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Front Cover: *Linaria supina* (Prostrate Toadflax) which occasionally appears in post-industrial sites at Burry Port after soil disturbance. © R.D. Pryce (see page 20).

1: *Carex digitata* (Fingered Sedge) in Monmouthshire © Gemma Wood (see page 14).

2: *Tilia platyphyllos* (Large-leaved Lime) from Tintern churchyard, Monmouthshire, 3 May 2017 © Gemma Wood (see page 14).

3: *Luronium natans* (Floating Water-plantain) where cattle wade through Maendewi Pool on Dowrog, Pembrokeshire. © Stephen Evans (see page 24).

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Items for inclusion in the next Welsh Bulletin should be sent to Richard Pryce by **1st December 2017**.

Back issues over one year old are uploaded to the website. www.watsonia.org.uk/html/wales.html. Most back issues are still available on request @ £2.50 per issue; please contact Sally Whyman or Katherine Slade. **Cheques are payable to BSBI (not BSBI Wales)**. Future issues are available to BSBI members living outside of Wales by sending £2.50 in advance.

BSBI Welsh Bulletin at 100

GWYNN ELLIS

BSBI News General Editor

Congratulations to the *BSBI Welsh Bulletin* on reaching the significant milestone of one hundred issues and also to Richard Pryce who has been its sole or joint editor for over 50 of these. It has developed over the years from a short, quarto sized, cyclostyled leaflet to the multi-paged A5 booklet with full colour covers that we enjoy today. My own involvement with the *Bulletin* was mainly through editing lists of 'Welsh Plant Records' during my stint as compiler, and producing an annual report of the AGM during my time as Secretary of the Committee for Wales.

I well remember the keen anticipation with which I awaited the arrival of *BSBI News* on the doorstep and then devouring its contents at one sitting. All this was lost when I took over as editor of that journal but happily it is now the *Welsh Bulletin* which fulfils that role! There is always something of interest to read and it is good to see that 'Welsh Plant Records', first compiled by Tommy Warren Davis well over 50 years ago and published in the now defunct *Nature in Wales*, is still going strong under the expert tutelage of Stephen Coker. It is also pleasing to remember that, for most of its long history, publication of the *Bulletin* was funded by the Committee for Wales from monies raised at the Welsh AGM and other Welsh meetings, without cost to the BSBI as a whole!

On a personal note, may I say how much I enjoyed my involvement with the Committee for Wales over a span of over 20 years and how much I valued the many friendships made during that period which have endured to the present day.

May I raise a glass to toast that most excellent journal the *Welsh Bulletin* and to salute its editors; long may it, and they, continue.

Celebrating the BSBI Welsh Bulletin

GORONWY WYNNE

Recorder Emeritus

Yes, I'm older than the Welsh Bulletin!

- 1947** The Botanical Exchange Club was dissolved, and then reconstituted as the Botanical Society of the British Isles.
- 1954** The BSBI had 956 members - with 32 in Wales. There are now over 200 Welsh members out of a total membership of nearly 3000.
- 1960** A.E.Wade (of the National Museum of Wales) was the 'County Recorder' for the whole of Wales except for Meirionydd which had Peter Benoit as Recorder.
- 1962** The Committee for Wales was set up in Bangor on 22 September with the following members: P. Benoit, T.A.W. Davis, W.S. Lacey, Mr. Newman, R.H. Roberts, C.A. Sinker, B. Seddon, and I.M. Vaughan. Later, 24 members attended a dinner, and the following day there was a Field Meeting...priorities!
- 1963** First AGM, held at the National Museum in Cardiff.
- 1963** This was the year I joined the BSBI...it was also the coldest winter since 1740!
- 1964** First issue of the Welsh Bulletin...alternate issues edited by Dr Savidge and Dr Seddon.
- 1964** I was appointed Recorder for Flintshire.
- 1968** Flora-writers Conference at Aberystwyth. Speakers: John Dony, Frank Perring, David Allen, and Ted Lousely...what a wonderful quartet.
- 1969** Welsh AGM at Bangor, including a stimulating talk by Dr Bill Lacey on The Calcicole - Calcifuge Problem, which really got me thinking.
- 1970** Welsh Photographic Competition, (guess who won!).
- 1973** My first year on the Committee for Wales. I remember the softly-spoken Mr Harrison as Chairman - he always brought a living specimen of an interesting Welsh plant to the meetings.

- 1978** *Gagea bohemica* (Early Star-of-Bethlehem) found on Stanner Rocks - new to British Isles. (Rix & Woods, 1981).
- 1983** Flowering Plants of Wales by Gwynn Ellis published - very useful and a synthesis of much consultation with all the Welsh VC Recorders.
- 1991** Served on Steering Committee for proposed Welsh Botanic Garden.
- 1993** Excited that my Flora of Flintshire saw the light of day after 20 years in preparation.
- 1997** Recording in full swing for New Atlas - Tim Rich's Plant Crib most useful.
- 2000** National Botanic Garden of Wales opened at Llanarthne.
- 2002** New Atlas published...what a volume!
- 2011** Heard that Polly Spencer-Vellacott appointed Welsh Officer - her grandfather was my first boss at Cartrefle College! [Polly produced a most interesting poster on him, displayed at the 2017 Welsh AGM in Holywell].
- 2012** Retired as County Recorder - good luck to my successor, Emily Meilleur. I've now reached the exalted rank of 'Recorder Emeritus'...someone said I should have reached it long ago!!

I've enjoyed the BSBI and made many friends -- thank you all so much. Diolch yn fawr iawn.

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Welsh Officer News

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We were delighted with the response to our Rare Plant Register launch at the end of March in Aberystwyth. It was attended by staff and students from Aberystwyth University, as well as staff from Natural Resources Wales (NRW), and many of the Welsh Vice-County Recorders. Emyr Roberts, the chief executive of NRW, gave a warm welcome to Kevin Walker (BSBI Head of Science) who spoke about the value of BSBI data for conservation, including the Threatened Plant Project and Rare Plant Registers.

Later, Andy Jones and I spoke about the Rare Plant Registers and the nature of rarity. The event was discussed on Twitter, Facebook and the BSBI blogs (bsbicymru.blogspot.co.uk and bsbipublicity.blogspot.com). I also spoke to *Good Evening Wales* and *Country Focus* on BBC Radio Wales, and contributed to an item on *Heno*, S4C, along with Goronwy Wynne.

The Rare Plant Registers have been printed in varying numbers in different counties, and so if you want a copy it is always best to ask your Vice-County Recorder, as some may still have spares available. However, I am working towards getting as many as possible available online as pdfs. They are also available as checklists on the BSBI's Distribution Database (DDb), which means that Vice-County Recorders, and others with access to the DDb, can search for records of Rare Plant Registers species.

As always, I hope to work with BSBI members across Wales to complete Threatened Plant Project forms for rare species – especially *Antennaria dioica* (Mountain Everlasting), *Vicia orobus* (Wood Bitter-vetch), *Trollius europaeus* (Globeflower) or *Hammarbya paludosa* (Bog Orchid) but other Nationally Rare or Scarce species, Red Data List species, or those listed on Section 7 (previously Section 42) are very welcome. Please feel free to contact me by email for copies of the form if required.

In joining the celebration for this 100th issue of the Welsh Bulletin, I feel like a real newcomer. I joined the BSBI in 2008 and started working as Welsh Officer in 2011 – so although I've been in place for 6 years I am still a newcomer. I am honoured to work alongside the volunteers who have been working for many decades, and in contributing to the Rare Plant Register project, I really feel that we are walking in the footsteps of giants, as they say. It does also bring home the fact that in botany the work will never be

complete, as new finds keep appearing and this is one reason why Rare Plant Registers are hard to finish. There is always one more record to add!

Many of you will know Andy Jones well. It seems appropriate to mention his retirement at this time and to thank him for his tireless championing of the BSBI as NRW's Higher Plants Specialist. Undoubtedly, he will continue to be active in the BSBI and botany in Wales, but in his role with NRW he has really been able to support and encourage the work of the BSBI – and I think we might well say that the Welsh Officer role would not be what it is without Andy's work. Thank-you Andy, for all I have learned from you in the last six years.

I have also recently been reminded of the National Plant Monitoring Scheme. I will be heading out to survey my square again shortly. A glance at the map shows that there are plenty of squares still available – especially in mid Wales but a few in the north and plenty in the south. Records created as part of this scheme will also contribute to Atlas 2020. So if you haven't got a square yet, please have a look at the website and see if you can find a convenient one near you. You don't have to be an expert botanist as you can contribute at whichever level you prefer.

Calendar of Field Meetings Wales 2017

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Full details and procedure for booking are available in the BSBI Year Book 2017 and the BSBI Welsh Bulletin no. 99, February 2017.

Saturday 19 August [Training] Roses, Montgomeryshire and Shropshire.
Leader: Kate Thorne

Friday 1 - Sunday 3 September [Training] *Dryopteris* training weekend,
Caernarvonshire and Denbighshire.
Leader: Fred Rumsey

Some Lessons from Rare Plant Monitoring in Wales 1991-3

ANDY JONES, *BSBI Wales Field Meetings Secretary*

About 25 years ago, I undertook a series of monitoring surveys of Red Data Book plants for the Countryside Council for Wales (CCW) (Jones, 1992, 1993 & 1994; Jones & Evans, 1994) and it might now be a good time to re-examine some aspects of that work. The range of species and methods chosen for the surveys do not lend themselves to a very systematic analysis but we can perhaps derive some helpful ideas or suggestions from this review.

So, the first thing that perhaps stands out is how useful it is generally to have at least one fixed-point photograph of a rare plant population – especially when this shows the distribution of these plants in their wider environment. Many botanists take close-up photographs of rare plants but if there is one thing that I should like to find in some imaginary NC filing cabinet from, say, 50 years ago it would be a series of good, wide-angle, telephoto or photo-mosaic images showing the location of all these species in a representative selection of their habitats. Of course, these should also include a location (GR), date and, ideally, some landscape features in the frame that would help people refind the original points of view.*

I can attribute this guidance mainly to Peter Hope Jones (the first CCW Head of Monitoring, 1991-3) and to conversations with Dr Quentin Kay during fieldwork in 1991 to record the distribution of *Ononis reclinata* (Small Restharrow) in south Pembrokeshire. At his suggestion, I used small “flags” of fluorescent coloured card to show the location of rare plants in distant habitat shots. Some good examples of the resulting methodology may be seen in the reports on *O. reclinata* in south Pembrokeshire from 1991 and 1993, *Veronica spicata* (Spiked Speedwell) from Aberdovey in 1992, *Potentilla rupestris* (Rock Cinquefoil) from Radnorshire in 1993 and *Hypericum linariifolium* (Toadflax-leaved St John’s-wort) from Pwllheli (also 1993) and all these have been useful for repeat monitoring / surveillance and, occasionally, management.

In general, these techniques seem to work quite well for plant populations on relatively small rock outcrops. However, the results on steep, distant cliffs

* From the editors: Amgueddfa Cymru-National Museum Wales houses a large collection of photographic slides taken by botanists such as Francis Rose, which includes rare species in situ and habitat shots. View by appointment.

(e.g. *Veronica spicata* at Castell Carreg Cennen, 1992), in woodland (e.g. *Carex muricata* subsp. *muricata* at Minera, May 1992) and in flat, open habitats (e.g. *Eriophorum gracile* (Slender Cottongrass) at Crymlyn Bog, 1993; *Gentianella uliginosa* (Dune Gentian) at Penally, 1993; *Aster linosyris* (Goldilocks) in south Pembrokeshire, 1993) were evidently much less successful. (There were no submerged aquatics in the original rare plant survey but, from subsequent experience, water bodies can be added to the list of ‘problem sites for photography’). To the preceding guidance we should almost certainly add advice about the best time of visit (perhaps early spring for most woodland plants) and further recommendations for good aerial photography (not available in 1991-3). My guess is that drones will make as much contribution to rare plant monitoring as these previous techniques in the next 25 years.

In the absence of photographic opportunities, I used a lot of sketch-maps and fixed-point measurements to record rare plant distribution / abundance in 1991-3 but these seem to have had rather more mixed results. Some very detailed maps were effective for refinding inconspicuous plants (e.g. *Asparagus prostratus* (Wild Asparagus) at Giltar Head in 1991 (redrawn 1993) and *A. prostratus* at Culver Hole in 1993) but the preparatory fieldwork was also extremely time-consuming, at least in comparison to fixed-point photography. Other sketch-maps have proved less reliable and Polly Spencer-Vellacott and I spent long hours in 2013 trying, with limited success, to relocate the patterns of bare ground in my 1993 *Tuberaria* (Spotted Rock-rose) reports. (Even apparently fixed points like the outline of rock outcrops can change over 20 years!). In dense, managed woodland the problems of relocation could be even worse (e.g. *Arum italicum* subsp. *neglectum* in Cwm George, mapped in 1993). Large scale sketch-maps have their own difficulties and I think it would be better to have simply marked up some relatively widespread species (e.g. *Veronica spicata* at Craig Breidden and Cefn Rocks and Caves, recorded in 1992) on a 1:25,000 OS map.

The solution to refinding these and many other rare plants is GPS (although not, of course, 25 years ago) but I think that maps and photographs are still practically essential for inconspicuous species and populations in near-vertical habitats etc. And, then, we also need to represent location data, in order to visualise distribution / abundance and habitat boundaries etc. and to monitor and assess change. Polly did this very well for the *Tuberaria* resurvey in 2013 by plotting GPS points on a series of aerial photographs and, if this was taught to less technically-proficient botanists, I think that it could become almost standard practice for rare plant survey / monitoring (e.g. TPP forms etc.).

It remains to be asked, however, what attributes of rare plant populations (e.g. flower spikes, size-classes, cover-abundance etc.) should actually be mapped

for long-term monitoring / surveillance? Unfortunately, I gave little thought to this question in 1991-3 and generally tried to record just the distribution of individual plants or colonies and their associated habitat / species or, occasionally, a sample of their abundance-distribution in fixed-point quadrats or belt-transects (e.g. *Gagea bohemica* (Early Star-of-Bethlehem) at Stanner Rocks, 1991-3; *Deschampsia setacea* (Bog Hair-grass) at Mynydd Cilan, 1992-3; *Orobanche purpurea* (Yarrow Broomrape) at Manorbier, 1993). The generalised approach worked fairly well for some species (see above) but it was often very costly in terms of effort...and yet also seems like an oversimplification. Do we only want to know the number of individual plants? The fixed-point sampling, as so often with this approach, was abandoned after a few years, due to practical difficulties (burdensome, complex methodologies) and doubts over the sampling strategy. The design of long-term sampling methods needs further discussion and is perhaps something that can be explored again (see below).

The only instance in these surveys where I tried to map any population attribute was early on, in 1991, looking at the distribution of *Limosella australis* (Welsh Mudwort) in “size-classes” at Morfa Glaslyn and this attempt was not repeated elsewhere due to the perceived cost over benefit (there was a lot of *Limosella* and it took days). Yet I now think that the mistake was in fact choosing the wrong size-classes for such a large population and if I had simply recorded presence / absence in various sectors of the site (or some equally manageable approach) the survey could have been done in a day or so – and even been repeated if necessary. (Of course, there is nothing to prevent us from “lumping” this originally over-detailed information and doing another survey but *L. australis* has also slipped down our list of conservation priorities – along with a few other species in the original group of plants – as a perceived non-native under no immediate threat). From this perspective, the use of size-classes for monitoring seems like a promising methodology that perhaps could have worked in a few other cases.

This is just a brief re-examination of some old technical reports but there could be some subjects – and plant populations – here of wider interest. And it might be useful to compare these examples with other monitoring studies and also see how they inform further work. How do we decide what to record (perhaps with species conservation in mind) and what are the best methods to employ? If there was further interest here then it might be worth having a practical session or discussion to explore plant population monitoring around the next BSBI Welsh AGM or in the future field meetings programme. After all, even if we are not ourselves here in another 25 years, it is likely that several very interesting plants still will be – and perhaps some record that we once made of their presence.

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Monmouthshire Plants over the last 45 years

ELSA WOOD & STEPHANIE J TYLER, *joint vice-county recorders for Monmouthshire, v.c.35*

Adrian and I (EW) moved to Monmouthshire in 1973. We had planned to make a life in Scotland and to that end, Franklyn Perring furnished us with lists of plants to find and monitor. It was the early days of the Biological Records Centre (BRC) and they were as keen to get as many records of interesting plants as possible. But our circumstances changed and we had to leave Scotland and move to Tintern.

I phoned Frank to tell him and his shocked response, I can still remember: “You don’t want to go there – there’s hardly anything of interest in Monmouthshire, but I’ll send you what I have! There is a new recorder for v.c.35 – Trevor Evans. Meet him as soon as you arrive in the county. You can take over from him when he retires” (40 years later!).

We duly met Trevor who was busy compiling his own records as Arthur E. Wade (National Museum Wales) had got rid of his paper records once his Flora had been produced in 1970; and we agreed to help him look for the interesting plants in the county. A few days later, some typewriter carbon copy pages arrived in the post from the BRC. Apparently there were only three plants of interest in the county, *Tilia platyphyllos* (Large-leaved Lime), *Euphorbia stricta* (Upright Spurge) (or *E. serrulata* (Tintern Spurge) as it was then!!) (see image 7 on back cover) and *Carex digitata* (Fingered Sedge), a far cry from the interests of the wilds of Perthshire!! These were of course all in the Wye Valley that Frank had, and continued to visit, many times.

The western valleys were deemed to be of little interest because of their industrial past. Experience has subsequently shown that some of the richest habitats exist in the western valleys with rich wet flushes and woodlands!

In 1977, Steph Tyler arrived in Monmouthshire to add to the very few competent botanists that were recording in the county. Our number is still very small so do please send us your records for v.c.35.

Wade had, of course highlighted many more plants of interest than were held by the BRC. Since 1970, Monmouthshire has lost numerous species and many flower-rich sites. It is hard now to believe that *Platanthera bifolia* (Lesser Butterfly Orchid) was considered by Wade to be locally frequent on heaths, pastures and in woods. He listed it for 16 sites but now it hangs on precariously at just one.

Trevor Evans completed his Flora of Monmouthshire in 2007 in which he documents many losses and gives various reasons for these - from conifer forests planted over good habitat, too much dredging and deepening of reens on the Levels, as well as widespread agricultural intensification – from drainage to ploughing and re-seeding of species-rich grassland.

Sadly the losses continue. In the last decade, at least six good grassland sites have been lost to ploughing. Others have been lost to grassland being scrubbed over because of lack of management. Of greater concern is the steady enrichment of hedgerow bottoms and road verges from nitrates leached from fertiliser on fields or from aerial deposition and from continual mowing of verges by local authorities who leave the mowings uncollected.

Not surprisingly, our efforts tetrad-bashing are not yielding nearly as many native species per tetrad as found in the previous atlas (Preston, Pearman & Dines, 2002). We are however, finding numerous garden plants established in the wild – at the last count, we have recorded 144 species of alien or neophyte in Monmouthshire. Some of these might only occur at a couple of sites but *Crocasmia x crocosmiflora* (Montbretia), *Buddleja davidii* (Butterfly Bush), *Crassula helmsii* (New Zealand Pygmyweed), *Symphoricarpos albus* (Snowberry), *Prunus laurocerasus* (Cherry Laurel), *Vinca* spp. (Periwinkles) and *Petasites fragrans* (Winter Heliotrope) – to name but a few – are now unfortunately very widespread.

There is also an increase in halophytes inland in the county due to all the salt on the roads. *Cochlearia danica* (Danish Scurvygrass) has spread significantly since Trevor's flora of 2007 and we are now recording more *Plantago coronopus* (Buck's-horn Plantain) as well as *Puccinellia distans* (Reflexed

Saltmarsh-grass), *Sagina maritima* (Sea Pearlwort) and *Catapodium marimum* (Sea Fern-grass) on our main roads.

From those first three species from BRC we now have a Rare Plant Register with over 150 rare species and 120 scarce species in it. *Carex digitata* is still a scarce plant (see image 1 on inside front cover) and is on the Rare Plant Register (RPR). However, *Euphorbia stricta* and *Tilia platyphyllos* (see image 2 on inside front cover) are recorded in more than ten tetrads and are not scarce in the county although they are localised in their distribution. The recent revision of the RPR has allowed us to remove several species from the register such as *Anacamptis pyramidalis* (Pyramidal Orchid) as they have been found in more sites and some in the register have new sites such as *Oenanthe pimpinelloides* (Corky-fruited Water-dropwort) from one site to eight. We have, however, had to add a number of species that are declining such as *Helianthemum nummularium* (Rock-rose).

Despite the doom and gloom of species loss, there have been exciting finds. There have been discoveries of species new to Monmouthshire such as our *Clinopodium calamintha* (Lesser Calamint) at Rogiet and Julian Woodman's *Centunculus minimus* (Chaffweed) above the Usk Valley. Some species thought to be extinct (71 listed by Evans in 2007) have subsequently been re-found such as *Osmunda regalis* (Royal fern), now in five sites and *Orobanche rapum-genistae* (Greater Broomrape) in one site.

We, and our small band of committed botanists, continue to square bash and look for rare and scarce species. Overall, we think Franklyn would be pleased with our efforts! Oh, and Tintern Spurge may be Upright Spurge but we recorded it for the first time in Tintern itself (by the rubbish bin in the car park in the centre of the village) only last year – bring back the old name! We wonder what botanists in the 22nd Century will still find in Monmouthshire?

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Llangorse, then and now

JOHN CRELLIN, *joint vice-county recorder for Breconshire, v.c.42*

The first and third editions of the Welsh Bulletin in 1964 both have articles about Llangorse Lake (Llyn Syfaddon). Arguably, this is the largest natural lake in Wales as Bala Lake has an artificially raised level thanks to Thomas Telford (although it was much bigger than Llangorse even before this was done). Llyn Padarn is, perhaps surprisingly, only 0.97 km² to Llangorse's 1.5 km².

Llangorse Lake gets several mentions in the first three editions of the Welsh Bulletin and about 100 years earlier, the Woolhope Club also visited the area. The leader of the Woolhope Club went to Llangorse the day before and caught some pike, perch and eels which were taken to the Ashburnham Arms at Talgarth for consumption the next day after the field meeting. Their visit entailed approaching the lake from the slopes of nearby Mynydd Troed through several meadows “*refulgent with the Globeflower (Trollius europæus)*”.

The date was 24th May 1866 and they reported that: “*It is rather early for water plants, but one of the prettiest objects just now are the red-coloured young growing leaves of the white water lily, the Nymphæa alba, as contrasted with the light fresh green of the young leaves of the yellow water lily, the Nuphar lutæa. They grow mingled together in great abundance, and when seen in the early morning or evening sun are very beautiful.*”

These are still on the lake as is *Nymphoides peltata* (Fringed Water-lily) but there must have been much more they could have found in the lake had they tried a little harder. Meadows refulgent with Globeflower are, however, now a rarity in the area!

The very first article in Welsh Bulletin no 1 reports a major survey of Welsh lakes: “*OPERATION WELLINGTON*” *Some results of a lake Flora Survey of Wales* by B. Seddon Ph. D.’ This does not mention Llangorse by name but talks generally about the distribution of indicator species according to water nutrient level. Unsurprisingly figure 1 (reproduced on page 16) “*showing the tolerance to water conditions of the more important aquatics*” lists ten species “*Hard Water*”, that require the highest nutrient content. They range from the most discerning *Potamogeton lucens* (Shining Pondweed) to *Phragmites communis* (now *P. australis* Common Reed), which has a tolerance extending to lower nutrient levels – all these species occur at Llangorse. However, the next seven are all not found there, down to the most demanding of low nutrient

levels – *Lobelia dortmanna* (Water Lobelia). There is no doubt about Llangorse’s nutrient level status. (See figure 1 below).

On page 9 of the 1st Edition, a brief note by B. Seddon describes an obviously connected visit by six members to the lake on 6th July 1964. They found *Butomus umbellatus* (Flowering Rush), *Rumex maritimus* (Golden Dock) and “several pondweeds” – all of which have been seen recently. “After lunch, the southern extremity was examined and dense stands of tall sedges proved most puzzling.” (It is comforting for me to read that!). They later determined *Carex acuta* (Slender Tufted-sedge) and *C. elata* (Tufted-sedge) which both have recent records and *C. aquatilis* (Water Sedge) that does not.

The 3rd edition of the Welsh Bulletin, dated September 1964, has a report of an earlier visit to Llangorse as part of a weekend meeting in May 1964 when many more species were identified. Participants met for dinner in the Castle Hotel in Brecon on Friday 29th May, went to Llangorse on the Saturday and Sunday was taken up with a visit to Craig y Cilau. Their walk from Llangasty at the southern tip of the lake resulted in the observation of a range of species which were also seen at the recent AGM meeting including *Veronica catenata* (Pink Water-speedwell), *Nymphoides peltata*, *Lemna trisulca* (Ivy-leaved

Duckweed), *Perisicaria amphibia* (Amphibious Bistort) and *Rumex maritimus*. In the recent meeting there were also two additions to the then known flora of the lake, *Zannichellia palustris* (Horned Pondweed) and *Hippuris vulgaris* (Mare’s-tail). Both were seen last year at the AGM – the latter being found late in the day by Ray Woods in the same area in which it had first been found –

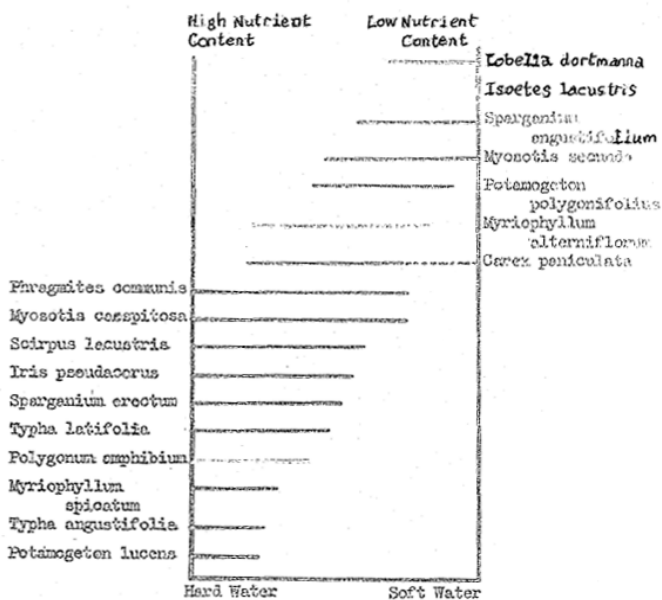


Figure 1: Tolerance to water conditions of the more important aquatics. From ‘Operation Wellington’ by B. Seddon. Welsh Bulletin no. 1.

an update on a 1993 record, I think.

Altogether, it is good to record that, from the evidence of these historical surveys, the flora of Llangorse Lake has not deteriorated significantly, despite some recent challenges from the competing interests of recreation on the lake. Indeed, none of the older surveys mention the relatively isolated *Juncus compressus* (Round-fruited Rush) population which is still at Llangasty and has been since at least 1962.

With thanks to Mike Porter who alerted me to the Woolhope meeting details.

Changes in the Carmarthenshire flora over the last half-century: notes prompted by a review of the first few issues of the BSBI Welsh Bulletin

RICHARD PRYCE, *joint vice-county recorder for Carmarthenshire, v.c.44*

The first issue of the Welsh Bulletin (January 1964) featured an article by Mrs Irene Vaughan (latterly Vice-County Recorder (VCR) for the county) entitled “*Preliminary notes on the distribution of roses in Carmarthenshire*” in which she described the broad distribution of the species and varieties current at that time in the county, whilst acknowledging that “*opinions are not firm as to the validity or limits of some of Wolley-Dod’s varieties and forms*”. Mrs Vaughan was an acknowledged expert on the genus and, following Wolley-Dod’s treatment of the taxonomy, was a referee for *Rosa* for the BSBI (she produced a useful article entitled “*Recognition of the Roses*” in the fourth issue of the Welsh Bulletin).

Wolley-Dod’s 1930-31 taxonomy was significantly revised by Melville (1975) who sank most of the varieties and followed Matthews’ (1920) lead by acknowledging that they be regarded as the result of hybridization and introgression involving a relatively small number of species. This was the approach taken by Gordon Graham and Tony Primavesi in their subsequent BSBI Rose Handbook, which appeared in 1993. All of Mrs Vaughan’s material in Amgueddfa Cymru-National Museum Wales (NMW) was re-examined by them during the preparation of this work and the imminent publication of the book also prompted a flurry of activity by George Hutchinson and myself during which we collected many rose specimens from all over the county. All the material we collected was also lodged in the NMW collections and Graham’s and Primavesi’s subsequent determinations led to a better understanding of rose distribution in the county.

In recent years, Roger Maskew, the current BSBI *Rosa* referee, has visited Carmarthenshire on a few occasions and further advanced our knowledge of some rose distributions in the north of the county. He has just published an article listing recent taxonomic and nomenclatural changes, together with a new identification key in the current edition of *BSBI News* (Maskew, 2017, 2017a). However, we are still a long way in Carmarthenshire from a comprehensive account of the genus and much work remains, particularly as agreement over the taxonomy seems still to be some way off!

In the second issue of the *Welsh Bulletin* (April 1964) the concept of recording “*grid squares*” was described in detail and the proposal made to record in detail all the “00” squares (the “00” *Survey*), ie the “*squares which occupy the bottom left-hand corner position of every 10 kilometre square*” (Savidge, 1964). We may now consider this wording to be rather quaint and in no need of explanation, but included in Mrs Vaughan’s records which were subsequently handed down to me when I took over as VCR in 1978, are field cards showing the records collected in connection with this initiative which show the results of one of the first plant distribution surveys involving grid-square sampling at a large scale. This was, of course, the precursor to the BSBI Monitoring Scheme and anticipated the way in which most recorders now approach tetrad or monad recording. In fact, issue no. 7 of the *Welsh Bulletin* (March 1966) reports on a field meeting based in Llandovery during which the SN72 and SN83 “00” squares were recorded (Vaughan and Davies, 1966). Looking at the lists they made, and examining recent aerial photos to identify habitats that now remain, it is unlikely that we would find species such as *Genista anglica* (Petty Whin), *G. tinctoria* (Dyer’s Greenweed), *Cirsium dissectum* (Meadow Thistle) and *Carex hostiana* (Tawny Sedge) with such frequency, if at all. And *Trollius europaeus* (Globeflower) has gone from all its former grassland sites in the county.

It was not until the third issue of the *Bulletin* (September 1964) that the first report of a field meeting held in Carmarthenshire appeared, led and written-up by Mrs Vaughan. This reported on a weekend based at Golden Grove with visits to “*Limestone and sand-dunes*” on 25th and 26th July 1964. The first sentence is saddening: “.....we met at Dryslwyn where the castle walls are draped with *Polypodium australe*” [*P. cambricum*] (Southern Polypody). No longer are the ruins so draped and it cannot have been long after the BSBI visit before they had been “cleaned” in order to conserve and consolidate the masonry, as I don’t remember the walls ever supporting any plants for at least the last thirty years. Today *P. cambricum* is confined to less than half-a-dozen plants on a natural rock outcrop on the castle mound.

The BSBI party continued to Carreg Gwenlais, a farm that now forms part of the Carmel Woods National Nature Reserve (NNR). In 1964, Mrs Vaughan reported that the ash-hazel woods “*are better in spring*” and the species she listed, including *Convallaria majalis* (Lily-of-the-valley) and *Lathraea squamaria* (Toothwort) are all still to be seen in the NNR today, albeit in very small populations. They are subject to conservation management so should have a better chance of survival than the Dryslwyn *Polypodium*!

On the Sunday they travelled to the coast where, at Tywyn Burrows, she related that “*with a gradual transition from one habitat to another it is full of ecological interest*” and she goes on to list many of the plants for which the site is noteworthy. Since 1964, the dunes have suffered the substantial loss of the rabbit population which maintained the short grassland necessary to sustain many of these special plants. This has resulted, over the last twenty or thirty years, in the dune grassland becoming increasingly coarse and rank with the loss of the relatively large populations of species such as *Centaurium littorale* (Seaside Centaury), *Pyrola rotundifolia* (Round-leaved Wintergreen), *Gentianella amarella* (Autumn Gentian) and *Ophioglossum vulgare* (Adder’s-tongue). *Liparis loeselii* (Fen Orchid) which was last seen at this site in 1971 has become extinct. She also lists *Gentianella uliginosa* (Dune Gentian), another species currently on the brink of extinction which, at Tywyn Burrows, depends entirely on the regular mowing of the small area of dune-grassland to which it has been confined for about the last ten years. It wasn’t seen in 2016 despite searching so I hope it hasn’t gone the same way as *Liparis*. Another major factor in habitat loss at the Carmarthenshire dunes during this time has been, until recently, the unchecked spread of *Hippophae rhamnoides* (Sea Buckthorn) which was introduced by the Forestry Commission to stabilize the dunes before conifer planting in the late 1920s and 1930s. Mrs Vaughan doesn’t mention this species in her report, neither does she in any of her field notebooks (which have entries covering the period from 1955 to 1977) so, I guess, she didn’t consider it to be a major detrimental factor at the time.

Following the engulfment and soil-alteration of much of the drier dune habitat by Sea Buckthorn, in the past few years there have been concerted efforts to remove large areas of infestation and to check its spread in all the duneland areas between Pembrey and Pendine. This has resulted in considerable disturbance as the bushes are physically grabbed-out of the sand by mechanical excavator before being burnt or composted. The bare sand initially tends to be colonised by large stands of ruderal species such as *Cirsium* spp. (thistles), *Chamerion angustifolium* (Rosebay Willowherb) and *Oenothera* spp. (Evening Primrose) but after ten years or so, Pembrey Burrows and

Tywyn Burrows have been recolonised with species for which these dune ecosystems are special. The areas have settled down to what appears to be good dune slack or dune grassland vegetation and support many of the notable species although *Hippophae* regrowth remains a constant problem. One regret I have, however, is that many of the small-scale dune hummocks which were maintained by the rabbits and which still existed locally when I first knew these dunes in the 1970s, have disappeared and been replaced by a generally much more homogenous and uniform topography which has resulted from all these changes and the accompanying necessary conservation management. However, we hope that *G. uliginosa* is still with us and that *Liparis* may one day reappear.

In south-east Carmarthenshire in particular, the last 50 years have seen profound changes in the growth of urbanisation and the post-industrial landscape. The extensive railway sidings at Burry Port Harbour were the site of *Linaria supina* (Prostrate Toadflax) (see image on front cover) which became established on the ballast and clinker, said to have been introduced from south-east England on railway vehicles. Since the 1960s, the whole area has lost, not only its sidings, but also the numerous heavy-industrial works and much has been replaced by regularly mown ‘lawns’ or open unmanaged areas which occasionally still produce a few *L. supina* plants from the soil seed-bank when the ground is disturbed. South Llanelli has seen much greater changes but the botanists of the 1960s didn’t seem to have ventured into these inhospitable places, probably thinking that plant-recording there would be unrewarding. Although there are records made by, for example, Motley in the 1840/50s and Innes c.1900, if only the 1960s botanists had visited, we might today, have been better able to judge what changes have occurred since that time.

Losses since the 1960s may be difficult to judge because of the paucity of contemporary records. However, species-gains or population increases are better documented with the arrival of species such as *Helminthotheca echioides* (Bristly Oxtongue) and *Lactuca serriola* (Prickly Lettuce) in the early 1900s but not really spreading until the 1990s. *Conyza floribunda* (Bilbao Fleabane) and *C. sumatrensis* (Guernsey Fleabane) were first recorded in the early 2000s, the former spreading, often abundantly, to several urban areas in the county within 10-15 years. Most recently, *Lactuca virosa* (Giant Lettuce) was first recorded ‘in the wild’ this year.

The uplands in the north-east of the county were the subject of a BSBI field visit in 1967 to Penrhiwiar. The leader, Mrs Vaughan, described in Welsh Bulletin 11, how: “*on the summit, at about 1400’*, the leader showed how a

most interesting community of plants including a prolific area of *Viola lutea* (Mountain Pansy), and also *Vicia orobus* (Wood Bitter-vetch) (see image 8 on back cover), *Genista tinctoria* (Dyer's-greenweed), *Serratula tinctoria* (Saw-wort), with smaller groups of *Gymnadenia conopsea* (Fragrant Orchid) and *Platanthera chlorantha* (Greater Butterfly-orchid), had severely reduced, in some cases to extinction, by the complete change in usage since the farm, with its rotation of winter grazing and late-year hay-crop, had been planted up by the Economic Forestry Group. Coarse grasses, mainly *Molinia*, had choked and smothered the whole area” [original text corrected by RDP]. In the afternoon, they moved on to the site of the Rhandirmwyn School Nature Reserve “where the oakwoods have relict pockets of *Ulmus glabra* (Wych Elm) in the cwms and patches of *Tilia cordata* (Small-leaved Lime) and *Populus tremula* (Aspen).” The whole site is now, of course, completely flooded under the Llyn Brienne Reservoir. Oh, to be able to turn back the clock!

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Specimens of new plants from Monmouthshire

STEPHANIE J TYLER, *joint vice-county recorder for Monmouth, v.c.35*

On 2 June whilst doing a Waterways Breeding Bird Survey along the River Monnow at Osbaston near Monmouth (in SO41W), I encountered about 50 plants of an umbellifer with which I was unfamiliar. At first, I thought they could be *Oenathe pimpinelloides* (Corky-fruited Water-dropwort) which had been found less than 1km away on Vauxhall Meadows in Monmouth by Pat Johns about 10 years ago and identified by Trevor Evans. The very narrow leaves, almost entire lack of bracts below the umbels and hollow stems confused me though. I showed Elsa Wood the plants some days later and we agreed it had to be an *Oenanthe* and we decided that it must be *O. silaifolia* (Narrow-leaved Water-dropwort). I let Heather Colls know of its location and she visited the site too and was in agreement.

O. silaifolia has not been recorded in Monmouthshire v.c.35 or elsewhere in Wales but it does grow in the Lugg Meadows in Herefordshire.

On 16 June, I returned to the site to collect some forming fruit and, according to Stace, the plants are indeed *O. silaifolia*, the first record for Wales. I will collect a plant to check the rootlets and shape of tubers.

The second plant I brought to the AGM was an *Allium* that I found on 9 May, not yet in flower, but with broad leaves. Many plants were growing at the edge of a track near White Castle (SO31T) and I collected one so that I could grow it on at home. When it flowered it was clearly *Allium scorodoprasum* (Sand Leek). It was presumably a garden throw-out which had become established, rather than native, although the species does occur in northern England. This record is the first for Monmouthshire.

Then and Now - the June 1963 Pembrokeshire Field Meeting 'revisited' in 2017

STEPHEN EVANS, *vice-county recorder for Pembrokeshire, v.c.45*

In October 1962, the Welsh Regional Committee of the BSBI was formed and at the Annual General Meeting in September 1963, the late Tommie Warren Davis became the Field Secretary for Wales. He joined the Society in 1958 and became the first resident Recorder for Pembrokeshire until his demise in 1980.

The Welsh Regional Bulletin No. 1, produced in January 1964, has an all too brief note by Tommie on a week-long Pembrokeshire field meeting, based in Haverfordwest, from 15th to the 22nd June 1963. The week was attended by 18 botanists, of whom about half were from Wales, and many classic Pembrokeshire habitats were studied. Fortunately, although the note in Bulletin No. 1 was a mere 2 paragraphs, Tommie's Botanical Diaries include a two-page description of some of the week's finds. The following article attempts to 'revisit' one or two of the sites, such as Dowrog Common (Dowrog), and to discuss how the main species observed by the BSBI members have fared over the intervening half century.

At the time, Dowrog was part of a Site of Special Scientific Interest and was owned by the Church in Wales. By the 1970s, ownership was transferred first to the University of Wales and later to the National Trust. It had become a nature reserve of the Wildlife Trust when owned by the University and from the outset, the BSBI recorder for Pembrokeshire has served on the management committee for the reserve.

St. David's Head and Dowrog, near St. David's, were visited on 15th June 1963. It is odd but there is no mention of any of the notable plants of St. David's Head whereas many finds were reported from Dowrog. *Pilularia globulifera* (Pillwort) was found in the small South Pond where it was thought, at the time, to be the first record in Pembrokeshire since its discovery at Dowrog, eighty years earlier. Specimens were collected from this small disused clay-pit for the herbaria at the Natural History Museum, London (NHM) and the National Museum of Wales (NMW). Since the 1970s a huge amount of effort has gone into restoring traditional rough grazing by cattle and ponies supported by patch burning. This pastoral activity combined with digging ponds down into the clay underlying the wet heath, fen and swamp, has led to a large increase in populations of *P. globulifera* on the site.

It is now known that the earliest Pembrokeshire record of this diminutive fern was made at Porthmelgan stream, St. David's Head, in 1840 where livestock grazing had ceased by 1963. This probably explains why it was not found by the BSBI on the 15th June that year. Grazing by ponies was later re-introduced by the National Trust and *P. globulifera* subsequently re-appeared in 2014 on the livestock trampled margins of a small re-excavated pond after an absence of fifty-five years. Pembrokeshire is an important British locality for this unusual fern which has been recorded in 16 monads since the year 2000. Today, Dowrog remains its stronghold in the county.

Luronium natans (Floating Water-plantain) was also collected on the same day from one of the small disused clay-pits by Brian Seddon from NMW who was, at the time, undertaking a Lake Survey of Wales. *Luronium* had first been found on Dowrog in 1905. In June 1927, it was described by Bertram Lloyd as ‘growing very lush in the mill-leaf on Dowrog marsh ... in some parts the foliage quite covering the whole leaf, thickly.’ It has not been found again in the old mill-leaf, lengths of which have been cleared out in an attempt to see if it would return. Nor has it been found in any of the small clay-pits which have been opened up or in the many new small pools that have been dug into the underlying clay. In 1997, however, Andy Jones found the submerged, isoetid form in the main Maendewi Pool on Dowrog where it had been found by Bertram Lloyd in 1928. A major clearance of silt from this shallow pool which is set in extensive fen and swamp vegetation in a large depression on the common, had taken place in the early 1990s and it seems likely that this allowed *L. natans* to flourish. Between 1999 and 2006, floating leaves and flowers were regularly observed and they were particularly abundant in the parts of the pool where cattle waded through, grazing the *Menyanthes trifoliata* (Bogbean) and *Equisetum fluviatile* (Water Horsetail) swamp, as they went from farmyard to summer grazing on the common (see image 3, inside front cover). The other Pembrokeshire stronghold of *Luronium* is Ramsey National Nature Reserve and this RSPB island which has been well grazed in recent years with cattle, sheep, deer and ponies, as well as rabbits, has good populations of plant along with *P. globulifera* in the island’s numerous small pools.

Flowering *Utricularia minor* (Lesser Bladderwort) was also found with *L. natans* and *P. globulifera* in the same disused clay-pits at Dowrog during the 1963 BSBI visit. It had first been recorded from the common in 1900 and, in 1927, it was described as ‘Much in big clots in the small “culm” (clay) pits near the mere’ known as Maendewi Pool. Dowrog remains the best place to find this plant in Pembrokeshire but the 1963 record is one of very few observations of it in flower.

Perhaps the most exciting discovery of the whole week’s recording was of *Carex appropinquata* (Fibrous Tussock-sedge) in a swamp of *C. paniculata* (Greater Tussock-sedge) by Maendewi Pool on Dowrog. It was new for Pembrokeshire and Wales. A specimen was collected by Tommie Warren Davis and was passed to the herbarium at NMW where, in 1965, it was determined by Brian Seddon. Confirmation was by Dr. A. Melderis who commented that mature fruit would have been desirable. Seddon and Davis published the find in **Plant Notes, BSBI Proceedings** in 1965 and in the plant

section of **Field Notes, in Nature in Wales** in 1966 with the comment that ‘*It is surprising that so conspicuous a plant should have hitherto escaped notice in a locality well explored by a number of well-known botanists since the beginning of the present century.*’

That comment turned out to be prophetic as although some visiting and resident botanists, including the author, managed to re-find the plant, there were increasing records of *Carex diandra* (Lesser Tussock-sedge) from the same locality but no *C. appropinquata*. The matter was resolved in June 1989 when R.W. David (Dick David) journeyed especially to Pembrokeshire to map the extent of the sedge which had become a much treasured member of the Pembrokeshire Flora. Dick David explored the fen and swamp around Maendewi Pool with the author and it was soon revealed that an error of identification had been made. Tussocks of *Carex diandra* forma *pseudoparadoxa* with compound, pedunculate, proximal spikes had been mistaken for the much rarer *C. appropinquata*. Herbarium specimens of this species from Pembrokeshire were subsequently re-examined and correctly identified as *C. diandra*. The author’s short article titled ‘***Carex appropinquata* in Pembs., v.c.45 a misidentification for *C. diandra***’ was included in **BSBI News** in December 1989.

To this day, the *Dactylorhiza* spp. (Marsh-orchids) of Pembrokeshire present identification difficulties so it is no surprise that Tommie’s Botanical Diary entry for that week in June 1963 mentions problems encountered with identifying them. He writes ‘*D. incarnata near Penally is probably ssp. incarnata, which may occur on Dowrog and in the W. Cleddau valley near Letterston. D. traunsteineri was also suspected in both these localities and on the Porthmelgan stream. We did not attempt to sort them out, but there are forms which are not typical D. praetermissa which occur with them.*’ It is fascinating to see that Tommie subsequently crossed out *D. traunsteineri* (Narrow-leaved Marsh-orchid) after re-visiting Dowrog in June 1964 to confirm its identification – and wrote alongside ‘*No! purpurella*’. In June 2009 the author along with Bradford Botany Group went through a similar process after finding a single spike of what could possibly have been *D. traunsteineri* in a *Juncus acutiflorus* (Sharp-flowered Rush) sward on Dowrog or was it perhaps merely a peculiar *D. purpurella* (Northern Marsh-orchid)? In 1990, David Lang was very confident that he had found a single plant of *D. traunsteineri* in species-rich fen at Castlemartin, in the south of Pembrokeshire, when accompanied by the author and a well-known naturalist and local BSBI member, Jack Donovan. He discovered it during a marsh-orchid tour of Wales when he also collected florets from the known population

at Cors Erddreiniog on Anglesey. Dick Roberts came down from Anglesey to see the plant at Castlemartin the following year but unfortunately 'good' *D. traunsteineri* could not be found. As a result, although David Lang's record was published, there remains some uncertainty about its true status in Pembrokeshire!

Jack Donovan had been with the 1963 BSBI party on Dowrog, and also kept a natural history diary. In addition to mentioning *D. praetermissa* (Southern Marsh-orchid) and *D. maculata* (Heath Spotted-orchid) and the erroneously named *D. traunsteineri*, he lists *Platanthera bifolia* (Lesser Butterfly-orchid) as being seen on that day. In the 1940s Lillian Rees described it as '*In profusion, together with the Yellow Star of the Moors* (Narthecium ossifragum), *on Dowrog Moor. ...*' It used to be scattered in heathy fields and unenclosed moors across the county but in the last few years has dwindled. It is now confined to the St. David's peninsula where it can no longer be described as occurring in profusion at its last sites on the Dowrog and St. David's Airfield Heaths – see **Welsh Bulletin No. 92**. 'The Lesser Butterfly-orchid/Tegeirian Llydanwyrdd *Platanthera bifolia*, in Pembrokeshire (v.c.45)'

Other sites visited from the base at Haverfordwest included Mynydd Preseli where *Hymenophyllum wilsonii* (Wilson's Filmy-fern) was found by Tommie and S.G. Harrison to be frequent in crevices between boulders near the source of the Afon Cewgyl below Carnmeini on 19th June 1963. The history of this fern in Pembrokeshire is interesting, as, although it was first found in 1857, it was not until 100 years later that it was found again by Arthur Wade on Mynydd Preseli. The year after the BSBI meeting Tommie and Jack Donovan found a further population amongst boulders on one of the Preseli tors on the east side of Carnmeini and in 1965 Francis Rose discovered it at Tycanol Wood amongst the rocks of a large tor, Carn Llwyn. That tor was surrounded by oak woodland and Tycanol Wood subsequently passed to the Pembrokeshire Coast National Park Authority and became a National Nature Reserve (NNR) on account of its rich lichen, bryophyte and fern communities. Francis also found *H. tunbrigense* (Tunbridge Filmy-fern) and *Dryopteris aemula* (Hay-scented Buckler-fern) at Tycanol which he called a 'Wistman's Wood' type oakwood because of the stunted trees and abundance of large igneous boulders and rock outcrops. Since 1965, *H. wilsonii* and *H. tunbrigense* have been discovered amongst damp crevices of many other of the spectacular tors and associated block-fields of Mynydd Carningli and Mynydd Preseli. It is more than a little pleasing that some fifty years after that 19th June BSBI field trip, *H. wilsonii* is still scattered amongst the linear block-fields of Cerrig Pant y Cadno in the upper reaches of the Afon Cewgyl where it grows

alongside *Huperzia selago* (Fir Clubmoss) and *Phegopteris connectilis* (Beech Fern).

The dune systems at Stackpole, now owned by the National Trust and part of a NNR, and the dunes at Newport, Whitesands and Tenby were also visited by the BSBI group in June 1963. Apart from reporting much *Hyocyanus niger* (Henbane) with *Verbascum thapsus* (Great Mullein) spread over a considerable area at Stackpole Warren on 22nd of that month, Tommie's diary makes scant mention of what was examined during the excursions to these coastal habitats. *H. niger* has since re-occurred on six occasions at Stackpole Warren, the last in 2003. It still 'turns up' erratically elsewhere around the coast of Pembrokeshire and its appearance almost always follows disturbance of the sub-soil in the previous year. Enough is known about such sporadic population explosions to justify another article for the Welsh Bulletin – perhaps for issue 101!

Vice-county 50 Denbighshire 'Then and Now'

DELYTH WILLIAMS, *vice-county recorder for v.c.50, Sir Ddinbych*

There is a short report of a field meeting in Welsh Bulletin No 1 written by J.P. Savidge entitled 'Loggerheads and Llanferres'. It begins "*The main purpose of this meeting held on 27th July [1963] was to examine the flora of two limestone areas in Denbighshire. The morning was spent looking at the vegetation of an old limestone quarry, beech wood and limestone outcrop just east of Loggerheads...in the afternoon the area around the Pot Hole Valley near Llanferres was explored.*"

The article describes that '*some attention was paid to the apomictic groups Alchemilla (Lady's-mantles), Hieracium (Hawkweeds) and Rubus (Brambles) and to the recognition of a number of species of Compositae*'. It goes on to list '*some of the more interesting species seen*'.

Are those lovely plants still there? It seems like a good idea to check the records. The two tables show the plants listed at both sites on that day along with recent (mostly within the last five years) records for those sites.

Grid references were not given in the article and so it is difficult to ascertain the exact route taken. Local knowledge leads me to suggest where they might have gone which is included on the tables in terms of 1km sq (monad) records.

Pseudofumaria lutea (Yellow Corydalis) and *Geranium endressii* (French Crane's-bill) were recorded as being 'near Inn', which is still there as 'The Loggerheads' (SJ198 625). No records for the former but a single record for the latter dates from 1952 in SJ1962. There seems also to have been perhaps a slip of the pen! *Geranium sylvaticum* (Wood Crane's-bill) was recorded as 'blood-red cranesbill'; I have assumed this to be *Geranium sanguineum** (see table) (Bloody Crane's-bill).

Taxa recorded in 1963	Presence/absence (recorded within last 5 years) - km sq				v.c.50 Rarity status & Comments
	SJ1961	SJ1962	SJ2061	SJ2062	
<i>Leontodon hispidus</i> (Rough Hawkbit)	Y	Y	Y	Y	Frequent
<i>Helianthemum nummularium</i> (Common Rock-rose)	Y	Y	Y	0	Local
<i>Gentianella amarella</i> (Autumn Gentian)	0	0	Y	0	Rare. SJ200 615. Current record. Probably the same site
<i>Inula conyzae</i> (Ploughman's- spikenard)	0	Y	0	0	Near Scarce. SJ199 629. Current record states 'Near rockface', unlikely to be same site.
<i>Geranium sanguineum</i> (Bloody Crane's-bill)*	0	Y	0	0	Rare. SJ198 628. Current record states 'On top of main rockface', unlikely to be the same site.
<i>Hypericum calycinum</i> (Rose-of-Sharon)	0	0	0	0	Scarce Neophyte. NSJ1962 in 1951. SJ199 627 'above rockface' in 1997, unlikely to be the same site
<i>Pseudofumaria lutea</i> (Yellow Corydalis)	0	0	0	0	Local Neophyte.
<i>Geranium endressii</i> (French Crane's-bill)	0	0	0	0	Local Neophyte. SJ1962 in 1952.

Table 1: Site 1 - East of Loggerheads

Of all the plants listed, only two are not either present in the nearby limestone area or present. They are *Centaurea scabiosa* (Greater Knapweed) and

Campanula trachelium (Nettle-leaved Bellflower). As far as can be seen, there have been no records for either from that site since.

All of this area has been botanised since then, but just because we have not seen some of the taxa does not mean to say that they are not still there. We shall have to go out and have another look.

Taxa recorded in 1963	Presence/absence (recorded within last 5 years) - km sq							v.c.50 Rarity status & Comments
	SJ1957	SJ1958	SJ1959	SJ1960	SJ2058	SJ2059	SJ2060	
<i>Campanula latifolia</i> (Giant Bellflower)	0	0	0	0	0	0	0	Near Scarce. SJ205 615 nearest current record
<i>Campanula trachelium</i> (Nettle-leaved Bellflower)	0	0	0	0	0	0	0	Rare.
<i>Knautia arvensis</i> (Field Scabious)	0	0	0	0	0	0	0	Frequent. Not uncommon in adjacent monads
<i>Centaurea scabiosa</i> (Greater Knapweed)	0	0	0	0	0	0	0	Rare.
<i>Geranium pratense</i> (Meadow Crane's-bill)	0	0	0	0	Y	0	0	Near Scarce.
In the grikes of the limestone pavement:								
<i>Gymnocarpium robertianum</i> (Limestone Fern)	0	Y	Y	0	Y	0	0	Scarce. SJ2059 in 1978
<i>Cystopteris fragilis</i> (Brittle Bladder-fern)	Y	Y	0	0	0	0	0	Near scarce.
<i>Asplenium trichomanes</i> (Maidenhair Spleenwort)	Y	Y	Y	Y	0	Y	Y	Common
<i>Asplenium adiantum-nigrum</i> (Black Spleenwort)	0	Y	0	0	0	0	0	Common. SJ2060 in 1972
<i>Asplenium ruta-muraria</i> (Wall-rue)	Y	Y	Y	Y	Y	0	Y	Common.
<i>Carduus nutans</i> (Musk Thistle)	Y	Y	Y	0	Y	0	0	Frequent.
<i>Paris quadrifolia</i> (Herb-paris)	0	0	0	0	0	0	0	Near Scarce. SJ1962 and SJ2061 nearest current records

Table 2: Site 2 Pot Hole Valley, near Llanferres

Second county record of Maidenhair Fern (*Adiantum capillus-veneris*) in Flintshire

GAIL QUARTLY-BISHOP

On 9th October 2016, I was leading a bryophyte meeting at Dyserth waterfall, near Prestatyn, for North Wales Plant Group[†]. Having investigated all the accessible parts of the waterfall, we were bemoaning our inability to reach the back wall where the lushest vegetation was. I was speculating whether the water was too deep for my waders when a member of our party produced some binoculars. We failed to identify any additional bryophytes with this new equipment, but we did spot something interesting.

On the left of the waterfall, I saw a fern which to my eyes looked exactly like Maidenhair Fern (see image 6 on inside back cover). I have never seen this species in the wild, but we used to have a plant in the bathroom when I was a child, so I'm familiar with its habit. We passed the binoculars around and everyone agreed it was Maidenhair Fern. But how to get a specimen to confirm our ID? It was too high to reach from the bottom of the waterfall and too low to reach from the top of the cliff.

Happily, Mike Klymko from North Wales Wildlife Trust was there that day and, being local, knew that some tree work was planned for the area around the waterfall later that winter. The work was to be undertaken by specialist contractors including abseiling chainsaw operatives (!). Mike asked nicely and the contractors were able to pick a frond from the mystery plant for closer inspection.

Maidenhair Fern is considered to be native in coastal south-west England, south Wales, the Isle of Man and western Ireland, where it grows on humid sea cliffs on calcareous rock, particularly where there are tufa deposits (Page, 1997). There are outlying native sites on the limestone of south-west Cumbria and north-west Lancashire. Outside these areas, plants have been found on damp walls, in heated greenhouses etc, including the first county record for

[†] North Wales Plant Group are affiliated with the British Bryological Society and organise field meetings across North Wales focusing on non-flowering plants, including bryophytes, horsetails and ferns.

Flintshire in 2007, found on the greenhouse wall at Mostyn Hall by Mark Woods.

Our plant at Dyserth was found on the back wall of a waterfall in a limestone area on a river which is known to produce tufa elsewhere in its catchment (see image 5 on inside back cover). The site is within 4 km of the sea and appears to replicate exactly the native habitat of this species. Could it be that this is a native site for Maidenhair Fern?

I think not. If North Wales were part of the native range for Maidenhair Fern, I would expect it to have been found on the north-facing limestone sea cliffs around Llandudno, or on Anglesey, which are extremely well-known botanically. But there are no other records. The Dyserth site is surrounded by houses. I suspect that someone locally has a Maidenhair Fern in their bathroom, just as my parents did, and that a stray spore found its way to the waterfall.

Whatever the origin of the Dyserth plant, it made for an interesting find and a new dot on the distribution map! (Preston, Pearman & Dines, 2002, see map on inside back cover).

References

Page, C.N. (1997) *The Ferns of Britain and Ireland* (Second Edition). Cambridge University Press.

Preston, C.D. Pearman, D.A. & Dines, T. (Eds.) (2002) *New Atlas of the British and Irish Flora*. Oxford University Press.

First record of *Viola x scabra* in Anglesey

IVOR & JANE REES

During his time as Welsh Officer and based on his experience in southeast Ireland Paul Green suggested to Ian Bonner that in Anglesey we should be recording *Viola odorata* (Sweet Violet) to variety level. It had not been done previously, so in March 2017 we went to several of the places in SW Anglesey where we had previously seen white flowered *V. odorata*.

Aided by the new BSBI Handbook 17 on Violas (Violets) by Porter and Foley, the patches of white ones in 5 monads (3 tetrads) in this part of Anglesey were all determined to be *V. odorata* var. *dumetorum*. However, while checking those in a wood called Cau Aur, near Brynsiencyn, which has grown over rubble mounds from past limestone quarrying, a patch of blue violets was noticed. These had white centres to the corolla and only some of the characters of *V. odorata*. After photographing them and checking that they lacked scent, a small piece with a few leaves was taken for closer study.

Under the microscope, the leaf petioles of the blue flowered plant were seen to have hairs that were longer and less uniformly adpressed than in the white *V. odorata* var. *dumetorum* from the same wood, but shorter and less patent than descriptions of *V. hirta* (Hairy Violet). From this crucial character and others given in the Viola Handbook we reached the conclusion that we had found the hybrid *V. x scabra* F.Braun (= *V.odorata* x *V. hirta*). This was confirmed by Mike Porter, author of the relevant section of the new Viola Handbook.

Later Nigel Brown collected a couple of leaves of *V. hirta* for us from a site in eastern Anglesey where it has been regularly recorded. This allowed direct comparison between the petiole hairs of the hybrid and both parents (see image 9 on back cover showing composite digital microscope image).

The find at Cau Aur (Grid Ref. SH 4900 6658) is the first record of this hybrid in v.c.52. Based on the BSBI Distribution database (DDB) (checked 20/04/17) it had also not been recorded in recent decades anywhere else in Wales. The DDB indicates that, in North Wales, it was recorded twice in the 1970-86 period from a single hectad in Denbighshire (SH87). There are also pre-1930 records in two hectads in South Wales (Glamorgan, ST48 & Monmouthshire ST17).

Reference

Porter, M. & Foley, M. (2017) *Violas of Britain & Ireland*. BSBI handbook No 17. BSBI.

Welsh Plant Records 2016

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

The following symbols are used:

- * to indicate a new v.c. record; ⊗ to indicate an updated VCCC record; ℞ to indicate a record demonstrating the rediscovery of a taxon published as extinct in the VCCC
- + to indicate a new hectad record; ⊕ to indicate an updated hectad record; ⊖ to indicate a new tetrad record
- † indicates archaeophyte; ‡ indicates neophyte; © indicates casual.
- †‡© before the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual at least somewhere in the British Isles.
- †‡© after the species number: to indicate that the species is regarded as an archaeophyte, neophyte or casual generally within the vice county, different from that of the British Isles.
- †‡© before the record: to indicate a species which although a native, archaeophyte or neophyte at least somewhere in the vice county, is not so in the locality recorded.
- [] to indicate that the record, previously published in error, should be deleted.
- to indicate an update to a rare or scarce taxon.
- Ø to indicate that the taxon is now believed to be extinct in the locality cited.
- N, S, E, W indicate points of the compass.

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

The Vice-county Recorders from 1/5/2017 are:

MONMOUTH, v.c.35; Dr S.J. Tyler, Yew Tree Cottage, Lone Lane, Penallt, Mons, NP25 4AJ; steph_tyler2001@hotmail.com & Mrs E. Wood (*all correspondence to Dr Tyler*).

GLAMORGAN, v.c.41 (West); Mr B. Stewart, 36 Pencoed Road, Gorseonion, Swansea, SA4 4FU. 01792 539447; moonmoths@virginmedia.com

GLAMORGAN, v.c.41 (East); Mr J.P. Woodman, c/o CCW, Rivers House, St Mellons Business Park, Fortran Road, St Mellons, Cardiff, CF3 0EY (Please mark PERSONAL). 029 2077 2400; juwood66@gmail.com
BRECON, v.c.42; Mr M. Porter, Aberhoywy Farm, Cyffredyn Lane, Llangynidr, near Crickhowell, Powys NP8 1LR. 01874 730354; mikechris1@btinternet.com & Dr J.R. Crellin; jrc@crellin.org.uk (all correspondence to Mr Porter).
RADNOR, v.c.43; Miss E.R. Dean, Enmore House, Croft Lane, Kingsland, Leominster, Herefordshire, HR6 9PP. 01568 780769; erd@btconnect.com & Mrs S.M. Spencer (*all correspondence to Miss Dean*).
CARMARTHEN, v.c.44; Mr R.D. Pryce & Mrs K.A. Pryce, Trevethin, School Road, Pwll, Llanelli, Carmarthenshire SA15 4AL; pryceeco@aol.com
PEMBROKE, v.c.45; Mr S.B. Evans, Glan-y-Mor, Dinas Cross, Newport, Pembrokeshire SA42 0UQ. 01348 811539; glanymor.dinas@gmail.com
CARDIGAN, v.c.46; Mr S.P. Chambers MONTGOMERY, v.c.47; Dr A K Thorne, Churton House, Church Pulverbatch, Shropshire, SY5 8BZ. 01743 718270; k.thorne@btinternet.com & Mrs G Foulkes (*all correspondence to Dr Thorne*)
MERIONETH, v.c.48; Mrs S.E. Stille, 48 Foregate, Fulwood, Preston, PR2 8LA; mossysal@btinternet.com.
CAERNARFON, v.c.49; Mrs W.N. McCarthy, 5 Tyn-y-coed, Great Orme, Llandudno, Conwy LL30 2QA. 01492 877451; Wendorme@aol.com
DENBIGH, v.c.50; Mrs D. Williams, Bryn Siriol, Graigfechan, Ruthin, Denbighshire, LL15 2HA. 01824 702196; delyth@siriolbryn.co.uk.
FLINT, v.c.51; Ms E. Meilleur, 1 Fron Goch, Llanberis, Gwynedd, LL55 4LE. 01286 870173; emilytheameilleur@gwynedd.gov.uk or emilytmei11@gmail.com.
ANGLESEY, v.c.52; Mr I.R. Bonner, 15 Littledean Hill Road, Cinderford, Gloucestershire, GL14 2BD. bonner@caetrefor.co.uk and Mr N.H. Brown, Granary Cottage, Llanddyfnan, Anglesey, LL77 8JA. N.brown@bangor.ac.uk

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

+c1-1-cot **Chara contraria** (Opposite Stonewort). Pools and runnels in disused limestone quarry, Penhow Quarry, ST42 91, E. Wood & S. Tyler, 22nd Apr 2016.
⊗c1-1-vul **Chara vulgaris** (Common Stonewort). Lagoon in limestone quarry, Livox quarry, ST54 97, E. Wood, 7th Jul 2016.
+011/1.1×2. **Polypodium ×mantoniae**. Along narrow country lane, Cwmcarnvan, ST474 063, E. Wood & A. Wood, 30th Jan 2016; (+) Govilon, SO26 13, E. Wood & S. Tyler, 0000.
+028/13.04. **Ranunculus sardous** (Hairy Buttercup) (Blodyn-y-menyn Blewog). Entrance to field opposite the Hall, Great pool hall, SO37 18, S. Tyler, E. Wood & A. Wood, 16th Jun 2016.
+028/13.22. **Ranunculus trichophyllus** (Thread-leaved Water-crowfoot) (Crafanc-y-frân Feinddail). Pond, Pantyreos Farm, ST26 91, E. Wood & S. Tyler, 9th Jun 2016; (+) lagoons in disused limestonequarry, Penhow Quarry, ST42 91, E. Wood & S. Tyler, 22nd Apr 2016.
+036/1.1.b. **Urtica dioica subsp. galeopsifolia**. Grosmont castle moat, SO40 27, E. Wood & A. Wood, 4th Jul 2016.
046/05.1.b. **Stellaria nemorum subsp. montana** (Serenllys-y-coed Cymreig). By the River Wye below the A466, North of Tintern, SO536 015, E. Wood & A. Wood, 17th Apr 2018, a new tetrad record for this RPR species.
+046/10.8. **Sagina maritima** (Sea Pearlwort) (Corwlyddyn Arfor). Along the dual carriageway -the march of the halophytes!!, nr llanellen -A40, SO31 11, S. Tyler & J. Winder, 5th May 2016.

- +047/1.15. **Persicaria mitis** (Tasteless Water-pepper) (Y Dinboeth Ddi-flas). Edge of lagoons, Penhow Quarry, ST42 91, E. Wood & A. Wood, 8th Sep 2016.
- *047/4. are. **Polygonum arenarium** (Lesser Red-knotgrass) (Y Canclwm Coch Bach). Barley stubble, Penallt, SO51 08, S. Tyler, 3rd Oct 2016.
- +051/1.06×07. **Hypericum ×desetangii (H. perforatum × H. maculatum)** (Des Etangs' St John's-wort) (Eurinllys Des Etangs). Lane in village, Pwllypant, ST15 89, E. Wood & A. Wood, 6th Jul 2016.
- +057/1.01. **Viola odorata var. imberbis** (Sweet Violet) (Fioled Bêr). Along roadside, Penhow Quarry, ST40 91, E. Wood & S. Tyler, 22nd Apr 2016.
- +061/2.10×11. **Salix ×reichardtii**. Hedgerows, Mairdiff Abergavenny, SO31 13, E. Wood & S. Tyler, 9th Nov 2016; (+) hedgerows, Three Castles, SO39 16, S. Tyler, E. Wood, 16th Jun 2016; (+) hedgerows, Skenfrith, SO44 20, E. Wood & A. Wood, 4th Jul 2016.
- +061/2.11×12. **Salix ×multinervis**. Around the fishing lake, Rumney, ST21 78, E. Wood & S. Tyler, 6th Sep 2016; (+) Rhubina farm, ST24 80, E. Wood & S. Tyler, 4th Oct 2016.
- +062/22.2. **Erophila verna** (Common Whitlowgrass) (Llyisiau'r-bystwn Cynnar). Old coal tips, Bedwas, ST17 89, E. Wood & A. Wood, 3rd Mar 2016; (+) Trethorn, ST18 88, E. Wood & A. Wood, 3rd Mar 2016.
- +062/23.5. **Cochlearia danica** (Danish Scurvygrass) (Llwylys Denmarc). All along the major roads in those tetrads, Around Pontllanfraith, ST19, E. Wood & S. Tyler, 26th Apr 2016.
- *069/6.3. **Centunculus minimus** (Chaffweed) (Gwlyddyn-Mair Bach). Gateway, Allt-y-bela, SO415 004, J. P. Woodman, 30th Jun 2016, first confirmed record in county.
- +‡075/21.05.06. **Rosa rugosa** (Japanese Rose) (Rhosyn Japan). By motor way bridge on way to the SSSI- white flowers, Llanmartin, ST38 89, E. Wood & S. Tyler, 18th Jun 2016.
- +077/15.12. **Lathyrus nissolia** (Grass Vetchling) (Ytbylen Feinddail). Old coal tip, Pwllypant, ST15 89, E. Wood & A. Wood, 6th Jul 2016.
- +†077/17.1. **Melilotus altissimus** (Tall Melilot) (Yr Wydro Dal). Waste ground and old coal tips, Pwllypant, ST15 89, E. Wood & A. Wood, 6th Jul 2016.
- ⊗077/19.22. **Trifolium scabrum** (Rough Clover) (Meillionen Arw). All along edge of concrete sea wall for about 50m, nr Redwick, ST42 83, E. Wood & S. Tyler, 25th Jul 2016, first record since 1920.
- *©077/19.tom. **Trifolium tomentosum** (Woolly Clover) (Meillionen Wlanog). Roadside verge, Crumlin, ST21 98, E. Wood & S. Tyler, 12th Jul 2016, from seed packet originally but well established.
- +084/1.03×04. **Epilobium ×neogradense**. Nurtons farmyard, Tintern, SO53 01, E. Wood, 10th Sep 2016.
- +084/6.1×2. **Circaea ×intermedia** (Upland Enchanter's-nightshade) (Llyisiau-Steffan yr Ucheldir). Edge of cemetery, Cwmcarn, ST222 957, E. Wood & A. Wood, 5th Jul 2016.
- +‡102/1.10. **Oxalis debilis** (Large-flowered Pink-sorrel) (Suran Oddfog). Hedgerow, Llanbedr, ST38 90, E. Wood & S. Tyler, 22nd Apr 2016; (+) muck heap in arable field, nr Crick, ST49 90, E. Wood & A. Wood, 1st Oct 2016.
- +‡103/1.17. **Geranium macrorrhizum** (Rock Crane's-bill) (Pig-yr-aran Wreiddfawr). Well established in woodland by the church, by Wentwood reservoir, ST427 929, E. Wood & A. Wood, 29th Apr 2016.
- +†107/21.1. **Foeniculum vulgare** (Fennel) (Ffenigl). Scattered on old coal tip, Pwllypant, ST15 89, E. Wood & A. Wood, 6th Jul 2016.
- +‡111/3.3. **Calystegia pulchra** (Hairy Bindweed) (Taglys Blewog). Hedgerow in farmyard, Penmaen farm, ST18 97, S. Tyler, E. Wood & A. Wood, 11th Jul 2016.
- +113/2.1.‡ **Nymphoides peltata** (Fringed Water-lily) (Lili'r-d'r Eddiog). Blaena, SO19 08, E. Wood & S. Tyler, 22nd Aug 2016.

- +120/1.6. **Callitriche brutia**. Edge of lake, Garn yr erw, SO23 10, E. Wood & S. Tyler, 14th Sep 2016.
- +121/1.1. **Plantago coronopus** (Buck's-horn Plantain) (Llyriad Corn Carw). Malpas, ST30 90, C. O'Rourke, 30th May 2016; (+) Dixton roundabout, Monmouth, SO51 13, A. Wood, 30th Sep 2016.
- +124/20.06. **Euphrasia tetraquetra** (Effros y Gorllewin). Disused Limestone quarry, Upper Ochrwyth, ST23 89, E. Wood & A. Wood, det. Chris Metherell 2016, 4th Jun 2015.
- +135/53.1. **Achillea ptarmica** (Sneezewort) (Ystrewlys). Wet depression on old coal tip, Pwllpant, ST15 89, E. Wood & A. Wood, 6th Jul 2016.
- +‡147/6.1. **Dracunculus vulgaris** (Dragon Arum) (Pidyn-y-gog Porffor). Well outside garden, Llanllowell, ST398 981, M. Ogden, 1st May 2016.
- +148/2. val. **Lemma valdiviana**. Pond by Hall, Great Pool hall, SO37 18, S. Tyler, E. Wood & A. Wood, 16th Jun 2016.
- ⊗152/16.01. **Carex paniculata** (Greater Tussock-sedge) (Hesgen Rafunog Fawr). Base of old coal tip, Pwllpant, ST15 89, E. Wood & A. Wood, 6th Jul 2016.
- +152/16.11. **Carex disticha** (Brown Sedge) (Hesgen Lygliw). Edge of lagoons, Penhow Quarry, ST42 91, E. Wood & A. Wood, 8th Sep 2016.
- +152/16.68 **Carex elata** (Tufted-sedge) (Hesgen Duswog). Fishing lake -possibly planted originally but well established, Ystrad Mynach, ST15 92, E. Wood & S. Tyler, 26th Apr 2016.
- *153/12.01×13.02. ×**Schedolium braunii** (**Festuca pratensis** × **Lolium multiflorum**). Around dung heap in field gateway, Mathern, ST50 91, E. Wood, 1st Oct 2016.
- +153/16.2. **Puccinellia distans** (Gwellt-y-morfa Atblygedig). Middle of the road on island, A48 nr Penhow, ST40 91, E. Wood & S. Tyler, 4th Oct 2016; (+) along the central strip of the A48, A48 nr Crick, ST48 90, E. Wood, 20th May 2016.
- +153/18.06. **Poa angustifolia** (Narrow-leaved Meadow-grass) (Gweunwellt Culddail). Walls, White castle, SO37 16, E. Wood & S. Tyler, 10th Feb 2016.
- +153/21.2. **Catapodium marinum** (Sea Fern-grass) (Gwenithwellt y Morfa)). Pavemnets in village by the A48, Crick nr A48, ST48 90, E. Wood, 20th May 2016.
- *153/24.2×3. **Glyceria fluitans** × **declinata**. SINC field at junction of road and footpath, Penmaen, ST197 972, S. Tyler, E. Wood & A. Wood, 11th Jul 2016, first confirmed record in the county.
- +⊙153/27.1.b. **Arrhenatherum elatius** var. **bulbosum** (Onion Couch). Hedgerow, Henllys, ST26 93, E. Wood & A. Wood, S. Tyler, 16th Mar 2016.
- +‡153/46.2. **Polypogon viridis** (Water Bent) (Barfwellt y D[^]r). Along the central strip of the A48, A48 nr Crick, ST48 90, E. Wood, 20th May 2016.
- +‡153/50.7. **Bromus secalinus** (Rye Brome) (Pawrwellt Bach). Edge of stubble field, Rhubina farm, ST24 81, E. Wood & S. Tyler, 4th Oct 2016; (+) Llanarth, SO36 11, E. Wood & S. Tyler, 25th Oct 2016; (+) Watery Lane, Monmouth, SO49 13, S. Tyler, 4th Jun 2016

GLAMORGAN, v.c.41 (comm. J.P. Woodman & B. Stewart)

- +c1-1-vir **Chara virgata** (Delicate Stonewort). Kenx. Moor 'new' pond, SS451 921, Hannah Shaw, conf. N.F. Stewart, 18th Apr 2016.
- +004/1.4×5. **Equisetum ×litorale** (Shore Horsetail) (Marchrawnyn y Glennydd). Merthyr Mawr, SS864 767, Barry Stewart, 21st Sep 2016, cleared area of slack SS86437675 to SS86467680.

- 010/2.1. **Trichomanes speciosum** (Killarney Fern) (Rhedynden Cilarne). Coedcastellau (Tarren Deusant), ST0520 8725, Barry Stewart, 10th Apr 2016, cliff area: small quantities of gametophyte in a couple of crevices.
- +011/1. **Polypodium cambricum** (Southern Polypody) (Llawredynen Gymreig). Rhosaman (Bwlch-y-fedwen), SN731 138, Barry Stewart, 29th Dec 2016, epiphyte on *Crataegus monogyna*.
- +017/3.03b. **Dryopteris cambrensis**. Margam Forestry, SS82 87, Charles and Hilary Hipkin, 1st Sep 2016; (+) woodland ravine below Llandermor-ganol, SN610 052, Barry Stewart, 11th Dec 2016; (+) Crynant Forest, SN77 04, Charles and Hilary Hipkin, 27th Jul 2016.
- +‡019/1.1. **Azolla filiculoides** (Water Fern) (Rhedynden y D^r). Sea View, Cwm Ivy, SS438 936, B. Stewart & V. Shenston, 6th Jun 2016.
- ‡028/06.1. **Aconitum napellus** (Monk's-hood) (Cwewll y Mynach). Near Wilton Farm, SS96 72, Rob & Linda Nottage, 13th Apr 2016; (□) Hirfynydd Mine, SN82 06, Charles and Hilary Hipkin, 25th Jul 2016, possibly planted.
- +028/13.24. **Ranunculus peltatus** (Pond Water-crowfoot) (Crafanc-y-frân y Llyn). Sker Pool & immediate surrounds, SS791 799, Barry Stewart, 6th May 2016.
- +031/3.1.‡ **Pseudofumaria lutea** (Yellow Corydalis) (Mwg-y-ddaear Melyn). Resolven, SN82 02, Charles and Hilary Hipkin, 12th Sep 2016.
- +031/5.01.b. **Fumaria capreolata subsp. babingtonii**. Baglan Energy Park (central), SS73 92, Charles and Hilary Hipkin, 28th May 2016.
- +039/4.6. **Quercus robur** (Pedunculate Oak) (Derwen Mes Coesyngog). River Amman, Garnant, SN691 133, Barry Stewart, 13th May 2016, riverbank.
- +043/1.05. **Chenopodium glaucum** (Oak-leaved Goosefoot) (Troed-yr-^ydd Dail Derw). Amazon-NPT Recycling Plant Road, SS705 935, Charles and Hilary Hipkin, 29th Jul 2016, in disturbed ground.
- +‡045/2.2. **Claytonia sibirica** (Pink Purslane) (Porpin Pinc). Middleton (east), SS423 877, Barry Stewart, 25th Mar 2016, lane (presumed garden throw-out).
- +046/10.3. **Sagina subulata** (Heath Pearlwort) (Corwlyddyn Mynawydaidd). Seven Sisters Opencast Reclamation, SN83 07, Charles and Hilary Hipkin, 25th Jul 2016; (+) Tyn-y-Wern (East), SN91 04, Charles and Hilary Hipkin, 28th May 2016, on reclaimed coal tip.
- 047/1.16. **Persicaria minor** (Small Water-pepper) (Y Dinboeth Fach). Merthyr Common, SO0742 0908, Glamorgan Botany Group, 18th Sep 2016.
- +051/1.06×07. **Hypericum ×desetangsii** (Des Etangs' St John's-wort) (Eurinllys Des Etangs). Kenfig NNR (Cmpt 5), SS792 812, Barry Stewart, 25th Jul 2016, dry dunes around margins of slack; (+) pSINC PRHi1: Ponrhydyfen land west of rugby field, SS7971 9414, Barry Stewart, 2nd Sep 2016, grassland; (+) NPT SINC Survey Onllwyn, SN850 106, Charles, Hilary and Mark Hipkin, 7th Aug 2016.
- +057/1.01. **Viola odorata** (Sweet Violet) (Fioled Bêr). 1 km square south west of Groesfaen, incl Llyn-y-pennau, ST06 80, Rob & Linda Nottage, 8th Apr 2016, white.
- 057/1.06. **Viola canina** (Heath Dog-violet) (Fioled y Cyn). Sker Point (grassland immediately behind point of headland), SS789 799, Barry Stewart, 6th May 2016.
- 059/1.1.‡ **Frankenia laevis** (Sea-heath) (Grugeilun Llyfn). Margam Tip, SS78383 83742, O.J. Leyshon, 29th Aug 2016, single plant with one flower.
- +‡062/11.4. **Barbarea verna** (American Winter-cress) (Berwr-y-gaeaf cynnar). Ystylafera Reclaimed Coal Tip, SN76 08, Charles and Hilary Hipkin, 26th May 2016.
- +066/1.1. **Pyrola minor** (Common Wintergreen) (Glesyn-y-gaeaf Bach). Cwm-hwnt, SN91 05, Charles and Hilary Hipkin, 8th May 2016, abundant in Larch plantation.
- +069/1.3. **Primula veris** (Cowslip) (Briallen Fair). Nelson Wern, ST118 956, D.R.W. Gilmore & M.C. Powell, 5th May 2016.

- +069/8/1. **Samolus valerandi** (Brookweed) (Claerlys). NPT SINC Survey, Onllwyn, SN850 108, Charles, Hilary and Mark Hipkin, 7th Aug 2016, a large and notable inland population growing with *Epipactis palustris* and *Triglochin palustris*.
- +‡072/2.7. **Ribes uva-crispa** (Gooseberry) (Eirinen Fair). Heol Hir GCG, SN7095 1138, NPT CBC Biodiversity Unit, 21st Jun 2016.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Sea View, Cwm Ivy, SS438 936, B. Stewart & V. Shenston, 6th Jun 2016.
- +‡073/5.7. **Sedum spurium** (Caucasian-stonecrop) (Briweg y Cawcasws). Aberpergwn Coal Tip Grassland, SN86 05, Charles and Hilary Hipkin, 22nd Jul 2016.
- +075/17.3.a. **Poterium sanguisorba subsp. sanguisorba** (Salad Burnet) (Bwrned). Cefn Onn, area of grassy knolls just S of track, ST172 850, M.C Powell, NPR, B. Stewart & S.J. Stewart, 22nd Jul 2016.
- +‡075/17.3.b. **Poterium sanguisorba subsp. balearicum** (Fodder Burnet) (Bwrned Ebran). Cornelly Quarry, SS835 797, Barry Stewart, 13th Sep 2016, disturbed ground along quarry lip.
- +‡075/28.07. **Sorbus intermedia** (Swedish Whitebeam) (Cerddinen Sweden). Onllwyn, SN84 10, Charles and Hilary Hipkin, 17th Aug 2016.
- +‡075/32.34. **Cotoneaster bullatus** (Hollyberry Cotoneaster) (Cotoneaster Deilgrych). lane to Cwm-Amman Farm/coal spoil site, SN713 138, Barry Stewart, 30th Sep 2016, lane banks; (+) Seven Sisters Forest, SN82 08, Charles and Hilary Hipkin, 25th Jul 2016.
- +‡077/02.1. **Galega officinalis** (Goat's-rue) (Nuw'r Geifr). 1 km square south-east of St Athan (Baronswell), ST02 67, Rob & Linda Nottage, 31st Jul 2016.
- 077/08.1. **Lotus glaber** (Narrow-leaved Bird's-foot-trefoil) (Pysen-y-ceirw Gulddail). Pengam Moors (south), ST216 766, George M. Tordoff, 18th Jun 2016.
- +‡077/17.1. **Melilotus altissimus** (Tall Melilot) (Yr Wydro Dal). River Amman (Glamorgan side), SN715 140, Barry Stewart, 30th Sep 2016, coal spoil; (+) Onllwyn, SN84 10, Charles and Hilary Hipkin, 17th Aug 2016.
- +‡079/2.2. **Myriophyllum aquaticum** (Parrot's-feather) (Pluen Parot). Sigingstone, SS97 71, Rob & Linda Nottage, 3rd Jul 2016.
- +094/1.1. **Linum bienne** (Pale Flax) (Llin Culddail). Pengam Moors (south), ST21 76, George M. Tordoff, 18th Jun 2016.
- +‡102/1.08. **Oxalis articulata** (Pink-sorrel) (Suran Ruddgoch). 1 km square west of St Athan, ST00 68, Rob & Linda Nottage, 8th May 2016.
- +107/16.1. **Berula erecta** (Lesser Water-parsnip) (Panasen-y-d'r Gulddail). NPT SINC Survey Onllwyn, SN850 108, Charles, Hilary and Mark Hipkin, 7th Aug 2016.
- +107/28.2. **Apium nodiflorum** (Fool's-water-cress) (Dyfrforonen Swp-flodeuog). Rhosaman (Bwlch-y-fedwen), SN731 138, Barry Stewart, 29th Dec 2016, drainage ditch.
- +107/43.3. **Torilis nodosa** (Knotted Hedge-parsley) (Troed-y-cyw Clymog). Crynant Forest, SN77 05, Charles and Hilary Hipkin, 27th Jul 2016.
- +©110/NIC.ala **Nicotiana glauca** (Sweet Tobacco) (Baco Melys). All Saint's Church (north) (Oystermouth Parish Church), SS616 880, B. Stewart & S.J. Stewart, 1st Jan 2016, casual on Mumbles Road.
- +116/15.09. **Myosotis ramosissima** (Early Forget-me-not) (Sgorpionllys Cynnar). Sker, damp hollow not far from Sker Point, SS789 798, Barry Stewart, 6th May 2016, adjacent dry dunes.
- +‡117/1.bon. **Verbena bonariensis** (Argentinian Vervain) (Ferfain yr Ariannin). Langland Bay, SS608 874, Barry Stewart, 2nd Oct 2016, pavement weed.
- +‡118/05.6. **Lamium amplexicaule** (Henbit Dead-nettle) (Marddanhadlen Goch Ddeilgron). East Moors (north-west), Cardiff, ST20 75, George M. Tordoff, 14th Oct 2016, frequent on road verges.

- +‡118/16.1. **Melissa officinalis** (Balm) (Balm). Hafodheulog, SS84 84, Charles, Hilary and Mark Hipkin, 3rd Aug 2016; (+) Pontardawe, SN72 04, Charles and Hilary Hipkin, 31st May 2016.
- *‡124/08.1. **Chaenorhinum organifolium** (Malling Toadflax) (Trwyn-y-llo Caint). Broughton caravan park, SS41665 92747, Barry Stewart, 22nd Oct 2016, pavement weed.
- +124/11.1. **Cymbalaria muralis** (Ivy-leaved Toadflax) (Trwyn-y-llo Dail Eiddew). River Amman, Garnant, SN692 134, Barry Stewart, 13th May 2016, nant Gwineu Road bridge parapets.
- 130/6.14. **Galium parisiense** (Wall Bedstraw) (Briwydd y Mur). Cwm Dulais, SN613 036, Barry Stewart, 16th Dec 2016, coal spoil.
- +134/3.1. **Knautia arvensis** (Field Scabious) (Claflllys y Maes). Onllwyn, SN84 10, Charles and Hilary Hipkin, 17th Aug 2016.
- +135/24.1. **Mycelis muralis** (Wall Lettuce) (Gwylaeth y Fagwyr). River Amman, Garnant, SN692 134, Barry Stewart, 13th May 2016, Nant Gwineu Road bridge parapets.
- +135/25.01.15. **Taraxacum lacistophyllum** (Cut-leaved Dandelion). Oxwich, SS50198656, SS5019 8656, Dawn Nelson, Apr 2016.
- +‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Cowbridge, SS99 74, Rob & Linda Nottage, 13th Jul 2016, on wall, south of crossroads by traffic lights.
- +135/43.6 **Erigeron acris** (Blue Fleabane) (Amrhydlwyd Glas). Onllwyn, SN84 10, Charles and Hilary Hipkin, 17th Aug 2016.
- +‡135/44.flo. **Conyza floribunda** (Many-flowered Fleabane). River Amman (Glamorgan side), SN715 140, Barry Stewart, 30th Sep 2016, coal spoil.
- +‡138/4.2. **Eloдея nuttallii** (Nuttall's Waterweed) (Ffugalaw Nuttall). Staffal Haegr (home pond), SS493 925, Barry Stewart, 29th Apr 2016; (+) Kenfig Pool (south pool shore), SS797 811, N.F. Stewart workshop group, 19th Apr 2016.
- +152/07.2. **Schoenoplectus tabernaemontani** (Grey Club-rush) (Llafrywynen Arfor). Sker Pool & immediate surrounds, SS791 799, Barry Stewart, 6th May 2016.
- +152/16.10. **Carex arenaria** (Sand Sedge) (Hesgen y Tywod). NPT SINC Survey Onllwyn, SN850 106, Charles, Hilary and Mark Hipkin, 7th Aug 2016.
- +‡153/15.2. **Cynosurus echinatus** (Rough Dog's-tail) (Rhonwellt-y-ci Pigog). Plaza Cinema, Port Talbot, SS7685 8960, NPT CBC Biodiversity Unit, 23rd Jun 2016.
- +153/18.09. **Poa compressa** (Flattened Meadow-grass) (Gweunwellt Cywasgedig). Mynydd Lliw, SN599 023, Barry Stewart, 18th Nov 2016, coal spoil.
- 153/18.13. **Poa bulbosa** (Bulbous Meadow-grass) (Gweunwellt Oddfog). Newton car park, SS8378 7698, Tim Rich, 15th May 2016, many plants in car park.
- +‡153/39.2. **Agrostis gigantea** (Black Bent) (Maeswellt Mawr). River Amman (Glamorgan side), SN715 140, Barry Stewart, 30th Sep 2016, coal spoil.
- 153/46.1.‡ **Polygomon speliensis** (Annual Beard-grass) (Barfwellt Unflwydd). Crynant Forest, SN79 07, Charles and Hilary Hipkin, 26th Jul 2016, in disturbed verge.
- +‡153/46.2. **Polygomon viridis** (Water Bent) (Barfwellt y Dwr). M4 (Baglan), SS744 926, Barry Stewart, 2nd Sep 2016.
- *©153/TRS.aur. **Trisetaria aurea**. 32 Village Farm, Bonvilston, ST065 742, Rob & Linda Nottage, 5th Jun 2016.
- +‡158/24.07. **Allium triquetrum** (Three-cornered Garlic) (Garlleg Trianglog). SS9774 1km square (Crossways), SS97 74, Rob & Linda Nottage, 13th May 2016.
- +162/03.1. **Epipactis palustris** (Marsh Helleborine) (Caldrist y Gors). NPT SINC Survey Onllwyn, SN850 108, Charles, Hilary and Mark Hipkin, 7th Aug 2016, a small but notable inland population, growing with *Samolus valerandi* and *Triglochin palustris*.

- +162/14.1. **Anacamptis pyramidalis** (Pyramidal Orchid) (Tegeirian Bera). Mynydd Blaengwynfi, SS90 97, Charles and Hilary Hipkin, 16th Jul 2016, in forestry road verge.
+162/18.1×4. **Dactylorhiza ×grandis**. Rhoose (quarry & pools), ST06 65, M.C. Powell, 21st Jun 2016

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

- *c1-3-obt **Nitelopsis obtusa** (Starry Stonewort). Llangors Lake, SO13 26, John Crellin, 8th Sep 2016, several fragments obtained from grapnel between boathouse and Llangasty. Poor condition (so probably not sampled from where it grows) but confirmed by Nick Stewart 18/9/16. No viable herbarium specimen apart from that sent to referee.
*c1-4-tra **Nitella translucens** (Translucent Stonewort). Llangors lake, SO13 26, Andrew Jones, 14th Jul 2016, rare / occasional, in gaps within the Nymphaeid zone on the south shore, near to Llangasty Church, c.SO131262 (determined subsequently from a single specimen collected in this area).
*‡021/1.1. **Cupressus macrocarpa** (Monterey Cypress) (Cypreswydden Monterey). Pont Ffrwdgrech, SO02 27, John Crellin, 16th Apr 2016.
+031/3.1. ‡ **Pseudofumaria lutea** (Yellow Corydalis) (Mwg-y-ddaear Melyn). Tack, SO24 39, John Crellin, 16th Jun 2016.
*031/5.01. **Fumaria capreolata** (White Ramping-fumitory) (Mwg-y-ddaear Gwyn). Talgarth main road, SO15 34, Andy Shaw, 16th Sep 2016.
+‡039/4.7. © **Quercus rubra** (Red Oak) (Derwen Goch). Buckland Hill, SO14 21, John Crellin, 26th Oct 2016.
*‡045/2.1. **Claytonia perfoliata** (Springbeauty) (Porpin y Gwanwyn). Footpath near the Swan, SO22 42, John Crellin, 2nd Apr 2016.
*‡051/1.03×04. **Hypericum ×inodorum** (Tall Tutsan) (Dail-y-Beiblau Tal). Coed Nant y Ceiliog, SO05 27, Michael Knee, 12th Jul 2016.
+062/22.2. **Erophila verna** (Common Whitlowgrass) (Llyisiau'r-bystwn Cynnar). Epynt sq west of Llandeilo'r Fan, SN88 34, John Crellin, 9th Jun 2016, roadsides.
+062/22.3. **Erophila glabrescens** (Glabrous Whitlowgrass) (Llyisiau'r-bystwn Llyfn). Hay-on-Wye pavement, SO22 42, John Crellin, 14th Mar 2016.
+062/23.5. ‡ **Cochlearia danica** (Danish Scurvygrass) (Llwylys Denmarc). Roadside, junction of A40 / A470, SO19 19, Mike and Christine Porter, det. Mike Porter, 31st Mar 2016.
+074/09.2. **Chrysosplenium alternifolium** (Alternate-leaved Golden-saxifrage) (Eglyn Bob yn Eilddail). Cwm Cadlan, SN95 09, Julian Woodman, 13th Jul 2016, BSBI AGM Meeting.
+075/08.02.034. **Rubus albionis**. Edge of small car park, Pen-y-cae, SN84 13, Mike and Christine Porter, det. Mike Porter, 6th Jul 2016.
+‡075/22.03. © **Prunus cerasifera** (Cherry Plum) (Coeden Goeg-geirios). Middle Gaer, SO17 21, John Crellin, 5th May 2016.
+075/28.24. **Sorbus torminalis** (Wild Service-tree) (Cerddinen Wyllt). Tack, SO24 39, John Crellin, 16th Jun 2016, in orchard.
+‡077/17.2. **Melilotus albus** (White Melilot) (Yr Wydro Wen). Road verge Gilwern, SO25 14, Mike and Christine Porter, det. Mike Porter, 12th Sep 2016.
+077/19.13. **Trifolium micranthum** (Slender Trefoil) (Meillionen Hopysaidd Eiddil). Epynt Range west of Llandeilo'r-Fan, SN88 34, John Crellin, 9th Jun 2016, roadsides; Llangors, SO12 27, Delyth Williams, 14th Jul 2016, BSBI AGM Meeting, first hectad record for over 30 years.
+107/19.1. **Oenanthe fistulosa** (Tubular Water-dropwort) (Cegiden Bibellaidd). Abercynrig, SO06 26, Richard Davies, det. Julian Woodman, 17th Jun 2016.

+‡116/03.1. **Pulmonaria officinalis** (Lungwort) (Llysiâu'r Ysgyfaint). Gilwern, SO24 14, John Crellin, 11th Mar 2016.

+116/15.10. **Myosotis discolor** (Changing Forget-me-not) (Sgorpionllys y Amryliw). Meadow near Hay, SO23 41, John Crellin, 26th May 2016, several plants on meadow edge.

+‡118/03.1. **Leonurus cardiaca** (Motherwort) (Mamlys). Tack, SO24 39, John Crellin, 16th Jun 2016, not planted by resident, New Forest farm.

+†124/16.24. **Veronica hederifolia** (Ivy-leaved Speedwell) (Rhwyddlwyn Dail Eiddew). Canal Bank, Llangynindr, SO16 19, Mike and Christine Porter, det. Mike Porter, 28th Apr 2016.

+†135/59.1. **Matricaria chamomilla** (Scented Mayweed) (Amranwen Bêr). Cwm Cadlan, SN95 09, Julian Woodman, 13th Jul 2016, BSBI AGM Meeting.

+135/62.01×10.‡ **Senecio** × **albescens** (**S. cineraria** × **S. jacobaea**). Llanfaes, SO04 28, Martyn Stead, 12th Jul 2016.

+135/62.10×11. **Senecio** × **ostenfeldii** (**S. jacobaea** × **S. aquaticus**). Cwm Cadlan, SN95 09, Martyn Stead, 13th Jul 2016, BSBI AGM Meeting.

+151/1.13×14. **Juncus articulatus** × **J. acutiflorus** = **J. surrejanus**. Nant Irfon, SN84 52, Tim Rich, 13th Jul 2016, BSBI AGM Meeting.

+151/1.26×27. **Juncus effusus** × **J. conglomeratus** = **J. kern-reichgeltii**. Cwm Cadlan, SN95 09, Julian Woodman, 13th Jul 2016, BSBI AGM Meeting.

+152/16.31 **Carex pendula** (Pendulous Sedge) (Hesgen Bendrom). Tack, SO24 39, John Crellin, 16th Jun 2016.

+†153/39.2. **Agrostis gigantea** (Black Bent) (Maeswellt Mawr). Nant Irfon, SN84 52, Tim Rich, 13th Jul 2016, BSBI AGM Meeting.

+158/35.1.‡ **Ruscus aculeatus** (Butcher's-broom) (Celynnen Fair). Pont Ffrwdgrech, SO02 27, John Crellin, 16th Apr 2016.

+‡159/13.1. **Crocsmia paniculata** (Aunt-Eliza) (Modryb Leusa). Roadside ditch, Tredomen, SO12 31, Mike and Christine Porter, det. Mike Porter, 23rd Aug 2016.

+©020A./SEQ.sem. **Sequoia sempervirens** (Coastal Redwood) (Cochwydden California). Pont Ffrwdgrech, SO02 27, Tony Vaughan, 16th Apr 2016, a few tall trees in mixed planted woodland

RADNOR, v.c.43 (comm. E.R.Dean & S.M.Spencer)

[51/1.11. **Hypericum linariifolium** (Toadflax-leaved St John's-wort) (Eurinllys Culddail). Dolyhir near Stanner, SO246.583, A. Shaw, 2006. 1st recent record, last recorded in 1945.] Previously reported in error for *Hypericum humifusum* × *Hypericum linariifolium*.

⊗‡075/11.3. **Fragaria ananassa** (Garden Strawberry) (Llwyn Mefus y Gerddi). Village, Evenjobb, SO26 62, E R Dean/S M Spencer/Hereford Botanical Society, 20th May 2016.

⊗077/14.04. **Vicia sylvatica** (Wood Vetch) (Ffachysen y Coed). Stanner Rocks, SO26 58, J Wynne-Jones/BSBI visit, det. A Shaw, 13th Jul 2016.

⊗107/40.1.‡ **Pastinaca sativa** (Wild Parsnip) (Panasen Wyllt). Road verge, Doldowlod, SN98 62, A Shaw, 9th Aug 2016, healthy colony before being mown.

*‡122/1.2×3 **Buddleja** × **weyeriana** (Weyer's Butterfly-bush) (Coeden-fêl Weyer). Roadside, Stanner, SO26 58, S M Spencer, 13th Aug 2016.

*130/5.1. **Asperula cynanchica** (Squinancywort) (Mandon Fach). Stanner Rocks, SO26 58, J Wynne-Jones/BSBI visit, det. A Shaw, 13th Jul 2016.

*162/15.1. **Pseudorchis albida** (Small-white Orchid) (Tegeirian Bach Gwyn). Rocky, rhosy patch below hayfield, Elan Valley, SN86, S Lewis, 1st Jul 2016, with fragrant orchids.

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

+010/2.1.gam. **Trichomanes speciosum (gametophyte)** (Rhedyne Cilarne). Glynhir Waterfall, SN6414- 1513-, Barry Stewart, 17th Dec 2016, locally frequent in cliff crevices on west side of river c.10m - 15m below (south of) waterfall.

*‡016/2.1. **Onoclea sensibilis** (Sensitive Fern) (Rhedyne Leiniog). Stradey Woods, Llanelli, SN48-01-, I.K. Morgan, 2016, originally planted but well-established and known at the site for over 30 years. +‡Gelli Uchaf, Rhydcymerau, SN5734- 3953-, WWBIC Recording Meeting, det. R.D. Pryce & K.A. Pryce, 9th Aug 2016, well naturalized pond-side stand several m across and also a separate small plant to north on rank, densely vegetated SE bank of pond.

+017/1.1. **Polystichum setiferum** (Soft Shield-fern) (Gwrychredynen Feddal). Blaen Nant-y-Cadno, Garnswllt, SN6453- 0969-, R.D. Pryce & K.A. Pryce, det. K.A.Pryce, 20th May 2016, edge of wooded ravine. First record for vc44 part of hectad.

+017/3.03b. **Dryopteris cambrensis**. Penuwch, N of St.Clears, SN2712- 1921-, R.D. Pryce, Geoffrey Hall & Mary Smith, 5th Jul 2016, shaded track between tall hedges. **NMW**; (+) Blaen Nant-y-Cadno, Garnswllt, SN6442- 0963-, R.D. Pryce & K.A. Pryce, 20th May 2016, trackside along edge of ravine woodland; (+) Ynys Dawela Community Woodland, Brynamman, SN7006- 1355-, WWBIC Recording Meeting, det. R.D. Pryce, 23rd Jun 2016, several plants by path in mature woodland.

+‡021/2.1.© **Chamaecyparis lawsoniana** (Lawson's Cypress) (Cypreswydden Lawson). Pen-y-rhaglan-wynt, SN7367- 5017-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 22nd May 2016, one self-sown seedling on grassy trackside through Sitka forestry plantation.

+027/1.1. **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). Llanlash, Broadoak, SN5707- 2205-, Llanelli Naturalists meeting, det. R.D. Pryce, 26th Jun 2016, dominating water in former sheep-dip trough; (+) Ynys Dawela Community Woodland, Brynamman, SN7018- 1375-, WWBIC Recording Meeting, det. R.D. Pryce, 23rd Jun 2016, locally abundant in pond, presumably originally introduced.

+028/13.27. **Ranunculus circinatus** (Fan-leaved Water-crowfoot) (Crafanc-y-frân Wyntyllog). RAF AWR Pembrey, Tywyn Burrows, SN3768- 0487-, BSBI meeting, det. A.O. Chater & Geoffrey Hall, 9th Jul 2016, eastern pond by landward control-tower. Also at SN37530490.

+030/1.5. **Papaver dubium agg.** (Pabi Hirben). Carnau Farm, nr. Trelech, SN2978- 2794-, Laurence Brooks, Aug 2016, few plants in arable field.

+031/5.03. **Fumaria bastardii** (Tall Ramping-fumitory) (Mwg-y-ddae'r Grymus). Cwm-ban-fach - Crach-gelli-fach tetrad, nr. Llanfynydd, SN52u, Geoffrey Hall, Laura Gravestock & Richard Gowing, 8th Jul 2016, disturbed ground.

+031/5.05. **Fumaria muralis** (Common Ramping-fumitory) (Mwg-y-ddae'r Amrywiol). Carnau Farm, nr. Trelech, SN2978- 2794-, Laurence Brooks, Aug 2016, arable field.

+‡043/1.13. **Chenopodium ficifolium** (Fig-leaved Goosefoot) (Troed-yr-ydd Dail Ffigys). Carnau Farm, nr. Trelech, SN2978- 2794-, Laurence Brooks, Aug 2016, frequent arable weed in cereal crop.

+‡045/2.2. **Claytonia sibirica** (Pink Purslane) (Porpin Pinc). Danycoed, Bancyfelin, SN3311- 1907-, R.D. Pryce & K.A. Pryce, det. K.A. Pryce, 25th Jun 2016, on river shoal and wooded bank.

+045/3.1.c. **Montia fontana subsp. amporitana**. Pantyffynnon, Mynydd Du, SN73- 19-, A.O. Chater, G.M. Kay, K.A. Pryce & Matt Sutton, det. A.O. Chater & M.O. Stead, 5th Jul 2016.

+046/07.08. **Cerastium glomeratum** (Sticky Mouse-ear) (Clust-y-llygoden Lydanddail). Blaen Nant-y-Cadno, Garnswllt, SN6464- 0965-, R.D. Pryce & K.A. Pryce, 20th May 2016, edge of NVC MG5 neutral grassland haymeadow. First record for vc44 part of hectad.

- +046/10.3. **Sagina subulata** (Heath Pearlwort) (Corwlyddyn Mynawydaudd). Llangynin, SN2500- 1985-, M.O. Stead, 5th Jul 2016, in driveway of bungalow.
- +046/20.05. **Silene uniflora** (Sea Champion) (Gludlys Arfor). Gelli Uchaf, Rhydcymerau, SN5716- 3959-, WWBIC Recording Meeting, 9th Aug 2016, locally abundant naturalized *Silene uniflora* in garden, rockeries and around farm house.
- +046/20.09. **Silene latifolia** (White Champion) (Gludlys Gwyn). Carnau Farm, nr. Trelech, SN2978- 2794-, Laurence Brooks, Aug 2016, one plant in arable field.
- +‡047/1.02. **Persicaria campanulata** (Lesser Knotweed) (Y Ganwraidd Fach). Heol-y-Dderwen, Pont-Tyweli, SN4078- 3955-, A.O. Chater, R.P.C. Shaw, K.A. Pryce & M.O. Stead, 7th Jul 2016, at start of footpath off road leading SW.
- +©047/1.cap. **Persicaria capitata** (Pink-headed *Persicaria*). Allt Troed-y-rhiw, Gwenogle, SN5226- 3465-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 23rd Apr 2016, forestry plantation by hair-pin bend in public road: large, locally dominant naturalized stand originating from plants thrown down slope into edge of plantation.
- +†047/4.6. **Polygonum rurivagum** (Cornfield Knotgrass) (Canclwm y Tir Âr). Llwyn-y-piod, Twynllanan, SN7630- 2412-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 27th Aug 2016, about 5 plants at edge of farmyard.
- +047/8.13×15. **Rumex ×sagorskii**. Y Garth, Llandybie, SN6150- 1384-, R.D. Pryce, 27th Jun 2016, rutted area in field on west side of gateway.
- +047/8.14×15. **Rumex ×ruhmeri**. Gwyddgrug, SN4730- 3553-, R.D. & K.A. Pryce, Margot Godfrey & Jenny Fode, det. R.D. Pryce, 14th Aug 2016, on silty river cliff on N side of Afon Gwyddgrug.
- +‡051/1.03×04. **Hypericum ×inodorum** (Tall Tutsan) (Dail-y-Beiblau Tal). c.0.5km west of Fachros, SN4462- 2280-, G.M. Kay & Mary Smith, det. G.M. Kay, 7th Jul 2016, one large plant.
- +051/1.04. **Hypericum hircinum** (Stinking Tutsan) (Dail-y-Beiblau Drewllyd). Bronwydd Rd, Abergwili, SN4279- 2153-, R.D. Pryce, 25th Jul 2016, self-sown plants on disturbed ground.
- *051/1.10×11. **Hypericum humifusum × linariifolium**. Morfa Bychan, Pendine, SN2228- 0744-, R.A. Jones, M.O. Stead & R.P.C. Shaw, det. N.K.B. Robson, Jan. 2017., 8th Jul 2016, 30-100 plants, 30ft up slope near slippage on coastal cliff. This record extends this hybrid's previously known range by about 20km north-eastwards from Pembs into Carmarthen, NMW.
- +053/1.1. **Malva moschata** (Musk-mallow) (Hocysen Fwsg). Felin Gwyddil, nr. Pont Tyweli, SN42- 38-, A.O. Chater, R.P.C. Shaw, K.A. Pryce & M.O. Stead, 7th Jul 2016.
- +†053/1.3. **Malva sylvestris** (Common Mallow) (Hocysen). Maes-twynog tetrad, SN63y, R.A. Jones, P. Spencer-Vellacott, K.A. Pryce & Mary Smith, 10th Jul 2016.
- ⊖055/1.3. **Drosera intermedia** (Oblong-leaved Sundew) (Gwlithlys Hirddail). Disgwylfa, nr. Pontyberem, SN5114- 0927-, S.D.S. Bosanquet, 24th Aug 2016, at least 200 plants with *D. rotundifolia* in open, peaty mire.
- +057/1.04. **Viola riviniana** (Common Dog-violet) (Fioled Gyffredin). Pen-y-rhaglan-wynt, SN7403- 5016-, R.D. Pryce & K.A. Pryce, 22nd May 2016, on Carmarthen bank of Afon Pisgotwr fach. First record for vc44 part of hectad. Also at SN73965020 and SN7395-021.
- ‡057/1.11×12×alt.© **Viola ×witrockiana** (Garden Pansy) (Trilliw'r Gerddi). Heol-y-Dderwen, Pont-Tyweli, SN4084- 3981-, A.O. Chater, R.P.C. Shaw, K.A. Pryce & M.O. Stead, 7th Jul 2016, levelled/waste area bulldozed and fenced-off adjacent to field probably for road widening?
- +061/2.01.‡ **Salix pentandra** (Bay Willow) (Helygen Bêr). Danycoed, Bancyfelin, SN3298- 1933-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 25th Jun 2016, presumably originally planted now forming a small thicket around east side of small overgrown pond, NMW.

- +061/2.11×12. **Salix** ×**multinervis**. Hafod, Llanwrda, SN6963- 3656-, R.A. Jones, P. Spencer-Vellacott, K.A. Pryce & Mary Smith, 10th Jul 2016, .
- +‡062/16.1. **Aubrieta deltoidea** (Aubretia) (Cynfas Biws). Penybanc, Drefelin, SN3631- 3767-, R.D. Pryce & K.A. Pryce, 18th Mar 2016, well naturalized on garden retaining wall.
- +‡062/33.2. **Diplotaxis muralis** (Annual Wall-rocket) (Roced-y-muriau'r Tywod). Llangynin, SN2508- 1963-, M.O. Stead, 5th Jul 2016, roadside verge.
- +‡062/34.2.a. **Brassica napus** subsp. **oleifera** (Oil-seed Rape) (Rêp Had Olew). Gwyddgrug, SN4744- 3551-, R.D. & K.A. Pryce, Margot Godfrey & Jenny Fode, det. R.D. Pryce, 14th Aug 2016, one small self-sown plant in centre of track; (+) Llwyn-y-piod, Twynllanan, SN7633- 2411-, R.D. Pryce & K.A. Pryce, 27th Aug 2016, several plants in farmyard.
- +‡074/03.1. **Bergenia crassifolia** (Elephant-ears) (Clustiau Eliffant). Pyllau-cochion Common, SN4980- 2688-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 21st Jun 2016, garden throw out.
- +‡075/03.1×3. **Spiraea** ×**pseudosalicifolia** (Confused Bridewort) (Ffug Erwain-dail-helyg). Glandwr, Llanwrda, SN6947- 3679-, R.A. Jones, P. Spencer-Vellacott, K.A. Pryce & Mary Smith, det. G.M. Kay, 10th Jul 2016, north-west of ford, **NMW**.
- +‡075/03.3.a. **Spiraea douglasii** subsp. **douglasii**. Login, SN432 190, G.M. Kay, Lynne Farrell & Geoffrey Hall, det. G.M. Kay, 7th Jul 2016, hedge north of disused quarry.
- ⊖077/14.01. **Vicia orobus** (Wood Bitter-vetch) (Ffachysen Chwerw). Tlhill Forestry Plantation, Penrhiw-iar, SN7599- 4779-, BSBI meeting, det. A.O. Chater & R.D. Pryce, 6th Jul 2016, rather overgrown, acid bank on NW side of secondary forestry track. Extending into adjacent tetrad at SN7600- 4780-.
- +077/15.03. **Lathyrus linifolius** (Bitter-vetch) (Ytbyesen y Coed). SE of Sarnau, Trelech, SN2991- 3178-, R.D. Pryce & K.A. Pryce, 30th Apr 2016, roadside verge at foot of hedgebank under beech hedge.
- +‡077/17.1. **Melilotus altissimus** (Tall Melilot) (Yr Wydro Dal). Felingwmuchaf tetrad, SN52c, Lynne Farrell, Laura Gravestock, Bron & David Wright, 5th Jul 2016.
- +‡079/2.2. **Myriophyllum aquaticum** (Parrot's-feather) (Pluen Parot). Glandwr, Llanwrda, SN6949- 3694-, R.A. Jones, P. Spencer-Vellacott, K.A. Pryce & Mary Smith, 10th Jul 2016.
- +084/1.07. **Epilobium roseum** (Pale Willowherb) (Helyglys Gwelw). Bronwydd Rd, Abergwili, SN4277- 2154-, R.D. Pryce, 25th Jul 2016, housing development site: on hardcore pile.
- +084/4.1×3×3. **Oenothera** ×**fallax**. Machynys, Llanelli, SS50- 97-, Lynne Farrell, G.M. Kay, Geoffrey Hall & Mary Smith, 6th Jul 2016, also in SS5098; (+) Pembrey Forest, SN3772- 0256-, A.O. Chater, R.D. & K.A. Pryce & Bron & David Wright, det. A.O. Chater, 8th Jul 2016, in vicinity of beach car park at west end of Concrete Road.
- +‡102/1.03. **Oxalis corniculata** (Procumbent Yellow-sorrel) (Suran Orweddol). Penybanc, Drefelin, SN3629- 3761-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 18th Mar 2016, weed in polytunnel.
- +‡103/1.01×02. **Geranium** ×**oxonianum** (Druce's Crane's-bill) (Pig-yr-aran Druce). Pendine: footpath to Morfa Bychan, SN2264- 0828-, R.A. Jones, M.O. Stead & R.P.C. Shaw, 8th Jul 2016, cross-roads of footpath and track.
- +‡103/1.17. **Geranium macrorrhizum** (Rock Crane's-bill) (Pig-yr-aran Wreiddfawr). Off Heol Goffa, Llanelli, SN5149- 0090-, Llanelli Naturalists meeting, det. I.K. Morgan, 11th Sep 2016, on wall on south side of Talsarnau footpath; (+) Gelli Uchaf, Rhydcymerau, SN5710- 3958-, WWBIC Recording Meeting, det. Julian Wormald, 9th Aug 2016, hedgebank.
- +103/1.18. **Geranium lucidum** (Shining Crane's-bill) (Pig-yr-aran Loywddail). Blaen Nant-y-Cadno, Garnswllt, SN6457- 0970-, R.D. Pryce & K.A. Pryce, 20th May 2016, farm yard to west of house.

*©110/CAP.ann. **Capsicum annuum** (Sweet Pepper) (Pupryn Melys). Back lane between James Street and Glenalla Road, Llanelli, SN5129- 0054-, Llanelli Naturalists meeting, det. R.D. Pryce & I.K. Morgan, 11th Sep 2016, self-sown in gutter at foot of wall on north side of back lane.

+111/3.2.b. **Calystegia sepium subsp. roseata**. Machynys, SS5109- 9763-, Lynne Farrell, G.M. Kay, Geoffrey Hall & Mary Smith, 6th Jul 2016; (+) Glanrhyd, Brechfa, SN5037- 3021-, R.D. Pryce & K.A. Pryce, 31st July 2016, near track junction by bridge over Nant Cwm-marydd.

+‡115/1.1. **Phacelia tanacetifolia** (Phacelia) (Ffasielia). Pembrey Road, Llanelli, SN5030-0064-, R.D. Pryce & K.A. Pryce, 21st June 2016, at least 3 plants in flower, self sown in angle between boundary wall and back of pavement. First record away from bird-seed plantings.

+‡116/03.1. **Pulmonaria officinalis** (Lungwort) (Llysiau'r Ysgyfaint). Heol-y-Dderwen, Pont-Tyweli, SN4090- 3990-, A.O. Chater, R.P.C. Shaw, K.A. Pryce & M.O. Stead, 7th Jul 2016, levelled/waste area bulldozed and fenced-off by field; (+) By car-park off Heol Goffa, Llanelli., SN5156- 0101-, Llanelli Naturalists meeting, det. R.D. Pryce & I.K. Morgan, 11th Sep 2016, left bank of Afon Lliedi.

+116/15.10. **Myosotis discolor** (Changing Forget-me-not) (Sgorpionllys y Amryliw). Blaen Nant-y-Cadno, Garnswllt, SN6462- 0961-, R.D. Pryce & K.A. Pryce, 20th May 2016, nVC MG5 haymeadow, also noted at several other locations at this farm.

*117/1.has. **Verbena hastata** (American Vervain). Gelli Uchaf, Rhydcymerau, SN5713- 3964-, WWBIC Recording Meeting, det. Julian Wormald, 9th Aug 2016, self sown in former turkey-run - one plant in full flower. Also self-sown elsewhere in garden and around house.

+‡118/01.2. **Stachys byzantina** (Lamb's-ear) (Clust yr Oen). Off Heol Goffa, Llanelli, SN5149-0090-, Llanelli Naturalists meeting, det. I.K. Morgan, 11th Sep 2016, on wall on south side of Talsarnau footpath.

+‡118/04.1.c. **Lamium galeobdolon subsp. argentatum**. Pendine, SN22- 08-, R.A. Jones, M.O. Stead & R.P.C. Shaw, 8th Jul 2016.

+‡118/16.1. **Melissa officinalis** (Balm) (Balm). Track to Morfa Bychan, Pendine, SN2264-0819-, R.A. Jones, M.O. Stead & R.P.C. Shaw, 8th Jul 2016, trackside.

+124/11.1. **Cymbalaria muralis** (Ivy-leaved Toadflax) (Trwyn-y-llo Dail Eiddew). Blaen Nant-y-Cadno, Garnswllt, SN6457- 0973-, R.D. Pryce & K.A. Pryce, 20th May 2016, farm yard: first record for vc44 part of hectad.

+‡124/16.24.a. **Veronica hederifolia subsp. hederifolia**. Pont Clawdd-Owen, NE of Llanfynydd, SN5792- 3091-, R.D. Pryce & K.A. Pryce, 29th May 2016, by bridge. First hectad record for subsp. and first post-2000 hectad record for species.

+124/20.03. **Euphrasia officinalis subsp. anglica** (Effros Lloegr). Cwm Pedol, SN6985- 1542-, BSBI meeting, det. A.O. Chater, 10th Jul 2016, damp west facing grazed acid-grassland slope.

+124/20.05. **Euphrasia arctica** (Arctic Eyebright) (Effros yr Arctig). Track between Troed-rhiw-ebyst and Cwm-llynfe-uchaf, SN6951- 3317-, Laura Gravestock, Bron & David Wright, det. Chris Metherell, 21/9/2016, 7th Jul 2016, scattered through reseeded meadow, **NMW**

+128/2.6. **Utricularia minor** (Lesser Bladderwort) (Chwysigenddail Bach). Gelli Uchaf, Rhydcymerau, SN5723- 3968-, WWBIC Recording Meeting, det. R.D. Pryce, 9th Aug 2016, locally abundant in large pond constructed on floodplain about 15 years previousy. **NMW**.

+‡133/1.2. **Valerianella carinata** (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffirwythau Rhychog). Rhyd-y-ceisiaid Chapel, SN2431- 2097-, R.D. Pryce & K.A. Pryce, 10th Apr 2016, weed around graves.

+‡135/11.3. **Centaurea cyanus** (Cornflower) (Glas yr ^d). Heol Goffa, Llanerch, Llanelli, SN5137- 0114-, R.D. Pryce, 13th Nov 2016, a single self-sown plant on the kerb/gutter escaped from nearby urban verge sown with pollinator plants.

- +†135/12.1. **Cichorium intybus** (Chicory) (Ysgellog). Pantyrewig, Felingwmuchaf, SN5049-2497-, Lynne Farrell, Laura Gravestock, Bron & David Wright, 5th Jul 2016, field.
- +135/16.3. **Leontodon saxatilis** (Lesser Hawkbit) (Peradyl Bach). Rhyd-y-ceisiaid Chapel, Llangynyn, SN2431- 2097-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 10th Apr 2016, neutral grassland graveyard.
- +135/25.01.14. **Taraxacum inopinatum** (Unexpected Dandelion). Penybank, Drefelin, SN3644- 3753-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 18th Mar 2016, 2nd VCR, **NMW**; (+) Clogau Bach, SN7199- 1940-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 18th Jun 2016, 3rd VCR, **NMW**
- +135/25.01.3. **Taraxacum argutum** (Sharp-toothed Dandelion). Nr Penrhiwlas, nr Talog, SN3266- 2661-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 25th Mar 2016, **NMW**; (+) Nr Blaen Pant-y-pinswrn, SN4998- 3616-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 23rd Apr 2016, **NMW**
- +135/25.04.35. **Taraxacum faeroense** (Faeroes Dandelion). Blaen Nant-y-Cadno, Garnswllt, SN6453- 0958-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**
- +135/25.05.39. **Taraxacum euryphyllum** (Wide-stalked Dandelion). Allt y Berth, SN7150-4588-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 22nd May 2016, **NMW**
- +135/25.07.54. **Taraxacum berthae** (Bertha's Dandelion). Bryn Cadwgan, SN7281- 4854-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 22nd May 2016, 2nd VCR, **NMW**
- +135/25.07.56. **Taraxacum britannicum** (British Dandelion). Rhyd-y-ceisiaid Chapel, SN2427- 2094-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**
- +135/25.07.58 **Taraxacum cambricum** (Welsh Dandelion). Maes-Ifan, Pantycerrig tetrad, SN5730- 3034-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 29th May 2016, **NMW**; (+) Sawdde Gorge, SN7176- 2556-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 17th May 2016, **NMW**
- +135/25.07.59 **Taraxacum celticum** (Celtic Dandelion). Idole, SN4207- 1594-, R.D. Pryce, det. A.J. Richards, Dec.2016, 12th May 2016, **NMW**
- +135/25.07.60. **Taraxacum duplidentifrons** (Double-toothed Dandelion). Blaen Nant-y-Cadno, Garnswllt, SN6466- 0973-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**
- +135/25.07.64. **Taraxacum gelertii** (Gelert's Dandelion). Penllwyngwair, Llanboidy, SN2257-2227-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Pont-yr-Efail, SN6933- 3710-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 8th May 2016, **NMW**
- +135/25.07.66. **Taraxacum hesperium** (Western Dandelion). Llanedi Church, SN5888- 0663-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 9th Apr 2016, **NMW**
- +135/25.07.72. **Taraxacum nordstedtii** (Nordstedt's Dandelion). Gwernogle burial-ground TN1601, SN5306- 3403-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 23rd Apr 2016, **NMW**; (+) Maescadog, Caio, SN6816- 3916-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 8th May 2016, **NMW**
- +135/25.07.80. **Taraxacum subbracteatum** (Dark-bracted Dandelion). Allt y Berth, SN7150-4587-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 22nd May 2016, **NMW**
- +135/25.07.83. **Taraxacum unguilobum** (Claw-lobed Dandelion). Blaen Nant-y-Cadno, Garnswllt, SN6453- 0958-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**
- +135/25.08.84. **Taraxacum atactum** (Narrow-bracted Dandelion). Blaen Nant-y-Cadno, Garnswllt, SN6447- 0965-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May

2016, **NMW**; (+) Banc Pen Arthur, SN7089- 2370-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 17th May 2016, **NMW**

+135/25.08.85. **Taraxacum boeckmanii** (Bokman's Dandelion). Layby S of Maen Llwyd cross-roads, SN3958- 1112-, R.D. Pryce, det. A.J. Richards, Dec.2016, 28th Mar 2016, **NMW**; (+) Blaen Nant-y-Cadno, SN6464- 0965-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**; (+) Banc Pen Arthur, SN7107- 2370-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 17th May 2016, **NMW**

+135/25.08.87. **Taraxacum hamatifforme** (Asymmetrical Hook-lobed Dandelion). Nr Lliene, SN2749- 3125-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 30th Apr 2016, **NMW**; (+) 300m W of Constant Farm, SN3963- 1266-, R.D. Pryce, det. A.J. Richards, Dec.2016, 28th Mar 2016, also at SN3964812643, **NMW**; (+) Llanedi Church, SN5884- 0658-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 9th Apr 2016, **NMW**

+135/25.08.89 **Taraxacum hamatum** (Hook-lobed Dandelion). Nr Blaen-wen-eirch, SN2011- 2057-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, also at SN2088123707, **NMW**; (+) RAF AWR Pembrey, Tywyn Burrows, SN3682- 0474-, RAF Pembrey Conservation Group, det. A.J. Richards, Dec.2016, 16th Mar 2016, **NMW**; (+) Layby 4km E of Trelech, SN3290- 3048-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 5th Mar 2016, **NMW**

+135/25.08.94. **Taraxacum marklundii** (Marklund's Dandelion). Old railway line, Abergwili, SN4461- 2103-, R.D. Pryce, det. A.J. Richards, Dec.2016, 14th Apr 2016, **NMW**; (+) Blaen Nant-y-Cadno, Garnswllt, SN6445- 0961-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**

+‡135/25.08.97. **Taraxacum pruinaum** (Pruinose Dandelion). Nr. Gellydogin, SN1978- 2135-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Nr Blaen-wen-eirch, SN2015- 2052-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Nr Llwyn-y-piod, Hengoed, SN5115- 0357-, R.D. Pryce, det. A.J. Richards, Dec.2016, 16th Apr 2016, **NMW**; (+) Tirlan, Rhos-y-corn, SN5143- 3481-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 23rd Apr 2016, **NMW**; (+) Blaen Nant-y-Cadno, Garnswllt, SN6455- 0963-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**

+135/25.08.98. **Taraxacum pseudohamatum** (False Hook-lobed Dandelion). Nr Caeglas, Pantycerrig Tetrads, SN5677- 3063-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 29th May 2016, **NMW**

+135/25.08.99. **Taraxacum quadrans** (Fleshy-lobed Dandelion). Nr Talfan-Isaf, Abernant, SN3314- 2274-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 14th May 2016, **NMW**

+135/25.08.sah. **Taraxacum sahlinaum** (Sahlin's Dandelion). Sawdde Gorge, SN7170- 2555-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 17th May 2016, **NMW**

+‡135/25.09.105. **Taraxacum acutifrons** (Acute-leaved Dandelion). Penybank, Drefelin, SN3627- 3759-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 18th Mar 2016, 2nd VCR, **NMW**

+‡135/25.09.106. **Taraxacum aequilobum** (Twisted-bracted Dandelion). Old railway line, Abergwili, SN4474- 2104-, R.D. Pryce, det. A.J. Richards, Dec.2016, 14th Apr 2016, **NMW**; (+) National Botanic Garden of Wales, SN5225- 1796-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 7th May 2016, **NMW**

+135/25.09.108. **Taraxacum alatum** (Green Dandelion). Cwmfelinboeth, SN1921- 1930-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Pistyll-efrith, SN2302- 2160-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, also at

- SN 22996 21631, **NMW**; (+) 300m W of Constant Farm, SN3964- 1264-, R.D. Pryce, det. A.J. Richards, Dec.2016, 28th Mar 2016, **NMW**
- +135/25.09.111. **Taraxacum ancistrolobum** (Few-lobed Dandelion). Sawdde Gorge, SN7174-2557-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 17th May 2016, **NMW**
- +135/25.09.120. **Taraxacum cophocentrum** (Rounded-lobed Dandelion). E of Pass By House, SN3529- 1937-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 30th Apr 2016, **NMW**; (+) Maesyrfafod, SN3035- 3318-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 30th Apr 2016, **NMW**
- +135/25.09.121. **Taraxacum cordatum** (Entire-lobed Dandelion). S of Banc Bronffin, SN6900- 4047-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 8th May 2016, **NMW**
- +135/25.09.123. **Taraxacum crociflorum** (Orange-flowered Dandelion). Capel Cendu, SN3426- 2269-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 14th May 2016, **NMW**; (+) Nr. Hermon, SN3633- 3105-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th Mar 2016, **NMW**
- +135/25.09.131. **Taraxacum ekmanii** (Ekman's Dandelion). Cwmfelinboeth, SN1922- 1929-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Pwll, Llanelli, SN4770- 0119-, R.D. Pryce, det. A.J. Richards, Dec.2016, 6th May 2016, also at SN4769501203 and SN45010047, **NMW**
- +135/25.09.137. **Taraxacum fasciatum** (Dense-bracted Dandelion). Llanedi Church, SN5884-0667-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 9th Apr 2016, 3rd VCR, **NMW**
- +‡135/25.09.140 **Taraxacum horridifrons** (Prickly-leaved Dandelion). Ty'n-y-waun, SN6851-2024-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 5th May 2016, 3rd VCR, **NMW**
- +‡135/25.09.146. **Taraxacum lacerifolium** (Jagged-leaved Dandelion). Penllwyngwair, Llanboidy, SN2256- 2227-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Penybanc, Drefelin, SN3627- 3760-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 18th Mar 2016, **NMW**
- +‡135/25.09.149. **Taraxacum laeticolor** (Pale-stalked Dandelion). Pont Rhyd-y-ceisiaid, SN2405- 2114-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) Blaen Nant-y-Cadno, Garnswllt, SN6457- 0971-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 20th May 2016, **NMW**
- *‡135/25.09.154. **Taraxacum leptodon** (Yellow-styled Dandelion). Maes-Ifan, Pantycerrig Tetrads, SN5745- 3032-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 29th May 2016, growing on NE facing shady bank on S side of road, **NMW**
- +135/25.09.172. **Taraxacum oblongatum** (Oblong-leaved Dandelion). Morfa Berwig LNR, Bynea, SS5446- 9862-, R.D. Pryce, det. A.J. Richards, Dec.2016, 5th Apr 2016, **NMW**; (+) Layby NE of Upland Arms, SN4142- 1505-, R.D. Pryce, det. A.J. Richards, Dec.2016, 28th Mar 2016, **NMW**
- +‡135/25.09.173 **Taraxacum obtusifrons** (Obtuse-leaved Dandelion). Maescadog, Caio, SN6885- 3943-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 8th May 2016, 3rd VCR, **NMW**
- +‡135/25.09.175. **Taraxacum ochrochlorum** (Winged Dandelion). Maescadog, Caio, SN6888-3941-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 8th May 2016, 2nd VCR, **NMW**
- +‡135/25.09.177 **Taraxacum pachymerum** (Dirty-leaved Dandelion). Banc-y-Mansel, SN5340- 1508-, R.D. Pryce, det. A.J. Richards, Dec.2016, 12th Apr 2016, **NMW**
- +135/25.09.186. **Taraxacum polyodon** (Common Dandelion). Banc Pen Arthur, SN7107-2370-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 17th May 2016, **NMW**
- +135/25.09.197. **Taraxacum sellandi** (Selland's Dandelion). S of Pant-y-gorffwys, SN1966-2215-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 10th Apr 2016, **NMW**; (+) SE

of Sarnau, SN2996- 3179-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 30th Apr 2016, **NMW**; (+) Overgrown quarry west of Maudsland, SN3221- 3371-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 30th Apr 2016, **NMW**

+135/25.09.201. **Taraxacum stenacrum** (Linear-lobed Dandelion). Nr Lliene, SN2754- 3122-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 30th Apr 2016, 2nd VCR, **NMW**

+135/25.09.207. **Taraxacum sublaeticolor** (Small-headed Dandelion). Nr Penrhiwlas, nr.Talog, SN3271- 2653-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 25th Mar 2016, **NMW**; (+) Allt y Berth, SN7143- 4583-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 22nd May 2016, **NMW**

+135/25.09.209. **Taraxacum lepidum** (Pruinose-bracted Dandelion). Muddy bank of car-park between Lliedi Reservoirs, SN5152- 0418-, R.D. Pryce, det. A.J. Richards, Dec.2016, 16th Apr 2016, 3rd VCR, **NMW**

+‡135/25.09.216. **Taraxacum undulatiflorum** (Dull-leaved Dandelion). Gwernogle burial-ground, SN5310- 3403-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 23rd Apr 2016, **NMW**

+135/25.09.217. **Taraxacum undulatum** (Wavy-leaved Dandelion). Footpath NE from Llanedi Church, SN5907- 0678-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 9th Apr 2016, **NMW**; (+) Pal-y-Cwrt, SN6771- 1822-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 5th May 2016, **NMW**

+135/25.non. **Taraxacum 'non-severum'**. Pwll, Llanelli, SN4769- 0120-, R.D. Pryce, det. A.J. Richards, Dec.2016, 6th May 2016, 3rd VCR, **NMW**

*135/25.aes **Taraxacum aesculosum sp.nov.** (Dandelion) (Dant y Llew). Pant-y-Llyn Farm, Abernant, SN3467- 2574-, R.D. Pryce & K.A. Pryce, det. A.J. Richards, Dec.2016, 14th May 2016, edge of ancient woodland. Description of species in prep. Only previously known from central Ireland where it is relatively frequent. First British record: endemic to the British Isles. **NMW**. See image 10 on back cover.

+‡135/41.4. **Aster novi-belgii** (Confused Michaelmas-daisy) (Blodyn-Mihangel Dyrys). Kidwelly, Dinas brickwoks site, SN4093- 0620-, R.D. Pryce, 20th Sep 2016, naturalized in derelict works.

+©135/55.aus. **Anthemis austriaca** (Austrian Chamomile). Calon-y-Fferi, Ferryside, SN3682- 1059-, R.D. Pryce & K.A. Pryce, 1st Oct 2016, overgrown planting bed with self-sown wildflower plants from originally sown seed-mix.

+135/62.10×11. **Senecio × ostenfeldii**. Nyns Dawela Community Woodland, Brynamman, SN7009- 1364-, WWBIC Recording Meeting, det. R.D. Pryce, 23rd Jun 2016.

+135/62.17. **Senecio sylvaticus** (Heath Groundsel) (Creulys y Rhos). Pen-y-rhaglan-wynt, SN7396- 5020-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 22nd May 2016, on track on Carms bank of Afon Pisgotwr fach east of ford and stile. First record for vc44 part of hectad.

+137/4.1. **Alisma plantago-aquatica** (Water-plantain) (Llyriad y Dwr). Cwm Caer Odyn, Cefn Gwenffrwd, SN7454- 4832-, BSBI meeting, 6th Jul 2016, small lake in Tillhill forestry plantation.

+‡147/5.2.b. **Arum italicum subsp. italicum**. Login tetrad, SN41j, G.M. Kay, Lynne Farrell & Geoffrey Hall, 7th Jul 2016.

+151/1.06. **Juncus foliosus** (Leafy Rush) (Brwynen Ddeiliog). Cwm Pedol, SN6978- 1560-, BSBI meeting, det. A.O. Chater & G.M. Kay, 10th Jul 2016, track with permanent standing water.

+152/13.1. **Rhynchospora alba** (White Beak-sedge) (Corsfrwynen Wen). Disgwylfa, Pontyberem, SN510 091, S.D.S. Bosanquet, 24th Aug 2016, in NVC M2a with patches of M18b: thousands of plants over more than 200m x 100m in SN510091, SN510092 and SN511092; (+) Cwm Pedol, SN6981- 1598-, BSBI meeting, det. A.O. Chater, G.M. Kay, Lynne

Farrell, Chris Cheffings, M.O. Stead & R.D. Pryce, 10th Jul 2016, about six populations scattered over area c.20m x 10m in mossy flush just east of river, extending into adjacent tetrad at SN69821600.

+152/16.05×15. **Carex** × **pseudoaxillaris**. Morfa Berwig LNR, Bynea, SS5446- 9870-, Llanelli Naturalists meeting, det. Andrew Stevens and R.D. Pryce, 4th Jun 2016, 2nd VCR. Also elsewhere in LNR along banks of drainage-ditches eg at SS54299878.

+152/16.35. **Carex flacca** (Glaucous Sedge) (Hesgen Lwydlas y Calch). Pen-y-rhaglan-wynt, SN7399- 5019-, R.D. Pryce & K.A. Pryce, 22nd May 2016, Carms bank of Afon Pisgotwr fach. First record for vc44 part of hectad. Also at SN73955021.

+153/12.02. **Schedonorus arundinaceus** (Tall Fescue) (Peiswellt Tal). Nr. Maesyrfafod, NE of Trelech, SN3037- 3260-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 30th Apr 2016, fairly new roadside verge where lane corner cut-off; (+) Penrhiw-iar, SN7600- 4780-, BSBI meeting, det. A.O. Chater & R.D. Pryce, 6th Jul 2016, well vegetated acid bank on NW side of secondary forestry track.

*‡153/28.2. **Avena strigosa** (Bristle Oat) (Blewgeirchen). Carnau Farm, nr. Trelech, SN2978- 2794-, Laurence Brooks, Aug 2016, naturally occurring arable weed in cereal crop, common in 2016 occasional 2015.

+153/39.8. **Agrostis vinealis** (Brown Bent) (Maeswellt-y-c[^]n y Mynydd). Pyllau-cochion Common, SN5001- 2672-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 21st Jun 2016, acid, unimproved grassland and heathy roadside bank; (+) Cwm-ban-fach, nr. Llanfynydd, SN5649- 2890-, Geoffrey Hall, Laura Gravestock & Richard Gowing, 8th Jul 2016, several plants on bank beside farm track.

+‡153/46.2. **Polypogon viridis** (Water Bent) (Barfwellt y D[^]r). Carmarthen Community Centre, SN4142- 2032-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 10th Sep 2016, one plant at foot of low boundary wall on NE side of car park.

+©153/59.vul. **Hordeum vulgare** (Six-rowed Barley) (Haidd Chwerhesog). Bronwydd Rd, Abergwili, SN4279- 2153-, R.D. Pryce, 25th Jul 2016, self-sown plant on disturbed ground.

+153/64.1. **Phragmites australis** (Common Reed) (Corsen). Cwm Caer Odyn, Cefn Gwenffrwd, SN7454- 4832-, BSBI meeting, det. A.O. Chater, M.O. Stead & R.D. Pryce, 6th Jul 2016, at edge of small lake in forestry plantation.

+‡157/1.1. **Pontederia cordata** (Pickerelweed) (Picrellys). Gelli Uchaf, Rhydcymerau, SN5733- 3954-, WWBIC Recording Meeting, det. R.D. Pryce, 9th Aug 2016, locally abundant by south-east bank of pond.

+‡158/12.2. **Lilium pyrenaicum** (Pyrenean Lily) (Lili Ddrewllyd). Pont Clawdd-Owen, NE of Llanfynydd, SN5792- 3091-, R.D. Pryce & K.A. Pryce, det. R.D. Pryce, 29th May 2016, large stand, well naturalized above N bank of stream at NW side of bridge.

+158/20.2×3.‡ **Hyacinthoides** × **massartiana** (Clychau'r-gog Croesryw). Cilgawod, Caio, SN6867- 3952-, R.D. Pryce & K.A. Pryce, 8th May 2016, road verge near entrance to Cilgawod Farm.

+‡158/33.5. **Narcissus pseudonarcissus** (Gweler yr Isrywogaethau yn Unig). Gwernogle burial-ground, SN5307- 3405-, R.D. Pryce & K.A. Pryce, 23rd Apr 2016, few plants in uncut, rather overgrown northern half of graveyard.

□162/13.1. **Platanthera chlorantha** (Greater Butterfly-orchid) (Tegeirian Llydanwyrdd). Idole, SN4210- 1585-, R.D. Pryce & K.A. Pryce, 2nd Jun 2016, several spikes in damp, acid grassland becoming overgrown with willow. Also in overgrown scrubby area at SN42031591. First reported by local resident.

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

+011/1. **Polypodium cambricum** (Southern Polypody) (Llawredynen Gymreig). Seamen's Chapel, St. Mary's Church, Angle, SM8664- 0292-, S.B. Evans & A.E. Evans, 31st Aug 2016, a few small fronds growing on the NNW tiled roof of the Seamen's Chapel but there must have been sheets of the fern a year or so before. These were found tipped amongst the trees at the back of the Churchyard; (+) Start of track out to Angle Point, Angle, SM8669 02914, S.B. Evans & A.E. Evans, 31st Aug 2016, *Polypodium cambricum* was on the limestone wall on the west side of the track going down to the bridge and saltings.

+027/1.1.‡ **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). Eastern side of main pool, Bottom Meadow Quarry, West Williamston, SN03790 05814, Matt Sutton, 9th Dec 2016.

*‡028/17.1. **Thalictrum aquilegifolium** (French Meadow-rue) (Arianllys Ffrainc). Deepford Railway Bridge, Clarboston, SN0488- 2008-, Bob Haycock, det. R.F. Taylor, 22nd May 2016, flowering *T. aquilegifolium* was growing on the edge of a thick roadside hedge near the railway bridge, just east of Deep Ford Farm. Assumed to be an escape from the farm.

+‡030/1.6. **Papaver hybridum** (Rough Poppy) (Pabi Penbigog). Carcoed, Goodwick, SM94589 39693, Matt Sutton, 19th June 2016, *Anchusa arvensis*, *Papaver hybridum* and *Fumaria cf. bastardii* were seen in the disturbed ground of a field corner. The owner had tried a seed mix; a 'volcano mix', a few years ago.

+‡031/5.07. **Fumaria officinalis** (Common Fumitory) (Mwg-y-ddaear Cyffredin). Caerhys Farm, Llanrhian, SM7962- 3009-, Jan Winder, 20th Jul 2016, growing in a wheat field with heritage varieties. Plantlife Arable Farm survey.

+‡043/1.08. **Chenopodium polyspermum** (Many-seeded Goosefoot) (Troed-yr-^ydd Amlhadog). Blaenffynnon, Brynberian, SN1034- 3525-, S.B. Evans, 20th Oct 2016, growing in a vegetable garden.

*043/3.03×04. **Atriplex ×taschereaui** (Taschereau's Orache) (Llygwyn Taschereau). Goodwick Moor, Fishguard, SM947 377, Paul R. Green, det. Rodney Burton, 5th Sep 2016, 3 plants of *Atriplex glabriuscula* x *longipes* were found amongst reeds on the margin of a brackish area.

+043/7.2. **Suaeda maritima** (Annual Sea-blite) (Helys Unflwydd). Broad Haven South, Stackpole, SR9773- 9432-, Jonathan Hughes, 21st Sep 2016, at least two or three plants of *Suaeda maritima* were growing at the top of the sandy beach below the outlet to Bosherton Lake.

+046/05.3. **Stellaria pallida** (Lesser Chickweed) (Gwlyddyn-y-dom Bach). NW side of Broomhill Burrows, Angle, SM88300 00638, S.B. Evans, 30th Mar 2016, *Stellaria pallida* was in rabbit and cattle grazed short dune turf on a SSW facing slope with patches of bare sand at the junction between dune grassland and scrub.

+047/1.7. **Persicaria amplexicaulis** (Red Bistort) (Y Ganwraidd Goch). Penralltlyn, Carregwen, Manordeifi, SN2146-4136-, Howard Williams, 23rd Jul 2016, scattered around tracks by farm buildings.

+‡047/4.6. **Polygonum rurivagum** (Cornfield Knotgrass) (Canclwm y Tir Âr). Llanunwas, Solva, SM7905- 2421-, Jan Winder, 21st Jul 2016, *Polygonum rurivagum* was in a field of Spring barley; (+) Pwll-caerog Farm, Llanrhian, SM7833- 3016-, Jan Winder, 19th Jul 2016, growing in spring barley. Both Plantlife Arable Farm surveys.

+047/8.13×14. **Rumex ×schulzei**. The Deer Park, Marloes, SM7603- 0903-, Geoffrey Kitchener, 13th Jul 2016, *Rumex x schulzei* was growing by a streamlet just west of Deer Park wall, with parents.

- *047/8.13×15. **Rumex ×sagorskii**. St. Twynnels, SR94- 97-, Geoffrey Kitchener, 10th Jul 2016, *Rumex x sagorskii* was growing by the road south-west of the cemetery with parents; (*) Coast path, Greenala Point, Stackpole, SS005 965, Geoffrey Kitchener, 11th Jul 2016, one plant of *R. x sagorskii* was found near the coast path, beyond the wooden barrier. *Rumex crispus* was in the vicinity, but *Rumex sanguineus* was at least 30m away; (*) Freshwater East, SS0159-9754-, Geoffrey Kitchener, 11th Jul 2016, one plant of *R. x sagorskii* at the bottom of a grassy slope SE of Trewent Park. The parents were in the general but not immediate vicinity; (*) Freshwater East, SS0163- 9749-, Geoffrey Kitchener, 11th Jul 2016, four plants of *R. x sagorskii* with parents on a grassy slope between Trewent Point and Trewent Park.
- +047/8.15×19. **Rumex × dufftii** Lyserry Lane, St. Twynnels, SR955 957, Geoffrey Kitchener, 10th Jul 2016, a large multi-stemmed plant of *Rumex x dufftii* was found in coarse vegetation on Lyserry Lane road verge. Both parents were within 5m; (+) East of St. Twynnels, SR953 975, Geoffrey Kitchener, 10th Jul 2016, *R. x dufftii* with parents on laneside east of St. Twynnels near electricity substation; (+) Colby Lodge, SN1575- 0779-, Geoffrey Kitchener, 12th Jul 2016, *R. x dufftii* was with parents in rough grassland in part of Colby Woodland Garden.
- +062/12.4 **Rorippa nasturtium-aquaticum** (Water-cress) (Berwr y Dwr). North of Bwlchgyroes, SN2431-3677-, Howard Williams, 25th Jul 2016, roadside ditch.
- + 062/12.4 **Rorippa palustris** (Marsh Yellow-cress) (Berwr Melyn y Gors). Glogue Quarry, Tegryn, SN2206-3264-, Howard Williams, 16th Jul 2016, lowest track at the disused slate quarry.
- +‡062/31.2. **Lepidium didymum** (Lesser Swine-cress) (Olbrain Bach). Pwll-caerog Farm, Llanrhan, SM7833- 3016-, Jan Winder, 19th Jul 2016, growing in spring barley. Plantlife Arable Farm survey.
- +‡062/34.2. **Brassica napus** (Rape) (Rêp). Pwll-caerog Farm, Llanrhan, SM7833- 3016-, Jan Winder, 19th Jul 2016, Plantlife Arable Farm survey.
- + 062/34.5. **Brassica nigra** (Black Mustard) (Mwstard Du). Glogue Quarry, Tegryn, SN2208-3264-, Howard Williams, 19th Aug 2016, disused slate quarry.
- +069/4.5. **Lysimachia punctata** (Dotted Loosestrife) (Trewyn Brych). Cwm Sidan, Abercych, SN2403-4242-, Howard Williams, 27th Aug 2016, woodland glade by Cwm Sidan, Glan Teifi Road.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Pond, Penrallt Ceibwr, Moylgrove, SN1162- 4538-, S.B. Evans, 22nd Jun 2016, variegated *Acorus calamus*, *Oenanthe fistulosa* and *Ranunculus lingua* were amongst other introduced aquatics to this large pond by the Garden Centre.
- +‡074/08.1. **Tellima grandiflora** (Fringecups) (Clychau'r Clawdd). Near 'Manteilo' east of Maenclochog, SN10053 27185, Trevor Theobald, 18th May 2016, *Tellima grandiflora* was found along the eastern bank of a green lane. It was assumed to be a garden escape.
- +075/20.1. **Aphanes australis** (Slender Parsley-piert) (Troed-y-dryw main). Coed Pen-yr-allt, Ffynnonau, Boncath, SN2297-3796-, Howard Williams, 12th Jul 2016, trackside.
- +‡075/32.13. **Cotoneaster lacteus** (Late Cotoneaster) (Cotoneaster Diweddard). Trewent Hill, Freshwater East, SS0143- 9805-, Geoffrey Kitchener, 11th Jul 2016, an over 1.5m height bush of *Cotoneaster lacteus* was found in roadside scrub on the hill - looking bird sown.
- +075/32.33. **Cotoneaster simonsii** (Himalayan Cotoneaster) (Cotoneaster Simons). Cilgerran, SN2029-4283-, Howard Williams, 17th Aug 2016, pathside below the Mason's Arms.
- +077/17.1. **Melilotus altissimus** (Tall Melilot) (Yr Wydro Dal). Glogue Quarry, Tegryn, SN2202-3282-, Howard Williams, 19th Aug 2016, disused slate quarry.
- +077/19.11. **Trifolium campestre** (Hop Trefoil) (Meillionen Hopysaidd). Cwm-blaen-bwlan, Ffynnonau, Boncath, SN231 377, Howard Williams, 28th Jul 2016, trackside.

- +‡079/2.2. **Myriophyllum aquaticum** (Parrot's-feather) (Pluen Parot). North of Puma Energy Landfarm, Tiers Cross, SM8792- 0926-, S.B. Evans, 8th Jun 2016. A small, very steep sided pond/pool immediately below the track had a small stand of *Myriophyllum aquaticum*. The pool was surrounded by *Oenanthe crocata*.
- + 084/1.7. **Epilobium roseum** (Pale Willowherb) (Helyglys Gwelw). West of Coed Devonald, Eglwysrw, SN1214- 4031-, Howard Williams, 6th Oct 2016, bank of stream where it crossed a forestry track.
- +084/1.12. **Epilobium brunescens** (New Zealand Willowherb) (Helyglys Sealand Newydd). Glogue Quarry, Tegryn, SN219 327, Howard Williams, 24th May 2016, frequent in disused slate quarry.
- +084/1.02×06 **Epilobium ×dacicum**. Lodge Park Wood, Stackpole, SR973 962, Geoffrey Kitchener, 11th Jul 2016, two plants with parents in area of partial woodland clearance.
- +084/1.02×08 **Epilobium × floridulum**. Lyserry, St.Twynnells, SR9557- 9669-, Geoffrey Kitchener, 9th Jul 2016, at least 5 plants on stone heap with parents. Also found elsewhere in the grounds of Lyserry Barns; (+) Lyserry, St.Twynnells, SR9559- 9667-, Geoffrey Kitchener, 9th Jul 2016, many plants of this hybrid in farm yard across the road from the other stands; (+) Stackpole Walled Garden, SR972 961, Geoffrey Kitchener, 11th Jul 2016, one plant with parents amongst numerous willowherbs in walled garden; (+) Lodge Park Wood, Stackpole, SR973 962, Geoffrey Kitchener, 11th Jul 2016, one plant with parents in area of partial woodland clearance; (+) Upton Castle Grounds, Cosheston, SN021 046, Geoffrey Kitchener, 14th Jul 2016, one plant of *E. x floridulum* in walled garden with parents.
- *084/1.03×06. **Epilobium ×aggregatum** (a hybrid willowherb). Lodge Park Wood, Stackpole, SR973 962, Geoffrey Kitchener, 11th Jul 2016, one plant with parents in area of partial woodland clearance; (*) Upton Castle Grounds, Cosheston, SN021 046, Geoffrey Kitchener, 14th Jul 2016, one plant each of *Epilobium x aggregatum* in walled garden with parents.
- +084/1.03×08. **Epilobium ×interjectum**. Lodge Park Wood, Stackpole, SR973 962, Geoffrey Kitchener, 11th Jul 2016, two plants with parents in area of partial woodland clearance.
- +084/1.06×08. **Epilobium ×vicinum (E. obscurum × E. ciliatum)**. Lodge Park Wood, Stackpole, SR973 962, Geoffrey Kitchener, 11th Jul 2016, two plants with parents in area of partial woodland clearance.
- +‡084/4.4. **Oenothera cambrica** (Small-flowered Evening-primrose) (Melyn-yr-hwyr Mân-floedeuog). Pwll Gwaelod, Dinas Cross, SN00521 39880, S.B. Evans, 25th Jul 2016, a few *Oenothera cambrica* plants were by the concrete steps up from the boat park.
- +†091/2.11. **Euphorbia peplus** (Petty Spurge) (Llaethlys Bach). Blaenffynnon, Brynberian, SN1034- 3525-, S. B. Evans, 20th Oct 2016, growing in a vegetable garden.
- +094/2.1. **Radiola linoides** (Allseed) (Llin Gorhadog). Coed Ffynnon Ddu, Eglwysrw, SN1196-4004-, Howard Williams, 24th Jul 2016, growing on a bare forestry track.
- *‡102/1.14. **Oxalis incarnata** (Pale Pink-sorrel) (Suran Welw). Lloyds Bank, Market Street, Newport, SN0571- 3908-, S.B. Evans & A.E. Evans, 30th Jun 2016, a single flowering *Oxalis incarnata* was growing out of the side of the low stone wall on the south side of the forecourt of Lloyds Bank. It would have self-sown into the crevices of the stone wall.
- +‡105/1.4. **Impatiens glandulifera** (Indian Balsam) (Jac y Neidiwr). Minor tarred road W. of Blaen Dyfnant, Llanfyrnach, SN2343- 2940-, S.B. Evans & A.E. Evans, 16th Sep 2016, *Impatiens glandulifera* was on the downstream side of the minor road just within VC45.
- +107/13.2. **Pimpinella saxifraga** (Burnet-saxifrage) (Gwreiddiriog). NW of Landshipping Quay, SN00719 11150, S.B. Evans & A.E. Evans, 22nd Sep 2016, *Pimpinella saxifraga* was growing with *Knautia arvensis* on a low estuarine cliff.
- +107/16.1. **Berula erecta** (Lesser Water-parsnip) (Panasen-y-d'r Gulddail). Jordanston Mountain, Redberth, SN0897- 0359-, Matt Sutton, 14th Jun 2016, 2 plants of *Berula erecta* were

in a shallow drainage ditch alongside the machinery store dug 3 years earlier - a possible accidental introduction from stored cut reed. The reed had been harvested from Ritec Fen from around SN1151 00751.

+107/28.1. **Apium graveolens** (Wild Celery) (Seleri Gwyllt). Ellis' piece, west of Marloes Mere, Marloes, SM77221 08059, Matt Sutton, 25th Oct 2016, one plant of *Apium graveolens* with *Callitriche platycarpa* etc in pool edge.

+107/43.3. **Torilis nodosa** (Knotted Hedge-parsley) (Troed-y-cyw Clymog). Stone wall, Strumble Head, SM89357 41208, Chloe Griffiths, 10th Jul 2016, *Torilis nodosa* was growing in the lee of the stone wall just before the gate that leads down to the bridge to the island with the lighthouse.

+‡110/9.1. **Datura stramonium** (Thorn-apple) (Afal Dreiniog). Baencleddau, Mynachclog-ddu, SN16539 32230, Val Kirby, Jul 2016, a single plant turned up with self seeded kale plants in a garden tunnel.

+116/04.1. **Symphytum officinale** (Common Comfrey) (Cyfardwf). Caerhys Farm, Llanrhian, SM7966- 3037-, Jan Winder, 20th Jul 2016, a field of organic vegetable plots. Plantlife Arable Farm survey.

+116/15.7. **Myosotis sylvatica** (Wood Forget-me-not) (Sgorpiollys y Coed). Glogue Quarry, Tegryn, SN2208-3284-, Howard Williams 16th Jul 2016, disused slate quarry.

+‡117/1.bon. **Verbena bonariensis** (Argentinian Vervain) (Ferfain yr Ariannin). Rough ground by Pembroke Dock Railway Station, SM970 035, David Saunders, 23rd Jun 2016, a single flowering plant.

+118/10.2. **Scutellaria galericulata** (Skullcap) (Cycyllog). North of Landshipping Quay, SN009 116, S.B. Evans & A.E. Evans, 22nd Sep 2016, growing in a major freshwater seepage onto salt marsh. *Bolboschoenus maritimus* and *Juncus maritimus* were locally abundant as were *Salix cinerea*, *Carex paniculata* and *Alnus glutinosa* in the freshwater seepage.

+118/18.2. **Clinopodium ascendens** (Common Calamint) (Brenhinllys). Baenffynnon, Brynberian, SN1036- 3525-, S B. Evans, 20th Oct 2016, it was growing in the crevices between paving slabs around the house.

+118/23.1. **Mentha arvensis** (Corn Mint) (Mintys yr Âr). Upper Flush, Wood farm, Newgale, SM86022 21911, S.B. Evans, 17th Aug 2016, *Mentha arvensis* was in a small relict, cattle grazed, sloping flush in the NE field corner.

+120/1.4. **Callitriche platycarpa** (Various-leaved Water-starwort) (Brigwlydd y Gwanwyn). Ellis' piece, west of Marloes Mere, Marloes, SM77221 08059, Matt Sutton, 25th Oct 2016, *Callitriche platycarpa* with a single *Apium graveolens* plant in pool edge.

+124/2.2. **Scrophularia auriculata** (Water Figwort) (Gwrneth y Dwr). Glogue Quarry, Tegryn, SN219 328, Howard Williams, 16th Jul 2016, frequent in disused slate quarry.

+†124/9.1. **Misopates orontium** (Weasel's-snout) (Y Trwyn-y-llo Lleiaf). Caerhys Farm, Llanrhian, SM7962- 3009-, Jan Winder, 20th Jul 2016, Plantlife Arable Farm survey.

+‡131/5.1. **Leycesteria formosa** (Himalayan Honeysuckle) (Bachgen Llwm). Archway opposite Brecon House, St. David's, SM75097 25514, S.B. Evans, A.E. Evans, Llion Davies & Nicola Obrian 30th Jul 2016, a fine old stone gateway arch with a double slate course capped by more mortared stone was unusual in that it had three invasive alien species, including *Leycesteria formosa* growing on top of the wall and arch; (+) St. Brynach's Church, Cwm-yr-eglwys, Dinas Cross, SN0148- 4005-, S.B. Evans, A.E. Evans, Leon Davies & Nicola Obrian, 31st Jul 2016, a single young *Leycesteria formosa* was well established in the churchyard alongside the wall of the stream that borders the north side of the access down to the slipway.

+†133/1.4. **Valerianella dentata** (Narrow-fruited Cornsalad) (Gwylaeth-yr-oen Meiffwrwyth). Pwll-caerog Farm, Llanrhian, SM78316 30335, Jan Winder, 19th Jul 2016, one small and delicate *Valerianella dentata* plant was found in spring barley during a Plantlife Arable Farm

survey. It was on a slope where the sprayer had not reached. *Stachys arvensis* and *Glebionis segetum* were in the same corner. *V. dentata* had been found in another field corner on the same farm in 2003 but in the adjacent hectad at SM79178 29756.

+ 134/1.1. **Dipsacus fullonum** (Wild Teasel) (Cribau'r-pannwr Gwyllt). Glogue Quarry, Tegryn, SN2202-3282-, 19th Aug 2016, disused slate quarry.

+†135/11.3. **Centaurea cyanus** (Cornflower) (Glas yr ^d). Caerhys Farm, Llanrhian, SM79380 30622, Jan Winder, 20th Jul 2016, 2 plants in a field of spring oats. The farmer told Jan that he had not sown the *Centaurea cyanus* and Jan's view is that their occurrence was natural; a single *Centaurea cyanus* plant was also found in a wheat field with heritage varieties at SM79672.30210 where it had not been sown and at SM79622 30317, 3 *Centaurea cyanus* plants were found within a field of organic vegetable plots where they had probably been accidentally introduced. All records were from a Plantlife Arable Farm survey.

+†135/17.1. **Helminthotheca echioides** (Bristly Oxtongue) (Tafod-y-llew Gwrychog). Cwm-yr-Eglwys, Dinas Cross, SN0148- 4015-, S. B. Evans, 25th Jul 2016, a plant was on the edge of the tarmac at the toe of the bank SW of Y Bont.

+‡135/43.4. **Erigeron karvinskianus** (Mexican Fleabane) (Amrhydlwyd y Cerrig). Cwm-yr-Eglwys, Dinas Cross, SN0146- 4013-, S. B. Evans, 25th Jul 2016, an *Erigeron karvinskianus* plant had self-sown into the toe of the stone retaining wall by the road SW of Y Bont.

+‡135/58.lac×max. **Leucanthemum ×superbum** (Shasta Daisy) (Y Llygad-llo Mwyaf). Abereiddy dunes, Llanrhian, SM79867 31282, S.B. Evans, A.E. Evans, Anne Hutchings & Alan Hutchings, 10th Jul 2016, garden throw-outs naturalised in dune scrub on the north side of the rough track opposite the cottage of Towyn included stands of *Leucanthemum x superbum*.

*‡135/62.03. **Senecio inaequidens** (Narrow-leaved Ragwort) (Creulys Gulddail). Liddeston Ridge Solar farm, Milford Haven, SM89962 06553, Matt Sutton, 25th Oct 2016, a single *Senecio inaequidens* plant was found on tipped dredgings from the Marina with *Kickxia elatine*.

+142/1.1. **Potamogeton natans** (Broad-leaved Pondweed) (Dyffrllys Llydanddail). Glogue Quarry, Tegryn, SN2194-3264-, Howard Williams, 16th Jul 2016, pool in disused slate quarry.

+‡147/2.1. **Lysichiton americanus** (American Skunk-cabbage) (Pidyn-y-gog Americanaidd). Old Slaughter House, Newport Estuary, SN06009 39527, S.B. Evans & A.E. Evans, 12th Sep 2016, seawards of the area where *Salix* scrub had been cleared by the old demolished Slaughter House there was a stand of *Lysichiton americanus*. Assuming it was not planted when attempts were made to plant a garden nearby at the top of the saltmarsh it could have been washed down from Newport gardens in the adjacent stream that discharges to the estuary at this point; (+) Porth Mawr, Boncath, SN20653 37578, Anthony Weake & Jeanette Allingham, det. Nigel Lee, 15th Apr 2016, a mass of *Lysichiton americanus* was found in woodland.

+‡147/5.2.b. **Arum italicum subsp. italicum**. Cresswell Quay, Cresswell, SN05091 06594, Nigel Lee, 14th May 2016, *Arum italicum* subsp. *italicum* was on a heavily tree shaded footpath bank.

+152/11.1. **Cyperus longus** (Galingale) (Ysnoden Fair). SE of Bethesda Chapel, SW of Saundersfoot, SN12158 03918, Richard J. Williams, 1st Dec 2016, a dense stand of *Cyperus longus* was found in the field corner alongside the main A478 road. The origin of *C. longus* here is a mystery: the size of the patch at ca 30 x 10m would suggest that it has been there a while.

+152/16.05. **Carex otrubae** (False Fox-sedge) (Hesgen Dywysennog Goesadeiniog). SSW of Y Bont, Cwmyreglwys, Dinas Cross, SN0148- 4014-, S.B. Evans, 18th Jul 2016, one plant on the damp rock just south south-west of Y Bont.

+152/16.09.a. **Carex divulsa subsp. divulsa** (Grey Sedge). Gorse/heath bank, Trewellwell Wood, Middle Mill, Solva, SM79983 26747, S.B. Evans & A.E. Evans, 2nd Jul 2016, two large *Carex divulsa* clumps were 3 paces below the track at the top of the gorse bank on the upper edge of the steep, gorge-like, valley of the river Solva.

+152/16.16. **Carex leporina** (Oval Sedge) (Hesgen Hirgron). Spring on east side Dinas Island, SN01591 40774, S. B. Evans, 25th Jul 2016, a single clump, with *Carex echinata*, was low down at the bottom just over the hedgebank where the spring fed flush discharged onto the sea-cliff.

+152/16.29. **Carex vesicaria** (Bladder-sedge) (Hesgen Chwysigennaidd). Caleb Quarry, Bosherton, SR95910 95101, Matt Sutton, 5th Nov 2016, stomata were clearly visible on lower side of the leaf.

+†153/14.3. **Vulpia myuros** (Rat's-tail Fescue) (Peisgwellt y Fagwyr). Abercastle, SM85328 33661, S.B. Evans, A.E. Evans, Anne Hutchings & Alan Hutchings, 10th Jul 2016, *Vulpia myuros* was growing on concrete steps on the east side of the village amongst dwellings.

+‡153/60.1. **Triticum aestivum** (Bread Wheat) (Gwenith). Castle Hill, Tenby, SN13854 00503, S.B. Evans, Aled W. Evans & A.E. Evans, 4th Dec 2016, a clump of *Triticum aestivum* was growing with *Brassica oleracea* on the inland side of the path around Castle Hill

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

+004/1.5. **Equisetum arvense** (Field Horsetail) (Marchrawnyn yr Ardir). Flushed streamside, N-bank of the Nant Brwynog, Tair Allt Gorge, c.1km SE of Bryn Trapau, SN820 651, S.P. Chambers, 23rd Jul 2016, 1st hectad record at least for the VC46 part.

006/1.1. **Osmunda regalis** (Royal Fern) (Rhedynen Gyfrdwy). Mire, W-basin of Cors Pentwyn, Mynydd Bach, SN579 635, D.K. Reed, 29th Sep 2016, 9 plants plus another 10 in the adjacent tetrad SN56W.

+017/1.1×2. **Polystichum ×bicknellii**. E-facing trackside bank, S of Llwyncelyn, 1km S of Cwrtnewydd, SN497 461, S.P. Chambers, 23rd May 2016, two plants, with both parents.

+026/2.1. **Nuphar lutea** (Yellow Water-lily) (Lili'r-d'r Felen). Lake in estate grounds, Llanerchaeron, SN482 599, A.O. Chater, 19th Sep 2016.

+‡029/2. **Mahonia aquifolium** (Oregon-grape) (Mahonia Dail Celynnog). Trackside scrub, Pant-y-petris, c.1.5km SW of Cross Inn, SN528 625, S.P. Chambers, 29th Dec 2016.

+†030/1.3. **Papaver somniferum** (Opium Poppy) (Llyisiau Cwsg). Gravelly strip by property, N-side of the B4459, Bwlch-y-fadfa, SN436 494, S.P. Chambers, 1st Sep 2016.

+036/2.1. **Parietaria judaica** (Pellitory-of-the-wall) (Paladr y Wal). Back alley, Llanrhystud, SN539 697, A.O. Chater, 0000; (+) mortared wall in back alley, SW of Borth Railway Station, SN608 900, A.O. Chater, 16th Nov 2016.

046/20.05. **Silene uniflora** (Sea Campion) (Gludlys Arfor). Leadmine spoil, Banc Esgair-mwyn, 2km NE of Ffair-rhos, SN754 693, S.P. Chambers, det. S.P. Chambers, 12th Oct 2014, new VC alt record of 360m.

+061/2.12. **Salix aurita** (Eared Willow) (Helygen Glustiog). Flushed *Molinia* slope on crag, E-end of the Tair Allt Gorge, c.1km SE of Bryn Trapau, SN821 651, S.P. Chambers, 23rd Jul 2016, one bush. 1st hectad record at least for the VC46 part.

+‡062/38.1. **Hirschfeldia incana** (Hoary Mustard) (Mwstard Llwyd). Disturbed streamside, Afon Mydr, c.250m E of Neuadd-lwyd-isaf, SN478 590, M.D. Sutton, 14th Sep 2016, one plant.

065/13.1. **Vaccinium oxycoccos** (Cranberry) (Llygaeren). Edge of bog pool, saddle c. 500m ENE of Pumlumon Fawr, SN796 870, P. Foulkes, 13th Aug 2016, new VC alt limit.

+065/13.4. **Vaccinium vitis-idaea** (Cowberry) (Llusen Goch). NVC M15d & H12 vegetation, Cors Pentwyn, Mynydd Bach, SN580 634, D.K. Reed, 29th Sep 2016, western-most site remote from others in Cards. & at 2nd lowest alt.

+‡074/05. are. **Saxifraga ×arendsii** (Garden Mossy-saxifrage). Rough slope below stream bridge, Cwrtnewydd, SN490 477, S.P. Chambers, 8th May 2016, three patches, pink-flowered.

- *‡075/07.1. **Kerria japonica** (Kerria) (Cerria). Around grave in burial yard, Salem Chapel, SN688 843, S.P. Chambers, det. S.P. Chambers, 14th Feb 2016, flore pleno variant, established but probably originally planted.
- +075/09.14×15. **Potentilla ×mixta** (Hybrid Cinquefoil) (Pumnaalen Groesryw). Species-rich grassland, Castell Bwlchgwallter, Llandre, SN622 867, A.C. Williamson, 18th May 2015.
- +‡075/11.2. **Fragaria moschata** (Hautbois Strawberry) (Llwyn Mefus Mawr). Roadside bank by cottage garden, Coed Nant Llwlwyn, Llanfarian, SN584 767, S.P. Chambers, 29th Apr 2016.
- +075/13.1×2. **Geum ×intermedium** (Hybrid Avens) (Mapgoll Groesryw). Edge of river shingle in gorge Oakwood, below Allt Boeth, Coed Rheidol, SN737 772, A. Hotchkiss, May 2016, 2nd VC record. A few plants.
- +‡075/13.3. **Geum macrophyllum** (Large-leaved Avens) (Mapgoll Fawr)). Road verge in beechwood, Noyadd Trefawr, SN258 459, A.O. Chater, 20th Sep 2016; (+) road verge, 400m E of Betws Ifan church, SN306 477, A.O. Chater, 7th Aug 2016; (+) wooded trackside on disused railway line, Llanerchaeron, SN482 596, A.O. Chater, 19th Sep 2016.
- +‡075/32.21. **Cotoneaster horizontalis** (Wall Cotoneaster) (Cotoneaster Asgwrn). Crumbling wall top by derelict building, Maes-mynach, SW flank of Trychrug Hill, SN538 594, S.P. Chambers, det. S.P. Chambers, 14th Mar 2016, one plant.
- +‡075/32.35. **Cotoneaster rehderi** (Bullate Cotoneaster) (Cotoneaster Deilgrych Rehder). Roadside bank, c.300m NW of Cross Inn, SN538 643, S.P. Chambers, 13th Nov 2016, one young, c. 2ft tall, self-sown plant.
- 077/14.01. **Vicia orobus** (Wood Bitter-vetch) (Ffacbysen Chwerw). Roadside bank, 2.5km WNW of Swyddffynnon, SN668 671, A.O. Chater, 6th Aug 2016.
- 077/14.12. **Vicia lathyroides** (Spring Vetch) (Ffacbysen y Gwanwyn). NVC U4c grassland, Mynachdyr Graig, SN560 746, M.D. Sutton, 8th Sep 2015, at least 10 plants. New site, tetrad & VC-alt limit for VC-rare sp.
- +‡084/4.1. **Oenothera glazioviana** (Large-flowered Evening-primrose) (Melyn-yr-hwyr Mawr). Road verge by houses, E-side of the B4578, Stags Head, SN640 590, S.P. Chambers, 3rd Jul 2016.
- +‡099/1.1. **Acer platanoides** (Norway Maple) (Masarnen Norwy). Trackside woodland, c.30m S of Llwyncelyn, 1km S of Cwrtnewydd, SN497 460, S.P. Chambers, 23rd May 2016, one self-sown sapling; (+) atlantic oakwood, Jacob's Ladder, Rheidol Gorge NNR, Devil's Bridge, SN741 772, S.P. & H.A. Chambers & H.F. Clow, det. S.P. Chambers, 4th Sep 2016, one self-sown sapling.
- +103/1.07.‡ **Geranium pratense** (Meadow Crane's-bill) (Pig-yr-aran y Weirglodd). Damp verge by cottage, c.1km E of Llanfair Clydogau, SN640 510, S.P. Chambers, 3rd Jul 2016.
- +103/1.18. **Geranium lucidum** (Shining Crane's-bill) (Pig-yr-aran Loywddail). In cattle grid on road at top of, Cwm Ceulan, SN721 906, A.O. Chater, 30th Aug 2016, new VC alt record of 400m.
- ‡111/3.3. **Calystegia pulchra** (Hairy Bindweed) (Taglys Blewog). Laneside hedge, Whilgarn, 2.5km E of Talgarreg, SN449 516, A.O. Chater, 17th Sep 2016.
- +‡111/3.4. **Calystegia silvatica** (Large Bindweed) (Taglys Mawr). Roadside hedge, 1km SW of Swyddffynnon, SN684 654, A.O. Chater, 27th Aug 2016.
- +118/12.1. **Ajuga reptans** (Bugle) (Glesyn y Coed). Rough strip by railway line, Aberystwyth, SN590 810, S.P. Chambers, 24th May 2016.
- +‡118/23.3. **Mentha spicata** (Spear Mint) (Mintys Ysbigog). Rough verge, S-side of minor road c.1.75km NNE of Cilcennin, SN528 618, S.P. Chambers, 17th Jun 2016, several patches in semi-rank vegetation. First post-1970 record for the hectad.

- +124/20.09. **Euphrasia confusa** (Effros Gliniog). Sheep-grazed, streambank grassland, N-bank of the Nant Brwynog, Tair Allt Gorge, c.1km SE of Bryn Trapau, SN822 650, S.P. Chambers, 23rd Jul 2016, 1st hectad record at least for the VC46 part, **hb. SPC**
- +‡127/1.1. **Acanthus mollis** (Bear's-breech) (Troed yr Arth). Streamside woodland, Afon Cledan, c.150m SW of Bryngwyn, W of Nebo, SN534 656, S.P. Chambers, 19th Nov 2016, one plant. 2nd VC record.
- +128/2.6. **Utricularia minor** (Lesser Bladderwort) (Chwysigenddail Bach). Outflow stream of uplake lake, Lln Gynon, SN804 646, S.P. Chambers, 14th Aug 2016, 1st hectad record at least for the VC46 part.
- 130/6.07. **Galium album** (Hedge Bedstraw) (Briwydd y Clawdd). Roadside bank, 1km NW of Trisant, SN707 766, A.O. Chater, 16th Aug 2016.
- *‡131/6.1. **Lonicera pileata** (Box-leaved Honeysuckle) (Gwyddfif Llorweddol). Streamside woodland, Afon Cledan, c.150m SW of Bryngwyn, W of Nebo, SN534 656, S.P. Chambers, 19th Nov 2016, one bush, c. 2 x 1 x 1m. 1st naturalised VC record, **hb. SPC**
- +133/2.1. **Valeriana officinalis** (Common Valerian) (Llysiâu Cadwgan). Flushed streambank, N-bank of the Nant Brwynog, Tair Allt Gorge, c.1km SE of Bryn Trapau, SN822 650, S.P. Chambers, 23rd Jul 2016, 1st hectad record at least for the v.c.46 part.
- +135/12.1.int. **Cichorium intybus subsp. intybus** (Cultivated Chicory). Locally frequent in organic hay meadow, between Blaenpant and Lleinau, 1.25km S of Cwrtnewydd, SN489 465, S.P. Chambers, 23rd May 2016.
- +135/25.08.90. **Taraxacum hamiferum** (Dark Hook-lobed Dandelion). Garden, Windover, Penyrangor, Aberystwyth, SN581 808, A.O. Chater, det. A.J. Richards, 25th Apr 2015, **NMW**
- +‡135/25.09.184. **Taraxacum piceatum** (Leaden-bracted Dandelion). Garden, Windover, Penyrangor, Aberystwyth, SN581 808, A.O. Chater, det. A.J. Richards, 25th Apr 2015, 2nd VC record, **NMW**
- *135/25.09.207. **Taraxacum sublaeticolor** (Small-headed Dandelion). Mature dune grassland, Ynys-las, SN607 942, A.O. Chater, det. A.J. Richards, 26th Apr 2015, **NMW**
- *135/25.09.edm. **Taraxacum edmondsonianum** (Edmondson's Dandelion). Road verge, Glanryafon Industrial Estate, SN610 802, A.O. Chater, det. A.J. Richards, 25th Apr 2015, **NMW**
- +135/28.07.76. **Hieracium rectulum** (Dyfed Hawkweed). Grassland developed on burial plots in graveyard, Capel y Fadfa, Bwlch-y-fadfa, SN437 494, S.P. Chambers, 1st Sep 2016, **hb. SPC**
- +135/40.1.vir. **Solidago virgaurea subsp. virgaurea**. Heathy ledges on crag, E-end of the Tair Allt Gorge, c.1km SE of Bryn Trapau, SN821 650, S.P. Chambers, 23rd Jul 2016, 1st hectad record at least for the v.c.46 part.
- +‡135/62.01. **Senecio cineraria** (Silver Ragwort) (Creulys Ariannaid). Gravelly ground below wall, Castle grounds, Aberystwyth, SN579 814, S.P. Chambers, 15th May 2016, one self-sown young plant c 8cm tall.
- +‡138/6.1. **Lagarosiphon major** (Curly Waterweed) (Ffugalaw Crych). Abundant in farm pond, c.200m WNW of Parcau, 1.5km NE of Cilcennin, SN537 611, S.P. Chambers, 20th Mar 2016.
- +‡147/2.1. **Lysichiton americanus** (American Skunk-cabbage) (Pidyn-y-gog Americanaidd). In ox-bow shallows, Afon Teifi, 0.5km W of Henllan, SN351 406, R.R. Rockingham Gill, 27th Apr 2016, flourishing, but not aggressively.
- 152/16.24. **Carex lasiocarpa** (Slender Sedge) (Hesgen Fain). Very locally frequent in mire, Groes Fawr, Blaen Camddwr, SN745 591, S.P. Chambers, 4th Jun 2016, new tetrad for VC-scarce plant.

- 152/16.57. **Carex limosa** (Bog-sedge) (Hesgen Eurwerdd). Locally frequent in mire channels, Groes Fawr, Blaen Camddwr, SN745 591, S.P. Chambers, 4th Jun 2016, update of 1981 record.
- +‡153/17.3 **Briza maxima** (Greater Quaking-grass) (Crydwellt Mawr). Roadside on E side of churchyard wall, Llanilar Church, SN624 751, J.T. Hughes, 17th Jun 2016, several clumps.
- +†153/47.6. **Alopecurus myosuroides** (Black-grass) (Cynffonwellt Du). Muck heap (horse bedding straw) in farmyard, Blaen-tir, c.1.5km NE of Plwmp, SN379 540, A.O. Chater & S.P. Chambers, 25th Jul 2016, c.3 strong tufts.
- +‡158/24.03. **Allium roseum** (Rosy Garlic) (Garlleg Rhosliw). Graveyard, NW corner of Bethania Chapel, SN572 630, A.O. Chater, 3rd Jun 2016.
- +158/24.16. **Allium vineale** (Wild Onion) (Nionyn Gwyllt). Roadside verge, Gwern-yr-efail, Cross Inn, SN388 574, S.P. Chambers, 3rd Apr 2016, two clumps on verge and abundant on grassy triangle; (+) old trackway above woodland, Coed Nant Llwlwyn, Llanfarian, SN588 772, S.P. Chambers, 3rd May 2016, one clump; (+) woodland path, Llwyn Yr Eos, Penparcau, Aberystwyh, SN594 799, C. Griffiths, 3rd Aug 2016.
- *159/08.bif. **Crocus biflorus** (Silvery Crocus) (Saffrwm Ariannaid). Edge of plot in burial ground, Penrhyn-coch Church (St. John's), SN643 841, S.P. Chambers & H.F. Clow, det. S.P. Chambers, 19th Mar 2016, one plant, resembling cv. 'Blue Pearl'.
- +162/18.2×5. **Dactylorhiza × formosa**. Rhos pasture, 1.75km NNE of Cilcennin, SN53- 61-, S.P. Chambers, 17th Jun 2016, one spike with both parents. 5th VC record.
- 162/18.3.c. **Dactylorhiza incarnata subsp. pulchella**. Wet rhos-mire field, Cors Fochno, SN62- 93-, S.P. Chambers, 12th Jun 2016, c.12 spikes.
- +162/18.4. **Dactylorhiza praetermissa** (Southern Marsh-orchid) (Tegeirian-y-gors Deheuol). Flushed ground by wheel-pit, Esgair Fraith mine, SN740 911, P. Foulkes, det. S.P. Chambers, 17th Jul 2016, c.10 spikes

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

- +001/1.1. **Huperzia selago** (Fir Clubmoss) (Cnwp-fwsogl Mawr). Blaentafalog (north of Llanbrynmair), SH89 09, J. Clayfield, 2016, stream descending to Blaentafalog.
- +001/4.1. **Diphasiastrum alpinum** (Alpine Clubmoss) (Cnwp-fwsogl Alpaidd). Plynlimon, SN799 870, G. Foulkes & P. Foulkes, 13th Aug 2016.
- +006/1.1. **Osmunda regalis** (Royal Fern) (Rhedynen Gyfrdwy). Nant-hir (north of Llanbrynmair), SH89 08, J. Clayfield, (Oct 2016, rock face above stream, east of Nant Hir.
- +015/3.1. **Asplenium ceterach** (Rustyback) (Duegredynen Gefngoch). Lake Vyrnwy, SJ021 209, G. Chambers, 17th Jul 2016, sJ0218920998. Quarry; (+) Lake Vyrnwy, SJ021 210, G. Chambers, 17th Jul 2016, several locations in quarry.
- +017/3.03. **Dryopteris affinis** (Dryopteris affinis - Scaly Male-fern - 662 - 17 - 3 - 3 -) (Marchredynen Euraid). Botalog (North of Cors Lwyd), SN85 76, Montgomeryshire Flora Group, 20th Jul 2016.
- +017/3.08. **Dryopteris carthusiana** (Narrow Buckler-fern) (Marchredynen Gul). Llechwedd mawr, SN77 89, G. Foulkes & P. Foulkes, 30th Jul 2016.
- +028/13.17.a. **Ficaria verna subsp. fertilis**. Adfa west, SJ05 01, Montgomeryshire Flora Group, 24th May 2016; (+) Adfa east, SJ06 01, Montgomeryshire Flora Group, 24th May 2016.
- +†030/1.3. **Papaver somniferum** (Opium Poppy) (Llysiau Cwsg). Llwynderw, SJ20 02, Montgomeryshire Flora Group, 15th Sep 2016.
- +†030/1.4. **Papaver rhoeas** (Common Poppy) (Pabi Coch). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed Plants flowering late and would not normally expect to find here Reseeding?

+030/2.1.‡ **Meconopsis cambrica** (Welsh Poppy) (Pabi Cymreig). Llansantffraid-ym-Mechain, SJ21 21, E. Beare & S. Southam, 19th Jul 2016, likely to be non-native at this site.

+039/4.5×6. **Quercus ×rosacea (Q. petraea × Q. robur)**. Dylife, SN86 94, Montgomeryshire Flora Group, 9th Aug 2016; (+) Manafon (south of), SJ10 01, E. Beare & R. Meade, 8th Jun 2016.

+043/1.06. **Chenopodium rubrum** (Red Goosefoot) (Troed-yr-^ydd Coch). Llandrinio, SJ314 160, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, floodplain muck heap; (+) Severn-Vrynwy confluence, Crew Green, SJ322 158, A.K. Thorne, 17th Oct 2016, damp hollow by hedgerow/ditch.

□†043/1.08. **Chenopodium polyspermum** (Many-seeded Goosefoot) (Troed-yr-^ydd Amlhadog). Severn-Vrynwy confluence, Crew Green, SJ322 158, A.K. Thorne, 17th Oct 2016, damp hollow by hedgerow/ditch.

+043/1.15 **Chenopodium album** (Fat-hen) (Troed-yr-^ydd Gwyn). Llandrinio, SJ30 16, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, flood plain arable land.

+043/3.02. **Atriplex prostrata** (Spear-leaved Orache) (Llygwyn Tryfal). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed.

+046/01.1. **Arenaria serpyllifolia** (Thyme-leaved Sandwort) (Tywodlys Dail Teim). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed; (+) Tan-y-Foel Quarry, SJ01 01, R.A. Dawes, 9th Sep 2016, bare ground in Quarry. Frequent in places.

+046/17.3. **Spergularia marina** (Lesser Sea-spurrey) (Troellig Arfor Bach). Llwynderw, SJ20 02, Montgomeryshire Flora Group, 15th Sep 2016, growing in gutter along A483 near Wernllwyd Farm. Not native at this site; (+) Belan, Welshpool, SJ21 03, A.K. Thorne, 2nd Jan 6-08, road verge, not native at this site.

+046/17.4. **Spergularia rubra** (Sand Spurrey) (Troellig Arfor Coch). Tan-y-Foel Quarry, SJ01 01, G. Foulkes, 9th Sep 2016, a few plants close to sand pile on south side of quarry.

+046/20.09. **Silene latifolia** (White Campion) (Gludlys Gwyn). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed Plants flowering late and would not normally expect to find here Reseeding?

+047/1.09. **Persicaria amphibia** (Amphibious Bistort) (Canwraidd y D^r). Aberangel (Esgair Ddu), SH86 09, R. Meade, 7th Aug 2016.

+†047/4.3. **Polygonum arenastrum** (Equal-leaved Knotgrass) (Y Canclwm Manddail). Tan-y-Foel Quarry, SJ01 01, R.A. Dawes & Montgomeryshire Field Society, 9th Sep 2016, quarry.

+051/1.06×07. **Hypericum ×desetangsii** (Des Etangs' St John's-wort) (Eurinllys Des Etangs). Hyssington, SO32 96, A.K. Thorne, 29th Aug 2016; (+) Manafon (south of), SJ109 001, E. Beare & R. Meade, 8th Jun 2016; (+) Manafon, SJ10 02, R. Meade, 12th Jun 2016.

+057/1.11. **Viola lutea** (Mountain Pansy) (Trilliw y Mynydd). Botalog (North of Cors Lwyd), SN85 76, Montgomeryshire Flora Group, 20th Jul 2016, sN856761 1 plant with purple colouration but 3 yellow found elsewhere in monad.

+†057/1.13. **Viola arvensis** (Field Pansy) (Trilliw'r Tir Âr). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed Plants flowering late and would not normally expect to find here Reseeding?

*062/22.1. **Erophila majuscula** (Hairy Whitlowgrass) (Llyisiau'r-bystwn Blewog). Montgomery Castle, SO221 967, S.J. Whild & G. Leel, det. T.C.G. Rich, 31st Mar 2016, castle ruins.

+062/23.5.‡ **Cochlearia danica** (Danish Scurvygrass) (Llwylys Denmarc). Commins Coch, SH85 03, BSBI Field Meeting 28 May 2016 (Leader R.A. Jones), det. R.A. Jones, 28th May 2016, a470 road verge, not native at this site.

⊞‡062/31.2. **Lepidium didymum** (Lesser Swine-cress) (Olbrain Bach). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed Plants flowering late and would not normally expect to find here Reseeding?; (⊞) Llanfyllin, SJ13 19, S. Swindells, 9th Jun 2016.

⊞‡062/7.1. **Erysimum cheiranthoides** (Treacle-mustard) (Triagl Arfog). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, 2nd county record. Growing on road verge (north side) where ground seems to have been disturbed. Plants flowering late and would not normally expect to find here Reseeding?

+‡063/1.1. **Reseda luteola** (Weld) (Melengu). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed Plants flowering late and would not normally expect to find here Reseeding?; (+) Bryngwyn Wood, SJ17 18, G. Evans & A. Evans, 14th Sep 2016.

+065/13.4. **Vaccinium vitis-idaea** (Cowberry) (Llusen Goch). Llechwedd mawr, SN77 89, G. Foulkes & P. Foulkes, 30th Jul 2016; (+) Plynlimon, SN799 870, G. Foulkes & P. Foulkes, 13th Aug 2016.

+069/6.2.a. **Anagallis arvensis subsp. arvensis** (Scarlet Pimpernel). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, conf. square, 8th Oct 2016, growing on road verge (north side).

*075/08.03.090. **Rubus amplifolius**. Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, det. D.P. Earl, 4th Sep 2016.

*075/08.03.093. **Rubus cardiophyllus**. Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, det. D.P. Earl, 4th Sep 2016, rare.

+075/08.06.146. **Rubus bartonii**. Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, det. D.P. Earl, 4th Sep 2016.

+075/08.06.163. **Rubus vestitus**. Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, 4th Sep 2016, rare.

*075/08.08.185. **Rubus griffithianus**. Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, det. D.P. Earl, 4th Sep 2016, rare.

+075/08.13.319. **Rubus tuberculatus**. Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, det. D.P. Earl, 4th Sep 2016, frequent.

⊞075/21.04×12. **Rosa arvensis × canina**. Dolfor, SO092 876, R. Maskew, 8th Sep 2016; (⊞) Dolfor (NW of), SO099 881, R. Maskew, 8th Sep 2016, laneside hedge; (⊞) Dolfor (N of), SO109 883, R. Maskew, 8th Sep 2016, laneside hedge.

⊞075/21.12.Dum. **Rosa canina group Dumales**. Dolfor (W of), SO092 875, R. Maskew, 8th Sep 2016, laneside hedge; (*) Dolfor (N of), SO111 884, R. Maskew, 8th Sep 2016, laneside hedge.

*075/21.12.Pub. **Rosa canina group Pubescentes**. Dolfor, SO092 876, R. Maskew, 8th Sep 2016; (*) Dolfor (NW of), SO099 881, R. Maskew, 8th Sep 2016, laneside hedge; (⊞) Dolfor (N of), SO108 881, R. Maskew, 8th Sep 2016, laneside hedge; (⊞) The Nea, SJ27 16, W.I.J. Thorne, det. R. Maskew, 10th Oct 2016, scrub along Offa's dyke.

*075/21.12.Tra. **Rosa canina group Transitoriae**. Dolfor (NW of), SO098 883, R. Maskew, 8th Sep 2016, var. spuria; (*) Dolfor (NW of), SO099 883, R. Maskew, 8th Sep 2016, laneside hedge; (⊞) Dolfor (N of), SO110 883, R. Maskew, 8th Sep 2016, laneside hedge.

⊞075/21.12×13. **Rosa ×dumalis**. Carno, SN9698 9643, A.K. Thorne, det. R. Maskew, 13th Sep 2016, lane side hedge.

- ☐075/21.12×13. **Rosa caesia subsp. glauca** × **canina**. Dolfor (NW of), SO099 881, R. Maskew, 8th Sep 2016; (☐) Dolfor (N of), SO109 881, R. Maskew, 8th Sep 2016, non directional hybrid. Laneside hedge; (☐) Hyssington, SO322 961, A.K. Thorne, det. R. Maskew, 4th Sep 2016.
- ☐075/21.12×13. **Rosa** × **dumalis**. Hyssington, SO3231 9660, A.K. Thorne, det. R. Maskew, 4th Sep 2016, in field boundary. Some introgression from Ros she; (☐) Llanfyllin (Tyncelyn), SJ1109 1871, S. Swindells, det. A.K. Thorne, 30th Jul 2016, 1 plant edge of river bank.
- ☐075/21.13.b. **Rosa caesia subsp. vosagiaca** (Glaucous Dog-rose) (Rhosyn Llwydwyrdd). Carno, SN9618 9757, A.K. Thorne, det. R. Maskew, 13th Sep 2016, lane side hedge; (☐) Dolfor (N of), SO110 882, R. Maskew, 8th Sep 2016, joint 2nd county record. Laneside hedge; (☐) Hyssington, SO3238 9659, A.K. Thorne, det. R. Maskew, 4th Sep 2016, joint 2nd county record. Hedgerow.
- *075/21.16×12. **Rosa sherardii** × **canina**. Dolfor, SO114 887, R. Maskew, 8th Sep 2016, laneside hedge.
- ☐075/21.17. **Rosa mollis** (Soft Downy-rose) (Rhosyn Blewog). Llandinam windfarm, SO03 82, A.K. Thorne & W.I.J. Thorne, det. R. Maskew, 11th Nov 2016, small 'gorge'; (☐) Dolfor (NW of), SO098 883, R. Maskew, 8th Sep 2016, laneside hedge; (☐) Dolfor (N of), SO110 882, R. Maskew, 8th Sep 2016, laneside hedge.
- *075/21.17×16. **Rosa mollis** × **R. sherardii** (f×m). Dolfor (N of), SO108 882, R. Maskew, 8th Sep 2016, joint 1st county record. Laneside hedge. Non directional hybrid; (*) Hyssington, SO3236 9660, A.K. Thorne, det. R. Maskew, 4th Sep 2016, joint 1st county record. in field boundary.
- ☐075/21.19. **Rosa micrantha** (Small-flowered Sweet-briar) (Drysiën Bêr Fân-flodeuog). Llanfyllin (Caeaugwynedd), SJ1257 1921, S. Swindells, det. A.K. Thorne, 8th Jul 2016, in laneside hedgerow.
- +075/22.06. **Prunus avium** (Wild Cherry) (Coeden Geirios Du). Hafren Forest (Severn-break-its-neck), SN86 86, Montgomeryshire Field Society, 8th Aug 2016, trackside.
- +077/10.3. **Ornithopus perpusillus** (Bird's-foot) (Troed yr Aderyn). Manafon, SJ10 02, R. Meade, 12th Jun 2016, died off.
- +077/14.06. **Vicia hirsuta** (Hairy Tare) (Ffachysen Flewog). Aberhosan west, SN80 97, G. Foulkes, 5th Jul 2016; (+) Aberhosan, SN81 97, G. Foulkes, 2nd Jul 2016.
- +077/14.08. **Vicia tetrasperma** (Smooth Tare) (Ffachysen Lefn). Commins Coch, SH85 03, BSBI Field Meeting 28 May 2016 (Leader R.A. Jones), det. R.A. Jones, 28th May 2016, a470 road verge; (+) Kerry Hill (Nantyrhynau), SO16 85, A.K. Thorne, 14th Oct 2016, felled forest area.
- +077/14.11.a. **Vicia sativa subsp. nigra** (Narrow-leaved Vetch). Aberhosan, SN81 97, G. Foulkes, 2nd Jul 2016.
- +†077/14.11.b. **Vicia sativa subsp. segetalis** (Common Vetch). Llanymynech Rocks, SJ26 21, BSBI field meeting, det. R.A. Jones, 4th Sep 2016.
- +©077/14.11.c. **Vicia sativa subsp. sativa** (Pupysen). Manafon (south of), SJ10 01, E. Beare & R. Meade, 8th Jun 2016.
- +‡077/18.2.c. **Medicago sativa subsp. sativa** (Lucerne) (Maglys Rhuddlas)). Caersws, SO03 91, G. Foulkes & P. Foulkes, 12th Sep 2016, growing on road verge of A489 (just east of Caersws A470 junction) at SO036914.
- +077/19.02. **Trifolium repens** (White Clover) (Meillionen Wen). Cors Llwyd, SN85 75, Montgomeryshire Flora Group, 20th Jul 2016, acid grassland/mire.
- +081/1.3. **Lythrum portula** (Water-purslane) (Troed y Gywen). Llanfyllin, SJ13 19, S. Swindells, 7th Jun 2016.
- +084/1.06. **Epilobium obscurum** (Short-fruited Willowherb) (Helyglys Byrgodog). Llechwedd mawr, SN78U, G. Foulkes & P. Foulkes, 30th Jul 2016.

□084/1.07. **Epilobium roseum** (Pale Willowherb) (Helyglys Gwelw). Manafon, SJ10 02, R. Meade, 12th Jun 2016.

+‡084/1.12 **Epilobium brunnescens** (New Zealand Willowherb) (Helyglys Seland Newydd). Cors Llwyd, SN85 75, Montgomeryshire Flora Group, 20th Jul 2016, wet road verge; (+) Botalog (North of Cors Lwyd), SN85 76, Montgomeryshire Flora Group, 20th Jul 2016.

□092/1.1. **Rhamnus cathartica** (Buckthorn) (Rhafnwydden). Llandrinio, SJ3098 1606, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, joint 2nd county record. Small tree along ditch, second one nearby at junction of ditch with Acre Brook; (□) Llandrinio, SJ3106 1606, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, joint 2nd county record. 3 trimmed shrubs along Acre Brook.

+103/1.10. **Geranium columbinum** (Long-stalked Crane's-bill) (Pig-yr-aran Hirgoes). Abergwydol, SH79 02, G. Foulkes, 27th Jul 2016, several plants growing along road verge on minor road to Abercegir on either side of field entrance on N side of road at SH798028.

+‡103/1.14. **Geranium pyrenaicum** (Hedgerow Crane's-bill) (Pig-yr-aran y Gwrych). Snead, SO31 92, R. Rowe, 2016.

+103/1.18. **Geranium lucidum** (Shining Crane's-bill) (Pig-yr-aran Loywddail). Machynlleth, SH74 00, G. Foulkes, 25th Jul 2016.

+‡106/1.hib. **Hedera hibernica**. Nant Ddeiliog (Dylife), SN86 95, Montgomeryshire Flora Group, 9th Aug 2016; (+) Ffridd Uchaf (north of Llanbrynmair), SH91 09, J. Clayfield, 2016; (+) Adfa west, SJ05 01, Montgomeryshire Flora Group, 24th May 2016.

+‡111/3.4. **Calystegia silvatica** (Large Bindweed) (Taglys Mawr). Carno, SN96 96, Montgomeryshire Flora Group, 16th Jun 2016, confirmed when flowering 4 July 2016.

□116/15.09. **Myosotis ramosissima** (Early Forget-me-not) (Sgorpionllys Cynnar). Llanfyllin (Coed Ioan-Adams), SJ1375 1843, S. Swindells, det. A.K. Thorne, 27th Jun 2016, 6 plants on rocky hedgebank.

+118/01.5×6. **Stachys sylvatica** × **S. palustris** = **S. ×ambigua** (Hybrid Woundwort) (Briwlys Croesryw). Nant-hir (north of Llanbrynmair), SH89 08, J. Clayfield, 2016, valley. east of Nant-hir plus roadside.

+118/20.1. **Origanum vulgare** (Wild Marjoram) (Penrhudd). Aberhosan west, SN80 97, G. Foulkes, 5th Jul 2016, growing in Chapel graveyard; (+) Machynlleth, SH74 00, G. Foulkes, 25th Jul 2016.

+118/23.1×3. **Mentha ×gracilis** (Bushy Mint) (Mintys Culddail). Carno, SN96 96, Montgomeryshire Flora Group, det. A.K. Thorne, 16th Jun 2016.

+118/23.2×3.‡ **Mentha ×piperita** (Peppermint) (Mintys Poeth). Llandrinio (Criggion Bridge), SJ30 15, A.K. Thorne, 18th Oct 2016, ditch in floodplain.

+124/02.2. **Scrophularia auriculata** (Water Figwort) (Gwrnerth y D^r). Llandrinio, SJ30 16, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, river bank.

+†124/16.19. **Veronica agrestis** (Green Field-speedwell) (Rhwyddlwyn-y-maes Gwyrdd). Carno, SN96 96, Montgomeryshire Flora Group, 16th Jun 2016, side of path in Carno Churchyard.

+‡124/16.21. **Veronica persica** (Common Field-speedwell) (Rhwyddlwyn y Maes). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side).

+†124/16.24.b. **Veronica hederifolia subsp. lucorum**. Adfa west, SJ05 01, Montgomeryshire Flora Group, 24th May 2016.

*124/20.05×09. **Euphrasia arctica** × **confusa**. Nant y Eira mine, SN82 87, Montgomeryshire Field Society, det. C. Metherell, 8th Aug 2016, just below upper wheel pit in short turf Identified by Chris Metherell His reference 2016/263.

□124/20.07×09. **Euphrasia nemorosa** × **confusa**. Hafren Forest (Severn-break-its-neck), SN860 866, Montgomeryshire Field Society, det. C. Metherell, 8th Aug 2016, 2nd county

record, by forest path/track. Only perhaps this hybrid. Very interesting plants. One must suspect there is more than two species involved here.

*124/20.07×19. **Euphrasia nemorosa** × **E. scottica**. Llechwedd mawr, SN78U, G. Foulkes & P. Foulkes, det. C. Metherell, 30th Jul 2016, growing on stable river shingle bank at SN760891 Identified by Chris Metherell His reference 2016/261.

*124/20.19. **Euphrasia scottica** (Scottish Eyebright) (Effros Eiddil y Fawnog). Nant y Ci/Esgair Gorddi, SN7655 9045, G. Foulkes & P. Foulkes, det. C. Metherell, 23rd Jul 2016, SN76559045 growing in wet on very thin soil over rock with *Ping. vulgaris*, *M.caerulea*, *C. pulicaris*, *C.demissa*, *C.panicea*. Identification confirmed by Chris Metherell His reference 2016/260.

+130/3.1. **Sherardia arvensis** (Field Madder) (Mandon Las yr ^d). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed Plants flowering late and would not normally expect to find here Reseeding?

+133/1.1. **Valerianella locusta** (Common Cornsalad) (Gwylaeth yr Oen). Carno, SN95 97, Montgomeryshire Flora Group, 16th Jun 2016.

+†133/1.2. **Valerianella carinata** (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). Machynlleth, SH74 00, G. Foulkes, 25th Jul 2016.

+134/1.1. **Dipsacus fullonum** (Wild Teasel) (Cribau'r-pannwr Gwylt). Llandrinio, SJ30 16, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, frequent on argae in flood plain; (+) Llandrinio, SJ31 15, A.K. Thorne, 17th Oct 2016, ditch in flood plain.

+†135/12.1. **Cichorium intybus** (Chicory) (Ysgello). Llanfyllin (Bodran), SJ1105 1999, S. Swindells, 18th Jul 2016, 4 plants close together on verge with *Hol mol*, *Agros cap*, *Anth odor*.

+135/28.02.6. **Hieracium umbellatum** (Umbellate Hawkweed) (Heboglys Culddail). Carno, SN96 96, A.K. Thorne, 13th Sep 2016, farm lane verge.

+135/33.5. **Gnaphalium uliginosum** (Marsh Cudweed) (Edafeddog y Gors). Cors Llwyd, SN85 75, Montgomeryshire Flora Group, 20th Jul 2016, lane verge.

+135/37.1. **Pulicaria dysenterica** (Common Fleabane) (Cedowydd). Aberhosan, SN81 97, G. Foulkes, 2nd Jul 2016, large patch in lower corner of field and small amount on verge close to bridge in Aberhosan village SN810974.

+‡135/44.1. **Conyza canadensis** (Canadian Fleabane) (Amrhydlwyd Canada). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side).

+†135/50.1. **Artemisia vulgaris** (Mugwort) (Y Feidiog Lwyd). Dylife road verge, SN864 938, G. Foulkes & P. Foulkes, 8th Oct 2016, growing on road verge (north side) where ground seems to have been disturbed.

+135/62.15.vul.hib. **Senecio vulgaris subsp. vulgaris var. hibernicus**. Tan-y-Foel Quarry, SJ01 01, R.A. Dawes & Montgomeryshire Field Society, 9th Sep 2016, quarry.

+138/2.1. ‡ **Stratiotes aloides** (Water-soldier) (Milwr y D^r). Montgomery Canal, Abermule, SO16 95, K. Perry, 1st Sep 2016, a few plants by Powys road depot. This plant is non-native to VC47, invasive and spreading in the Montgomery Canal.

+148/1.1. **Spirodela polyrhiza** (Greater Duckweed) (Llinad Mawr). Llandrinio, SJ3106 1738, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, in old water course (Sychpwll) with *Lemna minor*.

+‡151/1.02. **Juncus tenuis** (Slender Rush) (Brwynen Fain). Carno, SN96 96, Montgomeryshire Flora Group, 16th Jun 2016; (+) Llanymynech Hill SSSI, SJ26 21, BSBI field meeting, 4th Sep 2016.

+151/1.07. **Juncus bufonius** (Toad Rush) (Brwynen y Llyffant Du). Llechwedd mawr, SN78U, G. Foulkes & P. Foulkes, 30th Jul 2016.

- +151/1.25. **Juncus inflexus** (Hard Rush) (Brwynen Galed). Abergwydol, SH79 02, G. Foulkes & P. Foulkes, 29th Jul 2016.
- +151/2.6.a. **Luzula multiflora subsp. multiflora**. Tycrwyn, SJ10 18, S. Swindells, 19th Jun 2016, on hillside - thin soil cover; (+) Llanfyllin (Tyncelyn), SJ116 185, S. Swindells, 21st Jun 2016, edges of woodland track.
- +151/2.6.b. **Luzula multiflora subsp. congesta**. Botalog (North of Cors Lwyd), SN85 76, Montgomeryshire Flora Group, 20th Jul 2016; (+) Aberangel (Esgair Ddu), SH86 09, R. Meade, 7th Aug 2016; (+) Tycrwyn, SJ10 18, S. Swindells, 19th Jun 2016, on hillside - thin soil cover; (+) Llanfyllin (Tyncelyn), SJ116 185, S. Swindells, 21st Jun 2016, edges of woodland track.
- +152/05.1 **Scirpus sylvaticus** (Wood Club-rush) (Clwbfrwynen Bengron). Hirnant, SJ039 213, R.A. Dawes, 22nd Jul 2016, patch 10m x 10m in partial clear felled area near road.
- +152/16.18. **Carex dioica** (Dioecious Sedge) (Hesgen Ysgar). Nant-hir (north of Llanbryn-mair), SH89 08, J. Clayfield, 2016, valley, east of Nant-hir plus roadside.
- +152/16.31 **Carex pendula** (Pendulous Sedge) (Hesgen Bendrom). Llangadfan (Pencoed N), SH98 09, G. Foulkes & P. Foulkes, 4th May 2016, not near habitation but roadside location suggests garden waste.
- +152/16.44×46.b. **Carex hostiana** × **C. demissa**. Botalog (North of Cors Lwyd), SN85 76, Montgomeryshire Flora Group, 20th Jul 2016, in a flush running into Nant Rhydyfelin with *C. hostiana* and *C. demissa* st SN856761.
- +152/8.1. **Isolepis setacea** (Bristle Club-rush) (Clwbfrwynen Wrychog). Kerry Hill (Y Drain), SO14 85, A.K. Thorne & W.I.J. Thorne, 28th Aug 2016, north of stream close to county boundary; (+) Kerry Hill (Nantyrhynau), SO16 85, A.K. Thorne, 14th Oct 2016, felled forest area.
- +153/11.1. **Milium effusum** (Wood Millet) (Miledwellt y Coed). Snead, SO31 92, J. Clayfield, 2nd Jan 6-05, snead laneside to Bagbury. Verges.
- +153/12.01. **Schedonorus pratensis** (Meadow Fescue) (Peiswellt). Brithdir and Cwm Mawr SSSI, SO30 94, Montgomeryshire Field Society, det. A.K. Thorne, 4th Jul 2016, fields within SSSI.
- +153/12.02. **Schedonorus arundinaceus** (Tall Fescue) (Peiswellt Tal). Snead, SO31 92, R. Rowe, 2016.
- +153/12.07. **Festuca rubra** (Red Fescue) (Peiswellt Coch). Llechwedd mawr, SN77 89, G. Foulkes & P. Foulkes, 30th Jul 2016; (+) Plynlimon, SN799 870, G. Foulkes & P. Foulkes, 13th Aug 2016; (+) Cors Llwyd, SN85 75, Montgomeryshire Flora Group, 20th Jul 2016, acid grassland/mire.
- 153/18.09. ‡ **Poa compressa** (Flattened Meadow-grass) (Gweunwellt Cywasgedig). Carno, SN96 96, J. Clayfield, det. A.K. Thorne, September 2016, 16th Jun 2016.
- 153/25.1. **Melica nutans** (Mountain Melick) (Meligwellt Pendrwm). Ffridd Uchaf (north of Llanbryn-mair), SH91 09, J. Clayfield, 2016; (□) Llanfair Caereinion (NW of), SJ0609 0776, A.J. Hotchkiss & I. Hotchkiss, 2nd Jan 6-05, woodland by stream (Afon Einion). Single tuft.
- +©153/27.1.b. **Arrhenatherum elatius var. bulbosum** (Onion Couch). St Tyssil's Old Churchyard (Llandyssil), SO198 952, Montgomeryshire Field Society, 10th May 2016.
- +153/39.8. **Agrostis vinealis** (Brown Bent) (Maeswellt-y-e^n y Mynydd). Cors Llwyd, SN85 75, Montgomeryshire Flora Group, 20th Jul 2016, acid grassland/mire; (+) Botalog (North of Cors Lwyd), SN85 76, Montgomeryshire Flora Group, 20th Jul 2016; (+) Kerry Hill, SO13 85, A.K. Thorne & W.I.J. Thorne, 28th Aug 2016, clearfell area; (+) Llansantffraid-ym-Mechain, SJ21 21, E. Beare & S. Southam, 19th Jul 2016.
- 153/59.4. **Hordeum secalinum** (Meadow Barley) (Haidd y Maes). Rhos-y-brithdir, SJ1349 2206, S. Swindells, det. Cope, Mr T., 19th Jul 2015, 1 plant on edge of road.

+154/1.1. **Sparganium erectum** (Branched Bur-reed) (Cleddlys Canghennog). Llandrinio (Criggion Bridge), SJ30 15, A.K. Thorne & W.I.J. Thorne, 17th Oct 2016, ditch/hedge through flood plain; (+) Llandrinio, SJ31 17, A.K. Thorne, 18th Oct 2016, old water course (Sychpwll).
+158/24.10. **Allium ursinum** (Ramsons) (Craf y Geifr). Snead, SO31 92, R. Rowe, 2016.
□162/18.4. **Dactylorhiza praetermissa** (Southern Marsh-orchid) (Tegeirian-y-gors Deheuol). White Grit (New House Meadow), SO319 977, A.K. Thorne, 19th Jun 2016, several scattered spikes in east part of hay meadow. SJ319977 - SJ319978; (□) White Grit (New House Meadow), SO319 978, A.K. Thorne, 19th Jun 2016, several scattered spikes in east part of hay meadow. SJ319977 - SJ319978

MERIONETH, v.c.48 (comm. S. Stille)

001/4.1. **Diphasiastrum alpinum** (Alpine Clubmoss) (Cnwp-fwsogl Alpaidd). Old quarry, Cwm Teigl, SH736 445, M.W. Rand & P. Brown, 26th Jul 2016.
004/1.4×5. **Equisetum ×litorale** (Shore Horsetail) (Marchrawnen y Glenydd). Carreg, SH64A, S.E. Stille and Caerdeon Group, 23rd Jul 2016, 1st post-millennium record for hectad.
□005/2.1. **Botrychium lunaria** (Moonwort) (Lloer-redynen). Old slate mines, Moel Fferna, SJ124 397, P. Day, 7th Jun 2016, new hectad for a RPR sp and 4th VC record this millennium.
015/2.6. **Asplenium viride** (Green Spleenwort) (Duegredynen Werdd). North-facing cliffs, Ogof Ddu, SH89 22, Merioneth Naturalists/Grwp Natur Meirionnydd, 25th Aug 2016.
+017/1.1. **Polystichum setiferum** (Soft Shield-fern) (Gwrychredynen Feddal). Dinas Mawddwy, SH859 151, Merioneth Naturalists/Grwp Natur Meirionnydd, 24th Nov 2016.
017/3.05. **Dryopteris aemula** (Hay-scented Buckler-fern) (Marchredynen Bêr). Coed Ganllwyd, SH72 24, BSBI Field Meeting, 2nd Oct 2016, 1st post-millennium record for hectad.
+‡020/1.1. **Abies grandis** (Giant Fir) (Ffynidwydden Fawr). Lake side, Llangower, SH93B, S.E. Stille, P. Spencer-Vellacott, M.O. Stead & D.O. Elias, 27th May 2016.
+‡020/1.3. **Abies procera** (Noble Fir) (Ffynidwydden Urddasol). Coed Felin Rhyd, SH63P, Joanna Clark, 20th May 2016; (+) forest plantation, Nurse Cynlas, SH95 39, A.N. Graham & S.E. Stille, det. Stille S E, 26th May 2016, new hectad record and 3rd VC record.
+034/2.1. ‡ **Humulus lupulus** (Hop) (Hopys). Carrog, SJ14, Merioneth Naturalists/Grwp Natur Meirionnydd, 21st Oct 2016.
+040/1.2.c **Betula celtiberica**. Llyn Cwm Bychan, SH649 310, Phill L. Brown, Mari Roberts & R.A. Jones, 2407 2016, new hectad record and second VC record for this species.
□‡043/1.13. **Chenopodium ficifolium** (Fig-leaved Goosefoot) (Troed-yr-^ydd Dail Fffigys). Carreg, SH64A, S.E. Stille and Caerdeon Group, 23rd Jul 2016.
+‡047/1.02. **Persicaria campanulata** (Lesser Knotweed) (Y Ganwraidd Fach). Betws Gwerfil Goch, SJ023 471, S.E. Stille & H.M. Guyon, det. SES, 19 10 2016, new hectad record.
‡047/1.03. **Persicaria wallichii** (Himalayan Knotweed) (Y Ganwraidd Himalaiaidd). Coed-y-glyn, SH610 340, A N Graham, J E Graham, 24th Aug 2016.
047/1.12. **Persicaria lapathifolia** (Pale Persicaria) (Canwraidd y Dom). Carreg, SH64A, S.E. Stille and Caerdeon Group, 23rd Jul 2016.
‡047/5.4. **Fallopia convolvulus** (Black-bindweed) (Y Glymog Ddu). Ty'n y Fedw, SH902 264, M. Stead & J. Langton, 26th Jul 2016.
057/1.11. **Viola lutea** (Mountain Pansy) (Trilliw y Mynydd). College Warren, SH93P, A.N. Graham & S.E. Stille, 26th May 2016, 1st hectad record this millennium.
062/15.6. **Arabis hirsuta** (Hairy Rock-cress) (Berwr-y-cerrig Blewog). North-facing cliffs, Ogof Ddu, SH89 21, Merioneth Naturalists/Grwp Natur Meirionnydd, 25th Aug 2016.
⊗‡062/30.5. **Lepidium ruderales** (Narrow-leaved Pepperwort) (Pupurlys Culddail). Caerdeon shore, SH65 17, R.A. Jones, 22nd Jul 2016.

075/08.0.03. **Rubus saxatilis** (Stone Bramble) (Corfiaren). Ogof Ddu, SH89 21, Merioneth Naturalists/Grwp Natur Meirionnydd, 25th Aug 2016.

*‡077/19.19.a.© **Trifolium incarnatum subsp. incarnatum** (Crimson Clover) (Meillionen Waetgoch). Re-seeded field, Cefn Rhug, SJ057 437, T. Knight, det. Knight, T, 29th May 2016, new hectad and 1st Vice-county record this millennium.

084/6.2. **Circaea alpina** (Alpine Enchanter's-nightshade) (Llysiau-Steffan y Mynydd). Cliffs, Ogof Ddu, SH89 21, Merioneth Naturalists/Grwp Natur Meirionnydd, 25th Aug 2016.

094/2.1. **Radiola linoides** (Allseed) (Llin Gorhadog). Brackish shoreline, Caerdeon, SH653 175, R.A. Jones, 22nd Jul 2016, 1st VC and hectad record this millennium.

+107/20.1. **Aethusa cynapium** (Fool's Parsley) (Geuberllys). Abandoned railway sidings, Arenig, SH829 392, S.E. Stille & Clive Lovatt, 24th Jul 2016.

□107/34.2. **Carum verticillatum** (Whorled Caraway) (Carwy Droellennog). Meadow, Carreg, SH64A, S.E. Stille and Caerdeon Group, 23rd Jul 2016.

+120/1.4. **Callitriche platycarpa** (Various-leaved Water-starwort) (Brigwlydd y Gwanwyn). Pont Rhyd y Fen, SH83E, S.E. Stille & Clive Lovatt, 24th Jul 2016.

□‡124/16.20. **Veronica polita** (Grey Field-speedwell) (Rhwyddlwyn-y-maes Llwyd). Caerdeon shore, SH65 17, R.A. Jones, 22nd Jul 2016, new hectad record and 2nd Vice-county record.

+‡129/1.10. **Campanula poscharskyana** (Trailing Bellflower) (Clychlys Ymlusgol). Eisengrug, SH61 34, S.E. Stille & Mari Roberts, 21st Jul 2016.

+‡129/1.9. **Campanula portenschlagiana** (Adria Bellflower) (Clychlys Adria). Rhyd, SH636 419, M.O. Stead, M.F. Godfrey, R. Godfrey & P. Spencer-Vellacott, 23rd Jul 2016.

130/6.01. **Galium boreale** (Northern Bedstraw) (Briwydd y Gogledd). Aran, Glasgwm, SH841 199, A.N. Graham & J.E. Graham, 14th Aug 2016.

+130/7.1. **Cruciata laevipes** (Crosswort) (Llysiau'r Groes). Tanrallt, SH765 373, Gethin Elias, 8th Jun 2016.

*131/6.4. **Lonicera xylosteum** (Fly Honeysuckle) (Gwyddfif Syth). Hedge, Cefnddwysarn, SH965 386, A.N. Graham & S.E. Stille, det. Stille S E, 26th May 2016, apparently the first VC record since 1898.

134/3.1. **Knautia arvensis** (Field Scabious) (Claffrlllys y Maes). Morfa Dyffryn, SH52, C.M. Lovatt, P.L. Brown & J.M. Langton, 22nd Jul 2016.

*135/11.7.riv. **Centaurea nigra var. rivularis**. New road verge, Brithdir, SH762 173, S.P. Chambers, 29 07 2016, undoubtedly from seed mix.

□152/16.24. **Carex lasiocarpa** (Slender Sedge) (Hesgen Fain). Lake side, Llyn Wylfa, SH672 163, A.N. Graham & J.E. Graham, 3rd Jul 2016, millennium update for a RPR sp.

+152/16.32. **Carex sylvatica** (Wood-sedge) (Hesgen y Coed). College Warren, SH93p, A.N. Graham & S.E. Stille, det. Stille S E, 26th May 2016.

□152/16.46.a. **Carex lepidocarpa** (Long-stalked Yellow-sedge). Flush, Helygog, SH78 19, Merioneth Naturalists/Grwp Natur Meirionnydd, det. Stille S E, conf. M S Porter 30.6.2016, 23 06 2016, first VC record this millenium, new hectad record and first VC record away from the coast.

153/23.1. **Parapholis strigosa** (Hard-grass) (Caledweltl y Morfa). Morfa Dyffryn, SH55 26, C.M. Lovatt, P.L. Brown & J.M. Langton, 2016.

⊗153/24.4. **Glyceria notata** (Plicate Sweet-grass) (Melyswellt Plygedig). Hafod-talog, ditch, SH630 400, M.O. Stead, M.F. Godfrey & P. Spencer-Vellacott, 23rd Jul 2016; (⊗) Pont Rhyd y Fen, SH83E, S.E. Stille & Clive Lovatt, 24th Jul 2016, 1ST AND 2ND v-c RECORDS.

+‡153/28.3. **Avena fatua** (Wild-oat) (Ceirchen Wyllt). Field margin, Carreg, SH64A, S.E. Stille and Caerdeon Group, 23rd Jul 2016.

+153/50.3.© **Bromus racemosus** (Smooth Brome) (Pawrwellt Llyfn). Carrog, SJ14B, Merioneth Naturalists/Grwp Natur Meirionnydd, 21st Oct 2016.

153/56.2. **Elytrigia atherica** (Sea Couch) (Marchwellt Arfor). Carreg, SH64A, S.E. Stille and Caerleon Group, 23rd Jul 2016, 1st post-millennium record for hectad.

*‡158/12.2. **Lilium pyrenaicum** (Pyrenean Lily) (Lili Ddrewllyd). Road verge within 50m of dwelling outside garden, Melin y Wig, SJ042 486, T. Knight, det. Knight, T, 11th Jun 2016.

158/19.4. **Scilla verna** (Spring Squill) (Seren y Gwanwyn). Brackish shoreline, Caerleon, SH653 175, R.A. Jones, 22nd Jul 2016, 1st VC and hectad record this millennium.

+‡160/4.1. **Phormium tenax** (New Zealand Flax) (Llin Seland Newydd). Mochras S, SH553 259, C.M. Lovatt, P.L. Brown & J.M. Langton, 22nd Jul 2016, 2nd VC record and first record for SH52.

162/06.2. **Neottia cordata** (Lesser Twayblade) (Caineirian Bach). E of Carreg y Fran, SH740 446, M.W. Rand & P. Brown, 25th Jul 2016.

□162/10.1. **Hammarbya paludosa** (Bog Orchid) (Tegeirian Bach y Gors). Pont yr Afon Gam, SH751 416, G.M. Kay, M.O. Stead, M.F. Godfrey & R. Godfrey, 24th Jul 2016.

162/18.5. **Dactylorhiza purpurella** (Northern Marsh-orchid) (Tegeirian-y-gors Gogleddol). Islaw'r Dref, SH61X, M.O. Stead, P. Spencer-Vellacott & A. Burns, 22nd Jul 2016.

162/20.2. **Orchis mascula** (Early-purple Orchid) (Tegeirian Coch y Gwanwyn). Tir Stent, SH753 163, A.N. Graham & J.E. Graham, 5th Jun 2016, 1st detailed record as well as post 2000 update for hectad

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

+005/2.1. **Botrychium lunaria** (Moonwort) (Lloer-redynen). Grass bank in lane, Ysbyty Ifan, SH84 49, Caerns. Recording Group, 13th May 2016.

+017/1.1. **Polystichum setiferum** (Soft Shield-fern) (Gwrychredynen Feddal). Wooded track, Ysbyty Ifan, SH83 48, Caerns. Recording Group, 13th May 2016.

+017/3.05. **Dryopteris aemula** (Hay-scented Buckler-fern) (Marchredynen Bêr). Amongst boulders by lake shore, Llynnau Cwm Silyn, Nantlle, SH51 50, W.McCarthy, M.Stead & M.Roberts, det. W. McCarthy, 8th Oct 2016, 9 plants amongst boulders near lake shore.

+017/3.c. **Dryopteris borrieri**. Bank at roadside, Nant Gwrtheyrn, SH35 44, David Hill, 15th Oct 2016.

+‡019/1.1. **Azolla filiculoides** (Water Fern) (Rhedynen y D^r). Field pond, Glanwydden, SH81 80, W.McCarthy, 19th Sep 2016.

+‡020/2.1.© **Pseudotsuga menziesii** (Douglas Fir) (Ffynidwydden Douglas). By cycle path, Maesgeirchen, SH58 70, Wendy McCarthy, 23rd Feb 2016.

+‡021/3.1.© **Thuja plicata** (Western Red-cedar) (Cedrwydden Goch). Wood edge, Llanystumdwy, SH46 38, Wendy McCarthy, 30th Apr 2016; (+) forestry plantation, Penmachno, SH80 52, W.McCarthy, 17th Sep 2016.

+‡024/1.1 **Laurus nobilis** (Bay) (Lawrwydden). Waste ground at back of houses, Twthill, Caernarfon, SH48 63, Mari Roberts, det. Wendy McCarthy, 2nd Apr 2016.

+028/13.17.b. **Ficaria verna subsp. verna** (a subspecies of Lesser Celandine). Damp footpath edge, Pistyll, SH32 41, Wendy McCarthy, 4th Jun 2016.

+‡030/6.1.© **Eschscholzia californica** (Californian Poppy) (Pabi California). Gravelly waste ground, Tal-y-Bont, SH77 68, Wendy McCarthy, 27th Nov 2016.

□031/5.06. **Fumaria purpurea** (Purple Ramping-fumitory) (Mwg-y-ddaear Glasgoch). Sandy bank above the beach, Pwllheli, SH36 34, Wendy McCarthy & Martyn Stead, 18th May 2016.

+‡039/2.2. **Nothofagus alpina** (Rauli) (Ffawyddden Ddeheuol Rauli). Forestry plantation, Penmachno, SH80 52, W.McCarthy, 17th Sep 2016.

+‡039/4.2. **Quercus cerris** (Turkey Oak) (Derwen Twrci). Grassland, Nant Gwrtheyrn, SH35 44, Wendy McCarthy, 15th Oct 2016.

- +‡039/4.7. **Quercus rubra** (Red Oak) (Derwen Goch). Forestry plantation, Penmachno, SH80 52, W.McCarthy, 17th Sep 2016, several self sown small trees near mature planted trees.
- +040/3.1.‡ **Carpinus betulus** (Hornbeam) (Oestrwydden). Woodland, Llanrhos, SH79 80, W.McCarthy, 10th Sep 2016.
- +046/08.1. **Myosoton aquaticum** (Water Chickweed) (Llinesg y D'r). Garden waste dump, Tal-y-Bont, SH77 68, Wendy McCarthy & Martyn Stead, 27th Nov 2016.
- +‡046/22.1. **Saponaria officinalis** (Soapwort) (Sebonllys). Waste ground by road, Penrhosgarnedd, SH55 70, Wendy McCarthy & Martyn Stead, 6th Aug 2016.
- +051/1.03. **Hypericum androsaemum** (Tutsan) (Dail y Beiblau). Lane bank, Maenan, SH80 66, Wendy McCarthy, 24th May 2016.
- +057/1.09.b. **Viola palustris subsp. juressi**. Edges of marsh, Near Llyn Crafnant, Trefriw, SH73 60, Wendy McCarthy, 23rd Jun 2016.
- +‡057/1.11×12×alt. **Viola** × **wittrockiana** (Garden Pansy) (Trilliw'r Gerddi). Grassy centre of lane, Penmachno, SH79 50, M.Stead, 27th Aug 2016.
- +‡061/1.1×2. **Populus** × **canescens** (Grey Poplar) (Poplysen Lwyd). Field hedge, Penmachno, SH80 52, W.McCarthy, 17th Sep 2016.
- +061/2.10×11. **Salix** × **reichardtii**. Plantation at roadside, Nant Gwrtheyrn, SH35 44, Wendy McCarthy, 15th Oct 2016.
- +061/2.16.rep. **Salix repens var. repens**. Wet meadow, Penmachno, SH80 53, W.McCarthy, 17th Sep 2016.
- +062/12.1×2. **Rorippa** × **sterilis** (Hybrid Water-cress) (Berwr-y-d'r Croesryw). Pool in disused quarry, Dinorwic, SH60 62, W.McCarthy, 13th Aug 2016.
- +062/12.4. **Rorippa palustris** (Marsh Yellow-cress) (Berwr Melyn y Gors). River bank, Bont Newydd, Llangian, SH29 28, Wendy McCarthy & Martyn Stead, 11th Jun 2016.
- +‡062/17.1. **Lunaria annua** (Honesty) (Swllt Dyn Tlawd). Lane bank, Maenan, SH80 66, Wendy McCarthy, 24th May 2016.
- +‡062/30.1.© **Lepidium sativum** (Garden Cress) (Pupurlys yr Ardd). Waste ground near cottages, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +‡062/34.4.© **Brassica juncea** (Chinese Mustard) (Mwstard Tsieina). Waste ground near cottages, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +‡069/3.1. **Cyclamen hederifolium** (Sowbread) (Bara'r Hwch). Lane bank, Henryd, SH76 74, W.McCarthy, 20th Sep 2016.
- +‡072/2.3. **Ribes nigrum** (Black Currant) (Llwyn Cwrens Duon). Sandy bank above the beach, Borth y Gest, SH56 37, Wendy McCarthy, 9th Apr 2016.
- +073/1.1.‡ **Crassula tillaea** (Mossy Stonecrop) (Corchwyn Mwsoglog). In gravel at edge of lay-by, Tudweiliog, SH22 36, Debbie Evans, det. Wendy McCarthy, 22nd Apr 2016.
- +‡073/1.3. **Crassula helmsii** (New Zealand Pigmyweed) (Corchwyn Seland Newydd). Pool at Gypsy Wood Park, Bontnewydd, SH48 60, Mari Roberts, 2016, exact date unknown.
- +‡073/5.7. **Sedum spurium** (Caucasian-stonecrop) (Briweg y Cawcasws). Wall top & grass bank, Caernarfon, SH48 62, Wendy McCarthy, 2nd Apr 2016.
- +‡073/5.kam. **Sedum kamtschaticum** (Kamchatka Stonecrop) (Briweg Camtsiatca). Stone steps & side of bridge, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +‡075/08.0.10. **Rubus loganobaccus** (Loganberry) (Llwyn Mwyar Logan). Hedgerow by coast path, Caernarfon, SH49 64, Wendy McCarthy & Martyn Stead, det. Wendy McCarthy, 6th Nov 2016.
- +‡075/08.02.055 **Rubus laciniatus**. Bank at track side, Llandwrog, SH45 57, Wendy McCarthy, 13th Nov 2016.
- +075/08.03.112. **Rubus nemoralis** (Boreal Bramble). Mixed fen with scrub, Capel Uchaf, SH43 47, W.McCarthy, 12th Aug 2016.

- +‡075/08.05.134. **Rubus armeniacus**. Hedgerow by coast path in both SH4863 & SH4864, Caernarfon, SH46, Wendy McCarthy, 6th Nov 2016.
- +075/09.13×14. **Potentilla** × **suberecta**. Top of roadside wall, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +075/13.1×2. **Geum** × **intermedium** (Hybrid Avens) (Mapgoll Groesryw). Wooded gully, Trefriw, SH73 59, Wendy McCarthy, 25th Jun 2016, with parents.
- +075/15.2. **Agrimonia procera** (Fragrant Agrimony) (Llysiau'r-dryw Pêr). Hedgebank in lane, Penmachno, SH79 50, Wendy McCarthy & Martyn Stead, 27th Aug 2016.
- +‡075/19.15. **Alchemilla mollis** (Garden Lady's-mantle) (Mantell-Fair y Gerddi). Demolition site, Pistyll, SH32 42, Wendy McCarthy & Martyn Stead, 4th Jun 2016.
- +075/20.2. **Aphanes australis** (Slender Parsley-piert) (Troed-y-dryw Main). Acidic hillside with outcrops, Maenan, SH80 66, Wendy McCarthy, 24th May 2016.
- +†075/22.05.b. **Prunus domestica subsp. insititia** (a subspecies of Wild Plum) (Coeden Eirin Bwlas). Hedgerow by coast path, Caernarfon, SH48 63, Wendy McCarthy & Martyn Stead, 6th Nov 2016.
- +‡075/32.37. **Cotoneaster dielsianus** (Diels' Cotoneaster) (Cotoneaster Diels). Bank in disused quarry, Talysarn, SH48 51, Wendy McCarthy, 1st Jun 2016.
- +077/26.1×2. **Ulex** × **breganii** (**U. europaeus** × **U. gallii**). Hedge in lane, Llandwrog, SH45 57, Wendy McCarthy & Martyn Stead, 13th Nov 2016.
- +084/1.06×08. **Epilobium** × **vicinum** (**E. obscurum** × **E. ciliatum**). Roadside bank, Penmachno, SH78 49, W.McCarthy, 24th Aug 2016, epilobium obscurum x ciliatum, parents nearby.
- +‡084/4.4. **Oenothera cambrica** (Small-flowered Evening-primrose) (Melyn-yr-hwyr Mân-flodeuog). Disturbed soil by roadside, Ty'n y Groes, SH76 68, Wendy McCarthy, 28th Jul 2016.
- *‡085/3.1. **Griselinia littoralis** (New Zealand Broadleaf) (Griselinia). Acidic hillside, Twthill, Caernarfon, SH48 63, Wendy McCarthy, 2nd Apr 2016.
- +091/2.07. **Euphorbia stricta** (Upright Spurge) (Llaethlys Syth). Grass verge by road, Llandudno, SH77 82, Wendy McCarthy, 19th Aug 2009; (+) grass bank by lane, Glanwydden, SH81 79, Wendy McCarthy, 11th Jul 2016.
- +‡093/2.1.© **Parthenocissus quinquefolia** (Virginia-creeper) (Dringwr Fflamgoch). Slate quarry waste tips, Llanllechid, SH63 69, W.McCarthy, 4th Oct 2016.
- +‡094/1.2.© **Linum usitatissimum** (Flax) (Llin). Grassy patch of waste ground, Llandudno Junction, SH79 77, Wendy McCarthy, 14th Jun 2016.
- +‡099/1.1. **Acer platanoides** (Norway Maple) (Masarnen Norwy). Field hedge, Penmachno, SH80 52, W.McCarthy, 17th Sep 2016.
- +‡102/1.03. **Oxalis corniculata** (Procumbent Yellow-sorrel) (Suran Orweddol). Edges of allotments, Moelyci farm, Tregarth, SH59 67, Wendy McCarthy, 6th Jun 2016.
- +‡103/1.14. **Geranium pyrenaicum** (Hedgerow Crane's-bill) (Pig-yr-aran y Gwrych). Grassland, Nant Gwrtheyrn, SH34 44, Wendy McCarthy, 15th Oct 2016, perhaps introduced.
- +‡103/1.17. **Geranium macrorrhizum** (Rock Crane's-bill) (Pig-yr-aran Wreiddfawr). Hedgebank in lane, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +107/41.2. **Heracleum mantegazzianum agg.** (Giant Hogweed) (Efwr Enfawr). Near river, Felinheli, SH52 67, E.Meilleur, 22nd Jun 2016.
- *‡109/1.2. **Vinca difformis** (Intermediate Periwinkle) (Perfagl Serennog). Sandy bank above the beach, Borth y Gest, SH56 37, Mari Roberts, det. Wendy McCarthy, 9th Apr 2016.
- +113/2.1. **Nymphoides peltata** (Fringed Water-lily) (Lili'r-d'r Eddiog). Pool at Gypsy Wood park, Bontnewydd, SH48 60, Mari Roberts, 2016, exact date unknown.
- +116/02.1. **Echium vulgare** (Viper's-bugloss) (Gwiberlys). Roadside bank, Llanfairfechan, SH69 75, Wendy McCarthy, 16th Jul 2016.

- +‡116/02.4. **Echium pininana** (Giant Viper's-bugloss) (Gwiberlys Mawr). Waste ground by road, Penrhosgarnedd, SH55 70, Lesley Ball, 6th Aug 2016, 1 large mature plant, none seen in nearby gardens.
- +‡118/01.2. **Stachys byzantina** (Lamb's-ear) (Clust yr Oen). Grass bank, Llandudno, SH76 82, W.McCarthy, 5th Jun 2016.
- +118/23.4. **Mentha suaveolens** (Round-leaved Mint) (Mintys Deilgrwn). Gateway to disused quarry, Maenan, SH81 65, Wendy McCarthy, 4th May 2016.
- +‡124/04.2. **Mimulus guttatus** (Monkeyflower) (Blodyn Mwnci). Stream bank, Moelyci farm, Tregarth, SH59 67, Wendy McCarthy, 6th Jun 2016.
- +‡124/08.2. **Chaenorhinum minus** (Small Toadflax) (Trwyn-y-llo Bach). Dry slate waste, Dinorwic, SH60 62, M.Stead, 13th Aug 2016.
- +124/20.05.b. **Euphrasia arctica subsp. borealis**. Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016.
- +124/20.07×09. **Euphrasia nemorosa × confusa**. Grassland by the sea, Porth Ceiriad, SH31 24, W.McCarthy, det. C. Metherell, 17th Aug 2016.
- +‡129/1.10. **Campanula poscharskyana** (Trailing Bellflower) (Clychlys Ymlusgol). Side of wall above river, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +‡129/1.4. **Campanula persicifolia** (Peach-leaved Bellflower) (Clychlys Meinddail). Wall base in car park, Conwy, SH78 77, Wendy McCarthy, 10th May 2016; (+) grass bank in lane, Pydew, SH80 78, Wendy McCarthy, 4th Sep 2015.
- +‡129/1.9. **Campanula portenschlagiana** (Adria Bellflower) (Clychlys Adria). Wall top near road, Penmachno, SH79 50, W.McCarthy, 27th Aug 2016.
- +130/6.03. **Galium uliginosum** (Fen Bedstraw) (Briwydd y Fign). Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016.
- +130/6.07.b. **Galium mollugo subsp. erectum**. Grass bank at top of field, Glanwydden, SH81 80, Wendy McCarthy, 11th Jul 2016.
- +‡131/5.1. **Leycesteria formosa** (Himalayan Honeysuckle) (Bachgen Llwm). Stream bank, Nefyn, SH31 40, Wendy McCarthy & Martyn Stead, 4th Jun 2016.
- +‡131/6.2. **Lonicera nitida** (Wilson's Honeysuckle) (Gwyddfid Wilson). Lane bank, Llanystumdwy, SH46 38, Wendy McCarthy, 30th Apr 2016.
- +135/16.2. **Leontodon hispidus** (Rough Hawkbit) (Peradyl Garw). Bank near estuary, Llandwrog, SH44 57, Martyn Stead, 13th Nov 2016, 1 plant only on artificial bank, probably introduced.
- *135/25.09.137. **Taraxacum fasciatum** (Dense-bracted Dandelion). A470 roadside junction, Tanrallt, Betws y Coed, SH79 54, T.C.G.Rich & C.Gait, det. A.J. Richards, 25th Apr 2014.
- +‡135/80.2. **Galinsoga quadriradiata** (Shaggy-soldier) (Galinsoga Blewog). Wall base at pavement edge, Deganwy, SH78 78, S. Coleman, 30th Sep 2016.
- +‡147/2.1. **Lysichiton americanus** (American Skunk-cabbage) (Pidyn-y-gog Americanaidd). Damp field, Llanberis, SH57 59, E.Meilleur, 8th Jun 2016.
- +151/1.11. **Juncus subnodulosus** (Blunt-flowered Rush) (Brwynen Flaendon). Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016.
- +152/16.25. **Carex acutiformis** (Lesser Pond-sedge) (Hesgen -y-d'r Fach). Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016.
- +‡153/05.1 **Pseudosasa japonica** (Arrow Bamboo) (Bamb^r Saethau). Swamp near river, Pwllheli, SH36 34, Wendy McCarthy, 18th May 2016.
- +153/12.02. **Schedonorus arundinaceus** (Tall Fescue) (Peiswellt Tal). Abandoned field near derelict farm, Caernarfon, SH49 64, Wendy McCarthy, 6th Nov 2016.
- +‡153/13.2. **Lolium multiflorum** (Italian Rye-grass) (Rhygwellt yr Eidal). Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016.

- +153/17.1. **Briza media** (Quaking-grass) (Crydwellt). Wet heath, Bryneglwys, SH61 65, W.McCarthy, 6th Sep 2016.
- +153/21.1. **Catapodium rigidum** (Fern-grass) (Gwenithwellt Caled). Roadside near lay-by, Llanberis, SH62 57, Wendy McCarthy, 6th Jul 2016.
- +153/21.2. **Catapodium marinum** (Sea Fern-grass) (Gwenithwellt y Morfa)). Roadside near Ogwen cottage, Bethesda, SH65 60, Sharon Pilkington, 8th Jul 2016.
- *‡153/44.1. **Apera spica-venti** (Loose Silky-bent) (Sidanwellt). Lawn in council garden, Great Orme, SH78 83, Wendy McCarthy, 31st Jul 2000, **H**
- +153/46.1. © **Polyogon monspeliensis** (Annual Beard-grass) (Barfwellt Unflwydd). Paving cracks, Conwy, SH78 77, Wendy McCarthy & Martyn Stead, 25th Jun 2016.
- +‡153/50.4×5. **Bromus ×pseudothominei** (Lesser Soft-brome) (Pawrwellt Min y Ffordd). Neutral grassland, Pistyll, SH32 42, Wendy McCarthy, 4th Jun 2016.
- +158/13.1. **Convallaria majalis** (Lily-of-the-valley) (Lili'r Dyffrynnoedd). Sand dunes, Pwllheli, SH36 34, Wendy McCarthy, 18th May 2016, garden throw out.
- *‡158/24.05. **Allium subhirsutum** (Hairy Garlic) (Garlleg Blewog). Disturbed sandy bank, West Shore, Llandudno, SH77 81, Wendy McCarthy, 10th May 2016.
- +162/03.1. **Epipactis palustris** (Marsh Helleborine) (Caldris y Gors). Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016.
- +162/18.4. **Dactylorhiza praetermissa** (Southern Marsh-orchid) (Tegeirian-y-gors Deheuol). Damp grassland, Bangor, SH54 70, Wendy McCarthy, 28th Jun 2016

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

- *c1-1-vul **Chara vulgaris var. papillata**. Conwy RSPB Reserve, SH7973 7732, D. Williams, det. Ferguson-Smyth, C. 19/7/16, conf. N.F.Stewart 21/7/16, 12th Jul 2016, frequent in brackish shallow lagoon, **HB D.W.**
- *‡020/7.2.a. **Pinus nigra subsp. nigra** (Austrian Pine) (Pinwydden Awstria). Tu-hwnt-i'r-afon, SH8049 6794, Denbs Group (D. Williams), 15th Sep 2016, a few near Bryn Hafod.
- +027/1.1. **Ceratophyllum demersum** (Rigid Hornwort) (Cyrnddail Caled). Foxhall, SJ03 67, M.O. Stead, 13th Sep 2016.
- +028/13.10. **Ranunculus auricomus** (Goldilocks Buttercup) (Blodyn-y-menyn Peneuraid). Cumbers, SJ441 390, K.K. Bell, 10th May 2016, roadside N of Scrape Wood.
- *028/13.21. **Ranunculus baudotii** (Brackish Water-crowfoot) (Crafanc-y-frân y Morfa). Conwy RSPB Reserve, SH7973 7732, D. Williams, 3rd Jul 2016, frequent in brackish lagoon behind Cafe and other ponds in Reserve; (*) Conwy RSPB Reserve, SH801 767, D. Williams, 3rd Jul 2016, frequent in ponds in this area.
- +031/5.03. **Fumaria bastardii** (Tall Ramping-fumitory) (Mwg-y-ddaear Grymus). Bryn Trallwyn, SH796 734, Denbs Group (D. Williams), 9th Jun 2016, lanes and hedgerows.
- +031/5.06. **Fumaria purpurea** (Purple Ramping-fumitory) (Mwg-y-ddaear Glasgoch). Bryniau, SH7983 7436, Denbs Group (D. Williams), 9th Jun 2016, large spreading plants along the lane; (+) Pentrefelin, SH8010 7439, Denbs Group (D. Williams), 9th Jun 2016, several large patches along S side of lane.
- *‡039/2.2. **Nothofagus alpina** (Rauli) (Ffawyddden Ddeheuol Rauli). Ysbyty Ifan, SH8444 4850, M.O. Stead, 30th Sep 2016, planted a long time ago.
- ‡043/1.12. **Chenopodium murale** (Nettle-leaved Goosefoot) (Troed-yr-^ydd Dail Danadl). Pen-y-stryt South, SJ1872 5091, D. Williams, 7th Jul 2016, several plants with *C. album* and *M. discoides* in a very well-manured edge of barley field. 3rd record for VC, 1st since 1985, **HB D.W.**

- +043/3.06. **Atriplex littoralis** (Grass-leaved Orache) (Llygwyn Arfor). Marine Lake, SJ00 80, M.O. Stead, 7th Jun 2016.
- +046/10.8. **Sagina maritima** (Sea Pearlwort) (Corwlyddyn Arfor). Foryd, SH9967 8077, M.O. Stead, 7th Jun 2016, pavement weed.
- +046/17.3. **Spergularia marina** (Lesser Sea-spurrey) (Troellig Arfor Bach). Brookhouse, SJ0714 6572, M.O. Stead, 24th Aug 2016, main road verge by bridge.
- +046/17.4. **Spergularia rubra** (Sand Spurrey) (Troellig Arfor Coch). Mynydd y Gyrt S, SH9636 6822, Denbs Group (D. Williams), 18th Sep 2016, a small amount on bare rock by track.
- +047/1.12. **Persicaria lapathifolia** (Pale Persicaria) (Canwraidd y Dom). Groesffordd Marli East, SJ0100 7344, M.O. Stead, 2nd Aug 2016, east roadside verge; (+) Marine Lake, SJ0017 8057, M.O. Stead, 7th Jun 2016, between wall and small railway.
- +047/8.13×19. **Rumex crispus** × **R. obtusifolius** = **R. ×pratensis**. Groesffordd Marli East, SJ0147 7376, M.O. Stead, 2nd Aug 2016, by bricked gas meter control in business park.
- +051/1.16. **Hypericum elodes** (Marsh St John's-wort) (Eurinllys y Gors). Mynydd Poeth, SH95K, N.J Osley & S.K. Osley, 7th Sep 2016, muddy stream through wetland NW of Parc Newydd.
- +061/2.05. **Salix purpurea** (Purple Willow) (Helygen Gochlas). Fenn's Bank, SJ505 395, K.K. Bell, 17th Jul 2016, roadside pond by Fenn's Old Hall.
- +061/2.09×11. **Salix viminalis** × **S. cinerea** = **S. ×holosericea** [**S. ×smithiana**] (Silky-leaved Osier) (Helygen Dail Sidan). Cefn-brith, SH9342 5028, Denbs Group (D. Williams), 12th Jun 2016, large old tree on E side of track; (+) Caemor Wood, SJ22 35, M.O. Stead, 11th Oct 2016.
- ⊖062/21.4. ‡ **Draba muralis** (Wall Whitlowgrass) (Llysiau'r-bystwn y Muriau). Tregeiriog Farm, SJ1776 3385, Denbs Group (D. Williams), 29th May 2016, frequent in waste ground on both sides of lane from cross-roads N; (⊖) Nant Caledwynt East, SJ1763 3426, Denbs Group (D. Williams), 29th May 2016, occasional in hedgebanks for 100m or so N from Ty'n y gerddi. 2nd records in VC, 3rd since 1912, **HB D.W.**
- ⊗062/22.1. **Erophila majuscula** (Hairy Whitlowgrass) (Llysiau'r-bystwn Blewog). Geufron, SJ215 425, Sue Swindells, det. D. Williams, 14th Mar 2016, on side of track before Ty-isa, with *E. verna*. **HB DW**. VC2nd record since 1st in 1956, **HB D.W.**
- *‡062/34.2.a. **Brassica napus subsp. oleifera** (Oil-seed Rape) (Rêp Had Olew). Graig Yard Ind.Est., SJ05 66, M.O. Stead, 17th May 2016; (*) Colomendy Ind Est, SJ05 67, M.O. Stead, 17th May 2016; (*) Green, SJ05 68, M.O. Stead, 17th May 2016, probably not new to VC, probably under-recorded; (*) Green Isaf, SJ06 69, M.O. Stead, 17th May 2016.
- *‡062/34.3.a. **Brassica rapa subsp. rapa** (Meipen). Pentre Llanrhaeadr, SJ08 62, M.O. Stead, 16th Oct 2016, probably not new to VC, probably under-recorded.
- +‡062/38.1. **Hirschfeldia incana** (Hoary Mustard) (Mwstard Llwyd). Llys Meirchion, SJ0148 6855, M.O. Stead, 7th Sep 2016, in grass opposite Tyn y ffordd.
- *‡065/8.1. **Gaultheria shallon** (Shallon) (Gweunlwyn Sialon). Tu-hwnt-i'r-afon, SH813 668, Denbs Group (D. Williams), 15th Sep 2016, spreading along edge of bank on S side of cutting through rock. Not far from Pennant Lodge.
- *075/08.10.230. **Rubus condensatus**. Penycloddiau, SJ13068 67053, BSBI Field Meeting, det. Randall, R.D., 31st Jul 2016, coed Llangwyfan, forestry track. New to Wales. **HB Randall 2016.031**
- ⊖075/08.11.seg. **Rubus segontii**. Sydallt South, SJ31 54, R.D. Randall & J. Palmer, det. Randall, R.D., 28th Jul 2016, alyn Waters Country Park, path near carpark. 2nd VC record, 1st since 1995.
- +075/13.1×2. **Geum rivale** × **G. urbanum** = **G. × intermedium** (Hybrid Avens) (Mapgoll Groesryw). Pentre-llyncymmer, SH9797 5245, Denbs Group (D. Williams), 19th Jun 2016, s

side of track above the Afon Alwen. Large stands; (+) Moel Findeg, SJ2060 6165, M.O. Stead, 20th May 2016.

+075/21.13.a. **Rosa caesia subsp. caesia** (Hairy Dog-rose) (Rhosyn Rhuddlas). Pont y Glyn-diffwys, SH99 44, Denbs Group (D. Williams), 23rd Sep 2016, lane W to E; (+) Minera Quarry, SJ254 523, Denbs Group (D. Williams), 26th Sep 2016, old road through wooded area.

+077/14.08. **Vicia tetrasperma** (Smooth Tare) (Ffachysen Lefn). Pont y Glyn-diffwys, SH9963 4434, Denbs Group (D. Williams), 23rd Sep 2016, afon Ceirw.

+077/18.5‡ **Medicago arabica** (Spotted Medick) (Maglys Brith). Foryd, SH99 80, M.O. Stead, 7th Jun 2016; (+) Llwyn Mawr, SJ0802 6406, M.O. Stead, 6th May 2016, a525 main road verge of footpath; (+) Wrexham Industrial Estate, SJ37 49, P. Spencer-Vellacott, M.O. Stead & G. Gittins, 2nd Jan 2016, BSBI New Year Plant Hunt.

⊗077/19.01. **Trifolium ornithopodioides** (Bird's-foot Clover) (Corfeillionen Wen). Foryd, SH9962 8057, M.O. Stead, 7th Jun 2016, marine Park west end of lake by picnic table. 2nd VC record, 1st since 1893, **HB D.W.**

+‡077/19.04. **Trifolium hybridum** (Alsike Clover) (Meillionen Sweden). Llws y Frenhines, SJ066 555, W. McCarthy, 31st Jul 2016, forest track; (+) Llwynmawr, SJ22 37, M.O. Stead, 20th Sep 2016.

+077/19.20. **Trifolium striatum** (Knotted Clover) (Meillionen Rychog). Bryn Trallwyn, SH79 73, Denbs Group (D. Williams), 9th Jun 2016, lanes and hedgerows.

+079/2.3. **Myriophyllum spicatum** (Spiked Water-milfoil) (Myrdd-ddail Ysbigog). Conwy RSPB Reserve, SH7969 7733, D. Williams, 3rd Jul 2016, frequent in brackish and other ponds.

+081/1.3. **Lythrum portula** (Water-purslane) (Troed y Gywen). Bwlchyddar, SJ17 22, Sue Swindells, 20th Jul 2016.

+090/1.1.‡ **Buxus sempervirens** (Box) (Pren Bocs). Aber Quarries, SH9791 5972, Denbs Group (D. Williams), 1st Sep 2016, entrance to quarry. Dumped? Relicts?; (+) Cwm Blowty, SJ09 28, Denbs Group (D. Williams), 16th Aug 2016, roadside and hill track.

⊖103/2.1. **Erodium maritimum** (Sea Stork's-bill) (Pig-y-crëyr Arfor). Foryd, SJ9995 8034, M.O. Stead, 7th Jun 2016, marine Park between footpath and railway. 2nd VC record, 1st since 1970-1986, **HB D.W.**

+113/1.1. **Menyanthes trifoliata** (Bogbean) (Ffeuen y Gors). Moel Findeg, SJ20 61, M.O. Stead, 20th May 2016.

+118/01.5×6. **Stachys sylvatica** × **S. palustris** = **S. ×ambigua** (Hybrid Woundwort) (Briwllys Croesryw). Brookhouse, SJ07 65, M.O. Stead, 14th Sep 2016.

+†118/05.6. **Lamium amplexicaule** (Henbit Dead-nettle) (Marddanhadlen Goch Ddeilgron). Hightown, SJ3388 4971, M.O. Stead & G. Lowden, 22nd Oct 2016, disused raised bed.

+118/23.1×2. **Mentha arvensis** × **M. aquatica** = **M. ×verticillata** (Whorled Mint) (Mintys Troellennog). Tytandderwen, SH9908 4357, Denbs Group (D. Williams), 21st Aug 2016, wet area; (+) Cefn Berain SW, SH9860 6858, Denbs Group (D. Williams), 18th Sep 2016, large clump in stream below footbridge; (+) Bwlch Penbarra North, SJ1651 6151, M.O. Stead, 10th Oct 2016, beside bridge of pond.

+†118/23.3. **Mentha spicata** (Spearmint) (Mintys Ysbigog). Aberchwiler, SJ09 69, M.O. Stead, 9th Sep 2016.

+120/1.6. **Callitriche brutia**. Nantclwyd Hall, SJ112 514, D. Williams, 25th Aug 2016, private lake; (+) Moel Famau, SJ16 62, M.O. Stead, 10th Oct 2016; (+) Maeshafn South, SJ20 60, M.O. Stead, 9th May 2016.

+121/1.1. **Plantago coronopus** (Buck's-horn Plantain) (Llyriad Corn Carw). Trefnant, SJ0501 7088, Denbs Group (D. Williams), 7th Aug 2016, along the A541. Single plant on busy roadside.

+121/1.4. **Plantago media** (Hoary Plantain) (Llyriad Llwyd). Bryn Trallwyn, SH795 735, Denbs Group (D. Williams), 9th Jun 2016, lanes and hedgerows.

+†124/08.2. **Chaenorhinum minus** (Small Toadflax) (Trwyn-y-llo Bach). Berse, SJ3183 5024, Tom Knight, 29th Sep 2016, frequent on recently established new road verge.

+†124/12.1. **Kickxia elatine** (Sharp-leaved Fluellen) (Llysiâu-Llywelyn). Groesffordd Marli East, SJ0153 7375, M.O. Stead, 2nd Aug 2016, about 20 plants on verge between path and road.

+124/16.12. **Veronica catenata** (Pink Water-Speedwell) (Graeanllys-y-dwr Rhosliw). Conwy RSPB Reserve, SH801 767, D. Williams, 3rd Jul 2016, frequent in ponds.

+†124/16.19. **Veronica agrestis** (Green Field-speedwell) (Rhwyddlwyn-y-maes Gwyrdd). Bryniau, SH798 750, D. Williams, 8th Jul 2016, laneside hedgebanks.

□124/20.01.a. **Euphrasia officinalis subsp. pratensis**. Llys y Frenhines, SJ0651 5568, W.N. McCarthy, 31st Jul 2016, grass verge near carpark. 2nd in VC.

*124/20.05×07. **Euphrasia arctica** × **nemorosa**. Bryn Euryn, SH830 798, P. Spencer-Vellacott & W.N. McCarthy, det. Metherell, C., 25th Aug 2016, sSSI.

+124/25.2. **Pedicularis sylvatica** (Lousewort) (Melog y C^n). Foel Gasyth, SJ0203 6209, M.O. Stead, 25th May 2016, trackside.

+133/1.1. **Valerianella locusta** (Common Cornsalad) (Gwylaeth yr Oen). Marine Lake, SJ00 80, M.O. Stead, 7th Jun 2016.

+†133/1.2. **Valerianella carinata** (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). North Llanrwst, SH79 63, Denbs Group (D. Williams), 1st May 2016, frequent on walls and kerbsides in the area; (+) Tregeiriog Farm, SJ17 33, Denbs Group (D. Williams), 29th May 2016, about 50m N of cross-roads.

*‡135/11.mac. **Centaurea macrocephala** (Giant Knapweed) (Y Bengaled Benfawr). Cefn-brith, SH9334 5038, Denbs Group (D. Williams), 12th Jun 2016, disused garden of old tumbledown cottage.

+135/30.1. **Filago vulgaris** (Common Cudweed) (Edafeddog Lwyd). Moel Famau, SJ1763 6215, M.O. Stead, 13th Oct 2016, on both sides of track.

+142/1.19. **Potamogeton crispus** (Curled Pondweed) (Dyfrllys Crych). Nantclwyd Hall, SJ112 514, D. Williams, 25th Aug 2016, private lake. Abundant.

+145/1.1. **Zannichellia palustris** (Horned Pondweed) (Llynwlyddyn Corniog). Conwy RSPB Reserve, SH7973 7732, D. Williams, 3rd Jul 2016, abundant in brackish lagoon behind Cafe.

+‡147/5.2. **Arum italicum** (Italian Lords-and-Ladies) (Pidyn-y-gog Eidalaid). Llanelidan, SJ1173 5002, M.O. Stead, 6th Apr 2016, on corner of road by post.

+152/16.09.a. **Carex divulsa subsp. divulsa** (Grey Sedge). Rhiwbebyll, SJ1220 6579, D. Williams, 24th Jul 2016, a few plants on verge in lay-by.

+152/16.44. **Carex hostiana** (Tawny Sedge) (Hesgen Felynllyd). Bryn Hyfryd, SJ0181 6213, M.O. Stead, det. D. Williams, 17th Jun 2016, wet area near track.

+152/16.44×46. **Carex hostiana** × **C. viridula** = **C. × fulva**. Bryn Hyfryd, SJ0181 6213, M.O. Stead, det. D. Williams, 16th Jun 2016, voucher specimen.

+153/12.01. **Schedonorus pratensis** (Meadow Fescue) (Peiswellt). Llwyn Goronwy, SH82 61, N.J Osley & S.K. Osley, 6th Aug 2016, roadside verges and banks with bedrock exposure. Rare here.

+†153/14.3. **Vulpia myuros** (Rat's-tail Fescue) (Peisgwelld y Fagwyr). Denbigh Castle, SJ0523 6580, M.O. Stead, 26th Jun 2016, denbigh Castle car park; (+) Ruthin, SJ1254 5850, D. Williams, 2nd Jun 2016, occasional over car park and waste areas; (+) Hirwaen, SJ124 613, D. Williams, 19th Jul 2016, laneside.

+153/21.2. **Catapodium marinum** (Sea Fern-grass) (Gwenithwellt y Morfa)). Marine Lake, SJ0017 8048, M.O. Stead, 7th Jun 2016, grass between marine lake and small railway.

- +153/39.8. **Agrostis vinealis** (Brown Bent) (Maeswellt-y-c[^]n y Mynydd). Fedw, SH81 58, Denbs Group (D. Williams), 14th Aug 2016, laneside at Rhiw; (+) Elorgarreg, SH96 53, D. Williams, 30th Jul 2016, trackside.
- +153/50.3. **Bromus racemosus** (Smooth Brome) (Pawrwellt Llyfn). Bodnant Uchaf, SH81 72, N.J Osley & S.K. Osley, 21st May 2016; (+) Brynffanigl, SH92 74, N.J Osley & S.K. Osley, 4th Jun 2016, hedgerows, ditches, streams, gorse scrub, copses and road verges; (+) Caenant Wood, SJ433 454, K.K. Bell, 2nd Jul 2016, bridlepath NE of Caenant Wood.
- +153/64.1. **Phragmites australis** (Common Reed) (Corsen). Cefn-brith, SH93 50, Denbs Group (D. Williams), 12th Jun 2016, lane and tracks.
- +‡153/68.1. **Echinochloa crus-galli** (Cockspur) (Cibogwellt Rhydd). Brookhouse, SJ0721 6568, M.O. Stead, 14th Sep 2016, brookhouse Mill pub car park.
- *©153/70.ver. **Setaria verticillata** (Rough Bristle-grass) (Cibogwellt Troellog). Brookhouse, SJ0718 6591, M.O. Stead, 11th Aug 2016, patch on road beside church and field border gate, **HB D.W.**
- *©153/SEC.cer. **Secale cereale** (Rye) (Rhyg). Llys Meirchion, SJ0119 6861, M.O. Stead, 7th Sep 2016, casual south side of road, **HB D.W.**; (*) Colomendy Ind. Est, SJ0536 6716, M.O. Stead, conf. A.Chater 3/9/16, 20th Aug 2016, gutter main road at top of industrial estate Denbigh, **HB D.W.**
- +154/1.2. **Sparganium emersum** (Unbranched Bur-reed) (Cleddlys Di-gainc). Pont y Glyn-diffwys West, SH985 447, Denbs Group (D. Williams), 23rd Sep 2016, afon Ceirw.
- +‡158/24.07. **Allium triquetrum** (Three-cornered Garlic) (Garlleg Trianglog). Ty'n-y-rhos, SJ168 229, Sue Swindells, 22nd Jun 2016, small patch on verge near property.
- +158/24.16. **Allium vineale** (Wild Onion) (Nionyn Gwyllt). Foryd, SH9969 8064, M.O. Stead, 7th Jun 2016, east side of Estuary footpath.
- +162/14.1. **Anacamptis pyramidalis** (Pyramidal Orchid) (Tegeirian Bera). Conwy RSPB Reserve, SH7969 7733, D. Williams, 3rd Jul 2016, several scattered in grass in front of cafe.
- *162/18.3.b. **Dactylorhiza incarnata subsp. coccinea**. Conwy RSPB Reserve, SH8016 7679, D. Williams, 3rd Jul 2016, two large patches both near D. praetermissa in short grazed grass off path. Photos.
- +162/18.4. **Dactylorhiza praetermissa** (Southern Marsh-orchid) (Tegeirian-y-gors Deheuol). Conwy RSPB Reserve, SH8016 7679, D. Williams, 3rd Jul 2016, thousands over the Reserve. Photos

FLINT, v.c.51 (comm. E. Meilleur)

- +c1-1-glo **Chara globularis** (Fragile Stonewort). Talacre, SJ1240 8494, Emily Meilleur & Gail Quartly-Bishop, Jun 2016, natterjack toad ponds.
- +007/3.1. **Adiantum capillus-veneris** (Maidenhair Fern) (Briger Gwener). Waterfall on limestone, Dyserth Waterfall, SJ057 792, Gail Quartly-Bishop, det. Gail Quartly-Bishop 15/02/2017, 9th Oct 2016, see article in this edition of the Welsh Bul, **Voucher specimen held by Mike Klymko, N Wales Wildlife Trust**
- +011/1.1×2. **Polypodium × mantoniae (P. vulgare × P. interjectum)**. Argoed, SJ11 83, M.O. Stead, 24th May 2016, recorded as 'Callitriche agg.'; (+) Mold, SJ2245 6569, M.O. Stead, 28th Mar 2016, on road verge at base of hedge; (+) Mold, SJ24 63, M.O. Stead, 10th Feb 2016; (+) Northop, SJ25 68, M.O. Stead, 29th Jul 2016; (+) Northop Hall C, SJ2747 6654, M.O. Stead, 6th Sep 2016, on rubble bank by quarry. With *Picris hieracoides*.
- +011/1.2. **Polypodium interjectum** (Intermediate Polypody) (Llawredynen Ganolig). Prestatyn, SJ0373 8259, M.O. Stead, 6th Oct 2016, golf course rough.

+015/2.1. **Asplenium adiantum-nigrum** (Black Spleenwort) (Duegredynen Goesddu). Tanlan Banks, SJ1249 8330, Jonathan Shanklin, 24th May 2016, off road to sewage works - status uncertain.

+017/1.1×2. **Polystichum × bicknellii** (**P. setiferum** × **P. aculeatum**). Afon Conwy, SJ2313 6931, Jonathan Shanklin, 29th Jul 2016, one plant on stream side. Pinnae show 'ladder', pinnules curve, indusia various.

+017/3.03b. **Dryopteris cambrensis**. Treuddyn, SJ25 57, Jonathan Shanklin, 8th Oct 2016.

+031/5.03. **Fumaria bastardii** (Tall Ramping-fumitory) (Mwg-y-ddaear Grymus). Tan-lan, SJ12 82, Emily Meilleur, 24th May 2016.

*‡042/8.2. **Carpobrotus edulis** (Hottentot-fig) (Ffigysen yr Hotentot). Rhyl, SJ01 82, Jonathan Shanklin, 6th Oct 2016; (*) Rhyl, SJ02 82, Jonathan Shanklin, 6th Oct 2016; (*) Prestatyn, dunes, SJ05 83, Jonathan Shanklin, 6th Oct 2016.

+043/1.06. **Chenopodium rubrum** (Red Goosefoot) (Troed-yr-^ydd Coch). Argoed, SJ11 83, Jonathan Shanklin, 24th May 2016; (+) Northop, SJ24 68, Jonathan Shanklin, 29th Jul 2016, in Methodist church. Planted.

+‡043/1.13. **Chenopodium ficifolium** (Fig-leaved Goosefoot) (Troed-yr-^ydd Dail Ffigys). Talcre rabbit lawn & natterjack ponds, SJ123 849, Jonathan Shanklin, 23rd Apr 2016; (+) Nercwys, SJ22 59, Jonathan Shanklin, 13th Feb 2016; (+) Northop, churchyard, SJ246 685, Jonathan Shanklin, 29th Jul 2016.

+046/10.8. **Sagina maritima** (Sea Pearlwort) (Corwlyddyn Arfor). Treuddyn, SJ2480 5767, Jonathan Shanklin, 8th Oct 2016, orange hairs at vein intersections below.

+061/2.05. **Salix purpurea** (Purple Willow) (Helygen Gochlas). Argoed, SJ11 83, Jonathan Shanklin, 24th May 2016.

+061/2.10×11. **Salix caprea** × **S. cinerea** = **S. ×reichardtii**. Gwernaffield, SJ20 64, Jonathan Shanklin, 28th Mar 2016.

+062/11.1. **Barbarea vulgaris** (Winter-cress) (Berwr-y-gaeaf). Ffrith Beach, dunes, SJ03 82, Jonathan Shanklin, 6th Oct 2016; (+) Northop, SJ24 68, Jonathan Shanklin, 29th Jul 2016, by Methodist church.

+‡062/30.5. **Lepidium ruderae** (Narrow-leaved Pepperwort) (Pupurlys Culddail). Tremeirchion, SJ08720 73089, Jonathan Shanklin, 18th Feb 2016.

+‡062/33.1. **Diplotaxis tenuifolia** (Perennial Wall-rocket) (Roced-y-muriau Meinddail). Northop, SJ24 68, Jonathan Shanklin, 29th Jul 2016.

*062/42.1.b. **Raphanus raphanistrum subsp. maritimus** (Sea Radish) (Rhuddygl Arfor). Ffrith Beach, dunes, SJ03 82, Jonathan Shanklin, 6th Oct 2016; (*) Prestatyn, dunes, SJ05 83, Jonathan Shanklin, 6th Oct 2016, occasional, eg SJ05578355.

*‡074/03.1. **Bergenia crassifolia** (Elephant-ears) (Clustiau Eliffant). Nercwys, SJ237 602, Jonathan Shanklin, 13th Feb 2016, dumped in wood. Surviving.

+075/08.06.163. **Rubus vestitus**. Nercwys, SJ23 60, Jonathan Shanklin, 13th Feb 2016, recorded as 'Crocus x luteus'.

+075/20.2. **Aphanes australis** (Slender Parsley-piert) (Troed-y-dryw Main). Point of Ayr, SJ1268 8377, Jonathan Shanklin, 24th May 2016, scattered plants on old colliery site.

+075/21.17. **Rosa mollis** (Soft Downy-rose) (Rhosyn Blewog). Leadmill, SJ24 64, Jonathan Shanklin, 24th Dec 2016.

*‡075/22.12. **Prunus serotina** (Rum Cherry) (Coeden Geirios Rým). Treuddyn, SJ2480 5767, Jonathan Shanklin, 8th Oct 2016, orange hairs at vein intersections below.

*‡075/35.05. **Crataegus persimilis** (Broad-leaved Cockspurthorn) (Draenen Wen Lydanddail). Northop, churchyard, SJ246 685, Jonathan Shanklin, 29th Jul 2016, planted.

*‡089/1.1×per. **Ilex × altaclerensis** (**I. aquifolium** × **I. perado**) (Highclere Holly) (Celynnen Highclere). Mold, SJ23 62, Jonathan Shanklin, 10th Feb 2016, planted at side of A494.

- *‡103/1.17. **Geranium macrorrhizum** (Rock Crane's-bill) (Pig-yr-aran Wreiddfawr). Northop, churchyard, SJ246 685, Jonathan Shanklin, 29th Jul 2016, self-sown on wall. Established.
- +103/2.1. **Erodium maritimum** (Sea Stork's-bill) (Pig-y-crêyr Arfor). Flint Coastal Path, SJ2464 7359, Jonathan Shanklin, 10th Jun 2016.
- +103/2.3. **Erodium cicutarium** (Common Stork's-bill) (Pig-y-crêyr). Nant Alyn, SJ1922 6618, Emily Meilleur & Gail Quartly-Bishop, 25th Jul 2016, grassland at edge of Trim Rock Quarry; (+) Northop, A55, SJ24 68, Emily Meilleur & Gail Quartly-Bishop, 29th Jul 2016.
- *107/44.1.c. **Daucus carota subsp. gummifer** (Sea Carrot) (Moronen Arfor). Greenfield Dock, SJ199 779, Emily Meilleur & Gail Quartly-Bishop, 23rd Apr 2016.
- +111/3.2.a. **Calystegia sepium subsp. sepium**. Prestatyn, y Ffrith, SJ04 82, Jonathan Shanklin, 6th Oct 2016; (+) Point of Ayr, SJ120 838, Jonathan Shanklin, 24th May 2016; (+) Treuddyn, SJ25 58, Jonathan Shanklin, 8th Oct 2016; (+) Nercwys, SJ23 60, Jonathan Shanklin, 13th Feb 2016; (+) Mold, SJ23 64, Jonathan Shanklin, 28th Mar 2016; (+) Penyffordd, SJ29 61, Jonathan Shanklin, 1st Aug 2016.
- +111/3.2×4. **Calystegia × lucana (C. sepium × C. silvatica)**. Point of Ayr, SJ13 83, Jonathan Shanklin, 24th May 2016.
- *‡116/06.3. **Anchusa azurea** (Garden Anchusa) (Llysiau'r-gwrid Glas). Point of Ayr, SJ1280 8374, Jonathan Shanklin, 24th May 2016, one plant on old colliery site.
- *‡116/12.2. **Amsinckia micrantha** (Common Fiddleneck) (Amsincia). Prestatyn, y Ffrith, SJ04 82, Jonathan Shanklin, 6th Oct 2016.
- *‡118/01.2. **Stachys byzantina** (Lamb's-ear) (Clust yr Oen). Nercwys, church, SJ234 604, Jonathan Shanklin, 13th Feb 2016, on turned over ground - possibly self-sown.
- +†124/16.24.a. **Veronica hederifolia subsp. hederifolia**. Point of Ayr, SJ12 83, Jonathan Shanklin, 24th May 2016; (+) Mostyn Dock, SJ156 809, Emily Meilleur & Gail Quartly-Bishop, 23rd Apr 2016.
- *‡124/17.1. **Veronica salicifolia** (Koromiko) (Pedwar-ban-byd Helygddail). Nercwys, church, SJ234 604, Jonathan Shanklin, 13th Feb 2016, seeding into nearby wall and path on the other side.
- ⊗‡127/1.1. **Acanthus mollis** (Bear's-breech) (Troed yr Arth). Northop, SJ24 68, Jonathan Shanklin, 29th Jul 2016, seeding in uncut lawn.
- +‡129/1.4. **Campanula persicifolia** (Peach-leaved Bellflower) (Clychlys Meinddail). Hafod-dew, SJ16389 73564, Jonathan Shanklin, 27th Jan 2016.
- +130/3.1. **Sherardia arvensis** (Field Madder) (Mandon Las yr ^d). Ffrith Beach, dunes, SJ03 82, Jonathan Shanklin, 6th Oct 2016, recorded as 'Papaver dubium agg.'.
- +†133/1.2. **Valerianella carinata** (Keeled-fruited Cornsalad) (Gwylaeth-yr-oen Ffrwythau Rhychog). Rhyl, SJ02 82, Emily Meilleur, 6th Oct 2016, status: Planted; (+) Maes Grug, SJ261 664, Emily Meilleur, 6th Sep 2016; (+) Bagillt, SJ214 760, Emily Meilleur & Gail Quartly-Bishop, 19th Jul 2016, 6 flower spikes.
- +135/30.4. **Filago minima** (Small Cudweed) (Edafeddog Fach). Mold, SJ23 63, Jonathan Shanklin, 10th Feb 2016, recorded as 'Crocus x luteus'.
- *135/43.6×44.1. ×**Conyzigeron huelsenii (Erigeron acris × Conyza canadensis)**. Point of Ayr, SJ1282 8369, Jonathan Shanklin, 24th May 2016, one plant at edge of cycle path.
- *‡135/73.2. **Calendula arvensis** (Field Marigold) (Melyn-Mair yr ^d). Northop Hall, A55, SJ2600 6759, Jonathan Shanklin, 6th Sep 2016, south side of A55 by layby. Ligule 1.6mm, phyllary 1.2mm.
- +148/2.1. **Lemna gibba** (Fat Duckweed) (Llinad Crythog). Whitford, SJ15 77, Jonathan Shanklin, 12th Feb 2016.
- +152/16.09. **Carex divulsa** (Hesgen Lwyd). Rhewl-Mostyn, SJ15 80, Jonathan Shanklin, 12th Feb 2016.

- +153/12.02×13.01. **Schedonorus arundinaceus** × **Lolium perenne** = ×**Schedolium holmbergii**. Rhyl, SJ02 82, Jonathan Shanklin, 6th Oct 2016.
- +†153/28.3. **Avena fatua** (Wild-oat) (Ceirchen Wylt). Northop Hall, church, SJ269 678, Jonathan Shanklin, 6th Sep 2016.
- ⊗†153/50.7. **Bromus secalinus** (Rye Brome) (Pawrwellt Bach). Treuddyn, SJ2573 5757, Jonathan Shanklin, 8th Oct 2016, one plant on barley field margin.
- *©153/SEC.cer. **Secale cereale** (Rye) (Rhyg). Mold, SJ22 64, Jonathan Shanklin, 28th Mar 2016, a couple of dead plants at field margin.
- *©158/24.cep. **Allium cepa** (Onion) (Nionyn). Nercwys, SJ237 602, Jonathan Shanklin, 13th Feb 2016, dumped in wood. Surviving.
- *‡158/32.wor. **Galanthus woronowii** (Green Snowdrop). Rhewl-Mostyn, cemetery, SJ152 801, Jonathan Shanklin, 12th Feb 2016.
- *‡160/1.glo. **Yucca gloriosa** (Spanish-dagger). Prestatyn, dunes, SJ0471 8312, Jonathan Shanklin, 6th Oct 2016.
- +162/14.1. **Anacamptis pyramidalis** (Pyramidal Orchid) (Tegeirian Bera). Northop Hall C, SJ25 66, Mick Brummage, 6th Sep 2016

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

- +004/1.9. **Equisetum telmateia** (Great Horsetail) (Marchrawn Fawr). near Llangaffo, SH45 69, Nigel Brown, 13th Dec 2016.
- +011/1.1×2. **Polypodium** × **mantoniae**. Criw, SH38 92, Hugh Knott, 1st Sep 2016.
- +015/3.1. **Asplenium ceterach** (Rustyback) (Duegredynen Gefngoch). Llanfechell, SH3658 9192, Ian Bonner & Hugh Knott, 12th Aug 2016, l.a along c.5m of mortared wall to outbuilding.
- +©021/1.1×2.noo. ×**Cupressocyparis leylandii** (**Cu. macrocarpa** × **Ch. nootkatensis**) (Leyland Cypress) (Cypreswydden Leyland). Bodedern, SH34 82, Debbie Evans, 29th Sep 2015.
- +‡039/4.2. **Quercus cerris** (Turkey Oak) (Derwen Twrci). Hedgerow, Llamrebol, SH36 80, Debbie Evans, 9th Jul 2014.
- +043/1.06. **Chenopodium rubrum** (Red Goosefoot) (Troed-yr-Wydd Coch). Entrance to potato field, Valley, SH2980 8044, Debbie Evans, conf. W. McCarthy, 1st Jul 2014; (+) field, Bodedern, SH33 80, Debbie Evans, 17th Jul 2013.
- +043/3.03×04. **Atriplex** × **taschereaui** (Taschereau's Orache) (Llygwyn Taschereau), Porth y Mor, near Dulas, SH49 88, Ivor Rees, 22nd Sep 2016, strandline.
- +043/3.04. **Atriplex longipes** (Long-stalked Orache) (Llygwyn Hirgoes). Traeth Dulas, SH486 885, Ivor Rees, 22nd Sep 2016, in salt-marsh behind the spit.
- +043/6.2. **Salicornia ramosissima** (Purple Glasswort) (Llyrllys Porffor). Saltmarsh, Llanidan, SH49 66, Ivor Rees, 25th Aug 2016; (+) saltmarsh, Traeth Dulas, SH48 88, Ivor Rees, 22nd Sep 2016.
- +043/6.6. **Salicornia fragilis** (Yellow Glasswort) (Llyrllys Melyn). Red Wharf Bay, SH5529 8019, Ivor Rees, 12th Sep 2016.
- +043/6.7. **Salicornia dolichostachya** (Long-spiked Glasswort) (Llyrllys Canghennog). Saltmarsh, Traeth Dulas, SH48 88, Ivor Rees, 22nd Sep 2016.
- +045/3.1.a. **Montia fontana subsp. fontana**. Damp roadside bank near stream, Tre-Ysgawen Hotel, SH45 80, Hugh Knott, conf. Mike Wilcox, 30th Apr 2016.
- +045/3.1.b. **Montia fontana subsp. variabilis**. On tarmac of abandoned old road, Bryn-eryr, SH53 75, Hugh Knott, conf. Mike Wilcox, 18th Apr 2016.
- +046/17.3. **Spergularia marina** (Lesser Sea-spurrey) (Troellig Arfor Bach). Trwyn Penmon,

SH64 81, Ted Phenna, 6th Jul 2016, **Hb.H.K.**

+046/20.09×01. **Silene ×hampeana** ([Pink Campion]). Edge of cycle track, Traeth Penrhos, SH2627 8149, Debbie Evans, 14th May 2014.

+051/1.04. **Hypericum hircinum** (Stinking Tutsan) (Dail-y-Beiblau Drewllyd). Road verge, Trelolla, SH38 88, Hugh Knott, 1st Jun 2016.

*052/1.1. **Tilia platyphyllos** (Large-leaved Lime) (Pisgwydden Dail Mawr). Derelict land, Druid Road, Menai Bridge, SH557 724, Ivor Rees, Oct 2016, 2 trees, originally planted.

+052/1.1×2.© **Tilia ×europaea** (Lime) (Pisgwydden). Llangoed, SH61 80, Ted Phenna, 9th Jun 2016.

+‡061/1.3×del. **Populus ×canadensis** (Hybrid Black-poplar) (Poplysen Ddu Groesryw). Llamrebol, SH36 80, Debbie Evans, 9th Jul 2014, planted in field.

+‡062/11.4. **Barbarea verna** (American Winter-ress) (Berwr-y-gaeaf cynnar). Growing beside school carpark, Bodedern, SH33 80, Debbie Evans, 24th May 2013.

+062/22.3. **Erophila glabrescens** (Glabrous Whitlowgrass) (Llysiâu'r-bystwn Llyfn).

Holyhead, SH2489 8296, Debbie Evans, 18th Apr 2016, growing with moss in gravel.

*©062/24.1. **Camelina sativa** (Gold-of-pleasure) (Cydlin). Arable field, Ysbyllidir, SH3194 7931, Jan Winder, 28th Jul 2016, probably sown previously as bird seed crop, an option under Glastir.

+†062/7.2. **Erysimum cheiri** (Wallflower) (Blodyn y Fagwyr). Established on a wall, Valley, SH28 79, Debbie Evans, 11th Mar 2014.

+069/4.1. **Lysimachia nemorum** (Yellow Pimpernel) (Gwlyddyn Melyn Mair). Parc Pentir, SH62 81, J.H. Bratton, 11th Oct 2015, grassland in valley below Coed yr Hendy.

+069/4.3. **Lysimachia vulgaris** (Yellow Loosestrife) (Trewyn). Marshy roadside, Penmon, SH63 80, Ted Phenna, 6th Jul 2016.

+‡069/4.5. **Lysimachia punctata** (Dotted Loosestrife) (Trewyn Brych). Valley, SH2979 8049, Debbie Evans, 1st Jul 2014, established on verge, not near houses; (+) dry roadside bank, Criw, SH38 92, Hugh Knott, 1st Sep 2016, many plants; (+) road verge, Llangoed, SH6123 8089, Debbie Evans, 24th Jul 2014.

+074/05.19. **Saxifraga tridactylites** (Rue-leaved Saxifrage) (Tormaeln Tribys). Open ground, Bodedern, SH33 80, Debbie Evans, May 2015, by telephone box.

*‡075/03.3.a. **Spiraea douglasii subsp. douglasii**. Field corner, Llanfechell, SH36 91, Ian Bonner & Hugh Knott, 12th Aug 2016, well established clump.

+‡075/21.09. **Rosa virginiana** (Virginian Rose) (Rhosyn Virginia). Roadside hedge just outside village, Bwchanan, SH36 90, Hugh Knott, 17th Jul 2016, 2nd VCR.

+‡075/32.40. **Cotoneaster sternianus** (Stern's Cotoneaster) (Cotoneaster Stern). Hedge, Llanfaes, SH606 781, Ted Phenna, 8th Aug 2016, 1 shrub in hedge near St Catherine's church. 2nd VCR.

+†077/17.1. **Melilotus altissimus** (Tall Melilot) (Yr Wydro Dal). Soldiers Point, SH2382 8384, J.H. Bratton, 8th Sep 2015, waste ground at base of Holyhead Breakwater.

+‡079/2.2. **Myriophyllum aquaticum** (Parrot's-feather) (Pluen Parot). Pond behind beach on private land constructed c. 1994, Tyn Coed, Red Wharf Bay, SH54 79, Hugh Knott, 30th Jul 2016.

+‡084/4.4. **Oenothera cambrica** (Small-flowered Evening-primrose) (Melyn-yr-hwyr Mân-floedeuog). Bwchanan, SH36 90, Hugh Knott, 17th Jul 2016.

+‡102/1.03. **Oxalis corniculata** (Procumbent Yellow-sorrel) (Suran Orweddol). Llanfechell, SH36 91, Ian Bonner & Hugh Knott, 12th Aug 2016.

+‡102/1.04. **Oxalis exilis** (Least Yellow-sorrel) (Suran Felen Fach). Churchyard, Rhosbeirio, SH3911 9173, Debbie Evans, Hugh Knott & Ian Bonner, 14th Aug 2016, l.f. in tightly mown turf around church. Photo IRB. 2nd VCR.

- +103/1.09. **Geranium sanguineum** (Bloody Crane's-bill) (Pig-yr-aran Ruddgoch). Limestone scrub, Cors Bodeilio SSSI, SH50 77, Nigel Brown, 2016.
- +‡105/1.4. **Impatiens glandulifera** (Indian Balsam) (Jac y Neidiwr). Llanfechell, SH3689 9134, Ian Bonner & Hugh Knott, 12th Aug 2016, single flowering plant by stream in village.
- *108/5.4.c. **Gentianella amarella subsp. septentrionalis**. Dune grassland, Tywyn Trewan, SH3121 7423, Ivor Rees, det. Tim Rich August 2016, 15 in flower in 2016. Original specimens collected 2011.
- +‡109/1.3. **Vinca major** (Greater Periwinkle) (Perfagl Fawr). Tai Hen, Llanfechell, SH38 91, Hugh Knott, 5th May 2016.
- +‡110/9.1.© **Datura stramonium** (Thorn-apple) (Afal Dreiniog). Verge, Four Mile Bridge, SH2720 7801, Debbie Evans, 30th Sep 2014.
- ⊗116/04.1.a.‡ **Symphytum officinale subsp. officinale**. Tai Hen, Llanfechell, SH3813 9177, Hugh Knott, det. Bob Leanay, 5th May 2016, ssp. officinale .var.purpureum.
- +‡118/01.2. **Stachys byzantina** (Lamb's-ear) (Clust yr Oen). Edge of cycle track, Traeth Penrhos, SH2623 8148, Debbie Evans, 14th May 2014.
- +118/01.5×6. **Stachys ×ambigua** (Hybrid Woundwort) (Briwlys Croesryw). Road verge, Rhosbeirio, SH3971 9102, Debbie Evans, Hugh Knott & Ian Bonner, 14th Aug 2016.
- +‡118/04.1.c. **Lamiastrum galeobdolon subsp. argentatum**. Verge, Tai Hen, Llanfechell, SH38 91, Hugh Knott, 5th May 2016.
- +‡118/23.3×lon. **Mentha ×villosa subsp. villosa** (Sharp-toothed Mint) (Mintys Danheddog). Llangoed, SH6123 8089, Debbie Evans, 24th Jul 2014, large stand on road verge.
- +123/4.1. **Ligustrum vulgare** (Wild Privet) (Yswyddden). Roadside hedge, Criw, SH38 92, Hugh Knott, 5th May 2016.
- +‡124/16.24.a. **Veronica hederifolia subsp. hederifolia**. Road verge, Criw, SH38 92, Hugh Knott, 5th May 2016.
- *‡129/7.2. **Lobelia erinus** (Garden Lobelia) (Bidoglys yr Ardd). Llanfechell, SH3685 9138, Ian Bonner & Hugh Knott, 12th Aug 2016, single flowering plant in roadside gutter.
- +‡131/5.1. **Leycesteria formosa** (Himalayan Honeysuckle) (Bachgen Llwm). Churchyard, Llanfechell, SH36 91, Ian Bonner & Hugh Knott, 12th Aug 2016, mature and young bushes, well established.
- +134/3.1. **Knautia arvensis** (Field Scabious) (Claflllys y Maes). Churchyard, Bodedern, SH3336 8049, Debbie Evans, Sep 2014, 3 plants; (+) road verge, Llangoed, SH6139 8070, Debbie Evans, 24th Jul 2014.
- +‡135/12.1. **Cichorium intybus** (Chicory) (Ysgello). Grassy field, Tyddyn Botwm, SH40 69, Ian Bonner & Hugh Knott, 7th Jun 2016, scattered across field, presumably previously grown as a crop.
- +‡135/17.1. **Helminthotheca echioides** (Bristly Oxtongue) (Tafod-y-llew Gwrychog). Verge, Caergeiliog West, SH30 78, Debbie Evans, 10th Jun 2014.
- +135/24.1. **Mycelis muralis** (Wall Lettuce) (Gwylaeth y Fagwyr). Verge, Llamrebol, SH36 80, Debbie Evans, 9th Jul 2014.
- +‡135/27.6. **Pilosella aurantiaca** (Fox-and-cubs) (Clust-y-llygoden Euraid). Churchyard, Llanfechell, SH36 91, Ian Bonner & Hugh Knott, 12th Aug 2016.
- +‡135/59.1. **Matricaria chamomilla** (Scented Mayweed) (Amranwen Bêr). Llanfaesw, SH608 781, Ted Phenna, 8th Aug 2016, many plants growing in a crop of potatoes.
- +‡138/4.1. **Elodea canadensis** (Canadian Waterweed) (Ffuglaw Canada). Pool, Mynydd Bodafon, SH46 85, J.H. Bratton, 13th Aug 2015, detached fragment on shore.
- +‡147/5.2. **Arum italicum** (Italian Lords-and-Ladies) (Pidyn-y-gog Eidalaid). Lane side, Plas Berw, SH46 71, Nigel Brown, 3rd Dec 2016.
- +152/16.42. **Carex punctata** (Dotted Sedge) (Hesgen Fannog). Coastal cliff, Penrhosfeilw,

SH20 80, Ivor Rees, det. Ian Bonner, conf. Arthur Chater, 27th Aug 2016, by pool, NW Tip of The Range.

+‡153/28.5. © *Avena sativa* (Oat) (Ceirchen). Field margin, Llanfaes, SH606 779, Ted Phenna, 8th Aug 2016.

+‡153/46.2. *Polygonum viridis* (Water Bent) (Barfwellt y D^r). Wall base, Llanfechell, SH3699 9118, Ian Bonner & Hugh Knott, 12th Aug 2016.

*‡158/24.03. *Allium roseum* (Rosy Garlic) (Garlleg Rhosliw). Woodland edge, Red Wharf Bay, SH5305 8140, Nigel Brown, 8th Jun 2016, 1 vigorous flowering clump, established beside coastal path.

+‡158/24.07. *Allium triquetrum* (Three-cornered Garlic) (Garlleg Trionglog). Churchyard, Valley, SH2929 7938, Debbie Evans, 10th Mar 2015.

*‡159/05.10. *Iris xiphium* (Spanish Iris) (Gellesgen Sbaen). Shoreline, Inland Sea E. Shore, SH297 763, Richard Birch, 17th Jul 2016, 10 plants, extending below HWM.

*‡162/18.5×7. *Dactylorhiza purpurella* × *D. traunsteinerioides*. Fen, Cors Bodeilio SSSI, SH501 776, Nigel Brown, conf. Ian Denholm & Richard Bateman, January 2017, 12th Jun 2016, single plant, intermediate between parents, both of which were present.

Back cover photos:

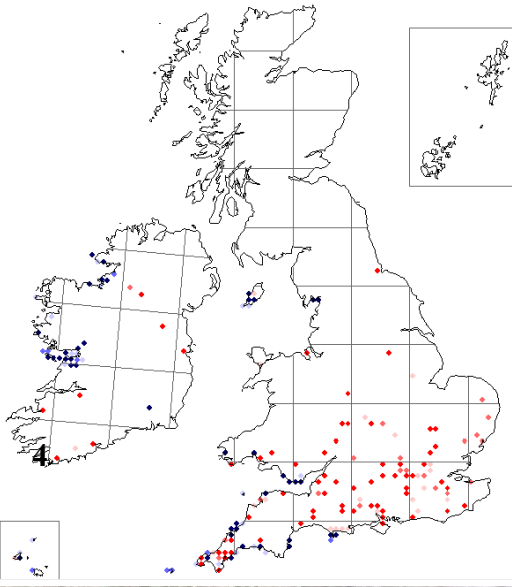
7: *Euphorbia stricta* (Upright Spurge) at Tintern at the Welsh BSBI AGM 2014. © R.D. Pryce (see page 12).

8: Part of the extensive *Vicia orobus* (Wood Bitter-vetch) population along the edge of a forestry track discovered in 2016 at Penrhiwiar in north-east Carmarthen - perhaps a survivor of the plants recorded by Mrs Vaughan in 1967 in a hay field at this locality prior to its afforestation. © Kath Pryce (see page 21).

9: Comparison of petiole hairs of *Viola* × *scabra* with parent species *V. odorata* and *V. hirta*. © Rees (see page 32).

10: A *Taraxacum* collected by Richard and Kath Pryce in 2016 from an ancient woodland at a farm near Blaenycloed, north-west of Carmarthen, that was subsequently determined by John Richards as *Taraxacum aesculosum* sp. nov., which he says is ‘tolerably common’ in central Ireland but new to the UK. © Richard Pryce (see Welsh Plant Records, page 49).

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Second record of *Adiantum capillus-veneris* (Maidenhair Fern) in Flintshire (see page 30):

4: Distribution map Maidenhair Fern from Preston, Pearman & Dines (2002). Red = alien, blue = native records.

5: Waterfall habitat of the fern. © Gail Quartly-Bishop

6: Possibly the saddest specimen ever, but unmistakably Maidenhair Fern with its long-stalked, thin, fan-shaped pinnules. © Gail Quartly-Bishop



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