

BOTANICAL SOCIETY OF THE BRITISH ISLES

WELSH BULLETIN

Editors : R. D. Pryce & G. Hutchinson

No. 75, WINTER 2004 / 2005



Life-size photocopies of *Juniper communis* ssp. *hemisphaerica* and ssp. *nana* at NMW, originating from Ramsey Is, Pembs. and Cader Idris, Merioneth resp. (see p. 9).

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Most back issues of the BSBI Welsh Bulletin are still available on request (originals or photocopies). Please enquire before sending cheque (made payable to BSBI Wales), @ £2 per issue, which includes p & p, to - Dr G. Hutchinson, Department of Biodiversity & Systematic Biology, National Museum & Gallery, Cathays Park, Cardiff CF10 3NP, specifying the issue number, or year (which would have to include the season or month). Large runs - price negotiable.

Those who have already ordered copies in advance will have their order honoured at the previous cost of £1 per issue including p & p.

EDITORIAL

This year's Welsh AGM, held at the Hand Hotel, Llangollen, was very well attended and enjoyed by all, despite the atrocious weather on the Sunday field-meeting. We all congratulate the organisers for finding such an excellent venue and arranging the weekend and thank all contributors, including, of course, Clive Stace as guest speaker. A resume of Clive's talk is included in this issue, reminding us that there is still much useful work to be done in the recording of subspecies, hybrids and some introductions. The exhibits were of a very high standard, embracing a wide range of topics, and are listed on pp.9-10. We have included a few pictures in the colour section.

Bob Ellis, BSBI's Local Change co-ordinator, was confident that he would receive all the field-records by the end of December 2004. I am sure that you all will have sent any outstanding records to your Vice County Recorder who will then have been able to send them in on time. Bob set this deadline so that he can start the analysis of the data. He has been pleased by the very high proportion of records submitted electronically which means that he will not have to spend so much time inputting data, time he can now more usefully spend on analysis. It still remains, however, for V.C. Recorders to assess the reasons for species gains and losses in each tetrad – no mean task, and one which may be very subjective. However it gives the opportunity of recording the reasons for change where they are known, e.g. habitat or site loss, or for speculating when the reason is not so obvious. But most of the core work has been successfully completed, so we are now entering the last lap: well done to all.

Thanks to all contributors to this issue of the Welsh Bulletin, but particularly to Gwynn Ellis for compiling an unprecedented 38 pages of *Welsh Plant Records*. This issue also includes the *Plantlife Wales Pages* provided by Trevor Dines, Plantlife International's Wales Officer. This is the first of what is planned to become a regular feature for both Plantlife and BSBI members in Wales. It is also hoped that it will foster greater 'cross-fertilization' between the two groups. This is building upon the collaboration initiated in 2003 at the Butterfly Orchid Count at Cae Blaen Dyffryn, Plantlife's Reserve in Carmarthenshire, when over 100 members and friends from both organisations had an enjoyable day carrying out useful recording work at the site.

Looking forward, we are again very grateful to Wendy McCarthy for coordinating the coming year's Welsh field meetings' programme which is printed on p. 7. The 2005 Welsh AGM weekend will be held in St.David's College, Lampeter on 17th to 19th June (booking details on p. 8) but I should also remind you that the [national] BSBI AGM will be held in Ferryside, Carmarthenshire on 13th to 15th May with a supporting programme of field work. Ferryside is easily accessible by train. A booking form will be included in the next issue of *BSBI News*: early booking for both meetings is recommended!

Finally, I hope you had a pleasant Christmas and I look forward to seeing you in 2005.

Richard Pryce
19 December 2004

Corrigendum to colour caption 8 in Welsh Bulletin No. 74 - for '*Mangifera indica* (Mango)' read '*Carica papaya* (Papaya [Pawpaw])'. We are grateful to Andy Jones for pointing out this mis-labelling.

GREETING FROM THE CHAIRMAN

It was in 1962 that the Committee for Wales (then the Welsh Regional Committee) was formed, largely under the impetus of the late Prof. W. S. Lacey. Many of us remember Bill Lacey with affection; he was a popular member of the Botany staff at Bangor and worked tirelessly for nature conservation. The first AGM was held in Cardiff in September 1963, with twelve members present. (There are more than that on the Welsh Committee these days!). The morning session consisted of three talks on "Plants of the Welsh Lakes", "Reflections on Botany" and "Experimental studies on the evolution of plant species". In the afternoon there were further talks and discussions as well as an opportunity to view members' exhibits. The following year's annual meeting was held in Bangor and was "well attended" and since then we haven't looked back; the latest AGM was a "3-day event" with over 60 members present.

This issue of the Welsh Bulletin is No. 75, and at the risk of allowing the BSBI in Wales to become a mutual admiration society, I feel that all members would like me to thank Richard Pryce and George Hutchinson for their continuing work as editors. What they really want is more material for the Bulletin, - we should all make an effort to put pen to paper (or should that be fingers to keypads?). It was exciting to see some pages of colour illustrations in the latest issues - well done.

Last month, my wife and I travelled north to the Scottish AGM, (Dilys needs no persuasion to visit Edinburgh!). There were several Welsh members present and we were welcomed warmly. Our Scottish friends were very brave, - the main lecture was on Hawkweeds, but their bravery was well rewarded; David McCosh led us through the labyrinthine complexities of *Hieracium* with great skill. I was also most impressed with the members' exhibition; the number and quality of the exhibits was excellent.

What would you do if you met an Archaeophyte?

Some of us are now working (rather belatedly) on a Rare Plant Register for Flintshire, and like many before us we are having to think long and hard about this vexed question of plant status, - what do we really mean by "native"?, when is a plant "naturalised"?, are there such things as "colonists"?, etc., etc. In the last couple of years we have been introduced to the concept of archaeophytes and neophytes, and many eyebrows have been raised. A word of advice, - if you haven't read it, try to get hold of a copy of 'Archaeophytes in Britain' by Preston, Pearman and Hall, published in the Botanical Journal of the Linnean Society, 2004, 145, 257-294. David Pearman may be able to supply a copy, his address is in BSBI News. This paper is clearly written and makes a convincing case.

With best wishes for 2005 - happy botanising.

Goronwy Wynne

Chairman: Committee for Wales, BSBI.

BSBI WALES ANNUAL GENERAL MEETING 2004

Saturday 24th July 2004

The 42nd Annual General Meeting of the BSBI in Wales took place at the Hand Hotel, Llangollen.

1. **Apologies for absence:** Dr D Humphreys, Dr G Hutchinson, Dr QON Kay, Mrs M Perring, Julian Woodman and Ray Woods.

2. **Minutes of 2003 AGM:** (published in *Welsh Bulletin* 73: 5-6). Accepted without amendment.

3. **Matters Arising:** None.

4. **Chairman's opening remarks:** Dr Goronwy Wynne welcomed everyone to the meeting and then warmly thanked Heulwen Bott and Committee members Jean Green and Sarah Stille for organising the whole weekend; Wendy McCarthy, Emily Meilleur, Joe Phillips and Delyth Williams for leading the field excursions; Professor Clive Stace, our guest speaker, and all those others who had helped in any way.

The Chairman outlined that the Committee had met three times since the AGM in 2003 and, since publication of the new Atlas and Vice-County Census Catalogue, had been mainly concerned with progressing County Rare Plant Registers and the Local Change project for all the vice-counties in Wales – a refreshingly uneventful year.

In closing the Chairman thanked all the honorary officers for their work over the past year and paid tribute to those retiring from the Committee. He also thanked CCW for the use of their offices for our committee meetings.

5. **Hon. Secretary's Report:** Gwynn Ellis explained that the two main committee meetings continued to be followed by sessions on wider botanical topics and that the Committee would like to make these accessible to other members in Wales. The next meeting will be on 16th October at Plas Gogerddan, Bow Street.

The Secretary described our close working relationship with CCW, with a meeting between our President and senior CCW staff in May, the agreement that we should assist with botanical surveys of land in the Tir Gofal agri-environment scheme, and CCW's continuing support for the production of Rare Plant Registers for each vice-county in Wales. Several of these Registers were making good progress and were close to completion.

Gwynn outlined future arrangements for submitting all plant records from Wales for publication. Any remaining records for 2002 and 2003 should be sent to him in the next month or two, he would then send proofs to each vice-county recorder for checking in time for publication in the next *Welsh Bulletin* in December. Gwynn would also select out those records for publication in *Watsonia* and forward them to Mike Porter (Cumbria).

Two issues of the *Welsh Bulletin* had been published during the year and continued thanks were due to George Hutchinson and Richard Pryce, our editors, and to the latter for bearing the cost of the much appreciated colour supplement.

All present were urged to submit contributions for future issues.

6. **Hon. Treasurer's Report:** Peter Jones tabled the Annual Statement of Accounts for 2003, explaining that the excess of expenditure over income of £239 was due to reimbursements for booking cancellations for the 2003 Wales AGM and higher costs for printing and distributing two editions of the *Welsh Bulletin*. However the account still showed a credit balance of £597 at the end of December 2003. The Statement is reproduced below.

Adoption of the accounts was proposed by Trevor Evans and seconded by Gill Barter and passed unanimously, and without comment.

Annual Statement of Accounts, 1 January 2003 to 31 December 2003

<i>Receipts</i>		<i>Payments</i>	
From BSBI Treasurer	0.00		
2003 AGM	2271.29	2003 AGM	2187.32
<i>Welsh Bull.</i> Subs.	37.00	<i>Welsh Bull.</i> 71 printing	103.99
		<i>Welsh Bull.</i> 71 postage	55.20
		<i>Welsh Bull.</i> 72 printing	134.56
		<i>Welsh Bull.</i> 72 postage	66.31
Totals	2308.29		2547.38
Excess of receipts over Payments	-239.09		
Carried forward from 2002	836.71		
Balance, 31/12/2003	£597.62		

Peter S Jones Hon. Treasurer (1994-2004), BSBI Committee for Wales, 21st July 2004.

7. Election of Officers and Committee Members: Mr RA Jones was nominated for the post of Hon. Secretary and Mrs SE Stille for the post of Hon. Treasurer.

In the absence of any new nominations, and with the agreement of the existing officers and committee members, the officers and then those committee members due to retire in 2004 and wishing to stand again, were re-elected as indicated on the reverse of the AGM agenda.

The Chairman re-iterated the thanks of the members to those retiring from the Committee, especially Peter Jones after ten years as Hon. Treasurer and Gwynn Ellis after 27 years as Hon. Secretary.

8.AGM & Exhibition Meeting 2005: The Chairman announced that this would be held from 17th – 19th June 2005 in St David's College, Lampeter. A programme of visits to some of the rich range of habitats in the area would be arranged and it was hoped the cost would be similar to this year's event.

Wendy McCarthy hoped to arrange a full programme of field meetings as usual, but particularly wanted potential leaders from the south of the country to volunteer and contact her before the programme is finalised in October.

9.Any Other Business: To commemorate Gwynn 's retirement as Hon. Secretary the Chairman invited Mike Porter (Brecknock) to present Gwynn with a landscape painting as a token of our thanks. In his response Gwynn recalled that in January 1977 he actually inherited the role of Secretary from Mike himself, indeed both Stephen Evans and Goronwy Wynne were also already on the Committee by then! This element of continuity, coupled with the steady recruitment of new members, gave the Committee for Wales the best of both worlds.

On this note the Chairman closed the meeting by thanking everyone who had attended the weekend and helped to make it such a success.

The AGM attendance list was signed by 59 members.

COMMITTEE FOR WALES 2004-2005

Following the election of honorary officers and members the composition of the Committee is as follows:

Hon. Chairman and Welsh Rep. on Council	Dr Goronwy Wynne
Hon. Vice-chairman	Julian Woodman
Hon. Secretary	RA Jones
Hon. Treasurer	Mrs Sarah Stille
Hon. Field Meeting Secretary	Mrs Wendy McCarthy
Hon. Minutes Secretary	Ian Bonner

Committee Members:

Arthur Chater	Dr George Hutchinson
Paul Day	Dr Quentin Kay
Dr Trevor Dines	Joe Phillips
Stephen Evans	Mike Porter
Trevor Evans	Richard Pryce
	Delyth Williams

CCW Observer: Ray Woods

Dr Trevor Dines also represents Plantlife International (Wales)

CALENDAR OF MEETINGS 2005

Full details and procedure for booking will be available in the BSBI Year Book for 2005.

SAT 30th APR - SOUTH GOWER COAST, GLAMORGANSHIRE (v.c. 41) – M. Howells

FRI 13th - SUN 15th MAY - BSBI AGM, FERRYSIDE, CARMARTHENSHIRE (v.c. 44)

SAT 4th JUN - PENCOED, GLAMORGAN (v.c. 41) – G. Barter

SAT 11th JUN - CRAIG Y RHIWARTH, BRECONSHIRE (v.c. 42) – M. Porter

FRI 17th - SUN 19th JUNE - WELSH AGM and EXHIBITION MEETING, LAMPETER and associated field meetings (v.c. 46)

SAT 9th JUL - PRESTATYN, FLINTSHIRE (v.c. 51) – G. Wynne & J. Phillips

SAT 23rd JUL - YSGOLION DUON, CAERNARVONSHIRE (v.c. 49) – W. McCarthy & S. Thomas

SAT 23rd JUL - SAT 30th JUL - GLYNHIR MANSION, LLANDYBIE, CARMARTHENSHIRE (v.c. 44) – R.D. Pryce

SAT 3rd SEP - TRAETH LLIGWY, ANGLESEY (v.c. 52) – N. Brown

43rd WELSH ANNUAL GENERAL MEETING & 23rd EXHIBITION MEETING

FRIDAY 17th — SUNDAY 19th June 2005

at

ST DAVID'S COLLEGE, LAMPETER
CARDIGANSHIRE

OUTLINE PROGRAMME

further details will be sent to participants later

PROGRAMME

FRIDAY 17th

- 2.00 pm Old Hall, St David's Building open for setting-up exhibits (offers of exhibits should be made to the Organising Secretary by 30th May 2005; see below)
- 4.00 pm Afternoon tea and Taxonomic Workshop on Aquatic Plants (**Richard Lansdown**)
- 7.00 pm Evening meal in the College Refectory
- 8.00 pm Exhibition in Old Hall and local excursion

SATURDAY 18th

- 8.00–9.00 am Breakfast in the Refectory (collect pack-lunch)
- 9.30 am Assemble in car-park for excursions to (1) Denmark Farm and (2) Caeau Blaen Dyffryn Plantlife Reserve
- 3.00 pm Return to St. David's College. Afternoon tea, second Taxonomic Workshop on Aquatic Plants (**Richard Lansdown**) and AGM in the Old Hall, St David's Building. Welsh Committee meeting
- 6.00 pm Illustrated talk on the Ceredigion Flora by **Arthur Chater**
- 7.00 pm Evening meal in the College Refectory
- 8.00 pm Illustrated talk by **Ray Woods**

SUNDAY 19th

- 8.00–9.00 am Breakfast in the Refectory (collect pack-lunch)
- 9.30 am Excursions to (1) Tregaron floodplain and (2) Teifi Pools

Further details and a booking form are included with the January mailing of BSBI News, but the costs for full board accommodation from Friday evening to Sunday morning will be approximately £95.

IMPORTANT

MEETING: All bookings for meeting must be made by 31st MARCH, 2004.

Full details, map &c., will be sent to participants.

Please enclose a Self Addressed Envelope to: Sarah Stille, (Treasurer, BSBI Wales), The Quillet, Berwyn St., Llandrillo, Corwen, Denbighshire LL21 0TH sarah.stille@virgin.net

EXHIBITS: All bookings for exhibits must be made by 30th MAY 2005. Further details for booking are on the same booking form included with the January mailing of BSBI News. Return exhibit booking part of form to the Organising Secretary: Andy Jones, CCW, Plas Gogerddan, Aberystwyth, Ceredigion SY23 3EE a.jones@ccw.gov.uk

AN INVENTORY OF JUNIPER POPULATIONS IN WALES

Abstract of exhibit shown at the BSBI Welsh AGM Hand Hotel, Llangollen July 2003

Although Juniper (*Juniperus communis*) and its subspecies *nana* and *hemisphaerica* are well recorded nationally at the 10-km scale, no single dossier or inventory exists from which to make an overall assessment of this species in Wales.

Records were initially sourced from the Biological Records Centre (Monks Wood). Additional records were sought from a wide range of sources, with particular emphasis on upland Snowdonia. Most records came from The National Trust, The Countryside Council for Wales and from BSBI Vice-county Recorders.

During the project, 208 records were added to the dossier, bringing the total for Wales to 349. Of these, 66% were made after 1987 and 46% since the year 2000. Fifty-five percent of the records have 6- or 8-figure grid references.

These records represent 100 "populations" in Wales - the first time such a figure has been available. An estimate of population size is available for 43 of the 100 populations; they range from 1 plant (in 23 populations) to 300+ at Nant y Gamar (Penrhyn Bay, Caerns.). The average size is 19.5 plants per population.

Information regarding detailed population structure and site management is lacking in both lowland and (especially) upland populations. This information is important to encourage appropriate management, particularly as rates of regeneration are often so low, and its collection should be seen as a priority.

Finally, it appears that the population of *Juniperus communis* subsp. *hemisphaerica* on Ramsey (Pembs.) has declined from six plants to four, two of which are in "poor condition". With no regeneration observed we are in danger of losing this taxon from Wales. Since the total British population is probably only around 11 plants (7 are known from the Lizard peninsula in Cornwall), more effort urgently needs to be put into conserving this subspecies.

Copies of the inventory are available from Trevor Dines. However, significant additional data for upland Snowdonia will be included in the dossier this winter, and will be available from March 2005.

Trevor Dines (Plantlife Wales Officer)
c/o Countryside Council for Wales,
Maes y Ffynnon, Ffordd Penrhos,
Bangor, Gwynedd, LL57 2LQ.
Telephone: 01248 385445.
E-mail: trevor.dines@plantlife.org.uk

The following also exhibited at the 22nd BSBI Welsh Exhibition Meeting, Hand Hotel, Llangollen July 2004

Ian Bonner: Dick Roberts' Proceedings, Watsonias etc - free to good homes!

Anne Daly: Some memorable moments and members from my botanical archives [exhibited by Ian Bonner]

Anne Daly: Help! required for specimens collected by Mike Poulton in Birmingham and the Black Country

Trevor Dines: The County Flowers of Wales

- Trevor Dines: Penboethyryd Downy Hemp Nettle (*Galeopsis segetum*)
 Margot Godfrey: BSBI postcards
 Jean Green: Specimens of *Allium ampeloprasum* var. *babingtonii*, *Equisetum x litorale* and *Gagea lutea*
 Wendy McCarthy: Specimens of *Poa chaixii*, *Ranunculus sardous*, *Melica uniflora*,*Hieracium pseudoleyi*
 Rose Murphy: Herbarium sheets of *Brachypodium*
 Richard and Kath Pryce: poster: Whorled Caraway: Carmarthenshire's County Flower
 Richard and Kath Pryce: *Cyperus* sp. - an as yet undetermined alien from South Llanelli [exhibit of potted plant] [since determined as *Cyperus congestus* by D.A. Simpson at Kew, the first record of the species in Wales]
 Richard and Kath Pryce: A strange form of ?*Arenaria leptoclados* invitation for expert opinions [det by Graeme Kay & AOC as *Linum catharticum*]
 Summerfield Books
 G.Wynne: *Dianthus armeria* - saving a Flintshire rarity [exhibit of potted plant]
 List supplied by Richard Pryce

Overlooked and Neglected Taxa in the British Flora: a note on the Guest Speaker's talk at the Llangollen AGM, 2004

Professor Clive Stace gave a fascinating illustrated talk on the neglected and overlooked taxa in the British flora, particularly as shown up in the New Atlas. He identified what seemed to be several distinct areas of oversight: around subspecies, hybrids and – especially – certain kinds of introduced and alien taxa. Not all of this last group were recently-arrived garden plants and an overriding theme in this talk was that nearly all of the overlooked taxa are quite easy to recognise and identify in the field.

Two examples illustrate this point for neglected native subspecies: the fruits of *Sparganium erectum* are distinctive, diagnostic and persistent and there should be no difficulty with recording any of the four widespread subspecies. *Ranunculus ficaria*, on the other hand, has two rather uncommon and local subspecies (ssp. *ficariiformis* and ssp. *chrysocephalus*) but the differences between two common subspecies (ssp. *bulbilifer* and ssp. *ficaria*) were clearly illustrated in a slide of them growing side by side. Anticipating another theme in this talk, the photograph also illustrated their overlooked triploid hybrid (with remarkably small flowers).

Hybrids were acknowledged (by this renowned specialist) to be more difficult but we should particularly look out for the offspring of widespread and partially interfertile native species, e.g. *Vaccinium myrtillus* x *V. vitis-idaea*, *Betula pubescens* x *B. pendula* and *Quercus petraea* x *Q. robur*. Hybrids should, perhaps, be more readily identified where one of the parents is an alien (eg. *Ilex aquifolium* x *I. perado* or *Lolium perenne* x *L. multiflorum*) but these seem to be most often recorded as one or other species. *Hyacinthoides hispanica* x *H. non-scripta* is a good example: *H. hispanica* is not common in gardens and very many records turn out to be the hybrid (with cream-coloured, not blue anthers). The two taxa are, in any case, probably best regarded as subspecies – and most likely in the genus *Scilla*.

Introduced species seem to be consistently under-recorded, although they are frequently widespread and conspicuous (eg. peas and cereals). The introduced agricultural subspecies (eg. *Vicia sativa* subsp. *sativa* and *Daucus carota* subsp. *sativus*) seem to be even more neglected. Recorders consistently resist sorting out similar species-pairs (eg. *Campanula portenschlagiana* vs. *C. poscharskyana*; *Lycium barbarum* vs. *L. chinense*) and avoid largely new genera (eg. *Spiraea* and *Cotoneaster* spp.) but perhaps most overlooked are the

widespread pairs of introduced shrubs where both the species and its hybrid offspring occur (eg. *Philadelphus coronarius* vs. *P. x virginalis*, *Colutea arborescens* vs. *C. x media*, *Escallonia macrantha* vs. *E. x langleyensis* and *Forsythia suspensa* vs. *F. x intermedia*). These are all widespread and easy to distinguish.

*

In the ensuing discussion several members noted that some taxa (eg. *Cotoneaster*, *Betula* and *Lolium*) present problems in the key – and perhaps agricultural ‘volunteers’ are not so widespread in west Wales. Professor Stace was delighted to respond that most of these taxonomic difficulties are now resolved in the new Interactive Flora of the British Isles DVD.

Summary supplied by Andy Jones, CCW, Plas Gogerddan, Aberystwyth, Ceredigion SY23 3EE a.jones@ccw.gov.uk

***Malus hupehensis* (Hupeh Crab) established in Wales**

Malus hupehensis (Hupeh Crab) was introduced into Britain from China by Ernest Wilson in 1900. It is a very attractive small tree with dark green leaves and abundant, fragrant white flowers from pink buds in Spring. The fruits, which at first sight resemble cherries, ripen to red in Autumn and are taken readily by thrushes and blackbirds who swallow them whole. It is often planted as a street tree, much less so in gardens, becoming bird-sown on nearby waste ground as at Derwen Fawr near Swansea, where I have counted five mature specimens well scattered in light woodland and scrub.

There are records of *Malus hupehensis* from two sites in Hampshire (v.c. 11) and indeed Roger Veall showed specimens and photographs of the species at the Annual Exhibition Meeting 2003. The Hampshire records date from 1986; this, the first Welsh record, from 2003.

I am grateful to Teifion Davies of Clyne Gardens, Swansea, in his help for determining *Malus hupehensis* for me.

TONY LEWIS
12 Cannisland Park
Parkmill
Swansea
SA3 2ED

PETER BENOIT - ANNIVERSARY

2004 saw the 50th anniversary of Peter Benoit's tenure as first and only Vice County Recorder for Merioneth (v.c. 48) and, since the death of Francis Simpson, the longest -serving VCR in the BSBI. We send him our congratulations and wish him many happy returns.

Sarah Stille
The Quillet
Berwyn Street
Llandrillo
Corwen
Denbighshire
LL21 0TH

Depositing specimens in the Welsh National Herbarium

The Welsh National Herbarium (NMW) at the National Museum and Gallery, Cardiff is the largest repository for Welsh botanical specimens. It is important that voucher material for species new to Wales, new vice-county records and other important records are accessible in the long term to the scientific community and the general public. The Welsh National Herbarium is one place where such material can be deposited and will be available for consultation, and our programme of documenting the specimens and making it available on the web also makes it accessible internationally. If you hold lots or only a few of important specimens, please consider depositing material with us now or in the future.

The quality of voucher specimens and their storage is important. We mount specimens onto stiff, acid-free card c. 41 cm x 26 cm with gummed linen tape, and store it in relatively dry conditions (c. 55% humidity - higher levels often result in pests eating the material) in cabinets. Labels include as a minimum the locality, date and collector, but more information is preferable! We can hold very sensitive information such as grid references for *Trichomanes* separately from the specimens if required. Material left in newspapers discolours rapidly, and Sellotape must not be used as it is difficult to remove and often goes sticky with time. Regularly freezing material can help limit or prevent pest damage such as by book lice.

We will be happy to supply mounting card, linen tape and blank labels to allow material to be prepared in advance on condition that the material is deposited with us, and we can provide advice on preparation of material. We also accept unmounted material. Please contact either of us if you want to discuss any issues.

T. C. G. RICH & G. HUTCHINSON
Department of Biodiversity and Systematic Biology
National Museums & Galleries of Wales
Cardiff CF10 3NP

WELSH PLANT RECORDS – 2002-2003

Welsh Plant Records are compiled by Gwynn Ellis, 41 Marlborough Road, Roath, Cardiff, CF2 5BU, from reports of BSBI vice-county Recorders to whom records should preferably be sent. Plants are now listed for each county in the order of D.H. Kent's *List of Vascular Plants of the British Isles* (1992). and *Supplements 1 & 2* (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 also follow Kent (1992) and *Supplements 1 & 2* or, if not in that list, the 2nd edition of C.A. Stace's *New Flora of the British Isles* (1997), E.J. Clement & M.C. Foster's *Alien Plants of the British Isles* (1994) or T.B. Ryves, E.J. Clement & M.C. Foster's *Alien Grasses of the British Isles* (1996). Authorities for Latin names are no longer given unless the name is not in any of these works. English names are those in *English Names of Wild Flowers* ed. 2 (1986) by Dony *et al.* or, if not in that list, Stace (1997), Clement & Foster (1994) or Ryves, Clement & Foster (1996). English names enclosed by square brackets do not occur in any of these books but are included in Davies & Jones (1995). Welsh names are those in Dafydd Davies & Arthur Jones' *Welsh Names of Plants* (1995).

The following symbols are used:

- * to indicate a new v.c. record
- + to indicate a new or updated hectad record
- † indicates archaeophyte; ‡ indicates neophyte; ø indicates casual
- †, ‡, ø before the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual in at least one of the Welsh vice-counties
- †, ‡, ø before the record: to indicate a species which although a native, archaeophyte or neophyte in at least one of the Welsh vice-counties, is not so in the locality recorded
- [] to indicate that the record, previously published in error, should be deleted
- to indicate an update to a rare or scarce taxon
- Ø to indicate that the taxon is now believed to be extinct in the locality cited

In general, only records which update the *Vice-county Census Catalogue* (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, references to a 1km or even a 100m square may be included. A letter in parenthesis following a grid reference indicates a tetrad.

The Vice-county Recorders from 1/1/2005 are:

MONMOUTH, v.c. 35; Mr T.G. Evans, La Cuesta, Mounton Road, Chepstow, Monmouthshire NP16 5BS
 GLAMORGAN, v.c. 41 (West); Dr Q.O.N. Kay, West Cwm, Llanmadoc, Gower, Swansea SA3 1DG
 GLAMORGAN, v.c. 41 (East); Mr J. Woodman, c/o CCW, Unit 4, Castleton Court, Fortran Road, Cardiff CF3 0LT
 BRECON, v.c. 42; Mr M. Porter, Aberhoowy Farm, Cyffredyn Lane, Llangynidr, nr Crickhowell, Powys NP8 1LR
 RADNOR, v.c. 43; Dr D.R. Humphreys, Knill Court, Knill, nr Presteigne, Powys LD8 2PR
 CARMARTHEN, v.c. 44; Mr R.D. Pryce, Trevethin, School Road, Pwll, Llanelli, Carmarthenshire SA15 4AL
 PEMBROKE, v.c. 45; Mr S.B. Evans, Glan-y-Mor, Dinas Cross, Newport, Pembrokeshire SA42 0UQ
 CARDIGAN, v.c. 46; Mr A.O. Chater, Windover, Penyrangor, Aberystwyth, Dyfed SY23 1BJ
 MONTGOMERY, v.c. 47; Mrs M. Wainwright, Troy, 1 Green End, Oswestry, Shropshire SY11 1BT
 MERIONETH, v.c. 48; Mr P.M. Benoit, Pencarreg, Barmouth, Gwynedd LL42 1BL
 CAERNARFON, v.c. 49; Mrs W.N. McCarthy, 5 Tyn-y-coed, Great Orme, Llandudno, Conwy LL30 2QA
 DENBIGH, v.c. 50; Mrs J.A. Green, Coed Duon, Tremerchion, St Asaph, Denbighshire LL17 0UH
 FLINT, v.c. 51; Dr G. Wynne, Gwylfa, Lixwm, Holywell, Flintshire CH8 8NQ
 ANGLESEY, v.c. 52; Dr N.H. Brown, Treborth Botanic Garden, University College of North Wales, Bangor, Gwynedd LL57 2RQ and Mr I.R. Bonner (all correspondence to Dr Brown).

MONMOUTH, v.c. 35 (comm. T.G. Evans)

- *10/2.1. *Trichomanes speciosum* gametophyte (Killarney Fern) (Rhedynen Wrychog). In horizontal crevices in sandstone rocks, Cleddon, SO52.08 & 52.04, F. Rumsey *et al.*, SO520.039, M.A.R. & C. Kitchen, T.G. Evans; both 1997. 1st records.
- 14/ 2.1. *Phegopteris connectilis* (Beech Fern) (Rhedynen y Graig). About 150 fronds on steep, rocky bank covered with mosses and ferns, SSW of Pistyll-gwn, SO287.070, S.D.S. Bosanquet, 2002. 3rd record.
- +16/4.1. *Gymnocarpium dryopteris* (Oak Fern) (Llawredynen y Derw). 20-30 fronds among rock scree, Garn Ddynys, E of B4246, SO259.119, C. Forster Brown, 2003.
- *¢20/7.pin. *Pinus pinea* (Stone Pine) (Pinwydden Anial). A large tree with magnificent cones in walled garden, Tredegar House, ST288.850, 1984-2003 at least, T.G. Evans, 2003.
- 28/13.4. *Ranunculus sardous* (Hairy Buttercup) (Crafnac y Frân Blewog). More than 50 plants in field of oats & *Vicia sativa* subsp. *sativa*, W of road, S of Middle Hendre Farm, SO454.132, T.G. Evans & H.V. Colls; 9 plants edge of farm track, Tre-fal-du Farm, SO461.082, H.V. Colls; both 2002.
- *46/10.1. *Sagina nodosa* (Knotted Pearlwort) (Corwlyddyn Clymog). Thousands of plants on damp, rocky bed of drained and disused Scotch Peter's Reservoir that once served Tredegar, SO155.059, T.G. Evans, 2002.
- *75/21.12×17. *Rosa × molletorum* (*R. canina* × *R. mollis*) (a hybrid Rose). One bush in gully near Coed Ithel, Little Mountain, Trevethin, SO288.032, T.G. Evans, 2002.
- +‡75/26.2. *Pyrus pyraeaster* (Wild Pear) (Gellygen Wylt). One young tree on bank in MOD, Caerwent, ST476.921, T.G. Evans, 2003. It has long, straight, stout spines.
- +77/10.3. *Ornithopus perpusillus* (Bird's-foot) (Troed yr Aderyn). Numerous plants in semi-improved grassland, Trostrey Common, SO377.044, J. Branscombe. 1st hectad record since 1930s.
- ¤91/2.7. *Euphorbia serrulata* (Upright Spurge) (Llaethlys Mynwy). Hundreds of plants on margin of made up forestry track, Church Grove, ST525.996, S.J. Tyler, 2002. Red Data Book Species.
- ‡105/1.2. *Impatiens capensis* (Orange Balsam) (Ffromlys Oren). Seven patches on margin of lane, reen and ditch, Pont Estyll Lane, N of St. Brides-Wentlooge, ST292.832; on the bank of Percoed Reen & 7 patches at ST287.836; 7 patches at ST287.837; 4 patches at ST290.839; 9 patches on banks of Pontycwaw Branch Reen, ST300.842; 6 patches in roadside ditch, Coedhernew, ST274.832; all T.G. Evans, 2003.
- 107/17.1. *Crithmum maritimum* (Rock Samphire) (Corn Carw'r Môr). One square metre among rocks on foreshore just to W of Lighthouse Inn, ST300.815, T.G. Evans, 2002.
- 107.19.7. *Oenanthe aquatica* (Fine-leaved Water-dropwort) (Cegid Manddail y Dwr). One plant in new reen, Goldcliff, ST362.826, T.G. Evans, 2002.
- 107/29.2. *Petroselinum segetum* ((Corn Parsley) (Eilunberllys). Ten to twenty plants on bank of Windmill Reen, Redwick, ST404.840, T.G. Evans, 2002. An uncommon plant, erratic in appearance.
- 107/30.1. *Sison amomum* (Stone Parsley) (Githran). About 10 plants by track near car park to Gwent Levels Wetlands Reserve, ST33.83, T.G. Evans; >50 plants central reservation of M4, Wilcrick, ST40.88, T.G. Evans & S.J. Tyler; >100 plants at edge of Barley crop, ESE of Peartree Cottage, Treowen, SO466.116, T.G. Evans; all 2003.
- +108/3.4. *Centaureum pulchellum* (Lesser Centaury) (Canri Leiaf). More than 1000 plants for 50m along a clayey, forestry track in Upper Tal-y-Coed Wood, SO415.162, T.G. Evans, 2002. 3rd & only extant site. The plants were very visible on this sunny day at 2.00 pm but by 3.45 pm most had closed up and were then quite difficult to detect. Three plants only found in 2003.
- 116/2.1. *Echium vulgare* (Viper's-bugloss) (Glas y Graean). One plant at edge of leat, N of castle, Skenfrith, SO457.202, G. Motley, 2002.
- ‡118/1.8. *Stachys arvensis* (Field Woundwort) (Briwllys yr Yd). 18 plants in SW corner of field of potatoes (only part not treated with a herbicide) S of Common y Coed, ST435.886; >100 plants in Barley crop at Llantrisant Fawr, ST407.985; 12 plants in SW corner of Barley crop, SSE of Gorse Cottage, Treowen, SO464.113; all T.G. Evans, 2003.

- 118/10.4. *Scutellaria minor* (Lesser Skullcap) (Cwccwl Bach). Occasional in flushes on Bal Mawr, SO26.26, S.D.S. Bosanquet, G. Motley, 2002.
- +121/2.1. *Littorella uniflora* (Shoreweed) (Beistonnell). About 300 plants in shallow margin of middle pond, Waun-y-Pound, SO153.010, C. Titcombe, 2002.
- +‡124/1.12. *Verbascum lychnitis* (White Mullein) (Pannog Gwyn). Four plants on landscaped old shunting yards' rail ballast, Severn Tunnel Junction, Rogiet, ST457.874 and 455.874, C. Titcombe, 2002. 2nd record and 1st post 1930.
- †124/12.1. *Kickxia elatine* (Sharp-leaved Fluellen) (Llysiau Llywelyn). About 24 plants (recounted, after harvesting, as > 200, TGE), in field of oats, E side of road, S of Middle Hendre Farm, SO456.132, H.V. Colls, 2002. A plant getting increasingly rare.
- †124/12.2 *Kickxia spuria* (Round-leaved Fluellen) (Llysiau Llywelyn Crwnddail). 11 plants, margin of maize crop, Kilpale, ST469.928, T.G.Evans, 2002. 1st record for 17 years of this plant now on the verge of extinction in the vice-county. (A 2nd visit, a fortnight after, the maize had been harvested and the *Kickxia* had been flattened and was dead or dying with NO seed produced).
- 124/20.1. *Euphrasia rostkoviana* subsp. *rostkoviana* [Common Eyebright] (Effros Blodau Bach Gludiog). In damp meadow, Coed Llifos, ST456.967, 1999; many plants scattered over 1 of 5 sites in 2 tetrads on grassy meadows over Carboniferous limestone in MOD, Caerwent, ST484.907, 2003; many plants on disused Carboniferous limestone quarry floor, Blackcliff, ST532.984, 2003; all T.G. Evans, det. A.J. Silverside 2003
- 124/20.1/3. *Euphrasia* intermediate between *E. rostkoviana* & *E. anglica* (an eyebright). 10 plants on grassy area above R. Wye, S of Tintern, ST537.992, T.G. Evans, 1996, det. A.J. Silverside.
- *124/20.5b×7. *Euphrasia arctica* subsp. *borealis* × *E. nemorosa* (a hybrid eyebright). Many on turf over Carboniferous limestone, Rogiet Common, ST452.884, 1997; woodland track, The Oaks, SO51.01, 1997; many on Carboniferous limestone disused quarry floor, S end of Lasgarn Wood, Abersychan, SO272.031, 2000; all T.G. Evans, det. A.J. Silverside, 2003. 1st & subsequent records.
- *124/20.5b×9 *Euphrasia arctica* subsp. *borealis* × *E. confusa* (a hybrid eyebright). About 20 plants on track sides on ORS, Barbados, Tintern, SO522.007, 1984, T.G. Evans, det. A.J. Silverside, 2003.
- 124/20.7 *Euphrasia nemorosa*. [Woodland Eyebright] (Llygad Effros). On grassland near revetment 1005, MOD, Caerwent, ST465.920, T. G. Evans, 2003, det. A. J. Silerside, 2003.
- *124/20.7×8. *Euphrasia nemorosa* × *E. pseudokernerii*, (a hybrid eyebright). Over 10 plants on short turf over Carboniferous limestone, MOD Caerwent, ST490.915, 1999 & 2003; both T.G. Evans, det. A.J. Silverside, 2003.
- 124/20.7×9 or 9×7. *Euphrasia nemorosa* × *E. confusa* (a hybrid eyebright). About 10 plants on trackside, Hale Wood, ST47.96, 1994; present in meadow, damp in parts, Underwood, Llanmartin, ST383.892, 1996, det. G. Hutchinson; many plants, trackside, Wet Meadow Wood, Loysey, SO496.062, 1997; many plants, short turf over coalwaste, N of Varteg, SO263.066, 2000; many plants, path side over coal waste, above R. Ebbw, Ebbw Vale, SO172.092, 2001; all T.G. Evans, det. or conf. A.J. Silverside.
- 124/20.8. *Euphrasia pseudokernerii* (an eyebright). Grassland over Carboniferous limestone, MOD, Caerwent, ST465.918, T.G. Evans, det. A. J. Silverside, 2003. One of several sites on the base that has the plant.
- 124/20.9. *Euphrasia confusa* [Dwarf Eyebright] (Effros Bach Gliniog). Present on SW flank of heather moor, Bal Mawr, SO258.265, P.A. Smith, 1994, det. T.G. Evans; numerous on ash track on N edge of Waun Afon Bog, SO220.108, T.G. Evans, 2003; many plants on drier parts of wet heath, Varteg, SO264.063, T.G. Evans, 2003; all det. or conf. A.J. Silverside.
- *124/20.mon. *Euphrasia officinalis* subsp. *monticola* (an eyebright). Present in meadow (with *Succisa pratensis* & *Centaurea nigra*), Penperlleni, SO327.055, T.G. Evans, 1997, det. A.J. Silverside. 1st record for subsp.
- +125/25.1. *Pedicularis palustris* (Marsh Lousewort) (Melog y Waun). Two areas, 1 of 7 & 1 of 4 plants, in boggy area, below Chapel Farm, Pontyspig, SO287.208, T.G. Evans, G.S. Harris & C. Titcombe, 2002. new 10K and 1 of only 5 vc sites.

- 128/1.3. *Pinguicula vulgaris* (Common Butterwort) (Tafod y Gors). A few plants in open flush, Bal Mawr, SO264.266, S.D.S. Bosanquet, 2002. a rare vice-county plant rediscovered in an old site.
- 129/1.1 *Campanula patula* (Spreading Bellflower) (Clychlys Lledaenol). Eight plants in 4 sites, woodland path side, Redding's Inclosure, SO532.134 & 532.134, T.G. Evans & C. Titcombe, 2002. One plant on bank on single track road between Groes-llwyd and Tre-wyn, SO325.226, G. Sheridan & M. Groucutt, 2003. The recorders are to be congratulated on this exciting refind of old site after more than 135 years. Nationally scarce plant.
- 130/6.9. *Galium sternerii* (Limestone Bedstraw) (Briwydden y Garreg Galch). ‡Six plants on forest track (had limestone chippings been added to track?; the few collected chippings did not react with vinegar), Craig y Trwyn near Abercarn, ST238.973, T.G. Evans, 2002. 2nd record.
- +135/6.1. *Cirsium eriophorum* (Woolly Thistle) (Ysgallen Benwlanog). About 25 plants on bank sloping south, Common y Coed, Undy, ST438.885, C. Titcombe, 2003. 1st hectad record since 1930.
- *‡135/25.187. *Taraxacum porrigens* (a dandelion). One or two plants on path side, Graig Wood, W of Abergavenny, SO24.16, T.G. Evans 2003, det. A.J. Richards. 'Very good distinctive material. This is a very rare British plant' AJR.
- 135/26.3. *Crepis biennis* (Rough Hawk's-beard) (Gwalchlys Garw). Fewer than 50 plants edge of Portal Road, Overmonnow, SO501.124; c.12 plants near retaining wall of Wonastow Brook, in Wonastow Road, SO501.123, H.V. Colls, 2003.
- *‡135/28.2. *Hieracium virgultorum*, (a hawkweed). Over 10 plants on ballast, old shunting yards, Severn Tunnel Junction, ST455.874, T.G. Evans, 2003. det. D.J. McCosh.
- †135/55.3. *Anthemis cotula* (Stinking Chamomile) (Camri'r Cwn). About 50 plants in headland and nearby crop, Upper Red House Farm, SO428.132, T. Dorien-Smith & T.G. Evans, 2003. Seed from a firm in SW of England that had been scattered in headland (Tir Gofal) by well-intentioned owner to enhance her farm's wild flowers was responsible for its presence. The last time I had experience of this plant in the vice-county was 1973 and then only 1-2 plants. TGE.) (Absent in 2004 TGE).
- +‡135/74.1. *Ambrosia artemisiifolia* (Ragweed) (Bratlys). One plant in bird feeding area of garden, 8 Rolls Avenue, Monmouth, SO49.12, P. Johns, 2003.
- 135/81.1. *Bidens cernua* (Nodding Bur-marigold) (Grabau Ogwydd). 10-20 patches both sides of reen, N of church, Marshfield, ST262.826, T.G. Evans 2002 & 2003. A species much reduced in numbers by lowering of water table and drainage of fields.
- +‡138/6.1 *Lagarosiphon major* (Curly Waterweed) (Pib-flodyn Crych). Many square metres in large pool, Severn Tunnel Junction, Rogiet, ST459.873, T.G. Evans & N.F. Stewart.
- 152/2. 2a×2b. *Trichophorum* nothosp. *foersteri* (*T. cespitosum* subsp. *cespitosum* × subsp. *germanicum*) (Hybrid Deergrass). Scattered tussocks on acidic Waun Afon Bog, SO219.105, T.G. Evans, 2003, det. G.A. Swan & M. Wilcox. 2nd record.
- *152/3.5. *Eleocharis quinqueflora* (Few-flowered Spike-rush) (Sbigfrwynen Goch). A few plants on turf of open flush, Bal Mawr, SO26.26, S.D.S. Bosanquet & G.S. Motley, 2002, conf. T.G. Evans.
- 152/5.1. *Scirpus sylvaticus* (Wood Club-rush) (Clwbfrwynen y Coed). One plant only on river bank at confluence of R. Monnow and R. Wye, Chippenham, Monmouth, SO512.123, H.V. Colls, 2003. A diminishing plant.
- *152/16.44×46. *Carex* × *fulva* (*C. hostiana* × *C. viridula*) (a hybrid sedge). Scattered on boggy slope, WNW of Chapel Farm, Pontyspig, SO286.208, T.G. Evans; +Frequent in flushes, Bal Mawr, SO26.26, S.D.S. Bosanquet & G.S. Motley; both 2002. 1st & 2nd records.
- 153/16.2a. *Puccinellia distans* subsp. *distans* (Reflexed Saltmarsh-grass) (Gweunwellt Gwrthblygedigaidd). 500-1000 plants S side of track between sea wall and golf course, Peterstone, ST281.805 to 286.806, T. G. Evans, 2003.
- 153/16.4. *Puccinellia rupestris* (Stiff Saltmarsh-grass) (Gweunwellt Anhyblyg). 17 plants in rough cattle-trodden area of foreshore, S of West Usk Lighthouse, ST311.828, 2002; 500-1000 plants track between sea wall and golf course, between New Quay Gout and Outfall Cottage, Peterstone, ST281.805 to 286.806, 2003; both T.G. Evans.
- *‡153/17.2. *Briza minor* (Lesser Quaking-grass) (Crydwellt Bychan). 31 plants in field of oats and

- Vicia sativa* subsp. *sativa*, W side of road, S of Middle Hendre Farm, SO454.132, T.G. Evans, 2002. Did not re-appear in 2003.
- 153/54.1 *Brachypodium pinnatum* (Tor-grass) (Breichwellt y Twr), Tor-grass, 50-100 plants on grassy bank topped by an iron fence, on Piercefield Park, Piercefield Woods border, ST524.961, T.G. Evans, 2003.
- 158/24.11. *Allium oleraceum* (Field Garlic) (Garlleg Rhesog y Maes). 100-150 plants on grassy bank leading to rail bridge, Severn Tunnel Junction, ST461.876, C. Titcombe; 20-30 plants in grass between car park and Caldicot Castle, ST486.884, T.G. Evans, G.S. Harris & C. Titcombe; both 2002. These are part of only 8 vc sites.
- +159/2.1 *Sisyrinchium bermudiana* (Blue-eyed-grass) (Glaswellt Llygatlas). Fewer than 60 plants in 17x2m narrow, shallow depression of SW facing and sloping wet meadow, Springdale Farm, ST407.996, J.S. Winder, 2003. I have not seen the sites in W. Ireland, but this patch, far from the farm (newly acquired by Gwent Wildlife Trust) in a little-improved field, where there are frequent patches of *Genista tinctoria*, looks native).
- 159/5.8. *Iris foetidissima* (Stinking Iris) (Iris Ddrewllyd). 12-20 plants in wood under Pen y garn, Pontypool park, SO288.013, C. Titcombe.
- 162/13.1. *Platanthera chlorantha* (Greater Butterfly-orchid) (Tegeirian Llydanwyrdd). About 30 plants in meadow N of Gethley Wood, ST471.976, T.G. Evans; 9 plants on bank of track leading into King's Wood, SO464.126, T.G. Evans & C. Titcombe; both 2002. In two, neutral to slightly acid fields, separated by a bungalow with 97 in field 1 and 168 in field 2, 'Four Acres', Maryland, Field 1 SO518.058 and Field 2, SO519.058, T.G. Evans & S.J. Tyler, 2003. The owner is a remarkably active widow, Mrs Ida Dunn, who maintains her large fields sympathetically, and was rebuilding her conglomerate boundary walls and making alterations to her bungalow herself in her mid 90s.
- 162/14.1. *Anacamptis pyramidalis* (Pyramidal Orchid) (Tegeirian Bera). 639 plants in wet area of Alpha Steelworks, ST336.841, T.G. Evans, 2002. 79 plants in Dixon Embankment Reserve, SO526.150 to 527.154, T.G. Evans; >100 plants, embankment S side of A40, Mitchell Troy, SO494.106, S.J. Tyler; both 2003.

GLAMORGAN, v.c. 41 (comm. Q.O.N. Kay & J.P. Woodman)

- +1/3.1. *Lycopodium clavatum* (Stag's-horn Clubmoss) (Cnwpfwsogl Corn Carw). Several plants in *Calluna* heath in disused quarry above Abernant, Aberdare, SO024.043, A. Bateman, 2002.
- +4/1.1. *Equisetum hyemale* (Rough Horsetail) (Marchrawn y Gaeaf). Locally frequent on river bank, Afon Dulais, SN772.000, A. Bateman, 2002.
- +10/1.1. *Hymenophyllum tunbrigense* (Tunbridge Filmy-fern) (Rhedynach Teneuwe). Small patches in humid sites on rock-faces near oak and hazel trees, Cwm Du Cilmaengwyn, SN739.062, S. Bosanquet, 2002.
- +23/1.1. *Taxus baccata* (Yew) (Ywen). Cwm Du, Pontardawe, SN713.044, B. Stewart, 2002.
- *†30/1.2. *Papaver atlanticum* (Atlas Poppy) (Pabi Atlas). Established along pavement and at base of old wall, south-central Swansea, SS652.926, C.R. Hipkin, 2002.
- +†30/6.1. *Eschscholzia californica* (Californian Poppy) (Pabi Califfornia). ‡Spontex derelict site near Swansea Marina, SS662.924, B. Stewart, 2002.
- 38/1.1. *Myrica gale* (Bog-myrtle) (Helygen Fair). Gwenlais-isaf, SN600.018, B. & S.J. Stewart, 2001. 1st recent record for hectad.
- +†39/4.2. *Quercus cerris* (Turkey Oak) (Derwen Dwrci). Disused railway line, Garden Village, Gorseion, SS594.975, B. Stewart, 2001.
- +46/5.3. *Stellaria pallida* (Lesser Chickweed) (Gwlydd y Tywod). Beach front opposite Brynmill Recreation Ground, Swansea, SS638.921, B. Stewart, 2002.
- +46/7.12. *Cerastium semidecandrum* (Little Mouse-ear) (Clust Llygoden Bach). Spontex derelict site near Swansea Marina, SS662.924, B. Stewart, 2002.

- +46/20.11. *Silene gallica* (Small-flowered Catchfly) (Gludlys Amryliw). Locally abundant in spring-sown oats field, Hunts Farm, Pennard, SS562.871, A. Jones & J.P. Woodman, 2002.
- +‡47/1.17. *Persicaria amplexicaulis* (Red Bistort). Small clump on shaded edge of heath, Clyne Common, SS605.899, A.S. Lewis, 2002.
- +‡47/8.5. *Rumex frutescens* (Argentine Dock) (Tafol yr Ariannin). Castell-du Lane, Waungron, SN588.021, B. & S.J. Stewart, 2001.
- +‡51/1.4. *Hypericum hircinum* (Stinking Tutsan) (Eurinllys Drewllyd). Locally frequent on walls, Grovesend, SN591.002, A.S. Lewis, 2002.
- +‡53/1.7. *Malva neglecta* (Dwarf Mallow) (Hocys Bychan). Pencaecrwn Road, Penyrheol, SS585.995, B. & S.J. Stewart, 2001. 1st recent record for hectad.
- +53/2.1. *Lavatera arborea* (Tree Mallow) (Hocywydden). Loughor Bridge, SS56.98, B. & S.J. Stewart, 2001. 1st recent record for hectad.
- +62/23.5. *Cochlearia danica* (Danish Scurvygrass) (Llwylys Denmarc). On central reservation of A465, Glyn-neath, SN905.075, A.S. Lewis, 2002.
- *‡74/4.1. *Darmera peltata* (Indian-rhubarb). Stream-bank near Merthyr Mawr, SS884.774, A.S. Lewis, 2002. 1st seen here 1998
- +‡75/9.7. *Potentilla recta* (Sulphur Cinquefoil) (Pumdalen Talsyth). ‡Mynedd Garn-goch, SS661.983, B. Stewart, 2001.
- +‡75/17.3b. *Sanguisorba minor* subsp. *muricata* (Fodder Burnet) (Gwyddlwdn Tramor). On reclaimed landfill, Derwen Fawr, Swansea, SS615.916, A.S. Lewis, 2002.
- *‡75/32.9×10. *Cotoneaster* × *watereri* (*C. frigidus* × *C. salicifolius*) (Waterer's Cotoneaster). One large tree and many seedlings in deciduous woodland, Bishopston Valley, SS574.883, A.S. Lewis, 2002.
- +‡75/32.21. *Cotoneaster horizontalis* (Wall Cotoneaster) (Cotoneaster y Mur). Locally frequent on embankment, Crymlyn Burrows, SS723.932, A.S. Lewis, 2002.
- +‡84/1.12. *Epilobium brunescens* (New Zealand Willowherb) (Helyglys Gorweddol). Valley Wood, Penlleagaer, SS62.97, B. Stewart, 2002.
- +‡84/4.ros. *Oenothera rosea* (Pink Evening-primrose). Established on stony waste ground, Hendrefoelan, Swansea, SS612.937, A.S. Lewis, 2002.
- +103/1.14. *Geranium pyrenaicum* (Hedgerow Crane's-bill) (Pig Garan y Gwrych). Spontex derelict site near Swansea Marina, SS662.924, B. Stewart, 2002.
- +‡109/1.1. *Vinca minor* (Lesser Periwinkle) (Perfagl). In deciduous woodland, Cwm Ivy, SS438.938, A.S. Lewis, 2002.
- +‡124/4.2. *Mimulus guttatus* (Monkeyflower) (Blodyn y Mwnci). Long established on wet rock cutting, Cockett, SS629.942, P.V. & A.S. Lewis, 2002.
- +‡129/1.9. *Campanula portenschlagiana* (Adria Bellflower) (Clychlys Adria). Cwmdulais Cottages, SN617.035, B. & S.J. Stewart, 2001.
- +‡129/1.10. *Campanula poscharskyana* (Trailing Bellflower) (Clychlys Ymlusgol). Well-established, well away from gardens, near Briton Ferry Docks, SS737.938, C.R. Hipkin, 2002.
- +‡131/5.1. *Leycesteria formosa* (Himalayan Honeysuckle) (Bachgen Llwm). Disused railway line, Garden Village, Gorseinon, SS594.975, B. Stewart, 2001.
- +‡133/1.3. *Valerianella rimosa* (Broad-fruited Cornsalad). Locally fairly frequent in part of a spring-sown oats field, with *V. dentata*, Hunts Farm, Pennard, SS563.873, A. Jones & J.P. Woodman, 2002. 1st record in western Glamorgan since c.1850.
- +135/17.1. *Picris echioides* (Bristly Oxtongue) (Gwylaeth Chwerw). Established at Afan Argoed, SS818.949, C.R. Hipkin, 2001. Spreading in western Glamorgan.
- +‡135/40.4. *Solidago gigantea* subsp. *serotina* (Early Goldenrod) (Eurwialen Gynnar). In scrub, Kenfig Burrows, SS803.809, A.S. Lewis, 2002.
- *‡135/43.5. *Erigeron annuus* (Tall Fleabane). About 50 plants along disused railway line near Port Tennant, Swansea, SS685.931, C.R. Hipkin, 2002.
- *‡135/44.2. *Conyza sumatrensis* (Guernsey Fleabane). Many plants in flower beds and on bare waste, Victoria Gardens, Swansea, SS642.923, A.S. Lewis, 2002.

- +†135/59.1. *Matricaria recutita* (Scented Mayweed) (Amranwen). Abundant in fallow field near Nash Point, SS913.691, A.S. Lewis, 2002.
- +†135/71.4. *Petasites fragrans* (Winter Heliotrope) (Alan Mis Bach). Cwm Du, Pontardawe, SN713.044, B. Stewart, 2002. 1st recent record for hectad.
- +†138/4.2. *Elodea nuttallii* (Nuttall's Waterweed) (Alaw Nuttall). Small pond in riverside park, Loughor, SS570.985; +Small pond, on Cadle Heath, SS627.969; both A.S. Lewis, 2002.
- *†153/Far.spa. *Fargesia spathacea* (Chinese Fountain-bamboo). Long established in deciduous woodland, Cwm Ivy Wood, Gower, SS483.938, Q.O.N. Kay, 2002.
- +†153/50.7. *Bromus secalinus* (Rye Brome) (Pawrwellt Ller). Weed in sandy soil of rockery, Victoria Gardens, Swansea, SS642.922, A.S. Lewis, 2002, det. T.B. Ryves. 1st record since 1937.
- +†153/52.1. *Anisantha diandra* (Great Brome) (Pawrwellt Mawr). Well-established, with *A. madritensis*, on disturbed fixed dunes near Swansea Marina, SS663.924, B. Stewart & C.R. Hipkin, 2002. 1st record in western Glamorgan since 1842
- +†159/2.2. *Sisyrinchium montanum* (American Blue-eyed-grass) (Llygatlas America). On bare ground near Pluck Lake, Lower Swansea Valley, SS667.952, C.R. Hipkin, 2002.
- *†159/13.1. *Crocospia paniculata* (Aunt-Eliza). Established on margin of Clyne Common, SS599.889, A.S. Lewis, 2002.
- *†160/3.1. *Cordylone australis* (Cabbage-palm). Seedlings frequent on sandy waste near The Slip, Swansea, SS643.922, A.S. Lewis, 2002.
- +162/23.3. *Ophrys apifera* (Bee Orchid) (Tegeirian y Gwenwyn). Waungron, SN597.017, B. & S.J. Stewart, 2001; +Swansea Barrage area, SS664.927, B. Stewart, 2002.

BRECON, v.c. 42 (comm. M. Porter)

- +4/1.7. *Equisetum sylvaticum* (Wood Horsetail) (Marchrawn y Coed). Edge of stream in deciduous wood, Wern Watkin, 3km S of Crickhowell, SO215.152, M. & C. Porter, 2002. 1st recent record for hectad.
- +4/1.9. *Equisetum telmateia* (Great Horsetail) (Marchrawn Mawr). Bank near stream, Llaneglwys Isaf, SO061.386, M. & C. Porter, 2002. 1st recent record for hectad.
- +9/1.1. *Pilularia globulifera* (Pillwort) (Pelenllys). Muddy pool on upland common, 3km NW of Llandefalle, SO086.384, M. & C. Porter, 2002.
- *†16/1.1. *Matteuccia struthiopteris* (Ostrich Fern) (Rhedynen Estrys). Several plants in old shrubbery along footpath in damp woodland, Gurnos, between Ystradgynlais and Ystalyfera, SN777.092, M. & C. Porter, 2002.
- +16/4.1. *Gymnocarpium dryopteris* (Oak Fern) (Llawredynen y Derw). Rocky bank at edge of road and plantation, near Pont Cadwgan, Grwyne Fawr, SO267.250, M. & C. Porter, 2002. 1st recent record for hectad.
- *†22/1.1. *Araucaria araucana* (Monkey-puzzle) (Pinwydden Chile). Sapling (c.30cm) regenerating from mature planted tree in scrub and waste ground, cemetery of derelict church 0.5km W of Princetown, SO106.098, M. & C. Porter, 2002.
- +28/17.4. *Thalictrum minus* (Lesser Meadow-rue) (Arianllys Bach). Rocky bank of R. Wye, 2km E of Builth Wells, SO056.508, M. & C. Porter, 2002.
- +†30/1.5a. *Papaver dubium* subsp. *dubium* (Long-headed Poppy) (Pabi Hirben). Disturbed road verge, Llandefaelog Fach, SO033.322, M. & C. Porter, 2002.
- +31/4.1. *Ceratocarpus claviculata* (Climbing Corydalis) (Mwg y Ddaear Gafaelgar). Rough grassland invaded by bracken, Trallong Common, 1.5km W of Trallong, SN949.299, M. & C. Porter, 2002.
- †35/2.1. *Ficus carica* (Fig) (Ffigysbren). A well grown plant c.5-6m tall in disused limestone quarry, 1km SW of Clydach, SO222.124, M. & C. Porter, 2002. 2nd record and 1st since 1941.
- +†39/4.7. *Quercus rubra* (Red Oak) (Derwen Goch). Restored heathland after opencast working, Mynydd y Drum, 1km N of Onllwyn, SN828.110, S.P. Chambers, 2002. 1st record of natural regeneration seen.

- †‡40/2.2. *Alnus incana* (Grey Alder) (Gwernen Lwyd). Young trees suckering from planted trees on river bank, near Bronllys Castle, 0.5km E of Bronllys, SO150.346; +Suckers spreading from planted trees on bank of Afon Tawe, Ystradgynlais, SN785.092; both M. & C. Porter, 2002. 1st records as neophyte.
- †‡40/2.3. *Alnus cordata* (Italian Alder). ‡Planted in shallow pool, Brechfa Pool, 1.5km W of Llyswen, SO117.376, M. & C. Porter, 2002.
- *‡43/3.1. *Atriplex hortensis* (Garden Orache) (Llygwyn yr Ardd). One plant in river shingle near Bronllys Castle, SO150.349, M. & C. Porter, 2002.
- †‡45/2.2. *Claytonia sibirica* (Pink Purslane) (Gwlyddyn Rhudd). River bank near Ystrad, 3km SE of Llanwrthwl, SO005.616, M. & C. Porter, 2002. 1st recent record for hectad.
- +45/3.1a. *Montia fontana* subsp. *fontana* (Blinks) (Gwlyddyn y Ffynnon). Road ditch, 2km NM of Upper Chapel, SN996.427; +Waterlogged 'improved' pasture, 3km W of Llanafan-fawr, SN944.554; both M. & C. Porter, 2002.
- +45/3.1b. *Montia fontana* subsp. *variabilis* (Blinks) (Gwlyddyn y Ffynnon). Damp, sheep-grazed, grassland, Cefn Gafros Common, 2.5km S of Erwood, SO103.406, M. & C. Porter, 2002.
- +45/3.1c. *Montia fontana* subsp. *amporitana* (Blinks) (Gwlyddyn y Ffynnon). Damp ruts, Llandefalle Common, 2km E of Llaneglwys, SO084.385, M. & C. Porter, 2002.
- +45/3.1d. *Montia fontana* subsp. *chondrosperma* (Blinks) (Gwlyddyn y Ffynnon). Short turf in concrete lattice, Ystradgynlais, SN783.093; +Ditch beside road, 2km NW of Upper Chapel, SN996.427; +Thin turf near edge of road, Little Hill, 2km S of Alltmawr, SO071.445; +Thin turf over disused limekiln, Darren Cilau, 2km S of Llangatwg, SO205.154; all M. & C. Porter, 2002.
- +46/1.1c. *Arenaria serpyllifolia* subsp. *leptoclados* (Slender Sandwort) (Tywodlys Main). Disused railway, track and parapets, 1km SW of Clydach, SO223.125, M. & C. Porter, 2002. 1st recent record for hectad.
- †‡46/7.3. *Cerastium tomentosum* (Snow-in-summer) (Clust Llygoden y Felin). River bank, Cwm Taf-fechan, Cefn Coed, SO033.082, M. & C. Porter, 2002.
- *46/17.3. *Spergularia marina* (Lesser Sea-spurrey) (Troellys Bach). †Many plants along c.100m of verge of 'Head of Valleys' road (A465), Blackrock, SW of Gilwern, SO219.127, M. & C. Porter, 2002.
- +47/1.6. *Persicaria bistorta* (Common Bistort) (Llys y Neidr). ‡Road verge 0.5km N of Pont-faen, SN993.347, M. & C. Porter, 2002.
- +61/2.9×10. *Salix* × *smithiana* (*S. viminalis* × *S. caprea*) (a hybrid willow). Old cemetery 0.5km W of Princetown, SO106.098, M. & C. Porter, 2002.
- +61/2.9×11. *Salix* × *holosericea* (*S. viminalis* × *S. cinerea*) (a hybrid willow). Bank of stream, Lower Chapel, SO028.357, M. & C. Porter, 2002.
- +61/2.16. *Salix repens* (Creeping Willow) (Corhelygen). Rough *Molinia* grassland, 2km S of Llangatwg, SO212.153, M. & C. Porter, 2002.
- †‡62/11.4. *Barbarea verna* (American Winter-cress) (Berwr Tir). Hedgebank of field, Glan-rhyd, Ystradgynlais, SN784.092, M. & C. Porter, 2002.
- *62/12.3. *Rorippa islandica* (Northern Yellow-cress) (Berwr Melyn y Gogledd). 40-50 plants of various sizes in drainage channel in rock beside minor road, 1.5km NW of Troedrhwiadalar, SN942.547, M. & C. Porter, 2002, conf. A.O. Chater.
- +62/23.3. *Cochlearia officinalis* (Common Scurvygrass) (Llwylys Cyffredin). ‡Roadside, 1km N of Cefn Coed, SO022.093, G.S. Motley, 2002. 2nd record.
- +62/26.1. *Hormungia petraea* (Hutchinsia) (Beryn Creigiog). Limestone rocks and derelict limekiln, Llangatwg quarries, 2km S of Llangatwg, SO205.154, M. & C. Porter, 2002. 1st recent record for hectad.
- †‡62/42.1a. *Raphanus raphanistrum* subsp. *raphanistrum* (Wild Radish) (Rhuddygl Gwylt). River shingle, near Bronllys Castle, SO150.349, M. & C. Porter, 2002.
- †‡63/1.1. *Reseda huteola* (Weld) (Melengu). Shingle bank near confluence of Digedi and Wye, 2.5km SW of Hay-on-Wye, SO198.408, M. & C. Porter, 2002. 1st recent record for hectad.

- +‡69/4.5. *Lysimachia punctata* (Dotted Loosestrife) (Trewynyn Brych). Roadside verge, Troed-rhiw-dalar, SN953.533; +Roadside verge, 1km W of Llanddew, SO043.307; +Canal bank, 1km W of Llangynidr, SO138.198; all M. & C. Porter, 2002.
- +69/6.2a. *Anagallis arvensis* subsp. *arvensis* (Scarlet Pimpernel) (Llys y Cryman). Entrance to chapel graveyard, 0.5km NE of Merthyr Cynog, SN988.381, M. & C. Porter, 2002. 1st recent record for hectad.
- +‡72/2.4. *Ribes sanguineum* (Flowering Currant) (Rhyfon Blodeuog). Overgrown, disused cemetery, 0.5km W of Princetown, SO106.098, M. & C. Porter, 2002.
- *‡73/5.4. *Sedum spectabile* (Butterfly Stonecrop) (Briweg Iar Fach yr Haf). Naturalised on stream bank near church yard, Llandeilo'r-Fan, SN896.346, 1999; +Road verge, between Crickadarn and Gwenddwr, SO075.431, 2000; +Road verge at entrance to farm drive, 1km SE of Garth, SN965.490, 2000; all M. & C. Porter. 1st, 2nd & 3rd records.
- +75/9.13×14. *Potentilla* × *suberecta* (*P. erecta* × *P. anglica*) (a hybrid cinquefoil). Edge of forestry track, Gornoeth, Llanafan Fawr, SN950.574, R.G. Woods, 2002.
- +‡75/11.3. *Fragaria ananassa* (Garden Strawberry) (Mefusen). Waste ground near railway station, Garth, SN953.494, 2000; +Overgrown bank of disused railway, Hay-on-Wye, SO228.424, 2002; both M. & C. Porter.
- +75/13.1×2. *Geum* × *intermedium* (*G. rivale* × *G. urbanum*) (Hybrid Avens) (Mapgoll Croesryw). Wooded river bank near Cwmgeidd, SN791.127, K.L. Davies, 2002; +Scrub on river bank, Taf fawr, Cefn Coed, SO030.076, M. & C. Porter, 2002. 1st recent record for hectad; +Wooded bank, 2km E of Builth Wells, SO056.513, M. & C. Porter, 2002.
- +75/15.2. *Agrimonia procera* (Fragrant Agrimony) (Llys y Dryw Peraroglus). Grassy bank of lane, 1km W of Llanddew, SO048.308; + Roadside bank, 4km N of Cwndu, SO188.278; both M. & C. Porter, 2002. 1st recent records for hectads.
- +‡75/19.15. *Alchemilla mollis* (Robust Lady's-mantle). Forest track, 4km SW of Llanwrtyd Wells, SN844.441; +Forest track, 1.5km N of Garth, SN952.511; both M. & C. Porter, 2002.
- +77/7.1a. *Anthyllis vulneraria* subsp. *vulneraria* (Kidney Vetch) (Plucen Felen). ‡Bed of railway, 2km E of Hirwaun, SN977.054, M. & C. Porter, 2002.
- +77/10.3. *Ornithopus perpusillus* (Bird's-foot) (Troed yr Aderyn). Grassy verge of track, Trallong Common, Trallong, SN949.302, M. & C. Porter, 2002. 1st recent record for hectad.
- +77/25.4. *Genista anglica* (Petty Whin) (Cracheithin). Rough grassland/heath, 2km NW of Upper Chapel, SN996.428, M. & C. Porter, 2002. 1st recent record for hectad.
- +84/1.4. *Epilobium lanceolatum* (Spear-leaved Willowherb) (Helyglys Gwayw-ddail). Waste ground on rocky limestone site, Clydach, SO231.134, M. & C. Porter, 2002. 2nd record and 1st since 1952.
- +‡84/4.4. *Oenothera cambrica* (Small-flowered Evening-primrose) (Melyn yr Hwyr Cymreig). Bank of Afon Tawe, near Glan-rhyd, Ystradgynlais, SN785.093, M. & C. Porter, 2002.
- +84/6.1×2. *Circaea* × *intermedia* (*C. lutetiana* × *C. alpina*) (Upland Enchanter's-nightshade) (Gwynyls Mynydd-dir). Shaded bank of R. Wye, near Ystrad, 3km SE of Llanwrthwl, SO005.616; + Damp deciduous woodland by river, near Trericket Mill, 2km SE of Erwood, SO108.414; both M. & C. Porter, 2002. 1st recent records for hectads.
- *‡85/1.4. *Cornus mas* (Cornelian-cherry). In silt on top of bank of, River Usk, 1km E of Llangattock, SO220.177, D. Pearman, 2002. 1st Welsh record.
- +88/1.1. *Euonymus europaeus* (Spindle) (Piswydden). Deciduous woodland on bank of R. Wye near Hollybush Inn, 3km SW of Hay-on-Wye, SO197.403, M. & C. Porter, 2002. 1st recent record for hectad.
- +‡102/1.3. *Oxalis corniculata* (Procumbent Yellow-sorrel) (Suran Felen Orweddol). Roadside, edge of car park, 2km NE of Glasbury, SO199.403, M. & C. Porter, 2002.
- +‡103/1.14. *Geranium pyrenaicum* (Hedgerow Crane's-bill) (Pig Garan y Gwrych). Roadside verge, Glundulas near Troed-rhiw-dalar, SN948.531, M. & C. Porter, 2002.
- *‡104/1.maj. *Tropaeolum majus* (Nasturtium) (Meri a Mari). Waste ground near church, Llanigon, SO213.399, M. & C. Porter, 1999. +Bank of stream, Lower Chapel, SO028.357, M. & C. Porter, 2002. 1st & 2nd records.

- +107/30.1. *Sison amomum* (Stone Parsley) (Githran). Spread over 120m of hedgerow and road verge, between Bronllys Castle and Bronllys village, SO147.347, M. & C. Porter, 2002. 1st record since 1908.
- +107/44.1a. *Daucus carota* subsp. *carota* (Wild Carrot) (Moronen y Maes). ‡One plant on roadside, Tymawr Mill, 2.5km SW of Newbridge-on-Wye, SN990.569, R.G. Woods, 2002.
- +‡110/1.1. *Nicandra physalodes* (Apple-of-Peru) (Afal Periw). ‡Eight plants in shingle along River Wye, 2km SW of Hay-on-Wye, SO198.408, M. & C. Porter, 2002. 2nd record.
- +‡110/7.1. *Lycopersicon esculentum* (Tomato) (Tomato). ‡Shingle along River Wye, 2km SW of Hay-on-Wye, SO198.408, M. & C. Porter, 2002.
- +110/8.1a. *Solanum nigrum* subsp. *nigrum* (Black Nightshade) (Codwarth Du). ‡Barn yard, Sheephouse Farm, 2km SW of Hay-on-Wye, SO209.414, M. & C. Porter, 2002. 1st recent record for hectad.
- +‡113/2.1. *Nymphoides peltata* (Fringed Water-lily) (Ffaen Gors Eddiog). Holding pond beside canal, 1km W of Llangynidr, SO138.198, M. & C. Porter, 2002.
- +‡118/4.1c. *Lamiastrum galeobdolon* subsp. *argentatum* (Variegated Yellow Archangel) (Marddanhadlen Felen Arianddail). River bank, Cwm Taf-fechan, Cefn Coed, SO033.082; +Hedgebank & riverside, Llaneglwys, SO061.387; both M. & C. Porter, 2002.
- +‡118/23.1×2×3. *Mentha* × *smithiana* (*M. arvensis* × *M. aquatica* × *M. spicata*) (Tall Mint) (Mintys Coch). Pond, Sheephouse Farm, 2km SW of Hay-on-Wye, SO208.415, M. & C. Porter, 2002. 1st recent record for hectad.
- +118/23.1×3. *Mentha* × *gracilis* (*M. arvensis* × *M. spicata*) (Bushy Mint) (Mintys Culddail). Shingle river bank, The Warren, 1km W of Hay-on-Wye, SO222.424, M. & C. Porter, 2002. 1st recent record for hectad.
- +‡123/3.1. *Syringa vulgaris* (Lilac) (Leilac). Lane hedge, Partrishow, SO279.222, M. & C. Porter, 2002.
- *‡124/1.1. *Verbascum blattaria* (Moth Mullein) (Gwyfynog). Over 100 plants on river shingle near Bronllys Castle, SO150.348, M. & C. Porter, 2002.
- +‡124/4.2×3. *Mimulus* × *robertsii* (*M. guttatus* × *M. luteus*) (Hybrid Monkeyflower). River Wye, near mouth of Afon Dgedi, 2.5km SW of Hay-on-Wye, SO198.408. 1st recent record for hectad.; +River bank, 1km E of Gilwern, SO260.150; both M. & C. Porter, 2002.
- +124/5.1. *Limosella aquatica* (Mudwort) (Lleidlys). Several hundred plants in shallow muddy pool on upland common, 1.5km W of Llyswen, SO119.376, M. & C. Porter & C. Dyson, 2002.
- +124/13.1×4. *Linaria* × *sepium* (*L. vulgaris* × *L. repens*) (a hybrid toadflax). Track of railway, 2km E of Hirwaun, SN977.054, M. & C. Porter, 2002.
- +‡124/16.20. *Veronica polita* (Grey Field-speedwell) (Rhwyddlwyn Llwyd). Kitchen garden, Aberduhonw Farm, 2.5km W of Builth Wells, SO063.507, M. & C. Porter, 2002.
- *‡124/17.1. *Hebe salicifolia* (Koromiko) (Coromiko). Waste ground near small park, Cefn Coed, SO036.077, M. & C. Porter, 2002.
- +125/1.1. *Lithraea squamaria* (Toothwort) (Dantlys). Edge of damp deciduous wood, 1km S of Lower Chapel, SO034.350. 1st recent record for hectad; +Shady river bank, Pont Sarn, 2km NE of Cefn Coed, SO043.097; both M. & C. Porter, 2002.
- +129/3.1. *Wahlenbergia hederacea* (Ivy-leaved Bellflower) (Clychlys Eiddew). Pasture invaded by bracken, Cefn-gafros Common, 3km NM of Llyswen, SO103.406, M. & C. Porter, 2002. 1st recent record for hectad.
- +‡129/7.2. *Lobelia erinus* (Garden Lobelia). Shingle along River Wye, 3km SW of Hay-on-Wye, SO198.408, M. & C. Porter, 2002.
- +130/6.6. *Galium verum* (Lady's Bedstraw) (Briwydden Felen). Rocky outcrop on bank of R. Wye, 1km NW of Builth Wells, SO031.522, M. & C. Porter, 2002. 1st recent record for hectad.
- *‡131/3.mic×orb. *Symphoricarpos* × *chenaultii* (*S. microphyllus* × *S. orbiculatus*) (Hybrid Coralberry) (Llus Eira Pinc). Small thicket, probably originating from garden outcast, in scrub on river bank, Cefn Coed, SO030.077, M. & C. Porter, 2002.
- +‡131/5.1. *Leycesteria formosa* (Himalayan Honeysuckle) (Bachgen Llwm). Base of wall beside road,

- Talgarth, SO155.336, M. & C. Porter, 2002. 2nd record.
- +‡131/6.2. *Lonicera nitida* (Wilson's Honeysuckle) (Gwyddfid Wilson). Lane hedge near Capel-y-ffin, SO253.315, M. & C. Porter, 2002. 1st record not casual.
- +‡133/1.2. *Valerianella carinata* (Keeled-fruited Cornsalad) (Llysiau'r Oen Rhychiog). Hedgebank around field, Glanrhyd, Ystradgynlais, SN784.092, M. & C. Porter, 2002.
- +135/9.1. *Serratula tinctoria* (Saw-wort) (Dant y Pysgodyn). Lane bank, 1km NE of Merthyr Cynog, SN992.383, M. & C. Porter, 2002. 1st recent record for hectad. +Four plants in grassland (Mg 5c), near Llanelly Hill, SO220.121, G.S. Motley, 2002, conf. M. Porter.
- *‡135/22.2. *Lactuca virosa* (Great Lettuce) (Gwylaeth Chwerwaidd). ♂About 40 plants on disturbed road verge beside A40 at Scethrog, SO107.251, M. Porter, 2002. Population cut down by verge trimmer.
- +135/43.6. *Erigeron acer* (Blue Fleabane) (Cedowydd Glas). Walls, bridge and bank of disused railway, 1km W of Clydach, SO225.124, M. & C. Porter, 2002. 1st recent record for hectad.
- *135/62.12. *Senecio erucifolius* (Hoary Ragwort) (Creulys Llwyd). Grassy road verge 0.5km SW of Troed-rhiw-dalar, SN947.531, M. & C. Porter, 2002. 1st confirmed record.
- +137/4.2. *Alisma lanceolatum* (Narrow-leaved Water-plantain) (Dwr-lyriad Culddail). Pool and ditch, Sheephouse Farm, 2km SW of Hay-on-Wye, SO208.416, M. & C. Porter, 2002. 1st recent record for hectad.
- +148/1.1. *Spirodela polyrrhiza* (Greater Duckweed) (Llinad Mawr). Garden pond, Rhysgog, 1km N of Troed-rhiw-dalar, SN944.544, R.G. Woods, 2002. Not deliberately introduced, no recent planting in pond. +Slow-flowing river near Bronllys Castle, SO150.349, M. & C. Porter, 2002.
- +148/2.1. *Lemna gibba* (Fat Duckweed) (Llinad Crythog). Shallow, spring-fed pools in bottom of disused farm roadstone quarry, Hirnant Valley near Trefilin, Llanfihangel Brynpabuan, SN993.569, R.G. Woods, 2002. +River Llynfi near Bronllys Castle, SO150.349, M. & C. Porter, 2002. +Pond, Sheephouse Farm, 2km SW of Hay-on-Wye, SO208.415, M. & C. Porter, 2002. 1st recent record for hectad.
- +148/2.3. *Lemna trisulca* (Ivy-leaved Duckweed) (Llinad Eiddew). Pond, Sheephouse Farm, 2km SW of Hay-on-Wye, SO208.417, M. & C. Porter, 2002. 1st recent record for hectad.
- +‡148/2.4. *Lemna minuta* (Least Duckweed) (Corlinad). Pond, S bank of Afon Hirnant near Ty Mawr Mill, Llanfihangel Brynpabuan, SN990.570, R.G. Woods, 2002.
- +151/1.6. *Juncus foliosus* (Leafy Rush) (Brwynen Ddeiliog). Damp flower bed in garden, Ty Mawr Mill, 2.5km SW of Newbridge-on-Wye, SN991.570, R.G. Woods, 2002. +Muddy river backwater near Bronllys Castle, SO150.349, M. & C. Porter, 2002.
- +151/2.1. *Luzula forsteri* (Southern Wood-rush) (Coedfrwynen Gulddail). Wooded bank of Afon Mellte, 1.5km E of Pont-nedd-fechan, SN915.084; +Wooded bank, 1.5km E of Builth Wells, SO052.512; +Shaded bank, Trericket Mill, 2km SE of Erwood, SO112.414; all M. & C. Porter, 2002. 2 latter, 1st recent records for hectads.
- +152/5.1. *Scirpus sylvaticus* (Wood Club-rush) (Clwbfrwynen y Coed). Edge of River Usk, 1km E of Gilwern, SO259.150, M. & C. Porter, 2002.
- +152/16.7. *Carex spicata* (Spiked Sedge) (Hesgen Dywysennog Borffor). Scrub beside canal towpath, 1km W of Llangynidr, SO138.198, M. & C. Porter, 2002. 1st recent record for hectad.
- +152/16.8b. *Carex muricata* subsp. *lamprocarpa* (Small-fruited Prickly-sedge) (Hesgen Bigog Hwyr). Grassy road verge, 2.5km NW of Erwood, SO077.443, M. & C. Porter, 2002. 1st recent record for hectad.
- +153/11.1. *Milium effusum* (Wood Millet) (Miledwellt). Bank of Afon Tawe near Glan-rhyd, Ystradgynlais, SN785.093; +Deciduous woodland beside Afon Mellte near Craig y Ddinas, 0.5km E of Pont-nedd-fechan, SN914.084. 1st recent record for hectad; +Shaded laneside bank, Grwyne Fechan, Llanbedr Ystradwy, SO228.251; all M. & C. Porter, 2002.
- +‡153/59.2. *Hordeum murinum* (Wall Barley) (Heiddwellt y Mur). Grassy verge of gravel track, Ty Mawr Farm, Llysadinam, SN995.571, R.G. Woods, 2002.
- +‡153/59.3. *Hordeum jubatum* (Foxtail Barley) (Heiddwellt Cribog). Road verge 0.5km E of Blackrock, SO219.127, M. & C. Porter, 2002. 2nd record.

- +154/1.3. *Sparganium angustifolium* (Floating Bur-reed) (Cleddlys Culddail). Pools on restored opencast site, Mynydd y Drum, 1km N of Onllwyn, SN828.110, S.P. Chambers, 2002. Large 'rafts' in pools created 10 years ago and left to colonise naturally.
- *‡158/14.1×2. *Polygonatum × hybridum* (*P. multiflorum* × *P. odoratum*) (Garden Solomon's-seal). Waste ground near Afon Tawe, Ystradgynlais, SN786.097, M. & C. Porter, 2002.
- +158/20.2×3. *Hyacinthoides × massartiana* (*H. non-scripta* × *H. hispanica*) (Hybrid Bluebell). ‡Bank of Afon Tawe, Ystradgynlais, SN786.097, M. & C. Porter, 2002.
- +‡158/20.3. *Hyacinthoides hispanica* (Spanish Bluebell) (Clychau Cog Sbaen). Waste ground, Cwm Taf-fechan, Cefn Coed, SO033.082, M. & C. Porter, 2002.
- *‡158/24.7. *Allium triquetrum* (Three-cornered Garlic) (Cenhinen Drichornel). Deciduous woodland on river bank, Hay-on-Wye, SO227.423, M. & C. Porter, 2002.
- +158/24.16. *Allium vineale* (Wild Onion) (Garleg Gwylt). Grassland invaded by scrub, Henallt Common, 2km S of Hay-on-Wye, SO236.399, M. & C. Porter, 2002.
- *‡158/31.1. *Leucojum aestivum* (Summer Snowflake) (Eiriaidd). Several clumps naturalised on steep wooded bank of River Wye, Hay-on-Wye, SO228.424, M. & C. Porter, 2002.
- *‡159/8.1. *Crocus vernus* (Spring Crocus). Churchyard, Lower Chapel, SO028.358, M. & C. Porter, 2002.
- +162/6.1. *Listera ovata* (Common Twayblade) (Ceineirian). Tall grassland near railway line 1km E of Hirwaun, SN973.055; +Pasture invaded by bracken, Henallt Common, 2km S of Hay-on-Wye, SO234.401; both M. & C. Porter, 2002. 1st recent records for hectads.

RADNOR, v.c. 43 (Comm. D.R. Humphreys)

- +‡30/6.1. *Eschscholzia californica* (Californian Poppy) (Pabi Califfornia). ‡Disturbed road verge of A4081 just N of Ty-canol, Llandrindod Wells, SO054.620, R.G. Woods, 2002. 2nd record.
- *‡34/1.1. *Cannabis sativa* (Hemp) (Cywarch). Shore of Llandrindod Lake, SO062.605, A.G. Shaw, 2002. Probably from fishing bait or birdseed.
- ‡69/4.4. *Lysimachia ciliata* (Fringed Loosetrife) (Trewynyn Eddiog). Roadside verge and river bank, beside R. Ithon N of Dolau Jenkin, Penybont, SO110.654, R.G. Woods & J. Poole, 2002. 1st recent record.
- +‡77/17.1. *Melilotus altissimus* (Tall Melilot) (Meillionen y Ceirw). One plant in seed on road verge below Yr Allt beside A470, SO003.619, R.G. Woods, 2002.
- *‡77/26.3. *Ulex minor* (Dwarf Gorse) (Eithin Mân). SW facing shale bank of road, A470 near Penlanole, Doldowlod, SN986.629, R.G. Woods & D.R. Drewett, 2002. +Over 50 plants in lower and well established on shale rich roadside bank, beside A460, Serw Bridge, N of Rhayader, SN964.693, R.G. Woods, 2002. +Several large plants with *Ulex gallii* on SW facing shale roadside bank on verge of A483 to W of Llanelwedd Wood, Llanelwedd, SO043.524, R.G. Woods, 2002. 1st, 2nd & 3rd records.
- +‡105/1.4. *Impatiens glandulifera* (Indian Balsam) (Jac y Neidiwr). Several plants seen for many years on bank of R. Ithon, Great Cellws, Crossgates, SO073.642, R.G. Woods, 2002. +Common but patchy on parts of river bank protected from grazing stock, beside R. Aran, Rhyddlyn, between Dolau and Penybont, SO124.658, R.G. Woods & J. Poole, 2002. A relatively recent colonist said to be 'all along the river'.
- 107/30.1. *Sison amomum* (Stone Parsley) (Githran). Roadside, Aberedw Rocks, SO075459, J. Wynne-Jones, 2002. 2nd record.
- +116/2.1. *Echium vulgare* (Viper's-bugloss) (Glas y Graean). ‡Rough ground on builders mound behind Media Research Centre, Llandrindod Wells, SO056.613, S.P. Chambers, 2002. 2nd record.
- +118/1.5×6. *Stachys × ambigua* (*S. sylvatica* × *S. palustris*) (Hybrid Woundwort) (Briwllys Croesryw). Large clump on river bank beside R. Aran, Rhyddlyn, between Dolau and Penybont, SO127.659, R.G. Woods & J. Poole, 2002. 1st recent record.
- +134/1.3. *Dipsacus pilosus* (Small Teasel) (Ffon y Bugail). Several plants in flower on wide roadside

- verge with tipped material on N side of road beside A44 to S of Fronddyrys, Llanfiahngel-nant-melyn, SO160.594, R.G. Woods, 2002.
- +135/81.1. *Bidens cernua* (Nodding Bur-marigold) (Graban Ogwydd). Rhos Goch NNR, SO191.481, A. Ferguson, 2002. 2nd record.
- +145/1.1. *Zannichellia palustris* (Horned Pondweed) (Cornwlyddyn). Pool, Hindwell Pool, SO256.605, D.R. Humphreys, 2002. Last recorded here in 1956.
- *153/50.3. *Bromus racemosus* (Smooth Brome) (Pawrwellt Llyfn). Abundant in one corner of wet hay meadow, Crossgates, SO087.654, S.P. Chambers, 2002.
- 154/1.3. *Sparganium angustifolium* (Floating Bur-reed) (Cleddylys Culddail). Large colony in flower in water filled hollow in centre of uncompleted dam, Dolymynach Dam, Claerwen Valley, SN908.619, R.G. Woods, 2002. 2nd record.

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

- **Nitella translucens* (a stonewort). Growing with *N. flexilis* in lake, Taliaris Pool, SN634.283, I.K. Morgan & R.N. Stringer, 2002, NMW, det. N. Stewart.
- +*Chara vulgaris* var. *papillata* (a stonewort). Pond in calcareous dunes excavated c.5 years ago, Pembrey Burrows LNR, SS423.994, R.D. Pryce & K.A. Cottingham, 2003, NMW, det. A. Orange.
- +4/1.3. *Equisetum variegatum* (Variegated Horsetail) (Marchrawn Amrywiol). Calcareous flush in front of lime kilns, Pentregwenlais Quarry, SN608.163, I.K. Morgan, 2002.
- +10/1.2. *Hymenophyllum wilsonii* (Wilson's Filmy-fern) (Rhedynach Teneuwe Wilson). Gully, Esgair Gaeo, SN724.502, S. Bosanquet, 2002.
- +10/2. 1gam. *Trichomanes speciosum* (gametophyte) (Killarney Fern) (Rhedynen Wrychog). Bottom of gorge, W bank of Afon Gorlech, N of Abergorlech, SN578.349, S. Bosanquet, 2002.
- +14/2.1. *Phegopteris connectilis* (Beech Fern) (Rhedynen y Graig). One clump on exposed alder on limestone, Coedydd-y-Garn SSSI, SN511.145, A. Wheeler, 2003, NMW, conf. R.D. Pryce. +Gully, Esgair Gaeo, SN724.502, S. Bosanquet, 2002.
- +17/3.5. *Dryopteris aemula* (Hay-scented Buckler-fern) (Marchredynen Aroglus). One clump on E bank of stream, N of Nant-y-ffin, SN555.333, S. Bosanquet, 2002.
- *‡28/2.5. *Clematis viticella* (Purple Clematis). On *Corylus avellana* in scrubby dunes, Pembrey Burrows, SS433.995, J. Green *et al.* 2001. 1st Welsh record.
- *‡30/1.3a. *Papaver somniferum* subsp. *somniferum* (Blue Poppy) (Cwsglys). ♂ Disturbed sandy ground, old boat yard E of Pickle Factory, Burry Port, SN443.004, T. & V. Lewis, 2002. 1st record for subsp.
- *‡30/1.3b. *Papaver somniferum* subsp. *setigerum* (Opium Poppy) (Cwsglys). ♂ Disturbed sandy ground, old boat yard E of Pickle Factory, Burry Port, SN443.004, T. & V. Lewis, 2002. 1st record for subsp.
- +‡30/1.5b. *Papaver dubium* subsp. *lecoqii* (Yellow-juiced Poppy) (Pabi Sudd Melyn). One plant in disturbed sandy soil, E of pickle factory, Burry Port, SN442.004, R.D. Pryce & K.A. Cottingham, 2002. 3rd record.
- +31/5.3. *Fumaria bastardii* (Tall Ramping-fumitory) (Mwg y Ddaear Grymus). 1 plant in small unmanaged area at base of wall on N side of road, Station Road, Llangennech, SN563.013, R.D. Pryce & K.A. Cottingham, 2003.
- *‡46/20.11qui. *Silene gallica* var. *quinquevulnera* (Small-flowered Catchfly) (Gludlys Amryliw). One plant in disturbed sandy soil, E of pickle factory, Burry Port, SN442.004, R.D. Pryce & K.A. Cottingham, 2002. 1st record of variety.
- [‡51/1.3×4. *Hypericum* × *inodorum* (*H. androsaemum* × *H. hircinum*) (Tali Tutsan) (Eurinllys Tal). Waste ground, Bynea, SS554.989, BSBI group, NMW. Redet as *H. hircinum* by N.K.B. Robson.].
- ‡51/1.4. *Hypericum hircinum* (Stinking Tutsan) (Eurinllys Drewllyd). Waste ground, Bynea, SS554.989, BSBI group, NMW, det. N.K.B. Robson. Redet. of *H.* × *inodorum*.

- 62/12.3. *Rorippa islandica* (Northern Yellow-cress) (Berwr Melyn y Gogledd). +Over 20 plants in rubble around rail tracks, Dolaucothi Goldmines, SN66.40, R. Goodchild, 2003. +Old grassy road verges, lane E from Cilycwm, SN757.402, A.O. Chater *et al.*, 2003.
- †62/28.1. *Thlaspi arvense* (Field Penny-cress) (Codywasg). Disturbed ground, Llanllwch, SN387.192, V. & T. Lewis, 2002.
- †62/31.2. *Coronopus squamatus* (Swine-cress) (Olbrain). One plant in recently excavated & replaced flower-bed, Prince Phillip Hospital, Dafen, Llanelli, SN525.013, R.D. Pryce, 2002.
- +69/4.3. *Lysimachia vulgaris* (Yellow Loosestrife) (Trewynyn). ‡Abundant in overgrown ditch by hedge adjacent to wide roadside verge, opposite side of road and N of Yet-wen, NE of Tafarnspite, SN189.135, R.D. Pryce, 2002.
- +75/8.27. *Rubus plicatus* (a bramble). Heathy woodland, Waun-y-Gwial Fach, Four Roads, SN447.084, A. Stevens, 2003, det. M. Porter. 3rd record.
- *75/8.220. *Rubus morganwgensis* (a bramble). Hedgerow in partial shade, Maerdy, Pantyffynnon, SN627.100, R.D. Randall, 1994, NMW.
- +75/8.274. *Rubus merlini* (a bramble). Nant Mwyn, SN7.4, Rev. A. Ley, 1897, NMW, det. R.D. Randall, Earliest & 2nd v.c. record.
- 75/9.14. *Potentilla anglica* flore pleno (Trailing Tormentil) (Tresgl Ymlusgol). Sea wall, Llansteffan, SN353.105, V. & T. Lewis, 2002. 1st noticed in 1999.
- +‡75/11.3. *Fragaria ananassa* (Garden Strawberry) (Mefusen). Large patch in grass verge, Burry Port Harbour, SN443.004, V. & T. Lewis, 2002. 1st recent record for hectad.
- ‡75/18.4. *Acaena inermis* (Spineless Acaena). Well naturalised and increasing vegetatively and also possibly by seed on shingly riverbank, Carreg Sawdde, SN705.278, V. & T. Lewis, 2003. 1st recorded here in 1987.
- +75/21.4×12. *Rosa* × *irregularis* (*R. arvensis* × *R. canina*) (a hybrid rose). Hedge, Pant-y-cefn, W of Capel Gwynfe, SN712.215, G.M. Kay, 2003.
- *75/21.4×16. *Rosa arvensis* × *R. sherardii* (a hybrid rose). Laneside hedge near Cilycwm, SN754.388, R. Maskew, 2003, conf. A.L. Primavesi.
- +75/21.11×12. *Rosa* × *andegavensis* (*R. stylosa* × *R. canina*) (a hybrid rose). Edge of scrub at margin of wide ride, Pembrey Forest, SN375.035, BSBI group, 2003, NMW, det. R. Maskew.
- +75/21.12×15. *Rosa* × *scabriuscula* (*R. canina* × *R. tomentosa*) (a hybrid rose). Edge of scrub at margin of wide ride, Pembrey Forest, SN375.035, BSBI group, 2003, NMW, det. R. Maskew.
- +‡75/32.34. *Cotoneaster bullatus* (Hollyberry Cotoneaster). Self-sown low shrubs in disused limestone quarry, Pentregwenlais Quarry, SN609.162, BSBI group, 2003, NMW, det. G. Hutchinson.
- +77/18.5. *Medicago arabica* (Spotted Medick) (Maglys Amrywedd). ‡One clump by path N of main pool, Welsh National Wetlands Centre, Penclacwydd, Llanelli, SS537.982, G.S. Motley, 2002.
- +81/1.3b. *Lythrum portula* subsp. *longidentatum* (Water-purslane) (Troed y Gywen). Sparsely vegetated laneside rut, lane E from Cilycwm, SN757.402, BSBI group, 2003.
- +‡84/1.12. *Epilobium brunnescens* (New Zealand Willowherb) (Helyglys Gorweddol). Stable ballast in former railway sidings S of Trostre Works, Bynea, SS528.988, R.D. Pryce & K.A. Cottingham, 2003, NMW.
- *‡102/1.1. *Oxalis tetraphylla* (Four-leaved Pink-sorrel). One plant in flower in dumped soil, disturbed ground above beach, The Green, Llanstephan, SN356.109, R.D. Pryce & K.A. Cottingham, 2002, NMW, det. G. Hutchinson.
- +‡102/1.6. *Oxalis stricta* (Upright Yellow-sorrel) (Suran Felen Unionsyth). ‡ Street weed, Carmarthen, SN416.206, H.J. Killick, D. Brookman & A. Ford, 2002.
- +107/34.2. *Carum verticillatum* (Whorled Caraway) (Carwas Troellog). Neutral/acid flush, N of Pont ar Wysg, SN816.271, S. & A. Coker, 2003.
- 107/41.1. *Sphondylium spondylium* var. *angustifolium* (Hogweed) (Efwr). Roadside verge, Rhandirmwyn, SN787.425, V. & T. Lewis, 2003, NMW. 1st record of var. for hectad.
- ‡110/9.1. *Datura stramonium* (Thorn-apple) (Meiwyn). ‡ One plant in disturbed sandy soil E of pickle factory, Burry Port, SN442.004, R.D. Pryce & K.A. Cottingham, 2002.

- +‡114/1.1. *Polemonium caeruleum* (Jacob's-ladder) (Ysgol Jacob). ‡One non-flowering plant in pavement in carpark, Llandeilo, SN630.223, V. & T. Lewis, 2003.
- +‡115/1.1. *Phacelia tanacetifolia* (Phacelia). ‡Seed contaminant in newly reseeded ryegrass field, Hafod Farm, Llanboidy, SN215.227, V. Dixon, 2003. 5th record.
- +‡118/1.8. *Stachys arvensis* (Field Woundwort) (Briwlys yr Yd). In planters, Llandeilo, SN630.224, V. & T. Lewis, 2002.
- +118/18.4. *Clinopodium vulgare* (Wild Basil) (Brenhinllys Gwylt). Dry dunes between forest and beach, Pembrey Country Park, SS400.999, S. & A. Rhodes, 2002, NMW.
- +‡118/23.3×lon. *Mentha × villosa* *mentha* (*M. spicata* × *M. longifolia*) (Sharp-toothed Mint). Railway embankment, Trenel, Pembrey, SN420.015, V. & T. Lewis, 2003, NMW, conf. A.O. Chater.
- +118/23.5. *Mentha pulegium* var. *erecta* (Pennyroyal) (Brymllys). ‡Two patches on shingle, River Tywi, Llandeilo, SN637.226, V. & T. Lewis, 2002.
- *121/1.3. *Plantago major* subsp. *intermedia* (Greater Plantain) (Llwynhidydd Mawr). Frequent in shallows of large pond, Pembrey Burrows, SS423.994, T. & V. Lewis, 2002, NMW. 1st record for subsp.
- +‡124/4.2. *Mimulus guttatus* (Monkeyflower) (Blodyn y Mwnci). Bank of R. Tywi, Llandeilo, SN636.221, V. & T. Lewis, 2002.
- *‡124/4.3. *Mimulus × hybridus* (*M. cupreus* × *M. smithii*) (A hybrid monkeyflower). Spontaneous seedlings in pavement from nearby planters, Llandovery, SN767.343, V. & T. Lewis, 2002.
- *‡124/16.25. *Veronica longifolia* (Garden Speedwell). One plant on disturbed ground (a garden throw-out), Morfa, Llanelli, SS519.988, Llanelli Naturalists, 2002, conf. G. Hutchinson. 2nd record and 1st since c.1960.
- *124/20.2. *Euphrasia rivularis* [Snowdon Eyebright] (Effros yr Wyddfa). Flush by Afon Sychlwch, Blaenau, Llanddeusant, SN799.237, S. Thomas *et al.*, 2003, NMW, det. A.J. Silverside.
- +124/20.5. *Euphrasia arctica* subsp. cf. *arctica* [Arctic Eyebright] (Effros â Gwallt Byr). Frequent in open area just inside entrance to disused quarry, Glan Gwenlais Limestone Quarry, Pentregwenlais, SN603.165, BSBI group, 2003, NMW, det. A.J. Silverside. 3rd record.
- +124/20.5×9. *Euphrasia arctica* × *E. confusa* (a hybrid eyebright). Rhandirmwyn, SN781.434, J. & M. Iliff, 2003, NMW, det. A.J. Silverside. 2nd record.
- +124/20.9. *Euphrasia confusa* [Dwarf Eyebright] (Effros Bach Gliniog). Somewhat base-rich upland grassland on valley side S of filter beds by track leading to Llyn-y-fan Fach, SN800.236, BSBI group, 2003, det. A.J. Silverside. 1st recent record for hectad.
- +‡129/7.2. *Lobelia erinus* (Garden Lobelia). Churchyard, Carmarthen, SN405.201, H.J. Killick, D. Brookman & A. Ford, 2002.
- +130/6.3. *Galium uliginosum* (Fen Bedstraw) (Briwydden y Ffign). Flush S of Afon Sawdde, Blaenau, Llanddeusant, SN794.239, G.M. Kay & S. Thomas, 2003.
- +135/2.1. *Carlina vulgaris* (Carlina Thistle) (Ysgallen Siarl). Shingly riverbank, Carreg Sawdde, SN705.277, V. & T. Lewis, 2003.
- +‡135/35.1. *Inula helenium* (Elecampane) (Marchalan). Roadside verge c.200m E of Ty Newydd Farm, Cwmgwili, SN578.115, R.D. Pryce, 2003. 1st record outside garden for this hectad.
- +‡135/40.4. *Solidago gigantea* subsp. *serotina* (Early Goldenrod) (Eurwialen Gynnar). Small clump on riverbank, Kidwelly, SN407.069, V. & T. Lewis, 2002.
- +‡135/41.5. *Aster lanceolatus* (Narrow-leaved Michaelmas-daisy). Roadside verge & rough marshy land, Yspytty Road, Bynea, SS556.983, V. & T. Lewis, 2003. 3rd record.
- *‡135/50.6. *Artemisia abrotanum* (Southernwood). One plant in rough ground beside cycle-way, Pwll, SN472.008, T. & V. Lewis, 2003.
- +‡135/59.1. *Matricaria recutita* (Scented Mayweed) (Amranwen). near Dyffryn Conin, Llandysilio, SN12.2, M. Godfrey *et al.*, 2003.
- +135/62.10×11. *Senecio × ostenfeldii* (*S. jacobaea* × *S. aquaticus*) (a hybrid ragwort). Site of former railway line, Carmarthen, SN418.202, H.J. Killick, D. Brookman & A. Ford, 2002.
- +‡135/62.18. *Senecio viscosus* (Sticky Groundsel) (Creulys Gludiog). A few plants on waste ground near former Thyssens works, Bynea, SN552.988, V. & T. Lewis, 2002.

- +‡135/80.1. *Galinsoga parviflora* (Gallant-soldier) (*Galinsoga*). ♂Roadside, Bynea, SS555.986, V. & T. Lewis, 2002. 2nd record.
- *‡135/81.fer. *Bidens ferulifolia* (Fern-leaved Beggarticks). ♂Two spontaneous seedlings, one in flower, from last years planters, in pavement crack, Llandeilo, SN630.223, T. & V. Lewis, 2002.
- *‡135/Gui.aby. *Guizotia abyssinica* (Niger) (Olewlys). One plant (ex bird seed) in crack in concrete apron of old quay, Carmarthen Quay, SN411.198, R.D. Pryce & K.A. Cottingham, 2003.
- +152/1.2. *Eriophorum latifolium* (Broad-leaved Cottongrass) (Plu'r Gweunydd Llydanddail). About 30 plants in flush, Cae Cilmaenllwyd SSSI, SN670.203, G.S. Motley, 2002.
- *‡152/11.con. *Cyperus congestus* (a galingale). One plant growing on WDA development plateau surfaced with limestone chippings, Machynys, Llanelli, SS509985, G.Hutchinson, I.K.Morgan & R.D.Pryce, 2003, K, det. D.A. Simpson. Duplicate at NMW. Additional plants recorded nearby later in the year by IKM. 1st records for Wales.
- +‡153/3.1. *Sasa palmata* (Broad-leaved Bamboo) (Bambw). Roadside bank, Burry Port, SN435.007, V. & T. Lewis, 2003.
- +153/14.2. *Vulpia bromoides* (Squirreltail Fescue) (Peisgwellt Anhiliog). One plant on boulders in river near filter beds by track leading to Llyn-y-fan Fach, SN800.237, BSBI group, 2003.
- +‡153/38.1.pic. *Phalaris arundinacea* var. *picta* (Gardener's Garters). Waste ground, Morfa Beach, Bynea, SS547.981, V. & T. Lewis, 2002.
- +154/1.2. *Sparganium emersum* (Unbranched Bur-reed) (Cleddlys Di-gainc). New Dafen River, Trostre, Llanelli, SS524.994, R.D. Pryce & I.K. Morgan, 2003.
- *‡158/31.1. *Leucojum aestivum* subsp. *aestivum* (Summer Snowflake) (Eiriaidd). Woodland, Llansteffan, SN353.103, V. & T. Lewis, 2002. 1st record of subsp.
- *‡159/13.1. *Crocossia paniculata* (Aunt-Eliza). Rank vegetation, waste ground, Trostre, SS522.995, T. & V. Lewis, 2003.

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

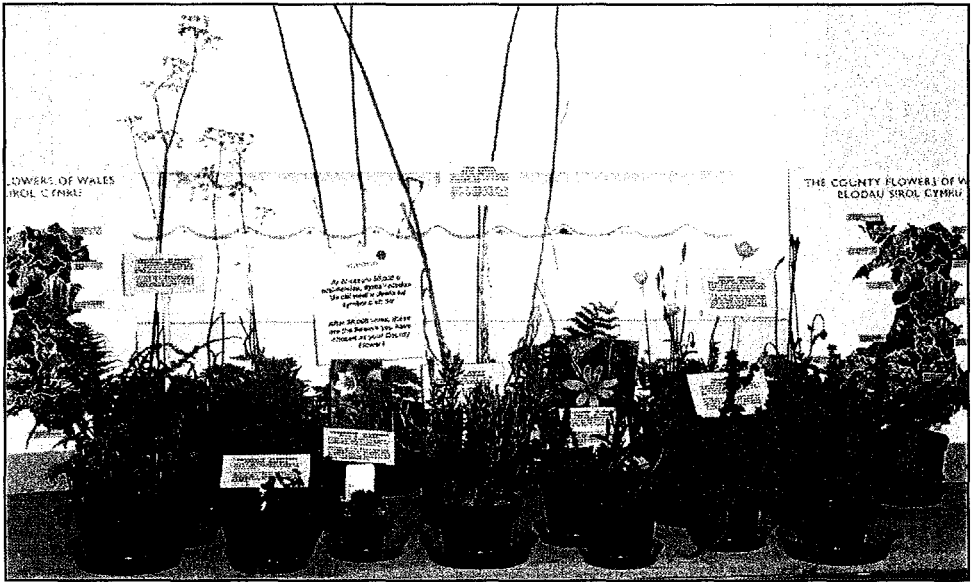
- *4/1.1. *Equisetum hyemale* (Rough Horsetail) (Marchrawn y Gaeaf). Several plants in disturbed sandy area, wet hollow in dune & dune scrub, Whitesands Dunes, St Davids, SM735.266, S.B. Evans, 2002.
- +5/2.1. *Botrychium lunaria* (Moonwort) (Lloerlys). Limestone clitter in sand dunes, old mortar impact area, Linney Burrows, Castlemartin, SR895.973, R. Crump *et al.*, 2002.
- +10/1.1. *Hymenophyllum tunbrigense* (Tunbridge Filmy-fern) (Rhedynach Teneuwe). Deep crevice in massive tor, S side of Carn Arthur, Mynachlog-ddu, SN133.322, S.B. & A.E. Evans, 2002.
- +28/13.20. *Ranunculus tripartitus* (Three-lobed Crowfoot) (Crafanc Trillob). Shallow winter pool on grazed heathland, Mynydd Llanllawer, Dinas, SN016.368, S.B. & A.E. Evans, 2002.
- +43/6.1. *Salicornia pusilla* (One-flowered Glasswort). Salt marsh, Boulston, Upper Western Cleddau, SM970.119, M. Prosser & H. Wallace, 2002.
- +46/9.1. *Moenchia erecta* (Upright Chickweed) (Cornwlyddyn Syth). Very tightly sheep grazed grassland, ENE of Mirianog-ganol, Pontyglasier, SN142.346, S. Bosanquet, 2002.
- +51/1.10×11. *Hypericum humifusum* × *H. linariifolium* (a hybrid St John's-wort). Sea-cliff heath, East Moor Farm, Manorbier, SS046.976, M. Sutton, 2002.
- +61/2.9×11. *Salix* × *holosericea* (*S. viminalis* × *S. cinerea*) (Silky-leaved Osier) (Helygen Dail Sidan). Marsh, Hendrewen, Scleddau, SM92.34, S. Bosanquet, 2002. 2nd record.
- +62/22.2. *Erophila verna* s.s. (Common Whitlowgrass) (Llys y Bystwn). S facing rock outcrop on village green, Trefin, SM839.325, S.B. & A.E. Evans, 2002.
- +62/22.2. *Erophila verna* var. *praecox* (Common Whitlowgrass) (Llys y Bystwn). Railway station, Narbeth, SN120.147, S.B. & A.E. Evans, 2002.
- +‡73/1.3. *Crassula helmsii* (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Garden pond, Pembroke Dock, SM968.033, S. Smith, 2002, herb. SBE.



BSBI Welsh AGM field meeting. Above: Jean Green leads some of the party through the disused limestone quarries at Minera (Denbighshire).

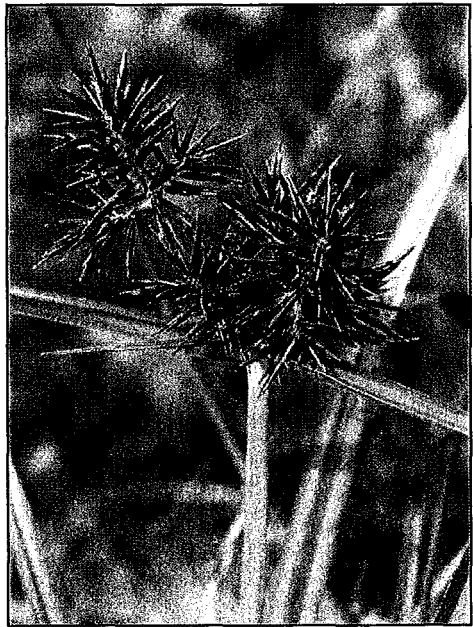
Below left: *Coeloglossum viride* (Frog Orchid), below right: *Gymnocarpium robertianum* (Limestone Fern), both at Minera. Photos: Richard Pryce.





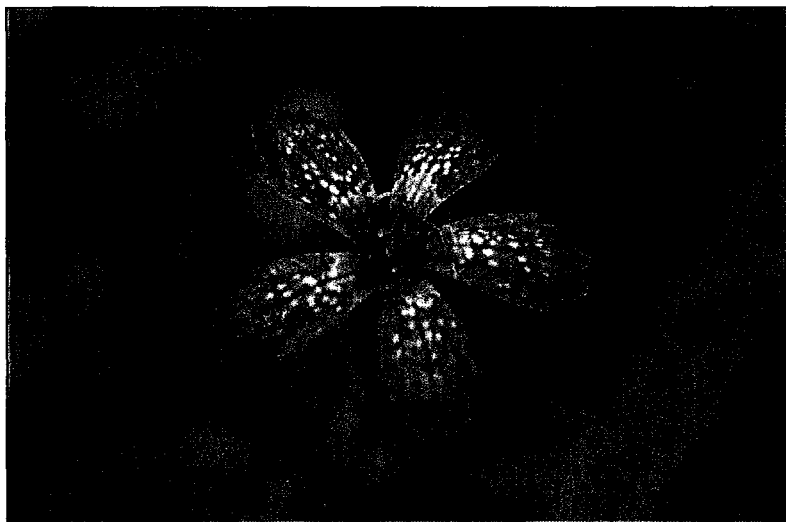
Above: BSBI Welsh AGM and Exhibition Meeting, Llangollen: Exhibit by Trevor Dines showing *The County Flowers of Wales*. Photo: Kath Pryce.

Below: *Cyperus congestus* growing in a limestone-chippings surfaced development site at Machynys, Llanelli, (Carmarthenshire), the first Welsh record, 27 August 2003, Det. D.A.Simpson, K. Photo Richard Pryce. (see Welsh Plant Records)





Above: A 5 cm tall *Dianthus armeria* (Deptford Pink) growing in a grassy pasture and dwarfed by grazing. Below: A single flower of *Dianthus armeria*. Both photographed at Bryndias, Carms. by Trevor Dines.





Above: Plantlife *Flora Guardians* working hard clearing scrub at the Clydach Vale Deptford Pink site (Glamorgan). Below: *Flora Guardians* begin clearing the Coed y Felin Deptford Pink site (Flintshire). Photos: Trevor Dines.



- +†77/17.1. *Melilotus altissimus* (Tall Melilot) (Meillionen y Ceirw). ‡Track, St Davids rubbish tip, SM788.265; ‡Landfill, Solbury Mountain, SM903.118; both M. Sutton, 2002.
- +84/1.2×9. *Epilobium × rivulare* (*E. parviflorum* × *E. palustre*) (a hybrid willowherb). Marshy grassland, Trewern, Pontfaen, SN035.324, S. Bosanquet, 2002. Much-branched, abortive-seeded, hybrid in N corner of field S of the farm.
- +†91/2.9. *Euphorbia lathyris* (Caper Spurge) (Llysiau y Cyfog). ‡Vegetable garden, Pontbren-pwll-y-brag, Felindre Farchog, SN118.392, S.B. & A.E. Evans, 2002.
- +107/16.1. *Berula erecta* (Lesser Water-parsnip) (Pannas y Dwr). Pool edge, Waun Tresais, SM790.263, M. Sutton, 2002.
- +118/1.5×6. *Stachys × ambigua* (*S. sylvatica* × *S. palustris*) (Hybrid Woundwort) (Briwlys Croesryw). Single patch, path side, Greenland Farm, Puncheston, SM993.297, A. Mundell, 2002.
- +135/24.1. *Mycelis muralis* (Wall Lettuce) (Gwylaeth y Fagwyr). Moor Farm, Jeffreyeston, SN07.07, S. Bosanquet, 2001.
- +135/30.4. *Filago minima* (Small Cudweed) (Edafeddog Lleiaf). Thousands of plants on gravel base of old oil storage tank, disused Esso refinery, Herbrandston, SM876.054, S.B. Evans, 2002.
- +†135/55.3. *Anthemis cotula* (Stinking Chamomile) (Camri'r Cwn). ‡Margins of arable crops, Monkhill Farm, St Ishmaels, SM837.066, S.B. & A.E. Evans, 2002.
- *†147/6.1. *Dracunculus vulgaris* (Dragon Arum). Six plants in single patch (<10×10m) in rough grassland, St Davids rubbish tip, SM787.266, M. Sutton, 2002.
- +152/3.5. *Eleocharis quinqueflora* (Few-flowered Spike-rush) (Sbigfrwynen Goch). NE of Iet Goch Farm, Mynachlog-ddu, SN167.295, S. Bosanquet *et al.*, 2000.
- +152/7.1. *Schoenoplectus lacustris* (Common Club-rush) (Llafrwynen). ‡Swamp, Wern Moor, Tretio, SM78.28, S. Bosanquet & D. Reed, 2001. The plant is not believed to be native and is regarded as a neophyte. Confirmation of an earlier National Trust record.
- +152/16.41. *Carex distans* (Distant Sedge) (Hesgen Bell). Wet heath behind Drws Gobaith, Dowrog Common, St Davids, SM774.275, S.B. Evans, 2002, det. A.O. Chater. A peculiar specimen with partly fertile female terminal spikes.
- +152/16.44×46. *Carex × fulva* (*C. hostiana* × *C. viridula*) (a hybrid sedge). Iet Goch Farm, Mynachlog-ddu, SN16.29, S. Bosanquet *et al.*, 2000.
- +153/12.1. *Festuca pratensis* (Meadow Fescue) (Peisgwellt y Waun). Treleddydd-fawr Moor, St Davids, SM75.27, S. Bosanquet & D. Dobson, 2001. 1st post-1986 hectare record.
- *†153/46/1. *Polypogon monspeliensis* (Annual Beard-grass) (Barfwellt Blynnyddol). ‡About 8 'clumps' casual in disturbed ground, W of Slade Lane, North Haverfordwest, SM949.162, H. Gravel; +Disturbed ground at extreme High Water springs, NW of the Iron Bridge, Newport Estuary, SN062.395, K.J.S. Devonald; both 2002.
- *153/47.2. *Alopecurus bulbosus* (Bulbous Foxtail) (Cynffonwellt Oddfog). Many plants in damp mesotrophic upper salt marsh, Radford Pill, Milton, SN041.032, M. Prosser & H. Wallace, 2002. +Grazed upper saltmarsh, Western Cleddau Saltings, Haroldston, SM965.140, M. Prosser & H. Wallace, 2002. 2nd record.
- +153/50.3. *Bromus racemosus* (Smooth Brome) (Pawrwellt Llyfn). Rush-pasture, Moor Farm, Jeffreyeston, SN068.077, S. Bosanquet, 2001.
- +153/59.4. *Hordeum secalinum* (Meadow Barley) (Heiddwellt y Maes). Numerous plants in grazed upper saltmarsh, Western Cleddau saltings, SW of Uzmaston, SM973.139, M. Prosser & H. Wallace, 2002.
- +†158/24.3. *Allium roseum* (Rosy Garlic) (Garlleg Gwridog). Rough grassland, St Davids rubbish tip, SM787.266, M. Sutton, 2002.
- *†159/9/2b. *Gladiolus communis* subsp. *byzantinus* (Eastern Gladiolus). Thriving and well established on top of sheltered wall beside track, N of the Priory, Caldy Island, SS141.966, S.P. Chambers, 2002.
- +162/18.2×4. *Dactylorhiza × hallii* (*D. maculata* × *D. praetermissa*) (a hybrid marsh-orchid). Moor Farm, Jeffreyeston, SN068.076, S. Bosanquet, 2001. One plant in each of 2 adjacent fields.

CARDIGAN, v.c. 46 (comm. A.O. Chater)

- 2/1.1. *Selaginella selaginoides* (Lesser Clubmoss) (Cnwfwfwsogl Bach). Steep S facing flushes, NE of Maesybetws, Cwm Doethie, SN756.534, S.D.S. Bosanquet & G.S. Motley, 2002. The 5th site for this species which reaches its southerly British limit in Cards.
- +3/1.2. *Isoetes echinospora* (Spring Quillwort) (Gwair Merllyn Bychan). Washed up in abundance by outflow, Llyn y Gwaith, SN673.507, A.O. Chater, 2003, NMW.
- +4/1.4×5. *Equisetum* × *litorale* (*E. fluviatile* × *E. arvense*) (Shore Horsetail). Extensive colony along roadside verge by ditch, Glanwern, Borth, SN611.888, A.O. Chater, 2002.
- +5/2.1. *Botrychium lunaria* (Moonwort) (Lloerlys). Heathy grassland on slumping drift cliff, Clogfryn, Aberaeron, SN445.621, S.P. Chambers, 2003.
- +10/2.1gam. *Trichomanes speciosum* gametophyte (Killarney Fern) (Rhedynen Wrychog). Cliff overhang in oakwood in stream dingle, N side of Nant yr Arian, 100m E of Afon Melindwr confluence, SN703.815, A.O. Chater, 2003.
- *11/1.2×3. *Polypodium* × *shivasiae* (*P. interjectum* × *P. cambricum*) (a hybrid polypody). Old mortared wall of St Mary's churchyard, Cardigan, SN180.460, A.O. Chater, 1998, NMW, conf. A.C. Jermy.
- *‡16/1.1. *Matteuccia struthiopteris* (Ostrich Fern) (Rhedynen Estrys). Abundantly naturalised over an area 15×7m in damp mixed estate woodland, 200m ENE of Plas Gogerddan, SN631.838, A.O. Chater, 2003, NMW.
- +17/3.5. *Dryopteris aemula* (Hay-scented Buckler-fern) (Marchredynen Arogllus). Dry, heathy S facing slope in felled conifer forest, NW side of Llyn Pendam, SN707.839, A.O. Chater, 2000, conf. A.C. Jermy.
- +17/3.8×9. *Dryopteris* × *deweveri* (*D. carthusiana* × *D. dilatata*) (a hybrid buckler-fern). With parents in valley mire, 1km S of Dyffryn Arth, SN534.621, A.O. Chater, 2002. +Edge of mire, with parents, 400m W of Llawr-cwrt, SN411.500; ‡Planted and naturalised in pond in pasture, 50m E of Cefn Hendre Farm, Waun Fawr, SN607.819; +Sitka Spruce forest, Bryn Du-bach, 3km SE of Llanddewi Brefi, SN678.526; all A.O. Chater, 2003.
- +‡26/1.1a. *Nymphaea alba* subsp. *alba* (White Water-lily) (Lili Ddwr Wen). Naturalised in pond in pasture, 50m E of Cefn Hendre farm, Waun Fawr, SN607.891, A.O. Chater, 2003.
- +27/1.1. *Ceratophyllum demersum* (Rigid Hornwort) (Cyrnddail). Dominant in much of pond in pasture, 50m E of Cefn Hendre Farm, Waun Fawr, SN607.819, A.O. Chater, 2003. With *Lagarosiphon* and *Nymphaea alba* so presumably introduced.
- +28/13.11. *Ranunculus sceleratus* (Celery-leaved Buttercup) (Crafanc yr Eryr). Muddy margin of ox-bow pool in pasture, 600m E of Newcastle Emlyn castle, SN317.409; +Poached pasture by drinking trough, 400m SSW of Grogall, New Quay, SN373.592; both A.O. Chater, 2003.
- +28/13.17b. *Ranunculus ficaria* subsp. *bulbilifer* (Lesser Celandine) (Llygad Ebrill). Abundant all over wooded abandoned grounds, Cardigan Castle, SN178.459, A.O. Chater, 2003.
- +43/1.8. *Chenopodium polyspermum* (Many-seeded Goosefoot) (Troed yr Wydd Luos-hadog). Manure heap, 1km N of Henhafod, Dyfi estuary, SN662.953, A.O. Chater, 2002.
- [+‡43/1.str. *Chenopodium strictum* (Striped Goosefoot). Disturbed ground, Parc-y-llyn, Llanbadarn Fawr, SN594.804, A.O. Chater, 1995, NMW, LANC, det. J.M. Mullin, 1995. LANC duplicate redet. as *C. album* by J.R. Akeroyd, 2001.]
- +45/2.2. *Claytonia sibirica* (Pink Purslane) (Gwlyddyn Rhudd). Flood zone under *Salix* by river, Teifi bank just S of Cwm Du, Coedmore, SN193.443, A.O. Chater & S.D.S. Bosanquet, 2003.
- +46/2.1. *Moehringia trinervia* (Three-nerved Sandwort) (Tywodlys Trinerf). Laneside hedgebank, 200m NNE of Blaendyffryn, Cwmbrwyno, SN 701.813, A.O. Chater, 2003.
- +46/10.7a. *Sagina apetala* subsp. *apetala* (Annual Pearlwort) (Corwlyddyn Anaf-flodeuog). Roadside verge by farm, Eisteddfa Gurig, SN798. 840, A.O. Chater, 2002. Here reaching its Cards and possibly British altitudinal limit of 415m.
- +46/11.2a. *Scleranthus annuus* subsp. *annuus* (Annual Knawel) (Dinodd Blynnyddol). 1000+ plants on stony track through fields, 900m NW of Gorrig crossroads, SN403.435, A.O. Chater, 2002.

- +46/17.4. *Spergularia rubra* (Sand Spurrey) (Troellys Coch). Shaley track on hilltop, Bryn Garw, Cwmystwyth, SN800.770, A.O. Chater, 2002. Here reaching its Cards and possibly British altitudinal limit of 590m. +Verge of Forestry road, 1km N of Cyneiniog, SN726.888, A.O. Chater, 2003.
- *‡46/18.cha. *Lychnis chalconica* (Maltese-Cross). Naturalised in bramble patch at edge of fen, 150m W of Clyngwyn, Troed-y-rhiw, SN488.536, A.O. Chater, 2003. Derived probably from rubble dumped in c.1995.
- +‡46/20.8. *Silene noctiflora* (Night-flowering Catchfly) (Gludlys Nos-flodeuol). ♂4 plants as casuals in field sown with *Lotus corniculatus* var. *sativus*, Nantsiriol, Bow Street, SN612.843, A.O. Chater, 2002, NMW. 1st record as casual since at least 1942.
- +‡46/20.9a. *Silene latifolia* subsp. *alba* (White Campion) (Gludlys Gwyn). Waste ground, old station yard, Llanilar, SN626.753, A.O. Chater & D.E. Allen, 2003.
- *‡47/1.cap. *Persicaria capitata* (Pink-headed Knotweed). Base of wall on pavement, Trefechan, Aberystwyth, SN582.811, R.A. Jones, 2003. Pet shop 50m away sells hanging baskets of flowers.
- +47/8.13×19. *Rumex × pratensis* (*R. crispus* × *R. obtusifolius*) (Meadow Dock) (Tafol y Maes). Road verge, 600m N of Faerdre Fach, Llandysul, SN421.430, R. Maskew & A.O. Chater, 2003.
- +47/8.15. *Rumex sanguineus* var. *sanguineus* (Blood-veined Dock) (Tafolen Gwythien-goch). ‡Throw-out by path in wood, just W of Pont Nanternis, SN373.567, S.P. Chambers, 2003.
- +‡51/1.1. *Hypericum calycinum* (Rose-of-Sharon) (Rhosyn Saron). Naturalised on roadside hedgebank, Perthyrnen, Gorrig, SN400.434, A.O. Chater, 2002.
- +51/1.9. *Hypericum tetrapterum* (Square-stalked St John's-wort) (Eurinllys Pedronglog). Streamlet below Urdd Centre, Llangrannog, SN326.550, A.O. Chater, 2002.
- *‡51/1.oly. *Hypericum olympicum* (a tutsan). ♂Self-sown from nearby rockery by pavement kerb, by village hall, Capel Bangor, SN657.802, S.P. Chambers, 2003.
- +57/1.5. *Viola reichenbachiana* (Early Dog-violet) (Gwiolydd y Goedwig). Steep, shaded, sandy river bank, N bank of Teifi, 200m SE of Hafod Wen, Llechryd, SN204.429, A.O. Chater & J.P. Woodman, 2003. 1st confirmed record since 1941.
- +57/1.9b. *Viola palustris* subsp. *juressi* (Marsh Violet) (Fioled y Gors). Marshy streambank, 500m W of Llawr-cwrt, Talgarreg, SN411.501, A.O. Chater, 2003.
- +57/1.12a. *Viola tricolor* subsp. *tricolor* (Wild Pansy) (Trilliw). Waste ground, old station yard, Llanilar, SN626.753, A.O. Chater & D.E. Allen, 2003.
- +61/2.16. *Salix repens* var. *repens* (Creeping Willow) (Corhelygen). Locally abundant in felled woodland, Coed Gwastad, Coedmore, SN203.436, A.O. Chater & J.P. Woodman, 2003.
- +‡62/1.7. *Sisymbrium officinale* (Hedge Mustard) (Cedw'r Berth). Road verge, Glynrhaidol farm, Cwm Rhaidol, SN712.787, A.O. Chater & J.P. Woodman, 2003.
- +62/12.3. *Rorippa islandica* (Northern Yellow-cress) (Berwr Melyn y Gogledd). Disturbed ground at edge of pasture, Ynys Edwin, Ynys Hir RSPB Reserve, SN678.962, A.O. Chater, 2002. The 1st record for the Dyfi area, growing with *R. palustris*.
- *‡62/14.4. *Cardamine raphanifolia* (Greater Cuckoo-flower). ‡At least 6 plants naturalised along 400m of streamside rocks in ancient woodland, Afon Llethi valley N of Llanarth, SN426.581, A.O. Chater, 2003, NMW.
- *‡62/14.cor. *Cardamine corymbosa* (New Zealand Bitter-cress). Abundantly naturalised for c.8 years, paths and nursery, below Bach-y-rhew, Ffostrasol, SN363.477, A.O. Chater, 2002, NMW.
- +‡62/16.1. *Aubrieta deltoidea* (Aubretia) (Obrisia). Naturalised on walls of long-abandoned walled garden, Highmead, Llanybydder, SN500.430, A.O. Chater, 2002. +Several clumps on S-facing sloping wall, N side of Penglais Hill, Aberystwyth, SN590.818, A.O. Chater, 2003.
- +62/23.3×5. *Cochlearia danica* × *C. officinalis* (a hybrid Scurvygrass). By limekiln on sea cliffs, Gwbert, SN159.502, A.O. Chater, 2002.
- +‡62/30.8a. *Lepidium draba* subsp. *draba* (Hoary Cress) (Pupurlys Llwyd). Small colony on shingle, 500m SSW of mouth of Afon Wyre, SN525.693, A.O. Chater, 2002.
- +‡74/8.1. *Tellima grandiflora* (Fringe-cups) (Clychau'r Clawdd). Well-naturalised in Llangwryfon old churchyard, SN596.705, A.O. Chater, 2002.

- *†75/8.2. *Rubus tricolor* (Chinese Bramble). Naturalised on pathside by Afon Rheidol, Aberystwyth, SN586.811, A.O. Chater, 2002, **NMW**.
- *†75/8.11. *Rubus cockburnianus* (White-stemmed Bramble). Well-naturalised colony 40×3m in margin of field, S of Clawdd Helyg, Commins Coch, SN612.823, A.O. Chater, 2003.
- +75/8.15. *Rubus bertramii* (a bramble). Slope above road and below conifers, 700m NNW of Blaentwrch, SN679.501; +Slope below oakwood, Cwm Newyddion, SN707.742; both D.E. Allen & A.O. Chater, 2003.
- +75/8.27. *Rubus plicatus* (a bramble). Valley mire, 1km SW of Dyffryn Arth, SN534.621, A.O. Chater, 2002.
- +75/8.34. *Rubus albionis* (a bramble). Laneside hedgebank, Swyddffynnon, SN694.660, 2001. +Allt Ffynnant wood, Llandysul, SN401.407, 2002. +Roadside hedgebank, Tyglyn Lodge, Ciliau Aeron, SN506.598; all D.E. Allen & A.O. Chater, 2002.
- +75/8.60. *Rubus lindleianus* (a bramble). Scrub, opposite Cellan church, SN614.497, D.E. Allen & A.O. Chater, 2003.
- +75/8.61. *Rubus ludensis* (a bramble). Roadside hedge and verge, just NW of Aber-coed, Tregaron, SN670.581, D.E. Allen & A.O. Chater, 2002, **BM**, conf. A. Newton.
- +75/8.92. *Rubus boudicca* (a bramble). Hedge by level crossing, Glanyrafon, SN614.804, 2002, **BM**; +Slope between farmyard and road, Dolgors, 3km S of Devil's Bridge, SN746.740, 2003; both D.E. Allen & A.O. Chater.
- +75/8.93. *Rubus cardiophyllus* (a bramble). Roadside hedgebank, Craigypenrhyn, SN656.925, D.E. Allen & A.O. Chater, 2001.
- +75/8.106. *Rubus incurvatus* (a bramble). One bush in replanted conifer plantation, The Arch, Devil's Bridge, SN765.756, D.E. Allen & A.O. Chater, 2003.
- +75/8.112. *Rubus nemoralis* (a bramble). Heathy roadside bank, 2km S of Llanilar, SN620.729; +Roadside hedge, Nantydderwen, 1km N of Llanddewi Brefi, SN664.565; +Roadside scrub, opposite Cellan church, SN614.497; all D.E. Allen & A.O. Chater, 2003.
- +75/8.113. *Rubus pampinosus* (a bramble). Colony at cleared wood-margin, Coed Glanleri, Dol-y-bont, SN622.879, D.E. Allen & A.O. Chater, 2001, **BM**.
- +75/8.117. *Rubus polyanthemus* (a bramble). Wood edge by village hall, Ciliau Aeron, SN500.587; +Roadside hedgebank, 3.5km SW of Swyddffynnon, SN664.644; both D.E. Allen & A.O. Chater, 2001.
- +75/8.118. *Rubus prolongatus* (a bramble). Felled conifer forest, Allt Maestir, SN548.501, D.E. Allen & A.O. Chater, 2001.
- +75/8.142. *Rubus ulmifolius* (a bramble). Roadside hedgebank, Tyglyn Lodge, Ciliau Aeron, SN506.598, 2001; +Disused quarries, Aberystwyth, SN587.821, 2002; both D.E. Allen & A.O. Chater.
- +75/8.154. *Rubus lanaticaulis* (a bramble). Roadside hedgebank, 200m NNW of Eglwys-fach church, SN685.957, D.E. Allen & A.O. Chater, 2003.
- +75/8.157. *Rubus longus* (a bramble). Laneside hedge, 150m S of Dihewyd church, SN484.560; +Roadside hedgebank, 2km N of Llangeitho, SN619.617; +Roadside hedgebank, Craigypenrhyn, SN656.925; all D.E. Allen & A.O. Chater, 2001.
- *75/8.158. *Rubus orbis* (a bramble). Felled woodland, Coed Newydd, Coedmor, SN196.443, D.E. Allen & A.O. Chater, 1999, **NMW**, conf. A. Newton.
- +75/8.174. *Rubus wirralensis* (a bramble). Field hedge, Trefilan motte, SN549.571; +Wood edge, Pont Llanio, SN652.569; both D.E. Allen & A.O. Chater, 2001.
- +75/8.187. *Rubus hastiformis* (a bramble). Mixed woodland, Parc Natur Penglais, Aberystwyth, SN591.821, D.E. Allen & A.O. Chater, 2002.
- *75/8.194. *Rubus micans* (a bramble). Roadside hedgebanks, 300m SW of Penffynnon, Llandysul, SN395.408, D.E. Allen & A.O. Chater, 1999, **BM**, conf. A. Newton. +Wooded, disused railway, Llanilar, SN628.752, D.E. Allen & A.O. Chater, 2003, **BM**.
- *75/8.205. *Rubus anglofuscus* (a bramble). Disused quarry by B4574, 1km SE of Devil's Bridge, SN747.763, D.E. Allen & A.O. Chater, 2003, **BM**, conf. A. Newton. 1st Welsh record.

- 75/8.209. *Rubus dentatifolius* (a bramble). Mixed estate woodland, Penglais, Aberystwyth, SN593.821, D.E. Allen & A.O. Chater, 2002. +Dominant in larch plantation, Allt Tyn-y-graig, Goginan, SN700.818, A.O. Chater, 2003, **NMW**, det. D.E. Allen. +Roadside bank by river, Glanyrafon Industrial Estate, Llanbadarn Fawr, SN613.804, D.E. Allen & A.O. Chater, 2003.
- +75/8.218. *Rubus leyamus* (a bramble). By footbridge, Afon Teifi by Cellan church, SN614.497, D.E. Allen & A.O. Chater, 2003.
- +75/8.221. *Rubus pascuorum* (a bramble). Patch by elders at top of dune, Ynys-las Dunes NNR, SN607.938, D.E. Allen & A.O. Chater, 2001, **BM**. +Roadside hedgebank, 2km W of Llandysul, SN395.411, **BM**; +Roadside hedge, by Nant Merwydd, 1.5km W of Llandysul, SN401.408; +Roadside hedgebank, Henfynyw, SN448.611, **BM**; all D.E. Allen & A.O. Chater, 2002.
- +75/8.234. *Rubus flexuosus* (a bramble). Clearing in partially felled conifer forest, Gwachal Dwmlo, Cenarth, SN258.425, D.E. Allen & A.O. Chater, 2002.
- *75/8.242. *Rubus longithrysiger* (a bramble). Damp alder wood at former sawmill site, Llanilar, SN626.753, D.E. Allen & A.O. Chater, 2003, **BM**, det. A. Newton.
- +75/8.262. *Rubus angusticuspis* (a bramble). Colony at bottom of oakwood, Trewen, Cwm Cou, SN291.417, D.E. Allen & A.O. Chater, 2002, **BM**. 2nd record.
- +75/8.266. *Rubus bercheriensis* (a bramble). Roadside bank, entrance to Gardeni drive, Llangwryfyon, SN612.726, D.E. Allen & A.O. Chater, 2003, **BM**. 2nd record.
- *75/8.295. *Rubus angloserpens* (a bramble). Shaded laneside hedgebank, 100m S of Ty'nycastell, 1km W of Devil's Bridge, SN726.772, D.E. Allen & A.O. Chater, 2003, **BM**, conf. A. Newton, 1st record for Wales.
- +75/8.321. *Rubus caesius* (Dewberry) (Mwyaren Fair). Roadside hedgebank, Coed Glanleri, Dol-y-bont, SN619.882, D.E. Allen & A.O. Chater, 2002. A rare species in Cards with only four other recent records.
- +75/8.dav. *Rubus davistii* (a bramble). Colony on heathy verge of lane, 200m NE of Swydd Farm, Swyddffynnon, SN694.660, D.E. Allen & A.O. Chater, 2001, **BM**. The only previous record is a specimen in **NMW** from the cliffs between Aber-porth and Tresaith in 1941, where it was not refound after an extensive search in 2000. +Roadside bank, Entrance to Gardeni drive, Llangwryfyon, SN612.726, D.E. Allen & A.O. Chater, 2003.
- +75/9.13b. *Potentilla erecta* subsp. *strictissima* (Tormentil) (Tresgl y Moch). Heathy area by pingos, Cathal, Cwrtnewydd, SN463.474, A.O. Chater, 2002. +Heathy lead mine site, 1.5km SSE of Llanddewi Brefi, SN667.537, A.O. Chater, 2003.
- +†75/11.2. *Fragaria moschata* (Hautbois Strawberry) (Mefusen Fawr). Naturalised at edge of estate woodland, Lax Lodge, Highmead, SN499.431, A.O. Chater, 2002. +Patch by path through wood, SE end of Cwm Woods, Llangorwen, SN603.830, S.P. Chambers, 2003.
- *†75/12.1. *Duchesnea indica* (Yellow-flowered Strawberry) (Mefusen Felen). Disused railway, Llanerchaeron, SN475.600, T. Goss, **NMW**, det. G. Hutchinson.
- +75/15.2. *Agrimonia procera* (Fragrant Agrimony) (Llys y Dryw Peraroglus). Scrub at top of salt marsh. Nantyferwig. SN169.481, A.O. Chater & S.P. Chambers, 2003.
- +75/17.1. *Sanguisorba officinalis* (Great Burnet) (Llysyrlys). Recently appeared in pasture, Garth House, Furnace, SN681.943, A.D.Q. Agnew, 2002.
- +†75/17.3b. *Sanguisorba minor* subsp. *muricata* (Fodder Burnet) (Gwyddlwdn Tramor). Abundant on roadside bank, Heol y Bryn, Aberystwyth, SN587.821, S.P. Chambers, 2002.
- +†75/19.15. *Alchemilla mollis* (Robust Lady's-mantle). Naturalised by wheelpit of lead mine ruin, Esgair Hir, SN733.912, A.O. Chater, 2002. The highest colony in Cards at 460m. +Naturalised on road verge in conifers, 350m E of Soar y Mynydd, SN788.532, A.O. Chater, 2003.
- +75/20.1. *Aphanes arvensis* (Parsley-piert) (Troed y Dryw). Road edge, Bryn-y-rhyd, 3.5km SE of Llanddewi Brefi, SN683.520, A.O. Chater, 2003. At 440m altitude.
- +†75/21.1. *Rosa multiflora* (Many-flowered Rose) (Rhosyn Lluosflod). Scrambling in scrub, by Afon Cledan, Llan-non, SN516.667, A.O. Chater, 2002, **NMW**.

- *75/21.4×11. *Rosa* × *pseudorusticana* (*R. arvensis* × *R. stylosa*) (a hybrid rose). Roadside by stream bridge, Tynewydd, Tremain, SN232.475, R. Maskew & A.O. Chater, 2002, NMW, conf. A.L. Primavesi.
- +75/21.4×12. *Rosa* × *irregularis* (*R. arvensis* × *R. canina*) (a hybrid rose). Roadside hedgebanks, Parclyn, SN237.504; +Roadside hedgebank, Betws Ifan, SN305.476; both R. Maskew & A.O. Chater, 2002.
- +‡75/21.6. *Rosa rugosa* (Japanese Rose) (Rhosyn Japan). Naturalised on sandy shingle, Borth beach, SN607.909; +Naturalised on heathy verge of trunk road, by A44(T). 900m WSW of Bwlch Nantyrarian, SN710.810; both A.O. Chater, 2003.
- +‡75/21.7. *Rosa* 'Hollandica' (Dutch Rose). Colony 9m long naturalised on laneside bank, 100m N of Clyngwyn, 1.5km NNW of Troed-y-rhiw, SN492.536, A.O. Chater, 2003.
- +75/21.12×13. *Rosa* × *dumalis* (*R. caesia* × *R. canina*) (a hybrid dog-rose). Overgrown roadside hedge, Cwm Cou, SN286.420, R. Maskew & A.O. Chater, 2002. +Scrub above salt marsh, Nantyferwig, Teifi estuary, SN168.481, R. Maskew & A.O. Chater, 2003. +Scrub on coastal headland, MoD site, Aber-porth, SN248.522, R. Maskew & BSBI Field Meeting, 2003.
- +75/21.12×14. *Rosa* × *dumetorum* (*R. canina* × *R. obtusifolia*) (a hybrid rose). Roadside hedgebank, Aber-porth, SN271.512, 2002; +Overgrown roadside hedge, Cwm Cou, SN286.422, 2002; +Roadside hedgebank, Brongest, SN324.450, 2002, NMW; +Roadside hedgebank, 200m SW of Blaenllynan, Ferwig, SN187.484, 2003; all R. Maskew & A.O. Chater.
- +75/21.12×15. *Rosa* × *scabriuscula* (*R. canina* × *R. tomentosa*) (a hybrid rose). Disused railway, Teifi Marshes WTSWW Reserve, Cardigan, SN186.455, R. Maskew & A.O. Chater, 2003.
- +75/21.12×16. *Rosa* × *rothschildii* (*R. canina* × *R. sherardii*) (a hybrid rose). NW hedge of road, 300m SW of Brynllnynan, Ferwig, SN188.484, R. Maskew & A.O. Chater, 2003.
- +75/21.12×19. *Rosa* × *toddiae* (*R. canina* × *R. micrantha*) (a hybrid rose). Scrub, 150m N of top of cliff rlwy, MoD site, Aber-porth, SN748.524, R. Maskew & BSBI Field Meeting, 2003.
- +75/21.12dum. *Rosa canina* group 'Dumales' (a dog-rose). Roadside in wood, 700m N of Llanfair, SN433.416, R. Maskew & A.O. Chater, 2003.
- +75/21.12dum. *Rosa canina* group 'Dumales' var. *spuria* (a dog-rose). W hedge of road, 600m NNE of Llwynpiod, Cardigan, SN181.482, R. Maskew & A.O. Chater, 2003.
- +75/21.12lut. *Rosa canina* group 'Lutetianae' (a dog-rose). Scrub above salt marsh, Nantyferwig, Teifi estuary, SN169.480, R. Maskew & A.O. Chater, 2003.
- +75/21.12pub. *Rosa canina* group 'Pubescentes' (a dog-rose). Roadside hedgebank, 600m N of Faerdre Fach, Llandysul, SN421.430, R. Maskew & A.O. Chater, 2003.
- +75/21.12tra. *Rosa canina* group 'Transitoriae' (a dog-rose). Roadside hedgebank, Faerdre Fawr, Llandysul, SN428.420, R. Maskew & A.O. Chater, 2003.
- +75/21.14. *Rosa obtusifolia* (Round-leaved Dog-rose) (Rhosyn Deilen Llawban). Roadside hedgebank, 150m W of Troed-yr-aur church, SN325.453, 2002, NMW; +Roadside hedgebank, 500m NNE of Llwynpiod, Cardigan, SN180.481, 2003, both R. Maskew & A.O. Chater. 2nd, 3rd & only extant records, the previously known bush near Capel Bangor having died.
- +75/21.19. *Rosa micrantha* (Small-flowered Sweet-briar) (Rhoslwyn Pêr). Roadside hedgebank, S of Aeron Villa, Rhydybandy, SN633.619, A.O. Chater, 2003.
- +‡75/32.21. *Cotoneaster horizontalis* (Wall Cotoneaster) (Cotoneaster y Mur). Waste ground, W part of MoD site, Aber-porth, SN242.520, A.O. Chater, 2003.
- +‡75/32.40. *Cotoneaster sternianus* (Stern's Cotoneaster). Rocky wooded slope, above Afon Aeron by Lovers' Bridge, Aberaeron, SN457.626, A.O. Chater, 2002.
- +77/7.1a. *Anthyllis vulneraria* subsp. *vulneraria* (Kidney Vetch) (Plucen Felen). NW corner of sand quarries, SN201.486, A.O. Chater, 2002, the only inland record in Cards.: var. *langei*.
- +‡77/8.2. *Lotus corniculatus* var. *sativus* (Common Bird's-foot-trefoil) (Pysen y Ceirw). Naturalised on new road verges constructed c.1988, 200m SW of Llwynceilyn crossroads, SN439.594, A.O. Chater, 2003.
- +77/10.3. *Ornithopus perpusillus* (Bird's-foot) (Troed yr Aderyn). Rocky verge of lane, 300m NE of Blaenddyffryn, Cwmbrwyno, SN702.814, A.O. Chater, 2003.

- +77/14.12. *Vicia lathyroides* (Spring Vetch) (Fflugbysen y Gwanwyn). Shaley trackside, W end of MoD site, Aber-porth, SN239.521, A.O. Chater & BSBI Field Meeting, 2003.
- +77/18.5. *Medicago arabica* (Spotted Medick) (Maglys Amrywedd). ‡Lawn and grassy slope, by National Library of Wales, Aberystwyth, SN595.815, A.O. Chater, 2002. Presumably originating from reseeded of the area some years ago.
- +77/19.1. *Trifolium ornithopodioides* (Bird's-foot Clover) (Corfeillionen Wen). Abundant along 150m of grassy and sandy shingle between road and sea wall, Borth, SN608.899, A.O. Chater, 2002.
- +77/19.20. *Trifolium striatum* (Knotted Clover) (Meillionen Rychog). Clay slope, 800m WNW of Llwynycelyn crossroads, SN434.598, A.O. Chater, 2003.
- *‡77/24.1. *Spartium junceum* (Spanish Broom) (Banadl Sbaeneg). Naturalised on railway verge, Plas Crug crossing, Aberystwyth, SN589.811, A.O. Chater, 2002.
- +‡79/2.2. *Myriophyllum aquaticum* (Parrot's-feathers). Abundantly naturalised in ditch by road culvert, SW corner of Glanyrafon Industrial Estate, Llanbadarn Fawr, SN606.800, A.O. Chater, 2003.
- +81/1.1. *Lythrum salicaria* (Purple-loosestrife) (Llys y Milwr). Valley mire, SSE of Hafod-fawr, Cross Inn, SN549.636, A.O. Chater, 2002.
- *84/1.1×8. *Epilobium* × *novae-civitatidis* (*E. hirsutum* × *E. ciliatum*) (a hybrid willowherb). Disused quarry in conifer forest, 900m N of The Arch, Devil's Bridge, SN764.764, A.O. Chater, 2001, NMW, det. T. D. Pennington.
- +84/1.3×8. *Epilobium* × *interjectum* (*E. montanum* × *E. ciliatum*) (a hybrid willowherb). Flowerbed in car park, Hen Ysgol Gymraeg, Aberystwyth, SN585.815, S.P. Chambers, 2002.
- +84/1.6×8. *Epilobium* × *vicinum* (*E. obscurum* × *E. ciliatum*) (a hybrid willowherb). Waste ground, Teifi Tce, Lampeter, SN577.478, A.O. Chater, 2003.
- +84/1.6×9. *Epilobium* × *schmidtianum* (*E. obscurum* × *E. palustre*). Valley mire, 2.4km E of Cilcennin, SN534.621, A.O. Chater, 2002, NMW.
- +84/1.7. *Epilobium roseum* (Pale Willowherb) (Helyglys Coesig). Verge of green lane, 250m WNW of Gwernant Home Farm, SN333.462, A.O. Chater, 2002, 2nd record.
- +84/1.8×9. *Epilobium* × *fossicola* (*E. ciliatum* × *E. palustre*) (a hybrid willowherb). Disturbed area in horse-grazed peaty pasture, Cors Fochno NNR, SN632.921, A.O. Chater, 2002, 2nd record.
- +85/1.1. *Cornus sanguinea* (Dogwood) (Cwyros). ‡Planted c.1970 at intervals along field hedge, now naturalised, Rhos Pil-bach WTSWW Reserve, Plwmp, SN369.529, A.O. Chater, 2003.
- +‡85/2.1. *Aucuba japonica* (Spotted-laurel). Overgrown grounds of deserted mansion, Cardigan Castle, SN178.459, A.O. Chater, 2003. Abundantly naturalised with self-sown saplings and bushes, including 'Longifolia' and 'Variegata'.
- +88/1.1. *Euonymus europaeus* (Spindle) (Piswydden). Roadside hedge below wood, Gorrig, SN410.429, A.O. Chater, 2002.
- *91/2.12×13. *Euphorbia portlandica* × *E. paralias* (a hybrid spurge). One plant in open community on N-facing dune slope, Ynys-las Dunes NNR, SN607.945, S.P. Chambers, 2003, herb. SPC, conf. P.M. Benoit. With frequent *E. paralias* and occasional *E. portlandica*.
- +‡102/1.10. *Oxalis debilis* (Large-flowered Pink-sorrel) (Suran Oddfog). In several places in hedgebanks and on verges, in Llan-non village, SN516.667, A.O. Chater, 2002.
- +‡102/1.14. *Oxalis incarnata* (Pale Pink-sorrel) (Suran Welw). Hedgebank, by Afon Peris, Lan-non, SN516.673, A.O. Chater, 2002.
- +‡103/1.1×2. *Geranium* × *oxonianum* (*G. endressii* × *G. versicolor*) (Druce's Crane's-bill). Scrub by stream, Glynarthen, SN309.485, A.O. Chater, 2002.
- +103/2.1. *Erodium maritimum* (Sea Stork's-bill) (Pig y Crëyr Arfor). Station platform, Borth Station, SN609.900, A.O. Chater, 2003. Dominant over area 4×3m on stony soil.
- +107/20.1a. *Aethusa cynapium* subsp. *cynapium* (Fool's Parsley) (Gauberllys). Scrub on riverside rocks below bridge, Cenarth, SN269.416, A.O. Chater & R. Maskew, 2002.
- +107/43.1. *Torilis japonica* (Upright Hedge-parsley) (Troed-y-cyw Syth). Forestry road verge, 1km E of Soar y Mynydd, SN794.530, A.O. Chater, 2003.

- *‡107/Ane.gra. *Anethum graveolens* (Dill) (Llys y Gwewyr). Base of wall on pavement, Union Street, Aberystwyth, SN584.811, S.P. Chambers, 2003.
- *‡110/1.1. *Nicandra physalodes* (Apple-of-Peru) (Afal Periw). ‡Weed in experimental plots, IGER, Plas Gogerddan, SN631.835, J. Valentine, 2003, det. A.O. Chater from photo.
- +110/8.1a. *Solanum nigrum* subsp. *nigrum* (Black Nightshade) (Codwarth Du). Upper driftline of sea beach, Cei Bach, SN406.598; +Abundant in maize crop, 300m SSW of Brynawelon, Llanon, SN520.676; both A.O. Chater, 2003.
- +‡113/2.1. *Nymphoides peltata* (Fringed Water-lily) (Ffaen Gors Eddtrog). Well-naturalised in large pond made c.1999, field S of Llain, 1.3km N of Llanarth, SN425.589, A.O. Chater, 2003.
- +‡115/1.1. *Phacelia tanacetifolia* (Phacelia). Occasional weed in barley crop, Ynys-hir RSPB Reserve, SN666.952, A.O. Chater, 2002. +‡Patch 1×1m on roadside, Llwynysgaw, Felin-wynt, SN218.515, J. Thomas, per S. B. Evans, 2003. Abundant in adjacent field sown in 2002.
- +‡116/9.1. *Borago officinalis* (Borage) (Tafod y Fwch). Scattered plants in amenity area with picnic table by footpath in fields, 500m S of Nantyferwig, Gwbert, SN169.476, A.O. Chater & M.D. Sutton, 2002. Origin uncertain, perhaps sown in a seed mix. +‡S verge of trunk road, near Tynllidiart Inn, Capel Bangor, SN655.802, S.P. Chambers, 2003.
- +116/15.1. *Myosotis scorpioides* (Water Forget-me-not) (Ysgorpionllys y Gors). Damp ditch in pastures, Llanerchaeron, SN480.599, A.O. Chater, 2002.
- +116/15.4. *Myosotis laxa* (Tufted Forget-me-not) (Ysgorpionllys Siobynnog). Marshy streamside, Mouth of Morfa Mawr stream, Llanon, SN499.658, A.O. Chater, 2003.
- +116/15.9. *Myosotis ramosissima* (Early Forget-me-not) (Ysgorpionllys Cynnar). E edge of sand quarries, Penparc, SN204.483; +Shaley sea cliffs, Carreg y Ty, Llangrannog, SN301.536; both A.O. Chater, 2002, NMW.
- +116/15.10. *Myosotis discolor* (Changing Forget-me-not) (Ysgorpionllys Amryliw). Rock outcrop in pasture, S of Cwmisdwr, Bangor Teifi, SN380.392, A.O. Chater, 2002, NMW.
- +‡118/1.8. *Stachys arvensis* (Field Woundwort) (Briwllys yr Yd). †Road verge, Glynrheidol farm, Cwm Rheidol, SN712.787, A.O. Chater & J.P. Woodman, 2003.
- +‡118/5.1. *Lamium album* (White Dead-nettle) (Marddanhadlen Wen). ‡Road verge, Pyllau-uchaf Farm, Llanfihangel y Creuddyn, SN643.757, A.O. Chater, 2002. Probably a recent arrival as this road is regularly walked.
- +‡118/16.1. *Melissa officinalis* (Balm) (Gwenynddail). Scrub by stream, Craigypenrhyn, SN654.928, A.O. Chater, 2002. Recorded here by Salter pre-1935.
- +118/23.1. *Mentha arvensis* (Corn Mint) (Mintys yr Yd). Permanently wet *Juncus acutiflorus* fen, Gorsgoch valley mire, SN481.503, A.O. Chater & P.S. Jones, 2002, NMW. An unusually wet habitat for the true species.
- +118/23.1×2. *Mentha* × *verticillata* (*M. arvensis* × *M. aquatica*) (Whorled Mint) (Mintys Troellaidd). Among *Phalaris* on shingle island in river, Afon Teifi 200m S of Aberbachnog, SN375.401, NMW; +Road verge by stream, Glanyrafon Isaf, Tregaron, SN706.611; both A.O. Chater, 2003.
- +118/23.2×3. *Mentha* × *piperita* (*M. aquatica* × *M. spicata*) (Peppermint) (Mintys Poethion). ‡Rank vegetation by stream, Mwnt, SN196.520; ‡+Marshy road verge, Wileirog-fach, Llangorwen, SN605.857; both A.O. Chater, 2002, NMW.
- +124/2.2. *Scrophularia auriculata* (Water Figwort) (Gornerth y Dwr). Waste ground, Teifi Tce, Lampeter, SN577.478; +Trackside by sluice, 400m ESE of Soar y Mynydd, SN788.530; both A.O. Chater, 2003.
- +124/9.1. *Misopates orontium* (Weasel's-snout) (Trwyn y Llo Bychan). Weed in fodder beet crop, Pentood-uchaf, Cardigan, SN172.440, A.O. Chater & M.D. Sutton, 2002.
- +‡124/13.3. *Linaria purpurea* (Purple Toadflax) (Gingroen Cochlas). Waste ground and hedgebank, Pantyrnnon, Gorrig, SN400.434, A.O. Chater, 2002.
- +124/16.19. *Veronica agrestis* (Green Field-speedwell) (Rhwyddlwyn Gorweddol). Weed in barley crop, Pentood-uchaf, Cardigan, SN176.443, A.O. Chater & M.D. Sutton, 2002.
- *‡124/17.1. *Hebe salicifolia* (Koromiko) (Coromiko). ‡Several self-sown bushes self-sown from adjacent garden in back alley, SE of Queen Street, Aberaeron, SN457.629, A.O. Chater, 2003.

- +124/20.5×9. *Euphrasia arctica* × *E. confusa* (a hybrid eyebright). Hay meadow, 250m SSW of Winllan, Talsarn, SN566.572, A.O. Chater, 2003, NMW, det. A. J. Silverside.
- +124/20.7. *Euphrasia nemorosa*, [Woodland Eyebright] (Llygad Effros). Grassy slopes, Cwm Gwerin, Pumlumon, SN804.889, A.O. Chater, 2002.
- +124/20.7×18. *Euphrasia nemorosa* × *E. micrantha* (a hybrid eyebright). Among *Calluna* on lead mine spoil, SW corner of Cwmsymlog lead mine, SN696.836, A.O. Chater, 2000; +Dry heathy slope, by road bridge at Cwmerfyn lead mine, SN695.828, A.O. Chater, 2003; both NMW, det. A. J. Silverside. 2nd & 3rd records since 1899.
- +124/20.9×6. *Euphrasia confusa* × *E. tetraquetra* (a hybrid eyebright). Abundant on mature dunes, Ynys-las Dunes, SN606.935, A.O. Chater, 1997, NMW, det. A. J. Silverside.
- +124/20.9×7. *Euphrasia confusa* × *E. nemorosa* (a hybrid eyebright). Shaded verge of Forestry road, 600m W of Dolfor, Trawsgoed, SN659.718, 1999; +Among *Calluna* on lead mine spoil, SW corner of Cwmsymlog mine, SN696.836, 2000; both A.O. Chater, NMW, det. A. J. Silverside. +Sandy pasture, E of Mwnt church, SN196.520, A.O. Chater, 2003. +Verge of Forestry road, Bryn Dubach, 3km SE of Llanddewi Brefi, SN678.527, A.O. Chater, 2003, NMW.
- +124/20.9×18. *Euphrasia confusa* × *E. micrantha* (a hybrid eyebright). Heathy verge of Forestry track, 1.5km NNE of Nant-y-maen, SN771.596, A.O. Chater & R. D. Pryce, 2001, NMW, det. A. J. Silverside.
- +124/20.18. *Euphrasia micrantha* [Slender Eyebright] (Gloywlys Eiddil Cyffredin). Among short *Calluna* on stony S-facing slope, W side of Afon Doethie at confluence with Nant y Cnwch, SN767.499, A.O. Chater & J.P. Woodman, 2000; +Gravelly road verge in felled conifer forest, 900m NNW of Nantystalwyn, SN801.583, A.O. Chater & R.D. Pryce, 2001; both NMW, det. A. J. Silverside. 2nd & 3rd records since 1955.
- +124/25.2b. *Pedicularis sylvatica* subsp. *hibernica* (Lousewort) (Melog y Cwn). Damp, heathy pasture, Rhos Cwmsaeson SSSI, 1km ENE of Oakford, SN462.584, A.O. Chater, 2003.
- 125/2.2. *Orobanche rapum-genistae* (Greater Broomrape) (Gorfanc Mwyaf). Amongst gorse on dry pasture slope, Pentood-uchaf, Cardigan, SN174.435, M.D. Sutton & A.O. Chater, 2002.
- +130/6.6. *Galium verum* (Lady's Bedstraw) (Briwydden Felen). Roadside bank of A44(T), Cwmbrwyno, SN706.806, A.O. Chater, 2003.
- +‡131/3.0rb×mic. *Symphoricarpos* × *chenaultii* (*S. microphyllus* × *S. orbiculatus*) (Hybrid Coralberry) (Llus Eira Pinc). Self-sown plants in hedge margin, roadside, by Cwm Rheidol Reservoir, SN695.795, S.P. Chambers, 2002.
- +‡131/5.1. *Leycesteria formosa* (Himalayan Honeysuckle) (Bachgen Llwm). Naturalised in estate woodland, Tan-y-bwlch, SN582.792, A.O. Chater, 2002.
- [*‡131/6.8. *Lonicera caprifolium* (Perfoliate Honeysuckle) (Gwyddfid Trydwl). Sea cliffs, New Quay, SN388.601, A.O. Chater, 1998. By 2002 the colony had spread far enough along the cliffs to come within reach and reveal itself as *L. × italicum*.]
- *‡131/6.8×etr. *Lonicera* × *italica* (*L. caprifolium* × *L. etrusca*) (Garden Honeysuckle). Abundantly naturalised in scrub on sea cliffs, W of pier, New Quay, SN388.601, A.O. Chater, 2002, NMW.
- *135/5.3×4. *Carduus* × *stangii* (*C. crispus* × *C. nutans*) (a hybrid thistle). Waste ground by building site, Felin y Mor Road, Aberystwyth, SN580.806, A.O. Chater, 2003, NMW, det. C. A. Stace.
- +135/5.4. *Carduus nutans* (Musk Thistle) (Ysgallen Ogwydd). Improved pasture, Pentood-uchaf, Cardigan, SN174.435, A.O. Chater & M.D. Sutton, 2002.
- *135/25.3. *Taraxacum argutum* (a dandelion). W-facing grassy slope, dam of Llyn Craigypistyll, SN718.856, A.O. Chater, 2003, NMW, det. A. J. Richards.
- *135/25.22. *Taraxacum rubicundum* (a dandelion). Mature dune slope, Ynys-las Dunes NNR, SN608.938, A.O. Chater & P. A. Smith, 2003, NMW, conf. A. J. Richards.
- *135/25.23. *Taraxacum scanicum* (a dandelion). Roadside bank in deciduous woodland, 400m E of Rhosgellan Fawr, Wallog, SN602.854, A.O. Chater & P. A. Smith, 2003, NMW, det. A. J. Richards. 1st record for Wales.
- +‡135/43.1. *Erigeron glaucus* (Seaside Daisy). Naturalised on roadside wall, Picton Tce, New Quay, SN389.599, A.O. Chater, 2003.

- +‡135/43.4. *Erigeron karvinskianus* (Mexican Fleabane) (Cedowydd y Clogwyn). Naturalised on wall, Finch Square and Feidrfaur, Cardigan, SN179.461, A.O. Chater, 2002. 2nd record. +Pavements, in Queen's Square, Aberystwyth, SN585.819, A.O. Chater & S.P. Chambers, 2002. 3rd record.
- *‡135/45.sol. *Olearia solandri* (Coastal Daisybush). Several self-sown bushes to 1m tall in railway ballast in fenced-off area, probably derived from gardens at Art Dept. 150m to E, Aberystwyth railway station, SN588.815, A.O. Chater, 2002.
- +‡135/56.1. *Chrysanthemum segetum* (Corn Marigold) (Melyn yr Yd). Winter stubble of spring barley field, 400m NE of Bryngwyn, Aberaeron, SN470.621, A.O. Chater & J.P. Woodman, 2003.
- *‡135/57.1. *Leucanthemella serotina* (Autumn Oxeye). ‡Rubbish tip, Aberystwyth, SN589.810, J. H. Salter, 1928, NMW, det. E. J. Clement 2004. 1st & only record.
- +‡135/74.1. *Ambrosia artemisiifolia* (Ragweed) (Bratlys). ‡Garden weed, Ger-y-llan, Penrhyn-coch, SN643.842, J. Valentine, 2003, det. A.O. Chater from photo. 2nd record.
- +‡138/4.2. *Elodea nuttallii* (Nuttall's Waterweed) (Alaw Nuttall). Naturalised in large pond constructed c.1999, field S of Llain, 1.3km N of Llanarth, SN425.589, A.O. Chater, 2003.
- +‡138/6.1. *Lagarosiphon major* (Curly Waterweed) (Pib-flodyn Crych). Dominant in much of pond in pasture, 50m E of Cefn Hendre farm, Waun fawr, SN607.819, A.O. Chater, 2003.
- +142/1.15. *Potamogeton berchtoldii* (Small Pondweed) (Dyfrllys Eiddil). Pond in valley mire, 1km SW of Dyffryn Arth, SN534.621, A.O. Chater, 2002.
- +‡147/5.1. *Arum italicum* subsp. *italicum* (Lords-and-Ladies) (Pidyn y Gog). Naturalised on road verge, 1km W of Llechryd bridge, SN208.439, A.O. Chater, 2003.
- +‡148/2.4. *Lemna minuta* (Least Duckweed) (Corlinad). Naturalised in pond made c.1998 in pasture, Below A487(T) road by Golden Lion Cottage, Llanarth, SN427.581; +Naturalised in swampy ditch, SW corner of Glanyrafon Industrial Estate, Llanbadarn Fawr, SN606.800; both A.O. Chater, 2003.
- *‡149/1.2. *Tradescantia fluminensis* (Wandering-jew). Abundantly naturalised in disused cellar under grating, King Street, Aberystwyth, SN580.816, S.P. Chambers, 2002, NMW.
- +151/1.15. *Juncus bulbosus* (Bulbous Rush) (Brwynen Oddfog). Hollows in wet heath, Pennar Fawr Wildlife Trust Reserve, Plwmp, SN368.534, A.O. Chater, 2002. The 3-stamened plant, growing with the vastly commoner *J. kochii*.
- +151/1.25. *Juncus inflexus* (Hard Rush) (Brwynen Galed). Waste ground, across lane from old woodyard site, Lampeter, SN580.488, A.O. Chater, 2003. Presumably accidentally introduced and naturalised here.
- +151/1.25×26. *Juncus × diffusus* (*J. inflexus* × *J. effusus*) (Diffuse Rush) (Brwynen Dryledol). Disturbed marshy pasture, old sewage works, MoD Site, Aber-porth, SN239.516, A.O. Chater, 2002.
- +151/1.26×27. *Juncus × kern-reichgeltii* (*J. effusus* × *J. conglomeratus*) (a hybrid rush). Blanket mire, by Afon Hengwm, Pumlumon, SN820.913, 2002; +Damp, heathy pasture, Rhos Cwmsaeson SSSI, 1km ENE of Oakford, SN460.586, 2003; +Flushed S-facing slope, Craig Clogan, Cwm Berwyn, SN726.582, 2003; all A.O. Chater.
- +151/2.3. *Luzula sylvatica* (Great Wood-rush) (Coedfrwynen Fawr). Felled conifer forest just NE of Llyn y Gwaith, SN674.508, A.O. Chater, 2003.
- +152/13.1. *Rhynchospora alba* (White Beak-sedge) (Corsfrwynen Wen). Many colonies in hollows in wet heath, E end of Rhos Cilcennin, SN530.621, A.O. Chater & P.S. Jones, 2003.
- +152/16.69. *Carex bigelowii* (Stiff Sedge) (Hesgen Ddu). Summit of Pumlumon Fawr, SN799.869, A.O. Chater, 2002. 2nd record, abundant to dominant over half an acre, not flowering, but astonishingly never noticed here before.
- +‡153/4.1. *Sasaella ramosa* (Hairy Bamboo). Damp woodland, Highmead, Llanybydder, SN499.430, A.O. Chater, 2002, NMW. 2nd record.
- +‡153/5.1. *Pseudosasa japonica* (Arrow Bamboo). Spreading colony along streambank, Abermydyr, Llanerchaeron, SN474.604, A.O. Chater, 2003.

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- +‡153/12.7g. *Festuca rubra* subsp. *megastachys* (a red fescue). Recently worked part of sand quarries, Penparc, SN201.485, A.O. Chater & M.D. Sutton, 2002, NMW. +Verge of A487(T). by Afon Cleddan bridge, Llan-non, SN526.667, A.O. Chater, 2002.
- +153/13.1×2. *Lolium* × *boucheanum* (*L. perenne* × *L. multiflorum*) (a hybrid rye-grass). Pasture, 500m W of Llwynceilyn crossroads, SN435.596; Trackside, IGER fields, Gogerddan, SN622.837; both A.O. Chater, 2003.
- +153/21.1. *Catapodium rigidum* (Fern-grass) (Gwenithwellt Caled). Shaley slope above sea, Cribach Bay, MoD Site, Aber-porth, SN249.522, A.O. Chater, 2002.
- +153/47.16. *Alopecurus myosuroides* (Black-grass) (Cynffonwellt Du). Car park, Llawr-cwrt, Talgarreg, SN416.500, A.O. Chater, 2003.
- +‡153/50.7. *Bromus secalinus* (Rye Brome) (Pawrwellt Ller). ‡Casual in stable yard, Hafod mansion site, SN759.732, A.O. Chater & J.P. Woodman, 2000, NMW, conf. L.M. Spalton. 1st record since 1933.
- +153/56.1×2. *Elytrigia* × *drucei* (*E. repens* × *E. atherica*) (a hybrid couch). Top of salt marsh, Nantyferwig, Teifi estuary, SN168.477, A.O. Chater, 2001, NMW. With both parents, and more abundant than *E. atherica*.
- +‡153/68.1. *Echinochloa crus-galli* (Cockspur) (Cibogwellt Rhydd). ‡Disturbed road verge, 500m N of Waungelod, Gwbert, SN168.490, A.O. Chater, 2003, NMW.
- +‡153/70.pum. *Setaria pumila* (Yellow Bristle-grass) (Cibogwellt Melyn). ‡Road verge by garden, 400m ESE of Glynrhaidol, Cwm Rhaidol, SN715.785, A.O. Chater & J.P. Woodman, 2003.
- +154/1.1b. *Sparganium erectum* subsp. *microcarpum* (Branched Bur-reed) (Cleddlys Canghennog). Pond margin, old woodyard site, Lampeter, SN579.488, A.O. Chater, 2003.
- +154/1.1c. *Sparganium erectum* subsp. *neglectum* (Branched Bur-reed) (Cleddlys Canghennog). Ditch in valley mire, 2km NE of Cilcennin, SN534.618, S.D.S. Bosanquet, 2002. +Silted-up lead mine reservoir, 150m W of Blaenbrwyno, Cwmbrwyno, SN713.805, A.O. Chater, 2003.
- +154/1.3. *Sparganium angustifolium* (Floating Bur-reed) (Cleddlys Culddail). Peaty pool at 575m, NW of Carnfachbugeilyn, Pumlimon, SN822.906, A.O. Chater, 2002.
- +‡158/24.7. *Allium triquetrum* (Three-cornered Garlic) (Cenhinen Drichornel). *Ammophila/Festuca* dune, between Moel Ynys Pool and road, Ynys-las, SN608.923, A.O. Chater, 2002.
- +‡158/32.1×3. *Galanthus nivalis* × *G. plicatus* (a hybrid snowdrop). Roadside bank in wood, 1.2km E of Wallog, SN602.854, A.O. Chater, 2002.
- +162/3.4. *Epipactis helleborine* (Broad-leaved Helleborine) (Caldrist Llydanddail). Roadside verge in wood, Dolwallter, 3km E of Llandysul, SN446.404, A.O. Chater & G. Harrison, 2002.
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MONTGOMERY, v.c. 47 (comm. Mrs M. Wainwright)

- +‡74/5.8×9. *Saxifraga* × *urbium* (*S. umbrosa* × *S. spathularis*). Large colony, several metres across, on inaccessible rock ledge on acidic upland cliff, Pistyll-y-llyn, Llyfnant, SN754.942, R. Meade, 1999, conf. R.J. Gornall, 2001. Can only be seen with binoculars; a root was procured many years ago, grown on, and eventually identified.
- *‡75/8.2. *Rubus tricolor* (Chinese Bramble). Local Authority planting as ground cover and spreading on roadside, Buttington, SJ250.086, R.A. Dawes, 2002.
- +75/8.146. *Rubus bertonii* (a bramble). Beside forestry extraction route, Bwlchycibau, SJ184.176, K. Thorne & M. Wainwright, 2002, det. D.E. Allen.
- +75/8.163×142. *Rubus vestitus* × *R. ulmifolius* (a bramble). Woodland edge above R. Vyrnwy, NW of Pontrobert, SJ101.136, K. Thorne & M. Wainwright, 2002, det. D.E. Allen.
- *75/8.309. *Rubus halssteadensis* (a bramble). Trackside in mixed woodland, Bwlchycibau, SJ184.176, K. Thorne & M. Wainwright, 2002, det. D.E. Allen.
- *75/8.319. *Rubus tuberculatus* (a bramble). Hedgerow in village, Bwlchycibau, SJ178.174, K. Thorne & M. Wainwright, 2002, det D.E. Allen.

- *75/21.12×17. *Rosa* × *molletorum* (*R. canina* × *R. mollis*) (a hybrid rose). Roadside hedge, N of Dolanog, SJ068.143; +Two sites in roadside hedge, NE of Pont Llogel, SJ04.16; both K. Thorne & M. Wainwright, 2002, det. A.L. Primavesi. 1st & 2nd records.
- *‡77/26.3. *Ulex minor* (Dwarf Gorse) (Eithin Môn). Several large clumps in flower, probably sown at time of road-widening in 1970s, SSW facing shale-rich roadside bank, beside A44 c.3km W of Llangurig, SN879.809, R.G. Woods, 2002.
- *‡103A/Lim.dou. *Limnanthes douglasii* (Meadow-foam). River stones at low water below aqueduct over River Rhiw, Berriew, SJ189.006, K. Thorne, 2002.
- +118/10.2. *Scutellaria galericulata* (Skullcap) (Cwccwl). Abundant at top of salt marsh among tidal debris, rocky mound by inn ruin, 300m NW of Dovey Junction Station, SN695.982, A.O. Chater, 2002.
- +135/17.2. *Picris hieracioides* (Hawkweed Oxtongue) (Gwylaeth yr Hebog). Large colony of >100 plants, many strongly fasciated, on verge of railway embankment immediately E of Dyfi Bridge, Dovey Junction, SN695.979, A.O. Chater, 2002. The only record in the far West.
- +153/21.1. *Catapodium rigidum* (Fern-grass) (Gwenithwellt Caled). Cracks in station platform, S end of Dovey Junction Station, SN696.978, A.O. Chater, 2002. With *C. marimum*. The only record in the West of the county.

MERIONETH, v.c. 48 (comm. P.M. Benoit)

- +2/1.1. *Selaginella selaginoides* (Lesser Clubmoss) (Cnwfwfwsogl Bach). Base-rich flush bog, Clochnant, Llandrillo, SJ04.34, S. Stille & P.M. Benoit, 2002. 1st recent record for hectad.
- +28/13.10. *Ranunculus auricomus* (Goldilocks Buttercup) (Peneuraidd). A few plants again in 2002 in a shady hedgebank on Carboniferous limestone at Hafod, near Corwen, SJ05.42, P.M. Benoit & S. Stille, 2002. The only Merioneth station.
- *43/3.6. *Atriplex littoralis* (Grass-leaved Orache) (Llygwyn Arfor). In quantity in one spot on driftline where sea encroached with high tides in Feb. 2002, between Llanaber and Talybont, SH59.19, P.M. Benoit, 2002, NMW. 2nd and 1st recent record.
- +47/4.2a. *Polygonum oxyspermum* subsp. *raii* (Ray's Knotgrass) (Canclwm Ray). Strand line, Fairbourne Spit, SH61.14, P.M. Benoit, 2002. 412 plants counted - the best occurrence in Merioneth known to me.
- +47/8.10. *Rumex hydrolapathum* (Water Dock) (Tafol y Dwr). Two plants still surviving in marsh at mouth of Afon Ysgethin, SH57.21, P.M. Benoit, 2002. 1st recent record for hectad.
- 52/1.2. *Tilia cordata* (Small-leaved Lime) (Pisgwydden Deilen Fach). Torrent Road, Dolgellau, SH73.17, P.M. Benoit, 2002, NMW. The great tree by the side of the Torrent Road, cited in *A Contribution to a Flora of Merioneth* (1963), p. 16, fell in the storm of February 2002.
- +61/1.2. *Populus tremula* (Aspen) (Aethnen). Steep wooded slope, Coed Pen-y-pigyn above Corwen town, SJ07.43, J.A. Green, 2002. A surely natural occurrence on a steep wooded slope.
- +62/42.1b. *Raphanus raphanistrum* subsp. *maritimus* (Sea Radish) (Rhuddygl Glan y Môr). One large plant on drift line near shore, near the mouth of Afon Dysynni, SH56.03; +Six large plants near the mouth of Afon Ysgethin, SH57.21; both P.M. Benoit, 2002, NMW. 1st & 2nd recent records for subsp.
- +‡63/1.1. *Reseda luteola* (Weld) (Melengu). Numerous plants in disused limestone quarry, Hafod, near Corwen, SJ05.42, P.M. Benoit & S. Stille, 2002.
- *‡148/2.4. *Lemna mimuta* (Least Duckweed) (Corlinad). In one spot (no other *Lemna* present) in shallow water of marsh at sea level near Caerdeon, Barmouth, SH64.17, P.M. Benoit, 2002, NMW.
- +152/3.5. *Eleocharis quinqueflora* (Few-flowered Spike-rush) (Sbigfrwynen Goch). Base-rich boggy slope, Nant Crechwyl, Llandrillo, SJ02.32; +Base-rich flush, Clochnant, Llandrillo, SJ04.35, S. Stille & P.M. Benoit, 2002.
- 152/11.1. *Cyperus longus* (Galingale) (Ysnoden Fair). Single patch still surviving at Morfa Dyffryn, SH5.2, P.M. Benoit, 2002. Increased in size from 4×2.5m in 1981 to 13.5×8m in 2002.

- 153/17.1. *Briza media* (Quaking-grass) (Crydwellt). Base-rich boggy slope, Nant Crechwyll, Llandrillo, SJ02.32, S. Stille & P.M. Benoit, 2002.
- +153/31.2. *Koeleria macrantha* (Crested Hair-grass) (Cribwellt). One large patch on dune grassland, Fairbourne peninsula, SH61.14, P.M. Benoit, 2002, NMW. 2nd record.
- *‡153/53.1. *Ceratochloa carinata* (California Brome) (Pawrwellt California). ‡Several plants at edge of car park/riverside meadow, Y Marian, Dolgellau, SH72.17, P.M. Benoit, 2002, NMW.
- +‡158/34.1b. *Asparagus officinalis* subsp. *officinalis* (Garden Asparagus) (Merllys). One large plant in sand dunes, Penrhyn Point, Fairbourne, SH61.15, P.M. Benoit, 2002, NMW. 2nd & 1st recent record.
- +162/14.1. *Anacamptis pyramidalis* (Pyramidal Orchid) (Tegeirian Bera). One fine plant in calcareous dune grassland, Fairbourne Spit, SH61.14, P.M. Benoit, 2002. No doubt a recent natural colonist from the populations in the same habitat at Tywyn or Harlech. The same plant produced two spikes in both 2003 & 2004.

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

- +4/1.3. *Equisetum variegatum* (Variegated Horsetail) (Marchrawn Amrywiol). Four or five good sized patches in wet bottom of old slate quarry near Llanberis, SH603.627, S. Thomas, 2002.
- +4/1.7. *Equisetum sylvaticum* (Wood Horsetail) (Marchrawn y Coed). Small colony at edge of flush near Llanllechid, SH639.693, S. Chambers, 2002.
- +5/2.1. *Botrychium lunaria* (Moonwort) (Lloerlys). Up to 200 plants on sand dunes near Fort Belan, Morfa Dinlle, SH434.600, W. McCarthy, 2003.
- +15/3.4. *Asplenium marinum* (Sea Spleenwort) (Duegredynen Arfor). One large plant with several fronds in rock crevice in splash zone, Porth Ty-mawr, SH18.33, G. Battershall, 2002.
- +17/3.10. *Dryopteris expansa* (Northern Buckler-fern) (Marchredynen y Gogledd). Six plants among rocks, Cwm Idwal, near Bethesda, SH640.590, T. Dines, 2002.
- +‡19/1.1. *Azolla filiculoides* (Water Fern) (Rhedynen y Dwr). In small un-named reservoir 0.5km E of Caeathro, SH506.619, W. McCarthy, 2002.
- +28/13.24. *Ranunculus peltatus* (Pond Water-crowfoot) (Crafanc y Llyn). Lake Llyn y Wrach, E of Penmaenmawr, SH748.757, W. McCarthy, 2002.
- +36/3.1. *Soleirolia soleiroliae* (Mind-your-own-business) (Mam Miloeidd). Tiny patch in disturbed ground, Llanfairfechan, SH698.735, W. McCarthy, 2002.
- +39/4.5×6. *Quercus* × *rosacea* (*Q. petraea* × *Q. robur*) (a hybrid oak). Edge of footpath, Aber, SH656.724, W. McCarthy, 2002.
- +43/7.2. *Suaeda maritima* (Annual Sea-blite) (Helys Unflwydd). Sandy, shingle beach, West Shore, Llandudno, SH768.822, W. McCarthy, 2002.
- *‡47/1.7. *Persicaria amplexicaulis* (Red Bistort) (Neidrlys Coch). Edge of field, Fachwen, Llanberis, SH576.617, W.M. McCarthy, 2002.
- *‡56/Cis.inc. *Cistus incanus* (Sun-rose). Limestone grassland opposite pier, Llandudno, SH782.828, W. McCarthy, 2003.
- *‡59/1.1. *Frankenia laevis* (Sea-heath) (Grugeilyn Llyfn). One plant on shingle beach, West Shore, Llandudno, SH768.822, W.M. McCarthy, 2002.
- 61/2.9×10. *Salix* × *sericans* (*S. viminalis* × *S. caprea*) (Broad-leaved Osier). River bank, Capelulo, SH744.765, W.M. McCarthy, 2002, det. R.D. Meikle. 1st recent record.
- +61/2.10×11. *Salix* × *reichardtii* (*S. caprea* × *S. cinerea*) (a hybrid willow). Grass bank near caves, Happy Valley, Great Orme, Llandudno, SH780.830, W. McCarthy, 2002, det. R.D. Meikle.
- +‡62/7.1. *Erysimum cheiranthoides* (Treacle Mustard) (Triagl-arfog). Disturbed grassland, Great Orme, Llandudno, SH774.826, W. McCarthy, 2003.
- +62/12.4. *Rorippa palustris* (Marsh Yellow-cress) (Berwr Melyn y Gors). Very frequent around slurry, Glanllynau farm near Chwilog, SH456.376, S. Chambers, 2002.

- +69/1.1×3. *Primula* × *polyantha* (*P. vulgaris* × *P. veris*) (False Oxlip) (Briallu Tal Ffug). Wooded slope E of river, Llanfairfechan, SH696.738, W. McCarthy, 2002.
- +72/2.1. *Ribes rubrum* (Red Currant) (Rhyfon Coch). ‡Hedge between field and lane near Llandudno, SH796.807, W. McCarthy, 2002.
- +‡73/1.1. *Crassula tillaea* (Mossy Stonecrop) (Anwywig). Hundreds of plants on sandy sides of tracks on Green Acres Caravan Site, Morfa Bychan, Porthmadog, SH541.348, S. Thomas, 2002.
- +‡73/1.3. *Crassula helmsii* (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Marshy field near Friar's School, SH56.70; +Pond at summit, Great Orme, Llandudno, SH767.833; both W. McCarthy, 2002.
- +‡74/8.1. *Tellima grandiflora* (Fringe-cups) (Clychau'r Clawdd). Stream bank, Capel Uchaf, SH432.488, M. Stead, 2003.
- +‡75/3.5. *Spiraea japonica* (Japanese Spiraea). Large shrub in woodland near Bangor, SH58.72, D. Earl, 2003. 1st record as neophyte.
- +75/9.13×14. *Potentilla* × *suberecta* (*P. erecta* × *P. anglica*) (a hybrid cinquefoil). Laneside bank, Fachwen, Llanberis, SH573.618, W. McCarthy, 2002, det. B. Harold.
- +75/9.14×15. *Potentilla* × *mixta* (*P. erecta* × *P. reptans* & *P. anglica* × *P. reptans*) (Hybrid Cinquefoil). Hedgebank, Aber, SH65.72, W. McCarthy, 2002.
- +75/15.2. *Agrimonia procera* (Fragrant Agrimony) (Llys y Dryw Peraroglus). Bank of ditch at footpath, Morfa Dinlle, SH436.575, W. McCarthy, 2003.
- +75/20.2. *Aphanes australis* (Slender Parsley-piert) (Troed y Dryw Fain). Footpath edge, Aber, SH656.724, W. McCarthy, 2002.
- +75/21.4×12. *Rosa* × *irregularis* (*R. arvensis* × *R. canina*) (a hybrid rose). Laneside hedge near Penmachno, SH799.498; +Hedgerow near Tan-yr-Eglwys, Llanrhychwyn, SH776.615; both W. McCarthy, 2002, det. A.L. Primavesi.
- +75/21.4×18. *Rosa* × *consanguinea* (*R. arvensis* × *R. rubiginosa*) (a hybrid rose). Limestone grassland, Great Orme, Llandudno, SH773.825, W. McCarthy, 2002, det. A.L. Primavesi.
- 75/21.12×15. *Rosa* × *scabriuscula* (*R. canina* × *R. tomentosa*) (a hybrid rose). Wood near Keeper's Cottage, Penrhynside, Llandudno, SH809.811, W.M. McCarthy, 2002. 1st recent record.
- +‡75/32.34. *Cotoneaster bullatus* (Hollyberry Cotoneaster). Disused limestone quarry, Little Orme, Llandudno, SH817.816, W. McCarthy, 2002.
- *‡75/32.obs. *Cotoneaster obscurus* (Obscure Cotoneaster). Disused quarry, Cwm Mountain, Llandudno, SH788.808, W.M. McCarthy, 2002, det. J. Fryer.
- *‡77/14.5. *Vicia villosa* var. *microphylla* (Fodder Vetch) (Ffugbysen yr Âr). Lupin field, Garreg Fawr, Lley, SH152.249, K. Atkinson, 2003, det. D. Pearman.
- +77/15.12. *Lathyrus nissolia* (Grass Vetchling) (Ythysen Goch). ‡One plant on bank, Conwy RSPB Reserve, SH79.77, G. Battershall, 2003.
- +77/19.15. *Trifolium micranthum* (Slender Trefoil) (Meillionen Felen Eiddil). Path edge, Bwlch y Ddeufaen near Conwy, SH719.715, W. McCarthy, 2003.
- +81/1.2. *Daphne laureola* (Spurge-laurel) (Clust yr Ewig). Woods over limestone, Mynydd Penyarreg, Little Orme, Llandudno, SH817.817, W. McCarthy, 2002.
- 84/1.3×6. *Epilobium* × *aggregatum* (*E. montanum* × *E. obscurum*) (a hybrid willowherb). Forest track near Llyn Bychau, SH75.59, det. A.O. Chater; +Roadside, Fachwen, Llanberis, SH580.617; both W. McCarthy, 2002. 1st recent records.
- +94/2.1. *Radiola linoides* (Allseed) (Gorhillig). Gravelly streambank, E of Crymlyn, Aber, SH645.716, M. Stead, 2002.
- +103/2.1. *Erodium maritimum* (Sea Stork's-bill) (Pig y Crëyr Arfor). Between the lake and railway line, Llyn Padarn, Llanberis, SH574.614, W. McCarthy.
- +113/1.1. *Meryanthes trifoliata* (Bogbean) (Ffa'r Gors). Marsh near Foel Gopyn, Ysbyty Ifan, SH833.487, W. McCarthy, 2003.
- +‡116/6.3. *Anchusa azurea* (Garden Anchusa). Grass bank opposite Grand Hotel, Llandudno, SH782.828, W. McCarthy, 2002.

- +†118/6.3. *Galeopsis speciosa* (Large-flowered Hemp-nettle) (Penboeth Amryliw). Disturbed grassland, Happy Valley, Great Orme, Llandudno, SH781.831, W. McCarthy, 2003.
- +118/23.1×2. *Mentha* × *verticillata* (*M. arvensis* × *M. aquatica*) (Whorled Mint) (Mintys Troellaidd). Stream bank, Ysbyty Ifan, SH83.49, W. McCarthy, 2003.
- +124/5.1. *Limosella aquatica* (Mudwort) (Lleidlys). A dozen or so plants in flower/fruitletting in muddy puddles on old trackway, Bwlch y Ddeufaen, Rowen, SH718.716, T. Lewis, 2002.
- +124/20.1a. *Euphrasia rostkoviana* subsp. *rostkoviana* [Common Eyebright] (Effros Blodau Bach Gludiog). Species-rich meadow, Tan-y-bwlch near Capel Uchaf, SH432.492, W. McCarthy, 2003.
- +124/20.5a×7. *Euphrasia arctica* subsp. *borealis* × *E. nemorosa* (a hybrid eyebright). Grassland near Dolwyddelan railway station, SH737.521, W. McCarthy, 2003, det. A. Silverside.
- +124/20.9. *Euphrasia confusa* [Dwarf Eyebright] (Effros Bach Gliniog). Many plants on dunes, Morfa Bychan, Porthmadog, SH551.336, BSBI group, 2002.
- *†131/6.6. *Lonicera japonica* (Japanese Honeysuckle). Well naturalised on cliff above beach, Great Orme, Llandudno, SH759.829, W.M. McCarthy, 2002.
- +135/2.1. *Carlina vulgaris* (Carline Thistle) (Ysgallen Siarl). Grassland near Llyn Eigiau, Dolgarrog, SH72.66, W. McCarthy, 2003.
- +†135/11.2. *Centaurea montana* (Perennial Cornflower) (Penlas Fythol). One plant in hedgerow near Rhiwlas, SH565.655, G. Battershall, 2003.
- +135/28.1. *Hieracium sabaudum* (a hawkweed). In dunes, Morfa Bychan, Porthmadog, SH551.336, BSBI group, 2002.
- +135/28.6. *Hieracium umbellatum* (Narrow-leaved Hawkweed) (Heboglys Culddail). Sand dunes, Morfa Bychan, Porthmadog, SH551.336, BSBI group, 2002.
- +135/28.127. *Hieracium snowdoniense* (a hawkweed). One plant on rock ledge, Cwm Idwal, near Bethesda, SH63.59, S. Hand & T. Rich, 2002.
- *†135/58.pal. *Leucanthemum paludosum* (a daisy). Pavement weed (casual only). Great Orme, Llandudno, SH773.826, W.M. McCarthy, 2002, det. M. Wilcox.
- *†138/3.1. *Egeria densa* (Large-flowered Waterweed) (Alaw Prin-flodeuog). Small pond in wood off Valley Road, Llanfairfechan, SH697.737, W.M. McCarthy, 2002.
- *†138/6.1. *Lagarosiphon major* (Curly Waterweed) (Pib-flodyn Crych). Small pond in wood off Valley Road, Llanfairfechan, SH697.737, W.M. McCarthy, 2002.
- +†147/5.2b. *Arum italicum* subsp. *italicum* (Italian Lords-and-Ladies) (Pidyn y Gog Eidalaidd). One small clump on side of track, SW of Chwilog, SH429.382, S. Chambers, 2002.
- +151/1.13×14. *Juncus* × *surrejanus* (*J. articulatus* × *J. acutiflorus*) (a hybrid rush). Marshy ground near stream, Aber, SH645.716, W. McCarthy, 2002.
- *152/2.2a×2b. *Trichophorum cespitosum* nothosubsp. *foersteri* (*T. cespitosum* subsp. *cespitosum* × *T. cespitosum* subsp. *germanicum*) (Hybrid Deergrass). Flush in mire, occasional with abundant subsp. *germanicum*, 400m NE of Llyn Idwal, SH650.600, A.O. Chater, 2002, NMW.
- +152/11.1. *Cyperus longus* (Galingale) (Ysnoten Fair). One clump in disturbed ground in wet field, NW of Madryn, Llanfairfechan, SH661.739, S. Chambers, 2002.
- +152/16.41. *Carex distans* (Distant Sedge) (Hesgen Bell). Field edge, Pencaenewydd, SH402.400, W. McCarthy, 2003, det. A.O. Chater.
- +152/16.42. *Carex punctata* (Dotted Sedge) (Hesgen Bigiad). Over 100 plants on sea cliff ledges, Morfa Bychan, Porthmadog, SH554.365, BSBI group, 2002. Last recorded in 1961?
- 152/16.44×46. *Carex* × *fulva* (*C. hostiana* × *C. viridula*) (a hybrid sedge). Flush, Cwm Idwal, near Bethesda, SH650.602, BSBI group, 2002.
- +†153/17.3. *Briza maxima* (Great Quaking-grass) (Crydwelwit Mwyaf). Cracks in wall of churchyard, Aber, SH653.726, W. McCarthy, 2002.
- 153/18.9. *Poa compressa* (Flattened Meadow-grass) (Gweunwelit Cywasg). Grassland, near disused quarry, Dinorwig, SH587.612, W.M. McCarthy, 2002.
- +153/62.1. *Cortaderia selloana* (Pampas-grass) (Paithwellt). Self-sown on derelict tennis courts, Llandudno, SH772.821, W. McCarthy, 2003.

- +153/Pan.mil. *Panicum miliaceum* (Common Millet) (Miled). Pavement edge, Llandudno, SH784.822, W. McCarthy, 2002.
- +154/1.3. *Sparganium angustifolium* (Floating Bur-reed) (Cleddlys Culddail). In lake, Llyn y Wrach, E of Penmaenmawr, SH748.757, W. McCarthy, 2002.
- *‡158/24.3. *Allium roseum* (Rosy Garlic) (Garlleg Gwridog). Naturalised on laneside, Llyn Helig, Llandudno, SH700.830, W.M. McCarthy, 2002.
- +162/18.4. *Dactylorhiza praetermissa* (Southern Marsh-orchid) (Tegeirian y Gors). Several plants in grassland, Plas Menai, Bangor, SH547.699, D. Thorpe, 2002.

DENBIGH, v.c. 50 (comm. Mrs J.A. Green)

- +28/13.24. *Ranunculus peltatus* (Pond Water-crowfoot) (Crafanc y Llyn). Stony upland lake, Llyn Brenig, SH981.580, A.O. Chater & C. Jermy, 2002.
- +‡37/1.1. *Juglans regia* (Walnut) (Coeden Cnau Ffrengig). Planted on roadside, Llanfair Talhaiarn, SH929.701, BSBI group, 2001.
- +43/8.1. *Salsola kali* subsp. *kali* (Prickly Saltwort) (Helys Ysbigog). On sand, Kinmel Bay, SH98.80, BSBI group, 2001. 1st recent record for hectad.
- +47/4.2. *Polygonum oxyspermum* subsp. *raili* (Ray's Knotgrass) (Canclwm Ray). Shingle beach, Kinmel Bay, SH988.807, J. Osley, 2003, conf. J.A. Green.
- *47/4.6. *Polygonum rurivagum* (Cornfield Knotgrass) (Canclwm Tir Âr). Headland of barley field, Abergele, SH967.762, J.A. Green, 2003, det. A.J. Akeroyd.
- +47/8.13×19. *Rumex* × *pratensis* (*R. crispus* × *R. obtusifolius*) (Meadow Dock) (Tafol y Maes). Roadside, Dinmael, SH997.443, M. Stead, 2002.
- +51/1.14. *Hypericum hirsutum* (Hairy St John's-wort) (Eurinllys Blewog). Deep roadside vegetation, Bryneglwys, SJ144.475, J.A. Green, 2002. +Roadside bank, Trefor, SJ248.423, J.L. Roberts, 2003.
- *‡53/2.3. *Lavatera* × *clementii* (*L. olbia* × *L. thuringiaca*) (Garden Tree-mallow). Roadside, Bodelwyddan, SH982.762, J.A. Green, 2003, NMW.
- +61/1.2. *Populus tremula* (Aspen) (Aethnen). Roadside hedge, Bont-newydd, SJ004.712, J.A. Green, 2003.
- +61/2.10×11. *Salix* × *reichardtii* (*S. caprea* × *S. cinerea*) (a hybrid willow). Roadside, Dinmael, SH993.443, G.M. Kay, 2002.
- +61/2.11×12. *Salix* × *multinervis* (*S. cinerea* × *S. aurita*) (a hybrid willow). Lane hedge, Rhydgaed, SH987.642, G.M. Kay, 2002.
- +61/2.16. *Salix repens* (Creeping Willow) (Corhelygen). Birch wood on quarry waste, Minera, SJ264.518, J.A. Green, 2003.
- 62/22.1. *Erophila majuscula* (Hairy Whitlowgrass) (Bystwn Blewog). Quarry, Llangollen, SJ223.425, E. Milleur, 2003. 2nd & 1st recent record.
- *75/9.13×14. *Potentilla* × *suberecta* (*P. erecta* × *P. anglica*) (a hybrid cinquefoil). Laneside, Dinmael, SJ00.44, W. McCarthy, 2002, NMW, conf. B. Harold.
- +75/15.2. *Agrimonia procera* (Fragrant Agrimony) (Llys y Dryw Peraroglus). Roadside (old A5). Dinmael, SH992.443, W. McCarthy, 2002.
- +75/21.4×12. *Rosa* × *irregularis* (*R. arvensis* × *R. canina*) (a hybrid rose). S side A5 road, Dinmael, SH997.443, G.M. Kay, 2002, 2nd record.
- *75/21.12×13a. *Rosa* × *dumalis* (*R. canina* × *R. caesia* subsp. *caesia*) (a hybrid dog-rose). S side of lane, Dinmael, SH995.496, G.M. Kay; +Hedgerow, Rhydgaed, SH984.647, G.M. Kay, conf. A.L. Primavesi; both 2002. 1st & 2nd records.
- *75/21.12×13b. *Rosa* × *dumalis* (*R. canina* × *R. caesia* subsp. *vosagiaca*) (a hybrid dog-rose). Roadside, Dinmael, SH993.445, G.M. Kay; +Hedgerow, Rhydgaed, SH983.639, G.M. Kay, conf. A.L. Primavesi; both 2002. 1st & 2nd records.

- *75/21.12×14. *Rosa* × *dumetorum* (*R. canina* × *R. obtusifolia*) (a hybrid rose). Hedgerow, Cobblers Lane, Burton, SJ335.579, conf. A.L. Primavesi; +Lane hedge, Firs Farm, Overton, SJ388.428; both G.M. Kay, 2003.
- +75/21.12×16. *Rosa* × *rothschildii* (*R. canina* × *R. sherardii*) (a hybrid rose). Roadside hedge, Bryneglwys, SJ153.479, G.M. Kay, 2002.
- +75/21.12×17. *Rosa* × *molletorum* (*R. canina* × *R. mollis*) (a hybrid rose). Roadside (A5104). Bryneglwys, SJ183.500, conf. A.L. Primavesi; +Floor of limestone quarry, Minera, SJ257.518; both G.M. Kay, 2002.
- +75/21.13a. *Rosa caesia* subsp. *caesia* (Hairy Dog-rose) (Rhosyn Blewog). Hedgerow, Rhydgaled, SH981.646; +Hedgerow, Foel Gasyth, SJ025.621; Hedgerow, Prion, SJ050.622; Hedgerow, Rhiwbeyll, Llangwyfan, SJ123.657; all G.M. Kay, 2002, conf. A.L. Primavesi.
- *75/21.13a×16. *Rosa caesia* subsp. *caesia* × *R. sherardii* (a hybrid rose). Hedgerow, Llangwyfan, SJ123.657, G.M. Kay, 2002, conf. A.L. Primavesi.
- *75/21.13b×16. *Rosa caesia* subsp. *vosagiaca* × *R. sherardii* (a hybrid rose). Road verge, Prion, SJ044.618, G.M. Kay, 2002, conf. A.L. Primavesi.
- *75/21.14. *Rosa obtusifolia* (Round-leaved Dog-rose) (Rhosyn Deilen Llawban). Hedgerow, Cobblers Lane, Burton, SJ334.579, G.M. Kay, 2002, conf. A.L. Primavesi.
- +75/21.17. *Rosa mollis* (Soft Downy-rose) (Rhosyn Deilen Feddal). Hedgerow, Rhydgaled, SH981.639; Moel Prion, SJ039.619; +Roadside NW side A5104, Bryneglwys, SJ185.504; all G.M. Kay, 2002, conf. A.L. Primavesi. +Floor of limestone quarry, Minera, SJ257.518, G.M. Kay, 2002.
- +75/28.24. *Sorbus torminalis* (Wild Service-tree) (Cerdinen Folwst). Lane hedge, Rhydgaled, SH981.644, J.A. Green, 2002.
- +‡75/32.9×10. *Cotoneaster* × *watereri* (*C. frigidus* × *C. salicifolius*) (Waterer's Cotoneaster). Roadside quarry, Pwllglas, SJ124.552, W. McCarthy, 2003. 2nd record.
- +‡75/32.34. *Cotoneaster bullatus* (Hollyberry Cotoneaster). Deciduous wood, Nant-y-ffrith, SJ266.540, J.A. Green, 2003, det. J. Fryer. 2nd record.
- *77/18.2b. *Medicago sativa* subsp. *varia* (Sand Lucerne). Established on sand dunes, Kimmel Bay, SH987.807, BSBI group, 2001. 1st record of subsp.
- 84/1.3. *Epilobium montanum* var. *verticillatum* (Broad-leaved Willowherb) (Helyglys Llydanddail). Roadside, Ruthin, SJ128.553, A.S. Lewis, 2003, det. G.D. Kitchener.
- +84/1.5. *Epilobium tetragonum* (Square-stalked Willowherb) (Helyglys Pedronglog). Car-park edge, Wrexham, SJ325.494, G.M. Kay, 2003.
- +84/1.7. *Epilobium roseum* (Pale Willowherb) (Helyglys Coesig). Roadside ditch, Rhydgaled, SH987.647, G.M. Kay, 2002.
- *84/1.8×3. *Epilobium ciliatum* × *E. montanum* (a hybrid willowherb). Edge of lane, Pwllglas, SJ120.549, J. Clarke, 2003, det. G. Kitchener.
- +‡91/2.10. *Euphorbia exigua* (Dwarf Spurge) (Fflamgoed Fach yr Yd). Arable field (barley). Hendre Bach, Abergele, SH967.763, J.A. Green, 2003.
- +102/1.3. *Oxalis corniculata* (Procumbent Yellow-sorrel) (Suran Felen Orweddol). Garden lawn weed, Marford, SJ359.557, J. Lawton Roberts, 2003.
- 103/2.2. *Erodium moschatum* (Musk Stork's-bill) (Pig y Crëyr Mwsgaidd). Gravelly, recently made, river bank, Llanfair Talhaiarn, SH926.703, J.A. Green, 2002, NMW. 1st recent record.
- +107/17.1. *Crithium maritimum* (Rock Samphire) (Corn Carw'r Môr). Shingle beach, Kimmel Bay, SH988.807, J.A. Green, 2003. 1st recent record.
- +107/28.4. *Apium inundatum* (Lesser Marshwort) (Dyfrforonen Leiaf). Pond, Wrexham, SJ383.493, E. Milleur, 2003.
- +‡110/1.1. *Nicandra physalodes* (Apple-of-Peru) (Afal Periw). Headland of 'Tir Gofal' field, Hendre Bach Farm, Abergele, SH965.767, J.A. Green, 2003, NMW. 2nd record.
- +‡114/1.1. *Polemonium caeruleum* (Jacob's-ladder) (Ysgol Jacob). Imported soil for roadworks, Cottage bridge, N end Alwen Reservoir, SH919.562, R. Whitehead, 2003, conf. J.A. Green.
- +‡118/1.8. *Stachys arvensis* (Field Woundwort) (Briwllys yr Yd). Headland in barley field, Hendre Bach, Abergele, SH966.763, J.A. Green, 2003.

- +124/8.2. *Chaenorhium minus* (Small Toadflax) (Gingroen Bychan). Railway track, Llangollen, SJ215.422, J.A. Green, 2002, conf. P.M. Benoit.
- +‡124/11.2. *Cymbalaria pallida* (Italian Toadflax) (Llin y Fagwyr Mwyaf). Roadside, Pwllglas, SJ122.549, W. McCarthy, 2003. 2nd record.
- *‡131/6.5. *Lonicera henryi* (Henry's Honeysuckle). Woodland near gardens, Bryn Euryn, SH834.801, J. Phillips & P. Ingham, 2002, NMW, det. E.J. Clement.
- +133/2.3. *Valeriana dioica* (Marsh Valerian) (Triaglog y Gors). Shady ditch, Worlds End, Llangollen, SJ230.483, J. Lawton Roberts, 2003.
- +134/3.1. *Knautia arvensis* (Field Scabious) (Clafrllys). ‡Imported soil for roadworks, Cottage bridge, N end Alwen Reservoir, SH919.562, J.A. Green, 2003.
- +‡135/22.1. *Lactuca serriola* (Prickly Lettuce) (Gwylaeth Bigog). Field gateway, Worthenbury, SJ416.466, B. Formstone, 2002.
- +135/26.3. *Crepis biennis* (Rough Hawk's-beard) (Gwalchlys Garw). By new cycle track, Llandulas, SH906.786, J.A. Green, 2002.
- +135/30.4. *Filago minima* (Small Cudweed) (Edafeddog Lleiaf). Quarry, Llangollen, SJ223.425, E. Milleur, 2003.
- +‡135/55.2. *Anthemis arvensis* (Corn Chamomile) (Camri'r Yd). Disturbed ground on farm, Llangollen, SJ229.479, J. Lawton Roberts, 2003, conf. J.A. Green.
- *‡135/74/1. *Ambrosia artemisiifolia* (Ragweed) (Bratlys). Edge of lake, Gresford, SJ346.536, B. Formstone, 2003, conf. J.A. Green.
- +152/16.43. *Carex extensa* (Long-bracted Sedge) (Hesgen Hirian). Shingle beach, Kinnel Bay, SH985.806, J. Osley, 2003, conf. A.O. Chater.
- +153/18.0. *Poa compressa* (Flattened Meadow-grass) (Gweunwelt Cywasg). Trackside, Minera, SJ257.512, W. McCarthy, 2002. 1st record as a native.
- +‡153/68.1. *Echinochloa crus-galli* (Cockspur) (Cibogwellt Rhydd). øEdge of lake, Gresford, SJ346.536, B. Formstone, 2003. 2nd record.
- +‡153/70.1. *Setaria viridis* (Green Bristle-grass) (Cibogwellt Gwyrddlas). øWeed in maize field, Wrexham, SJ382.485, G. Lowden, 2002.
- *154/1.1d. *Spartanium erectum* subsp. *oocarpum* (Branched Bur-reed) (Cleddlys Canghennog). Farm pond, Cloy Farm, Overton, SJ398.431, J. Clark, 2003, conf. A.O. Chater.

FLINT, v.c. 51 (comm. G. Wynne)

- +46/7.10. *Cerastium diffusum* (Sea Mouse-ear) (Clust Llygoden Arfor). Small colonies on old lead spoil tips, NE of Rhes-y-cae, SJ193.713, S.P. Chambers, 2002.
- *75/21.20. *Rosa agrestis* (Small-leaved Sweet-briar) (Miaren Gulddail). Scrub on limestone, Graig Fawr, Meliden, SJ062.805, G.M. Kay, 2002.
- +124/1.2. *Verbascum virgatum* (Twiggy Mullein) (Tewbannog). Three plants, Connah's Quay, 100m E of Flintshire Bridge, SJ285.709, D.O. Jones, 2002. 2nd recent record.
- +‡148/2.4. *Lemna minuta* (Least Duckweed) (Corlinad). Pond in wood, Coed Duon, Tremeirchion, SJ074.715, J.A. Green & A.O. Chater, 2002. 2nd record.
- *151/1.26×27. *Juncus* × *kern-reichgeltii* (*J. effusus* × *J. conglomeratus*) (a hybrid rush). Hay field, Coed Duon, Tremeirchion, SJ073.715, J.A. Green & A.O. Chater, 2002.

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

- *4/1.5×8. *Equisetum* × *rothmaleri* (*E. arvense* × *E. palustre*). (a hybrid horsetail). Wet grassland near Llyn Penrhyn, SSSI & RSPB reserve, SH309.766, T.D. Dines & BPS visit, 2002, **herb. IRB**. Field and laboratory examination confirms an earlier report of this hybrid from this locality. In cultivation at Treborth Botanic Garden.

- +‡19/1.1. *Azolla filiculoides* (Water Fern) (Rhedynen y Dwr). Garden pond, Trearddur Bay, SH255.795, I.R. Bonner, 2003.
- [28/13.19×20. *Ranunculus* × *novae-forestae* (*R. omiophyllus* × *R. tripartitus*). Wet open heathland, Tre Wilmot, SH228.814, M. Sutton, 2001. R.V. Lansdown has now examined photographs of the plants and is confident they are within the range of variation of *R. tripartitus*.]
- +‡30/1.4. *Papaver rhoeas* (Common Poppy) (Pabi Coch). ‡Probably sown with corncockle and corn marigold in the wild part of a caravan site at Tyddyn Isaf, Lligwy, SH48.87, I.R. Bonner, 2003.
- +31/5.5. *Fumaria muralis* (Common Ramping-fumitory) (Mwg y Ddaear Amrywiol). Garden weed, Ffrwd onen, Llangristiolus, SH442.732, I.R. Bonner, 2003.
- +‡34/1.1. *Cannabis sativa* (Hemp) (Cywarch). In a field opposite Fron Capel, Gaerwen, SH491.728, W. McCarthy & M. Stead, 2003.
- +‡37/1.1. *Juglans regia* (Walnut) (Coeden Cnau Ffrengig). Planted by a new track cut through secondary woodland, Tyddyn Isaf, SH48.87, I.R. Bonner, 2003.
- +‡40/3.1. *Carpinus betulus* (Hornbeam) (Oestrwydden). Originally planted as a row along a field boundary between Bryn Fuches and the coast, SH488.903, I.R. Bonner & S.N. Priest, 2003.
- +‡42/8.2. *Carpobrotus edulis* (Hottentot-fig) (Ffigysen Felen). Coastal rocks, Swnt, Moelfre, SH516.867, Mrs I.M. Evans, 2002.
- +43/1.6. *Chenopodium rubrum* (Red Goosefoot) (Troed yr Wydd Ruddog). Shore of Menai Strait, Tan y Foel, SH463.637, G.M. Kay, 2002.
- +45/3.1a. *Montia fontana* subsp. *fontana* (Blinks) (Gwlyddyn y Ffynnon). Wet trackway, Fferam Parc, SH407.709, I.R. Bonner, 2003.
- +45/3.1d. *Montia fontana* subsp. *chondrosperma* (Blinks) (Gwlyddyn y Ffynnon). Central strip of minor road, Fron Deg, Gaerwen, SH493.732, I.R. Bonner, 2003. 1st post-1970 record for Anglesey, presumably overlooked.
- +46/10.7a. *Sagina apetala* subsp. *apetala* (Annual Pearlwort) (Corwlyddyn Anaf-flodeuog). Garden path, Rhoscefnhir, SH523.763, I.R. Bonner, 2003.
- +‡46/19.1. *Agrostemma githago* (Corncockle) (Bulwg yr Yd). ‡Sown with corn marigold in the wild part of a caravan site at Tyddyn Isaf, Lligwy, SH48.87, I.R. Bonner, 2003. It is unlikely to persist as future cultivation looks doubtful.
- +‡47/4.3. *Polygonum arenastrum* (Equal-leaved Knotgrass) (Clymog â Dail Bach). Open ground near Ynys y Fydlyn, SH292.917, I.R. Bonner & S.N. Priest, 2003.
- *‡47/5.3. *Fallopia baldschuanica* (Russian-vine) (Taglys Tibet). Established on roadside hedge near Cae Enyon, from where it presumably originated, SH294.780, I.R. Bonner, 2002.
- +51/1.10. *Hypericum humifusum* (Trailing St John's-wort) (Eurinllys Mân Ymdaenol). Verge of new A55 dual-carriageway, Gaerwen, SH489.723, I.R. Bonner, 2003.
- +‡53/1.3. *Malva sylvestris* (Common Mallow) (Hocysen Gyffredin). Stony beach by Ynys y Fydlyn, SH292.917, I.R. Bonner & S.N. Priest, 2003.
- +61/2.1. *Salix pentandra* (Bay Willow) (Helygen Beraroglaidd). ‡Short row of four rather moribund trees beside a ditch near the Afon Cefni, SH419.693, I.R. Bonner, 2003.
- ‡61/2.9×10. *Salix* × *smithiana* (*S. viminalis* × *S. caprea*) (a hybrid willow). Single bush in hedge near Capel Mawr, SH415.719, I.R. Bonner, 2003, **herb. IRB**. 2nd record, 1st as neophyte.
- *61/2.11a. *Salix cinerea* subsp. *cinerea* (Grey Willow) (Helygen Lwyd). Alongside damp roadside ditch by Goferydd, SH208.821, S.P. Chambers, 2003, **herb. SPC**, conf. R.D. Meikle.
- +61/2.11×12. *Salix* × *multinervis* (*S. cinerea* × *S. aurita*) (a hybrid willow). Limestone scrub, Y Bonc, Tynyngongl, SH504.838, I.R. Bonner, 2002, det. A.O. Chater.
- +62/12.1. *Rorippa nasturtium-aquaticum* s.s. (Water-cress) (Berwr y Dwr). Streamside above Porth yr Hwch, SH292.921, I.R. Bonner & S.N. Priest, 2003.
- +62/22.2. *Erophila verna* sensu Stace (Common Whitlowgrass) (Llys y Bystwn). Waste ground, Soldiers Point, Holyhead, SH236.836, I.R. Bonner, 2003.
- +62/42.1a. *Raphanus raphanistrum* subsp. *raphanistrum* (Wild Radish) (Rhuddygl Gwyllt). ‡Casual near Club House, Rhosneigr, SH324.739, M. & W. Walton, 2002. 1st post-1970 record.

- +69/2.1. *Hottonia palustris* (Water-violet) (Pluddalen). Shallow water, Mynachdy reservoir, SH303.922, M. & W. Walton, 2002.
- +69/3.rep. *Cyclamen repandum* (Spring Sowbread). Single flowering plant on roadbank near Trefdraeth, SH407.702, I.R. Bonner, 2003. 2nd record.
- +69/4.5. *Lysimachia punctata* (Dotted Loosestrife) (Trewynyn Brych). Established on road verge near Criglas, SH293.783, I.R. Bonner, 2002.
- +75/9.14×15. *Potentilla* × *mixta* (*P. anglica* × *P. reptans*) (Hybrid Cinquefoil). Hedgebank near Capel Mawr, SH419713; +Coastal grassland just south of Porth Helygen, SH491.906; both I.R. Bonner, 2003.
- +75/19.9. *Alchemilla xanthochlora* (Intermediate Lady's-mantle) (Mantell Fair Gyfryngol). Road verge near Cors Erddreiniog, SH502.770, I.R. Bonner, 2002.
- +75/19.10b. *Alchemilla filicaulis* subsp. *vestita* (Hairy Lady's-mantle) (Mantell Fair Flewog). Unimproved grassland, Plas Newydd, SH516.694, I.R. Bonner, 2002.
- +75/21.6. *Rosa rugosa* (Japanese Rose) (Rhosyn Japan). Well established near the car park, Penrhosfeilw Common, SH214.803, I.R. Bonner, 2003.
- +77/14.11b. *Vicia sativa* subsp. *segetalis* (Common Vetch) (Ffugbysen Faethol). Established along roadside to Mynachdy, SH309.922, I.R. Bonner, 2002.
- +77/19.25. *Trifolium subterraneum* (Subterranean Clover) (Meillionen Wen Ymgudd). Open grassland in former borrow-pit, Cleiflog Uchaf, SH284.796, T.D. Dines, 2003, **herb. IRB**.
- +84/1.8. *Epilobium ciliatum* (American Willowherb) (Helyglys Americanaidd). Established along roadside to Mynachdy, SH309.922, I.R. Bonner, 2002.
- *84/4.4. *Oenothera cambrica* (Small-flowered Evening-primrose) (Melyn yr Hwyr Cymreig). Few plants by gateway, Fron Capel, Gaerwen, SH491.727, I.R. Bonner, W. McCarthy & M. Stead, 2003.
- +88/1.1. *Euonymus europaeus* (Spindle) (Piswydden). Coastal cliffs, Porthygwichiad, SH487.916, I.R. Bonner & S.N. Priest, 2003.
- 69/4.1.2. *Linum usitatissimum* (Flax) (Llin Amaeth). Single casual plant in oat crop in small field, Cors Goch, SH493.810, I.R. Bonner, 2002. 1st post-1970 record.
- +99/1.3. *Acer campestre* (Field Maple) (Masarnen Leiaf). ‡Large tree by entrance to Bryn Glas and bushes in adjacent hedges, Llangristiolus, SH443.733, I.R. Bonner, 2003.
- +103/1.1×2. *Geranium* × *oxonianum* (*G. endressii* × *G. versicolor*) (Druce's Crane's-bill). Established along edge of car park, Pentraeth, SH523.785, I.R. Bonner, 2003.
- +105/1.4. *Impatiens glandulifera* (Indian Balsam) (Jac y Neidiwr). Locally frequent by the mouth of the stream at Porth Newydd, SH466.933, I.R. Bonner & J. Hanson, 2003.
- +110/8.1a. *Solanum nigrum* subsp. *nigrum* (Black Nightshade) (Codwarth Du). 6Casual under maize crop, Llanfairyrneubwll, SH296.775; 6Abundant under maize crop, Cefn-maesoglen, Llangaffo, SH457.676; both I.R. Bonner, 2002.
- *111/3.2b. *Calystegia sepium* subsp. *roseata* (Pink Hedge Bindweed) (Taglys Mawr). Wet heath about 250m from the coast, Penrhosfeilw Common, SH220.798, I.R. Bonner & S. Priest, 2003.
- *6115/1.1. *Phacelia tanacetifolia* (Phacelia). Field margins, Cefn Maesoglen, Llangaffo, SH463.671, T.D. Dines, 2003. Grown as a crop in 2002, several plants re-appeared along field margins in 2003.
- +116/4.4. *Symphytum grandiflorum* (Creeping Comfrey) (Cyfardwf Llwg). Spreading from garden rubbish, Capel Mawr, SH413.714, W. McCarthy & M. Stead, 2003.
- +116/15.10. *Myosotis discolor* (Changing Forget-me-not) (Ysgorionlllys Amryliw). Old spoil bank, Carmel Head, SH296.927, I.R. Bonner, 2002.
- +118/5.1. *Lamium album* (White Dead-nettle) (Marddanhadlen Wen). Established on bank by lane to Glan-rhyd-isaf, SH293.780, I.R. Bonner, 2002.
- +118/6.5. *Galeopsis bifida* (Bifid Hemp-nettle) (Penboeth Lleiaf). Near Llangwyllog, SH43.78, W. McCarthy & M. Stead, 2003.
- +124/16.20. *Veronica polita* (Grey Field-speedwell) (Rhwyddlwyn Llwyd). Established in churchyard, Llanbabo, SH378.867, M. & W. Walton, 2002.

- +124/20.6. *Euphrasia tetraquetra* [Western Eyebright] (Torfagl ar Graig y Don). Cliff-top grassland, Mynydd Pantygaseg, SH419.947, I.R. Bonner, 2002. (Also an unlocalised record by GH Battershall in 07.2000)
- *129/3.1. *Wahlenbergia hederacea* (Ivy-leaved Bellflower) (Clychlys Eiddew). ‡Garden lawn, Rhoscefnhir, SH523.763, N.J.A. Aron, 2003. I. Bonner & N. Brown were invited to confirm the identity of a 1.5m. patch in a close mown lawn. The owner had not noticed it before and had no idea how it had become established here.
- +‡131/5.1. *Leycesteria formosa* (Himalayan Honeysuckle) (Bachgen Llwm). By ride, Newborough Forest, SH408.643, I.R. Bonner, 2002. Not clear if planted or bird sown.
- +135/19.1b. *Tragopogon pratensis* subsp. *minor* (Goat's-beard) (Barf yr Afr Felen). Road bank opposite Wireless Station, Llanddona, SH584.809, I.R. Bonner, 2002. +Near Capel Mawr, SH40.71, W. McCarthy & M. Stead, 2003.
- +135/24.1. *Mycelis muralis* (Wall Lettuce) (Gwylaeth y Fagwyr). On retaining wall, Plas Newydd, SH521.697, I.R. Bonner, 2002.
- +‡135/35.1. *Imula helenium* (Elecampagne) (Marchalan). Established clump on rubble dumped in marshland near Amlwch Port, SH455.931, I.R. Bonner & J. Hanson, 2003.
- +135/54.1. *Chamaemelum nobile* (Chamomile) (Camri). Patch spreading from a rock outcrop into a damp grassy hollow, Tywyn Trewan, SH320.754, I.R. Bonner, 2002, **herb. IRB**. 1st post-1970 record.
- +‡135/58.lac×max. *Leucanthemum* × *superbum* (*L. lacustre* × *L. maximum*) (Shasta Daisy) (Llygad Ych Mawr). Established on waste ground, E side of Inland Sea, SH28.79, I.R. Bonner, 2002.
- +‡135/59.1. *Matricaria recutita* (Scented Mayweed) (Amranwen). A few plants along a roadside near Talwrn, SH494.762, I.R. Bonner, 2002.
- +‡135/71.4. *Petasites fragrans* (Winter Heliotrope) (Alan Mis Bach). Established on bank by lane to Glan-rhyd-isaf, SH293.780, I.R. Bonner, 2002.
- +148/2.3. *Lemna trisulca* (Ivy-leaved Duckweed) (Llinad Eiddew). Rare in wet fen, Parc Newydd, SH500.809, P.S. Jones, 2000.
- +151/1.20. *Juncus maritimus* (Sea Rush) (Brwynen Arfor). Fragment of saltmarsh, Carmel Head, SH298.929, I.R. Bonner, 2002.
- +151/1.25. *Juncus inflexus* (Hard Rush) (Brwynen Galed). Waste ground, Soldiers Point, Holyhead, SH23.83, I.R. Bonner, 2001.
- +152/8.2. *Isolepis cernua* (Slender Club-rush) (Clwbfrwynen Eiddil). Several clumps in seepages by board walk, Cors Goch, SH500.812, I.R. Bonner, 2002.
- +152/12.1. *Schoenus nigricans* (Black Bog-rush) (Corsfrwynen Ddu). Single clump in flushed grassland, South Stack, Holyhead, SH207.823, I.R. Bonner, 2003.
- +152/16.10. *Carex arenaria* (Sand Sedge) (Hesgen Arfor). On dumped soil on disused length of road near Capel Mawr, SH409.718, W. McCarthy & M. Stead, 2003.
- +152/16.51. *Carex caryophyllaea* (Spring-sedge) (Hesgen Gynnar). Coastal grassland near Ynys y Fydlyn, SH293.919, I.R. Bonner & S.N. Priest, 2003.
- +‡153/13.2. *Lolium multiflorum* (Italian Rye-grass) (Rhygwellt Eidalaidd). Tourist information board, Pentraeth, SH523.785, I.R. Bonner, 2003, **herb. IRB**.
- +153/18.4. *Poa humilis* (Spreading Meadow-grass) (Gweunwellt Helaeth). Wall top, Pentraeth, SH52.78, I.R. Bonner, 2003.
- +‡153/38.3. *Phalaris canariensis* (Canary-grass) (Pefrwellt Amaethol). Frequent in field corner (sown in sward) by Llyn Traffwll, SH325.764, S.P. Chambers, 2003.
- +153/50.4b. *Bromus hordeaceus* subsp. *ferronii* (Least Soft-brome) (Pawrwellt Arfor). Short turf in disused coastal quarry, Rhoscolyn, SH262.753, I.R. Bonner, 2003, **herb. IRB**, conf. L.M. Spalton. Probably overlooked, but the 1st post-1970 record.
- *153/50.4lon. *Bromus hordeaceus* subsp. *longipedicellatus* (a soft-brome). Grass verge of new A55 dual-carriageway, Gaerwen, SH490.723, I.R. Bonner, 2003, **herb. IRB**, conf. L.M. Spalton.

- +158/14.1×2. *Polygonatum* × *hybridum* (*P. multiflorum* × *P. odoratum*) (Garden Solomon's-seal). At least 30 stems spreading from garden waste on a roadbank near Trefdraeth, SH409.702, I.R. Bonner, 2003.
- 158/20.2×3. *Hyacinthoides* × *massartiana* (*H. non-scripta* × *H. hispanica*) (Hybrid Bluebell). Roadside, Capel Mawr, SH410.718, W. McCarthy & M. Stead, 2003.
- *162/13.1. *Platanthera chlorantha* (Greater Butterfly-orchid) (Tegeirian Llydanwyrdd). Five flower spikes in unimproved grassland (former playing field), Plas Newydd, SH516.694, D. & M. Walker, 2002, conf. I.R. Bonner & N. Brown. 1st confirmed record. The records by J.E. Griffith from Llaniestyn Common and Cors Erddreiniog in 1885 are apparently an error according to R.H. Roberts, *The Flowering Plants and Ferns of Anglesey*, NMW, Cardiff, 1982.
- +162/18.1×5. *Dactylorhiza* × *venusta* (*D. fuchsii* × *D. purpurella*) (a hybrid marsh-orchid). With both parents in unimproved grassland, Plas Newydd, SH516.694, N. Brown, 2002.



PLANTLIFE WALES NEWSLETTER - 1

PLANTLIFE

Introduction

As many of you will know, for the last three years I've been working as the Plantlife Wales Officer. This post, jointly funded by CCW, the Laura Ashley Foundation and Plantlife International, is based in the CCW headquarters in Bangor. The principal aim of the role is to manage Plantlife's *Back from the Brink* programme of species recovery in Wales, overseeing and undertaking work on any sites in Wales where plants in the programme occur.

The majority of *Back from the Brink* site survey and habitat management work is undertaken by volunteers, whom we call *Flora Guardians*. There are 120 such volunteers in Wales now, and they include members of Plantlife, the BSBI, the Wildlife Trusts, CCW staff, County and Borough Council staff, LBAP officers and National Park wardens.

Since there is such a close relationship between the work of Plantlife in Wales and the BSBI, we are introducing this new item as a regular slot in the *Welsh Bulletin*. These articles will include reports about our activities and the progress of our work, and provide a platform for more detailed articles about the species in the programme. We hope to achieve closer links between the two organisations, and report back the results of our work to our *Flora Guardians*. To this end, the *Welsh Bulletin* will now be sent to all active *Flora Guardians* in Wales as well as BSBI members as usual.

For Plantlife members...an introduction to the BSBI

For those Plantlife *Flora Guardians* that are receiving their first copy of the BSBI *Welsh Bulletin*, a little background to the Botanical Society of the British Isles may be needed. The BSBI was founded (as the Botanical Society of London) in 1836. The Society is for everyone who is interested in studying and recording the flora of Britain and Ireland, and welcomes both professional and amateur members.

The great strength of the Society is its network of Vice-county Recorders. Britain and Ireland are divided into manageable areas called Vice-counties (which often match the "old" counties such as Caernarfonshire and Radnorshire) and one person (the Vice-county Recorder) is responsible for collating and checking the plant records from their county. These people act as botanical focal-points in their counties, organising field meetings and helping people with their identifications.

The BSBI produces national plant Atlases, county Floras and identification handbooks. Members are kept informed and entertained three times a year by a newsletter (*BSBI News*), and also receive a scientific journal called *Watsonia*. If any Plantlife member wishes to learn more about the plants around them, I would recommend that you join the BSBI and attend their very friendly and helpful field meetings. More information is available on www.bsbi.org.uk/

For BSBI members...introducing Plantlife International

Plantlife International is the UK's leading charity dedicated to the conservation of wild plants in their natural habitats. Formed in 1989, we are based in Salisbury and own 23 reserves across Britain. The main focus of our work in the UK is the *Back from the Brink* programme

of species recovery, which combines molecular and ecological research with monitoring and site management to effect recovery in rare plant populations. The latter two activities rely heavily on volunteer involvement. We also act to influence policy and legislation, collaborate widely to promote the cause of wild plant conservation, and try to get all sectors of the community involved in recording and thinking about the wild plants that surround them.

We also work at a European and international level, promoting the Global Strategy for Plant Conservation and hosting the secretariat for Planta Europa, a network of organisations working for plant conservation across Europe. For more information, please visit www.plantlife.org.uk

Which species does Plantlife work on?

In Britain, the *Back from the Brink* programme includes 100 species of vascular plants, mosses, liverworts, lichens, fungi and stoneworts. Seventy seven of these are UK BAP species, identified as being national priority species and having a UK Biodiversity Action Plan (www.ukbap.org.uk/). The others are a range of declining species (such as *Cephalanthera longifolia*, Sword-leaved Helleborine) that can benefit from direct conservation action. The full UK list appears on our website.

Forty of the *Back from the Brink* species occur in Wales. Nineteen of these are vascular plants and are listed below along with the total number of sites they have been recorded from historically in Wales, and the total number of known extant sites.

Species	Common Name	Total Sites (all records)	Extant Sites (year)
<i>Campanula patula</i>	Spreading Bellflower	31	3 (2000+)
<i>Carex depauperata</i>	Starved Wood-sedge	1	0 (extinct)
<i>Centaurea cyanus</i>	Cornflower	56	1 (native, 2003)
<i>Cephalanthera longifolia</i>	Sword-leaved Helleborine	11	4 (2003+)
<i>Chamaemelum nobile</i>	Chamomile	62	20 (2000+)
<i>Dianthus armeria</i>	Deptford Pink	26	4 (2004)
<i>Galeopsis angustifolia</i>	Red Hemp-nettle	38	2 (2004)
<i>Gentianella anglica</i>	Early Gentian	2	1 (1994)
<i>Hypericum linariifolium</i>	Toadflax-leaved St John's-wort	7	4 (1994+)
<i>Juniperus communis</i>	Juniper	ca. 108	ca. 60 (2000+)
<i>Lychnis viscaria</i>	Sticky Catchfly	2	2 (2000+)
<i>Lycopodiella inundata</i>	Marsh Clubmoss	16	4 (2002+)
<i>Pilularia globulifera</i>	Pillwort	76	28 (1998+)
<i>Ranunculus tripartitus</i>	Three-lobed Water-crowfoot	50	24 (1998+)
<i>Rumex rupestris</i>	Shore Dock	7	3 (2002+)
<i>Salvia pratensis</i>	Meadow Clary	1	1 (2004)
<i>Scandix pecten-veneris</i>	Shepherd's Needle	29	3 (2003+)
<i>Silene gallica</i>	Small-flowered Catchfly	74	6 (2000+)
<i>Valerianella rimosa</i>	Broad-fruited Cornsalad	7	1 (2004)

The odd-one-out on this list is *Campanula patula* (Spreading Bellflower), which has been added to the *Back from the Brink* list in Wales, but not in England. This species has been identified by CCW as a priority species in Wales, and was added to Section 74 of the Countryside and Rights of Way Act (and then to the *Back from the Brink* list) in 2003.

As you can see from the list, it's an interesting selection of species. They have either declined across their range (sometimes catastrophically so, such as the arable plant *Silene gallica* - Small-flowered Catchfly), or have only ever been found in very few sites in Wales (such as *Salvia pratensis* - Meadow Clary). A few are more frequent and widespread; their inclusion

on the list may reflect their rarity elsewhere in Britain (e.g. *Pilularia globulifera* - Pillwort) or they may simply be more frequent in Wales than elsewhere (e.g. *Ranunculus tripartitus* - Three-lobed Water-crowfoot).

If anyone has records for any of these species in Wales, I'd be very grateful for them. I'm also very happy to supply anyone with the records I have - please just get in touch. All my records have been shared with the Welsh Vice-county Recorders.

***Dianthus armeria* (Deptford Pink) - Progress in Wales**

In order to show BSBI members how *Back from the Brink* works, and to update our *Flora Guardians* on progress with this species, I'll describe in a little detail our work on Deptford Pink (*Dianthus armeria*) over the last three years.

D. armeria is a biennial or short-lived perennial herb that is currently known from about 22 sites in Britain. It is listed as Vulnerable in the Red Data Book (Wiggington, 1999), and is a Wildlife and Countryside Act Schedule 8 species, meaning that it's illegal to pick, uproot or destroy plants without a special licence. For such a rare plant, we know surprisingly little about its ecology. It tends to prefer open, disturbed sites such as quarries, roadsides, waysides and field margins, but also occurs in heavily grazed short grassland. It usually grows on dry, often mildly basic soils, but can occur on acidic ground too. Populations at individual sites can vary in size enormously from year to year, but we don't really understand the mechanisms that govern this. For this reason, Plantlife is supporting a PhD student at Sussex University (Jo Nightingale) who is looking into the population dynamics, genetics and ecology of *D. armeria* across Britain.

What we do know is that seeds of *D. armeria* can be very long lived, that they need disturbance to germinate, that a closed sward or too much competition from surrounding vegetation leads to a decline in the number of plants, and that plants prefer open, sunny conditions. These straightforward facts inform the management we have undertaken on sites in Wales.

D. armeria has been recorded historically from 26 sites in Wales. There are, however, just 4 extant sites that are generally accepted as native. It also occurs as an alien, such as the 1500 plants reported from Newport Docks (Mons.) in 1997; separating native populations from alien ones can be difficult. The first record for Wales appears to be from Anglesey, when the Reverend H. Davies found it "near Penmon" in 1813. He recorded it again in 1821 at Fryars Beach in the same county. For the next 160 years, *D. armeria* was recorded from 19 scattered localities across Wales, with Monmouthshire (3 sites), Glamorgan (5 sites), Cardigan (3 sites) and Flintshire (3 sites) featuring most frequently. Again, some of these sites may be alien occurrences, but it's almost impossible to assign status to historical records. The four remaining sites and the work we've done at them are described in more detail below.

BAGLAN RESERVOIR, GLAMORGAN

This population is rather forlornly sandwiched directly between the M4 motorway and the Baglan Energy Park, just west of Port Talbot. First recorded in 1987 by Charles Hipkin, plants grow alongside and on the concreted edge of a triangular reservoir constructed to contain storm water. This reservoir was once frequently used by local fishermen; their trampling of the paths around the pond kept conditions open and disturbed, allowing *D. armeria* to thrive. However, the site is now fenced off and fishing is discouraged. This had led to the development of gorse, alder and willow scrub, and an abundance of rank grass, ivy and (interestingly) Wallflower Cabbage (*Coincya monensis* subsp. *cheiranthos*). Consequently, *D. armeria* declined from 303 flowering plants in 2000 to 100 in both 2001 and 2002.

The site is owned by Neath Port Talbot Borough Council, and Suzanne Waldron from the Environmental Quality Unit has been extremely helpful in restoring correct management to the site. A *Flora Guardian* workday in March 2003 saw volunteers removing grass, scrub and ivy from the path edges. During the winter of 2003 and 2004, Suzanne arranged for Council workers and volunteers to continue this work, and to remove trees from the site that were shading areas where *D. armeria* grew. Charles Hipkin monitors the site annually, providing detailed counts of where the plants are growing. In response to the management work, 243 flowering plants were recorded this year.

CLYDACH VALE, GLAMORGAN

In 1997, Julian Woodman (Vice-county Recorder for E. Glamorgan) discovered a large colony of *Dianthus armeria* in two abandoned sandstone quarries in the Clydach Vale Country Park above Tonypany in the Rhondda. The site, owned by Rhondda Cynon Taff Borough Council, is somewhat unusual, with *D. armeria* being present on several terraces of the main quarry, but not other apparently suitable terraces, and on one bank of a smaller quarry nearby. Above the quarries, open moor gives way to conifer plantations, while below are areas that were reclaimed and re-seeded in the late 1980s.

Management work at this site has been undertaken by the Borough Council and the Landmark Trust. More recently, *Flora Guardians* have been involved in surveys to provide population counts, and in joining a workday during which willow, brambles, coarse vegetation and seedling conifers were removed from the site. We are especially grateful to Richard Wistow (County Ecologist) for his help with this work.

In 1998, 219 flowering plants were recorded at Clydach Vale. This fell to 66 in 2001 but, since the workday, numbers have risen again and 193 flowering plants were recorded this year.

FARM NEAR PEMBREY, CARMARTHEN

D. armeria was first recorded at a private farm between Pembrey and Trimsaran in 1994. By 1998, the farm had been abandoned for 20 years and existing populations were suffering badly from scrub encroachment. The farm was then purchased by a new owner, who improved access to the house in the winter of 1999/2000 by pushing back the edges of the track. Spoil was dumped around the farmhouse and a small quarry was excavated. This work removed most of the encroaching scrub and produced areas of disturbed soil, and *D. armeria* is now thriving as a result. The owner is very keen to maintain the population and is undertaking appropriate management, cutting the track verges and removing brambles and scrub.

This site is unusual in that, as well as the trackside plants, *D. armeria* also occurs in an adjacent well grazed pasture. The heavily grazed plants are often tiny (less than 5 cm tall), but flower and fruit well. They are most abundant in the disturbed ground around the field gateway (which is opposite the main trackside population) and may have spread into the field from there, or from the field to the track!

In 2001, 28 flowering plants were recorded. The owner appears to have got the management spot-on, however, as 155 plants were flowering this year.

COED Y FELIN, nr HENDRE, FLINTSHIRE

This is the only extant site in north Wales. It lies within a North Wales Wildlife Trust (NWWT) reserve, and is also the only Welsh site to occur over a limestone rock substrate. Jean Green (Vice-county Recorder for Denbighshire) discovered the plants on a steep, sunny

bank in 1994, when she counted hundreds of plants in flower. Since then, the site became very overgrown with scrub - mostly Hawthorn and Bramble with a high density of Ash and Hazel regeneration. It had also become heavily shaded by the growth of Ash and Wych Elm (*Ulmus glabra*) trees at the base of the slope.

In November 2002 we held our first workday at this site, with 16 Plantlife and NWWT volunteers helping to clear the site of scrub and over-shading trees. A repeat operation in November 2003 saw the site being further cleared and extended, with large areas of bare earth created on the steep slope. We are especially grateful to Adrian Lloyd Jones (NWWT Conservation Officer) for his help with work on this site. Three surveys of *D. armeria* have also been held, so we can monitor the response of the population to the work.

In 2002, before we started work on the site, just 19 plants were found, 3 of which were in flower. The following year this had risen to 5 flowering and 86 non-flowering plants (given that the plant is a biennial, we expect a large increase in non-flowering plants first). This year, an astonishing 45 flowering and 159 non-flowering plants were counted.

The future for *Dianthus armeria* in Wales

Populations of *D. armeria* are clearly doing well in Wales and this is due to the co-ordinated volunteer effort that has been directed into site management. Now that all the sites are in better condition, the frequency of such workdays can be reduced (with perhaps one every two or three years rather than annually). I'm delighted that some of the work on the two sites owned by Borough Councils (Baglan and Clydach Vale) is now being undertaken by the Councils themselves.

Such management by volunteers is often said to be "gardening", and is looked on with disdain by those who prefer more "sustainable" methods of management (grazing by livestock for example). At the Carmarthenshire site, *D. armeria* does occur in well-grazed pasture. The two Glamorgan sites are totally unsuitable for grazing, so an input of manpower is the only way appropriate management can be undertaken. The Flintshire site is potentially suitable for grazing and we have investigated doing this, although finding a farmer who was prepared to take the site on proved impossible. However, I would argue that "gardening" is actually not that distasteful. It gets people directly involved with their local environment, it is often the best way to return a scrubbed-over site to favourable condition, and sometimes it's the only management option available. Our aim is to maintain or expand remnant populations of exceptionally rare species. There's really little difference between a farmer doing this with livestock and volunteers doing it with saws and loppers. Neither is more "natural" than the other and neither is really sustainable (the farmer is just as likely to change his farming practises as the funding is to be pulled on volunteer co-ordinators!). What's important is that the last remaining sites are safeguarded. Once this has been done, we can look towards longer-term management options as part of wider, landscape-scale restoration projects.

I would like to thank all those that have been involved with work on Welsh Deptford Pink sites over the last three years. The remarkable recovery of this species in Wales is testament to their hard work and generosity. Let's hope we can continue the trend in the future!

Trevor Dines (Plantlife Wales Officer)

c/o Countryside Council for Wales, Maes y Ffynnon, Ffordd Penrhos, Bangor, Gwynedd, LL57 2LQ. Telephone: 01248 385445. E-mail: trevor.dines@plantlife.org.uk

