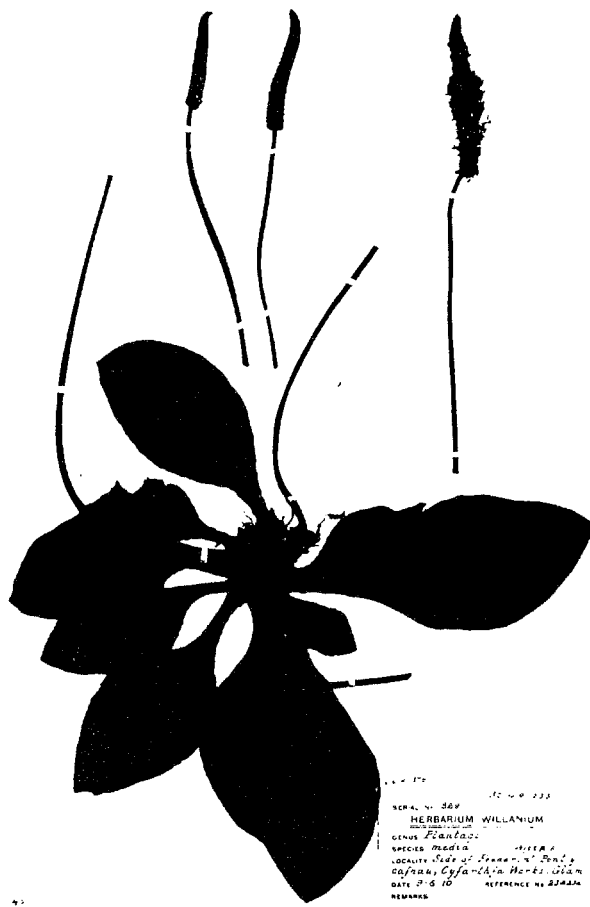


BOTANICAL SOCIETY OF THE BRITISH ISLES

WELSH BULLETIN

No. 49, Spring 1990

Acting Editor: R.D. Pryce



CONTENTS

Editorial	2
Annual General Meeting, 1989	3
Hon. Secretary's Report	3
Hon. Treasurer's Report	4
Elections	4
Committee Members	5
Exhibits, Video and Slides	5
Committee for Wales, 1989-1990	5
Quadrennial Meeting, Annual General Meeting and Welsh Exhibition Meeting, 1990	6
BSBI Wales Field Meetings, 1990	7
Recording in VC 46 during 1988 and 1989	9
Welsh Plant Records, 1986	13

EDITORIAL, June 1990

After long and diligent searching, a replacement editor for the Welsh Bulletin was not forthcoming and it has therefore fallen to me to step into the breach at the eleventh hour!. I take over from Ian Morgan who has very ably dealt with the last nine issues and I thank him most sincerely, not only from the Wales Committee but also on behalf of you, the membership in general. When Ian moved to his present address, he explained in his editorial that he had named his house "Cae Tegeirian", translated as "orchid field"; I am afraid my address is not quite so romantic but still has a botanical connection: "Trevethin" is an anglicisation of "Trefeithin", "gorse home", which relates to the heathy hillside overlooking the Burry Estuary and Gower, on which my home is built.

Due to the inclusion in this issue of part of the backlog of Welsh Plant Records, at least one article has had to be held over until next time. I do ask you, however, wearing my most persuasive hat, to continue to send your contributions for the next and subsequent Bulletins. Short Notes are just as welcome as major articles, topical or local issues likewise; as are letters to the editor. So please make my new job a pleasant one: there is little merit in having an editor if he has no material to edit!. My thanks go to all contributors to this number and also, of course, to George Hutchinson and Gwynn Ellis who unfailingly do so much in its actual production.

Changing to my treasurer's hat, the accounts of the Wales Committee for 1989-1990 will show a considerable increase in income from subscribers to this Bulletin living outside Wales. This is in direct response to a reminder printed last year. May I make a fresh reminder that many 1990 dues are outstanding and their receipt would help to maintain the quality of the publication. Thank you for your past support.

Richard Pryce
June 1990

ANNUAL GENERAL MEETING, 1989

The Twenty-seventh Annual General Meeting and Seventh Exhibition Meeting of BSBI Wales was held at the Ferryside Education Centre, Ferryside, near Carmarthen, Dyfed on Saturday 22 July, 1989.

On the Friday evening, members resident at the College enjoyed a brief visit to habitats on the Ferryside foreshore. On Saturday, members visited meadow heathland sites on the Western Coalfield including *Carum* meadows before returning to Ferryside for the AGM.

After tea, the Chairman opened the Annual General Meeting. She informed members of the sad deaths of Mr A.E. Wade (aged 93), and Dr Mary Percival, both well known members of the BSBI, and the meeting stood in silent tribute.

Apologies for absence were received from Nigel Brown, Paul Day, Trevor Evans, Peter and Joan Hall, Ray Woods and Goronwy Wynne. The Chairman, on behalf of those present, expressed the hope that Trevor Evans would make a speedy and complete recovery from his recent illness. The minutes of the last AGM, published in the *Welsh Bulletin* No. 47, Spring 1989, were then taken as read.

The Chairman, in her opening remarks, welcomed all members present and thanked all those who had helped the Society in Wales during the past year, mentioning in particular: members of the Committee for Wales, especially its Secretary and Treasurer, the leaders of all the Welsh field meetings and the Welsh vice-county recorders. She then thanked Richard Pryce for the excellent way in which he had organized the meeting, and finally she thanked the officers of the Ferryside Education Centre.

Hon. Secretary's Report

The Hon. Secretary then gave his report on the last years activities. He started by giving a short appreciation of the work of the late Arthur E. Wade, well known to most members as part of that inimitable duo Hyde and Wade who wrote *Welsh Ferns* and *Welsh Flowering Plants*. For many years, until his retirement in 1961, Mr Wade WAS the BSBI in Wales, he was recorder for all the Welsh vice-counties, and vetted all the Welsh recording cards for the Atlas of the British Flora Mapping scheme. In 1970 his *Flora of Monmouthshire* was published and he is one of the authors of the completed, but as yet unpublished, *Flora of Glamorgan*.

He also paid tribute to Dr Mary Percival, a former lecturer at UC Cardiff and author of many papers and books on the pollination of flowers. She too has contributed to the *Flora of Glamorgan*.

He commented that with the election of George Hutchinson to the Committee for Wales at last years AGM, the committee remained at full strength for the year.

One issue of the *Welsh Bulletin* had been issued since the last AGM, with George Hutchinson as producer, while Ian Morgan remains as editor; both were warmly thanked, Ian for procuring and editing the papers and George for planning and executing the production of the *Bulletin* almost single handed. "

With the end of the Monitoring Scheme, there was a reduction in the number of field meetings held in Wales, the Gower meeting was again well subscribed, but there were fewer bookings for some meetings than expected, although it had to be admitted that it was always easier for the leader and better for the participants if there were less than about 12 people.

One important topic discussed by the Committee for Wales during the past 12 months had been the proposed landscaping of lead and other heavy-metal mine sites throughout Wales. These sites were often botanically very rich and any attempt at landscaping could do

irreparable damage. A letter was sent to the Welsh Development Agency pointing out the dangers involved and asking for proper surveys to be carried out before work started. A reply was still awaited!

The Secretary then recorded the thanks of the Society to the various organisations that had helped over the past year: to the offers of Ferryside Education Centre; to the NCC for allowing the Committee for Wales to meet in its offices at Plas Gogerddan, Aberystwyth and Llandrindod Wells; and to the National Museum of Wales for Secretarial assistance, for the production of the *Welsh Bulletin*, and for its help in many other ways.

Members were then reminded of the following days field meeting in the Kidwelly and Pembrey Burrows area led by Richard Pryce, which was the last field meeting of the year that had been organised by the Committee for Wales, but there was still a fern meeting to be held at Bangor in August.

Finally members were reminded that there was a talk after the AGM entitled 'Progress report on recording for the Flora of Carmarthenshire' by Richard Pryce, and after dinner the exhibition would be opened and slides shown.

Hon. Treasurer's Report

The Treasurer, Mr R.D. Pryce, then gave his report on the financial situation, which was satisfactory. A balance sheet was circulated to all present (reproduced below). The report was received with thanks.

Statement of Accounts from 1 Jan. 1988 to 31 Dec. 1988

Receipts	£	Payments	£
BSBI Welsh Bulletin Subs.	3.00	Bulletin production & postage	296.38
Wales AGM Accommodation	666.00	AGM Accommodation	688.60
Carmarthen Meeting		Carmarthen Meeting	
Accommodation	234.50	Accommodation	219.50
		1988 AGM Painting Competition prizes	8.97

Total £903.50

Total £1213.45

£

Carried forward from 1987 (General & Special Accounts) 406.58

Excess expenditure over income 1.1.88 to 31.12.88 309.88

Total £96.70

Current Account Balance 11.10

Deposit Account Balance 85.60

Total £96.70

Statement of Accounts from 1 Jan. 1989 to 30 June 1989

No transactions took place.

Elections

Officers

The Hon. Secretary, R.G. Ellis and Hon. Treasurer, R.D. Pryce, were both nominated for re-election to their respective posts and, in the absence of any other nominations from the floor, were duly elected.

Committee Members

N. Brown, P. Day, M. Porter and R.G. Woods were due to retire under rule 5 of the constitution and were eligible for immediate re-election. M. Porter had decided not to seek re-election, but the other three members had indicated their willingness to stand again, and Dr David Humphreys was nominated by the Committee for Wales to fill the vacancy. In the absence of any other nominations from the floor, N. Brown, P. Day, and R.G. Woods were re-elected and D. Humphreys elected, to serve on the Committee for Wales for a period of two years.

Under Any Other Business the Secretary reported that next year's AGM would include the Quadrennial meeting at which a new Chairman and Welsh Representative on Council must be elected. The Committee would be nominating the present vice-chairman, Trevor Evans, for both posts, any other nominations for these posts must be made in writing to the Secretary at least a month before the date of the meeting. In the absence of any other business, the chairman declared the Annual General Meeting closed and invited Richard Pryce to deliver his 'Progress report on recording for the Flora of Carmarthenshire'. This was much enjoyed by an attentive audience which reassembled after dinner for the exhibition, slides and videos.

Exhibits

Ann Conolly & Nigel Brown : *Galium mollugo* agg.
Gwynn Ellis : Map of Welsh Field Meetings
 : Original illustrations and posters from the National
 Museum of Wales
George Hutchinson : Coastal *Bromus* in Carm. .
 : *Polystichum aculeatum cambricum*
 : Bus Services in Dyfed
Zoe Keating : Miniature paintings

Videos

Gwynn Ellis : Ferns (National Museum of Wales)
Richard Pryce : Eastern North America

Slides

Ann Conolly : Plants of the Lleyrn Peninsula
Richard Pryce : Eastern North America

COMMITTEE FOR WALES, 1989-1990

Following the election of officers and members at the Annual General Meeting, the composition of the Committee for Wales is as follows:

Officers

Chairman	Mrs J.A. Green
Vice-chairman	Mr T.G. Evans
Secretary	Mr R.G. Ellis
Treasurer	Mr R.D. Pryce

Committee members

Mr N. Brown	Mr S.B. Evans*
Mr P. Day	Dr G. Hutchinson*
Dr D. Humphreys	Dr Q.O.N. Kay*
Mr R.G. Woods	Dr G. Wynne*

*Members due to retire in 1990

QUADRENNIAL MEETING
ANNUAL GENERAL MEETING

AND

WELSH EXHIBITION MEETING, 1990

The 7th Quadrennial Meeting, 28th Annual General Meeting and 8th Welsh Exhibition Meeting will be held at Bangor, Gwynedd on Friday 20th July - Monday 23rd July.

The meetings will be based partly at Normal College (George Campus) [NC], Bangor, and partly at the University Botanic Gardens [UBG].

Programme

Friday: 6.00pm Dinner [NC]
 7.30pm Talk by Nigel Brown [NC]

..... Saturday: 10.30am Meet at the College campus for Field Meeting.
 The morning and early afternoon will be devoted to recording lowland sites for the Flora of Caernarfonshire project.

 3.15pm Tea and meeting of Committee for Wales [UBG]
 4.00pm Quadrennial and Annual General Meetings [UBG]
 4.30pm Talk : N. Brown 'The Flora of Caernarfonshire Recording Project'. [UBG]
 5.15pm Tour of the Botanic Gardens. [UBG]
 6.30pm Dinner [NC]
 7.30pm Exhibition Meeting and slide show [NC]

Sunday: 10.00am Meet at Normal College (SH(23)/564.718), or
 11.00am Meet at Swallow Falls Hotel car park
 (SH(23)/766.577 on A5 W of Betws-y-Coed) for Field Meeting.
 The meeting will be to record the upland flora of the Betws-y-Coed area.
 7.00pm Dinner [NC]

Monday: Disband after breakfast with opportunity to record in tetrads on the way home.

Single room accommodation will be available at Normal College (George Campus), Bangor, at approx £20 per day, but the meeting is also open to non-residents.

Please apply for accommodation booking forms and maps of meeting places, or send bookings for the field meetings to Mr R.G. Ellis, Department of Botany, National Museum of Wales, Cathays Park, Cardiff, South Glamorgan, CF1 3NP.

BSBI WALES FIELD MEETINGS - 1990

**SUNDAY 3rd JUNE
CORS ERDDREINIOG, ANGLESEY (v.c. 52)
Leader : Mr L. Colley**

A meeting to Search for Marsh-orchids including the Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri*) and a variety of sedges on one of the richest fens in western Britain. The leader is the warden of this NNR and numbers are limited to 20.

Meet at 11am in the car park of the California Inn, Brynteg, 23/496.826, 2km west of Benllech. Bring packed lunch, waterproof footwear advised.

Please send bookings to Mr R.G. Ellis at the address above and not to the leader.

**SUNDAY 24th JUNE
CWM LLINAU, POWYS (v.c. 47)
Leader : Mrs M. Wainwright**

A recording meeting for the Montgomeryshire Flora Project, to record upland moor and bog, or riverside and old railway in the Dovey Valley.

Meet at Cwm Llinau on the A470 north of Cemmaes at 10.30am, grid ref. 23/846.077. Bring packed lunch, stout footwear advised.

Please send bookings to Mr R.G. Ellis at the address above and not to the leader.

**FRIDAY 29th JUNE to MONDAY 2nd JULY
CARMARTHENSHIRE RECORDING WEEKEND
FERRYSIDE, DYFED (v.c. 44)
Leader : Mr R.D. Pryce**

A Flora of Carmarthenshire Recording Weekend to assist in tetrad recording for the county flora. Single room accommodation (c. £15 per day) will be available at the Ferryside Education Centre, grid ref. 22/369.106, but non-residents are equally welcome.

Please apply for details and booking forms to Mr R.D. Pryce, Trevethin, School Road, Pull, Llanelli, Dyfed SA15 4AL. It is essential to book before June 1st.

**SATURDAY 7th JULY
OGOF FFYNNON DDU NNR, BRECONSHIRE (v.c. 42)
Leader : Mr R.G. Woods**

Created to conserve caves, the surface vegetation of this NNR is also of considerable interest. Good limestone grassland and pavement and extensive gritstone scree, cliff and pavement. Stout footwear essential.

Meet at 11am at 22/856.155 on the A4067, near the caving and mountain rescue post at Penwyllt, east of Craig y Nos Country Park, Pen y Cae.

Please send bookings to Mr R.G. Ellis at the address above and not to the leader.

**SUNDAY 8th JULY
KENFIG BURROWS, GLAMORGAN (v.c. 41)
Leader : Mr S. Moon**

A visit to this classic sand-dune nature reserve, to see many of its specialities including Fen Orchid and various marsh-orchids.

Meet at 11am at the car park of Kenfig Nature Reserve Centre at 21/802.811.

Bring packed lunch, stout waterproof footwear advised.

Please send bookings to Mr R.G. Ellis at the address above and not to the leader.

SATURDAY 14th JULY
YNYSLAS, CARDIGANSHIRE (v.c. 46)
Leader : Mr A.O. Chater

To visit various dune grassland and wetland sites around Ynyslas.

Meet at 11am in the car park on the beach west of the T junction at Ynyslas, 22/605.925. Take the B4353 west from the A487 at Tre'r-ddol (from the north) or Bow Street (from the south). Bring packed lunch, stout waterproof footwear advised.

Please send bookings to Mr R.G. Ellis at the address above and not to the leader.

FRIDAY 20th to MONDAY 23rd JULY
BANGOR, CAERNARFONSHIRE (v.c. 49)
(in conjunction with the Welsh A.G.M. and Exhibition Meeting)
Leader : Mr N. Brown

This meeting will be based at Normal College (George Campus), Bangor. Nigel Brown will give a talk at the College after dinner on the Friday evening. Saturday morning and early afternoon will be devoted to recording lowland sites for the Flora of Caernarfonshire project. Meet at 10.30am at the College campus (23/564.718). At 3.15pm, the meeting will reconvene at the University Botanic Gardens (23/551.711) for tea, followed by the Welsh Quadrennial and Annual General Meetings, a short talk on the Flora of Caernarfonshire Recording Project, and a tour of the Botanic Gardens. The Exhibition Meeting and slide show will take place back at the College campus at 7.30pm, after dinner.

Sunday's field meeting will be to record the upland flora of the Betws-y-Coed area. Meet at 10.00am at the College campus (23/564.718) or at 11.00am at the Swallow Falls Hotel car park (23/766.577) on the A5 west of Betws-y-Coed.

Single room accommodation will be available at Normal College (George Campus), Bangor, at approx £20 per day, but the meeting is also open to non-residents.

Please apply for accommodation booking forms and maps of meeting places, or send bookings for the field meetings to Mr R.G. Ellis at the address above and not to the leader, before July 1st.

SUNDAY 19th AUGUST
NORTH EAST ANGLESEY (v.c. 52)
Leader : Mr N. Brown

To visit several sites including wet heathland for Marsh Gentian, lakeside for pillwort, dunes for hybrid horsetails and limestone woodland for ferns, including southern polypody.

Meet at 11.00am at Traeth Lligwy (23/496.872). Take the minor road northwest from Moelfre roundabout and drive 2km to public car park by the beach at the southern end of Lligwy Bay. Numbers limited to 20. Bring packed lunch, stout waterproof footwear advised.

Please send bookings to Mr R.G. Ellis at the address above and not to the leader.

RECORDING IN VC 46 DURING 1988 and 1989

1988 was the second and final year of the BSBI Monitoring Scheme and by the end of the Scheme 18,259 records had been submitted from Ceredigion. Habitat surveys of all ten tetrads involved were completed, at least in so far as the more interesting areas of vegetation were concerned, and copies of these and all the other Scheme cards were deposited at both the NCC, Plas Gogerddan, and the Botany Department, National Museum of Wales. Resurveying the tetrads in ten or twenty years' time should be an interesting exercise, especially in the case of tetrad SN78A (Cwmbrwyno). This extends from lowland to upland, traverses four valleys, includes much semi-natural as well as re-seeded and improved grassland, and contains a vast range of habitats even though two-fifths of it are conifer plantation. None of the tetrad has any formal conservation status, so what happens to it in the future seems likely to reflect very clearly whatever market forces and fashions in land management come into play in the country as a whole. Furthermore, a considerable number of the 311 species in it (notably Lycopodium clavatum, Pinguicula vulgaris, Carex pallescens, Epilobium brunescens, Senecio sylvaticus, Silene maritima, Linum catharticum, Hymenophyllum wilsonii, Dryopteris carthusiana, etc) happen to be confined to just one site each in the tetrad, as very small colonies or as one or a few plants, so even small changes in management will probably affect even the species list, this one will be well worth recording at regular intervals.

Work in the Monitoring Scheme squares produced several notable or new records in 1988. Plantago media, apparently not recorded in VC 46 since the 1930's (except as a garden throw-out) was found to be abundant in Ciliau Aeron chapel graveyard, SN45 (A.O. Chater); the rich grassland community also contained Trisetum flavescens, so is presumably semi-natural and must be considered one of our best sites for graveyard calcicoles. One spike of Coeloglossum viride, the first seen in the VC since 1926, was found on a BSBI Field Meeting on 17 July at Rhos Glynryhely, SN45, on one of the pingo ramparts close to the colony of Botrychium. A third calcicole, Alchemilla filicaulis subsp. vestita was found on a rich, flushed, south-facing slope in Cwm Berwyn, SN75, (AOC, who had first found it in an unverifiable, non-flowering state here in 1987) and was new for the VC. A second site for Selaginella selaginoides was found on the banks of the Camddwr only 300m from Capel Soar y Mynydd, SN75 (AOC and D. Davies), where many hundreds of spikes were seen in a large flushed area with Carex hostiana and Carum verticillatum. (On the same day in SN85 Rubus saxatilis was found in its fifth site in the VC, growing with Sanguisorba officinalis and Sedum telephium in a relict ash wood on cliffs in the conifer plantation on the west bank of Llyn Brianne). Sorbus torminalis was found in two new ancient woodland sites in SN45 by R. Cooke and G.R. Saunders of the NCC Woodland Survey, one in the Lleith dingle north of Llanarth, the other in Allt yr Haern in the Mydyr valley. Carduus acanthoides and Atriplex laciniata were both found in third sites in the VC in the same square, the first in a recently improved pasture near Llwyncelyn (AOC) and the second on the beach at Cei Bach (AOC). This latter site, comprising most of the short stretch of coast in the square, normally has no seashore species, but fortuitously in this Monitoring Scheme year not only one plant of the Atriplex but two of Salsola kali and one of Cakile maritima appeared, all new for the

square. Two colonies of Tolmeia menziesii, from North America, were found on the wooded bank of the Afon Mydyr below Felin Rhiwbren, SN45 (M. Chater and AOC), new for the VC and well-established nowhere near a garden. Polygonum pensylvanicum, a rare alien recorded only from a few sites in the east of England, was found in a mixed barley and potato field at Ty-gwyn, Mwnt, in SN15 (AOC); the field is well known as a site for relict arable weeds such as Misopates and Kickxia elatine, so it was surprising to find a presumed new arrival such as this in it.

Hammarbya paludosa was monitored for the NCC's Rare Vascular Plant Survey in Wales in 1988, and three colonies were found in the Monitoring Scheme square SN78: 16 plants by Dyffryn Castell leadmine on 5 July (A.P. Fowles and AOC); 197 plants in the mire south-west of Bryn Lluestydd on 6 August (AOC). On 23 July AOC, MC, WM Condry and P. Condry visited the three previously known sites, and found 10 plants on the south side of Bryn Bras, SN7789 on the slope of Ty-mawr, Cwm Ystywyth, SN87 (where only seven had been seen on previous visits, in 1977 and 1981), but none at the site east of Ty-mawr. In all these sites the plants grow along the edges of linear flushes, in very wet moss-dominated communities (not Sphagnum). In two sites plants were seen lying scattered on the surface, presumably dislodged but discarded by grazing sheep, the lack of proper roots making them easily disturbed. At the site south-west of Bryn-bras farm a large colony of Carex dioica was also found, only the third extant site for this species.

A side-effect of the Monitoring Scheme was to stimulate the collection and identification of Euphrasia material, and P.F. Yeo and A.J. Silverside have now named sufficient material for the distribution of the commoner species in VC 46 to be fairly clear. E. rostkoviana is common in a wide range of pastures, rhosydd and hay meadows. E. tetraquetra, a plant of exposed coastal grassland, is so far known from three sites in the south-west. The other widespread species are E. anglica, E. arctica subsp. borealis, E. confusa, E. nemorosa and (the characteristic purple-tinges species of our upland flushes) E. scottica. The most interesting species, collected in 1986 in one of the base-rich soligenous mires by the Afon Myldan, SN14 (AOC and APF), is E. pseudokernerii forma elongata. The species has only once before been recorded from Wales, from limestone grassland in Flint, and forma elongata was previously known only from a few fens in East Anglia - a good addition to the list of Mwdan specialities.

Viola lactea, a very characteristic species of the Oceanic wet heaths of Pembrokeshire, was recorded by Salter from Llannon/Pennant/Aber-arth area in the 1930's, although the exact site or sites cannot be easily identified from his diary entries, and it had not been seen in the VC since. But on 29 May 1988 AOC and APF surveyed an extensive area of rhos and wet heath 2km west of Pennant, SN 46 and found several large colonies of the species over about an acre of Molinia sward on a slight north-facing slope. There was no sign of any hybridisation with V. riviniana (which Salter had noted in 1932). Other species on the site included Eleocharis quinqueflora, Dactylorhiza purpurella and Triglochin palustris. Most unfortunately, although negotiations to conserve it were

under way, the whole site was ploughed up seven months later and it seems unlikely that any other site suitable for Viola lactea exists in the area.

The extensive Dactylorhiza populations at Ynyslas, SN 69, have been studied intensively by many experts over the last 80 years, but F. Horsman found a hybrid new to science there in 1987, D. maculata subsp. ericetorum x majalis subsp. cambrensis, and two hybrids new to the VC there in 1989, D. majalis subsp. praetermissa x incarnata subsp. pulchella and D. majalis subsp. cambrensis x incarnata subsp. pulchella. (Horsman considers the plants at Ynyslas usually known as D. incarnata subsp. coccinea to be in fact subsp. pulchella).

Miscellaneous new records for the VC included Hirschfeldia incana from the railway embankment at Ynys Edwin, SN 69 (WMC & PC), where it had been known for at least 20 years but was assumed to be Brassica nigra. Eloдея nuttallii was found in the small pond on Rhos Pil-bach DWT Reserve, SN 35 (AOC) and in the Aeron above Talsarn, SN 55 (AOC & D. Glyn Jones), and will presumably now spread rapidly as it has in other counties. (That even more unwelcome aquatic, Crassula helmsii, has now been successfully exterminated from the Ynyslas dunes NNR by the NCC; it was found in a second, much less dangerous site, the pond in the grounds of Plas Gogerddan, SN 68, in 1989 by L. Jones). I had not realised, until W.A. Strange reported the species in 1989 from near Tal-y-bont, SN 68, that Galeopsis speciosa was such a rare species in the VC, but this seems to be the only record in recent decades. Carex rostrata x vesicaria, known from the Carmarthenshire side of the Teifi, was found on the Ceredigion side in 1989 in a farm pond constructed in 1986 at Dolsugwyrd-don-isaf, SN 54, (AOC), a good example of hybridisation in a disturbed habitat. The most surprising new record came on 19 July 1989 when AOC, D.C. Boyce and APF were surveying the arable weeds on the recently acquired National Trust property of Llwynysgaw, on the coast by Pen Peles, SN 25. Polygonum rurivagum, only twice recorded in Wales this century (at Marloes, VC 45, in 1962, and at Pont-lliw, VC 41, in 1974), was abundant over several acres of a rather patchy beanfield. The farmer has been rotating potatoes, spring barley, beans and winter wheat, and applying standard fertilisers and herbicides to this field, and says that the Polygonum was just as abundant in 1988 and 1987. The pH was 5.2 in summer 1988 (and is probably now about 5.8 after liming in autumn 1988), which is surprising as the species is usually considered to be especially characteristic of arable fields on the chalk in southern England, although it also occurs in less calcareous soils in East Anglia.

- 0) Much of the fieldwork in 1989, especially by I.S. Francis in the north, and AOC further south, was devoted to recording the upland lakes, which were unusually easy to botanise because of the very dry summer. Llyn Gynon, SN 76 and 86, was visited on a BSBI Field Meeting on 15 July and an inflatable boat carried by R.G. Ellis was used to search for Pilularia, grappled here from a boat by B. Seddon in 1964. It was not refound, but all the other species previously recorded from the lake were (with the surprising exception of Sparganium angustifolium), and Elatine hexandra, growing on a gravel island at the north end, was added to the list. Llyn Gorast, SN 76, was visited the same day, a more mesotrophic lake which has become largely overgrown in recent decades. Utricularia

minor and Carex limosa were found in abundance in the marginal swamp. More C. limosa was found in a boggy pool 200m to the north-west, and C. lasiocarpa was found in its third site in the VC on the headwaters of the Afon Mwyro nearby. It is possible that C. limosa is increasing in VC 46 (in 1987 it was found by APF in the reasonably well-botanised Rhos Bwlch-y-rhandir SSSI, SN 57) and there are now 13 colonies known as against only two up to 1981. Some of the upland colonies, however, are sometimes non-flowering (as was the case in 1989 with the extensive one at Llyn y Figyn, SN 87, first found by D. Reed in 1988) so may have been overlooked.

Both Isoetes species seem to be spreading in VC 46, and whereas in the past only Llyn Pendam was confirmed as containing both, now seven lakes and reservoirs are known to have both (Llyn Nantycagal, Llyn Penam, Llyn Blaenmelindwr, Llyn Hir, Llyn Teifi, Llyn Eiddwen and Llyn Fanod). The number of lakes from which each species has been recorded has been doubled in the last two years, and surely not all of these new records can be due to the plants being overlooked in the past. In the case of reservoirs, mostly built in the mid nineteenth century, natural colonisation may well still be taking place as the substrate develops, but the apparent arrival of Isoetes in such natural lakes as Llyn y Gorlan (well known to Salter) and Llyn Bach, and the arrival of I. echinospora in Llyn Hir (also a natural lake, where I. lacustris was first recorded as recently as 1965) seem of some interest.

AOC recorded the aquatics in all six Teifi Pools, SN 76, on 17 July, found virtually all previously recorded significant species to be still present, and made a number of new records. Only Llyn Egnant seemed to have become impoverished, and the previously recorded Subularia, Luronium, Lobelia and Littorella were not seen. Llyn Teifi, on the other hand, had gained both Isoetes species, Myriophyllum alterniflorum and Sparganium angustifolium, among others, and presented a spectacular display of Luronium flowering on bare mud in the south-east bay. On 5 July AOC and DD visited the natural lake Llyn Crugnant, SN 76, where Littorella was found in abundance, certainly a recent arrival as neither Salter, nor Seddon on his visit in 1972, had seen it; conversely, Lobelia and Myriophyllum alterniflorum, both seen by Seddon, were not refound in spite of careful searching and grappling. How all these changes may be related to acidification and other alterations in the uplands is at present unclear.

A.O. Chater

Welsh Plant Records 1986

WELSH PLANT RECORDS - 1986

Welsh Plant Records are compiled by R. Gwynn Ellis, Dept. of Botany, National Museum of Wales, CARDIFF CF1 3NP, from reports of BSBI vice-county Recorders to whom records should preferably be sent. Plants are listed for each county in the order of Dandy's *List of British Vascular Plants* (1958), the number in that list preceding the name, so that names recently changed can be used without giving the former name. English names are those in *English Names of Wild Flowers* ed. 2 (1986) by Dony et. al.

The following symbols are used:

- * to indicate a new v.c. record.
- + to indicate a new 10km square record.
- ! to indicate that the species is not native to Wales.
- \$ to indicate a species which, though native in some parts of Wales, is not so in the locality recorded.
- [] to indicate that the record, previously published in error, should be deleted.

Where entries consist of one record only, the symbols appear before the species number: where entries consist of more than one record, the symbols appear before each record, except for the ! sign which, if required, is always placed before the species number.

In general only those records which are additional to those given in *Flowering Plants of Wales* by R.G. Ellis (1983) are included. Other records are included at the discretion of the vice-county Recorder.

The Vice-County Recorders from 1/1/1990 are:

- MONMOUTH** v.c. 35; T.G. Evans, La Cuesta, Moun-ton Road, Chepstow, Gwent NP6 5BS.
- GLAMORGAN** (West) v.c. 41; Dr Q.O.N. Kay, Department of Botany, University College, Singleton Park, Swansea, West Glamorgan, SA2 8PP.
- GLAMORGAN** (East) v.c. 41; J.P. Curtis, 12 St Lythan Close, Dinas Powys, South Glamorgan, CF6 4UB.
- BRECON** v.c. 42; M. Porter, Aberhoywy 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; R.D. Pryce, Trevethin, School Road, Pwll, Llanelli, Dyfed SA15 4AL.
- PEMBROKE** v.c. 45; S.B. Evans, Glan-y-Mor, Dinas Cross, Newport, Dyfed, SA42 0UQ.
- CARDIGAN** v.c. 46; A.O. Chater, Department of Botany, British Museum (Natural History), Cromwell Road, London, SW7 5BD.
- MONTGOMERY** v.c. 47; Mrs M. Wainwright, 'Troy', 1 Green End, Oswestry, Shropshire, SY11 1BT.
- MERIONETH** v.c. 48; P.M. Benoit, Pencarreg, Barmouth, Gwynedd LL42 1BL.
- CAERNARFON** v.c. 49; N.H. Brown, Treborth Botanic Garden, University College of North Wales, Bangor, Gwynedd.
- DENBIGH** v.c. 50; Mrs J.A. Green, Coed Duon, Tremerchion, St Asaph, Clwyd LL17 0UH.
- FLINT** v.c. 51; G. Wynne, Gwylfa, Lixwm, Holywell, Clwyd.
- ANGLESEY** v.c. 52; R.H. Roberts, Quinton, Belmont Road, Bangor, Gwynedd LL57 2HY.

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

+25/1.intxvul. *Polypodium x mantoniae* Rothm. (*P. interjectum* x *P. vulgare*) (a hybrid polypody). Roadside bank, Kilgwrrwg - Devauden, ST49, T.G. Evans, 1985, det. G. Hutchinson.

+28/1. *Botrychium lunaria* L. (Moonwort). Old colliery spoil heap, Cwm Lickey, Upper Race, Pontypool, ST29, G.W. Garlic, 1981.

+!79/1. *Lepidium sativum* L. (Garden Cress). Waste ground, edge of Cwmbran, ST29, T.G. & U.T. Evans, 1986.

115/14. *Hypericum elodes* L. (Marsh St John's-wort). + Wet area in cleared forest, Trelleck Hill, SO50, E. Wood, 1985; + boggy area & stream above British, Abersychan, SO20, T.G. Evans, 1986.

+143/1. *Spergularia rubra* (L.) J. & C. Presl (Sand Spurrey). Ashy waste ground, Ynysddu, ST19, T.G. & U.T. Evans, 1986.

!149/3. *Montia sibirica* (L.) Howell (Pink Purslane). + Edge of R. Rhymney, nr Llanbradach, ST19, T.G. & U.T. Evans, 1986; + near R. Usk, Llanvihangel Gobion, SO30, J. Jones, 1986; + deciduous woodland, Caer Llan Field Centre, SO40, R.G. Ellis, 1983, brookside, Mitchell Troy Common, SO40, John Harper, 1986; + stream, Coed Llifos, ST49, T.G. Evans, 1987.

*160/2var. *Salicornia dolichostachya* Moss var. *fragilis* (Ball & Tutin) Gehu (a glasswort). Numerous plants among *Spartina anglica* on mud in Severn Estuary, Towyn Pill, Caldicot, ST48, T.G. Evans & D. Upton, det. F. Rose. First record for variety, 1986.

168/14. *Geranium pusillum* L. (Small-flowered Crane's-bill). + Near gateway in hedge near railway, Mount Ballan, ST48, T.G. & U.T. Evans; + near Llandogo, SO50, E. Wood, 1986.

185/2. *Genista anglica* L. (Petty Whin). + Boggy field above British, Abersychan, SO20, R. Hewitt, 1986; + south of Penrhos Farm, SO41, L. Powells, 1987.

+190/6. *Medicago arabica* (L.) Hudson (Spotted Medick). Near Goetre, SO30, B. Morgan, 1986.

+192/5. *Trifolium squamosum* L. (Sea Clover). Clay sea-wall bank, Redwick, ST48, A. Jones, 1986.

+!197/1. *Galega officinalis* L. (Goat's-rue). Tudor street car park, Abergavenny, SO21, R. Fraser, 1986.

*!212/6. *Potentilla argentea* L. (Hoary Cinquefoil). One plant in fruit on railway ballast, Rock, near Oakdale, ST19, T.G. & U.T. Evans, 1986. First record.

222/1. *Sanguisorba officinalis* L. (Great Burnet). + Near River Ebbw, Abercarn, ST29, M. Morris, 1986; streamside meadow, Wattsville, ST29, T.G. & U.T. Evans, 1986; + wet field, Coed Mawr, ST39, T.D. & E.D. Pollard, 1985; + wet meadow, Castleton, ST28, G. Hutchinson, 1987.

+!226/2a. *Prunus domestica* L. subsp. *domestica* (Wild Plum). Lower mountain slopes of Sugar Loaf, Abergavenny, SO21, G. Hutchinson, 1986.

Monmouth, v.c.35

+261/1. *Hippuris vulgaris* L. (Mare's-tail). Pond, H.M. Borstal, Prescoed, ST39, C. Titcombe, 1985.

+300/4. *Oenanthe lachenalii* C.C. Gmelin (Parsley Water-dropwort). Near tidal section of River Usk, Bulmore, ST39, T.D. & E.D. Pollard, 1986; also near R. Usk, in ST39, B. & F.J. Mason, T.G. & U.T. Evans, K. Bryant, and T.D. & E.D. Pollard, 1985-1987.

319/11. *Euphorbia exigua* L. (Dwarf Spurge). + Scattered over stony meadow, Kilpale, ST49, C. Titcombe & T.G. Evans, 1985-1986; edge of cornfield south of Carrow Hill, ST49, T.G. & U.T. Evans, 1985; + arable field near Jingle Street, SO41, H. Colls, 1986.

+1320/18. *Fallopia aubertii* (Louis Henry) J. Holub (Russian-vine). Abergavenny, SO31, G. Hutchinson, 1986.

1336/2. *Alnus incana* (L.) Moench (Grey Alder). Usually planted on landscaped coal tips and similar sites that need quick cover. + Wainfelin, SO20, and + Wattsville, ST29, both T.G. & U.T. Evans, 1986; + Michaelston-y-Fedw, ST28, G. Hutchinson, 1986; + Uskmouth Power Station, ST38, S. Perry & T.G. Evans, 1986; + Over Monnow, SO51, T.G. & U.T. Evans, 1986.

+1342/tri. *Populus trichocarpa* Torrey & Gray ex Hooker (Western Balsam-poplar). Planted on trackway, Abergavenny, SO31, G. Hutchinson, 1986.

422/2. *Kickxia elatine* (L.) Dumort. (Sharp-leaved Fluellin). + Meadow, Bishton, ST38, T.G. & U.T. Evans, 1986; + SE Raglan, SO40, E. Wood, 1986; Great Graig, SO42, P.C. & J. Hall, 1985.

+1425/3. *Mimulus moschatus* Douglas ex Lindley (Musk). Pond, probably planted, The Nurtons, Tintern, SO50, E. Wood, 1986.

*1430/14. *Veronica peregrina* L. (American Speedwell). Numerous plants, mainly under fixed hoses or other well watered areas, Welsh Tree Service Garden Centre, Raglan, SO30, C.A. Shirley, 1986, conf. T.G. Evans. First record.

+432/1. *Pedicularis palustris* L. (Marsh Lousewort). Wet area, Henllys, ST29, T.G. Evans, 1985.

+445/3x5. *Mentha x gentilis* L. (Bushy Mint). River side, Skenfrith, SO42, P.C. & J. Hall, 1985.

+451/2. *Calamintha sylvestris* Bromf. subsp. *ascendens* (Jordan) P.W. Ball (Common Calamint). North bank of road past Tal-y-coed Court, SO41, P.C. & J. Hall, 1985.

+475/1. *Campanula latifolia* L. (Giant Bellflower). Near River Ebbw, Bassaleg, ST28, E.J. Searle, 1986.

502/1. *Bidens cernua* L. (Nodding Bur-marigold). + Marshy fields, Marshfield, ST28, NCC record, 1985; + reenside, Duffryn, ST38, M. Edwards, 1985; + reenside, Llandeveyney, ST48, P.R. Glading, 1985.

+1503/1. *Galinsoga parviflora* Cav. (Gallant Soldier). Weed of concrete flower tubs, Caerleon Secondary School, ST39, T.D. & J.D. Pollard, 1985-1986.

+1503/2. *Galinsoga ciliata* (Rafin) S.F. Blake (Shaggy Soldier). Base of walls and gate-posts, Abergavenny, SO31, G. Hutchinson, 1986.

Monmouth, v.c. 35 / Glamorgan v.c. 41

545/1. *Serratula tinctoria* L. (Saw-wort). + Wet road verge west of Bettws, ST49, T.G. Evans, 1985; + near Waun-y-pound, Beaufort, SO11, T.G. & U.T. Evans, 1986.

+558/1.129. *Hieracium perpropinquum* (Zahn) Druce (a hawkweed). Bank of Afon Llwyd, Pontnewydd, ST29, T.G. Evans, 1984, det. J. Bevan.

+558/1.217. *Hieracium umbellatum* L. subsp. *umbellatum* (a hawkweed). Wet area, Cwm Kendon, Crumlin, ST29, T.G. Evans, 1986.

!560/9/pro. *Taraxacum procerisquameum* H. Ollgaard (a dandelion). + Roadside, Coppice Mawr, ST39; + and playing field, Mather Hill, ST59, both T.G. Evans, 1985, det. C.C. Haworth.

574/1. *Trigonella palustris* L. (Marsh Arrowgrass). + Marshy field near River Rhymney, NNE of Llanbradach, ST19; + marshy field near Pant Brook, Llanddewi Rhydderch, SO31, all T.G. & U.T. Evans, 1986; + marshy field near Triley Wood, SO31, R. Fraser, 1987.

584/1. *Narthecium ossifragum* (L.) Hudson (Bog Asphodel). + Boggy ground above British, Abersychan, SO20, R. Hewitt, 1986; + near ponds, Garn-yr-erw, SO21, T.G. Evans, 1986.

605/5. *Juncus gerardi* Loisel (Saltmarsh Rush). Found inland in three sites (1985-1987), one of which seemed to be associated with road grit (sand) and salt; + Abercarn, ST29, M. Morris, 1986; + wet area over colliery waste, Rock, ST19, T.G. & U.T. Evans, 1986.

606/2. *Luzula forsteri* (Sm.) DC. (Southern Wood-rush). + Near work sheds, Raglan Castle, SO40, A.P. Conolly & G.D. Wilson, 1971; + and woodland, Skenfrith, SO42, P.C. & J. Hall, 1986.

+607/6. *Allium oleraceum* L. (Field Garlic). Edge of field and hedgerow for 30m, Kilpale, ST49, T.G. Evans, 1985.

+625/1. *Epipactis palustris* (L.) Crantz (Marsh Helleborine). Willow Carr, Uskmouth Power Station, ST38, (largest Monmouthshire colony, 1684 flowering spikes counted July 1987), S. Perry & T.G. Evans, 1986.

+640/1. *Ophrys apifera* Hudson var. *trollii* (Bee Orchid). Lane bank, southern end of Kemeys Graig, Wentwood, ST39, R. Hewitt, 1985.

*!650/min. *Lemna minuscula* Herter (Least Duckweed). Small roadside pond covered with this duckweed (upper surface ridged, veins 1-0, but no pointed ends), Mynyddislwyn W of Abercarn, ST19, T.G. & U.T. Evans, det. T.C.G. Rich, 1986. First record.

*!683/19. *Bromus carinatus* Hooker & Arnott (California Brome). Several plants on edge of field inside gateway and further along road just outside next gateway, Coed Morgan, SO31, T.G. & U.T. Evans, 1986. First record.

+!692/sat. *Avena sativa* L. (Oat). Wet road-side, Abergavenny, SO31, G. Hutchinson, 1986.

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

+21/2. *Dryopteris affinis* (Lowe) Fraser-Jenkins subsp. *borreri* (Newman) Fraser-Jenkins (Scaly Male-fern). Meadow near old disused railway, Treforest, ST08, A. Jones, 1954, det. G. Hutchinson.

Glamorgan, v.c. 41

!66/8. *Fumaria officinalis* L. (Common Fumitory). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986, (BSBI Meeting).

!67/2. *Brassica napus* L. (Rape). Waste ground, Barry Docks, ST16, J.P. Curtis et al., 1986 (BSBI Meeting).

!67/3. *Brassica rapa* L. (Wild Turnip). Waste ground, Barry Docks, ST16, J.P. Curtis et al., 1986 (BSBI Meeting).

+!68/1. *Erucastrum gallicum* (Willd.) O.E. Schulz (Hairy Rocket). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986. First record since 1939.

!79/6. *Lepidium latifolium* L. (Dittander). Waste ground, Cardiff Docks, ST17, J.P. Curtis et al., 1986 (BSBI Meeting).

!92/1. *Lobularia maritima* (L.) Desv. (Sweet Alison). Waste ground, Cardiff Docks, ST27, J.P. Curtis, 1986.

+!105/1. *Erysimum cheiranthoides* L. (Treacle Mustard). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting).

!108/4. *Sisymbrium orientale* L. (Eastern Rocket). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting).

+!154/9. *Chenopodium ficifolium* Sm. (Fig-leaved Goosefoot). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting).

+!155/1a. *Beta vulgaris* L. subsp. *vulgaris* (Cultivated Beet). Roadside, Whitchurch, Cardiff, ST18, G. Hutchinson, 1985.

!191/4. *Melilotus indica* (L.) All. (Small Melilot). Waste ground, Barry Docks, ST16. and waste ground, Cardiff Docks, ST27, both J.P. Curtis, 1986.

+!209/2x1. *Spiraea x billiardii* Herincq. (*S. douglasii* x *S. salicifolia*) (Billard's Spiraea). Rubbish tip near Llanedeyrn Church, Cardiff, ST28, R.G. Ellis, 1983.

+211/9x11. *Rubus caesius* L. x *fruticosus* agg. (*Rubi Corylifolii*) (a hybrid bramble). Top of disused canal bank, Boulevard-de-Nantes, Cardiff, ST17, G. Hutchinson, 1986, det. A. Newton.

+!211/11/139. *Rubus procerus* P.J. Muell. cv. Himalayan Giant (a bramble). Top of disused canal bank, Boulevard-de-Nantes, Cardiff, ST17, G. Hutchinson, det. A. Newton, and waste ground, Cardiff Docks, ST27, J.P. Curtis et al. (BSBI Meeting), both 1986.

*225/8x7. *Rosa canina* L. x *R. stylosa* Desv. (a hybrid rose). N edge of Bulwarks Wood, Porthkerry Bay, ST06, 1969; + Spinney near Lavernock, ST16, 1969; + hedgerow, Coity, SS98, 1970; + above Cold Knap beach, ST06, 1969; all A.E. Wade, det. A.L. Primavesi, the last "probably this but may not be a first generation hybrid". First and subsequent records.

*225/9x8. *Rosa afzeliana* Fries x *R. canina* L. (a hybrid rose). Porthkerry Bay, ST06, A.E. Wade, 1969; + untrimmed hedge, Llantrithyd, ST07, W.H. Nicholls, 1970; + and hedgerow, Coychurch Higher, SS98, A.E. Wade, 1970, all det. A.L. Primavesi. First, second and third records.

*225/9x8. *Rosa caesia* Sm. x *R. canina* L. (a hybrid rose). Near St Mary Church, ST07, A.E. Wade & A.B. Pinkard, 1969, det. A.L. Primavesi. First record.

225/12. *Rosa sherardii* Davies (Sherard's Downy-rose). + N of Llantrisant Common, ST08, 1971; + Tir-y-berth, Rhymney Valley, ST19, 1974, both A.B. Pinkard & A.E. Wade, det. A.L. Primavesi.

+!227/wat. *Cotoneaster* x *watereri* Exell (a cotoneaster). Two tall shrubs well established alongside railway, Cefn Onn, N of Cardiff, ST18, G. Hutchinson, 1986, det. J. Fryer.

+!235/4. *Sedum dasyphyllum* L. (Thick-leaved Stonecrop). Disused quarry, Font-y-gary, ST06, J.P. Curtis, 1986. Second post-1930 record.

315/1. *Bryonia cretica* L. subsp. *dioica* (Jacq.) Tutin (White Bryony). Weed in flower bed, Cardiff, ST17, G. Walters, 1986.

*!320/19x20. *Reynoutria* x *bohemica* Chrtek & Chrtkova (*R. japonica* x *R. sachalinensis*) (a hybrid knotweed). Overgrown S facing wooded embankment, Whitchurch, Cardiff, ST18, G. Hutchinson & R.G. Ellis, 1985, det. J.P. Bailey & A.P. Conolly. First record.

!325/9. *Rumex cristatus* DC. (Greek Dock). Waste ground, Cardiff Docks, ST27, G. Walters, 1986.

325/9x12. *Rumex cristatus* DC. x *obtusifolius* L. = *R. x lousleyi* D.H. Kent (a hybrid dock). Waste ground, Cardiff Docks, ST27, G. Walters, 1986.

372/2. *Anagallis arvensis* L. (Scarlet Pimpernel). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986.

392/1. *Symphytum officinale* L. (Common Comfrey). Waste ground, Cardiff Docks, ST27, J.P. Curtis, 1984.

+!415/1. *Datura stramonium* L. (Thorn-apple). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting).

+435/13. *Euphrasia nemorosa* (Pers.) Wallr. (Eyebright). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

472/5. *Plantago coronopus* L. (Buck's-horn Plantain). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

+!491/nit. *Lonicera nitida* E.H. Wilson (Chinese Honeysuckle). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

!Hel/rigxtub. *Helianthus rigidus* (Cass.) Desf. x *tuberosus* L. = *H. x laetiflorus* Pers. (Showy Sunflower). Waste ground, Cardiff Docks, ST17, J.P. Curtis, 1986.

!503/2. *Galinsoga quadriradiata* Ruiz & Pavon (Shaggy Soldier). + Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting); + and street weed, Bridgend, SS97, H.J. Dawson, 1986.

+!533/3. *Leucanthemum maximum* (Ramond) DC. (Shasta Daisy). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

Glamorgan, v.c. 41 / Brecon, v.c. 42

!544/1. *Lactuca serriola* L. (Prickly Lettuce). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

+605/9x8. *Juncus x diffusus* Hoppe (*J. effusus* x *J. inflexus*) (Diffuse Rush). Wet area, old Bute West Dock, Cardiff, ST17, G. Walters, 1984.

+627/1. *Spiranthes spiralis* (L.) Chevall. (Autumn Lady's-tresses). Waste ground, Cardiff Docks, ST27, J.P. Curtis, 1984.

+676/9. *Poa compressa* L. (Flattened Meadow-grass). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

!692/2. *Avena sterilis* L. subsp. *ludoviciana* (Durieu) Nyman (Winter Wild-oat). +Waste ground, Garn-swllt, SN61, R.G. Ellis, 1981; + and waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting). First and Second post-1930 records.

*!701/7. *Agrostis scabra* Willd. Long-disused railway sidings, Gabalfa, Cardiff, ST17, G.M. Barter & G. Hutchinson, 1986, det. T.G. Evans. Second Welsh record.

!702/1. *Apera spica-venti* (L.) Beauv. (Loose Silky-bent). Waste ground, Cardiff Docks, ST27; and + waste ground, Barry Docks, ST16, both J.P. Curtis, T.G. Evans et al., 1986 (BSBI Meeting). First and second post-1930 records.

+708/1. *Alopecurus myosuroides* Hudson (Black-grass). Waste ground, Cardiff Docks, ST27, J.P. Curtis et al., 1986 (BSBI Meeting).

+!718/1. *Echinochloa crus-galli* (L.) Beauv. (Cockspur). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting). First post-1930 record.

+!720/1. *Setaria viridis* (L.) Beauv. (Green Bristle-grass). Waste ground, Barry Docks, ST16, J.P. Curtis, T.G. Evans, et al., 1986 (BSBI Meeting). First post-1930 record.

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

*185/3. *Genista pilosa* L. (Hairy Greenweed). Upland heath on edge of limestone pavement, Penwyllt, SN81, R.G. Woods, 1984. First record.

*211/11/77. *Rubus amplificatus* Lees (a bramble). Bank at edge of wood, Llangloed, SO14, M.Porter, 1982, det. A. Newton. First record.

*211/11/212. *Rubus echinatus* Lindley (a bramble). Woodland glade, Priory Groves, Brecon, SO02, M. Porter, 1978, conf. A. Newton. First record.

*211/11/vil. *Rubus villicauliformis* A. Newton (a bramble). Lane bank, Llangammarch Wells, SN84, M. Porter, 1978, det. A. Newton. First Welsh record

+235/2. *Sedum telephium* L. (Orpine). Churchyard, Llangammarch Wells, SN94, A.M. Pell, 1985.

*!237/hel. *Crassula helmsii* (T. Kirk) Cockayne (New Zealand Pigmyweed). Accidentally introduced into garden pond, Talgarth, SO13, R.G. Woods, 1986. First record.

- *343/16b. *Salix repens* L. var. *argentea* (Sm.) Wimm. & Grab.
(Creeping Willow). Moorland, Cwmgeidd, SN71, M. Porter, 1973, det.
R.D. Meikle. First record.
- +420/3. *Linaria repens* (L.) Miller (Pale Toadflax). Churchyard,
Llangammarch Wells, SN94, A.M. Pell, 1985.
- *435/1.1x1.13. *Euphrasia micrantha* Reichb. x *E. nemorosa* (Pers.)
Wallr. (a hybrid eyebright). Damp heathy pasture, Pont-ar-hydfer,
SN82, M. Porter, 1981, det. A.J. Silverside. First record.
- *435/1.17x1.1. *Euphrasia arctica* Lange ex Rostrup x *E. micrantha*
Reichb. (a hybrid eyebright). Haymeadow, Llanafan Fawr, SN95, M.
Porter, 1978, det. A.J. Silverside. First record.
- *435/1.17x1.15. *Euphrasia arctica* Lange ex Rostrup x *E. confusa*
Pugs1. (a hybrid eyebright). Haymeadow near Llangammarch Wells,
SN94, M. Porter, 1981, det. A.J. Silverside. First Welsh record.
- *435/1.17x1.19. *Euphrasia arctica* Lange ex Rostrup x *E. rostkoviana*
Hayne (a hybrid eyebright). Heathy field, Coelbren, SN81, M. Porter,
1980, det. A.J. Silverside. First confirmed record for Wales.
- +440/8. *Orobancha minor* Sm. (Common Broomrape). On *Trifolium repens*,
Llangynidr, SO11, M. Porter, 1986. Second record, first since 1800.
- +!503/2. *Galinsoga quadriradiata* Ruiz & Pavon (Shaggy Soldier).
Pavement edge outside museum, Brecon Town, SO02, R.G. Woods, 1986.
Second record.
- +559/8. *Crepis paludosa* (L.) Moench (Marsh Hawk's-beard). Stoney wet
flush, river gorge near Ystradfellte, SN91, R.G. Woods & F. Rose,
1986.
- *605/18x19. *Juncus acutiflorus* Ehrh. ex Hoffm. x *J. articulatus* L. =
J. x surrejanus Druce. (a hybrid rush). Fen, Ystradfellte, SN91, M.
Porter, 1978. First record.
- +638/1. *Platanthera chlorantha* (Custer) Reichb. (Greater
Butterfly-orchid). Old pasture near Llywel, SN83, R.G. Woods, 1986.
- +663/8x4. *Carex demissa* Hornem. x *hostiana* DC. (a hybrid sedge).
Small fen, Cwm Cadlan near Penderyn, SN91, R.G. Woods & M. Porter,
1986.
- +663/17. *Carex vesicaria* L. (Bladder-sedge). Upland marsh, Mynydd
Epynt, SN83, M. Porter, 1986.
- *663/57x71. *Carex otrubae* Podp. x *C. remota* L. (a hybrid sedge).
Margin of reservoir near Talybont-on-Usk, SO01, M. Porter, 1980,
det. A.C. Jermy. First record.
- *689/1. *Koeleria macrantha* (Ledeb.) Schultes (Crested Hair-grass).
Limestone pavement, Ystradfellte, SN91, R.G. Woods, 1986. First
localised record.
- *!700/2. *Calamagrostis canescens* (Weber) Roth (Purple Small-reed).
Carex acutiformis swamp, Llwyn-cus, Beulah, SN95, R.G. Woods, 1986.
First record.
- +!702/1. *Apera spica-venti* (L.) Beauv. (Lose Silky-bent). Weed in
flower pot imported from London, Bronllys, SO13, R.G. Woods, 1986.
Second record and first since 1926.

Radnor, v.c 43

RADNOR, v.c. 43 (comm. A.C. Powell)

Cha/glo. *Chara globularis* Thuill. var. *virgata* (Kutz.) R.D. Wood (a stonewort). + Pool & stream, Llanbedr Hill, SO14, A.C. Powell, 1985; + and pool, Llynheilyn, SO15, A.C. Powell & I. Soane, 1985, both det. J. Moore.

Nit/fle. *Nitella flexilis* (L.) Agardh (a stonewort). + Ditch by River Ithon, Llandewi Ystradenny, SO16, A.C. Powell, 1978; + pool, Aberedw, SO04, A.C. Powell, 1985; + pool, Redding, Harpton, & Wolfpits, SO25, J. & C. Port, 1985; + pool, Llyngwyn, SO06, F.M. Slater, 1986; + pool, Begwyns, SO14, A.C. Powell, 1986, all det. J. Moore.

+4/6. *Equisetum palustre* L. (Marsh Horsetail). Woodland, Rhyd-blawd dingle, Disserth, SO05, D. Gray & J. Butler, 1986.

+4/7. *Equisetum sylvaticum* L. (Wood Horsetail). Woodland, Nant-y-wylan, Llanfihangel Rhydithon, SO16, D. Gray & J. Butler, 1986.

+15/1. *Asplenium adiantum-nigrum* L. (Black Spleenwort). Woodland, Fron Bran dingle, Beguildy, SO17, D. Gray & J. Butler, 1986.

+19/1. *Cystopteris fragilis* (L.) Bernh. (Brittle Bladder-fern). Woodland, Gwernaffel dingle, Knighton, SO27, D. Gray & J. Butler, 1986.

21/2. *Dryopteris affinis* (Lowe) Fraser-Jenkins (Scaly Male-fern). + Woodland, Cregina, SO15; + Bailey Einon wood, Llandrindod Wells, SO06; + riverbank wood, Knighton, SO37; + Brynmawr wood, Penybont, SO16; all D. Gray & J. Butler, 1986.

22/2. *Polystichum aculeatum* (L.) Roth (Hard Shield-fern). + Woodland, Craig Fain, Disserth, SO05; + also Bailey wood, Llandrindod Wells, SO06, both D. Gray & J. Butler, 1986.

+24/4. *Gymnocarpium dryopteris* (L.) Newman (Oak Fern). Semi-natural woodland, Cwmgilla, Knighton, SO27, D. Gray & J. Butler, 1986.

43/1. *Anemone nemorosa* L. (Wood Anemone). + Small woodland, Harpton, SO25; + also woodland, Boultibrook, Presteigne, SO36, both A.C. Powell, 1986.

46/10. *Ranunculus auricomus* L. (Goldilocks Buttercup). + Beddugre wood, Llandewi Ystradenny, SO16; + also Station Wood, Llanbadarnfawr, SO06, both D. Gray & J. Butler; + Oak and Beech plantation, Stanner Wood, SO25, R.G. Woods, all 1986

*46/15. *Ranunculus sceleratus* L. (Celery-leaved Water-crowfoot). A few plants in marshy patch behind Bariland Farm, Evenjobb, SO26, J. & C. Port, 1986. First record.

+58/1. *Papaver rhoeas* L. (Common Poppy). Roadside, Llangunllo, SO27, J. & C. Port, 1986.

+65/3. *Corydalis claviculata* (L.) DC. (Climbing Corydalis). Woodland, Knighton, SO37, D. Gray & J. Butler, 1986.

+79/3. *Lepidium heterophyllum* Benthham (Smith's Pepperwort). Grassland, Llandrindod Hall, SO06, D. Gray & J. Butler, 1986.

- +184/1. *Thlaspi arvense* L. (Field Penny-cress). Eighteen plants on recently excavated road verge by A483 between Crossway and Howey, SO05, R.G. Woods, 1985.
- +113/1. *Stellaria nemorum* L. (Wood Stitchwort). Woodland, Woodhouse Farm, Norton, SO26, D. Gray & J. Butler, 1986.
- +113/5. *Viola reichenbachiana* Boreau (Early Dog-violet). Woodland, Bleddfa, SO27, D. Gray & J. Butler, 1986.
- 113/9. *Viola palustris* L. (Marsh Violet). + Marsh, Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982; + also around margin of hill pool, Llangunilo, SO27, A.C. Powell, 1986.
- +113/12. *Viola tricolor* L. (Wild Pansy). One plant on verge of woodland track, Boultribrook, Presteigne, SO36, A.C. Powell, 1986.
- +115/5. *Hypericum perforatum* L. (Perforate St John's-wort). Roadside, Walton, SO26, A.C. Powell, 1986.
- +115/12. *Hypericum hirsutum* L. (Hairy St John's-wort). Woodland, Bailey Einon, Llandrindod Wells, SO26, D. Gray & J. Butler, 1986.
- +154/4. *Chenopodium album* L. (Fat-hen). Roadside, Beguildy, SO17, A.C. Powell, 1986.
- +1175/1. *Aesculus hippocastanum* L. (Horse-chestnut). One large and 2 smaller trees, near Crungoed Farm, Llangunilo, SO17, A.C. Powell, 1986.
- +190/3. *Medicago lupulina* L. (Black Medick). Woodland, Gwernaffel dingle, Knighton, SO27, D. Gray & J. Butler, 1986.
- +202/1. *Ornithopus perpusillus* L. (Bird's-foot). Gravelly roadside bank S of Great Vaynor, Nantmel, SO06, R.G. Woods, 1986.
- +235/10. *Sedum forsterianum* L. (Rock Stonecrop). Volcanic grassland, quarry, Llandrindod Wells, SO06, A. Orange, 1985.
- 242/2. *Chrysosplenium alternifolium* L. (Alternate-leaved Golden-saxifrage). + Bailey Einon wood, Llandrindod Wells, SO06; + also woodland, Gwernaffel dingle, Knighton, SO27, both D. Gray & J. Butler, 1986.
- +246/1. *Ribes rubrum* L. (Red Currant). Marsh land, Burfa Bog, Evenjobb, SO26, J. & C. Port, 1986.
- +259/4. *Myriophyllum alterniflorum* DC. (Alternate Water-milfoil). Hill pool, Bleddfa, SO27, A.C. Powell, 1986.
- +262/4. *Callitriche hamulata* Koch (Intermediate Water-starwort). Hill pool, Llanbister, SO17, J. & C. Port, 1986.
- +266/1. *Cornus sanguinea* L. (Dogwood). Broadleaved woodland, Cefnlllys, SO06, D. Gray & J. Butler, 1986.
- 270/1. *Sanicula europaea* L. (Sanicle). + Woodland, Gilwern dingle, Gladestry, SO25, D. Gray & J. Butler, 1986; + also woodland, Boultribrook, Presteigne, SO36, A.C. Powell, 1986.
- +320/10. *Polygonum lapathifolium* L. (Pale Persicaria). Gravel of dry stream, Summerhill brook, Walton, SO26, A.C. Powell, 1986.

337/1. *Carpinus betulus* L. (Hornbeam). + Woodland, Knighton, SO37: + also Nant-y-groes dingle, Whitton, SO26, both D. Gray & J. Butler, 1986.

+343/6. *Salix purpurea* L. (Purple Willow). Roadside hedge, Nantmel, SO06, R.G. Woods, 1983.

+1345/1. *Rhododendron ponticum* L. (Rhododendron). Woodland, Boultibrook, Presteigne, SO36, A.C. Powell, 1986.

+358/1. *Vaccinium vitis-idaea* L. (Cowberry). Heather moorland, Caerneuadd, St Harmon, SN97, D. Gray & J. Butler, 1986.

+358/2. *Vaccinium myrtillus* L. (Bilberry). Woodland, Cil Bigyn, Gladestry, SO25, D. Gray & J. Butler, 1986.

+364/1. *Empetrum nigrum* L. (Crowberry). Heather moorland, Caerneuadd, St Harmon, SN97, D. Gray & J. Butler, 1986.

+386/1. *Menyanthes trifoliata* L. (Bogbean). Marshy ground, Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.

+400/2. *Myosotis secunda* A. Murray, (Creeping Forget-me-not). Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.

+400/9. *Myosotis discolor* Pers. (Changing-Forget-me-not). Field, Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.

+424/2. *Scrophularia auriculata* L. (Water Figwort). Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.

430/24. *Veronica filiformis* Sm. (Slender Speedwell). + Field, Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1986; + also Gwernaffel dingle Knighton, SO27, D. Gray & J. Butler, 1986.

+436/1. *Odontites verna* (Bellardi) Dumort. (Red Bartsia). In quantity in meadow, Boultibrook, Presteigne, SO36, A.C. Powell, 1986.

+462/5. *Lamium album* L. (White Dead-nettle). Roadside verge, Llandegley, SO16, R.G. Woods, 1986.

485/1. *Galium odoratum* (L.) Scop. (Woodruff). + Woodland, Gilwern dingle, Gladestry, SO25, D. Gray & J. Butler, 1986; + also Fron barn dingle, Beguildy, SO17, D. Gray & J. Butler, 1986.

+488/3. *Viburnum opulus* L. (Guelder-rose). Broadleaved woodland, Gwernaffel dingle, Knighton, SO27, D. Gray & J. Butler, 1986.

+495/3. *Valeriana dioica* L. (Marsh Valerian). Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.

497/2. *Dipsacus pilosus* L. (Small Teasel). South facing stepped scree and soil-covered ledges, below Motte, Aberedw, SO04, R.G. Woods, 1986. Second record and first since that of A. Ley in 1886.

+528/3. *Achillea ptarmica* L. (Sneezewort). Meadow, Boultibrook, Presteigne, SO36, A.C. Powell, 1986.

+555/1. *Mycelis muralis* (L.) Dumort. (Wall Lettuce). Woodland, Fron Barn dingle, Beguildy, SO17, D. Gray & J. Butler, 1986.

- +556/2. *Sonchus arvensis* L. (Perennial Sow-thistle). Roadside on A44, Llanfihangel-nant-melan, SO16, J. & C. Port, 1986.
- +563/1. *Alisma plantago-aquatica* L. (Water-plantain). Bank of River Ithon, Cefnlllys, Llandrindod Wells, SO06, D. Gray & J. Butler, 1986.
- +577/14. *Potamogeton obtusifolius* Mert. & Koch (Blunt-leaved Pondweed). Hill pool, Bleddfa, SO27, A.C. Powell, 1986. Confirmation of P. Richards' 1964 record.
- +577/19. *Potamogeton crispus* L. (Curled Pondweed). Pool, Pwll Patty, Glasbury-on-Wye, SO13, F.M. Slater, 1986.
- +603/1. *Paris quadrifolia* L. (Herb-Paris). Woodland, Gwernaffel dingle, Knighton, SO27, D. Gray & J. Butler, 1986.
- +605/7. *Juncus bulbosus* L. (Bulbous Rush). Hill pool, Llanfihangel-nant-melan, SO15, A.C. Powell, 1986.
- +606/1. *Luzula pilosa* (L.) Willd. (Hairy Wood-rush). Woodland, Llandewi Ystradenny, SO16, D. Gray & J. Butler, 1986.
- 606/3. *Luzula sylvatica* (Hudson) Gaudin (Great Wood-rush). + Wet ground, River Ithon, Penybont, SO16, A.C. Powell, 1986; + also Folly wood, Presteigne, SO36; + and Riverbank wood, Knighton, SO37, both D. Gray & J. Butler, 1986.
- +625/2. *Epipactis helleborine* (L.) Crantz (Broad-leaved Helleborine). Marsh, Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.
- 642/7. *Orchis mascula* (L.) L. (Early-purple Orchid). + Woodland, Cil Bigyn, Gladestry, SO25; + and Gwernaffel dingle, Knighton, SO27, both D. Gray & J. Butler, 1986.
- +652/1. *Sparganium erectum* L. (Branched Bur-reed). Pool, Barland, Evenjobb, SO26, J. & C. Port, 1986.
- 663/21. *Carex acutiformis* Ehrh. (Lesser Pond-sedge). + Wet ground by stream, Llandewi Ystradenny, SO16, J. & C. Port, 1986; + also marsh, Burfa Bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.
- +663/26. *Carex panicea* L. (Carnation Sedge). Marsh, Burfa bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.
- +663/32. *Carex hirta* L. (Hairy Sedge). Marsh, Burfa bog, Evenjobb, SO26, R.G. Woods, 1983.
- +670/1. *Festuca pratensis* Hudson (Meadow Fescue). Burfa bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.
- +676/6. *Poa nemoralis* L. (Wood Meadow-grass). Woodland, Knighton, SO37, D. Gray & J. Butler, 1986.
- +676/13. *Poa trivialis* L. (Rough Meadow-grass). Burfa bog, Evenjobb, SO26, L. Paul & J. Langford, 1982.
- *676/15. *Poa chaixii* Vill. (Broad-leaved Meadow-grass). Among trees, Rock Park, Llandrindod Wells, SO06, R.G. Woods, 1986. First record.

Radnor v.c. 43 / Carmarthen, v.c. 44

+677/1. *Catabrosa aquatica* (L.) Beauv. (Whorl-grass). Burfa bog, Evenjobb, SO26, J. & C. Port, 1985.

681/1. *Melica uniflora* L. (Wood Melick). + Woodland, Cregina, SO15, D. Gray & J. Butler; + also woodland, Boultribrook, Presteigne, SO36, A.C. Powell; + also Riverbank wood, Knighton, SO37, D. Gray & J. Butler, all 1986.

+683/2. *Bromus ramosus* Hudson (Hairy-brome). Old Hall wood, Llanfihangel Rhydithon, SO16, D. Gray & J. Butler, 1986.

+707/1. *Phleum bertolonii* DC. (Smaller Cat's-tail). Lane verge, Walton, SO26, A.C. Powell, 1986.

+709/1. *Milium effusum* L. (Wood Millet). Lower Alltgoch wood, Aberedw, SO04, D. Gray & J. Butler, 1986.

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

Cha/glo. *Chara globularis* Thuill. (a stonewort). Ditch, Laugharne Burrows, SN30, I.K. Morgan, 1986, det. J.A. Moore.

Cha/vul. *Chara vulgaris* L. approaching var. *gymnophylla* (A. Braun) Nyman (a stonewort). Pond, Machynys, Llanelli, SS59, I.K. Morgan, 1986, det. J.A. Moore.

*Cha/asp. *Chara aspera* Deth. ex Willd. approaching var. *curta* (Nolte ex Kutz.) A. Braun ex Leonh. (a stonewort). Ditch, Laugharne Burrows, SN30, I.K. Morgan, 1986, det. J.A. Moore. First record.

11/1. *Adiantum capillus-veneris* L. (Maidenhair Fern). + A substantial colony on tufa below limestone cliff, Craig Ddu, Llanybri, SN31, A.P. Fowles, First undoubtedly native record; + also limekiln wall, near Llandybie, SN61, D. Davies et al, both 1986.

+21/2x1. *Dryopteris affinis* (Lowe) Fraser-Jenkins x *filix-mas* (L.) Schott = *D. x tavelii* Rothm. (a hybrid male-fern). Near Gwyddgrug, SN43, T.S. Crosby & A.M. Pell, 1986. Second record.

+21/6. *Dryopteris carthusiana* (Vill.) H.P. Fuchs (Narrow Buckler-fern). Zabulon, SN11, G. Hutchinson, 1986.

50/3. *Thalictrum minus* L. (Lesser Meadow-rue). +\$ Hedgebank near Talog, SN32, T.S. Crosby; +\$ grass plot along A48, Cross Hands, SN51, G. Hutchinson; +\$ and roadside near Rhandirmwyn, SN74, Mr & Mrs J. Iliff, all 1986.

58/1. *Papaver rhoeas* L. (Common Poppy). +\$ Near straw barn, Banc Farm, Abergorlech, SN53, M.J. & R.D. Pryce, probably introduced with straw brought from Herefordshire; + also S of Llansawel, SN63, H.J. Killick, both 1986.

+\$59/1. *Meconopsis cambrica* (L.) Vig. (Welsh Poppy). Llandingat churchyard, Llandovery, SN73, A.M. Pell, 1986.

+169/3. *Rhynchosinapis cheiranthos* (Vill.) Dandy (Wallflower Cabbage). Along footpath leading to beach, Ferryside, SN31, G. Hutchinson, 1986.

+74/1. *Raphanus raphanistrum* L. subsp. *raphanistrum* (Wild Radish). WDA site, Johnstown, Carmarthen, SN31, G. Hutchinson, 1986.

Carmarthen, v.c. 44

+79/2. *Lepidium campestre* (L.) R.Br. (Field Pepperwort). Disused quarry, on bare limestone rock, near Glangwenlais, SN61, I.K. Morgan, 1986.

+79/3. *Lepidium heterophyllum* Bentham (Smith's Pepperwort). Railway siding near Clynderwen, SN11, G. Hutchinson, 1985

+79/6. *Lepidium latifolium* L. (Dittander). Disturbed ground near River Towy, Carmarthen, SN41, G. Hutchinson, 1986.

+!81/1. *Cardaria draba* (L.) Desv. (Hoary Cress). Disturbed ground, Carmarthen, SN41, G. Hutchinson, 1984.

+84/1. *Thlaspi arvense* L. (Field Penny-cress). Lane to colliery, Pantyffynnon, SN61, A.M. Pell, 1986.

+!105/1. *Erysimum cheiranthoides* L. (Treacle Mustard). Roadside verge, Carmarthen, SN31, J. Bevan, R. Burton & G Hutchinson, 1986. Second record.

+112/2. *Reseda lutea* L. (Wild Mignonette). Disused railway sidings W of Whitland, SN11, G. Hutchinson, 1986.

+!115/4. *Hypericum calycinum* L. (Rose-of-Sharon). Well colonized on long bank of disturbed ground in industrial estate, Capel Hendre, SN51, A.M. Pell, 1986.

+143/1. *Spergularia rubra* (L.) J. & C. Presl (Sand Spurrey). Low natural shale bank near Cynghordy, SN83, G. Hutchinson, 1986.

+148/1.1. *Scleranthus annuus* L. (Annual Knapweed). Dunes, Pendine Burrows, SN20, J. Rees, 1986.

162/2x1. *Tilia x vulgaris* Hayne (*T. cordata* x *T. platyphyllos*) (Lime). Roadside hedgebank, Clynderwen, SN12, G. Hutchinson, 1985.

+!166/2. *Linum usitatissimum* L. (Flax). Intersection of pavement and main road leading to M4, Capel Hendre, SN51, A.M. Pell, 1986.

+!168/3x4. *Geranium x oxonianum* Yeo (*G. endressii* x *G. versicolor*). Churchyard, 2.5km SSE of Halfway, SN62, G. Hutchinson, 1986. Second record.

168/10. *Geranium columbinum* L. (Long-stalked Crane's-bill).

+Roadside hedgebank near Halfway, SN63; + roadside hedgebank, near Llangadog, SN72, both G. Hutchinson, 1986.

+185/1. *Genista tinctoria* L. (Dyer's Greenweed). Damp heath, Rhosydd Rhydcymerau, SN53, A.P. Fowles, 1986.

+192/11. *Trifolium scabrum* L. (Rough Clover). Short calcareous turf on maritime cliff top, Pendine, SN20, J. Bevan, R. Burton, G. Hutchinson & R.D. Pryce, 1986.

+202/1. *Ornithopus perpusillus* L. (Bird's-foot). Roadside bank, Bethlehem, SN62, J. Bevan, R. Burton, G. Hutchinson, A.M. Pell & R.D. Pryce, 1986.

!209/2x1. *Spiraea douglasii* Hooker x *salicifolia* L. = *S. x billiardii* Herincq. (a hybrid bridewort). + Edge of overgrown field, 1.7km NW of Bethesda, SN01, G. Hutchinson; + and near Gellideg, Llanyfaellog, SN41, T.S. Crosby, both 1986.

- +210/1. *Filipendula vulgaris* Moench (Dropwort). Myddfai churchyard, SN73, A.M. Pell, 1986.
- 235/2. *Sedum telephium* L. (Orpine). Railway junction, 1.9km SE of Llanfallteg West, SN11, G. Hutchinson, 1986.
- 235/5. *Sedum anglicum* Hudson (English Stonecrop). On low natural shale bank near Cynghordy, SN83, G. Hutchinson, 1986.
- +!239/5x4. *Saxifraga* x *urbium* D.A. Webb (*S. spathularis* x *S. umbrosa*) (London-pride). Hundreds of plants in churchyard at foot of mountain, Mynydd Llansadwrn, SN63, G. Hutchinson, 1986.
- 250/1. *Lythrum portula* (L.) D.A. Webb (Water-purslane). + Wet acid pasture, Myrtle Hill, Waun Baglam, SN40, R.D. Pryce; + and edge of pool, 2.5km SSE of Llangadog, SN72, G. Hutchinson, both 1986.
- +!256/nov. *Oenothera novae-scotiae* Gates (*O. cambrica*) (Welsh Evening-primrose). Edge of railway line, Carmarthen railway junction, SN41, G. Hutchinson, 1986.
- +262/4ham. *Callitriche hamulata* Kutz. ex Koch (Intermediate Water-starwort). Drainage ditch in field, 1.7km NW of Bethesda, SN01, G. Hutchinson, 1986.
- +!276/1. *Myrrhis odorata* (L.) Scop. (Sweet Cicely). Hedgebank near Blaenwaun, SN22, T.S. Crosby, 1986.
- *300/1. *Oenanthe fistulosa* L. (Tubular Water-dropwort). Valley mire, Ynys Uchaf, Cwm Isfael, I.K. Morgan; and muddy field by river, Johnstown near Carmarthen, G. Hutchinson, both SN41, 1986. First and second records.
- +300/4. *Oenanthe lachenalii* C.C. Gmelin (Parsley Water-dropwort). Base of railway embankment, Carmarthen railway junction, SN41, G. Hutchinson, 1986.
- *314/1b. *Daucus carota* L. subsp. *gummifer* Hook. fil. (Sea Carrot). Maritime limestone cliff, Pendine, SN20, I.K. Morgan, 1986, det. S.B. Evans. First record.
- +319/11. *Euphorbia exigua* L. (Dwarf Spurge). About 200 plants on floor of old limestone quarry, NW of Garn, Drefach, SN51, I.K. Morgan, 1986. First post-1930 record outside burial grounds.
- +320/15. *Fallopia convolvulus* (L.) A. Love (Black-bindweed). Roadside near Cynwyl Elfed, SN32, B.J. Reely, 1986.
- +333/1. *Myrica gale* L. (Bog-myrtle). Recently burnt site on degraded basin mire near Horeb, Brechfa, SN42, R.D. Pryce, 1986.
- +342/3. *Populus tremula* L. (Aspen). Hedgerow N of Clynderwen, SN12, G. Hutchinson, 1985.
- +343/5. *Salix triandra* L. (Almond Willow). Mynydd Llanybydder, SN53, T.S. Crosby & A.M. Pell, 1986.
- +364/1. *Empetrum nigrum* L. (Crowberry). Peaty upland sheep pasture (recently burnt), Tair Carn Isaf, 3km NE of Glanamman, SN61, G. Hutchinson, 1986.
- +367/3. *Primula veris* L. (Cowslip). Llanfynydd Churchyard, SN52, A.M. Pell, 1986.

Carmarthen, v.c. 44

+379/1. *Ligustrum vulgare* L. (Wild Privet). Roadside near Tafarn Jem, SN64, J. Iliff, 1986.

385/3.1. *Gentianella amarella* (L.) Borner (Autumn Gentian). Hundreds of plants on damp, sparsely vegetated, disused quarry floor with only a thin accumulation of humus, absent from other parts of quarry floor, Capel Dyddgen Quarry, Crwbin, SN41, I.K. Morgan, 1986.

+1392/6. *Symphytum tuberosum* L. (Tuberous Comfrey). Roadside verge near Bolahaul, SN41, G. Hutchinson, 1984.

+422/2. *Kickxia elatine* (L.) Dumort. (Sharp-leaved Fluellen). Edge of kale field, 1.1km SE of Clynderwen, SN11, G. Hutchinson, 1986.

+430/3. *Veronica catenata* Pennell (Pink Water-speedwell). Flush, Crychan Forest, SN83, T.S. Crosby, 1986.

*430/20hed. *Veronica hederifolia* L. subsp. *hederifolia* (Ivy-leaved Speedwell). Disturbed ground on railway station platform, Clynderwen, SN11, G. Hutchinson, 1986. First record.

+440/3. *Orobanche rapum-genistae* Thuill. (Greater Broomrape). 21 plants under gorse on maritime heath, Telpyn Farm, Marros, SN10, T. Hallett, 1986..

+1445/5. *Mentha spicata* L. (Spear Mint). Disused rubbish tip 2.3km S of Llangadog, SN72, G. Hutchinson, 1986.

+\$447/1. *Origanum vulgare* L. (Marjoram). Myddfai churchyard, SN73, A.M. Pell, 1986.

+483/2. *Asperula cynanchica* agg. (Squinancywort). Disturbed dunes, Laugharne Burrows, SN30, J. Rees, 1986.

+1491/nit. *Lonicera nitida* E.H. Wilson (Chinese Honeysuckle). In small wood above stream near Halfway, SN62, G. Hutchinson, 1985.

+494/1. *Valerianella locusta* (L.) Laterrade (Common Cornsalad). Old wall, Carmarthen, SN42, G. Hutchinson, 1986.

+502/2. *Bidens tripartita* L. Edge of pond, 2.5km SSE of Llangadog, SN72, G. Hutchinson, 1986.

*1502/3. *Bidens frondosa* L. (Beggarticks). Frequent in drainage ditch and at edge of *Typha/Phragmites* marsh close to factory site, Bynea, SS59, BSBI Wales field meeting, 1986, det. T.G. Evans. First record.

+1518/3. *Solidago gigantea* Aiton subsp. *serotina* (O. Kuntze) McNeill (Early Goldenrod). Waste ground, Machynys, Llanelli, SS59, T.G. Evans, 1986.

||

+1533/1. *Chrysanthemum segetum* L. (Corn Marigold). Dominant over 0.5km of new road cutting (probably in seed mixture), Swiss Valley, Llanelli, SN50, R.D. Pryce, 1986.

+1544/2. *Centaurea montana* L. (Perennial Cornflower). N side of unmetalled road alongside railway station, Llandovery, SN73, G. Hutchinson, 1986.

+545/1. *Serratula tinctoria* L. (Saw-wort). Damp heath, Rhosydd Rhydcymerau, SN53, A.P. Fowles, 1986.

- +1552/2. *Tragopogon porrifolius* (Salsify). Three plants in flower on roadside verge near Four Roads, SN40, S. & J. Wilks, 1985. Second record and first since 1921.
- *558/1.152. *Hieracium lepidulum* (Stenstrom) Omang. (a hawkweed). Improved roadside embankment, Sardis, Llanedi, SN50, J. Bevan, R.M. Burton & G. Hutchinson, 1986. Det. J. Bevan. First Welsh record.
- +558/1.222. *Hieracium salticola* (Sudre) Sell & West (a hawkweed). Waste ground, 0.3km from Central Wales railway line, Bynea, Llanelli, SS59, BSBI field meeting, 1986, det. J. Bevan.
- +559/2. *Crepis vesicaria* L. subsp. *haenseleri* (DC.) P.D. Sell (Beaked Hawk's-beard). Betws, Ammanford., SN61, A.M. Pell, 1986.
- +574/1. *Triglochin palustris* L. (Marsh Arrowgrass). Ancient heathy meadow, Pant-y-llyn, Milo, SN51, D. Wells, I.K. Morgan & R.D. Pryce, 1986.
- +574/2. *Triglochin maritima* L. (Sea Arrowgrass). Grazed tidal meadows adjoining river, Johnstown, Carmarthen, SN41, G. Hutchinson, 1986.
- +577/2. *Potamogeton polygonifolius* Pourret (Bog Pondweed). Pond, N of Waun Uchaf, Alltwalis, SN43, I.K. Morgan, 1986.
- +580/1. *Zannichellia palustris* L. (Horned Pondweed). Brackish shallow pool in meadow, S end of Morfa Uchaf, Ferryside, SN31, G. Hutchinson, 1986.
- +584/1. *Narthecium ossifragum* (L.) Hudson (Bog Asphodel). Valley/blanket mire, Llwyn Teg bog, Llannon. SN50, I.K. Morgan & R.D. Pryce, 1983.
- 588/1. *Convallaria majalis* L. (Lily-of-the-valley). Limestone woodland, Bylchau Woodland, Carmel, SN51, M.J. Pryce, 1986. Rediscovery of population known in 1960s, several more populations subsequently found (SN5916, SN6016) by I.K. Morgan later in 1986.
- +605/2. *Juncus tenuis* Willd. (Slender Rush). Muddy field adjoining tidal river, E of Johnstown, Carmarthen, SN41, G. Hutchinson, 1986.
- 605/5. *Juncus gerardi* Loisel. (Saltmarsh Rush). + Tidal riverside meadow, near Carmarthen railway junction, SN41, G. Hutchinson, 1986; + and lip of limestone quarry, Pentregwenlais, SN61, J. Bevan, G. Hutchinson *et al.*, 1986. First inland record. Conf. P.M. Benoit.
- +605/7buf. *Juncus bufonius* L. s.s. (a toad rush). Grazed field adjoining river, WSW of Carmarthen railway station, ST41, G. Hutchinson, 1986.
- *607/3. *Allium scorodoprasum* L. (Sand Leek). Undisturbed dry dunes, Laugharne Burrows, SN20, J. Rees, 1986, det. T.G. Evans. Second Welsh record and First substantiated record for the county.
- +611/2. *Leucojum aestivum* L. (Summer Snowflake). Churchyard, Henllan. SN12, R.D. Pryce, 1985.
- +616/3. *Iris foetidissima* L. (Stinking Iris). Hedgebank, 1.2km SSW of Efailwen, SN12, G. Hutchinson, 1986.

Carmarthen, v.c. 44

+627/1. *Spiranthes spiralis* (L.) Chevall. (Autumn Lady's-tresses). 58+ flowering plants on old limestone spoil heaps and in nearby limestone grassland, near Llandyfan, SN61, I.K. Morgan, 1985.

*636/1x643/1. *Gymnadenia conopsea* (L.) R. Rr. x *Dactylorhiza fuchsii* (Druce) Soo = x *Dactylogymnadenia cookei* (H.-Harrison) Soo (Fragrant Orchid x Common Spotted-orchid). One plant with both parents in undisturbed pasture, Pant-y-llyn meadow, Milo, SN51, D. Wells, I.K. Morgan & R.D. Pryce, 1986, conf. R.H. Roberts. First record.

+638/1. *Platanthera chlorantha* (Custer) Reichenb. (Greater Butterfly-orchid). About 20 flowering spikes in wet, species-rich, rushy meadow, Cae Iago, Ffarmers, SN64, I.K. Morgan & R.D. Pryce, 1986.

655/9. *Schoenoplectus tabernaemontani* (C.C. Gmelin) Palla (Grey Club-rush). S bank of river, Carmarthen, SN41, G. Hutchinson, 1986.

+655/10. *Isolepis setacea* (L.) R. Br. (Bristle Club-rush). Marsh, Mynydd Llanybydder, SN53, T.S. Crosby & A.M. Pell, 1986.

+655/12. *Eleogiton fluitans* (L.) Link (Floating Club-rush). Stream, Nant y Cynnant Fawr, SN84, J. Iliff, 1986.

+656/4. *Eleocharis multicaulis* (Sm.) Desv. (Many-stalked Spike-rush). Wet flush, Banwen Gwythwch, 2.5km SE of Trapp, SN61, G. Hutchinson, 1986.

+660/1. *Rhynchospora alba* (L.) Vahl (White Beak-sedge). Hundreds of plants in base-rich flush, Brechfa Forest, SN53, R.D. Pryce, 1986.

*663/3. *Carex punctata* Gaudin (Dotted Sedge). Infrequent in damp dune grassland, mown as a fire break between RAF targets and Pembrey Forests, Tywyn Burrows, SN30, R. Meade & R.D. Pryce, 1982, det. A.O. Chater & R.W. David. First record.

+663/4. *Carex hostiana* DC. (Tawny Sedge). Ancient heathy meadow, Pant-y-llyn, Milo, SN51, D. Wells, I.K. Morgan & R.D. Pryce, 1986.

+663/34. *Carex pilulifera* L. (Sedge Pill). 1km NE of Crugybar, SN63, G. Hutchinson, 1985, conf. A.O. Chater.

+663/67. *Carex spicata* Hudson (Spiked Sedge). Roadside verge near Ferryside, SN31, G. Hutchinson, 1986, det. R.W. David.

+663/68lam. *Carex muricata* L. subsp. *lamprocarpa* Celak (Small-fruited Prickly-sedge). Roadside hedgebanks near Clynderwen, SN11, G. Hutchinson, 1985.

+665/1. *Phragmites australis* (Cav.) Steudel (Common Reed). A small stand in damp heath, Rhosydd Rhydcymerau, SN53, A.P. Fowles, 1986.

+671/3. *Lolium temulentum* L. (Darnel). Trackway verge, Coygan Quarry, SN20, G. Hutchinson, 1986. 3rd record, Second post-1930 and first since 1966.

+672/1. *Vulpia fasciculata* (Forsskal) Samp. (Dune Fescue). Sand dune, Ferryside, SN31, G. Hutchinson, 1986.

+676/10. *Poa pratensis* L. s.s. (Smooth Meadow-grass). Talley - Crugybar area, SN63, BSBI field meeting, 1985.

Carmarthen, v.c. 44 / Pembroke, v.c. 45

*695/1x2. *Holcus lanatus* L. x *mollis* L. = *H. x hybridus* K. Wein (a hybrid grass). Roadside near Gwyddgrug, SN34, T.S. Crosby & A.M. Pell, 1986. First record.

+697/1. *Aira praecox* L. (Early Hair-grass). Peat based heathy pasture near Halfway, SN63, G. Hutchinson, 1985.

+701/4. *Agrostis gigantea* Roth (Black Bent). Capel Hendre, SN51, A.M. Pell, 1986.

+1720Sec/cer. *Secale cereale* L. (Rye). Kale field near Clynderwen, SN11, G. Hutchinson, 1986.

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

+26/1. *Pilularia globulifera* L. (Pillwort). Dense populations in two sites on Marloes Mere, SM70, S.B. Evans, 1986.

+34/1. *Juniperus communis* L. (Juniper). One old plant at top of unstable sea-cliff, Pen-y-Bal, Morfa Head, Newport. SN04, S.B. Evans, 1986.

*1259/aqu. *Myriophyllum aquaticum* (Velloso) Verdcourt (Parrot's-feathers). Irrigation reservoir, Porthiddy, Abereiddy, SM83, J.W. Donovan, 1983. Still there in 1986, S.B. Evans. First record.

415/1. *Datura stramonium* L. (Thorn-apple). Hundreds of plants dead in field, Cethins Farm, Haverfordwest, SM91, J.W. Donovan, 1985. Probably introduced with grass seed, flowered autumn 1984.

440/3. *Orobanchae rapum-genistae* Thuill. (Greater Broomrape). A magnificent plant with five flower spikes, Moylgrove, SN14, M. Patterson, 1986.

+520/1. *Aster linosyris* (L.) Bernh. (Goldilocks Aster). Two clumps reported on exposed limestone sea-cliff, Linney Head, 3km SW of Castlemartin, SR89, C. Gillham, 1986, det. S.B. Evans. Second record.

540/8. *Cirsium dissectum* (L.) Hill (Meadow Thistle). + Wet heath, Waun Isaf Common, SN13, F. Evans, 1985; + and Dinas, SM93, S.B. Evans, 1986.

+577/9. *Potamogeton perfoliatus* L. (Perfoliate Pondweed). In tranquil bays of river, Eastern Cleddau above Canaston Bridge, SN01, J.W. Donovan, 1985. Second record.

+577/14. *Potamogeton obtusifolius* Mert. & Koch (Blunt-leaved Pondweed). Farm irrigation reservoir, Maerdy Farm, Brawdy, SM82, J.W. Donovan, 1986. Second record.

+577/19. *Potamogeton crispus* L. (Curled Pondweed). Irrigation reservoir, Houghton, Neyland, SM90, J.W. Donovan, 1982.

655/4. *Scirpus sylvaticus* L. (Wood Club-rush). Eastern Cleddau near Robeston Wathen, SN01, J.W. Donovan, 1986.

677/1. *Catabrosa aquatica* (L.) Beauv. (Whorl-grass). Several plants, reservoir spillway on Devonian rock, Sandy Haven, St Ishmael's, SM80, J.W. Donovan, 1986.

Pembroke, v.c. 45 / Cardigan, v.c. 46

+680/3. *Briza maxima* L. (Great Quaking-grass). One plant on disturbed roadside verge, Sclleddau, SM93, Lady R. FitzGerald, 1986. Second record.

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

+7/2. *Hymenophyllum wilsonii* Hook. (Wilson's Filmy-fern), Streamside in mixed woodland, Cwmere, SN68, A.O. Chater, 1986.

+22/2. *Polystichum aculeatum* (L.) Roth (Hard Shield-fern). Wooded dingle, Betws Leucu, SN65, I.K. Morgan, 1985.

*46/22c. *Ranunculus penicillatus* (Dumort.) Bab. subsp. *pseudofluitans* (Syme) S. Webster var. *pseudofluitans* (*R. calcareus* Butcher) (a stream water-crowfoot). In shingley river, Afon Teifi above Henllan, SN34, A.O. Chater, 1986, conf. S. Webster. Previously known on the Teifi system only from Afon Cych. First record.

+115/1. *Hypericum x inodorum* Miller (Tall Tutsan). Mixed woodland by Nant Llwlwyn, Llanfarian, SN57, A.P. Fowles, 1986, conf. N.K.B. Robson.

+133/1b. *Stellaria nemorum* L. subsp. *glochidisperma* Murb. (Wood Stitchwort). Damp streamside in wooded dingle, Cwm Clettwr, Tre'r-ddol, SN69, I. Weston & W.M. Condry, 1985. Second record.

+148/1. *Scleranthus annuus* L. (Annual Knawel). Rock-cut track above Nantperchellan, S of Cardigan, SN14, A.O. Chater, 1986. Fifth extant site, and third in this habitat.

162/2. *Tilia cordata* Miller (Small-leaved Lime). Locally dominant, wooded valley of Afon Arth, SN46, 1985; and old coppiced trees by Afon Peithyll, WSW of Plas Gogerddan, SN68, both A.O. Chater & A.P. Fowles, 1986. Recorded in both areas by Salter.

*192/7. *Trifolium incarnatum* L. (Alsike Clover). 'Permanent pasture land', field immediately NE of original National Library of Wales Building, Aberystwyth, SN58, Maby Thomas, 1924 (*Ann. Appl. Biol.* 11: 349-394 (1924)). First record.

+211/2. *Rubus saxatilis* L. (Stone Bramble). Gorge of Nant Cwm-du, Tywi, SN85, A.O. Chater & D. Davies, 1986. Fourth site, not associated with any other calcicoles.

211/11.2. *Rubus scissus* W.C. R. Watson (a bramble). + Heathy roadside bank, Rhos Cilcennin, SN51, 1981; + and gorge of Nant Cwm-du, Tywi, SN85, 1986, both A.O. Chater, det A. Newton.

+1259/2. *Myriophyllum spicatum* L. (Spiked Water-milfoil). Artificial pool in dune slack, Ynys-las, SN69, A.O. Chater, 1986. Probably introduced.

+1265/2. *Cornus sericea* L. (Red-osier Dogwood). Scrub by Afon Mldan, Penparc, SN24, A.O. Chater, 1986. Well naturalised.

+364/1. *Empetrum nigrum* L. (Crowberry). Wet heath, Rhos Cilcennin, SN56, A.O. Chater & A.P. Fowles, 1986.

+397/1. *Anchusa arvensis* (L.) Bieb. (Bugloss). Sandy waste ground, 1.5km NW of Penparc, SN24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986. Second extant site.

+400/9. *Myosotis discolor* Pers. (Changing Forget-me-not). Old track, Pwntan Quarry, Tan-y-groes, SN24, A.O. Chater & A.P. Fowles, 1986.

+416/7. *Verbascum nigrum* L. (Dark Mullein). Eight plants in abandoned pasture, near Ash Grange, N of A487, Comins Coch, SN68, A.P. Fowles, 1986, conf. A.O. Chater. Second record: only previous record was as rubbish-heap casual in 1901.

+442/2. *Utricularia australis* R. Br. (Greater Bladderwort). Ditch E of Teifi, Ystradcaron, Tregaron, SN65, A.O. Chater, 1986, det. P. Taylor. Otherwise known for certain only from Cors Fochno, the Cors Caron record requiring confirmation.

561/1. *Baldellia ranunculoides* (L.) Parl. (Lesser Water-plantain). Boggy pool, Ty-llwyd, Llanfarian, SN67, A.P. Fowles, 1986. Recorded here by Salter in 1901.

+625/1. *Epipactis palustris* (L.) Crantz (Marsh Helleborine). Base rich flushes in pasture, by Afon Mwldan, Penparc, SN14 & 24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986. Second record; also present in two other sites within the 10km square, abundant in all three sites.

636/1. *Gymnadenia conopsea* (L.) R. Br. (Fragrant Orchid). + Flushes and fen by Afon Mwldan, SN14 & 24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986; and heathy slope, Cwmerfyn, SN78, J. Stacey, 1986. Known in latter site c.1950-1965, but erroneously believed lost when slope was ploughed and reseeded.

+643/4. *Dactylorhiza praetermissa* (Druce) Soo (Southern Marsh-orchid). Flushes by Afon Mwldan, Penparc, SN24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986.

+654/3. *Eriophorum latifolium* Hoppe (Broad-leaved Cottongrass). One inflorescence only in base-rich flush in pasture, by Afon Mwldan, Penparc, SN14 & 24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986. Second record.

+656/3. *Eleocharis quinqueflora* (F.X. Hartm.) O. Schwarz (Few-flowered Spike-rush). Flushes by Afon Mwldan, Penparc, SN14 & 24, A.O. Chater, 1986, conf. S.M. Walters. Third, and only inland, site.

+656/4. *Eleocharis multicaulis* (Sm.) Sm. (Many-stalked Spike-rush). Flush in pasture by Afon Mwldan, Penparc, SN24, A.O. Chater, 1986.

+663/2. *Carex distans* L. (Distant Sedge). Damp hollow at top of sea-cliffs, 2km NE of Aber-arth, SN46, A.P. Fowles, 1986, conf. A.O. Chater. The second extant site between Dyfi and Teifi.

+663/4. *Carex hostiana* DC. (Tawny Sedge). Flushes by Afon Mwldan, Penparc, SN14 & 24, A.O. Chater, 1986.

*663/4x7. *Carex hostiana* DC. x *lepidocarpa* Tausch = *C. x fulva* Good. (a hybrid sedge). One tuft only, apparently fertile, with both parents in base rich flush in pasture, by Afon Mwldan, Penparc, SN24, A.O. Chater, 1986, conf. R.W. David. First record.

*663/7a. *Carex lepidocarpa* Tausch subsp. *lepidocarpa* (Long-stalked Yellow-sedge). Abundant in base rich flushes and fen by Afon Mwldan, Penparc, SN14 & 24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986, conf. R.W. David. First confirmed records.

Cardigan, v.c. 46 / Montgomery, v.c. 47

+663/16. *Carex rostrata* Stokes (Bottle Sedge). Marsh by Afon Tywi S of Dolfor, SN85, A.O. Chater, 1986.

+663/17. *Carex vesicaria* L. (Bladder-sedge). River bank, Teifi S of Pont Einion, SN66, A.O. Chater, 1986.

+663/21. *Carex acutiformis* Ehrh. (Lesser Pond-sedge). Flushed slopes and fen on SE side of Afon Mwldan, Penparc, SN14, A.O. Chater, 1986. Second record.

+663/24. *Carex pallescens* L. (Pale Sedge). Damp meadow, Glanhelyg, Llechryd, SN24, A.O. Chater, A.P. Fowles & D. Glyn Jones, 1986.

+663/36. *Carex caryophyllea* Latourr. (Spring-sedge). Meadow 1km NW of Llechryd Bridge, SN24, A.O. Chater, 1986.

+663/54. *Carex paniculata* L. (Greater Tussock-sedge). Flushes and fens by Afon Mwldan, Penparc, SN24, A.O. Chater & A.P. Fowles, 1986.

+663/81. *Carex dioica* L. (Dioecious Sedge). Frequent in flushes by Afon Mwldan, Penparc, SN24, A.O. Chater & A.P. Fowles, 1986. Probably second extant site.

+669/2. *Glyceria plicata* Fr. (Plicate Sweet-grass). Flushes by Afon Mwldan, Penparc, SN24, A.O. Chater, 1986.

+680/1. *Briza media* L. (Quaking-grass). Flushes by Afon Mwldan, Penparc, SN24, A.O. Chater, 1986.

MONTGOMERY, v.c. 47 (comm. Mrs M. Wainwright)

4/10. *Equisetum telmateia* Ehrh. (Great Horsetail). + Plentiful near springs in wet pasture near Hurdley, SO29, + and large patch near stream flowing from Cwm Mawr in the same area, SO39, both J. Wolfe, 1983.

+21/3. *Dryopteris oreades* Fomin (Mountain Male-fern). On rocky outcrops of Coradon hill, SO29, P.M. Benoit et al., 1981. Second record.

*21/6x7. *Dryopteris carthusiana* (Vill.) H.P. Fuchs x *dilatata* (Hoffm.) A. Gray (a hybrid Buckler-fern). One certain plant (intermediate characters, imperfect spores), and very probably others, with quantities of both parents, *Betula pubescens*/*Salix cinerea* swamp, Gwaunynog near Dolanog, SJ01, P.M. Benoit, 1986. First record.

*198/3. *Barbarea intermedia* Boreau (Medium-flowered Winter-cress). Near small roadside quarry, east of Aberhosan, SN89, A.J. Morton, 1985. First record.

102/5. *Rorippa amphibia* (L.) Besser (Great Yellow-cress). Near lower pool at Lymore, SO29, J.M. Roper, 1984. Second record.

+1108/4. *Sisymbrium orientale* L. (Eastern Rocket). About 50 plants near road through quarry, Breidden, SJ21, G. Wilson, 1986, det. P.M. Benoit.

*123/13x14. *Silene dioica* (L.) Clairv. x *pratensis* (Rafn.) Godron & Gren. (a hybrid Campion). One plant with 1 of *S. pratensis* on an old lead mine spoil heap, E end of Fan Pool, SN98, W.A. Thompson, 1986. First record.

*149/2. *Montia perfoliata* (Donn ex Willd.) Howell (Springbeauty). Two or three plants on wooded bank at Hurdley, SO29, E.H. Wolfe. 1975. First localized record.

*158/1. *Suaeda maritima* (L.) Dumort. (Annual Sea-blite). Three plants on muddy edge of tidal River Dovey, Dovey Junction, SN69, P.M. Benoit, 1986. First record.

*180/1. *Frangula alnus* Miller (Alder Buckthorn). South shore of Lake Vyrnwy, SH92, R. Petley-Jones, 1984. First record.

+239/8. *Saxifraga tridactylites* L. (Rue-leaved Saxifrage). About 50 plants on rock ledge. Breidden, SJ21, G. Wilson, 1986. Second localized record.

+262/2. *Callitriche platycarpa* Koch (Various-leaved Water-starwort). Stream with *C. hamulata* and the mosses *Amblystegium fluviatile* and *Hygrohypnum ochraceum*, Carno, SN99, P.M. Benoit, 1986. Identity confirmed by pollen.

+262/bru. *Callitriche brutia* Petagna (Pedunculate Water-starwort). In pool on top of Todleth hill, SO29, J.M. Roper, 1981, det. I.C. Trueman.

*285/4. *Apium inundatum* (L.) Reichenb. fil. (Lesser Marshwort). Wet meadow near Llansantffraid, SJ21, F.H. Perring et al., 1976. First record (included in *Flowering Plants of Wales*).

*325/12x14. *Rumex obtusifolius* L. x *sanguineus* L. = R. x *dufftii* Hausskn. (a hybrid dock). One plant with quantities of both parents by track in cattle-grazed meadow, Powis Castle Park, SJ20, P.M. Benoit, 1986. First record.

*1370/5. *Lysimachia punctata* L. (Dotted Loosestrife). Disturbed marshy thicket, Boncyn Celyn near Llanwddyn, SJ01, P.M. Benoit & E.D. Pugh, 1974. First record (included in *Flowering Plants of Wales*).

+411/1. *Hyoscyamus niger* L. (Henbane). One plant in sandy disturbed soil, Montgomery, SO29, A. Welton, 1975.

+413/3. *Solanum nigrum* L. (Black Nightshade). Near Pont yr Pentre, Llansantffraid, SJ21, F.H. Perring, 1980. Second record.

+1420/2. *Linaria purpurea* (L.) Miller (Purple Toadflax). On waste ground at Machynlleth railway station, SH70, Mont. Flora project party, 1985.

*1420/2x3. *Linaria purpurea* (L.) Mill. x *repens* (L.) Mill. = L. x *dominii* Druce (a hybrid toadflax). A variable hybrid population ranging morphologically from *L. repens* to near *L. purpurea*, numerous plants in derelict railway yard, Caersws Railway Station, SO09, P.M. Benoit, 1986. First record.

+442/4. *Utricularia minor* L. (Lesser Bladderwort). Small patch in NW corner of old reservoir at Nant Droppings. SN89, A.J. Morton, 1985. Second record.

+506/3. *Senecio erucifolius* L. (Hoary Ragwort). One fine plant with *S. jacobaea*, railway yard, Machynlleth railway station, SH70, P.M. Benoit, 1986.

Montgomery, v.c. 47 / Merioneth, v.c. 48

*!522/1. *Conyza canadensis* (L.) Cronq. (Canadian Fleabane). Two plants in railway yard, Welshpool Railway Station, SJ20, K.M. Benoit, 1986; + single plant in disturbed ground near the bridge at Trefeglwys, SN99, M. Wainwright, 1986. First & second records.

!540/7. *Cirsium helenioides* (L.) Hill (Melancholy Thistle). Well naturalized on top of roadside bank, Carno, SN99, J. Roper, 1986, det. P.M. Benoit. Naturalized in Carno churchyard for many years but completely eradicated there in about 1980.

*558/1/77. *Hieracium orimeles* F.J. Hanb. ex W.R. Linton (a hawkweed). Shaded bank in the Dulas Valley, Aberhosan, SN89, A.J. Morton, 1986, det. P.D. Sell. First record.

*!570/3. *Elodea nuttallii* (Planchon) St John (Nuttall's Waterweed). Montgomery canal from Aberbechan to Pentreheylin, SO19, SJ10, SJ20, SJ21, J. Davidge & Montg. canal Survey Team, 1985. First and subsequent records.

*580/1. *Zannichellia palustris* L. (Horned Pondweed). Canal, between Crowther Hall and Pool Quay, SJ21, C. Paskell, 1978. First record.

+!591/1a. *Asparagus officinalis* L. subsp. *officinalis* (Garden Asparagus). Long established clump on roadside verge at Leighton, SJ20, A. Markwick, 1986. Second record.

*605/amb. *Juncus ambiguus* Guss. (a toad rush). A few plants on sandy upper saltmarsh, Dovey Junction, SN69, P.M. Benoit, 1986.

*663/2. *Carex distans* L. (Distant Sedge). Several fine clumps on muddy bank of tidal river, Afon Llyfnant, Dovey Junction, SN69, P.M. Benoit, 1986. Confirmation of 1953 record that was never published. First records.

670/10. *Festuca vivipara* (L.) Sm. (Viviparous Fescue). Widely scattered on high moorland especially on stream-sides, SH92, C.J. Tyas, 1986.

+683/14. *Bromus racemosus* L. (Smooth Brome). Grassland in Powis Castle park with *Bromus mollis*, SJ20, P.M. Benoit, 1985. Second record.

*693/2. *Avenula pubescens* (Hudson) Dumort. (Downy Oat-grass). Short turf on limestone, below Giant's Head, Llanymynech Hill, SJ22, E.D. Pugh & M. Wainwright, 1983. First native record.

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

*262/4b. *Callitriche brutia* Petagna (Pedunculate Water-starwort). In quantity between clumps of tall *Carex*, *Juncus* and other marsh plants, in a few cms of water 'bn muddy/gravelly shore at SW end of Llyn Tegid, SH83, and also in a similar habitat at NE end of the same lake, SH93, both P.M. Benoit, 1986. First and second records.

+!319/2. *Euphorbia lathyris* L. (Caper Spurge). 'Well established' on scrubby bank above estuary, Penhelig, Aberdyfi, SN69, S.C. Holland, 1971; still there, numerous plants, K.M. & P.M. Benoit, 1986. Second record, and first post-1930.

*540/3x2. *Cirsium* x *subspinuligerum* Peterm. (*C. palustre* x *C. vulgare*) (a hybrid thistle). One plant with both parents on roadside at Arthog, SH61, P.M. Benoit, 1986. First Welsh record.

Merioneth, v.c. 48 / Caernarfon, v.c. 49

+!676/14. *Poa palustris* L. (Swamp Meadow-grass). In quantity in wet marshy ground at NE end of Llyn Tegid, SH93, P.M. Benoit, 1982. Second record.

CAERNARFON, v.c. 49 (comm. M. Morris)

[4/7. *Equisetum sylvaticum* L. The record of this species in *Welsh Bulletin* No. 44, p.32, 1986 is an error for the following and should be deleted.]

+4/10. *Equisetum telmateia* Ehrh. (Great Horsetail). In fair quantity on wooded slope above Afon Llyfni, near Pont-y-cim, SH45, D. Jones, 1985. Recorded in error as *E. sylvaticum* in *Welsh Bulletin* No. 44, p.32, 1986.

+16/1. *Asplenium ceterach* L. (Rustyback). Cwm-y-llan slate quarry, c. 2km S of Snowdon summit, SH65, E. Roberts, 1948.

+28/1. *Botrychium lunaria* (L.) Swartz (Moonwort). A single plant in rough grass by path alongside golf-links, Pwllheli, SH33, A.P. Conolly, 1986.

49/1. *Aquilegia vulgaris* L. (Columbine). + One non-flowering plant only, in a cleft on a vertical rock-face in woodland in a gorge of the Avon Porthllwyd above Dolgarrog, SH76; + and on limestone crags, disused quarries above road between Marl Hall and Esgryn, SH87, R. Lewis, 1986.

+!58/5. *Argemone* L. (Prickly Poppy). Disturbed soil behind cottage, Tai-Morfa, Hell's Mouth, SH22, A.P. Conolly, 1986. First post 1930-record.

+\$59/1. *Meconopsis cambrica* (L.) Vig. (Welsh Poppy). Naturalizing in village by Chapel, Rhiw, SH22, A.P. Conolly, 1986.

+!67/3. *Brassica rapa* L. (Wild Turnip). Golf car park, Porth Dinllaen, SH24, A.P. Conolly, 1986.

!96/1. *Armoracia rusticana* P. Gaertner, B. Meyer & Scherb. (Horse-radish). + Ditch, Tai-Morfa, Hell's Mouth, SH22; + also ditch, Morfa Nevin, SH24, both A.P. Conolly, 1986.

+!98/4. *Barbarea verna* (Miller) Ascherson (American Winter-cress). Three plants near Penygroes station, and also in fair quantity in several places around the Industrial Estate, Penygroes, both SH45, D. Jones, 1986, conf. T.C.G. Rich.

+!115/4. *Hypericum calycinum* L. (Rose-of-Sharon). A few plants by the stream at Glynllifon, SH45, D. Jones, 1986.

+129/1. *Saponaria officinalis* L. (Soapwort). Abundant on roadside in Penygroes, SH45, D. Jones, 1986.

+141/1. *Arenaria serpyllifolia* L. s.s. (Thyme-leaved Sandwort). Tai-Morfa, Hell's Mouth, SH22, A.P. Conolly, 1986.

+!171/4. *Impatiens glandulifera* Royle (Indian Balsam). In several places in Glynllifon Park, SH45, D. Jones, 1986.

+!227/2. *Cotoneaster simonsii* Baker (Himalayan Cotoneaster). Woodland in gorge of Afon Porthllwyd, above Dolgarrog, SH76, R. Lewis, 1986.

+!227/3. *Cotoneaster horizontalis* Decne (Wall Cotoneaster). Woodland in gorge of Afon Porthllwyd, above Dolgarrog, SH76, R. Lewis, 1986.

+235/2b. *Sedum telephium* L. subsp. *fabaria* (Koch) Kirschleger (Orpine). Woodland in gorge of Afon Porthllwyd above Dolgarrog, SH76, R. Lewis, 1986.

+250/1. *Lythrum portula* (L.) D.A. Webb (Water-purslane). On muddy shores, Llyn Chwythlyn, SH86, J.A. Green, 1985.

251/2. *Daphne laureola* L. (Spurge-laurel). One bush only on roadside grass verge between Henefail and Eirianws Farm on B5106 road N of Ty'n-y-groes, SH77, R. Lewis, 1986.

+!276/1. *Myrrhis odorata* (L.) Scop. (Sweet Cicely). On waste ground at Village Hall, Dolgarrog, SH76, R. Lewis, 1986.

+291/1. *Carum verticillatum* (L.) Koch (Whorled Caraway). Wetland near Llangybi, SH44, P. Day & T. Blackstock, 1984.

+\$293/1. *Conopodium majus* (Gouan) Loret (Pignut). Methlem Farm near Rhydlios, SH13, A.P. Conolly, 1986. Perhaps introduced on imported soil.

+320/6. *Polygonum bistorta* L. (Common Bistort). Wet meadow, near Caernarfon, SH46, L.J. Larsen, 1986. First post-1930 record for v.c. 49.

+!329/1. *Soleirolia soleirolii* (Req.) Dandy (Mind-your-own business). Garden escape at base of walls and in rocky places in Roewen, SH77, R. Lewis, 1987.

342/1. *Populus alba* L. (White Poplar). + Three planted trees behind inn, Sarn, SH23; + and near Abersoch, SH32, both A.P. Conolly, 1986.

+!342/2. *Populus x canescens* (Aiton) Sm. (Grey Poplar). Car park, Abersoch, SH32, A.P. Conolly, 1986. Probably planted.

+!379/1. *Vinca minor* L. (Lesser Periwinkle). Woodland in gorge of Afon Porthllwyd above Dolgarrog, SH76, R. Lewis, 1986.

+!392/2x1. *Symphytum x uplandicum* Nyman (Russian Comfrey). Pwllheli sand-dunes, by golf links, SJ33, A.P. Conolly, 1986.

+!395/1. *Pentaglottis sempervirens* (L.) L.H. Bailey (Green Alkanet). On waste ground at Village Hall, Dolgarrog, SH76, R. Lewis, 1986.

+397/1. *Anchusa arvensis* (L.) Bieb. (Bugloss). On disturbed soil behind cottages, Tai-Morfa, Hell's Mouth, SH22, A.P. Conolly, 1986.

+400/7. *Myosotis sylvatica* Hoffm. (Wood Forget-me-not). Roadside near Nebo, Penygroes, SH45, D. Jones, 1986.

+!Lap/squ. *Lappula squarrosa* (Retz.) Dumort. (Burr Forget-me-not). Disturbed wooded bank, above Haulfre Gardens, Llandudno, SH78, K.M. Benoit, 1986, det P.M. Benoit. Second record and first since 1919.

+416/7. *Verbascum nigrum* L. (Dark Mullein). Two plants in Lonpabty, Bangor, SH57, P.D. Stanley, 1986.

+!489/1. *Symphoricarpos albus* (L.) S.F. Blake (Snowberry). Woodland in gorge of Afon Porthllwyd, above Dolgarrog, SH76, R. Lewis, 1986.

Caernarfon, v.c. 49 / Denbigh, v.c. 50

+497/1. *Dipsacus fullonum* L. subsp. *fullonum* (Fuller's Teasel).
Marchros, c.1.5km S of Abersoch, SH32, A.P. Conolly, 1986.

*!509/3. *Petasites japonicus* (Siebold & Zucc.) Maxim. (Giant Butterbur). Well established colony of several hundred plants on gravelly banks of stream, Afon Roe, Pontyddol, between Roewen and Pantwgan, SH77, R. Lewis, 1986. First record.

+!546/1. *Cichorium intybus* L.
(Chicory). On waste ground, Bwlch Mawr Caravan Park near Conway, off B5106, SH76, R. Lewis, 1986.

*!591/1a. *Asparagus officinalis* subsp. *officinalis* (Garden Asparagus). 'A tallish plant, the only one present', sand dunes, Pwllheli, SH33, L.J. Larsen, conf. R.G. Ellis. First definite record of the subspecies, almost certainly introduced. There is a 1929 record for this species which may refer to subsp. *officinalis* but no specimen is known to exist.

+!598/1. *Ornithogalum umbellatum* L. (Star-of-Bethlehem). Garden outcast, Tai-Morfa, Hell's Mouth, SH22, A.P. Conolly, 1986.

!600/2. *Hyacinthoides hispanica* (Miller) Rothm. (Spanish Bluebell).
+ Garden outcast, Tai-Morfa, Hell's Mouth, SH22, A.P. Conolly, 1986;
+ and in grassland, Conway Morfa, SH77, R. Lewis, 1986.

+642/5. *Orchis morio* L. (Green-winged Orchid). Short grass, Abersoch golf-links, SH32, A.P. Conolly, 1986.

643/5. *Dactylorhiza purpurella* (T. & T.A. Stephenson) Soo (Northern Marsh-orchid). Upwards of thirty plants near the Industrial Estate Penygroes, SH45, D. Jones, 1986; + and Tyn-y-mynydd, SH56, E. Roberts, 1954.

+663/28. *Carex limosa* L. (Bog-sedge). Wetland near Llangybi, SH44, P. Day & T. Blackstock, 1984.

+663/52. *Carex bigelowii* Torrey ex Schweinitz (Stiff Sedge). One plant only in gully below Clogwyn Station, Snowdon, SH65, D. Jones, 1986.

+670/6pru. *Festuca rubra* L. subsp. *pruinosa* (Hackel) Piper (a red fescue). A few plants on the Marine Drive, Great Orme's Head, near the toll gate, E. Bray, SH78, 1986.

+674/1. *Desmazeria rigida* (L.) Tutin (Fern-grass). Hell's Mouth, SH22, A.P. Conolly, 1986.

+676/12. *Poa subcaerulea* Sm. (Spreading Meadow-grass). Shore line, Glan-y-mor, c.1.5km S of Llanystumdwy, SH43, Prof. R.E. Hughes, 1986, conf. R.G. Ellis. First post-1930 record for the square.

+689/1. *Koeleria macrantha* (Ledeb.) Schultes (Crested Hair-grass). Abersoch golf-links with *Briza*, *Avenula* etc., SH32, A.P. Conolly, 1986.

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

+24/4. *Gymnocarpium dryopteris* (L.) Newman (Oak Fern). Steep wood near Bettws Gwerfyl Goch, SJ04, B. Formstone, 1986.

Denbigh, v.c. 50

+46/7. *Ranunculus sardous* Crantz (Hairy Buttercup). Single large plant in tracks made by heavy vehicles in gravelly waste ground, Chirk town tip near Halton, SJ33, J.A. Green, 1986. First post-1930 record.

+48/1. *Myosurus minimus* L. (Mousetail). Farm gateway, near Worthenbury, SJ44, B. Formstone & J.A. Green, 1986. Second record and second 10km square record for Wales.

+79/3. *Lepidium heterophyllum* Benth (Smith's Pepperwort). Disturbed ground near Llanfihangel Glyn Myfyr, SH94, J.A. Green, 1984.

*80/2. *Coronopus didymus* (L.) Sm. (Lesser Swine-cress). Garden weed, spreading from edge of cottage garden onto pavement, Bettisfield, SJ43, J.A. Green, 1986. First record.

+1153/1. *Amaranthus retroflexus* L. (Common Amaranth). Manure heap in field near Holt, SJ45, J.A. Green, 1986, det. A.L. Grenfell. Second record.

*1153/spi. *Amaranthus spinosus* L. (an amaranth). Manure heap in field near Holt, SJ45, J.A. Green, 1986, det. A.L. Grenfell. First record.

+154/2. *Chenopodium polyspermum* L. (Many-seeded Goosefoot). Edge of River Clywedog, near Sutton Green, SJ44, J.A. Green, 1986, det. A.L. Grenfell.

+154/11. *Chenopodium murale* L. (Nettle-leaved Goosefoot). Waste ground near farm pond, Fenn's Old Hall, Bronington, SJ53, J.A. Green, 1985.

+1154/14. *Chenopodium rubrum* L. (Red Goosefoot). Several plants at edge of maize field, near Wolvesacre Hall, Whitchurch, SJ54, J.A. Green, 1986. Second record.

+163/4. *Malva neglecta* Wallr. (Dwarf Mallow). Edge of lane near Ty'n Twll, Pontfadog, SJ23, D. Tinston, 1986.

189/2. *Ononis spinosa* L. (Spiny Restharrow). Banks of old railway, Abergele, SH97, D. Tinston; + near Erlas Hall, Wrexham, B. Formstone; and near Bridge Farm, Penley, SJ44, A.G. Spencer, all 1986.

+1191/1. *Melilotus altissima* Thuill. (Tall Melilot). Six large plants, 5ft high on waste ground near St Georges Quarry, Abergele, SH97, J.A. Green, 1986.

233/1. *Pyrus pyraister* Burgsd. (Wild Pear). + Single tree in hedge, Abergele, SH97, G.P. Kerfoot; + small tree in hedge near Pontfadog, SJ23, J.A. Green, both 1986.

!276/1. *Myrrhis odorata* (L.) Scop. (Sweet Cicely). On roadside bank at Nebo on the minor road between Llanrwst and Pentrevoelas, SH85, R. Lewis, 1986.

+342/4. *Populus nigra* L. s.s. (Black Poplar). Single tree in hedge near Erlas Hall, Wrexham, SJ35, G. Wynne, 1986.

+368/1. *Hottonia palustris* L. (Water-violet). Ditch choked with this species near Bronington, SJ43, J.A. Green, 1986.

Denbigh, v.c. 50 / Flint, v.c. 51

+1399/2. *Pulmonaria officinalis* L. (Lungwort). Woods near Henllan, SJ06, J.A. Green, 1984.

*538/3. *Arctium pubens* Bab. (a burdock). Roadside near Llansannan, SH96, G. Kay, 1986. First record.

*1552/2. *Tragopogon porrifolius* L. (Salsify). One plant on edge of footpath by wasteland, Towyn near Abergele, SH97, G.P. Kerfoot, 1986. Plant known here for 5 years; another plant c.0.5 miles away. First records.

1557/3. *Cicerbita macrophylla* (Willd.) Wallr. (Common Blue-sow-thistle). + Edge of layby near Afon Ceiriog, Pontfadog, SJ23, J.A. Green; and many plants on road verge near Eglwys Cross, Whitchurch, SJ44, W. Hankers, both 1986.

558/1.118. *Hieracium oistophyllum* Pugs1. (a hawkweed). Quarry near Minera, SJ25, O. Stewart, 1986.

+566/1. *Butomus umbellatus* L. (Flowering-rush). Thirty plants in fresh water ditch cleared each year by WWA, near Abergele, E of Morfa Rhuddlan, SH97, G.P. Kerfoot, 1986.

*1605/2. *Juncus tenuis* Willd. (Slender Rush). Path near canal, Chirk, SJ23, B. Davies, 1986, det. R.G. Ellis. First record.

+663/17. *Carex vesicaria* L. (Bladder-sedge). Wet ditch near Pulford Brook, Trevalyn, SJ35, J.A. Green, 1984.

*663/57x71. *Carex otrubae* Podp. x *remota* L. = *C. x pseudaxillaris* K. Richt (a hybrid sedge). Edge of pond, Sutton Green, SJ44, J.A. Green, 1986. First record.

+663/65. *Carex divulsa* Stokes subsp. *divulsa* (Grey Sedge). Roadside between Ruabon and Pen y Cae, SJ24, B. Davies, 1986, det. A.O. Chater.

663/66. *Carex divulsa* stokes subsp. *leersii* (Kneucker) W. Koch (a grey sedge). Roadside bank near Ruthin, SJ16, J.A. Green, 1986, det. A.O. Chater.

+663/68lam. *Carex muricata* L. subsp. *lamprocarpa* Celak (Small-fruited Prickly-sedge). Bank of lane near Llansannan, SH96, J.A. Green, 1986. Det. A.O. Chater.

+676/9. *Poa compressa* L. (Flattened Meadow-grass). Rock ledge in mountains, near Llanarmon Dyffryn Ceiriog, SJ13, J.A. Green, 1986.

+1713/2. *Phalaris canariensis* L. (Canary-grass). Chirk town tip, near Halton, SJ33, J.A. Green, 1986.

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

1125/1. *Agrostemma githago* L. (Corncockle). + Growing in a hedge of country lane between Pantymwyn and Rhydymwyn, SJ16, 1977; + also recorded as a garden weed in a vegetable patch, Cilcain, SJ16, both H.G. Harvey. First and Second post-1930 records for the vice-county.

*1225/5. *Rosa rugosa* Thunb. (Japanese Rose). Well naturalized behind sand-dunes, Gronant, SJ08, G. Wynne, 1983. First record.

Flint, v.c. 51 / Anglesey, v.c. 52

+!415/1. *Datura stramonium* L. (Thorn-apple). Disturbed ground on town building site, Mold, SJ26, H.G. Harvey, 1986.

+663/56. *Carex diandra* Schrank (Lesser Tussock-sedge). Mesotrophic mire, Lixwm, SJ17, P. Day, 1984. Second record.

*672/1. *Vulpia fasciculata* (Forsskal) Samp. (Dune Fescue). Mobile dune, Talacre Warren, SJO8, P. Day, 1982; + also 2 miles east in same dune system, SJ18, J.A. Green & G. Wynne, 1985. First and second records post 1930.

*687/3. *Hordeum marinum* Hudson (Sea Barley). Grazed saltings, River Clwyd just NW of Rhuddlan, SJO7, P. Day, 1986, conf. R.H. Roberts. First confirmed record for North Wales.

ANGLESEY, v.c. 52 (comm. R.H. Roberts)

16/1. *Asplenium ceterach* L. (Rustyback). Mortared wall, Llandegfan, SH57, M.R. Davies; and roadside wall near Bwrdd Arthur, SH58, P. Day, 1986.

+58/2. *Papaver dubium* agg. (Long-headed Poppy). Gardens in Cemaes, SH39, R. Barber, 1986.

+!67/jun. *Brassica juncea* (L.) Czern. (Chinese Mustard). Garden weed, Llandegfan, SH57, M.R. Davies, 1986. Second record and first post-1930.

!70/2. *Sinapis alba* L. (White Mustard). Garden weed, Llandegfan, SH57, M.R. Davies, 1986.

!84/1. *Thlaspi arvense* L. (Field Penny-cress). Garden weed, Llandegfan, SH57, M.R. Davies, 1986.

+122/2. *Elatine hydropiper* L. (Eight-stamened Waterwort). Pond near Rhosmor, Llanfaelog, SH37, P. Stanley, 1986.

+149/1c. *Montia fontana* L. subsp. *amporitana* Sennen (a blinks). Disturbed soil by track between Coed Tan-y-bryn and Bryn-y-Bar, Rhoscolyn; and wet ground on cliff top, Porth Saint, both SH27, C.D. Preston, 1986, conf. S.M. Walters.

+166/1. *Linum bienne* Miller (Pale Flax). Serpentine outcrop near Rhoscolyn, SH27, J. Roper, 1986.

168/6. *Geranium phaeum* L. (Dusky Crane's-bill). Hedgebank near Bod Deiniol, Llanbabo, SH38, R. Arnold; and hedgebank, Llangristiolus, SH47, S. Wilkinson, both 1986.

192/1. *Trifolium ornithopodioides* L. (Bird's-foot Clover). + On gravelly tracks near Borthwen and Bryn-y-bar, Rhoscolyn, SH27, C.D. Preston, 1986.

+320/15. *Fallopia convolvulus* (L.) A. Love (Black-bindweed). On waste ground, Penrhyn, Cemaes, SH39, R. Barber, 1986.

+385/1. *Gentianella campestris* (L.) Borner (Field Gentian). Near the beach, Silver Bay, SH27, J. Roper, 1986.

+!428/1. *Erinus alpinus* L. (Fairly Foxglove). On made-up soil near Church Island, Menai Bridge, SH57, R.H. Roberts, 1986.

+459/3. *Stachys arvensis* (L.) L. (Field Woundwort). Neglected field adjacent to cliff shore, Llanellian, SH49, A.W. Robson, 1954.

!460/1. *Ballota nigra* L. subsp. *foetida* Hayek (Black Horehound). Penrhyn, Cemaes, SH39, R. Barber, 1986.

+!465/5. *Galeopsis speciosa* Miller (Large-flowered Hemp-nettle). Cultivated land, Llangristiolus, SH47, S. Wilkinson, 1986.

\$484/1. *Cruciata laevipes* Opiz (crosswort). On made-up soil near Treffos, Llansadwrn, SH57, L.J. Rees, 1986.

*628/2. *Listera cordata* (L.) R.Br. (Lesser Twayblade). Conifer plantation, Newborough Forest, SH46, B.D. Wheeler, 1986. First record.

+663/57. *Carex muricata* L. subsp. *lamprocarpa* Celak (Small-fruited Prickly-sedge). Roadside verge near Llanfair-pwll, SH57, P. Day, 1986.

674/1. *Desmazeria rigida* (L.) Tutin (Fern-grass). + West side of Silver Bay, SH27, C.D. Preston; + also Bodorgan and Ty Croes Stations, SH37, P. Stanley, both 1986.

+700/1. *Calamagrostis epigejos* (L.) Roth (Wood Small-reed). Rough grassland and scrub, Mynachdy, SH39, P. Day, 1986.

