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Editors: Richard Pryce & Katherine Slade

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Front cover image: The second vice-county record for Carmarthenshire of *Cardamine bulbifera* (Coralroot) growing by the Afon Tywi downstream of Manordeilo railway bridge recorded by Peter Lee Thompson and det. By I.K. Morgan, 25th Apr 2023. Photo © P. Lee Thompson.

Contributions from all BSBI members are very welcome.

Please send to the corresponding editor Richard Pryce by 15 Jan 2025 for the next Welsh Bulletin, email: PryceEco@aol.com

Please see the webpage <u>bsbi.org/welsh-bulletin-archive</u> for back issues. Printed versions of some back issues are available on request from Katherine Slade.

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Editorial

Katherine Slade

This year we welcome our new BSBI Wales Officer, <u>Alastair Hotchkiss</u>. This role runs until March 2026 focusing specifically on the Priority Plants Project funded by the Nature Networks Programme, working with volunteer botanical recorders to survey and assess individual plant special features on SSSIs in Wales to improve evidence of their condition and determine future management. More on <u>page 9</u>.



Alastair Hotchkiss BSBI Wales Officer

There are a few changes to staff Amgueddfa Cymru-

Museum Wales to update you on. Firstly, we are pleased to welcome a new member of the botany team, Sophie Hocking, in a new post Senior Botany Curator (Invasive and Non-invasive Plants). Sophie's research interests include plant conservation and the impacts of invasive species on the native flora.

Following Sally Whyman leaving the museum, you can direct any herbarium enquiries or specimen loan requests for vascular plants to Heather Pardoe: <u>museum.wales/staff/150/Heather-Pardoe</u>

Currently Nathan Smith is acting Head of Plant and Earth Sciences with research interests in fungi and a focus on the history of natural history. I continue in my role as Botany Curator covering access to bryophytes, fungi and algae. Hannah Jenkins joins the team for a year as Assistant Curator also covering bryophytes, fungi and algae.

Finally, after 35(!) and 15 years respectively, Richard and I will be stepping down as editors of the Welsh Bulletin following a hand over period with the new editors. I'm sure everyone will join me in saying a big thankyou to Richard for 35 years as editor!



Sophie Hocking Senior Botany Curator (Invasive and Non-invasive Plants)



Hannah Jenkins Assistant Botany Curator

Highlights of the BSBI Wales Annual Meeting 2024

Charles Hipkin

Over 50 delegates attended the BSBI Wales Annual Meeting on the weekend of July 5th to July 7th 2024, which was held on the Swansea University Bay Campus. A full report on the event will appear in the Yearbook.

Some of highlights included *Matthiola sinuata* (Sea Stock) in full flower on Crymlyn Burrows and Baglan Dunes (see photo below) and a chance to see part of Swansea Bay's dynamic, semi-fixed dune system. In the Brownfield sites of Baglan Energy Park delegates were able to see *Dianthus armeria* (Deptford Pink) and remarkably large populations of *Clinopodium acinos* (Basil Thyme), *Vulpia ciliata* ssp. *ambigua* (Bearded Fescue) and *Galium prisiense* (Wall Bedstraw) as well as *Filago germanica* (Common Cudweed) and a patch of *Odontites jaubertianus* (French Bartsia). On the dunes nearby, *Carex punctata* (Dotted Sedge), *Polygonum oxyspermum* (Ray's Knotgrass) and *Juncus ranarius* (Frog Rush) were also seen.

Cefn Cribwr Grasslands Special Area of Conservation was visited on the final day where, among many other notable species, was *Scorzonera humilis* (Viper's Grass) as well as *Myrica gale* (Bog Myrtle) and a large sward of *Thelypteris palustris* (Marsh Fern) with *Juncus subnodulosus* (Blunt-flowered Rush), *Epipactis palustris* (Marsh Helleborine) and *Pedicularis palustris* (Marsh Lousewort). Later that day a significant population of *Epipactis phyllanthes* (Green-flowered Helleborine) was found on the extensive, unrestored overburden mound, which is part of the worked-out Margam Opencast Mine.



Matthiola sinuata (Sea Stock) on Baglan Dunes, Ragworm Farm © Charles Hipkin

Montgomeryshire recorders round-up 2024

Fiona Gomersall and Kate Thorne, vice-county recorders for Montgomeryshire, v.c.47

We've been busy in Montgomeryshire this year, both as individuals or in our field group with the main objectives being to continue with our teaching and to help Montgomeryshire Wildlife Trust (MWT) with their wildlife site surveys. The wildlife sites were very varied and included orchid-rich meadows and rhos with *Dactylorhiza purpurella* (Northern Marsh-orchid) and *Trollius europaeus* (Globeflower); acid grassland and rocky outcrops with *Hieracium lasiophyllum* (Stiff-haired Hawkweed) and frequent *Teesdalia nudicaulis* (Shepherd's Cress) (Moel y Golfa, SJ2812); a series of meadows alongside the upper River Severn; a rich peat bog (Allt Dolanog, SJ0613) and Y Golfa, Welshpool Golf Club where MWT have a significant project. We met a group of wildlife trust staff and young volunteers for a full day of surveying and teaching followed by a welcome complimentary tea with cake in the clubhouse. Despite the concern about flying golf balls, we thoroughly enjoyed recording in the good acid grassland and rich flushes of Y Golfa.

Early in the year several of us helped research students at the University of Edinburgh by collecting samples of *Cochlearia danica* (Danish Scurvygrass) from roadsides in our county, some of us even collecting further afield on Harris and Skye. Christopher Dudley and others are interested in knowing whether the inland march of these halophytes began with a single genotype.

Gill and Peter Foulkes returned to check old *Acaena* records, mostly located in the Dyfi forest, SH8007/SH8310. With careful examination, all plants were identified as *Acaena ovalifolia* (Two-spined Acaena) and not *A. nova-zelandiae* (Pirri-pirri-bur) as was previously thought.

Ruth Dawes has been very active in helping Alistair Hotchkiss locate rare species to fill gaps in the SSSI features database. *Hypericum montanum* (Pale St John's-wort) was proving elusive in the Llanymynech and Llynclys Hills SSSI (and sadly may have gone from there). Alan Dawes, did eventually find over a dozen plants in limestone grassland on a roadside verge between Trefonen and Treflach, in v.c.40 outside a disused quarry once used to store salt for road treatment.

Claire Backshall and Ruth have recorded good populations of *Gentianella amarella*, Autumn Gentian and *Spiranthes spiralis*, Autumn Lady's-tresses in the above SSSI with Claire achieving an impressive final count of 51 spikes of *S. spiralis*. Mark Lawley, v.c.47 County Recorder for Bryophytes continues to supply long lists of mosses and liverworts and to encourage our interest in non-vascular plants on our field outings.

Three of us attended the excellent Welsh AGM in Swansea and delighted in the very different habitats we visited. We continue to recruit new members to our field group.

Priority Plants on SSSIs in Wales Project

Alastair Hotchkiss, Wales Officer (Priority Plants Project) alastair.hotchkiss@bsbi.org

We're underway with our 2-year project on Priority Plants on Sites of Special Scientific Interest (SSSIs) in Wales, funded by Welsh Government's Nature Network Fund. Wales has more than 1,000 SSSIs, covering about 12% of the country's surface area. There are about 2000 species 'features' on SSSIs in Wales in total – essentially these are species that are considered to be one reason for the sites' special status and protection. This is usually alongside other reasons - habitats, other species or geoscience features. Around 650 of these are plant species features (bearing in mind that one plant species can be a feature of multiple SSSIs).

In 2020, the Natural Resources Wales (NRW) 'Baseline Evaluation' was an attempt to set out how SSSIs in Wales are doing – Generally these reports use terms like 'favourable' or 'unfavourable' for conservation status of sites and features - but the evaluation also revealed that 50% of species features on SSSIs were considered to be in 'unknown' condition – basically lacking sufficient information to be able to state anything with any confidence.

Hopefully this project can help. The initial project priorities have been derived from a 'gap analysis' – drawing out which of the 650ish SSSI plant features have no recent (from the past 20 years) records on the <u>BSBIs Distribution Database</u> (DDb) within those SSSIs – some haven't been recorded for much longer, and some have no localised records at all within SSSI boundaries (e.g. hectad records only). When I started on the project in June this list was 165 features strong. Of course, there will be other species on SSSIs that local NRW staff and BSBI vice-county recorders see as priorities to survey – and we may come on to some of those later. But for now at least, we're focusing on the 'missing' things.

The 'missing' 165 includes a real range of taxa, from very geographically restricted rarities like some *Hieracium* spp., or Welsh Eyebright *Euphrasia cambrica*, to more widespread axiophytes like *Vicia orobus* (Wood Bitter-vetch) or *Trollius europaus* (Globeflower) for example. Often these SSSI plant features are those that strongly characterise a particular area, e.g. *Carex montana* (Soft-leaved Sedge) in south Wales, *Hypericum undulatum* (Wavy St. John's-wort) in west Wales and *Cicuta virosa* (Cowbane) in north-east Wales. There are species from the top of Wales' mountains, down to its coastal waters. As you'd imagine, the reason some haven't been recorded recently is because they are just difficult to get to – on cliffs, aquatics in lakes etc.!

The logical start was some investigative work to truth-check the list. Conversations with vice-county recorders, botanists across Wales, and Natural Resources Wales' staff have revealed that, inevitably, there have been some more recent observations

of some of these plant features, but they just haven't made it to the BSBI. At the moment, I've found out about more recent records for 36 of these 'missing' features. So this is a relatively straightforward case of compiling these and getting them on the DDb. This is also helping to reveal the priorities to re-survey next year. Thanks to everyone who has helped me with these thus far, NRW SSSI officers, specialists and monitoring staff, BSBI vice-county recorders and many others. I expect there will be a few more to come too.

For another 50-ish features I've been provided with a wide range of other useful information, e.g., more detailed location info, issues etc. Around 11 of those are considered to have been lost (or at least, resurveying very likely to be unsuccessful!) – Some have been subject to thorough survey efforts recently, with null results. For example a couple of SSSIs listed for *Gentianella amarella* subsp. *occidentalis* (Dune Gentian). Some are longstanding missing, and considered to be extinct - *Hieracium griffithii*, as one example, over 100 years since its last record at the only known location at Nant Ffrancon, within Eryri SSSI v.c.49. Species like *Trollius europaeus* (Globeflower) are a concern, with losses from some marshy grassland SSSIs, which have been checked several times in recent years.

I've discovered 7 errors on the list. Some are just taxonomy/name issues - *Sorbus leptophylla* at Breidden Hill SSSI is now *Sorbus stirtoniana*, and *Sorbus hibernica* feature of Coedydd Afon Menai SSSI should be *Sorbus arvonicola*. The *Hypericum linariifolium* (Toadflax-leaved St. John's-wort) listed as a feature of Dolyhir Quarry SSSI in Radnoshire is now considered to be *Hypercium x caesariense* (*H. humifusum x linariifolium*). So these just need changing as a feature by NRW. *Hieracium riddelsdellii* was listed as a feature of Brecon Beacons SSSI, but the historic Craig Cerrig Gleisiad (with Brecon Beacons SSSI) record is considered to be an error. There is also the mysterious case of *Nuphar x spenneriana* being listed as a feature of Llyn Syfaddan (Llangorse Lake) SSSI, despite having no mention on the citation, or anywhere else for that matter, and no-one seems to know anything about it! Its nearest outpost in Wales is at Tal-y-Llyn near Cadair Idris (v.c.48).

We were already into the summer by the time I joined, but I've been out to a number of sites to pilot the approach, so some features have been surveyed this year. These have been mostly sites close-ish to home in mid-Wales with straightforward access. This began in June with a visit to Llwyniarth SSSI near Dolgellau v.c.48, with thanks to Jo and Heather for arranging permission to access with the Meirionnydd Naturalists Group. Here we re-recorded and mapped areas of *Euphrasia rostkoviana* (*Euphrasia officinalis subsp. pratensis*). Thanks to Gill Foulkes for helping me out with my first foray into *Euphrasia* identification. Since then, I've had re-finds of *Melica nutans* (Mountain Melick) at a Radnorshire SSSI, *Dryopteris aemula* (Hay-scented Buckler Fern) at a Mongomeryshire SSSI, and other Merioneth SSSI re-finds including *Platanthera bifolia* (Lesser Butterfly Orchid), *Carex pseudocyperus* (Cyperus Sedge) and two *Salix herbacea* (Dwarf Willow) sites, neither of which had any BSBI records for and the two hectads weren't in the 2020 Atlas. Hopefully squeeze in a few more before winter!

There's also been a fair few things I haven't been able to re-find (yet!). Lots of staring at Sphagna and peatland vegetation trying to find bog orchids *Hammarbya paludosa* and *Lycopodiella inundata* (Marsh Clubmoss), without success. Most recently also dropping and losing my glasses somewhere in a bog! It'd be good to try again with the Bog Orchid sites next year, so it'd be good if anyone else wants to check sites for a Wales-wide effort. As if one small orchid wasn't enough, I've also had a go with a couple of *Pseudorchis albida* (Small-white Orchid) sites to no avail. It'd be easy to get a bit downhearted from these sorts of visits but they're invariably in very nice places, lots of other nice plants, and sometimes have resulted in some new finds. I got to see *Bupleurum tenuissimum* (Slender Hare's-ear), which made up for not re-finding any *Hordeum marinum* (Sea Barley) by the tidal section of the River Dee in Flintshire. The lack of finding any *Hypericum montanum* (Pale St-John's-wort) at Llanymynech and Llynclys Hills SSSI in v.c.47 was made-up for by finding a new site (2nd v.c.47 and only extant site) for *Trifolium scabrum* (Rough Clover).

So of the 165 'missing' features I started the project with in June, I reckon I've whittled it down to under 100 now, and these will be the main things to focus on for 2025. So we now have the autumn and winter to plan a full 2025 season of surveying, and it'd be great to get more features covered by other botanists across Wales who might be interested in helping out – I've been in touch with all vice-county recorders in Wales, and I'd be really pleased to hear from anyone who might be up for getting involved with surveys. There's plenty to have a go at, and even if you just want to try one species next year, that'd be great. Do get in touch, and I'd be very happy to talk through the approach, and we can think what might be needed and how I can help.

The Spadework before the Fieldwork

Signposting some resources to help you prepare for your site visits

Heather Garrett

No doubt you will have read about the recent wonderful discovery of the Ghost Orchid in Scotland by Richard Bate. This record is the result of years of painstaking fieldwork and research. As we all know recording plants usually involves much more than just accidentally stumbling across a rare species in a field. Behind most site visits there will have been hours of planning and research using existing records, maps and published surveys. Much of this pre-site visit preparation material is now digital and available on-line. The following is a brief run-down of the resources that I frequently use and may be of interest to others.

Data Map Wales - data and maps from the Welsh public sector

A Welsh Government website (<u>datamap.gov.wales</u>) hosting online spatial datasets where the most useful maps for botanists include:

Terrestrial Phase 1 Habitat Survey is a simplified habitat classification at a scale of 1:10,000 covering the whole of Wales using the JNCC Phase 1 survey methodology. The maps have several layers of data and the most useful is called NRW_Phase1_mospolys_voronoi.

<u>Phase 2 habitat surveys in Wales</u> for: <u>sand dunes</u>, <u>lowland grasslands</u>, <u>lowland</u> <u>peatlands</u>, <u>lowland heathland</u>, <u>lowland raised bogs</u>, <u>saltmarsh</u>, <u>uplands</u>, <u>woodlands</u>. A Phase 2 survey is more detailed than a Phase 1 survey and is usually completed at a site level. There are individual detailed reports for most Phase 2 sites which can be obtained from the NRW library service.

"<u>Unitisation Boundaries</u>" is an obscure title relating to a SSSI spatial dataset. Large or complex SSSI are sub-divided into conservation management units. Visit: <u>datamap.gov.wales/layers/inspire-nrw:NRW_UNITIZATION</u>

This map is useful when used in combination with the <u>Protected Sites Baseline</u> <u>Assessment 2020</u> data which is downloadable from the NRW website as a csv spreadsheet. This data may help you to narrow down the location of SSSI species. Visit <u>NRW Home > Evidence and data > Research and reports</u> then click on the report.

LandIS – Land Information Service with Soilscapes soil types Viewer

A soils and land-use information service hosted by the Cranfield Institute. The free soilscapes map includes lots of additional information about the attributes of the soil type. <u>landis.org.uk/soilscapes</u>

Protected sites in Wales

When sites are confirmed as Sites of Special Scientific Interest (SSSI) their biological features of interest are listed by habitat and species in the citation and maps delineating the legal boundary are published. The SSSI will usually have a Site Management Statement (SMS) which sets out the aspirations for managing these features and achieving Favourable conservation status. All this information is available on the Natural Resources Wales website although it can be difficult to find. I suggest that you use the NRW breadcrumb trail below and then bookmark the web page <<u>Find protected areas of land</u>> for future reference. This webpage has a map and text search facility.

<u>NRW Home> Guidance and advice> Environmental topics> Wildlife and biodiversity></u> <u>Protected areas of land and seas</u>

Natural Resources Wales (NRW) library service

In the 1990s, when Ian Mercer was the Chief Executive of the Countryside Council for Wales (CCW) he aspired to CCW having the best environmental library in Wales and a lot of resources were dedicated to making this happen. NRW inherited this service, and they recently upgraded the library catalogue to improve its Advanced search function. This web catalogue is open to the public and available online at NRW breadcrumb trail <u>Home> Evidence and data> Our library and information</u>.

You can request electronic copies of their more recent surveys and reports and the very efficient librarians will send you copies and assist with searches. The physical library in the Maes y Ffynnon office, Bangor is open as a reference library to the public. Please check the website for opening hours. It houses an extensive book and journal collection and a great deal of "grey literature" including older surveys and technical reports which are not accessible elsewhere. Researchers, students and academics and volunteer recorders frequently make use of this excellent library service.

National Library of Wales, Aberystwyth

This is a library of record and should have copies of every publication with an ISBN number published in the UK. Prior to the BSBI handbooks being made available as pdf documents I would visit the library to consult out-of-print handbooks. They also have an extensive collection of maps.

Membership is free and can be set up online. The web catalogue is open to nonmembers. A fraction of their collections is digitised for online viewing. Visit <u>library.wales/catalogues-searching</u>

Royal Commission on the Ancient and Historic Monuments Wales library, Aberystwyth

This service is perhaps of less relevance to botanists, but it does have some useful datasets including old air photos, historic place names and tithe maps. The latter gives us clues to past land-use and habitats.

The collections are a mix of digitised online information and a physical reference library open to the public. Please check the website for opening times. Visit rcahmw.gov.uk/services/rcahmw-library

Historical maps of the UK hosted by the National Library of Scotland

An extensive resource of historical maps including OS maps dating back to the 1840s.

Mostly maps of Wales, Scotland and England. Visit maps.nls.uk

Closing the information loop

Vice-County Recorders finish their field work by inputting their records into the BSBI Distribution database (database.bsbi.org). I also follow-up a field visit by writing a short file note which includes photos and observations on the site / key species. I sometimes share these notes with others who have an interest in the site, for example, ecological staff working in the public sector. I hope these notes will raise the profile of our records and support the conservation of the species that we find.

Increases in Anacamptis morio in vice-county 35

Stephanie Tyler and Elsa Wood, vice-county recorders for Monmouthshire

In the Principality, *Anacamptis morio* (Green-winged Orchid) is mainly confined to coastal lowlands in south and south-west Wales, Ceredigion and north Wales. With the exception perhaps of Pembrokeshire, Monmouthshire v.c.35 has the largest populations of Green-winged Orchids in Wales. This orchid is considered Near Threatened in a Great Britain context, Vulnerable in England but of Least Concern in Wales (Bateman *et al.* 2023). Green-winged Orchids have suffered a long-term decline due to loss of old meadows to intensive rye grass and arable crops and due to habitat loss from housing and other developments. Lack of management of some

former sites and the succession to coarse grasses and scrub has also caused losses.

In Monmouthshire, Evans (2007) reported the species in 18 tetrads, all in eastern and south-eastern parts of the vice-county. Some of his sites have been lost. In 2012 BSBI organisers of the Threatened Plant Project asked vice-county recorders (VCRs) to visit known sites and record if Greenwinged Orchids were still present. We (Elsa Wood, Jan Winder, Trevor Evans and Steph Tyler) visited all the allocated sites in v.c.35. We were unable to find plants at three of the sites.

However, the project did not allow for any new sites to be surveyed so a misleading picture may have emerged of a continuing



decline. Thus, Walker *et al.* (2017) reported that this species was re-found at 57% of pre-selected sites in Britain and Ireland. They noted that the survey showed a substantial decline in the Welsh lowlands, suggesting that the threat status in the GB List (in which the Welsh populations were thought to be relatively stable), may have been underestimated.

We contend that in Monmouthshire, populations appear to be faring well with many 'new' sites being discovered since 2000. From 20 sites known in 2012 (Tyler *et al.* 2013) the number of sites has nearly doubled, rising to 38 in 2024. Away from the main populations in eastern Monmouthshire and after the publication of the Monmouthshire Flora by Evans (2007), a site was found in central Monmouthshire on grassland on the slip road from the dual carriageway to Usk in 2008, another further west at Blaenserchan in the western coalfields in 2015 and far to the west in a cemetery near Tredegar in 2024. These extend the range in the v.c. considerably. Maps clearly show a marked increase in the species' distribution; the orchid occurred in 14 tetrads in 2012 (Tyler *et al.* 2013) but in 27 tetrads by 2024.

Are the new sites really new or previously overlooked? Indeed, an emphasis on grassland surveys by Gwent Wildlife Trust in recent years and also by Monmouthshire Meadows Group (MMG) when visiting fields of new members (now >300 members with land) has revealed some apparently new sites for the species. Other new sites may be from the spread of seed from orchid-rich meadows at Pentwyn and New Grove GWT reserves or also to favourable management. MMG promotes



management of grassland for hay and then winter grazing and this sympathetic management may also have resulted in Green-winged Orchids gaining a foothold or simply being able to flower and be noted in the absence of grazing animals in the late spring. At one site that had been subjected to heavy sheep-grazing in all months, once sheep were excluded from the end of March until July, spikes of Green-winged and other orchids appeared. They had been in the sward vegetatively but had not been able to flower. Similarly in a few lawns or small grassy areas that had been regularly mown but then in 2022 with 'No Mow May' were allowed to grow, a flower of A. morio appeared.

In v.c.35 there are only five known sites

where *A. morio* now occurs in thousands – Pentwyn Farm GWT reserve at Penallt, New Grove GWT reserve and adjacent New Grove Farm near Trellech, two small fields on Cobblers Plain between Llanishen and Devauden, Lower Nex Meadows near Devauden, an SSSI and Brockwells Meadows, a GWT reserve on limestone. Both Brockwells Meadows and Lower Nex Meadows had far fewer than this in 2012, supporting 381 and 116 respectively.

A small number of sites have supported many hundreds of plants including fields at Moorcroft Cottage, Penallt and a garden lawn at Green Acres, Penallt. The houses here at been built on a former Cowslip *Primula veris* and Green-winged Orchid field and at least four other houses in this complex had small numbers appearing in their lawns.

Some other sites for *A. morio* had from 10 to 100 plants as a field at Devauden behind the village hall and fields at Kilgwrrg and at Manorside, Penyvan as well as a garden in Pentwyn Park at Penallt where up to 50 now occur.

Eight sites had from one to fewer than 10 plants. At some sites that first came to attention with one flower in evidence, there has been no real increase over the last decade but, at others, notably fields at Moorcroft Cottage, Penallt, numbers have quickly risen to over 300. Likewise, at a garden in Pentwyn Park there was one only for several years but 50 were counted in 2023. Colonisation can be quite rapid. At New Grove GWT reserve the original two unimproved fields had 1000s of plants. Then two adjacent semi-improved fields were purchased by GWT and within 15 years the number of Green-winged Orchids was higher in one of the semi-improved fields than in the original fields.

Clearly counts can vary greatly from year to year as noted above for Brockwells Medows and Lower Nex Meadows and can be influenced also by grazing pressure from deer, rabbits and pheasants that eat flower heads.

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Anacamptis morio (Green-winged Orchid) photos © S.Tyler and E.Wood.

Carex magellanica at the source of the Afon Mawddach, Meirionnydd

Heather Garrett, joint vice county recorder for Meirionnydd, v.c.48

When I worked at Ynyslas visitor centre I would start my day by checking that the audio-visual installation was working. The romantic opening words spoken by an actor with a mellifluous Welsh accent were "*The Afon Dyfi has its cradle in a mountain pool…*" During our recent field visit to the source of the Afon Mawddach, I had naively assumed that we would find a similar cradle but instead the Meirionnydd Naturalists' Group encountered a landscape that had more in common with the qualities of a giant bath sponge.

The Afon Mawddach arises in a remote upland area above Waun y Griafolen approximately 5km northeast of Abergeirw, near Trawsfynyd d. This extensive area of deep peat has few ditches and a small area of peat hags but most of the wetland habitat appeared to be in favourable condition. With an average rainfall of 1200mm per annum the ground was very wet which made walking through the terrain hard work on a hot and humid day in July. Fortunately, the group was highly motivated to



C. magellanicum (Tall Bog-sedge) habitat © H.Garrett

search the area to re-find *Carex magellanica* (Tall Bog-sedge) which was last recorded here a decade earlier. *C. magellanica* is classified as Scarce in the UK and is listed in the <u>Meirionnydd Rare Plant Register</u>. It has a sparsely scattered distribution in the more northern uplands of Meirionnydd where it's usually found on the edge of *Sphagnum* pools and the sloping edges of mires. There are 42 records for this vicecounty, and it was first recorded in 1962, however, it was not discovered at Waun y Griafolen until 2000 by Andrew Graham.

If the ground beneath our feet had been more solid, we probably would have jumped for joy when we found our first patch of the sedge. We continued to find relatively large beds throughout the area for the rest of the day. In fact, we almost became blasé about seeing it, but we returned home with soggy socks and a deep sense of satisfaction with our list, which also included the following notable species: *Carex limosa* (Bog-sedge), *C. canescens* (White Sedge), *C. paniculatum* (Greater Tussocksedge), *Vaccinium oxyccocus* (Cranberry), *V. vitis-idaea* (Cowberry) and many typical bog species.



Sparganium species, possibly *S. angustifolium* based on leaf venation and its diamond shaped cross-section. © H.Garrett



Peat hags are a sign of damage to the peatland habitat. The usual causes are over-grazing, fire or erosion caused by the downward flows of water into the peat. These processes create isolated islands or hags of peat which dry out and often eventually blow away. © Heather Garrett

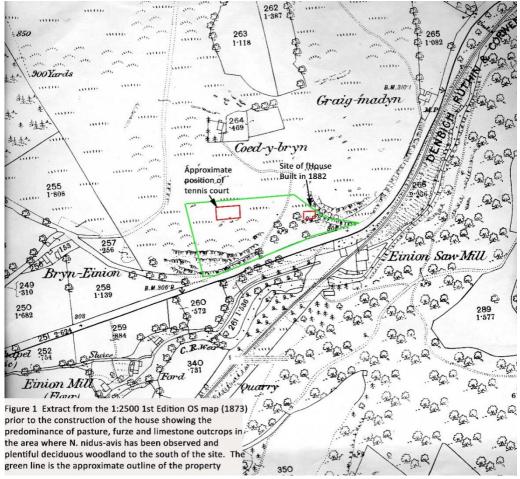


Meirionnydd Naturalists' Group at Waun y Griafolen © Jo Clark

Some observations on *Neottia nidus-avis* at a site on Carboniferous limestone in NE Wales

John Palmer

In 1987 we moved into a house, built in 1882, on the Carboniferous limestone of NE Wales. According to the 1851 census there had been many small limestone quarries in the area and the house appears to have been built in part of one of these small quarries. There was about 1 hectare of land associated with the house of which about half was incorporated in the Eyarth Rocks and Cilgroeslwyd Woods SSSI. The 1873 1st Edition OS map showed the land behind the site of the house to be pasture, furze (usually interpreted as gorse and maybe bramble) and limestone outcrops with few trees (Figure 1 below) and a pre-1907 photograph of the house confirms that was still the case after construction (photo 2 on page 24). There were however well-



established deciduous woodlands across the road and other pockets of woodland nearby. By 1987 however the land described as furze or pasture in the 1870 map had become well-wooded with a mixed woodland including *Quercus rosacea, Ilex aquifolium, Fraxinus excelsior, Corylus avellana, Acer pseudoplatanus, Ulmus glabra, Crataegus monogyna* with occasional *Cornus sanguinea* and *Prunus spinosa* (Photo 3 on page 24, and see Appendix page 27, for a fuller list of species). The most mature trees were *Quercus rosacea* and judging by their girth (2.3-2.6 metres) were probably 80-100 years old. So it seems that whatever was keeping the furze and pasture short pre-1907 - sheep or possibly rabbits - had disappeared allowing tree and shrub growth. An area in the upper part of the site had been levelled and converted into a tennis court, probably in the 1920s-30s (see Figure 2 below). To the east of the tennis court was an area which prior to 1987 had been managed to accommodate some ponies – this area has been excluded from the SSSI together with the house and gardens to the south.

The vegetation of the former tennis court appeared to have been cut annually and had been colonised by wild flora when we took possession. The year after we moved in 15 inflorescences of *Neottia nidus-avis* appeared in a corner of the former tennis court. The following year there were no spikes of *N. nidus-avis* in this area but a

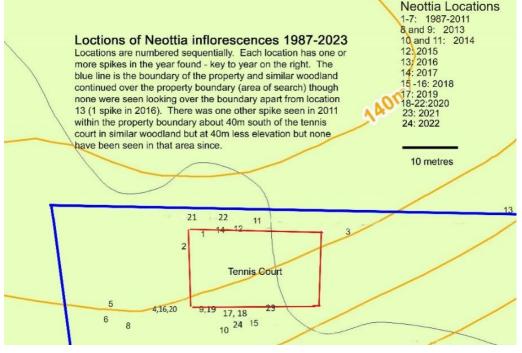


Figure 2. Locations of N. nidus-avis inflorescences between 1987 and 2023

couple of spikes appeared many metres away. Out of curiosity we commenced monitoring the appearance of inflorescences annually on the whole property and this has continued for the last 36 years. Observations from this monitoring are as follows:

- Inflorescences were seen in almost every year from 1987 to 2023. They are not always easy to spot and some of the terrain was steep and not so accessible so some will have been missed.
- The majority of inflorescences were observed in the woodland surrounding the former tennis court (Figure 2, page 22).
- Spikes seen were for the most part single or in pairs. Only in two years were many spikes seen together over a few metres: the first observation in 1987 (1) and in 2020 (21-22) (Figure 2).
- Most of the observations indicate that the plants are monocarpic (i.e. die after flowering). On just one occasion in 2020 did it look as though a plant produced



Photo 1: *N. nidus-avis* appearing to have produced inflorescences from the same rhizome in two consecutive years (2019 and 2020). On the left is the current year's spike and on the right the seedhead from the previous year

spikes in consecutive years from the same point on the rhizome (Photo 1, left).

• In some locations inflorescences appeared many years apart in the broadly similar location e.g. locations 4, 16, 20 and 9 and 19 in Figure 2.

• It was unclear from this site what the trigger was for flowering and in particular what triggered many spikes at the same time – was this due to some physical, edaphic or climatic factor and/or were the plants all part of one rhizome system? Or just by random dissemination of seeds?

• The appearance of spikes did not appear to be associated with any particular tree species and inflorescences were as likely to be found next to a 100-year-old oak as adjacent to younger hazel or Ash. However, the inflorescences seemed more common on woodland edge rather than in the deep litter of the mature oak woodland.

• There were one or two beech trees at the site but *N. nidus-avis* spikes were not seen near those.



Photo 2: Image from a postcard of the house and surrounding land sent in 1907, depicting the area some time between 1882, when the house was built, and 1907. The area where *N. nidus-avis* inflorescences have been observed since 1987 (the herbaceous area in the top left above the escarpment) is almost devoid of trees.



Photo 3: Shot of the same area as Photo 2 in 2023 from a slightly different angle. The visible building is the corner of the house shown in Photo 2 above. The extent to which the pasture, furze and escarpment has become wooded in the last 100+ years is obvious.

In 2022 a Biological Flora review of *N. nidus-avis* was published (Jersáková, Minasiewicz and Selosse 2022) which, together with the underlying research on which it is based, has been invaluable in considering the flowering behaviour of this plant at this site over time. A summary of the principal characteristics of *N. nidus-avis* described in the Biological Flora relevant to the findings at this site are:

- *N. nidus-avis* requires the presence of a mycorrhizal fungus from the family Sebacinaceae for the germination of its seeds and subsequent growth.
- Where *N. nidus-avis* occurs, nearby tree roots are infected with the same mycorrhizal fungus inferring extraction of carbon for the whole system. DNA analysis has indicated a mycelial link between orchids and surrounding trees allowing transfer of carbon and nutrients to the orchid.
- Each inflorescence produces a large number of tiny seeds. Sonkoloy et al. (2016) estimated that each capsule produced over 2000 seeds with an estimate for each inflorescence of 84,983. Germination is however very low with various authors recording 0.1 to 28%. In experiments where the fungal symbiont was not present 0% germination was observed. It is suggested that higher germination rates are experienced near to established *N. nidus-avis* plants because of the greater likelihood of the presence of the mycorrhizal symbiont.
- Various authors have suggested it takes from 3-5 to 9-10 years from seed germination to flower production.
- Perennation is achieved via the rhizome with some authors suggesting it grows from its tip bud exclusively and once the fruits ripen the plant and its rhizome die whereas others suggest, with photographic evidence (personal communication Selosse) that lateral buds can allow sympodial growth allowing persistence of the plant.
- One rhizome may produce several flowering shoots.
- Vegetative reproduction can occur through branching of the rhizome or transition of adventitious roots into new rhizomes, the latter usually when the root becomes separated from the rhizome.

So it seems likely that at this site we can conclude the following:

- The plants at this site are mostly monocarpic, dying after flowering.
- At least one plant appears to have produced flowers in two consecutive years but then died in the second year (Photo 1, page 23) indicating some persistence of the rhizome from the first to second year after flowering.

- The occurrences of two spikes sometimes very close together suggests two spikes growing from the same rhizome in the same year.
- The appearance of a number of spikes simultaneously in one area from apparently separate plants suggests some sort of very local trigger for inflorescence production but it is unclear what it might be. It is possible, though probably not likely, that the inflorescences are all from one extensive rhizome or it could be that there was historic seed fall in an area where there were mycorrhiza present and some years later the resulting plants all flowered at the same time. There have also been observations of several roots of old rhizomes giving rise to several new rhizomes (personal communication Selossi). However, at this site in 2020 there were 5 distinct and separate locations of inflorescences observed which might also point to some common edaphic or climatic factor triggering flowering.
- Jersáková *et al* (2022) indicate that most authors consider that the time between germination and flowering is 3-5 to 9-10 years. In order for the seed to germinate it appears that it has to be infected by the mycorrhizal fungus and the most likely place for there to be such fungi is where the orchid and/or possibly a tree host has been or is present. Hence an orchid inflorescence might be seen many years after the appearance of a previous inflorescence simply because the previous orchid died after flowering but left behind a fungal presence which was then infected a new seed which took years to produce a flower. This is rather conjectural but seems to explain why inflorescences may be found in a similar place to previously but years afterwards.
- Overall, the distribution of inflorescences spatially and over time, producing a
 patchwork distribution, concurs with the characteristics of mostly
 monocarpic behaviour, lengthy time between germination and flowering and
 previous presence of the plant providing favourable sites for new plant
 establishment due to the presence of mycorrhiza of the appropriate species.
- At this site it seems that colonisation by appropriate host trees and also by the mycorrhizal fungi needed for germination will need to have occurred since the 1880s before *N. nidus-avis* itself would be able to establish. Given the relative proximity of established trees nearby at the end of 19th century and the inferred age of the oaks on the site of 80-100 years it appears that colonisation by *N. nidus-avis* of the furze and pasture may have started at the start of the 20th century.

One could conjecture that the successful establishment and flowering of *N. nidus-avis* is completely dependent on suitable conditions for the viability of the mycorrhizal fungi rather than the plant itself. According to Weiß *et al.* (2016) the ecological preferences of the mycorrhiza in the family Sebacinaceae beyond the presence of trees as a carbon source are unknown.

Appendix: Species list for woodland and associated habitats where inflorescences of *N. nidus-avis* were observed

		1	
Acer pseudoplatanus	Epilobium montanum	Neottia nidus-avis	
Agrimonia eupatoria	Rosa arvensis	Origanum vulgare	
Agrostic vinealis	Rubus bartonii	Platanthera chlorantha	
Agrostis capillaris	Rumex obtusifolius	Poa annua	
Alliara petiolata	Rumex sanguineous	Poa pratensis	
Allium ursinum	Senecio vulgaris	Polygonatum	
Alopecurus pratensis	Solidago virgaurea Fagus	multiflorum	
Anemone nemorosa	sylvatica	Polystichum aculeatum	
Anthoxanthum oderatum	Festuca ovina	Potentilla erecta	
Arabis hirsuta	Festuca rubra	Potentilla sterilis	
Arctium minor	Fragaria vesca	Prunella vulgaris	
Arrhenatherum elatius	Fraxinus excelsior	Prunus avium	
Arum maculatum	Geranium robertianum	Prunus spinosa	
Asplenium scolopendrium	Geranium sanguineum	Pteridium aquilinum	
Avenula pubescens	Geum urbanum	Quercus rosacea	
Betula pendula	Hedera helix	Ranunculus acris	
Brachypodium sylvaticum	Helleborus foetidus	Ranunculus bulbosus	
Bromopsis ramosus	Heracleum sphondylium	Rhamnus cathartica	
Cardamine hirsuta	Hieracium sect sabauda	Tamus communis	
Carex flacca	Hieracium sect vulgata	Taraxacum agg.	
Carex sylvatica	Holcus mollis	Taxus baccata	
Centauria nigra (debauxii?)	Hyacinthoides non-	Teucrium scorodonia	
Chamerion angustifolium	scripta	Torilis japonica	
Cirsium arvense	Hypericum pulchrum	Trifolium dubium	
Cornus sanguinea	Hypochaeris radicata	Trifolium pratense	
Corylus avellana	llex aquifolium	Trisetum flavescens	
Cotoneaster simonsii	Ligustrum vulgare	Ulmus glabra	
Crataegus monogyna	Lonicera periclymenum	Urtica dioica	
Cynosurus cristatus	Lotus corniculatus	Veronica chamaedrys	
Dactylis glomerata	Melica uniflora	Veronica officinalis	
Dryopteris dilatata	Mercurialis perennis	Viola odorata	
Dryopteris felix-mas	Moehringia trinervis	Viola riviniana	

Acknowledgements

I am very grateful to Delyth Williams, vice-county recorder for Denbighshire and Marc-André Selosse for reviewing this note.

References

Jersáková, J., Minasiewicz, J. and Selosse, M.-A. 2022. Biological Flora of Britain and Ireland: *Neottia nidus-avis. Journal of Ecology*, 110, 2246-2263. <u>https://doi.org/10.1111/1365-2745.13953</u>

Sonkoloy, J., Vojtkö, E. A., Tökölyi, J., Török, P. Sramkó, G., Illyés, Z. & Molnáy, V. A. 2016). Higher seed number compensates for lower fruit set in deceptive orchids. *Journal of Ecology*, 104 (2), 343-351. Referred to in Jersáková et al. (2022).

Weiß, M., WALLER, F., ZuCARO, A. Selosse, M.-A. 2016. Sebacinales — one thousand and one interactions with land plants. *New Phytologist* 211: 20–40

Welsh Plant Records for 2023

Welsh Plant Records are compiled by Stephen Coker, Mountain Grove, Clarbeston Road, Haverfordwest, Pembrokeshire, SA63 4SG, from reports of BSBI vice-county Recorders to whom records should be sent. Plants are listed for each vice-county in the order of D.H. Kent's *List of Vascular Plants of the British Isles* (1992) and *Supplements 1, 2* & 3 (1996 & 2000) the number in those lists preceding the name so that names changed since 1996 can be given without giving the former name. Latin names follow the 3rd edition of C.A. Stace's *New Flora of the British Isles* (2010) or, if not in that Flora, E.J. Clement & M.C. Foster's *Alien Plants of the British Isles* (1994). T.B. Ryves, E.J. Clement & M.C. Foster's *Alien Grasses of the British Isles* (1996) or Sell & Murrell's *Flora of Great Britain and Ireland* (1996-2009). Authorities for Latin names are not given unless the name is not in any of these works. English names are those in Stace (2010) or *English Names of Wild Flowers* ed. 2 (1986) by Dony *et al*, or, if not in either of those, Clement & Foster (1994), Ryves, Clement & Foster (1996) or Sell & Murrell (1996-2009). English names enclosed by square brackets do not occur in any of these books but have been used elsewhere. Welsh names are those in *Planhigion Blodeuol, Conwydd a Rhedyn*, published by Cymdeithas Edward Llwyd (2003).

The following symbols are used:

* to indicate a new v.c. record; \otimes to indicate an updated VCCC record; \Re to indicate a record demonstrating the rediscovery of a taxon published as extinct in the VCCC

+ to indicate a new hectad record; \oplus to indicate an updated hectad record; \ominus to indicate a new tetrad record

† indicates archaeophyte; ‡ indicates neophyte; © indicates casual.

[†]‡© before the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual at least somewhere in the British Isles.

*‡© after the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual generally within the vice county, different from that of the British Isles.
*‡© before the record: to indicate a species which although a native, archaeophyte or neophyte at least somewhere in the vice county, is not so in the locality recorded.
[] to indicate that the record, previously published in error, should be deleted.
X to indicate an update to a rare or scarce taxon.

 $\ensuremath{\varnothing}$ to indicate that the taxon is now believed to be extinct in the locality cited.

N, S, E, W indicate points of the compass.

In general, only records which update the *Vice-county Census Catalogue* [VCCC] (2003) or the *New Atlas of the British & Irish Flora* (2002) will be listed. Other records are included at the discretion of the vice-county recorder. The minimum grid reference is to a hectad but, if supplied by the recorder, more precise grid references may be included. A letter in parentheses following a grid reference indicates a tetrad.

The Vice-county Recorders from 2023 are:

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(all correspondence to Mr Porter).

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ANGLESEY, v.c.52; Mr Ian R. Bonner, 15 Littledean Hill Road, Cinderford, Gloucestershire, GL14 2BD; bonner@caetrefor.co.uk and Mr Nigel Brown, Granary Cottage, Llanddyfnan, Talwrn, Llangefni, Anglesey, LL77 8JA; nigelbrown55@yahoo.com

MONMOUTH, v.c.35 (comm. S.J. Tyler & E. Wood)

- ++017/3.03b.cam. **Dryopteris cambrensis subsp. cambrensis**. Sirhowey Valley Park, ST21 91, E. Wood & S. Tyler, 19th Jul 2023.
- +‡020/6.lib. **Cedrus libani** (Cedar-of-Lebanon) (Cedrwydden Libanus). Grounds of the castle, Caldicot, ST48 88, E.Wood & S. Tyler, 29th Nov 2023, mature trees originally planted.
- +‡020/7.5. © **Pinus radiata** (Monterey Pine) (Pinwydden Monterey). Middle Ton, SO37 12, E.Wood & S. Tyler, Nov 2023, originally planted.
- +036/1.1.b. **Urtica dioica subsp. galeopsifolia**. Sirhowey Valley Park, ST20 91, E. Wood & S. Tyler, 19th Aug 2023, meeting of Botany Group.
- +046/07.12. **Cerastium semidecandrum** (Little Mouse-ear) (Clust-y-llygoden Fach). Footpath track, Graig Syfyrddin, SO41 21, E. Wood & A. Wood, 20th May 2023.
- +046/10.8. **Sagina maritima** (Sea Pearlwort) (Corwlyddyn Arfor). Roadside, nr. Llandenny, SO40 02, E. Wood & S. Tyler, 8th Nov 2023; (+) roadside, nr. Llandenny, SO41 04, E. Wood & S. Tyler, 8th Nov 2023.
- +046/17.2. **Spergularia media** (Greater Sea-spurrey) (Troellig Arfor Mawr). Roadside, Cat's Ash, ST37 91, E. Wood & S. Tyler, 8th Nov 2023.
- +061/2.09×11. Salix viminalis × S. cinerea = S. ×holosericea [S. ×smithiana] (Silky-leaved Osier) (Helygen Dail Sidan). Bank of the Usk, Llanvihangel Gobion, SO343 089, E. Wood & S. Tyler, 30th Aug 2023.
- +‡062/14.occ. **Cardamine occulta** (Nursery Bitter-cress). In gravel at garden centre, Llanbadock, ST377 996, T. Rich, 1st Jul 2023, 2nd county record.
- +‡062/33.2. **Diplotaxis muralis** (Annual Wall-rocket) (Roced-y-muriau'r Tywod). Rogiet, ST46 87, E. Wood & S. Tyler, 18th Oct 2023; (+) verge nearly opposite the entrance to the recycling centre, near Five Lanes, ST43 91, E. Wood & S. Tyler, 18th Oct 2023.
- +077/10.3. **Ornithopus perpusillus** (Bird's-foot) (Troed yr Aderyn). Mynydd Machen, ST206 902, D. Barden, 14th Jul 2022.
- +077/19.13. **Trifolium micranthum** (Slender Trefoil) (Meillionen Hopysaidd Eiddil). Footpath track, Graig Syfyrddin, SO41 22, E. Wood & A. Wood, 20th May 2023.
- +084/1.06×08. **Epilobium obscurum × E. ciliatum = E. ×vicinum**. Sirhowey Valley Park, ST21 91, E. Wood & S. Tyler, 19th Aug 2023, meeting of Botany Group.
- *‡102/1.14. **Oxalis incarnata** (Pale Pink-sorrel) (Suran Welw). Bare ground under the bridge, Llanrumney, ST226 819, E. Wood, A. Wood & S. Tyler, 10th May 2023.
- +‡104/1.maj. **Tropaeolum majus** (Nasturtium) (Capan Cornicyll). Verge outside recycling centre, Five Lanes, ST43 91, E. Wood & S. Tyler, 18th Oct 2023.
- +‡110/1.1.© Nicandra physalodes (Apple-of-Peru) (Afal Periw). Verge outside recycling centre, Five Lanes, ST43 91, E. Wood & S. Tyler, 18th Oct 2023.
- +‡117/1.bon. Verbena bonariensis (Argentinian Vervain) (Ferfain yr Ariannin). Waste ground, Llandevenny, ST40 86, E. Wood & A. Wood, 8th May 2023.

- +‡118/23.3×lon. **Mentha ×villosonervata** (Sharp-toothed Mint) (Mintys Danheddog). On shoals at the edge of the river, The Bryn, SO329 096, E. Wood & S. Tyler, 30th Aug 2023.
- +‡124/02.5. **Scrophularia vernalis** (Yellow Figwort) (Gwrnerth Melyn). Waste ground, Llandevenny, ST40 86, E. Wood & A. Wood, 8th May 2023, second county record.
- +124/20.09. **Euphrasia confusa** (Effros Gliniog). Tracks, Sirhowy Country park, ST20 90, E. Wood, 19th Jul 2023.
- +124/20.18. **Euphrasia micrantha** (Purple-stemmed Eyebright) (Effros Mân-flodeuog). Growing amongst heather, Sirhowey Valley Park, ST21 90, E. Wood & S. Tyler, 19th Jul 2023.
- +125/2.02. **Orobanche rapum-genistae** (Greater Broomrape) (Gorfanhadlen Fawr). Springdale farm, ST405 996, L. Watkins, 1st Jun 2023.
- +‡135/80.2. **Galinsoga quadriradiata** (Shaggy-soldier) (Galinsoga Blewog). Fields on farm, Mitchel Troy, SO48 09, S. Tyler, 6th Oct 2023.
- +148/1.1. **Spirodela polyrhiza** (Greater Duckweed) (Llinad Mawr). Pond, Grwyne Fawr, SO27 20, E. Wood & S. Tyler, 27th Sep 2023.
- +148/2.1. Lemna gibba (Fat Duckweed) (Llinad Crythog). Pond, Grwyne Fawr, SO27 20, E.Wood & S. Tyler, 27th Sep 2023, flat form.
- +148/2.3. Lemna trisulca (Ivy-leaved Duckweed) (Llinad Dail Eiddew). Pond, Grwyne Fawr, SO27 20, E.Wood & S. Tyler, 27th Sep 2023.
- +153/21.2. **Catapodium marinum** (Sea Fern-grass) (Gwenithwellt y Morfa)). Llantrisant, ST37 91, E. Wood & S. Tyler, 8th Nov 2023.
- +153/35.2. Aira praecox (Early Hair-grass) (Brigwellt y Gwanwyn). Footpath track, Graig Syfyrddin, SO41 22, E. Wood & A. Wood, 20th May 2023.
- *153/50.4.d. **Bromus hordeaceus subsp. longipedicellatus**. Along roadside, Llanrumney, ST22 81, E. Wood, A. Wood & S. Tyler, 10th May 2023.
- ++153/50.7. **Bromus secalinus** (Rye Brome) (Pawrwellt Bach). Muck heap, Grosmont, SO41 23, E. Wood & S. Tyler, 27th Sep 2023.
- +‡153/53.3.© **Ceratochloa cathartica** (Rescue Brome) (Pawrwellt Porthi). Arable field edge, Middle Ton, SO36 13, E. Wood & S. Tyler, 22nd Nov 2023.
- +‡153/70.pum.© **Setaria pumila** (Yellow Bristle-grass) (Cibogwellt Melyn). Monmouth, SO49 13, S. Tyler, 28th Aug 2023.
- +‡153/71.1.© **Digitaria ischaemum** (Smooth Finger-grass) (Byswellt Llyfn). In pavement in the middle of the town, Usk, SO374 009, E. Wood, 13th Aug 2023, second county record.
- +‡153/PAN.mil.© **Panicum miliaceum** (Common Millet) (Miled). Waste ground, Rogiet, ST46 87, E. Wood & S. Tyler, 18th Oct 2023.
- +162/03.4. **Epipactis helleborine** (Broad-leaved Helleborine) (Y Galdrist Lydanddail). Footpath track, Graig Syfyrddin, SO42 21, E. Wood & A. Wood, 20th May 2023.
- *162/16.1.b. **Gymnadenia densiflora**. Llanmartin SSSI, ST385 894, S. Westwood, 3rd Jul 2023, det. R. Bateman

GLAMORGAN, v.c.41 (comm. B. Stewart)

- +c1-1-glo **Tolypella glomerata** (Clustered Stonewort). Margam landfill (borrow-pit slack), SS781 834, Barry Stewart, 16th Jun 2023, in five 2m x 2m quadrats.
- +c1-5-nid **Tolypella nidifica** (Bird's-nest Stonewort). Margam Burrows, SS7797 8379, Barry Stewart, 5th May 2023, deeper flooded slag area.

- +001/3.1. **Lycopodium clavatum** (Stag's-horn Clubmoss) (Cnwp-fwsogl Corn Carw). Glyncorrwg Hills, SS86 97, Charles Hipkin, 30th May 2023; (+) Mynnydd Blaengwynfi, SS9079 9723, Charles Hipkin, 24th Jul 2023; (+) Mynnydd Blaengwynfi, SS90856 97473, Charles Hipkin, 24th Jul 2023, formerly a large population which has been largely destroyed by forest operations. See back cover for photo.
- +001/4.1. **Diphasiastrum alpinum** (Alpine Clubmoss) (Cnwp-fwsogl Alpaidd). Glyncorrwg, SS87 98, Charles Hipkin, 30th May 2023. See back cover for photo.

+046/01.1.c. Arenaria serpyllifolia subsp. leptoclados (Slender Sandwort). Cwm Ivy Tor, SS434 940, Barry Stewart, 13th Jan 2023, north facing cliffs.



Cerastium pumilum, Dwarf Mouse-ear, Clust-y-llygoden Bitw at Margam Burrows, Glamorgan. © Charles Hipkin

+046/07.11. Cerastium pumilum (Dwarf Mouseear) (Clust-y-llygoden Bitw). Margam Burrows, SS7797 8379, Barry Stewart, 5th May 2023, slag spoil mound; (+) Margam Moors SSSI (Field S30), SS787 845, Charles Hipkin, 15th Apr 2023; (+) Margam Moors SSSI (Field S30), SS787 845, Charles Hipkin, 18th Apr 2023; (+) Margam Moors (dis. railway line east of Field S27), SS787 846, Charles Hipkin, 18th Apr 2023; (+) Margam Moors (dis. railway line

east of Field S31), SS788 844, Charles Hipkin, 15th Apr 2023; (+) Margam Moors, SS78 85, Charles Hipkin, 19th Apr 2023, at SS78728539 and SS78708537; (+) Margam Moors, SS787 853, Charles Hipkin, 15th Apr 2023; (+) Heolcae'r-Bont Level Crossing, SS787 854, Charles Hipkin, 15th Apr 2023, also seen by Barry Stewart on 5th May 2024; (+) Heolcae'r-Bont Level Crossing, SS787 854, Charles Hipkin, 18th Apr 2023; (+) Heolcae'r-Bont Level Crossing, SS787 854, Charles Hipkin, 19th Apr 2023, large population along railway line.

- +047/5.1×2.‡ **Fallopia ×bohemica**. Fairwood Airport, SS573 921, Barry Stewart, 19th Jun 2023, temporary track.
- +‡047/5.2. **Fallopia sachalinensis** (Giant Knotweed) (Y Glymog Fawr). Rheola Forest, SN82 04, Charles Hipkin, 3rd Jun 2023.
- +047/8.13×14. **Rumex ×schulzei**. Blaen Baglan / Mynydd Dinas (n), SS76 92, Charles Hipkin, 23rd Jul 2023.
- +051/1.14. **Hypericum hirsutum** (Hairy St John's-wort) (Eurinllys Blewog). Upper Crugau Wood, SN83 06, Charles Hipkin, 28th Jun 2023.
- +051/1.oly. **Hypericum olympicum**. Port Eynon dunes, SS4686 8517, Barry Stewart et al, 6th Jun 2023, at least two established plants.

- +066/1.1. **Pyrola minor** (Common Wintergreen) (Glesyn-y-gaeaf Bach). Rheola Forest, SN8212 0597, Charles Hipkin, 4th Aug 2023, under Sitka Spruce.
- +066/1.3. **Pyrola rotundifolia** (Round-leaved Wintergreen) (Glesyn-y-gaeaf Deilgrwn). Margam Landfill (capped) slack west of Pond 8, SS781 838, Barry Stewart, 5th May 2023.
- +‡069/4.4. Lysimachia ciliata (Fringed Loosestrife) (Trewyn Eddïog). Glyncorrwg, SS87 98, Charles Hipkin, 10th Aug 2023.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Pwll-yfroga (by Selwyn's cockle washery), SS523 945, Barry Stewart et al, 12th Jun 2023.
- +‡074/05.are. **Saxifraga ×arendsii** (Garden Mossy-saxifrage). Rhigos-Glyncastle Forest Road, SN90 02, Charles Hipkin, 27th May 2023, garden escape population along forest road.
- +075/19.09. Alchemilla xanthochlora (Intermediate Lady's-mantle) (Mantell-Fair Ganolig). Pelenna Forest, SS81 99, Charles Hipkin, 26th May 2023; (+) Glyncastle-Coed Morganwg Way Roadside Verge, SN87 02, Charles Hipkin, 8th Jun 2023; (+) Rhigos-Glyncastle Forest Road, SN90 02, Charles Hipkin, 27th May 2023.
- +075/19.10.a. Alchemilla filicaulis subsp. filicaulis (Mantell-Fair Goesfain). Mynydd Resolven, SN8617 0206, Charles Hipkin, 22nd May 2023, on forest road.
- +075/19.10.b. **Alchemilla filicaulis subsp. vestita** (Mantell-Fair Flewog). Mynydd Resolven, SN86 02, Charles Hipkin, 1st Jun 2023.
- +075/19.14. Alchemilla glabra (Mantell-Fair Lefn). Mynydd Nant-y-Bar, SS8301 9659, Charles Hipkin, 3rd Aug 2023; (+) Rhigos-Glyncastle Forest Road, SN9112 0433, Charles Hipkin, 31st Jul 2023.
- +075/20.2. **Aphanes australis** (Slender Parsley-piert) (Troed-y-dryw Main). Nant-y-mynydd, SN856 070, Barry Stewart, 18th Jul 2023, (Pond 19) surrounding banks.
- +084/1.04. **Epilobium lanceolatum** (Spear-leaved Willowherb) (Helyglys Gwaywddail). Baglan Energy Park (north), SS73 93, Charles Hipkin, 9th Sep 2023.
- +084/1.05. **Epilobium tetragonum** (Square-stalked Willowherb) (Helyglys Pedronglog). Baglan Energy Park (north), SS73 93, Charles Hipkin, 9th Sep 2023.
- +103/2.4. **Erodium lebelii** (Sticky Stork's-bill) (Pig-y-crëyr Ludiog). Port Eynon / Horton dunes, SS469 852, Barry Stewart et al, 6th Jun 2023.
- +108/3.4. **Centaurium pulchellum** (Lesser Centaury) (Y Ganrhi Goch Fach). Margam Landfill (capped) slack west of Pond 8, SS78193 83823, Barry Stewart, 28th Jul 2023.
- +108/5.4. **Gentianella amarella** (Autumn Gentian) (Crwynllys yr Hydref). Rhigos Forest Road, SN90 00, Charles Hipkin, 1st Sep 2023, 135 plants flowering in roadside verge.
- ++116/06.4. **Anchusa arvensis** (Bugloss) (Llysiau'r-gwrid y Tir âr). Afon Lliw/Heol y Mynydd, Gorseinon, SS594 986, Barry Stewart, 9th Apr 2023, cultivated pictorial mix verge.
- +118/01.1. Betonica officinalis (Betony) (Cribau San Ffraid). Hafod Wennol, SN67 09, Charles Hipkin, 19th Jul 2023.
- +118/18.2. Clinopodium ascendens (Common Calamint) (Brenhinllys). BP Baglan (ne part of Helios Dr), SS7399 9216, Charles Hipkin, 18th Aug 2023.
- +125/2.09. **Orobanche picridis [O. artemisiae-campestris]** (Oxtongue Broomrape) (Gorfanhadlen Walchlys). Trawler Road, Swansea, SS663 925, Barry Stewart, 29th May 2023, brownfield community (with Paul Alton & Sylvie Hérault); (+) Crymlyn (west of new Swansea Uni campus), SS692 929, Barry Stewart, 20th Jun 2023, st Modwen site most focussed @ SS69289294; (+) Baldwins Crescent, Crymlyn, SS693 929, Barry Stewart, 20th Jun 2023, st

Modwen site most focussed @ SS69389292 & SS69329295; (+) Fabian Way, SS694 929, Barry Stewart, 20th Jun 2023, st Modwen site most focussed @ SS69419291; (+) Swansea Bay Campus (car park area), SS6954 9285, Barry Stewart, 20th Jun 2023, 6 spikes; (+) Port Talbot Harbour (dunes & beach immediately north of jetty), SS755 878, Barry Stewart, 12th Jun 2008; (+) Port Talbot Dock, SS753 883, Barry Stewart, 16th Jun 2023; (+) Port Talbot Harbour (dune grassland imm. south of Puckey House), SS753 884, Barry Stewart, 16th Jun 2023; (+) Port Talbot Harbour (riverbank / n end of sand quarry), SS754 886, Barry Stewart, 16th Jun 2023; (+) Port Talbot Dock, SS769 886, Barry Stewart, 16th Jun 2023; (+) Port Talbot Dock, SS770 888, Barry Stewart, 16th Jun 2023, hundreds at SS77008880-SS77008882.

- +‡129/1.5.© **Campanula medium** (Canterbury-bells) (Clychlys Caer-gaint). Trawler Road, Swansea, SS663 925, Barry Stewart, 29th May 2023, brownfield community (with Paul Alton & Sylvie Hérault).
- +135/25.01.11. **Taraxacum fulviforme** (Green-bracted Dandelion). Baglan Energy Park (central), SS73 92, Charles Hipkin, 24th Apr 2023; (+) Baglan Energy Park, SS731 926, Charles Hipkin, 9th Apr 2023.
- +135/25.01.15. **Taraxacum lacistophyllum** (Cut-leaved Dandelion). Baglan Dunes and Salt Marsh, SS72 92, Charles Hipkin, 24th Apr 2023; (+) Baglan Energy Park, SS729 924, Barry Stewart, 10th Apr 2023; (+) Baglan Energy Park Compound, SS739 918, Charles Hipkin, 9th Apr 2023; (+) Baglan Energy Park (central), SS73 92, Charles Hipkin, 24th Apr 2023; (+) Baglan Energy Park, SS731 926, Charles Hipkin, 9th Apr 2023; (+) Baglan, SS737 922, B. Stewart & C.R. Hipkin, 10th Apr 2023.
- +135/25.01.16. **Taraxacum oxoniense** (Oxford Dandelion). Margam Moors SSSI (Field S30), SS787 845, Charles Hipkin, 15th Apr 2023; (+) Baglan Dunes and Salt Marsh, SS72 92, Charles Hipkin, 24th Apr 2023; (+) Baglan Energy Park (central), SS73 92, Charles Hipkin, 24th Apr 2023.
- +135/25.01.22. **Taraxacum rubicundum** (Ruddy Dandelion). Baglan Dunes and Salt Marsh, SS72 92, Charles Hipkin, 24th Apr 2023; (+) Baglan Energy Park (central), SS73 92, Charles Hipkin, 24th Apr 2023.
- +135/25.01.4. **Taraxacum brachyglossum** (Purple-bracted Dandelion). Baglan Burrows, beach & BP works (w), SS72 91, Charles Hipkin, 21st Mar 2023.
- +135/25.08.87. **Taraxacum hamatiforme** (Asymmetrical Hook-lobed Dandelion). Blaengwrach (west), SN87 05, Charles Hipkin, 11th Apr 2023.
- +135/25.08.89 **Taraxacum hamatum** (Hook-lobed Dandelion). Margam Moors (dis. railway line east of Field S31), SS788 844, Charles Hipkin, 15th Apr 2023; (+) Glyncorrwg, SS87 99, Charles Hipkin, 27th Apr 2023; (+) Blaengwrach (west), SN87 05, Charles Hipkin, 11th Apr 2023; (+) Selar Fields, SN88 05, Charles Hipkin, 11th Apr 2023.
- +135/25.08.90. **Taraxacum hamiferum** (Dark Hook-lobed Dandelion). Blaengwrach (west), SN87 05, Charles Hipkin, 11th Apr 2023.
- +‡135/25.08.91. **Taraxacum kernianum** (Kern's Dandelion). Tennant Canal/Crymlyn Burrows, SS70 93, Charles Hipkin, 15th Apr 2023.
- +135/25.08.98. **Taraxacum pseudohamatum** (False Hook-lobed Dandelion). Tennant Canal/Crymlyn Burrows, SS70 93, Charles Hipkin, 15th Apr 2023.
- +135/25.08.99. **Taraxacum quadrans** (Fleshy-lobed Dandelion). Baglan Energy Park Compound, SS739 918, Charles Hipkin, 9th Apr 2023.

+135/27.4.

Pilosella praealta (Tall Mouse-earhawkweed). Cwm Corrwg, SN87 00, Charles Hipkin, 8th Jun 2023.

+‡135/27.4.a. **Pilosella praealta subsp. praealta.** Cwmnantlleici Quarry (settlement tanks), SN733 071, Barry Stewart, 21st



Pilosella praealta (Tall Mouse-ear-hawkweed) Railway track, Neath Port Talbot coastal path © Charles Hipkin

Oct 2023, settlement ponds: ground around ponds.

- +135/28.07.58. Hieracium pollichiae (Roffey's Hawkweed). Rhigos-Glyncastle Forest Road, SN9111 0477, Charles Hipkin, 24th May 2023, in forest road verge.
- +‡135/28.08.138. **Hieracium grandidens** (Grand-toothed Hawkweed). Rheola Forest, SN82 04, Charles Hipkin, 3rd Jun 2023; (+) Rhigos-Glyncastle Forest Road, SN91 04, Charles Hipkin, 24th May 2023.
- +135/30.1. Filago vulgaris (Common Cudweed) (Edafeddog Lwyd). Worms (inner) Head, Rhossili, SS3951 8750, Barry Stewart, 6th Feb 2023; (+) Mewslade Valley, SS421 873, Barry Stewart, 27th Jan 2023; (+) Oxwich Point, SS493 854, Barry Stewart, 10th Feb 2023, at SS4937685457 and SS4939185472; (+) Baglan Energy Park, SS729 924, Barry Stewart, 10th Apr 2023; (+) Pont Walby, SN89 06, Charles Hipkin, 1st May 2023.
- +†135/50.3. Artemisia absinthium (Wormwood) (Y Wermod Lwyd). Worm's Head (Inner), SS3944 8754, Barry Stewart, 6th Feb 2023; (+) Cwm Ivy Tor (SE section), SS4362 9393, Barry Stewart, 13th Jan 2023; (+) Cwm Ivy Tor (SE section), SS43646 93905, Barry Stewart, 13th Jan 2023.
- +†135/59.1. Matricaria chamomilla (Scented Mayweed) (Amranwen Bêr). Glyn Neath Aberpergwm, SN86 05, Charles Hipkin, 25th Jun 2023.
- +‡135/62.03. Senecio inaequidens (Narrow-leaved Ragwort) (Creulys Gulddail).
 Langdon/Lamberts Road, Swansea, SS668 930, Barry Stewart, 22nd Jun 2023, sancta garden;
 (+) S. side of Prince of Wales Dock, Swansea, SS671 927, Barry Stewart, 17th Aug 2023; (+)
 Prince of Wales Dock, Swansea, SS6713 9280, Barry Stewart, 17th Aug 2023, small area of metalliferous spoil; (+) Prince of Wales Dock (east), Swansea, SS672 928, Barry Stewart, 17th Aug 2023, secondary grassland; (+) S. side of Prince of Wales Dock, Swansea, SS673 928, Barry Stewart, 17th Aug 2023, verge strip.

- +136/1.1. **Butomus umbellatus** (Flowering-rush) (Brwynen Flodeuog). Tennant Canal, SS72 94, Charles Hipkin, 14th Aug 2023, at SS72409499, 72399467 and 72419457; (+) Tennant Canal, SS72 94, Charles Hipkin, 23rd Jun 2023, at SS72059432 and SS72339448; (+) Tennant Canal, SS7264 9574, Charles Hipkin, 14th Aug 2023; (+) Tennant Canal, SS73 97, Charles Hipkin, 14th Aug 2023, at SS73689730, 73659728, 73639728 and 72919653.
- +‡153/12.05. **Festuca heterophylla** (Various-leaved Fescue) (Peiswellt Amryddail). Salthouse Point, SS522 955, Barry Stewart, 11th Jun 2023; (+) Dan-y-lan (saltmarsh tip & surrounds), SS553 960, Barry Stewart, 11th Jun 2023.
- +‡153/12.15. **Festuca brevipila** (Hard Fescue) (Peiswellt Caled). Penhydd Fawr, SS80 93, Charles Hipkin, 26th Jun 2023; (+) Rhigos-Glyncastle Forest Road, SN91 04, Charles Hipkin, 24th May 2023.
- +153/14.4. **Vulpia ciliata** (Bearded Fescue) (Peisgwellt Barfog). Langdon Road, Swansea, SS674 929, Barry Stewart, 31st May 2023, road verges; (+) Swansea Bay Campus (car park area), SS6954 9285, Barry Stewart, 20th Jun 2023; (+) Margam landfill (capped) (Pond 7 south), SS783 837, Barry Stewart, 16th Jun 2023; (+) Witford Point (Baglan Burrows), SS725 916, Charles Hipkin, 27th Jun 2023; (+) Baglan Energy Park, SS737 927, Charles Hipkin, 31st May 2023.
- +153/21.1. **Catapodium rigidum** (Fern-grass) (Gwenithwellt Caled). Caswell, SS5960 8737, Barry Stewart et al, 25th May 2023, small limestone outcrop by top footpath.
- +153/21.2. Catapodium marinum (Sea Fern-grass) (Gwenithwellt y Morfa)). Port Eynon Point, SS465 846, Barry Stewart et al, 6th Jun 2023; (+) Oxwich Point, SS50584 84897, Barry Stewart, 2nd Jan 2023, thin rendzina on outcrop; (+) Bishop's Wood, SS593 878, Barry Stewart et al, 14th Jun 2023, car park; (+) Caswell, SS5960 8737, Barry Stewart et al, 25th May 2023, small limestone outcrop by top footpath; (+) West End, Penclawdd, SS538 958, Barry Stewart et al, 12th Jun 2023, church car park; (+) Mumbles Road, SS615 885, Barry Stewart, 1st Jun 2023, breakwater; (+) Blackpill, SS620 908, Barry Stewart, 1st Jun 2023, breakwater; (+) M4, Junction 47 eastbound exit, SS622 994, Barry Stewart, 31st May 2023, m4 slipway verge; (+) Singleton (seaward lawns & dunes adjacent to the Rec.), SS635 919, Barry Stewart et al, 15th Jun 2023, dune front; (+) Swansea Bay cycle path (Cenotaph), SS637 920, Barry Stewart et al, 15th Jun 2023, dune front; (+) Swansea Bay cycle path (St Helens dunes and promenade west), SS638 920, Barry Stewart et al, 15th Jun 2023, dune front; (+) Swansea Bay Campus (car park area), SS695 928, Barry Stewart, 20th Jun 2023; (+) Margam Landfill (near offices), SS774 844, Barry Stewart, 15th Jun 2023, earth banks (sand & slag); (+) Margam Landfill (capped) slack west of Pond 8, SS781 838, Barry Stewart, 16th Jun 2023; (+) Margam landfill (capped) (Pond 7 south), SS783 837, Barry Stewart, 16th Jun 2023; (+) Baglan Energy Park, SS729 924, Barry Stewart, 10th Apr 2023.
- +153/35.1. Aira caryophyllea (Silver Hair-grass) (Brigwellt Arian). Port Eynon Point, SS465 846, Barry Stewart et al, 6th Jun 2023; (+) Caswell, SS5961 8738, Barry Stewart et al, 25th May 2023, earth bank; (+) Crofty Industrial Estate, SS523 955, Barry Stewart, 19th Mar 2023, on abandoned footings; (+) Afan Argoed Country Park, SS81 94, Charles Hipkin, 26th Jun 2023; (+) Aberpergwm Wood, SN855 062, Barry Stewart, 18th Jul 2023, (Pond 11) surrounding banks; (+) Nant-y-mynydd, SN856 070, Barry Stewart, 18th Jul 2023, (Pond 19) surrounding banks; (+) Selar Fields, SN88 05, Charles Hipkin, 18th Jun 2023.

- +153/46.1.‡ **Polypogon monspeliensis** (Annual Beard-grass) (Barfwellt Unflwydd). Waun Road, Loughor, SS579 977, Barry Stewart, 8th Jun 2023, pavement flora; (+) Crymlyn Burrows SW, SS69 92, Charles Hipkin, 21st Jun 2023; (+) Crymlyn (west of new Swansea Uni campus), SS694 928, Barry Stewart, 20th Jun 2023, seasonal puddles; (+) Cimla (East), SS77 96, Charles Hipkin, 5th Jul 2023.
- +‡153/52.1. Anisantha diandra (Great Brome) (Pawrwellt Mawr). Crofty Ind.Est., SS525 954, Barry Stewart et al, 12th Jun 2023; (+) Kilvey Hill (low section above Port Tennant), Swansea, SS6801 9355, Barry Stewart, 31st May 2023, lane verges several plants.
- +‡153/71.san.© **Digitaria sanguinalis** (Hairy Finger-grass) (Byswellt Blewog). Baglan Energy Park (central), SS73 92, Charles Hipkin, 9th Sep 2023.
- +‡158/24.03. Allium roseum (Rosy Garlic) (Garlleg Rhosliw). High View, Mayhill, Swansea, SS6534 9401, Barry Stewart, 5th Jun 2023, in verge.
- +‡158/24.07. Allium triquetrum (Three-cornered Garlic) (Garlleg Trionglog). Langdon Road, Swansea, SS674 928, Barry Stewart, 31st May 2023, road verges.
- +162/18.2. **Dactylorhiza maculata** (Heath Spotted-orchid) (Tegeirian Brych y Rhos). Gelliorgan north-east field, SS602 995, Barry Stewart, 10th Jun 2023; (+) Gelli-Organ northern fields, SS603 995, Barry Stewart, 10th Jun 2023; (+) Kilvey Hill, SS667 942, Barry Stewart, 27th Jul 2023.
- +162/18.2.a. Dactylorhiza maculata subsp. ericetorum. Stepping Stones, SN87 09, Charles Hipkin, 15th May 2023.
- +162/18.3.b. Dactylorhiza incarnata subsp. coccinea. Margam Landfill (capped) slack west of Pond 8, SS781 838, Barry Stewart, 16th Jun 2023.
- +162/20.3. Anacamptis morio ([Green-winged Orchid]) (Tegeirian y Waun). Magam Moors (sidings), SS790 837, Barry Stewart, 9th May 2023, bund across fen area (several hundred); (+) Aberavon Sands, SS73 90, Charles Hipkin, 18th Apr 2023

BRECON, v.c.42 (comm. M. Porter & J. Crellin)

- *‡020/6.1. **Cedrus deodara** (Deodar) (Cedrwydden Ddeodar). Llanfrynach, SO07 25, Anne Griffiths & Joan Millard, det. John Crellin, 21st Feb 2023.
- +‡028/04.1. **Eranthis hyemalis** (Winter Aconite) (Bleidd-dag y Gaeaf). Cantref bridge, SO05 25, Anne Griffiths, Joan Millard & Sue Goodhead, 14th Feb 2023.
- +036/2.1. **Parietaria judaica** (Pellitory-of-the-wall) (Paladr y Wal). Troed yr harn, SO16 32, J. Crellin, A. Griffiths, C. Halpin, A. Jones & C. Goring, 10th May 2023, walls of farm buildings.
- +‡039/4.3. **Quercus ilex** (Evergreen Oak) (Derwen Fythwyrdd). Builth Wells, SO04 51, John Crellin, 28th Jun 2023.
- 046/17.4. **Spergularia rubra** (Sand Spurrey) (Troellig Arfor Coch). Gornoeth, SN95 57, Steph Coates, 16th May 2023, first record since 1970.
- *‡046/18.1. Lychnis coronaria (Rose Campion) (Lluglys Gwridog). Garwnant, SO00 13, Ray Woods, 21st Sep 2023, both white and red flowered forms. Probably from a seed mix sown a few years ago.
- ⊗⁺046/20.11. **Silene gallica** (Small-flowered Catchfly) (Gludlys Amryliw). Ty Mawr Farm, SN98 57, Ray Woods, 10th Oct 2023, edge of swede field.
- +051/1.06×07. **Hypericum ×desetangsii (H. perforatum × H. maculatum)** (Des Etangs' St John's-wort) (Eurinllys Des Etangs). Roadside near Garthbrengy, SO04 33, John Crellin, Anne

Griffiths, Arlene Jones, Sue Goodhead, Joan Millard & Bob Peat, 3rd May 2023; (+) West of Blaen y Cwm, SO24 28, Anne Griffiths & Joan Millard, 4th Jul 2023.

- +‡063/1.2. **Reseda alba** (White Mignonette) (Melengu Wen). Garwnant, SO00 13, Ray Woods, 21st Sep 2023, probably from a seed mix sown a few years ago.
- +065/12.5. Erica cinerea (Bell Heather) (Grug y Mêl). Source of Tawe, SN83 22, A. Griffiths, C. Goring, P. Keene, L. Brazell & S. Lee, 16th Aug 2023.
- +‡072/2.4. **Ribes sanguineum** (Flowering Currant) (Llwyn Cwrens Blodeuog). Penmoelallt, SN99 09, John Crellin, Sue Goodhead, Claire Halpin, Arlene Jones, Lynsey McAllister & Paula Keen, det. John Crellin, 12th Apr 2023.
- +074/05.19. **Saxifraga tridactylites** (Rue-leaved Saxifrage) (Tormaen Tribys). Defynnog, SN92 27, Anne Griffiths, Joan Millard & Alan Salter, 22nd Feb 2023.
- +‡077/21.2. **Lupinus polyphyllus** (Garden Lupin) (Bysedd-y-blaidd y Gerddi). Fan Gyhirych NW, SN87 19, Ray Woods, Arlene Jones & Stephen Marshall, det. Ray Woods, 19th Jul 2023.
- +‡094/1.2.© Linum usitatissimum (Flax) (Llin). Blaen Nant-y-bedd, SO24 27, Anne Griffiths & Joan Millard, det. Anne Griffiths, 1st Aug 2023.
- +103/1.16. **Geranium molle** (Dove's-foot Crane's-bill) (Pig-yr-Aran). Glan Gwesyn, SN86 53, Tess Lister, 28th May 2023.
- +103/1.18. Geranium lucidum (Shining Crane's-bill) (Pig-yr-aran Loywddail). Gorof, SN78 10, Arlene Jones, 28th Mar 2023.
- 108/3.2. **Centaurium erythraea** (Common Centaury) (Y Ganrhi Goch). Cwm Lletgwial West, SN83 46, John Crellin, Sue Goodhead, Joan Millard, Tess Lister & Bob Peat, 6th Sep 2023, first record since 1970.
- +†109/1.1. Vinca minor (Lesser Periwinkle) (Perfagl Fach). Roadside, Bwlch, SO15 22, BBG, 3rd Jan 2023.
- +114/1.1.‡ **Polemonium caeruleum** (Jacob's-ladder) (Ysgol Jacob). Pwll y Bo, SN85 50, John Crellin, Sue Goodhead & Tess Lister, det. John Crellin, 5th Jul 2023.
- +‡116/08.1. **Pentaglottis sempervirens** (Green Alkanet) (Llysiau'r-gwrid Gwyrdd). Glynllwyd, SN97 32, Anne Griffiths, Sue Goodhead & Arlene Jones, 5th Apr 2023.
- *‡118/07.1. **Phlomis russeliana** (Turkish Sage) (Saets Twrci). Penybont Uchaf drive, SN85 50, John Crellin, Sue Goodhead & Tess Lister, det. John Crellin, 5th Jul 2023.
- +118/18.4. **Clinopodium vulgare** (Wild Basil) (Brenhinllys Gwyllt). Beulah to Garth back road, SN93 50, Tess Lister, 23rd Jul 2023.
- +‡122/1.2. **Buddleja davidii** (Butterfly-bush) (Y Gynffon Las). Gwenddwr, SO06 43, Anne Griffiths, Joan Millard & Sue Goodhead, 19th Apr 2023.
- +†124/13.4. Linaria repens (Pale Toadflax) (Llin-y-llyffant Gwelw). Onllwyn, SN84 10, Arlene Jones, 24th Jul 2023.
- +129/3.1. Wahlenbergia hederacea (Ivy-leaved Bellflower) (Clychlys Dail Eiddew). Bridle way south of Berth-lwyd-awr, SO09 20, Anne Griffiths & Joan Millard, 23rd Aug 2023.
- +130/7.1. **Cruciata laevipes** (Crosswort) (Llysiau'r Groes). Cwm Gwesyn, SN85 54, Tess Lister, 28th May 2023.
- 134/3.1. Knautia arvensis (Field Scabious) (Clafrllys y Maes). Road junction near Aberbran, SN98 29, Steph Coates, 25th Aug 2023, first record since 1970.
- +‡135/27.6. **Pilosella aurantiaca** (Fox-and-cubs) (Clust-y-llygoden Euraid). Llanfihangel Nant Bran, SN94 34, Sue Goodhead & Keith Goodhead, 25th Jun 2023.

- *‡135/62.03. **Senecio inaequidens** (Narrow-leaved Ragwort) (Creulys Gulddail). Garwnant, SO00 13, Ray Woods, 21st Sep 2023, probably from a seed mix sown a few years ago.
- +147/5.1. **Arum maculatum** (Lords-and-Ladies) (Pidyn y Gog). Glan Gwesyn, SN86 53, Tess Lister, 28th May 2023.
- + Trichophorum germanicum agg. (NP.). Battle Fach, SO00 33, Anne Griffiths & Joan Millard, 3rd Oct 2023.
- +152/16.28×29. **Carex rostrata × C. vesicaria = C. ×involuta**. Near mountain road, SO16 13, John Crellin, Sue Goodhead, Tess Lister, Bob Peat, Stephen Marshall & Rebecca Price, det. John Crellin, 12th Jul 2023.
- *‡153/70.1. Setaria viridis (Green Bristle-grass) (Cibogwellt Gwyrddlas). Llanfaes, SO03 28, Janet Imlach, conf. John Crellin, 10th Sep 2023, road edge.
- +‡158/28.1. **Tristagma uniflorum** (Spring Starflower) (Sêr-flodyn y Gwanwyn). Near Daen Fach, SO24 20, Anne Griffiths & Joan Millard, 18th Apr 2023.
- *‡159/02.5. **Sisyrinchium striatum** (Pale Yellow-eyed-grass) (Sisirinciwm Melyn Mawr). Hay Market Car Park, SO22 42, Ray Woods, 22nd Jun 2023.
- +162/18.4. **Dactylorhiza praetermissa** (Southern Marsh-orchid) (Tegeirian-y-gors Deheuol). Taf Fechan Forest, SO04 16, Anne Griffiths, 28th Jun 2023

CARMARTHEN, v.c.44 (comm. R.D. Pryce & K.A. Pryce)

- +c1-1-vul **Chara vulgaris var. vulgaris**. Site of former Emlyn Colliery, Penygroes, 22/5806 1350, R.D.Pryce, 12th Oct 2023, abundant in small pond in colliery spoil. 1st hectad record of var.
- +017/1.1×2. **Polystichum ×bicknellii**. Cwmbach, SN2555 2579, R.D.Pryce & K.A.Pryce, 21st May 2023, rare on bank of green lane with P. setiferum but no P. aculeatum seen.
- *017/2.for. **Cyrtomium fortunei**. Laugharne, SN3025 1140, Jo Parmenter & D.P.Lester, 1st May 2023, unlikely to have been planted in this location: accidental introduction, regenerating.
- +‡024/1.1© Laurus nobilis (Bay) (Llawrwydden). Queen Victoria Road, Llanelli, SS5011 9976, I.K.Morgan, 11th Apr 2023, small plant growing in inaccessible corner of bridge (on side facing railway). Not planted arrived by natural means.
- +028/17.3.[‡] Thalictrum flavum (Common Meadow-rue) (Arianllys). Cwmbach, SN2568 2592, R.D.Pryce & K.A.Pryce, 21st May 2023, naturalized on south side of road.
- +‡030/1.1. **Papaver pseudoorientale** (Oriental Poppy) (Llygad y Bwgan). Side-lane of Coronation Road, Llanelli, SS5122 9987, I.K.Morgan, 19th May 2023.
- +031/5.01. Fumaria capreolata (White Ramping-fumitory) (Mwg-y-ddaear Gwyn). Little Water Street, Carmarthen, SN4141 2024, I.K.Morgan, 8th Sep 2023, cobbled area adjacent to road.
- +031/5.03. Fumaria bastardii (Tall Ramping-fumitory) (Mwg-y-ddaear Grymus). Amroth,
- SN1742 0729, Jo Parmenter & D.P.Lester, 3rd May 2023, also at SN 1744 0727.
- +033/1.3. **Ulmus minor** (Llwyfen Fanddail). Cwrt Farm, Pentrecwrt, SN3980 3910, R.D.Pryce & K.A.Pryce, 1st May 2023, frequent in low-cut hedge on north side of road.
- +036/2.1. **Parietaria judaica** (Pellitory-of-the-wall) (Paladr y Wal). Llanwrda churchyard, SN712 319, Laura Moss, 27th Jul 2023.
- +‡039/4.7.© Quercus rubra (Red Oak) (Derwen Goch). 1.25km NE of Craigyrwyddon, Crychan Forest, SN8562 3791, R.D.Pryce & K.A.Pryce, 14th May 2023, by track through forestry plantation.

- +043/3.08. **Atriplex laciniata** (Frosted Orache) (Llygwyn Ariannaid). Llanfynydd, SN559 273, Laura Moss, det. A.O. Chater and J. Poland from photos, 23rd Jun 2023, road verge, thought to have been introduced with builders' sand.
- +‡045/2.2. **Claytonia sibirica** (Pink Purslane) (Porpin Pinc). Godrecynnen Barn, Newchurch, SN3544 2230, West Wales Country Gardeners meeting, det. R.D.Pryce, 13th May 2023, self sown in garden. Also self sown at woodland edge at Pant-y-Llyn, Abernant SN 3482 2566.
- +045/3.1.d. **Montia fontana subsp. chondrosperma**. East of Amroth, SN180 074, Jo Parmenter & D.P.Lester, 3rd May 2023, also at several other locations in the monad.
- +046/07.10. **Cerastium diffusum** (Sea Mouse-ear) (Clust-y-llygoden Arfor). Telpyn Point, SN184 072, Jo Parmenter & D.P.Lester, 3rd May 2023, also at SN185072 and at Top Castle SN192075; (+) Waterloo Bridge, Llandovery, SN7712 3440, R.D.& K.A.Pryce, M.O.Stead & L.Richards, 15th Jul 2023, rare pavement weed on NW part of Waterloo Bridge.
- +047/1.16. **Persicaria minor** (Small Water-pepper) (Y Dinboeth Fach). National Botanic Garden of Wales, Llanarthne, SN5244 1798, BSBI Meeting, 11th Jul 2023, locally frequent in exposed, well-vegetated bed of Llyn Canol: lake at artificially low level while dam repairs are carried out. Also at SN 5241 1797.
- +047/.4.pol **Polygonum polycnemiforme** (Bushy Knotgrass). Penybanc Farm, Llandovery, SN7401 3205, R.D.& K.A.Pryce, M.O.Stead & L.Richards, 15th Jul 2023, partially vegetated shingle shoal on south bank of Afon Tywi. Also at SN 7382 3214.
- +047/4.bel. **Polygonum agrestinum** (Red-knotgrass). RAF Range, Tywyn Burrows, SN3688 0498, Ruth Harding, Julian Woodman, R.D.& K.A.Pryce, 18th Aug 2023, surface of former helipad scraped to bear sand during previous winter; (+) North of Esgairdawe, SN6106 4183, R.D.Pryce & K.A.Pryce, 30th Aug 2023, gateway and short grassy track on west side of road. Also at SN 6107 4177.

+047/4.den **Polygonum denudatum**. Penybanc Farm, Llandovery, SN7398 3206, R.D.& K.A.Pryce, M.O.Stead & L.Richards, 15th Jul 2023, partially vegetated shingle shoal on south bank of Afon Tywi. Also at SN 7391 3213.

+053/1.7. **Malva neglecta** (Dwarf Mallow) (Corhocysen). The Green, Llansteffan, SN354 106, Andrew & Liz Stevens, 5th Jul 2023, >c.2000 plants along south-east facing slope of low, grass and paving-clad sea bank between SN 3539 1060



Malva neglecta, Dwarf Mallow, Corhocysen at The Green, Llansteffan, v.c.44 © R.D.Pryce

and SN 3553 1082. Recorded here in 1988 and a single plant in 2013.

- +057/1.05. Viola reichenbachiana (Early Dog-violet) (Fioled y Coed). Marros Mill, SN208 076, Jo P armenter & D.P.Lester, 29th Apr 2023.
- +061/2.09×01. Salix ×smithiana (S. viminalis × S. caprea) [S. ×sericans] (Broad-leaved Osier) (Helygen-wiail Lydanddail). Pantyffynnon, SN6251 1074, R.D.Pryce & K.A.Pryce, 27th Apr 2023, bank of Afon Aman near footbridge; (+) Betws Park, SN6331 1210, R.D.Pryce & K.A.Pryce, 1st Jul 2023, dry boulder and cobble bank of Afon Aman, river at very low level. Also one small sapling at SN 6335 1210.
- +062/14.1. **Cardamine bulbifera** (Coralroot) (Deintwraidd). Manordeilo railway bridge, SN6867 2653, Peter Lee Thompson, det. I.K. Morgan, 25th Apr 2023, bank of Afon Tywi downstream from bridge. 2nd vc record. See front cover image.
- +062/22.2. **Erophila verna** (Common Whitlowgrass) (Llysiau'r-bystwn Cynnar). Ty Hen Chapel, south of Trelech, SN3019 2407, R.D.Pryce & K.A.Pryce, 15th Apr 2023, grassy graveyard. Also at SN 3020 2409; (+) 1.25km NE of Craigyrwyddon, Crychan Forest, SN8585 3813, R.D.Pryce & K.A.Pryce, 14th May 2023, on gravel surfaced turning area in forestry plantation.
- +©062/42.sat. **Raphanus sativus** (Garden Radish) (Rhuddygl y Gerddi). Cwm Hust, south of Llanybydder, SN5376 4046, R.D.Pryce & K.A.Pryce, 29th Jun 2023, 1 plant, 25cm tall.
- +‡063/1.2. **Reseda alba** (White Mignonette) (Melengu Wen). Former Buckleys Brewery site, Llanelli, SN5085 0059, I.K.Morgan, 18th Jun 2023, one large and two small plants in wildflower seeded area on site of the malt-house now converted to flats.
- +‡069/3.1. **Cyclamen hederifolium** (Sowbread) (Bara'r Hwch). Llanelli, SN5055 0034, Llanelli Naturalists meeting, R.D.Pryce & K.A.Pryce, det. I.K. Morgan, 2nd Sep 2023, urban Botany Walk: one plant in flower in mown grass under an ornamental tree in the Sunken Gardens adjacent to the Law Courts.
- +‡073/5.4. **Sedum spectabile** (Butterfly Stonecrop) (Briweg lâr Fach yr Haf). St Michael's Church, Golden Grove, SN5899 1969, R.D.Pryce & K.A.Pryce, 3rd Jun 2023, graveyard southeast of church, established under two old Yew trees from grave-tenders discards.
- +‡074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Cwmbach, SN2558 2568, R.D.Pryce & K.A.Pryce, 21st May 2023, one plant by ford (north-side). Also rare by stream in woodland at SN 2555 2566.
- +‡075/03.1. **Spiraea salicifolia** (Bridewort) (Erwain Dail Helyg). Ffos y Broga, Cwrt Henry, SN551 231, Andrew Martin, 10th Aug 2023, verge of track from lane to log-shed.
- *‡075/08.0.08. **Rubus phoenicolasius** (Japanese Wineberry) (Llwyn Mwyar Gwin). Argaerhyd, nr Llannon, SN5531 1034, R.D.Pryce & K.A.Pryce, 13th Apr 2023, locally abundant and well naturalized presumably from original planting on roadside bank at junction to property on NW side of road.
- +‡075/08.02.055 **Rubus laciniatus**. NE of Laugharne, SN311 119, Jo Parmenter & D.P.Lester, 1st May 2023, originally introduced, regenerating.
- +‡075/17.3. **Poterium sanguisorba** (Bwrned). Brandy Hill between Red Roses and Llanddowror, SN2256 1363, Jack Gradidge, 18th Jun 2023, verge of country road; (+) A40 Llandeilo by-pass, SN6129 2339, Elen Hall, 12th Jun 2023, eastbound road verge.
- +‡075/32.10. **Cotoneaster salicifolius** (Willow-leaved Cotoneaster) (Cotoneaster Dail Helyg). Cwmbach, SN2578 2595, R.D.Pryce & K.A.Pryce, 21st May 2023, self-sown in hedgerow.

- +‡075/35.05. Crataegus persimilis (Broad-leaved Cockspurthorn) (Draenen Wen Lydanddail). Millennium Coastal Park, Llanelli, SS4949 9999, I.K.Morgan, 25th Sep 2023, in full fruit in amenity planting.
- +077/10.3. **Ornithopus perpusillus** (Bird's-foot) (Troed yr Aderyn). Cwmbach, SN2596 2585, R.D.Pryce & K.A.Pryce, 21st May 2023, very abundant in short, mown gravelly vegetated strip in centre of track to Queenie Bach Caravan; (+) Llanfihangel Rhôs-y-corn, SN546 357, Laura Moss, 10th Jun 2023, on road verge proposed as part of road verge management scheme.
- +077/14.11.a. Vicia sativa subsp. nigra (Narrow-leaved Vetch). 1.25km NE of Craigyrwyddon, Crychan Forest, SN8585 3813, R.D.Pryce & K.A.Pryce, 14th May 2023, at edge of large gravel surfaced turning area in forestry plantation.
- +‡077/15.09. Lathyrus latifolius (Broad-leaved Everlasting-pea) (Ytbysen Fythol Lydanddail). Tumble Community Woodland, SN5393 1291, Llanelli Naturalists meeting, det. R.D.Pryce, 17th Jun 2023, one plant NE of junction of path with main track.
- +081/1.1. Lythrum salicaria (Purple-loosestrife) (Llysiau'r-milwr Coch). Penstacan, Cilycwm, SN7481 4103, West Wales Biodiversity Information Centre recording meeting, 28th Jun 2023, on bank of pond excavated in 1997; (+) Cynghordy, SN801 405, Laura Moss, 30th Jun 2023, road verge.
- +081/1.3. Lythrum portula (Water-purslane) (Troed y Gywen). Maes-manach, nr. Cynghordy, SN8184 4294, A.Jones, M.Stead, C.Cheffings, G.& T.Moss, 12th Jul 2023, on south side of track.
- +‡091/2.16. **Euphorbia amygdaloides** (Wood Spurge) (Llaethlys y Coed). Glanyrynys, nr. Nantgeredig, SN4903 2043, R.D.Pryce, 16th May 2023, north bank of Afon Tywi. Also at SN 4893 2046.
- *©091/2.mel. **Euphorbia mellifera** (Canary Spurge). School Road, Pwll, SN4769 0116, I.K.Morgan, 30th Mar 2023, large plant at least 2 years old growing at foot of roadside privet boundary hedge, self-sown from adjacent garden where there are also several self-sown plants.
- +102/1.03.cor.atr. **Oxalis corniculata var. atropurpurea**. Waterloo Bridge, Llandovery, SN7712 3440, R.D.& K.A.Pryce, M.O.Stead & L.Richards, 15th Jul 2023, garden escape on footpath below bridge.
- +‡102/1.06. **Oxalis stricta** (Upright Yellow-sorrel) (Suran Felen Unionsyth). Upland Mansion, SN4033 1363, R.D.Pryce & K.A.Pryce, 10th Aug 2023, three plants self-sown in limestonegravel surfaced yard north-east of mansion.
- +103/1.07. **Geranium pratense** (Meadow Crane's-bill) (Pig-yr-aran y Weirglodd). Cynghordy, SN801 405, Laura Moss, 30th Jun 2023, road verge.
- +‡103/1.14. **Geranium pyrenaicum** (Hedgerow Crane's-bill) (Pig-yr-aran y Gwrych). Waterloo Bridge, Llandovery, SN7712 3440, R.D.& K.A.Pryce, M.O.Stead & L.Richards, 15th Jul 2023, rare pavement weed.
- +103/1.18. **Geranium lucidum** (Shining Crane's-bill) (Pig-yr-aran Loywddail). Cynghordy, SN801 405, Laura Moss, 30th Jun 2023, road verge.
- +103/2.1. **Erodium maritimum** (Sea Stork's-bill) (Pig-y-crëyr Arfor). Amroth, SN173 073, Jo Parmenter & D.P.Lester, 3rd May 2023, .

- +‡105/1.4. Impatiens glandulifera (Indian Balsam) (Jac y Neidiwr). Maes-manach, nr. Cynghordy, SN8189 4298, A.Jones, M.Stead, C.Cheffings, G.& T.Moss, 12th Jul 2023, on north side of track.
- +107/40.1. **Pastinaca sativa** (Wild Parsnip) (Panasen Wyllt). A40 between Llandovery and Llandeilo, SN751 334, Laura Moss, 6th Aug 2023, possibly from introduced seed mix following roadworks on road verge.
- +110/8.6. **Solanum dulcamara** (Bittersweet) (Elinog). Cynghordy, SN801 405, Laura Moss, 30th Jun 2023, road verge.
- +‡116/08.1. Pentaglottis sempervirens (Green Alkanet) (Llysiau'r-gwrid Gwyrdd). St. Michaels Churchyard, Llanfihangel Rhôs-y-corn, SN549 346, Laura Moss, 10th Jun 2023.
- +‡117/1.bon. Verbena bonariensis (Argentinian Vervain) (Ferfain yr Ariannin). Gilfach Iago restored opencast site, nr. Saron, SN6026 1286, R.D.Pryce, 4th Oct 2023, scattered self-sown plants over extensive, part-vegetated sub-soil/spoil area.
- +118/23.1×2. Mentha ×verticillata (Whorled Mint) (Mintys Troellennog). Pendine MOD Ranges, SN2742 0749, Matt Sutton, 26th Jul 2023, in damp-dry dune transition north of C9 track.
- +‡118/23.4×lon. **Mentha ×rotundifolia** (False Apple-mint) (Mintys Gwlanog). Dynant Fawr, SN5207 1171, R.D.Pryce & K.A.Pryce, 15th Sep 2023, edge of mature semi-natural woodland lining the course of the Afon Goch.
- +120/1.7. **Callitriche brutia var. hamulata** (Intermediate Water-starwort) (Brigwlydd Canolig). National Botanic Garden of Wales, Llanarthne, SN5244 1798, BSBI Meeting, det. C.D. Preston, 11th Jul 2023, Llyn Canol: lake at artificially low level while dam repairs are carried out. Also at SN 5241 1797.
- +121/1.1. **Plantago coronopus** (Buck's-horn Plantain) (Llyriad Corn Carw). National Botanic Garden of Wales, Llanarthne, SN5215 1825, BSBI Meeting, det. R.D.Pryce, 11th Jul 2023, one plant on cobbles by kerb on east side of stable block.
- +‡122/1.2. **Buddleja davidii** (Butterfly-bush) (Y Gynffon Las). Cynghordy by Carbon Community entrance, SN806 421, Laura Moss, 6th Jul 2023, road verge.
- +124/02.2. Scrophularia auriculata (Water Figwort) (Gwrnerth y Dŵr). Maes-manach, nr. Cynghordy, SN81 42, A.Jones, M.Stead, C.Cheffings, G.& T.Moss, 12th Jul 2023, along track from SN81004279 to SN81914299.
- +†124/08.2. **Chaenorhinum minus** (Small Toadflax) (Trwyn-y-llo Bach). North of Ffronddaunant, Mynydd Llansadwn, SN6886 3386, R.D.Pryce & K.A.Pryce, 7th May 2023, edge of grass road verge.
- +124/13.3×4. Linaria ×dominii. Burry Port, SN4484 0045, R.D.Pryce & K.A.Pryce, 6th Jun 2023, NW corner of site of demolished power station.
- +124/16.16. Veronica arvensis (Wall Speedwell) (Rhwyddlwyn y Fagwyr). North of Cefn Goch, Crychan Forest, SN8597 4016, R.D.Pryce & K.A.Pryce, 14th May 2023, rocky grassland bank and trackside on east side of Brynffo Road (forestry track).
- +†133/1.2. **Valerianella carinata** (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). St Margaret's Church, 2.5km north of Pendine, SN2305 1061, R.D.Pryce & K.A.Pryce, 22nd Apr 2023, in north-west section of gravel-surfaced car park. Also in eastern section of car park at SN 2308 1060.

- 135/05.3. **Carduus crispus** (Welted Thistle) (Ysgallen Grech). River shingle at Carreg Sawdde Common, Llangadog, SN696 281, Theresa Haine, 31st Aug 2022, det. confirmed during BSBI field meeting on 29/5/2024, previously known here only from an anonymous field record in Nature Conservancy files dated 27/9/1971.
- Voucher material of the following **Taraxacum** records was col. by R.D.Pryce & K.A.Pryce and det. by A.J.Richards in Dec.2023. Material will be deposited in NMW.
- +135/25.01.12. **Taraxacum fulvum** (Cinnamon-fruited Dandelion). Track to Llyn-y-Fan Fach, SN8036 2278, BSBI Meeting, 13th Jul 2023, several plants on gravel by small pond adjacent to track. 2nd VCR, det from photos.
- *135/25.01.24. **Taraxacum scoticum** (Scottish Dandelion). North of Cefn Goch, Crychan Forest, SN8602 4033, R.D.Pryce & K.A.Pryce, det. NMW, 14th May 2023, side track off Brynffo Road, fenced with wide, open, sheep-grazed acid grassland verges.
- +135/25.01.3. **Taraxacum argutum** (Sharp-toothed Dandelion). Crychan Forest, SN8596 4015, NMW, 14th May 2023, Brynffo Road (forestry track) north of Cefn Goch.
- +135/25.05.39. **Taraxacum euryphyllum** (Wide-stalked Dandelion). Llathige, Crug-y-bar, SN6698 3737, NMW, 7th May 2023, northwest side of road.
- +135/25.07.55. **Taraxacum bracteatum** (Dark-green Dandelion). Penrhiw-geingen, north of Cwmdu, SN6356 3178, NMW, 7th May 2023, eastern road bank at top of wooded ravine.
- *135/25.07.63. **Taraxacum fulvicarpum** (Brown-fruited Dandelion). Crychan Forest, SN8589 3997, NMW, 14th May 2023, Brynffo Road, north of Cefn Goch, from west side of forestry track in sheep grazed vegetation amongst ungrazed Urtica.
- +135/25.07.64. **Taraxacum gelertii** (Gelert's Dandelion). Crychan Forest, SN8632 3909, NMW, 14th May 2023, major junction of forestry tracks 750m SE of Cefn Goch.
- +135/25.07.70. **Taraxacum landmarkii** (Landmark Dandelion). Crychan Forest, SN8561 3791, NMW, 14th May 2023, track through mature Picea abies plantation 1.25km north-east of Craigyrwyddon.
- +135/25.07.72. **Taraxacum nordstedtii** (Nordstedt's Dandelion). Herbert's Quarry, Mynydd Du, SN7324 1903, 17th May 2023, low west facing quarry face inaccessible to sheep. First confirmed hectad record. Also from Pen Rhiw-ddu SN 7280 1921, 26th May 2023, conf. AJR, NMW.
- +135/25.07.73. **Taraxacum oellgaardii** (Ollgaard's Dandelion). North of Cefn Goch, Crychan Forest, SN8596 4019, NMW, 14th May 2023, sheep-grazed, acid, rocky slope. Also at SN 8596 4015.
- +135/25.07.78. **Taraxacum porteri** (Porter's Dandelion). Blaen-dyffryn, Porthyrhyd, SN7129 4034, NMW, 7th May 2023, north corner of garden.
- +135/25.07.80. **Taraxacum subbracteatum** (Dark-bracted Dandelion). Blaendyfod, south-east of Trelech, SN3120 2741, NMW, 15th Apr 2023, west facing bank by junction of farm track and road.
- +135/25.07.83. **Taraxacum unguilobum** (Claw-lobed Dandelion). 750m south-east of Cefn Goch, Crychan Forest, SN8626 3903, NMW, 14th May 2023, forest track through mature Picea abies plantation. Also north-east of Craigyrwyddon at SN 8563 3792 and SN 8590 3805.
- +‡135/25.08.100. **Taraxacum spiculatum** (Sagittate-lobed Dandelion). Dolwen Fawr, Pencader, SN4562 3780, NMW, 1st May 2023, north side of road at edge of tarmac.

- +135/25.08.84. **Taraxacum atactum** (Narrow-bracted Dandelion). St Margaret's Church, 2.5km north of Pendine, SN2309 1067, NMW, 22nd Apr 2023, graveyard north of church; (+) Nr Cwm Clyd Llansteffan, SN3606 1282, NMW, 1st Apr 2023, narrow verge on north side of road at ravine woodland edge. Also at SN 3618 1274.
- +‡135/25.08.86 **Taraxacum fusciflorum** (Brown-striped Dandelion). Mountain Hall, Rhôs, SN3801 3653, NMW, 1st May 2023, west facing laneside bank north of gateway. AJR comment: "but diagnostic ligules eaten".
- +135/25.08.87. **Taraxacum hamatiforme** (Asymmetrical Hook-lobed Dandelion). Nr. Railway Bridge, Penybont Road, Llandovery, SN7826 3682, NMW, 17th May 2023, roadside by culvert carrying stream under road.
- +135/25.08.89 **Taraxacum hamatum** (Hook-lobed Dandelion). South-west of New Mill, SN2588 1295, NMW, 22nd Apr 2023, east facing bank, c.1.25m above road level in wooded valley; (+) North of Esgair Fwyog, SN8414 4139, NMW, 14th May 2023, edge of lay by on south side of road.
- +135/25.08.90. **Taraxacum hamiferum** (Dark Hook-lobed Dandelion). Plas paun, SN2916 2352, NMW, 15th Apr 2023, steep vegetated bank on NE side of road; (+) Pantwaun, Cwmbach, SN3781 3375, NMW, 1st May 2023, south verge of road; (+) Halfway Forest, SN8411 3456, NMW, 17th May 2023, north-west verge of public road.
- +‡135/25.08.91. **Taraxacum kernianum** (Kern's Dandelion). Blaendyfod, south-east of Trelech, SN3119 2742, NMW, 15th Apr 2023, verge on west bank of public road.
- +‡135/25.08.92. Taraxacum lamprophyllum (Lustrous-leaved Dandelion). Pantgwyn, east of Trelech, SN3165 3076, NMW, 15th Apr 2023, also from verge on east side of wide, well-used farm entrance, Brynglas, Hermon SN 3667 3407; (+) Pantyfen, Llanfihangel-ar-Arth, SN4624 3952, NMW, 1st May 2023, foot of grassy hedgebank on south side of road; (+) Tan-y-lan, Llansawel, SN6376 3808, NMW, 7th May 2023, trackside verge.
- +‡135/25.08.93. **Taraxacum lancidens** (Spear-toothed Dandelion). Parkswadog, Rhôs, SN3706 3853, NMW, 1st May 2023, field gateway on north-west side of road; (+) Blaen-dyffryn, Porthyrhyd, SN7129 4032, NMW, 7th May 2023, unmown fenced garden 'lawn': the owner commented: "the garden is the only area in the district with dandelions as all fields are heavily sheep grazed".
- +135/25.08.94. **Taraxacum marklundii** (Marklund's Dandelion). South end of track to Cringae Bach, SN2007 1423, NMW, 22nd Apr 2023, south end, east side of green-lane/wet track to farm. Also at St Cyffic's Church, Cringae SN 2077 1395 and east of Bwlchgwynt, Llanddowror SN 2224 1388.
- +135/25.08.99. **Taraxacum quadrans** (Fleshy-lobed Dandelion). Near junction to Tycoch, Llandovery, SN7872 3938, NMW, 17th May 2023, sloping verge below coppiced hazel c.60m west of road junction on south side of road.
- +135/25.08.sah. **Taraxacum sahlinianum** (Sahlin's Dandelion). Llangain Church, SN3910 1561, NMW, 1st Apr 2023, hedge bank on west side of gateway; (+) Brynglas, Hermon, SN3665 3411, NMW, 1st May 2023, gateway with vegetated-over, old gravel surfaced yard. Also at Cefntriol, Rhôs SN 3840 3579; (+) Llangennech, SN5629 0154, NMW, 28th Apr 2023, back garden of 57 Station Road in shade under large apple tree.
- *‡135/25.09.103. **Taraxacum acroglossum** (Broad-bracted Dandelion). Coed Glas, Porthyrhyd, SN5301 1738, NMW, 13th Apr 2023, improved grassland field.

- +‡135/25.09.105. **Taraxacum acutifrons** (Acute-leaved Dandelion). St Margaret's Church, 2.5km north of Pendine, SN2308 1064, NMW, 22nd Apr 2023, west side of path between lych gate and church door. Also at Cringae Bach SN 2007 1420; (+) Blaen-dyffryn, Porthyrhyd, SN7128 4032, NMW, 7th May 2023.
- +‡135/25.09.106. **Taraxacum aequilobum** (Twisted-bracted Dandelion). Llangain Church, SN3895 1556, NMW, 1st Apr 2023, narrow verge below grassy hedge bank on north side of lane. AJR comment: "specimen not yet heterophyllous".
- +135/25.09.108. **Taraxacum alatum** (Green Dandelion). St Clears Quay, SN2818 1534, NMW, 22nd Apr 2023, verge at junction of Treventy Road with access road to sewage treatment works; (+) Pantwaun, Cwmbach, SN3781 3375, NMW, 1st May 2023, south verge of road.
- +135/25.09.120. **Taraxacum cophocentrum** (Rounded-lobed Dandelion). Nr Felin Pandy, Coed Ty Hen, south of Trelech, SN3025 2394, NMW, 15th Apr 2023, vegetated verge on east side of road.
- +135/25.09.123. **Taraxacum croceiflorum** (Orange-flowered Dandelion). East of Bwlchgwynt, Llanddowror, SN2225 1389, NMW, 22nd Apr 2023, verge on north side of road at west end of layby. Also SN 2230 1388.
- +135/25.09.131. **Taraxacum ekmanii** (Ekman's Dandelion). Pantyfen, Llanfihangel-ar-Arth, SN4622 3953, NMW, 1st May 2023, verge on north side of road.
- +135/25.09.133. **Taraxacum expallidiforme** (Broad-stalked Dandelion). Hannerffordd, SN3695 4006, NMW, 1st May 2023, side of steep track branching off north side of lane.
- +135/25.09.137. **Taraxacum fasciatum** (Dense-bracted Dandelion). Cilau Fach, Llandissilio, SN1231 2388, NMW, 10th May 2023, west side of farm entrance at foot of grassy bank. AJR comment: "petioles are coloured".
- +‡135/25.09.140 **Taraxacum horridifrons** (Prickly-leaved Dandelion). St Margaret's Church, 2.5km north of Pendine, SN2305 1061, NMW, 22nd Apr 2023, north-west section of gravelsurfaced car park. Also from graveyard north of church at SN 2309 1067; (+) Troedrhiwfelen, Llandovery, SN7825 3407, NMW, 17th May 2023, foot of hedgebank on north side of road at east end of passing place.
- *‡135/25.09.141. **Taraxacum huelphersianum** (Hülphers's Dandelion). Ty Hen Chapel, south of Trelech, SN3018 2407, NMW, 15th Apr 2023, in chapelyard.
- +‡135/25.09.142. **Taraxacum incisum** (Incise-leaved Dandelion). Pont Ty-Poeth, SN4206 3914, NMW, 1st May 2023, bank by gateway into adjacent field to north. 3rd VCR.
- +135/25.09.143. **Taraxacum insigne** (Remarkable Dandelion). Nr Penddol, Cynwyl Elfed, SN3657 2766, NMW, 15th Apr 2023; (+) Moat Farm, Llandyry, SN4327 0530, NMW, 25th Apr 2023, foot of bank on north side of track.
- +‡135/25.09.146. **Taraxacum lacerifolium** (Jagged-leaved Dandelion). Lord's Park, Llansteffan, SN3403 0975, NMW, 20th Apr 2023, in reseeded rye-grass field with spectacularly abundant dandelions; (+) Llangain Church, SN3911 1562, NMW, 1st Apr 2023, sparsely vegetated hedge bank on east side of gateway; (+) Pantyffynnon, SN6262 1067, NMW, 27th Apr 2023, foot of wooded bank on east side of path.
- +‡135/25.09.149. **Taraxacum laeticolor** (Pale-stalked Dandelion). East of Bwlchgwynt, Llanddowror, SN2224 1389, NMW, 22nd Apr 2023, verge on north side of road west of layby.

- +135/25.09.150. **Taraxacum laticordatum** (Decumbent Dandelion). Pleasant View, Meidrim, SN3053 2114, NMW, 15th Apr 2023, north side of road under large oak tree. Also near Felin Pandy, Coed Ty Hen, south of Trelech at SN 3025 2397; (+) Hannerffordd, SN3694 4005, NMW, 1st May 2023, south side of lane at edge of tarmac.
- +135/25.09.151. **Taraxacum latisectum** (Broad-lobed Dandelion). Blaendyfod, south-east of Trelech, SN3121 2741, NMW, 15th Apr 2023, west facing bank of public road.
- +135/25.09.158. **Taraxacum longisquameum** (Elongate-bracted Dandelion). Dolwen Fawr, Pencader, SN4564 3782, NMW, 1st May 2023, layby on north side of road at edge of stand of naturalised, discarded Inula helenium; (+) Pantyffynnon, SN6248 1081, NMW, 27th Apr 2023, verge on north side of path adjacent to Sambucus nigra growing out of top of fence post.
- +135/25.09.172. **Taraxacum oblongatum** (Oblong-leaved Dandelion). St Cyffic's Church, Cringae, SN2080 1395, NMW, 22nd Apr 2023, foot of hedgebank at west end of layby on north side of road.
- +‡135/25.09.175. **Taraxacum ochrochlorum** (Winged Dandelion). Lord's Park, Llansteffan, SN3385 0975, NMW, 20th Apr 2023, east end of 'alley' between farm buildings. 3rd VCR.
- +‡135/25.09.179. **Taraxacum pallidipes** (Grey-bracted Dandelion). East of Bwlchgwynt, Llanddowror, SN2233 1388, NMW, 22nd Apr 2023, wide grass verge on north side of road.
- +135/25.09.181. **Taraxacum pannulatiforme** (Tar-blotched Dandelion). Llangain Church, SN3890 1557, NMW, 1st Apr 2023, sparsely vegetated soil mound adjacent to south-east corner of church wall.
- +‡135/25.09.182. **Taraxacum pannulatum** (Brown-ribbed Dandelion). Moat Farm Llandyry, SN4333 0535, NMW, 25th Apr 2023, reseeded field dominated by Rye-grass; (+) Llangennech, SN5629 0152, R.D.Pryce, NMW, 28th Apr 2023, from front drive between 57 and 55 Station Road.
- +‡135/25.09.184. **Taraxacum piceatum** (Leaden-bracted Dandelion). Pantwaun, Cwmbach, SN3781 3375, NMW, 1st May 2023, south verge of road. Also at Mountain Hall, Rhôs SN 3802 3652; (+) Herbert's Quarry, Mynydd Du, SN7323 1899, NMW, 17th May 2023, low north-west facing quarry face inaccessible to sheep.
- +135/25.09.186. **Taraxacum polyodon** (Common Dandelion). St Clears Quay, SN2817 1535, NMW, 22nd Apr 2023, north side verge of access road to sewage treatment works.
- +135/25.09.197. **Taraxacum sellandi** (Selland's Dandelion). Between St Clears and Mylett, SN2761 1493, NMW, 22nd Apr 2023, grassy verge north-east of double gateway/layby on NW side of road under oak trees. Also at St Cyffic's Church, Cringae SN 2077 1395; (+) Llathige, Crug-y-bar, SN6694 3734, NMW, 7th May 2023, grassy bank, west roadside hedge, 1st confirmed hectad record; (+) Blaen-dyffryn, Porthyrhyd, SN7129 4032, NMW, 7th May 2023, unmown fenced garden 'lawn': sheep excluded.
- +135/25.09.209. **Taraxacum lepidum** (Pruinose-bracted Dandelion). Lord's Park, Llansteffan, SN3322 1032, NMW, 20th Apr 2023, near foot of grassy hedge bank on east side of road leading to Lord's Park; (+) Coed Glas, Porthyrhyd, SN5299 1739, NMW, 13th Apr 2023, improved grassland field with locally abundant dandelions. Also at SN 5296 1739.
- +‡135/25.09.215. **Taraxacum tumentilobum** (Swollen-lobed Dandelion). Lord's Park, Llansteffan, SN3326 1022, NMW, 20th Apr 2023, near foot of grassy hedge bank on east side of road leading to Lord's Park.

- +135/25.09.220. **Taraxacum xanthostigma** (Ochre-styled Dandelion). West of Lovelodge Wood, Ffairfach, SN6193 2110, NMW, 27th Apr 2023, wide road verge, north side of road.
- +‡135/25.09.sun. **Taraxacum sundbergii** (Sundberg's Dandelion). Castell Lloyd Farm entrance, SN2418 1049, NMW, 22nd Apr 2023, wide grass verge on south side of road immediately west of entrance; (+) Lord's Park, Llansteffan, SN3403 0973, NMW, 20th Apr 2023, reseeded rye-grass field with spectacularly abundant dandelions.
- +135/25.pie. **Taraxacum pietii-oosterveldii**. Wenallt, Pontyates, SN4754 0834, conf. A.J.Richards, Dec.2023, 3rd May 2023, damp bank in semi-improved pasture, 1st refereed hectad record. Also at SN 4763 0839; (+) Penygroes-Caerbryn path/cycleway assessment site, SN5895 1386, R.D.Pryce, conf. A.J.Richards, Dec.2023, NMW, 19th Apr 2023, damp, rushy, secondary grassland on restored opencast land; (+) Cwm-gwlaw-fawr, Talley, SN6175 3344, 7th May 2023, bank on south side of road; (+) N of Cefn Goch, Crychan Forest, SN8596 4018, NMW, 14th May 2023, Brynffo Road (forestry track), from west facing bank.
- +135/25.qua. **Taraxacum quadrangulum**. Pantyfen, Llanfihangel-ar-Arth, SN4621 3951, NMW, 1st May 2023, wide verge below low-cut hedge by field gateway on south side of road, 2nd GB record, 2nd VCR.
- +135/27.2.trsc. **Pilosella officinarum subsp. trichoscapa** (a subspecies of Mouse-ear-hawkweed). Cwmbach, SN2537 2588, R.D.Pryce & K.A.Pryce, 21st May 2023, small patch by wall of Capel-y-Graig; (+) Crychan Forest, SN8585 3813, R.D.Pryce & K.A.Pryce, 14th May 2023, abundant on east-facing rocky cutting slope in forestry plantation.
- +†135/35.1. Inula helenium (Elecampane) (Marchalan). Dolwen Fawr, Pencader, SN4563 3781, R.D.Pryce & K.A.Pryce, 1st May 2023, well established garden throw-out on wide road verge.
- +‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Ammanford Road, Llandybie, SN6178 1556, R.D.Pryce & K.A.Pryce, 9th Jun 2023, in angle between base

of wall and pavement.

+†135/56.1. Glebionis segetum (Corn Marigold) (Melyn yr yd). Coed Ifan monad, SN82 43, A.Jones, M.Stead, C.Cheffings, G.& T.Moss, 12th Jul 2023, by track through mature forestry plantation.

+‡135/62.03.© Senecio inaequidens (Narrowleaved Ragwort) (Creulys Gulddail) (right). Incredible Edible Community Project, Trallwm, Llanelli, SN5362 0033, R.D.Pryce &



Senecio inaequidens, Narrow-leaved Ragwort, Creulys Gulddail © R.D.Pryce

K.A.Pryce, 24th May 2023, at least eight plants in gravel surfaced car park on south-east side of site. 3rd VCR.

- +135/81.2. **Bidens tripartita** (Trifid Bur-marigold) (Graban Teiran). National Botanic Garden of Wales, Llanarthne, SN5220 1795, BSBI Meeting, 11th Jul 2023, Llyn Uchaf, locally abundant in temporary draw-down zone while dam repairs are carried out. Also at SN 5218 1795.
- +142/1.02. **Potamogeton polygonifolius** (Bog Pondweed) (Dyfrllys y Gors). Marros Mountain, SN198 096, Jo Parmenter & D.P.Lester, 3rd May 2023, in new pond. Also in new pond at SN 1991 0932.
- +147/5.1. **Arum maculatum** (Lords-and-Ladies) (Pidyn y Gog). Pont Ty-Poeth, SN4204 3912, R.D.Pryce & K.A.Pryce, 1st May 2023, hedge in vicinity of junction of tracks near river bank.
- +148/1.1. **Spirodela polyrhiza** (Greater Duckweed) (Llinad Mawr). Trevethin, School Road, Pwll, SN4772 0120, R.D.Pryce & K.A.Pryce, 5th Sep 2023, completely covering garden pond c.5m x 3m. Not introduced; (+) Bishop's Canal, Abergwili, SN4391 2076, C.D.Preston, R.D.& K.A.Pryce, det. C.D.Preston, 14th Jul 2023, occasional in long-disused canal overgrown with fen vegetation.
- +148/2.1. **Lemna gibba** (Fat Duckweed) (Llinad Crythog). Bishops Pond, Abergwili, SN4425 2084, C.D.Preston, R.D.& K.A.Pryce, det. C.D.Preston, 14th Jul 2023, at pond margin in western part of Bishop's Pond. Also in overgrown Bishop's Canal at SN 4391 2076.
- +148/2.3. Lemna trisulca (Ivy-leaved Duckweed) (Llinad Dail Eiddew). Pendine MOD Ranges, SN2813 0772, BSBI Meeting, det. C.D.Preston, 16th Jul 2023, bank of well vegetated Witchett Pill; (+) Bishops Pond, Abergwili, SN4425 2084, C.D.Preston, R.D.& K.A.Pryce, det. C.D.Preston, 14th Jul 2023, vegetated margin of western part of Pond.
- +‡148/2.4. Lemna minuta (Least Duckweed) (Llinad Bach). Gilfach lago restored opencast site, nr. Saron, SN6037 1290, R.D.Pryce, 4th Oct 2023, Lemna minor and L. minuta completely covering the surface of small eutrophic attenuation lagoon in disturbed ground.
- +152/01.1. Eriophorum angustifolium (Common Cottongrass) (Plu'r Gweunydd). Marros Mountain, SN1987 0952, Jo Parmenter & D.P.Lester, 3rd May 2023.
- +152/02.2.c. **Trichophorum germanicum ss** (Deergrass) (Clwbfrwynen y Mawn). Marros Mountain, SN1956 0972, Jo Parmenter & D.P.Lester, 3rd May 2023, also at SN 1988 0947.
- +152/16.01. **Carex paniculata** (Greater Tussock-sedge) (Hesgen Rafunog Fawr). Aber Dyfnant, SN2131 3005, R.D.Pryce & K.A.Pryce, 23rd Aug 2023, one large plant in wet, nutrient-rich, tall-herb vegetation on river floodplain on Carms bank of Afon Taf.
- +152/16.05×15. Carex ×pseudoaxillaris. Tumble Community Woodland, SN5381 1266, Llanelli Naturalists meeting, det. R.D.Pryce, 17th Jun 2023, 1 plant on west side of track.
- +152/16.27. **Carex pseudocyperus** (Cyperus Sedge) (Hesgen Gynffonnog). Penstacan, Cilycwm, SN7481 4103, West Wales Biodiversity Information Centre recording meeting, det. R.D.Pryce, 28th Jun 2023, scattered plants around margins of pond originally excavated in 1997, dry at time of visit after prolonged dry weather. Also at least one large clump (c.3+m x 1m) by smaller pond at SN 7476 4088.
- +152/16.28. **Carex rostrata** (Bottle Sedge) (Hesgen Ylfinfain). Marros Mountain, SN1990 0948, Jo Parmenter & D.P.Lester, 3rd May 2023.
- +152/9.1. **Eleogiton fluitans** (Floating Club-rush) (Clwbfrwynen Arnofiol). Telpyn Point, SN186 073, Jo Parmenter, 3rd May 2023, also recorded by Jo Parmenter & D.P.Lester on Marros Mountain at SN 1987 0952 on the same date.

- +153/17.1. Briza media (Quaking-grass) (Crydwellt). Rhydargaeau, SN438 262, Alison Fraser, 25th Jun 2023, in field.
- +153/26.1. Avenula pubescens (Downy Oat-grass) (Ceirchwellt Blewog). Llanelli Railway Goods Shed, SS5116 9932, R.D.Pryce & K.A.Pryce, 5th Jun 2023, verges of access road within conservation site, also at SS 5117 9933.
- +153/26.2. Avenula pratensis (Meadow Oat-grass) (Ceirchwellt y Ddôl). Gilman Point, SN228 076, Jo Parmenter & D.P.Lester, 1st May 2023, .
- +153/40.1. **Calamagrostis epigejos** (Wood Small-reed) (Corsen Fach y Coed). Gilfach Iago restored opencast site, nr. Saron, SN6051 1300, R.D.Pryce, 4th Oct 2023, stand c.7m x 3m on vegetated sub-soil bund with tall herb ephemeral/ruderal dumped/introduced and colonising species.
- +©153/60.tur. **Triticum turgidum** (Rivet Wheat) (Gwenith Barfog). Corner of St Peter's car park, Carmarthen, SN4140 2039, I.K.Morgan, 8th Sep 2023, overgrown area next to informal path; presumably from bird seed?
- +‡158/31.1. Leucojum aestivum (Summer Snowflake) (Eirïaidd yr Haf). Nr. Whitemill, SN4639 2140, R.D.Pryce, 19th May 2023, one small clump established on embankment slope on south side of A40 road.
- +161/1.1. **Tamus communis** (Black Bryony) (Cwlwm y Coed). Cynghordy, SN801 405, Laura Moss, 30th Jun 2023, road verge.
- +162/14.1. Anacamptis pyramidalis (Pyramidal Orchid) (Tegeirian Bera). Tumble Community Woodland, SN5426 1274, Llanelli Naturalists meeting, det. R.D.Pryce, 17th Jun 2023, 2 plants, one in fresh flower, one desiccated.
- +162/20.3. Anacamptis morio ([Greenwinged Orchid]) (Tegeirian y Waun). Cilcattw, Felingwm, SN5162 2645, Theresa Greenaway, 4th May 2023, in soil with limestone chippings underlying it



Anacamptis pyramidalis new to the site & hectad at Tumble Community Woodland, 2023. © R.D.Pryce

PEMBROKE, v.c.45 (comm. S.B. Evans)

‡019/1.1. Azolla filiculoides (Water Fern) (Rhedynen y Dŵr). Esgyrn Bottom, Llanychaer, SM97613 34578, Stephen & Anne Coker, 28th Aug 2023, azolla had colonised an extensive open water area created by damming the margins of the raised bog to enhance the water table of the central dome. The work had been done in late 2022. Also found in the same hectad at SM9049 3894 by Nigel Lee at Penpark, Llanwnda in a large standing water body on 5th November 2023.

- +‡047/1.07.© **Persicaria amplexicaulis** (Red Bistort) (Y Ganwraidd Goch). Begelly, SN1167 0703, Nigel Lee, 30th Sep 2023, base of hedge.
- +075/19.10.b. Alchemilla filicaulis subsp. vestita (Mantell-Fair Flewog). Nash, Hook, SM973 108, John Steer & Robin Taylor, det. Robin Taylor, 14th Oct 2023, quite a lot of plants growing in one spot in a cattle grazed unimproved species-rich meadow. John had known Alchemilla from the field for several years but it was not given a specific name until this visit. Briza media and Succisa pratensis also present.
- +135/08.1. **Silybum marianum** (Milk Thistle) (Ysgallen Fair). SW of Sandy Haven, SM8485 0627, Nigel Lee, 25th Nov 2023, first in hectad since 1984 when it was at Angle on the opposite side of Milford Haven.
- 162/10.1. Hammarbya paludosa (Bog Orchid) (Tegeirian Bach y Gors). Carningli, SN059 377, Dan Guest, Karen Wilkinson & S.B.Evans, 17th Aug 2023, tiny non-flowering Hammarbya paludosa were present where it had been first found by lan Smith on 06091983 at SN059377. At that time there had been 3 flower spikes and about 17 vegetative plants along along 40-50m of an extensive flush by a small stream on the northern slopes below the summit of Carningli. Searches had been made in subsequent years for flowering plants without success. In 2023 no flower spikes were found despite a very thorough search. 6 tiny bulbils were found between SN05976 37734 and 05972 37729 at 17cm accuracy. In addition bulbils were found at a major spring-head at the top of the extensive flush complex at SN05931 37561.
- +162/23.3. **Ophrys apifera** (Bee Orchid) (Tegeirian y Wenynen). Sydney Rees Way, Haverfordwest, SM95711 16581, Trevor Theobald, 2021, bee orchids have been present on the NW side of the road just up the hill from the northbound bus shelter, first recorded 2021, 20-30 flowering spikes each year since

CARDIGAN, v.c.46 (comm. S.P. Chambers)

- 001/3.1. Lycopodium clavatum (Stag's-horn Clubmoss) (Cnwp-fwsogl Corn Carw). Dry bank beside stream, S of Llyn Gron c. 200 m W of Llyn Teifi, SN778 675, O. Glenister, 3rd Jul 2023, new site & tetrad for this VC-local axiophyte previously unrecorded from the Teifi pools area; Disgwylfa Fach, c. 1 km NE of Bog Pond, SN734 833, P. & G. Foulkes, 13th Aug 2023, one plant in rough upland grassland. New tetrad record for VC-local axiophyte & unrecorded before on Disgwylfa Fach.
- +004/1.4. **Equisetum fluviatile** (Water Horsetail) (Marchrawnen y Dŵr). W-bank of Llyn Brianne reservoir on the N-arm of the Afon Tywi S of the roadbridge c. 100 m NNE of Hafdre, SN804 537, S.P. Chambers, 1st Aug 2023, locally frequent in inundation-zone vegetation on riverbank. The 1st hectad record for the VC46 part of SN85.
- *004/1.5×9. Equisetum ×robertsii (E. arvense × E. telmateia) (Marchrawnen Roberts). Sandy slope at edge of sand quarry, Penparc sand quarry, c. 1.5 km NE of Cardigan, SN203 485, M.D. Sutton, 28th Jul 2023.
- +004/1.8. **Equisetum palustre** (Marsh Horsetail) (Marchrawnen y Gors). W-bank of Llyn Brianne reservoir on the N-arm of the Afon Tywi S of the roadbridge c. 100 m NNE of Hafdre, SN804 537, S.P. Chambers, 1st Aug 2023, occasional to locally frequent in inundation-zone vegetation on riverbank. The 1st hectad record for the VC46 part of SN85.

- +006/1.1. **Osmunda regalis cv. 'Purpurascens'** (Royal Fern) (Rhedynen Gyfrdwy). SW-side of the Nant y March, Capel Betws Lleucu, SN607 581, S.P. Chambers, 20th May 2023, large, c. 5 ft tall clump established where planted in streamside woodland. The 1st time this cv., which has gaudy lavender-purple fronds, has been noted in the VC.
- 006/1.1. **Osmunda regalis** (Royal Fern) (Rhedynen Gyfrdwy). NE-side of the Afon Doethie, below Foel Fraith, SN769 514, D. Hawkins, 19th Aug 2023, one small plant below path in damp upland grassland on steep slope above river. Recorded only once before in the VC from an upland site >50 years ago in c. 1969, c. 2.5 km to the east by Llyn Brianne at c. SN798511.
- 011/1.1×2. **Polypodium ×mantoniae**. Silian, SN565 512, S.P. Chambers, 25th Mar 2023, strong colony over c. 2x1m of N-facing bank under trees by property. Only the 2nd tetrad for the hectad & the 1st post-1986 hectad record.
- 016/4.1. **Gymnocarpium dryopteris** (Oak Fern) (Rhedynen Dridarn). SW-side of the Nant y March, Capel Betws Lleucu, SN608 580, S.P. Chambers, 20th May 2023, colonies c. 3 x 3 m & 4 x 2 m in streamside woodland. New tetrad for VC-local axiophyte. Previously recorded higher up the Nant y March dingle by A.O. Chater in 1978-1995.
- 016/4.2. **Gymnocarpium robertianum** (Limestone Fern) (Rhedynen y Calchfaen). Mynach Vale (former lead mine), c. 3 km ENE of Devil's Bridge/Pontarfynach, SN771 775, D.L. Davies, 24th Jun 2023, nine fronds on old mortared wall. The only VC-site, last seen here in 2004 & feared lost due to vegetation overgrowth.
- +‡020/7.peu. **Pinus peuce** (Macedonian Pine) (Pinwydden Macedonia). c. 0.5 km SW of Trefenter, SN596 680, S.P. Chambers & P. Milner, det. S.P. Chambers, 16th Aug 2023, one large sapling, c. 12 ft tall, planted c. 20 years ago from tree grown from seed collected from a tree in Bristol (fide P. Milner) on N-edge of former conifer block under reversion to mixed woodland.
- +†030/1.4. **Papaver rhoeas** (Common Poppy) (Pabi Coch). SE-side of minor road between cattle grid & roadbridge over the Afon Tywi, c. 150 m NNE of Hafdre, SN803 537, S.P. Chambers, 1st Aug 2023, five plants growing on mounds of dumped gravelly-stony soil beside road. Associated with a range of other improbable species in this remote upland locality, undoubtedly from 'wildflower seed bombing/Guerilla-gardening'.
- +031/5.01.b. **Fumaria capreolata subsp. babingtonii**. Goyallt farm, c. 1 km SSW of Llangeitho, SN616 590, S.P. Chambers & Aberystwyth Botanical Society members, det. S.P. Chambers, 2nd Jul 2023, one plant in plant pot by wall in farmyard. A bizarre, non-native occurrence of a VC-rare native growing in a plant pot that originally had a different ornamental plant in it brought in from Pembs (fide S. Fleiss).
- 046/01.1. **Arenaria serpyllifolia** (Thyme-leaved Sandwort) (Tywodlys Dail Teim). Newman's garden centre, Capel Dewi, SN626 823, S.P. Chambers, 27th Aug 2023, one quite large 'bushy' plant on gravel by storage pallets. Only the 2nd tetrad for the hectad.
- +046/10.3. **Sagina subulata** (Heath Pearlwort) (Corwlyddyn Mynawydaidd). Dalar-wen plantation, Tywi forestry, c. 1 km NW of Llyn Brianne, SN790 507, S.P. Chambers, 14th Jun 2023, colony of at least c. 50+ plants over c. 5x4m on wide edge of forestry track. New VC alt-limit of 400 m (was 390 m).
- +046/10.7. **Sagina apetala** (Annual Pearlwort) (Corwlyddyn Unflwydd). fields above the Nant Fleinog c. 1 km SE of Tregaron, SN690 583, S.P. Chambers & Aberystwyth Botanical Society

members, det. S.P. Chambers, 18th Jun 2023, four plants on concrete rubble hardsurfacing of trackway between rhôs pastures.

- +†046/19.1. **Agrostemma githago** (Corncockle) (Bulwg yr Ŷd). SE-side of minor road between cattle grid & roadbridge over the Afon Tywi, c. 150 m NNE of Hafdre, SN803 537, S.P. Chambers, 1st Aug 2023, c. 4 plants growing on mounds of dumped gravelly-stony soil beside road. Associated with a range of other improbable species in this remote upland locality, undoubtedly from 'wildflower seed bombing/Guerilla-gardening'.
- +047/1.11. **Persicaria maculosa** (Redshank) (Y Ganwraidd Goesgoch). Scraped edge of muddy track crossing upland grassland, S-end of Craig yr Hafdre, c. 100 m WNW of Hafdre, SN802 536, S.P. Chambers, 9th Aug 2023, one plant on. The 1st hectad record for the VC46 part of SN85 since 1970. Appearing to have been brought in as seed on tracks of machines undertaking tree planting on the hillside here.
- +051/1.07.b. **Hypericum maculatum subsp. obtusiusculum**. N-side of the Nant yr Helm on the W-side of the Llyn Brianne reservoir, SN802 531, S.P. Chambers, 9th Aug 2023, one fine patch, perhaps c. 2-3 individual plants with several stems in total, associated with Betonica officinalis & Sanguisorba officinalis, inter alia, on flushed slope above stream. The 1st hectad record for the VC46 part of SN85.
- +051/1.14.‡ Hypericum hirsutum (Hairy St John's-wort) (Eurinllys Blewog). Llandre (Llanfihangel-genau'r-glyn), SN624 865, A.C. Williamson, 27th Jun 2023, one plant with multiple (c. 5) stems on roadside verge. Seen again by ACW here on 23 August 2023 when it was regrowing after being cut. Presumably an escapee from some nearby garden as not native in the VC. The 2nd certain VCR.
- *‡053/2.2. **Malva multiflora** (Smaller Tree-mallow) (Hocyswydden Fach). Llanrhystud sewage treatment works, SN532 693, H.F. Clow & S.P. Chambers, det. S.P. Chambers, conf. F. Rumsey (on 19/9/2023), 19th Aug 2023, a few plants in dry grassland. First discovered & reported here by T.G.J. Rayner on 25/7/2020, but only just confirmed (by Fred Rumsey), **Herb. SPC**
- 057/1.11. **Viola lutea** (Mountain Pansy) (Trilliw y Mynydd). Disgwylfa Fach, c. 1 km NE of Bog Pond, SN734 834, P. & G. Foulkes, 13th Aug 2023, one plant in rough upland grassland. New tetrad record for VC-local axiophyte & unrecorded before on Disgwylfa Fach.
- 057/1.11.e **Viola lutea var. elegans** (Mountain Pansy) (Trilliw y Mynydd). S-flank of Craig yr Hafdre, c. 150 m WNW of Hafdre, SN802 536, S.P. Chambers, 1st Aug 2023, c. 3 plants, in dry NVC U4-type upland grassland. New tetrad record & the 1st hectad record since 1987 at least for the VC46 part of SN85.
- 061/2.03.vit. **Salix alba var. vitellina** (Golden Willow). Allt Esgair-Arth, between Aberarth & Esgair Arth, SN484 630, S.P. Chambers & L. Spencer, det. S.P. Chambers, 16th May 2023, female tree with sizeable trunk in hedge at NW-edge of field. Unusual hedgerow occurrence.
- 062/12.3. **Rorippa islandica** (Northern Yellow-cress) (Berwr Melyn Gogleddol). fields above the Nant Fleinog c. 1 km SE of Tregaron, SN690 583, S.P. Chambers & Aberystwyth Botanical Society members, det. S.P. Chambers, 18th Jun 2023, three plants on concrete rubble hardsurfacing of trackway between rhôs pastures. New tetrad for VC-scarce plant.
- ‡062/14.4. Cardamine raphanifolia (Greater Cuckooflower) (Blodyn Llefrith Mawr). Afon Llethi below Coed Blaen-wern, c. 1.3 km SE of Llanarth, SN426 564, S.P. Chambers, 25th Sep

2023, at least c. 5 patches, c. 1-2 x 1 m, along c. 200 m in disturbed scrubby wet woodland on wet valley bottom floor. The 2nd VCR. Upstream of the Afon Llethi woodland dingle near Llanarth where it was 1st found in 2003 by AOC & where it still occurs. Also in SN427567. 062/22.2. **Erophila verna** (Common Whitlowgrass) (Llysiau'r-bystwn Cynnar).

- Pontrhydfendigaid village hall, SN730 667, S.P. Chambers, 1st Apr 2023, locally occasional plants on tarmac edge of car park. A far inland record, a new tetrad & only the 2nd tetrad for the hectad.
- +‡062/31.2. **Lepidium didymum** (Lesser Swine-cress) (Olbrain Bach). Cwm Rheidol mine, SN728 781, L. Moss, det. S.P. Chambers, 13th Jul 2023, one patch on bank of flood attenuation lagoon. Almost certainly imported on machinery working on recently enlarged lagoon.
- *073/5.hyb. Sedum hybridum (Siberian Stonecrop). Capel Pant-y-Defaid, Pren-Gwyn, SN425 442, S.P. Chambers, 16th Sep 2023, single plant appearing self-seeded on earthy top of burial plot in graveyard. herb. SPC
- 075/06.1.**‡ Filipendula vulgaris** (Dropwort) (Y Grogedau). Capel Horeb, Penrhyn-coch, SN650 841, S.P. Chambers, 3rd Nov 2023, in one place on narrow, grassy bank above pathway in grassland in chapel graveyard. New site, & only the 2nd tetrad & 1st post-1970 record for SN68.
- +075/09.15. **Potentilla reptans** (Creeping Cinquefoil) (Pumnalen Ymlusgol). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, patch c. 1 x 0.5 m, on W-verge of minor road. The 1st hectad record for the VC46 part of SN85 since 1987.
- ‡075/12.1. Potentilla indica (Yellow-flowered Strawberry) (Llwyn Mefus Melyn). between Victoria St. & Mason's Rd, Aberaeron, SN460 630, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 19th Aug 2023, several patches along narrow alley way.
- 075/13.1. **Geum rivale** (Water Avens) (Mapgoll Glan y Dŵr). western stream at Pistyll y llyn, c. 0.5 km E of Pen Creigiau'r Llan, SN753 942, D.L. Davies, 21st Jul 2023, under wet rock overhang. Recorded here by Salter in 1904 & seems to be the 1st record at Pistyll y llyn since then.
- 075/13.1×2. **Geum ×intermedium** (Hybrid Avens) (Mapgoll Groesryw). SW-side of the Nant y March, Capel Betws Lleucu, SN607 581, S.P. Chambers, 20th May 2023, one plant with four stems in pathside glade in streamside woodland. The 3rd VCR, but near the 1st. Previously recorded by A.O. Chater higher up the dingle at SN607578 in 1978.
- ‡075/13.3. Geum macrophyllum (Large-leaved Avens) (Mapgoll Fawr)). below Tanybwlch mansion, c. 1.5 km S of Aberystwyth, SN582 793, S.P. Chambers, 14th Apr 2023, 3 plants on edge of muddy footpath. New tetrad; Coed Tamsin (Flat Covert), Nanteos, SN626 785, S.P. Chambers, 7th May 2023, occasional plants along edge of woodland track. New tetrad & continuing spread; below Coed Ty-llwyd, Rheidol Visitor Centre, near Cwm Rheidol reservoir, SN702 795, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 6th May 2023, frequent plants along c. 100 m of forestry track edge. New tetrad & continuing spread. Also in SN703795.
- +‡075/17.3.b. **Poterium sanguisorba subsp. balearicum** (Fodder Burnet) (Bwrned Ebran). Capel Tabernacl, Cwmsymlog, SN697 838, S.P. Chambers, 23rd Oct 2023, single plant at foot of headstone in chapel graveyard.

- +‡075/19.15. Alchemilla mollis (Garden Lady's-mantle) (Mantell-Fair y Gerddi). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, frequent plants alongside roadside verge. The 1st hectad record for the VC46 part of SN85.
- 075/28.24. **Sorbus torminalis** (Wild Service-tree) (Cerddinen Wyllt). Allt-y-Gigfran, Cwm Rheidol, SN725 780, S.P. Chambers, 13th Jul 2023, two recently planted saplings on trackside in forestry plantation. With labels reading 'Dingle Nurseries, Welshpool'.
- +‡075/33.1. **Pyracantha coccinea** (Firethorn) (Llosgddraenen). SW-side of the Nant y March, Capel Betws Lleucu, SN607 581, S.P. Chambers, 20th May 2023, bush c. 4 ft tall, established perhaps vegetatively rather than bird-sown as on former bonfire site used for garden refuse, in streamside woodland. The 2nd VCR.
- 077/14.01. Vicia orobus (Wood Bitter-vetch) (Ffacbysen Chwerw). between Ffosgoy & Lledrod, c. 1 km SE of Lledrod, SN651 692, D.L. Davies, 28th Jul 2023, two plants on roadside bank. New tetrad for VC-scarce axiophyte.
- 077/14.02. Vicia cracca (Tufted Vetch) (Ffacbysen y Berth). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, frequent on roadside verge. The 1st hectad record for the VC46 part of SN85 since 1970.
- +077/15.04. Lathyrus pratensis (Meadow Vetchling) (Ytbysen y Ddôl). by Hafdre on the Wside of the N-arm of the Llyn Brianne reservoir, SN801 532, S.P. Chambers, 1st Aug 2023, frequent along c. 20m on flowery verges beside minor road. The 1st hectad record for the VC46 part of SN85.
- 077/19.01. **Trifolium ornithopodioides** (Bird's-foot Clover) (Corfeillionen Wen). Ynys-las dunes NNR, SN608 938, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 29th May 2023, a few plants in gently sloping sandy grassland in dune slack. Last seen in the main slack at Ynys-las dunes 40 years ago in 1983; Searivers' caravan park, Ynys-las, SN611 937, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 29th May 2023, three plants growing with Erodium maritimum on dry gravelly ground by waste bins. New site for VC-scarce plant.
- +077/19.14. **Trifolium pratense** (Red Clover) (Meillionen Goch). by Hafdre on the W-side of the N-arm of the Llyn Brianne reservoir, SN801 532, S.P. Chambers, 1st Aug 2023, frequent along flowery verges beside minor road. The 1st hectad record for the VC46 part of SN85.
- 077/19.15. **Trifolium medium** (Zigzag Clover) (Meillionen Igam-ogam). Pencae chapel, c. 1 km SE of Llanarth, SN431 566, S.P. Chambers, 25th Sep 2023, a few patches in grassland in graveyard. New site & tetrad for VC-uncommon plant.
- ‡077/19.19.a. Trifolium incarnatum subsp. incarnatum (Crimson Clover) (Meillionen Waetgoch). Banc y Pennau, Rhydypennau, c.0.5 km NE of Bow Street, SN631 857, D.L. Davies, 1st Oct 2023, appearing from 'wildflower seed mix' on roadside embankment.
- +077/23.4. **Cytisus scoparius** (Broom) (Banhadlen). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, one c. 2 ft tall bush on roadside verge. The 1st hectad record for the VC46 part of SN85.
- 081/1.1. Lythrum salicaria (Purple-loosestrife) (Llysiau'r-milwr Coch). Newman's garden centre, Capel Dewi, SN626 823, S.P. Chambers, 27th Aug 2023, locally frequent plants on gravelly ground by storage pallets. New tetrad & interesting record from an artificial synanthropic habitat but not far from natural populations on the Afon Rheidol c. 1 km to the S.

- +084/6.1. **Circaea lutetiana** (Enchanter's-nightshade) (Llysiau Steffan). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, colony, c. 6 x 1 m, on W-side of roadside verge. The 1st hectad record for the VC46 part of SN85 & new VC alt-limit of 310 m (was 300 m).
- 088/1.1. **Euonymus europaeus** (Spindle) (Piswydden). Side of small stream, nr. Grogwynion, c. 2 km E of Llanafan, SN707 720, M.D. Sutton, 7th Nov 2023, new tetrad for a plant that is uncommon inland in the VC.
- +‡094/1.2.© Linum usitatissimum (Flax) (Llin). NW-side of the A487(T) in Llanarth, SN425 578, S.P. Chambers, 29th Sep 2023, three plants (in seed), with Hordeum distichon, on edge of carriageway.
- +094/1.4. Linum catharticum (Fairy Flax) (Llin y Tylwyth Teg). above SW-end of Falcondale Lake, c. 1.5 km NW of Lampeter, SN568 498, S.P. Chambers, 18th May 2023, one plant, in dry, sheep & goose-grazed pasture. The 1st hectad record at least for the VC46 part of SN54; (+) NW-side of minor road by cattle grid above roadbridge over the Afon Tywi, c. 150 m NNE of Hafdre, SN803 537, S.P. Chambers, 1st Aug 2023, locally abundant in base-rich grassland on upland roadside. The 1st hectad record for the VC46 part of SN85.
- +‡105/1.4. Impatiens glandulifera (Indian Balsam) (Jac y Neidiwr). Wet ground, Yr Ochrydd by the Nant Nod, c. 0.75 km WSW of Eisteddfa Gurig, SN791 839, J.M. Parmenter, 9th Oct 2023, new hectad record at least for the VC46 part of SN78 & new VC alt limit of 480 m (was 320 m); (+) scraped edge of muddy track crossing upland grassland, S-end of Craig yr Hafdre, c. 100 m WNW of Hafdre, SN802 536, S.P. Chambers, 9th Aug 2023, one incongruouslooking, short, c. 2 ft tall, plant on. The 1st hectad record for the VC46 part of SN85. Appearing to have been brought in as seed on tracks of machines undertaking tree planting on the hillside here.
- 107/34.2. **Carum verticillatum** (Whorled Caraway) (Carwy Droellennog). Orchid Meadows, Tyn'reithin, SN660 620, D.L. Davies, 16th Jul 2023, one plant in rhôs pasture. New tetrad record for VC-local axiophyte.
- +107/41.1. Heracleum sphondylium (Hogweed) (Efwr). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, one plant on roadside verge. The 1st hectad record for the VC46 part of SN85.
- +‡110/8.7. **Solanum tuberosum** (Potato) (Taten). Felin y Mor below Pen Dinas, c. 0.5 km S of Aberystwyth, SN581 803, C. Griffiths, 14th Sep 2023, one plant in flower on grassy bank.
- +‡115/1.1.© **Phacelia tanacetifolia** (Phacelia) (Ffaselia). Banc y Pennau, Rhydypennau, c.0.5 km NE of Bow Street, SN631 857, D.L. Davies, 1st Oct 2023, appearing from 'wildflower seed mix' on roadside embankment.
- 116/17.1. **Cynoglossum officinale** (Hound's-tongue) (Tafod y Bytheiad). Waungau Cottages, between Waun Fawr & Comins Coch, c. 2 km E of Aberystwyth, SN609 821, M. Moylett, conf. S.P. Chambers, 1st Jun 2023, one plant on patch of gravelly ground in garden. An interesting, non-deliberate introduction of Hound's-tongue, vectored (aptly) by a wolfhound walked regularly at Ynys-las dunes where the plant is at its only native site in the VC.
- +‡118/16.1. **Melissa officinalis** (Balm) (Balm). by Capel Pant-y-Defaid, Pren-Gwyn, SN425 442, S.P. Chambers, 16th Sep 2023, one plant at base of old stonebank on edge of road. The 1st hectad record at least for the VC46 part of SN44.

- 124/02.2. **Scrophularia auriculata** (Water Figwort) (Gwrnerth y Dŵr). Afon Llethi below Coed Blaen-wern, c. 1.3 km SE of Llanarth, SN427 567, S.P. Chambers, 25th Sep 2023, patch c. 2 x 1 m on eroding riverbank in woodland. New site & tetrad; woodland between Plas Cwmcynfelin & Cwm Cottage, SN605 832, S.P. Chambers, 21st Feb 2023, locally frequent over at least c. 12 x 6 m on ground disturbed by machinery on either side of woodland track. New site & tetrad for this increasing species.
- +124/16.09. Veronica scutellata (Marsh Speedwell) (Rhwyddlwyn Culddail y Gors). W-bank of Llyn Brianne reservoir on the N-arm of the Afon Tywi S of the roadbridge c. 100 m NNE of Hafdre, SN804 537, S.P. Chambers, 1st Aug 2023, rare in inundation-zone vegetation on riverbank. The 1st hectad record for the VC46 part of SN85.
- +124/20.05.b. **Euphrasia arctica subsp. borealis**. verges of minor road above roadbridge over the Afon Tywi, c. 5 - 100 m NNE of Hafdre, SN801 532, S.P. Chambers, 1st Aug 2023, locally common in dry grassland on upland roadside. The 1st hectad record for the VC46 part of SN85.
- +124/20.07. **Euphrasia nemorosa** (Effros). verges of minor road above roadbridge over the Afon Tywi, c. 5 100 m NNE of Hafdre, SN801 532, S.P. Chambers, 1st Aug 2023, occasional in dry grassland on upland roadside. The 1st hectad record for the VC46 part of SN85.
- +124/20.09. **Euphrasia confusa** (Effros Gliniog). S of Llyn Gron, c. 200 m W of Llyn Teifi, SN778 675, O. Glenister, 3rd Jul 2023, colony of c. 5 10 plants in dry grassland on streambank.
- +125/1.1. Lathraea squamaria (Toothwort) (Deintlys). below Coed Ty-llwyd, Rheidol Visitor Centre, near Cwm Rheidol reservoir, SN697 796, C. deCarle, conf. S.P. Chambers, 05052023, 1st May 2023, 3 plants, seemingly on Prunus spinosa, in scrub patch on path edge. The 3rd extant site for the vice-county & a new host.
- +130/6.07. **Galium album** (Hedge Bedstraw) (Briwydd y Clawdd). below Cardigan castle, Cardigan, SN177 458, Y.J. Samari, conf. S.P. Chambers (from digital photos), 27th Mar 2023, several plants on grass verge. Likely from 'wildflower' seed mix. 1st hectad record at least for the Cards part of SN14.
- 135/05.4. **Carduus nutans** (Musk Thistle) (Ysgallen Bendrom). c.100 m SW of Ty'n-y-cwm, c. 0.75 km NE of Penrhyn-coch, SN646 849, S.P. Chambers, 5th Nov 2023, one rosette in S-facing dry grassland in cattle-grazed pasture. New site & only the 2nd tetrad for SN68.
- +†135/11.3. **Centaurea cyanus** (Cornflower) (Glas yr Ŷd). SE-side of minor road between cattle grid & roadbridge over the Afon Tywi, c. 150 m NNE of Hafdre, SN803 537, S.P. Chambers, 1st Aug 2023, c. 18 plants growing on mounds of dumped gravelly-stony soil beside road. Associated with a range of other improbable species in this remote upland locality, undoubtedly from 'wildflower seed bombing/Guerilla-gardening'.
- +135/12.1. Cichorium intybus (Chicory) (Ysgellog). c. 0.5 km S of Morfa, Llanrhystud, SN526 692, H.F. Clow & S.P. Chambers, det. S.P. Chambers, 19th Aug 2023, several plants, dwarfed from having been driven over, on dry grassland on verge on side of minor road. The 1st record for SN56 for 117 years since Salter recorded it by the Wyre in cornfields here in 1906.
- 135/16.2. **Leontodon hispidus** (Rough Hawkbit) (Peradyl Garw). Allt-y-Gigfran, Cwm Rheidol, SN725 780, Y.J. Samari, 13th Jul 2023, colony of c. 5 plants over c. 1x2 m on track in forestry plantation. Unusual habitat for the species in the VC.
- +135/16.3. Leontodon saxatilis (Lesser Hawkbit) (Peradyl Bach). above SW-end of Falcondale Lake, c. 1.5 km NW of Lampeter, SN568 498, S.P. Chambers, 18th May 2023, in local

abundance in dry grassland, tightly grazed by sheep, Canada Geese & their goslings. The 1st hectad record at least for the VC46 part of SN54; pasture below the Allt-goch hillfort, c. 1.5 km SW of Tal-y-bont, SN642 883, S.P. Chambers, 25th Jul 2023, locally very abundant on dry, SE-facing slope of NVC U1f (Hypochaeris radicata sub-community) grassland. New tetrad for a species that is rare in the VC away from the coast.

- +135/22.1.int. Lactuca serriola f. integrifolia. W-side of the A487(T) near the Afon Wyre, Llanrhystud, SN539 697, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 19th Aug 2023, one plant on edge of pavement.
- +‡135/27.6.b. **Pilosella aurantiaca subsp. carpathicola**. Nant y Neuadd, c. 0.5 km S of Hafdre, SN802 508, S.P. Chambers, 9th 2023, occasional plants along edge of forestry track. The 1st hectad record for the VC46 part of SN85 & new VC alt limit of 350 m (was 305 m).
- 135/43.sum. **Erigeron sumatrensis**. Newman's garden centre, Capel Dewi, SN626 823, S.P. Chambers, 27th Aug 2023, occasional plants on gravelly ground by storage pallets. The 4th VCR & a new tetrad.
- +‡135/44.1. **Conyza canadensis** (Canadian Fleabane) (Amrhydlwyd Canada). Mwldan Terrace, Cardigan, SN176 461, S.P. Chambers & D.J. Armstrong, det. S.P. Chambers, 6th Aug 2023, c. 4 plants at foot of wall. The 1st hectad record at least for the VC46 part of SN14.
- +135/55.2.a **Anthemia austriaca**. SE-side of minor road between cattle grid & roadbridge over the Afon Tywi, c. 150 m NNE of Hafdre, SN803 537, S.P. Chambers, 1st Aug 2023, c. 200+ plants growing on mounds of dumped gravelly-stony soil beside road. Associated with a range of other improbable species in this remote upland locality, undoubtedly from 'wildflower seed bombing/Guerilla-gardening'. The 5th VCR.
- 135/58.1. **Leucanthemum vulgare** (Oxeye Daisy) (Y Llygad-llo Mawr). Dalar-wen plantation, Tywi forestry, c. 1 km NW of Llyn Brianne, SN791 506, S.P. Chambers, 14th Jun 2023, c. 3 clumps on dry edge of forestry track. Only the 3rd tetrad for the hectad for a plant that is rare in the VC-uplands.
- *‡135/58.pal. Leucanthemum paludosum. N-side of Aberystwyth harbour just W of the Nend of Trefechan bridge, SN582 813, A.O. Chater, 1st Jan 2023, one plant at base of rather grubby wall on road verge, Herb. SPC
- +135/62.10. **Senecio jacobaea** (Common Ragwort) (Llysiau'r Gingroen). c. 300 m SSW of Hafdre, SN801 533, S.P. Chambers, 9th Aug 2023, c. 4 plants on roadside verge. The 1st hectad record for the VC46 part of SN85.
- +‡135/74.1.© Ambrosia artemisiifolia (Ragweed) (Bratlys). Beside path/cycle-path, nr. Pentood Marsh, Teifi Marshes, Cardigan, SN185 456, Y.J. Samari, conf. S.P. Chambers (from digital photos), 18th Sep 2023, the 1st hectad record at least for the VC46 part of SN14, herb. Samari
- +‡147/2.1. Lysichiton americanus (American Skunk-cabbage) (Pidyn-y-gog Americanaidd). Afon Rheidol, c. 300 m S of Plas Dolau, near Lovesgrove/Gelligemlyn, SN622 810, R.R. Bye, 4th Jun 2023, one plant on river edge. Presumably washed down from the population at Glanrhyd-ty-noeth just S of Capel Bangor c. 5 km upstream.
- +151/1.25. Juncus inflexus (Hard Rush) (Brwynen Galed). beside the Nant Tawelan, Silian, SN568 513, S.P. Chambers, 30th Mar 2023, c. 9 tussocks over c. 6x4m on rough brambly edge of marshy grassland adjacent to mown amenity grassland. Outwith its native range & likely introduced, perhaps on machinery used for cutting the grassland.

- 152/16.32. **Carex sylvatica** (Wood-sedge) (Hesgen y Coed). c. 300 m SSE of Troed-rhiwruddwen, SN771 476, S.P. Chambers, 5th Jun 2023, colony c. 3 x 1 m plus small outliers in dry bluff in woodland. New tetrad & SE-most location in the VC where the species is rare.
- +152/16.39. **Carex laevigata** (Smooth-stalked Sedge) (Hesgen Lefn). Riverside vegetation, Sbank of the Afon Ystwyth below Yr Allt, Cwmystwyth, SN840 754, D.L. Davies, 25th Jun 2023, the 1st hectad record at least for the VC46 part of SN87.
- +152/3.1.a. **Eleocharis palustris subsp. vulgaris**. W-bank of Llyn Brianne reservoir on the Narm of the Afon Tywi S of the roadbridge c. 100 m NNE of Hafdre, SN804 537, S.P. Chambers, 1st Aug 2023, stand c. 5 x 1 m, in inundation-zone vegetation on riverbank. The 1st hectad record for the VC46 part of SN85.
- 153/12.04. **Festuca altissima** (Wood Fescue) (Peiswellt y Coed). Crags in river gorge, gorge of the Afon Ystwyth below Craig Golomennod, W of Pont-rhyd-y-groes, SN733 720, M.D. Sutton, 27th Jul 2023, new site for VC-rare plant.
- 153/35.1. **Aira caryophyllea** (Silver Hair-grass) (Brigwellt Arian). Dalar-wen plantation, Tywi forestry, c. 1 km NW of Llyn Brianne, SN790 507, S.P. Chambers, 14th Jun 2023, locally frequent, with Vulpia bromoides, along c. 40 m of dry edge of forestry track. Only the 2nd tetrad for the hectad.
- ‡153/43.1. Lagurus ovatus (Hare's-tail) (Cynffon Ysgyfarnog). Park Avenue, Aberystwyth, SN584 815, D. Ardeshir & R.A. Jones, 2nd May 2023, one plant on pavement. The 2nd VCR. The very same plant independently reported by DA & RAJ within c. 2 hours of each other!
- 153/46.1.[©] **Polypogon monspeliensis** (Annual Beard-grass) (Barfwellt Unflwydd). Pavement, Waunfawr, Aberystwyth, SN603 820, O. Glenister, 3rd Jul 2023, the 6th VCR.
- +‡153/46.2. **Polypogon viridis** (Water Bent) (Barfwellt y Dŵr). Pont Bath-house, Cardigan, SN176 460, S.P. Chambers & D.J. Armstrong, det. S.P. Chambers, 6th Aug 2023, occasional tufts at foot of wall bases by car park. New tetrad; (+) Aberystwyth Road, Cardigan, SN180 465, S.P. Chambers & D.J. Armstrong, det. S.P. Chambers, 6th Aug 2023, occasional tufts at foot of walls beside pavement. The 1st record for Cardigan town & from the far SW-end of the VC.
- +153/50.3. **Bromus racemosus** (Smooth Brome) (Pawrwellt Llyfn). Plas-y-berllan, c. 1.5 km SE of Aberporth, SN278 502, S.P. Chambers, R.R. Bye & P. Smyth, det. S.P. Chambers, 3rd Jun 2023, very locally frequent over c. 30 x 20 m along SE-part of hay meadow. The field is a 'Coronation Meadow' to which hay from the Winllan SSSI meadow was brought post-2015 & where the grass has been recorded.
- 153/51.1. **Bromopsis ramosa** (Hairy-brome) (Pawrwellt Blewog). Afon Drywi, c. 0.75 km S of Llwyncelyn, SN442 588, S.P. Chambers, 10th Oct 2023, several plants scattered along streamside woodland. New site & tetrad for VC-local axiophyte; Arth dingle, c. 150 m S of Esgair Arth, SN488 627, S.P. Chambers & L. Spencer, det. S.P. Chambers, 16th May 2023, c. 5 clumps over c. 10x5m on upper wood edge under Quercus, with Allium ursinum, on WSWfacing wooded slope. New site & tetrad for VC-local axiophyte.
- 153/54.2. **Brachypodium sylvaticum** (False-brome) (Breichwellt y Coed). c. 300 m SSE of Troed-rhiw-ruddwen, SN771 476, S.P. Chambers, 5th Jun 2023, scattered plants over c. 10 x 30 m in oak wood. New tetrad & SE-most location in the VC where the species is rare.
- +‡153/62.1. **Cortaderia selloana** (Pampas-grass) (Peithwellt). Development site, land S of the health centre, Cardigan, SN176 464, M.D. Sutton, 27th Jul 2023, the 1st hectad record at

least for the VC46 part of SN14. The 5th VCR; (+) beside streamlet in forestry plantation, Allt-y-Gigfran, Cwm Rheidol, SN726 785, L. Moss, det. S.P. Chambers, 13th Jul 2023, one large tussock. Established by unknown means but probably planted. The 4th VCR.

- \$153/68.1. Echinochloa crus-galli (Cockspur) (Cibogwellt Rhydd). nr. Pentood Marsh, Teifi Marshes, Cardigan, SN186 455, Y.J. Samari, conf. S.P. Chambers (from digital photos), 18th Sep 2023, a few plants on rocky edge (old railway ballast) of cycle/footpath. Only the 2nd record of this alien grass from the S-end of the VC, herb. Samari
- +©153/SEC.cer. Secale cereale (Rye) (Rhyg). c. 200 m W of Goyallt farm, c. 1 km SSW of Llangeitho, SN615 591, S. Duller, S.P. Chambers, S. Fleiss & Aberystwyth Botanical Society members, det. S. Duller & S.P. Chambers, 2nd Jul 2023, on. Seen in two places (i) c. 3 clumps with c. 30 stems on old silage pit muck heap in field adjacent to barn, and (ii) c. 5 clumps on flattened heap of spent silage in field near the Afon Aeron. Also in SN612591. Only the 3rd VC record of Rye as a casual in the VC.
- +‡158/23.2. **Muscari armeniacum** (Garden Grape-hyacinth) (Clychau Dulas yr Ardd). St Sulien's church, Sulien, SN571 512, S.P. Chambers, 25th Mar 2023, two self-seeded plants on edge of path by bench by scrubby tump E of the church.
- +159/05.08.‡ Iris foetidissima (Stinking Iris) (Gellesgen Ddrewllyd). c. 0.5 km W of Ffos-y-ffîn, SN444 606, S.P. Chambers, 13th Feb 2023, c. 4 clumps on grass verge beside minor road.
- 162/03.4. **Epipactis helleborine** (Broad-leaved Helleborine) (Y Galdrist Lydanddail). Burial yard, Llandre old church, SN623 869, A.C. Williamson, 23rd Jul 2023, one plant. The 1st record for the tetrad since 1946.
- 162/07.3. **Spiranthes romanzoffiana** (Irish Lady's-tresses) (Troellig Wyddelig). Cors Fochno NNR, SN6--9--, J.P. Lyons & J. Morgan, Jul 2023, two spikes in wet field. New location remote from the 1st.
- 162/13.2 **Platanthera bifolia** (Lesser Butterfly-orchid) (Tegeirian Llydanwyrdd Bach). Orchid Meadows, Tyn'reithin, SN659 620, D.L. Davies, 16th Jul 2023, a couple of plants in rhôs pasture. New tetrad record for VC-scarce axiophyte.
- +162/18.2×5. **Dactylorhiza ×formosa**. Plas-y-berllan, c. 1.5 km SE of Aberporth, SN278 502, S.P. Chambers, R.R. Bye & P. Smyth, det. S.P. Chambers, 3rd Jun 2023, two plants, growing with both parents within c. 1 m distance, in hay meadow. The 5th VCR.
- +162/18.4×5. **Dactylorhiza ×insignis**. Plas-y-berllan, c. 1.5 km SE of Aberporth, SN278 502, S.P. Chambers, R.R. Bye & P. Smyth, det. S.P. Chambers, 3rd Jun 2023, occasional individuals in hay meadow. The 3rd VCR. Likely to have come from seed in hay brought from the Winllan SSSI meadow where the hybrid and/or introgressants occur.
- +162/20.3. **Anacamptis morio** ([Green-winged Orchid]) (Tegeirian y Waun). S-flank of Foel-y-Mwnt, SN194 520, S.P. Chambers, 9th May 2023, two short, rabbit-nibbled spikes in close pair on slope of dry S-facing, base-rich grassland. New for the hectad & the 1st record from the Mwnt area, surprisingly given the availability of suitable habitat on the Foel

MONTGOMERY, v.c.47 (comm. A.K. Thorne & Fiona Gomersall)

x+c1-1-vul Chara vulgaris (Common Stonewort). Upland lake, Llyn Gwyddior, SH93 07, Kate Thorne & Mark Lawley, det. N.F. Stewart, March 2024, 23rd Aug 2023, near NW shore, Specimen with AKT

- +027/1.1. **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). Lymore (Upper Pool), SO23 96, Gill Foulkes & Montgomeryshire Flora Group, 11th Aug 2023, in pool near east shore, vegetative.
- x+028/13.25.b. Ranunculus penicillatus subsp. pseudofluitans. Newtown, SO105 915, A.K. Thorne, det. R.V.H. Lansdown, Feb 20204, 2023, good stand in river rapids downstream of Dolerw bridge. Flowering/fruiting, Specimen with AKT
- *043/3.06. **Atriplex littoralis** (Grass-leaved Orache) (Llygwyn Arfor). Welshpool, SJ227 064, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 27th Jun 2023, at least one plant under crash barrier by layby. Non-native site.
- +046/20.04. **Silene vulgaris** (Bladder Campion) (Gludlys Codrwth). Machynlleth, SH70K, D. Elias, 2023, 30 plants on new grass verge, part of a seed mix; (+) Machynlleth, SH70K, D.O. Elias, 2023, component of the meadow seed mix used, 30 plants on new grass road verge.
- ¤+050/1.1. Elatine hexandra (Six-stamened Waterwort) (Gwybybyr Chwebrigerog). Llyn Hir, SJ02 05, Kate Thorne, Martin Beaton & Montgomeryshire Flora Group, conf. A.O. Chater, 12th Jul 2023, east and north-east margin of lake, fruiting. Photo of fruit supplied, Specimen with AKT
- +051/1.06×07. Hypericum ×desetangsii (H. perforatum × H. maculatum) (Des Etangs' St John's-wort) (Eurinllys Des Etangs). Machynlleth (A487), SN7288 9976, J.M. Parmenter, 8th Oct 2023; (+) Machynlleth (A487), SN7301 9991, J.M. Parmenter, 8th Oct 2023.
- +057/1.11. **Viola lutea** (Mountain Pansy) (Trilliw y Mynydd). Llanfyllin (Cefn Bran), SJ0958 1992, R.A. Dawes, 20th May 2023, a few plants over several metres in corner of field of sheep grazed NVC U4 grassland, one of the few remnants of this habitat, other fields in vicinity improved.
- +‡061/1.1×2. **Populus alba × P. tremula = P. ×canescens** (Grey Poplar) (Poplysen Lwyd). Newtown (Dolerw Park), SO10 91, A.K. Thorne, 7th Jun 2023, suckers only, on bank of grassland and scrub.
- *©062/30.4. Lepidium virginicum (Least Pepperwort) (Pupurlys Bach). Machynlleth, SH70K, D.O. Elias, det. A.O. Chater, 9th Oct 2023, a single plant in gravel entrance drive not far from garden bird feeders.
- +‡062/38.1. **Hirschfeldia incana** (Hoary Mustard) (Mwstard Llwyd). Machynlleth, SH70K, D.O. Elias, det. A.O. Chater, 5th Jul 2023, 2 plants on newly sown verge on New Dyfi Bridge roadworks.
- +‡072/2.4. **Ribes sanguineum** (Flowering Currant) (Llwyn Cwrens Blodeuog). Kerry, SO15 89, John Clayfield & Montgomeryshire Flora Group, 17th May 2023, woodland.
- *073/5.hyb. **Sedum hybridum** (Siberian Stonecrop). Machynlleth, SH70K, D.O. Elias, det. A.O. Chater, 2nd Aug 2023, 2-3 plants in pavement crack, garden escape.
- *‡074/01.1×ros×chi. Astilbe ×arendsii (A. japonica × A. rosea × A. chinensis) (Red False-buck's-beard) (Ffug-farf-y-bwch goch). Afon Llyfnant valley, SN7226 9751, Dylan Davies, det.
 M. Duffell, Aug 2023, single plant, strictly Astilbe sp. but likely to be A. chinensis or A.x arendsii (MD), flowering. A. long way from gardens. Photos provided.
- +‡074/07.1. **Tolmiea menziesii** (Pick-a-back-plant) (Crydlys). Pontrobert, SJ112 119, S. Southam, 22nd Oct 2023, large patches in damp woodland.
- +‡075/13.3. **Geum macrophyllum** (Large-leaved Avens) (Mapgoll Fawr)). Machynlleth (A487), SN7308 9998, J.M. Parmenter, 8th Oct 2023.

- +075/17.1. **Sanguisorba officinalis** (Great Burnet) (Bwrned Mawr). Gwaunynog, SJ0821 1107, C. Faulkner, 10th Sep 2023, in County Wildlife Site? Close to an SSSI. Flowering.
- +‡075/17.3.b. **Poterium sanguisorba subsp. balearicum** (Fodder Burnet) (Bwrned Ebran). Machynlleth, SH70K, D.O. Elias, 18th Apr 2023, 100s of plants on newly sown verges on New Dyfi Bridge roadworks.
- *‡075/18.3. **Acaena ovalifolia** (Two-spined Acaena) (Pirri-pirri Pigog). Ffridd y Glyn (Dyfi Forest), SH8178 0889, J. Handley, conf. A.K. Thorne from photos supplied, Aug 2023. All along track running SE from GR, fruiting; (*) Cwm Llwydo, SH8247 0785, J. Handley, Aug 2023, within woodland, fruiting; (*) Aberangell (North west of), SH8387 1021, J. Handley, Aug 2023, at gateway by woodland entrance, fruiting.
- *‡084/4.4. **Oenothera cambrica** (Small-flowered Evening-primrose) (Melyn-yr-hwyr Mânflodeuog). Machynlleth, SH70K, D.O. Elias, det. J. Poland, 18th Sep 2023, 1 large plant on rubble behind Leisure Centre.
- *091/2.07. **Euphorbia stricta** (Upright Spurge) (Llaethlys Syth). Llanfyllin, SJ1423 1953, S. Cope, 2nd Jul 2023, growing out of tarmac at base of wall, fruiting. Photo of warty fruit provided.
- +‡094/1.2.© Linum usitatissimum (Flax) (Llin). Machynlleth, SH70K, D.O. Elias, det. A.O. Chater, 19th Aug 2023, single plant on steps behind pub.
- +†107/25.1. **Conium maculatum** (Hemlock) (Cegiden). Machynlleth, SH70K, D.O. Elias, 23rd Mar 2023, numerous plants along newly planted hedgerow on new Dyfi Bridge roadworks.
- +‡107/44.1. **Daucus carota** (Carrot) (Moronen). Machynlleth, SH70K, D.O. Elias, 30th Jun 2023, 3 plants in pavement cracks.
- *‡110/1.1. **Nicandra physalodes** (Apple-of-Peru) (Afal Periw). Guilsfield, SJ243 137, S. Southam, 2023, in veg garden, probably due to home-made compost including old seed from beneath feeder.
- +‡110/9.1. **Datura stramonium** (Thorn-apple) (Afal Dreiniog). Abercegir, SH80 01, G. Foulkes, 24th Dec 2023, trackside waste ground by small sewage plant at SH8036.0172, fruiting.
- +©110/PET.axi×int. Petunia ×hybrida (P. axillaris × P. integrifolia) (Petunia) (Petwniâu). Machynlleth, SH70K, D. Elias, 23rd Aug 2023, single plant self-seeded in step/pavement crack.
- *‡112/1.1. **Cuscuta campestris** (Yellow Dodder) (Llindag Melyn). Guilsfield, SJ243 137, S. Southam, 2023, under bird feeder originally Now also in veg. garden, probably in home-made compost including old seed from beneath feeder.
- +†116/06.4. **Anchusa arvensis** (Bugloss) (Llysiau'r-gwrid y Tir âr). Newtown (Trehafren Hill), SO10 91, A.K. Thorne, 7th Jun 2023, edge of bottom path, likely planted seed mix.
- +118/21.2. **Thymus pulegioides** (Large Thyme) (Teim Gwyllt Mawr). Machynlleth, SH70K, D.O. Elias, det. A.O. Chater, 2nd Aug 2023, garden escape.
- +†118/23.3. **Mentha spicata** (Spear Mint) (Mintys Ysbigog). Machynlleth, SH70K, D.O. Elias, 6th Sep 2023, several plants established in car park grassland.
- *‡118/24.1. Rosmarinus officinalis (Rosemary) (Rhosmari). Llanidloes, SN95 84, D.O. Elias, det. D. Elias, 2023, small plant self-seeded in pavement crack.
- x+121/1.1. Plantago coronopus (Buck's-horn Plantain) (Llyriad Corn Carw). Garthmyl (R.Severn), SO196 981, J. Clayfield, Apr 2023, pavement on bridge with Spergularia marina. Non-native site.

- +124/11.1. **Cymbalaria muralis** (Ivy-leaved Toadflax) (Trwyn-y-llo Dail Eiddew). Kerry (Pentre), SO15 88, A.K. Thorne, 2nd Oct 2023, on walls at Black Hall, flowering.
- +‡124/13.3. Linaria purpurea (Purple Toadflax) (Llin-y-llyffant Porffor). Todleth Hill, SO28 93, Kate Thorne & John Thorne, 6th Jun 2023, lane-side.
- +124/19.3.a.hia. **Melampyrum pratense subsp. pratense var. hians**. Pontrobert, SJ10 13, Kate Thorne & John Thorne, 16th Jun 2023, laneside near river, flowering.
- +†133/1.2. Valerianella carinata (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). Kerry, SO15 89, Kate Thorne, Fiona Gomersall & Montgomeryshire Flora Group, 17th May 2023, lane verge, flowering.
- +‡135/28.08.115. **Hieracium scotostictum** (Dappled Hawkweed). Llanfyllin, SJ1432 1962, Kate Thorne & John Thorne, det. Brian Barrow, 8th May 2023, wall/pavement edge on river bridge, several plants, flowering Noted first on MFG outing in April, **Specimen with AKT**
- +‡135/62.13. **Senecio squalidus** (Oxford Ragwort) (Creulys Rhydychen). Lake Vyrnwy, SH9742 2135, G. Elias, 10th Jul 2023, flowering.
- *‡135/62.16. **Senecio vernalis** (Eastern Groundsel) (Creulys y Dwyrain). Machynlleth, SH70K, D.O. Elias, det. A.O. Chater, 23rd Mar 2023, several plants on newly sown verges on new Dyfi Bridge roadworks; (*) Machynlleth, SH70K, D. Elias, det. A.O. Chater, Mar 2023, single flowering plant on a newly made-up roadside bank just on the north side of Machynlleth.
- *©135/GUI.aby. **Guizotia abyssinica** (Niger) (Guizotia). Guilsfield, SJ243 137, S. Southam, 2023, under bird feeder. Flowered late in the season.
- +138/1.1. **Hydrocharis morsus-ranae** (Frogbit) (Ffugalaw Bach). Montgomery Canal, Berriew, SJ19 01, Kate Thorne & John Thorne, 7th Aug 2023, frequent in canal throughout monad, possible non-native strain; (+) Montgomery Canal, Brithdir, SJ19 02, Kate Thorne & John Thorne, 7th Aug 2023, frequent in canal throughout monad, flowering. Possible non-native strain.
- ×+142/1.15. **Potamogeton berchtoldii** (Small Pondweed) (Dyfrllys Bach). Lymore (Upper Pool), SO23 96, Kate Thorne & Montgomeryshire Flora Group, 11th Aug 2023, in pool near east shore, vegetative.
- +‡148/2.4. Lemna minuta (Least Duckweed) (Llinad Bach). Lymore (Upper Pool), SO23 96, Martin Beaton, 11th Aug 2023, in pool.
- +151/1.25. Juncus inflexus (Hard Rush) (Brwynen Galed). Eunant Valley, SH935 237, G. Elias, 9th Jun 2023, in field north of river, flowering.
- +153/12.02. **Schedonorus arundinaceus** (Tall Fescue) (Peiswellt Tal). SW of Penybontfawr, SJ08 23, R.A. Dawes & S. Swindells, 24th May 2023, route taken along lanes, tracks and rocky places; (+) Montgomery Canal, Berriew, SJ19 01, Kate Thorne & John Thorne, 7th Aug 2023, towpath margin.
- +153/18.04. **Poa humilis** (Spreading Meadow-grass) (Gweunwellt Ymledol). Llandinam (Giant's Grave), SO04 86, Kate Thorne, Fiona Gomersall & Montgomeryshire Flora Group, 15th Jun 2023, moorland.
- +†153/28.3. Avena fatua (Wild-oat) (Ceirchen Wyllt). Machynlleth, SH70K, D.O. Elias, 6th Sep 2023, single plant in wall/pavement crack.
- +153/50.3. **Bromus racemosus** (Smooth Brome) (Pawrwellt Llyfn). Penygarnedd (Dolydd Gobaith), SJ10 23, Kate Thorne & Montgomeryshire Flora Group, 26th Jun 2023, grassland, flowering

MERIONETH, v.c.48 (comm. J. Clark)

- c1-4-opa **Nitella opaca** (Dark Stonewort). Llyn Llagi, SH6481 4813, Gill & Peter Foulkes, det. Nick Stewart, 13th Jun 2023.
- 005/2.1. **Botrychium lunaria** (Moonwort) (Lloer-redynen). Rhobell Fawr, SH7940 2567, Meirionnydd Naturalists, 22nd Jul 2023.
- 015/2.3. **Asplenium obovatum** (Lanceolate Spleenwort) (Duegredynen Hirgul). Boston Lodge, Porthmadog, SH584 376, Julian Driver, 22nd Aug 2023.
- 015/2.4. **Asplenium marinum** (Sea Spleenwort) (Duegredynen Arfor). Portmeirion, SH5879 3678, Dafydd Paul, 29th Aug 2023.
- 015/2.8. Asplenium septentrionale (Forked Spleenwort) (Duegredynen Fforchog). Carreg y Fran, SH737 449, Gwyn Williams, 1st May 2023.
- 016/5.1. **Cystopteris fragilis** (Brittle Bladder-fern) (Ffiolredynen Frau). Craig Cywarch, Dinas Mawddwy, SH841 184, Julian Driver, 13th Jun 2023.
- 017/3.05. **Dryopteris aemula** (Hay-scented Buckler-fern) (Marchredynen Bêr). Craig yr Aderyn SSSI / SPA, SH646 066, Meirionnydd Naturalists Group, det. Rumsey, F, 17th Mar 2023.
- *‡040/2.2. Alnus incana (Grey Alder) (Gwernen Lwyd). Morfa Harlech, SH57 31, Prof Ralph Martin, Mark Lawley & Philippa Thompson, 13th Aug 2023.
- 046/05.1. **Stellaria nemorum** (Wood Stitchwort) (Serenllys y Coed). Dolgun Uchaf, Dolgellau, SH75 18, H.M. Garrett, 22nd Apr 2004.
- 055/1.3. **Drosera intermedia** (Oblong-leaved Sundew) (Gwlithlys Hirddail). Cwm Nantcol, SH6439 2726, Robbie Blackhall-Miles, 21st Jul 2021; Llyn Cwm Bychan, SH644 312, Julian Driver, 8th Sep 2023.
- +061/2.02. **Salix fragilis** (Crack-willow) (Helygen Frau). Llangollen Railway, Corwen to Carrog, SJ10647 43149, Chris Hall & Kate Williamson, 14th Sep 2011.
- 062/30.3. **Lepidium heterophyllum** (Smith's Pepperwort) (Pupurlys Amryddail). Coed y Gofer, Aberdyfi, SN64054 96838, Meirionnydd Naturalists Group, 19th May 2023.
- 074/05.16. **Saxifraga hypnoides** (Mossy Saxifrage) (Tormaen Llydandroed). Craig Cywarch, Dinas Mawddwy, SH841 184, Julian Driver, 13th Jun 2023.
- 075/15.2. **Agrimonia procera** (Fragrant Agrimony) (Llysiau'r-dryw Pêr). Harlech dunes, SH57 32, J. Clark & H.M. Garrett, 12th Jul 2023.
- 077/07.1. **Anthyllis vulneraria** (Kidney Vetch) (Plucen Felen). Aberdyi Dyfi SSSI Unit 50 Aberdyfi Golf Course, SN5907 9766, D. Elias, J. Clayfield, J. Clark, K. Fincken-Roberts, P. Foulkes, G. Foulkes, F. Cauley, S. Cauley, S. Grasse, R. Kernohan, H. Lewis, D. Anning, A. Graham & H. Garrett., 17th Nov 2023.
- 077/19.08. **Trifolium fragiferum** (Strawberry Clover) (Meillionen Fefusaidd). Morfa Harlech, SH56 33, Prof Ralph Martin, Mark Lawley & Philippa Thompson, 13th Aug 2023.
- 077/25.4. **Genista anglica** (Petty Whin) (Cracheithinen). Coedydd Dyffryn Ffestiniog, near Ddualt, SH6794 4210, Meirionnydd Naturalists Group, 16th Jun 2023.
- +099/1.3. Acer campestre (Field Maple) (Masarnen Fach). Pendre Industrial Estate, Tywyn, SH50V, H.M. Garrett, 4th Dec 2023.
- 103/2.1. **Erodium maritimum** (Sea Stork's-bill) (Pig-y-crëyr Arfor). Aberdyi Dyfi SSSI Unit 50 Aberdyfi Golf Course, SN59 97, D. Elias, J. Clayfield, J. Clark, K. Fincken-Roberts, P. Foulkes, G. Foulkes, F. Cauley, S. Cauley, S. Grasse, R. Kernohan, H. Lewis, D. Anning, A. Graham & H. Garrett., 17th Nov 2023.

- ×+107/02.1. **Sanicula europaea** (Sanicle) (Clust yr Arth). Coed y Gofer, Aberdyfi, SN6397 9694, Meirionnydd Naturalists Group, 19th May 2023.
- 107/20.1. Aethusa cynapium (Fool's Parsley) (Geuberllys). Tywyn, Corbett Arms Hotel, SH58 00, H.M. Garrett, 4th Dec 2023.
- 116/17.1. **Cynoglossum officinale** (Hound's-tongue) (Tafod y Bytheiad). Aberdyi Dyfi SSSI Unit 50 Aberdyfi Golf Course, SN59 97, D. Elias, J. Clayfield, J. Clark, K. Fincken-Roberts, P. Foulkes, G. Foulkes, F. Cauley, S. Cauley, S. Grasse, R. Kernohan, H. Lewis, D. Anning, A. Graham & H. Garrett., 17th Nov 2023.
- *124/20.13×14. **Euphrasia cambrica × E. ostenfeldii**. Cadair Idris, SH7365 1374, A.N.Graham, J.F.Clark & J.Clayfield, det. Chris Metherell, 4th Jul 2022.
- ×+124/20.18×19. **Euphrasia ×electa (E. micrantha × E. scottica)**. Moel Fferna Quarry, SJ13 39, Meirionnydd Naturalists, 18th Aug 2023.
- ‡125/1.2. Lathraea clandestina (Purple Toothwort) (Deintlys Porffor). Pont y Dyfi, SH7467 0196, Emily Meilleur, 4th May 2023.
- +125/2.08. **Orobanche hederae** (Ivy Broomrape) (Gorfanhadlen Eiddew). Tywyn railway station car park, Bryn Mair Road, Tywyn, Gwynedd, SH5828 0071, H.M. Garrett, 14th Aug 2023.
- 130/3.1.‡ **Sherardia arvensis** (Field Madder) (Mandon Las yr Ŷd). Coed y Gofer, Aberdyfi, SN64054 96838, Meirionnydd Naturalists Group, 19th May 2023; Cynwyd, SJ057 412, Gordon Plater, 25th Sep 2023.
- 130/6.01. **Galium boreale** (Northern Bedstraw) (Briwydd y Gogledd). Rhobell Fawr, SH7761 2488, Meirionnydd Naturalists, 22nd Jul 2023; Rhobell Fawr, SH77619 24887, Gwyn Williams, 6th May 2021; Rhobell Fawr, SH7800 2505, Meirionnydd Naturalists, 22nd Jul 2023.
- 130/6.03. **Galium uliginosum** (Fen Bedstraw) (Briwydd y Fign). Llyn Tegid shoreline, Llangower point, SH90 32, H.M. Garrett, 1st Sep 2003; Llyn Tegid shoreline, Bala sailing club, SH92 34, H.M. Garrett, 24th Sep 2003.
- 135/09.1. **Serratula tinctoria** (Saw-wort) (Dant y Pysgodyn). Coed y Gofer pasture, Aberdyfi, SN6387 9687, Meirionnydd Naturalists Group, 19th May 2023.
- ×+135/28.10.165. Hieracium lasiophyllum (Stiff-haired Hawkweed). Foel Penolau, SH66 34, Alastair Hotchkiss, det. Tim Rich I, 20th Aug 2020.
- 135/37.1. **Pulicaria dysenterica** (Common Fleabane) (Cedowydd). Aberdyi Dyfi SSSI Unit 50 Aberdyfi Golf Course, SN59 97, D. Elias, J. Clayfield, J. Clark, K. Fincken-Roberts, P. Foulkes, G. Foulkes, F. Cauley, S. Cauley, S. Grasse, R. Kernohan, H. Lewis, D. Anning, A. Graham & H. Garrett., 17th Nov 2023.
- 137/2.1. **Baldellia ranunculoides** (Lesser Water-plantain) (Llyriad-y-dŵr Bach). Morfa Harlech, SH57 31, Prof Ralph Martin, Mark Lawley & Philippa Thompson, 13th Aug 2023; Aberdyfi golf course ditch between golf course and A493, SH59 97, D. Elias, J. Clayfield, J. Clark, K. Fincken-Roberts, P. Foulkes, G. Foulkes, F. Cauley, S. Cauley, S. Grasse, R. Kernohan, H. Lewis, D. Anning, A. Graham & H. Garrett., 17th Nov 2023.
- 137/3.1. Luronium natans (Floating Water-plantain) (Llyriad-y-dŵr Arnofiol). Llyn Pryfed, SH6642 3215, Robbie Blackhall-Miles, 21st Jul 2021.
- 152/16.08. **Carex muricata** (Hesgen Ysbigog). Coed y Gofer, Aberdyfi, SN63 96, Meirionnydd Naturalists Group, 19th May 2023.

- 152/16.29. **Carex vesicaria** (Bladder-sedge) (Hesgen Chwysigennaidd). Shell Island Campsite, Mochras, Llanbedr, Gwynedd, SH553 264, Tim Yardley & Lucia Ruffino, 9th Jun 2017.
- ×+152/16.can **Carex canescens**. Coedydd Dyffryn Ffestiniog, near Ddualt, boggy lake, SH678 420, Meirionnydd Naturalists Group, 16th Jun 2023.
- 153/26.1. Helictotrichon pubescens (Downy Oat-grass) (Ceirchwellt Blewog). Shell Island Campsite, Mochras, Llanbedr, Gwynedd, SH552 262, Tim Yardley & Lucia Ruffino, 9th Jun 2017.
- 153/51.1. **Bromopsis ramosa** (Hairy-brome) (Pawrwellt Blewog). Aberdyfi sea-front car park, SN612 959, H.M. Garrett, 18th Apr 2023.
- 162/14.1. Anacamptis pyramidalis (Pyramidal Orchid) (Tegeirian Bera). Fairbourne, SH616 147, S. Grasse, 27th Jul 2023.
- 162/18.5. **Dactylorhiza purpurella** (Northern Marsh-orchid) (Tegeirian-y-gors Gogleddol). Pont Croesor surrounding fields, Snowdonia, SH595 418, C. Morris, 11th Jun 2023

CAERNARFON, v.c.49 (comm. W. McCarthy)

- +028/03.1.[‡] Helleborus foetidus (Stinking Hellebore) (Crafanc-yr-arth Ddrewllyd). Lane bank near houses, Henryd, SH77 75, W.McCarthy & M.Stead, 11th Nov 2023, presumed garden escape.
- +028/03.hyb. Helleborus ×hybridus (Hybrid Lenten-roses). Woodland by track, Little Orme, Llandudno, SH81 81, W. McCarthy, M.Stead & M.Roberts, 20th Feb 2023.
- +028/13.17.b. Ficaria verna subsp. verna (a subspecies of Lesser Celandine). Lane bank, Penmachno, SH80 53, W.McCarthy & M.Stead, 27th Apr 2023.
- +031/5.03.hib. **Fumaria bastardii var. hibernica**. Disturbed soil near park, Great Orme, Llandudno, SH77 82, Wendy McCarthy, conf. T.C.G.Rich, 11th May 2023, first record in hectad for variety.
- +‡039/4.7. **Quercus rubra** (Red Oak) (Derwen Goch). Woodland, Llyn Geirionydd, SH76 60, W.McCarthy & M.Stead, 3rd Aug 2023.
- +‡049/1.off. **Paeonia officinalis** (Garden Peony) (Rhosyn-y-mynydd y Gerddi). Slate waste tips, Llanllechid, SH63 69, W. McCarthy, M.Stead & M.Roberts, 5th Jul 2023, growing where presumably thrown out.
- +‡053/2.olb×thu. Lavatera ×clementii (L. olbia × L. thuringiaca) (Garden Tree-mallow) (Hocyswydden yr Ardd). Pavement edge, Great Orme, Llandudno, SH77 82, Wendy McCarthy, 19th Jun 2023, self sown at pavement edge, mature plant in garden nearby.
- +‡053/4.1.© Alcea rosea (Hollyhock) (Hocysen Fendigaid). Wall base beside track, Great Orme, Llandudno, SH76 82, Wendy McCarthy, 29th Jul 2023, self sown from mature plants in nearby garden.
- 057/1.12. **Viola tricolor** (Wild Pansy) (Trilliw). Disturbed ground following reservoir works, Llanrhychwyn, SH77 60, W.McCarthy & M.Stead, 8th Aug 2023, first record for hectad since 1950.
- +062/12.3. **Rorippa islandica** (Northern Yellow-cress) (Berwr Melyn Gogleddol). Roadside, Capel Curig, SH71 58, Caerns. Recording group, 27th Jul 2023.
- +‡062/16.1. **Aubrieta deltoidea** (Aubretia) (Cynfas Biws). Wall base near cottages, Llanfairfechan, SH67 73, E. Phenna, 2nd May 2023.
- +062/22.3. Erophila glabrescens (Glabrous Whitlowgrass) (Llysiau'r-bystwn Llyfn). Dry stony

ground in disused quarry, Little Orme, Llandudno, SH81 81, W. McCarthy, M.Stead & M.Roberts, conf. T.C.G.Rich, 20th Feb 2023.

- +‡074/05.09×01. **Saxifraga ×polita** (False Londonpride) (Balchder Llundain Ffug). By footpath behind gardens, Dwygyfylchi, SH73 76, Wendy McCarthy, 17th Oct 2023.
- +‡074/07.1. **Tolmiea menziesii** (Pick-a-back-plant) (Crydlys). Stream bank beside lane, Capel Uchaf, SH43 48, W.McCarthy & M.Stead, 3rd May 2023.
- +‡074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Bank in Iane, Hafotygwyn, Rowen, SH73 70, W.McCarthy, M.Stead & M.Parry, 9th Jun 2023, upland Iane, far from houses.
- +‡075/08.0.02. **Rubus tricolor** (Chinese Bramble) (Llwyn Mwyar Trilliw). Edge of coast path, Bangor, SH54 71, W.McCarthy, M.Stead & M.Parry, 10th Oct 2023; (+) roadside bank, Gyffin, SH77 76, W.McCarthy, M.Stead & M.Parry, 15th Nov 2023.
- +075/09.14×15. **Potentilla ×mixta** (Hybrid Cinquefoil) (Pumnalen Groesryw). Disturbed ground, Y Ffor, SH40 39, W.McCarthy & M.Stead, 29th Sep 2023.
- +‡075/12.1. **Potentilla indica** (Yellow-flowered Strawberry) (Llwyn Mefus Melyn). Grass verge in lane, Garndolbenmaen, SH49 44, W.McCarthy & M.Stead, 21st Sep 2023, first record for vc49.
- +075/21.18. **Rosa rubiginosa** (Sweet-briar) (Drysïen Bêr). Roadside hedge, Llanrhychwyn, SH77 61, Wendy McCarthy, 4th Sep 2023, presumed planted following road widening.
- +‡075/22.03. **Prunus cerasifera** (Cherry Plum) (Coeden Goeg-geirios). Roadside bank, Llanddeiniolen, SH54 66, W. McCarthy, M.Stead & M.Roberts, 4th Apr 2023.
- +‡075/22.14. **Prunus laurocerasus** (Cherry Laurel) (Coeden Lawrgeirios). Woodland above river gorge, Penmachno, SH80 53, W.McCarthy & M.Stead, 27th Apr 2023.
- +‡077/19.04. **Trifolium hybridum** (Alsike Clover) (Meillionen Sweden). Car park edge, Waunfawr, SH52 58, Caerns. Recording group, 7th Jul 2023.
- +‡084/4.4. **Oenothera cambrica** (Small-flowered Evening-primrose) (Melyn-yr-hwyr Mânflodeuog). Roadside, Trefriw, SH78 63, Wendy McCarthy, 16th Jun 2023.
- *‡091/2.obl. **Euphorbia oblongata** (Balkan Spurge) (Llaethlys y Balcanau). Wall base, Glanwydden, SH81 80, Wendy McCarthy, 13th Jan 2023, first county record.
- +‡102/1.06. **Oxalis stricta** (Upright Yellow-sorrel) (Suran Felen Unionsyth). Wall base, Great Orme, Llandudno, SH77 82, Wendy McCarthy, 29th Jul 2023.
- +‡102/1.14. **Oxalis incarnata** (Pale Pink-sorrel) (Suran Welw). Roadside bank, Abergwyngregyn, SH65 72, W. McCarthy, M.Stead & M.Roberts, 23rd Mar 2023; (+) disused quarry, Little Orme, Llandudno, SH81 81, W. McCarthy, M.Stead & M.Roberts, 20th Feb 2023.
- +‡103/1.01×02. **Geranium ×oxonianum** (Druce's Crane's-bill) (Pig-yr-aran Druce). Bank in lane, Trefriw, SH77 62, W.McCarthy & M.Stead, 16th Jun 2023.
- +‡103/1.23. **Geranium phaeum** (Dusky Crane's-bill) (Gweddw Alarus). Lay-by in lane, Penmachno, SH80 53, W.McCarthy & M.Stead, 27th Apr 2023, growing at side of lay-by where thrown out.
- +111/3.2.a. **Calystegia sepium subsp. sepium**. Hedge in field, Llanllechid, SH62 68, W.McCarthy & M.Stead, 5th Jul 2023, first record in hectad for subspecies.
- +111/3.2×4. **Calystegia ×lucana**. Hedge in woodland, Llanrhychwyn, SH77 61, Wendy McCarthy, 22nd Aug 2023.

- +‡115/1.1.© **Phacelia tanacetifolia** (Phacelia) (Ffaselia). Gateway near car park, Abergwyngregyn, SH65 72, E. Phenna, 2nd Oct 2023.
- +‡116/03.1. **Pulmonaria officinalis** (Lungwort) (Llysiau'r Ysgyfaint). Lane bank opposite houses, Llanddeiniolen, SH53 66, W. McCarthy, M.Stead & M.Roberts, 4th Apr 2023.
- +‡116/09.1. **Borago officinalis** (Borage) (Tafod yr Ych). Disturbed ground by track, Abergwyngregyn, SH65 72, W. McCarthy, M.Stead & M.Roberts, 23rd Mar 2023.
- +‡117/1.bon. Verbena bonariensis (Argentinian Vervain) (Ferfain yr Ariannin). Newly constructed path at top of beach, Llanfairfechan, SH66 74, Jeff Brice, 27th Sep 2023.
- +‡118/23.3×4. **Mentha ×villosa** (Apple-mint) (Mintys Lletgrwn). Damp field edge, Garndolbenmaen, SH50 45, W.McCarthy & M.Stead, 21st Sep 2023.
- +‡118/LAV.ang.[©] Lavandula angustifolia (Garden Lavender). Crack in wall top, Abergwyngregyn, SH65 72, Wendy McCarthy, 21st Mar 2023.
- +‡124/01.02. **Verbascum virgatum** (Twiggy Mullein) (Pannog Fain). Disturbed ground, Y Ffor, SH40 39, W.McCarthy & M.Stead, 29th Sep 2023.
- +©124/13.mar. Linaria maroccana (Annual Toadflax) (Llin-y-llyffant Moroco). Disturbed ground following reservoir works, Llanrhychwyn, SH77 60, W.McCarthy & M.Stead, 8th Aug 2023, several plants in different colours.
- +‡129/7.2.© **Lobelia erinus** (Garden Lobelia) (Bidoglys yr Ardd). By footpath behind gardens, Dwygyfylchi, SH73 76, Wendy McCarthy, 17th Oct 2023; (+) disturbed ground, Great Orme, Llandudno, SH78 83, Wendy McCarthy, 11th Jul 2023.
- +‡131/3.1. **Symphoricarpos albus** (Snowberry) (Llusen Eira). Woodland above river gorge, Penmachno, SH80 53, W.McCarthy & M.Stead, 27th Apr 2023.
- +‡131/6.6. Lonicera japonica (Japanese Honeysuckle) (Gwyddfid Japan). Roadside hedge, Gyffin, SH77 76, W.McCarthy, M.Stead & M.Parry, 15th Nov 2023.
- +135/05.4. **Carduus nutans** (Musk Thistle) (Ysgallen Bendrom). By footpath near top of beach, Abergwyngregyn, SH64 73, Julian Driver, 29th Jun 2022.
- +†135/11.3. **Centaurea cyanus** (Cornflower) (Glas yr Ŷd). Disturbed ground at roadside, Abergwyngregyn, SH62 71, E. Phenna, 8th Sep 2023, possible archeophyte or maybe from wildflower seed sowing following highway improvement.
- +135/40.4. **Solidago gigantea** (Early Goldenrod) (Eurwialen Gynnar). Bank in lane, Y Ffor, SH40 39, W.McCarthy & M.Stead, 29th Sep 2023.
- +135/62.min. **Senecio minimus** (Toothed Fireweed). On collapsed stone wall, Tregarth, SH59 67, Tony Cumberlidge, 11th Jun 2022, second county record.
- +‡135/73.1.[©] Calendula officinalis (Pot Marigold) (Melyn Mair). Disturbed ground following reservoir works, Llanrhychwyn, SH77 60, W.McCarthy & M.Stead, 8th Aug 2023.
- *†135/BUP.sal. Buphthalmum salicifolium. Wall base in car park, Llandudno Junction, SH79
 77, Trevor Dines, conf. Mark Spencer, 19th Jul 2023, several plants around car park, self-sown from cultivated plants in wall top.
- +‡153/28.5.© Avena sativa (Oat) (Ceirchen). Roadside hedge, Llanrhychwyn, SH77 61, Wendy McCarthy, 4th Sep 2023.
- +‡153/62.1. **Cortaderia selloana** (Pampas-grass) (Peithwellt). Roadside bank, Esgyryn, SH80 78, Wendy McCarthy, 21st Mar 2023.
- +©153/ANE.les. Anemanthele lessoniana. Wall top in car park, Conwy, SH78 77, Trevor Dines, 18th Oct 2023, self-sown from plants in nearby raised beds. First record for vc49.

- +‡158/05.1. Hemerocallis fulva (Orange Day-lily) (Lili Undydd Oren). Slate waste tips, Llanllechid, SH63 69, W. McCarthy, M.Stead & M.Roberts, 5th Jul 2023.
- +158/20.2×3. Hyacinthoides ×massartiana (Clychau'r-gog Croesryw). Lane bank, Penmachno, SH80 53, W.McCarthy & M.Stead, 27th Apr 2023.
- +‡158/21.1. **Hyacinthus orientalis** (Hyacinth) (Hiasinth)). Bank of new road by hedge, Abergwyngregyn, SH63 71, E. Phenna, 15th May 2023.
- +158/BRO.lax. Triteleia laxa. Grass bank, Great Orme, Llandudno, SH77 83, Richard Jones, 26th Jun 2023.
- +159/05.08. Iris foetidissima (Stinking Iris) (Gellesgen Ddrewllyd). Roadside bank, Llanllechid, SH62 68, W.McCarthy & M.Stead, 5th Jul 2023.
- +162/03.4. **Epipactis helleborine** (Broad-leaved Helleborine) (Y Galdrist Lydanddail). Woodland edge, Beddgelert, SH57 49, I.& L. Fraser, 14th Jun 2023

DENBIGH, v.c.50 (comm. D. Williams)

- +017/3.03.a. **Dryopteris affinis subsp. affinis**. Melin-y-Wig, SJ044 488, Denbs Group (D.Williams), 20th May 2023, woodland path by river.
- +017/3.03b. **Dryopteris cambrensis**. Melin-y-Wig, SJ044 488, Denbs Group (D.Williams), 20th May 2023, woodland path by river.
- +‡020/7.2.a. **Pinus nigra subsp. nigra** (Austrian Pine) (Pinwydden Awstria). Cefngarw, SH884 513, Denbs Group (D.Williams), 1st Oct 2023, a few old trees by farm.
- +©021/1.1×2.noo. **×Cupressocyparis leylandii (Cu. macrocarpa × Ch. nootkatensis)** (Leyland Cypress) (Cypreswydden Leyland). Moel Trefriw, SH82 56, N.J. Osley & S.K. Osley, 25th Aug 2023, a couple of trees planted in a hedgerow; (+) Plas Matw, SH88 64, N.J. Osley & S.K. Osley, 17th May 2023.
- +028/13.11. **Ranunculus sceleratus** (Celery-leaved Buttercup) (Crafanc yr Eryr). Bryn Hafod, SH89 62, N.J. Osley & S.K. Osley, 31st May 2023, in muddy roadside ditch.
- +028/13.23. **Ranunculus aquatilis** (Common Water-crowfoot) (Crafanc-y-frân y Dŵr). Mynydd Cricor, SJ1420 5156, Denbs Group (D.Williams), 14th May 2023, pond.
- +028/13.25. **Ranunculus penicillatus** (Stream Water-crowfoot) (Crafanc-y-frân y Nant). Gwydir Castle, SH79 61, W. McCarthy, 16th Jun 2023, yn llawn flodeuo ger y Bont Fawr.
- *033/1.3.a. **Ulmus minor subsp. minor** (Small-leaved Elm). Erbistock, SJ3486 4281, Denbs Group (D.Williams), 3rd Sep 2023, in small plantation on E side of lane.
- ++036/1.2. Urtica urens (Small Nettle) (Danhadlen Fach). Moel Trefriw, SH822 562, Denbs Group (D.Williams), 30th Jul 2023, farm track.
- *‡037/1.1. Juglans regia (Walnut) (Coeden Cnau Ffrengig). Bryn Ocyn, SJ021 588, Denbs Group (D.Williams), 13th Aug 2023, streamside track. Single tree. Planted.
- +037/1.nig. **Juglans nigra** (Black Walnut). Rhewl, SJ106 604, N.J. Osley, 27th Jul 2023, edge of farmyard Rhyd-y-cilgwyn. Two mature trees, both in fruit. Voucher Specimen Hb DW.
- +039/4.5×6. Quercus petraea × Q. robur = Q. ×rosacea. Ty Nant Gell, SH84, N.J. Osley & S.K. Osley, 19th Aug 2023.
- +046/20.09×01. Silene ×hampeana (S. latifolia × S. dioica) ([Pink Campion]). Mynydd Branar, SH87 71, N.J. Osley & S.K. Osley, 7th May 2023, pale pink flowers, one parent present S. dioica.
- +‡061/1.3×del. Populus ×canadensis (P. nigra × P. deltoides) (Hybrid Black-poplar) (Poplysen

Ddu Groesryw). Ty'n-twmpath, SJ161 371, Denbs Group (D.Williams), 18th Jun 2023, field path.

- ++061/2.09. **Salix viminalis** (Osier) (Helygen Wiail). Llanerch Emrys, SJ213 237, Denbs Group (D.Williams), 6th Aug 2023, laneside.
- +061/2.10×11. **Salix ×reichardtii (S. caprea × S. cinerea)**. Mwdwl-Eithin Hiraethog BS, SH92 54, N.J. Osley & S.K. Osley, 6th Jun 2023.
- ++062/28.1. **Thlaspi arvense** (Field Penny-cress) (Codywasg y Maes). Mynydd Cricor, SJ1420 5156, Denbs Group (D.Williams), 14th May 2023, n side of pond.
- ++062/35.1. **Sinapis arvensis** (Charlock) (Mwstard Gwyllt). Llanerch Emrys, SJ213 237, Denbs Group (D.Williams), 6th Aug 2023, roadside.
- +075/09.14×15.s.s. Potentilla anglica × P. reptans = P. ×mixta sens. str.. Oerfa, SH83 59, N.J. Osley & S.K. Osley, 2nd Sep 2023.
- +075/21.12. **Rosa canina** (Dog-rose) (Rhosyn Gwyllt). Llanerch Emrys, SJ211 236, Denbs Group (D.Williams), 6th Aug 2023, laneside.
- +075/21.12×14. **Rosa corymbifera**. Trevalyn Meadows, SJ402 578, Denbs Group (D.Williams), 16th Jul 2023, track.
- +075/21.16 Rosa sherardii (Sherard's Downy-rose) (Rhosyn Sherard). SycharthSE, SJ211 243, Denbs Group (D.Williams), 6th Aug 2023.
- +‡075/22.03. **Prunus cerasifera** (Cherry Plum) (Coeden Goeg-geirios). Llanrwst East, SH811 614, Denbs Group (D.Williams), 2nd Apr 2023, bridle path.
- ++075/22.05.a. **Prunus domestica subsp. domestica** (Coeden Eirin). Bryn Ocyn, SJ021 588, Denbs Group (D.Williams), 13th Aug 2023, streamside track. Large fruit. Probably not wild.
- +075/28.09.agg. **Sorbus aria agg.** Melin-y-Wig, SJ0402 4892, Denbs Group (D.Williams), 20th May 2023, laneside. Very close to river and vc boundary.
- +‡077/15.09. Lathyrus latifolius (Broad-leaved Everlasting-pea) (Ytbysen Fythol Lydanddail). Llanerch Emrys, SJ213 237, Denbs Group (D.Williams), 6th Aug 2023, roadside.
- +‡077/18.2.c. **Medicago sativa subsp. sativa** (Lucerne) (Maglys Rhuddlas)). Coed Mawr NW, SJ063 638, Denbs Group (D.Williams), 23rd Apr 2023, large patches along N laneside. Relicts of cultivation? Throw-outs?
- +‡077/19.04. **Trifolium hybridum** (Alsike Clover) (Meillionen Sweden). Moel Trefriw, SH8255 5608, Denbs Group (D.Williams), 30th Jul 2023, farm track. In a field full of white clover, Probably planted?
- +082/1.2. **Daphne laureola** (Spurge-laurel) (Clust yr Ewig). Melin-y-coed, SH8151 6078, Denbs Group (D.Williams), 2nd Apr 2023, single plant on W side of lane.
- +‡106/1.hib. Hedera hibernica. Llanerch Emrys, SJ213 237, Denbs Group (D.Williams), 6th Aug 2023, roadside; (+) SycharthSE, SJ211 243, Denbs Group (D.Williams), 6th Aug 2023, laneside.
- +†107/10.1. **Smyrnium olusatrum** (Alexanders) (Dulys). Pentre Gwyn, SJ357 491, Denbs Group (D.Williams), 29th Oct 2023, lane and roadside.
- +‡107/26.rot.[©] **Bupleurum rotundifolium** (Thorow-wax) (Paladr Trwyddo Deilgrwn). Eirias Park, SH8505 7894, S. Coleman, det. T.C.G. Rich, 19th Dec 2023, ivy Street. Photo confirms. 'Probably a bird-seed alien'.
- +110/8.1. **Solanum nigrum** (Black Nightshade) (Codwarth Du). Llanerch Emrys, SJ213 237, Denbs Group (D.Williams), 6th Aug 2023, roadside.

- +‡116/09.1.© **Borago officinalis** (Borage) (Tafod yr Ych). Pentre Gwyn, SJ3543 4933, Denbs Group (D.Williams), 29th Oct 2023, allotment.
- +116/15.09. **Myosotis ramosissima** (Early Forget-me-not) (Sgorpionllys Cynnar). Nant y Foel, SH87 53, N.J. Osley & S.K. Osley, 27th May 2023, on a dry bank opposite the entrance to the trackway to Hafod y Garreg; (+) Cwm Canol, SH88 62, N.J. Osley & S.K. Osley, 2nd Jun 2023; (+) Marine Lake, SJ001 805, T. Cumberlidge, 3rd May 2023, river Clwyd, on some very bare ground.
- +118/20.1. **Origanum vulgare** (Wild Marjoram) (Penrhudd). Melin-y-Wig, SJ0402 4892, Denbs Group (D.Williams), 20th May 2023, laneside. Very close to river and vc boundary.
- +‡123/4.2. Ligustrum ovalifolium (Garden Privet) (Yswydden yr Ardd). Moel Trefriw, SH82 56, N.J. Osley & S.K. Osley, 25th Aug 2023, a few bushes planted to fill a gap in a hedgerow.
- ++124/16.19. Veronica agrestis (Green Field-speedwell) (Rhwyddlwyn-y-maes Gwyrdd). Rhydlydan West, SH8838 5099, Denbs Group (D.Williams), 1st Oct 2023, on wall by house.
- +124/20.05. **Euphrasia arctica** (Arctic Eyebright) (Effros yr Arctig). Moel Trefriw, SH827 565, Denbs Group (D.Williams), 30th Jul 2023, roadside hedgebanks; (+) Ty'n-twmpath, SJ162 371, Denbs Group (D.Williams), 18th Jun 2023, scattered across meadow with Rhinanthus minor.
- *124/NEM.str. Nemesia strumosa (Cape-jewels). Morfa Rhuddlan, SH973 788, Denbs Group (D.Williams), 5th Nov 2023, housing estate. Pavement weed. Spreading from nearby houses.
- *©124/SUT.cor. **Sutera cordata** (Bacopa). Gwydir Castle, SH7980 6165, T.D. Dines, 1st Sep 2023, llanrwst, between pavement and wall of main town square.
- +125/1.1. Lathraea squamaria (Toothwort) (Deintlys). Tyn-y-bedw, SH967 728, T. Cumberlidge, 18th Apr 2023, coed Tan y Gaer, Afon Elwy. Close to the river bank around Salix and Corylus. Photos confirm; (+) Tyn-y-bedw, SH968 728, T. Cumberlidge, 18th Apr 2023, coed Tan y Gaer, Afon Elwy. Close to the river bank around Salix and Corylus.
- +‡129/1.10. **Campanula poscharskyana** (Trailing Bellflower) (Clychlys Ymlusgol). Morfa Rhuddlan, SH973 788, Denbs Group (D.Williams), 5th Nov 2023, housing estate. Pavement weed.
- +130/6.07. **Galium album** (Hedge Bedstraw) (Briwydd y Clawdd). Llanrwst East, SH8173 6118, Denbs Group (D.Williams), 2nd Apr 2023, large patch on W side of lane; (+) Buarth Cerrig, SH87 64, N.J. Osley & S.K. Osley, 20th May 2023, on hedgebank at entrance to Cefn-yffynnon (probably seed packet origin).
- +‡131/3.orb×mic. **Symphoricarpos ×chenaultii (S. microphyllus × S. orbiculatus)** (Hybrid Coralberry) (Llusen Gwrel Groesryw). Morfa Rhuddlan, SH973 788, Denbs Group (D.Williams), 5th Nov 2023, housing estate.
- +‡131/6.1. Lonicera pileata (Box-leaved Honeysuckle) (Gwyddfid Llorweddol). Meusydd Farm, SH804 734, Denbs Group (D.Williams), 9th Apr 2023, Iane. Hedge by caravan park.
- +‡131/WEI.flo. Weigela florida (Weigelia) (Weigela). Cwm Canol, SH88 62, N.J. Osley & S.K. Osley, 2nd Jun 2023.
- +†133/1.2. Valerianella carinata (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). Morfa Rhuddlan, SH973 788, Denbs Group (D.Williams), 5th Nov 2023, housing estate. Pavement weed; (+) Pentre Gwyn, SJ3546 4930, Denbs Group (D.Williams), 29th Oct 2023, allotments.
- +134/1.1. Dipsacus fullonum (Wild Teasel) (Cribau'r-pannwr Gwyllt). Plas Matw, SH8845

6440, N.J. Osley & S.K. Osley, 17th May 2023, a few plants on bulldozed tip.

- +‡135/11.2. **Centaurea montana** (Perennial Cornflower) (Y Benlas Luosflwydd). Pentre Isaf North, SH877 694, N.J. Osley & S.K. Osley, 17th May 2023, in flower in rank grass on the N verge of A548.
- +135/37.1. **Pulicaria dysenterica** (Common Fleabane) (Cedowydd). Nant Gau, SH9015 6260, N.J. Osley & S.K. Osley, 8th Sep 2023, a number of patches along the roadside ditch up to SH9012562750.
- *‡135/38.1. **Telekia speciosa** (Yellow Oxeye) (Llygad-llo Melyn). Coed y Fron-wyllt, SJ0832 5622, Sue Burnett, det. D. Williams, 25th Jul 2023, tall plant up to 2m. Photos confirm; (*) Pentre-celyn, SJ1493 5344, Sue Burnett, det. D. Williams, 31st Jul 2023, in flower on lane. Photos confirm.
- +‡135/43.flo. **Erigeron floribundus**. Creamery North, SJ3888 4704, D. Williams & G. Lowden, 24th Sep 2023, farmyard. Plentiful.
- +135/62.17. **Senecio sylvaticus** (Heath Groundsel) (Creulys y Rhos). Melin-y-Wig, SJ0413 4923, Denbs Group (D.Williams), 20th May 2023, laneside. Single plant on E side.
- +‡135/80.2. **Galinsoga quadriradiata** (Shaggy-soldier) (Galinsoga Blewog). Towyn, SH9750 7900, Denbs Group (D.Williams), 5th Nov 2023, single small plant between pavement edge and road on housing estate. Garden escape.
- +†153/14.3. **Vulpia myuros** (Rat's-tail Fescue) (Peisgwellt y Fagwyr). Llanerch Emrys, SJ211 236, Denbs Group (D.Williams), 6th Aug 2023, laneside.
- +153/46.1. **Polypogon monspeliensis** (Annual Beard-grass) (Barfwellt Unflwydd). Pentre Gwyn, SJ3543 4933, Denbs Group (D.Williams), 29th Oct 2023, edges of pavement and roadside, also near nearby allotment.
- +153/50.3.r **Bromus racemosus subsp. racemosus** (Smooth Brome) (Pawrwellt Llyfn). Boncyr-Hafod, SJ3137 4608, T. Knight, 15th Aug 2023, occasional on arable field margin. Crop had been harvested.
- +158/20.2×3. Hyacinthoides ×massartiana (H. hispanica × H. non-scripta) (Clychau'r-gog Croesryw). Cwm Canol, SH88 62, N.J. Osley & S.K. Osley, 2nd Jun 2023, in a planted copse by the track to Tyddyn-Dafydd.
- +‡158/23.2. Muscari armeniacum (Garden Grape-hyacinth) (Clychau Dulas yr Ardd). Llanerch Emrys, SJ211 236, Denbs Group (D.Williams), 6th Aug 2023, laneside

ANGLESEY, v.c.52 (comm. N.H. Brown & I.R. Bonner)

- +004/1.5×9. **Equisetum ×robertsii (E. arvense × E. telmateia)** (Marchrawnen Roberts). Traeth Dulas (part) (SH4888), SH4884 8887, Nigel Brown, 6th Aug 2023, small colony on soft sand cliff with Pteridium, C. erythraea, J. inflexus & C. nigra.
- +005/1.1. **Ophioglossum vulgatum** (Adder's-tongue) (Tafod y Neidr). Wylfa Head LNR (SH3594), SH3545 9440, Adrienne Stratford, 25th Apr 2023, widespread in central damp area, c.10,000 fronds.
- *‡018/1.2 **Blechnum cordatum** (Chilean Hard-fern) (Gwibredynen Chile). Plas Newydd (SH5270), SH5269 7069, Anglesey Flora Group, 3rd Apr 2023, established in damp woodland by streamlet and spreading.
- *©021/CUN.lan. **Cunninghamia lanceolata (Lamb.) Hook.** (Chinese Fir). Coed Mor, SH541 716, Anglesey Flora Group, 25th Apr 2023, single tree.

- *021/THU.dol. **Thujopsis dolabrata** (Hiba). Coed Mor, SH541 716, Anglesey Flora Group, 25th Apr 2023, single tree.
- +028/03.1.[‡] Helleborus foetidus (Stinking Hellebore) (Crafanc-yr-arth Ddrewllyd). SH4881, SH485 813, Nigel Brown, 15th Apr 2023, roadside verge, near cottage garden escape.
- +028/13.19. **Ranunculus omiophyllus** (Round-leaved Crowfoot) (Crafanc-y-frân y Rhostir). Wylfa Head LNR, SH35 94, Anglesey Flora Group, 11th May 2023, local in shallow pool.
- +039/2.dom. **Nothofagus dombeyi** (Dombey's Beech) (Coigue). Plas Newydd, SH52 70, Anglesey Flora Group, 3rd Apr 2023, 27m. tall tree in arboretum/rhododendron area.
- +040/1.1×2. **Betula ×aurata**. Plas Newydd (SH5270), SH5269 7069, Anglesey Flora Group, 3rd Apr 2023, one mature specimen, possibly of natural origin.
- ++043/1.08. **Chenopodium polyspermum** (Many-seeded Goosefoot) (Troed-yr-ŵydd Amlhadog). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023, in several of the plots.
- *046/GYP.rep. **Gypsophila repens** (Alpine Gypsophila). Beaumaris (South) (SH6075), SH6040 7593, Richard Birch, 30th Jul 2023, var. rosea. 2 plants established on seawall, Beaumaris.
- *‡047/6.1. **Muehlenbeckia complexa** (Wireplant) (Llwyn Gwifrau). Menai Bridge (SH5571), SH5545 7169, Nigel Brown, 25th Feb 2023, rampant over rocks and up adjacent shrubby growth. Veg. spread from former garden.
- +052/1.2.[©] Tilia cordata (Small-leaved Lime) (Pisgwydden Dail Bach). Beaumaris (North) (SH6076), SH603 768, Tim Blackstock, 24th Jun 2023, lane between Henllys and Beaumaris.
- +057/1.12.a. Viola tricolor subsp. tricolor. Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023, in several plots.
- +062/29.2.© Iberis amara (Wild Candytuft) (Beryn Chwerw). SH2180 (SH2180), SH2187 8076, Nigel Brown, 24th Jul 2023, sown on a new length of clawdd in conjunction with the tidal energy scheme.
- +‡062/29.umb. Iberis umbellata (Garden Candytuft) (Beryn yr Ardd). SH4578 (SH4578), SH4595 7863, Anglesey Flora Group, 3rd Mar 2023, 2 plants on low wall.
- *†062/5.1. Isatis tinctoria (Woad) (Llysiau). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023, originally introduced for dyeing, now spread to several plots.
- *065/02.arb. **Rhododendron arboreum** (Tree Rhododendron). Plas Newydd (SH5270), SH5271 7072, Anglesey Flora Group, 3rd Apr 2023, veteran specimens in arboretum/rhododendron area.
- *‡065/12.6. **Erica lusitanica** (Portuguese Heath) (Grug Portiwgal). Penmon Priory (SH6380), SH631 808, Nigel Brown, 18th Apr 2023, 5m. tall specimen in full flower in newer cemetery. Det. from Stace 3 & Poland.
- *065/PIE.jap. Pieris japonica. Plas Newydd, SH52 70, Anglesey Flora Group, 3rd Apr 2023, several large specimens in arboretum/rhododendron area; (+) Cadnant Dingle (SH5572), SH5597 7269, Nigel Brown, 25th Jun 2023, mature bush, prob. planted, grounds of Moorings, during search for Bird's-nest Orchid.
- *‡071/DEU.sca. **Deutzia scabra** (Deutzia) (Deutsia). SH2282, SH2205 8207, Nigel Brown, 6th Jun 2023, one large (1.5m. x 2m. spread) in old quarry.
- +073/5.5. **Sedum telephium** (Orpine) (Canewin). Newborough Forest SSSI (SH3965), SH3920 6574, Nigel Brown, 28th May 2023, clump at seaward edge of forest adjoining fixed dune.

- +074/03.1×cil. **Bergenia ×schmidtii**. Menai Bridge SH5572, SH55 72, Anglesey Flora Group, 25th Feb 2023, now naturalised and spreading.
- +©075/22.02. **Prunus dulcis** (Almond) (Coeden Almon). Community Woodland Centre (former Forestry England offices) (SH4166), SH4136 6697, Nigel & Caroline Brown, 16th Sep 2023, planted c. 2020.
- *†075/26.sal. **Pyrus salicifolia** (Willow-leaved Pear). Oriel Ynys Mon, SH459 764, Nigel Brown, 15th Aug 2023, mature tree by carpark.
- +‡075/32.22. **Cotoneaster hjelmqvistii** (Hjelmqvist's Cotoneaster) (Cotoneaster Hjelmqvist). Oriel Ynys Mon, SH459 764, Nigel Brown, 15th Aug 2023, in fruit, roadside hedgebank. 2nd VCR.
- +‡075/32.37. **Cotoneaster dielsianus** (Diels' Cotoneaster) (Cotoneaster Diels). Oriel Ynys Mon, SH459 764, Nigel Brown, 15th Aug 2023, in fruit, roadside hedgebank. 3rd VCR.
- +077/19.23. **Trifolium arvense** (Hare's-foot Clover) (Meillionen Gedennog). Capel Mawr, SH41 71, Jane Stevens, 22nd Jul 2023, single plant on rock outcrop.
- +‡085/1.3. **Cornus alba** (White Dogwood) (Cwyrosyn Rhisgl Coch). Llangefni, SH45 75, Anglesey Flora Group, 3rd Mar 2023, now well established in damp riverside area.
- +‡085/2.1.© **Aucuba japonica** (Spotted-laurel) (Coeden Frech Felen). Menai Bridge SH5572, SH55 72, Anglesey Flora Group, 25th Feb 2023, possibly self-sown.
- +‡085/3.1.© **Griselinia littoralis** (New Zealand Broadleaf) (Griselinia). Menai Bridge SH5572 (SH5572), SH556 724, Anglesey Flora Group, 25th Feb 2023, persisting strongly in derelict land.
- +†091/2.09. **Euphorbia lathyris** (Caper Spurge) (Llaethlys Caprys). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023; (+) Penmon Priory (SH6280), SH623 805, Nigel Brown, 13th Apr 2023, naturalised on low roadside wall.
- +103/1.07.‡ Geranium pratense (Meadow Crane's-bill) (Pig-yr-aran y Weirglodd). Aberffraw, near old bridge (SH3568), SH3566 6869, Mandy Forde, 8th Jul 2022, established over at least 15 years and increasing.
- +‡104/1.maj. **Tropaeolum majus** (Nasturtium) (Capan Cornicyll). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023, reappeared from seed in several plots.
- +110/8.1.a.‡ **Solanum nigrum subsp. nigrum**. Church Island, Menai Bridge, SH55 71, Hugh Knott, 16th Aug 2023, photo of stem shows eglandular hairs, by war memorial (see S. physalifolium in 2018).
- +114/1.1. **Polemonium caeruleum** (Jacob's-ladder) (Ysgol Jacob). Pen-y-garnedd (SH5376), SH5366 7665, Mandy Forde, 28th May 2022, growing in private woodland, probably planted.
- +‡116/09.1. **Borago officinalis** (Borage) (Tafod yr Ych). SH2180 (SH2180), SH2187 8076, Nigel Brown, 24th Jul 2023, sown on a new length of clawdd in conjunction with the tidal energy scheme.
- +118/06.4. **Galeopsis tetrahit** (Common Hemp-nettle) (Y Benboeth). Beaumaris Allotments, SH60 76, Nigel Brown, 20th Aug 2023, weed in allotments.
- *‡118/07.2. **Phlomis fruticosa** (Jerusalem Sage) (Saets Caersalem). SH4165 (SH4165), SH4177 6521, Dr. Richard Arnold., 1st April 2023, spreading vegetatively from a garden.
- +†118/23.3. Mentha spicata (Spear Mint) (Mintys Ysbigog). Beaumaris Allotments (SH6076),

SH608 764, Anglesey Flora Group, 20th Aug 2023.

- +‡118/23.3×4. **Mentha ×villosa** (Apple-mint) (Mintys Lletgrwn). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023.
- +118/23.4.‡ **Mentha suaveolens** (Round-leaved Mint) (Mintys Deilgrwn). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023.
- +‡124/16.20. Veronica polita (Grey Field-speedwell) (Rhwyddlwyn-y-maes Llwyd). Beaumaris Allotments (SH6076), SH608 764, Anglesey Flora Group, 20th Aug 2023; (+) Penmon Priory (SH6380), SH631 808, Nigel Brown, 18th Apr 2023, locally common. on rock outcrops and ruins.
- +125/2.08. **Orobanche hederae** (Ivy Broomrape) (Gorfanhadlen Eiddew). Lleiniog (SH6279), SH6248 7962, John Harold, 9th Oct 2023, single spike on roadside verge.
- ++135/12.1. **Cichorium intybus** (Chicory) (Ysgellog). SH6180 (SH6180), SH617 809, Tim Blackstock, 4th Aug 2023, scattered in reseeded grassland field N. of Penmon.
- +‡135/41.5. Aster lanceolatus (Narrow-leaved Michaelmas-daisy) (Blodyn-Mihangel Cculddail). Newborough Forest (part) (SH4167), SH4157 6738, Nigel & Caroline Brown, 16th Sep 2023, well established by the bird hide.
- *‡135/45.3. **Olearia traversii** (Ake-ake) (Llwyn-llygad-y-dydd Travers). SH2479 (SH2479), SH2443 7936, Nigel Brown, 18th Mar 2023, huge rampant growrh in derelict garden covering 50m x 50m. Likely to be redeveloped for housing. Re-rec. 17.9.23 abundant as a boundary/windbreak round sev. land holdings incl. SH2454.7941. 1st VCR.
- +‡138/4.2. Elodea nuttallii (Nuttall's Waterweed) (Ffugalaw Nuttall). Holy Island Coast SSSI & RSPB (SH2182), SH217 822, Nigel Brown, 12th Oct 2023, common, Llyn Cwn; (+) Plas Newydd, SH52 69, Anglesey Flora Group, 3rd Apr 2023, small lily pond just north of the Plas.
- +‡153/03.1. **Sasa palmata** (Broad-leaved Bamboo) (Bambŵ Llydanddail). Menai Bridge SH5572, SH55 72, Ivor Rees, 25th Feb 2023, now established and spreading onto verge.
- +‡153/46.2. **Polypogon viridis** (Water Bent) (Barfwellt y Dŵr). Llangefni (SH4575), SH459 756, Jane Stevens, 21st Sep 2023, 3 plants, steps to the A. Cefni, end of carpark in front of town hall.
- +153/59.1. s.l. Hordeum distichon sens. lato. Ad Astra, Brynteg, SH48 82, Nigel Brown, 24th Jun 2023, local by dung heap.
- +‡153/60.1. **Triticum aestivum** (Bread Wheat) (Gwenith). Ad Astra, Brynteg, SH48 82, Nigel Brown, 24th Jun 2023, local, by dung heap.
- *‡153/62.ric. **Cortaderia richardii** (Early Pampas-grass) (Peithwellt Cynnar). Four Mile Bridge SH2878 (SH2878), SH289 783, Nigel Brown, 16th Oct 2023, several flowering individuals, det. by leaf vein structure. Unclear if originally planted. Originally recorded in 2018 as C. selloana.
- +‡158/05.1. Hemerocallis fulva (Orange Day-lily) (Lili Undydd Oren). Penrhosfeilw (RSPB)& Holy Island SSSI (SH2180), SH2165 8033, Nigel Brown, 4th Jul 2023, becoming established; (+) Llyn Maelog SSSI (north), SH32 73, Nigel Brown, 25th Jun 2023, 3m. x 1m. patch with small outlier nearby, established on lakeside.
- *158/24.11. **Allium oleraceum** (Field Garlic) (Garlleg y Maes). Newborough SSSI (SH3963), SH3961 6373, Lucy Watts, 12th Aug 2023, conf. NHB. Unclear if Native or Introduced. Counted c.50 plants in rough grassland by forest track. After the note about this appeared in WB113 we were contacted by Roy and Marie Beacham to report they had seen A.

oleraceum at this location in August 2019.

- +‡158/33.5.b. Narcissus pseudonarcissus subsp. obvallaris (Tenby Daffodil) (Cenhinen-Bedr Penfro). Plas Newydd (SH5269), SH521 697, Anglesey Flora Group, 3rd Apr 2023, originally planted, flowering widely on grassy bank.
- *‡159/08.2. **Crocus tommasinianus** (Early Crocus) (Saffrwm Cynnar). Menai Bridge SH5572 (SH5572), SH5561 7281, Anglesey Flora Group, 25th Feb 2023, becoming established in grassland.
- +‡160/4.1. **Phormium tenax** (New Zealand Flax) (Llin Seland Newydd). Point Lynas (west) (SH4793), SH479 936, Nigel Brown, 28th Jan 2023, 2 small plants in maritime grassland/heath.
- *021A/CEP.for. **Cephalotaxus fortunei** (Chinese Plum-yew). Coed Mor, SH541 716, Anglesey Flora Group, 25th Apr 2023.



Lycopodium clavatum (Stag's-horn Clubmoss) Glyncorrwg Forest track. Both images from Glamorgan Records 2024 © Charles Hipkin



Diphasiatrum alpinum (Alpine Clubmoss) Glyncorrwg Forest track.



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