wood, Tenterden by r[oa]d, l[ocally] s[emi] d[ominant] on clay, 62. 93 Gill Bottom, S. of Pigeon Hoo, Tenterden, 62. 82 Bates Gill, Wittersham. 82 Bates Gill N of Wittersham. 82 Gill N of Sandhurst Village, Alderden Wood. 92 Owley, Gill Wood, Wittersham.

**16)** 03 Aldington Knoll. 13 Coombe Wood, Etchinghill. 13 Postling Wents. 13 Asholt Wood. NE of Asholt Wood by str[eam]. 23 Holywell, Folkestone. Wood W. of Hythe on Ath[erfield] Clay. Brockhill Park DACL.



**C. sylvatica** Huds.

[Wood Sedge.]

15, 16

47/51

Native. Deciduous woodland on a very wide range of soils, from Beechwoods on chalk and Ashwoods on ragstone to damp oak and alder woods; absent from unflushed waterlogged gleys (where it is replaced by *C. remota* and *C. pendula*) and from very acid soils (pH below about 5.5), and its abundance in a site generally indicates good aeration, fair water supply, and reasonable base-content. Common throughout Kent wherever there are old woodlands, thus absent from the marsh districts 2), 3) and 15). (apart from woods on Tertiary outliers in 2) and 4)). Absent from Sheppey. In the Heathy Oakwoods of *Quercetum petrae* type on Greensand and Hastings Sands, it is confined to gills, puddle tracks, hollows, and flushes where the base-status of the soil rises. Common in all adjacent counties and in N. France.

1) High Wood, Crofton PCH. O[ccasional] Abbey Wood GAM '54. Joydens Wood PCH. Farningham Wood, PCH. Holwood Park. Beckenham Place PCH. Shooters Hill Woods GMB. Hollows Wood, Chelsfield. W. Wickham Woods, 1916, AGD, **MNE**. NW part of Petts Wood, Chislehurst, 1954 **MNE**. 82!

2) 87 Copse N of Fenn Street, St Mary Hoo, 1955 **MNE**. Hawes Wood, Newington.

3) 16 Thornden Wood. Bishopsden Wood. Church Wood SE. 15 Bigbery Wood. 15 Trenley Park. 15 Old Park, Canterbury '55. Wood S. of Dunkirk. 26 Shelving Wood Hoath 1962. 06 Wood 1m N. of Dunkirk, 1955 **MNE**.

5) Pilots Wood, Shoreham, PCH. Wood W. of Shoreham PCH. Darwins Bank (Hanging Grove) Downe. Jewells Wood, Biggin Hill, 1915, AGD **MNE**. W of West[er]ham Hill 426577, RAC. Well Wood, S. of W. Wickham 3964, PCH.

6) The Thrift, Bean PCH. 581730 Darenth Wood. Lords Wood Darenth. Swanscombe Wood. Mounts Wood. Vigo Woods.

6E) Cockham Woods DMCC. Ladies Close Wood. Chattenden Wood. Great Wood, Cobham. G[rea]t Crabbles Wood, Shorne. Randall Wood.

Dunstable Woods, Shoreham, PCH. Preston Hill, PCH. Whitehorse Wood. North Wood, Bush, 1944 **MNE**. Wingate Wood, Halling 1943 **MNE**. Merralls Shaw.

7) Bredhurst Hurst, '55. Squirrels Wood, Stockbury. Westfield Wood. Above Queen Down Warren 1954, ATT and FR **MNE**. Purple Hill. Copse below Purple Hill '55.

8) Hangers NW of Westwell '62. Larkey Valley Wood RGW. In copse on loam and on clay N of Bavinge '62. Wood W.

of Podlinge (loam) '62. Winterage Wood Acrise, 1963 DACL. Garden Wood Acrise, 1963 DACL. Copse by Halfway Ho[use], Barham on A2, '55. Coombe Vale Dover (1<sup>st</sup> wood). Wolverton Wood, Alkham. On chalk on valley side Reinden Wood '62. Oak Wood (ch[al]k) E side Goodnestone Park '62. Cast[anea] copp[ice] (loam) Goodnestone '62.

10) Westerham Wood 1947. Scords Wood.

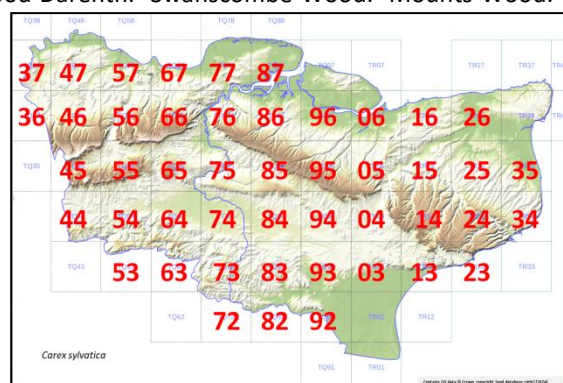
11) Scarp, Rooks Hill, 55. Wood SE L[owe]r St Clere '55. Ryarsh Wood. Larkfield Heath, Mereworth Woods. Horish Wood. Holt Wood '55. Warren Wood. Oaken Wood R[oa]d, Barming '55: HL 1895 **MNE**. Kiln Wood, Lenham, '62 (Alnetum). Millbay Wood, Nettlestead. N. of Bough Beech '55. 863438 N of Marley F[ar]m Smarden DMCC.

12) Copses S. of E. Lenham. Willesborough Lees. Near Pond, SW of Sellindge Ch[urch], RAC. Cuckoldscoombe '97.

13) NE of Cobhambury, Edenbr[idge], 1955. Redleaf N. of Penshurst. Lamberhurst Quarter. Brookhurst Wood / Vauxhall Lane Southborough HNC. Shadwell Wood Speldhurst. Wetwood, South Park, Penshurst '62. Stone Cross Gill, Ashurst, 518381, 1960 CAS. Timberlog Wood JRW. Bayham Abbey CAS. Combwell Wood.

14) College Wood Wittersham (Ash. S.) 897265, '62. Rook Wood Wittersham '62. Gill W of Tophill F[ar]m, Wittersham '62. Gill S. of Pigeon Hoo, Tenterden 62. Knock Wood Tenterden by R[oa]d '62. Butness Wood Appledore '62. In Gill ¾m E. of Rolvenden 1954 **MNE**. Gill NE of Benenden 1954 **MNE**.

16) Postling Wents. Asholt Wood. Coombe Wood. Lympne Park Wood. N of Asholt Wood. Holywell Folkestone BW.

**C. strigosa** Huds.

[Thin-spiked Wood Sedge.]

15, 16

26/52

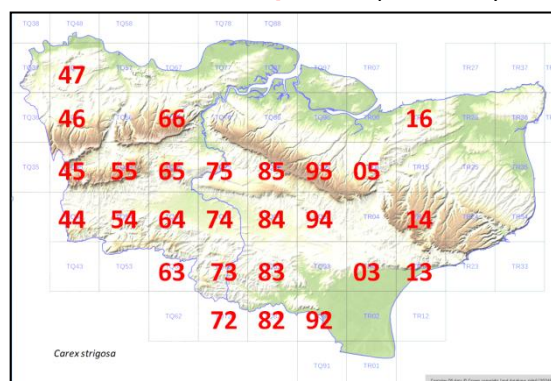
Native. Damp deciduous woodland on base-rich soils, mainly in calcareous or basic flushes in *Alneta*, but also in rides: widely distributed in the Weald, mainly in gills on the Wadhurst Clay of 13) and 14) (becoming rather common eastwards about Tenterden to Oxney); on the ragstone of 10) and 11), and on the gault of 11) and 12); also occurring on the Eocene, particularly on the glauconite Thanet Sand and the Woolwich Beds, in six localities in 1) and 3); far rarer on the Weald Clay of 11) and 12) where it is always associated with flushed sites.

It extends westward into Surrey along the gault, but is rare there: in Sussex it is frequent in gills, and occurs on the Weald Clay and Greensand as well. Rare and local in Essex. Rare in Pas de Calais on Wealden and Jurassic strata in base-rich *Alneta*. It is far commoner in the Wealden region than elsewhere in Britain.

**1)** 46 [High Wood, 441657, Crofton, 1954 **MNE**: wood destroyed 1961.] [Charlton Wood, Hb. **Dill.**] 46 Petts Wood, 1954 **MNE**. 47 Ice House Wood, Scadbury Park, Chislehurst, 1959 **MNE**. 46 [Moor Copse, Bickley, 1957 **MNE**, destroyed 1957.]

**3)** 16 Dengrove Wood, Sturry, 1955 **MNE**. 05 Joan Beech Wood / N. of Up[pe]r Ensinge [*sic*, for Ensign], in ride on Wool[wich] Beds, 1957 **MNE**.

**10)** 45 Crockham Hill, LNHS (by stream to SW, 1953!). 45 Quinten Wood, S. of Toys Hill 1960 **MNE**, 417514. 45 Scords Wood, S. edge, in Alder Carr, 1957 **MNE**. 55 Martin Wood, W. of Ightham Mote 1957. 45 S. of Everlands, W. of Bayleys Hill, 1960 **MNE**. 55 Str[eam] N. of Dibden, 1969. 55 Springs S. of St Julians, Underriver, 1960. SE of Bayleys Hill, 517517, 1959, RAC. Westerham Wood, 825, 55



**11)** 66 Ryarsh Wood 1943!, '46 **MNE**. S. of Wrotham Water, c.1960. 74 Wood S. of Boughton Monchelsea (Ath[erfield] Clay/Rag[stone] spring line) 1954 **MNE**. 85 Snarkhurst Wood, Hollingbourne, 1944 **MNE**. 65 Wet copse E of Pizien Well, Wateringbury '57. 75 Quarry Wood, W. Farleigh, 1957 **MNE**. 85 E. of Chegworth, 1954. 85 A[bandant] Alder carr, Kiln Wood, Lenham, '62. 494509, S. of Hanging Bank, F[olkestone] sand, RAC. 499486 Bayleaf RAC. 94 Park Wood, SW of Pluckley, 1954, 1956 **MNE**. 84 Copse by Beult, Kelsham, Headcorn, 1956 **MNE**.

**12)** 95 Copse on Gault SE of Lenham 1944-45 **MNE**. 03 Bourne Wood, Orlestone (W[eald] Clay) 1957 **MNE**. 03 Wood W. of Bilsington (W[eald] Clay) 1959 **MNE**. 14 S. of Stowting, copse by stream on Gault, 1947 **MNE**.

**13)** 44 Greybury Gill 1954 **MNE**. N.E. of Cobhambury, Edenbridge. 44 SW of Chiddingstone Hoath 1954, **MNE** (487423). 54 Meadow Wood, Bidborough. 64 Playfoots Gill, Matfield, 1952 **MNE**. 63 SW of Kippings Cross in gill, 1954 **MNE**.

**14)** 73 Parsonage Wood, Benenden, 1957, Wad[hurst] Clay. 33 Gill 1m E of Rolvenden, 1954, Wad[hurst] Clay. 33 Lit[tle]Pix Hall, Rolvenden, 1954, Wad[hurst] Clay. 83 In gill on Wad[hurst] Clay, NE of Benenden, 1954 **MNE**. 83 ½m NE of Penhill, Tenterden, 1949 **MNE**. 897366 in copse SW of High Halden Ch[urch], 1958 RAC. 72 Wood NW of Sandhurst Cross, 1958 **MNE** (Wad[hurst] Clay). 92 Gill Wood, Owley, 1951-54, **MNE**. 82 College Wood 62, Wittersham, on Wad[hurst] Clay. 82 Cuckoo Wood 62, Wittersham, on Wad[hurst] Clay. 82 Bates Gill 58, Wittersham, on Wad[hurst] Clay.

**16)** 13 Lympe Park Wood, 1949.

### C. flacca Schreb.

[Glaucous Sedge.]

'15, 16

47/51

Native. Grassland and scrub on chalk, abundant and very constant; fens and fen-meadow, common; basic grasslands on sand and clay soils, less common and usually in open associations and near the sea. Well distributed and generally frequent throughout Kent, except on alluvial flats in the Sheppey-Grain Thames-Medway estuary below Rochester and Greenhithe, and the inland parts of Romney Marsh. Not about Appledore, Minster, Grain, (Gravesend).

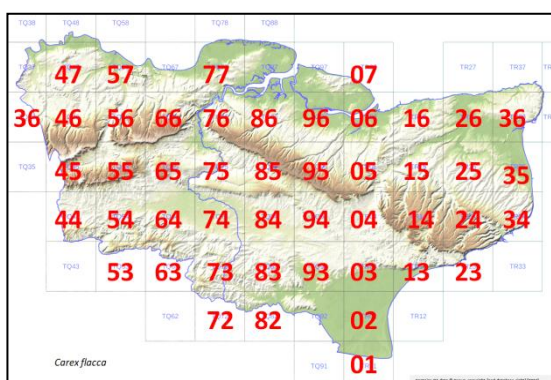
**1)** 47 Chislehurst. 46 Keston Common, 1940, F.R.B. 36 Wickham Wood, AGD 1916 **MNE**. 46 Holwood Park, 1945 **MNE**. Ruxley pits S&S. 57 Joydens Wood, PCH. 07 on L[ondon] Clay, Warden Point, 1918, AGD, **MNE**.

**2)** 76 Holborough Marshes.

**3)** 05 Grassland N. of Dunkirk. 05 Grassland NE of Rhode Common. Ellenden Wood, Penn Hill REW. 16 Thornden Wood. 15 Marsh on hills W. of Fordwich. 16/110650 g[rass]l[and] on clay, Duncan Down, Whitstable, 1961, HMW.

**4)** 35 Ham Fen. 35 Hacklinge Fen 1946 **MNE**. 45 Worth Minnis. 25 N. of Wingham. 26 Preston Marshes. 35 Dune Slack S. of Hotel, Sandwich Bay.

**5)** 46 Darwins Bank, Downe. 56 Pilots Wood PCH. 45 NE of Pilgrim Ho[use], Westerham, 1962. Down, 426577, W. of West[er]ham Hill RAC.





- 6) 57 Darenth Wood, PCH. 66 Down E of Molehill Wood, Buckland, '61. 56 Shoreham Rifle Range; and Downs above, PCH. 56 Magpie Botton PCH. 56 Greenhill Wood, PCH. Wrotham Water Down. Trottscliffe Down. 66 Down S of Great Wood, Cuxton, 1944 **MNE**.
- 7) Scarborough Spur / Church spur, Burham Downs. Down above Waterworks, Boxley, 62. Boarley Warren. Pilgrims View, E of L[owe]r Bell 62. Down E of White Horse Stone, 62. Bluebell Hill 44 **MNE**. Downs in Filmer Wood '62. Down S of Spuckles Wood, Stalisfield, 62. Base of Hangers NW of Westwell, '62.
- 8) Wye Crown, '60. Broad Downs '62. Down NE of Giddy Horn '62. Down N of Podlinge 62. Down NW of Misling F[ar]m, Elmsted, 62. Free Down, 1962.
- 10) Westerham Wood 1977, 82!
- 11) Allington Wood, 1881 **MNE**. Kiln Wood, Lenham BD. 563482, R[ai]l[wa]y bank, Hildenborough, 1960, CAS. 813454, Pond bank, Leighbridge, Headcorn, 1962. 863438, N of Marley F[ar]m, Smarden, DMCC. Pluckley Brickworks, EB.
- 12) Meadow SW of Sellindge Ch[urch] RAC. Stowting Marsh, 1954, **MNE**. Cuckoldscoombe 1995. 93, 03
- 13) Ditch, Chittenden Wood, 1944 **MNE**. Modest Corner / Vauxhall Lane, Southborough, HNC. [Old pit, Spelmonden, 1903 JS **TLS**.]
- 14) Penhill, 1947. Marsh in Gill 1m E. of Rolvenden, 1954.
- 15) 01 Marsh E. of School, Dungeness, 1962. Romney Warren. NE of Dymchurch. By canal, St Marys Bay, LJM.
- 16) Holywell. Aldington Frith, 1950. Gault, Folkestone Warren, BN.

### **C. panicea** L.

[Carnation Sedge.]

15, 16

23/51

Native. Fens, fen-meadows, basic flushes, and the more flushed parts of valley bogs: abundant and fairly constant in such habitats; usually in short vegetation and tolerant of grazing. In the alluvial marsh areas 2) and 15) it is rare, normally confined to areas of calcareous flushing. Widespread but only locally common: absent from the dry chalk of 5)-9). Commonest in the fen areas of 4).

- 1) 46 Keston Bog, J.E.L., G.M. Brown. 47 Chislehurst Common, GMB.

- 2) 76 Holborough Marshes. 57 Dartford Marshes, G.M.B. 06 Brackish Dike S. of Harty Ferry, 1961, H.M. Wilks.

- 4) 35 Ham Fen, 1946-52 **MNE**, 1991. 35 Worth Minnis 1950-60 **MNE**. 35 Hacklinge Fen, 1946 **MNE**. 25 Fen N. of Wingham. 16 Westbere Marshes, 1956 **MNE**. 26.

- 10) 55 Meadow W. of Otford R[oa]d (¼m N. of Bat & Ball) Sevenoaks 1950 **MNE**. 56 Meadow N. of Shoreham 1954 **MNE**.

- 11) 65 Leybourne, 1944. 66 Birling Marshes. 65 Lunsford 1944. 35 Sandway Bog, Lenham 1954 **MNE**.

- 12) 94 Hothfield Common, valley bogs, 1943-62, **MNE**.

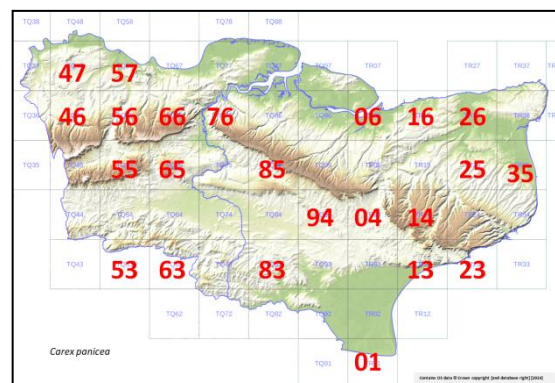
- 04 Fen-meadows, Cuckoldscoomb, Brook. 04 Marshes W. of Blackwall, Willesborough, 1955 **MNE**. 14 Stowting Marsh 1954 **MNE**. [Stream E of Lenham, AHWD, 1893 **TLS**.] 13 Gibbons Brook, 1945-54, **MNE**.

- 13) Vauxhall Lane, Pentecosts Field, Southborough, HNC. 53 Hawkenbury Bog, JRW: 1945! 1958 ..S. 63 Field below Ellis Wood, Lamberhurst, 1942, JRW: 1957! **MNE**. 83 Chittenden Wood, 1943, JRW: 1944 **MNE**. [T[unbridge] Wells WWR **TLS**.] R[ai]l[wa]y W of T[unbridge] Wells West Sta[tion] CAS.

- 14) 83 Penhill Marsh, 1947.

- 15) 01 Hoppen Pits, Denge Beach, 1945-1956 **MNE** 1962. 01 Marsh E. of old school, Dungeness.

- 16) 23 Valley fen, Darnley Vale, Cheriton, 1955 **MNE**.



### **[C. depauperata** Curtis ex With.

[Starved Wood Sedge.]

[16.]

Formerly native of Charlton, but long extinct, where it occurred in dry woodland on Eocene strata (probably calcareous Thanet Sand). Still found but very rare, on Bargate limestone at Godalming in Surrey: elsewhere in Britain only in Somerset (Axbridge) and Anglesey.

- 1) Charlton Wood, Curtis: 1787, Withering; ex Hb. Ed. Forster **BM**; ex Hb. Carrington **BM**. ]

### **C. laevigata** Sm.

[Smooth-stalked Sedge.]

15, 16.

15/51

Native. Weakly acid, base-deficient flushes in woodland, usually *A/neta*; abundant in the greater part of the High Weald of 13) and 14), though rarer westward and absent from the Oxney-Newenden area; scattered on the Folkestone Sand in 12), where it is found in open bogs as well as in carrs; locally common in the SW part of the Blean woods in 3); unreported elsewhere. A characteristic High Wealden species, abundant throughout

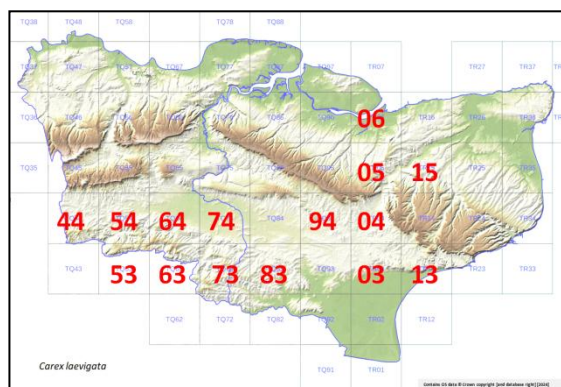
the Sussex High Weald except in the extreme east; rare in Surrey (*Alneta* on Hythe Beds), very rare in Essex (Woodham Walter); once recorded, possibly in error, from Pas de Calais, but in the Ardennes.

**3)** 05 Church Wood, Dunkirk, 1949. NW of Harbledown RGW. 05 S Bishopsden Wood, 1950, **MNE**. 15 Homestall Wood, 1954. 15 Bigberry Wood, 1954, **MNE**. 05 Denstall Wood, 1956. Court Wood. 05 Joan Beech Wood, N of Up[pe]r Ensinge [*sic*, for Ensign], 1957 **MNE**. 05 Iron Hill, Boughton, 1957 **MNE**. 06 Blean Wood, N of Dunkirk, 1945. Hill top SE of Winterbourne, Boughton. Hunstead Wood, by stream, 1965. Fishpond Wood. Clowes Wood. Ellenden Wood.

**12)** 94 Hothfield Common, E.S.M.: in the North bog, in poor fen, 1945-62, **MNE**. 94 Ashford Warren, N. of R[ai][wa]y, W.R.J.; 1945! 94 Alder Carr, S of Potters Corner, E. Scott, 1953. 03 Stonehill, Sellindge, 1954, **MNE**. 13 Gibbons Brook, 1945-54. 04 Barrack Wood, Mersham-le-Hatch, 1960, FR, and ES.

**13)** Scarletts Pond Cowden, 1947. 44 Furnace Pond, Cowden, 1947. 634 Pembury Wood, bog near Pond, 1947+-52; 1961, C. Stace. Corks Pond, Matfield. 64 Cinderhill Wood, Brenchley, 1947. Cryalls, Brenchley. 63 Bayham, 1945. 53 Hawkenbury Bog. 63 Lamberhurst Quarter, J RW 1944-46 **MNE**. Old Park Wood, Goudhurst 1954 **MNE**. 63 Kilndown Wood. 73 The Pinetum, Bedgebury 1943 **MNE**; EGP 1961 **MNE**; 1962.. 73 Combwell Wood, 1945; 1979. 63 Chingley Wood. 83 Causton Wood, Biddenden 1941 **MNE**. 54 Roundabout Wood, T[unbridge] Wells 1943, JRW. 54 Shadwell Wood, Speldhurst, GE Shaw. 63 Tongs Wood, JRW. 63 Ellis Wood, 1941, JRW. 63 Timberlog Wood, 1941, JRW. 54 Broke Wood, Southborough, 1954 **MNE**. 63 Carr in Wood SW of Pembury, 614395, PCH. 64 Furnace Pond, Horsmonden, 1954 **MNE**. 73 Frizley Bog, Cranbrook, 1945 **MNE**, 1961. Wisketts Wood, JHL. 83 Chittenden Wood, 1944-1958. 83 Rogers Wood, Biddenden, 1954 **MNE**. 53 Stone Cross Gill, Ashurst, 518381, 1960 CAS. Redleaf Wood, N. of Penshurst, 1947-50. 64 Hayes Wood, Pembury. 64 Cole brook Park, Pembury. 64 Playfoots, Matfield, 1952. Gedges Wood, Matfield 1961 CAS. 74 Wood S. of Hartsheath F[ar]m, NE of Curtisden Green, 1958. 73 Brewers Wood. 83 Sissinghurst Park Wood. 83 Rounds hill Park Wood. 73 [Finchcocks 1909 JS **TLS**.] 44 Greybury Gill, EP. 63 Greggs Wood.

**14)** 83 The Brogues, Biddenden. 83 Sand pits Wood, Biddenden, 1963. 83 Marsh E. of Penshill, 1947. 83 In alder Carr, Farnell Wood, SW of Rolvenden, '62. 83 Alder Carr, Knock Wood, E of Tenterden, '62. Robins Wood, Cranbrook.



### C. binervis Sm.

[Green-ribbed Sedge.]

15, 16.

14/51

**Native.** Sheltered ground on heaths, heathy oak-birch or pine woods, often in the rides; very local, and largely confined to the High Weald of 13) and the NW part of 14), where however it is frequent and locally abundant; outlying areas of distribution exist in the rather similar habitats of the Blean Woods in 3) and at one locality each on heaths in 1) and 12). Common in the High Weald of Sussex, local in Surrey, very rare in Essex and very local in Pas de Calais. This is a highly oceanic species, requiring a humid atmosphere: it quickly fades out as one passes into the Continent.

**1)** Keston Common, in wet-heath by bog, E. de C: 1945-58 **MNE**. Spring Park, W. Wickham, D.P.Y. Chislehurst Common; Holwood Park, WCRW. Petts Wood, 1951, J.D. Lovis.

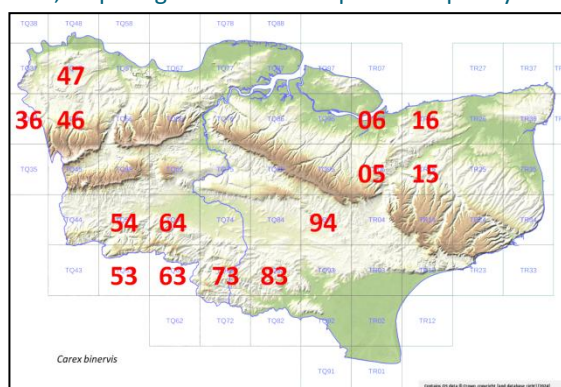
**3)** Damp grassy heath, 1m NW of Dunkirk, 1945. Church Wood, in heath, R.G.W. (SE part). Bigberry Wood, P.R.B. Minching Wood, in heathy ride, 1956 **MNE**. Perry Wood, Selling, Stowell: F.I.K.

**(4)** Ham Ponds, ESM: error for *distans*.)

**10)** -

**12)** Hothfield Common, 1946; 1954 **MNE**. (Recorded from Barrack Wood, Mersham by G.E. Smith in FGEK; we could only find *laevigata* there, which he does not record; FR & ES, 1960.)

**13)** 54 Broke Wood, Southborough, 1954 **MNE**. 64 Pembury Wood, bog by pond, 1952 **MNE**; 1961 CA Stace. 53 Hawkenbury Bog, JRW 1943; 1944-46! CAS, 1958. 63 Kilndown Wood, 1945-60. 73 Combwell Wood, 1945, 1962; 1979. 63 Chingley Wood 1944-60. 73 Bedgebury Pinetum 1954 **MNE**, 1961 EGP **MNE**. 73 Bedgebury Forest, 1941, JRW; 1945-62. 83 Chittenden Wood, 1943, JRW; 1944-58! **MNE**. 83 Causton Wood. 64 Cinderhill





Wood, Brenchley, 1947-. 73 Brewers Wood, Cranbrook, 1944-60. 73 Angley Wood, 1945-63 **MNE**. 73 Oaks Wood, Cranbrook, 1944 **MNE**. 83 Sissinghurst Park Wood.

**14)** 83 The Brogues, Biddenden. Brook Wood, NW of Woodchurch.

**C. distans** L.

[Distant Sedge.]

15, 16.

18/51

Native. Fens, meadows, marshes and their dikes, in brackish habitats near the sea and estuaries, and in calcareous habitats inland; uncommon, occasional near the coast and estuaries in 2), 4), and 15), inland frequent in 4), local in 12) and 16). It resembles *Oenanthe lachenalii* and *Schoenus nigricans* in its tolerance of both sodium- and calcium-rich environments. Local near the coast in Sussex, Essex and in Pas de Calais in similar habitats: extremely rare in Surrey.

**2)** 67 Northfleet Brooks, 1944, **MNE**. 77 Meadows S. of Cliffe Station, 1943. 76 Holborough Marshes, 1944 **MNE**. 76 Snodland Marshes, 1944. 06 Meadow N. of Oare Mill Pond, 1959 **MNE**. Shellness. 06 Harty, 1946. 87 Grain, 1946.

**4)** 26 E. of Reculver, 1946. 25 Fen N. of Wingham, 1946-49 **MNE**. 35 Hacklinge Fen, JPMB: 1946, abund[ant]; 1962 **MNE**. 35 Worth Minnis, 1947-50 **MNE**; 1960. 35 Northbourne Fen, 1947 **MNE**. 35 Ham Fen, 1954 **MNE**, 1958 **MNE**. 16 Westbere Marshes, 1956 **MNE**. 26 Preston Marshes 1947. 26 Dike N. of Shuart, 270685, 1962. 35 Sandwich Bay, in dune slacks to W of Princes, 1946 **MNE**. 35 Deal Links, 1954 **MNE**. 36 Minster Marshes, L.W.W., 1946.

**6)** 57 Chalk pit, Swanscombe, 1947 **MNE**.

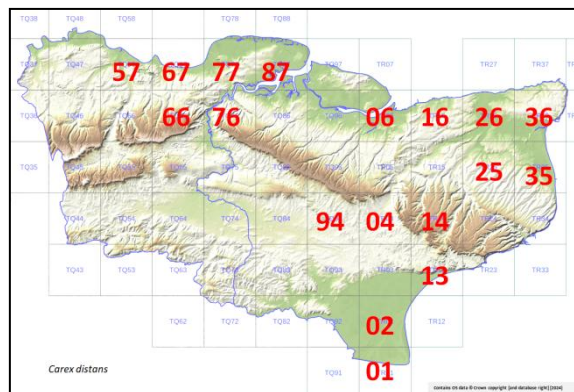
**7)** Chalk pit (flooded), Eccles, 1953, RGW.

**11)** [Birling Marshes, 1943 **MNE**, ploughed up, 1944.]

**12)** 14 Stowting in fen meadows, 1946-54 **MNE**. 04 Brabourne coomb, in fen-meadows 1946. 04 S. of Brabourne Church, 1954 **MNE**. 04 Cuckolds coomb, Brook, in fen-meadow, 1945-58 **MNE**. 94.

**15)** 02 Brackish marsh SW of Littlestone, 1946. 13 Shingle lows SW of Hythe, 1947, abund[ant]. 13 Sea wall, NE of Dymchurch, 1947. 02 Behind dunes, Greatstone, 1947. Sandy hollows behind.

**16)** South Brooks, Denge Marsh. 13 Calc[areous] Marsh, the Lince, SE of Etchinghill, 1958 **MNE**.



**C. distans x extensa** = **C. x tornabonii** Chiov.

[15.]

**15)** Littlestone, 1902, in Hb. G.C. Druce (as *C. extensa*) det. J.P.M.B.

**(C. punctata** Gaudin<sup>965</sup>)

[Dotted Sedge.]

**C. extensa** Gooden.

[Long-bracted Sedge.]

15.

1/51

Native. Sandy salt marshes and saline dune-slacks: very rare; abundant at the mouth of the Stour, but occurring nowhere else at present. Absent in Surrey; very rare in Sussex (confined to the Selsey and Littlehampton areas); extinct in Essex; very rare in Pas de Calais (Ambleteuse!)

**4)** Abundant in sandy saline slacks of the dunes, 200 yards S. of Bloody Point, Mouth of the Stour, Sandwich, 1946-62 **MNE**.

[Former estuary, E. of Reculver, Hb. JSM: *Phyt.* N.S. VI p56. Not seen there recently: the coast is much altered since JSM's time.]

**9)** Small salting behind beach, below cliff, Cliffsend, Pegwell Bay, 1947, **MNE**.

**(C. hostiana** DC.<sup>966</sup>)

[Tawny Sedge.]

**(C. flava** L.

[Large Yellow Sedge.]

This "Continental" species is confined in England to Yorks and Lanc; but it occurs in the fens of the Somme in N. France.)

**C. viridula** Michx. ssp. **brachyrrhyncha** (Celak) B. Schmid<sup>967</sup> [Long-stalked Yellow Sedge] 15, 16. 5/51

<sup>965</sup> No records given.

<sup>966</sup> No records given.

Native. Calcareous spring-fens and fen meadows in short vegetation; vey rare and local, and confined to areas fed by springs from the chalk (or ragstone). Drainage tends to restrict it to dike-borders. Extremely rare in Sussex (in two localities by chalk springs), absent or extinct in Surrey and Essex: still locally abundant in fens in Pas de Calais.

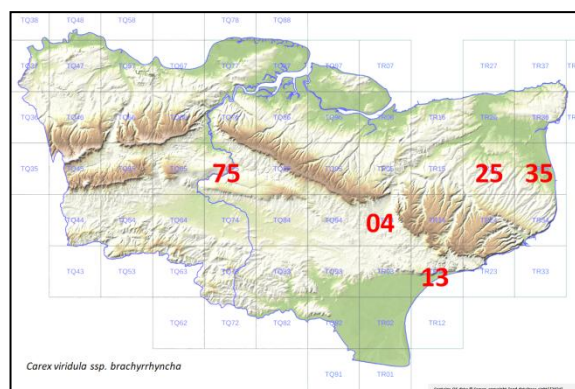
(1) This was reported by me on an LNHS excursion from the uppermost lake in Holwood Park in 1948: further material collected from the same spot in 1962 by F. Swain makes in clear that what was seen was *C. demissa* Hornem.)

4) 25 Marshy bank of fen-dike, Wingham Fen, 1945-46 **MNE**. 35 Worth Minnis, 1947; further north l[ocally] a[bandant] 1950-56 **MNE**. 35 Ham Fen, on dike edge, 1956-60 **MNE**; 1980, A.H. to S.

11) 75 Marsh between Church and railway, Barming (v.c.16) H. Lamb, 1900 **MNE**. The marsh exists still but I have not refound this plant.

12) 04 Calcareous fen meadow by chalk stream, Cuckoldscoomb, Brook, **MNE**, 1944-54, with *A. tenella*, etc., abundant. Both gone, 1978.

16) 13 Calcareous marsh, The Lince, E. of Etchinghill, 1950; '54-59, **MNE**, 1986!



**C. viridula** Michx. sssp. **oedocarpa** (Andersson) B. Schmid<sup>968</sup>

[Common Yellow Sedge.] 15, 16. 20/52

Native. Damp- and wet-heaths, valley bogs, damp acid woodland rides, sandy or peaty borders of acid ponds: frequent in the High Weald in 13) and 14) and on the Folkestone Sand in 12): rare on the Weald Clay and Gault in 11) and 12) and on the Eocene Sands in 1) and 3): absent elsewhere 5)-9), 2), 4, 10), 15) and 16) though it would have been expected in 10) and 16). Locally frequent in suitable habitats in Surrey and Sussex, very rare in Essex and Pas de Calais.

1) 46 Holwood Park, DMCC; 1948! 1954! **MNE**; F. Swain, 1962 **MNE**. 46 Ninhams Wood, WCRW. 57 Track, Joydens Wood, PCH and FR, 1954, **MNE**. 46 Keston bog, 1948. 46 Track, Sparrow Fields, Orpington, 1962, F. Swain **MNE**.

3) 15 Acid marsh on Golf Links, Canterbury, 1948. Church Wood, SE part, RGW. 15 Ride, Minching Wood, Blean, 1957 **MNE**. 05 Wet track E of Rhode Common, S. of Dunkirk, 1959 **MNE**. 16 Near Blean Church, 1955, RGW.

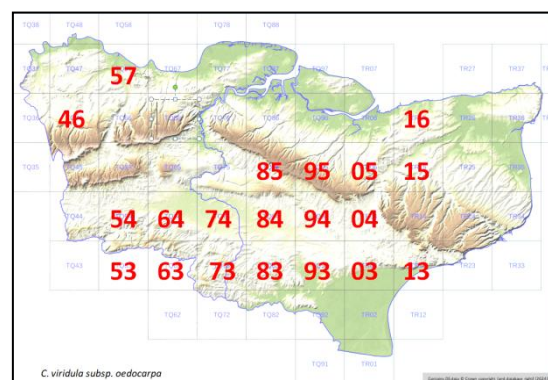
4) Pit SE of Ham Fen, 1991, J. Pitt.

10) Westerham Wood 82!

11) 83 Sandway Bog, Lenham, 1954 **MNE**. 74 Widehurst Wood, SE of Marden Beech, 1958 **MNE**. 84 Ride, W. Part of Dering Wood (W[eald] Clay), 1962, E. Scott. Pluckley Brickworks ES.

12) 94 Valley bog, Hothfield Common, 1943-62 **MNE**. 04 WillesboroughLees, 1944-54 **MNE**. 03 Bog, Stonehill, Sellindge 1947-54. 13 Gibbons Brook, 1945-54, **MNE**. Near Spot House, 975348, 1955, ES. 93 (W[eald] Clay) Long rope Wood, 1946. 04 On Gault, Nackholt Wood, Brook, 1947. 95 Copse on Gault S of Lenham, 1946. S. of New Shelve. 93 (W[eald] Clay) S. of Shadoxhurst, E.S. 1955 **MNE**. 04 Mersham le Hatch Park, ES and FR, 1960 **MNE**.

13) 54 Buggy valley in wood, Redleaf Wood, Penshurst 1944-46, **MNE**. 54 Ashour Wood, Penshurst, 1944 **MNE**. Buggy Wood SW of Pembury 614395, RGW. 64 Pembury Wood, boggy area near Pond, 1952; **MNE** – 1961, C. Stace. 53 Hawkenbury Bog, JRW, 1943; 1944-46! 1958, CAS. 63 Hook Green, 1943 JRW. 63 Field below Ellis Wood, Lamberhurst, 1942, JRW, det. E.N. 73 Bedgebury Pinetum, JHL: 1948; 1954 **MNE**. Chittenden Wood, 1943, JRW: 1946 **MNE**. Shadwell Wood, Speldhurst GE Shaw. 54 Broke Wood, Southborough 1954 **MNE**. 64 Bog by Furnace Pond, Horsmonden, 1954 **MNE**. 63 Kilndown Wood, T[unbridge] W[ells] S[and], '55, F.R.B. 13 Combwell Wood, 1959 **MNE**. Bayham Woods CAS. 83 Sissinghurst Park Wood,



<sup>967</sup> Given in the manuscript as *C. lepidocarpa* Tausch subsp. *lepidocarpa* to which it has reverted after the name given here, from Stace edn. 2.

<sup>968</sup> Given in the manuscript as *C. demissa* Hornem., to which it has reverted after the name given here, from Stace edn. 2

T[unbridge ] W[ells] S[and], 1948-49 **MNE**. 63 Chingley Wood T[unbridge] W[ells] S[and]. 83 Wood E. of Sissinghurst, T[unbridge] W[ells] S[and], 1954 **MNE**. Robergate<sup>969</sup> Wood, T[unbridge] Wells, 1959 CAS.

**14)** 83 Marsh, Penhill, 1947. 843 Knock Heath, Tenterden, 1956 **MNE**. 83 Wood (T[unbridge ] W[ells] S[and]) Clappers Hill, 1m S of Biddenden, 1954 **MNE**. 93 Great Heron Wood, Kenardington, 1952 **MNE**.

**15)** [Lydd, 1901, H. Lamb **MNE**, det. FR.]

**C. viridula Michx. ssp. viridula**<sup>970</sup> [Small-fruited Yellow Sedge.] 15. 1/51

**Native.** Shingly lake shores: extremely rare, and only seen at intervals, Very rare in W. Sussex and SW Surrey: extinct, if it occurred, in Essex: unrecorded in Pas de Calais.

**4)** Stonar Beach, Sandwich. Dowker in *Fl.K.*, as *C. oederi* Retz: sp[ecimen] seen by E.S.M.: probably *serotina*. Deal Sandhills, 1883, ex hb. H.T. Messell (**BM**).

**15)** Very rare, on shingly shore of smallest lake, Hoppen Pits, Denge Beach, 1947, P.R.B. and F.R. **MNE**: not found since.

**C. pallescens L.** [Pale Sedge.] 15, 16. 16/52

**Native.** Woodland on moderately damp, usually somewhat acid, loams and sands; local and rather uncommon, but widely distributed; occasional on the Eocene in 1) and 3), on Pliocene sands and loams in 8), Gault and greensand in 10), Weald clay in 12): most frequent in 13) on the Hastings Sands, where it is rather common.

**1)** 57 Joydens Wood, FR and PCH, 1954, **MNE**. 46 Holwood Park, near lakes, WCRW; 1954! **MNE**. 46 Roundabout Wood. Sparrow Fields, Orpington, 432668, WCWR; 1940, A.B. Jackson **BM**; FR and C.A. Swain. St Ninians Wood, Farnborough, 1921, E.B. Bishop. [Sidcup, WCRW.] Keston, PHC.

**3)** 15 Bigbery Wood, P.R.B., 1947. 15 Church Wood (SE), RGW. 15 Pine Wood, 1955, P. Furneaux **MNE**. 05 S. Bishopsden Wood, 1950. 05 Hunstead Wood, W. of Chartham Hatch (under Fagus) 1956 **MNE**. 16 Minching Wood, 1953 REW; 1957 **MNE**.

**7)** E. part Longbeech Wood, EP.

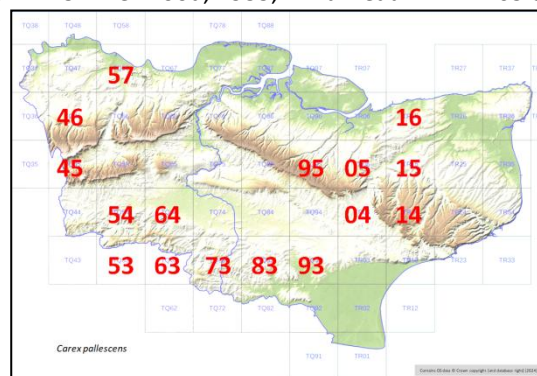
**8)** 14 West Wood, Stowting, 1953. 05 Denge Wood, on Pliocene loam, ½m NE of Penny Pot Inn, 1959 **MNE**. Larkey Valley Wood, on loamy drift, 1955 **MNE**. Park Wood, L of Six Mile Tolls, E.P.

**10)** 45 Westerham Wood, 1947 **MNE**, 82! 45 Scords Wood, Brasted, on loam, 1955 **MNE**.

**11)** Wood W. Of Chiddingstone Causeway, E.P. North Frith, E.P.

**12)** 04 (near Brook). 95 Wood S. of New Shelve, E. Lenham. 93 Longrope Wood, 1946 **MNE**.

**13)** Shadwell Wood, Speldhurst, GE Shaw. 54 Redleaf Wood, N. of Penshurst, 1944 **MNE**. 63 Wood, Lamberhurst Quarter, 1946. 64 Pembury Wood, near pond, 1952: 1961, CAS. 73 S. edge, Bedgebury Forest, FR and CW 1944. 83 Chittenden Wood, JRW '43: 1944! **MNE**. 53 Stone Cross Gill, Ashurst, 518381, 1960 CAS. 64 Cinderhill Wood, Brenchley, 1947 **MNE**. W of Cowden, near ponds EP. 73 Angley Wood, Cranbrook, 1955 **MNE**. Dundle Wood, EP. 64 S. of Foxhole, Matfield, 1954 **MNE**. 63 Wood opp[osite] the Manor, Lamberhurst 1942 JRW. 63 Timberlog Wood, Lamberhurst 1942 JRW. 63 Wood N. of Bayham, Lamberhurst 1942 JRW. 73 Finchcocks Wood, JS 1896 **TLS**.



( **C. humilis** Leyss. Dwarf Sedge occurs on chalk downs in West Hants., but no nearer to Kent.)

**C. caryophyllea** Latourr. [Spring Sedge.] 15, 16 28/51

**Native.** Old dry pastures, grass-heath, ancient short turf on chalk, banks on wood-borders; widespread and frequent locally in the High Weald, on the Greensand, the chalk downs, and the Eocene districts, but not really common. Frequent in Surrey and Sussex, rarer in Essex, fairly frequent in Pas de Calais.

**1)** 46 Hayes Common, DMCC. 46 Holwood Park, near Lakes, 1954 **MNE**. Keston Common, G.M.B.

**3)** 05 Grass heath N. of Dunkirk 1945 **MNE**. 05 Grassland NE of Rhode Common. 96 Bysing Wood, 1946 **MNE**. 16 Thornden Wood. 06 Edge of Blean Wood, Hernhill, 1945. Harbledown RGW.

<sup>969</sup> Clearly this; but Robingate may be the wood in question.

<sup>970</sup> Given in the manuscript as *C. serotina* Mérat



6) 66 Cobham Great Wood, 1943, 1944 **MNE**. Maplescombe Valley, 1923, WCRW. Downs NE of Otford 1930 PHC. 66 Downs above Wrotham Water 1951 **MNE**.

7) 76 Burham Downs, 1954 **MNE**. 86 Queen Down Warren, 1945-60 **MNE**. 95 Timbalds Hall, Wichling, 1945 **MNE**. 85 Hollingbourne Downs, 1945 **MNE**. 95 Pilgrims Way, E. Lenham, 1958 **MNE**. Gravel pit, Putt Wood, Ospringe 1945 **MNE**.

8) 04 Brook Hillock, 1955 **MNE**. 04 Crundale Downs, N of Ch[urch], 1949 **MNE**. 14 Grassheath on Pliocene Sand, Stelling Minnis '62. Parkgate Down DACL. 13 Postling Down. 24 Woodville Downs, Temple Ewell, 1955 **MNE**. 291438 Field SSE of Kearsney St[ation], KDR.

10) 45, 55.

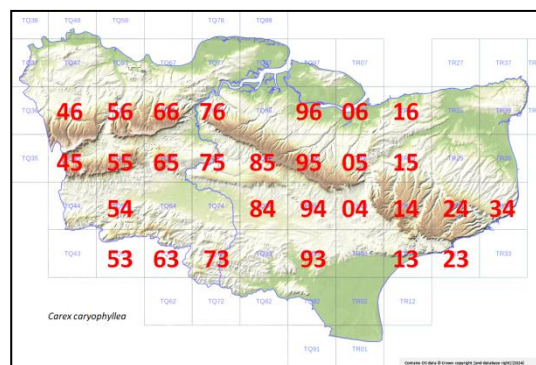
11) 65 Near N Pole, Teston, 1945. 85 Grass-Heath N. of A.20 1m W of Hollingbourne, 1944 **MNE**. 84 Pasture on loam, Elmstone Hole, Ulcombe, 1955 **MNE**. Kings Wood, S of Harrietsham Mrs B. Dodds. [Fairlawne, Shipbourne, 1878, F.W.E. Shrivell **TLS**.] Hoads Common, 1945. 84, '55.

12) 04 by Smeeth Ridgeway, 1945. 94 Ashford Warren.

13) 63 Pasture ½m S. of Horsmonden. 53 Near Hawkenbury Bog. 73 Combswell, 1896, JS **TLS**. 63 W of Lamberhurst, freq[uent], JRW. 53 Tunbridge Wells Common 1960 CAS. Combswell Wood. Dunorlan Park, 1959 CAS. Pentecost field Southborough HNC. 54, '55. 53, '56.

14) G[rea]t Ninevah, Benenden.

16) 13, '53; 23.



(*C. ericetorum* Pollich Heath Sedge Is not known nearer than Cambridge and Suffolk in England, but has old records from Pas de Calais.)

(*C. montana* L. Soft-leaved Sedge occurs at Eridge, Sussex in grass-heath, only ½ mile across the present Kent border. The old Kent records in Fl. K., Bysing and Thornden Woods in 3) are unconfirmed and probably errors for *C. pilulifera*: I have searched these areas closely and only found the latter species. *C. montana* has never been found on the Kent side of the boundary near Tunbridge Wells, either in VC14 or 16: reports are due to misunderstanding of the boundary line.)

*C. pilulifera* L. [Pill sedge.] 15, 16 31/51

Native. Dry heathland, open heathy woodland, on more or less podsolised sands and gravels; calcifuge, common in such habitats. Common in 1) and 3), local in 6E), on the Eocene, local in 7) and 8) on the Pliocene formations over the chalk; plentiful on the Lower Greensand (Folkestone Sand and Hythe Beds chert) in 10), 11) and 12); and on the Tun[bridge] Wells Sand and Ashdown Sand in 13) and 14). Absent from the marsh districts 2), 4) and 15), and from the London, Gault, Weald and Wadhurst clays. Common in similar habitats in Surrey and Sussex, rare in Essex and in Pas de Calais, where such habitats are few in number and extent.

1) 46 Hayes Common 1945 **MNE**. 46 Keston Common, 1954: 1958, FRB. Holwood Park, 1954. Crofton Heath, F. Swain, 1955; 62. 46 Hollows Wood, Chelsfield, 1945.

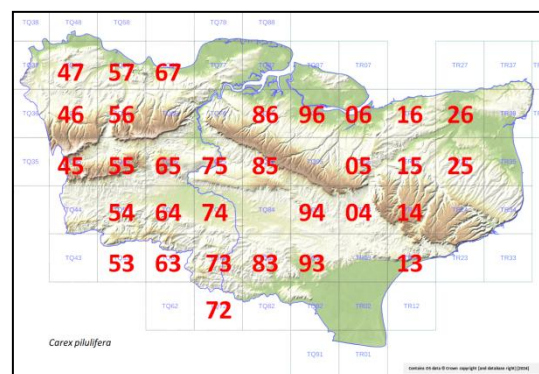
3) 05 Perry Wood, Selling. 96 Bysing Wood, 1946. 06 Grassheath NW of Dunkirk, 1945 **MNE**. E of Rhode Common. 16 Thornden Wood. Church Wood RGW, REW. 26. West Blean Wood REW. 16 Minching Wood, Blean 1957 **MNE**. Clowes Wood REW. S corner Ellenden Wood REW. 15 Trenley Park Wood.

5) 45 Apparently on chalk, Beech hanger ½m S of Cudham, 1958 **MNE**.

6) 57 Darenth Wood. 66 Cobham Park, 1944 **MNE**. 66 Great Wood, Cobham 1944 **MNE**. 67 Common by Shorne windmill. 66 By A2, S. of Brewers Wood, Cobham (Thanet S[and]) 1945 **MNE**.

7) 86 Heath on Thanet Sand, Dannaway, S. of Newington, 1957 **MNE**. Syndale Wood; Coxett Wood, REW.

8) 04 Top of Wye Downs, on drift. 14 Covert Wood, Kingston, on Pliocene drift, 1950 **MNE**. 14 Grass-heath on Pliocene, Stelling Minnis, 62. 14 Oak wood on Pliocene, U[pper] Hardres Wood, '62. 14 Oak wood on



Pliocene, SW of Lit[t]le Waddenhall '61. 14 On Pliocene, West Wood, Stowting 1956 **MNE**. Winterage Wood, Acrise, on Pliocene, 1963, DACL.

**10)** 45 Ide Hill. 55 Bichet Common. Squerries Park RAC. 45 Goathurst Common. Oldbury Hill. 55 Rose Wood, Ightham. Crockham Hill, M. Swain. Heath above Hill Bottom Wood, Sundridge, RAC. Greatness, RAC. **45, 55**

**11)** 65 Wrotham Heath 1949 **MNE**. 65 Platt Woods. 65 Ryarsh Roughetts. 65 Leybourne Wood (F[olkestone] Sand) 1955 **MNE**. 65 Larkfield Heath. 75 Pendenden Heath (F[olkestone] Sand), 1944, **MNE**. 85 by A20, 1m W of Hollingbourne, 1945 **MNE**. Sandway Heath, Lenham, 1965, B.D. 75 Oaken Wood. 65 Warren Wood, E Malling. Kings Wood, Langley to Ulcombe.

**12)** 94 Hothfield Common, 1944-62, **MNE**. 04 Willesborough Lees, 1955 **MNE**. 94 Ashford Warren. 13 Gibbons Brook.

**13)** 53 Stone Cross Gill, Ashurst, 518381, 1960, CAS. 63 Wood near Lindridge F[ar]m, Lamberhurst, 1943, JRW. Timberlog Wood; Ellis Wood, Lamberhurst, JRW, 1942; 1944! Free Heath; Tongs Wood, Lamberhurst, JRW, 1942; 1944! Lamberhurst Quarter, 1960, CAS. 53 Tun[bridge] Wells Common, 62 CAS. Scotney Castle PCH. Combwell Wood, 1979. 73 Bedgebury Pinetum. 83 Chittenden Wood, 1944 **MNE**.

**14)** 83 near Breeches Pond, 1947. Angley Wood, RAC. 83 Moor Wood, Benenden (T[unbridge] W[ells] S[and]) 62. 83 Knock Wood Tenterden (Ash[down] S[and]) + Call[una], '62. 72 Hurst Wood, Sandhurst. **72**

(*C. limosa* L.<sup>971</sup>

Bog Sedge.)

*C. acuta* L.

[Slender Tufted Sedge.]

15, 16

10/51

**Native.** River banks, ponds, and swamps in rather base-rich waters: local and uncommon, and largely confined to the Medway and its tributaries and neighbouring ponds in 11), 13) and 2), and to the middle Stour in 12) and 14). Local in Sussex and Surrey, rare in Essex, rather frequent in Pas de Calais.

**2)** 75 Medway bank S. of New Hythe, C. West, 1943 **MNE**.

**4)** 16 Marsh Dike below Trenley Park Wood, Fordwich, 1949 **MNE**.

**10)** 55 Pond, Wildernes Park, Seal, 1944 **MNE**.

**11)** 44 By Eden, W. of Chiddingstone '53. 54 W. of Penshurst 1944, 1953 **MNE**. 75 Medway, Maidstone, 1960, E.G.P., **MNE**. 64 Medway, S. of Yalding, 1953 **MNE**. 54 Medway, 1 mile above Tonbridge. 64 Medway bank, E. of Tonbridge, 1939, F.R.B. 64 Pond E. of Hale Street, E. Peckham, 1952 **MNE**. 65 Medway, Watlington, 1949 **MNE**. 75 Above Teston Bridge, 1959 **MNE**. 73 By Teise, Goudhurst, 1896; 1907; J. Stirling (as *C. elata*), **TLS**.

**12)** 94 Godmersham DACL.

**13)** 73 Swamp, Angley Wood, Cranbrook, 1955 **MNE**.

var. *sphaerocarpa* R. Uechtr.<sup>972</sup>

[16.]

**11)** Medway E. of Tonbridge, 1939, F.R.B.

*C. nigra* (L.) Reichard

[Common Sedge.]

15, 16.

27/51

**Native.** Marshes, fens, valley bogs and meadows, usually on peat, and where the water is weakly acid to calcareous (pH 5.0 – 7.5); in short sedge-grass associations (*parvocariceta*).

**1)** 46 Keston, JEL. 46 Hayes Common, DMCC. 47 Chislehurst Common. Ravensbourne, Bromley, AGD, 1919 **MNE**.

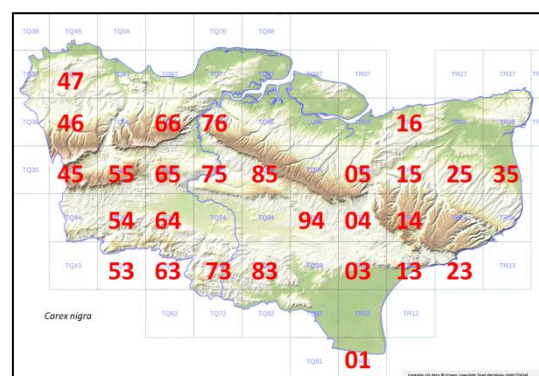
**2)** Holborough Marshes, 1944.

**3)** 05 Alder carr bog, Hunstead Wood, Chartham Hatch, 1956 **MNE**. SE part Church Wood, REW, 1955.

**4)** 35 Ham Fen, 1954 **MNE**. 35 Hacklinge Marshes, 1946 **MNE**. 35 Dune Slack S. of Hotel, Sandwich Bay, 1956 **MNE**.

25 Meadow ½m N. of Wingham, 1956 **MNE**. 25 Fen E of Lit[t]le Britton, Wingham, 1947 **MNE**. 16 Westbere Marshes, 1956 **MNE**. Fordwich Marshes, P. Furneaux.

**10)** Peaty ponds, Rose Wood, Ightham, 1944-62 **MNE**. 55 Bog, Oldbury Hill, 1945. 45 Marsh by Darent 1m E of Westerham, 1955 **MNE**. 66 Meadow, Birling Marshes, 1951 **MNE**.



<sup>971</sup> No further entry given; indeed, it is difficult to see why it was mentioned at all.

<sup>972</sup> The manuscript's author citation is (Attr.) Kük.



- 11)** 65 Damp heath, Valley Wood, Wrotham Heath 1955 **MNE**. 75 Marsh W of Sandling 1944 **MNE**. 85 The Brooks, Harrietsham, 1962, Mrs B. Dodds. Sandway Bog, Lenham, Mrs B. Dodds.
- 12)** 94 Hothfield Common, 1943-62 **MNE**. 04 Willesborough Lees, 1944-55. 04 Bog, Mersham Le Hatch, 1960, FR and ES **MNE**. 13 Gibbons Brook 1945-54. 13 Boggy field, Monks Horton, 1953. 03 Stonehill bog, Sellindge 1934 **MNE**. Fields SW of Sellindge Ch[urch] RAC. 14 Stowting Meadows, 1954 **MNE**.
- 13)** 54 Marsh N of Redleaf, 1943, 1949 **MNE**. 53 Hawkenbury Bog, 1943, JRW; 1945!; 1958, CAS. 64 Pembury Woods. 63 Field W. of Ellis Wood, Lamberhurst, JRW; 1957! Scotney Castle, PCH. 73 Frizley Bog. Angley Wood, Tuckers Pond swamp. 83 Chittenden Wood. [Cranbrook, 1909, AW Hudson **TLS**.]
- 14)** Penhill, 1947.
- 15)** 01 Hoppen Pits, Denge Beach, abundant in fen zones, 1945-62 **MNE**. 01 Marsh E. of old school, Dungeness, 1956-62, **MNE**.
- 16)** Darnley Vale, Cheriton, 1955 **MNE**. 01.

(**C. trinervis** Degl. [Three-nerved Sedge] Is abundant in dune slacks in Pas de Calais and Somme; in Britain it has a solitary record for E. Norfolk, where it seems to be extinct now.)

**C. elata** All. [Tufted Sedge.] 15. 2/51

Native. In calcareous fens, and dune slacks: rare and local and confined to 4), but locally abundant between Sandwich and Deal, and at Wingham. Very rare in Sussex, extinct in Surrey and Essex; abundant in fens behind the dunes in Pas de Calais. Common in the East Anglian fens. This robust tussock-forming species can be recognised by its broad blunt black female glumes and membranous leaf-sheaths, which readily tear into filamentous shreds.

**4)** Fen remnants and sides of dikes, N. of Wingham, 1946. Wenderton, copses by str[eam], BN. Ham Fen, 1946-62 **MNE**. Hacklinge Marshes, 1946-54 **MNE**. Worth Minnis, 1947-60. Wet hollows of dunes S. of Guildford Hotal, Sandwich Bay, 1949-62, **MNE**. Dune slacks NW of Princes Club Ho[use], Sandwich, JEL.

**C. pulicaris** L. [Flea Sedge.] 14 (Kent), 15 4/51

Native. In flushed though acid valley bogs, as well as in alkaline fens: now very rare, though still locally plentiful. Rare in Surrey and Sussex, very rare in Essex and in Pas de Calais.

[**1)** Keston Bog, 1903, S.E.C. (Hb. Croydon NHS).]

**4)** Formerly at Ham Fen: Fl. K.; no recent records.

**12)** Hothfield Common, frequent in flushed part of main valley bog, 1943-64 **MNE**. Gibbons Brook, G. Walton: 1954! **MNE**.

**13)** Hawkenbury Bog, 1942, JRW: 1944-46 **MNE** (VC.14); 1958, CAS; 1963 R.E. Sh., 1967. Boggy ditches and rides, Chittenden Wood, Cranbrook, 1943, JRW; 1944! **MNE** 1946! 1958!

(**C. dioica** L. [Dioecious Sedge] formerly occurred in Surrey and Sussex but appears to be now extinct in each.)

## POACEAE<sup>973</sup>

[**Leersia oryzoides** (L.) Sw. [Cut-grass] occurs in western Surrey and West Sussex.]

**Nardus** L. [Mat-grass. 15, 16.]

**N. stricta** L.

**1)** Chislehurst Common, 1945 **MNE**. St Pauls Cray Common, WCRW. Keston Common, 1945-62 **MNE**. Dartford Heath, 1947.

**12)** Hothfield Common 1946-62 **MNE**. Willesborough Lees, 1950, **MNE**. Moory field (wet heath relic) SE of Monks Horton Priory, 1953 **MNE**. Gibbons Brook, 1954, **MNE**.

**13)** Hawkenbury Bog, 1956, CAS. [Tun[bridge] Wells Common WWR **TLS** probably in Sussex.]

**Milium** L.

**M. effusum** L. [Wood Millet. 15, 16.]

<sup>973</sup> GRAMINEAE in the manuscript.

- 1) Abbey Wood, PCH, RAB. [Bromley AGD 1909 **MNE**.] Shooters Hill Woods, G.M.B. Wood E of Old Bexley (Bl[ackheath] Beds) 1955 **MNE**. Moor Grove, Bickley, 1957 **MNE**. Beckenham Place, PCH. Sparrow Fields, Swain. Farningham Wood 82. Hollows Wood, NW of Shoreham, 1945.
- 2) Holly Hill REW.
- 3) Thornden Wood, Blean, 1945 **MNE**. Dengrove Wood, Sturry 1955 **MNE**. Shelving Wood, Hoath, on Oldhaven Beds, 1962. Denstroud Wood, 1956, **MNE**. Perry Wood, DHK. Bigberry Wood RCW. Church Wood RCW. Boughton Hill RCW.
- 5) Jewells Wood, Biggin Hill, 1949 **MNE**. W of Westerham Hill 426577 RAC.
- 6) Whitehill, E of Shoreham 1945 **MNE**. Wood near Ch[urch], Fawkham, Swain; DVS Woods.
- 7) Bredhurst Hurst 1945 **MNE**. Trundle Wood Wormshill 1956 **MNE**. Filmer Wood (valley bot[tom], sandy loam) '62. Q[ueen] D[own] W[arren] Wood. Squirrels Wood '45. Kings Wood, Bilting DHK.
- 8) Larkey Valley Wood, 1955 **MNE**. Brabourne Downs top. Wood S of Crundale Ch[urch] DHK. Top Reinden Wood (Pliocene loam) '62. Frandham Wood KDR. W. side Covet Wood DACL. Coombe Vale, 1955, 2<sup>nd</sup> wood to W.
- 10) Westerham Wood. Brasted Chart, 1957 **MNE**.
- 11) Ryarsh Wood. Longham Wood 1944 **MNE**. Hoads Wood.
- 12) Hinxhill.
- 13) Shadwell Wood Speldhurst, GE Shaw. Pembury Woods, 1944. East Wood, Lamberhurst, JRW.
- 14) 50 acre Wood / Cole Wood, Woodchurch ES.
- 16) Postling Wents, 1945.

### **Festuca L.**

**F. pratensis** Huds. [Meadow Fescue.] 15, 16 31/51

Native. Pastures and meadows, nearly always on base-rich riverine alluvial or peaty soils; common in suitable habitats; absent from the chalk country, and from the alluvial flats including Romney Marsh; and very rare in the High Weald. Its absence from alluvial coastal flats is probably due to the lack of suitable habitats with periodic flushing or flooding with base-rich non-saline water.

- 1) Shooters Hill, GMB. North Cray Meadows 1955 **MNE**. Ruxley pits, S&S. 51/46 Orp[ington]; 51/47 Bexley
- 2) 51/66 Meopham; 51/76 Medway; 61/06 Fav[ersham] '58.
- 4) L[i]t[tle] Britton Fen N. of Wingham 1946: ½ m N of Wingham 1956 **MNE**. Hacklinge Fen-Meadows 1946 **MNE**. E of Sandwich. Fen meadow, Westbere Marshes, 1956.
- 61/25 Wingham; 61/35 S[and]wich; 61/16 Sturry 55; 61/26 Chislet 55; 61/36 Thanet '56.
- 5) Path in wood on c[lay] w[ith] f[lints], Chevening Park, 1961 **MNE**.
- 6) 51/77 Cliffe
- 8) Valley on Wye Downs on loam, F.H.P., 1954. Denton, meadow, DACL. 61/24 1956 T[emple] Ewell.
- 10) Darenth Meadows 1944-54 **MNE**. Meadows ¼ m N. of Bat & Ball 1951 **MNE**. Meadow N. of Shoreham '54 **MNE**. S. of Lullingstone '56 **MNE**. Bradbourne Meads FSEF.
- 51/55 S[evenoaks]; 51/56 Farn[borough]; 51/57 Dartf[or]d.
- 11) Meadows SW of Snodland 1945 **MNE**. E. of Polhill Harrietsham 1958 **MNE**. Meadows W of Tonbridge. Kelsham, Headcorn, 1956 **MNE**. Meadows W of Penshurst. Meadows by R[iver] Eden, Chiddingstone, 1944.
- (not 51/75 M[aid]stone); 51/65 W[est] M[alling]; 51/44 Edenbr[idge]; 51/54 Tonbr[idge] '55; 51/54 Headcorn '56; 51/85 '58 Hollingbourne
- 12) Meadow ESE of Lenham Ch[urch] 1958 **MNE**. Fen meadow, Cuckoldscoombe, Brook 1945-54 **MNE**. Stowting Fen Meadows 1946.
- 51/95 Lenham '58; 51/45 West[erha]m<sup>974</sup>; 51/94, '58; 61/04; 61/14 Stowting; 61/05 Chilham; 61/15 C[anter]bury '55.
- 13) E of Beachborough HNC. 51/53 T[unbridge] W[ells] '54.
- 14) 51/82 W. Oxney 1956.
- 16) 61/13 Hythe '56; 61/23 Folkestone '58.

**F. arundinacea** Schreb. {Tall Fescue.] 15, 16 35/51

Native. Banks and rough grassland, nearly always on heavy soils inland, but on sand and chalk as well on the coastline, where it is more abundant than inland; locally common.

- 1) Kent Gate, W. Wickham AG Davis **MNE** 1915. Ruxley pits, S&S. 51/46 Orp[ington]; 51/47 Bexley '55.

<sup>974</sup> Misplaced.

- 2) S. of Cooling. Northfleet. Snodland. 66 Seasalter HMW. Meadow S. of Oare Creek 1959 **MNE**. Ham Hill Birling PCH. Luddenham Marshes HMW. 51/66 Meopham '56; 51/76 Medway; 51/67 G[raves]end; 51/86 Halstow '58; 51/96 Teynham '58; 61/06 Fav[ersham] '55; 51/87 Grain '58; 51/97 Sheerness '55; 61/07 Warden.
- 3) 16 Behind shore, 102660, W of Whitstable, HMW, 1957. 05 Pasture on L[ondon] C[lay], N of Dunkirk 1955 **MNE**. 06 top of Beach, Medina Av[enue], Seasalter, HMW. Herne Bay, 1843, R. Warnock<sup>975</sup> (as *F. sylvatica*  $\beta$  *decidua*) but is *F. arundinacea* det. A. Melderis, see Flora K. p.409.
- 4) Worth Minnis. Ham Fen, 46-54 **MNE**. Slacks, Sandwich Bay. E of Sandwich. 61/25 Wingham; 61/35 S[and]wich; 61/26 Chislet '55; 61/36 Thanet '55.
- 6E) Swanscombe Wood, cutting of A2 on clay. 51/77 Cliffe; 51/57 Dartford.
- 8) Newington Downs 1955 **MNE**. Above Folkestone Warren on chalk 1960 **MNE**. 61/24 '55; 61/34 '55.
- 10) 51/55 S[even]oaks; 51/56 Farn[ingham] '56.
- 11) Addington, r[oa]dside, 1946 **MNE**. Ryarsh, r[oa]dside, 1946. Aylesford H.L. **MNE** 1899. SE of Startled Saint, W. Malling, 1960 **MNE**. Goddington, Harrietsham, Mrs B. Dodds. Sandling Wood, R[oa]dside on F[olkestone] Sand, EGP. 51/65 W[est] M[alling]; 51/75 M[aid]stone; 51/84 Headcorn '55; 51/85 Holl[ingbourne] '58.
- 12) E. of Gibbons Brook on clay pasture 1954 **MNE**. 61/04 T[emple] Ewell; 61/14 Dover; 51/95 Lenham '59; 61/05 Chilham.
- 13) 51/73 Crundale '56. 61/64 Pembury '55.
- 15) Pastures W. of Hythe 1952 **MNE**. 61/01 Dungeness.
- 16) Gault in Folkestone Warren 1960. Edge of Newington Moor 1954 **MNE**. 61/13 Hythe; 61/23 Folkestone.

### **F. gigantea** (L.) Vill.

[Giant Fescue.

15, 16.]]

Native. Woodlands on relatively base-rich soils; common throughout Kent, except in the treeless Marsh districts and on very acid sands and heavy clays. On the Weald Clay it is usually confined (as is *Glechoma*) to alluvial deposits or flushed areas on stream banks.

- 1) Crofton Heath PCH. High Wood, Crofton PCH. Holwood Park PCH. R[iver] Cray, N Cray, PCH 54. Wood by River, N. of N Cray, PCH **MNE** '55. Copse by N. Cray Ch[urch] PCH '54. Joydens Wood, 1946 **MNE**. Beckenham Place, PCH. W. Wickham Common, 397653 PCH. Shooters Hill Woods, G.M.B.
- 2) 06 S. of Oare Pond '59 **MNE**. 87 Copse, St Mary Hoo, PCH. 97 Rare in Brambledown Oakwood, 1955. ...By Oare Meadow, 1962, HMW.
- 3) Shelving Wood, Hoath, 1962. S. of Stodmarsh Court F[ar]m REW.
- 5) Darwin's Bank Wood, Downe, JEL. Chevening Park PCH.
- 6) R[oa]dbank N. of Harvel, '62.
- 7) Bridge Woods, (East) 1997.
- 8) Bridge JG. Copse on chalk in valley bott[om], N. of Bavinge F[ar]m 62. Minnis La[ne], River, KDR. Reinden Wood, BN. Womenswold RGW. 25 Wood, Fredville, 1955, BN. 34 Oxney Court Wood, B.N., 1956. Eastling Wood, BN. Wolverton Wood, 1962.
- 10) Knole Park entrance drive, 1950. R[iver] path below Shoreham PCH. Lullingstone, by Darent in copse, 1956 **MNE**. St Johns Jerusalem PCH. Wood, Bayleys Hill, S[even]oaks, 50 **MNE**. Westerham Wood, 82.
- 11) Leybourne Wood, 1953 **MNE**. Addington Place DMCC. {F[olkestone] S[and]} Sandling Wood '55; 57 EGP **MNE**. E of Bearsted. Fairbourne Mill, B. Dodds. Medway, Tonbridge, J. Felton. N of Chiddingstone Causeway 1950. 887411 Riverbank SE of Golden Square, Smarden, '62. 915403 By Beult, Birch Wood, Bethersden, '62. 918397 By Beult, E of Buckhall, Bethersden, '62. 889418 Beult, N. of Buckmans Green, Smarden, '62.
- 12) Copse on Gault SE of Lenham '44. Copse (gault) S. of Brook 1952 **MNE**. 1 m NE of Chilham 1950 **MNE**.
- 13) Wood N. of Penshurst 1950 **MNE**. SW of Southborough Common HNC. Hawkenbury, E. Shorrock. SE of Cranbrook. Wood NW of Brenchley, 1952 **MNE**.
- 16) Aldington Knowle 1950 **MNE**.

### [**F. altissima** All.

[Wood Fescue.]

Probably never found in Kent. Of the localities cited in *Fl. K.*, "Harrison's Rocks, Tunbridge Wells, Kent" (last report Townsend 1852) was a genuine locality for this species, but it is in Sussex: it is now extinct there. The Herne Bay and Cranbrook localities have never been confirmed. The former is highly unlikely; and intensive search of the Cranbrook area has not revealed the species, though the district has suitable localities for it: it still occurs in two rocky woods in the High Weald of Sussex, but not otherwise nearer than the Wye Valley, N. Warwick and the Derbyshire Pennines.]

<sup>975</sup> The manuscript appears to read R. Warnock; BM has collections from Herne Bay recorded as by P. Marnock; and Hanbury & Marshall (1899) refer to R. Marnock, although stating they had not seen the specimen.

**F. arenaria** Osbeck<sup>976</sup>

[Rush-leaved Fescue.

15.]

Native. Fixed dunes, and white dunes becoming fixed; rare, but very locally abundant on the Sandwich dunes and at Shellness in Sheppey. Also at Camber, E. Sussex (1961!); Crabknowe spit, Essex (1956!); and on the dunes of Pas de Calais.

2) in Ammophiletum on shell-sand, Shellness, Sheppey, 1962 **MNE**.

4) Sandwich Bay, Dunes N. of Princes Club House, 1952 **MNE**; St Georges Links 1962 **MNE**, 1963, KFC det. A. Melderis.

(not reported yet from New Romney area, but it probably occurs there.)

**F. rubra** L. ssp. **rubra**

[Red Fescue.

15, 16.]]

Native. Hedgebanks, pastures on a wide variety of soils, saltmarshes: abundant throughout Kent. On the chalk downs it occurs on deeper soils, more gradual slopes, and damper sites generally than *F. ovina*, and is less abundant on the N. Downs than on the S. Downs. Common in all adjacent counties and in N. France.

1) Chislehurst 1888, E. de C., det WOH, BEC Rep 1926, p.175-6 (var. vulgaris). Ruxley pits, S&S.

2) *Festucetum rubrae* sub/emerg ratio 0.004: 3krs/732 p. month. S Minster Marshes '55. Eastchurch cliffs '55. E of Minster, on top of cliffs '54 **MNE**. Beach Seasalter HMW. Var. *arenaria* Shellness: N of Leysdown: Grain S. Beach.

3) Canterbury Golf Course, '55.

4) Var. *arenaria* → Sandwich Bay, 46-61 **MNE**. Fixed dunes E of Downs F[ar]m, Sandwich '62. Salting edge, l[ocally] d[ominant], 266692, N. of St Nicholas, '62. Wingham, L[it]t[le] Britton, 1949 **MNE**. Ham Fen ...1991. var. *barbata* Hack. Deal, GCD det WOH, BEC Rep. 1926, p.142.

5) Darwin's Bank, Downe. Chevening Park. 396611<sup>977</sup> PCH.

6) G[rea]t Chalk pit NW of Horns Cross '62. Mounts R[oa]d, PCH. Down N. of Cuxton 45 **MNE**.

7) Down foot, N. of W[ater] Works, Boxley, '62. R[oa]dside Hartlip Hill '55.

8) Wye Crown Downs. Broad Downs '62. Brook Hillock '62. S of Alkham: Hougham. Coombe Vale Dover. Edge of Wolverton Wood 62. Track ½m NE of St Margarets at Cliffe '62. Down 1 m NE of St Margarets at Cliffe '62. Free Down '62. Beech plant[at]io[n] E side Goodnestone P[ar]k 62. Abbots cliff top 1946-62 **MNE**.

10) Westerham Wood 82.

11) R[oa]dside E of Forstal '55. Wrotham Heath 1945 **MNE**. East Malling, abund[ant]. Ditton. Laneside N of Hildenborough '55. R[ai]l[wa]y bank, Hildenborough, CAS, '59. Headcorn Ch[urch] y[ar]d '62.

13) Wood on T[un]bridge W[ells] S[and], South Park, Penshurst, '62.

14) Knock Wood Tenterden on Ash S, '62.

15) V. *arenaria* Greatstone; Romney Warren **MNE** 1945; Lydd Common. Shirley Moor.

16) W of Hythe.

ssp. **commutata** Gaudin<sup>978</sup>**F. ovina** L.

[Sheep's Fescue.

15, 16.]

Native. Chalk Downs, in short open turf, on shallow, skeletal rendzina soils; characteristic and constant in such habitats, and very nearly faithful to them; occasionally in dry pastures on neutral non-calcareous sands and gravels. If sheep-grazing ceases, *F. ovina* tends to be replaced by *B. erectus* instead, or by *Brachypodium pinnatum*, especially nearer the sea; except on steep, hot slopes where solifluction tends to maintain a skeletal soil and thus an open sward of short grasses. General on the chalk downs of Surrey and Sussex; naturally very local on the limited chalk areas of Essex; general on the chalk of N. France.

1) Ruxley pits, S&S.

3) Whitstable harbour REW.

4) Dunes, Deal links.

5) Downs W of Shoreham 1945 **MNE**. By Lattice Coppice, Knockholt, 1947 **MNE**. Darwins Bank, Downe. Chevening Park. Down NE of Pilgrim Ho[use], Westerham, 62.

6) Down, E of Molehill Wood, W of Buckland '61. White Hill, Shoreham, PCH; 1962 FR. Down at The Warren Cobham 1944 **MNE**. Down S of Great Wood Cuxton 1945-60. Ryarsh Downs '43 **MNE**. Upper Halling Downs '43 **MNE**.

<sup>976</sup> Given as *F. juncifolia* St.-Amans.

<sup>977</sup> A location near New Addington, just within the vc16 border.

<sup>978</sup> No account under this entry.

7) Down E of Whitehorse Stone E of L[owe]r Bell '62. Down above W[ater] Works, Boxley '62. Church Spur / Scarborough Spur, Burham Downs. Foxbury Down, Cobham F[ar]m, Lenham 1948 **MNE**. Grass heath on Eocene (Thanet) Sand, Chestnut Street, Newington 1957 **MNE**. Down, Filmer Wood, '62. Down S. of Spuckles Wood, Stalisfield, '62.

8) Wye Crown Downs. Downs N. of Ch[urch], Crundale. Winchcombe Down, Crundale '56 **MNE**. Broad Downs, Brook 62. Brook Hillock, 62. Downs N of Podlinge '62. Down NW of Misling F[ar]m Elmsted 62. Down 137503 SE Petham, MEM. SW of Lydden (v. hispida) DPY det CEH, 1955. Chalk bank, Bonnybush Hill, Kingston 62. Coombe Vale Dover, 1959 **MNE**. Down 1m NE of St Margarets at Cliffe, 1962.

13) Timberlog Orchard, JRW. By Hawkenbury Bog, CAS, 1958.

15) Romney Warren, 1962.

**F. tenuifolia** Pourr.<sup>979</sup>. (*F. filiformis*) {Fine-leaved Sheep's Fescue. 15, 16.]

1) Hayes Common 1945 **MNE**, 1948. Keston Common 1944-62. Chislehurst Common 1945 **MNE**. Dartford Heath, 1960 **MNE**. Blackheath GMB. Farningham Wood 1945. Hollows Wood, SE of Chelsfield 1945.

3) Grass heath NW of Dunkirk 1945 **MNE**. Grass heath S. of Dunkirk. Fishponds Cottages. Trenley Park Wood. Canterbury golf course.

6E) Cobham Park. Darenth Wood. Brewers Wood border by A.2 on Eocene Sand. Top of Holly Hill 668628, (Black[heath] Beds) '62.

10) Seal Chart. Knole Park. Rose Wood Ightham. Oldbury Hill. Bitchet Common. Bayleys Hill. Brasted Chart. Crockham Hill Common.

11) Wrotham Heath 1945 **MNE** 1962. Platt Woods. Comp Woods. Oaken Wood, Ditton. On 'head' in Woods S. of Preston Hall '45 **MNE**. W. of Hollingbourne. Warren Wood, Leeds.

12) Hothfield Common. Ashford Warren 1945 **MNE**. Willesborough Lees. Gibbons Brook. Brabourne Lees.

13) Stone Cross Gill, Ashurst, '59 CAS. T[unbridge] Wells Common. Southborough Common. Bedgebury. Hawkenbury Bog, 1958, CAS. Chittenden Wood.

15) Shingle Beach, Dungeness, 1945, **MNE**.

**Festuca x Lolium** = [X] **Festulolium** Aschs. & Graebn.

**F. pratensis x L. perenne** = [X] **Festulolium loliaceum** (Huds.) P. Fourn.

4) Fen-meadows N. of Wingham, 1946 **MNE**.

10) Darenth Meadows, 1946 **MNE**. N.E. of Riverhead in Meadows, 1954 **MNE**.

13) Field by High Woods, Hawkenbury, 1960, CAS.

**Festuca x Vulpia**

**F. rubra x V. fasciculata**<sup>980</sup> [= X **Festulpia** Melderis ex Stace & R. Cotton]

4) Dunes, Sandwich Bay, Miss McCallum Webster, 1954, det. A. Melderis.

**Lolium** L.

**L. perenne** L. [Perennial Rye-grass. 15, 16.]]

1) Crofton Heath PCH. Dartford Heath PCH. R[oa]dsides Hockenden, W of Swanley PCH. Bexley Mill Pond PCH. N. Cray Wood PCH. Eltham Common / Woolwich, RAG 1934 **MNE**. Shooters Hill GHB. Ruxley pits S&S. Farningham Wood 82.

2) Woolwich Arsenal PCH. River wall Dartford 545777, '62. Dartford Marshes 541761, '62. Pasture, Chetney Marshes '62.

3) Pasture on gravels S of Highstead Heath '62.

4) Sandwich Bay, etc.

5) Field W. of Shoreham PCH. Chevening Park PCH. 3964 Well Wood PCH.

6) Mounts R[oa]d PCH. Shoreham R[ifle] Range PCH. Preston Hill PCH. Below G[rea]t Wood Cobham, 1944-60 **MNE**. R[oa]dsides Wrotham PCH. Kemsing Down PCH.

8) Foot of Westwell Hangers '62. d[ominant] Brook Hillock (ley) '62. 137508 Petham MEM.

10) Riverhead meadows '54 **MNE**. Otford PCH. Meadow N. of Shoreham 54 **MNE**. Eynsford PCH. W. of S. Darenth PCH. St John Jerusalem PCH.

11) Wrotham Heath '44 **MNE**. E. Farleigh, LAG, 1958 **MNE**.

<sup>979</sup> Author citation of Sibth. In the manuscript.

<sup>980</sup> In the manuscript, given as *V. membranacea*.



12) Hothfield Common 1943 **MNE**.

13) Southborough HNC.

15) Lydd Airport DMcC.

var. **sphaerostachyum** Mast. Wye, Mrs M. Cobbe, BEC Rep. 1923, p224.

**L. multiflorum** Lam. [Italian Rye-grass. 15, 16.]

1) Crofton Heath PCH. R. Cray, N. Cray PCH. 37 Beckenham Place, 1954, PCH. W. Wickham AG Davis 1916 **MNE**. Woolwich Common 1934 Lrag **MNE**. Ruxley pits S&S.

3) Sharmal St[reet] Sta[tion] PCH. Blue Anchor, Seasalter, REW. Grain, 885765, AGS.

4) Plucks Gutter 1953 **MNE**.

5) Stubble, n[ea]r Well Wood, 396642, PCH.

6) Kemsing Downs, PCH. Pilgrims Way, Wrotham, PCH. Buckland R[oa]d, Luddesdown PCH. Maplescombe HMP. Cabbage f[iel]d 619723 N of Southfleet PCH.

7) [E of Bluebell Hill H.L. 1899 **MNE**]. Orchard E of Long Beech Wood ES.

8) Ringwould, B.N. Kale SE of Eastling Wood B.N.

10) Otford: Eynsford PCH. S. Darenth PCH. St Johns Jerusalem PCH. Bradbourne pits FSEF. [Seven]oaks tip DMcC. [Boxley H. Lamb, 1898 **MNE**].

11)W) Field, 917397, SE of Buckhall, Bethersden. Edenbridge tip DPY.

13) Cranbrook DS.

16) n[ea]r Kiln Wood, Sandling, LJM.

**L. rigidum** Gaudin [Mediterranean Rye-grass. 15.]

4) Sandwich, 1960, DMcC.

9) Birchington, 1960, DMcC, **MNE**.

‡ **L. temulentum** L. Darnel. [16.]

6) Longfield tip, DMcC 1956 **MNE**, 1965, JR Palmer.

10) [Seven]oaks Dump, DMcC.

**Vulpia** C.C. Gmel.

**V. fasciculata** (Forssk.) Fritsch<sup>981</sup> [Dune Fescue. 15.]

Native. On fixed dunes, especially in rather open turf or disturbed areas: confined to the Sandwich dunes, where it is however very abundant. Surprisingly it appears to be absent at Romney. Absent at Camber, E. Sussex, but plentiful at Littlehampton. Unrecorded in Pas de Calais.

4) Fixed dunes, St. Georges Links, Sandwich Bay, 1945-62 **MNE**. Fixed dunes about Guilford Hotel, Sandwich Bay.

**V. bromoides** (L.) Gray [Squirrel-tail Fescue.] 15, 16.

1) Eltham Common Lrag 1934 **MNE**. Ruxley pits, S&S. Hayes Common 1945 **MNE**. Keston Common. SE of Chelsfield 1945. Farningham Wood. Joydens Wood, PCH.

2) g[ras]s[an]d on Bagshort Sand, Cliffs E of Minster, 1954 **MNE**.

3) Bysing Wood. Rough Common RGW. Grass heath NW of Dunkirk 1945 **MNE**. Swanton F[ar]m pit, 1955 **MNE**. 06 top of Beach n[ea]r Medina av[enue], Seasalter, **MNE**, 1945-60.

4) about Guilford Hotel, Sandwich Bay **MNE** 1945-60. Deal Links. Richborough.

6E) Green St[reet] Green, 1945 **MNE**. Common by Shorne Windmill. Randall Wood. Cookham Wood, Upnor 1960 **MNE**.

7) Newnham gravel pit. Stockbury, Three Squirrels Down, 1944 **MNE**.

8) Chilham Hill ES.

10) Sevenoaks 1903 H.L. **MNE**.

11) Wrotham Heath 1942-60 **MNE**. Ryarsh Sandpits. Leybourne Wood 1955 **MNE**. A20 W. of Hollingbourne. A20 E. of Hollingbourne 1955 **MNE**. Sandpit 1m. SE of Harrietsham 1958 EGP, **MNE**. By Pond E of Hale St[reet] CAS. Platt. Holt Wood. Lark field Heath. Warren Wood, Leeds. Ditton S quarry 715566 CAS. E. Malling 1944 **MNE**. Aylesford Gravel pits EGP.

<sup>981</sup> In the manuscript, given as *V. membranacea* (L.) Dumort..

- 12) 915405, path, Birch Wood Bethersden (sandy) 1962. Hothfield Common 1945 **MNE**. Ashford Warren. Willesborough Lees. Brabourne Lees 1945 **MNE**.  
 13) Stone Cross, Ashurst, 1959 CAS. By Brighton Lake, T[unbridge] Wells, 1960 CAS. Penshurst Park 1944 **MNE**. High Rocks Lane, on rubbish heap, '51. KEB.  
 14) 50 Acre Wood, Woodchurch ES.  
 15) Romney Warren. Lydd Common. Dungeness. Ancient dunes S. of W. Hythe, '62. Hythe W. Beach BW.

**V. myuros** (L.) C.C. Gmel. [Rat's-tail Fescue. 15, 16.]

- 1) Farningham Wood, 1946.  
 2) R[ai][wa]y bank, Cuxton, 1945 **MNE**. Grain, PCH. River Wall, Stone Marshes, 1945 **MNE**. River Wall, Swanscombe, 1946. Tonge Marshes 1958, DMCC **MNE**. Waste g[rou]d, Faversham Creek 1960 **MNE**.  
 3) Hernhill village, 1955 **MNE**.  
 4) Richborough waste g[rou]d. Kingsdown Beach, 1946 **MNE**. Plucks Gutter, 1955 **MNE**. Old r[ai][wa]y and Wall of Churchyard, Wingham BN.  
 6E) Cliffe Sta[tion] PCH. Sharnal St[reet] Sta[tion] PCH. Swanscombe Wood, 1946. Dry ground, Green Street Green 1945 **MNE**.  
 8) Bridge, JG.  
 11) Birling Marshes, 1945, **MNE**. W. Malling Station Road, 1960 **MNE**. Cinder Path by Medway, near Gasworks, Tonbridge, CAS, 1960 **MNE**. Kemsing Sta[tion]. Boro[ugh] G[ree]n, DMCC. Wrotham Heath 1945 **MNE**. Aylesford sandpits, 1957, EGP, **MNE**. A20, Warren Road, Broomfield, 1945 **MNE**.  
 12) Headcorn Sta[tion], '62. [Wye, Lady D., 1902] Brabourne Lees, 1945 **MNE**. Canterbury W. sta[tion] sidings MEM.  
 13) near Brighton Lake, Tunbridge Wells, CAS.  
 15) Dungeness, Shingle beach near Long ballast pit, 1946 **MNE**. Beach W. of Hythe, 1955, **MNE**.

‡ **V. myuros** f. **megalura** (Nutt.) Stace & R. Cotton<sup>982</sup>

- 11) Harrietsham Station, Mrs. B. Dodds, E.G.P., D.McC & JEL, 1961; 1965, BD, **MNE** det. C.E. Hubbard.  
 12) Sellindge, 1951, D.H.K.

**V. ciliata** Dumort. [ssp. **ambigua** (Le Gall) Stace & Auquier]<sup>983</sup> Bearded Fescue. 15, 16.]

- 1) Sandy grass heath, W side of Farningham Wood, 1946 **MNE**.  
 4) Deal Links, 1954-'61 **MNE**. Sandwich Bay, 1946-62 **MNE**. St Georges Links, 1950 **MNE**. Princes Links. Sandwich Town, 1946. Upper Deal, 1946. Walmer Beach, 1946, **MNE**. Kingsdown Beach, 1946 **MNE**, 1958 KDR.  
 5) near Biggin Hill, 1903, W.H. Griffin, *Wool[wich] Surveys*.  
 6E) Chalk gravel pit 1946 **MNE**.  
 11) Wrotham Heath, 1944-62 **MNE**. Ryarsh Sandpits, 1945. Near Hythe Sandpits, 1946. Sandy Bank of A.20, Warren Road, Leeds, 1945-62 **MNE**.  
 12) R[oa]dside A.20, W. of Woolpack, Hothfield, 1946. R[oa]dside A.20, Warren Woods, Ashford, 1945.. Sandpit, 005451, Sandyhurst L[a]n[e], ES. Brabourne Lees, in sandpit, 1945.  
 15) Romney Warren, 1945-'62 **MNE**. Ancient dunes S. of W. Hythe '62. Lydd Common 1946. Dungeness, 1946.

**V. ciliata** ssp. **ciliata** Dumort.<sup>984</sup>

- 2) Brickworks S. of Hoo, 1951, DMCC; 1951! **MNE** det. C.E.. Hubbard at Kew.

**V. unilateralis** (L.) Stace<sup>985</sup> [Mat-grass Fescue. 15, 16.]

- 6) Broken chalky bank, between arable and downland, 628605, above Wrotham Water, PCH., 1959. 1959! Rough open chalky field, Halling Warren, PCH., 698656, 1959. White Pit, Upper Halling + *T. botrys*, PCH.  
 7) Chalk pit, Hollingbourne Hill, 848558, 1959 PCH.: 1959! det. A. Melderis.  
 8) Wye.

<sup>982</sup> In the manuscript given as *V. megalura* (Nutt.) Rydb.

<sup>983</sup> In the manuscript given as *V. ambigua* subsp. *ciliata* (Le Gall) More; but this would better have been called ssp. *ambigua*..

<sup>984</sup> In the manuscript given as *V. ciliata* Link. which is the casual subspecies, better treated as subsp. *ciliata*, instead of this being attributed to the previous taxon.

<sup>985</sup> In the manuscript given as *Nardurus maritimus* (L.) Murb.

15) Littlestone, Lady Davy, 1909.

### **Cynosurus L**

**C. cristatus** L. [Crested Dog's-tail. 15, 16.]

1) Blackheath GMB. Shooters Hill. Ruxley pits. Woolwich Common 1934 LRA **MNE**. 36 W. Wickham Common PCH.

4) Minster Marshes, 1963.

5) Field W. of Shoreham PCH. Darwins Bank Downe. Pilgrims Way Pohill PCH. Chevening Park PCH.

6) Swanscombe Wood PCH. Kemsing Downs PCH.

8) 137508 Petham SE Down MEM.

10) Knole Park PCH. Otford PCH. Darenth water meadows PCH.

11) Leybourne Marshes 1943 **MNE**. Sandling Wood Edge EGP 1957 **MNE**. Fields SE of Buckhall, Bethersden 62.

13) Stone Cross, Ashurst, 523388, CAS, 1959. Southborough Common. South Park, Penshurst '62. Bayham Abbey CAS.

15) Lydd Airport DMCC. Denge Beach, J. Hubbard. Shirley Moor '65.

**C. echinatus** L. [Rough Dog's-tail. 15, 16.]

Vc16: **X** BEC, '35, p.47.

1) [1 plant, Bexley, 1946. Hayes, casual, D.McC.] [Beckenham, 1934, A.G. Davis **MNE**.]

4) Gravel pit, Lit[tile] Stonar, Richborough, C.C.T., 1948. Beach by Guilford Hotel, Sandwich Bay, abundant 1946-1961, D. McC & FR **MNE**. Loc[ally] abundant, Walmer Beach, 1946 **MNE**.

6) Temple Farm Estate, Stroud, G.O.P. Roadside, Cliffe, 1951, D. Hamblen.

8) Dover E. Cliff, KDR. Bridge J.G.

9) Birchington, 1960 in shoddy, DMCC **MNE**.

11) [Maidstone, N.C. Cook. 1924 **MNE**.]

15) Old shingle workings N. of Lighthouse, Dungeness 1948, B.W; 1953-54 **MNE**. Shingle workings SE of Halfway Bush, Denge Beach 1946 **MNE**. Greatstone, 1946, rare **MNE**.

### **Puccinellia** Parl.

**P. maritima** (Huds.) Parl. [Common Saltmarsh-grass.] 15, 16.

2) Erith Marshes, Dartford saltmarshes by R[iver] Thames, 545777 & 541799. Stone saltmarshes. Swanscombe saltmarshes. Northfleet saltmarshes. Gravesend Canal Dock **MNE** 145. Chalk. Shorne. Higham Marshes. Cliffe Creek. Egypt Bay. St Marys Bay. All Hallows **MNE** 1945. Grain. L[owe]r Stoke. Hoo. W. of Upnor. Cuxton **MNE**, 1945, 1951. Halling. Borstal. Wouldham. Motley Hill / Horrid Hill, Rainham 1951 **MNE**. L[owe]r Halstow. L[ocally] d[ominant], Funton Creek 62. Tonge. Conyer Creek. Oare Creek **MNE** 1959. Faversham Creek 1960 **MNE**. Elmley. Fowley Island 1960 **MNE**. Harty. Kingsferry. Shellness. N. of Leysdown. W. of Seasalter! HMW 1958 **MNE**.

4) E. of Reculver 1946. Stour estuary Salt Marshes, Sandwich to Shellness.

8) Shakespeare Beach, Dover, KDR.

15) Salting behind Dymchurch Wall. Midrips, J. Hubbard.

**P. distans** (Jacq.) Parl.<sup>986</sup> [Reflexed Saltmarsh-grass.] 15, 16.

2) Saltings, Stone Marshes, 564762, HMP. Swanscombe Marshes. Gravesend Canal Dock **MNE** 1945. Denton. Shorne. Borstal, by Medway. Cuxton Saltings, 1945→. N of New Hythe. Rainham. Lower Halstow 1957 **MNE**. Cliffe 1950 **MNE**. W of Upnor. Shellness. Harty. Elmley. N. of Leysdown 1956 **MNE**. Oare Creek 1959 **MNE**. Faversham Creek. W. of Seasalter 1958, HMW **MNE**, 1960! Seasalter Beach 1958 HMW **MNE**. N of Stoke Junction Halt 1945-1959 **MNE**. Grain. 87 Greenborough Marsh. 86 W. of Milford Hope.

3) Swalecliffe sea wall, 1959, HMW.

4) Sandwich Quay, 1946. Brackish dikes, Sandwich Flats, E. of Stour, 1957 **MNE**. E of Reculver. V[ery] a[bundant], Dikes behind Princes Links, 1962, to Shellness. Pegwell (St. Augustines G[olf] C[lub] dikes! 1963. W. of Minnis Bay, Mrs B. Dodds.

15) N. of Dymchurch. S. of Dymchurch. St Mary's Bay. SE of New Romney.

**P. distans x rupestris** = **P. x pannonica** (Hack.) Holmb.

2) Gravesend Canal Dock, 1945, det. P. Jansen **MNE**; conf. C.E. Hubbard.

<sup>986</sup> In the manuscript, cited as *P. distans* (L.) Parl.

**P. pseudodistans** (Crép.) Jansen & Wacht.<sup>987</sup>

[Greater Saltmarsh-grass. 15, 16.]

2) Stone Marshes, J.E.L., 1847. Northfleet Marshes, 1945. Stoke Junction Halt, 1958 **MNE**. Marsh N. of Leysdown, Sheppey 1956, **MNE**. S. of Harty Ferry 1957 **MNE**. E. of White Sluice near Sportsman, Seasalter, 1960, **MNE**.

4) Brackish Marsh dikes, N of Ebbsfleet, 1963.

**P. fasciculata** (Torr.) Bicknell

[Borrer's Saltmarsh-grass. 15, 16.]

2) Stone Marshes, 1945-. Swanscombe Marshes, 1945-. Gravesend, C.P. Hurst, 1900 **MNE**. Frindsbury marshes, W. of Upnor, 1945-60 **MNE**. NE of Cuxton, 1945- **MNE**. S. of Harty Ferry 1957 **MNE**. W of Seasalter near Sportsman, 1957-60 **MNE**. Seasalter, 1958, HMW, **MNE**. Scrapsgate, 1965, JE Nichols. Lower Halstow 1957 **MNE**. Brackish fleets. Chetney Marshes 62. Elmley, 1950 **MNE**. Capel Fleet, Harty 1959 **MNE**. N. of Leysdown, 1956 **MNE**. Shellness, 1956-60 **MNE**. N of Stoke Junction Halt 1945-61 **MNE**. N coast, I[sle] of Grain, 1945-48 **MNE**. NE of Blacketts, Tonge, 1958 **MNE**. W. of Conyer Creek, 1958 **MNE**. 101661, West Beach boating lake, Whitstable, HMW.

3) Swalecliffe, HMW 1959 **MNE**.

4) Stour estuary, NE of Sandwich, 1957. Behind Princes Links, 1962. Dikes N of Ebbsfleet 1963. Brackish Dike N. of Shuart, 270686, '62. Salting N. of Shuart 266692, '62. W. of Minnis Bay, 1960, EGP, **MNE**.

15) 982264 Fairfield, 152: 1962, Mrs. K.D.R. NE of Littlestone 1947, 1950 **MNE**. St Mary's Bay 1947, **MNE**. By Canal, W. of Hythe, 1956, LJM.

**P. rupestris** (With.) Fernald & Weath.

[Stiff Saltmarsh-grass. 15, 16.]

2) Plumstead, G.E. Dennis, 1845, **MNE**. Erith Marshes, PCH. Crossness PCH. Dartford Marshes, at edge of ditch, 1962 **MNE** and behind seawall, 546776 and 541769.. Swanscombe Marshes 1945-46 **MNE**. Northfleet. Stoke Junction 1945-61 **MNE**. Gravesend Canal 1945 **MNE**. Denton, GMB. Shornmead. Strood, 1850 **MNE**. SW of Upnor 1945→ **MNE**, **BM**. Creek, Cliffe, 1950. Grain 1946 **MNE**. N of Cuxton, 1945 **MNE**. New Hythe 1945. E. of White Sluice, Seasalter, HMW. Castle Coot, near sea wall, KDR, 1960. N. of Leysdown 1956 **MNE**. Shellness, Lady D, BEC Excur[sion] 1938; 1954! 1963! Harty, 1946. Elmley 1950 **MNE**. Ground behind sea wall, Castle Coot, Graveney, 1960. Oare Creek 1959 **MNE**.

3) Swalecliffe, 1959, HMW **MNE**.

16) Folkestone Harbour, Miss M. Cobbe, BEC Rep. 1923, p.223.

**Briza L.**

**B. media** L.

[Common Quaking-grass. 15, 16.]

1) Keston Common AGD 1916 **MNE**. Holwood Park near Lakes, 1954 **MNE**.

2) Meadow ¾m S. of Cliffe, 1944.

3) Grassland on clay, S. of Dunkirk, 1946. Duncan Down, Whitstable, v[ery] a[bundant] in grassland on clay, 110650, 1961, H.M. Wilks.

4) Hacklinge Meadows. Sandwich Bay.

5) Down W. of Shoreham PCH. Pilots Wood, PCH. Pilgrims Way, Polhill PCH. Darwins Bank Downe 1961. Down NE of Pilgrims Ho[use], Westerham '62.

6) Down E. of Molehill Wood, Buckland '61. White Hill, Downs E. of Shoreham, PCH; FR. Preston Hill Down PCH; FR. Kemsing Downs PCH. Downs above Trottscliffe PCH.

7) Church spur, Scarborough spur, Burham Downs. Pilgrims View L[owe]r Bell '62. Down E of Whitehorse Stone '62. Boxley Down N. of W[ater] Works 62. Queen Down Warren. Downs at Foxbury Lenham 1946. Downs ½ m. E. of Lenham, 1956. Filmer Down, '62.

8) Wye Crown Downs. A[bundant], Broad Downs '62. Brook Hillock 62. A[bundant] – cod[ominant] Down NE of Giddy Horn 62. A[bundant] Down N of Podlinge 62. Ch[al]k bank, Bonny Bush Hill, Kingston 62. Winchcomb Farm Down Crundale 1956 **MNE**. Down NW of Misling F[ar]m, Elmsted 62. 137508 SE of Petham MEM. Down N. of Pean BW. A[bundant] – l[ocally] d[ominant] Woodville Downs, T[emple] Ewell. A[bundant] Free Down '62. Down 1m NE St Marg[are]ts at Cliffe 62.

10) N. of Bat & Ball Sevenoaks 1950 **MNE**. Darenth Water Meadows, PCH.

11) Wrotham Heath 1944, on r[oa]dsides **MNE**. Clare Park, E. Malling. Meadows ½m W. of Penshurst 1944 **MNE**.

12) Cuckolds Coomb fen, Brook, 1945-54 **MNE**. Stowting fen 1954 **MNE**.

<sup>987</sup> This taxon has since been treated as subsumed in *P. fasciculata*.

13) Near Stone Cross gill, Ashurst, in meadow, CAS, 1959. Marsh by Ellis Wood, Lamberhurst 1946 **MNE**. Pentecost's Field Southborough HNC. Dunorlan, T[unbridge] Wells, CAS.

14) 926347 g[ras]s[land] by r[oa]d E of Robhurst ES.

**B. minor** L.<sup>988</sup>

[Lesser Quaking-grass.]

**B. maxima** L.

[Great Quaking-grass. 16.]]

11) Casual, R[oa]dside N of Wateringbury, 1947.

13) Claremont R[oa]d, T[unbridge] Wells, v[ery] a[bundant], 1957, 1962, K.E.B. Hook Green, 1960, FRB.

**Poa** L.

**P. annua** L.

[Annual Meadow-grass. 15, 16.]]

1) Blackheath GMB. Bostall Heath PCH. Ruxley Pits. Shooters Hill. GMB. Bexley Mill Pond PCH. N. Cray Wood, PCH. Joydens Wood PCH.

2) Woolwich Arsenal, PCH. Sewer Bank, Plumstead, PCH. River Wall by Longreach Tavern 545777, '62. Shellness Sheppey 1950-1955 **MNE**.

3) Swalecliffe Sea Wall, '59, HMW. Church Wood: Blean Wood. RGW.

5) Cornfield S of Morants C[our]t Hill '62. N of Chevening Park '62. 396611 PCH. Wood W. of Shoreham PCH. Pilots Wood PCH.

6) Darenth Wood PCH. Mounts Rd PCH. . Preston Hill PCH. Pilgrims Way E of Wrotham PCH. Cornfield NE of St Clare '62. ½m NE of Kemsing Ch[urch] '62.

8) Down, NE of Elham Park Wood 1958 **MNE**.

10) Bat & Ball tip CAS. Otford PCH. River Path N of Shoreham PCH. Eynsford PCH. Shoreham Ch[urch] Y[ar]d PCH. W. of S Darenth PCH. St Johns Jerusalem PCH.

11) E Malling abund[ant] '62. W. Malling abund[ant] '62. Ancient wall, The Friars, Aylesford 62. Maidstone, 1926, H. Elgar **MNE**. Sandling Wood edge 1957, EGP, **MNE**. Headcorn Ch[urch] y[ar]d 62.

13) Stone Cross, Ashurst 1959 CAS. S. Park Penshurst, by track 62. Southborough HNC. Bayham Abbey CAS.

15) Lydd Airport DMCC.

**P. trivialis** L.

[Rough Meadow-grass.] 15, 16

*Native. Meadows, dry to damp woodland and carrs, roadsides, hedges, waste ground; abundant everywhere, except open grasslands on chalk and sands.*

1) Blackheath GMB. Ruxley pits, S&S. Abbey Wood, RAB. Farningham Wood, PCH; 82!

2) Stone Marshes, St J.M. (var. *glabra* Doell.) BEC Rep 1921 p403. Oare mill pond meadow, 1959, **MNE**. Marsh E. of Oare Creek 1959 **MNE**.

4) Sandwich Bay.

5) Darwins Bank, Downe, JEL.

6) Great Wood Cuxton 1944 **MNE**. Preston Hill on c[lay] w[ith] f[lints] PCH.

7) Warren Lane L[owe]r Bell '62. Highsted Pits HMW. Filmer Wood (Valley Bott[om] on sandy loam) 62. Tassels Wood Norton '62. Park Bottom Wood Newnham '62. 975505 on Pliocene? Longbeach Wood Charing, '62.

8) Bridge JG. ....JG. Copse N. of Bavinge (basic loam) '62. Beech Plant[atio]n (ch[al]k) E side Goodnestone P[ar]k '62. Coombe Vale Woods, '55. Sutton Downs '55.

10) Meadow N. of Bat & Ball, Sevenoaks, 1950 **MNE**. Westerham Wood 82! By R[iver] above S. Darenth, PCH.

11) Alnetum, Leeds Bridge; Chegworth; Polhill. Maidstone, Path s[i]d[e] Hedges, 1957 EGP **MNE**. W. Malling 1955 **MNE**. E. Malling. E, Farleigh. Kiln Wood Lenham, Alnetum '62. Beult S. of Headcorn Ch[urch] 831440, '62. Leighbridge Pond, 813454, 62. Beult N of Buckmans Green 889419, '62

13) Southborough HNC.

14) R[oa]d, Knock Wood Tenterden '62. V[ery] l[ocally] f[requent], Great Heron Wood, Kenardington 62.

15) Lydd Airport DMCC. Shirley Moor '65.

**P. humilis** Erh. ex Hoff.<sup>989</sup>

[Spreading Meadow-grass.] 15, 16.

*Native. In dry habitats in Kent (walks, sandy ground, dunes, etc.) and probably not uncommon. In other counties it is reported in wetter places.*

<sup>988</sup> Listed, but no records given.

<sup>989</sup> In the manuscript given as *P. subcaerulea* Sm., with *humilis* added later.



- 4) Sandwich Bay dunes 1949 **MNE**; 1963, KFC, det. A. Melderis.  
 11) Mote Park Wall, 1944 **MNE**. Wrotham Heath, by A.20 verge, 1944-1946 **MNE**. Verge of A.20, near Addington, 1945 **MNE**.  
 12) Hothfield Common, 1945 **MNE**: 1962, E.G.P. + KFC.  
 15) Dungeness Beach, 1951 **MNE**.  
 16) Folkestone Leas, 1946 **MNE**. Ragstone scars W. of Hythe, 1955, **MNE**.

**P. pratensis** L. [Smooth Meadow-grass. 15, 16.]

- 1) Blackheath GMB. Abbey Wood, GAM. Shooters Hill, GMB. Ruxley pits, S&S.  
 2) Grain N. Beach 1955 **MNE**. Meadow SW of Upnor 1960 **MNE**.  
 4) Sandwich Bay 1946 **MNE**.  
 5) Cudham Ch[urch]y[ar]d (s.s.) D.P.Y. Morants Court Hill 1951 **MNE**. 3964, Well Wood, PCH.  
 6) The Warren, Down S. of G[rea]t Wood Cobham '44 **MNE**.  
 6E) Gravel pits, Chalk 1946 **MNE**.  
 7) Pilgrims View Wood, L[owe]r Bell '62. Down above Water Works, Boxley, '62. Church and Scarboro[ugh] Spurs Burham Down. Walderslade Down 1955 **MNE**. Foxbury Downs E of Lenham 1946 **MNE**.  
 8) Brook Hillock, '62. Alkham Downs S., DPY, det. CEH. Lydden Spout Cliffs, 1953 **MNE**. Sutton Downs '55. N. of St Margarets '55.  
 10) St Johns Jerusalem PCH. R[ai]l[wa]y, 1 m W. of Kemsing Sta[tion], 1946 **MNE**.  
 11) Ragstone Walls, E. Malling **MNE**, Heath R[oa]d; New R[oa]d; Well St[reet]; Well St[reet] Rocks. W. Malling. Aylesford Friary Wall 1952 **MNE**. R[ai]l[wa]y bank, Hildenborough 563482 CAS.  
 12) Hothfield Common 1946 **MNE**. Stubbs Cross, Kingsnorth 1952 **MNE**.  
 13) Stone Cross, Ashurst, 518381, 1959, CAS. Southborough HNC. Hawkenbury Bog, CAS. Bayham Abbey CAS.  
 14) R[oa]dsides Knock Wood Tenterden '62.  
 15) Ancient dunes S of W Hythe '62.  
 16) Folkestone Leas 1946 **MNE**.

**P. angustifolia** L. [Narrow-leaved Meadow-grass.] 15, 16.

*Native. Dry grasslands, on chalk or sand; probably common, but under-recorded, as I did not attempt to separate it from P. pratensis in earlier survey work.*

- 4) Deal Links, 1951 **MNE**. 36 Minster, Ch[urch]y[ar]d wall, 1963.  
 6) Horns Cross Great pit, '62 **MNE**. Stanstead / Farningham, 1934, A.H.G. Alston. Chalk bank, Frindsbury, 1945 **MNE**. Greenhithe Chalk pits! 1945 **MNE**. Downs N of Crookhorn Wood, Snodland, 1960 **MNE**.  
 7) Boxley Warren, RD English. Sandy bank of A2, E of Newington, 1946 **MNE**. Open wood on chalk, N. of Milsted, 1963, **MNE** det. ECW.  
 8) Downs NE of St Margarets, 1955, DPY, det. CEH.  
 9) Walls, Minster Thanet 63.  
 11) Sandy verge of A.20, 1m W. of Hollingbourne, 1944 **MNE**.  
 13) Bank near Lit[tle] Scotney, Lamberhurst, 1906, JS, **TLS**. Cabbage Stalk Lane, T[unbridge] Wells, 1962 CAS. Wall, T[unbridge] W[ells] Common, 62 CAS.

**P. chaixii** Vill.<sup>990</sup> [Broad-leaved Meadow-grass.]

**P. compressa** L. I [Flattened Meadow-grass. 15, 16.]

*Native. On old walls, widespread but uncommon: also in old shingle workings on Denge Beach. Most frequent on the Kentish ragstone belt. Rare in Surrey, Sussex and Essex and Pas de Calais.*

- 1) Ruxley pits.  
 2) 06 Bank S. of Oare Creek HMW.  
 3) 15 Wall, St. Augustines Abbey, Canterbury.  
 4) 35 Old walls, Sandwich. Wingham Ch[urch] y[ar]d Wall, '59, BN.  
 5) 46 Old wall, Downe, F.H.B., 1962.  
 6) 56 Fawkham Ch[urch] DVS Woods. 67 Shorne Ch[urch] y[ar]d Wall, 1946, DMCC. 57.  
 7) 86, Wall, Kemsley Street Farm, Bredhurst, 1960 **MNE**.  
 8) Elham Ch[urch]y[ar]d Wall '59 BN. North Elham, Hedgebank, 1959, BN. 34 Oldstairs Bay, Kingsdown, on flint-faced bank 1956-58 **MNE**. 24 Temple Hill, KDR. Walls near Barracks and Station, Walmer, 1959, BN.

<sup>990</sup> Listed, but without any entries.

R[oa]dside beechwood, Lynsore Bottom, 1959, BN. Elmstead, R[oa]dside E of Hastingleigh, '59, BN. Barfreton, in open beechwoods, Wollage Mill and Barham, 1959 BN.

**10)** 56 Lullingstone Castle 1956 **MNE**. 56 Farningham Village on wall 1958 **MNE**. 56 Farmhouse wall S. of Shoreham GMB & PCH.

**11)G)** 75 E. Malling, 1956-60, frequent in several places, **MNE**. 65 Abbey, West Malling, 1955 **MNE**. Wall, Offham. 85 Leeds village, 1959 **MNE**. 85 Hollingbourne (Eythorne St[treet]) 1962 **MNE**. 75 Old ragstone wall, The Friars, Aylesford, '62. 75 Aylesford Sand pit, 1957 EGP **MNE**. 75 Maidstone, H.L. 1894 **MNE**; 1957 **MNE**. 84 Wall, Sutton Valence Ch[urch]y[ar]d. 1954. Rooks Hill!; All Saints Churchyard!; Knole Park!; Sandling Road! **(W)** 44 Edenbridge, wall in town, 1955 **MNE**.

**12)** 04 Ashford town on wall, CNP. 05 Old wall, Chilham, F.H. Perring.

**13)** 53 Cobbles by Sussex Tavern, Tun[bridge] Wells, K[en]t (V.C.14), CAS, 1960. 53 1 pl[ant] by Brighton Lake, T[unbridge] Wells, CAS, 1960.

**15)** 01 Old shingle workings, N.E. of Bird Observatory, Dungeness, 1953-1962.

### **P. palustris** L.<sup>991</sup>

[Swamp Meadow-grass.]

### **P. nemoralis** L.

[Wood Meadow-grass.]

15, 16.

**1)** R[oyal] M[military] A[cademy] Enclosure, Woolwich, LRAg 1934 **MNE**. Wood E. of Bexley Ch[urch] '55 **MNE**. Elmstead Lane, Bickley, 1944. Holwood Park PCH. Hollows Wood, SE of Chelsfield, 1945. Joydens Wood PCH. Upper Hockenden PCH. Bunkers Hill, N Cray PCH. Farningham Wood, PCH, (82!).

**3)** Bysing Wood. Thornden Wood. Trenley Park Wood.

**5)** Wood W. of Shoreham PCH. Woods Darwins Bank, Downe, JEL. 396611 hedge of copse PCH.

**6)** Mounts Wood PCH. Horton Kirby Wood PCH. Fawkham Ch[urch] DVS Woods. Preston Hill PCH. Bank by Rd. Birling Hill top, 62. R[oa]d Bank N of Harvel 62.

**6a)** Cockham Wood Upnor, 1960 **MNE**.

**7)** Warren Lane bank, E of L[owe]r Bell '62. Bluebell Hill '57 EGP **MNE**. R[oa]d bank, top of Coxett Wood (Thanet S[and]) 62.

**8)** Temple Ewell: Bridge JG.

**11)** Sandling, EGP, 1957 **MNE**. Ryarsh Wood (SE corner on F[olkestone] Sand) 1945 **MNE**. Barming, S. of Fountain Inn, H.L. 1903 **MNE**. Copse Golden Square Smarden 885415, '62. Beult Bank N of Buckmans G[ree]n 889419, '62. Beult E of Buckhall, Bethersden, 918397, '62. Str[eam] bank SE of Golden Sq[ua]re Smarden, 887412, '62.

**13)** Stone Cross, Ashurst, 523388, 1959, CAS. E. of Bidborough Ch[urch] HNC. Shadwell Wood, Speldhurst, GE Shaw. 1m N. of Goudhurst (Horsmonden Road) 1979.

**16)** R[ai]l[wa]y near Sandling Junction.

### **P. bulbosa** L.

[Bulbous Meadow-grass.]

15

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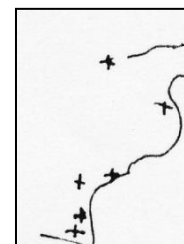
Native. Fixed dunes and old dune pasture, turfed shingle beach, sandy cliffs; locally abundant on the E. Kent coast in 4) and 15), at Swalecliffe in 3), unrecorded elsewhere. Very locally abundant on the Sussex coast and westward on that of Hants and Devon; unrecorded for Essex and only adventive in Surrey, but it occurs rarely on the Suffolk and Norfolk beaches and in the Pas de Calais. Commoner on the Kent coast than in any other part of England.

**3)** 16 Beach, Swalecliffe, P.R. Bell 16.

**4)** 35 Fixed dunes, Deal Links, 1961, 35. 35 Sandwich Bay; 1946: 35 E. of Downs Farm, '62. 35 St Georges Links 1946-61 **MNE**. 35 Walmer Beach, 1946.

**5)** Ancient dunes, S. of West Hythe, '62 **MNE**. Beach W. of Hythe, rare, 1946-55 **MNE**. N. of Lighthouse, Dungeness, abund[ant] 1948-68 **MNE**. By A259, Romney Warren, 1947-62 **MNE**. Littlestone beach, 1958, **MNE**. S.W. of Lydd, J.H.L., 1946. N.E. of Littlestone, 1962, E.S.

**16)** Folkestone Leas, W. end, 1946, abund[ant] **MNE**; 1954 E.S. **MNE**.



### **Dactylis** L.

#### **D. glomerata** [L.]

[Cock's-foot.]

15, 16.]

**1)** Crofton Heath PCH. Holwood Park PCH. N Cray Wood PCH. Bexley Ch[urch]y[ar]d, PCH. Ruxley pits S&S. Shooters Hill GMB. Farningham Wood 82. Blackheath, GMB. Wood, near Mill below Keston Common '55 **MNE**. W. Wickham (Skid Hill) AGD 1915 **MNE**. Woolwich Common 1934 LRAg **MNE**. Joydens Wood PCH.

<sup>991</sup> Listed, but without any entries.

- 2) Sewerbank, Plumstead PCH. Woolwich Arsenal PCH. Medway bank above Aylesford '55. S. Minster Marshes '55. Minster ch[urch] y[ar]d '55. Scrapsgate '55. Scrub S. of Scrapsgate '55. Brambledown R[ai]l[wa]y '55. Brambledown oak wood '55. Leysdown village '55. SE of Leysdown '55. Warden Ash copse '55. Eastch[urch] cliffs '55. Shellness.
- 3) Canterbury G[olf] Course '55. Dry Pasture S. of Highstead, Hoath and to SE, '62.
- 4) Sandwich Bay. Track, 271690, N of St. Nicholas '62.
- 5) Larches Wood W of Farnborough PCH. Field W. of Shoreham PCH. Pilots Wood, PCH. Pilgrims Way, Polhill PCH. Chevening Park PCH. Darwins Bank 1969, 396611 PCH.
- 6) Mounts R[oa]d PCH. Swanscombe Wood PCH. R[oa]dbank Foxendown Hill, Meopham '62. Gravesend Aerodrome 1937 LRAG **MNE**. Preston Hill Wood PCH. Kemsing Downs PCH.
- 7) Halling Warren PCH. Burham Downs HL [18]96, 62! **MNE**. Upper Bell '55. Warren L[a]n[e] L[owe]r Bell '62. Pilgrims View 62. R[oa]dside Hartlip Hill 55.
- 8) Westwell W.Hanger '62. Broad Downs '62. Brook Hillock 62. ENE of Giddy Horn 62! 137508 SE of Petham MEM. Stafflands Wood (ch[al]k) '62. Beech Plant[at]io[n] E side Goodnestone P[ar]k 62. Wolverton Wood edge '62. R[oa]dside Kearsney '55. Free Down '62.
- 10) Knole Park PCH. Otford PCH., R[iver] path N of Shoreham PCH. Eynsford PCH. Waste g[r]oun[d] S. Darenth. St Johns Jerusalem PCH. Sevenoaks tip CAS. Westerham Wood 82.
- 11)G) Wood SE of L[owe]r St Clare '55. Old wall, Friars '62. Holt Wood Aylesford '55. Gravel pit E of Aylesford '55. R[oa]dside E of Mereworth '55. W. of Bearsted by A20 '55. Park Wood Boughton Mon[chelsea] '55. Near Riverbank SE of Watlington 1957 **MNE**. Pendenden Heath 1850-1956 **MNE**. Maidstone 1886 HL – 1957 EGP **MNE**.
- W) ¼m N of Bough Beech '55. 1m N of Bough Beech (w[oo]d by str[eam] WC) 55. R[ai]l[wa]y bank, Hildenborough 563482 CAS. Tonbridge Castle 55. Whetsted by B2015 '55. By R[iver], E of Golden Sq[ua]re] Smarden '62. SE of Buckhall, Bethersden, 62. SE of Buckhall, Bethersden, 62. Copse by Beult Buckmans Green 889419, 62.
- 13) Stone Cross, Ashurst, 159 CAS. South Park Pasture, Penshurst, '62. Southborough HNC. Bayham Abbey CAS.
- 14) Knock Wood R[oa]dside E of Tenterden '62.
- 15) Dungeness near Lighthouse.

### Catabrosa [P.] Beauv.

**C. aquatica** (L.) [P.] Beauv. [Whorl-grass. 15, 16.]

1) Near Ravensbourne W.W., Bromley, 1908, S.E.C. Hb. Croy. 46 Orpington Park, PHC.

2) 76 Holborough Marshes, 1946.

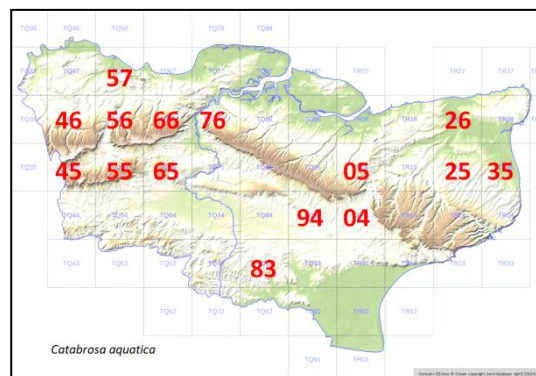
4) 26 Deerson Marshes, Preston, 1956 **MNE**.

[Wickhambreaux, 1929, PHC.] 25 Marsh ½m. N. of Wingham 1956 **MNE**. 25 Wenderton Dikes, BN. 35 Worth Minnis 1956-60 **MNE**. Chislet, 1949, L.W.W.

10) 45 Chevening, PHC. 55 S. of Otford in meadows GMB, '56. Sutton C[or]n[e]r, Darenth, PCH, 1956. 57 Sutton C[or]n[e]r, by Darenth Bridge, PCH, 1956. 56 Horton Kirby by Bridge PCH.

11) 65 Leybourne, '44. 66 By Stream, Lunsford Lane, E. Malling, 1962, R.W.English. 65 Plaxtol, '44. 83 Biddenden, '44.

12) 94 Pond SW of the Common, Hothfield, 1943, **MNE**. 04 Ditch, Longport Bridge, Willesborough. 04 Ditch, Mersham Mill, 1952, CNP. 05 Meadows, Chilham near Bagham Mill, 1947 **MNE**.



### Catapodium Link

**C. rigidum** (L.) C.E. Hubb. [Fern-grass.] 15, 16

1) Hayes. Keston. Farningham Wood.

2) Stone Marshes 575755, HMP. Shellness, Sheppey. [Sheppey AE [sic, for AG] Davis 1917 **MNE**.] Swanscombe Marshes. Grain 1945 **MNE**.

3) 16 Old R[ai]l[wa]y, S of Whitstable, 1959, HMW. 16 Shore to W of Whitstable. Bysing Wood HMW. Reculver Wall near Ch[urch] M.E.M. Whitstable Castle Row.

4) Deal Links. Sandwich Bay 1946-62 **MNE**. Richborough 1946 **MNE**, '95! (Castle). Pegwell Bay.

5) on chalk – steps N. of A.20, W. of Farningham [cross]roads, PCH. Chelsfield Ch[urch]. Down W. of Shoreham 1945 **MNE**. Polhill Place Lrag 1934 **MNE**. Polhill above Tunnel 1948 **MNE**. Pilgrims Way, Westerham, RAC. Lane bank NE of Brasted RAC.

6) Mounts Wood. Swanscombe Wood, PCH. Greenhithe, M[oun]ts R[oa]d, 1945 **MNE**. Downs E of Wrotham 1959 **MNE**. S edge of Cobham Great Wood 1944 **MNE**. Ryarsh Downs 1943 **MNE**. Path in wood, N. Halling, PCH. L[ocally] a[bandant]

6a) Cockham Wood Upnor 1960 **MNE**.

7) Hollingbourne Hill 1959 **MNE**. Highsted pits DMCC.

8) Chilham Hill ES. Down ENE of Giddyhorn 1962. N of Arpinge 1991. Down N. of Pean BW. Woodville wall. Chalk bank Bonnybush Hill, Kingston '62. Folkestone Downs 1961 **MNE**. Below Abbots Cliff 1960 **MNE**. Lydden Spout 1958 **MNE**. Shakespeares Cliff 1955 **MNE**. Dover E. Cliff 1953 **MNE** 1955. Oldstairs Bay 1956 **MNE**. River, KDR. Bridge JB. Langdon Bay, Mrs. B. Dodds. St Margaret's Bay 1955, DP Murray.

10) Dartford 1862 **MNE**.

11) Ditton S. Quarry 715566 CAS. Aylesford Sandpit 1857 EGP **MNE**. Walls, E. Malling. W. Malling. Boughton Mon[chelsea] ch[urch] y[ar]d DMCC. R[ai]l[wa]y Bridge parapet, 573460, NE of Haysden, Tonbridge, 1959, CAS.

12) Canterbury, old walls, DHK. Chilham Station platform, 1945, DHK.

15) Ancient dunes S. of W Hythe '62. Hythe W. shingle Beach BW. Dungeness 1954 **MNE**. W of Galloways, JHL, 1947. W of Hope & Anchor, P. le Brocq.

**C. marinum** (L.) C.E. Hubbard

[Sea Fern-grass.

15, 16]

2) Isle of Grain, E.S.M.; S. beach, 1947 **MNE**. Shellness beach, 1945- 1959-...-62 **MNE**. Oare Creek 1959 **MNE**. Beach W. of Seasalter 1959 **MNE**, 098657, HMW.

3) Whitstable, RGW. Reculver, wall near Ch[urch], MEM.

4) Danes, Deal Links 1954-61 **MNE**. Sandwich Bay, 1946-62 **MNE**. Shingle beach, Walmer. Shingle beach, Kingsdown.

8) 250 yds SE of Pope St[reet] F[ar]m, Godmersham, 1954, P. le Brocq, 077512. Shakespeare Beach, Dover, KDR.

15) Dymchurch. Romney Warren 1945 **MNE**. Littlestone 1947 **MNE**. Greatstone. Dungeness, 1954 **MNE**. Hythe, JG, 1930.

16) Folkestone Leas cliff 1945 **MNE**. By Sandgate Castle, 1955 **MNE**.

**(Sesleria caerulea** (L.) Ard.)<sup>992</sup>

[Blue Moor-grass]

**Parapholis** C.E. Hubb.

**P. strigosa** (Dumort.) C.E. Hubb.

{Hard-grass.

15, 16.]

2) Stone. Northfleet. Shorne. Higham. S. of Stoke E of L[owe]r Stoke **MNE**. W of Upnor. Cuxton **MNE**. Snodland, 1899, H.L. **MNE**. W of Upnor. Funton. Shellness. Harty. Horrid Hill Rainham, 1950- **MNE**. Faversham Creek. W. of Seasalter, Saltings, HMW. Sheerness, 1918, AGD **MNE**. Motley Hill, Rainham 1951 **MNE**. Conyers Creek **MNE**. Tonge N of Blacketts DMCC **MNE**. Oare Creek 1958, 1959 **MNE** 1962 HMW. Grain **MNE**.

3) Swalecliffe Sea Wall, 1959, HMW. W. beach, 103664, Whitstable HMW. Salting, behind beach, N. of St. Nicholas, 266692, 1962. Pegwell Bay 1946 **MNE**. Shellness Saltings, & to S., S. of Mouth of Stour.

15) W of Hythe 1947 **MNE**. Dymchurch, 1947. St Marys Bay, 1947, **MNE**.

**P. incurva** (L.) C.E. Hubb.

[Curved Hard-grass.

15, 16.]

\*1938: BEC, 1938, p.67.

2) Grain N. Beach, 1945 **MNE**. Grain S Beach, 1955 **MNE**. Beach below Upnor, 1960 **MNE**. SW of Upnor, 1951 **MNE**. Cuxton NE of Station, 1951 **MNE**. Shellness 1956 **MNE**. By Oare Creek, 1959 **MNE**, 1962 HMW.

4) Shellness, Sandwich, 1952 **MNE**. W of Minnis Bay, 1961, HMW.

8) Shingly bank above sea wall, at cliff base, Lydden Spout 1953-5 **MNE**. Ditto, below Abbots cliff 1960 **MNE**.

9) Westgate 1946, C.E. Hubbard.

15) Littlestone, Lady D, 1902. Dymchurch, CPSK.

**Glyceria** R. Br.

**G. maxima** (Hartm.) Holmb.

[Reed Sweet-grass.

15, 16.]

<sup>992</sup> Listed in the manuscript, but no entries given (and not a Kentish plant, anyway).

- 1) Beckenham Place, PCH. Stream W. of Orpington, Swain. Ruxley Pits, S&S. 51/46 Orp[ington] '55
- 2) Dartford Marshes, 541761, '62. Northfleet Brooks, 1944. Ham Hill Birling PGA. Snodland Marshes. New Hythe '53 **MNE**. Aylesford, W of Eccles by Medway l[ocally] d[ominant]. Luddenham Marshes. HMW. 51/47 Woolwich; 51/76 Medway; 51/96 Teynham '36; 61/06 Fav[ersham]; 51/57 Dart[ford]; 51/67 Gravesend, c.'58. Not rec[orde]d for 51.77 Higham nor Sheppey or Grain, 51/89, 51/97, 61/07.
- 3) Pond, Kites F[ar]m, Swalecliffe. Whitstable Harbour, REW.
- 4) Wingham, Ham Fen →1991. Hacklinge Marshes→1991. Worth Minnis. Marshside Chislet 225661, '62. Preston Marshes '62. 36 Minster Marshes, 1963. Woodnesborough. Stodmarsh, 1955 **MNE**. By Stour dikes below Sandwich, P.W.W. Wenderton Dikes, BN. 61/25 Wingham '55; 61/35 S[and]wich; 61/16 Sturry; 61/26 Stodmarsh; 61/36 Thanet '55.
- 10) Riverhead, Bradbourne Meads, FSEF. R[iver] below Shoreham PCH. St. Johns Jerusalem PCH. Darent. 51/45 W[ester]ham; 51/55 S[even]oaks; 51/56 Farn[in]gh[a]m
- 11) Ryarsh. 1½ m N of Hadlow. E of Tonbridge. S of Yalding. R[iver], Wateringbury. R[iver], Teston. Pond E of Hale Street CAS. Chiddingstone. Penshurst. N of Collier St[reet]. Marden. Medway W of Tonbridge CAS. Allington. Maidstone, EGP, 1957 **MNE**. 849137<sup>993</sup> Pond E of Headcorn, '62. 51/44 E[den]br[idge]; 51/54 Tonbr[idge]; 51/64 E. Peck[ham]; 51/74 Marden; 51/84 Headcorn 58; 51/65 W[est] M[alling]; 51/75 M[aid]stone; 51/66 Birling '56.
- 12) Stour, Hothfield. Gibbons Brook. Stour, Ashford to Wye ←→. Ponds Ashford. Stour G[rea]t Chart, Bybrook. Ponds SW of Kingsnorth. Evegate Mill. Mersham dikes. Pond, Wootton Manor Westwell. Brook. Brickfields S of Wye. Blackwall Marshes. Stowting Marshes. 51/94 W Ashford; 61/84 E. Ashford; 61/14 Stowting 55; 61/05; 61/15 C[anter]bury.
- 14) Breeches Pond. 51/83 Tenterden
- 15) Shirley Moor 1945 **MNE**. Dungeness. Brenzett. Sandhurst Levels 1954 **MNE**. Appledore. Kenardington. Ruckinge. Ham Street. R[oyal] M[ilitary] Canal. 61/01 Dungeness; 51/82 W. of Oxney; 51/92 Appledore; 61/02 Romney; 61/13 Hythe; 61/03 Ham St[reet]; 51/93 Shirley M[oor].

#### G. fluitans (L.) R. Br.

[Floating Sweet-grass. 15, 16.]

- 1) W. side Avery Hill Lrag, '34 **MNE**. 36 Pickhurst Road, PCH. Shooters Hill, G.M.B. Ruxley pits, S&S. Pond in Farningham Wood, PCH.
- 2) Dikes Dartford Marshes 541761, 62. Higham Marshes PCH. High Halstow Marshes, 1958 **MNE**. All Hallows, Dike, AGS. Tonge Marshes, DMcC, 58, **MNE**. Graveney Brickworks, H.M.W. 06 Seasalter ditches, HMW.
- 3) Str[eam] N. of Brotherhood F[ar]m, Blean, 135603, 1955, P. Furneaux. Pond, W side of Blean CAS, '56.
- 4) Minster Marshes. Worth. Hacklinge.
- 6) pit N of Shorne 694735, PCH.
- 10) Meadows N. of Bat & Ball, Sevenoaks, 1950 **MNE**. Wildernes Park Seal '44 **MNE**. Wood Childsbridge Kemsing 543585 (Gault) CAS. Pond, Rose Wood, Ightham, 1944.
- 11) Addington Place, DMcC. Pond, The Quest, Harrietsham, BD. W. of Teston Bridge 59 **MNE**. Pond E of Hale St[reet] '56 **MNE**. By Straight Mile, Tonbridge, 1960, CAS. Poundsbridge, n[ear] Medway, 1963, R.E. Sh[orrock]. Pond E. of Golden Sq[ua]re, Smarden, 886415, '62. Kelsham Pond, Headcorn '56 **MNE**.
- 12) SE of Lenham Church, Marsh on Gault, 60 **MNE**. Marsh N. of Willesborough '55 **MNE**. Willesborough [sic] Lees '45 **MNE**. S. Willesborough Marshes. Gibbons Brook ES. "Scotts Pond", Stubbs Cross '52 **MNE**. Stile F[ar]m, Chilham, RGW. Dikes, Thannington Ford, 127567, P. Furneaux 1955.
- 13) By Stream, High Rocks Lane, T[unbridge] Wells, CAS, 1960. Pond, Broadwater La[ne], T[unbridge] Wells, CAS 1960. Stone Cross Gill Ashurst, '59, CAS. Ditch S. of Ch[urch], Lamberhurst 684365, CAS. Pond, Kippings Cross, 1957, CAS. Southborough Pest. F[iel]d, HNC. Bayham Abbey, CAS. Combwell Wood, 1979.
- 14) Pond n[ear] Palustre Court, Wittersham 58 **MNE**.
- 15) Windmill Channel Rolvenden '59, **MNE**. Shirley Moor, 1965.
- 16) Holywell, Folkestone.

#### G. fluitans x notata<sup>994</sup> = G. [x] pedicellata F. Towns.

[Hybrid Sweet-grass. 15, 16.]

- 1) Bowman's Hollow, Plumstead, 1934, Lrag **MNE**.
- 2) Snodland Marshes, JPMB. Tonge, DMcC.
- 4) Marsh NE of Wickhambreaux '56 **MNE**.
- 7) Marsh, Whitehill, Ospringe, 1959, **MNE**.
- 10) Marshy Meadows N. of Bat & Ball, 1950. R. Darent, Westerham, AGS, 1957.

<sup>993</sup> Grid reference is plainly wrong: perhaps TQ849437?

<sup>994</sup> In the manuscript, *notata* is given as *plicata*.



**11)** Ryarsh Wood '43 **MNE**. Maidstone, EGP, '61, **MNE**. Bearsted EGP & GHM, '59 **MNE**. N[ea]r Boxley Abbey, EGP. Aylesford, EGP. Harrietsham, 1944, FR & LJM.

**15)** Ditch, Burmarsh R[oa]d, Hythe, LJM.

**G. declinata** Bréb.

[Small Sweet-grass.

15, 16.]

**1)** Brook Hosp[ital] Woolwich, LRAg, 1934 **MNE**.

**4)** Hacklinge, 1945-1991. Plucks Gutter 1955 **MNE**. Little Britton Fen, Wingham, 1960 **MNE**. 36 Minster Marshes, 1963.

**8)** Gate Inn Pond, DACL.

**10)** Squerries Park, Westerham, 1957, RAC. Westerham Wood, 82. Wildernes Park, Seal 1944 **MNE**.

**11)** Ditch, Straight Mile, W of Tonbridge, 1960, CAS. Gilridge, Penshurst, 1944, **MNE**. Hoads Wood, 1946.

**12)** Hothfield Common, P.R.B. 1946. Little Chart, 1946. SE of Lenham Ch[urch] on Gault '58 **MNE**. Cuckoldscombe, 1995!

**13)** T[unbridge] Wells Common, JPMB, BEC 1938 rep. P.65. By stream, High Rocks Lane, T[unbridge] Wells, 1960, CAS. Brighton Lake, T[unbridge] Wells, 1960, CAS.

**G. notata** Chevall.<sup>995</sup>

[Plicate Sweet-grass.

15, 16.]]

**2)** Plumstead Marshes, 1944. Gravel pits, Aylesford, EGP, '58 **MNE**. Stream, L[owe]r Halstow, 857669, '62. Oare Pond Meadow 59 **MNE**. Abbey F[ar]m, Faversham, HJN.

**3)** Denstroude, Pond, HMW.

**4)** Fen N of Wingham. Fen SE of Wingham 49 **MNE**. Wenderton dikes BN. Ham Fen. Hacklinge 1956 **MNE**. Worth Minnis. Ditch, NE of Sandwich PWW. 36 Minster Marshes, 1963. Chislet Marshes MEM.

**10)** Chipstead by R. Darent '55 **MNE**. NE of Riverhead. Meadows N of Bat & Ball, Sevenoaks, 1950 **MNE**. Shoreham. Darent. Westerham Wood 82.

**11)** Leybourne. Ham Hill, Birling. Trottiscliffe. Ryarsh. Bearsted EGP 57 **MNE**. N[ea]r. Boxley Abbey, EGP '58 **MNE**. Maidstone H.L. 1895 **MNE**; EGP, 61 **MNE**. Harrietsham, R[iver] Len Fairbourne Lane, BD. Mote Park, '58, '59, EGP **MNE**. Hartlake Br[idge] JRW '43 **MNE**. By Medway, Poundsbridge, 63 R.E.Sh[orrock]. Marden. Headcorn. W of Teston Bridge, 59 **MNE**. Barming by Medway '59 EGP **MNE**.

**12)** Coldridge Wood S. of Lenham, 1958, Miss M.E. Milward **MNE**. SE of Lenham. Stowting Fen, '54 **MNE**.

**13)** Ditch by Hawkenbury Bog, CAS. Pond N. of Kippings Cross, 6444901, 1957, CAS. Cranbrook, DS.

**14)** 50 Acre Wood, Woodchurch, ES.

**16)** The Lince, SE of Etchinghill, 54 **MNE**.

**Melica** L.

**M. uniflora** Retz.

[Wood Melick.

15, 16.]]

**1)** Abbey Wood, 1862 **MNE** – RAB. Elmstead Lane Bickley, 1965. Holwood Park PCH. Woods W. of Keston Common. Bunkers Hill Wood, N. Cray PCH. Joydens Wood PCH. Farningham Wood PCH (82!). Eden Park, Beckenham 1918 AGD **MNE**. Shooters Hill GMB. Dartford Heath GMB. Hollows Wood.

**5)** Brasted Hogtrough Hill 396611 PCH. Wood on downs W. of Shoreham PCH. Darwins Bank Wood, Downe, 1962. Lane SE of Downe 1962. Pilots Wood PCH. Woods by A21 Polhill. Shady R[oa]d banks Foxendown Hill 62, Birling Hill top 62, N of Harvel 62.

**6)** Darenth Wood PCH. Lords Wood Darenth PCH. Mounts Wood border PCH. Horton Kirby Wood PCH. Fawkham by ch[urch] DVS Woods. Woods above Wrotham, Wrotham Water→Vigo, Trottiscliffe. Dunstall Woods PCH. Preston Hill Woods on chalk PCH. Magpie Bottom Woods. Pilgrims Way E of Wrotham PCH. Wingate Wood, Halling 1945 **MNE** 1954 PCH.

**7)** Warren La[ne], L[owe]r Bell, '62 **MNE**, 1951... Squirrels Wood, Stockbury 1953 **MNE**. R[oa]dbank, Coxett Wood (Thanet S[and]) 1945 62 **MNE**.

**8)** Spong Wood, MJ Comyn. Copse N. of Bavinge (basic loam) '62. Lane N. of Bossingham '62. Bank, Wood W. of Misling F[ar]m Elmstead (loam) '62. Reinden Wood (on Pliocene) by track '62. R[oa]d below Hawkinge Church. Larkey Valley Wood (albiflora) ES 1955 **MNE**. Hurst Wood, Hassel St[reet], Wye, CAS 1961 (albiflora). Coombe Vale Woods Dover '55.

**10)** Westerham Wood 82! Brasted Chart 82!

**11)** Sandling Wood 1957 EGP **MNE**. Warren Wood, E. Malling 1963.

**13)** Springline W. of Southborough HNC. Lane S of Bullingstone, 1966. Groombridge Hill, E. Shorrock. Combwell Wood 1979.

<sup>995</sup> Given as *G. plicata* Fr. In the manuscript..

14) Gill (Ash S.) S. of Pigeon Hoo, SE of Tenterden, '62.

16) Blackhouse Shaw Saltwood Brockhill, LJM.

**Helictotrichon** Besser ex Schult. & Schult. f.<sup>996</sup>

**H. pubescens** (Huds.) Pilg. [Downy Oat-grass. 15, 16.]

Native. Chalk grassland, very common and general; also on fixed dunes at Sandwich Bay, locally abundant

4) Fixed dunes, St. Georges Links, Sandwich Bay, 1950-63 **MNE**.

5) Chevening Park 1961 **MNE**. Darwin's Bank Downe, 1961 **MNE**. Down 426577 W of Westerham Hill RAC.

6) Magpie Bottom, 1949, **MNE**. Upper Halling Downs 1943 **MNE**. N. of Cuxton 1951 **MNE**.

7) Burham Downs 1946-63 **MNE**. Bluebell Hill **MNE**. Thurnham 1959 EGP **MNE**. Harrietsham Ch[urch] y[ar]d, B.D. Down, Filmer Wood, '62. Belmont Park, Throwley, 1959 **MNE**.

8) o[ccasional] – l[ocally] f[requent], Broad Downs, 1962. Downs ENE of Giddy Horn '62. Down N of Podlinge '62. Postling Downs 1945 **MNE**. N. of Pean, BW. Free Down, N of St Margarets DPY. Down SW of Lydden DPY. Charlton Park, Bishopsbourne, 1946, **MNE**. Ch[al]k Bank, Bonnybush Hill, Kingston '62. S. of Wolverton, Alkham, 1949 **MNE**. Lydden Spout, 1951 **MNE**. Woodville Downs, 1952-55 **MNE**. Langdon Bay, Dover, 1954 **MNE**.

**H. pratense** (L.) Besser<sup>997</sup> [Meadow Oat-grass. 15, 16.]

5) Darwins Bank, Downe, 1958-1961 **MNE**. Chevening Park, 1961 **MNE**.

6) Upper Halling Downs.

7) Burham Downs, 1946 **MNE**. Down, Foxbury Wood, E. of Lenham, 1946 **MNE**. Downs ½ to 1m. NE of Lenham, 1956-58 **MNE**. "Simia" down, HMW. 94 Westwell Downs, ES.

8) Winchcombe F[ar]m, Crundale, 1956 **MNE**. Charlton Park, Bishopsbourne, 1946 **MNE**. S. of Hastingleigh 1960 **MNE**. A[bundant], Broad Downs, Brook, 162 **MNE**. Postling Downs. Down at Shuttlesfield, Lyminge. SE of Etchinghill. Summerhouse Hill, 1948 **MNE**. E. of Folkestone, above Abbots cliff, on loam head, 1960, **MNE**. Free Down, 1954, **MNE**. Kingsdown Golf Course, 1954 **MNE**. N of Alkham 1955 **MNE**. Temple Ewell (Woodville Downs) 1955 **MNE**. Coombe Vale, W of Dover, 1959, **MNE**. Down SW of Lydden DPY.

9) Chalk grassland, Kingsgate, Thanet, 1959 **MNE**.

11) Meadows, Aylesford, 1943.

**Arrhenatherum** P. Beauv.

**A. elatius** (L.) P. Beauv ex J & C. Presl [False Oat-grass. 15, 16.]

1) R[ai]l[wa]y banks Erith PCH. Crofton Heath PCH. Bexley Ch[urch] y[ar]d PCH. By R[iver], N. Cray PCH. Blackheath GMB. R[oyal] M[ilitary] A[cademy], Woolwich 1934, LRA **MNE**. Shooters Hill. Ruxley pits. Farningham Wood 82.

2) Woolwich Arsenal PCH. Sewer Bank, Plumstead PCH. R[ai]l[wa]y Brambledown '55. Shellness. Medway above Aylesford Br[idg]e 45. Medway below Aylesford Br[idg]e 45. By str[eam], L[owe]r Halstow 857669, '62.

3) Old Park, Canterbury '55. Shelving Wood and copse to W, Highstead, Hoath (Thanet and Wool[wich] Beds). (var. *tuberosum* – common in Blean, copses and wood borders, RGW.)

4) Rear of fixed Dunes, Sandwich Bay. Shingle Beach, Walmer; Kingsdown.

5) Farningham R[oa]d St[a]t[i]o[n] Approach PCH. Chalk W. of Eynsford, PCH.

6) Mounts R[oa]d, PCH. Horns Cross pit '62. Preston Hill PCH. R[oa]dside Luddesdown PCH.

7) Below Downs N. of Village Boxley 62.

8) 137608 Down SE of Petham MEM. R[oa]dside (ch[al]k) Bonnybush Hill Kingston '62. Beech pla[n]t[i]o[n] (ch[al]k) E side Goodnestone P[ar]k '62. Wolverton crossroads, Alkham '62.

10) St Johns Jerusalem PCH. Westerham Wood 82.

11) Rag[stone] Quarry N. of Yalding 62. Green lane E of Headcorn 849137, '62. R[ai]l[wa]y bank Hildenborough 563482 CAS. W. R[oa]dside Whetsted 1945.

13) Stone Cross, Ashurst, '59 CAS. Southborough Garden HNC. Bayham Abbey CAS. Combwell Wood 1979.

15) Dungeness Beach, v[ery] abund[ant]. Hythe Beach, v[ery] a[bundant].

**Avena** L.

**A. strigosa** Schreb. [Bristle Oat. 15.]

8) Adisham, 1948.

<sup>996</sup> Cited as Bess. In the manuscript.

<sup>997</sup> Cited as (L.) Pilg. In the manuscript.

**A. fatua** L. [Wild Oat.] 15, 16.

*Alien, usually only casual in waste ground and in crops: rare.*

- 1) Woolwich, near stadium, 1934, L.R.A.G. M[ar]k[e]t g[ar]d[e]n, Bromley, DPY, 488675. W Arsenal, PCH. Swanscombe Marshes, PCH. [Stone Marshes, 1831, R.P. **BM.**] W. of Seasalter HMW. Conyer Creek Mrs B. Dodds.
- 2) Bobbing, Mrs Henson. Tonge DMcC.
- 4) Wingham Well, 1958 **MNE.** Worth, oatfield, 355555, DACL & KDR.
- 6) N of Stansted 605625 DVS Woods. Trottiscliffe, Mrs Begg.
- 7) Belmont Park DMcC. Westwell cornfield, G. Morgan.
- 8) Selstead in oats 211454 / W of Halfway Ho[use], Barham 228488, 1955, DACL. Denton 1955 DACL. Bourne Park DACL.
- 9) Cornfield W of Minster, Thanet, 1958 **MNE.**
- 10) [Seven]oaks tip CAS.
- 11) Edenbridge Tip, D.P.Y., 1955.
- 15) Arable N.W. of Wittersham, 1958, **MNE.**

var. **pilosissima** Gray

- 11) Staplehurst, E.S.M., Hb. Dr., det. Marquand; *BEC Rep.* 1921, p.402.

**A. fatua x sativa (A. sativa)** L.

- 2) Sandpit W of All Hallows, 1958, AGS.
- 7) Between Bluebell Hill and Boxley, 1899, H.L., **MNE.** Near Highsted, DMcC.
- 9) Joss Bay, Mrs B. Dodds.

**A. sterilis** L.<sup>998</sup> [Winter Wild Oat.] 15, 16.]

*Alien, only casual in Kent in arable land, etc.: rare.*

- 1) Woolwich Common, 1934, LRA **MNE.**
- 3) Medina Av[enue], Seasalter, HMW.
- 4) SW of Grove, 28.7.1963, E.G. Philp **MNE.** Near Chislet, 1958, Miss M.E. Millward **MNE.** S of Plucks Gutter MEM.
- 7) In crops, Godmersham, 1946, DHK, **K.**
- 9) N. of Minster in arable '63.
- 10) Rubbish Dump, Dunton Green, 1958, R.C. Palmer, det. C.E. Hubbard.
- 11) E. Farleigh, 1957, E.G.P., **MNE.**

**A. byzantina** [K. Koch] [Algerian Oat.] 16.]

- 6) Longfield tip DMcC.

**Trisetum** Pers.

**T. flavescens** (L.) P. Beauv. [Yellow Oat-grass.] 15, 16.]

- 1) Woolwich common 34 LRA **MNE.** Blackheath GMB. Repository Grounds 34 LRA **MNE.** Ruxley pits.
- 2) I[sle] of Grain 1945 **MNE.**
- 4) Sandwich Bay.
- 5) S. of Green St[reet] Green, '34, LRA **MNE.** Larches Wood W. of Farnborough PCH. Down NE of Pilgrim Ho[use] Westerham '62.
- 6) A.2 verge, Swanscombe Wood, PCH. Trottiscliffe Downs '45 **MNE.** Downs E of Shoreham PCH.
- 7) Bluebell Hill, EGP, 1957 **MNE.** Down E. of Lenham 1956 **MNE.** Glade foot of hanger W of Westwell 62.
- 8) [locally] f[requent] Broad Downs 1962. L[ocally] a[bandant] Down NNE of Giddy Horn '62.
- 10) Meadow, Darenth, 1954 **MNE.** St Johns Jerusalem PCH.
- 11) Sandling Wood EGP 57 **MNE.** Tonbridge CAS. Pluckley 1943 **MNE.**
- 12) Stubbs Cross 1952 **MNE.** R[oa]dside, G[rea]t Priory Wood, Bilsington '56 **MNE.**
- 15) Hythe W Shingle Beach BW. Shirley Moor '65.
- 16) Shornecliffe, KDR.

<sup>998</sup> In the manuscript given as *A. ludoviciana* Durieu.

**Koeleria Pers.**

**K. macrantha** (Lebed.) Schult.<sup>999</sup> [Crested Hair-grass. 15, 16.]

- 1) [Chislehurst Common, 1885 **MNE.**] Blackheath G.M.B.  
 4) Deal Links. St Georges Links. Sandwich Bay, 1945-63 **MNE.**  
 5) Chevening Park? Darwin's Bank, Downe, 1961 **MNE.**  
 6) E) Green Street Green Common, 1944 **MNE.** By Windmill, Shorne (grass-heath on Blackheath Beds) 1946 **MNE.**  
 Downs above Trottiscliffe, PCH. Upper Halling **MNE.**  
 7) Burham Downs 1947-54 **MNE.** Bluebell Hill 1945 **MNE.** Boarley Warren, 1945 **MNE.** Queen down Warren '54 **MNE.** Pilgrims W[ay] E of Lenham 1958 **MNE.** Downs E of Lenham (Foxbury) 1946 **MNE.**  
 8) Chartham Downs, 1949 **MNE.** Broad Downs, l[ocally] f[requent] '62. Ch[al]k bank, Bonnybush Hill, Kingston, '62. Folkestone Warren **MNE.** Abbots Cliff **MNE.** Free Down, l[ocally] f[requent] 1962. Ringwould Lince, 1954 **MNE.** Kingsdown Golf Course 1954 **MNE.**  
 9) Cliff top, Kings gate, Thanet, 1959, **MNE.**  
 11) Ryarsh Sandpits, 1945 **MNE** (F[olkestone] sand).  
 12) A.20 bank 2m E of Ashford, 1954 **MNE** (F[olkestone] sand).  
 15) Fixed dunes, Romney Warren, by A.259, '62 **MNE.** Greatstone dunes, + Littlestone **MNE.** Old Dunes S. of W. Hythe '62. Hythe Shingle beach 1955 **MNE.** Dungeness, 1954 **MNE.**

**K. albescens** DC. was reported at Sandwich by W. Barton (*BEC Rep.* 1914). Dr C.E. Hubbard considers the British plants reported under this name as indistinguishable from *K. cristata*.<sup>1000</sup>

**Deschampsia [P.] Beauv.**

**D. cespitosa** (L.) [P.] Beauv. Tufted Hair-Grass. 15, 16.

**Native.**

- 1) Eltham Common 34 Lrag **MNE.** High Wood, Crofton PCH. Crofton Heath PCH. Keston PCH. N. Cray Wood, PCH. Joydens Wood PCH. Farningham Wood on Wool[wich] Beds, PCH, 82! Ruxley pits, S&S.  
 2) Grain, PCH.  
 5) Wood on c[lay] w[ith] f[lints] on plateau, W. of Shoreham, PCH. Copse 396611 PCH.  
 6) E) Mounts Wood, PCH. On Wool[wich] Beds, Darenth Wood! HMP. G[rea]t Chattenden Wood. Plateau Wood above Kemsing PCH. Stoneyfield Wood, Up[pe]r Halling, PCH.  
 7) Kennelling Wood on chalk loam, o[ccasional], '62.  
 8) by Track in coppice on Pliocene Reinden Wood, 1962. Copse, clay loam, N. of Bavinge '62. Wood on loam W. of Podlinge 62. Yocketts Bank, 1963. Hall Wood Swingfield (ch[al]k) 1962. Sladden Wood Alkham (ch[al]k) 1962. Wood S. of Chilton (ch[al]k) 1955. Woolwich Wood (Ch[al]k loam) '55. Reinden Wood. Puckland Wood (ch[al]k) '62. Stafflands Wood (ch[al]k) '62.  
 10) Westerham Wood PCH, 82! Bradbourne Meads FSEF. ByR[iver] above S. Darenth PCH.  
 11) Sandling Wood 1957, EGP, **MNE.** Kings Wood, Ulcombe. S. of Lock, Yalding, 1957, EGP, **MNE.** Kiln Wood Lenham, a[bundant] on sandgates and in Alnetum '62. Beult bank S. of Headcorn Ch[urch] 831440, 1962.  
 12) Hothfield Common 1957 EGP **MNE.**  
 13) Stone Cross Ashurst 518381 CAS. Wet Wood, S. Park, Penshurst, 1962. Penshurst Park by Pond, M. Mallinson. Brookhurst Wood / Vauxhall Lane, Southborough HNC. Combwell Wood 1979. Shadwell Wood, Speldhurst, 1966. Bayham Abbey CAS. Roundabout Woods, Sherwood estate, S. of Pembury, CAS. Angley Wood, 1957, EGP, **MNE.** Chittenden Wood, 1950 **MNE.**  
 14) Robin's Wood. Parsonage Wood, on clay, 1966. (Wad[hurst] Clay) top of Gill W of Tophall F[ar]m, Wittersham. College Wood, Wittersham.  
 15) Dungeness, 1945 **MNE.**

(**D. setacea** Huds. Hack.<sup>1001</sup> [Bog Hair-grass]

**D. flexuosa** (L.) Trin. Wavy Hair-Grass. 15, 16.

<sup>999</sup> In the manuscript, *K. cristata* (L.) Pers.

<sup>1000</sup> i.e. *K. macrantha*.

<sup>1001</sup> No entry given, but this is not a Kent plant.

Native. Dry woodlands and dry heaths on acid sandy or gravelly soils; locally common in such places, but absent from the chalk districts (except where light drift soils occur), from the clay areas, from the marsh districts 2), 4), 5), and indeed from the whole coastline. Common in 1), 3), 6E), 10), 11), 12), 13) and 14). An “atlantic” species, much at home in the humid climate of the western Greensands and the High Weald.

- 1) Hayes Common. Keston Common, **MNE**. 36 W. Wickham Common PCH. Chislehurst Common. St Pauls Cray Common. Shooters Hill, GMB. Hollows Wood, NW of Shoreham. Joydens Wood, PCH. Farningham Wood, 82! Dartford Heath. Abbey Wood, 1862 **MNE**. Woolwich Repository 1934 CH Grindling **MNE**.
- 2) Bysing Wood. Perry Wood, Selling. Church Wood, RGW. Bigberry Wood RGW.
- 6)E) Darenth Wood. Shorne. Heath at Danaway Newington 1957 **MNE**.
- 7) R[oa]d bank, Top of Coxett Wood, on Thanet Sand, '62.
- 8) Whitehill Wood L[owe]r Hardres, on acid capping. B.N. Grassheath on Pliocene N end, Stelling Minnis '62. Oak Wood on Pliocene SW of Lit[tle] Waddenhall '61. Oak w[oo]d, West Wood, Stowting (Pliocene) '60.
- 10) Seal Chart, abund[ant] on Q. pet[raea]-Call[una]-Bet[ula] assoc[iation], '62. Oldbury Hill. Rose Wood Ightham. Brasted Chart. Crockham Hill.
- 11) Platt Woods. Valley Wood, Wrotham Heath **MNE**. Mereworth Woods. Comp Wood. Oaken Wood, Ditton. Kings Wood Ulcombe.
- 12) Ashford Warren. Hothfield Common 1943-63 **MNE**.
- 13) Stone Cross, Ashurst, 523388, '59 CAS. Southborough Common: E of Bidborough HNC. Combwell Wood 1979.

#### **Holcus L.**

**H. lanatus L.** [Yorkshire-fog. 15, 16.]

- 1) Woolwich Lrag, 1933 **MNE**. Blackheath GMB. Shooters Hill GMB. Ruxley pits, S&S. Crofton Heath PCH. Holwood Park PCH. Dartford Heath PCH. Farningham Wood PCH, 1982! Joydens Wood PCH. Bexley Ch[urch] y[ar]d PCH. N. Cray Wood PCH.
- 2) Woolwich Arsenal PCH. Sewer Bank Plumstead PCH. Shellness.
- 3) Whitstable, REW. Copse S. of Highstead Hoath, 62.
- 4) Sandwich Bay.
- 5) 396611 PCH. Pilgrims Way, Polhill PCH. Chevening Park PCH. Darwin's Bank Downe.
- 6) Mounts R[oa]d PCH. Swanscombe Park. Horns Cross pit 62. Downs E of Shoreham PCH. Preston Hill c[lay] w[ith] f[lints] PCH. Kemsing Downs PCH. Pilgrims Way E of Wrotham PCH. Wingate Wood, Halling PCH.
- 7) Base of Hangers W. of Westwell, '62.
- 8) R[are], Down ENE of Giddy Horn, '62. Wolverton crossroads '62.
- 10) By R[iver] below Shoreham PCH. By R[iver] above S. Darenth PCH. St Johns Jerusalem PCH. Westerham Wood 82.
- 11) East Malling. R[ai]l[wa]y bank Hildenborough 563482 CAS. Past[ure] SE of Buckhall, Bethersden 62.
- 13) South Park Pasture, Penshurst, '62. Stone Cross, Ashurst, 518381, '59 CAS. Southborough HNC. Bayham Abbey CAS. Combwell Wood 1979.
- 14) Felled copp[ice], Gills of Pigeon Hoo, '62. College Wood Wittersham '62.

**H. mollis L.** [Creeping Soft-grass. 15, 16.]

- 1) Keston Common. Blackheath, 1946, ECW. Sparrow fields, Swain. 36 W. Wickham Common, PCH. Shooters Hill Woods GMB. Ruxley Pits, S&S. Gattons Plant[atio]n, PCH. Joydens Wood, PCH. Farningham Wood PCH, 82!
- 3) Bysing Wood. Perry Wood 1959 **MNE**. Thornden Wood. W. Blean Wood. Trenley Park Wood. Shelving Wood Hoath (Oldhaven Beds) '62.
- 5) Andrews Wood, Badgers Mount PCH.
- 6) E) Darenth Wood. Mounts Wood, PCH. Randall Wood, Shorne. Great Wood, Cobham. Holly Hill (Black[heath] Beds) '62.
- 7) Top of Coxett Wood (Thanet S[and]) '62. Filmer Wood (sandy loam of valley bot[tom]) '62.
- 8) Covert Wood DACL. By Track and in coppice on Pliocene Sand, Reinden Wood '62.
- 10) Westerham Wood 82! Brasted Chart 82!
- 11) Fairbourne Lane, Harriesham, BD.
- 12) Hothfield Common, 1957, E.G.P., **MNE**.
- 13) Southborough Common HNC. Pembury Woods, 1952 **MNE**. Combwell Wood 1979.

**(Corynephorus canescens (L.) [P.] Beauv.** [Grey Hair-grass.]



This was reported in Kent by L'Obel in 1655, and by GES in C.P.S.K., but the evidence is slender and unconfirmed, though it could well have existed on the Sandwich dunes. It is not uncommon on the fixed dunes in Pas de Calais: in Britain it is probably only native on the Norfolk and Suffolk coast, and formerly occurred in Breckland.

#### Aira L.

**A. caryophyllea** L. [Silver Hair-grass.] 15, 16

*Native. Dry open grassland or disturbed ground on sand or gravel, usually on leached soil; widespread, but not common generally.*

- 1) Chislehurst Common. Keston Common, A.G.D., 1906 **MNE**. Hayes Common, 1946, **MNE**. Dartford Heath 1946. Farningham Wood, 1946.
- 2) On Bagshot Sand, E of Minster, 1954 **MNE**.
- 4) Deal Links. Richborough Port, '55, PCH. St Georges Links, Sandwich (Sand) 1946, W.J.L.S.
- 6) Lane End Common, Darenth, **MNE**. Darenth Wood, on Bl[ackheath] Beds. Mounts Wood, on Bl[ackheath] Beds **MNE**. Heath by Windmill, Shorne, on Bl[ackheath] Beds.
- 8) On Pliocene Sand in old pits, above Wye Crown, 1954, F.H.P. West Wood, on Pliocene, B.N.
- 11) Wrotham Heath, 1945 **MNE**. Ryarsh Sandpits 1944, 1945 **MNE**. Ride, Oaken Wood, E. Malling. Eythorne Street, Hollingbourne, 1960, EGP.
- 12) Hothfield Common, 1950 **MNE**.
- 13) Wood N. of Penshurst, 1945 **MNE**. Pitts Gate, Lamberhurst, 1943, JRW. Pembury Walks, 1957, CAS. Bedgebury Pinetum, 1954. Angley Wood 1955 **MNE**. Bayham Abbey CAS.
- 14) R[ai]l[wa]y bank NE of Sta[tion], Tenterden, 1959 **MNE**.
- 15) Denge Beach, J. Hubbard.
- 16) Kiln Heath, Sandling, LJM.

**A. praecox** L. Early Hair Grass. 15, 16.

*Native. Dry open grassland, usually on leached soils: common in suitable places.*

- 1) Chislehurst Common 1945. Hayes Common 1946 PCH. Joydens Wood, PCH. Heath SW of Joydens Wood 1947 **MNE**. Bexleyheath GMB. Wynn's Common, Plumstead, LRAG, 1934 **MNE**. Heath Abbey Wood, GAM. Ruxley pits, S&S. 55 Heath on W border of Farningham Wood, 1946; PCH. 57 Dartford Heath. 56 Hollows Wood, NW of Shoreham, 1945.
- 3) 05 Grass heath S. of Dunkirk **MNE**. 15 Trenley Park Wood, 1946. (Fordwich JG.)
- 4) 35 Fixed Dunes E. of Downs F[ar]m, Sandwich, 1962. 34 Fixed Shingle S. of Walmer Castle, BN, 1959. 35 Deal Links.
- 6) E) Swanscombe Wood PCH. Green Street Green. Randall Wood, Shorne. Grass Heath by Windmill, Shorne. By A2, N. of Cobham Park, 1945 **MNE**. Top Holly Hill 668628 (Black[heath] Beds), 62. Fawkham St[at]io[n] 602688, DVS Woods. Longfield Hill 622674 DVS Woods.
- 7) Heath, Danaway, Newington, 1957, **MNE**.
- 10) Sandpit E. of R[ai]l[wa]y, Riverhead, CAS.
- 11) Wrotham Heath, 1944, **MNE**. By A.20 W. of Hollingbourne 1954 **MNE**. R[ai]l[wa]y bank, Hildenborough 563482, CAS. Ryarsh Roughetts 1945 **MNE**. Warren Wood, Leeds 1945 **MNE**. On sandy path, Birch Wood, Bethersden, 915405, 62.
- 12) Hothfield Common, 1945→ **MNE**, 1963, EGP. Mersham Park, F.R. & E.S., 1960 **MNE**.
- 13) By Luke R[oa]d, T[unbridge] Wells Common, 1944 FR **MNE**; 1961, CAS. Southborough Common, HNC. Langton Green, 1944 **MNE**. Angley Wood 1955 **MNE**. Lodge Wall, Scotney Castle, 1961 **MNE**.
- 14) Glade on T[unbridge] W[ells] S[and], Moor Wood, Benenden '62.
- 15) Fixed dunes, Romney Warren, 1962, by A259. Hythe Beach. Dungeness.
- 16) Folkestone Leas. Shorncliffe, 1955 **MNE**.

#### Anthoxanthum L.

**A. odoratum** L. [Sweet Vernal-grass.] 15, 16.]

- 1) Blackheath GMB. Eltham Common 1934 LRAG **MNE**. Ruxley pits, S&S. Farningham Wood, PCH. 82.
- 3) 110650, Grassland on clay, Duncan Down, Whitstable, 1961, H.M.W. Bysing Wood HMW. Shelving Wood Hoath (Oldhaven Beds) '62.
- 4) Sandwich Bay.
- 5) Chevening Park PCH.
- 6) Darenth Wood, PCH. Lords Wood, Darenth PCH. Green Street Green. Preston Hill, PCH.

- 6E)** Randall Wood, Shorne (Thanet S[and]) 1953 **MNE**.  
**7)** Squirrels Wood '45. Coxett Wood (Than[et] S[an]d) '62. FilmerWood (valley bot[om] sandy loam) '62. Tassels W[oo]d Norton (loam) '62.  
**8)** N. Stelling Minnis Grass Heath '62. Reinden Wood Pliocene loam '62.  
**10)** Bradbourne Meads FSEF. Knole Park PCH.  
**11)** Wrotham Heath. Roughetts Ryarsh 55. Leybourne Wood 55. Larkfield H[ea]th. E. Malling 1943 **MNE**. Pendenden Heath 1944 **MNE**. Oaken Wood Barming 1954 **MNE**. Maidstone EGP 1957 **MNE**.  
**12)** Hothfield Common. Ashford Warren.  
**13)** Wood NE of Cobhambury '55. Combwell Wood 1979. SW of Leigh '55. Stone Cross, Ashurst, 523388→ CAS '59. Southborough Common, HNC. Bayham Abbey CAS. Bedgebury Pinetum '55.  
**14)** Knock Wood, E of Tenterden by B.2007, '62.  
**15)** Dungeness Beach n[ea]r Lighthouse 55. Beach to N '62 - l[ocally] d[ominant]. Beach to W '57 - l[ocally] d[ominant]. SE of Boulderwall Dungeness 62 - l[ocally] d[ominant].

# **Phalaris L.**

## **P. arundinacea L.**

[Reed Canary-grass.

15, 16.]

- 1)** Holwood Park. Crofton Heath, by stream, PCH. Ruxley pits, S.&S. R[iver] Cray, N. Cray PCH. Ponds, Beckenham, 1955, J.M. Sherwood. 37 Beckenham Place, PCH. 36 Near Hayes Sta[tion], PCH.  
**2)** Sewer Bank, Plumstead, PCH. Plumstead Marshes. Northfleet, Ebbsfleet Channel. 66 Birling Marshes PCH.  
**3)** Oare Meadow HMW. Near Waystreet F[ar]m Hernhill HMW,  
**4)** Wingham. Ham. Hacklinge. Minster Marshes, 1963. Sandwich Bay.  
**6)** Swanscombe Wood, in marshy cutting PCH.  
**8)** Dour head Chilton KDR. Bridge, Nail Bourne, JG.  
**10)** Bradbourne Meads, Riverhead, 1944 **MNE**. R[iver] bank below Shoreham PCH. R[iver] bank Eynsford, PCH. R[iver] above S. Darenth, PCH. R[iver] St John Jerusalem PCH. Darenth, 1944 **MNE**.  
**11)** Mote Park, 1958, EGP **MNE**. R[iver] W of Tonbridge. River ½mW of Penshurst 1953→ **MNE**. Ditch 676493 Hale St[reet] CAS. Ditch Leighbridge 814454 '62. Ditch E of Golden Sq[uare] 887413 '62. Pond E of Headcorn 849137 '62. Beult E of Buckhall 918398 '62. Beult S. of Headcorn Ch[urch] 831440 '62. By Beult, Buckmans Green 889419 '62. New[?house] F[ar]m, Pluckley, V.F.P.D.  
**12)** Stour: Wye, Ashford, E of G[rea]t Chart, NW of G[rea]t Chart, SW of Hothfield. Willesboro[ugh] Br[idge]. Stour S. of Sevington. Stour S. of Mersham. Withersdale [sic, ?for Withersdane]. Wye Brickworks. Kennington B[rick]works. NE of Bybrook. Kingsnorth Mill. Brisley F[ar]m W. of K[ings]north. Chilmington. R[ai]l[wa]y Marshes SE of K[ings]north. Rowling Street Ruckinge. Broad oak Mersham, SE of.  
**13)** Bayham Lakes, CAS.  
**15)** E of Ham St[reet]. R[oyal] M[ilitary] C[ana] S of Ham St[reet]. Shirley Moor. Dungeness gravel workings, J. Harper. Romney Warren Pond, 1945 **MNE**.  
**16)** L[owe]r Sandgate R[oa]d, Folkestone VFPD.

var. **picta** [L.]

## **8)** Coldred Pond.

**11)** Bourne F[ar]m, Plaxtol, 1960, DMCC.**13)** Toad Rock Tavern, Bishopsdown, KEB.

## ‡ **P. canariensis L.**

[Canary-grass.

15, 16.]

- 1)** N. Cray tip, PCH. Pokeridden Wood, Swain. Hayes Gravel pit 1915 AGD **MNE**. Eltham Common by Police Sta[tion] 1934 LLAG **MNE**.  
**2)** Conyer KDR.  
**3)** Dargate, Denstroke R[oa]d, HMW.  
**4)** Worth, DACL.  
**6)** Cotton Lane, Stone, tip side, 563746, 1961, HMP. Longfield tip DMCC **MNE**. A.2 verge E of Darenth Wood 583730, H.M.P.  
**7)** near Westwell, EGP 1958 **MNE**. Kennaways, Mrs W. Verschoyle.  
**9)** North Foreland, L.W.W., 1949! **MNE**.  
**10)** Sevenoaks tip DMCC.  
**11)** E. Malling '53 **MNE**, 57. Vintners Quarry 1956 LLAG **MNE**. Edenbridge Tip DPY. Runham sandpit Mrs B Dodds.  
**12)** Canterbury Station MEM. Chylmington tip ES.

13) High Rocks La[ne], T[unbridge] Wells, CAS, 1959. Cranbrook DS. Garden, Southborough HNC.

14) Woodchurch Green RAC.

16) Folkestone Brickfields DMcC.

‡ **P. minor** Retz. [Lesser Canary-grass. 15.]

Shoddy alien:

4) Ash: Sandwich, 1960, DMcC.

‡ **P. paradoxa** L. [Awned Canary-grass. 15, 16.]

Shoddy alien:

1) Green St[reet] Green, 1938 DMcC.

4) Sandwich.

9) Birchington; 1960, DMcC.

†**P. brachystachys** Link. [Confused Canary-grass. 16.]

1) Green Street Green, J.P.M.B., *BEC Rep.* 1939-40, p.302.

### **Agrostis** L.

**A. capillaris** L.<sup>1002</sup> [Common Bent-grass. 15, 16.]

1) Crofton Heath, PCH. N. Cray Wood, PCH. Joydens Wood, PCH. Shooters Hill GMB. Keston Common. Hayes Common. Dartford Heath. Ruxley Pits, S&S. Blackheath GMB. Plumstead c.1934 LRA **MNE**. Woolwich Common 1934 LRA **MNE**. Chislehurst Common. Pickhurst Mead, PCH. Farningham Wood '82.

3) Clayhill Wood '55. Blean Wood N of Dunkirk '5. Canterbury golf course '55. Shelving Wood Hoath '62. Field to W. of Shelving Wood.

6) 668628, Holly Hill (B. Bels) 62. Darenth Wood, H.M.P.

8) Grass heath, N end Stelling Minnis, '62. West Wood, Stowting, 1959 **MNE**.

10) Sandpit by R[ai]l[wa]y E. of Riverhead CAS. Bat and Ball tip CAS.

11) Wrotham Heath **MNE**. Roughetts Common Ryarsh 55. Oaken W[oo]d Rd, Barming '55. Park Wood Boughton Mon[Chelsea] '55.

12) Ashford Warren **MNE**. Hothfield Common, 1903, HL to 1963! **MNE**.

13) Timberlog Wood, 1939 JRW / Shoesmith Wood 1939 JRW / Gibbs F[ar]m 1939 JRW: awned forms. All Lamberhurst. Southborough Common HNC. N end Penshurst P[ar]k 55. South Park Pastures Penshurst '62.

14) Knockheath, Tenterden, 1956 **MNE**. T[unbridge] W[ells] S[and], Moor Wood, Benenden '62. On Ash[down] S[and], Knock Wood Tenterden 62. Ash[down] S[and], College Wood, Wittersham 62.

15) Blackwall Farm, Dungeness, 1956 **MNE**.

**A. gigantea** Roth. [Black Bent-grass. 15, 16.]

1) Bexley ch[urch] y[ar]d PCH. Lewisham, Mrs. Teagle, det. E.B.Ba. Gravel pit, Hayes, 1915 AGD **MNE**. Woolwich 1934, LRA **MNE**. Ruxley Pits, S&S.

2) Dartford 1898 H.L. **MNE**. Tonge, DMcC. Snodland, 1898 H.L. **MNE**.

5) Arable, Blackmans, 397684, PCH.

6) Greenhithe Waste Ground, H.M.P.

7) 95 Field below Timbalds Hill, Wichling, 1959 **MNE**. 95 Eastling, C.T. 86 Field, Guildsted, Stockbury, 1960 **MNE**.

8) Field N. of Winchcomb F[ar]m. 04 Godmersham, 1960 **MNE**. 25 Arable S of Fredville, DMcC. 25 Chalky arable, Woolage Village, BN. 35 Track, Willow Wood, Tilmanstone, B.N.

10) Sandpit by R[ai]l[wa]y, E of Riverhead, CAS.

11) Holt Wood, Aylesford, 1946 **MNE**. E. Malling, 1958 **MNE**. Sandpit Aylesford, 1957, E.G.P., **MNE**. Brickworks, Pluckley, 1949 **MNE**.

12) Ashford Warren Woods, 1955 **MNE**.

**A. stolonifera** L. [Creeping Bent-grass 15, 16.]]

1) Blackheath GMB. Shooters Hill GMB. Ruxley Pits, GMB.

<sup>1002</sup> Given as *A. tenuis* Sibth.

- 2) Woolwich Arsenal PCH. Waste G[roun]d, Crossness PCH. Chetney Marshes, g[ras]sl[an]d Dike banks, Creek shores. Higham Marshes. Cliffe Marshes. Cuxton '43 **MNE**. L[owe]r Stoke **MNE**. Stoke Junction Halt **MNE**. W of Seasalter H.M.W. '58 **MNE**. Luddenham Marshes HMW.
- 9) Past[ure] S. of Highstead, Hoath, '62.
- 4) Sandwich Bay. Marshside, Chislet 225661, '62. Dike N. of Shuart 270686, 62. Bank Shuart 271690, 62. Salting edge Shuart 266692, 62.
- 5) A.20 NW of Farningham PCH. Chevening Park PCH.
- 6) Horns Cross pit 1962. By Str[eam] L[owe]r Halstow 857669, '62.
- 8) I[ocally] a[bundant] foot of Westwell Hanger '62. Swingfield Garden Wood PWW. Brook Hillock 62. Cornfield Wolverton 62. Clavertyes Wood, Elham, 1956 **MNE**. Down 1m NE St Margarets 62.
- 9) East Wear Bay 1947 **MNE**. Lydden Spout 1955 **MNE**. Abbots Cliff 1956 **MNE**.
- 10) Sandpit E of R[ai]l[wa]y, Riverhead, CAS. Bat and Ball tip CAS.
- 11) Sandling Wood, 1957, EGP **MNE**. W. Malling, near Airfield, 1960 **MNE**. Yalding, EGP, 1957 **MNE**. Track E of Headcorn 849437, '62. Leighbridge Pond Headcorn 813454, '62.
- 13) Trodden area near Lamberhurst Ch[urch], 1942, JRW: Ditch S. of Ch[urch], CAS, 684365. T[unbridge] Wells Common, E. Shorrocks.
- 15) Lydd Airport DMCC.

**A. avenacea** J.F. Gmel. [Blown-grass. 15, 16.]  
*Shoddy alien.*

- 4) Sandwich 1959 **MNE**.  
 11) Comp, 1960 **MNE**: both D.McC.

**(A. curtisii** Kerguelen<sup>1003</sup> [Bristle Bent -grass.]

**A. canina** L.<sup>1004</sup> [Velvet Bent-grass. 15, 16.]

- 1) Keston Common, 1946. Joydens Wood, PCH.
- 3) Church Wood Blean, SE part, RGW.
- 10) Fawke Common 1954 **MNE**. Westerham Wood '82.
- 11) S of Wrotham Heath, 1946 **MNE**. Oaken Wood, NE of the North Pole Inn 1958 **MNE**. Sandway Bog, Lenham 1954 **MNE**.
- 12) Hoads Wood 1946 **MNE**. 915405 Birch Wood, W of Betersden, on sandy loam, 1962. Park Wood, Bonnington, 1950. Hothfield Common. Willesborough Lees 1955 **MNE**.
- 13) Redleaf Wood, W. of Penshurst 1950 **MNE**. Hawkenbury Bog.<sup>1005</sup> South Park, Penshurst (T[unbridge] W[ells] S[and]) '62. Pinetum /Louisa Lake, Bedgebury Forest. Kilndown Wood 1946→ **MNE**. Southborough Common HNC. Combwell Wood 1979. Bayham Woods, JRW. NE of Kippings Cross. Bayham Abbey CAS. AngleyWood 1946- 1957 **MNE**. Wood SW of Folly Hill, Colliers Green, 62. Wood 1m S. of Biddenden 1954 **MNE**. Rogers Wood SW of Biddenden 1954 **MNE**. Chiddingstone Hoath. Free Heath, JRW (unawned). Chittenden Wood! JRW: 1954 **MNE** (var. *varians* Asch & Graebn.). N of Bayham Abbey JRW, 1941 (var. *fascicularis* (Curt.) Sinclair). Sissinghurst Park Wood 1979.
- 14) Farnell Wood, SW of Rolvenden (T[unbridge] W[ells] S[and]) '62. College Wood, Wittersham (Ash[down] S[and]) '62. Standen Wood, Benenden, 1960 **MNE**.
- 16) Ride, Kiln Wood, Sandling Park (F[olkestone] Sand) 1958 **MNE**.

**A. vinealis** Schreb.<sup>1006</sup> [Brown Bent-grass. 15, 16.]  
 1) Keston Common.  
 12) Hothfield Common.

**Agrostis x Polypogon = X Agropogon** P. Fourn.

**A. stolonifera x P. monspeliensis = X Agropogon littoralis** (Sm.) C.E. Hubb.

[1] [Plumstead Marshes, by Practice Butts, 1845, 1846, 1850, **MNE**. Extinct here now.]

<sup>1003</sup> Given as *A. setacea* Curt. without any entry; it is not a Kent plant.

<sup>1004</sup> Given as subsp. *canina* and distinguished from subsp. *montana* (now *A. vinealis*).

<sup>1005</sup> In vc14, East Sussex.

<sup>1006</sup> Given as *A. canina* subsp. *montana* (Hartm.) Hartm.

**2)** All Hallows, J.E.L. Brackish dikes E. of Stoke Junction Halt. 1949 **MNE**. Brackish dikes S. of Village, Grain. 1947, 1949, W. of Fort **MNE**. Near Grain Crossing Halt, Grain, 1946.

### **Calamagrostis** Adans.

**C. epigejos** (L.) Roth Bush Grass. 15, 16. 10/52

Native. Roadside ditches, woodborders, etc., on heavy moist soils; also in old quarries: rather rare, but widespread. Rare in Surrey and Sussex, commoner in Essex; v[ery] common in Pas de Calais, even on the dunes. 10 localities 9/51.<sup>1007</sup>

**1)** 46 Roadside Ditch, Hayes Common, D.McC; 1946-62! **MNE**.

**3)** 16 Roadside on clay, A.291, E. of West Blean Wood, 1946 **MNE**.

**6)** 57 Horns Cross Chalk pit, 1964, Mrs AG Side. 77 Damp floor of chalk pit, SW of Cliffe, 1963.

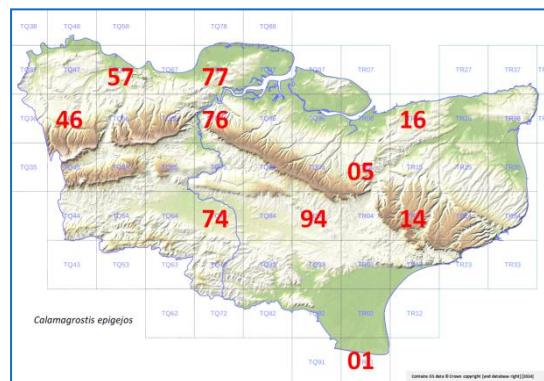
**6) E)** 77 edge of Chattenden Wood, Lodge Hill, 1954 **MNE**.

**7)** 76 Edge of flooded clay pit, Burham, 1955, P.C.H. **MNE**. 05 Valley on loam over chalk, Kings Wood E. of Molash, 1956; to S., E. Scott, 1961. Highsted pits, Tunstall, 1958, DMcC.

**8)** 14 Border of West Wood, Stowting, W. of Gate F[ar]m, on Pliocene loam, 1956, Miss DAC Long 1958 **MNE** (1956!). Near Winterage Wood Acrise DACL.

**11)** (74 Wood SW of Staplehurst, J.P.M. Brenan. 94 Wood near Pluckley, JE Chambers, comm. C.E.S., *J.Bot*, 1924, p307: prob=) Wood 1m W. of Rippers Cross, 949439, Hothfield, E. Scott, 1953 **MNE** (1954!): 1962, C.A. Stace.

**15)** 01 Damp ground, old shingle workings E. of Old School, Dungeness, 1956, Miss DACL: 1961! **MNE**.



**C. canescens** (F.H. Wigg.) Roth<sup>1008</sup> [Purple Small-reed.] 15 1/51

Native. Swamps; extremely rare, and now apparently confined to one locality. Very rare in Sussex and Essex; rare in Pas de Calais. Commoner in Suffolk and Norfolk, unrecorded in Surrey. Reported at **1)** Charlton, FK; and Walmer see FK: (probably errors).

**11)** Pond W. of London Beach, N. of Tenterden, 1959, E. Scott: 1959!

**[12)** Swamp below Lit[t]le Hoddiford, Sellindge, FGK.

**[16)** Woods near Hythe, Ann [sic, for Anne] Pratt.]

(**C. epigejos** x **Ammophila arenaria** = **X Calammophila baltica** (Flüggè ex Schrad.) Brand<sup>1009</sup> Purple Marram occurs on the dunes at Ambleteuse, Pas de Calais (C. Stace, 1959, det. C. Melderis 1962). In Britain it occurs in Norfolk, Suffolk and Northumberland; it may appear on the Kent coast.)

### **Ammophila** Host

**A. arenaria** (L.) Link Marram Grass 15, 16. 7/51

Native. Sand dunes and sandy beaches: very local but locally abundant in all suitable habitats: the chief agent in sand-dune building in Britain. Unrecorded in Surrey. Very local in a few places in Sussex and in Essex, abundant on the extensive dunes of Pas de Calais and Somme.

**2)** 87 Grain S. Beach, 1946-59 **MNE**. N. Beach, 1945; gone, 1959, **MNE**. Beach opp[osite] "Rose in Bloom" Seasalter, 1959, HMW, 098657 and to W. 06 Shell sand beach, Shellness, Sheppey, l[ocally] d[ominant]. 07 Beach N. of Leysdown, 1918 AGD **MNE** 1945!

**4)** 35 Abundant, to dominant on white dunes, Deal Links to Shellness, 1946-62 **MNE**. 36 Beach, Pegwell Bay, 1946. Old Fixed Dunes E of Downs F[ar]m '62.

**9)** 36 Cliffsend, Pegwell, 1946.

**15)** 02 Lydd on Sea, a small patch, 1946. 02 Lydd Common, on ancient dunes 2 miles inland, 1946-62, **MNE**. 02 Greatstone Dunes, l[ocally] d[ominant], 1946-60 **MNE**. Romney Warren, abundant near sea wall, and rarer inland, 1946 **MNE**. 01 W of Dungeness, 1957, E.G.P. **MNE**.

<sup>1007</sup> Contradicted by the total above of 10/52.

<sup>1008</sup> Cited as (Weber) Roth.

<sup>1009</sup> Given as *Ammocalamagrostis baltica* (Schrad.) P. Fourn.



**Gastridium** [P.] Beauv.

[Nit-grass.

16.]

**G. ventricosum** (Gouan) Schinz & Thell.

**6E)** Ride on clay, G[rea]t Chattenden Wood, Cliffe, 1954, **MNE**. [Swanscombe Wood, C.C. Babington (**CGE**).]

**Lagurus** L.

‡ **L. ovatus** L.

[Hare's-tail Grass.

15, 16.]

Escape in waste places 51/58-36; 52-54; 56;68; 54-74. Normandy, Brittany, S[usse]x, S. Hants, Channel Is[lands] – native, Dawlish Warren. Could be an old native, or more likely is extending its range with warmer climate on this side of the Channel.

**4)** Sandwich Bay, nat[uralise]d and abund[ant] 61/34-60, 1985-92.

**6)** Longfield tip, DMCC.

**11)** Ditton, 1933, FF.

**Apera** Adans.

**A. spica-venti** (L.) [P.] Beauv.

[Loose Silky-bent.

15, 16.]

(vc15)\* Top. Bot. Suppl.1.

**1)** Plum lane Brickfield, Elmstead, AHWD, 1893 **MNE**. Green Street Green (casual) J.P.M.B. Marlborough La[ne], Shooters Hill, G.M.B.

**7)** Upper Bell, .F.F.

**8)** Arable field, at Lydden, 1964, Miss D. Moore.

**Polypogon** Desf.

**P. monspeliensis** (L.) Desf.

Annual Beard-Grass.

15, 16

2/51

Native. Brackish marshes, and alluvial dikes, usually on mud drying out in late summer; very rare, but locally plentiful. It also occurs as a shoddy casual. In Sussex, very rare in extreme west only: unknown in Surrey: very rare in Essex. Only as an adventives in Nord: not in Pas de Calais.

**[1)]** [Woolwich, F. Barham, 1846 **MNE**: =Plumstead Marshes, 1850 **MNE**.] **[57** Stone Marshes, 1930, G.C. Pownall.]

**2)** Open muddy parts of brackish *Phragmites* swamp, N. of Stoke Junction Halt, abund[ant], J.E.L. 1945-61! **MNE**. Brackish dikes S. of village, Grain. Dikes E. of Stoke Junction Halt **MNE** 1945-61. Dikes near Grain Crossing Halt, 1945 **MNE**. ± dry Salting behind S. beach, Grain **MNE**. Brackish marsh E. of Binney Farm, All Hallows, 1954, J.E.L.: 1954! **MNE**. Brackish marsh behind beach, N.W. of Leysdown, 1948-1958-1962, C.A. Lister **MNE**-1963!

**[77** Siding, Sharnal Street, with shoddy aliens, PCH]

**4)** **[36** Dikes, alluvial flats, N.E. of Sandwich, Fl. K.]

[As a shoddy casual alien at:

**4)** Sandwich: **11)** Comp and Wrotham, all 1960, D.McC. **MNE**].

**Alopecurus** L.

**A. pratensis** L.

[Meadow Foxtail.

15, 16.]]

**1)** Blackheath GMB. Shooters Hill, GMB. Chislehurst Common. Ruxley pits, S&S.

**2)** Meadows W. of Upnor, 1945-1960 **MNE**. Sheerness Canal, OD.

**4)** Wenderton Meadows, BN. Mead[ow]s, ½m N. of Wingham.

**5)** Meadow 396611 PCH.

**7)** Upper Bell '55.

**10)** Bradbourne Meads FSEF.

**11)** R[oa]d S. of Bough Beech '55. Tonbridge Castle 55. Hildenborough R[ai]l[wa]y bank 563482, CAS. 849437 grassy track 1m E of Headcorn '62. 88419 by Beult N of Buckmans Green '62.

**13)** Meadow by Teise S. of Lamberhurst Ch[urch], 684365, CAS. Southborough, HNC (common).

**14)** Meadow W. of Pigeon Hoo, E of Tenterden '62.

**15)** Dungeness near Bird Obs[ervatory], J. Harper.

**A. pratensis x geniculatus = A. x brachystylus** Peterm.<sup>1010</sup>

<sup>1010</sup> Cited as *A. x hybridus* Wimm. Order of parents reversed here and sequencing regularised. No records given.

**A. geniculatus** L. [Marsh Foxtail. 15, 16.]

- 1) Beckenham Place, PCH. Chislehurst Common **MNE**. Keston Common. Woolwich Common 1934 LRG **MNE**. Sparrowfields, Swain. Old r[oa]d cutting, on clay, W. Wickham, 1955 JM Shorrocks.
- 2) Wet field, Crossness, PCH. Meadows SW of Upnor 1960 **MNE**. NW part Elmley I[sle], 1954 **MNE**. Brackish Creek, Chetney Marshes, 1962. Luddenham Marshes, 1961, H.M. Wilks. Below Oare Mill Pond 1959 **MNE**. Pasture by Pit, N of Shorne, 694735 PCH.
- 3) Pond by Church, Blean, 1945.
- 4) 26 Stodmarsh 1955 **MNE**. 26 Levels N. of Paramour Street, Ash, 1956 **MNE** det. A. Melderis. 26 Minnis Bay, Miss T. Webber. 25 Wenderton Meadows, Wingham, BN.
- 6) Pond, Cobham, 1945.
- 8) Pond NE of West Wood Stowting 1956 **MNE**.
- 10) Otford 1904 H Elgar **MNE**. Bradbourne Pits FSEF. N of Shoreham 1954 **MNE**. Westerham Wood, 82.
- 11) Goddington, Harrietsham, Mrs B. Dodds. Aylesford gravel pits 1958 EGP **MNE**. Ham Hill Boxley 1943 **MNE**. Near Teston lock H.L. 1897 **MNE**. Meadows Edenbridge DPY. Pond E of Hale Street 1956 **MNE**. 94 Pond, Lovelace F[ar]m, Bethersden, 921402, ES.
- 13) 63 Ditch by Teise S. of Lamberhurst Ch[urch] 684365, CAS. 54 Pentecosts field Southborough HNC.
- 15) 82 Sandhurst Levels 1954 **MNE**. 83 Windmill Channel SE of Rolvenden 1959 **MNE**. 93 Shirley Moor ES. 01 01 Dungeness KDR. 02 Canal St Marys Bay LJM. 13 Willow Tree F[ar]m, Burmarsh R[oa]d, LJM.

**A. bulbosus** Gouan Bulbous Foxtail. 15, 16.

Native. Brackish meadows: extremely rare, and only seen in recent years<sup>1011</sup> at Frindsbury. Very rare in Sussex and Essex.

- 2) Brackish alluvial meadows between Frindsbury and Upnor, abundant, JHL. & FR., 1944 to 1960! **MNE**. Below Gravesend, C.P.Hurst, 1890 **MNE** probably equals: Higham Marshes n[ea]r Uralite, J.B. Marshall 1938. Seasalter Marshes, abundant, H.M.W., 1965.

**A. aequalis** Sobol. [Orange Foxtail. 15, 16.]

- 1) Hayes Common. W.C.R.W.
- 2) Harty, R.D. English.
- 6) Thong, in Pond, 1956, P.C.H. det. A. Melderis.
- 11) Pond in NW part of Ryarsh Wood, 1944 **MNE**.
- 12) Dried up pond, Willesborough, C.N.P., 1946. The Moat, Sevington, C.N.P., 1946. Mersham-le-Hatch, Miss E. Davies, 1960 **MNE**. Gibbons Brook, Sellindge, 116386, 1958, L.J. Margetts **MNE**.
- 13) Finchcocks Road, J. Stirling TLS.

**A. myosuroides** Huds. [Black Grass. 15, 16.]

- 1) Ravensbourne, Bromley 1912 AGD, **MNE**. Near Chelsfield Station 1946 **MNE**.
- 2) Arable, Scocles F[ar]m, Minster in Sheppey, 1958.
- 3) Corn Fields E of Seasalter Church, 0964 0965, H.M.W.
- 4) Chislet Marshes MEM. Beet field, Ebbsfleet, MEM.
- 5) Chelsfield, 1945. 426577 W. of Ebbsfleet, MEM.
- 6) Near Ash Ch[urch], DVS Woods 603645.
- 8) St. Radigunds, K.D.R.
- 10) Arable N of Westerham, 1958 RAC.
- 11) East Mallings, JHL. [Maidstone, 1903 HL **MNE**.] Watlingtonbury, 1942 **MNE**. Platt, 1949, DMCC. Field E of Edenbridge 1950 **MNE**. Edenbridge tip DPY. S. of Cheveney Bridge, SW of Marden, 1956 **MNE**.
- 12) Arable, Hinxhill, 1956 **MNE**. Arable, New Street F[ar]m, G[rea]t Chart 972407, 1952, DMCC & CNP.
- 13) Southborough Garden HNC.
- 14) Arable, Wittersham 1956 **MNE**.

**Phleum** L.

**P. pratense** L. [Timothy. 15, 16.]

- 1) Beckenham (Elmers End) 1915 AGD **MNE**. 36 Near Hayes Sta[tion] PCH. Eltham Common 1934 LRG **MNE**. Ruxley pits, S&S. Past[ure] by R[iver] Cray, N. Cray PCH.

<sup>1011</sup> 'Recent years' will have been before 1985, possibly well before. It since transpires that, although rare, the grass is more widespread than this.

- 2) Woolwich Arsenal PCH. Meadow n[ea]r Fort Grain, AGS.  
 3) Hernhill 1955 **MNE**.  
 6) Mounts R[oa]d, PCH. Romney St[reet] PCH. Kemsing Downs PCH. Field above Trosley.  
 8) 24 R[oa]dside, Hawkinge BN.  
 10) By R[iver] above S Darenth, PCH. St J[ohns] Jerusalem, PCH.  
 11) Sandling Wood 1957 EGP **MNE**.  
 12) Hinxhill, 1956, **MNE**.  
 13) Meadow by Teise S. of Ch[urch] Lamberhurst 684365 CAS. Hawkenbury 592888, E. Shorrocks. Bayham Abbey CA.  
 14) 50 acre Wood Woodch[urch] ES.  
 15) Shirley Moor ES.

**P. bertolonii** DC., *P. nodosum* auct. [Smaller Cat's-tail. 15, 16.]

- 1) Chiselhurst Common. Hayes Common. Dartford Heath. Blackheath GMB. Woolwich 1934 LRAG **MNE**. Pickhurst Mead PCH. Shooters Hill GMB. Ruxley pits S&S. Farningham Wood 82. Crofton Heath, PCH.  
 2) Woolwich arsenal, PCH. Grain, PCH. All Hallows 1945 **MNE**. Aluvial pasture, Chetney Marshes '62.  
 3) Barley Feld W of Shelving Wood Hoath '62  
 4) Deal Links 1954 **MNE**. Sandwich Bay dunes 1963. Track bank N. of Shuart, St Nicholas 271690, '62.  
 5) Pilgrim's Way, Polhill PCH.  
 6) Darenth Wood HMP. Downs E of Shoreham PCH. Kemsing Downs PCH. Trottiscliffe Downs 1945 **MNE**.  
 7) Burham Downs '57 EGP **MNE**. Bluebell Hill '57 EGP **MNE**. Above Lower Bell 1951 LRAG **MNE**. Down above W[ater] Works, Boxley '62. Boarley Warren.  
 8) 137508 Down SE Petham MEM. Brook Hillock (ley) '62. Copp[ice] Wood W. of Podlinge 62. Wolverton Wood borders '62. Track ½m NE of St Margarets '62.  
 10) Horton Kirby PCH.  
 11) Meadows W. of Penshurst, 1953, **MNE**. By Pond E of Hale St[reet] CAS. 1m E of Headcorn 849437, in green lane '62. Pasture Field SE of Buckhall, Bethersden, '62.  
 13) South Park pasture, Penshurst '62. Meadow by Teise S. of Ch[urch], Lamberhurst, CAS. Southborough HNC.  
 15) Dungeness, 1945 **MNE**.

(**P. phleoides** (L.) [H.] Karst. [Purple-stem Cat's-tail.]  
 It occurred formerly in Essex; plentiful in Suffolk Breckland! In Somme! but now extinct in Pas de Calais.)

- P. arenarium** L. Sand Cat's tail grass. 15 4/51  
 Native. On sanddunes, particularly on looser sand; rare, but very locally abundant in 2), 4) and 15).  
 2) Shell sand beach, Shellness, Sheppey, 1945-62 **MNE**. 06 Seasalter Beach, 1951 **MNE**.  
 4) Deal Links 1954 **MNE**. Sandwich Bay to Shellness, abund[ant] on loose sand, rarer on fixed dune sand, 1945-63 **MNE**, 1996.  
 15) Near RomneyWarren, **MNE**, '45-'62. Littlestone Beach. Greatstone dunes **MNE**.

**Bromus** L.<sup>1012</sup>

- ‡ **B. arvensis** L. [Field Brome.]  
 A casual: many old records for 1) and 2), 3), 6), 7), 8), 9), 10) and 13: (see Fl.K.) none recent.  
 13) Meadow, Scotney Castle, JS (TLS).

- B. commutatus** Schrad., *B. pratensis* Erh. ex Hoffm. non Lam. [Meadow Brome. 15, 16.]  
 2) Stone Marshes, 1945 **MNE**. AllHallows, 1946 **MNE**. Tonge, DMCC. Seasalter, 1959 **MNE**.  
 3) Herne Bay, 1868, N.T. **BM**.  
 4) W of Minnis Bay.  
 6E) N. of Chattenden Wood, Cliffe, 1954, **MNE**.  
 13) Ditch near Skiffs Cottages, Lamberhurst, 1940, JRW.

<sup>1012</sup> The treatment of *Bromus* as a broad family under the one name, but covering what was separated as *Anisantha* in the first edition of Clapham, Tutin & Warburg's *Flora of the British Isles* (1952) and *Ceratochloa* in the second edition (1962), appears to be a very conservative 'lumping' approach.

**B. racemosus** L.

[Smooth Brome.

15, 16.]

*\*Top Bot Suppl.1.*

- 1) Bexley, EMH.
- 2) Meadow, New Hythe 1947 **MNE**.
- 4) Hacklinge Fen, 1946 **MNE**. Deal Links, 1954 **MNE**.
- 11) Meadow, The Brooks, Fairbourne Mill, Harrietsham, 1962, Mrs. B. Dodds (sp!). W. of Edenbridge, 1947-1950 **MNE**. W of Penshurst, 1953 **MNE**.
- 12) Stowting Meadows, 1947 **MNE**: 1954 **MNE**. Meadow, Stubbs Cross, Kingsnorth, 1952 DMcC **MNE**. Meadow E of Gibbons Brook 1954 **MNE**. By Birchett Wood, 992358, 1952, D.McC. Cuckolds coomb, Brooke 1954 **MNE**. S of Brabourne Church. E of Cadmans Wood.
- 13) Lamberhurst on Roadside, 1943, J.R.W. Bedgebury, 1952, **MNE**.
- 14) Wittersham in hedges, Col. R. Meinertzhagen, **BM**.
- 15) Maytham Wharf, Wittersham, 1958 **MNE**. Sandhurst Levels, 1954 **MNE**.

**B. hordeaceus** L. ssp. **hordeaceus**<sup>1013</sup>

[Soft Brome.

15, 16.]

- 1) Blackheath, GMB. Woolwich Common, 1934, LRAG. Ruxley pits. N. Cray tip PCH. Farningham Wood 82!
- 2) R[ai]l[wa]y bank Cuxton 1945 **MNE**. Burham Marshes **MNE**. Shornmead Fort 1945 **MNE**. Shorne Marshes, 1946 **MNE**. Grain, 1947 **MNE**. E of Minster Sheppey, 1954, on Bagshot Sand **MNE**. Shellness. Tonge, DMcC, 1958 **MNE**. Oare Road, Faversham. 1946 **MNE**. R[oa]dside, SE of Chetney Cottages, 1960.
- 4) Meadows, Hacklinge 1946 **MNE**.
- 5) 3964 Well Wood PCH.
- 6) (var. glabrata) Eynsford, 1893, ESM **BM**. Above Trottiscliffe in field, 1945 **MNE**.
- 7) L[owe]r Bell 55 by A269. Upper Bell 55 by A229.
- 8) Langdon Bay, 1955 **MNE**.
- 10) Bradbourne Meads FSEF.
- 11) Wrotham Heath 1945, **MNE**. Roughetts Common, Ryarsh 55. Ryarsh sand pit '45 **MNE**. R[oa]d .E. of Lenham 1945 **MNE**. R[ai]l[wa]y bank Hildenborough, 563482, CAS. S. of E. Peckham 1956 **MNE**. Kelsham, Headcorn 1956 **MNE**. 917397 Field SE of Buckhall, Bethersden 62.
- 12) Rippers Cross 1954, **MNE**. Near Mill E of Hothfield, 1948, **MNE**.
- 13) Blind Lane, Lamberhurst, 1943, JRW. Southborough Common HNC. T[unbridge] W[ells] Common CAS.
- 15) Romney Warren by A259, '62. Shirley Moor, 1947 **MNE**. Fairfield, 1952 **MNE**. Maytham Wharf, Wittersham 1958 **MNE**.
- 16) Shorncliffe 1955 **MNE**.

**B. hordeaceus** ssp. **divaricatus** (Bonnier & Layens) Kerguelén.<sup>1014</sup>

[15, 16.]

*Shoddy alien.*

- 4) Sandwich, 1960, DMcC, **MNE**.
- 9) Birchington, 1960, DMcC **MNE**.
- 11) Wrotham, 1960, DMcC **MNE**.

**B. hordeaceus** ssp. **ferronii** (Mabille) P.M. Sm.<sup>1015</sup>

[15.]

- 4) Sandhills N. of Deal, ESM (det. Häckel as *B. mollis* var. *confertus* Mabille: probably this: see Fl. K.): Deal Links, 1961 **MNE**. Fixed dunes E. of Downs F[ar]m, Sandwich, 1962, KFC; 1963 det. A. Melderis. Sandwich Bay, 1960, EGP **MNE**. Abundant on fixed dunes in several places between Deal and Princes Golf Links.
- 8) Shakespeare Cliff. Abbotscliff, 1953 **MNE**, 1960 **MNE**.
- 15) Old Dunes S. of West Hythe, 1962.

**B. hordeaceus** ssp. **thominei** (Hardouin) Braun-Blanq.<sup>1016</sup>

[15, 16.]

- 2) Chalk gravel pits, 1946 **MNE**. Grain S. Beach, 1945 **MNE**; 1955 **MNE**. Horrid Hill, Rainham, 1952 **MNE**. 56 Ham Hill, Birling, PCH.
- 4) Sandwich Bay, on dunes, 1956 **MNE**, 1963, KFC, det. A. Melderis.

<sup>1013</sup> In the manuscript, given as *Bromus mollis* L.<sup>1014</sup> In the manuscript, given as *B. molliformis* Lloyd.<sup>1015</sup> In the manuscript, given as *B. ferronii* Mabille.<sup>1016</sup> In the manuscript, given as *B. thominii* Hardouin. It may be that many of these records, especially the inland ones, should be placed in *Bromus x pseudothominei*, which was not named until 1968.

- 6E) Lane End to Green Street Green, 1945 **MNE** 1951 **MNE**.  
 8) Shakespeares Cliff, 1955 **MNE**. Barham Downs 1955 **MNE**.  
 11) Meadow W. of Penshurst 1953 **MNE**.  
 12) Hothfield Common 1945 **MNE**.  
 13) Tunbridge Wells Common, 1961, CAS ("common here").  
 15) Dungeness, 1953-56 **MNE**. Old shingle Palmarsh, LJM.

**B. lepidus** Holmb. [Slender Brome. 15, 16.]

\* 16: *BEC* (1929) pp.41-42. \*15: *BEC* (1935) pp.47-48.

- 2) Shorne Marshes, 1956. P.C.H.  
 4) Sandwich Bay, KFC.  
 5) By field W of Shoreham, 1951 **MNE**. Chevening Park 1955 **MNE**. Farningham, AHG Alston, 1934 **BM**. In field of *Lolium multiflorum*, Eynsford, ESM, **BM** det. I.A. Williams: *J. Bot.*, 1929, p.68.  
 6) Roadside above Trottiscliffe 1945. Ranscombe F[ar]m, Cuxton 1946. Fields near Lads F[ar]m, Snodland, 1945, **MNE**. Green Street Green.  
 7) W. of Thurnham Castle, 1961, **MNE**.  
 8) Below Juliberry Downs, Chilham, in pasture, 1945, **MNE**. Cliffs E of Dover, 1955 **MNE**.  
 11) 64 Beltring, J.P.M.B. 54 W. of Penshurst, 1947 **MNE**.  
 12) R[oa]dside, Hothfield, Common, JMPB.  
 13) 64 North F[ar]m. Sewage W[or]ks, Sherwood Park, T[unbridge] Wells, 1954, CAS.

**B. interruptus** (Hack.) Druce [Interrupted Brome.]

Colonist, of doubtful origin; cultivated fields; not seen recently. See *Fl. K.*, p.413-4; *J.Bot.* 1895, p.344; *J. Linn.Soc.* 32, p.426-430, 1896.

- 1) Eltham, 1894, A.H.W.D. Sainfoin field near Dartford Hospital (W of Darenth Wood), 1893, A.H.W.D. **BM**.  
 6) Cultivated field, Snodland, Ida M. Roper, *BEC Rep.* 1923, p.413. Lads F[ar]m., Snodland, J.E.L. Upper Halling, J.P.M.B. Sainfoin field, Singlewell→Cobham, CEB, 1912 **BM**.

It has been found also in Surrey, Cambridge.

‡ **B. secalinus** L. [Rye Brome. 15, 16.]

Colonist or casual in fields and waste ground: many old records for 1), 3), 4), 5), 6), 7), 8), 11), 12), 13) and 16) (see *Fl. K.*); recently only as follows:

- 11) 94 Elvey Farm, Pluckley, ES. 84 E of Headcorn. Egghill F[ar]m., Smarden, in wheat, Mr. Miller, teste L. Hawkins (sp!).  
 15) Lydd Common, 1946? Var *grossus* Desf. Cornfield Appledore, 1 pl[ant], ESM, 1893 **BM** conf[irme]d Melderis.

‡ **B. lanceolatus** Roth.<sup>1017</sup> [Large-headed Brome. 16.]

- 1) Woolwich, C.H. Grinling, *BEC Rep.* 1921, p.403.

‡ **B. scoparius** L.

- 8) Near Dover, Mr. C. Moore, June 1897, **BM**, ex Herb. Roy. Bot. Soc. det. Melderis.

‡ **B. schraderi** Steudel<sup>1018</sup>

- 1) & 2) Casual about Woolwich and Greenwich AHWD (see *Fl.K.*).

‡ **B. patulus** L.<sup>1019</sup>

Casual 2) Woolwich Arsenel, AHWD, 1892.

**Bromopsis** (Dumort.) Fourr.<sup>1020</sup>

**B. ramosa** (Huds.) Holub<sup>1021</sup> [Hairy Brome or Wood Brome. 15, 16.]

<sup>1017</sup> In the manuscript, given as *Bromus macrostachys* (without citation; presumably Desf. Intended).

<sup>1018</sup> Nomenclature as given; may best relate to *Ceratochloa*, e.g. as *Ceratochloa cathartica*.

<sup>1019</sup> May belong under *B. squarrosus* L.

<sup>1020</sup> In the manuscript, all *Bromopsis* species are subsumed into *Bromus*.

<sup>1021</sup> In the manuscript, given as *Bromus ramosus* Huds. and placed after *Bromus erectus*.



- 1) High Wood, Crofton PCH. Copse by N. Cray Ch[urch] PCH. Wet wood by R[iver] N. of N. Cray PCH. N. Cray Wood PCH.
- 2) Oare Meadow HMW.
- 5) Larches Wood W. of Farnborough PCH. Near Knockholt, LLAG 1934 **MNE**. Wood S. of Cudham 1949 **MNE**.
- 6) Mounts Wood PCH. R[oa]dbank in shaw, Foxendown Hill, Meopham, '62. Downs E of Shoreham PCH. Preston Hill Wood PCH. Kemsing Downs PCH. Copse E of Wrotham PCH. Wingate Wood Halling PCH. Cockham Woods, DMCC.
- 7) Chalk pit by A2, E of Preston HMW.
- 8) Wolverton Wood border, Alkham, '62. Frandham Wood, KDR. Reinden Wood BN.
- 10) Bradbourne pits FSEF. R[iver] path below ShorehamPCH. Eynsford PCH. St Johns Jerusalem PCH. Wood S. of Darenth Ch[urch], 1944 **MNE**.
- 11) Sandling Wood, Maidstone, E.G.P., 1957, **MNE**.
- 13) Holden Corner Southboro[ugh] Common HNC. Bayham CAS.
- 16) Seabrook, 1955, **MNE**.

**B. erecta** (Huds.) Fourr.<sup>1022</sup> [Upright Brome. 15, 16.]

- 1) S. side Eltham Common 1934 LLAG **MNE**.
- 5) Cross R[oa]ds on chalk A20 N of Farningham PCH. Down W. of Shoreham. Darwins Bank, Downe, 1962 Downe Golf Course, 1957. Down NE of Pilgrim Ho[use] Westerham 1962. Chevening Park, 1961. Downs below Polhill. Pilgrims Way Polhill PCH. Chevening Park, PCH. 426577 W of West[erha]m Hill RAC.
- 6) E) Green St[reet] Green Common, FR. Down S. of Purvil Wood, Priestwood 61. Swanscombe Wood Borders PCH. Greenhithe 1838 HCW **MNE**: 1946!
- Horton Kirby PCH. Down by Fawkham Ch[urch] DVS Woods. Shoreham Rifle Range Downs d[ominant]. White Hill, Downs E. of Shoreham, PCH & FR. Preston Hill Down DVS Woods. Dunstall Woods, in glades, 1960. Otford Mount d[ominant] **MNE**. Down W of Greenhill Wood Otford, d[ominant]. Kemsing NW downs l[ocally] d[ominant]. E of Beechy Lees, l[ocally] d[ominant]. W. of Wrotham d[ominant]. Down E of Wrotham d[ominant]. Wrotham Water Down. Trosley Pilgrims Ho[use] W. d[ominant]. Trosley N. of Ch[urch] d[ominant] on downs. Ryarsh Downs d[ominant]. Birling Downs d[ominant]. Down N. of Crookhorn Wood d[ominant]. Down NW of Crookhorn Wood d[ominant]. Down Mount Ephraim Snodland d[ominant]. Upper Halling Downs d[ominant].
- 7) Down above Boxley W[ater] Works '62. Bluebell Hill 57 EGP **MNE**. Down E of Whitehorse Stone 62. Scarborough Spur, Church Spur, Delta Down, Burham '55 **MNE**. W coombe: Detling Hill. Thurnham Castle. Broad Street. Allington Down. Hollingbourne Hill. Down in Filmer Wood, l[ocally] d[ominant].
- 8) Rare on scarp E of Wye. Down N. of Crundale Ch[urch], l[ocally] d[ominant], 1960. Ch[al]k bank, Bonny Bush Hill, Kingston, v[ery] l[ocal], '62. Beech Plant[at]io[n] E side Goodnestone P[ar]k, '62. Tolford Hill 1945 **MNE**. Postling Downs 1945 **MNE**.
- 9) N. Foreland Golf Course 1954 **MNE**.
- 11) R[ai]l[wa]y Bank by Straight Mile, W of Tonbridsge, 1960, CAS.
- 12) R[oa]dside, A.20, Mersham.
- 13) R[ai]l[wa]y bank, W of T[unbridge] Wells West Sta[tion], CAS, 1956, **MNE**. Calverley Grounds, T[unbridge] Wells, 1955 CAS: K.E.B. 1961.

**Anisantha** K. Koch<sup>1023</sup> [Great Brome. 15, 16.]

‡ **A. diandra** (Roth.) Tutin ex Tzvelev<sup>1024</sup>  
 Alien, occasionally naturalised. \* vc15, BEC Rep. 1937, p.519.

- 1) Woolwich Common, GMB.
- 4) Pegwell Bay Beach, 1961, Mrs. B. Dodds. Beach N. of Sandwich Bay, opp[osite] Princes Club Ho[use], 1962. Sandwich Shoddy 1960 DMCC **MNE**.
- 11) Fairbourne Heath, 1960, Mrs B. Dodds, det. D.McC. **MNE**.

**A. sterilis** (L.) Nevski<sup>1025</sup> [Barren Brome. 15, 16.]

<sup>1022</sup> In the manuscript, given as *Bromus erectus* Huds.

<sup>1023</sup> In the manuscript, all *Anisantha* species are subsumed into *Bromus*.

<sup>1024</sup> In the manuscript, given as *Bromus diandrus* Roth.

<sup>1025</sup> In the manuscript, given as *Bromus sterilis* L.

- 1) Crofton Heath PCH. Bexley Ch[urch]y[ar]d PCH. Ruxley pits S&S. Upper Hockenden PCH. Blackheath GMB. Woolwich Common LRAG 1934 **MNE**. Farningham Wood 82!
- 2) Waste G[roun]d, Crossness PCH. Medway Bank above Aylesford Br[idg]e, '55.
- 5) Farningham R[oa]d St[at]io[n] Approach PCH. Field W. of Shoreham PCH. 3964 Well Wood PCH.
- 6)E) Green Street Green Common PCH. Mounts R[oa]d PCH. R[oa]dside E of Kemsing PCH.
- 7) L[owe]r Bell / Up[pe]r Bell, A229. '55. Warren L[a]n[e] L[owe]r Bell '62. Tassels Wood Norton (edge on broken ch[al]k soil) 62. R[oa]d Hedge, the Valley, Otterden 62.
- 10) Otford, PCH. R[oa]dside, Eynsford, PCH. S. Darenth PCH.
- 11) Old wall, The Friars, 1962. Sandling Woods 1957 EGP, **MNE**. R[oa]dside F[olkestone] Sand, Forstal – Sandling 62. E. Malling common 62. W. Hever, 1955. R[ai]l[wa]y bank, Hildenborough 563482, CAS.
- 13) Southborough Common HNC.
- 14) 93 Woodchurch ES.
- 15) Ancient dunes S. of Hythe 1962. Romney Warren 1962.

‡ **A. tectorum** (L.) Nevski<sup>1026</sup> [Drooping Brome. 16.]  
 2) 1 pl[ant] on sea wall, Dartford Marshes, 1961, M. Swain.

‡ **A. madritensis** (L.) Nevski<sup>1027</sup> [Compact Brome.]  
 Could have been native near Sandwich.

Old records for 4) Sandown Castle (Petiver 1716) and Walmer Beach, 1866, 16) C.P.S.K. "frequent": none since 1866 (see *Fl.K.*).

**A. rubens** (L.) Nevski<sup>1028</sup> [Foxtail Brome. 15.]  
 Shoddy alien.  
 4) Sandwich, 1960, DMCC **MNE**.

**Ceratochloa** DC. & P. Beauv.

**C. carinata** (Hook. & Arn.) Tutin<sup>1029</sup> [Californian Brome.]

‡ **C. cathartica** (Vahl) Herter<sup>1030</sup> [Rescue Brome. 16.]  
 1) Hayes, Mrs. Wedgewood, *BEC Rep.* 1921, p.403. Bickley, Garden Wood, 1955, D.P.Y. – Hb. DPY.  
 13) Waste ground, High Brooms, J.P.M.B., *BEC Rep.* 1939-40, p.304.

**Brachypodium** [P.] Beauv.

**B. pinnatum** (L.) [P.] Beauv. [Chalk False Brome or Tor-grass. 15, 16.]

5) 45 Chevening Park, 1955 **MNE** – l[ocally] d[ominant].

6) 66 S. of Cobham Park. 76 S, edge of Great Wood, Cuxton 1955 **MNE**. 66 Downs S, of Purvil Wood, Priestwood (ploughed 1945) 1962.

7) 85 Down NW of Broad Street, E of Thurnham 1950-62, increasing patches. Hollingbourne Hill, a[bundant] and E to Harrietsham. Hart Hill. Charing Gill and E to Westswell. Eastwell Park. Belmont Golf Course, Throwley, CT. Lees Park, Sheldwich, Down of W. aspect 62. 94 V[ery] l[ocally] d[ominant] Foot of Weswell Hangers '62. 05 Godmersham Downs. 05 Down NW of Bilting, Whitehill.

8) Broad Downs 1962 open d[ominant]. Brook Hillock 62. L[ocally] d[ominant] ENE of Giddy Horn '62. D[ominant] above Cuckolds Coomb 62. A[bundant] Down N. of Podlinge 62. L[ocally] dominant Down SW of Lydden 62. SE of Swingfield 62. Wolverton [cross]r[oa]ds 62. By Sladden wood Alkham '55. Chilton '62. Woodville- Lydden 1960 **MNE**. Down 1m NE St Marg[are]ts at Cliffe l[ocally] a[bundant] '62. Free Down f[requent] – l[ocally] a[bundant]. Brabourne Downs. Stowting Downs W. Postling Downs d[ominant]. Tolsford Hill d[ominant]. Brockmans Bushes d[ominant]. E. of Etchinghill l[ocally] d[ominant] → Newington. N of Beachborough d[ominant]. Newington Down d[ominant]. Cheriton Downs d[ominant]. Folkestone Downs d[ominant]. Dover Hill l[ocally] d[ominant]. Top of Abbotscliff l[ocally] d[ominant]. Grassheath on Pliocene, Stelling Minnis N, 62. Chalk Bank Bonny Bush Hill Kingston '62. Down NW of Misling F[ar]m,

<sup>1026</sup> In the manuscript, given as *Bromus tectorum* L.

<sup>1027</sup> In the manuscript, given as *Bromus madritensis* L.

<sup>1028</sup> In the manuscript, given as *Bromus rubens* L.

<sup>1029</sup> In the manuscript, given as *Bromus carinatus* Hook. & Arn., without any records.

<sup>1030</sup> In the manuscript, given as *Bromus uniloides* Kunth. See also *Bromus schraderi* above.

Elmsted, '62. Little Fredville, 4' high, DMCC. Barham Downs. Chartham Downs. Folkestone Warren, **MNE**. Lydden Spout and above. Shakespeares Cliff. E Cliff Dover. Langdon Barracks. Langdon Bay. Fan Bay. S. Foreland.

**11)** Warren Wood, Leeds, R[ai]l[wa]y cutting on gault.

**13)** Horsmonden New Church, abund[ant] on road verge.

**16)** Ragstone scarp W. of Hythe. R[oa]dside, Sandling Junction.

**B. sylvaticum** (Huds.) [P.] Beauv.

[False Brome.

15, 16.]

**1)** Woolwich Lrag 1934 **MNE**. Abbey Wood PCH. High Wood Crofton PCH. Holwood Park PCH. Joydens Wood. R[oa]dside, Bexley→N Cray PCH. N. Cray Wood, PCH. Ruxley pits. Shooters Hill GMB. Beckenham Place Park Woods '55. Elmstead La[ne], Bexley. R[ai]l[wa]y bank, Orpington, 1944. Farningham Wood, 82!

**2)** Brambledown by R[oa]d, 55. Copse S of Brambledown Farm 55. Oak Wood, Brambledown 55. R[oa]d W. of Eastchurch 55. R[oa]d E of Eastchurch 55. Warden Ash copse 55. Eastchurch cliffs 55.

**3)** Shelving Wood (Wool[wich] Beds) Hoath, 62.

**5)** Hedgebank on chalk W. of Eynsford PCH. Larches W[oo]d W of Farnborough PCH. Darwins Bank, Downe 1962. Knockholt Lrag 34 **MNE**. 426577 W. of West[erha]m Hill RAC. 398811 PCH. Pilots Wood PCH. Pilgrims Way Polhill PCH. Chevening Park PCH. Down E of Pilgrim Ho[use] Westerham 62.

**6)** Mounts R[oa]d PCH. Mounts Wood PCH. Darenth Wood. White Hill Shoreham. Preston Hill PCH. Shoreham R[ifle] range PCH. Magpie Bottom PCH. Greenhill Wood, Otford PCH; 62 FR. Kemsing Downs PCH. Downs W. of Woodlands Hill, N of Ightham 55. Downs, Woodlands Hill, 55. NW of Wrotham village '55. Halling Warren. Recolonised Down S. of Purvil Wood Priestwood 1961. Down E of Molehill Wood Buckland 61. Foxendown Hill, 62.

**E)** G[rea]t Chattenden Wood. Northward Hill Wood.

**7)** Burham Down, Church Spur/ Scarborough Spur (scrub) **MNE**. Boxley W[ater] Works Down 62. Rainham Park Wood 1961 **MNE**. Queen Down warren '55. Down N of Bredhurst Hurst '55. Wood, Bredhurst Hurst '55. Down E of Whitehorse Stone Bluebell Hill '62. Pilgrims View L[owe]r Bell '62. Filmer Wood Chalk down '62. Tassels Wood edge, Norton (ch[al]k) '62. Border of Spuckles Wood Stalisfield 62. Hangers NW of Westwell '62.

**8)** rare, Broad Downs Brook '62. Copse (ch[al]k) N. of Bavinge 62. Wood W. of Podlinge (ch[al]k) 62. Land N. of Bossingham '62. Bourne P[ar]k, Bridge '55. Bridge Hill N, '55. N of Wolverton in wood and by lane (ch[al]k) '62. Wood NW of S. Alkham '55. Beech Pl[antation] S. side Goodnestone P[ar]k '62. Opp[osite] Puckland Wood (ch[al]k) '62.

**9)** Sevenscore E of Minster, 1956 **MNE**.

**10)** Rooks Hill, '55. Westerham Wood 82! Pastures N. of Farningham PCH.

**11)** Wood SE of L[owe]r St Clere Kemsing '55. Larkfield Heath '55. Oaken W[oo]d R[oa]d Barming '55. E end of Mote Park. Springfield copse, E. Malling '55. Kiln Wood Lenham (Sandgates [Formation]) '62. R[ai]l[wa]y bank Hildenborough 563482, CAS. R[oa]dside N. of Hildenborough '55. Starvecrow Woods. Tonbridge Castle. ¼m N of Bough Beech. Wood by Stre[am] 1m N of Bough Beech. R[oa]dside, Whetsed '45. Wood, Golden Sq[ua]re S. of Smarden '62, 885915. Birch Wood, Bethersden 915402, '62. Beult N of Buckmans Green 889419, '62.

**13)** Stone Cross, Ashurst, 523388, '59 CAS. Damp Wood on clay, S. Park, Penshurst, 62. Southborough Spring Lane HNC. Bayham Abbey CAS. Bedgebury Pinetum '55. Combwell Wood, 1979.

**14)** 1½ m S of Hawkhurst '55. Knock Wood, Tenterden by R[oa]d, '62. Ash[down] S[and] gill, College Wood, Wittersham 62. Shaw E of B2082 on clay loam over Ash[down] S[and], Underhill Wittersham 62.

**Elymus** L.<sup>1031</sup>

**E. caninus** (L.) L.<sup>1032</sup>

[Bearded Couch.]

15, 16

Native.

**1)** Elmstead Lane, by Kid Brook, Sundridge Park, Chislehurst 424703, 1957; 1965. Shooters Hill Woods, G.M.B. 1958. Sutton at Hone, bank by church, 553705, HMP, 1949.

**2)** Bank of River Path, NW of Aylesford (Elm copse on Valley Terrace gravel, 1955 PC & JH; 1962! 718600) **MNE**. Copse S. of Snodland on alluvium, 705613, 1955 **MNE**. 66 Ham Hill stream, PCH.

**5)** Saltbox hill, Shade on chalk, 408605, 1955, **MNE**.

**6)** Darenth Wood, on Thanet Sand, 1960 **MNE**. Birling Hill top by R[oa]d (shady bank) 670625, 1962. Vigo Hill, banks, 633609. Land W. of Cuxton 1960 **MNE**. R[oa]d verge E of Stone Castle 587742 HMP. Copse, NewBarn, hay field, Longfield, 620691, 1958. Copse E of Southfleet, 621707, 623708, PCH.

<sup>1031</sup> Treated, with *Elytrigia*, as *Agropyron* Gaertn.

<sup>1032</sup> In the manuscript, given as *Agropyron caninum* (L.) Beauv.

- 7) Shady track in Ash/hazel Wood, Burham Down, 1955, 739622. E. border of Belmont Park, Throwley in light shade by r[oa]d, 1959 **MNE**. Rainham Park Wood (Ash Wood) 1961 **MNE**. Copse (hornbeam) E of Marshall R[oa]d, Rainham, 1958. Old Wives Lees, Chilham, 087547. 13 clumps on bank, Ash tree nearby, 1956, D. Royle. Mountain Street, Chilham DHK.
- 8) Thruxted Mill, Denge Wood, 095509, under Ash, 1956, D. Royle. Edge of Larkey Valley Wood. Thanington, 127559, 1956, D. Royle (V[ery] a[bundant] under Ash and Elm) **MNE**.
- 10) By Darent, S. of Darent Church, 1944, 560711 **MNE**. Copse by Darent, Roman Villa, Darenth, 563707, 1957 **MNE**. Wooded river cliff of Darent, SW of Eynsford, 533645, 1956 **MNE**. By Darent, S of Lullingstone Castle, 529641, 1956 **MNE**. Bradbourne Meads, Riverhead, F.S.E. Fawkes, 1957.
- 11) Nettlestead, 684523, by B.2015. By Medway, S of Teston Br[idg]e 709530. Sandling W[oo]d 1957 EGP. By Medway E of Barming Br[idg]e 725539. E Farleigh 739538. Maidstone (Archbishops palace) **MNE**. Bydews Wood Tovil, 745542. NE of Hadlow by A26, 640509 **MNE**. Lane, Frittenden to Lashenden, RAC. 889419 1 pl[ant] by Beult N of Buckmans Green, Smarden 1962. By Medway, S.E. of Watlingbury, 699527, 1957 **MNE**. Beult SE of Burford Hunton 742983. Beult S. of Cheveney Yalding 709941. Beult W. of Cheveney Yalding 704995. Teise SW of Marden, 725426, 1956 **MNE**. S. of Elphick F[ar]m Hunton 715482. S. of Laddingford 690470 **MNE**. Lunsford Osiers 695595. Wall, Larkfield, 700582 **MNE**. Medway S. of Yalding 690496 / 685492 **MNE**. Medway E of Hale St[reet] 679493 to 682495. Med[way] E of Brandbridges 677486 **MNE** 681487. Med[way] SW of E Peckham 652471 to 659473. E of Hartlake Bridge 634473 **MNE**. W of Hartlake Bridge 627473. Above Tonbridge 571465 to 577467 **MNE**. S. of Bridge, SW of Leigh 546452. Below Tonbridge 599467 / 613471 **MNE** (617471). Trib[utary] Stream of Beult, E of Golden Square, Smarden, 1962, in shade, l[ocally] f[requent] 887412. By Len, Fullingmill, Hollingbourne, 818542, 1856, 1959 **MNE**. W. Malling n[ea]r Startled Saint, 1960, **MNE**.
- 12) Thanington, ash copse by A.28 on calc[areous] alluvium 1955, **MNE**. Under ash, NE of Chilham n[ea]r R[iver] Stour, 085539, D. Royle **MNE**. Chilham, W of Mill under Ash trees, 1955 **MNE**. [Wye, Lady D.]

### *Elytrigia* Desv.<sup>1033</sup>

**E. repens** (L.) Desv. ex Nevski<sup>1034</sup> {Common Couch or Twitch. 15, 16.]

- 1) Blackheath. Shooters Hill. Ruxley pits. Crofton Heath PCH. Pickhurst Mead PCH. N. Cray tip PCH. Farningham Wood 82!
- 2) Woolwich Arsenal PCH. Dartford Marshes 541761, '62. R[iver] wall Dartford 545777, '62. Medway bank above Aylesford Br[idg]e '55. Funton Creek edge '62. S. Minster Marshes '55. Scrub S. of Scrapsgate 55. Brambledown '55. Shellness '62. Sheerness canal O.D.
- 3) Hernhill village banks '55. Boughton Street banks '55.
- 4) Track N. of Shuart, St. Nicholas 271690, '62. Richborough Port 1946 **MNE**. Stodmarsh PWW, '63.
- 6) Mounts R[oa]d, PCH. Swanscombe Wood 1945 **MNE**. R[oa]dside Foxendown Hill, 62, Romney St[reet], PCH.
- 7) Longbeach Wood ES.
- 8) Bridge JG.
- 10) R[oa]dside 1m. E. of Westerham 1955 **MNE**. [Seven]oaks tip CAS. R[iver] bank N. of Shoreham PCH. By R[iver] S. Darenth PCH. St Johns Jerusalem PCH. Bradbourne pits FSEF.
- 11) E. Malling, 1963. W. Malling. Maidstone, 1957 EGP **MNE**. By Beult Buckmans Green 889419, '62. By Beult E of Buckhall, Beth[ersden], 62. Lane E of Golden Square Smarden, 886913, 62. 1m E of Headcorn 849437, '62. W. Marley F[ar]m Smarden 863439, 62.
- 13) Southborough G[ar]d[e]n HNC. Bayham Abbey CAS.
- 15) Fixed dune, by A.259, Romney Warren, '62.

var. **lasiorachis** Hack.

- 1) Abbey Wood, C.H. Grinling & St.J.M., *BEC Rep.*, 1922, p.754.

**E. repens** x **E. atherica** = **E. x oliveri** (Druce) Kerguélen ex Carreras Mart..<sup>1035</sup>

Frequent where the parents meet along the coast and estuaries.

- 2) Greenhithe 1862 **MNE**. Cuxton 1944 **MNE**. Conyers Creek 1944 **MNE**. Sheppey, AGD, 1918 **MNE**.

<sup>1033</sup> Treated, with *Elymus*, as *Agropyron* Gaertn

<sup>1034</sup> In the manuscript, given as *Agropyron repens* (L.) Beauv

<sup>1035</sup> In the manuscript, given as *Agropyron pungens* x *repens* = *A. x oliveri* Druce.

**E. atherica** (Link) Kerguelén ex Carreras Mart.<sup>1036</sup>

[Sea Couch.

15, 16.]

2) River Bank, Erith Marshes, PCH. River Bank, Dartford Marshes, 1962, 545777 & 541779. Stone Marshes '62 HNS. Greenhithe, 1862 **MNE**. River bank, Salting top, Cuxton 1943-44 **MNE**. Snodland 1890, '98, HL, **MNE**. Conyers Creek 1943 **MNE**. Oare Sea Wall, CT. Higham Saltings. Cliffe Saltings. High Halstow. Egypt Bay. All Hallows. Grain N. Beach, 1945 **MNE**. Funton Saltings, '62. Shellness, '62. [Sheppey AGD 1918 **MNE**.]

4) Track N. of Shuart, 270686, 62. Salting edge, N. of Shuart 266692, 62. Pegwell Bay, 349641, D Royle, '56. Sandwich Bay. Behind dunes; Shellness.

15) Denge Beach, J. Hubbard.

**E. atherica** x **E. juncea** = **E. x obtusiuscula** (Lange) Hyl.<sup>1037</sup>

Not infrequent with the parents, on the dune systems.

2) N. of Cuxton, 1943, **MNE**: but *junceiforme* does not occur here, and perhaps never did. Grain S. Beach, 1949, 1959 **MNE**. Shellness, Sheppey, 1959, **MNE**.

4) Sandwich Bay, 1945 **MNE**.

15) Romney Warren, 1945 **MNE**.

**E. juncea** (L.) Nevski<sup>1038</sup>

[Sand Couch.

15, 16.]

Native. Sanddunes, the main primary colonist and builder of foredunes: locally common in such habitats on the coast from All Hallows to Greatstone. Frequent in suitable places in Sussex, Essex and N. France.

2) Beach, All Hallows. N & S Beach, Grain, **MNE**. Beach N. of Leysdown. Sandy Beach, Shellness. Castle Coot, N. of Graveney. Beach opp[osite] "Rose in Bloom", Seasalter, 1959 HM Wilks **MNE**.

4) Beach, Pegwell Bay, 1946 **MNE**. Sandwich Bay to Shellness, abundant on foredunes and strand, 1946-62.

9) Below cliffs, Pegwell Bay, 1946.

15) Greatstone Dunes, 1946 **MNE**. Near shore, Romney Warren, 1946. Denge Beach, J. Hubbard.

**Leymus** Hochst.<sup>1039</sup>

**L. arenarius** (L.) Hochst.

[Lyme-grass.

15.]

Native. White Sand dunes: extremely rare, and only recently found. Probably planted in Sussex.

[Casual at 1) Murray Avenue, Bromley, 1946, G.W. Coxhead.]

4) Sandwich Bay, c. ¼m. N. of Princes Club House on fore-dunes, about seven clumps, 1962, C.A. Lister, who showed it to me shortly afterwards.

**Hordelymus** (Jess.) Jess. ex Harz

**H. europaeus** (L.) Jess. ex Harz<sup>1040</sup>

Wood Barley.

16

1/51

Native. In one Beechwood on calcareous soil derived from ragstone; extremely rare. It is strange that this species has not been found on the chalk downs of Kent: it occurs rarely (Effingham, Ranmore, Chipstead, etc.) on those of Surrey. It occurs in a wood on boulder clay near Thaxted in N. Essex, but is unknown in Sussex. The nearest French locality known to me is Forêt d'Eu in Normandy. It is of course common in the Chiltern and Cotswold Beechwoods.

10) Copse by Roadside, Riverhill, 1842, W. Borrer; Fl. Tonbr. suppl. p.26; 1955! in Beechwood on ragstone scarp on E. side A.21, not seen in 1960. It is remarkable that this locality appears to have been overlooked from Borrer's time until 1955, but it does not appear every year.

**Hordeum** L.

**H. distichon** L.<sup>1041</sup>

[Two-rowed Barley.]

**H. murinum** L.

{Wall Barley.

15, 16.]

<sup>1036</sup> In the manuscript, given as *Agropyron pungens* (Pers.) Roem. & Schult.

<sup>1037</sup> In the manuscript, given as *Agropyron junceiforme* x *pungens* = *A. x obtusiusculum* Lange.

<sup>1038</sup> In the manuscript, given as *Agropyron junceiforme* (A & D. Löve) A. & D. Löve.

<sup>1039</sup> In the manuscript, given as *Elymus*, and its representative species as *Elymus arenarius* L.

<sup>1040</sup> In the manuscript the genus is cited as (Jessen) Harz and the species as (L.) Harz.

<sup>1041</sup> Included in a note: *Guizotia abyssinica*, *Hordeum distichon*, *Secale cereale* – Longfield tip, 3657, PCH.



- 1) S. of Woolwich Common '34 LLAG **MNE**. Crofton Heath PCH. R[oa]dside Upper Hockenden PCH. Banks, Bexley Mill Pond PCH. Banks, R[iver] Cray, N. Cray, PCH. N. Cray Wood, PCH. Blackheath GMB. Pickhurst Mead, PCH. Shooters Hill GMB. Ruxley Pits, GMB. Farningham Wood 82.
- 2) Woolwich Arsenal PCH. Sewerbank Plumstead PCH. R[oa]dside, Funton Marshes, '62. Shellness '56.
- 3) Dry Pasture S. of Highstead, Hoath, 62.
- 6) Mounts R[oa]d PCH. Swanscombe Wood PCH.
- 10) Otford PCH. R[iver] path N of Shoreham PCH. S. of S. Darenth PCH. St Johns Jerusalem PCH. E of Farningham R[oa]d St[atio]n PCH. Headcorn Ch[urch] y[ar]d, '62.
- 11) West Street, Harrietsham, BD. E. Malling. Maidstone **MNE**. By Pond E of Hale St[reet] CAS. Edenbridge Tip DPY.
- 13) Southborough Common HNC.
- 14) Wittersham Ch[urch] y[ar]d '62.
- 15) Lydd Airport DMcC.

‡ *H. murinum* ssp. *glaucum* (Steud.) Tzvelev<sup>1042</sup>

[15, 16.]

*Shoddy alien*

- 4) Sandwich 1960, MNE.
- 9) Birchington 1960 MNE.
- 10) Brasted 1960. All DMcC.

*H. secalinum* Schreb.

[Meadow Barley.

[15, 16.]]

- 1) Shooters Hill, GMB.
- 2) Erith Meadows PCH. Barnes Cray, '44 **MNE**. Stone Marshes. Swanscombe Marshes. N. of Cuxton 1945 **MNE**. All Hallows 45 **MNE**. Grain. Lower Stoke 1959 **MNE**. Pastures, S. Chetney Marshes, 62. Oare Meadow HMW. N. of Leysdown '56 **MNE**. Sheerness AED [*sic*, for AGD], 1918 **MNE**. Shellness 1960 **MNE**.
- 3) Swalecliffe.
- 4) Marshside Chislet 225661, 62. Past[ure] N. of Shuart, 270686. Sandwich Bay, meadows to rear.
- 8) Denton, meadow, DACL. Kingsdown, above Knights' Bottom, B.N.
- 10) S of Darenth Ch[urch] 1954 **MNE**. Meadows above S. Darenth PCH. Meadows N. of Bat & Ball, S[even]oaks 1950 **MNE**.
- 11) Meadow on Gault SE of Trottisliffe 1945 **MNE**. E of Edenbridge 1950 **MNE**. W. of Penshurst, 1949 **MNE**, 1963. E. of Chiddingstone, 1949 **MNE**. R[ai][wa]y bank, Hildenborough, 563482, CAS. Goose Green, CAS. Meadows above Tonbridge. Meadows below Tonbridge. R[oa]dside, Ulcombe to Grafty Green, B.D. Yalding meadows 1957 EGP, **MNE**. R[oa]dside Leighbridge, Headcorn 813454, '62. Past[ure] E of Buckhall Betersden, 917397, '62. Past[ure] ¼m SE of Smarden, 879417, '62. E of Headcorn 1956 **MNE**. By Pond E of Hale St[reet] CAS.
- 12) 93 Stubbs Cross Kingsnorth, 1952, **MNE**. 95 Meadow E of Ch[urch], Lenham, 1960 **MNE**.
- 13) 63 By pathway to church, Lamberhurst, 1939, J.R.W. Weed Forest plots, Bedgebury, '58, LJ Davies. [Tun[bridge] Wells, W.W.R. **TLS**.]
- 14) 83 R[oa]dside E of Cranbrook, DS.
- 15) 13 Hythe JG. Dungeness F. Swain. Shirley Moor, 1965.
- 16) 13 Postling Wents KDR.

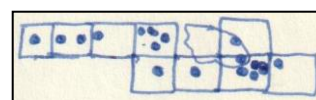
*H. marinum* Huds.

Sea Barley.

15, 16.]

*Native. Sea-walls and dry banks near the sea, usually of clay: frequent to locally common in the Thames estuary from Stone to Shellness in Sheppey and Whitstable in 2), but rare in 4) and 15).*

- 2) Stone Marshes, 1945. Northfleet Marshes, 1946. Seawall, Higham 1962, HAS. W. of Yantlet 1954 **MNE**. All Hallows, 1945 **MNE**. Grain, 1945, **MNE**. L[owe]r Stoke 1949 **MNE**. Seawall N. of Oare, C.T. Seawall, Nagden, B. Dodds. Chetney Marshes, seawall, dike banks and creek margin, '62. N. of Blacketts, Tonge, 1958 **MNE**. Cuxton 1890, H.L., **MNE**. Faversham Creek 1956, Rev. D. Murray. N. of Leysdown 1949, '56 **MNE**. Shellness, 1956 **MNE**. Graveney DHK, 1957 HMW. W of Seasalter, 1951, DMcC.
- 3) 16 Shore W of Whitstable HMW.
- 4) Kingsdown, beach, KDR.



<sup>1042</sup> Given as *H. glaucum* Steud.

15) Between the long pits, Denge Beach, J. Harper. [Dymchurch, 1902, Lady D.]

‡ *H. geniculatum* All.<sup>1043</sup> [Mediterranean Barley. 15, 16.]  
Shoddy alien.

4) Sandwich, DMcC 1960; **MNE**.

11) Comp, DMcC 1960, 61 **MNE**.

‡ *H. trifurcatum* Jacq.<sup>1044</sup> Belvedere, Poore & St.J. M., *BEC Rep.* 1922, p.754.

## Secale cereale<sup>1045</sup>

*Triticum* L.

*T. aestivum* L. [Bread Wheat.]

Yalding, E.G. Philp, 15-6-1957.

## Danthonia DC<sup>1046</sup>

*D. decumbens* (L.) DC<sup>1047</sup> [Heath-grass. 15, 16.]

1) Chislehurst Common, 1945- **MNE**. Hayes Common, 1944-. St. Pauls Cray Common, 1946-. Keston Common, 1945-. Dartford Heath, 1960 **MNE**. Sparrow Fields, Swain.

3) Minching Wood, Blean 1957 **MNE**. Heath, Church Wood, Blean, RGW.

4) Worth Minnis, 1950, **MNE**. Ham Fen, in meadow, 1956 **MNE**.

5) Downs in Chevening Park, 1961 **MNE**.

8) Chalk Downs, E. of Etchinghill. 1946-. Covert Lane, Kingston, 1946 JG.

10) S. of Sevenoaks, 1944. Rose Wood, Ightham, 1944.

11) Wrotham Heath, 1946-. Oaken Wood, by Barming R[oa]d., 1943 JHL. Kings Wood, Langley, 1949, DMcC. Platt, DMcC, 1949. Sandway bog, SW of Lenham, 1954 **MNE**. Hoads Wood, 1946, **MNE**.

12) Hothfield Common, 1943-62 **MNE**. Ashford Warren. Willesborough Lees. Monks Horton bog, 1953 **MNE**. Fen meadows, Cuckoldscoomb, Brook, 1945 **MNE**. Gibbons Brook, 1954 **MNE**.

13) Hawkenbury Bog, JRW, 1944-6; 1963, R.E.Sh[orocks]. Free Heath, Lamberhurst, JRW. Pembury Woods, 1961, CAS. Combwell Wood. Kilndown Wood. Pinetum, Bedgebury !GMB. Old Park Wood, 1946. Angley Wood. Stone Cross Gill, Ashurst, '59, CAS. By Brighton Lake, T[unbridge] Wells c. 1960, CAS. Chittenden Wood 1944-58 **MNE**. Southborough Common HNC.

14) Heath n[ea]r Breeches Pond, 1947.

## Molinia Schrank

*M. caerulea* (L.) Moench. [Purple Moor-grass.] 15, 16 23/52

1) Chislehurst Common **MNE**. St Pauls Cray Common. Keston Common, on damp heath and in the bog, AG Davis, 1915 **MNE**, 1944-62! **MNE**. Joydens Wood. Hayes Common. Woolwich Repository Grounds, LRAg, 1934 **MNE**.

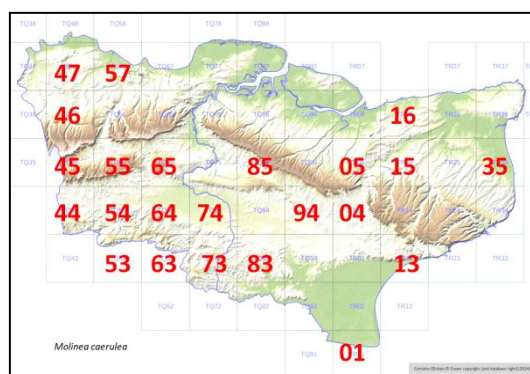
3) 16 W Blean Wood, 1945. 15 W of Rough Common, 1954. 15 Church Wood, L.W.W.; RGW. 05-.

4) 35 Worth Minnis, 1946 **MNE**.

10) 55 Boggy bottom, SW corner of Seal Chart, 1954. 55 E part of Whitley Scrubs, 1949. 55 By Ponds, Rose Wood, Ightham, 1945-62. 55 Bog, Oldbury Hill. 45-.

11) 65 Heath in Valley Wood, Wrotham Heath, 1945-61, **MNE**. 65 Platt Woods. 85 Sandway Bog, Lenham, 1965, B. Dodds. 94 Hoads Wood, 1946, **MNE**.

12) 94 Hothfield Common 1944-62 **MNE**. 04 Ashford Warren 1944-. 04 Willesborough Lees, 1944-55 **MNE**.



<sup>1043</sup> Given as *H. hystrix* Roth.

<sup>1044</sup> = *H. aegericas* Nees ex Royle.

<sup>1045</sup> Included in a note: *Guizotia abyssinica*, *Hordeum distichon*, *Secale cereale* – Longfield tip, 3657, PCH.

<sup>1046</sup> Given as *Sieglingia* Bernh. In the manuscript.

<sup>1047</sup> Given as *S. decumbens* (L.) Bernh. in the manuscript.

**13)** Highfield, Chiddingstone, 1954, **MNE**. Southborough Common. Broke Wood, Southborough, 1953-54. Tun[bridge] Wells Common, 1895 HL, 1945! **MNE**. Hawkenbury Bog, to '63. Pembury Woods. Hayes Wood, Pembury, 1953. Bog by Furnace Pond, Horsmonden, 1954. R[oa]dside NE of Kippings Cross 1946. Hook Green JRW. Chingley Wood. Kilndown Wood. Combwell Wood l[ocally] d[ominant] in NE. Pinetum, Bedgebury. Louisa Lake, Bedgebury. Brewers Wood, 1946-60. Angley Wood, 1946-61. Oaks Wood, Cranbrook, 1945. Chittenden Wood 1946-62 **MNE**. Causton Wood, 1946-62. Rogers Wood, 1954, **MNE**. Roundhill Park Wood 1954. Sissinghurst Park Wood 1948-62.

**14)** Sandpits Wood, 1948. Brogues Wood, 1948.

**15)** Dungeness, old ballast pit workings, 1958, Miss B. Nash, **MNE**.

#### **Phragmites** Adans.

**P. communis**<sup>1048</sup> (Cav.) Trin. ex Steud. Common Reed. 15, 16 /51  
Native.

\*Bronze Age, Roman: macroscopic remains, Crossness, Spurrell, 1889.

**1)** R[ai]l[wa]y Brockley to Honor Oak, 1946, ECW. Ruxley pits, S&S. 424640 Pond, Lakes Wood, Keston., 1957, DPY.

**2)** Woolwich Arsenal, 1944; PCH. Sewer Bank, Plumstead, PCH. Erith Marshes. N. of Abbey Wood 1934 LRAG **MNE**. Stone Marshes. Dartford Marshes 541761, '62. Barnes Cray. Greenhithe. Northfleet Marshes. Holborough Marshes. S. of Snodland **MNE**. Opp. New Hythe. 1m below Aylesford. Above Aylesford. Below Allington lock. Grain 1952 **MNE**. Cliffs, N. Coast, Minster. Harty. Elmley 1954 **MNE**. L[owe]r Halstow Fen, 857669, '62. Dikes by Oare Creek. Faversham Creek dikes. Seasalter. Luddenham Marshes HMW. Highham Marshes. East Church Marshes 1917, A.G.D. **MNE**. Sheerness Canal OD.

**3)** Swale Cliffe. Ditch by W. Blean Wood.

**4)** Wingham N. Wenderton BN. Hacklinge. Ham Fen. Worth Minnis. Preston Marshes '62. Marshside, Chislet, 225661, '62. Stodmarsh. Dikes N. of St. Nicholas 270686, 271692, '62.

**6)** Flooded chalk pits, Swanscombe, /S. of Northfleet.

**10)** The Moors, Bat & Ball, 530575 CAS.

**11)** Pond E of Bethersden ES, 941402. Pluckley Brickworks 919435, ES.

**12)** S.W. of Chilmington ES, 973400. Spot Ho[use], 973341, ES. Halfway Ho[use] S. of Kingsnorth by B2070, ES. E. of R[ai]l[wa]y, Rowling St[reet], 017367, ES. S Ashford 012420. S. Willesborough 010410, 017394, ES. Marshes N. of Willesborough 040445. Pond at Smeeth 067383, ES. Pond at Blackwall 040440 ES. Troytown 070442 ES. Potters Corner 990550 ES. Hothfield Lake 980545 ES. Carr E of Rooting Street, 963457 ES. Pond Kingsland, Westwell S, 995455 ES.

**13)** Furnace Pond, Horsmonden. [Tun[bridge] Wells, WWR **TLS**.

**15)** R[oyal] M[ilitary] Canal S of Ham Street ES, 003324. Shirley Moor, ES, 940320 etc. & N. of B2080, '65. S. of Appledore, 1952 **MNE**.

**16)** Folkestone Brickworks. The Warren.

#### **Leptochloa** [P. Beauv.]

**L. fusca** (L.) Kunth<sup>1049</sup> [Brown Beetle Grass. 16.]

**1)** Stonehill Green, shoddy, 1948, DMcC, det. CEH.

#### **Eragrostis** [Wolf]

**E. curvula** (Schrud.) Nees [African Love-grass. 15.]

**[4)]** Sandwich, D.McClintock, 1960.

**E. cilianensis** (All.) Vignolo ex Janch.<sup>1050</sup> [Stink-grass. 15.]

**[4)]** Sandwich, D.McClintock, 1-11-1959. Wrotham, D.McClintock, 1960.

#### **Eleusine** [Gaertn.]

**E. indica** [(L.) Gaertn. Yard-grass 16.]

**1)** Chicken run, Bromley, 1952, T.R. Eagles.

<sup>1048</sup> Cited as Trin. In the manuscript.

<sup>1049</sup> Given as *Diplachne fusca* (L.) Beauv.

<sup>1050</sup> Cited as (All.) Link ex Vign.

**E. indica** ssp. **africana** (Kenn. O'Byrne) S.M. Phillips<sup>1051</sup>  
 [11]] Wrotham, D.McClintock, 1960.

**Dactyloctenium** {Willd.]

**D. radulans** [(R.Br.)] P. Beauv. [Button Grass. 16.]

1) Stonehill Green Shoddy, DMcC, det. CE Hubbard, 1948.

**Chloris** Sw.<sup>1052</sup>

**C. truncata** R. Br. [Windmill Grass. 15.]

Shoddy alien, at

4) Sandwich, 1959, DMcC, **MNE**.

**Cynodon** Rich

**C. dactylon** (L.) Pers. [Bermuda-grass. 15, 16.]

1) Woolwich near Dock. 1934. PHC. Plumstead Marshes, 1934, LRAG & Miss Spratt **MNE**: = N. of Abbey Wood, 1953, 1954, G.M. Brown **MNE**.

2) Sheerness, 1964, Mrs. Hewson, plentiful on waste ground.

6) Longfield tip, DMcC, 1956 **MNE**.

†**Cynodon incompletus** Nees<sup>1053</sup>

[African Bermuda-grass. 15.]

Shoddy alien:

4) Sandwich, 1956, DMcC.

**Spartina** Schreb.

**S. maritima** (Curtis) Fernald [Small Cord-grass. 15, 16.]

2) St Marys Bay, St Mary Hoo, rare, 1958, **MNE**. Shellness! JEL: 1946-1960 **MNE**. Harty Ferry, Fl. Fav; 1945 **MNE**. E. Harty Marshes, 1946 **MNE**. W. Harty Marshes, 1947. Windmill Creek, E end of Elmley, 1949. Nagden Marshes, 1924, CES, BEC rep. 1924: 1949! et seq. 1945-1960 **MNE**. W. side Oare Creek, REW.

3) Whitstable, RGW.

**S. maritima** x **alterniflora** = **S. x townsendii** H. & J. Groves<sup>1054</sup> [Townsend's Cord-grass. 15, 16.]

Native. Salt marshes, now abundant. This allotetraploid hybrid appears to have arisen naturally in this country in Southampton Water. It is an aggressive colonist of mud flats and even of the lower *Aster* saltmarshes. It is not easy to separate natural and planted localities; it is often planted now to consolidate mud flats prior to reclamation. App[ear]ed 1870 in Brit[ain]. 1.<sup>st</sup> record for 15: for 16. Now common on the Essex coast.

2) Longreach Dartford, mudbank by R. Thames, Mrs. AG Side: 1962! Egypt Bay 1950. St Marys Bay 1958. E of AllHallows, 1946 **MNE**. Grain N coast 1948, 856756-893758: SE Coast 1946. Hoo Marshes. E of Frindsbury to Upnor. W. of All Hallows, 1954. Harty **MNE**. Elmley. Shellness, 1938 JEL, 1946-62 **MNE**. Stone / Gravesden, (fertile) 1962 HAS. Shorne Marshes W of Fort, 1961, 695748, HMP. Higham Marshes (fertile), PCH. Seasalter (Sportsman) 1946. Graveney 1946 **MNE**. Nagden 1946. Faversham Creek. Saltings, Funton Creek, '62. Cuxton Saltings, 1943-62 **MNE**. Borstal Saltings. Temple Marsh, Strood, rare, 1954 Fowey I[sland], EGP. Conyer, KDR.

3) W of Whitstable. Mouth of Swalecliffe Brook, 1950.

4) 61/36 Pegwell Bay. E. of Reculvers 1946. Saltings of Stour, Shellness to Richborough. Saltings, below Sandwich, 61/35, 1961, Miss B Nash.

15) Littlestone, 1902, ex Hb. Lady Davy, in Hb. ND Simpson. Saltings, South Brooks 1935 J.P.M.B., BEC 1935, p.46; 1947, JHL.

**Tragus** Haller.

**T. racemosus** (L.) All.

[11]] Wrotham, D.McClintock, 1960.

<sup>1051</sup> In the manuscript, given as a species, *E. africana* O'Byrne.

<sup>1052</sup> Cited as L.

<sup>1053</sup> Given as *C. hirsutus* Stent. In the manuscript.

<sup>1054</sup> Given thus, but all, or nearly all, of these records must be of *Spartina anglica*, which was not named as such until 1978.

‡ *Panicum* L.*P. schinzii* Hack.<sup>1055</sup> [Transvaal Millet. 16.]

7) Cobham F[ar]m, Lenham, in Buckwheat, 1950, DMcC.

‡ *P. capillare* L. [Witch-grass. 16.]11) Edenbridge, G. Talbot, BEC Rep. 1922, p.752. Addington, DMcC, 1947: 1947! Det. J.E.L. 1950! **MNE**.‡ *P. miliaceum* L. [Common Millet. 15, 16.]1) Bromley 1939 H. Newey. B[ritish] O[il] [and] C[ake] M[ills] Erith, DMcC, 1956. Beckenham, A.G.D., 1934 **MNE**. E. Wickham tip DMcC. Green Street Green (Farnborough) 1938, D.Mc.C. **MNE**.2) Snodland, 1955 **MNE**.6) Longfield tip, 1956, DMcC **MNE**.9) Pegwell Bay Cliffsend, 1958 LRA G **MNE**.

10) Sevenoaks tip DMcC.

11) Yalding Rubbish tip, 1961, CAS.

12) Deanery Canterbury MEM. Stadium C[anter]bury MEM.

13) Dunorlan T[unbridge] W[ells] CAS.

*Echinochloa* [P.] Beauv.*E. crus-galli* (L.) [P.] Beauv. [Cockspur. 15, 16.]1) Hayes gravel pit, 1915, AGD **MNE**. 1934, DMcC.

2) By Canal E. of Gravesend, 1945. Motney Hill, Rainham, DMcC 1951.

6) Allotments, Stone, HMP. Longfield tip, 1956, DMcC, **MNE**. Tip in Greenhithe pits, 1965, J.R. Palmer.

8) Walmer allotments, 1959, BN.

11) Bracken Hill Platt, 1949, DMcC. Boro[ugh] Green DMcC '48.

12) Goldwell q[uar]ry, 64 ES. Chylmington quarry ES.

‡ *E. frumentacea* [Link White Millet. 16.]]

6) tip in pit, Greenhithe, 1965, J.R. Palmer.

*Setaria* [P.] Beauv.*S. pumila* (Poir.) Schult.<sup>1056</sup> [Yellow Bristle-grass. 15, 16.]1) Beckenham, A.E.D. [*sic*, for A.G.D.], 1934 **MNE**. Shortlands, 1897, 1900, Dr D.T. Playfair. Green Street Green, Farnborough, 1938, DMcC **MNE**.

4) Carrot f[ield], Stodmarsh, MEM. Beet f[ield], Ebbsfleet MEM.

6) Broomhill, Strood, G.C.P. Bush R[oad], Cuxton, GCP.

8) Denton, garden, Miss D.A.C. L., 1958 **MNE**. Ottinge, Elham, 1940, EH Solly.*S. verticillata* (L.) P. Beauv. [Rough Bristle-grass. 16.]

1) Eltham FF.

6) Longfield Dump, DMcC. Wickham (Strood) F.F.

*S. viridis* (L.) [P.] Beauv. [Green Bristle-grass. 15, 16.]1) Woolwich Common, 1926, CH Grinling **MNE**. Beckenham, AE Davis 1934 **MNE**. S. of Farningham Wood 1947 DMcC. Green Street Green, 1938 DMcC.4) Walmer, Miss Schon & Miss B. Nash, 1960, **MNE**.

6) Longfield Dump DMcC.

8) Walmer, 1960, BN. Ottinge, Elham, 1936 EH Solly.

10) Sevenoaks tip, B[at] &amp; Ball CAS.

11) East Malling, JHL. Allotments close to Tonbridge Castle, 1950, KEB.

12) Deanery G[ar]d[e]n Canterbury MEM.

var. *weissmanii* [(Roem. & Schult.) Borbás

[ 3)]Sturry DMcC.

<sup>1055</sup> Given as *P. laevifolium* Haeck.<sup>1056</sup> Given as *S. lutescens* (Weigel) Hubbard.



**S. italica** (L.) [P.] Beauv. [Foxtail Bristle-grass. 16.]

1) Green Street Green, Farnborough, 1938, D.McC, **MNE**. E Wickham tip, DMcC.

6) Longfield tip, 1956, D.McC., **MNE**.

11) Yalding rubbish tip, 1961, CAS.

**Digitaria** Haller<sup>1057</sup>

‡ **D. ischaemum** (Schreb. ex Schweigg.) Muhl.<sup>1058</sup> [Smooth Finger-grass.]

‡ **D. didactyla** Willd. [16.]

1) Stonehill Green, shoddy, 1948 DMcC, det. CEH.

‡ **D. sanguinalis** (L.) Scop. [Hairy Finger-grass. 15, 16.]

1) Chislehurst; Bickley, DMcC (BEC (1937) 516).

8) (Garden of Miss Hutchence Elmer's End) Lyminge, 1955-56, Miss D.A.C. Long.

11) Addington, in arable, 1950, MNE.

16) Garden weed, Folkestone Leas, 1957, F. Clarke, Hb. DPY.

‡ **Sorghum** Moench

**S. halpense** (L.) Pers. [Johnson-grass. 16.]

6) tip in pit, Greenhithe, 1965, J.R. Palmer.

**Zea** L.

**Z. mays** L. [Maize. 16.]

10) Sevenoaks Dump, DMcC, '51.

13) Several plants, edge of Matfield Green, 1953, K.E.B.

**Sparganium** L.

**S. erectum** L. [Branched Bur-reed. 15, 16 9/51]

ssp. **erectum**

Native. Streambanks, ponds and ditches, in fresh base-rich water: widespread but only locally common: the distribution of the segregate, however, is incompletely known.

1) By small Pond on Keston Common, 1961, H.A.S.

2) 57 Dartford Marshes, 543772 & 541761, '62.

4) 26 Marshside, Chisle, 1962 **MNE**. 36 Minster Marshes, 1963.

6E) 77 Pond, Northward Hill, High Halstow, 1958 **MNE**.

11) Medway, above and below Tonbridge CAS. 84 Pond at Leighbridge Headcorn 813454, '62. 84 Beult S. of Headcorn Ch[urch], 831440, '62. 84 Pond ¼m SE of Smarden 879417, '62.

12) Ashford JG.

14) 82 Pond, Palstre Court, 1½ m W. of Wittersham, Oxney, 1958 **MNE**. 02 Brenzett; New Romney.

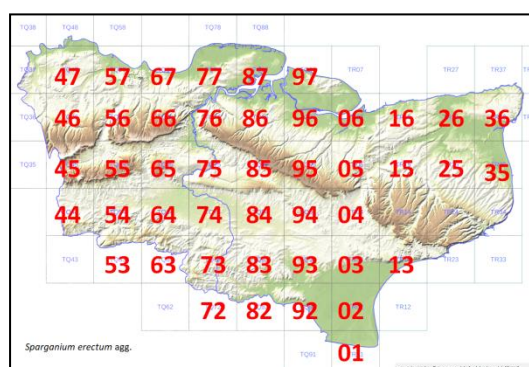
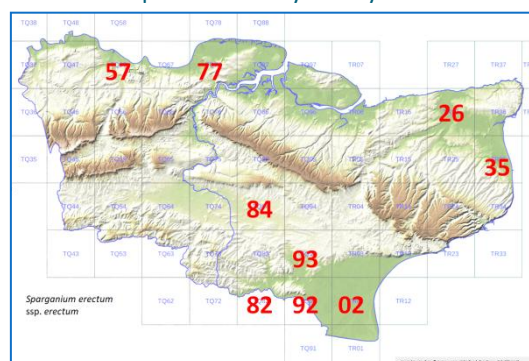
15) 93 Shirley Moor, near B.2080, 1945 **MNE**. 92 Appledore, dike near Station, 1959 **MNE**.

**S. erectum** L (agg.)

\* Bronze Age, Roman: fruit stone, Crossness, Spurrell, 1889, Reid, 1899.

1) Elmers End, Beckenham, 1915 AGD **MNE**. Shooters Hill, GMB. Ruxley Pits, S&S. R. Cray, N. Cray PCH.

2) Erith Marshes, PCH. Birling Common, 1943 **MNE**. High



<sup>1057</sup> Cited as P.C. Fabr.

<sup>1058</sup> Cited as (Schreb.) Muhl. and no entry given.

Halstow 1958 **MNE**. (Sheppey AGD, 1918 **MNE**.) Ripley Hill F[ar]m, 942735, O.D. 86 stream, Lower Halstow, 1962. Waystreet F[ar]m Hernhill, HMW. Luddenham Marshes, HMW.

3) pond, Denstroude, 093608, H.M.W.

4) Grove Ferry. Stodmarsh, 1955 **MNE**. 36 Minster Marshes 1963. Hacklinge. W. of Brooksend, Birchington, 1947, LWW. Wenderton dikes, B.N. Westbere Marshes, 1965, MEM.

10) 45, 55, 56.

11) Barming 1895: Maidstone 1888 **MNE**. N. of Marden 1948 **MNE**. ½m W. of Marden 1956 **MNE**. SW of Headcorn 1960 **MNE**. Kiln Wood Pond, Lenham, 1962. Addington Place DMCC.

12) Gibbons Brook, Mrs MJ Comyn .

13) 63 Ditch S. of Lamberhurst church, 1960, CAS, 684365. Dunorlan, CAS. Bayham CAS.

14) Beals F[ar]m Ponds, Redbrook St, Woodchurch, HW Adams. Palstre Court, Wittersham, 1958, **MNE**.

15) Shirley Moor, by B.2080 1945 **MNE**. Appledore by Station 1959 **MNE**.

(ssp. **oocarpum** and **microcarpum** have not yet been recorded in Kent.)

ssp. **neglectum** (Beeby) [K. Richt.]<sup>1059</sup>

15, 16

20/51

**Native.** Streamsides, ponds, swamps and ditches: common in such habitats, but segregate distribution probably not fully worked out.

2) 67 Northfleet. 77 S. of Cliffe. 76 Holborough Marshes. 65 Lunsford. 06 Faversham Ponds. 77 Higham. 77 Cooling. 76 Birling Common 1943 **MNE**. 86, Stream, L[owe]r Halstow 857669. 57 Ditch by Cray below Crayford, 1944.

4) 26 Stodmarsh, 1955 **MNE**. 35 Dike W. of St Georges Club House, Sandwich Bay, 1963.

10) Stream, Westerham, 441536, 1955, DPY. 57 Darenth.

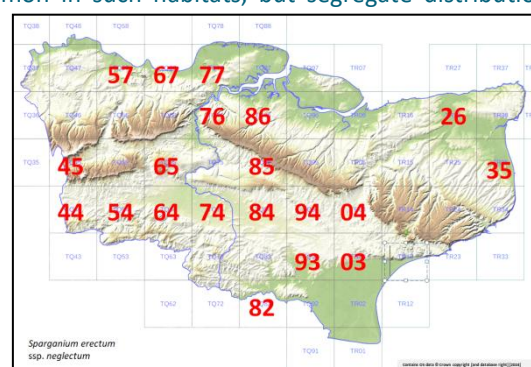
11) 44 Edenbridge, E.S. Salmon. 74 N. of Marden, 1948 **MNE**. 74 ½m W. of Marden, by Teise, 1956 **MNE**. 54 Pond, Hildenborough, ESM. Medway, above and below

Tonbridge, CAS. 74 Beult, Cross at Hand. Staplehurst 1963. 74 Beult E of Staplehurst 1963, 74 Pond W. of Staplehurst 1963. 84 R[iver] Beult / Moatenden, Headcorn. 84 Sherway, Headcorn. 74 E of Marden 1963. 54 W & E of Tonbridge. 54 Leigh. 64 Beltring. 74 Yalding. 54 W. of Penshurst. 54 N of Penshurst. 84 S. of Smarden. 84 Pond by River ½m SE of Golden Square, Smarden, '62, 886411. 93 Beult E of Buckhall, Bethersden, 1962, 917397. 849437, 1m E of Headcorn in Pond 1962. Near Brook Wood, SW of Headcorn, 1960 **MNE**.

12) 94 Pond W. of Hothfield Common. 04 Ashford, ESM. 04 Willesborough Lees ESM. 03 E. Stour near Sellindge, ESM.

13) 54 Pond N. of Penshurst. 54 South Park Lake, Penshurst, 1962. 54 Pond ½m N. of Penshurst, 1955.

15) Shirley Moor, N. of B.2080, 1965.



**S. emersum** Rehm. (*S. simplex* Huds. *pro parte*)

[Unbranched Bur-reed.

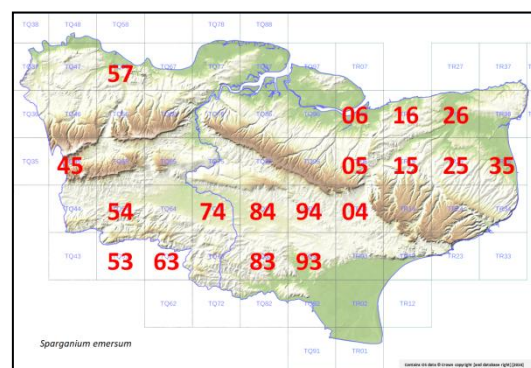
15, 16.]]

2) Greenhithe, 1860 **MNE**. Snodland Brook, 1870 **MNE**. 06 Nagden Marshes, C.T.

4) 35 Hacklinge Fen, 1946 **MNE**. 35 Worth Minnis. 16 Fordwich Marshes 1949 E. Robinson; 1963 MEM. West Bere Marshes, 1965, MEM. Littlebourne, by river, Mrs B. 25 Fen, Lit[t]le Britton, N of Wingham, 1960 **MNE**. 26 Preston Marshes. W of Birchington/ Brooksend, 1947, L.W.W.

10) 45 Pond N of Westerham, RAC, 1958. Marsh near Brasted Ch[urch], RAC, 1960.

11) Medway below Maidstone, 1897, H. Lamb **MNE**. 54 Medway, above Tonbridge, CAS. 74 Ditch by B.2162, N. of Collier St[reet], Yalding. Bubhurst, Frittenden, RAC. 84 R[iver] Sherway, Headcorn, 1944. 94 New Ho[use] F[ar]m, Pluckley, V.F.P.D.



<sup>1059</sup> Cited in the manuscript as (Beeby) Schinz. & Thell.

12) 03 Mersham Mill, E.S. 04 Stour. 94 Stour.

13) 63 Ditch S. of Lamberhurst Ch[urch], 1937, JRW: 1956! **MNE**. 53 Groombridge Park (vc.16) G.E. Shaw.

15) 83 Ditch by Windmill Channel, 867305, E. of Rolvenden Layne 1959.

**S. natans** L.<sup>1060</sup>

[Least Bur-reed.]

15

1/51

Native. Dikes in calcareous fens: very rare, but still locally abundant between Worth and Hacklinge: a relic of the flora of the primaevial fens of this area.

4) Fen dike, Worth Minnis, 1950-1960 **MNE**. Dike, ½m E. of Hacklinge, 1960, **MNE**.

**Typha** L.

**T. latifolia** L.

Greater Reed-Mace.

15, 16

50/51

Native. Ponds, streamsides, swamps, and ditches: common in these habitats and occurring in all districts except 5), 7) and 9), but (naturally) rare in 6) and 8).

1) Ruxley pits, S&S.Pond S. of Joydens Wood, PCH.

2) Plumstead Marshes, 1944. Northfleet Brooks, 1944.

Dartford Marshes (Longreach) PCH. Snodland S. Marshes, 1944. Tonge Pond, J.M. 96 Luddenham Marshes, H.M.W. Oare Meadow and Pond HMW. Pits E of Oare Creek, HMW. 06 Seasalter HMW.

3) Denstroude, Pond, 093608, HMW.

4) Hacklinge Marshes. West Bere Marshes MEM.

5) Pond, Downe village, 1960, FHB.

6) Marshy chalk pit SW of Cliffe, 1963.

6G)<sup>1061</sup> Northward Hill, 1958.

8) Dour, River, KDR.

10) Noahs Ark, Kemsing. Greatness Moors RAC. St Johns Jerusalem PCH. Pond, Westerham Wood, '82. Dartford Mill pond.

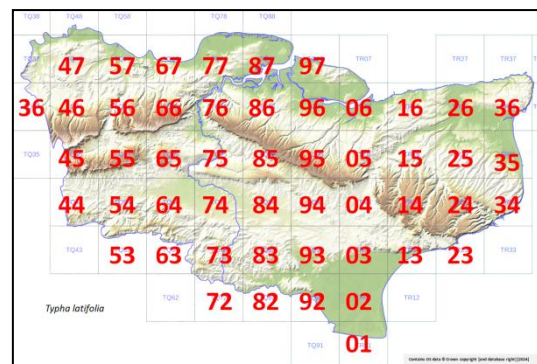
11) Pond on Gault, W of Ryarsh Wood, Trottiscliffe. Pond E of Hale St[reet], CAS. 886414, Pond E. of Golden Square Smarden '62. 849437, Pond E of Headcorn '62. Pluckley Brickworks ES. New H[ou]s[e] F[ar]m Pluckley VFDP.

12) N of Brabourne RAC. Hothfield Common. Stowting Marshes ES. Mersham le Hatch CNP. Pond, Westwell, CNP. New Lake E of Chilham ES.

13) Lake, South Park, Penshurst '62. Southborough Common, SW pond HNC. Bayham CAS. Boggy Wood SW of Pembury, 614395 PCH.

15) Romney Warren.

16) Gault ponds, Folkestone Warren, '65, BN.



**T. angustifolia** L.

Lesser Reed-Mace .

15, 16.

28/51

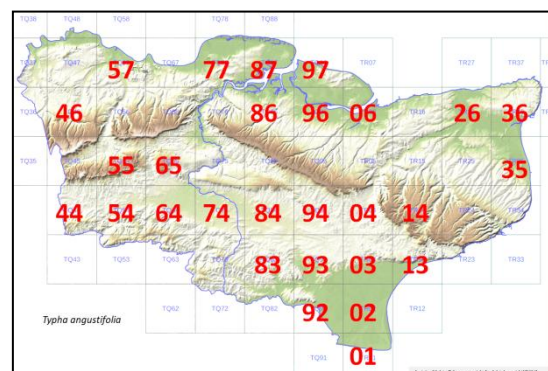
Native. Ponds, swamps, and ditches, in base-rich fresh or brackish water: locally common in 2), 4), 15), and on the Weald Clay in 11) and 12): rare in 1), 6), 10) and 13): unrecorded in 3), 5), 9), 14) and 16).

1) Ruxley pits, GMB; S&S.

2) N. of Abbey Wood. Dartford Marshes (Longreach) PCH. Shorne Marshes. Warden, Sheppey, 1917, AGD **MNE**. Higham Marshes, 1956, PCH **MNE**. Grain, 870752, DMCC. East church Marshes 1917 AGD **MNE**. Cliffe Marshes '62 HAS. St Marys Hoo Marshes. Snodland S. Marshes. Holborough Marshes, '63 EGP. Luddenham Marshes, HMW. Oare Marshes, C.T. Pits E of Oare Creek.

4) 96 Ditches N of Shuart, St. Nicholas, 270686, '62. E of Reculver 1947 DHK. Westbere Marshes, MEM, '65. Ham Fen 1991. 36 Minster Marshes, 1963.

6) Marshy chalk pit, SW of Cliffe 63.



<sup>1060</sup> In the manuscript, *S. minimum* Wallr.

<sup>1061</sup> This district lettering is anomalous, and surely 6E or 6A was intended.

- 10) Greatness moors RAC.  
 11) Edenbridge, A. Beadell. Pluckley Brickworks ES. Hartlake Bridge, JRW, 1943.  
 12) Eastwell Lake ES.  
 13) Penshurst Place.  
 15) Shirley Moor. Brezett. Hoppen Pits, Dungeness, 1952 **MNE**. Ditch by R[oyal] M[ilitary] C[anal], Appledore, 958294, 1962 HMP. Palmarsh, F. & C.A.Swain. Dymchurch.

## LILIACEAE<sup>1062</sup>

### **Narthecium** Huds.

**N. ossifragum** (L.) Huds. Bog Asphodel. 15, 16. 3/51

Native. Valley bogs and wet-heath: very rare, but very abundant locally at Hothfield Common; elsewhere now only at Keston Bog and Hawkenbury. Still locally common on bogs and greensand heath in W Sussex and in E. Sussex on Ashdown Forest: unknown in Essex, and long extinct in Pas de Calais.

\* 1746: Bogs n[ea]r Caesars Camp, Bromley, *Blackstone*, p.72.

- 1) Bog, Keston Common, A.G. Davis 1915 **MNE**: 1944-62! **MNE** →1990!  
 12) Hothfield Common, GES in FGEK; abund[ant] in Valley bogs II, also in III and IV; H. Lamb, 1900-01 **MNE**; 1943-62 **MNE** →1996!  
 13) [small bog S. of Hawkenbury, JRW, 1942; 1946!; CAS, 1957; 1963, R.E.Sh[orrocks]; by now destroyed, 1994.] [Kilndown Wood, J. Stirling, 1896, **TLS**; not refound though searched for thoroughly.]

### **Asphodelus** L

‡ **A. fistulosus** L.<sup>1063</sup> [Hollow-leaved Asphodel. 16.]

Alien: waste ground.

- 1) Beckenham, A.G. Davis, 1934 **MNE**.  
 1) Eltham, Mrs. Wedgewood, BEC Rep. 1921, p.400.

### ‡ **Hemerocallis** L.

‡ **H. fulva** (L.) L. [Orange Day-lily. 16.]

- 1) Ruxley pits, S&S.

### [**Colchicum** L.

**C. autumnale** L. Meadow saffron, Autumn Crocus.

Alien

- 3) Swalecliffe churchyard, 1950, R.E.W.

This may have been native formerly NE of Shooters Hill in moist fields (Cooper, *Fl. Met.*, p51) but it is certainly now extinct: the other records are improbable as *native* localities (Littlebourne and Cranbrook, Fl. K., N of New Hythe F.F.) for this species whose British distribution is markedly midland to western, though it is common in Central Europe. It has been commonly cultivated in Kent gardens for a long time. In Surrey it is probably extinct, if ever native, but may still occur very rarely as a native in both E. and W. Sussex. Extinct in Essex: not uncommon *inland* in Pas de Calais and Nord, but absent near the coast.]

### **Gagea** Salisb.

(**G. lutea** (L.) Ker-Gawl. [Yellow Star-of-Bethlehem.]

It is doubtful if this species has ever occurred as a native in Kent, within historical times at least. The two records are without confirmation and the habitats seem very improbable.

- 1) West Coombe Park (Greenwich) C. Finch: *Fl. Met.*

“Dartford”, Masters.

Not known as an indigenous species nearer than N. Hants (Preston Candover), though many examples of woodland on calcareous loam apparently suitable for it exist in Kent.)

<sup>1062</sup> The sequencing of Liliaceae here is as given in Stace (1997), on the basis that Francis Rose had begun revisions which might have been expected to bring the various species ordered in accordance with that sequencing. But the manuscript treats Liliaceae, beginning with *Narthecium*, as starting after Zannichellaceae, and has a narrower concept of Liliaceae (so separating out some species under Amaryllidaceae, so as to follow *Luzula*).

<sup>1063</sup> This species appears twice in the manuscript, with different records for district 1), both given here.



**Tulipa L.**‡ **T. sylvestris** L.

[Wild Tulip.

16.]

Alien, long naturalised.

[1] Chislehurst, Wollaston; Fl.K.]

6) Ash, c. 1860, Mrs. Ben. Harrison.

11) Ightham Court. Asylum Grounds, W. Malling, H. Lamb, Fl.K.; E. Bartlett 1882 **MNE**; 1944-51! **MNE**.

[13] Southborough, Blowers Hill, WWR, 1849.]

**T. gesneriana** (Garden Tulip) occurs as an escape at 1) Ruxley pits, S&S.**Fritillaria L.**[**F. meleagris** L.

Fritillary, Snakeshead.

[15, 16]

Possibly native formerly in alluvial meadows of the Thames and Medway Valleys; but now extinct: modern records probably refer to escapes or planted colonies.

1) Near Bromley, Curtis, c.1782: Fl.K.

2) Grassy places, Higham, Ann [*sic*, for Anne] Pratt. Upnor, Miss Young. Wouldham Marshes, in meadow, 1 plant, J. Hepworth: c. 1930, F. Forsyth.

6) Highfield, Shoreham, Robert Halker.

7) Above Detling, H. Elgar, 1896 **MNE**.11) n[ea]r Trottiscliffe, W. Bridge, 1921 **MNE**.]

Formerly native, now extinct, by the Thames in Surrey (Mortlake); in N France, in the Somme Valley nr. Abbeville.

**Lilium L.****L. martagon** L.

Martagon Lily, Turk's Cap Lily.

15, [16].

Possibly native. In woods on clay over the chalk: very rare, but known today in four natural-looking localities, and similarly recorded elsewhere in the past. On the Continent it comes no nearer than E. France; this is against it being a native of Britain.

6) Ash, "plentifully in a very wild situation" N.B. Ward, *Phyt*, III, p.300. Copse at Meopham, Beeby. "Grove at Cobham, planted?" E. de C.7) Hoath Wood, Ospringe, Mrs. W. Verschoyle, 1948: 1948-62! **MNE**. It is extremely abundant here in coppice among *Mercurialis* on a basic clay loam. 159501, S E corner of Hayfield, E. of Manor H[ou]s[e], L[owe]r Hardres, 1953 E. Day: DACL & ED., 8 pl[ants] 1955: 20 pl[ants] 1958, DACL.

8) S. of Penny Pot, Chilham, in Wood on clay loam, 093511, H.M. Wilks: 1961! Lords' Wood, Temple Ewell, 12 in flower, H.M. Wilks, 1961: 1961! in coppice in a valley on chalk, about ¼ mile from any house or cultivation. Bourne Park, Bishopsbourne, naturalised, 1942.

**Convallaria L.****C. majalis** L.

Lily of the Valley.

15, 16.

16/51

Native. Dry woodlands, particularly of sessile oak, on light acid soils: on Eocene sands and gravels in 1), 3) and 6E), on Pliocene sands in 8), on lower Greensand in 10), 11) and 12), and on Tunbridge Wells Sand in 13); widespread but only locally frequent; but locally dominant in the field layer in many woods in 1), 3), 6E) and 11). Much rarer in Surrey, Sussex and Essex: locally frequent in Pas de Calais.

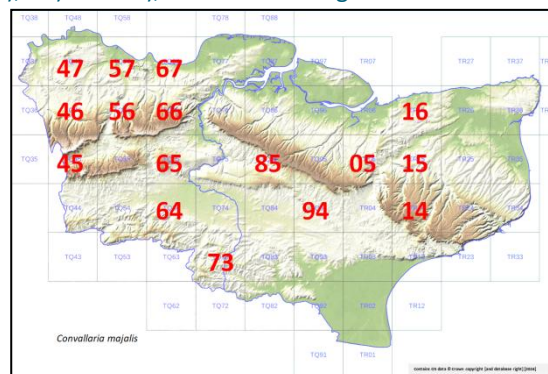
1) [Sydenham, J. Britten, *Phyt*. N.S. VI, 1863, p.592.][Abbey Wood, 1870, Hb. Lamb **MNE**.] 46 Spring Park

Wood. 46 In the drier shaded part of the valley bog, Keston Common, 1948. 57 Joydens Wood, 1945-64

**MNE**. 46 Holwood Park, 1949 **MNE**. 56 Farningham

Wood, 1945. 56 Ram Wood, E of Old Swanley, 1951. 47 Chislehurst, in wood in grounds of S.I.R.A. [British

Scientific Instrument Research Association], apparently a native relic. 47 Sessile oak Wood W. of Elmstead Lane, on pebble beds, abund[ant], 1965.

3) 16 Blean Rifle Range, REW. 15 Bigbery Wood, 1951 **MNE**. 15 Trenley Park Wood, 1950-. 15 Brotherhood Wood. 05 Joan Beech Wood. 16 Thornden Wood. 15 Church Wood, D. Stainer, REW. 15 Just E of stream, Oldridge Wood, 1950, **MNE** REW: a[bundant] 1956, R. Gorer. 15 Homestall Wood, REW.



- 6) E) 57 Darenth Wood, 1945-60 **MNE**. 67 Randall Wood, Shorne, 1949. Cobham Park, 685691, D.V. Woods. Holly Hill 668629, wood on Blackheath Beds, 1962 **MNE**.
- 8) 14 West Wood, Stowting, on Pliocene sands and to E: 1947-62 **MNE**. Whitehall Wood, E. Robinson. Walk Wood, Garlinge Green, Petham, 1964, ES.
- 10) 45 Brasted Chart, probably an escape, 1957, RAC.
- 11) 65 Mereworth Woods. 65 Valley Wood, S. of Wrotham Heath, 1956 **MNE**. 65 Wood E. of Church, Offham. 65 Platt Woods. Harrietsham. 85 Kings Wood, Ulcombe, 1883, H. Lamb **MNE**; 1950! **MNE**. 85 Kings Wood, Langley, 816515, 1959, 1960 Mrs. B. Dodds **MNE**.
- 12) 94 Ashford Warren, E. Scott: 1954!
- 13) [Tun[bridge] Wells, WWR, **TLS**.] 64 Wood, Pembury Walks, on T[unbridge] W[ells] S[and] n[ea]r R[oad], 1961, CAS. 73 S. end Angley Wood, 1956, D. Streeter: 1957! **MNE**. S of Milfield. Glassenbury Wood / Chittenden Wood: A.W. Hudson. ‡ Naturalised, Stone Cross Gill, Ashurst, 518381, 1960, CAS.  
(16) † Naturalised at Brockhill LJM.)

### Polygonatum Mill.

**P. multiflorum** (L.) All.

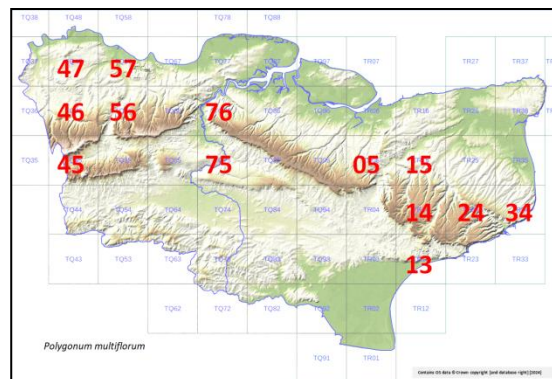
Solomon's Seal

15, 16

15/51<sup>1064</sup>

**Native.** Dry woodlands, mainly on sands and gravels; widespread and certainly native in old woodlands on the Eocene sands and gravels (especially the Blackheath Pebble Beds) in N. Kent, in 1), 6) and 3), and also on Pliocene and other sandy drift soils, and the chalk in 8); less certainly native, thought probably so, in 10) and 7). Only naturalised in 13), the plants appear to be of hybrid origin at least at Lamberhurst. As a native, very rare in Surrey and confined to the extreme west in Sussex: extinct in Essex (formerly in Epping Forest), abundant in woods on a range of soils in Pas de Calais.

- 1) 46 On Black[heath] B[eds] n[ea]r stream, Petts Wood, 1954 **MNE**. 46 On Black[heath] B[eds], Hockendell Wood, E. of St Mary Cray, 1954 **MNE**. 56 Thanet Sand, Farningham Wood, 538682, 1949-56 **MNE** 1982! 57 On Black[heath] B[eds], Joydens Wood, 1946 **MNE**. 57 Wood, E. of Bexley, PCH. 47 S.I.R.A. [British Scientific Instrument Research Association], Chislehurst, 1957. Black[heath] B[eds], Ram Wood, E. of Swanley Village, 1951-53 **MNE**. 46 Ravensbourne, Keston, A.G. Davis, 1912 **MNE**; 1955! 8 loc[ation]s in 1).



- 3) 05 Hunstead Wood, Chartham Hatch, 1956-1965 **MNE**.

15 Brotherhood Wood, 1947 Miss DACL. 15 Fishpool Hall Wood, RE Wood, 1950. [Hales Place Wood, 1948, Miss DACL – since destroyed.] 3 [locations] in 3).

- 6) 57 On Black[heath] Beds, Darenth Wood, F.J. Epps. 1 [location] in 6).

7) 75 By old lane up downs, 794588, on chalk, Detling, Coombe to N.W., 1944: 1957, HMW. Chalk Wood, Cades, Whitehill, REW. 76 Wood n[ea]r Westfield Sole, on loam over chalk, E. Philp.

- 8) 13 Postling Wood, on sandy drift, 1954! **MNE**. 24 Walderchain Wood, 1953 Alan Clough: 1955, Miss DAC Long. 24 Garratt Wood, Wickham Bushes, Lydden, JG: on chalk, 1956, DACL. 34 Napchester Wood on chalk, Miss B. Nash: 1959! **MNE**. 24 Winterage Wood, 200412, Acrise, Miss DACL, 1963. 14 Garden Wood, Acrise, Miss D.A.C.L., 1963. 6 [locations] in 8).

- 10) 45 Parson's Marsh, Brasted Chart, on Hythe Beds chert, 1958, P.A. Hitch & FR. † 505556, copse N. of Bessels Green, 1955 FSEF. † 512555, by stream Montreal Park, 1955, FSEF.

- 12) 05 on alluvial gravels, Shalmsford St[ation], alder wood by Stour, 2m NE of Chilham.

- 13) † By stream, Ashurst, 1940, Hon. Mrs Nightingale, comm.. AHWD, BEC Rep. 1939-40, p.296; naturalised, Stone Cross, Ashurst, 513381, 1960, CAS. ‡ Naturalised by track N. of Lamberhurst Quarter, 1944, JRW & FR. ‡ Garden outcast, W. end Tun[bridge] Wells Common, 1962, CAS.

- 16) 13 Asholt Wood, R.E. Wood, on Gault.

‡ **P. odoratum** (Mill.) Druce

[Angular Solomon's-seal.

16.]

**Alien in Kent.**

- [1] Reported at Joydens Wood in Hooker, Fl. Lond., Fl. K.: evidently an error, or confusion of nomenclature. I suspect that *Convallaria* was intended!]

- 13) Naturalised in planted woodland, Capel Place, Horsmonden, 1946.

<sup>1064</sup> The total should be 13; hectads 13 and 15 were double-counted.

(*Maiathemum* Weber

**M. bifolium** (L.) F.W. Schmidt

[May Lily.]

It formerly occurred in Ken Wood, Middlesex, where it may have been native. This Continental species is abundant in dry, acid woodlands in the more inland parts of the Pas de Calais and Nord departments.

13) Naturalised in the grounds of Scotney Castle, Lamberhurst, teste K.E. Bull.)

**Paris** L.

**P. quadrifolia** L.

Herb Paris

15,16

24/51<sup>1065</sup>

Native. Woodlands on moist base-rich or calcareous soils: very common in coppice on moisture-retaining loams derived from the chalk, over the greater part of districts 7) and 8), though apparently absent in 8) NE of the line L[ower] Hardres – Womenswold – Barfreton – Waldershare – Dover, and in 7) E. of the line Milsted – Doddington – Stalisfield. Unrecorded in 5); in 6) only near Halling. Frequent and characteristic of coppice-woods on the Gault belt from Westerham in 10) across 11) and 12) to Postling Wents in 16). In eighty ash-elm woods on the ragstone between Plaxtol and Elmstone Hole in 11): on Folkestone Sand at Sandling 11), and on Sandgate Beds at Kiln Wood, Lenham and Park Wood, Smeeth. Very rare and possibly now destroyed on the Thanet Sand in 7), still in 5 locations on this formation in 3); in the Weald only at Hawkhurst on calcareous Wadhurst Clay in 14), absent elsewhere. Probably commoner on the E Kent chalk area than elsewhere in Britain. It is very rare in Surrey (nearly confined to the extreme east) and has one E. Sussex [location] and a few West Sussex ones. Rare in Essex (except in the north on Boulder clay); abundant in N. France. Its rarity on the chalk of West Kent is at first sight strange, but the cause may be climatic: there may be an association between the wetter climate of the East Kent chalk country and the development of the deeper, moisture-retentive calcareous loams that *Paris* seems to require; other species (*Allium ursinum*, *Mnium stellare*, *Angelica*) show a similar pattern.

1) 439663, High Wood, Crofton, WCRW. 3 infl[orescences] 55, C. Swain, 1957! **MNE**, now destroyed. 462679, Broom Wood, St Mary Cray, WCRW. 432647, St Ninians Wood, Locks Bottom, WCRW.

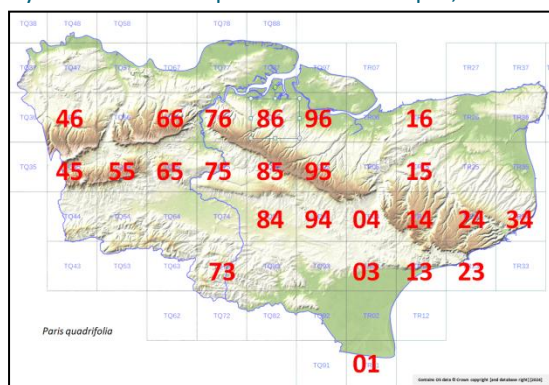
3) 15 Oldridge Wood, LWW, 1950. 15 Trenley Park Wood, NE end, 1949 **MNE**; SE of R[oa]d, REW. 16 Calcott Hill, 175620, Jane Hyde. 16 Dengrove Wood, 1955. West Blean Wood, E.P.

5) no records

6) SE of Cooling, E.P. 66 Bavins Shaw, Bush Valley, Halling, abundant, PCH.

7) 76 Tunbury Wood 1955 **MNE**. 76 S. of Bredhurst Ch[urch], 1961, 797616. 76 Westfield Wood. 86 Bredhurst Hurst 1944 **MNE**. 76 Wigmore, 1944. 75 N. of Detling 1942. 96 Cromer Wood, N of Milsted, 907604, J. Felton. 85 Wood S of [Three] Squirrels [pub], 1958, 840605 **MNE**. 85 Longton Wood, 827597. Squirrels Wood, 45. Lords Wood, BC. Hempstead, BC. Monkdown Wood, BC. 85 Hucking, NW of Pond F[ar]m, 838593. SE of Rumsted Court, 842595. 85 Wood in valley W. of Wormshill, 1943, 875575 & to SW, 871569. 85 Trundle Wood, Milsted, 1956 **MNE**, 888586. 95 Wrinsted Wood, Wichling, 901553, 1958 **MNE**. 95 Filmer Wood 925558. 95 Oaken pole Wood, 922546. 95 coppice ½m N of Ch[urch], Stalisfield, 970531. 95 coppice ½m E of Ch[urch], Stalisfield, 971518. 95 Wichling Wood 909555 **MNE**. 95 W. of Payden St[reet], 916542. 95 Spuckles Wood, Stalisfield, 960525. 95 Kennelling Wood, Stalisfield, 956520.

8) Wood SE of Longport, Crundale, 075483, 1955 **MNE**. The Junipers, Wye, 067474, PCH.; FR 42-55 **MNE**. SW of Podlinge 109467 DR Glendenning [*sic*, for Glendinning] 1953. E of Grandacre F[ar]m 104474. 04 Wood W. of Big Coombe F[ar]m, 076463. 04 Hurst Wood, 085465. 04 Fanscombe Wood, 076473 & 082476. 04 SE of Crundale Ch[urch], 090475. 04 N of Hassell St, Park Wood, 091471, ES. 14 Wood N. of Bavinge Farm, Hastingsleigh 62, 104469. 14 Copse SW of Hastingsleigh Ch[urch], ES, 100444, 099444. 24 Wood E. of Acrise Rectory, 204428. 14 (ch[al]k) Hunts Wood, Upper Hardres 147498, '62 **MNE**. Copse, N of Bossingham, 148495, 62. 24 (ch[al]k) Reinden Wood, Hawkinge, 221417, etc. 62. Spong Wood, RAC. 15 Burstard Wood, 163505. 14 Atchester Wood, 162485, 1961. 14 Elham Park, 155457 on Pliocene. Denge Wood 106515. Waddenhall, SE of Petham, 125493, 128493, 1956 **MNE**. 15 Iffin Wood, Petham, 137535, 1959 **MNE**. 14 Yockletts Bank, 1962, D. Cattlin, 127473. 14NW of Maxted Street, Elmsted, 126450. Winterage Wood / Garden Wood, Acrise, DACL.



<sup>1065</sup> The total should be 23; hectad 15 was double-counted.

14 Coombe Wood Stowting, 1954 **MNE** – 1972! 115423. 14 Sibton Wood, 143424, 1956 **MNE**. W. of Woodlands, 144413, '56, **MNE**. 14 Blacklands Carvet N of Woodlands, 147417, '50. 14 N. of Postling Wood, 146402. 14 Clavertye Wood 165453, 164455, **MNE** 1954. 14 NE end Elham Park Wood, 171469. 14 Coppice Lynsore Bottom, 159472, 1939-. 14 Copse E of Wingmore, 193467, 1955, **MNE**. Lords Wood, T[emple] Ewell HMW. 24 Swanton Banks, 252447. 24 Lit[tle] London, 255447. 24 Hall Wood, Swingfield, 233431, 1962. 24 E. of Swingfield, 236434, 1955. 24 North Court, Swingfield, 243440, 1955. 24 Copse (ch[al]k) S of S. Alkham 251415, 1962. 24 Woolwich Wood, 232485 & 236487.<sup>1066</sup> 34 2 copses N. of Lit[tle] America Waldershare, 303480 & 305481, 1954 **MNE**. 24 NW of Drellingore, 237415. 24 Sladden Wood, Alkham, 258428, '55 **MNE**. NW of Wolverton, 263431, 55 **MNE**. 24 SE of Chilton, 280431. 24 S. of Chilton 277427. 24 Coombe Vale, W of Dover, 286417, '55 **MNE**. (ch[al]k) Puckland Wood, Sibbertswold, 62. 24 Frandham Wood KDR. Reinden Wood. 24 Elms Wood, Hougham, 286415, '55. 24 SW of Chilveton Elms 277405. 24 E of Hougham, 257403. 23 Lady Wood, Capel, 236393 & 238390, **MNE** 1959. 23 S. of Hawkinge, 217393, 1960.

**10)** 45 Westerham Wood, 445553. Gault copse SW of Chevening (S. of Combe Bank F[ar]m), EP. 55 Copse S. of Kemsing, 563585.

**11)** 65 Lit[tle] Wrotham 54 **MNE**. 65 Boot Wood Plaxtol 54 **MNE**. 65 Swanton Valley, 640537, 1960, **MNE** & copse to E, 1962. 65 S of Mereworth, in damp Frax[inus] copp[ice] 655534 & 655530 **MNE**. 65 S. of Pizien Well, 672523. 75 Quarry Wood, W. Farleigh, **MNE**, 1957, 717521. 84 Elmstone Hole, 868497, coppice on basic loam, 1955, **MNE**. 85 Kiln Wood, Lenham, in Alder carr, '62. 85 Wood N. of Templetree, Harrietsham, 875523, Mrs B. Dodds. 66 Ryarsh Wood **MNE**, 1923 ASK; 1946. 75 Sandling Wood, 1955 **MNE**. 75 Park Wood, Boxley, 779580, 1956 **MNE**. 75 Horish Wood, 784575. 75 Palace Wood, G. Morgan. 85 Snarkhurst Wood, Hollingbourne, 1944 **MNE**. SE of Boxley, 7858, EP.

**12)** 95 Gault: S. of E. Lenham, 906515 & 909512, 1944 **MNE**. [95 Cobham Wood, 924507, G.L. Davidson (wood destroyed).] 94 Wood E of Westwell Leacon, 966477, E.S. 94 Westwell, by springs, ES. Copse, 109406 Water F[ar]m, Stowting, ES. SW of Westwell Leacon, 9547, E.P. 04 N. of Wye Station, 047476 & 048479, JHPS. 04 Wood E of Nackholt Wood 074427 ES. 04 Wood 073434, SW of Beddlestone, ES. 04 Troy Town (Wood to N.E.) 075442, ES. 04 Cadmans Wood, 082432. 03 Park Wood, Smeeth, 073384, E.S. 14 Stowting, by stream, 122413, 1954 **MNE**.

**14)** 73 Copse, Ockley, Hawkhurst, 1954, on calc[areous] flush (on Wadhurst Clay?) 763313, 1954, **MNE**. **73**

**16)** 13 Gault: Postling Wents, 150377 & 152375. 13 Coombe Wood, Newington, 173391, 1960 **MNE**. 13 Asholt Wood, 175382.

### Ornithogallum L.

(*O.pyrenaicum* L. [Spiked Star-of-Bethlehem] is native in woods in the Pas de Calais but in England no nearer than Hants and Berks, though it occurs as a probable introduction in W. Sussex and also as a garden escape at 8) Pickersden, Wye, 1951, CNP.)

*O. angustifolium* Boreau<sup>1067</sup> L Star of Bethlehem.

15, 16

17/51

Alien, well naturalised in sandy fields and heathland in several places; rare. It occurs as an alien in all the adjacent counties, but may be native in the Suffolk Breckland: it is regarded as native in Pas de Calais, though rare.

**1)** 46 Hayes, field behind church, 1946 **MNE**.

**3)** 96 Bysing Wood, 1959 **MNE**. Trenley Park Wood by cott[age]s, REW.

**4)** 35 Dunes N of Deal, 1963, Miss I. Moore. Sandwich Bay; Stodmarsh MEM.

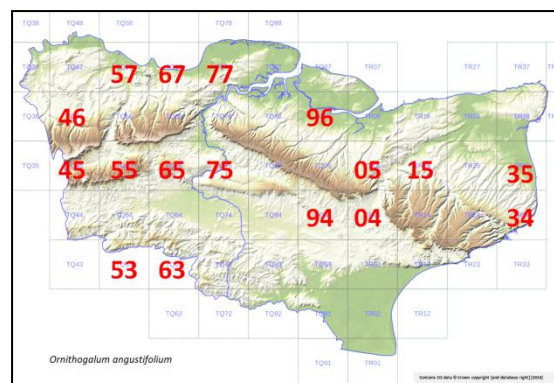
**5)** Cudham Ch[urch] Y[ar]d, DPY.

**6)** E 67 Shorne Warren FGEK; 1949! **MNE**. Swanscombe n[ea]r *Epipactis* pit, A.G.S. Pit, Greenhithe, T.H. Angel. 562715, Meadow Darent Grange, HMP, 1948-55.

**7)** Lords Wood, B.C. Covett Wood, Ospringe, Roberts.

**8)** Copse E of Bridge Hill, RGW.

**10)** 45. 55 Ivy Hatch, D.McC. 55 Seal, copse E of Godden Green Road, Miss Booker, 1947. B55 40 yrs at copse at Stone Street, Blakes Green Hill, 1948 Mrs D. Warnett, 1949!



<sup>1066</sup> Annotations of '(ch[al]k)' and '**MNE**' belong either to this entry or the next.

<sup>1067</sup> Given as *O. umbellatum* L. in the manuscript.

- 11) 65 Piney Toll, West Malling, in sandy field, 1942-56 **MNE**. Addington, P. Grattan. 75 E. Farleigh, A. Golding, 1905, **MNE**. Penenden Heath, copse edge, 773 578, 1956, O.D.  
 12) 94 Hothfield Common, 1948: 1960, HMP. 04 Willesborough Lees, in wood, 1955, P. Furneaux.  
 13) 53 among bracken, nr High Rocks Lane, Tun[bridge] Wells Common, 1949-53, K.E.B.; 1955, CAS. 63 Hook Green, Lamberhurst (vc14), G.E. Shaw (**TLS**).

### Scilla L.

[**S. autumnalis** L.

[Autumn Squill.]

[16]

Former native, now apparently extinct. Dry gravelly pastures and commons; very rare. Still in Surrey, Essex and Middlesex, but very rare; unrecorded in Pas de Calais.

1) Blackheath, Ray, *Synopsis*, 1696; E. Jenner, 1855; W.W.R., 1864; W.W.R. 1884; 1920, Miss Bacon, BEC Rep. 1921, p.400. No record since. W. of Eltham: F. Met. NE of Shooters Hill, M&G.

6E) Gravel pits, Chalk, Pocock. Shorne Warren, 1829, NBG. Not recorded since.]

**Hyacinthoides** Heist. ex Fabr.<sup>1068</sup>

**H. non-scripta** (L.) Chouard ex Rothm.<sup>1069</sup>

Bluebell.

15,16

.

48/51 Atlantic

abs[ent] 01, 02, 36

Native. Woodlands, or in shady hedge banks and road-cuttings, particularly on well-drained soils: extremely abundant throughout Kent wherever there is woodland, or remains of it. It is rare in beechwoods on shallow dry chalk soils, in ashwoods on shallow ragstone soils, but frequent on the deeper calcareous soils which prevail in valley bottoms on chalk and ragstone. It becomes scarce, though usually still present, on stiff gleyed clay soils with high water-table and poor drainage. It is most abundant on sands and gravels, except where highly acid and podsolised, and on the clay-with-flints and sandier drifts of the chalk plateau. It is absent from the alluvial sandier drifts of the chalk plateau. It is absent from the alluvial marshes of 2), 4) and 15), and from 9); but occurs as far east as Fenn Street in the Hoo Peninsula and in one oakwood at Brambledown in Sheppey on London Clay. Very common throughout SE England and Pas de Calais; fades out in NE France.

1) Abbey Wood, PCH. R[ai]l[wa]y N. of Ravensbourne Station. R[ai]l[wa]y W. of Shortlands Sta[tion]. Bromley Common. Keston Common. Holwood Park. Beckenham Place P[ar]k. Shooters Hill Woods 54 GMB. Ruxley pits, in copse, S&S. Farningham Woods, FR, PCH (82!). Joydens Wood, FR, PCH. Roundabout Wood, Crofton Heath PCH. High Wood, Crofton, FR, PCH. Scadbury Park, Chislehurst, 58. Ram Wood, E of Swanley Village. Hockendell Wood, '54. Bourne Wood, '54. Petts Wood, '54. Moor Grove, Bickley, 57. W. Wickham Woods, 1916, AGD **MNE**. Rowhill Wood, Wilmington.

2) Brambledown oak wood, 55, rare. Coppice, E of Fenn Street, St Mary Hoo, '55 (L[ondon] Clay). Hawes Wood, Newington. Oak copse N of Brambledown, 966719, rare, 14/4/1955.

3) Bysing Wood. Perry Wood. SE of Dunkirk. Blean Wood N. of Dunkirk, '55. Chequers Wood / Old Park C[anter]bury, 55. Thornden Wood 47. By stream, Church Wood W of Blean, 55, and Harbledown (N. of). Trenley Park Wood. Oldridge Wood. Pine Wood / Fir Downs, Littlebourne. N. Bishopsden Wood, '55. Copse S. of Highstead Hoath, 62. Shelving Wood / Marley Pits, H.... Hoath, '62.

4) Wenderton Wood, Wingham, A Grattan.

5) Wood W. of Shoreham, PCH. Pilots Wood, PCH. E of Berrys Green, Cudham. Cudham Frith. 396611, PCH. Sow Wood, Downe. Leasons Wood, Downe. Jewells Wood, Biggin Hill. Darwins Bank, Downe. Cuckoo Wood, Downe. 1m. S. of Cudham. Chevening Park Wood. W of Letts G[ree]n NW of Knockholt. ¼m W. of Knockholt Ch[urch]. W. of Scotts Lodge. NW of Grays F[ar]m. Brasted Hill. Hogtrough Hill. Rushmore Hill (Pratts Grove, Lattice Coppice). High Wood. Newyears Wood.

6) Darenth Wood, PCH FR. Lords Wood, Darenth PCH FR. The Thrift, Bean PCH. Great Crabbles Wood. Randall Wood, Shorne. Dunstall Woods, PCH. Magpie Bottom, PCH. Greenhills Wood, Otford. Wood, Beechy Lees, Kemsing PCH. Wingate Wood, North Wood, Red Wood, Horseholders Wood. Above Up[pe]r Halling, abund[ant] (valley too). Mounts Wood. Swanscombe Wood. Horton Wood PCH. Holly Hill top 668 229 (B[lackheath] Beds)<sup>1070</sup> '62. Court Wood Southfleet, F.J. Barker. Court Wood/ Hall Wood/ Ingram Wood/ Wessels Wood, Stansted, F.J. Barker.

7) Westfield Wood. Top of Boxley Warren. Bredhurst Hurst '55. Plateau N. of Detling, '62. Scragged Oak, 62. Cox Street, 62. Wood above Q[ueen] D[own] Warren, 55. Stockings Wood Detling, 55. (loam) a[bundant], Filmer Wood, '62. (ch[al]k) r[are], College Wood Norton, 62. Tassels Wood Norton 62. Park Bottom Wood

<sup>1068</sup> Given in the manuscript as *Endymion* Dumort.

<sup>1069</sup> Named as *Endymion non-scriptus* (L.) Garcke.

<sup>1070</sup> The Chelsfield Gravel Formation may be intended here.



Newnham '62. Coppice W of The Valley Otterden 62. Spuckles Wood Stalisfield on loam 62. Kennelling Wood Stalisfield on loam '62. Wood E of Lees Park, Sheldwich (loam) '62. Hucking Valley, 1950 **MNE**. Wood E of Valley c[lay] w[ith] f[lints] Lees Park Sheldwich '62. Longbeech Wood 975505 on Pliocene Sand 62.

**8)** Penny Pot; Denge Woods. Gorsley W[oo]d. Whitehill W[oo]d. Covert Wood. Fleet Wood Lydden. Lydden Hill. Woolwich Wood. Walderchain Wood. Alkham: Sladden Wood, Lockeringe, The Firs.. Wood NW of S Alkham '55. R[are] to f[requent] copse S. of S Alkham 62. O[ccasional], Hall Wood, Park Wood, Hill House: Scrayfield 62. Copse N. of Bavinge F[ar]m on clay loam '62. Wood W. of Podlinge 1962 9c[lay] w[ith] f[lints]). Wood W. of Misley F[ar]m Elmsted on loam '62. Stelling Minnis '62. Lane N of Bossingham '62. Hunts Wood U[pper] Hardres '62 & copse S. of Hunts Wood U[pper] Hardres. Postling Wood. Sibton Wood. Dingleton Wood. Gorsehill Wood T[emple] Ewell. Lords Wood T[emple] Ewell. Pitts Wood / Lower Frights, Adisham. Willow Wood / Denton Wood / Denton Court Wood, Denton. Pickleden Wood Wotton. On loam, Reinden Wood 62. Valley bot[tom], Reinden Wood 62. Puckland Wood '62. F[requent] Stafflands Wood 62. S[emi] d[ominant], Coppice E of Goodnestone (loam) '62. Lady Wood, Capel.

**10)** Rooks Hill '55. Wood NW of Everlands. Mid part Scords Wood. Ide Hill. Whitley Forest. Dibden Bottom. Flane Wood, Seal Chart. Oldbury Hill.

**11)** Ightham Village '55. Valley Wood, Wrotham Heath. Oakan Wood R[oa]d, Barming 55, **MNE** 1898 H. Lamb. Park Wood Boughton Mon[chelsea] '55. Wet Wood SW of Mereworth 55. Wood SE of L[owe]r St Clere 55. Leybourne Wood '55. Ryarsh Roughetts 55. Larkfield Heath 55 **MNE**. Holt Wood Aylesford 55. Sandling Wood 55. Park Wood Boxley. Kiln Wood Lenham (Sandgate & F[olkestone] Sands) '62. Shipbourne: Shipbourne Wood, Cold Blows, Clearhedges, Tinley Lodge, Poynt Wood, Kiln Wood, Peacock Wood, Claygate. Golden Sq[uare] Wood, Smarden, 885415, 1962. ¼m N. of Bough Beech; Wood by str[eam] 1m N of Bough Beech; Wet Wood N of 4 Elms by R[oa]d; E of Leigh by R[oa]d in copse: 55. Tonbridge Castle '55. Birch Wood, Bethersden, on alluvium by R[iver] Beult 915402, '62.

**12)** Hayton Wood, Monks Horton, 55. Nackholt. Mersham Park. Captains Wood, Bliby Wood, Court Lodge F[ar]m copse, Quarrington, Bockhanger, Barrack Wood: Mersham.

**13)** Wood N E of Cobhambury '55. Stone Cross Gill, Ashurst, 518381→, 1960, CAS. Modest Corner / Brookhurst Wood: Southborough, Crampton. By A21, wood S. of Combwell, 55. Combwell Wood, 1979. Roundabout Park. Birch Wood / Brookhurst Wood: Bidborough. Castle Hill / Park Wood / Cryalls / Humphries / Pilleridge: Brenchley.

**14)** Lit[tle] Pix Hall '55. Mopesden Gill 55. S[emi]d[ominant], Cast[anea] copp[ice] on Ash S, Knock Wood, Tenterden '62. Gill S. of Pigeon Hoo 62. Sandhurst: Clergy Wood, Hurst Wood, Alderden Wood, Risden Wood. Rolvenden: Slades Wood, Long Planting], The Tolls, Lambsden, Pookwell Wood, Windmill Wood, Brick kiln Wood, Stumble Wood, North Wood, Sparkes Wood Gill, Mount Lane, Cherry Garden, Whiting Wood, The squares, Rawlinson gill. Benenden: Strawberry Wood, Willards Hill, Seven Acre Shaw. Woodchurch [...]: Denne Wood, 05651, South R[oa]d Wood 05674, Barn Wood 05244, Godfrey W[oo]d 05247. A[bundant] – s[emi]d[ominant] G[reat] Heron Wood, Kenardington 62. A[bundant], Butness Wood Appledore '62. Standen Wood. Moor Wood Benenden (T[unbridge] W[ells] S[and]) 62. Parsonage Wood. Rook Wood E & W Gills, Wittersham '62. Shaw by B2082 Underhill F[ar]m Wittersham '62. Gill S. of Pigeon Hoo, '62. Knock Wood, Tenterden 62.

**16)** Lympe Park. Postling Wents. Asholt Wood. Sandling Park.

var. *lacaillei* Senay

**6)** Shoreham, 1926 W.B. Turrill, J. Bot (1930) 68, p112 (fl[ower]s white, perianth long & narrow, new to Britain.)

‡ **H. hispanica** (Mill.) Rothm.<sup>1071</sup> [Spanish Bluebell. 16.]

Alien, naturalised at:

**13)** Lamberhurst churchyard, 1961, CAS; Tun[bridge] Wells, 1960, CAS; High Brooms, 1960, CAS.

**Muscari** Mill.

‡ **M. neglectum** Guss. ex Ten.<sup>1072</sup> *M. racemosum* auct. [Grape-hyacinth. 15, 16.]

Alien in Kent, occasionally escaping and becoming naturalised. Native in East Anglia, but not in any adjacent county, nor in Pas de Calais.

<sup>1071</sup> Given as *Endymion hispanicus* (Mill.) Chouard.

<sup>1072</sup> Given as *Muscari atlanticum* Boiss. & Reut. Recognition that many escaped Grape-hyacinths were *M. armeniacum* only came in the 1980s.



4) Grove Ferry, REW.

6) abundantly naturalised on R[ail][wa]y cutting, Halling, 1943-49 **MNE**. Stone, well nat[uralised], 1940, PCH.

11) Hadlow, 1871, FWE Shrivell **TLS**.

16) casual, Brockhill, Saltwood, LJM.<sup>1073</sup>

[**M. comosum** Mill. [Tassel Hyacinth] occurs on the dunes in Pas de Calais.]

**Allium** L.<sup>1074</sup>

‡ **A. cepa** L. [Onion. 16.]

1) Escape, Ruxley Pits, S&S.

**A. roseum** L. [Rosy Garlic. 15.]

Alien, naturalised in one pace, formerly in another.

4) Beach opposite Walmer Castle, 1950 MEM; 1951, 1953, Miss D.A.C. Long, **MNE**.

11) Roadside, Thurnham R[oa]d, Bearsted green, D. Cattlin, 1960.

‡ **A. moly** L. [Yellow Garlic. 16.]

11) 1 plant in grassland by railway, W. of Tonbridge, CAS.

‡ **A. triquetrum** L. [Three-cornered Garlic. 16.]

[13]]one clump established in wet patch, Bull's Hollow, Rusthall, 1950, KEB; large patches, 1952, KEB.

‡ **A. paradoxum** (M. Bieb.) G. Don

13) Claremont R[oa]d, Tunbridge Wells, 1962-63, KEB.

**A. ursinum** L. Ramsons 15, 16 38/52

Native. Damp woodlands on base-rich moisture-retentive, but well-aerated loams or peats, under Alder or Ash coppice, and also on deep calcareous loams on the chalk; local and mostly on spring lines on the Eocene areas of 1) and 3), widespread and locally very abundant on the chalk, unknown in 5), very rare in 6) and 7) but plentiful locally in 8) from Wye to Dover and Adisham; abundant on the Ragstone of 10), 11) and 12), and along the river valleys on the Greensand, and on the Gault into 16; very rare on the Weald clay; abundant in gills in 13) and 14) wherever soils are base-rich; absent in the alluvial marshes of 2), 4) and 15). About 120 localities known. Locally common similarly on the Greensand and High Weald areas of Surrey and Sussex; local in Essex, locally common in Pas de Calais, especially in the Boulonnais.

1) NW part of Petts Wood (spring line) 1954, **MNE**. Kid Brook SW of Petts Wood. Wood by R[ai][wa]y NE of Kevington, St Mary Cray, 1954 **MNE**. b...Sundridge Park Avenue, Chislehurst, WCRW. 47 Abbey Wood, R. Burton. Darrick Wood 443652 F & C Swain.

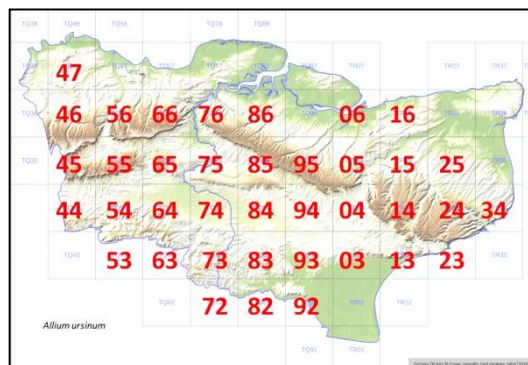
2) 76 By Medway NW of Eccles, 1944. [Aylesford, 1880, Hb. Lamb **MNE**.]

3) NE corner Thorden Wood, 1947. Damp copse SW of Hernhill Church, 1958 **MNE**. SW Chestfield, R.E. Wood. SE of Frogs Island F[ar]m/ SW of Share & Coulter Farm, Thornden Wood R[oa]d/ ½m S of this, E side R[oa]d/ REW.

6) 76 Wingate Wood, Cuxton, very local, 1945 **MNE**. Meopham, Miss Barnsdale.

7) 75 Copse, Hillfield Grange, Detling, '55.

8) Pickersdean, Fl K. Wood N. of Wye Crown. Copse N of Bavinge (loam and chalk) '62. Copse by Halfway Inn, A.2, Denton '55. Wood by Hastingleigh Ch[urch], 099444, 1959, P. Furneaux. Swanton Banks. E Brabourne Downs RAC. Bladbean. Postling Wood. Wood NW of Postling Wood 145403. Winterage Wood/ Garden Wood Acrise 63 DACL. Wolverton Wood. Coombe Vale, Dover. Caen Wood S of Coldred Ch[urch]. Woodlands, Lyminge. Sibton Wood. Lyminge Ch[urch] Y[ar]d.... Eastling Wood. Capon Wood Hunt Str[ee]t. Ileden Wood.



<sup>1073</sup> This line is placed as in the manuscript, possibly qualifying the *M. comosum* entry rather than continuing that for *M. atlanticum*.

<sup>1074</sup> Rose placed *Allium* under Amaryllidaceae, following the treatment of that family by J. Hutchinson (*The Families of Flowering Plants*, 1926-34).

Woods, Waldershare, Fl K. Frandham Wood, River, KDR. S. of Adisham in hedge, 223530, 1955 PCH. Bossington Wood, Adisham, L.W.W., 1949; 230555, 1955 PCH. Bishopsbourne by Nailbourne, 55. Patricbourne, G Mowat. Copse on deep calc[areous] loam, S. of Hunts Wood, L[owe]r Hardres 1962. Fryarne P[ar]k Wood, Lynsore, 1961. Wood W. of Misling F[ar]m Elmsted (loam) '62. Wood W. of Southhill, Hastingleigh RAC. Reinden Wood, l[ocally] a[bundant] on ch[al]k, '62. Copse S. of S. Alkham (ch[al]k '62. Oakwood on ch[al]k, E side Goodnestone Park, '62.

**10)** Scords Wood, in carr at base, 1954 **MNE**. SW of Ide Hill 1954. Base of Brockhoul Mount 505515. Westerham Wood 82. W of Ightham Mote. Everlands, 508518, R.A. Clarke. N. of French St, Westerham (copse by str[eam] on Hythe B[eds]) 1954 **MNE**. Boot Wood, Plaxtol. Dibden Bottom. Gault SE of Kemsing (Hills Wood).

**11)** Ryarsh Wood, NE corner by stream, abund[ant]. Lunsford Osiers. Sandling Wood by str[eam] 55. Buttons Bourne. Basted Mill. Quarry Wood Loose. Copse by Medway, E. Farleigh, 1954. Loose Valley. Otham. Fulling mill. 921457 Park Wood, Pluckley, '54. Welham Wood, B[oughton] Malherbe. Mereworth, Alder carr S. of village. Copse SW of Watringbury (Pizien Well). Chegworth. W. of Chegworth. W. Farleigh, Quarry Wood. E. Sutton 836497. Long Wood Borough Green. Old Soar. Harrietsham. Little Wrotham springs. SW of Hollingbourne by Len. Kent ditch W of Edenbridge RAC.

**W)** 1½m S. of Yalding. Tonbridge Castle '55. Wood by str[eam] 1m N of Bough Beech '55. Hartlake. 1½m NE of Hadlow. SW of Hever → Gilrich. ...Gabriels S of Edenbridge. S. of Bough Beech. N of Chiddingstone bridge. NE of Leigh by R[oa]d and St[at]io[n]. Millbay Wood W. 1m E of Delaware. E of Collier Street.

**12)** Copse S of E Lenham. Troy Town, Brook. Bowley F[ar]m, Lenham '54. SW of Charing Heath, ES, '54. By Ponds W of Lit[tle] Chart. Brabourne Coombe. Fordswater S of W Brabourne. Sellindge Ch[urch] y[ar]d RAC. By A20 SE of Charing. Cadmans Wood, Bulltown. Carr, Stone Hill Sellinge [sic]. Brabourne Lees. Bybrook. NW of Ashford Warren. SE of Charing on Gault (many loc[ation]s). East Well Lake, E end swamp ES. West Well springs. 05 Thicket by Chilham Hill, '45 DHK, abund[ant]. 03 Park Wood, Smeeth, 54.

**13)** Furnace Pond, Cowden. Scarletts, Cowden. Howletts, SE of Edenbridge. Loch Skinners, SW of Chiddingstone, 1943 **MNE**. Stream S. of New Church, Pembury. Copse by R[iver] Teise, Hoathly, Lamberhurst, '55. Southborough, Vauxhall Lane Bottom HNC. Chingley Wood, S end. Wood S. of Chingley Wood. ¼m S of Goford. ½m S. of Sissinghurst. Tong F[ar]m Brenchley. Gill N of Goudhurst. By River, Groombridge Village. Groombridge Hill. Str[eam] 1m SE of Tonbridge. Friezeley Wood. S of Postheap Kippings Cross. S of Horsmonden Pit/Stream. Near Lamberhurst. Batts Wood, Goudhurst, L.J. Davies.

**14)** Mopesden gill, '55. By A.229 N of Hawkhurst. Robins Wood, Cranbrook. W. of Lit[tle] Oven Wood. Gill S. of Tenterden, 1949. Penhill, Tenterden. W. of Iden green. Gill Wood, Owley, Wittersham. SE of Conghurst on S[use]x b[oun]d[ar]y in copse, '55. A229, 1½m S. of Hawkhurst 55. Wood SW of Lit[tle] Conghurst, Hawkhurst 55. Gill NE of Rolvenden. 1m N of Rolvenden. Bodiam Br[idg]e Sandhurst b[ri]dg. Babbs Gill. Hawkhurst Ch[urch]. Ockley Hawkhurst. SE of Rolvenden. Rolvenden St[at]io[n]. Dingley Gill. Gill NE of Benenden. S pf Tenterden Golf Course 903337, ES, 47. Copse, Buckhurst Br[idg], 915349, ES, 46. Bottoms, Appledore, J. Ridley, 1908 **MNE**.

**16)** Asholt Wood. Mill Leese Shaw n[ea]r old Sta[tion], Hythe, LJM. Oak Banks, Stone F[ar]m, Saltwood, LJM. Holywell, Folkestone, 1948, B.W.

**A. oleraceum** L. [Field Garlic.] 15, 16 3/51

Possibly native. Dry hedgebanks and grassland; very rare.

**7)** Hedgebank S. of Borstal, 1946: destroyed by new motorway, 1963. Bank at Whitehill, Wye, 1960, R. Gorer.

**8)** Roadside ¾m N. of Street End, L[owe]r Hardres, 1959, BJB.

**11)** Open area in Sandling Wood, G. Morgan and EG Philp, 1958 **MNE**. Hedge by Roadside, Comp, W of Offham, Mrs Denton, 1962, comm. K.E.B., 1963! 200yds E of crossroads, 642 570(5). E. Farleigh, H. Lamb, 1890, 1901 **MNE**; Rev Fielding, 1893 **MNE**. Holland Road, Maidstone, 1958, E.G.P. **MNE**.

‡ **A. ampeloprasum** [L. Wild Leek. 16.]

*Alien:*

**11)** Addington, 1947, DMCC.

‡ **A. scordoprasum** [L. Sand Leek. 16.]

**2)** Landward side of ditch behind sea wall, 2m. E of Gravesend.

**A. vineale** L. Crow Garlic. 15, 16.

Native. Fixed dunes, dry grass-heaths, turfed shingle beach, dry banks: locally common to abundant on the coast, rather rare inland. Local in Surrey and Sussex, commoner in Essex as a weed of cultivated land. Frequent on dunes in Pas de Calais.

- 1) Hayes Common, 1948: GMB. Dartford Heath, 1962, H.A.S. (var. *vineale*). Wilmington, A.C. Tagg, 1938 Notes. [Chislehurst Common, WCRW.]
- 2) Northfleet Marshes, on bank, 1946. Stone Marshes, 559751, in scrubland, HMP. Sheerness, A.G.D., 1917, **MNE**. Weed, Graveney, RTh. 06 Seasalter (vars. *bulbiferum* and *compactum*), RGW. All Hallows (var. *compactum*) 1950, J. Morton (**BM**).
- 3) Swalecliffe, mouth of brook, RGW. Chestfield, P.R. Bell.
- 4) Deal links; Sandwich Bay 1945-62 **MNE** (vars *capsuliferum* and *vineale*); St Georges; Princes Links, abund[ant]. W. side Lampen Wall, Stodmarsh, REW. Roadside, Stodmarsh, MEM.
- 6) Green Street Green 1946; 1963, HAS (vars *vineale* and *compactum*). Shorne by Windmill, 1946, **MNE**. Shorne, R[oa]d verge, S of Kings F[ar]m, 702726, HMP.
- 11) by Medway, Tonbridge, 1944. Hartlake Bridge, 1943, RW. Gravel pits W of Brandbridges, 1956, CAS. By Medway S. of Golden Green, G.E. Shaw; 1962, A.P. Brown. Leybourne, DMCC. By A20 W. of Hollingbourne, 1946. R[oa]dside Ditton Laboratory CW. Medway Bank, Allington, EGP.
- 13) Kent College, Pembury, 1960, F.R.B. (var. *compactum* Thuill.).
- 14) Cranbrook R[oa]d, Tenterden, 1962.
- 15) Romney Warren, 1962 (var. *compactum*) RGW. Lydd Common. Dungeness 056203 H.M.M. (var. *vineale*). Hythe, LJM, 1956 **MNE**. Hythe shingle beach, near Range Canteen, 1958, **MNE**.
- 16) Folkestone Leas, '46.

### **Tristagma** Poepp.<sup>1075</sup>

‡ **T. uniflorum** (Lindl.) Traub<sup>1076</sup> [Spring Starflower. 15, 16.]

Alien, occasionally escaping and becoming naturalised.

- 3) Whitstable Castle, REW.
- 11) Oaken Wood, near North Pole Inn, Teston.

### **Leucojum** L.

**L. aestivum** L. [Summer Snowflake. 15, 16.]

Former native, now extinct, of alluvial marshes by the Thames and Medway. It now exists no nearer than the Thames and Loddon Banks in Berkshire.

- 2) [½ mile below Orchard House Ferry, Greenwich, on Thames bank, 1821, C. Johnson, *Hortus Delineatus*.] [Greenwich Marsh, 1847, K. Chambers, (**BM**).] Plumstead Marshes, 1848/1850, Maidstone LNHS **MNE**. Marsh, Cuxton, Hb. Bed[ford] Coll[ege].
  - 11) [N[ea]r Tudeley, 1877, F.W.E.S., **TLS**.]
  - 16) Naturalised at Brockhill, LJM.
- Alien, naturalised in ornamental woodland in a few places.
- 10) Wood S. of Beechmont, Riverhill, Sevenoaks, 1949, Mrs Warnett (sp!) **MNE**, 1950.
  - 11) Tinley Lodge, Tonbr[idge], Mrs D. Warnett.
  - 12) Brook, MEM, in ditch by cott[age].
  - 16) Naturalised in wood by stream SW of Brockhill School, Saltwood, 1962.

‡ **L. vernum** L. [Spring Snowflake. 15, 16.]

- 13) Groombridge, Mrs. Robinson, 1952, **MNE**.
- 16) Naturalised at Brockhill, LJM.

### **Galanthus** L.

‡ **G. nivalis** L. Snowdrop. 15, 16.]

Alien, naturalised in a few woods and near churchyards. Possibly native by the Mole in Surrey, but not in Kent.

- 3) Kenesdale, 1959, Mrs. B.; RGW.
- 5) Chevening Ch[urch] y[ar]d and copse NE of Rectory RAC.
- 6) Still ½ acre at Cobham Park, RD English, 1967. Holly Hill, J. Hepworth.

<sup>1075</sup> In the manuscript given as *Ipheion* Raf.

<sup>1076</sup> In the manuscript given as *I. uniflorum* (Grah.) Raf.

8) N of Westwood F[ar]m, Upper Hardres 608683, E. Robinson.

10) Wilmott Hill, 1943.

11) Wood NW of Plaxtol, 1945, CW. Penenden Heath, MNHS 1850 **MNE**: EGP, 1960.

Woodlands S. of Court Lodge, Harrietsham, 1961, B. Dodds. Spinney E. of Rectory, Harrietsham, 1961, B. Dodds.

13) Lamberhurst Churchyard, J.R.W.; 1961, CAS, and on Golf Course and by main road, CAS. [Angley Wood, formerly ASK.]

16) Naturalised at Brockhill LJM.

### **Narcissus L**

[‡ **N. x medioluteus** Mill.<sup>1077</sup> Primrose-peerless. 15, 16.]

4) Old r[ai]l[wa]y W. of Wingham 235575, 1953.

6E) Shorne Warren, 1947! 1948! **MNE**.

14) R[oa]dside n[ea]r Tenterden, Dr. Taylor, teste KEB.

[‡ **N. poeticus** L. ssp. **poeticus**<sup>1078</sup> Pheasant's-eye. 15, 16.]

[6) Shorne Warren, 1823, C. Johnson, *Hortus Delineatus*)]

12) Wet g[roun]d by Wye Sta[tion], KEB.

13) Stream below High Rocks, JRW: DMcC, D. Pigott, 1949. R[ai]l[wa]y bank, Tun[bridge] Wells West Sta[tion], KEB, 1962.

[‡ **N. [x] incomparabilis** Mill. [Nonesuch Daffodill. 16.]

13) Stream below High Rocks, D.McC., 1949.

### **N. pseudonarcissus L.**

Daffodil.

15, 16.

12/52<sup>1079</sup>

Native. Dry woodlands on sands and loams, rather rare and local, but locally abundant in a number of scattered localities, particularly in the gills of the High Weald. Formerly it appears to have been much commoner, particularly near London in 1). Locally plentiful in several parts of the Weald of Surrey and Sussex, very local and nearly confined to the N. in Essex: very local in Pas de Calais.

1) 47 [Charlton Wood, 1841, J. Forbes Young, **BM**.] 47 Abbey Wood, PCH.; 1839, Sansom, **BM**; 1944, abund[ant] and protected, PCH, 1954; G Matthews, 1950 **MNE**. [Copse, Poverest, Orpington, PHC.

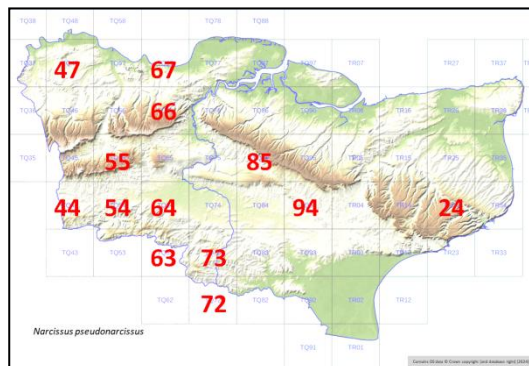
6E) 67 Randall Wood, Shorne, 1948. 67 Brewers Wood, Shorne, S. of Ridgeway, 1948 **MNE**. 66 Cobham Park, in oakwood with *Pteridium*, R.D. English, 1963 .

8) 24 Lockeringe Wood, Alkham, Miss D.A.C.L.: 1948-62! **MNE**. 24 Wood E of Wootton, Miss D.A.C.L.: 1950! **MNE**.

10) Chestnut Woods N of Bitchet Green! 563547, W. Breed; 565545, Mrs. Warnett, 1948. 45 Squerries Park, n[ea]r Cricket pitch, 1958, RAC. 55 Emmetts, Scords Wood, prob. native, RAC.

11) 64 Woods E. of Starve Crow Hill, Tonbridge, 1948, Mrs. Warnett. Wood n[ea]r Leeds, 1891, H. Lamb **MNE**. a[bandant]: copse W. of Warren Wood, Hollingbourne, 1964, Mrs B. Dodds. Kingswood, Ulcombe: EP. 44 Guildables Wood (N and by pond), Crockham Hill 1958, RAC. Meadow, Scotney Castle, JS, **TLS**.

13) 44 Hedgebank and pasture, N of Scarletts. Shernden, RAC. 44 Furnace Pond, Cowden, 1947 **MNE**. 63 Brick Kiln Wood, SW of Hook Green, (vc14) 1958, CAS. 44 Gill SW of Chiddingstone, JHL, 1948. 54, 64 Woods, South Frith, Tonbridge, CAS, 598437, l[ocally] a[bandant], 1957 (SE of Forest F[ar]m). 73 E Bank, tributary gill of Crane Valley 786362, SE of Cranbrook, abundant, D. Streeter. Robins Wood, Cranbrook, 764338, v[ery] a[bandant], 1956, DS. 73 Attwaters Gill, S. of Cranbrook, abundant, Burgess; 1944-51 **MNE**. 73 Horseshoe Wood, S. of Cranbrook, rare, 1945. 73 Mopesden Gill, W. of Hawkhurst, abundant, 1948-60 **MNE**. 72 Gill W. of Delmonden, W. of Hawkhurst, 1954 **MNE**.



<sup>1077</sup> Given as *N. x biflorus* Curt.

<sup>1078</sup> Given as *N. majalis* Curt. (*N. poeticus* auct.).

<sup>1079</sup> The stated total OF 12 does not match the 13 hectads shown on Francis Rose's rough map, which the transcript map follows. However, the real total should probably be 14, as the text lists a further square, TQ45.

ssp. **major** (Curtis) Baker.<sup>1080</sup>  
Pickleden, Chartham, DHK.

[Spanish Daffodil. 15.]

Garden *Narcissi* occur at Ruxley pits as escapes, S&S.

### **Asparagus L.**

**A. officinalis** L. ssp. **officinalis** [Garden Asparagus.] 15, 16. 7/51

Alien, inland: but it may well be native on coastal fixed dunes as at New Romney and Sandwich. This subspecies occurs on dunes in Sussex, and in Pas de Calais, where it is common on the dunes, and is regarded as a native by some French Botanists.

- 1) Ruxley pits, S&S. Ravensbourne, Bromley, 1915, AG Davis **MNE**. Dartford Heath, in scrub, 1962, HAS.
- 2) Escape at Upnor, 1944 **MNE**, 1949. Edge of saltings, Cuxton, 1944. Stone Marshes, 565571, 1962, HAS: HMP. Edge of Faversham Creek, 1943. W. of "Sportsman", 1960, HMW.
- 4) Deal Links: plentiful on fixed dunes, Sandwich Bay, H. Elgar, 1896 **MNE**: St George's: Prince's Links; Shellness 1946-62 **MNE**. First noted here by E.S.M. in Fl. K., but it may have been here for a long time. Lampen Wall, Stodmarsh, Mrs. B.
- 6) Stone, 1960, H.M.P.
- 11) Roadside of A.20; on F[olkestone] Sand, 1m W of Hollingbourne, 1943.
- 15) Greatstone Dunes. Romney Warren, Fl. K.: 1946.

### **Ruscus L.**

**R. aculeatus** L. Butcher's Broom. 15, 16. 36/51 (31/52 native)<sup>1081</sup>

Native. Dry woods, mostly of oak or beech; commonest on the Eocene Sands and gravels of N. Kent in 1), 3) and 6E), but also frequent on the chalk and on the moderately acid soils of the Lower Greensand country: rare in the Weald, absent from the alluvial marsh areas. Locally frequent in Surrey and Sussex, though rare in the Wealden areas: rare in Essex: very rare in Pas de Calais: Oceanic Southern.

- 1) 47 Abbey Wood, 1944. 57 Joydens Wood, 1946. 47 Shooters Hill Woods '54 GMB. 56 Farningham Wood, 1945-56; (BB) 82! 56 Rams Wood, Swanley, 1951 **MNE** (B.B.). 36 W. Wickham Common: CEB, 1899; 1958, PCH. 46 W side Common, Keston, 1947. Bexley Churchyard (planted?) PCH.

- 2) 86 Newington 1918, A.G. Davis, **MNE**. 86 N[ea]r Gore, Upchurch (T[hanet] Sand) 1959.

- 3) 05 Perry Wood, Selling, DHK. 26 Copse NW of Shelving Wood, Hoath, 1962. 16 Ellenden Wood n[ea]r Pean Hill, REW. 16 Clowes Wood, PRB. 15 Brotherhood Wood, 1947. 25 Elbridge RGW. 05 Hawkins Wood, Chilham 1944; DHK 1945. 05 Iron Hill, Boughton (T[hanet] Sand) 1960 **MNE**. 06 Holly Hill, REW. 16 Thornden Wood, fairly common, P.R.B. 16 Trenley Park Wood 197599 REW. 15 Church Wood Blean RGW. 16 Tyler Hill RGW. 16 Hempshall Wood REW. 16 Kingsdown P[ar]k, Whist[able], REW. 16 E. Blean Wood, REW. 16 West Blean Wood, REW. 25 Wenderton Manor, copse on Thanet S[and], BN.

- 4) (Planted by D.... R[oa]d, Sandwich

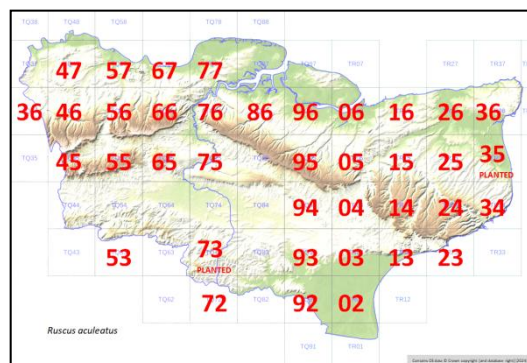
35 planted only

- 5) 45 Copse, Chevening Park, 1943, JRW.

- 6)E) 57 Darenth Wood, 578729, 1945: 1951. 57 Stone Castle, 582742, HMP. 57 Mounts Wood, 1945 **MNE**: PCH. 57 The Thrift, Bean<sup>1082</sup>, 1945. 67 Swanscombe Wood, 1945. 77 Great Crabbles Wood, 1944-55 **MNE**. 77 Northward Hill, 1963, H.A.S.

- Stoneyfield Wood, Halling, PCH. 66 Horseholders Wood, 1963, PCH. 76 Cuxton Churchyard (?planted), PCH, 1943.

- 7) 86 Queen Down Warren, 1962. 76 Lords Wood, BC. 86 Borden, 1946. 95 Milstead, 1946. 95 Kennaways, 1946. 94 NW of Westwell, 981485, ES. 04 By White Hill, 036492, ES. 04 Soakham, 047496, ES. 04 Godmersham, 057500, ES. 05 Kings Wood, Molash, 1946. 05 Park Wood, Chilham, 042524, ES. 05 E of Lees



<sup>1080</sup> Given as *N. major* Curt.

<sup>1081</sup> The stated overall total of hectad records and the total of native hectad occurrences are not readily reconcilable.

<sup>1082</sup> Written as Blean in error.



Park, 032555, 030556, CT. 05 E of Badlesmere, 023549, CT. 05 Chalky roadbanks, Old Wives Lees to Stone Stile F[ar]m, 1943, DHK. Mulberry Hall, Chilham, DHK.

**8)** Denge Wood, n[ea]r Penny Pot, 1945. N of Pickersdean, Brook, 075453, ES. Above chalk pit, Chartham Downs, B. Dodds, 1961. E of Chilham RGW. Temple Ewell, KDR. Woodville Park, Lydden, 1948, probably planted here. Whitehill Wood, L[owe]r Hardres (ch[al]k) CC. Covert Lane, Kingston 1946 JG. Barfreton, J. Hibbard 1948. Woolwich Wood, 1965. Oxney Court Wood, B.N. Pitt Wood Adisham, CC {?} (ch[al]k). Woodville Park, Lydden, 1948; probably planted here.

**9)** (Ramsgate, Herb. Lamb, 1861 **MNE**.)

**10)** Scords Wood, on top of Ragstone bank, 1959, RAC.

**11)** Mereworth Woods, 1943. Oaken Wood, 1884, H. Lamb **MNE**: 1944. Hamlet Wood, Loose, 1947. Holt Wood 1942. Sandling Wood, 1942.

**12)** SW of Digges Court 973475, ES. Westwell Springs 990475, ES.

**13)** Tunbridge Wells.

53 T[unbridge] Wells, 1956, 73 (planted), 55

**14)** Lords Wood (on Wadhurst Clay) ½m E of The Stocks, Stone in Oxy, 1934, ASK: 1958!

**(15)** Planted at Old Romney.)

02, P[anted] only

**16)** Aldington, 1950.

## IRIDACEAE

‡ *Sisyrinchium* L.

‡ *S. bermudiana* (*S. angustifolium* Mill.)

[Blue-eyed-grass.]

16.

Alien; garden escape, v. rare.

**1)** Dartford Heath, HW Monckton, BEC Rep. (1913), p.394. Hayes Common, 1934, DMCC, BEC Rep. (1937), p.508.

**2)** Swanscombe Marshes, one clump, AG Side, 1965.

**13)** Naturalised at Bayham, 648366, vc14, Sussex, 1957, CAS.

*Iris* L.

‡ *I. "germanica* L."

[Bearded Iris.

15, 16.]

Alien. A favourite garden plant which sometimes becomes naturalised when thrown out of gardens.

**1)** Ruxley pits, S&S.

**8)** Puckland Wood, garden throw-out, 1962.

*I. pseudacorus* L.

Yellow Flag, Fleur-de-lis.

15, 16.

48/51

Native. Streambanks, ponds, ditches, and swamps; very common throughout Kent, except in the chalk districts where, however, it occurs in a few ponds in 6) and 8); and in the Sheppey Swale area, where it is very rare. Most plentiful in 2), 4), 15), and on the clay areas of 10), 11) and 12). Very common in the adjacent counties and in N France.

Unrecorded 96, 97, and 23.

\*Roman; seed, Crossness, Spurrell 1889, Reid 1899.

**1)** Keston Common, HAS. North Cray Wood PCH. Sparrow Fields, F. Swain. Ruxley pits, S&S. 375661, W. Wickham PCH.

**2)** Erith Marshes, PCH. Ebbsfleet, Northfleet, now only 1 clump, HAS, 1961. Medway, Eccles, '44. Snodland! E. Bartlett 1883 **MNE** B.C. Pond ¼m W of Warden Point, Mrs. E. Bryson, Stream, above L[owe]r Halstow, 857669, '62.

**4)** Grove Ferry, Worth Minis, Hacklinge, Ham Fen f[requent] – l[ocally] a[bundant]. W of Sandwich. Sandwich Bay. Wenderton Manor by stream, BN. Wingham Fen.

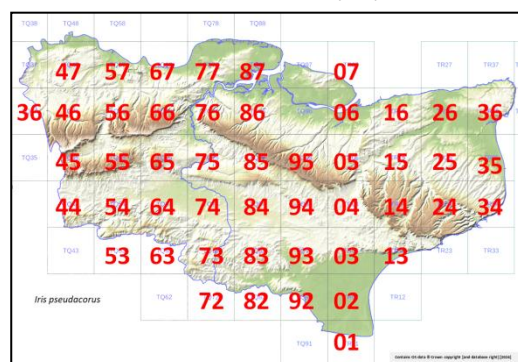
**6)** 67 Chalk pit, Swanscombe, HAS.

**8)** Pond, Garden Wood, Acrise, DACL. Pond, Gate F[ar]m.

**9)** Copse, Durlock, Minster, A.G.S.

**10)** Westerham, E. Armstrong, stream at 440535, DPY. Riverbank, Otford, PCH. Lullingstone, F. Swain. Darenth Meadows PCH.

**11)** Maidstone, 1882, MNHS **MNE**. Boxley station. Fairbourne Mill, Harrietsham, B. Dodds. Medway Bank, Hartlake Farm, 1939, JRW. Golden Square Wood Smarden 885415, '62. Pond E of Headcorn 849137, '62. Pond Leighbridge Headcorn 813454, '62.



**12)** Fordwater, Brabourne, RAC. Gibbons Brook. Wood SW of R[ai]l[wa]y W. of Sellindge, RAC. East Well lake swamp ES.

**13)** 53 Pond by Broadwater Lane, T[unbridge] Wells, CAS, 1960. Bayham CAS. 63 Ditch and Teise S. of Lamberhurst Church, 684365, CAS, 1960. Pond W of Speldhurst GE Shaw.

**14)** Breeches Pond RAC.

**15)** Shirley Moor, near B.2080, 1945 **MNE**.

**16)** Stream NE of Asholt Wood BW. Newington Moor.

# **I. foetidissima** L.

Gladdon, Stinking Iris, Roast-beef Plant.

15, 16.

33/51

**Native.** Woodland, mostly of Beech and Ash, scrubland and hedgebanks, mostly on chalk and ragstone; on sea-cliffs in *Ligustrum-Rubia* scrub association; occasionally in woodlands on clay or loam; widespread, but with its greatest abundance on the chalk and ragstone of S.E. Kent in 8) and 16); common westward particularly on the escarpments of these formations in 5), 6) and 7), and in 10) and 11) more locally; on weald clay near the old coastline and on the gault in 12), and rarely in gills on Wadhurst Clay in the SW part of 14); not rare on the Thanet Sand in 1) and 6E). Unknown native in the Marsh districts 2), 4) and 15), on the Western and Central High Weald in 13) and 14), and on the weald clay in 11) and the west part of 12). It shows a somewhat oceanic distribution. In Surrey almost confined to the chalk; in Sussex common on the chalk and in the Hastings area on Wealden sands and clays near the coast; rare to mostly on the Boulder clay in Essex; unknown in N. France E. of Normandy.

**1)** 56 Farningham Wood PCH.

**2)** ‡ Tonge church ;'57 J Moor.

**5)** Woods W. of Shoreham, 1946. Downe. Chevening Park. Cudham Ch[urch] Y[ar]d, DPW.

**6)** Mounts Wood. Darenth Wood. Lords Wood, Darenth. [Ash, Benj[amin] Harrison.] The Thrift, Bean. Swanscombe Wood. Edge of Swanscombe Marshes, 1938, P.H.C. Great Crabbles Wood. S. of Cobham Park. E. of Shoreham. East Hill, E. Armstrong. Greenhills, NE of Otford. SE of Eynsford. Woods on Downs scarp above Trottiscliffe, 1962. 65 Wrotham, chalk scrub. Forty acre Shaw, Ryarsh Downs.

Birling Downs. Crookhorn Wood. Upper Halling Downs, v[ery] a[bundant]. Wingate Wood. Woods above North Halling PCH. N of Cuxton.

**7)** 76 Burham Downs. 76 Boxley Warren. 75 Boxley Warren **MNE**. 75 Detling Hill. 86 Bredhurst Hurst. Queen Down Warren. Hollingbourne Hill. Bluebell Hill. Lords Wood. By A251, Hill W. of Boughton Aluph Ch[urch] 030485, 030486, 027484, 55. Belmont Park DMCC. NE of Molash 030525 ES. Park Wood, Chilham, 040525, ES. Hawkins Wood, Chilham DHK. East well Park, 002492, ES. West Well Suomi 987482, ES. White hill, 036490, ES. Godmersham Downs 057503, ES. Below Bilting 045495, ES. N. borders Kings Wood, 036617, 043520, 053523, ES, and edge DHK.

**8)** 04 Sole St[reet] Downs 090495 ES. 05 N of Winchcombe 085500 ES. 04 The Junipers, Wye, 070477. Stowting Hill RAC. Downs foot E of Etchinghill. Browns Wood, Temple Ewell. Northbourne, 1961, Miss B. Nash. Wood W. of Lit[tle] Mongeham on chalk. Coombe Vale Dover 1955. St Radegunds KDR. Lydden Spout. Abbots Cliff. The Warren, a[bundant]. Base of Folkestone Downs. Base of Cheriton Downs. Postling Downs.

**9)** 36 – planted in Thanet.

**10)** Rooks Hill, scarp woods.

**11)** Kings Wood, Ulcombe, B. Dodds. Kent Brook W of Edenbridge, RAC. Headcorn Ch[urch] Y[ar]d, RAC.

44, 54 R, 84 (?rag[stone])

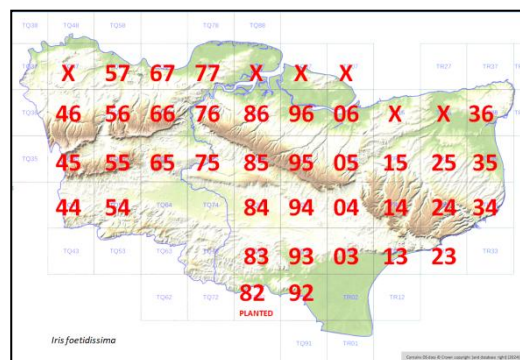
**12)** 04 Nackholt Wood, 065425, ES. 03 NW Park WoodBilsigton 042363, ES. 03 Horns Wood W of Bilsington 032342 ES. 03 Copse by B2070 N of Ham St[reet], 000341, ES. Chilham Castle n[ea]r lake. Sellindge Ch[urch] Y[ar]d RAC.

94, 93, 03 (rag[stone])

**14)** 92 On Wadhurst Clay at top, gill W. of Tophill F[ar]m, Wittersham, 1962. 83 Gill NE of Benenden, 1954 (Wadhurst Clay) **MNE**. 982 Planted in W Oxney.) 93 —.

(82 planted), 92, 83 one loc[ation]

**16)** 23 abund[ant] N. of Cheriton, 1944, DHK. Folkestone JG. Postling Wents (Gault Clay) ES Edees. Coombe Wood, Etchinghill, BN. Sandling Park RAC.



# **Crocus** L.

‡ **C. vernus** (L.) Hill<sup>1083</sup> [Spring Crocus. 16.]  
 1) Ruxley pits, S&S.  
 13) Naturalised in Lamberhurst Churchyard, 1961, CAS.

**C. nudiflorus** [Sm.] [Autumn Crocus. 16.]  
 10) SE of Crockham Hill in copse, 1960, RAC.

‡ **Gladiolus** L.  
*Alien, scarcely naturalised.*

‡ **G. communis** [Eastern Gladiolus 15.]  
 9) Naturalised in gardens, Margate, Minster, and Monkton, L.W.W.]

**Crocasmia** Planch.

**C. x crocosmiiflora** [(Lemoine) N.E. Br. Montbretia. 15, 16.]  
 3) Dargate → Monument, path through trees, Mrs B.  
 10) Sevenoaks tip CAS.  
 11) Edenbridge tip DPY.  
 13) Commonly naturalised around Tunbridge Wells, 1960, CAS.

## DIOSCOREACEAE

**Tamus** L.

**T. communis** L. Black Bryony. 15, 16. 48/51  
*Native. Woodlands, scrub, and hedgebanks' very common throughout Kent except in the Marsh districts 2) and 4), where it is very rare: seemingly absent from Romney Marsh 15), and in Sheppey only at Warden point.*  
 1) Shooters Hill Woods, GMB. Ruxley pits, S&S. W. Wickham Woods, 1916 AGD **MNE**. Joydens Wood. Farningham Wood, PCH, 82.  
 2) Grain, PCH. Warden point.  
 3) Shelving Wood Hoath (Wool[wich] Beds) '62.  
 5) Wood W. of Shoreham PCH. Hedge<sup>1084</sup> 396611 PCH. Chalk W. of Eynsford PCH. Pilgrims Way, Polhill, PCH. Pilots Wood, PCH. Darwins Bank Wood, Downe, JEL.  
 6E) Darenth Wood, PCH. Mounts Road, PCH. Dunstall Woods, Shoreham, PCH. Romney Street, PCH. Preston Hill, PCH. Wingate Wood, Halling PCH.  
 7) Burham Downs. Pilgrims View L[owe]r Bell 62. Spuckles Wood, Stalisfield (ch[al]k) 62. Oak Wood / Beech plant[at]ion, E side Goodnestone P[ar]k '62. Sandy *Cast[anea]* copp[ice] E. of Goodnestone '62. Puckland Wood '62. Stafflands Wood '62.  
 8) copse N. of Bavinge (ch[al]k) '62. Wolverton, Wood edge, ch[al]k '62. Ch[al]k Wood W. of L[it]t[tle] Mongeham. Wood W. of Misling F[ar]m Elmsted (ch[al]k loam) 62. Patribourne / Bishopsbourne, JG, Reinden Wood (ch[al]k) 62.  
 10) Westerham Wood 82! Horton Kirby PCH.  
 11) Hedge, Green Lane E of Headcorn 849437.  
 13) Stone Cross Gill, Ashurst, 518381, 1959 CAS. E of Bidborough. Vauxhall Lane Southborough HNC. Combwell Wood 1979.  
 14) Gill S. of Pigeon Hoo, 1962. Knock Wood Tenterden (loam by r[oa]d) '62. Butness Wood, Appledore 62. Oxney, Cuckoo Wood, Wittersham '62.  
 15) unrecorded  
 16) Postling Wents on Gault GSE. Above R[oyal] M[ilitary] C[anal] Hythe, Mrs MJ Comyn '54.

## The Orchids of Kent<sup>1085</sup>

<sup>1083</sup> Here named as in Stace, second edition, but given in the manuscript as *C. purpureus*, without author citation.

<sup>1084</sup> No location stated, but the gridreference is near New Addington, barely within the vc16 boundary.

<sup>1085</sup> A list ('the orchid check-list') headed The Orchids of Kent was amongst documents typed out when Francis Rose was embarking on his revision of the Flora c.1999. It is unclear whether it was intended for the Flora and what was its relationship with the general check-list of species, whose typing up was incomplete, but its sequence of species has been followed here, rather than as given in the MS or Stace's *New Flora*. There was also a list of orchid-rich sites with their constituent orchids headed 'Flora of Kent Orchid-rich downlands' and covering Arpinge Down, Lydden Downs, Parkgate Down, Queendown Warren, Crundale and Wye Downs, Folkestone-Cheriton

## ORCHIDACEAE

After Hants, Kent is the richest British county in Orchidaceae – 35 species have been recorded, of which 30 still occur. It is even more notable for the relative abundance of a number of species which are rare, or very rare, elsewhere, such as *Orchis purpurea*, *Ophrys sphegodes*, and *Aceras anthropophorum*.

“Enough orchids grow in Cobham Park to pleasure all the seamen’s wives in Rochester”. Robert Turner, *Botanologia*, 1664.<sup>1086</sup>

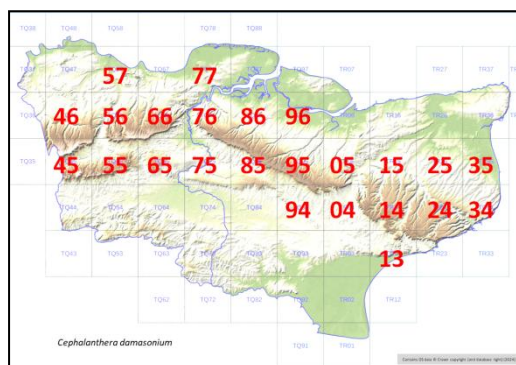
### *Cephalanthera* Rich.

**C. damasonium** (Mill.) Druce Common White Helleborine. 15,16 24/52

Native. Beechwoods, on chalk, very constant and often abundant: coppice and scrub on chalk, frequent but not abundant: very rarely in other soils – in one wood on ragstone and two on Gault clay. [Districts] 5-8, 10, 11 and 12.

[ 1] St Johns Ch[urch] Y[ar]d. Beckenham, S.E. Chandler.]

5) Beechwood W. of Shoreham 513617-514619 PCH; DL. Pilots Wood PCH. Fox’s garage, Badger’s Mount, 494623 DL, 1954. High Elms 445628 DL. Chevening Park 486586. Cuckoo Woods Downe 447623. Timberden Bottom 511619, 512620, DL. Polhill tunnel 506603. Polhill, by A21, by quarry 503591. Rushmore Hill (Lattice Coppice) 473612. Darwin’s Bank, Downe. S of Pratts Bottom 474618, Dr. K. Marsh. 474615, DL. Hazelwood, N. of Cudham. Nr Westerham Hill top, 440562, DL. Salt Box. Downe Golf Course 427605. 433635 The Larches, Farnborough DL, [19]54. N. of Andrews Wood, Shoreham 503622 DL. Beechwood N.W. of Eynsford 535662 DL.



6) S.E. of Eynsford, 533644, [19]57 DL. S.E. of Dartford. Great Crabbles Wood, Shorne, 1946 **MNE**. Magpie Bottom 548618; 543611, 1954, DL. S.E. of Shoreham 531608 DL. 549693 Dines F[ar]m by Kemsing DL. Dunstall Woods, Shoreham PCH 530619. 529612 White Hill, Shoreham PCH, 531608, 531613. Row Dow Hill 542597. N.W. of Kemsing, above St Clere 582588<sup>1087</sup> DL. Woodlands, W. of Wrotham 591597. Wrotham Hill. Woods NE of Wrotham, 622599. Above Wrotham Water 626605. North Wood, Cuxton. Wingate Wood, Halling PCH; 1959 **MNE**. Wingate Wood 698655 DL, FR. Ryarsh Downs. Crookhorn Wood 672628 DL. Upper Halling Wood. S. of Cobham Park, 1946. S.E. of Luddesdown. Ridge Wood, Meopham, 1948 **MNE**. Wouldham Steps Meopham D. Friend. Hartley Wood. Buckland. Pennis Wood E., D.V.S. Woods 61262 [sic].

7) Castle Mound, Wouldham 727653 DL. Burham Downs, E. end, 1955. Pilgrims View, Bluebell Hill, '62. Under beech, Westfield Wood, 1962. Under beech, Boxley Warren, **MNE**. Abundant, coombe W. of Detling 1944-62, 788587. Detling Hill. 819577, Thurnham DMcCl. Longreach Wood, Stockbury, 1954 **MNE**. Bluebell Hill. Chatham Ridgeway, BC. Horsted Valley BC. College Wood, Newnham. Park Wood, Molash. Ashford R[oa]d, Chilham DHK. Purple Hill '44-'62, 808624. Bredhurst Hurst. Queen Down Warren '62 **MNE** 827629. Potter Wood DW 54. DL 826628. Wichling Wood. Beech, Filmer Wood (ch[al]k), 1949: 1962. Belmont Oark, Mrs Vershope. Syndale Wood, Ospringe, 1956 **MNE**. N. of Chilham Church, D.H.K. Hangers NW of Westwell: E of Charing. Hart Hill. Godmersham Downs DHK. Soakham Down. Monkdown Wood BC. Lords Wood, Walderslade, 1951 **MNE**:769622, '61 DL. Monk Wood, B.C. Hempstead, B.C. Rainham Park, B.C.

8) Mystole 088533 AGS. Chilham Downs DHK. Olantigh R[oa]d., Wye, DHK. Hurst Wood, Hassel Street, Wye, 1961, CAS. Longport, Crundale, DHK. Covert Wood. Larkey Valley Wood 1949-55 **MNE**. Copse, Ropersole F[ar]m, Denton, 1946 PRB. W of SW of Lydden, 1955. Chilton, KDR. Chartham Downs DHK. Bourne Park, Charlton Park, above Street F[ar]m, Barham [cross] R[oa]ds beechwood a[bundant], Before SW of B[ishop]sbourne )- BJB. E. of Bridge in larch pl[antation], Snowdown Plantations, Rubery Down.)- BJB. Stacklands Wood '62. Fagus belt E side of Godnestone Park 1962. Beech plant[atio]n N of Coldred 1959 **MNE**. Eastling Wood, Waldershare 1959 **MNE**.

escarpment, Shoreham White Hill, Sandwich fixed dunes, Trosley-Ryarsh escarpment, Burham Downs, Bluebell Hill, Crookhorn Valley to Birling, Yockletts Bank, Chevening Park, Covert Wood complex, Great Shuttlesfield Down, Darland Banks and Warren Lane Lydden SW.

<sup>1086</sup> The actual quotation, as applied to *Satyrion*, or orchids generally, should be: '... in Cobham Park in Kent it groweth so abundantly, that it may serve to pleasure Seamens wives in Rochester, for there they may be sure to finde it in great plenty...'.  
<sup>1087</sup> This grid reference is neither very legible nor (apparently) accurate.



- 10) Broadhoath Wood, S. of Stone Street on ragstone escarpment, 1950 **MNE**.  
 11) Ryarsh Wood, 1942-3, rare in ride on gault clay. Kiln Wood, Lenham, 1965, B. Dodds & KFC.  
 12) Cadmans Wood, Brook, on gault, 1946, C.N. Pope.

**[C. longifolia (L.) Fritsch**                      Sword-leaved Helleborine.                      **[15,16.]**

Beech woods on chalk and in Oakwood on Hythe Beds. Very rare. It has become very rare in Surrey, but still exists in West Sussex very locally, and more plentifully in Hants. Not in Essex. In Pas de Calais (very rare, Hesclin, Le Touquet): less rare in Somme.

**[5]** above Dunton Green, Mrs Tristram, BEC Rep. 1920; seen by her in 1927, not in 1929.]

**6)** [Wrotham Hill, in beechwood by A20, R.A. Graham, c.1930.] [Wingate Wood, c.1930, F. Forsyth: not seen, 1942-62.] [Between Cobham & Cuxton through Bush. *Fl. Met. Suppl.* 10.] [Fawkham Wood, *Fl. Lond.* IV.]

**7)** [Boxley Warren, F. Forsyth c. 1930.]

**10)** in *Q. petraea* woodland in grounds of house, Brasted Chart, 1973, R.A. Clarke; 1982! 3 infl[orescence]s.]<sup>1088</sup>

**(C. rubra (L.) Rich.)**

Of very doubtful occurrence in Kent.

**5)** High Elms, several plants. A.D. Webster in *British Orchids* 1899.

**7)** Beechwood ¼m W. of Wormshill, F. Forsyth etc., c.1930. Not seen since, 1942-62, though many searches of this spot have been made.

**8)** "1 pl. Reported near Chilham, 1925", J. Jacob, *Wild Flowers, Ferns & Grasses of E. Kent*. "near Wye" T. Attenborough, 1919, BEC Rep. 1919, p.680.

I doubt if any of these records were correct, except perhaps the Wormshill one. No specimens are known to exist to settle the matter.]

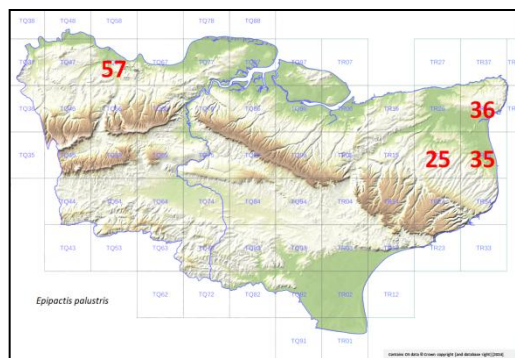
**Epipactis Sw.**

**E. palustris (L.) Crantz**                      Marsh Helleborine.                      15, 16.                      3/52 **[8/52]**

Native. Calcareous Dune slacks, fens, and a damp disused chalk pit: very rare, but locally still abundant in 4) and 6). This beautiful delicately-tinted plant with its frilled cravat-like labellum, is now probably extinct in Surrey and Essex, and exists probably in only one Sussex locality (Balcombe); in the Pas de Calais it is however still abundant in the dune slacks and in certain fens to their rear.

**[1]** old records for the Cray Valley between St Mary Cray and Bexley (Fl. K.).]

**4)** 35 W. of Princes Club House, in slacks, 1952, Miss D.A.C. Long: 1963! 1964, Mrs B: 1965! ¾m W. of Princes Club House, in marsh behind dunes, slack by R[oad] N of old Club House, 1996 – 2 sites. 36 Miss E. Day, before 1939; 1946-52! C.200 spikes, each year **MNE**. 35 Dune slack S W of Guilford Hotel, 1950, Miss D.A.C. Long: 1950-62! **MNE** c.500-1000 spikes each year. [n[ea]r Sandwich, 1893, ESM, **BM.**] 35 Ham Fen, *Bot. Guide* (1805), FGEK: 1839. 1946-1962! **MNE** ext[inct]. 36 Marsh E. of A256-B2048 junction Ebbsfleet, R.E. Wood, 1954: D. Harle, to 1963! Still 1996 formerly abundant, now scarce. [Formerly at Wingham, O.B.G.: this fen is now reclaimed.]



**6)** 57 Chalk pit, N. of Craylands Lane, E of Greenhithe, 597751 & 596750, 1946-63, abundant **MNE**. 50 pl[ants] 1956, DL: 500 pl[ants] 1961, at 597751, DL.

**[8]** Formerly on the undercliff N of St Margarets Fl. K.].

**[16]** Formerly N of Beachborough: Newington Moor, CPSK: Aldington Park, FGEK: not refound, though the habitats still exist.] [Planted in Sandling Park, by Major Hardy, teste Rev. A.C. Cawston.]

**E. purpurata Sm.**                      Purple-washed Helleborine.                      15, 16.                      26/52

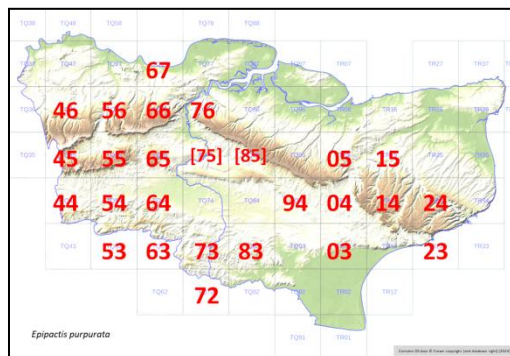
Native. Dark Woodlands and shaded roadside verges and Banks; widespread and locally frequent on clay-with-flints in 5)-8), also scattered in many places in 11) on weald clay and in 13) and 14) on Hastings sands and clays: rare in 1) and 3): unrecorded in 2), 40, 15) and 16). Not uncommon on clay with flints in Surrey and in the Weald of Surrey and Sussex; very rare in Essex; so far unrecorded in Pas de Calais.

**1)** Roundabout Wood, Crofton Heath, P.C. & J. Hall.

<sup>1088</sup> At this point in the manuscript there is an abbreviated list of orchid taxa, which looks just to be an aide memoire.



- 3) 05 Perry Wood, Selling, DHK, 1945. 15 Bigberry Wood, Harbledown, 1954 **MNE**.
- 5) 45 fifteen pl[ants] R[oad] verge E of Cudham Grange 447571, D.L. 1962. 45 S of Knockholt, 1947, M. Paffard: Miss H. Zetton, 1947, teste A.J.W. 45 R[oad] verge, Hogtrough Hill, 1954, 458568. 56 100 pl[ants] Timberden Bottom W of Shoreham, 511619, 1954, DL. 56 Darent Acres, Shoreham, 515623, 1961, D.L. 46 Wood SW of Downe, JEL. 55 Polhill by A21, 505591, 1 pl[ant] D.L. 1952; 504592, 7 pl[ants] D.L. 1960. 46 30 pl[ants] High Elms, 443626, DL 1955; Cuckoo Wood, Downe, 448622, 20 pl[ants], 1956, DL. 46 R[oad] SW of Washneys, 464603, 1956, DL.
- 6) Brewers Wood 684698, Mrs D.V.S. Woods. 67 E. side of Swanscombe Wood, C.L. Colonette & F.R., 1946 **MNE**. 66 Wingate Wood, Halling, 698655, 20 p[ants], P.C. & J. Hall, 1954. One infl[orescence] In Downs Wood E of Vigo, A. Ruck. W. side Bush Valley, 1964, PCH.
- 7) 76 Castle mound S. of Borstal, 727653<sup>1089</sup>, 200 pl[ants], 1954, D.L. 76 Chalkpit W. of Borstal, 725665, 1954, D.L. 94 Fritten Field, Westwell ES. 04 Soakham down, ψ HPS (Bilting). 85 Bicknor Rectory, 1895; Bredhurst, 1898: Rev. G. Waterman **MNE**. Queendown Warren, formerly, F.F. Top of Torry Hill, Newnham on c[lay] w[ith] f[lints], 1955, OD. 94 Beech Hanger NW of Westwell, ES, c[lay] w[ith] f[lints].
- 8) 04 Wye Down, field border, 083440, 1956, DL. R[oad]side Denge Wood, n[ear] Penny Pot P[ublic] H[ouse], Mrs B. 15 Copse E of and opp[osite] Gorsley Wood, BJB, 1946! **MNE** 1955 BJB. Roadside SW of Denton 202453, Miss DACL; 1945! 14 Nr Standard Hill Farm, Acrise, BJB, 1955. 24 Winterage Wood, Acrise, 1965, DACL. Wood n[ear] St Radigunds Abbey, BJB, KDR. 24 Lit[tle] London, Lydden, KDR. Larkey Valley Wood, 1951, REW. R[oad]side, Park Wood E of Six Mile Cotts, BJB: DACL. 14 Yockletts Bank, Miss D.M. Elwin. 15 Copse S. of Bursted Wood, Upper Hardres, 1955, BJB, RG & FR, **MNE**. W edge Charlton Wood, v[ery] a[bundant] 1955. BJB. 24 Wood near Denton, 1949, Miss D.A.C.L. 24 Selstead, 1939, F. Hyland. Lords Wood, Browns Wood, T[emple] Ewell, KDR. 24 Walderchain Wood, 1939, F. Hyland. 14 Clavertye Wood, Elham, 1956 **MNE**. 23 Hougham, VFP Day.
- 10) Riverhill, under Beeches, 1955. 54 Top of Medway Bank n[ear] Castle, Tonbridge, 588465, M.M. McFarlane.
- 11) 55 Fairhill n[ear] Tonbridge, Mrs V.E. Baxton. 65 Golden Stable Wood, Starvecrow Hill, 1954 **MNE**<sup>1090</sup>. 55 Nizells, A. Grazemann. 54 Trench Wood, G.E. Shaw. [75 Oaken Wood, Barming, 1904, H. Lamb **MNE**.]
- 12) 03 Browne Wood.
- 13) Forge Wood Bayham 1947 Miss G. Scott. 63 By Bayham Chapel, JRW: 1944! **MNE** 1957 CAS. 53 n[ear] Langton Green, Miss F.I. Williams, teste A.J.W. 73 N[ear] Frith Farm, Bedgebury, 1955, **MNE**. By Pinetum, Bedgebury, CAS, 1955. 64 Wood n[ear] Capel, 1938, Mr. Benions, **TLS**.
- 14) 83 Wood W. of Breeches Pond, 1947 **MNE**, 1962, C.A. Lister. 83 R[oad]side W of East End, 2m. NE of Benenden, 1947. 72 SE of Hawkhurst.
- 16) 44 l[ocally]- a[bundant] Wood N of Aldington Knoll, 1958, LJM.



**E. purpurata** x **E. helleborine** = **E. x schulzei** P. Fourn.

- 8) Copse S. of Bursted Wood, Upper Hardres, 1955, B.J.B., R.G. & F.R., conf. V. Summerhayes. Park Wood, E of Six Mile Cotts, R. Gorer, det. V. Summerhayes. 1960.

**E. helleborine** (L.) Crantz Broad-leaved Helleborine. 15, 16. 34/52

**Native.** Woodlands and shady road banks, on a variety of well drained soils; frequent: commonest by far on the chalk in 5)-8), but widely distributed over the Weald in 10)-14), and present but rare in 1) and 3); unrecorded in 2), 4) and 15). Frequent in Surrey and Sussex, rarer in Essex, frequent in Pas de Calais.

- 1) Wet Wood by R. Cray, N. Cray, PCH.

3) Oldridge Wood, 1949. Copse, St Stephens Hill, Canterbury, RGW. Perry Wood, Selling, 1945, DHK. Hospital Wood, Fordwich, REW. Dargate, 1955, RGW.

5) The Larches Wood W. of Farnborough, PCH. Darwin's Bank, Cudham. Hazel Wood, Cudham. Beech hangers by A.21, Polhill. Westerham Hill, 440560. 12, Lattice Coppice, Knockholt, 473612, 1962, DL. Cuckoo

<sup>1089</sup> Corrected from 127653. This is likely to be a mound in Shoulder of Mutton Shaw.

<sup>1090</sup> An entry follows referring to 'also lane to W...1953, D.L.', in which several grid references are deleted. One not clearly deleted reads 498605, but this must have been intended to be 605498.

Wood 448622, DL, 1956. W. of Shoreham. 6, Roadside W. of Chevening Part 474579, DL, 1961. Copse S. of Cudham, 40 pl., 445594, 1962, DL. Betsoms Hill, 430559.

**6)** Whiting Chalk pit, E. of Greenhithe, 1947. Wrotham Water Downs. Ryarsh Downs, Hb. Lamb 1881 **MNE**. E. of Pennis Wood, DVS Woods. Greenhill Wood, Otford. Crookhorn Wood, Snodland. Upper Halling Hangers, 1960 **MNE**. Wingate Wood, Halling! 697657, DL. Horseholders Wood, 696642, HMP.

**7)** Burham Downs. Pilgrim House, Bluebell Hill 62. Bluebell Hill, N of L[owe]r Bell 1910 **MNE** 1947. Boxley Warren **MNE**. Wigmore. 745607 Kits Coty. Rainham Park Wood, 1962, CA Lister. Coombe W. of Detling. Bredhurst Hurst. Purple Hill. Queendown Warren. Hill Wood, Stockbury, 1958 **MNE**. Hollingbourne Hill, 1962. Lords Wood ; Ridgeway; Monkdown Wood; Monk Wood, B.C. Wormshill. Filmer Wood. 023547 S. of Lees Park, C.T. 030558 Wood S. of Lees Park, C.T. Park Wood, Molash. Soakham Downs. Godmersham Downs ES. 94 Hangers NW of Westwell '62. Whitehill, E.S. Soakham Downs, by P[ath]way. N. of Bilting, ES, BJB.

**8)** 04 Giddy Horn, Wye. 04 Down E of Giddy Horn '62. 04 The Junipers, Wye, 1957, Dr. Pyddoke **MNE**. 05 R[ai]l[wa]y bank, between Chilham and Godmersham DHK, '44. 15 Larkey Valley Wood, a[bandant]. 05 W. of Penny Pot 089514, Denge Wood. 04 Olantigh Plantation. 04 Broad Downs, Brook ES. 04 Rob Sacks Wood, Wye. Bourne Park, BJB. 04 Hurst Wood, E. of Wye ES & FR. 14 N of Bavinge F[ar]m, copse on chalk '62. E. of Bridge, BJB. Yockletts Bank. Acrise Ladwood 204432 DACL. Snowdown plantations BJB. Covert Lane about Duskins Farm Kingston BJB. 14 Covert Wood. 15 N. of Westwood F[ar]m, Kingston, BJB. Swanton Banks KDR. 24 Woolwich Wood. 24 S. of Denton DACL. 15 Wood ½m S. of Patricxbourne 1941 **MNE**, 1958 **MNE**. Not in 34. Lords Wood Ewell Pay St[reet]. VFPD. 15 Copse S. of Bursted Wood, Upper Hardres, 1955 **MNE**. 13 Postling Wood. 35 Plantation on chalk W. of Little Mongeham '62. 25 Ilden Wood. Pine belt, Knowlton, 1958 B.N.

**10)** 555542 Fawke Common Godden Green 1957 W. Breed. Starvecrow Hill, N. Frith, Tonbridge 600504 W. Breed 1957.

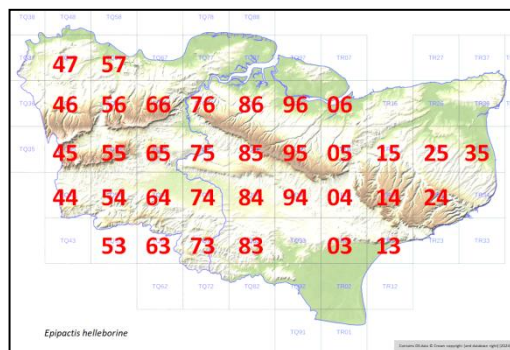
**11)** 66 Ryarsh Wood, 1946 **MNE**. 65 S. of Wrotham Heath. Copse 683493 E of Hale Street CAS, 1957. N of Knowle Hill 862504, B. Dodds. 86 Kiln Wood, Lenham, 62. 74 Widehurst Wood. 94 Hoads Wood, 955422 ES: FR, 1946-1954 **MNE**. W. of Edenbridge n[ea]r R[iver] Eden, D.P.Y.

**12)** 04 Cadmans Wood. 03 Bourne Wood 005332, ES.

**13)** 44 '57. 54 Ashour Wood. Southboro[ugh] Common Cem[eter]y 1944, Miss Sayers. 64 Waterworks Wood, Matfield, W.H.P., 1933 **BM**. 83 Rogers Wood, Biddenden. E end Sissinghurst Park Wood, 1956, L.W.W. 53 Tunbridge Wells, 578381, 1 infl[orescence], 1962, E. Shorrocks. 73 SE of Louisa Lake, Bedgebury Forest, 1945: 1955. 63 Kippings Cross, 1946. 73 Angley Wood, 1957 **MNE**. Blackbush Wood, Goudhurst, D.S. [n[ea]r High Rocks, 1817, W.J. Hooker Price **BM**.]

**14)** 83 Breeches Pond, 1947. 73 Hawkhurst 1949. 82 Comb Wood, Wittersham 1964.

**16)** 1 pl. Paraker Wood, Horn Street; 2 pl[ants] on Lake Island, Brockhill 1957089 LJM.<sup>1091</sup>



**E. leptochila** (Godfery) Godfery      Narrow-lipped Helleborine.      15

Native. In two woods on the chalk in 8) in hornbeam-ash coppice: extremely rare. The Kent form has a wider epichile to the lip than the Surrey plant.

Very rare, in 3 localities on the chalk in Surrey, and in one locality in W. Sussex; unrecorded for Essex and for Pas de Calais, but now known in Seine-Maritime (Forêt d'Eu) so it may be found in N. France.

**8)** 25 Ilden Wood, Kingston F. Hyland: J. Jacob: BJB & FR, 1939!, 20 pl[ants] 1953, 1960! **MNE**; 214515. 64 spikes, 1963, H.M.W. c.1980, E. Philp. 24 Woolwich Wood, Womenswold, c.234487, 1955, BJB, R.G. & FR **MNE**: 1956. Now destroyed. Alkham, E. Philp.

**E. phyllanthos** G.E. Sm.      [Green-flowered Helleborine.]      15, 16      3/52

*E. vectensis* (T. & T.A. Stephenson) Brooke & F. Rose<sup>1092</sup>

Native. Beech plantations & a disused pit on chalk, usually among ivy in heavy shade: extremely rare: 6) & 8). Very rare in Surrey and Sussex, unrecorded for Essex and N. France.

<sup>1091</sup> An entry which apparently post-dates the chart of 10k square records.

<sup>1092</sup> Cited as (Godfery) Brooke & Rose.

6) 56 Beech plantation between A.225 and R[ai][wa]y., S. of Eynsford, Mrs Denton: 1956, 1958, plentiful from 534647 to 533642! **MNE**. 121 p[ants]. 1957, DL. 60 pl[ants]., 1960, DL. 66 pl[ants]. 1962, DL. 57 Great chalk pit, NW of Horns Cross, F.R. & K. & A.G. Side, 1962, **MNE**.

8) Rubery Down, Womenswold, J. Jacob (as *E. leptochila* Godfr. in BEC '33 Rep, 543.): BJB & F.R., 1939! (then described as a species distinct from *leptochila*): 13 plants, 1946 **MNE**; 1 pl[ant] 1954, DACL. 8 spikes, 1955, Mrs B. & J. Gurr.

[**E. atrorubens** (Hoffm.) Besser<sup>1093</sup> Dark-red Helleborine.

This species has been reported for Kent, certainly in error; but it exists on hot S. facing open chalk slopes in Pas de Calais (Hesdin) and, more plentifully, in the Somme Valley. Our northern British plants may be a different ecotype.]

[**E. mülleri** Godfery occurs in Pas de Calais (Desvres) and in Somme (Abbeville) in Woods on chalk, so may be found in Kent sometime.]

**Neottia** Guett.<sup>1094</sup>

**N. nidus-avis** (L.) Rich. [Bird's-nest Orchid. 15, 16. 31/52

Native. A saprophyte of humus in woodlands, mostly beechwoods on chalk: locally common in 5)-8), rather rare off the chalk but widespread, and in all parts of Kent except the marsh districts 2), 4) and 15) and Thanet 9).

Frequent on the North Downs in Surrey, and in the South Downs beech woods in W Sussex and Hants: rarer in E. Sussex, very rare in Essex. Frequent on chalk in N. France.

1) [Abbey Wood, MNHS, 1861, **MNE**.] Near lakes, Holwood Park, 1959, RAC. 47 Sundridge Park, J. Lidstone, 1948. 57 Joydens Wood, R.A.B. 56 Farningham Wood, SW part, on Thanet sand, 1950: PCH.

3) 05 Wood at Upper Ensinge [*sic*, for Ensding.], DHK 1945.

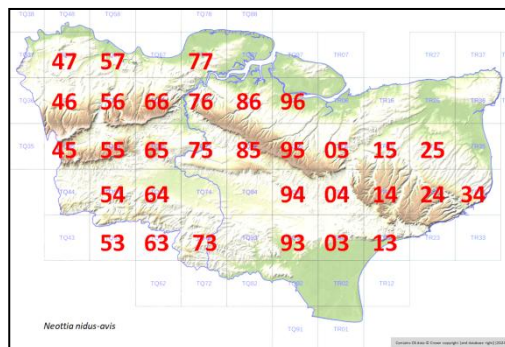
5) 46 High Elms 446624. Cuckoo Wood, Downe 446629, '55, DL. 46 Darwins Bank, Downe, 1946-62 **MNE**. 46 Lattice Coppice, 1948-62, 473612, FR, DL. 513617, Beech Hanger W of Shoreham, 1945 **MNE**, DL 1953/6. 45 beech wood Chevening Park 486587, DL '55 & '62. 55 Beech hanger above A.21, Polhill, 1937→. S. of Pratts Bottom 474616 K. Marsh. Down NW of Westerham 1951, J. Bedford.

6) Row Dow Hill, Otford, c.23, 540595, 1957, DL. 2-300, Dunstall Priory Wood, 530619, 1957, DL. Fawkham, F. Swain. Woods E of Magpie Bottom PCH, DL 545605. Preston Hill in hanger PCH. Greenhills Wood C. Fitzgerald: 1955 ! **MNE**. Whitehorse Wood 663620 DL. 66 Upper Halling Hangers, 1943→. 66: 695655 Wingate Wood, 1944→: PCH, 1954, D Lang. 698690 Cobham Golf Course under beech 1954. Great Crabbles Wood '47. Knockmill Wood on chalk, 1949. Wood E of Dode 1946. By A.227, NE of Wrotham. Hanger above Wrotham Water 1937-61. Forty Acre Shaw 1952 DL 663620. Wrotham Hill, Labour-in-vain.

7) Bluebell Hill 755606 B Carter. 75 Boxley Warren, 1882 E. Bartlett **MNE**. 86 Purple Hill, Bredhurst: 1942-62. 86 Top of Queen Down Warren, 1938. 86 Rainham Park Wood, 1952-54 **MNE** (now destroyed). Kettle Hill Newnham. 85 Beechwood W. of Wormshill, 1942. Oak Hill Painters Forstal HMW. Downs N of Bilting DHK. 94 Hangers NW of Westwell, '62. Challock Forest Centre ES. Squirrels Wood 1945. Horsted Valley BC. Lords Wood BC. Monk Wood 738643, BC. Monkdown Wood BC. 86: 827600, Longreach Wood, Stockbury 1954 **MNE** 1960. 86 Hill Wood, Stockbury, 1960. 95 Wichling Wood, 1949 **MNE**. 95 under Beech on chalk, Filmer Wood, 1949-1962 **MNE**. 96 Covett Wood, 987603, DL. 95 Putt Wood HMW. 96 Syndale Wood, Ospringe, 1956 **MNE**. 96: 980602 Sandbanks Wood, Ospringe (NE of *Scandix* field). 05 Park Wood, Chilham.

8) Penny Pot Woods DHK. S end Gorsley Wood, Bishopsbourne, LWW; BJB. Wood E of Denton, Miss DACL. Covet Wood n[ea]r Hearts Delight, Kingston BJB. Watertower Wood BJB. Minnis La[ne], River, KDR. Lords Wood, Jane Hyde. Beech Plant[at]io[n] E of Knowlton 1955 **MNE**. Ileden Wood BJB. Beech pl[antation] top Rectory La[ne] Barham BJB. Puckland Wood DACL.

10) Wilderness, Seal, under Castanea, 1956, B. Smith.



<sup>1093</sup> Cited as (Hoffm.) Schult.

<sup>1094</sup> Cited as Ludw.

**11)** Basted in Wood, Miss Nisbett. Horish Wood, Detling, 1938. Wood S. of Mereworth W of B2016, 648543, B. Prowse. [Allington Woods, Otham H.L. Lamb 1880 **MNE.**] [Hermitage Wood, Barming, 1894, H. Lamb **MNE.**] [Linton, 1897, D. Kennard **MNE.**] *Castanea* coppice N. of Coxheath.

**12)** Willesborough Lees, W. Wood, 1955, CNP. Orlestone, DHK 1946.

**13)** 53 Stone Cross Gill, Ashurst 518381, 1958 CAS. 64: 614429 S side Pembury Walks AG 1957. 64 By A.21, Pembury S. of Yew Tree F[ar]m, 1950 in full sun **MNE.** 63 Near Drive, Scotney Castle, 1961, KEB. 64 Wood E of Kippings Cross, 1946. 54: 502473 Roadside coppice W. of Chiddingstone 1953 **MNE.** 73 Marshy place n[ea]r Combwell 1898, J.S. **TLS.** 73 c[om]p[artmen]t. 52, Fowlers Gate, Bedgebury Forest, 1961, W.J. Davies. Batts Wood, Goudhurst, W.J. Davies, 1957.

14) 93 Cole Wood Woodchurch ES.

**16)** Sandling Park, 1961, Major Hardy. Thorn Wood (Gault) Postling Wents, L.J.M.

**Listera R. Br.**

**L. ovata** (L.) R.Br.

[Common Twayblade.]

15, 16

44/52<sup>1095</sup>

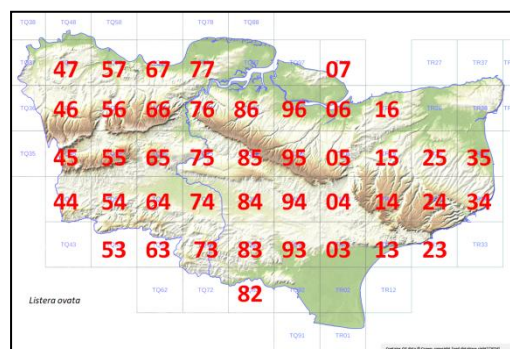
**Native.** Woodlands of all types on all more or less base-rich soils, from Alder carr to beechwoods on chalk: grassland, scrub, and old orchards: very common except in the Marsh districts of 2) and 15), which are almost devoid of shade: certainly our commonest orchid, frequently common in Surrey and Sussex, more local in Essex (mostly on Boulder Clay in N.W.): common in Pas de Calais.

**1)** Wood near Lake, Holwood Park, 1954, **MNE.** Ruxley pits, S&S. Abbey Wood, 1954, G.A.M. Chislehurst, W.C.R.W. Farningham Wood, 1949.

**2)** 87 Copse, E of Fenn Street, 1955 **MNE.** 07 Warden copse.

**3)** Oldridge Wood, 1949. Dengrove Wood. Calcott Hall Wood, Sturry, 1955, Jane Hyde.

**4)** 35 Willow plantation, Hacklinge, 1946. 25 Copse, Wingham Well, 1948 **MNE.** 25 Marsh Sallow Carr, W. of Wingham, 1949.



**5)** Downe Golf Course 428601. Darwins Bank, Downe. Lattice coppice, Rushmore Hill, PCH, FR 473612. Andrews Wood 507619, 503622, Badgers Mount, PCH. Hill Park Westerham 428562. Wood W. of Shoreham, 1945. Wood S. of Ch[urch], Cudham. Cuckoo Woods Downe, PG & R Edwards '57. Mollards Wood 402591 RAC. Salt box 408605, 61, DG. Chevening Park, 1951, **MNE.** The Larches Farnborough 200, 433635, 1954, DL. Pratts Grove, 477618, DL. Newbarn S. of Cudham 445594 DL. S. of Pratts Bottom 474618. 426577 W of Nash Hill RAC.

**6)** 67 Darenth Wood, PCH. 57 Swanscombe Pit, 576750 FR: DL. 67/77 Great Crabbles Wood, Shorne, 1944-53 **MNE.** Magpie Bottom 541612 & 545607. Woodlands Hill 592598. Otford, Greenhills Wood. Whitehill, Shoreham. S of Vigo 630600. High Castle Wood. Romney Street. Knockmill, wood on chalk, Hartley Wood. S of Meopham D. Friend. Wrotham Water Downs. Chalk pit above Trottiscliffe, PCH. Below Crookham Wood, Snodland. Upper Halling Downs. Wingate Wood. North Wood, Cuxton, FR '44: PCH. Vigo Hill, above. Pilgrim House Trottiscliffe 634609, DL, 1953.

**7)** Chalk pit W of Borstal, 725665, DL. Burham Downs. Pilgrims View, Bluebell Hill, 62. Bredhurst Hurst 1944 **MNE.** Purple Hill. Queen Down Warren. Squirrels Wood Stockbury. Hollingbourne Hill. Downs NE of Cobham F[ar]m Lenham. Hangers NW of Westwell. Soakham Downs. Boxley Downs, 1882 **MNE.** E. Bartlett. Detling, NW coombe, '62. Lords Wood, S. end, 769622, DL. Wrinstead Court, KSJ. Gorham Wood 855589, DG v[ery] a[bundant]. Wichling Wood. Down in Filmer Wood, 1949-62. College Wood, Newnham. Down opposite Putt Wood. Covett Wood. E of Whitehill, Ospringe. Spuckles Wood (loam & chalk), Stalisfield, 1962. Kennelling Wood (chalk). Park Wood, Chilham. Down N of Dunn Street, ES. Challock Forest, ES.

**8)** Larkey Valley Wood. Hurst Wood, Hassel St, Wye, 1961, CAS. Olantigh Plantation. Longport, Crundale. R[oa]dbank N of Hunt Street, AGS 091489. Mystole, Chilham 088533. Penny Pot. Juliberry Downs. Crown Down Wood 072468. Brook hillock, 085437 **MNE.** Devils Kneading Trough, Brook, rare '62. 100's, Down N. of Podlinge, '62. Copse N. of Bavinge 62 (chalk & loam). Wood W. of Misling F[ar]m Elmsted, '62. Yockletts Bank, 1962. Parkgate Down Elham 1955 **MNE.** Clavertye Wood, Elham 1955 **MNE.** Tolsford Hill. Postling Downs. Downs NW of Newington DG Stanford. Copse N. of Bavinge 62 (chalk & loam). Spong Wood RAC. Downs N of Ch, Crundale, 1949 **MNE.** Lynsore Bottom. Iffin Wood. Gorsley Wood. Stelling Minnis, on clay '62. Copse S. of Hunts Wood/Hunts Wood Upper Hardres '62. Spong Wood. S of Chilton. Swanton Banks, Lydden 1950

<sup>1095</sup> The correct total appears to be 42, hectads 03 and 76 having been double-counted.



**MNE.** Reinden Wood (chalk) 62. Copse S. of S. Alkham '62. Caesars Camp. Abbots Cliff. Lady Wood Capel RAC. Postling Wood 145403 HMW. Juliberrie Chilham (extra labellum) 1946 WJLS. Puckland Wood '62. Stafflands Wood '62. Oak Wood on chalk, E. side Goodnestone Park, '62. Hall Road, Swingfield, 62. Down NE of Asholt Wood BW. Lords Wood, Jane Hyde.

**10)** Westerham Wood (82!). Scords Wood. Darenth Meadows, PCH. Whitley Forest, RAC. Hills Wood Kemsing (Gault) 563585 CAS. S. of Bessells Green. Dry Hill pit. Wildernesse, 1957, BFC Sennitt.

**11)** Ryarsh Wood 1936 **MNE.** By A20, Larkfield. Ragstone Quarry S. of Preston Hall, 1945 **MNE.** Broadhoath Wood S. of Stone Street (Ragstone) 1950 **MNE.** Kiln Wood Lenham (loam) 62. Park Wood, Boxley. Birling Marshes. Horish Wood. Longham Wood. Snarkhurst Wood. (Oaken Wood 1883 H. Lamb **MNE**) Copse E of Knoxbridge, Staplehurst, 1963, Mrs EM Kelly.

**12)** Hoads Wood. Copse on Gault SE of Lenham. Cadmans Wood 082429 - 079433! RAC. Hothfield Common, on clay patch, 1948 **MNE.** Cuckoldscombe 1995!

**13)** Stone Cross Gill, Ashurst, 518381, 1960, CAS. Ashour Wood. Brookhurst Wood Southborough GE Shaw. Penshurst Park, H.V.Wood. R[ai][wa]y bank W of T[unbridge] Wells West Sta[tion] CAS. Pembury 636415, M. Boyser. Scotney Castle, PCH. T[unbridge] Wells Common, CAS. Finchcocks 1898 JS **TLS.**

**14)** (Finchcocks, Goudhurst 1898 J. Stirling **TLS.**)<sup>1096</sup> Knock Wood E of Tenterden! RAC. Frax[inus] plant[atio]n, Cole Wood, Woodchurch, ES. Shirkoak Wood, etc.

**16)** Postling Wents. Coombe Wood, Etchinghill BW.

### **Spiranthes Rich.**

**S. spiralis** (L.) Chevall.

[Autumn Lady's-tresses.]

15, 16.

32/52

**Native.** Dry short grassland, frequent locally on the chalk, rare and scattered elsewhere, but often abundant in its localities. It sometimes appears suddenly in quantity on garden lawns. Frequent in Surrey and Sussex on the downs and in the weald, very rare in Essex, frequent in Pas de Calais.

**2)** 07 Warden Cliffs.

**3)** 16 23 infl[orecences]., grassland, Duncan Down, W. of Benacre Wood, Whitstable, 1961, H.M. Wilks.

**4)** [35 [n[ea]r Sandown Castle, 1833, Miss Harvey, Hb. FJH.] Fixed beach opp[osite] Walmer Castle, 1957, B.N.

**5)** 45 SW of Biggin Hill, RAC 46. E. Coombe, Chevening Park, 1955 D. Lang 488587 to 487586. '55, 16 pl[ants] '56, 17 pl[ants] '60, 11 pl[ants].

**6)** 55 Otford Mount, Miss C. McD, 1962. 66 Birling Downs, 1946, F. Forsyth: 1946-58! **MNE.** 76 Cuxton chalk pit, 1 plant, 1945 **MNE.** 77 Cliffe chalk pit 728766, 1945-62, abund[ant] **MNE** (100 pl[ants], 62, DL). Lawn, Strood, R.D. English, 1963.

**7)** 75 NE of Boxley, below Pilgrims Way, F.Forsyth. 86 Queen Down Warren, 1954-1961! **MNE.** 96 Down opposite Putt Wood, Ospringe! 1956 **MNE.** 30 spikes HMW. [95] Newnham, J.M. Hubble. Throwley Golf Course, C.T. 95 Down above Cobham Farm, Lenham, 1950 **MNE.** 05 Soakham Down, Godmersham, JHPS. 86 Down N. of Magpie F[ar]m, n[ea]r Bredhurst, 1962, Mrs. B. Dodds. 94.

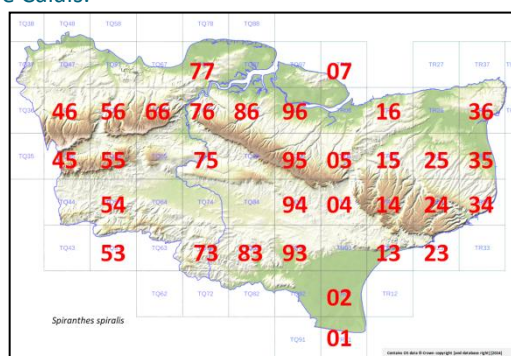
**8)** Down above Winchcombe F[ar]m, Crundale, '55, BJB. 04 Wye Hill Race Course, Wormald. 14 Down in Covert Wood, Miss DACL, 1945: BJB. 24 Above Coombe F[ar]m, Dover, Miss DACL & FR, 1945 **MNE.** Temple Hill, KDR. AdderDown, T[emple] Ewell, RDR. 13 Downs N of Hythe, Mrs M.J. Comyn. 15 Charlton Park, 1939, BJB. 25 Barham Downs 1946, BJB [Snowdown, BJB.] 26 Valley E of Castle, 1955, ECH Haes. 34 East Cliff, Dover, 1946, BJB: 1962, Mrs B. Dodds. (34 S. Foreland, Mrs B. Dodds. In sunken hollows, 1962. 1898, Rev. G. Waterman **MNE.**) Langdon Bay, KDR. ECH Haes, 1955. spur edge of cliff n[ea]r juniper. Sugarloaf, Folkestone, BJB. Waterworks Folkestone, V.F.P.D. Arpinge Down, P. Gay.

**9)** 36 1 pl[ant] waste g[roun]d, Broadstairs, R.W.W., 1947.

**11)** golf links, Bearsted, 1910, J. Rumsey **MNE.** 1912, H. Elgar. [Staplehurst, WHP senior.]

**12)** Golf Course, Ashford, ES. Pasture, WestenhangerSta[tion], LJM.

**13)** 54 Southborough in g[ras]sl[an]d, 585415, 1956, CAS. Penshurst Park, Dr. L.B. Langmead. [Matfield WHP senior.] 53 Lawn, Molyneux Park, T[unbridge] Wells, 1947, R. Crowson **TLS.** 53 Hawkenbury Cemetery, v[ery] abund[ant] to 1962, C.A.S. (in vc.14 Kent). 73 Rammell House & War Mem[oria], Cranbrook, DS 1956. [73 Goudhurst, 1897, J.S. **TLS.**



<sup>1096</sup> Record duplicated, see above.



**14)** 83 Benenden, Mrs A.G. Side. S. of Mount le Hoe, 826385, Miss D.E.C. Williams:<sup>1097</sup> 83 Lawn, Rolvenden village, 1960, Miss E. Davies. [Swattenden 1893 AW Hudson.] 93 Small quarry NW of Brook Street, Woodchurch, 920343, C. Skinner; 1955!

**15)** 01 Dungeness, by Long Ballast Pit. 02 Romney Warren, on Golf Links.

**16)** Sandling Park, Major Hardy, 1961.

(*S. aestivalis* (Poir.) Rich.

[Summer Lady's-tresses

occurred formerly in the Pas de Calais.)

[*Goodyera* R. Br.]

(*G. repens* (L.) R. Br.

[Creeping Lady's-tresses.]

This was discovered in a pine plantation on the le Touquet dunes, Pas de Calais, on a BSBI Expedition in 1959: otherwise it is known no nearer than Norfolk.)

*Liparis* Rich.

[*L. loeselii* (L.) Rich.

[Fen Orchid.]

[15.]

Extinct. Formerly in a calcareous fen: extremely rare. In Britain the type is only found now in Norfolk and Suffolk, where it is rare and local, the var. *ovata* occurs plentifully locally in the dune slacks of S Wales. Still in 3 localities in Pas de Calais, abundant in 2 of them (Dune slacks at Beach Fen E. of Cucq), rare in one (Ambleteuse dune slack).

**4)** Boggy ground about Ham Ponds, O.B.G. 1802. (In Fl. K. It is reported that Duthie saw a specimen in Herb. Univ. Edinburgh labelled "Kent".) Ham Fen was formerly a very wet calcareous mossy fen, and ponds remained in this state as late as 1947; but a general improvement of drainage of the area by lowering the level of the North Stream has rendered it very unlikely that *Liparis* will reappear now in the area, although much of the fen has never been disturbed by cultivation of any kind.]

*Hammarbya* Kuntze

[*H. paludosa* (L.) Kuntze)

[Bog Orchid.]

[16.]

Long extinct in Kent: formerly in acid bogs, extremely rare.

**13)** N[ea]r Rifle Butts, Frizley Bog, 2m. N. of Cranbrook, E.W. Howell, per A.W. Hudson; Fl. K. Frizley Bog still exists in part, but probably owing to the enclosure and cultivation of the former acid heathland of Cranbrook Common, it is now poor fen with rank vegetation and quite unsuitable for *Hammarbya*. An Ancient record also exists for Tunbridge Wells (*Ray Syn* ed.3, p385 and "Tun Wells Kent", E. Jenner, Hb. FJH). It may have been widespread in the Weald and on the bogs of the Folkestone Sand in ancient times, but we have no direct evidence. It existed in a valley bog in Ashdown Forest, E. Sussex until at least 1952, and may still reappear there. Apparently extinct in Surrey: unrecorded from Essex and N. France: but still locally abundant in the New Forest.]

*Herminium* R. Br.

*H. monorchis* (L.) R.Br.

Musk Orchid.

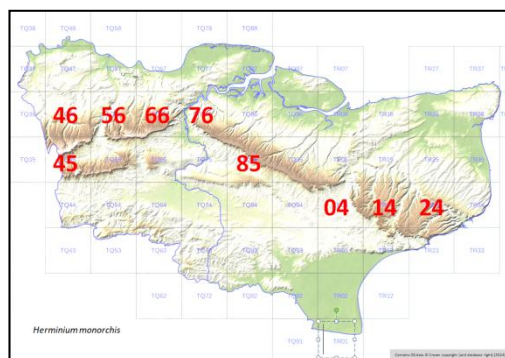
15, 16.

9/52

Native. Chalk grassland in short turf; well distributed and locally abundant, but not common, except very locally. 23 localities. In several places on chalk in Surrey, and frequent along the Sussex Downs: unknown in Essex: very locally frequent in Pas de Calais.

**5)** 439613 Down N. of Darwin's Bank, Downe, 1945-50: to 1955, JEL. Not seen since, but it may reappear now that the turf is kept raked. 505603 Downs above Tunnel mouth and to SW, Polhill, 1946-62 **MNE**. 488587 Chevening Park, NW Coombe, 1951-55 **MNE**, FR, DL. 411603 Down SW of Saltbox, Biggin Hill, R.A. Clarke.

**6)** Downs above Wrotham Water, abundant, 1945-62 **MNE** 626604 – 629606 (100 '54, 40 '55). Chalk pit W. of Pilgrim House, Trottiscliffe, abundant, 1958, 1962, 626604, 629606. Ch[alk] Pit and on Downs N. of Church, Trottiscliffe, abundant, 700 pl[ants]. 1955, O.D., 1961, 646612. Birling Downs, chalkpit, 677624. Downs N. of Crookhorn Wood, Snodland, abundant 1942-54 **MNE**, 678629. Downs S. of



<sup>1097</sup> The manuscript is difficult to interpret at this point, and the entry may be tied in with one referring to meadow on Wad[hurst] Clay, Schoolham, Miss A. Graseman 1947. The grid reference is not that of Mount Le Hoe, which is at TQ827336.

Greatpark Wood, Snodland, 677633. Chalkpit, Wickham Cement Works, 1¼[m.] NE of Cuxton Station, 1949-53 **MNE**, 725677.

7) [Bluebell Hill, H. Lamb, 1899 **MNE**: not recently observed.] W side A.229, abund[ant], till 1991 when destroyed in roadworks. Down above Allington E.P.

85 Thurnham Castle, 1961. 85 Hollingbourne Hill, on knoll near road to E, Miss M. Amos; 1957-62 (1964)! **MNE**. [NW of Westwell, 1902, Lady D: 1939, E. Scott: not seen recently.] [Ospringe Parsonage Meadows, Pl. Fav; now extinct.] [Boxley, J. Rayer MS.]

8) 04 Downs E of Longport, Crundale, abundant, E. Scott: 1947-62! **MNE**. by Juniper roadside, Longport, REW: ES '54. [Downs S. of Crundale Church to about 1945, JHPS, etc.: now apparently destroyed.] Wye Downs NNR. 04 Downs SW of Pett Street, Crundale; not seen 1986. [Newington, J. Jacob.] 14 Downs NW of Podlinge Farm, Miss W. Frost, 1952, 1 plant 1962!, gone 1986. 14 Little Gains 127461, Elmsted, R. Clarke. 14 Stowting, Downs W. of road up hill, 1947. 14: 172473 SW of Dane Farm, Bladbean, 1958 D. Stainer. 14: 178485 Down in Covert Wood, 1950, FR & RGW **MNE** FR 1985, 1992 JP. 14 Down, Parkgate, Elham, 1955-61, 1992! Abund[ant] **MNE**. 14 Down E of Elham, CPSK; 1946! 24 E of Sevingfield, Miss V. Day. 206452 Tappington. 24 S of Denton, 1946, 30 pl[ants] Miss DACL, 1 pl[ant] 1948, DACL.

### **Platanthera** Rich.

**P. chlorantha** (Custer) Reichb.

Greater Butterfly Orchid.

15,16

36/52

Native. Woodlands and scrub on chalk and on base-rich clays and loams: widespread and fairly frequent, and locally in abundance. Unrecorded in the marsh districts 2), 4) and 15), and rare in 1), 13), and 14).

Fairly frequent in Surrey and Sussex and locally so in Essex: common in Pas de Calais, where it often occurs in open chalk grassland.

1) Darrick Wood, 443652, 3 infl[orescences] 1957, 5 infl[orescences] 1958, F.& C. Swain. 46 St Julians Wood, Holwood Park 1954.

3) 16 Calcott Hill Wood, 1955, Jane Hyde. Old Gravel pit S of Herne c.179654, 1951, REW (& SP) .

5) 447623 Cuckoo Wood, Downe, 1947, '48. S. of Hangrove, Downe, 438604. Lattice Coppice '48. High Wood Cudham '48. Wood E. of Berrys Green, Cudham, 1962, 443591. Wood ¾m SE of Cudham Church, 1949: 1958 **MNE** 447589. 1 pl[ant] Copse, Fox's Garage, Badgers Mount, 1955, D.L. 493625. 445594 copse S. of Cudham Ch. '62 DL. SW of Biggin Hill, RAC. W. of Norheads 403591, 1957, RAC. Betsoms Hill NW Corner, RAC.

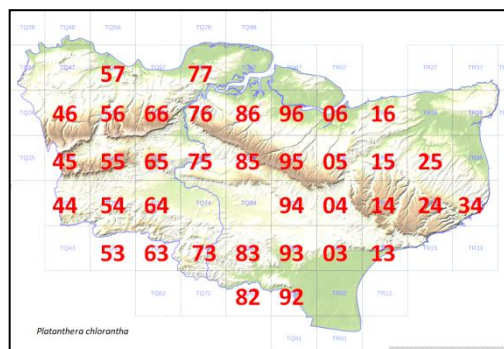
6) [Dartford, A.C. Tagg.] 57 Darenth Wood, N end, 1947 **MNE**. Magpie Bottom, 545614 AGS. Greenhills Wood, Mrs C. Fitzgerald. N[ea]r Wouldham steps, E. of Meopham, D Friend, 1947! 1948. Wingate Wood, 7942. 66 Ridge Wood, S of Meopham 1948 **MNE**. Chattenden Wood.

7) Horsted Valley, BC. Lord's Wood, BC. 86 Bredhurst Hurst. Copse E of Scragged Oak, 1965. 85 Hollingbourne Hill. S of Rumsted Court Hucking '61. 86 S. of Stockbury. N of Divan Wood. Down N of Dunn St, 1980, ES. W side Walderslade Bottom, BC. Monks Wood, BC. Bridge Woods N end, BC. Hemsted, BC. NE of Bredhurst Hurst, BC. SW of Bredhurst Church. NE of Lit[tle] Budds, '50. Gorham Wood '50. 95 E. of Skooks. 95 SW of Hockley. S. of Holbeam. 95 Tong Green. 95 Kennelling Wood, Stalisfield, f[requent] on chalk 1962. Soakham Down R. Th. Challock forest centre ES. [Detling, 1915 MC Tapsfield, **MNE**.] Stock Wood, Forstal, 1984. Lynsore Bottom. Fryarne Park Wood.

8) Wood SE of Crundale Ch[urch], Mrs B. Long Plantation, Olantigh. Hurst Wood, Hassell St[reet], Wye, 1961, CAS. Whitehill Wood, RAC. 889514 W of Penny Pot Woods, Mrs B; AGS. Woolwich Wood, 1965. Duskins, Kingston BJB. Podlinge Farm Wood, 48. Postling Wood, Mrs D. Elwin. Down W of Postling Wood 1954 **MNE**. Frandham Wood, River R. Chantry. Lords Wood, T[emple] Ewell, 1949 **MNE**, 1961 HMW. Sutton Downs, 1955. Fanscombe Wood, Wye 1959. Longport, Wye, BJB. Gorsley Wood BJB. Denge Wood, SW of Petham 1949 **MNE**. Yockletts Bank, Waltham 1948-62 **MNE**. Sponge Wood MJ Comyn. N of Westwood F[ar]m, 1950 LWW. Blacklands Carvet, Lyminge, '50. Atchester Wood LWW: 1955 R. Chambers: 1962! E of Acrise, 1949 **MNE**, 1950. F[requent] Reinden Wood (chalk) '62. Copse S. of Alkham 19621. S. of Chilton 279432 DMCC. Covert Wood, 1998. Hunts Wood, Up[er] Hardres. Eastling Wood Waldershare 1959 **MNE**.

10) 45 Westerham Wood, 1947 **MNE**. 55 Cockney's Wood, Kemsing on gault.

11) 66 Ryarsh Wood 1936-'45 **MNE**. 75 Horish Wood 1949 **MNE**, 1963. 85 Snarkhurst Wood. 85 Warren Wood, Leeds. 65 Mereworth Woods, H. Lamb 1893 **MNE**; 1960! (Swanton Valley). 55 N. of Horn's Lodge F[ar]m, N. of Tonbridge 588505, 1953-54, DL. a[bundant] Starvecrow Hill, 600505, 5890504, 1957 R. Breed.



a[abundant] Coldharbour, Tonbr[idge] W. Breed, 106 infl[orescences] 1958. Dene Park, 40 pl[ants], 1958, W. Breed. 54 Ringshill Wood, by st[atio]n, Hildenborough, CAS, 1960. 54 R[oa]dside copse n[ear] Coles F[ar]m N. of Chiddingstone, 502474, FSEF & FR, 1953: **MNE**: 1957, CAS. N[ear] Nizels Hoath EP. 44 Warren Wood, Hever 1947, Miss D. Swan.

**12)** (Gault) Cadmans Wood, 1946 **MNE**, 081429, 078433, DL, '57. E of Troy Town.

**13)** Longrope Wood, N. [*sic*, for M.] Chalmers Hunt. 54 Ashour Wood, 1944. 53 Stone Cross Gill, Ashurst 518381 etc. 1968, CAS. Twyssenden Wood, Goudhurst, 1960, L. Davies. Vauxhall Lane Wood Southborough, HNC. 63 Hayden Wood, Lamberhurst, 1940 JRW. 64 By Pembury Tonbridge R[oa]d, 612422, M. Boyser. = A.21 bank S. of Yew Tree F[ar]m CAS. Wood clearing Pembury, Coltshill, 6445, M. Boyser. Frittenden E.P. 8040.

**14)** 93 Knock Wood, E. of Tenterden! RAC 1958.

**16)** 13 Postling Wents, in g.w.s. on gault, 1945 **MNE**, 1954 03 Coombe Wood, Etchinghill Mrs B.W., 1948. Sandling Park, 1961, Major Hardy. Wood N of Aldington Knoll, LJM, 1958, 1954! Asholt Wood, VFPD.

### **P. bifolia** (L.) Rich.

Lesser Butterfly Orchid.

15, 16

15/52<sup>1098</sup>

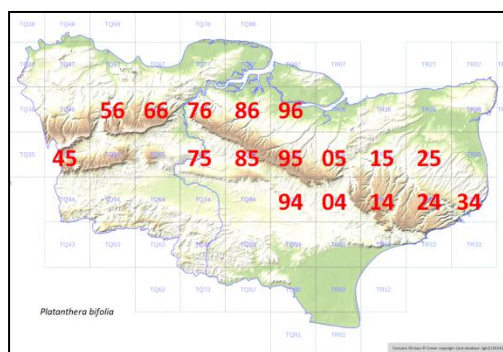
**Native.** Woodlands, mostly coppice, but also of beech, on chalk or on overlying loam, also on the Gault. Very rare in W. Kent in two localities in 6): fairly frequent in E. Kent in 7) and 8). Very rare in 11) on Gault. Formerly in the acid bog at Keston, as the ovate-leaved form. Our normal Kent plant has elliptical-lanceolate leaves. Now very rare in Surrey, occasional in Sussex, extinct in Essex, rare in Pas de Calais.

**1)** [Keston Bog, to c.1930, C. West.]

**5)** Betsoms Hill, RAC, 1958.

**6)** 56 High Castle Wood, 1949, 560629. 56 Hog Wood, NE of Romney Street 1949 **MNE**. Ridley Wood, 1950. Fawkham Wood, 1950. Cuxton, B.C. 56 Greenhills Wood, rare, Mrs C. Fitzgerald.

**7)** [Boxley Downs 1880: 1888 **MNE**] 86 Down N. of Bredhurst Hurst, 1945 **MNE**. Purple Hill, 1942-53 **MNE**. Hill Wood, Stockbury, 1960. 95 Filmer Wood, Wichling 1949 **MNE**. Trundle Wood Wormshill, 1956. Kings Wood, Molash. 05 Park Wood, Chilham. 05 Hawkins Rough, Chilham, 0654. Horsted Valley BC. E of Walderslade Bottom, BC. S. edge



Lords Wood, BC. 86 Potter Wood, Queen Down Warren, 1960, 829630. Copse E of Scragged Oak, 1965. Church Wood, Bicknor, 1952, C.A. Lister. 95 Ash copse, Snoad Street, Throwley, 995527, E.S., 1955. 96 Ash copse Coxett Wood, 1956-1962 **MNE** 987603. Kennelling Wood, Stalisfield, 1964. 95 Spuckles Wood, Stalisfield, 20 pl[ants], 1962. Stock Wood, Frinsted. Valley Woods S of Hockley R Th. Leaveland Valley, HMW. 96 1 infl[orescence] Wood NE of Simia field, 1958, HMW. 94 N. of Dunn Street Westwell. Badlesmere 032555 C.T.

**8)** 15 Denge Wood, 1949, 1960, 085521. 05 Downs Wood, Chilham, 1959 **MNE**. W. of Penny Pot 089514 AGS. Above Duskins F[ar]m, Kingston, BJB. 15 Gorsley Wood, BJB. Covert Wood, 1995, OP & FR. 15 Larkey Valley Wood, RGW. 24 S. of Chilton, 1949. 24 Lords Wood, 1949 **MNE**. Woods N. of Waltham Court, 1943 **MNE**. Longport 076485. N of Crundale Ch[urch] 082493, 1951, P. le B. 04 Pett Street, 1954, P. le Brocq, 080473. 14 Copse on chalk N. of Bavinge, 1962. E of Whiteacre 1950 (Waltham). 14 Copse S. of Hunts Wood, L[owe]r Hardres (calc[areous] loam) '62. 14 Hunts Wood, L[owe]r Hardres (chalk), '62. 14 Atchester Wood, 1955, freq[uent], R. Chambers. 14 Lynsore Bottom BJB. Ileden Wood, BJB. Pitt Wood, Adisham, 1966. 25 Watertower Wood 210525, Adisham 1955 **MNE**. 34 Eastling Wood, Waldershare 1959 **MNE**. Woolwich Wood 1957. Iffin Wood, 1959 (also EP, 137535). Blacklands Carvet Wood, Lyminge 147417, 50. [Maidstone, MNHS, 1881 **MNE**.] W of Martin E.P.

**11)** 75 Horish Wood – on Gault, 1943 **MNE**.

### **Anacamptis** Rich.

**A. pyramidalis** (L.) Rich.

Pyramidal Orchid.

15, 16.

25/52

**Native.** Chalk grassland and scrub, extremely common and locally abundant in 5)-8); also locally plentiful on fixed dunes in 4), and rarely in 15: occasional in old ragstone pits in 10, 11, and 12): as a rare casual in 13), and in 1). Common on the chalk in Surrey and Sussex, rare in Essex: it is, strangely, extremely rare in Pas de Calais (one locality on dunes) and in Somme (a few localities on chalk). In France, it only becomes common much further south.

<sup>1098</sup>

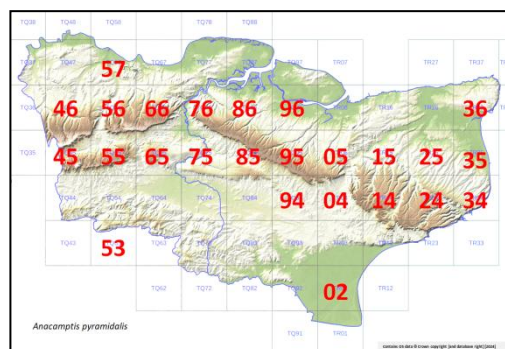
Francis Rose's own draft mapping gives a total of 17/51, and this is followed in the map prepared here for this transcript.

1) Ruxley pits, S.&S.

4) St. Georges Links, Sandwich Bay, 361576-362581, on fixed dune grassland (pH 7.0), 1905 Elgar: 1945-62, abundant! **MNE**. Ebbsfleet.

5) 56 Down W. of Farningham, 1946. 56 Above Cross, Shoreham Downs, PCH. 46 Down S. of Green St. Green 445616, '55. 46 Darwin's Bank, Downe. W. of Northstead F[ar]m. W. of High Wood Cudham 458609. 45 Down S. of Cudham 1949 **MNE**. 46 Downe Golf Course 426605, 429602, DL. 46 Saltbox Hill 409604, DL, 1961. 55 Downs, Morants Court Hill, W. of Pit 1949-61 **MNE**, 508591<sup>1099</sup>. 55 Down above tunnel, Polhill, 1948 **MNE**. The Nower Brasted, RAC. 45 Chevening Park, 1951-61 **MNE**. 45 Down NE of Pilgrims Ho[use], Westerham 453567. 45 Westerham Hill, 445565. 45 Hill Park, Westerham. Betsoms Hill RAC. 56 Timberden Bottom 504623. 45 E side Norheads Valley, Biggin Hill, 405589, '62, DL.

6) 57 Down ½m. SE of Dartford 1946. 57 Chalkpit N of Craylands Lane, 596750, Swanscombe, 1946 **MNE**, 1956, 200 DL. R[ai]l[wa]y. Eynsford. 56 White Hill, Shoreham, PCH, 529611, 531607. 55 Otford Mount PCH. 56 NW of Greenhills Wood. 56 Magpie Bottom, PCH, 543611. E of Otford 549496. Down above St Clere, 582588, DL, '52. 66 Downs 1½ m NW of Wrotham 1947 **MNE**. 65 above Hogmore Farm



Wrotham 624600, 617596, DL. 66 626604 Wrotham Water Downs **MNE** 629606. 66 Downs W. of Pilgrim Ho., Trottscliffe, PCH. 66 Down above Trosley Church. 66 Snodland Downs N. of Crookhorn Wood 680630 **MNE**. Hatch Hill, Luddesdown, 675655 AGS. 609597, A20 pit Wrotham DMcC. 56 Pennis Wood, Fawkham 1950 **MNE**. 66 The Warren, S. of Cobham Park, 1946. S. of G[rea]t Wood Cuxton. Up[pe]r Halling Downs 1941-60 **MNE**. 66 S. of Wingate Wood. 76 Cuxton R[ai]l[wa]y Cutting to NE. 76 Halling R[ai]l[wa]y. cutting. 66 Birling Downs 667623 DL.

7) 76 Wouldham Downs. 76 Pilgrims View lawn '62. 76 Burham Downs. 75 Boarley Warren 1880: 1937-69 **MNE**. Detling Downs. 85 Hollingbourne hill. 95 Foxbury Down, NE of Cobham F[ar]m, Lenham 1945 **MNE**. 94 By Suomi, Westwell. 94 E of Charing Hill. W of Charing Hill REW. [Down N of Dunn St[reet], v[ery] a[bandant] ES, 1950.] 76 Pit W of Borstal, 725665, DL. 86 Queen Down Warren. Purple Hill. 85 South Green Stockbury 850598 DL, '60. Wrinstead Court KSJ. Lordswood. Horsted Valley. SE of Bredhurst. Bluebell Hill. Rainham Park AP Major. 96 Down N. of Putt Wood, Ospringe, 981602, 1960, DL, FR. 05 Park Wood, Molash. 05 Soakham Downs. 05 Godmersham Downs.

8) Longport, Crundale. Downs N. of Crundale Ch 1952 **MNE**. Crown Downs, Wye, 071466. Broad Downs, Brook. o[ccasional], 62 **MNE** 1995. Brook hillock, 2 infl[orescences] 62, 085437. Stowting Down. Postling Downs. Shuttlefield F[ar]m Down, Lyminge. SW of Danes F[ar]m 175474, Mrs.B. Downs NW of Newington. Castle Hill Folkestone 217382, DL. Downs W. of Folkestone Hill, 1954-62 **MNE**. Crabble Downs. Meadway, River, KDR. Langdon Bay, ECH Haes, '55. Julibery Downs. Downs N. of Winchcombe F[ar]m Crundale. Down N. of Podlinge f[requent] 62. Larkey Valley Wood. Barham Downs. Bishopsbourne (Charlton Park). 25 Brambling pit. Parkgate Down, NW of Elham 1955 **MNE** 1995. Woodville Downs, T[emple] Ewell. Kingsdown Golf Course. NE of St Margarets Bay. Free Down. Sugarloaf, Folkstone, 1962. S. of Chilton DMcC. S. Foreland. Dover E Cliff.

10) 45 Dry Hill Ragstone Pit Chevening 496549 DL.

11) 65 Grassy Bank in garden, S. side A.20, Ditton, 1946-48 (F[olkestone] sand). 65 Ragstone pits Borough Green (S. of), Miss Nisbet. 65 Ragstone pits w of Offham, 1954.

12) 04 Mersham Ragstone Quarry, by A.20, 1946.

13) 53, 1 plant among *Aegopodium*, Broadwater Lane, T[unbridge] Wells, 1957, KEB.

15) 02 fixed dunes, Greatstone, 1947.

[*Pseudorchis* Ség.<sup>1100</sup>(

*P. albida* A.Löve & D.Löve)

[Small-white Orchid.]

[15]

Possibly native, but if so long extinct.

8) Lyminge; gone by 1873, Wollestone: Fl.K.

<sup>1099</sup> The gridreference given is east of the pit, not west.

<sup>1100</sup> This entry is placed before *Platanthera* in the manuscript and is there treated as *Leuchorchis albida* (L.) E. May ex Schur.



This could have been an error for *Herminium*, though Wollaston was a good botanist. It was known in Ashdown Forest and neighbouring localities in both E. and W. Sussex until at least 1935, but has not been seen since World War II. The nearest modern localities are in Wales, the Pennines, and central France.]

<sup>1101</sup>**Gymnadenia** Hartm.

**G. conopsea** (L.) R.Br.

Fragrant Orchid.

15, 16

22/52

Native. Old chalk grasslands, very common and fairly constant, and sometimes in very great abundance. Not recorded off the chalk in Kent. Not now in Dartford-Gravesend area, nor in Thanet.

Common on the chalk in Surrey and Sussex: in Essex now extremely rare (Thurrock). V[ery] common in Pas de Calais.

Mr. M. Chalmers-Hunt reports *Plusia gamma* (Silver y moth) and *Ochlodes venata* (Large Skipper) visiting the flowers of this species at Downe in 1958, but it is not known if pollination was effected.

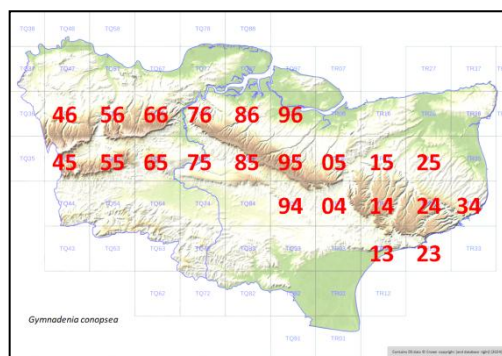
**5)** Downe golf course (1) 426605, DL, '56. c.580 Darwin's Bank, Downe, 1962. Pratts Bottom, 1947. Downs below A.21, Polhill, 1949-52 **MNE**. Downs NE of Pilgrim Ho[use] Westerham 1955 **MNE**. Brasted Nower, RAC. Saltbox Down, 409604, 1961, D.L. [Downe, 1903, 1916, AG Davis **MNE**.] NE Coombe, Chevening Park, 1951-61 **MNE**, 488587. From NW of Lusted 409584 RAC.

**6)** SE of Park Wood, Eynsford, 1949 **MNE**. White Hill, Shoreham. Downs SE Shoreham, 530609-531604. Downs E. of Otford. Downs W. of Greenhill Wood & to N, 530609- 531604. Downs N, & NW of Kemsing. Downs 1¼m NW of Wrotham 1947 **MNE**. v[ery] a[bandant] Wrotham Water Down 1936-62 **MNE** 626604 (500, '62), 629605. Pilgrim Ho[use], Trottiscliffe, 635608. Down N of Crookhorn Wood. S. of L[owe]r Austen Lodge, 1949. N. of Romney Street (Round Hill). Magpie Bottom 543611, 541612, 542615, 1953 **MNE** c.3000, 1955 c.3000, 1956 c.10,000, 1957 c. 10,000. Down SSE of Meopham Green, 1955 **MNE**. Wrotham Hill. [Dartford AC Tagg.] Edge of High Castle Wood. W. of Hog Wood.

**7)** Upper Halling Downs. 725665 Borstal, DL. Pilgrims New Grounds, L[owe]r Bell, 1962→1998. Burham Downs. 819577 Thurnham. 834569 Broad St[reet] DMCC. Hollingbourne Hill, 1962, 1886 **MNE**. Timbols Hill, Witchling. ½m NE of Lenham, 1956 **MNE**. Foxbury Wood, East Lenham Downs, 1946 **MNE**. Hart Hill, Charing, DHK. 94 Chalkpit, Westwell. Wouldham Downs. Walderslade Valley, 1951 **MNE**. 829629 Queen Down Warren '37, 62. Down N. of Magpie F[ar]m, Bredhurst. South Green, Stockbury, 1960, 850598, D.L. W. of Worms hill. Down S of Filmer Wood, Wichling. Putt Wood, Ospringe. Down opposite Putt Wood, Ospringe, 980602.

Godmersham Downs 1946. Lees Park, HMW. Down N of Dunn St Westwell HMW, '55.

**8)** 088533 Mystole Chilham AGS. Downs by the Crown, Wye, 085466. Downs N. of Church, Crundale 1945 **MNE** 1960. E of Longport Crundale 1952-62 **MNE**. Broad Downs, Brook, v[ery] a[bandant], 1962 **MNE**. Downs N. of Podlinge, v[ery] a[bandant], '1962. Downs, Cuckoldscoombe Brook 1955 **MNE**. [Brook hillock, 085437, 1956, 1958 DL & FR.] Stowting Downs. Postling Downs. Cheriton Downs. S & E of Castle Hill, Folkestone, 1000's, 217382, '62. Sugar Loaf, Folkestone. Folkestone Hill, v[ery] a[bandant] on top. S. Foreland. Kingsdown Golf Course, 1954, v[ery] a[bandant] **MNE**. The Lince, Ringwould 1951 **MNE**. Langdon Bay, ECH Haes '55. Juliberry Downs, Chilham. W. of Penny Pot DHK. Downs N. of Winchcomb F[ar]m, Crundale, v[ery] a[bandant]. E. of Eggerton Manor, Godmersham 1949 **MNE**. Hassell St[reet] (Albino) DHK. Downs S of Lydden. SW of Dane F[ar]m 172473, Mrs B. Lynsore Bottom. Bourne Park, B[isho]p[s]bourne, BJB. V[ery] a[bandant] [Breach Downs, Barham, ploughed c.1975.] Downs E of Elham 1950 **MNE**. Parkgate Down Elham 1955 **MNE**, 1998. Bishopsbourne (Charlton Park) 1948 **MNE**. Covert Wood, 1950 **MNE**. G[rea]t Shuttlesfield Farm Lyminge, 1992. SE of Etchinghill n[ear] Arpinge 1998. Arpinge Down NE of Asholt Wood BW →1998. Down E of Pitt Wood, Adisham. Barham Downs 1998. N. of Pean, B.W. above Crabble sports ground, 301426, '62 D.L. S. of Chilton, 279432 DMCC. Downs W. of Woodville, Temple Ewell – a[bandant] 1995, '96. White fl[ower]s at Crabble. Breach Downs.



<sup>1102</sup>**G. densiflora** (Wahlenb.) Camus, Bergon & A. Camus

<sup>1101</sup> In the manuscript treated as *G. conopsea* subsp. *conopsea*.

<sup>1102</sup> In the manuscript, given as *Gymnadenia conopsea* subsp. *densiflora* (Walenb.) G, Camus, Bergon & A. Camus. Francis Rose championed the separation of taxa formerly lumped under *G. conopsea*, certainly at least to subspecific level, and he considered that they could merit specific status (which has since been recognised). Not dealt with in the Flora manuscript is his belief (pers. comm.) that



Fens and calcareous marshes: very rare and probably now extinct.

It occurs in a chalk pit at Offham E.Sussex (C.A. Lister), and in a calcareous bog at Balcombe, E. Sussex, and on chalk grassland (N aspect) at Heyshott, W Sussex (1976), Ditchling Beacon; and formerly occurred in fen at Westbourne, W. Sussex; not recorded for Surrey nor Essex, but in fens in Hants.. On chalk in Pas de Calais, and in fen in Somme.

1) [North Cray Brooks, Hb. Sim: Fl.K.] [Keston Common A.G. Davis **MNE** 1916]

4) [Little Britton, Wingham, FGEK.] Ham Fens, c.1920, G.L. Davidson, the exact site is now completely altered. N end w[oo]ds, SE of Ham Road (61/3)

6) [Bogs...between Northfleet & Thames, Merrett, 1666.]

### <sup>1103</sup>**Coeloglossum** Hartm.

**C. viride** (L.) Hartm.

Frog Orchid.

15, [16.]

1/52

[8/52]

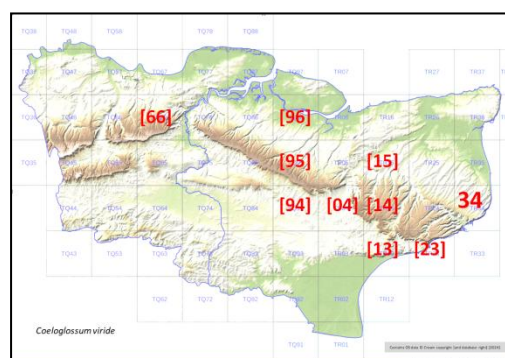
Native. Chalk grassland: formerly in at least 12 localities, now confined to Crabble near Dover, where however it is abundant. Extremely rare and erratic in its appearance in Surrey (3 localities known in the last 20 years); rather common on the Sussex Downs: apparently extinct in Essex: very rare now in Pas de Calais, but still in Nord (Ardennais).

6) [Downs NW of Crookhorn Wood, 1926, F. Forsyth; not observed recently.]

[Downs NW of Birling, M. Atkins, c.1932; not observed recently.]

8) Downs above Crabble sports ground, n[ea]r Dover, J. Jacob: Lloyd, 1946, abundant: 1948-54! and since, to 1962, several observers. Reported in Elham Valley near Barham.

[Formerly n[ea]r Canterbury (Oxenden 1873). Ospringe (Blackstone, Pl. Fav.) Folkestone Warren, Ulyett: Sellinger: Horton FGEK: Stowting FGEK: Brook, ESM: Wye, W.R. Jeffrey its disappearance may be due to ploughing and the spread of *Brachypodium pinnatum*.]



### **Dactylorhiza** Necker ex Nevski<sup>1104</sup>

**D. fuchsii** (Druce) Soó<sup>1105</sup> ssp. **fuchsii**

Common Spotted Orchid.

15, 16.

47/52

Native. Woodlands, scrub and grassland on base rich soils, particularly on chalk, clay and ragstone; disused claypits, chalk and ragstone quarries; marshes, fens, meadows, and dune slacks: very common and often abundant. Common in the adjacent counties and in N. France.

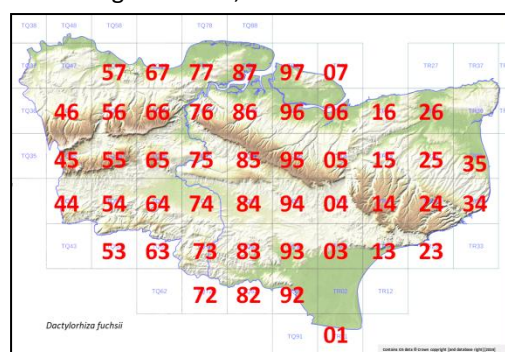
1) Holwood Park, 1954 **MNE**. Ruxley gravel pits, F. Holroyd: SBS. 56 Farningham Road, PCH.

2) 97 Landslips on cliffs East End, E. of Minster in Sheppey, 970734, 990732, 1954 **MNE**. 87 Copse E of Fenn St., St Mary Hoo, 1955. 07 Warden Point cliffs, Sheppey, 020726, 1955 **MNE**.

3) 96 Bysing Wood, field below, 1946: with unspotted leaves & flowers 1958 Mrs B. Cane Wood, Tylerhill, REW. Calcotthill Wood, Sturry / Sturry Hill Gravel Pit, Jane Hyde, 1952. Old Park, Canterbury '55: - '81!

4) Stodmarsh (Lampen Wall) REW. Fen-Meadow S.E. of Wingham, 1949. Hacklinge, 1939, JPMB. Plucks Gutter! 1958 A.C.C. Worth Minnis 1950 **MNE**. Dune slack, behind Sandwich Bay 1956 **MNE**.

5) N of Norheads Wood Biggin Hill 403590, '62. 100's, down, Saltbox, Biggin Hill 408605, 50, 61, DL. Chalkpit, Morants Court Hill, 1949 **MNE**. Darwins Bank, Downe, 1962. Copse Fox's Garage, Badgers Mount 493615. Lattice Coppice 473612. Timberden Bottom 507623, DL. The Nower, Brasted, RAC. Downs, Chevening Park,



subsp. *densiflora* was present at Parkgate, which post-dates dated *G. conopsea* records in the account (latest, 1998). Subsequent observations have not supported this determination.

<sup>1103</sup> This entry follows *Herminium* in the manuscript.

<sup>1104</sup> Originally given as *Dactylorchis* (Klinge) Vermeul, amended to *Dactylorhiza* without updating author citation.

<sup>1105</sup> Authority cited as in the orchid check-list; Flora manuscript gives (Druce) Vermeul.

1951 **MNE**. 426577 W of West[erha]m Hill RAC. Copse W of Newbarn Lane Cudham 445594, '62. SW of Biggin Hill, RAC. NW of Lusted 409584 RAC. Mollards Wood, N slope 402591 RAC. E of Westerham Hill, DL 454567

**6)** Whitehill Shoreham 531604 / 530609. Magpie Bottom 53541612 DL. Otford Mount 531613 DL. Pit E of Otford 549496 DL. Wrotham Water Downs W of Pilgrim Ho[use], 626605. Upper Halling Downs. Down N of Crookhorn Wood. Halling Great Pit, 100's of pl[ants], white to deep mauve, 1961, G L Davidson. Holborough Pit, 1961, G L Davidson. Chalk pit, NW of, & N of Horns Cross, 1962. Swanscombe *E. palustris* pit 596750 DL, BOJ, 1956. 67 Pit Swanscombe HAS. Wouldham Steps, Meopham, 1947 D. Friend. E of Pennis Wood. Whiting Pit, NE of Cuxton, 1951 **MNE**. Great Crabbles Wood, Shorne, 1946, 1965 **MNE**. Hatch Hill 575655.

**7)** Chalk pit W of Borstal, DL 725665. Barham Downs. Pilgrims View, Bluebell Hill, '62. Berengrave Lane pits. Horsted Valley. Lords Wood. Hollingbourne Hill, 1939-62. Queen Down Warren. Rainham Park. Hempstead BC. Timbolds Hill, Wichling. Filmer Wood (loam), ditto (chalk) 62. Coxett Wood 987603. Ospringe Down 980602. High Wood, Wormshill. NW Cobland F[ar]m below Foxbury Wood, Lenham 1946 **MNE**. (ch[al]k) Spuckles Wood, Stalisfield '62. 028556 / 022546, Badlesmere E, CT. Challock Forest ES. Down N of Dunn St ES. Westwell Hangers 62. Hawkins Wood, Chilham. Whitehill E side r[oa]d 034493, '56.

**8)** Downs ENE of Giddy Horn 62. Mystole, Chilham, DHK. 805437 Brook, Hillock, r[are], 62, 1955 **MNE**. Devils Kneading Trough, l[ocally] f[requent], 62. Winterage Wood / Garden Wood, Acrise DACL '63. Lydden-Swingfield. Bishopsbourne JG. Bridge JG. Kingston JG. River KDR. E of Winchcombe Farm Crundale 1956 **MNE**. Larkey Valley Wood. Wood SE of Crundale Ch[urch], Mrs B. Covet Wood. Covert Wood. Copse (ch[al]k) N. of Bavinge '62. c100 Down N. of Podlinge '62. (clay) Wood W of Podlinge '62. Down NW of Misling F[ar]m, Elmsted, '62. (ch[al]k) Hunts Wood, Bossingham '62. S of Chilton BW. Reinden Wood (ch[al]k) 62. Lady Wood, Capel, RAC. Down NE of Asholt Wood BW. Puckland Wood '62. Stafflands Wood, 62. Spong Wood M J Comyn. Down NW of Parkgate, Elham, 1955 **MNE**. SW of Dane F[ar]m 175474 Mrs B. West Wood, Stowting BN. Yocketts Bank. Sugarloaf (one bifurcated,  $\infty$  bracts, no fl[ower]s), R. Chambers. Castle Hill Folkestone 217382. Folkestone Warren, chalk. 301426 Crabble Down, Dover, 1949 **MNE**.

**10)** 57 Water Meadows Darenth 1945 **MNE**: PCH 1959. 55 Meadows W. of Otford R[oa]d, Sevenoaks, 1950 **MNE**. 45 Dry Hill Chevening 549496, DL. 45 Scords Wood, in valley on clay loam, 1963. Westerham Wood 82! 55 Broadhoath Wood, Stone Street, 1950 **MNE**.

**11)** Sandpits, Trottscliffe / Platt DMCC. Ryarsh Wood. Oaken Wood, Ditton. Copse by R[oa]d N of Chiddingstone 1953 **MNE**. Dunks Green, 616526 c1960, D. Cattlin. Borough Green Quarry. Leybourne Castle lakes in marsh. Horish Wood. Fairbourne Mill. Field W. of Cage Green, 588480, 1952, DL. Wood by Hoad Common 592515, 1953 DL. Copse N of Horn's Lodge, '53, 588505, DL. Snarkhurst Wood. Dickley Wood, Harrietsham. Trench Woods 519488 DL. ....580488 DL. On loam, Kiln Wood, Lenham '62. 563482 R[ai]l[wa]y bank, Hildenborough 1960, CAS. Pluckley Brickworks ES.

**12)** (Gault) SE of E Lenham. Nackholt Wood. Hinxhill. Cadmans Wood, 082428 Brook 1946 **MNE** 1956 DL. Cuckolds Comb 1984.

#### **D. fuchsii x incarnata**

##### **4)** Plucks Gutter

[**11)** Birling Marshes, 1943: now destroyed.]

#### **D. fuchsii x praetermissa**

Common where the parents occur together, forming hybrid swarms, in fen-meadows and damp disused chalkpits.

**3)** 15 N. side Canterbury Golf Course, RGW.

**4)** 35 Ham Fen, JEL, 1925: 1949-60! 35 Sandwich Bay, Mrs Dodds, 1959 **MNE**. 25 fen SE of Wingham.

**6)** 57 Chalk pit N. of Craylands Lane Swanscombe 596750, 1946 **MNE**. 77 Chalk pit SW of Cliffe, 1957, DL, 1963, HAS: A. Da' Ruck.

**7)** 76 Ch[alk] pit, Woodlands Lane Gillingham, 1955, OD.

**10)** 55 Meadow W. of Otford R[oa]d, Sevenoaks, 1950 **MNE**.

**11)** 66 [Birling Marshes, 1942, 1943 **MNE**.] 65 Leybourne Castle lakes, 1949 **MNE**: 1958.

#### **D. maculata** (L.) Soó<sup>1106</sup>

Heath Spotted Orchid.

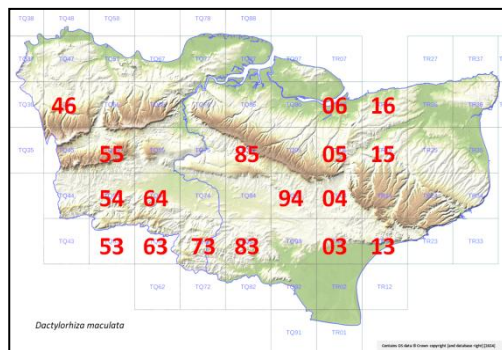
15, 16.

17/51

Native. Wet-heaths, valley-bogs, and moist heathy rides in woods on acid soils: only locally frequent. Frequent in 12) and 13), rare to very rare in 1), 3); 10) and 11): unrecorded elsewhere. Widespread locally common on the heathlands of Surrey and Sussex, rare in Essex and in Pas de Calais, where heaths are scarce.

<sup>1106</sup> Name as in the orchidcheck-list. In the manuscript, given as *D. maculata* (L.) Vermeul. subsp. *ericetorum* (E.F. Linton) Vermeul.

- 1) 46 Keston Bog, 417642; 1917 AGD **MNE**; plentiful, 1944, 1945. 1958, HMP.
- 3) 15 Heathy area, Church Wood, Harbledown, RGW. 16 Heathy ride, Minching Wood, Blean N.R., 1957. 06 Old Sandpit, Forstal, / Hernhill, H.M.Wilks. 05 Small colony n[ea]r stream, Rhode Common, 1962, Mrs Brickenden & J. Gurr. 15 abundant in acid marsh E. of Canterbury, Scotland Hills, 166587, 1963, R. Gorer.
- 4) Hacklinge, 1952, BJB.
- 8) Westwood, B. Nash.
- 10) 55 Deep Sandpit, 1m S. of Ightham 1950 **MNE**: destroyed, 1952. Wildernessee Seal, 3 pl[ants] 1955, in grassland, B. Sennitt.
- 11) 85 Small boggy meadow, Sandway, 1954, abund[ant] **MNE** 882512.
- 12) 94 Hothfield Common, in valley bogs, 1943-62, v[ery] a[bundant] **MNE**, both W. & E. of A20. 13 Gibbins brook, 1945: 1954 **MNE**. 04 Nash N. of Blackwall Farm, Willesborough, E. Scott: 1955! **MNE**. 03 Small bog, Stone Hill, Sellinge [sic], 1945; 1954. 04 S.S. of Hinxhill, 1950 **MNE**.
- 13) 54 a[bundant], Valley bog, Moorden, N. of Penshurst, 1943-1948 **MNE**. 53 Hawkenbury Bog, JRW; 1944<sup>1107</sup> 63 Bog W. of Ellis Wood, Lamberhurst, JRW: 1944-57 **MNE**. 64 Cinderhill Wood, 1947. 73 Louisa Lake bog, Bedgebury, 1947. 83 Heathy banks & Rides, Chittenden Wood, JRW: 1944-58 **MNE**. 83 Causton Wood 828365, 1950-54 **MNE**.



**D. maculata** subsp. **ericetorum** x **praetermissa** (*Orchis hallii* Druce)

- 12) Hothfield Heath, in northern valley bog, 1942, **MNE**.

**D. incarnata** (L.) Soó<sup>1108</sup>

Early Marsh Orchid.

15, [16]<sup>1109</sup>

9/52

Native. Fens and calcareous fen-meadows: rare and local. It appears to be now confined to 2), 4), 11) and 12), and to have become extinct through ploughing in 10). The Kent colonies are all of plants with flesh-coloured flowers except some of those at Chilham which have purple flowers. It occurs rarely in Surrey, mainly as the subsp. *pulchella* in mildly acid flush bogs; and rarely too in Sussex and Essex as the type. It is frequent in the coastal duneslacks and fens of the Pas de Calais in several colour forms.

- 2) Holborough Marshes, 1980→

4) 26 Plucks Gutter, BJB, etc.; 1951-62, several observers! **MNE**. 35 Hacklinge Fen, BJB etc.; 1945-54! **MNE**. 35 Ham Ponds, 1925 J.E.L. N. end of Ham Fen, 1957, KDR. Preston Marshes, Mrs. B. Dodds.

10) [Water meadow N. of Shoreham, G.M.B., 1954! **MNE** since ploughed up.]

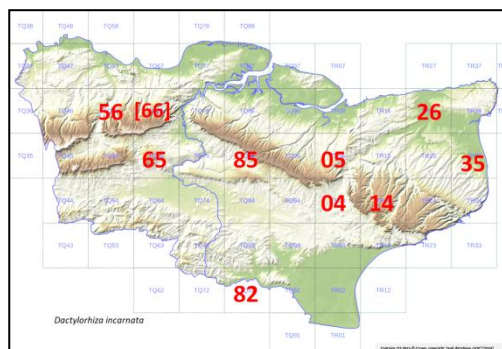
11) [66 Birling Marshes, 1942-43 **MNE**.]

65 Leybourne Marshes, 1944, 1963 R.D. English. 862535 Meadow N. of Goddington, Harrietsham, by chalk stream, 1961-2, Mrs B.Dodds.

12) 080537 Water Meadows, Chilham, abund[ant], 1946, BJB; 1947-59! NW of Mill; & SE of Village, 1965. Abundant (100s) in meadows below Chilham, Mrs B. 14 S. of Stowting, in calcareous fen-meadow; c.100 pl[ants], 1954, **MNE**. 04 N. of Willesborough, E.S.

15) 82?

(subsp. *coccinea* (Pugsli.) H.-Harrison f. has been planted in a dune-slack S. of the Guilford Hotel, Sandwich Bay.)



**D. incarnata** x **praetermissa**

4) Ham Ponds, J.E.L., det. CBT; J. Bot. 1925, p.340.

11) Birling Marshes, 1943, det. A.J.W. **MNE**.

**D. praetermissa** (Druce) Soó<sup>1110</sup>

[Southern Marsh Orchid.]

25/52

<sup>1107</sup> Hawkenbury Bog was not in vc16 West Kent.

<sup>1108</sup> Name as in the orchid check-list, in manuscript given as *D. incarnata* (L.) Vermeul.

<sup>1109</sup> Brackets of original drafting indicate that species was gone from West Kent; but the addition of Holborough Marshes from 1980 is not reflected in this.

Native. Fens, fresh-water-marshes, duneslacks, alluvial meadows, and disused chalk pits: widespread in the N. and NE parts of Kent; far commoner than *D. incarnata* and less restricted in habitats, but unrecorded from most of the Weald Clay and the whole of 13), 14) and 15): not noted either for 1). Scattered in 11) and 12) but hardly common in Surrey and Sussex: Rare in Essex: common in Pas de Calais near the coast in dune slacks and fens, and rare also in chalk grassland inland.

2) 65 Marshes N of Lunsford. 76 Burham, 1911, K. Peters, **MNE**. 97 Landslips on clay cliffs, E. end, Minster in Sheppey, 1954. 65 S. Snodland Marshes.

3) 15 Valley marsh on Eocenes. N. of Golf course Canterbury, 1947 **MNE**; 1963, R. Gorer. 175607 Sturry Hill Gravel Pit 1955, Jane Hyde.

4) 35 Sandwich Bay, dune slacks W. & S. of Hotel 1949-62 **MNE**. 35 NW of Princes Club House. 35 Hacklinge. 35 Ham Fen 1947 **MNE**. 35 Worth Minnis, 1947. 35 Northbourne Fen 1947 **MNE**. 25 Fen N of Wingham, 1947 **MNE**. 36 Ebbsfleet, C. [sic, for D.] Harle: 1963! 35 Marsh 1m. S. of Sandwich, 1946, 1951 **MNE**. 25 Fen Meadow SE of Wingham, 1947: v[ery] a[bandant], 1958 BJB. 26 Plucks Gutter, 1951-55 **MNE**, 1958, ACC. Fordwich Marshes, M. Ch[almers]-Hunt, REW. 16 Sturry Marshes, Bretts Gravel pits, JO; 1955, Jane Hyde.

6) 57 Chalk pit N. of Craylands Lane, Swanscombe, 1946-50 **MNE**, 596750. 77 Wet Chalk pit SW of Cliffe, 1963, HAS & A. Ruck. 66 Great pit, Holborough, a few pl[ants], G.L. Davidson 1961.

7) 86 Chalk pit, Berengrave Lane, Rainham, Jolly, '76. Ch[alk] pit, Woodlands Lane, Gillingham, 1955, OD. 96 Highsted pits, Tunstall, 1958, DMCC. 76 Chalk pits, Eccles, E end, 1953, REW.

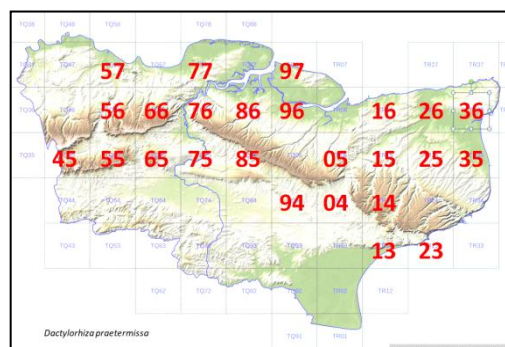
8) 35 chalk pit N. of Hacklinge, 1960-67 **MNE**.

10) 55 Waste g[roun]d by garage, Dunton Green, 514566, '54, DL. 57 Meadows at Darenth, St J.M. 56 Meadow N. of Shoreham, 1954, **MNE**. 55 Meadow W of Otford Road, Sevenoaks, N of Bat & Ball, 1950, **MNE**. 55 Marsh W. of Sevenoaks Station, 1949, F.S.E.F. 45 Marsh at Brasted n[ea]r Church, G.M.B.; RAC.

11) E of Dunks Green, 616526, D. Cattlin, 1960. W. Peckham, 639521, 1960, D. Cattlin. [Birling Marshes, 1942-44 **MNE**.] 65 Lunsford Marshes, 1946 **MNE**. 65 Leybourne Castle Lakes, 1944-60. 66 Birling Marshes. 85 Meadow on gault S. of Thurnham, 1945. 85 Meadow by stream joining Len, ½m. W. of Harrietsham, 1961-2, Mrs B. Dodds. 75 Bearsted, J.B. Marshall. Teston, 1890, H. Lamb **MNE**. [S. of Marden, Fl. K.] 85 Hollingbourne, J. Justise.

12) 05 Chilham Meadows, 1945-59. 04 By Stour, Olantigh, J.H.P.S. 94 Hothfield Common, 1943→. 14 Stowting Meadows, 1954. 13 Gibbons Brook, 1945, **MNE**. 04 Marshes N. of Willesborough, E.S.

16) 23 Darnley Vale, Cheriton, 1955 **MNE**.



#### **D. praetermissa** ssp. **junialis** [(Verm.) Soó]<sup>1111</sup>

This distinct looking plant, as I understand it, is not the hybrid *D. praetermissa* x *fuchsii*, but a ring-spotted-leaved variety of *praetermissa*.

4) Hacklinge, 1939, BJB: 1946 **MNE**. Worth Minnis, 1947-60 **MNE**. Ham Fen 1947→. 1m. S. of Sandwich, 1946 **MNE**. Fens N of Wingham, 1946-47 **MNE**. Wenderton F[ar]m, Wingham 1947 **MNE** and "hybrid" with *praetermissa*, 1947 **MNE**. Dune slack S. of Guildford Hotel, 1950 **MNE**. Fen SE of Wingham, 1949, v[ery] a[bandant] 1958. Dune slack, NW of Princes Club Ho[use], Sandwich Bay 1946. 10) [Meadow N. of Shoreham 1954 **MNE**.]

It occurs in Pas de Calais.

(**D. purplella** (T. & T.A. Stephenson) Verm. [Northern Marsh Orchid . occurs in Hants. as a remote outlier from its northern area of distribution, so could occur in Kent.)

(**D. traunsteineri** [(Saut. ex Rchb.) Soó]<sup>1112</sup> Narrow-leaved Marsh Orchid occurs in Suffolk and Berkshire, but this "Continental" marsh orchid occurs in no adjacent county nor in Pas de Calais.)

#### **Dactylorhiza**<sup>1113</sup> x **Gymnadenia**

<sup>1110</sup> Name as in the orchid check-list, in manuscript given as *D. praetermissa* (Druce) Vermeul.

<sup>1111</sup> Name as in the orchid check-list, in manuscript given as *O. pardalina* "Pugsl." and var. *junialis* Verm.

<sup>1112</sup> Cited as (Sauter) Vermeul.



**D. fuchsii** x **G. conopsea** (**X Dactylodenia st-quintini** (Godfery) Duvign.<sup>1114</sup>)

**5 or 6)** n[ea]r Sevenoaks, H. Pierson, 1898: *J. Bot.* (1898) p.288; *J. Bot.* (1907) p.278.

**8)** Pett Street Down, 1946 **MNE**.

# Orchis L.

**O. mascula** (L.) L.<sup>1115</sup>

Early purple Orchid.

15, 16.

44/52

Native. Woodlands, scrub, and occasionally grassland on more base-rich loams, clays and sands; very common and frequently abundant locally in all wooded areas of Kent: unrecorded recently for the Marsh districts 4) and 15), for Thanet 9) and very rare (on the Tertiaries only) in 2); now very rare in 1) due to suburban developments. Common in all adjacent counties and in N. France. After *Listera ovata*, this is our commonest orchid, occurring in hundreds of localities and it is still a normal feature of our acid woodlands everywhere, but its tom-cat-like odour at night should discourage pickers.

**1)** 46 St Julians Wood, Bromley Common, 1954. Wood E of Bromley Common, 1848, DMcC. 46 Bourne Wood, W. of Swanley, 1954 **MNE**.

**2)** 56 Farningham Wood, 1949: PCH. Joydens Wood Miss M Wythes, '57. 86 Hawes Wood, Newington, 1954. 87 Copse N.E. of Fenn Street, St Mary Hoo; 1955 **MNE**. 07 Warden, Sheppey, 1918, AG Davis **MNE**: 1956!

**3)** 05 Upper Ensinge [*sic*, for Ensign], 1945, DHK (white fl[ower]s). 05 W[oo]d SE of Iron Hill, Dunkirk, 1948 **MNE**. 05 Stonestile, DHK, 1945 (flesh col[oured] fl[ower]s). Calcott Hill Woods, Jane Hyde 1953. Hempshall Wood, 1951, REW. 15 Trenley Park Wood, 1949.

**5)** 46 Jewells Wood, '45. 46 Copse n[ea]r Cuckoo Wood, Downe, PCH. 46 Darwin's Bank, Downe, 1945-62. 46 New Years Wood. 46 Lattice Coppice. 45 S. of Cudham Church. SW of Biggin Hill RAC. 56 Wood W. of Timberden Bottom 506619, DL. W. of Downe, M Ch[almers]-H[unt].

**6)** 57 Darenth Wood, E. side 582726, HMP, 1951. 56 Down above Shoreham Sta[tion] 530609 DL. 56 W of Magpie Bottom 541615, PCH. 56 High Castle Wood 561628, DL. 66 Wood above Wrotham Water Down, 629606, 626605, DL. 66 Worth Wood, Bush, PCH. Cobhambury Wood, HAS. Purvil Wood. E of Priestwood. W. of Harvel. Foxesdown. Chattenden Wood 745735 AGS.

**7)** Copse, Burham Downs. Pilgrims View: & Wheat field Wood, E. of Lower Bell, '62. Rainham Park, A.P.Major. Hollingbourne Hill. Hart Hill. Squirrels Wood 45. Hawkins Rough, Chilham. Rainham Park Wood. Bredhurst Hurst. Purple Hill 808624. Wood above Queen Down Warren **MNE**. Timbalds Hill. College Wood, Newnham. (Lower) Park Bottom Wood, Newnham, r[are] '62. Spuckles Wood, Stalisfield '62. Kennelling Wood Stalisfield '62. Copse E of Whitehill, Ospringe 1945 **MNE**. Coxett Wood. Sandbanks Wood 930602. Syndale Wood. Woods S. of Hockley. Down in Filmer Wood '62. Wichling Wood 1949 **MNE**. S. end Lords Wood 769622, DL.

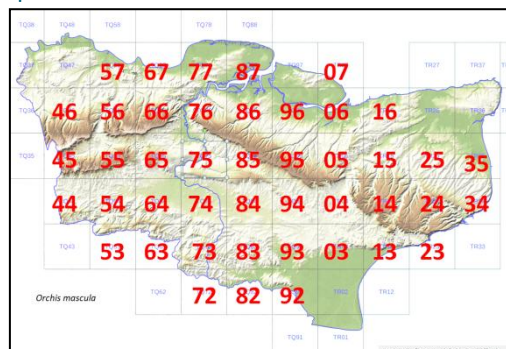
**8)** Wood SE of Crundale Ch[urch], Mrs B. Winchcombe Down l[ocally] a[bandant] 1959, 085498. Wood W. of Sole St[reet], DL, 092496. Hurst Wood, N of By Coombe F[ar]m. Copse (ch[al]k) N of Bavinge '62. Spong Wood RAC: 1992. Lynsore Bottom. Garden Wood, Acrise DACL. S. of Denton, Miss DACL. Yocketts Bank, '97. Coombe Vale Dover. Swingfield – Lydden. Sladden Wood to 1995. Downs NW of Newington DG Stanford. Lousyberry Wood, T[emple] Ewell. Mystole 086533 ABS, 1997. Hurst Wood (ch[al]k) '62. Copse S. of Hurst Wood (ch[al]k) '62. Stelling Minnis (loam) '62. Atchester Wood 1961. Parkgate Down, Elham, 1961, 1998. Reinden Wood (ch[al]k) '62. Copse S. of S Alkham (ch[al]k) '62. Lady Wood Capel, RAC. Frandham Wood KDR. S. of Chilton. Wolverton Wood. Waterhouse Wood, Adisham 1955 **MNE**. Covert Wood. Parkgate. Arpinge.

**10)** 45 Westerham Wood, 1949. Bessell's Green, 1950, F.S.E.F. Hills Wood Kemsing 563585, CAS.

**11)** Ryarsh Wood. Oakden Wood. Forslet Quarry. Horish Wood. Park Wood, Boxley. Longham Wood. Snarkhurst Wood. Milbay Wood, E. Peckham 1945 **MNE**. Starvecrow Hall 600502 B. Sennitt 1957. On loam, Kiln Wood, Lenham '62. Fairhill, DMcC. Bank by Hildenborough Sta[tion] CAS. Minne Hood Tonbridge 580488, DL. Woodland Walk Tonbridge 598488 DL. Starvecrow Hill Tonbridge 601503 DL. Trench Woods 591438 DL.

**12)** Copse on Gault S. of E. Lenham. Cadmans Wood, Brook, 082429, DL.

**13)** Chatfields, n[ea]r W Pond, RAC. Ashour Wood. Hoathly, Lamberhurst. Southborough HNC. Castle Hill/Pixot Hill, Brenchley. Combwell Wood 1898 JS **TLS**.



<sup>1113</sup> *Sic*, although *Dactylorchis* has been changed to *Dactylorhiza* elsewhere.

<sup>1114</sup> Given as *Orchigymnadenia heinzliana* (Reichardt) Camus), reflecting the failure to update from *Dactylorchis*.

<sup>1115</sup> In the manuscript, *O. mascula* follows *O. morio*, preceded by *O. ustulata*, before which is *O. simia*.



**14)** Robins Wood Cranbrook. Attwaters Gill, Cranbrook. High Halden Ch[urch]y[ar]d, RAC. Wood SW of Sandhurst, 1950 **MNE**. Shirkoak, Woodchurch.

**16)** Lympe Park Wood 1949. Hythe JG. Asholt Wood. Postling Wents.

# **O. morio (L.)**

Green-winged Orchid

15, 16.

33/52

**Native.** Grasslands on clay, loam and chalk: formerly common, and abundant in many old permanent pastures throughout Kent: now far rarer, due to the conversion of such pastures to leys or arable, and becoming more confined to the chalk, where it is less vigorous in growth, though still widespread and found in all districts except 9) and 16), and locally abundant on London Clay in Sheppey 2) and 3). In Surrey, Sussex, Essex, and N. France, but becoming rarer as in Kent through the same factors.

**1)** Eden Park, Beckenham AG Davis 1905 **MNE**. 46 Sparrow Fields, Orpington, Miss C. Swain. 36 One pl[ant] between Hayes and Beckenham, 1950, JSS Beesley (*Lond. Nat.* 1950).

**2)** 07 W of Warden Point, AG Davis; Mrs. B. Welch, 1947; 1955 **MNE**. 07 S. of Warden Point, 1918 **MNE**, 1959. 97 Brambledown, W. of Eastchurch! L[ocally] a[bundant] in scrub, 1955, OD.

**3)** 05 Pasture on L[ondon] Clay, SE of Iron Hill, Dunkirk, 1946

**MNE**: 1948 **MNE**. 05 Blean NE of Rhode Common. 06 Seasalter, 097643, 39 infl[orescences] SE of S, 1958 HMW; 094638, 78 infl[orescences] E of Fox's Cross, 1958 HMW;

097636, 3 infl[orescences] E of Fox's Cross, 1958 HMW. 26 Ravine, Bishopstone, RE Wood, 207687. 16 Clapham Hill, RE Wood, 107644, 49 infl[orescence], HMW 1959. 16 Duncan Down, Whitstable, 110650, 1961, H.M.W. Field N of Hawcroft F[ar]m, Sturry, 181617, 1955, Ja ne Hyde. Cliff top Beltinge, 1954, Mrs K. Mackenzie, REW. E of Longreach P.H., 102660, Whitstable, REW. Shrub Hill Golf Course, Chestfield 140650 a[bundant], 1952, REW. Shrub Hill → Bogshole F[ar]m, 129650, REW & LWW, 1950. Frogs Island F[ar]m 148652, E of Chestfield REW.

**4)** 35 Damp pasture behind dunes, St Georges Links, Sandwich (behind Princes clubhouse, LWW), 1998. Preston Marshes, Mrs B. Dodds. NE of Stodmarsh, REW. S. of Shellness Sandwich REW.

**5)** 46 Down S. of Saltbox, 409604, 1 pl[ant], 1961, D.L. 1 pl[ant] SW of Biggin Hill, 1948, B.W.

**6)** 56 SE of Eynsford, G. Brand. Romney Street, 1937. 66 SE of Meopham, 1947, D. Friend. Birling Downs, 665616, Mrs. DVS Woods. S. of Whitehorse Wood, Trosley, DVS Woods. [Base of Birling Downs DVS Woods.

**7)** Walderslade, 4 pl[ants] 1954, REW. 86 Quen Down Warren 826629, JB Groom, 1803 **MNE**; 1946-62 **MNE**; 1998. 85 above Detling, pastures on each side of A.249, on clay with flints, S of Aerodrome, 1945-60 **MNE**. 95 Down in Filmer Wood, Wichling, 1949 **MNE**. 85 Down E. of Hollingbourne Hill, 1961, Mrs. B. Dodds. 76 W of Cowbeck Wood 973616 BC. ½m N of Hucking Church, Brig. Orr. 96 Simia Down, Ospringe, 1955, HMW.

**8)** 04 Crown Downs, Wye, 072467, 4 infl[orescences] 1960, D.L., 1997. Hassell St[reet], 1958, MEM. 14 Down E. of Elham, 1950 **MNE**. 14 Podlinge Down/Waltham 1948 **MNE**. 14 1 infl[orescence], Parkgate Down, Elham, 1962, Rev. A.C. Cawston; 1995! Down S of Denton '48 DACL. Downs E of Stowting '49 DACL. [Charlton Park, BJB.] Arpinge, P Gay 1998. 13 Downs NW of Newington before about 1947, DG Stanford, now burnt, 1951. 15 Meadows, Marley Lane, n[ea]r Duskins, Kingston, BJB. Swingfield Minnis, BJB. 23 Rifle range pasture, top of Abbots cliff, 1945-62 **MNE**. 34 Free Down, Ringwould, 1954 **MNE**. 34 Kingsdown Downs (Golf course) L.W.W. Warren Lane, Down 1/2 m SW of Lydden, 1955 **MNE**, 1994. 24 Down N of Lit[tle] London, Lydden 1955 **MNE**.

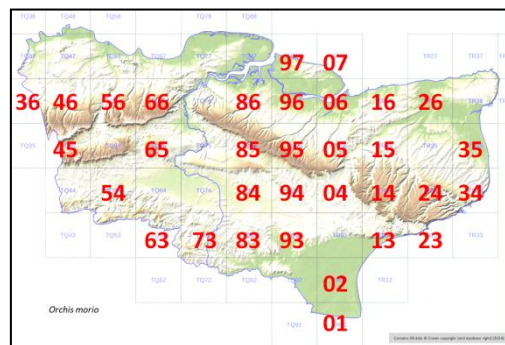
**10)** 56 Meadow N of Shoreham, G.M.B., 1954. Wildernessee, Seal, in grass, 548562, 1956, B. Sennitt. 45 Pit, Dry Hill, Sundridge, F.S.E.F.

**11)** 65 marshy meadow S. of Wrotham, 1962. [Ditton Laboratory, CW.] 66 Ryarsh Wood in pasture, 1936 **MNE**. W of West Peckham & N. of Hadlow, 639521, D. Cattlin, 1961. Dunks Green, Miss Nisbett. [S of Ide Hill, E. Armstrong – ploughed up.] [Meadow at Brandbridges, East Peckham, 1882, E Bartlett **MNE**.] 84 W. of Smarden, 863438, ¼m N of Marley F[ar]m D.McC. 1949.

**12)** 94 Westwell, ES. 934499 wet meadow on gault (122 pl[ants]) SE of Lenham, 1960. P.G.W. Meadow by Stour n[ea]r footbridge, Olantigh, 1946, DHK.

**13)** 54 Upper Haysden, 1945 **MNE**. 63 Scotney Castle c.200 spikes, PCH, 1956; abund[ant] in meadow, KEB, 1961. [Bidborough rectory –built over HNC.] Orchard, Bayham Abbey, 1947, Mrs. G.E.Scott. [Twysden, Goudhurst, 1899, JS **TLS**.] [S. of High Woods, G.E. Shaw.]

**14)** 93 S. of Woodchurch, 1939. 83 1m W. of Rolvenden, 1939 **MNE**. 93 Beals Farm, meadow on clay, Redbrook Street, Woodchurch, >200 spikes, H.W. Adams, 1960; C.A. Lister, 1961.



**15)** 13 Beach W. of Hythe, 1946, 1 infl[orescence] **MNE**. 02 Romney Warren. 93 N. of Shirley Farm, V. Rendel, 1943. 01 Dungeness, n[ea]r old school, on turf over shingle, 1957, W.G. Breed.

(**O. palustris** Jacq. This species, closely allied to *O. laxiflora* Lam., occurs in the fens near the coast in Pas de Calais (Merlimont, Cucq!) but is unknown in the British Isles.)

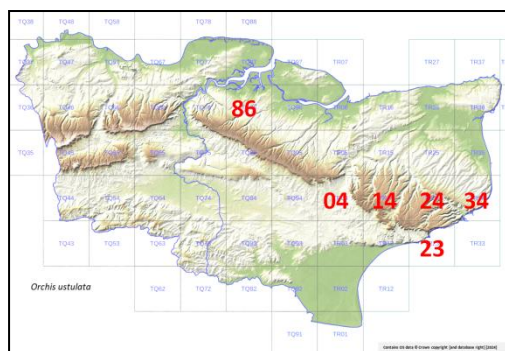
**O. ustulata** L. Dwarf Orchid. 15, [16]. 6/52

Native. In short grassland on chalk: rare, and now only in 7) and 8), though in some local abundance in some localities in 8) in some seasons: only recorded in seven localities since 1947, and apparently long extinct in V.C. 16. This charming species appears to have diminished everywhere in England this century due to ploughing up, and lack of grazing, of chalk grasslands. It has not been seen in Surrey very recently though probably still exists there; it is still abundant in a few Sussex localities; extinct in Essex; and confined to one locality (Blanc Nez) in Pas de Calais. This species requires about 14 years for development of a flower spike from a seed, and each plant apparently flowers once only, so it should not be picked.

[5] ?Reported at Darwins Bank, Downe, by E.J. Epps, 1939: Polhill, H. Knight / Chevening Park, H. Knight probably all errors for *Herminium*.]

[6] Formerly at Gravesend and Dartford, Fl.K.]

7) 86 Queen Down Warren 829629/ 1880, Fawcett Osborne **MNE**: 1905, **MNE**. 1923 **MNE**.



1939, c.24 infl[orescences].	1949	1956
1942 nil	3 - 1950	1957
1943 – 1 infl[orescence].	1951	1958
1944 - nil	1952	1959
1945 – a few, Whelon.	1953	13 - 1960
1946 – 24 infl[orescences].	1954	15 - 1961 <b>MNE</b>
1947	1955	1962
1948 – 5 infl[orescences].		1963

[Formerly near Bluebell Hill and Faversham, Fl. K.]

**8)** 04 Down S.E. of the Crown, Wye, F.G.E.K.: a few, 1954, K.E.B.: 33 spikes, 1952, M.E.M.; 1953, 4 infl[orescences] D.A.C.L.; 1 infl[orescence], 1955, below Crown, Mrs. N.E. Baker; 1959! 3 infl[orescences]; 1964, 2 infl[orescences]. Mrs B. Broad Downs, Brook, 1964, Mrs. B., 1 plant. Down above Bulltown, H. Greenfield. 14 S. of Whiteacre, Waltham, 1945, D.H.K. 14 Cobbs Hill, E. of Stowting, 1947, D.H.K & F.R., 1 infl[orescence] [14 Down E. of Elham above old railway station, Miss V. Day.] 23 N.W. side Sugar Loaf, Folkestone, 1939, B.J.B: below tank trap, 1951, D.A.C.L. E. of Folkestone, 1957, A.C. Cawston. [24 S.E. of Sladden Wood, Alkham, Miss V. Day: apparently now gone.] 24 Little London, Down S.W. of Lydden; for many years: 1959 **MNE**, 1963. 24 Down W. of Woodville, Temple Ewell, 217454, 1955-63 **MNE**, >100, 1955! 7 in 1958, K.D.R., 1980, 1991, 1995! 7 seen 1995. 34 Langdon Bay, B.J.B., 1939; 1946, 80 infl[orescences] **MNE**; 1948, 44 infl[orescences]; 1949; 1950; 1951; 1952; 1953; 1954; 13 infl[orescences] 1955; 1963, B.J.B. [34 Between lighthouses and sea, St Marg[arets] Bay, A.D. Webster, before 1898.] 34 Free Down, Ringwould, 1954; 5 infl[orescences] 1955. [Formerly on cliffs, St Margarets Bay, 1901, J Bennett **MNE**: above Brook: above Beachborough: Wingham: Barham Downs: Undercliff S. of Kingsdown, Fl.K.]

**O. purpurea** Hudson Lady Orchid, Maids of Kent. 15, 16 18/52

Native. Scrubland, woodland (both beech forest and coppice), and, more rarely, grassland on chalk: widespread in 5)-8) from near Knockholt in the west to Betteshanger, Waldershare and Dover in the east, and locally frequent and locally abundant in the east part of 6), the west half of 7), and throughout much of 8). Also in one wood on the Gault in 12).

This magnificent orchid still occurs in some 130 localities in Kent, and in abundance in about 25 of them, with from 100-400 spikes flowering in "good" seasons. It is however now very rare from Meopham westwards, and absent from much of 7) between Frinsted and Milstead on the west and Challock on the east. It is almost confined in Britain to Kent today: it exists in Surrey as a single locality and in Sussex and Oxford only as single plants within the last 25 years. In Essex it is long extinct: in Pas de Calais and N. France generally, however, it is

common and locally abundant on the chalk: clearly Kent lies at the extreme margin of its main European range, which is Continental-Southern in character.

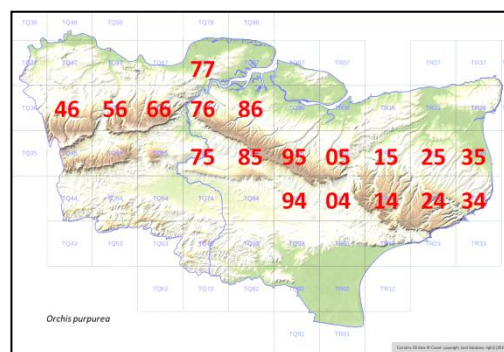
The wasp *Ancistrocerus parietum* (L.) is a known pollinator.

**5)** [1 plant E of Jewells Wood, C.1925, Fagg.] 46 Lattice coppice, Pratts Bottom, 473613, many 1936, Miss B[urnaby]-Atkins; 1947 (4 pl[ants] in fl[ower]) -1962! (5 pl[ants], 3 infl[orescences]) **MNE**. 7 st[ems], 1950, FSEF; 195, 1 inf[lorescence]; 1956 – 10 st[ems], 2 infl[orescences], DL; new site, 1991, E of road, 3 infl[orescence]s.

**6)** 56 Greenhills Wood, Otford, 538603, Knight, FSE Fawkes, 1949 (1949!-1962: **MNE**); 12 st[ems], 5 infl[orescences] 1950 FSEF; 15 st[ems], 8 infl[orescences] 5[sic]; 14 infl[orescences] 1956 DL; 12 infl[orescences] 539602, '58 DL; 8 infl[orescences], 15 st[ems] 539602 '59 DL. Wood N of Knockmill, West Kingsdown, 1949 **MNE**. Down N. of Wrotham Water, 1936-61 **MNE** EP. Lit[tle] Commodity, N. of Ryarsh, 1941-58 EP. Birling Down, 679625. Crookhorn Wood, in *Sorbus* area scrub at E end, abund[ant], 1944-53 **MNE**. Great Park Wood, 1943-53. E of Buckland, 1942-51. Hatch Hill, 1951. Red Wood, Luddesdown, 1946, abund[ant] **MNE** 683658 & 684665. North Wood, Bush, 1944: 693658, PCH. Above White pit. Up[pe]r Halling, 1943-60. 56 Magpie Bottom, sterile pl[ant], 545612, 1956, DL; 5 pl[ants] 1961, K. Marsh. Beech pl[antation] Fawkham Wood 597663, Mrs D. Woods, 3 infl[orescences] '55. Churchdown Brake, 594683 D.V.S. Woods. 613678 W side of Hartley Wood, 1954. EP 642635 below Ridge Wood, Harvel, D.E. Kimmins, Baker. Wood SE of Meopham, n[ea]r Wouldham Steps, 30 infl[orescences], Friend 1947: 1948! 77 Great Crabbles Wood, Shorne, 1944-'55 **MNE**, 1991. Scrub at top of down above N. Halling, PCH, = Scrub below Wingate Wood 699657 – 698655, 1942-1945 **MNE**. S. part of Wingate Wood **MNE** 694653.. Upper Halling hanger 1946 (**MNE**) -63. Top of r[oa]dbank n[ea]r Warren House, L[owe]r Bush (1 pl[ant]) 690672. Bush Valley Home Bavins 1946-53 **MNE**.

**7)** Bridge Wood NE Robin Hood. Wouldham Downs, 1947. Burham Downs, 1955-62, 200 infl[orescences] '62; 5 infl[orescences] 1960, OD. Lit[tle] Monk Wood, 738643, BC. V[ery] a[bundant] Coal Bottom, Tunbury Wood. Lords Wood, Walderslade 769622 '51, v[ery] a[bundant] 750 infl[orescences]. "Pilgrim view", Bluebell Hill, E. of Lower Bell; c400 spikes 1962. 1 pl[ant], Coombe W. of Detling, 1962, D. Cattlin. Westfield Wood, 755606, B.C. Hempstead 793636, BC. Coxett Wood, Ospringe, rare. Pett Dane, Ospringe, 1946. Park Wood, Chilham 1945-61 **MNE**. King's Wood to SE: S of Park Wood to E: **MNE** 1956. Edge of woods above Bilting, 21 pl[ants] 1945 DHK; 1954. Westwell (Suomi), ES. [Down N of Dunn St[reet], ES, 1950; ploughed 1957.] S. of Hempstead BC. Rainham Park Wood 1952. Purple Hill v[ery] a[bundant] 1942-62 **MNE**. Bredhurst Hurst 1941-62 **MNE**. Queendown Warren 1880 **MNE**; 1962!; & copse below 1961-2. SE of Scragged Oak 1965 – Penfold Bank LRAC. S, of L[owe]r Cox St. Church Wood, Bicknor, C.A. Lister. Holbeam, J. Pitt, 1997. Wood border SE of Young Manor Farm, Chilham, 3 infl[orescences], 1962. Bluebell Hill 1881 **MNE**. Top of Boxley Downs 1882 **MNE**. 1895. Bredhurst 1881, 1885 **MNE**. Rainham chalkpit EP. NE of L[owe]r Cox Street. Gorham Wood, Bicknor, 1950-62 **MNE** 855590 1978. Longreach Wood, Stockbury Valley 827699 **MNE** 1948-62; 92 pl[ants], 4 infl[orescences] 1960 DL. Hill Wood, Stockbury, E side, 1953, NE rare 1945. Longton Wood. High Wood, Wormshill, 1949; 1956. Stock Wood, Frinsted, 1949; 53 **MNE**. Bassiline Wood, Milsted, 1956 **MNE**. Wood 905595 N of Milsted, 1962, C.A. Lister. Cromers Wood 9060, 1990. W of Marriage F[ar]m 073479 DR Glendenny [sic, ?for Glendinning].

**8)** Mystole, DHK 1946 **MNE** – 087593. Downs Wood, 1946-59 **MNE** – 089514/087518/085520. S. of Penny Pot, HMW, 092511. Denge Wood, 10 ) : : **MNE** [sic]. Gorsley Wood, 1998, P. Gay (FR!). v[ery] a[bundant] N of Broadway Green F[ar]m, Petham, 1949-59 **MNE**. Iffin Wood, J. Moor – not recently. Larkey Valley Wood, 1949 **MNE**, 1955 **MNE**. a few in Gorsley Wood BJB, 1997 P. Gay (&!) [copse opp[osite] Gorsely Wood by Langham Park Rd BJB – grubbed by 1978.] Whitehill Wood, L[owe]r Hardres LWW. Hunts Wood (Up[pe]r Hardres Wood) 1961: 1962. Fryarne Park Wood & wood to N. Lynsore Bottom 1939-61 **MNE**. Atchester Wood, 1949, LWW. Westwood F[ar]m, Bishopsbourne, 1950, LWW. Blacklands Carvet Wood, W. of Lyminge, 1950. Clavertye Wood, NW of Elham, 1956 (wood cleared & cut). Valley, S. part of Covert Wood, 1950. W. of S. Barham, 1954: 1962. Covet Wood – v[ery] a[bundant] 3000 pl[ants] 1990-99. NE end Elham Park Wood Mrs. B. 1958. N[ea]r Danes F[ar]m 475177, 1960, Mrs. B. Covet Wood above Duskins, Kingston, 1939-56 **MNE**. v[ery] a[bundant] Wood, E of Swingfield 1965 **MNE**. v[ery] v[ery] a[bundant] Swanton Banks 1949-55 **MNE**; 12, 1948: >1000, 1949: ∞ 1947. v[ery] v[ery] a[bundant] Lit[tle] London, 1948-55 **MNE**. N. of Wolverton, 1949: 1955. v[ery] a[bundant] Sladden Wood, Alkham 1949 **MNE**. Copse S. of S Alkham 1950-62 **MNE**. Lords Wood, Temple Ewell, 1949 **MNE** 2 sites; 4 colonies; 1961 HMW. Jumping Downs, P. Gay 1992. Parkgate Down W[oo]d, 1997-99. Reinden Wood 1962. S. of Kearsney copse W of Frandham Wood, Mrs KDR. Coombe



F[ar]m, 1955. Copse E of Poulton F[ar]m, 1955. V[ery] a[bundant] Wood S. of Coombe Farm, 1955 BSBI. Wood E. of Longport 076488, 077483. N.W. of Hassell St[reet] W. of Pett Street. Beech Wood Wye. Fancombe Wood, Wye. Rob Sacks Wood, DHK 1945. L[ocally] a[bundant] S.E. of Pickersdean. [Brook Hillock] Wood S.W. of Big Coombe F[ar]m. Yockletts Bank, 1948 to 1962 v[ery] a[bundant], 1995 **MNE**. W. of Waddenhall Wood, 1956. Down N. of Podlinge, v[ery] a[bundant] 1948 **MNE**, 14 infl[orescences] 1962. N of Bavinge F[ar]m, 1962. Lit[tle] Gains, Elmsted, 1969. Spong Wood, RAC / MJ Comyn, 4 infl[orescences] 1961. Maxsted Street. Copse NE of Hastingleigh, 1945. Wood SW of Denton 202465 Miss DAC Long. Valley S of Denton DACL 1949. Watertower Wood, 1955 **MNE**. Woodlands Wd Adisham 1960. Pitt Wood Adisham, 1955 **MNE** l[ocally] a[bundant], 1960, 1978. Ileden Wood, 1955, not since. Woolwich Wood, 1955 **MNE** in SE & NE widespread: NW part 1985. By Rubery Downs Miss Hibberd. Stafflands Wood, Miss J Hibberd: 1948!. Puckland Wood, Miss J. Hibberd, 1 pl[ant]: 1 pl[ant] DACL. Eastling Wood, 1965 **MNE** l[ocally] a[bundant], 1990 J Pitt. Betteshanger, PC & J Hall, 1955, 1 pl[ant]. One pl[ant] on cliff top Langdon Bay, D Harle. Capon Wood, 1954 **MNE**. SW of Crundale Ch[urch]. SE of Crundale Ch[urch], 1949. Hurst Wood, Hassell St[reet] 1943-60: 200 infl[orescences], 1961 CAS. Giddy Horn. S. of Whiteacre 1943. [Downs NW of Newington DG Stanford before burning of Downs prior to 1947.]

**12)** Cadmans Wood, W of Brabourne on Gault, 082433, 078434, CN Pope: 1946-61 **MNE**. 1957 – 70 infl[orescences]; 1959 – 30 infl[orescences]; 1960 – 4 infl[orescences], D.L.

**16)** Postling Wents, on Gault, J Pitt, c.1990.

### **O. purpurea** x **Aceras anthropophorum** = **X O. melsheimi** Rouy

[No account is given in the manuscript, but the discovery of this hybrid in private woodland in vc15 was written up by Francis Rose as: A new orchid hybrid for Britain – X *Orchiaceras melsheimeri* (*Aceras anthropophora* x *Orchis purpurea*), *BSBI News* (1998) **79**: 19-20.]

### **(O. militaris** L.

[Military Orchid.]

This species has been reported from Kent on a number of occasions, but there is no convincing evidence that it has ever really been found: all the specimens appear to be of *O. purpurea*.<sup>1116</sup> Apparently correctly recorded, though long extinct, in Surrey; only known today in Britain in Bucks, Oxford (2 localities), and Suffolk (one locality); apparently extinct in Pas de Calais, but locally abundant in Somme in several places.

“nr. Deal, 1908” GW Harris. “Near Deal, Kent”, 1910, Hb. Druce, det. G.C. Druce, RAG & VS examined these two specimens in 1958 and concluded that they were abnormal forms of *O. purpurea*. “Kent”, Hb. Merrell ex Hb. Backhouse junior K. “Kent”, 1846 K.

[Cobham, 1836, Joseph Woods, Herb. Bolton Museum (determined by FR; has oval-lanceolate sepals 19mm long, labellum c.8mm long, narrow side lobes.) ]

### **O. simia** Lam.

Monkey Orchid

15, 16

1/52: [2/52]

Native. Continental – southern. Chalk grassland and chalk coppice: extremely rare: at present confined to two localities, one in East Kent, where 33 spikes appeared in 1963 and c.240 in 1965; and one in W. Kent, where the solitary plant was moved from Otford to a safer place nearby in 1956, but has not been observed since 1957. There are several old records from the districts 6), 7) and 8). Otherwise confined now in Britain to one locality in Oxfordshire and one in E Yorkshire (Spurn). Recorded in Pas de Calais a single plant on the dunes at Dannes, 195[ ] but very rare in Northern France, commoner in central and southern France.

\*1777, E. Jacob.

**6)** Otford, Rev. E. Elder, 1952; V.S. 1952; 1954 1 spike; 1955 1 spike; 1956 1 spike **MNE** 6st. Moved, Nov. 1956, to Dunstall Woods, where there developed 1 fine spike, 1957, not since to 1963.

“ ‘macra’ type with broad labellum resembling Otford plant”. V.S.<sup>1117</sup>

**7)** (Burham Downs, c.1930, F. Forsyth: unconfirmed). On chalky bushy banks beyond Ospringe, E. Jacob in *Pl. Fav.* 1777. Down opp[osite] Putt Wood, Ospringe, 1955, H.M. Wilks, 1 inf[lorescence]; 1960 – 5 infl[orescences], 1961 – 6 infl[orescences], 1 st[em] Down, 2 infl[orescences], 13 st[ems] wood, total 20 st[ems], 8 infl[orescences]; 1962 – 14 infl[orescences], 3 st[ems]; 1963 – 33 infl[orescences]; 1964 – 162 infl[orescences]; 1965 – 220 infl[orescences].

<sup>1116</sup> Thus the original manuscript. But Francis Rose became subsequently persuaded that there was good evidence for the occurrence of *O. militaris*. By 1998 he had authenticated an 1836 specimen as indicated by the note which he added at the end of this species account.

<sup>1117</sup> This seems to be a quotation set down here without working into a context within the Flora. Var. ‘macra’ is a term which has been used for Oxfordshire *O. simia* specimens in distinguishing them from Continental plants (*macra* being Lindley’s specific name for the British plant).



8) [Charlton Park, Bishopsbourne, Mrs. S. Hall, teste RA Roffe in J. Bot. (1920) p.177; BJB, etc. 1920-1923.] Sown at Parkgate Down, Elham, 1965, 3 infl[orescences], C. Cadbury, from seed sown 1958; 9 infl[orescences] 1979!, 14 infl[orescences] 1980!, 44 infl[orescences] 1995!, 100 infl[orescences] 1999. ["Downs nr Winchcombe, Crundale, 1920, R.J. Deacock, "Kentish Express", 1.1.1921.]

**O. simia** x **Aceras anthropophorum** = **X Orchiaceras bergonii** (De Nant.) E.G. Camus.<sup>1118</sup>

**Aceras** R. Br.

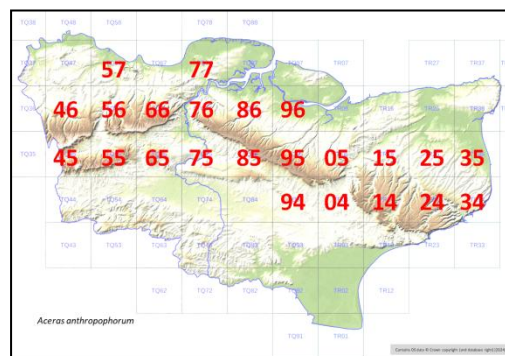
**A. anthropophorum** (L.) W.T. Aiton<sup>1119</sup>

Man Orchid

15, 16

23/52

Native. Chalk grassland, wood borders, banks, scrub and coppices on the chalk, widespread on the North Downs, and quite common from the Surrey border to a line from Wingham to Denton, Elmsted and Wye, rare east of this; very common locally most abundant from the Darent valley to the Wye downs towards the coast: also on calcareous fixed dunes at Sandwich, in a disused ragstone pit at Sundridge, and in a railway cutting on Gault at Leeds: 5)-8), 4), 10) and 11). Over 100 localities [142 localities] exist on the Kent chalk. The headquarters in Britain are the North Downs of Kent and Surrey, though in W. Surrey it becomes rarer. Very rare in Sussex on the South Downs, where only 4 or 5 localities are now known; in Essex, only in one chalkpit near the Thames at Thurrock (1997, only 2): in Pas de Calais very rare, and known only on dunes at Le Touquet and Étaples and on chalk at Wavrans. Hence its abundance with us is not a direct continuation of any similar abundance in N. France.



2) Tower Hill Upnor, on chalk outcrop, D.McC et al., **MNE** 1959.

4) Calc[areous] fixed dune grassland. Royal St Georges Links, Sandwich Bay, L.W.W., 1951→1999!

5) Chalk pit, Morants Court Hill, Knight: 1949, FSEF: 1949! **MNE**. W. border of Darenth Wood, B. Green (1969!). Above Cross, Downs W. of Shoreham, 1951 **MNE**: PCH. 1999. Pilots Wood, PCH. Darwin's Bank, Downe, 1961, Miss J. Clapham – 1 infl[orescence]. 408603, Down S. of Saltbox, 1952 DH [sic, for JH] Burnett, 1960 RA Clarke. 409604 1961, D Lang. Copse by Garage, A.224, Badgers Mount, D. Lang, 1955, 493625. Down NE of Pilgrim Ho[use], Westerham, P. Greenfield: 100 infl[orescences], 1959! Down SW of Biggin Hill, 408585, RA Clarke. Lane NW of Lusted, 409584, 1959, RAC.

6) [Chalk pit, Northfleet to Greenhithe, 1823, C. Johnson, *Hortus Dilineatus*[?]] [SE of Dartford, AC. Tagg; Brand.] [Mounts Wood, Greenhithe, 5 infl[orescences] 1946 **MNE**.] Mental Hosp[ital] Grounds, Darenth Wood, Bryn Green. 57 Chalkpit N. of Craylands Lane, Swanscombe, CA Lister, 1962. 77 Great Crabbles Wood, Shore, 1944-55, **MNE**, 1994. Off Lullingstone drive, HMP. Rifle Range, Shoreham, 1947, PCH 1954. Dunstall Woods 530619, '57. 529611, etc., 528613, White Hill, Shoreham 1945-58 **MNE**. Otford Mount. Down NW of Greenhill Wood Shoreham. S. of Cotmans Ash, NE of Kemsing. Down S of old Terrys Lodge NE of St Clere, Kemsing 585597. Magpie Bottom 545612 to 542615. Down NW of Wrotham 595599. Above A.20 Wrotham Hill 609597. Above Hogmore F[ar]m, Wrotham 623599. Wrotham Water Down, 1936-61, 627605 **MNE**. Down N. of Trosley Church PCH. Ryarsh Down 660615. A[bundant] N. of Crookhorn Wood, 1946-60 **MNE**. Down above Birling. Elbows Wood, Meopham, Swain. Down E. of Lullingstone, PCH, 535640. E. of L[owe]r Austin Lodge. 544640, 1949 **MNE**. Round Hill, NE of Romney St[reet], 547621. S. of Hog Wood, W. Kingsdown, 555627 **MNE**. E side High Castle Wood, 562628, 1949 **MNE**. S of Longfield, 603687, by r[oad], G.Fannell; 1962. Plant[at]io[n] N of West Yoke, Ash, 597664. Down E of Valley, Priestwood, 656645, 1961: 1964. Near Wouldham Steps. SE of Meopham, 1949, **MNE**. SE of Farningham, 30 pl[ants] D.L. (120 fl[owers] on one spike). W & E sides Buckland Valley, P. Greenfield. 691647 Upper Halling Downs, 1943-54 **MNE**. 697653, S. Edge of Wingate Wood, Halling, PCH. S. of Great Wood Cuxton, 698681, **MNE**. Halling W. Works 699643. N[ear] Medway, Halling, 705637. White pit, Halling, 693651. Chalk bank n[ear] Medway, NE of Cuxton, 1961 **MNE**.

7) Wouldham Downs 1954 **MNE**. 100 pl[ants] Borstal, B. Hawkes 1964. Burham Downs 1946-62: Scarborough Spur **MNE**; Church Spur; ¾m E of Church. Above W[ater] W[orks] Boxley. Boarley Warren **MNE**. Boarley Lane. Detling W. coombe. Thurnham Castle, 819577. Allington Down, Hollingbourne 1949 **MNE**. Hollingbourne Hill, 1962. Down NW of Broad Street. Hart Hill, Charing. Chalk pit by Suomi, Westwell 1949 **MNE**. Soakham

<sup>1118</sup> No account given, but first recorded in 1985, at Ospringe.

<sup>1119</sup> Cited as (L.) Ait. f. in manuscript.



Downs NW of Bilting! DMR: 1950, R.Th. Godmersham Downs. Belmont Golf Course'51 REW. Bredhurst Hurst. Queen Down Warren, 1938-62 abund[ant] **MNE**, 828629, 1000's. South Green Stockbury 849598, '60 DL. Wormshill. 803604 Newlands Wood. Purple Hill, a[bundant]. Wrinsted Court. E. Timbols Hill. Filmer Wood, Wichling, 1949 **MNE**. 96 Down NW of Putt Wood, Ospringe, 1960 **MNE**, 980602. L[ocal?] Wood border S. of Young Manor F[ar]m, Chilham 62. Highsted pits, 9061. Eccles pits RGW, '53. Culand pit. Copse below Kits Coty. Conny Banks BC. Westfield wood (beech) '62. 'Pilgrims View' (2-300 pl[ants]) 62. Down E of White Horse Stone, (6) 1962. Bluebell Hill **MNE**, E of A229, 1882-1945. Horsted Valley, Walderslade, 1952 **MNE**. Walderslade Valley B.C. Lords Wood, S. edge BC. A[bundant] 075528 R[ai]l[wa]y cutting S of Chilham '51 REW. **8)** 071467, Crown pit, Wye, 1949-62 **MNE**, 1998 PG. Longport 076485. 04 Down N. of Crundale Church, 1950 **MNE** [locally] a[bundant] 55 BJB. 04 Down N. of Winchcombe F[ar]m, Crundale 087498, 1957-60. 05 Down above Egerton Manor Godmersham 1949 **MNE**. 04 Down W of Pett Street, 081474. 14 Down E of Stowting, Miss DACL: 1953! 130417. 24 Down S. of Denton, Miss D.A.C. Long, 208454, 206452, 1949. S. of Gatteridge F[ar]m. [Breach Downs BJB.] Edge, Frandham Wood, River, 1958, KDR. Foot of Shakespeare cliff, 1958, Mrs.KDR: 1958! 307396 **MNE**. 24 Plantation in NE of Coldred Ch[urch], 1959, 276476 **MNE**. 25 Plantation, Knowlton Park, SE of Chillenden, 1954, 273533, **MNE**. SE of Eyethorne, EP. 25 Brambling pit, Ickham, 1961, 225560. [13 Downs NW of Newington, before burning of downs, DG Standford.] refound E. Philp, 1970's. Arpinge Down, P. Gay (&FR) 1998. Wood W of Penny Pot 089514 ABS. 05 Mystole Woods, Chilham 1945! 05 Juliberry Down, Chilham, 1945. 05 Downs Wood, Chilham 1945. 15 Bourne Park, Bishopsbourne, 1946. 15 Charlton Park, Bishopsbourne, 1946 **MNE**. 25 Barham Downs, 1945 **MNE**. 14 S. of Yockletts Bank, 1945, 126462. 14 Down W of Misling F[ar]m, Elmsted, 1962, 129451 (1 pl[ant]). Broadway Green F[ar]m Petham, P. le B. 1951. Gorsley Wood B[isho]p[s]bourne LWW. Juniper Rough, Pett Bottom, B[isho]p[s]bourne BJB. (N side of) on Covert lanebanks, Kingston, DACL, BJB. Yockletts Bank 1978→. SE of Wingham, EP. **10)** 45 Old Ragstone quarry, Dry Hill, Chevening, FSEF: 1961! **MNE**. **11)** 85 R[ai]l[wa]y cutting on Gault, Warren Wood, Leeds, Ward.

#### **Himantoglossum** Spreng.

**H. hircinum** (L.) Sprengel Lizard Orchid. 15, [16.] 4/52 [23/52]

**Native.** Chalk grassland and calcareous fixed dunes: very rare, and usually occurring as sporadic single plants, but long established in quantity in 4). Very rare and sporadic only in Surrey, Sussex, and Essex: rare but persistent in several places on chalk downs in Pas de Calais.

**4)** Fixed dune grassland, St. Georges Links, Sandwich Bay, 360578 etc. 1924, C.G. Field-Marsham in Hb. FJH. 1944 reported; 1949, Mrs. Moore-Brabazon; 1949 DACL: 1949-62! **MNE BM**; 70 pl. '49, >200, '50; >400, '51 (372 FR); '52; 12, '53; 10, '54; 25, '55; 3 infl[orescences], '56; 3 only, '57; 50 to 60, '58; '59; '60; '61; 42, '62; - '63; -'64; -'65. Beach opposite Walmer Castle, Miss Long. By Slack S. of Guilford Hotel, 1958, Mrs. K.D.R.

**6)** [Dartford, 1921, AC Tagg.] 1 pl[ant] n[ea]r water tower, above Trosley 635612, D.V. Woods, c.1950. Lobfield (Longfield?) [sic] Hb. Druce. Foxendown, Meopham, formerly, Baker.

[Inserted in the MS Flora at this point is a sheet headed "Himantoglossum in Kent – all records traced to 1933: compiled by P.M. Hall & W.H. Pearsall sen. on behalf of the B.E.C." This had been copied out (not quite verbatim) by Francis Rose from a typescript in his Flora of Kent related papers, to which he had added the number of the botanical district into which the relevant record fell, as well as some further records.]

**9)** Manston Wood Thanet before 1776 (Fl.K.).

**7)** bet[ween] Chatham & Maidstone before 1820 (Fl.K.).

**9)** n[ea]r Margate before 1839 (Fl.K.).

**7)-8)** Charing to Walmer – 27 plants, 1858 Fl.K.: (1859<sup>1120</sup> Hb. **BM**) Oxenden.

**8)** Broome Park, Barham, 1859, Oxenden (Hb. E. Kent NHS (where is this?))

**8)** Nonington 1868, Fl.K.; 1906, Plumtre: 1912, 1929<sup>1121</sup>, Rigden.

**7)** n[ea]r Maidstone 1875, Tempere (Hb. **K**).

**8)** Sibertswold, 1885, J. Jacob, Fl.K.: 1908, JB.

**8)** n[ea]r Wye, 1898-1908, J.B.: 1908: 1921: 1923, Cobbe in BEC/1923 p.215.

**8)** Adisham R[ai]l[wa]y bank 1908-1933. Discovered by A. Fox (ganger of platelayers) in 1908: in 1917 Fox cut a fruiting spike and scattered the seeds; in 1921, 27 plants appeared. J. Jacob saw it annually from 1908 to 1933; numbers varied from 2 to 27.

**7)** Boxley, 1909, Groom.

<sup>1120</sup> Miscopied as 1959.

<sup>1121</sup> The source gives 1928.

- 8) Whitfield, 1909, an employee of G & A Clark, Folkestone Florists.  
 8) Lyminge, 1910, 1924, 1925, C. Clark.  
 8) Bifrons Park, Bridge, 1911, teste W.H.P.  
 11) n[ea]r. Great Chart, 1912, White (Hb. Mus. Brit.).  
 8) n[ea]r Canterbury, 1915, Walker in BEC (1916) p.503 (Hb. Druce).  
 8) n[ea]r Folkestone, 1915; 1923; 1924; C. Clark & Andrews: 1930, Walker, in BEC (1930).  
 8) Waldershare, 1921, Scutt.  
 8) Dover 1924, 1927, 1930, teste W.H.P.  
 8) Betteshanger, 1924, James.  
 7) Harrietsham, 1924, SE Gazette, 15.7.24.  
 8) Petham, 1925, 3 pl[ants], teste J. Jacob.  
 (...) Otterden, n[ea]r Faversham, 1925, Maryon & Page, **BM**.  
 12) Bilsington, 1926, Kentish Express, 2.7.26.  
 7) Eastling, 1926, Kentish Express  
 8) Brabourne, 1926, Bentley.  
 8) Bishopsbourne (Charlton Park) 1926, 32, 33, J. Jacob.  
 15) Brenzett Sims 1926.  
 8) St Margarets at Cliffe, 1928, 1933, J. Jacob.  
 8) Alkham 1933, J. Jacob.  
 8) Postling, c.1938 or 9, J. Jacob.  
 8) Crundale, c.1938, reported to FR ("many plants"(?)).  
 4) St George's Links, Sandwich: Hb FJH; 1949 Miss Long (1949!); 1950; 1951 (572 seen by FR, 425 D. Harle); 1952; 1953; 1954; 1955; 1956; 1957; 1958; 1959; c.1000 each year to →1998.  
 7) Down SW of Ospringe, 1956, 1 pl F.R. & B.J.B. (1957, 11 pl[ants], 2 with spikes, one set seed).  
 6) Gravesend (1760-1830) Hb. **BM**.  
 6) Greenhithe 1878-9 Fl.K., 1878 Glennie (Hb. A.M.....ales).  
 6) Dartford, v[ery] many records.  
 6) Eynsford 1921 Hodgson (Photo, **CGE**).  
 6) Sevenoaks 1933, Knight, "The Times".  
 6) Dartford Wood Hb Turner 1775-1858 **K**.  
 1) Crayford →Dartford, Johnson 1641, Fl.K.  
 1) Puddledock **K**,  
 6) Lobfield = Longfield? (Hb. Druce).  
 1) Sutton at Hone, c.1800, Pocock.  
 6) Dartford, Hb. Banks, 1847-9, **BM**.  
 1) Wilmington (Stanhill) 1807, Peete, **CGE**.  
 1) W[ilmington] Hockstable 1842 **CGE**.  
 1) W[ilmington] Hextable 1845<sup>1122</sup> **BM** Ellson.  
 6) Darenth 1831 Peete **CGE**.  
 6) Green St Green (Trulling Down) 1840 Peete (Fl.K.); 1840, Salmon, **CGE**.  
 6) Dartford 1841 Ansell (Hb. Druce); 1847, Potter **BM**; 1847-9, Woods in Hb. Borrer.  
 1) Bexley 1851, Wollaston **CGE**. Darenth Wood, 1843, Wollaston **DVR**.  
 5) Shoreham →Farningham before 1846 (Fl.K.)  
 5) Knockholt, before 1845 **BM**.  
 5) Chevening **K** after 1845.  
 6) Ash 1850 Potter **BM**.
- 7) Wouldham Downs, 1958, F.J. Bloomfield, 1 spike (vidi photograph!). 980602 Down opposite Putt Wood, Ospringe, 1955-62; one set seed in 1957, RAC; 2 infl[orescences] in 1962. Down NW of Golf Club House, Belmont Park, 1 plant, 1959: before 1939, Mrs. Brodrick; "years ago", Mrs. Finn. Downs, Harrietsham →Hollingbourne, 8 infl[orescences], 1913, G. Richardson. Queendown Warren, 1966, 2 spikes; 1967. Darland Banks, O. Davis (FR 1994!). 2 spikes n[ea]r Maidstone 1875 Prof. Tempère.
- 8) R[ai]l[wa]y bank Adisham, 1908 Fox: J. Jacob 1912-1939; teste Miss DACL, 1939. [Charlton Park, 1924, Mrs Ford; 1926 BJB, 10 pl[ants].] [Field now ploughed, N. of Junipers Wood, Wye, formerly, LWW.] Barham Downs

<sup>1122</sup> Miscopied as 1454.

1927, JG. Wood n[ea]r Longport, Crundale, 1939, Hubbard. [Postling Downs, Hyland. [Waterworks Hill, Folkestone, Clarke. St Margarets Bay, J.Jacob. Sibertswold, 1885, J. Jacob. Nonington, 1906, Plumptre.

11) n[ea]r. Leeds Castle, L. Smith 1914 **MNE**.

12) n[ea]r Ashford, 1922, M Corden, **MNE**. G[rea]t Chart, 1912, AE White.

15) Roadside, Brookland to Brenzett, J. Ridley, 1909 **MNE**.

### **Ophrys L.**

#### **O. insectifera L.**

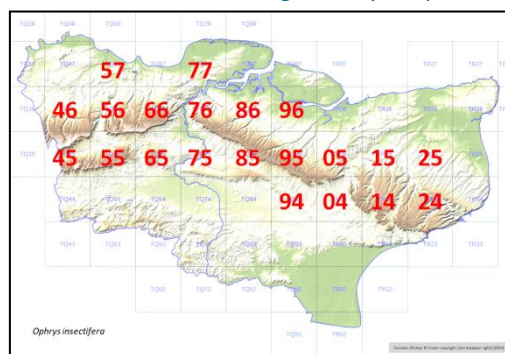
Fly Orchid.

15, 16.

21/52

**Native.** Woodlands, scrub and grassland on chalk, widely distributed and common, often in abundance, in 5)-8); woodlands on ragstone and gault, very rare, in 11) and 21). Much less common, though locally frequent, on the chalk of Surrey and Sussex; apparently extinct in Essex; common on chalk in Pas de Calais.

5) Saltbox, RAC. Cuckoo Wood, Downe, 445622, DL. Darwins Bank, Downe, 1945-62. Hazel Wood, N. of Cudham, 1945. Berrys Green Wood, SW of Cudham, 1962. The Grove, Wood ¼ mile S of Cudham Church, 1949; 1958. N end of Polhill Tunnel 493625, DL. 443625, v[ery] a[bundant], n[ea]r Fox's Garage, Badgers Mount, 1953-57. Wood NW of Lusted 409584, '59, RAC. [Downe, AGD 1916 **MNE**.] 474618 W of Pratts Grove K Marsh, '55. Lattice Coppice, Pratts Bottom, 1947-62 **MNE**. Wood W. of Shoreham, 1945 **MNE**. Wood SW of Shoreham, 1951 **MNE**. W. of Timberden Bottom 507620, DL, '55. Copse W. of Newbarn Lane Cudham, 62, DL. Shellem Wood Cudham 445594, 58. Cudham Frith 58.



6) [Dartford AC Tagg.] Chalk pit, Cotton Lane, Stone, 565748, 1957, H.M.P. Dunstall Woods, DL, 57, 530619. White Hill, Shoreham. Greenhills Wood, 1955-1962 **MNE** 538602, DL. Preston Hill Down. Magpie Bottom W side, PCH, 545614 & 541615, 1954 E side DL. Beechwoods N. of Wrotham [cross]r[oa]ds, A Ruck. Wrotham Water Down, 626605 & 629606. N of Crookhorn Wood, 1946 **MNE**. Wingate Wood. Upper Halling Downs. Hog Wood. High Castle Wood. W. of Knatts Valley. N. of Romney Street. Knockmill, on chalk, 1949. Purvil Wood E. of Priestwood Green, 1964. Pilgrims Way, NE of Ryarsh. Beech pl[antation] E of Peanes Wood, DWS Woods: 1953, a[bundant]! Great Crabbles Wood, Shorne, 1944; 1946 **MNE**; 1953 **MNE**; 1955 **MNE**. Wood W of Kingsdown, 1949 **MNE**. Wouldham Steps SE of Meopham 1948 **MNE**. Buckland Valley, E & W sides, H. Greenfield.

7) Horsted Valley BC. Walderslade Bottom BC. Wouldham, 1943. Burham Downs, E. of Church, 1955. a[bundant], Pilgrims View, Bluebell Hill, 1962. Burham Downs, purpurea copse, '55. Rainham Park Wood. Bredhurst Hurst, 1945. Purple Hill, 1945-62. **MNE** 808624. Queen Down Warren, 1949-62. High Wood, NW of Wormshill '56. Hollingbourne Hill, 1939-62. Timbalds Hill 1945 **MNE**. Copse W. of Doddington. N[ea]r Simia field, Sandbanks Wood, Ospringe, 1955-62. College Wood, Newnham 1945:1962. Foxbury Down, E of Lenham 1946 **MNE**. N of Bilting DAK. By Suomi, NW of Westwell ES. N of Dunn St[reet], 993485, '55 HMW. Belmont Park, REW. Boxley Warren 1882 **MNE**. Coombe W of Detling. Gorham Wood, Bicknor. Trundle Wood, Wormshill '56. E of Scragged Oak 1965. Lords Wood Wichling 1957. Copse E. of Newnham 55. Stock Wood Frinsted, 1957. Wrinsted Court KSJ. Valley W. of Wormshill 1942 **MNE**. Filmer Wood, Wichling, 1949; 1962, 12 infl[orescences] **MNE**. Coxett Wood, Ospringe, 1955 **MNE**, 1957 **MNE**. Syndale Wood, Ospringe, 1956 **MNE**. c.40 infl[orescences] Spuckles Wood, Stalisfield, 1962. R[are], Kennelling Wood, Stalisfield, 1962. Kings Wood, S. of Park Wood, Chilham 1956 **MNE**. Challock Forest to E., ES. E of Court Lodge, Stalisfield. SE of Kennaways Ospringe 1946. Wood S of [Three] Squirrels, Stockbury 1961. Longreach Wood. 1960 Hill Wood Stockbury. Church Wood, Stockbury. NW of Otterden Place 1963. Holbeam Wood, Throwley 58. S of Philpott Wood. Broomham Wood, Eastling '58. Cuckoo Wood Otterden 1958. Putt Wood Ospringe OD 1955, 1958, 1980!

8) 04 Winchcombe Down Crundale 087498. The Junipers, Wye, 067414, PCH. Long Plantation, Olantigh, 1942: 1953. Hurst Wood, Hassell St., Wye, 1943: 1961, CAS. E of Longport Crundale 1951-61 **MNE**. Wood SE of Crundale Ch[urch] Mrs. B. Newgate Scrubs '55. Rob Sack's Wood Giddy Horn. Down Wood, Chilham. 15 Larkey Valley Wood, 1948 **MNE**! 05 pit, Mystole E of Chilham, DHK. E of Chilham→Denge Wood. Denton DACL (abund[ant]) **BM**. Duskins, Marley Lane, Kingston, 1939: 1956 **MNE**. Copse n[ea]r Ropersole F[ar]m, Denton, 1946, PR Bell. Swanton Banks 1950 **MNE**, 1953 **MNE**. E of Swingfield, 1955 **MNE**. S of Chilton, Alkham, 1949 **MNE**. Sladden Wood, Alkham, 1955 **MNE**. Westwood F[ar]m, Bishopsbourne LWW. Bavinge Farm. Down N. of Podlinge, 1948 **MNE**; 1962. E of Whitacre 1950. Yockletts Bank, 1962: 1995. 1 pl[ant]. Down N. of Misling F[ar]m, Elmsted, 1962. Elham Park Wood, 1958, Mrs B. Spong Wood, MJ Comyn, 1986-90. Hunts Wood, Up[pe]r Hardres, 1962. Clavertye Wood, Elham 1958 **MNE**. SW of Deans F[ar]m, Covert Wood,

473177, Mrs B. Frandham Wood, River, KDR. Atchester Wood LWW. Bourne Park BJB. Walderchain Wood, BJB. Burstled Wood, BJB. Lynsore Bottom. Pitt Wood, 1966. Woolwich Wood, 1956. Wood ¼m. NW of Barfreton, 1966. S. Covert Wood on Dane F[ar]m. Marley Lane. S.E. of Acrise E valley, 204427, 1950. Blacklands Carvet W[oo]d woodlands, Lyminge, 1950. Coombe – Poulton Vale, Dover N side: 1955 FR; S side: 1955 BSBI.

**11)** Ryarsh Wood, on gault, 1936: 1943 **MNE**. Allington Wood, on ragstone, 1880, 1882 **MNE**: 1945!

**12)** Cadmans Wood 078432 DL, '57. "*Myosotis*" copse on gault SE of Lenham, 1946, WJLS.

A monstrosity has been reported n[ea]r Canterbury with extra anthers: E. Ogden, BEC Rep. 1920, p.49.

#### **O. insectifera x sphegodes = O. x hybrida** Pokorny

Sepals of *sphegodes*: petals like *insectifera*: lip brown, almost as narrow as *insectifera*.

**8)** Long plant[atio]n, Olantigh, Wye, 1913. Wye Downs, 1905: G. Richardson, Misses Harris & Walker. 087498 Down N. of Winchcombe Farm, Crundale, 1956, BJB; 1957, C.N. Pope (1957!); 2 in 1960, D. Lang.

#### **O. sphegodes** Miller

Early Spider Orchid.

15, [16.]

7/52

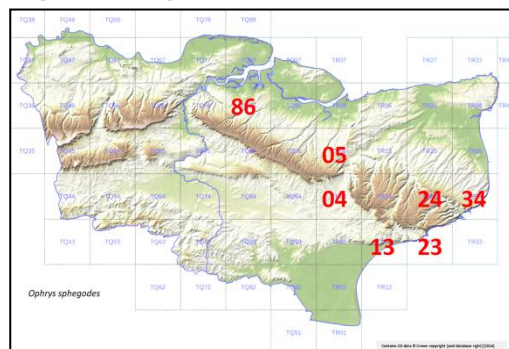
Native. Chalk grassland: rare, but locally very abundant in 7) at Queendown Warren; and in 8) near Wye, and in many places near the coast between Etchinghill and Deal. Apparently extinct in W. Kent. Extinct as a native in Surrey; still locally abundant in a few localities in E. Sussex, and rare in one locality in W. Sussex: extinct in Essex: extremely rare in Pas de Calais (Boffles!). The Queendown Warren plants flower always three weeks earlier than those of eastern Kent.

[ 5) W of South Street, Biggin Hill, 1947, teste D.E. Kimmins.]

[ 6) Paddlesworth Downs, FJH: Fl. K. Field n[ea]r Culverstone School, 1920? E.G. Brand. Reported on down NW of Crookhorn Wood, Snodland, c.1926 by F. Forsyth.]

**4)** Sandwich, St Georges Golf Links, 1880; 1882, Fawcett Osborne **MNE**; 1887, H.L. **MNE**; 1903, JB Green, **MNE**; 1905, Mrs Silcock[?] **MNE**; 1920, H. Elgar **MNE**; 1939 a[bandant]; 1942 v[ery] a[bandant]; 1944 r[are]; 1945 a[bandant]; 1996, KWT. Kingsdown Beach. P. Gay, 1998.

**7)** 86 Queen Down Warren, 829629, F.G.E.K.; 1938-1962! **MNE** usually 500-1000 plants per year; a[bandant] 1946; 1947; 1948; 1949; 1950; 1951; 250, 1952; 1953; 50, 1954; 1955; 1956; 1957; 1958; 1959; 50W, 250E, 1960; 294 H. Greenfield, 150 DL, 1961; 300 DL, 1962; 1963; 1964; 1965. Soakham Down, W. of Godmersham, 3 infl[orescences] 1951, '52, '53, Gurr & Theobald, a few plants.



QDW	Shakespeare C.	<b>86</b>
Crown	T. Ewell	<b>05</b>
Crundale		
Winchcombe	Dover C.	<b>04</b>
Etchinghill	Langdon Bay	<b>13</b>
Dover Hill	S. Foreland	<b>23, 24</b>
Abbotscliffe	S of Kingsdown	<b>34</b>
	W. of K[ingsdown]	

**8)** 04 Crown 071467 Chalk-pit and Downs, Wye, Hookham; 1939-72 **MNE**! abundant most years; 30-40, 1946; 8 pl[ants] 1952; 12, 1972; not 1997. 04 Down N. of Crundale Church, 1951, **MNE**. 04 Down NE of Winchcombe Farm, Crundale, C.N. Pope: 1957!; 12 pl[ants] D.L. 1960!; 1983!; not 1997. Wingate Hill, Folkestone, 1994-5. 13 Downs E. of Etchinghill 1958, L.J. Margetts; c.40 pl[ants] 1960! **MNE**. Above Danton Pinch, Newington, formerly abund[ant], DG Stanford before 1947. Folkestone Warren slopes, J. Walton. Below A.259, Dover Hill, Folkestone, 1948, 1983. 23 Castle Hill, Folkestone, 1939. 23 Sugarloaf, Folkestone, 1939 **MNE**. 23 Above Abbots Cliffe on rifle range, 1945-53 **MNE**, hundreds. 23 on undercliff slopes, Lydden Spout, 1953-61. Undercliff slopes Abbotscliff 1962, 1965. 34 Downs on top of Shakespeares Cliff, abundant, 1948-62 **MNE**: hundreds of plants. Round Downs 1983. 24 Down W of Coombe Farm, Dover, M.McFarlane, 1955. 24 Down above A2, River, RG Williams. 24 Downs W. of Woodville, Temple Ewell, abundant, 1948-60 **MNE**, hundreds of plants; 1971; 1972; 1983; 1989, 2000 infl[orescences]. 24 Bushy Rough, E. of Alkham, teste local farmer, 1949. 24 Downs E. of Woodville, Temple Ewell, 1953. 34 Cliffs E. of Dover Castle, abundant 1948 **MNE**; 1954; 1990. 34 Langdon Bay, abundant 1946-55 **MNE**. 34 above Fan Bay 1946. 34 South Foreland, abundant, 1945 **MNE**; 1946 **MNE**; 1983. 34 Free Down, Ringwould, a few plants, 1955. 34 Cliff top, Oldstairs Bay to Hope Point, 44 infl[orescences] 1955, AGS, S of Kingsdown 1946 **MNE**, 1948 **MNE**. 34 on chalky rubble, to the rear of beach, S. of Kingsdown, 1840, F.Y. Brocas **BM**, 1948! 1955 AGS 11 plants. NE & SE of Dover Patrol Memorial, 1983.

**15)** Dungeness in Power Station grounds, 1995, teste B. Banks. Denge Beach within Power Sta[tion] Grounds 1995→.



**O. apifera** Hudson

Bee Orchid.

15, 16.

25/52

Native. Chalk grassland and chalk pits, very widespread and general, but only locally in abundance: ragstone quarries, sandpits, and road verges off the chalk, quite rare and rather sporadic. Common on chalk, rare off it, in Surrey and Sussex, rare in Essex, common in Pas de Calais.

1) Ruxley Gravel pits, abundant, 1965. Ruxley Gravel pits, F. Holroyde, 1962.

2) Stone marshes, on chalk rubble GMB.

3) Sturry Hill Gravel pit, 175607, 1954-55, Jane Hyde.

4) 35 Beach opp[osite] Walmer Castle, 1950, M.E.M.; 1957 BN.

5) Morants C[our]t Hill Chalk pit, FSGF. Saltbox Down, 1966. Darwins Bank, Downe, '62. Downe Golf Course. Downe AGD 1916 **MNE**. Downs above Tunnel, Polhill, 1948 **MNE** 1952, 505603. S of Pratts Bottom, 1947. W. of Northstead, Cudham, 458609, '58, DL. Chevening Park. W. of Shoreham 514619, '55, DL. 447564 E of Westerham Hill above Pilgrim Ho[use], DL. E of Badgers Mount 504623, DL. W side Timberden Bottom in copse, 507619 DL & 504623.

6)E) Tower Hill, Upnor, DMCC & JEL. Goreswood R[oa]d Hartley, 605665 HMP. [Northfleet, R. Pocock, 1812.] Beesfield, Farningham EG Brand. Down SE of Shoreham 530609. a[bundant], Whitehill, Shoreham 529612, '54 DL, '57. Top Chalk pit E of Otford 549594, DL. Kemsing Downs, abund NW of Village, 1954. 42 infl[orescences], chalk Pit NW of Horns Cross, 1962. Pit NW of Craylands Lane, Swanscombe. E. of Lower Austin Lodge, Eynsford, 1949 **MNE**. S. of Park Wood, Eynsford, 1949. Down S. of Hog Wood, abund[ant] 1949. By High Castle Wood, 1949. NW of Kingsdown 1949 **MNE**. Magpie Bottom 543612. E of Pennis Wood, D.V.S. Woods. 67 Chalkpit Swanscombe HAS. R[oa]d verge Gores wood R[oa]d, Hartley, 605665, 1961 H.M.P.<sup>1123</sup> [S of Mounts Wood, J Priest.] Hogmore F[ar]m Down 623600 dL. Wrotham Water Downs 1936-62 **MNE** 626604, 200, 1962 DL. Trottscliffe, W. of Pilgrim House PCH (EJ Sheppard 1898 **MNE**). Trottscliffe N. of church. Snodland Downs. 609597 Wrotham A20 pit, DMCC. Hatch Hill, Luddesdown 675655 AGS.

7) Burham Downs, 1956→1998. Lawn, Pilgrims View, Bluebell Hill, 1962-98. Horsted Valley BC. Bluebell Hill BC. Walderslade Bottom, BC. Bredhurst Hurst. Queen Down Warren, 1879, Fawcett Osborne **MNE** 1937-62! 830629, 1996. *Simia* field, Ospringe, HMW. Putts Wood, N end, ES. Simia Down HMW. a[bundant] Down N of Dunn St 1950 ES. Downs N of Bilting, DHK. Godmersham Downs, 1946. Soakham Downs, RTh. Suomi, Westwell, ES: REW.

8) Wye Crown Downs 071466. Downs N of Crundale Church, l[ocally] a[bundant]. Broad Downs, Brook, o[ccasional], 1962: 19 pl '64. Down, EWE of Giddy Horn, l[ocal], 1962. Down N. of Podlinge, o[ccasional], 1962. Brook Hillock, 1949 **MNE**. Downs N. of Winchcombe Farm. Downs E of Longport, 1949 **MNE**. Elmsted. Parkgate Downs, Elham, 1955 **MNE**, 1957 **MNE**, 1961. SW of Dane F[ar]m, 195474, Mrs B. l[ocally] a[bundant] Shakespeares Cliff, R. Chambers. Postling Downs, 1942-56 **MNE**: 1958, LJM. Chalk pit, Danton Pinch, Kennington, DG Stanford 1954 REW. Cheriton Downs. Wolverton, Alkham. Bourne Park BJB. Charlton Park BJB. Barham Downs BJB. Castle Hill, Folkestone 1949 **MNE**: 1954 **MNE**, '62. St Margarets Bay BJB. Down G[rea]t Shuttlesfield F[ar]m, Lyminge. Folkestone Hill 1953-62. Sugarloaf, 1938 **MNE**: 1946 **MNE**: 1962. Crabble Downs. Dover E. Cliff KDR. Downs n[ea]r Coombe Wood, Etchinghill LJM.

9) Behind Broadstairs, L.W.W.

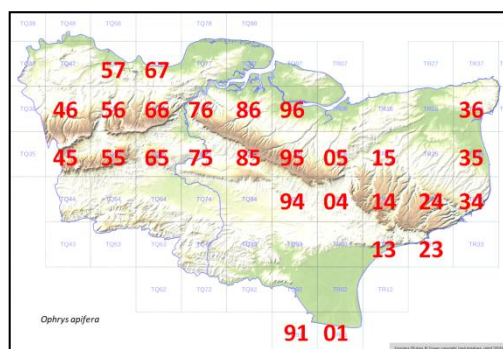
10) Ragstone pit, Dry Hill, Chevening 596459<sup>1124</sup>, F.S.E. Fawkes 1953 **MNE**. Ightham Mote, Miss V.E. Buxton.

11) Borough Green, Basted Quarry, 1948 Miss Nisbett. Sandpit, Sandway, 1962, Mrs. B. Dodds. Ditton S. Quarry, C. West. Ditton Laboratory, C. West. Bearsted 1935 **MNE**. Pluckley Brickworks, ES.

12) Hothfield Heath, one plant on clay patch, 1944 **MNE**. Mersham, in Ragstone Quarry, 1907, Miss D. Hancock **MNE**: 1946, C.N. Pope.

[13] Opposite Timberlog Wood, Lamberhurst: one plant, 1941, JRW.] Bayham, 1947, Mrs BE Scott.

16) The Roughs, (ragstone) W of Hythe LJM. Tanners Hill Hythe, 1 pl[ant], LJM 1958.

**O. apifera x fuciflora = O. x albertiana** Camus

<sup>1123</sup> A duplicated record.

<sup>1124</sup> The figure 4 in 596459 has been deleted, but the entire grid reference is incorrect for Dry Hill and should presumably be 500552. It has been ruled off from the entry below, at Basted Quarry, but a reference of 596559 would not be far from that location.



8) Downs above Brook, 1949. Between Folkestone and Dover, H. Walker and Major JW Harris, BEC Rep (1920) p.49. Albino: [St. Margarets Bay, S. Foreland, pre 1898, A.D. Webster.], Folkestone W[ater] W[orks], VFP Day 1953.

**O. apifera** x **sphegodes** = **O. x pseudapifera** Caldesi<sup>1125</sup>

8) a plant which may be this at Brook Hillock 1942-58. Folkestone Downs. Cheriton Downs.

(**O. trollii** does not occur in Kent.)

**O. fuciflora** (Crantz) Moench

Late Spider Orchid.

15

4/52

Native. Chalk grassland: rare, and now confined to about 16 localities in 8) between Wye and Folkestone: formerly in 7). This species occurs nowhere else in the British Isles. It appears to have become extinct in Pas de Calais (at Blanc Nez till 1939), but it is still plentiful in the Somme above Amiens.



Ophrys fuciflora site, Folkestone Downs, 1986-7. Photo by Rosemary FitzGerald.



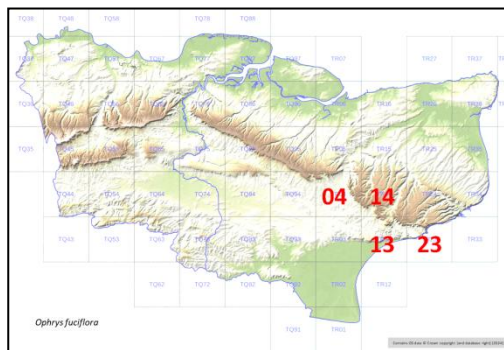
Ophrys fuciflora site, Wye, 1987. Photo by Rosemary FitzGerald.

( 6) Trosley 666618 Mrs. DVS Woods, 1 pl[ant].) [Ospringe, extinct]

<sup>1125</sup> Given by Francis Rose as *O. x pseudoapifera* Caldesio, but, irrespective of the validity of either version of the name, the cross is not currently recognised as part of the British flora.

**7)** ( "Godmersham", Hon. E. Legge, BEC Rep 1924 (p.598, no confirmation). The Bilting record in SE Nat (1954) is an error.

**8)** above Winchcombe, Crundale, 1963, Rev. A.C. Cawston (088495?)<sup>1126</sup>. 04 Hillock E. of Brook, 085437, 1942, R.H. & E. Lepper 1942! 13 pl[ants]; 1943 -23 pl[ants] **MNE**; 1945 -6 pl[ants]; 1946 -15 pl[ants]; 1947 -4 pl[ants]; 1948 -c.100 pl[ants]; 1949 >100 pl[ants]; 1950 **MNE**; 1956 -35 pl[ants], DL, 60 infl[orescences] BJB, 1953 **MNE**, 1955 **MNE**, Bulldozed, 1958: 5 spikes, 1962, FR & ECW. Above Fishponds Farm 1995! 04 Cuckolds Coomb, 1962, D. Cattlin, c.083446, 1995! [not 38], 1987 RFr;<sup>1127</sup> 1995, 12 pl[ants]. 04 Broad Down, 077451, 1 pl[ant], 1962: more frequent now (1975), 1995. 04 [Coombe at Stowting Downs, **BM**, Fl. K.] Ravine S of Hastingleigh, 086436 main site, E. Scott: 1959-62! 43 spikes, 1961, 6 pl[ants] 1980, NCC. 13 Postling Down 1942: 1945: **MNE**, 1946 - 12 pl[ants], 144394 to 145393. (13 West of Postling Down, 138394, 1 pl[ant], 1945, not since c.1960.) 13 Tolsford Hill, Postling, 157381 to 156382, 1 pl[ant] 1958, LJ Margetts (short turf above W[ater] W[orks] outlet). 14 Down by Shuttlesfield Farm, E. of Lyminge, 1939 BJB 1946! (20 pl[ants]); 1951 **MNE**; 1955, 4 infl[orescences] BJB; 1958, 4 infl[orescences] BJB; 1978 10 pl[ants]!; 1979, 1980 none seen; 1991, 25 pl[ants]. 14 Parkgate Down, NW of Elham, 1955, F.R. & E. Scott; 1958 (20 infl[orescences]; 1959 **MNE**; 1961; 1963 (7 infl[orescences]); 1980, 1 pl[ant]. 13 Down E of Etchingfield, 1958, 8 infl[orescences] L.J. Margetts; 1998, 41 infl[orescences], FR & PG. SW of Arpinge 183384, 1991, R. Payne; FR! (>30 pl[ants] 1997!). 13 Above Newington Quarry, 1954 R.E. Wood, not seen 1955 Mrs B. 23 Cheriton Downs, BJB: 1939! 1945 (27 pl[ants]), 1960 (1 pl[ant]). N. of Crete R[oad], 209303, 6 spikes J. Cadbury 1961. **MNE** 2017382, 1980, c. 12 [in]fl[or]scenc[es]. 23 Castle Hill, Folkestone, 1945-54, **MNE**. 23 Scarp W. of Folkestone Hill 216182<sup>1128</sup>, 1953-62; up to 100 pl[ants] seen per annum 215381 (30 pl[ants] 1961 KDR), 20 pl[ants] 1962, 1963! 23 S. side of Sugarloaf Hill, 223377, 1938 **MNE**, 1946, 20 pl[ants] 1961 KDR. 23 E. side of Sugarloaf Hill, 224378, Mrs K.D. Rowlands, 30 pl[ants] 1962 (1962!). [The Warren, Folkestone, c.245378, H. Lamb, 1909 **MNE** / F. Forsyth: not reported for about 25 years.] N of Holywell, 1981, 223384. [reported 30-60 yrs ago in Alkham Valley, KDR.<sup>1129</sup>] W of Arpinge, on S side of first spur of scarp NW of Newington, 20 pl[ants] 1991(?), 41 pl[ants] 1998 Above the Cherry Gardens, CPSK - 1986-97. [N[ea]r Walmer Castle, 1837, Little, **EDIN**, probably extinct.]



**[11]** 1 pl[ant] appeared in garden by A.20, Hollingbourne, J.R. Justice, 1949-]

**O. fuciflora x sphegodes = O x obscura** G. Beck

**8)** Apparently this on Downs E. of Etchinghill, with the parents, 1958, L.J. Margetts. Cheriton Downs, 1945, Miss D.A.C. Long.

**O. scolopax** Cav.

[Given in Francis Rose's *The Orchids of Kent* List, but no account in manuscript.]

**Serapias cordigera** L.

[Given in Francis Rose's *The Orchids of Kent* List, but no account in manuscript.]

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<sup>1126</sup> Winchcombe site recognised by Francis Rose as in error (note on letter from Nick Stewart, 16 February 1998).

<sup>1127</sup> This passage is unclear.

<sup>1128</sup> This gridreference is incorrect; TR 216 382 may have been intended.

<sup>1129</sup> Alkham Valley site recognised by Francis Rose as in error (note on letter from Nick Stewart, 16 February 1998).

## Bibliography

The Bibliography has been assembled from a series of sheets not included in the species accounts folders and the entries have been placed in alphabetical order by adding author and date at the beginning.

All material in square brackets has been added, in order to clarify the entries, but the entries remain scrappy and inconsistently laid out as with the originals which (unlike the species accounts) do not appear to have been revised after Francis Rose jotted them down.

The opportunity has been taken to add various Floras (wholly square-bracketed below) which are mentioned in the species accounts, but which had not been included. In addition to the listed entries, there are many bibliographic references within the text of the species accounts. Some are 'secondhand' and probably not consulted directly, e.g. references taken from H. Godwin's *The History of the British Flora* (1956). Some others may derive from N.D. Simpson's *A Bibliographical Index of the British Flora* (1960).

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- [Anon. n.d.] MS. In BM (N[atural] H[istory]) Library – Cat[alogue] of plants in vicinity of Gravesend.
- [Anon. 1756?] Natural History of Kent – Anon, 1756?<sup>1131</sup> (map only dated) in Gentleman's Magazine, pp175-206.
- [Anon. 1830.] *Orobanche purpurea* – Bishopsbourne, Anon, Mag[azine of] N[atural] H[istory] III (1830) 435.
- [Anon. 1839, perhaps G. Dennes.] *Polygonum maritimum* in Kent [per Daniel Cooper] – Report of Bot[anical] Soc[ociety of London] meeting [1838, Proceedings, 1837-39, p.79].
- [Anon. 1857, probably A. Irvine] Phyt NS II (1857) p250. [Species Defunctae.] *Sonchus palustris* reported "defunct" at Aylesford<sup>1132</sup>.
- [Anon. 1861. Phyt NS V (1861)<sup>1133</sup>, also Ibid. VI 1862, ref[erences] to Fav[er]sham plants, Thanet, Ham, Sandwich, Pegwell, Canterbury, Barham, Ashford.
- [Anon. 1862.] Phyt NS. VI (1862) 129 – {Kentish Botany:} Romney Marsh, [its general Aspect, Formation, and Vegetation.]
- [Anon. 1865.] Plants of S. Kent. Bot[anical] Chron[icle] (1865) 126.
- [Anon. 1879.] Nat[ural] Hist[ory] Journal. Kent Botany (1879) 106.
- [Anon. 1880.] Nat[ural] Hist[ory] Journal IV (1880) 112: *Op[hrys] fuciflora* n[ea]r Ashford, as *Op[hrys] aranifera* var. arachnites. Ibid. *Polyg[ala] aust[riaca]* & *Sagina* at Ashford, T Jeffrey.
- {Anon. 1883.] *Cuscuta epithymum* Chislehurst Re[po]rt of Exhibit, Bradford N. Soc. Nat. Trans. (1883) 91.
- [Anon. 1897.] Sci[ence] Gossip (1897) N. Series IV, p27. Lamb (exhibit of pl[ants] at South London Entomological and Natural History Society meeting)).
- [Anon. 1903] Nat[ure] Notes XIV (1903) 158. Rep[ort] of Field Club Ramble, Hayes and Keston.
- [Anon. 1905.] Nature Notes XVI (1905) 138 – Rep[ort] of Chislehurst ramble.
- [Anon. 1905a] S[outh] E[astern] Naturalist 1905 – List of pl[ant] loc[ation]s not recorded in recent floras.
- [Anon. 1910, 1911.] [Nature Notes] Selb[orne] Mag[azine] XXI (1910) & XXII (1911) – Rambles, Chislehurst, Bickley, Hayes, Keston.
- [Anon. 1910.] *Himantoglossum* in Kent (n[ea]r Ashford); Countryside Monthly I (1910) 67. Also Wollaston Phyt IV (1851) 169. Also R. Paulson J Bot L (19.....; J. Bot LVIII (1920) 177. –Dover; AD Webster, Observer 21 Aug 1921; J. B[ot]. LIX (1921) 303[-4]. – Wye, AB Cobbe, J B[ot]. LXI (1923) 242.<sup>1134</sup>
- [Anon. 1914.] Holmesdale N[atural] H[istory] C[lub] – (1914) p26 – Excur[sion] Edenbridge→Oxted.
- [Anon. 1921.] Records of new or rare plants (Kent). S[outh]-e[astern] Nat[uralist] XXVI (1921) xvii.

<sup>1130</sup> The find was actually near Olantigh Park, Wye. An Oxford (not Otford) specimen is also mentioned.

<sup>1131</sup> It is not in Gentleman's Magazine for 1756, vol.26.

<sup>1132</sup> Francis Rose's description, but the published note refers to the fact that despite *S. palustris* having long been considered gone from near Aylesford, a single plant was seen by Pamplin and Irvine on 4 September 1857.

<sup>1133</sup> There is also a separate entry, which refers to p177. This page carries the Notes and Observations made during a Week's Botanizing in South Kent.

<sup>1134</sup> Two overlapping entries are combined here.

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- {Anon. 1925.] S[outh]-e[astern] Nat[uralist] (1925) Rep[orts of ] excurs[ions] to Alkham and Dungeness.
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- [Blackstone, J. 1746. Specimen Botanicum.]
- [Boulger, G.S. 1874.] *Verb[ascum] lychnitis* – Bickley – G.S. Boulger, [Hardwicke's] Sci[ence-]Gossip, X, 1874, 211.
- [Boulger, G.S. 1906.] Rep[ort] of Brit[ish] Ass[ociatio]n, S. Africa, meeting of 1905<sup>1135</sup>, G.S. Boulger (1906) 56 (on *Eryng[ium] campestre* [lost to golf at] New Romney).
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- [Brabazon, E.J. 1863.] A Month at Gravesend, EJ Brabazon, 1863, ii 1864.
- [Bray, E. 1910.] *Melilotus indica* – Bexley, E. Bray, [Proceedings and Transactions of the ] Liverpool Biol[ogical] Soc[iety] (1910) 17.<sup>1136</sup>
- [Bree, W.T., 1834.] *Malcomia marit[ima]* / *Op[hrys] fucifera* = ?*fuciflora*, W.T. Bree, Loudon Mag[azine of] N[atural] H[istory], VII (1834) 271[-272]. *Kentranthus ruber* at Dartford & Ramsgate<sup>1137</sup>. *Op[hrys] fucifera* at Walmer and St. Marg[arets].
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- [Britten, J. 1902.] *Euphrasia gracilis*, Offham. J. Britten, J B[ot.] XL (1902) 391.
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- [Cooper, D. 1837.] Pl[ants] coll[ected] in [the] Is[le] of Sheppey, D. Cooper, Mag[azine of] N[atural] H[istory] I (1837) 554.

<sup>1135</sup> The manuscript incorrectly gives this as 1903.

<sup>1136</sup> This entry is duplicated.

<sup>1137</sup> This comment does not appear to be associated with reference given.

<sup>1138</sup> This appears incorrect: the published note is about *Smyrniololus atrum* at Dover.

<sup>1139</sup> In error for 1840.



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- [Druce, G.C. 1887.] J Bot XXV (1887) 182 – *Falcaria* at West gate, GC Druce.
- [Druce, G.C. 1902.] Some Kentish Plants: G.C. Druce, J. B[ot.] (1902) 350[-353].
- [Druce, G.C. 1903.] *Puccinellia distans* var. *tenuifolia* (Gren. et Godr.) E Kent, GC Druce, J Bot XLI (1903) 408.
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- [Druce, G.C. 1904.] {Kent Plants.} J. Bot. XLII Druce (1904) p.309.
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<sup>1140</sup> Francis Roses's note 'where' (he presumably had not seen the book, which he called *Primata Latina* in error), but which is now internet-available , e.g. at

[https://archive.org/details/bim\\_early-english-books-1641-1700\\_abrahami-coulei-j-angli-cowley-abraham\\_1668/page/26/mode/2up](https://archive.org/details/bim_early-english-books-1641-1700_abrahami-coulei-j-angli-cowley-abraham_1668/page/26/mode/2up)

There is a separate entry elsewhere for the translation: Cowley's History of Plants, 1795; 1810.

<sup>1141</sup> This entry is duplicated.

<sup>1142</sup> Given erroneously as 1919 in the manuscript.

<sup>1143</sup> This reference is only to a note (under Articles in Journals, October 1883) of the existence of a text by Fielding in the *Rochester Naturalist*.



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Cat[alogue] of Tun[bridge] Wells pl[ants], 1810 (circa).  
List of pl[ants] found in neighbourhood of Tum[bridge] Wells, 1801.
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- [Hammond, W.H. 1904.] J Bot XLII (1904) 312 – *Euph[orbia] esula* n[ea]r Dover, WH Hammond.
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<sup>1144</sup> There is also a duplicate entry for this, with less detail.

<sup>1145</sup> Incorrectly given as 1852.

<sup>1146</sup> This entry is given twice in the notes, in slightly different format.

<sup>1147</sup> The same volume also mentions Hepworth’s Rochester Umbelliferae in *Rochester Naturalist*.

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- [Johnson, T. 1629. *Iter Plantarum*.]
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- [Little, J.E. 1884.] Fl[ora] of Tonbr[idge], JE Little; Tonbridgian, 1884.
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<sup>1148</sup> Hall is given in Francis Rose’s notes as the author, but he was the bookseller; R.E. Hunter (not mentioned in the notes) was the author.

<sup>1149</sup> The reference is to finds at Heathfield and Dallington in Sussex, so Francis Rose’s query is as regards the potential for discovery to be made in Kent.

<sup>1150</sup> Part of these observations was disowned by Little in unpublished correspondence in the possession of the editor.

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<sup>1154</sup> Sic; but the second edition of this work was actually dated 1776.

<sup>1155</sup> This entry is duplicated.

<sup>1156</sup> This latter reference does not seem to correspond to Taylor's Dover find, although elsewhere in vol. XLVIII there is a general paper by M. Christy on *Lathyrus tuberosus* in Britain.

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## List of contributors, recorders and abbreviations

No draft for this section has been found and so it has been compiled from the contents of the species accounts. Recorders' names are often given as initials in the manuscript, and abbreviations are also used for the standard county flora and some other things. Attaching names to the initials (or adding initials to names) has been partly by way of by surmise and so may not always be accurate. But it has also been attempted with reference to Francis Rose's correspondence, to labels on herbarium specimens, to the Herbaria at Home website, to various societies' address lists; to Alex Lockton's database of Botanists of Kent; to the lists given in Rose (1960) (*Botanical Records for Kent, 1955-58, Vascular Plants in Transactions of the Kent Field Club* 1: 56-65) and Kent & Lousley (1951-57) (*A Hand List of the Plants of the London Area, Supplements to the London Naturalist* 30-36), and to those cases in the manuscript where a name has been expanded. This list, for consistency of layout and completeness of reference to contributors, includes names where initials are not known, and initials (where known) even where not deployed in the text. Recorders include not only contemporaries of Francis Rose, but also historic recorders.

Some contributors were particularly generous with their assistance, such as Mrs E. Brickenden, Kenneth Bull, Barbara Dodds, Richard English, Peter and Joan Hall, Dorothy Long, David McClintock, Miss B. Nash, Horace Pratt, Mrs K.D. Rowlands, Dr. E. Scott, Clive Stace, Hector Wilks, R.G. Williams, R.E. Wood, Donald Young.

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	Miss Anderson (cf. MJA)	AGS	Mrs A.G. (Trudy) Side
	Miss Attersole given also as Attersell (=?Maria. Attersoll)	AGT	A.G. Spooner
AA	Anna Atkins	AHB	Mr A.G. Turner
AB	Arthur Bennett	AHC	A.H. Carter
	A. Beadell	AHE	
	A. Blackmore	AHGA	Arthur Hugh Garfit Alston
	A. Brown	AHWD	Anthony Hurt Wolley Dod
	Rev. Adam Buddle	AI	Alexander Irvine
ABC	Miss A.B. Cobbe	AJM	A.J. Miller
ABS		AJW	Alfred James Wilmott
ABJ	A.B. Jackson	AM	Miss A. Mills
AC	Alan Clough		Aubrey Moore
	Arthur Cole	AMB	A.M. Bernard
ACC	Rev. A.C. Cawston	AMG	A.M. Glennie
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ADG	A.D. Greenwood	AOH	Allan Octavian Hume
ADH	A.D. Harrison	AP	Anne Pratt
ADW	Angus Duncan Webster	APB	Aubrey P. Brown
AEW	A.E. White	APH	A.P. Hughes
AF	A. Fox	APM	Alex (Alan?) P. Major
AFGK	A.F.G. Kerr	ARG	A.R. Gemmell
AFM	Mr A.F. Mussellwhite	ARH	A.R. Horwood
AG	A. Golding	ARP	Alfred Reginald Pryor
	Miss (H.) Aline Grasemann	AS	Miss A. Stone
	A. Grattan (cf. P. Grattan)	ASK	A. S. Kennard

ATB	Rev. A.T. Browne	BTL	Benjamin Thompson Lowne
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AV	A. Verrall		Mrs Barbara Welch
AW	Adam White		B. White
AWB	A.W. Bacot		Brian Woodhams
AWC	Mr A.W. Crump	CA	C. Alister
AWH	Mr. A.W. Hudson	CAJ	C.A. Johnson
AWR	A.W. Roberts	CAL	Charles Anthony Lister
AY	Miss A. Young	CAR	C.A. Roberts
B	Lady Baker		C.A. Rylands
	Mrs Bamborough	CAS	Clive Anthony Stace
	Miss Barnsdale		Rev. Charles Abbot Stevens
	Mr Benions		Miss C.A. Swain
	Mrs ?[J.B.]Benson	CAW	
	Mrs Bentley	CAV	C.A. Vink
	Mrs Besch	CC	C. Clarke
	Mrs Bingley		Miss C. Cloke
	Mr Blunt		C. Cox
	Mrs Blunt		Rev. C. Crowden
	Miss Booker	CCF	Lt. Col. C.C. Foss
	Mrs Brodrick	CCT	Clifford Charles Townsend
	Mrs Bryson	CD	C. Charles Drew
	Miss Bunyard		Charles Dubois
(Mrs B)	(see EB)	CDP	Christopher Donald Pigott
Bab. Man.	C.C. Babington, <i>Manual of British Botany</i>	CEB	C.E. Baker
BC	B. Carter		Charles Edward Britton
BD	Mrs Barbara Dodds	CEH	Charles Edward Hubbard
BDJ	Benjamin Daydon Jackson	CEP	C.E. Palmer
BDS	B.D. Stoyel	CES	Charles Edgar Salmon
BDW	B.D. Wardale	CF	C. FitzGerald
BEC	British Exchange Club {Reports}	CH	C. Haes (cf. E.C.H. Haes)
BEM		CHF	Charles Henry Fielding
BENA	British Empire Naturalists' Association	CHG	C.H. Grinling
BES	Mrs B.E. Scott	CHH	CH Hornsey
BFCS	Brian F.C. Sennitt	CJC	Dr Christopher James Cadbury
BG	Rev. Benjamin Glennie	CJP	C.J. Plumptre (see also P)
	Miss B. Gore	CL	Mr Carrington Ley
	Bryn Green	CLC	C.L. Colorette
BGR	B.G. Rogers	CMB	C.M. Baker
BH	Benjamin Harrison	CMcD	Miss C. McDermott
	B. Hawkes	CN	C. Norman
BJB	Bernard Jocelyn Brooke	CNP	Colin Pope
BK	B. Keane	CPH	Cecil Prescott Hurst
	B. Kempster	CPSK	G.E. Smith (1829) <i>A Catalogue of rare and remarkable Phaenogamous Plsnts, collected in South Kent</i>
BM	Natural History Museum Herbarium	CR	Mrs C. Rogers
BN	Miss B. Nash	CS	C. Skinner
	B. Neame		Miss C. Stevens
BP	B. Prowse	CSC	C.S. Chettoe
BR	Mrs B. Rogers	CSN	C.S. Nicholson
BRIST	University of Bristol (Herbarium)	CT	C. Turner
BS	John Thomas Irvine Boswell Syme	CTI	Prof. Cecil Terence Ingold
	B. Sennitt (cf. BFC Sennitt)	CTP	Cecil Thomas Prime
	B. Smith	Curtis	<i>Flora Londinensis 1777-98</i>
BSB	B.S. Brookes		
BSF	BS Furneaux		

CW	C. Watt Dr. Cyril West (CW records are his)	ECHH	E.Chris H. Haes .(cf. C Haes)
CWS	Rev. Charles William Shepherd	ECJ	E.C. Joy
D	Lady D (see JCD)	ECW	Edward Charles Wallace
DACL	Miss Dorothy A.C. Long	ED	Miss E. Davies Mrs E. Day Miss Edith D'Ombra
DB	Miss D. Baylis	EDM	E.D. Morgan
DBF	D.B. Fanshawe	E de C	Dr Eyre Champion de Crespingy
DC	Daniel Cooper Douglas Cattlin	EE	E. Eagles (1960s records) E. Edwards Rev.(A.) E. Elder Rev. E. Ellman
DCL	David C. Lang	EEJ	Mrs E.E. Johnson
DCMcC	David Charles McClintock	EF	Edward Forster
DEC	Dr David Edward Coombe	EFD	Eric Frederick Drabble
DECW	Miss D.E.C. Williams	EFL	Rev. Edward Francis Linton
DEK	D. E. Kimmins	EFW	Edmund Frederic Warburg Miss E.F. Worship
DF	D. Freed	EGB	E.G. Brand (cf. G. Brand)
DFH	Dennis F. Harle	EGBM-W	Edmund G.B. Meade-Waldo
DGS	D.G. Stanford	EH	Miss Elizabeth Harvey
DF	D. Friend	EHB	E.H. Bowles
DH	Miss D. Hancock	EHE	E.H. Ellis
DHK	Douglas Henry Kent	EHS	E.H. Solly
Dill.	Prof. Johann Jacob Dillenius	EJ	Edward Jenner
DJH	David J. Hamblar	EJB	Edward John Bedford (cf. J. Bedford)
DME	Miss D.M. Elwin	EJQ	Edwin John Quekett
DPM	D.P. Murray [?= Rev. Desmond P. Murray]	EJS	E.J. Sheppard
DPP	Miss Dora P. Peers	EGP or	
DPY	Donald Peter Young	EP	Eric Philp
DR	Mrs. Dilys Rowlands (= K.D. Rowlands) D. Royle	EL	Hon. E. Legge
DRG	Dalton Rowell Glendinning	ELA	E.L. Angel
DS	D. Smith [for records 1877-1905] David Stainer David Streeter	EM	[see MEM] E. Marston
DTP	Dr David Thomson Playfair	EMA	E.M. Attwood
DVSW	Mrs Dorothy V.S. Woods	EMC	Miss E.M. Child
DW	Mrs D. Warnett (cf. B. Warnett) D. Watts Mrs D Woods (cf. DVS Woods)	EMH	Edward Morell Holmes
DWB	D.W. Bloodworth	EMK	Mrs E.M. Kelly
E	Dr Eagles (1920s records, cf. EE) Miss Elliott	EMP	E.M. Plumptre
EA	Miss E. Armitage E. Armstrong	EMR	Miss E.M. Ratcliffe
EB	Edward Bartlett Edward Biron Lady Edith Bligh Mrs E. Brickenden (=Mrs B.) Miss E. Brooks Miss E. Burrows	EM-R	Edgar Milne-Redhead
EBB	Edmund Browne Bishop	EMT	Ethel M. Treves
EBBa	Edward Benedict Bangerter	EN	Ernest Nelmes
EC	Mrs E. Carlton Elizabeth Chandler Mrs E. Clarke	ER	E. Robinson
ECG	E.C. Gilbert E.C. Green	ES	Dr. E. Scott (ES records usually are his) E. Shorrocks (=? R.E. Sh.) E. Solley
		ESE	Eric Smoothy Edees
		ESH	Mrs E.S. Hewson
		ESS	Prof. Ernest Stanley Salmon
		ESM	Rev. Edward Shearburn Marshall
		ET	Dr E. Taylor
		EW	(Mrs or Miss) E. Waley
		EWB	E.W. Howell
		EWP	Mrs E. Ward Petley

F	Mrs Farquarson		Goff (G., S. or T.S.)
	Miss Fawdry	GAB	G.A. Bristow
	Mrs Finn	GAM	G.A. Matthews
	Mrs Ford	GAOSB	Gustavus A.O. St Brody
	Miss Forrest	GB	Miss Gertrude Bacon
FAH	Francis Alfred Hanbury		G. Brand
FAS	F.A. Swain (= F.M. Swain?)		Mr G. Brown
FB	Francis Bossey	GBS	G.B. Shaw
	F. Brent	GBW	George Buchanan Wollaston
FC	Miss F. Clarke	GC	G.Coxhead
FCS R	F.C.S. Roper	GCB	G.C. Brown
FCT	F.C. Townsend	GCD	George Claridge Druce
FF	Miss F. Fagg	GCO	G. Chichester Oxenden
	Fred Forsyth	GCP	Rev.G .C. Pownall
FGEK	M.H. Cowell (1839) <i>A Floral Guide for East Kent</i>	GCW	George Chapman Walton
	<i>etc.</i>	GD	George Dowker
FGB	F.G. Baker	GED	G.E. Dennis
FH	F. Holroyde	GEF	G.E. Frisby
FHB	Frank Hatton Brightman	GEH	G.E. Hutchings
	F.H. Burgess	GEK	Prof. G.E. Kewell
FHJ	F.H. Jones	GES	Mrs G.E. Scott
FHP	Franklyn Hugh Perring		G.E. Shaw
FHW	Frederic Henry Ward		Gerard Edward Smith
FIW	Miss F.I. Williams	GESB	Prof. George Edward Simonds Boulger
FJ	F. James	GF	G. Fannell
	F. Jones		Mrs Gertrude Foggitt (née Bacon, see GB)
FJB	F.J. Barker		G. Freeman
FJE	F.J. Epps	GG	George Gulliver
FJH	Frederick Janson Hanbury	GH	Miss G. Heeley
Fl. Ang	W. Hudson (1762) <i>Flora Anglica</i>	GHM or	
FLFK	Mrs Frances Louisa Foord-Kelcey	GM	George H. Morgan
Fl. Kent	Hanbury & Marshall (1899) <i>Flora of Kent</i>	GHN	G.H. Norton
Fl. Lond.	W.J. Hooker (1821) <i>Flora Londinensis</i> v4	GL	George Luxford
Fl. Lond	W. Curtis (1777) <i>Flora Londinensis</i>	GLD	G.L. Davidson
Fl Met	Daniel Cooper (1836) <i>Flora Metropolitana</i>	GM	G. Miller
Fl. Ton.	T.F. Forster (1816) <i>Flora Tonbrigensis</i>		G. Mowat
Fl. T.W.	E. Jenner (1845) <i>Flora of Tunbridge Wells</i>	GMA	Gerald Mortimer Ash
FMR	F.M.Roberts	GMB	G.M. Brown
FMS	F.M. Swain (=F.A. Swain?)	GMCM	George M.C. Mount
FMW	Frederick Morgan Webb	GMP	Miss G.M. Prideaux
FO	Fawcett Osborne	GN	George Nicholson
FP	Mr F. Prebble	GNM	G.N. Melland
FR	Francis Rose	GO	Mrs G. Oldaker (cf.J. Oldaker)
FRB	F.R. Browning	GOP	
FRT	Rev. Frederick Robert Tennant	GR	Miss G. Richardson
FRW	Frank R. Waley (cf. E. Waley)	GS	G. Spooner (?short for AGS)
FSEF	Mr F.S.E. Fawkes	GT	Sir George Justice Talbot
FWES	F.W.E. Shrivell		G. Taylor
FWM	F.W. Morris	H	Rev. Hale
FWP	Frederick William Payne		Major Hardy
	F.W. Place		Miss Harris
FYB	Frederick Yorke Brocas		Miss Hayton
G	Gasson		Miss [F.M.]Henley
	Mrs Gibbings	H&JG	Henry & James Groves
	Mrs Godfrey		

H&M	Hanbury, F.J. & Marshall, E.S. (1899) <i>Flora of Kent</i>	HTM	Henry Tuke Mennell
Hanbr	(see F.J. Hanbury)	HU	Henry Ulyett
HAS	H.A. Sandford (cf. W.A. Sandford) Rev. Hugh Ashworth Stowell	HVW	H.V. Wood
Hb.	Herbarium	HW	H. Walker
HB	H. Barlow H. Brenchley Mrs H. Brice	HWA	H.W. Adams
HB-A	Miss H. Burnaby-Atkins	HWP	Herbert William Pugsley
HBM	H. B. Mackeson	HMW	Harold Warren Monington
HCW	Hewett Cottrell Watson	HZ	Miss H. Zetton
HD	H. Donesthorpe	IAW	I.A. Williams
HDH	H.D. Hewitt	IB	Ian Bryson
HE	Hubert Elgar	IJH	I.J. Hughes
HEF	Rev. Henry Elliott Fox	IM	Miss Ida Moore
HEGE	H.E.G. Emmett	IMH	I.M. Hubble {also given as J.M.H}
HEW	H.E. Wilkinson	IMR	Ida Mary Roper
HFP		JAF	J.A. Field
HG	Herbert Giraud Dr H. Gray H. Green H. Greenfield H. Guermonprez	JBF	Joseph Barnabas French
HGB	Miss H.G. Belton	JBG	J.B. Green
HHH	Henry Haselfoot Haines	JBH	J.B. Hopkins
Hist. Kent	Edward Hasted <i>The History and Topographical Survey of the County of Kent</i>	JBM	John Braybrooke Marshall
HJB	H.J. Burkill	JBS	J.B. Salmon
HJMB	H.J.M. Brown <sup>1159</sup>	JBT	J.B. Tuck
HJS	H.J. Sutton	JC	John Cherry Miss J. Clapham Miss J. Coast J. Codd John Cryer
HK	H. Knight	JCC	J.C. Codrington
HKAS	Herbert Kenneth Airy Shaw	JCD	Lady Joanna Charlotte Davy (Lady D)
HL	Henry Lamb	JCEH	John C.E. Hubbard
HMH	Henry Martin Hollman	JCF	John C. Felton
HMP	Horace M. Pratt	JCM	James Cosmo Melvill
HMW or		JD	Rev. Joshua Dix
HW	Hector Mark Wilks	JDS	J.D. Stephen
HNC	H.N. Crampton <sup>1160</sup>	JEC	J.E. Chambers
HNR	Henry Nicholas Ridley	JEL	Job Edward Lousley Joseph Edward Little
HP	H. Peters H. Pierson	JED	James Edgar Dandy
HPS	H.P. Sargent	JEH	Miss J.E. Hibbard
HPT	Rev. H.P. Thompson	JEN	Miss J.E. Nichols
HS	Miss H. Spean Miss H. Speer	JES	Sir James Edward Smith Dr. J. Evans Smith
HSR	Herbert Stanley Redgrove	JF & PCH	Joan Frances Hall & Peter Charles Hall
HSVH	H.S. de Vere Hodge	JFD	Prof. John Firminger Duthie
HT	Henry Trimen (Miss) H.T. Miss H. Turnbull (also the Misses Turnbull)	JFH	J.F. Hyland
		JFL	John Donald Lovis
		JFMC	John Francis Michael Cannon
		JFDP	
		JFY	James Forbes Young
		JG	Miss J. Gibbons Dr John Grayling James Groves J. Guardia Joe Gurr J. Guthrie
		JGB	John Gilbert Baker

<sup>1159</sup> The manuscript clearly gives this, although one would expect the initials to belong to Humphrey Bowen.

<sup>1160</sup> The text also gives Miss H.M. Crampton.



JGC	John George Children		J. Tempère
JGG	Rev. J.G. Gilman	JTD	J.T. Dodd
	J.G. Groom	JTIB-S	John Thomas Irvine Boswell-Syme
JGL	J.G. Lawn	JW	J. Walton
JGP	Mr J.G. Prebble		Miss J. Webber
JH	Mrs J. Hardy		J. Westrup
	J. Harper		J. Wills
	J. Hepworth (or see JEH)		Joseph Woods
	Miss J. Hibberd		Miss J. Wright
	Jane Hyde	JWE	Rev. John Walter Ewing
JHA	J.H. Allchin	JWH	Major J.W. Harris
JHL	J.H. Lavinder	JWL	J[ames?] W[alter?] Long
JHPS	Mr J.H.P. Sankey	K	Miss Kenrick
JJ	J. James	KA	K. Atkinson
JJB	J.J. Bennett	KC	K. Chambers
	J.J. Brent	KDR	Mrs K.Dilys Rowlands
JJS	Rev. John James Scargill	KEB	Kenneth Emerson Bull
JL	J. Lidstone	KF	Kathy Friend
JKMcL	Miss/Mrs	KFC	Kent Field Club
JKM	John Kenneth Morton	KG	Miss K. Green
JKS	J.K. Spearing	KJ	K. Jolly
JM	Rt. Rev. Bishop John Mitchinson	KM	Mrs K. MacKenzie
	John Moor		K. Marsh
	Miss J. Moore	KP	K. Peters
JMS	J.M. Sherwood	KS	Miss K. Smith
JN	James Newton	KSJ	K.S. Jelley
	Miss J. Nisbett	KW	K. White
JO	Mrs Jean Oldaker		Miss K. Wood
	John Ounsted	L	(in Hb L): Louseley's herbarium
JP	John Palmer (see also JRP)	LBB	Mrs L. Breda Burt
	John Parkinson	LBH	L.B. Hall
	Miss J. Peplow	LBL	Dr L.B. Langmead
	Prof. John Percival	LCB	L.C. Bushby
	J. Piper	LD	Miss Louisa Day
	Joyce Pitt	LES	
JPMB	John Patrick Micklethwait Brenan	LH	L. Hawkins
JR	Jacob Rayer	LHJW	L.H.J. Williams
	J. Reid	LJD	L.J. Davies
	J. Ridley	LJM	Leonard John Margetts
	Rev. John Roffey	LJT	L.J. Tremayne
	J. Rumsey	LM	L. Musslewhite
	Mrs J. Russell	LMPS	Mrs L.M.P. Small
JRB A	J.R.B. Arthur	LNHS	London Natural History Society
JRJ	J.R. Justice	Lond. Nat.	The London Naturalist
JRP	John Robin Palmer	LRAG	L.R. Allen Grove
JRW	John Richard Wallis	LS	L. Smith
JS	James Sherard		L. Stevens
	James Sowerby	LTP	L.T. Powis
	Lord Justice James Stirling	LW	Miss L. Webb
	John Storr		Miss L. West
JSH	Rev. Prof. John Stevens Henslow	LWD	Lewis Weston Dillwyn
JSL	John S. Linford	LWW	Leonard. W. Wilson
JSM	John Stuart Mill	Lady D	Lady Davy [see JCD]
JSSB	J.S.S. Beesley	M	Miss McMurray
JT	J. Taylor		Dr. McReddie

- Miss Murray
- M&G Milne & Gordon (1793) *Indigenous Botany*
- MA Miss M. Amos
- Miss M. Ashbee
- M. Atkins
- MAL Prof. Marmaduke Alexander Lawson
- Martyn Thomas Martyn (1763) *Plantae Cantabrigienses*
- MB Mrs M. Bostock
- M. Boyser
- Mrs Moore Brabazon
- MBG M.B. Gerrans
- MC M. Chitt
- Miss M. Cobbe
- M. Corden
- McTaggart Cowan
- MCH [J.] M. Chalmers-Hunt
- MCT Miss M.C. Tapsfield
- MD Marjorie Devereau
- MEM Miss M.E. Milward [sometimes given as Millward, or E. Milward/Millward]
- MG Miss M. Goslin
- MH M. Horner
- MHC Matthew Henry Cowell
- MHD Mrs Marjorie H. Dolling
- MHW Mrs M.H. Walton
- MJA Miss M.J. Anderson
- MJC Mrs M.J. Comyn
- MLM M.L. Wedgewood (?= Mrs Wedgwood)
- MM M. McFarlane
- Mrs M. Mallinson
- MMW Mary McCallum Webster
- MNHS Maidstone Natural History Society
- MP M. Paffard
- MR M. Rathbone
- Martyn Rix
- Mrs. B (see EB, Mrs. Brickenden)
- MS M. Swain (?= F.M. Swain)
- MSM Michael S. Moon
- MTM Maxwell Tylden Masters
- MW Miss M. Wythes
- MWB Miss M.W. B.
- MWP Mrs Mary W. Page
- MWZ M. W. Zambra
- N Miss Nevill
- Hon. Mrs Nightingale
- NBG H.C. Watson (1835-7) *New Botanist's Guide*
- NBW Nathaniel Bagshaw Ward
- NCC N.C. Cook
- NDS Norman Douglas Simpson
- NEB Mrs N.E. Baker
- Newman Edward Newman (1845) *History of British Ferns*
- NHS Natural History Society
- NJW
- NLK N.L. Kimmins (see also DEK)
- NT Nathaniel John Winch
- NYS Noel Ivri Sandwith
- O Brigadier Orr
- O.B.G. D. Turner & L.W. Dillwyn (1805), *The Botanist's Guide through England & Wales* [the 'Old Botanist's Guide', to distinguish from a later New B.G.]
- OD Owen Davis
- OW
- P Mr Pain
- Miss Palmer
- Mrs Pankhurst
- Miss Pearce
- Mrs Pemble
- Mrs Perable
- Mrs Pencott
- The Misses Plumtre
- Miss Poulter
- PAH P.A. Hitch
- PAL Peter A. Lane
- PBG P.B. Graham
- PBT Miss P.B. Topham
- P[C] & J(F)H Peter Charles Hall & Joan Frances Hall
- PCH Peter Charles Hall
- (much less frequently) P.C. Holland
- PDS Paul D. Stanley
- PF P. Furneaux
- PG Peter Gay
- P. Grattan
- Percy Greenfield
- PGA
- PH Philip Hookham
- PHC P.H. Cooke
- Phil. Trans. Philosophical Transactions
- Phyt. or Phytol. Phytologist
- PJ P. Jacob
- PJO P.J. Olney
- P le B Peter Le Brocq
- Pl. Fav. E. Jacob (1777) *Plantae Favershamienses*
- PM P. Marnock
- PMR P.M. Roberts
- PR&RE P.R. & E. Edwards
- PRB P.R. Bell
- PS P. Scott
- PWR Professor Paul Westmacott Richards
- PWW Peter W. Wilberforce
- R Miss Russell
- R&C ? Francis Rose & Cyril West
- RAB Ronald Archie Boniface
- RAC Raymond A.R. Clarke
- RAG Rex Alan Henry Graham
- RAR R.A. Roffe
- RB R. Beer

	Miss or Mrs R. Begg		Mr Selcock
RBC	R.B. Codd (and see JC)		Mrs Silcoe
RC	see RAC		Mrs Small
	R. Chambers		Mrs Spear
	R. Chantry		Miss Spillett
	R. Crowson		Miss Spratt
RCP	Richard Charles Palmer		Rev. Stacey
RCW	R.C. Wingfield	SA	S. Andrews
RD	Roy Day	St J M	St John Marriott
RDE	Richard D. English	S&S	N.I. & C.I. Sandwith?
RDM	R.D. Murray	SB	Miss S. Berkeley
RE	R. Elphick	SD	S. Dancy
REE	R.E. Edwards		Samuel Doody
REH	Dr Robert Edward Hunter	SEC	Stafford Edwin Chandler
R.E. Sh.	R.E. Shorrocks	SH	Mrs S. Hall
REW	R.E. Wood	SHC	Rev. S.H. Cooke
RF or		SJC	S.J. Chamberlain
RoF	Lady Rosemary FitzGerald	s.l..	<i>sensu lato</i> , in the wide sense
RG	Richard Gorer	SM	S. Morris
RGW	Mr. R.G. Williams	SMW	Dr. S. Max Walters
RH	Robert Halher	SRD	S.R. Devey
	R. Herdwick	s. strict.	<i>sensu stricto</i> , in the strict sense
RH&EL	R.H. & E. Lepper	ST	Sir Stephen Tallents
RHC	Ronald Harold Compton	SW	Sydney Webb
	R.H. Chandler	SWP	Dr S.W. Pyddoke
RJD	R.J. Deacock	Syn	John Ray (1724 edn.) <i>Synopsis methodica stirpium Britannicarum</i>
	Rev. R.J. Dolling		
RM	Dr Ronald Melville	T	Prof. Tabor
	Col. Richard Meinertzhagen		Mr Tatham
	Richard Moyse		Mrs Teagle
RMB	Rodney McGuire Burton		Mrs Thatcher
RMP	R.M. Payne		Mrs Tristram
ROJD	R.O.J. Dare	TB	Miss or Mrs M. Tatton Brown
RP	Robert Pocock	TBB	Thomas Bates Blow
	Rev. Ralph Price	TDP	Terence Dale Pennington
	R. Pryor	TDVS	Dr. T.D.V. Swinscow
RPH	Miss R.P. Hills	TFF	Thomas Furlly Forster
RR	R. Rayne	TGT	T.G. Tutin
RRH		THA	T.H. Angel (see also ELA)
RS	R. Scott	THMB	Rev. Thomas Henry Marsh Bartlett
RSA	Prof. Robert Stephen Adamson	TJ	Thomas Johnson
RSRF	Richard Sydney Richmond Fitter	TJF	Thomas Jackson Foggitt
RT, RTh	R. Theobald	TLS	Tunbridge Wells Museum & Art Gallery
RW	R. Warnock		herbarium (various abbreviations have been converted to this in editing)
	R. Woodell	TM	T. Miller
RWR	E.W. Robbin	TRE	T.R. Eagles (cf. E. Eagles)
RWB	Roger William Butcher	TS	Thomas Sansom
RWD	Dr Richard William David	TT	Tony Tynan
RWH	R.W. Hale	TW	Thomas Walker
RWW	?R.W. Westrup		Miss T. Webber
S	Miss de Satze	TWM	T.W. Morris
	Miss Sankey	TWNHST	Tunbridge Wells Natural History Society
	Miss Sayers	U	Mrs Urmston
	Miss Schön	UR	unrecorded
	Mrs Seamark		

V	Miss [?Eleanor] Vachell	WGMcl	William Graham Mclvor
VAC	Miss V.A. Carpenter	WG-W	Rev. Waterman Gardner-Waterman
VB	Mrs. V. Brumby	WH	William Hudson
VCH	Victoria County History	WHB	William Hadden Beeby
VEB	Miss V.E. Buxton	WHG	William Henry Griffin
VFPD	Vera Day	WHK	W.H. Kew
VLG	Miss V.L. Gower	WHP	William H. Pearsall
VN	Miss V. Nunns	WJ	Walter Johnson
VR	V. Rendel	WJD	W.J. Davies
VSS	Victor Samuel Summerhayes	WJH	Sir William Jackson Hooker
VSW	Vita Sackville-West	WJLS	W.J.L. Sladden
W	Mrs Walton	WLBT	Miss W.L.B. Tower
	Mrs Wedgewood	WM	William Mitten
	Miss (?RE) Wickham	WMR	Rev. William Moyle Rogers
WAC	William Ambrose Clarke	WNHS	W... Natural History Society
WAS	W.A. Sandford (cf. H.A. Sandford)	WOH	Dr Willis Openshaw Howarth
WB	W. Beeston	WP	William Pamplin
	W. Biddiscombe		William Peete
	William Borrer	WRJ	William Rickman Jeffrey
	W. Bridge	WRL	William Richardson Linton
WC	William Christy	WRS	William Robert Sherrin
	William Curtis	WS	Mrs W. Sankey
WCB	William Charles Barton	WTB	Rev. William Thomas Bree
WBW	Dr W.B. Williams	WRRD	Sir W.T. Thistleton Dyer
WCRW	William Charles Richard Watson	WV	Mrs W. Verschoyle
WES	Frederick W.E. Shrivell	WW	William Whitwell
WF	W. Fagg	WWN	Rev. William Williamson Newbould
	W. Fawcett	WWR	Walter Waters Reeves
WFS	Wild Flower Society	WWs	William Wilson Saunders
WGB	W.G. Breed		



Blackbush Shaw, Cudham, 28 May 1986. Francis Rose surveying; Joyce Pitt on the left.  
Photo by Rosemary FitzGerald

## Appendix

### Background and draft material for the planned contents of the Flora

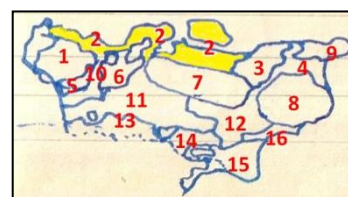
#### Part 1: description of the numbered botanical districts

One of Francis Rose's notebooks (the Flora notebook, c.1947) contains comments on the botanical districts which would have been included in the Flora (although needing to be updated in nomenclature and plant occurrences) as follows. These are only brief summaries per numbered district. For district 2), however, there both a brief summary and a more worked-up version and both are given below. The district maps are adapted from one in the notebook.

**1) The Metropolitan District.** 2<sup>nd</sup> for heath plants – the light soils near London. Soil: Eocene sands, clays, gravels, alluvium. Best localities: Keston Common; HayesC[ommon]; Chislehurst C[ommon]; Dartford Heath; Farningham Wood; N. of Bickley; SE of Bickley; Petts Wood – St Pauls Cray C[ommon]; Holwood Park. [Special plants listed, species confined to 1) were *Myrica gale*; *Scirpus caespitosus*; *Filago apiculata*].



**2) The Thames- Medway Estuary.** (brief summary) Finest for brackish and saltmarsh flora – one of the best in Britain. Good localities: Strood (Rochester) (with obvious exceptions); round district (6) to Gravesend and Dartford. [Special plants listed, species confined to 2) were *Rumex palustris*, *Salvia verticillata*, *Sonchus palustris*.]



(worked-up version)

Does not look promising to an outside botanist. Purposely left out wider chalk, to show richness of area, history very long.

**Districts (geological):** i) **The alluvium marshes** of the 2 estuaries: fresh, brackish and salt. ii) **The Eocene Beds** – Reading, Woolwich, Blackheath, London Clay – Woodland and heaths or dry common. iii) **The chalk massif**, N. of the great E-W valley.

i) **[The alluvium marshes]**

a) **The real Beach flora** (Grain) — *Eryngium*, *Glaucium*, *Card[uus] tenuiflorus*, *Salsola*, *Cakile*, *Crithmum*, *A[triplex] laciniata*, *Ammophila*, *A[gropyron] junceum*, *C[erastium] tetrandum*, *{Trifolium} scabrum*.

b) **Saltmarshes:** v[ery] extensive: 3 kinds:

- i) Coastal strip – *Salicornia perennis*, *Limonium*, *Inula crith[moides]*, *Armeria*, *Obione*, sandips, narrow, dryish.
- ii) Mid Thames: *Limonium*, *Salicornias* of many kinds, *Obione*, *M. sicula* rare here (wider, muddy, with creeks, *Aster*).
- iii) Upper T[hames]. *Aster* and *Puccinellia*, *F[estuca] rubra*, smaller red *Salicornias*, *Triglochin*, no *Limonium*.

c) **Banks:** *H[ordeum] marit[sic, for marinum]*, 14 clovers in Grain, *Marrubium*, *Mariana [lactea]*, *G[ravesend]* and *Sho[rne]*, *C[entaurea] calcitrapa*, *Lactuca saligna*, *Onopordum*.

d) **Brackish marsh** – ditches, etc. 2 rare *Rumex*, *Eleocharis uniglumis*, *C[arex] divisa*, *Cheno[podium] botry[oides]*, *Sis[ymbrium] sophia*, *Pucc[inellia] fasciculata*, *P[uccinellia] dist[ans]*, *P[uccinellia] procumbens*, *Ran[unculus] baudotii*, *Pot[amogeton] interr[uptus]*, *lucens*, *Oe[nanthe] fist[ulosa]*. Canal; Grain; Upnor; Cooling. *Polypogons* (Grain). *Ruppia* / *Zann[ichellia]*, Stone.

e) **decayed marsh** ~~Fresh Water~~ – *J[uncus] obtus[iflorus]*, *C[arex] div[isa]*, *C[arex] distich[a]*, *C[arex] dist[ans]*, *C[arex] panic[ea]* – Northfleet and Crayford *Thalictrum*. f – true for marsh. Darenth, orchids.



*Oe[nanthe] pimp[ineloides]*, *Glaux*. ... *vulgaris* – yell[ow] waterlily and *Ran[unculus]* [?] *pseudofluitans*, *Card[amine] amara*, *S[tellaria] neglecta*. Joydens, Farn[ingham] Wood — *Sax[ifraga] gran[ulata]* (gravel).

## ii) Eocenes beds.

Sandy loam – Darenth, Mounts, Swanscombe, Cobham: Shorne Woods.

Clay – Upnor, Swanscombe, Cliffe and Halstow.

**Heath** Dry Common: Shorne (pebbles) G[ree]n St[reet] Green.

**Woods:** orig[inally] oak or part oak, birch, hornbeam (e.g. Cobham) now chestnut planted. (former light, drier, latter heavier soils),. Hazel in Cliffe Woods. V[ery] rich flora: Tutsan; Lily of the Valley; Solomons Seal; Hard Fern; Mountain Fern (v[ery] rare); G[rea]t Wood rush; *D[aphne] laureola*; *Iris foetidiss[ima]*; *Ruscus*, all very char[acteristic]. *Primula*, *Scilla*, *Mercurialis*, *Pteris*, *Lonicera*. Similar woods n[ear] Woolwich – *Narcissus*, form at Shorne, Swanscombe, etc. Pea, *Lotus*, *Epilobium lanceolatum*, *Aira caryoph[ylla]*, sedges, *Aira flexuosa*.

**Clay:** *Trif[olium] medium*, *P[impinella?] magna* (Cliffe), *B. biennis*, *H[ypericum] pulchrum*, *humifus[um]*, *hirsut[um]*, *per[foratum]*. *Filago germ[anica]* – bare places. A pink eye fl[owered] *Nepeta glechoma* at M[oun]ts W[oo]d.

**Dry Commons:** v[ery] int[eresting], 10 clovers at Green St[reet] Green, Shorne: *arvense*, *prat[ense]*, *repens*, *fil[iforme]*, *camp[estre]*, *stri[atam]*, *suff[ocatum]*, *glom[eratum]*, *subt[erraneum]*, + 14 in Grain (+ *hyb[ridum]*, *scrabr[um]*, *[squamosum]*, *frag[iferum]*). V[ery] dry – Farn[ingham] – *Hypo[chaeris] glabra*... *Moenchia*, even *Montia*, *Calamintha nepeta*, *Nepeta cataria*, *Mariana lact[ea]*, *C[entaurea] calcitrapa*, *Draba verna*. Formerly *Scilla autumn[alis]*. Aliens: *Samb[ucus] ebulus*, *Pot[entilla] recta*, *Euphorbia virgata*. Gravel pits: *Sax[ifraga] gran[ulata]*, *Ger[anium] luc[idum]*, *Ger[anium] rotund[ifolium]*, *C[erastium] arvense*.

**True heath:** Shorne and (Dartford) *Calluna*, ((*E[rica] tetralix*, Joydens only), *U[lex] nanus*.

## 3) Chalk:

3<sup>rd</sup> great area – v[ery] interesting indeed, but v[ery] dissected; outcrops beneath the Eocene plateau and where eroded in valleys, now much quarried by man near Thames.

**In Woodland**, it appears at Mounts, Cobham, and Crabbles Woods; also Darenth: sudden change in flora: *Hypericum montanum* the b[oun]d[ar]y plant; v[ery] rare [in] Kent. *Daphne* commoner. Orchids. *Lactuca virosa* in old pits, formerly rare. *Helianthemum* fringes Woods; *Cal[amintha] acinos*, *clinopod[ium]*, and *ascendens*; *Atropa*; *C[erastium] arvense*, *Peucedanum* [= *Pastinaca*], on banks of roads.

**V[ery] steep Quarry sides and cuttings** – limited flora – *Senecio squalidus*, v[ery] c[ommon], *Centranthus ruber*, v[ery] c[ommon] – *Lac[tuca] scariola*, v[ery] c[ommon] – *Onopordon*, local – *Antirrhinum*, less c[ommon] – *Diploxys*, v[ery] c[ommon], *V[erbasum] lychnitis* (rarer), *Salvia horminioides*. *Clematis*.

**Less smoky** [sic, apparently] **Banks:** *Silene italica* (only loc[al]) *Anthyllis* also.

**True chalk grassland:** *Hippocrepis* and 2 orchids in *B[rachypodium] pinn[atam]* grassland S. of Cobham Park; scarce in area.

best area: hedge and border of park: *Salvia prat[ensis]*, *Astragalus* (also M[ou]nts Rd., Northfleet), *Althaea hirsuta* (only native loc[ation]).

**Ploughlands:** v[ery] rich: *A[juga] chamaepitys*, *Specularia*, *Linaria spuria*, *A[nagallis] foemina*, *Filago spath[ulata]*, *L[inaria] elatine*. Rich in orchids – separately dealt with.

*O[rchis] mascula* – not common.

*O[rchis] morio* – not seen.

*O[rchis] maculata* – Darenth, Greenhithe, Shorne.

*O[rchis] purpurea* – v[ery] r[are] – Shorne, and Mounts Wood, S. of Cobham Park.

*Anacamptis* – S/ Cobham P[ar]k, Greenhithe, Dartford.

*O[phrys] apifera* – Greenhithe, Cobham P[ar]k.

*O[rchis] praetermissa* – Darenth, Greenhithe (fine hybrids here).

*Neottia* – Shorne.

*E[pipactis] violacea* – Swanscombe W[oo]d.

*E[pipactis] latifolia* – S. of Randall Wood, Shorne.

*Listera* – Greenhithe, Dartford, Shorne, Cliffe Woods.

*Spiranthes* – Cliffe pits.

*Ceph[alanthra] pallens* – S Cobham P[ar]k, Dartford; Nurstead.

*Epipactis palustris* - Greenhithe pit.

**Summary:** Great unexpected – richness, - v[ery] varied, prob[ably] where in Eng[land] can so many plants be seen in a such a small area in one day. **750 spp minimum.**

**3) The Blean.** Best localities: (i) heaths, bogs, and ponds E. of Canterbury and SW of Fordwich; (ii) Trenley Woods; (iii) W. Blean; (iv) E. Blean; (v) Thornden Wood; (vi) N. of Dunkirk; (vii) S. of Dunkirk; (viii) Darland C[ommon]; (ix) SE of Chestfield; (x) Tankerton Cliffs;. [Special plants listed, species confined to **3**] comprised *Prunus padus*.]



**4) Stour Marsh.** Richest in county. Mainly in 3 first rate areas — The Dunes; Ham & Hacklinge Fen; Wingham Fen. Richest in species confined to it — finest for marsh and coast plants in c[oun]ty and in SE Eng[land]. [Special plants listed, species confined to **4**] were *Potamogeton coloratus*, *Vulpia uniglumis*, *Carex extensa*, *Carex elata*, *Utricularia vulgaris*, *Tillaea muscosa*, *Juncus acutus*, *Parentucellia viscosa*, *Himantoglossum*, *Clematis flammula* †, *Juncus compressus*.]



**5) Chalk W. of Darent.** Fair only. [Special plants listed, a relatively short list with none confined to **1**).]



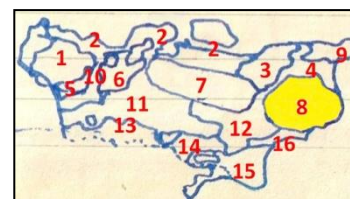
**6) Darent [to] Medway Chalk and other Hills (6E.)** Very rich in var[ieties] of chalk plants and others on overlying soils. [Special plants listed, and species confined to **6**] were *Althaea hirsuta*, *Silene italica*, *Ranunculus parviflorus*, *Campanula glomerata* and (deleted) *Eryngium campestre*.]



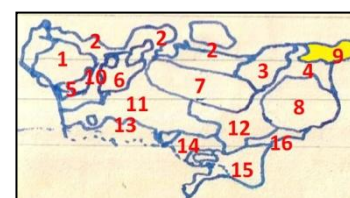
**7) Medway [to] Stour – Chalk.** Fair chalk flora - not distinctive. [Special plants listed, species confined to **7**] comprised *Senecio campestris*.]



**8) Srou [to] Channel chalk.** Div[isio]n of most interest, other than local — for splendid chalk and cliff flora. [Special plants listed, species confined to **8**] were *Cirsium eriophorum*, *Euphorbia cyperissias*, *Thesium humifusum*, *Rubia peregrina*, *Brassica oleracea*, *Silene nutans* subsp. *smithiana*, *Ophrys arachnites*, *Epipactis leptochila*, *Rosa agrestis*, *Matthiola incana*.]



**9) Thanet.** Poor. [Special plants listed, a very short list, mostly of coastal plants; species confined to **9**] comprised *Falcaria vulgaris*.]



**10) Darent Basin.** Fair. [Special plants listed, species confined to **10**] were *Potamogeton lintonii*.]



**11) Medway Wealden Basin.** 1<sup>st</sup> [for] inland waterways and dry heaths – finest woods on clay. [Special plants listed, species confined to **11**) were *Arabis perfoliata*, *Oenanthe silaifolia*.]



**12) Stour Wealden Basin.** Richest in variety of species and of greatest veg[eta]t[iona]l types – clay/sand, limestone, local interest. [Special plants listed, species confined to **12**) were *Carex canescens*, *Orobanche major*.]



**13) High Weald of Medway.** The heathy forest division – best for “atlantic” species. Rich Atlantic flora – cf. Sussex High Weald. [Special plants listed, species confined to **13**) were *Illecebrum*, *Anthemis nobilis*, *Mentha reliquenii*, *Elatine hexandra*.]



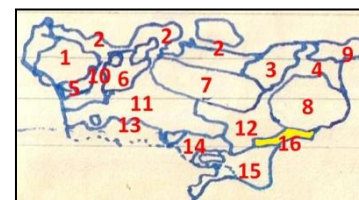
**14) Rother High Weald.** V[ery] poor? [Special plants listed, species confined to **14**) comprised *Cyclamen hederifolium*.]



**15) Romney Marsh.** Fine marsh and coastal flora – follows **4**) in this respect. [Special plants listed, species confined to **15**) were *Dryopteris cristata*, *Carex serotina*, *Raphanus maritimus*, *Sium latifolium*, *Crepis foetida*, *Littorella lacustris*, *Carex diandra*.]



**16) Channel Terrace.** Fair only. Little known today: better known in past (G.E. Smith’s hunting ground). [Special plants listed, none confined to **16**).]



## Part2: Draft for the history of the flora and vegetation of Kent

Francis Rose made some outline notes for this section, kept with his Flora papers, as follows:

### The history of the vegetation of Kent since the Ice Age.

There is little purely local evidence. Information on this subject has been largely obtained from pollen analysis data, and to a less extent from macroscopic remains in alluvial deposits (peat, river gravels, lake muds, marine deposits). In Kent, we have few sites where damp peat beds of great age occur; Ham-Hacklinge fen — bored by Godwin, never published. Hothfield Common — very shallow liquid peat — very recent. Medway — not studied. Some data from Thames side (Roman, Potteries) and Thanet (Bronze age coastal sites). Picture derived from general English studies, mostly in E. Anglia, also in New Forest, Southampton, etc.

Give diagram of pollen zones (Episcope).

**Pliocene — before the Ice Age:** (Matthews (1955) orig[in] and distribution of the British Flora. Godwin Hist[ory] of Brit[ish] Flora, 1957).

Flora much as now; Cromer Forest Bed, Decid[uous] forest.

**Full glacial:** arctic flora, e.g. Lea Valley Middx, and Cambridge. *Arctostaphylos uva-ursi*, *Betula nana*, etc. (see list in Rose, Lond. Nat. **36**, p30, 1957.<sup>1161</sup>

but also some maritime [species] (*Silene maritima*)

some marsh species:

*Carex pulic[aris]*

*Pot[entilla] palustris*

*Damasonium [alisma]*

*Vicia sylv[atica]*

*Eriophorum ang[ustifolium]*

*Salix rep[ens]*

*Menyanthes [trifoliata]*

*Pot[amogeton] obtus[ifolius]*

Ice not nearer than 100 miles then.

Thus ... Max. of Ice Age.

Hence flora like arctic tundra of Lapland or Iceland, or m[oun]t[ain] tops in Scotland today — no woodland — open scrub-heath — some present day bog plants still with us. We can assume therefore that the woodland flora of Kent of lowland species had almost completely disappeared during the Ice Age — had to re-emigrate except for a few heath and marsh species and aquatics.

Birch woods of Allerød.

### Recession:

Birch pine pre-boreal IV.

Boreal. Pine V, evidence in Sussex and Surrey.

VI, Pine — Hazel.

VIIa Atlantic mixed oak forest, warmest period.

VIIb Sub boreal drier, cooler, dry. Neolithic — Bronze Age — lime pollen at Addington.

VIII Sub atlantic — much cooler and wetter, bogs grow faster.

Holes [=Holocene?]

**Post glacial period** — v[ery] open — (see Piggott & Walters 1954). Many common weeds of today v[ery] common, also chalk grassland, open habitat species, e.g. *Helianthemum*.

**Neolithic period** — much forest cleared in E Anglia (Hockham Mere etc.); no doubt in Kent too: where?

<sup>1161</sup> Rose, F. (1957). Vegetation History and Environmental Factors in the London Area. *London Naturalist* for 1956, 36: 29-40. This paper, at least as far as the Iron Age, follows closely the notes given here, albeit adjusted as applicable to the London area.

late Neolithic 1800 BC. Kits Coty, Coldrum; prob[ably] same period: Giants Grave, Juliberry's Grave. Clearances in Medway Valley and at Wye. Many chalk spaces may have spread then.

Bronze [age]: heaths on Greensand; and on E. Kent chalk plateau. Prob[ably] heaths formed later on land cleared then.

Iron age — more forest cleared. Hornbeam common and Beech commoner.

Romans — Caesar prob[ably] wrong about *Fagus* absent in Kent. He prob[ably] didn't explore the forested areas.

Mediaeval period. More clearance in R[iver] Valleys, and in Weald.

Elizabethan Maps — Woods essentially as today; but more contin[uous] e.g. Blean, Mereworth (Wild Boar), Kings Wood, Ham Street, Chalk plateau.

#### Historical period: Botanical study.

See *The New Flora of Kent*, Rose 1955 SE Nat. & Ant., p.9.

Turner — 1548 *Names of Herbes*

John Gerarde 1597, *Herbal*

Thomas Johnson 1633 *Gerard emaculatus*

1629 *Iter* ) 1<sup>st</sup> accounts of botanical rambles in Kent.

1632 *Descriptio* )

give details from MS.

Parkinson *Theatrum* 1640

C. Merrett *Pinax* 1666

Ray, several records taken up

E. Jacob — 1<sup>st</sup> local flora in Kent, 1777.

Dillwyn & Turner, *Bot[anical] Guide*.

G.E. Smith.

Cowell — 1840.

H[anbury] & M[arshall] 1899.

My own work



### Part 3: Draft for the vegetation account, Chalk Woodlands

Francis Rose made some notes, kept with his Flora papers, which may indicate how he was going to approach describing aspects of characteristic Kent vegetation and its habitats.

#### The Chalk Woodlands of Kent

**Geol[ogical] map** — c[lay] w[ith] f[lints] — bare chalk plateau old woods form a “fringe” to summit of scarp and dry valley slopes.

Much of downs — open sheepwalk on scarps, ± contin[uous.] E. of Watling Street and in Thanet woods have undoubtedly spread.

- i) Scrub of *Cornus*, *Vib[urnum] lant[ana]*, *Sorb[us] aria*, *Taxus*, *Rhamn[us] cath[artica]*, *Euonymus*, *Bet[ula] pub[escens]* (local), *Crata[egus] mon[ogyna]* on deeper soils esp., *Rosa* spp., *Corylus*, *Frax[inus]*, *Acer camp[estre]*.
- ii) *Sorb[us] aria* — *Bet[ula] pub[escens]*, *Taxus* on S.aspects; *Frax[inus]* — *Corylus* wood on north aspects.
- iii) *Fagus* woodland + *Taxus*, *Sorb[us] aria* — *Daphne laur[eola]*, *H[elleborus] foet[idus]*, *Ceph[alanthra] dam[asonium]*, *Sanic[ula] europaea*, *Merc[urialis] perennis*.

#### Variations:

- i) **Many dry valleys** — modified to copp[ice] and st[andards] or pure copp[ice]. In mid Kent (Wichling, Bredhurst etc.) *Corylus* *Viburnum* *Frax[inus]* copp[ice]: + *Frax[inus]*, *Acer*, *Q[uecus] robur* st[andards], *Fagus* local.
- ii) **in Kent E of Canterbury Folkestone Road:** *Frax[inus]* - *Acer* - *Q[uecus] robur* woods; *Taxus* rare; *Fagus* rare; *Corylus* — *Frax[inus]* — *Acer* — *Cornus* copp[ice]. Wetter climate (35 ins p.a.); deeper loamy soil: *Allium urs[inum]*, *Paris*, *Mnium stellare*, *Angelica*, *Desch[ampsia] caesp[itosa]*, *Helleb[orus] vir[idis]*, *Pimp[inella] maj[or]*, *O[rchis] purpurea*.
- iii) **E of A2:** little natural woodland — except in areas of loamy superficals: Woolwich, Ileden Pitt Oak Ash coppicewoods. Eastling, Watertower Wood. Much Beech plant[atio]n, e.g. Barfreton area; *Monotropa*, *Neottia*, *Daphne*, freq[uent]. Scrub devel[opment] on old sheepwalks: country of *Lath[yrus] sylv[stis]* and *Cerast[ium] arvense*.
- iv) **Beech planting** on scarp to W. Westwell, Boxley, Shoreham. In general, the pure beechwoods prob[ably] planted. Some ancient mixed woods at Barham, Boarley, Bluebell Hill, Snodland, Halling, Luddesdown. Medway valley Woods flora: *Helle[borus] foet[idus]*, *Atropa*, *Euph[orbia] lathyrus*, *Buxus*, orchids, *Merc[urialis] perennis*, *Sanic[ula] europaea*, *Daphne*.  
Note features of beechwood flora and regeneration.

#### Plateau Woods — what is natural veget[atio]n?

- i) **c[lay] w[ith] f[lints]** — *Carp[inus] betulus* — *Q[uecus] robur* wood copp[ice] and st[andards]. Prob[able] orig[in] high forest. *Card[amine] prat[ensis]*, *Pimp[inella] maj[or]*, *Rubi*.  
**loams** — *Allium*, *Paris*, *Adoxa*, *Card[amine] prat[ensis]*, *Ran[unculus] auric[omus]*, *Sax[ifraga] gran[ulata]* v[ery] l[ocal].  
**Pliocenes** — acid soils: *Luz[ula] sylv[atica]*, *Blechnum*, *Sarothamnus*, *Convallaria*, *Quercus pet[raea]*, *Rubi*.

## Part 4: Notes for species distribution patterns

The following notes by Francis Rose, held with his Flora papers, appear to have been an early sketch towards the Flora account of types of species distribution patterns.<sup>1162</sup>

### The types of distribution occurring in Kent plants

Main features botanically are: **The chalk downs; woodland areas; Alluvial flats; coastline, The Forest ridge; The Folkestone Sands.**

**A. Widespread spp** where phys[ical] character of ... is ... feature, wayside spp “weeds”

- i) Universal; in cultivated land; *Bellis perennis*, *Artemisia vulgaris*, *Lamium rubr.* [sic]. *Crataegus oxycantha*, *Arrhenatherum elatius*, *Lotus corniculatus*, *Trifolium dubium*, *Anthoxanthum*, {*Capsella*} *Bursa[-pastoris]*, *Poa annua*, *Cent[aurium] umb[ellatum]*
- ii) Universal; in all wooded areas, irres[pective] of soil. —: *Stellaria*, abs[ent] from alluvial areas and Thanet — nearly treeless. *Arum maculatum*, *Scilla*, *O[rchis] mascula*, *P[rimula] vulgaris*, *Galeobdolon*, *E[uphorbia] amygdaloides*, *Nepeta glech[oma]*, *Ajuga reptans*. Shelter more than shade the factor.
- iii) Universal in woods on heavy soil. *Carex pendula* (non-calc[areous]); *P[rimula] vulg[aris]* ca[lcareous].
- iv) On all areas of heavy soils (gleys and brown earths) wooded or not. *Pulicaria dysenterica*.

**B. Chemo-Edaphically det[ermine]d distribu[tion]s**, confined largely to local soil types.

- v) Calcicoles of main distribu[tion]s on v[ery] base-rich soils, chalk and rag[stone]. *P[rimula] veris*, *V[iola] hirta*, *Origanum*, *Cal[amintha] offic[inalis]*, *Cent[aurea] scabiosa*. More local — *Astragalus gly[cyphyllos]*, *C[repis] biennis*.
- vi) On chalk, rag[stone] and calc[areous] sand dunes — *Anacamptis*, *Anthyllis*, *Anthropophora*, {*Platanthera*} *Chlora [perfoliata]*.
- vii) Strict calcicoles on chalk, etc. — widespread — *Pot[erium] sang[uisorba]*, *Helianthemum*, *Scab[iosa] columb[aria]*, *Op[hrys] apifera*.
- viii) Strict calcicoles — localised to ± aborig[inal] turf in drier places; *Asperula*, *Hippocrepis*, *Gent[ianella] amarella*.
- ix) Strict calcicoles — woodland — *Helleborus foetidus*, *O[rchis] purpurea*, *O[phrys] muscifera*.
- ix) [sic] Strict calcicoles very local and puzzling — *P[olygala] calcarea* → *Aceras* → *P[olygala] austriaca* → *Senecio camp[estris]*, *O. fuciflora*, *C[ampanula] glom[erata]*, *Filip[endula] hexapetala*.
- x) v[ery] base rich deep woodland soils — *H[elleborus] viridis*, *Paris*. Little less base rich — (*Allium [ursinum]*, *Adoxa [moschatellina]*) more wide[spread] off downs.
- xi) Wetter base rich — *C[arex] strigosa*.
- xii) Weald clay only — *C[arex] vulpina*.
- xiii) rivers only — *C[ardamine] impatiens*, *N[asturtium] amphib[ium]*, *S[cirpus] lacust[ris]*, *R[anunculus] pseudofluitans*.
- xiv) Coastal:
  - (Alluvium — *Althaea offic[inalis]*, *H[ordeum] pratense*, *C[arex] divisa*.
  - (shingle — *L[athyrus] marit[imus]*, *Crambe*, *R[umex] [crispus] trigran[ulatus]*.
  - (sand — *Eryng[ium] [maritimum]*, *C[ampanula] soldan[ella]*.
  - (wide. *C[arduus] tenuiflorus* + chalk. all beaches, *Glaucium [flavum]*
  - (salt m[arsh] — *Limonium*, *Triglochin [maritima]*, *P[olygonum] marit[imum]*, *Sal[icornia] ramos[issima]*
  - (cliff — *L[inum] bienn[e]*, *B[rassica] oler[aceus]*, *Crith[mum] maritimum*).

<sup>1162</sup> These notes would appear to be drafted early on, not least from the older versions of plant names used (Bentham & Hooker, rather than CTW, 1952 edition); and some of the insights which emerged from the Flora work are not reflected, e.g. such as are mentioned in Rose, F. (1955). The New Flora of Kent. Presidential address to the Botanical Section. *The South-eastern Naturalist and Antiquary* **60**: 9-19.

**C. Climatically det[ermin]ed distribu[tion]s, v[ery] local**

xv) *P[olygala] oxyptera*, *Op[hrys] sphegodes*, *Rubia*, *Orobanches*, *Iris foet[idissima]* — bias E.

xvi) v[ery] local - *Oe[nanthe] silaifolia*, *Oe[nanthe] fluv[iatlilis]*.

xvii) High Weald. *Dentaria*, *Serratula*, *A[grimonia] odorata*, *C[arex] helodes*, *Wahlenbergia*, *D[ryopteris] aemula*.

xviii) Heaths —dry g[roun]d.

xix) bogs

xx) fen.