Short Notes

RUBUS BLOXAMII (BAB.) LEES (ROSACEAE) WITH RED STYLES

Rubus bloxamii, a widespread and locally abundant bramble of central southern England and the central Midlands, normally has styles that are yellowish-green. Towards the south-western limit of its English range, however, at the southern end of the border between N. Somerset, v.c. 6, and S. Wilts., v.c. 8, and abundantly along the Blackdowns astride the border between S. Devon, v.c. 3, and W. Somerset, v.c. 5, A. Newton and L. J. Margetts have respectively come across populations in which the styles are bright red (but which otherwise do not differ from the normal examples of the species in Britain in any significant respect).

On the opposite side of the Channel, in various parts of Normandy and (according to Sudre 1911) just to the south in dép. Sarthe, there is a common bramble which has long been known as *R. multifidus* Boulay & Malbranche. One place it occurs in particular profusion is the Forêt de St-Sauveur, 30 km south of Cherbourg, and specimens I collected there in 1991 have proved to match the red-styled *R. bloxamii* of England. A. Newton and H. Vannerom share my impression that except in this one character *R. multifidus* is not distinguishable from *R. bloxamii* and should accordingly be treated as conspecific, a conclusion reached earlier by Friderichsen (MS note by Rogers 1897 on **BM** sheet), Rogers (1900) and, ultimately, Watson (1958). The name nevertheless seems worth retaining at varietal level in view of the interesting difference in range, and the necessary new combination is accordingly now made:

Rubus bloxamii (Bab.) Lees var. multifidus (Boulay & Malbranche ex Corbière) D. E. Allen, comb. et stat. nov.

R. multifidus Boulay & Malbranche MS (Assoc. rub. exsicc.); Corbière, *Nouv. Fl. Normandie* 208 (1894); *R. menkei* subsp. *multifidus* (Boulay & Malbranche) Boulay in Rouy & Camus, *Fl. Fr.* 6: 104 (1900); *R. menkei* microgene *multifidus* (Boulay & Malbranche) Sudre, *Rubi Eur.*, 160 (1911).

Corbière cites no fewer than ten numbers distributed by the Association rubologique as belonging to *R. multifidus*. The lectotype must clearly be chosen from the earliest of these (no. *36*: Forêt de la Londe, dép. Seine-Inférieure, 1873, *A. Malbranche*) and I designate as that the example of that number which I have examined in Paris (**P**).

It is worth adding that *R. bloxamii* var. *bloxamii* also occurs in Normandy, but appears to be much the rarer of the two there. In the North Cotentin (dép. Manche) I have so far seen it in only two places, in both cases just a bush or two. H. Vannerom informs me (in litt. 1992) that two of Letendre's specimens of '*R. multifidus*' from dép. Seine-Inférieure, Association rubologique nos. 656 and 772, have yellowish styles too. In the Channel Isles, on the other hand, where *R. bloxamii* is locally common in Guernsey though scarce in Jersey, the populations consist of var. *bloxamii* exclusively.

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RUBUS CORBIERI BOULAY (ROSACEAE) IN THE BRITISH ISLES

In 1897 the then leading British authority on *Rubus*, W. Moyle Rogers, paid a first (and only) visit to the Channel Isles and on two of them encountered quantities of an unfamiliar bramble. While he

found it "rather frequent" on Guernsey, on Sark it was "remarkably abundant" (Rogers & Rogers 1898), so much so that, in the words of his companion on that day, it "seemed to monopolise nearly the whole place" (Derrick 1898). And as subsequent batologists have found, these words are indeed no exaggeration: this large, coarse, white-flowered plant is one of the most dominant features of the island's landscape.

Rogers promptly sent a specimen to Focke, who considered it "very near" R. schlechtendalii Weihe ex Link (Rogers & Rogers 1898), an opinion Focke was later to refine to "maybe a form of schlechtendalii. Not typical", when G. C. Druce sent him a specimen he had brought back from Sark in 1906 (now in **OXF**). Although Rogers initially placed the plant under that name (Derrick 1898, Rogers 1899), within a year he had decided it was best regarded instead as a strong and highly glandular form of R. macrophylloides Genev. (Rogers & Rogers 1898). It was not that species, however, as Riddelsdell was eventually to note on one of Rogers' sheets (herb. Barton & Riddelsdell 8743: **BM**) after study of Genevier's type and description. Nor was it R. adscitus Genev., as Watson first supposed on re-examining Druce's specimen in 1931 (a determination he subsequently abandoned for R. boraeanus Genev.) – although it is certainly closely related to that species, as A. Newton remarked of a further Sark specimen that was submitted to him by Lady Anne Brewis in 1973 (now in **STP**).

It has always seemed likely that the bramble would prove to be on the neighbouring French mainland; but as the *Rubus* flora of that area has not been much studied, it might well be one of the many species there as yet undescribed. Fortunately, however, the latter has not proved to be the case.

In 1987, on a first reconnaissance of the Cherbourg area, I came across a bramble growing in plenty round the north foot of Le Roule, the high crag which overlooks that city, that proved to match a panicle in **BM** collected by Corbière in 1889 from what are today the outskirts of Cherbourg and later distributed under the name Boulay bestowed on the bramble in his honour, *R. corbieri*. Corbière tended to interpret *Rubus* species over-broadly, and his determinations cannot be accepted uncritically; but the very distinctiveness of this particular plant taken together with his published description of *R. corbieri* (Corbière 1894) leave no room for doubt in this instance. Moreover, there is a further Cherbourg specimen of his so named in **P** (Association rubologique no. 894) that clearly belongs to the same entity.

Subsequently I discovered that this Cherbourg plant was identical with a specimen in my herbarium that I had collected in Guernsey in 1978, in a deserted garden in the middle of St Peter Port. Because R. corbieri is rather variable, however, it was some time before I began to suspect that this might also be the bramble which occurs more widely in the north of that island and in such profusion on Sark. Fuller exploration of the north of the Cotentin Peninsula in 1991, bringing at the same time wider acquaintance with the variation exhibited by the species in the field, showed conclusively that that suspicion was well-founded. R. corbieri proved to occur conspicuously all along the coast to the west of Cherbourg (though apparently absent to the east), rising to abundance in the vicinity of Cap de la Hague, the headland facing Alderney, the northernmost of the Channel Isles. The comparable abundance of the species on Sark and its presence in much smaller quantity on Guernsey, which is situated farther out to the west, thus represents a natural prolongation, and gradual tailing-off, of its Cotentin range. I did not have an opportunity of following the coastline south from Cap de la Hague, but the discovery of a patch of R. corbieri just outside Carteret, some 40 km in that direction, suggests that the species may similarly prove to extend down to there. Most unusually for a *Rubus* species, it would appear to prefer the proximity of the sea, the coarseness of its foliage presumably rendering it well fitted to the rigours of that environment. Even so it noticeably avoids the most exposed situations, tending to occur on banks offering some shelter from the wind.

Unexpectedly, *R. corbieri* also turns out to occur in England. In the autumn of 1990, while going through **OXF** in search of Channel Isles *Rubus* material, I came across an unmistakable specimen of it collected on Corfe Common in south-east Dorset, v.c. 9, by L. Cumming in 1916 and distributed through both of the exchange clubs that year as a white-flowered form of *R. boraeanus* (as determined by Rogers). The sheet bears a later determination by Watson, confirming that name. In one of the published notes on the gathering (Rogers 1918) the plant was described as locally abundant in the locality in question, which encouraged the belief that it might still be present there; and a visit to the Common the following July quickly revealed that not only was that the case, but

also that the population remains very extensive. Later the same day the species was encountered in a second locality in quite another part of Purbeck, along a lane crossing Studland Heath (GR SZ/ 01.84 and SZ/02.84). E. F. Linton has also since been found to have collected it in 1892 in a locality nearly midway from Corfe to Swanage, the specimen (**BM**) having been dismissed by Rogers and R. P. Murray as *R. bloxamii* × vestitus. In **CGE**, too, there turns out to be a gathering of it (no. 64/368) by B. A. Miles as recently as 1964 from the south-west part of Rempstone Heath (GR SZ/983.840), in this case with no name hazarded. Possibly, therefore, the species may prove widespread in the south-east corner of v.c. 9. Although that has been relatively well worked by batologists in the past, the superficial resemblance of *R. corbieri* to the common *R. bloxamii* (Bab.) Lees could well have led to its being passed over as the latter.

Work on the *Rubus* flora of Hampshire, v.cc. 11 and 12, and the Isle of Wight, v.c. 10, in recent years has been sufficiently intensive to render it unlikely that so obtrusive a species has escaped notice in those neighbouring counties. Floristically, in any case, the affinity of their *Rubus* floras with that of the French coastal areas directly opposite appears to be but slight. At least the north end of the Cotentin Peninsula has a *Rubus* flora with a markedly more western facies than theirs, which makes the presence of *R. corbieri* in Dorset more congruous and Devon, v.cc. 3 and 4, the likeliest further English county in which the species may occur.

The descriptions of *R. corbieri* by Corbière (1894) and by Boulay (1900) – the latter of whom reduced the species to a 'Forme' of *R. multifidus* Boulay & Malbranche (a common Normandy bramble) and that in turn to a subspecies of *R. menkei* Weihe – are sufficiently detailed and accessible to render providing a further one unnecessary. It is nevertheless worth emphasising that the species, while unambiguously a member of Series *Vestiti* (Focke) Focke, varies considerably in the quantity of stalked glands present as well as in the size of the rachis prickles. In addition, the flowers tend to be pinkish on first opening or on plants growing in shade.

Sudre in his *Batotheca Europaea*, fasc. 10, no. 487, relegated R. *corbieri* to the synonymy listed on the printed label of the bramble he distributed as R. *fuscus* subsp. *retrodentatus* (Mueller & Lef.) Sudre. The latter, however, a specimen of Questier's from dép. Valois, is quite a different plant and it would seem that Sudre had a mistaken idea of the Cherbourg species.

Representative material from Dorset, the Channel Isles and the North Cotentin has been deposited in BM.

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A NEW SPIRAL VARIANT OF JUNCUS EFFUSUS L. (JUNCACEAE)

The Spiral Rush of gardens, *Juncus effusus* L. cv. 'Spiralis', was discovered as a single plant in Northern Ireland by David Bishop, Curator of the Botanic Garden, Belfast in 1869. It was brought into cultivation and has continued as a curiosity in gardens since then. It differs from the ordinary *J. effusus* in that the stems spiral upwards, often completing six to eight turns. James McNab, Curator at that time of the Royal Botanic Garden, Edinburgh and a most intelligent experimenter, obtained plants of the Irish discovery and sowed seeds from them. He reported that the seedlings all showed the spiral character (McNab 1873). There seems to be no other record of this variety in the wild.

In the autumn of 1988, I noticed on rough croft grazing above Big Sand, Gairloch, W. Ross (v.c. 105), areas of *Juncus* which at first sight had every appearance of having been flattened by animals lying on the plants. Some of the colonies were 1.3–1.9 m across. Closer examination showed that

many of the stems were gently spiral and that all of them were only suberect in contrast to the strictly erect habit of normal *J. effusus* growing nearby. Plants were brought into cultivation. Seed from the 'spiral' plants at Big Sand germinated easily and all the seedlings were spiral and suberect. The Irish 'Spiralis' differs from the Scottish in that the stems in the Irish are quite erect and are much more obviously spiral six to eight turns as against two to three.

There are many other populations in N.W. Scotland between Plockton and Dundonnell: on the village green in Plockton, at Flowerdale, Gairloch, at Red Point, Gairloch, at Cove, Poolewe, on the Inverewe peninsula, Poolewe, along the roadside by Loch Tollie between Gairloch and Poolewe, at Slaggan west of Mellon Udrigle and by the roadside at Dundonnell. It has not been found in the eastern or central Highlands, although once known it can be spotted from a moving car. It usually occurs mixed with normal plants and the contrast between the two is quite striking.

There seem to be no previous records of this spiral rush on mainland Britain but there are specimens in E from the Northern Isles: Orkney, 1906, M. Spence; Ramsdale, Orphir, 1927, H. H. Johnston; Flotta, Orkney, 1932, J. Sinclair and all are similar to the West Ross plants rather than the Irish. I have also seen a photograph of an Orkney specimen collected by Linton in LIV. However, in 1991, it was evident that the variety had a wide and certainly long established distribution in the Outer Hebrides where I found it on the Island of Killegray (Harris) on the Shiant and Monach Isles just west of Loch Boisdale (Uist) and on Mingulay (Barra).

In view of its considerable occurrence as wild populations over a considerable area of N.W. Scotland it seems appropriate to treat it as a distinct variety of *Juncus effusus*:

Juncus effusus L. var. suberectus D. M. Henderson, var. nov.

HOLOTYPUS: Big Sand, Gairloch, W. Ross, v.c. 105, on rough croft land with var. *effusus*, 6 December 1988, D. M. Henderson (E).

A varietate typica culmis leniter spiralibus suberectis differt.

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CONTRIBUTIONS TO A CYTOLOGICAL CATALOGUE OF THE BRITISH AND IRISH FLORA, 2

The only recent, published summary of chromosome counts made on native material of British and Irish vascular plants is contained in Clapham *et al.* (1987). The source of many of these counts, however, is unlocalised material or untraceable. The present series of notes is intended to contribute to a properly documented cytological account of our flora (Wentworth *et al.* 1991). We present here chromosome counts of 102 flowering plant species from 122 populations. Only one plant from each population was studied, except where noted. All counts were made from squashes of root-tips, except where noted; supernumerary chromosomes are designated by the suffix 'S'. Voucher specimens have been placed in LTR.

Achillea millefolium L., 2n = 54: Caerns., v.c. 49, E. of Sarn, SH/24.32; Westmorland, v.c. 69, near Ulpha, c. 5 km N.E. of Lindale, SD/44.81.

Agrimonia eupatoria L., 2n = 28: W. Lancs., v.c. 60, Silverdale, Gait Barrows N.N.R., SD/48.77; W. Lancs., v.c. 60, Warton Crag, R.S.P.B. nature reserve, SD/49.72.

Agrimonia procera Wallr., 2n = 56: W. Lancs., v.c. 60, Warton Crag, R.S.P.B. nature reserve, SD/ 49.72.

Ajuga reptans L., 2n = 32: W. Lancs., v.c. 60, near Forton, SD/48.53.

Allium vineale L. var. vineale, 2n = 32 + 0-2S: W. Lancs., v.c. 60, near Carnforth, SD/49.71.

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- Anagallis tenella (L.) L., 2n = 22: Caerns., v.c. 49, Lleyn peninsula, W. end, SH/2.3.
- Angelica sylvestris L., 2n = 22: W. Lancs., v.c. 60, near Lancaster, SD/47.59.
- Anthriscus sylvestris (L.) Hoffm., 2n = 16: Leics., v.c. 55, Rutland, 4 km S. of Oakham, near Brooke, SK/85.06.
- Apium graveolens L., 2n = 22: W. Lancs., v.c. 60, Potts Corner, SD/41.57.
- Apium nodiflorum (L.) Lag., 2n = 22: Dorset, v.c. 9, near Sydling St Nicholas, ST/63.00.
- Arum maculatum L., 2n = 56: Leics., v.c. 55, Swithland Wood, SK/53.12.
- Atriplex portulacoides L., 2n = 36: W. Lancs., v.c. 60, Potts Corner, SD/41.57.
- Barbarea vulgaris R.Br., 2n = 16: Caerns., v.c. 49, Tudweiliog, 1 km to W. on Tyd'dyn road, SH/ 22.36.
- *Blackstonia perfoliata* (L.) Hudson, 2n = 40: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/47.38.
- *Centaurea scabiosa* L., 2n = 20 + 3-8S: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/47.38.
- Chelidonium majus L., 2n = 12: Caerns., v.c. 49, Llaniestyn, SH/26.33.
- *Chrysanthemum segetum* L., 2n = 18: Caerns., v.c. 49, N. of Botwnnog, overlooking Cellar Farm, SH/26.32.
- Chrysosplenium oppositifolium L., 2n = 42: Derbys., v.c. 57, Dovedale, SK/14.53.
- *Cichorium intybus* L., 2n = 18: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/47.38.
- *Cirsium vulgare* (Savi) Ten., 2n = 68: Caerns., v.c. 49, Botwnnog, above Cellar Farm, SH/26.32.
- *Clematis vitalba* L., 2n = 16: Surrey, v.c. 17, Silent Pool, near Shere, TQ/06.48.
- Conyza canadensis (L.) Cronq., 2n = 18: Leics., v.c. 55, Leicester University Botanic Garden glasshouse (spontaneous weed), SK/61.01.
- Corylus avellana L., 2n = c. 22: Leics., v.c. 55, Swithland Wood, SK/53.12.
- *Deschampsia setacea* (Hudson) Hackel, 2n = 14: Caerns., v.c. 49, Cilan, near Abersoch, SH/29.24. *Digitalis purpurea* L., 2n = 56: W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57.
- *Euonymus europaeus* L., 2n = 32: Westmorland, v.c. 69, Brigsteer Park, 2.5 km S. of Brigsteer, SD/ 48.87.
- *Eupatorium cannabinum* L., 2n = 20: Dorset, v.c. 9, Hartland Moor N.N.R., c. 4 km S.E. of Wareham, SY/96.85; W. Norfolk, v.c. 28, Foulden Common, TL/76.99; W. Lancs., v.c. 60, near Carnforth, SD/49.71.
- *Filipendula ulmaria* (L.) Maxim., 2n = 14: Leics., v.c. 55, Swithland Woods, SK/53.12; W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57.
- *Galeopsis bifida* Boenn., 2n = 32: Caerns., v.c. 49, E. of Sarn, SH/24.32; Caerns., v.c. 49, N. of Botwnnog, overlooking Cellar Farm, SH/26.32.
- Galium cruciata (L.) Scop., 2n = 22: W. Lancs., v.c. 60, Potts Corner, SD/41.57.
- *Galium mollugo* L., 2n = 44: W. Cornwall, v.c. 1, Goonhilly Earth Station, SW/73.21; E. Cornwall, v.c. 2, Rame, near church, SX/42.49.
- Galium odoratum (L.) Scop., 2n = 44: Westmorland, v.c. 69, Brigsteer Park, 2.5 km S. of Brigsteer, SD/48.87.
- Geranium dissectum L., 2n = 22: W. Lancs., v.c. 60, near Lancaster, SD/46.62.
- *Geranium lucidum* L., 2n = 40: Westmorland, v.c. 69, near Meathop Moss, c. 3 km N.E. of Lindale, SD/44.81.
- Geranium pratense L., 2n = 28: Derbys., v.c. 57, Milldale, SK/14.55; Co. Durham, v.c. 66, 2 km N. of Barnard Castle, NY/05.18.
- Geranium sanguineum L., 2n = 84: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/47.38.
- Geum urbanum L., 2n = 42: Derbys., v.c. 57, Milldale, SK/14.55.
- *Glaux maritima* L., 2n = 30: W. Lancs., v.c. 60, W. of Cockerham, near Bank Houses, SD/42.53; W. Lancs., v.c. 60, Potts Corner, SD/41.57.
- *Glechoma hederacea* L., 2n = 36: Leics., v.c. 55, Rutland, Brooke, by the church, SK/85.06; W. Lancs., v.c. 60, Silverdale, E. of Thrang End Farm, SD/49.77.
- *Heracleum sphondylium* L., 2n = 22: W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57. *Hippuris vulgaris* L., 2n = 32: W. Lancs., v.c. 60, near Forton, by canal, SD/48.53.
- Hydrocotyle vulgaris L., 2n = 96: Caerns., v.c. 49, Llanbedrog, valley W. of Penarwel, SH/32.32.

Hypericum hirsutum L., 2n = 18: W. Lancs., v.c. 60, near Carnforth, SD/50.70; Westmorland, v.c. 69. Ravens Lodge, S.E. edge of Whitbarrow, base of Whitescar, SD/46.85.

Hypericum perforatum L., 2n = 32: Surrey, v.c. 17, Silent Pool, near Shere, TO/06.48.

Lathyrus nissolia L., 2n = 14: W. Lancs., v.c. 60, near Lancaster University, SD/48.56.

Limonium britannicum Ingrouille subsp. celticum Ingrouille var. pharense Ingrouille, 2n = 35: Caerns., v.c. 49, Bardsey Island, E. of Pen Cristin, Ogof y Gaseg, SH/12.21.

Lotus corniculatus L., 2n = 24: W. Lancs., v.c. 60, Gait Barrows N.N.R., near Silverdale, SD/ 48.77.

Luzula pilosa (L.) Willd., 2n = 62: Co. Waterford, v.c. H6, Nier Valley, S/2.1.

Lycopus europaeus L., 2n = 22: Caerns., v.c. 49, Pwllheli, SH/37.34.

Lysimachia nemorum L., 2n = 16: Leics., v.c. 55, Swithland Wood, SK/53.12; W. Lancs., v.c. 60, near Barkin Bridge, SD/60.63.

Lythrum portula (L.) D. A. Webb, 2n = 10: Caerns., v.c. 49, Rhos Botwnnog, SH/26.32.

Medicago sativa L. subsp. *sativa*, 2n = 32: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/47.38.

Myosotis sylvatica Hoffm., 2n = 18: W. Lancs., v.c. 60, near Yealand Conyers, SD/50.74.

Oenanthe crocata L., 2n = 22: W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57.

Oenanthe lachenalii C. C. Gmelin, 2n = 22: W. Lancs., v.c. 60, Potts Corner, SD/41.57.

Parietaria judaica L., 2n = 26: W. Cornwall, v.c. 1, Newbridge, near St Just, SW/42.31; W. Lancs., v.c. 60, near Silverdale, SD/45.74.

Paris quadrifolia L., 2n = 20: W. Lancs., v.c. 60, Gait Barrows N.N.R., near Silverdale, SD/ 48.77.

Pedicularis sylvatica L. subsp. *sylvatica*, 2n = 16: W. Cornwall, v.c. 1, between Penzance and St Just, SW/39.31.

Phleum arenarium L., 2n = 14: Caerns., v.c. 49, Abersoch dunes, N. part of Porth Fawr, SH/31.27.

Pinguicula lusitanica L., 2n = 12: Dorset, v.c. 9, Slepe Heath, c. 2.5 km S.E. of Wareham, SY/94.86 (count made on integumentary tissue).

Plantago lanceolata L., 2n = 12: W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57.

Plantago media L., 2n = 24: Dorset, v.c. 9, Fontmell Down, c. 5 km S.S.E. of Shaftesbury, ST/ 88.18; W. Lancs., v.c. 60, near Lancaster, by dismantled railway, SD/46.62; Westmorland, v.c. 69, Helsington Barrows, c. 3 km S.E. of Kendal, SD/48.89.

Primula elatior (L.) Hill, 2n = 22: Cambs., v.c. 29 (no further details known).

Primula veris L., 2n = 22: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/ 47.38.

Prunella vulgaris L., 2n = 28: Co. Durham, v.c. 66, coastal cliffs between Blackhall and Crimdon, NZ/48.38; W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57.

Pulicaria dysenterica (L.) Bernh., 2n = 18: Dorset, v.c. 9, Hartland Moor N.N.R., c. 4 km S.E. of Wareham, SY/96.85.

Quercus petraea (Mattuschka) Liebl., 2n = 24: Leics., v.c. 55, Swithland Wood, SK/53.12.

Ouercus robur L., 2n = 24: E. Norfolk, v.c. 27, Badley Moor, NT/00.11.

Radiola linoides Roth, 2n = 18: Caerns., v.c. 49, Cwmistir, near Edeyrn, SH/25.38.

Ranunculus auricomus L., 2n = 32: W. Lancs., v.c. 60, near Yealand Conyers, SD/50.74.

Ranunculus bulbosus L., 2n = 16: W. Lancs., v.c. 60, Potts Corner, SD/41.57.

Ranunculus flammula L. subsp. flammula, 2n = 32: Westmorland, v.c. 69, Killington, SD/61.88.

Ranunculus omiophyllus Ten., 2n = 32: Caerns., v.c. 49, Garn Fadryn, SH/27.35.

Ranunculus sceleratus L., 2n = 32: W. Lancs., v.c. 60, Potts Corner, SD/41.57.

Rhamnus catharticus L., 2n = 24: W. Norfolk, v.c. 28, Foulden Common, TL/76.99.

Ribes nigrum L., 2n = 16: Leics., v.c. 55, Swithland Wood, SK/53.12.

Ribes uva-crispa L., 2n = 16: W. Lancs., v.c. 60, Silverdale, E. of Thrang End Farm, SD/49.77.

Rubus chamaemorus L., 2n = 56: Derbys., v.c. 57, Snake Pass summit, N. side of car park, SK/ 08.92.

Salsola kali L., 2n = 36: N. Somerset, v.c. 6, near Berrow, ST/28.53.

Sambucus nigra L., 2n = 36: Leics., v.c. 55, Swithland Wood, SK/53.12.

Sanguisorba minor Scop. subsp. minor, 2n = 28: Westmorland, v.c. 69, Brigsteer Park, 2.5 km S. of Brigsteer, SD/48.87.

Sanguisorba officinalis L., 2n = 56: W. Lancs., v.c. 60, near Aldcliffe, SD/46.60.

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Sanicula europaea L., 2n = 16: Leics., v.c. 55, Swithland Wood, SK/53.12; Westmorland, v.c. 69, Brigsteer Park, 2.5 km S. of Brigsteer, SD/48.87.

Scabiosa columbaria L., 2n = 16: Westmorland, v.c. 69, Helsington Barrows, c. 3 km S.E. of Kendal, SD/48.89.

Scrophularia nodosa L., 2n = 36: W. Lancs., v.c. 60, near Lancaster, SD/47.59.

Sedum telephium L., 2n = 24: W. Lancs., v.c. 60, Gait Barrows N.N.R., near Silverdale, SD/47.77. Senecio viscosus L., 2n = 40: W. Lancs., v.c. 60, near Carnforth, SD/49.71.

Solanum dulcamara L., 2n = 24: W. Lancs., v.c. 60, near Aldcliffe, close to estuary of River Lune, SD/45.60.

Spiranthes spiralis (L.) Chevall., 2n = 30: Caerns., v.c. 49, Abersoch Bay, below Marchros, on Abersoch golf-links, SH/31.26.

Stachys officinalis (L.) Trev., 2n = 16: W. Cornwall, v.c. 1, Chyenhal, SW/45.27.

Stellaria holostea L., 2n = 26: Leics., v.c. 55, Swithland Wood, SK/53.12.

Tanacetum vulgare L., 2n = 18: W. Lancs., v.c. 60, River Lune estuary, near Lancaster, SD/45.62. *Taxus baccata* L., 2n = 24: Leics., v.c. 55, Swithland Wood, SK/53.12.

Teucrium scorodonia L., 2n = 32: Cheviot, v.c. 68, Ingram, River Breamish, NU/01.16.

Triglochin palustris L., 2n = 24: E. Norfolk, v.c. 27, Badley Moor, NT/00.11, (three plants counted).

Tussilago farfara L., 2n = 60: W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57; W. Lancs., v.c. 60, near Carnforth, SD/50.71.

Typha latifolia L., 2n = 30: W. Lancs., v.c. 60, Lancaster University grounds, SD/48.57.

Valeriana dioica L., 2n = 16: Leics., v.c. 55, Swithland Wood, SK/53.12.

Verbascum nigrum L., 2n = c. 30 + 4 (3-7)S: S. Hants., v.c. 11, near Winchester, SU/4.2.

Veronica serpyllifolia L. subsp. *serpyllifolia*, 2n = 14: Caerns., v.c. 49, Bardsey Is., Chapel garden, SH/12.22.

Vicia sepium L., 2n = 14: W. Lancs., v.c. 60, above Saltmire Bridge, SD/51.75; Westmorland, v.c. 69, Whitbarrow (S.E. edge), Raven's Lodge, underneath White Scar, SD/46.85.

Wahlenbergia hederacea (L.) Reichenb., 2n = 36: cultivated plant, originally from S. Devon, v.c. 3, Dartmoor, Newbridge near Hone (W. of Bovey Tracy), SX/71.70.

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THE ROSA HERBARIUM OF A. H. WOLLEY-DOD

As far as is known, until last year Wolley-Dod's *Rosa* collection in **BM** had never been examined fully, and certainly had never in its entirety been examined critically, since Wolley-Dod himself. A few of the specimens have been remounted, but most are on Wolley-Dod's original sheets. Large numbers are unmounted, many of them between old and yellow sheets of newspaper dating from the 1920s. The author of this note was asked to go through the collection and label the specimens in the light of modern taxonomic opinion. He received the collection on loan early in 1990, and did

most of the routine work himself, with the assistance of G. G. Graham where consultation or a second opinion seemed desirable.

The collection contains 3091 specimens. Of these, over 100 were indeterminate, in some cases because the specimens had deteriorated, but mainly because they were too immature or too scrappy for determination. A few in the latter category carried a caustic comment from Wolley-Dod, and as he had not attempted identification one wonders why he bothered to keep them. Pasted on to many of the sheets are comments by Sudre, whose reliability Wolley-Dod came to distrust, and more valuable comments by R. Keller, who wrote in a crabbed hand indiscriminately in English, German, French or Latin.

Besides the large numbers of specimens collected by Wolley-Dod himself, he had acquired considerable collections from others, many of them illustrious names in the history of the study of *Rosa*. These, in alphabetical order, are as follows: C. Bailey, J. G. Baker, W. Barclay, E. B. Bishop, C. E. Britton, R. & M. Corstorphine, E. M. Day, G. Claridge Druce, Rev. A. Ley, Rev. E. F. Linton, Rev. W. R. Linton, Rev. E. S. Marshall, Rev. H. J. Riddelsdell, Rev. W. Moyle Rogers, I. M. Roper and W. A. Shoolbred. There are also a few specimens from other well-known botanists such as Rev. A. Bloxam and A. R. Horwood.

Study of the localities from which collections were made would give a fair indication of the distribution of species from north to south. Otherwise, distribution maps compiled from the records would tend rather to show the chosen hunting grounds of the main collectors. Wolley-Dod collected mainly in Devon, Surrey, Derbyshire, Cheshire and the Lake District; Baker from around Thirsk in Yorkshire; Druce from Oxfordshire; Ley from Gloucestershire, Herefordshire and parts of Wales: Moyle Rogers from Devon and Gloucestershire. Other collectors also appear to have concentrated mainly on these same regions, with a plethora of records from Surrey and scattered records from elsewhere in England. Most of the collections in Scotland are from the Perthshire vice-counties, with outlying records by E. S. Marshall from Westerness and Wester Ross, Mrs Corstorphine from Angus and H. Halcro Johnston from Hoy and Mainland, Orkney. There are only about 30 records from Ireland, mostly collected by C. H. Waddell in County Down. The Channel Islands are represented by two specimens from Jersey.

There are a few specimens from Europe. The main interest of these lies in the only two specimens of *Rosa elliptica* Tausch, both from France. These show that Wolley-Dod knew and recognised this species, but presumably had not found it in Britain, which seems to corrobrate the assumption that this is not a native British species (Graham & Primavesi 1990).

Allowing for the somewhat patchy distribution of records described above, there appears in general to have been little change in frequency of *Rosa* species and their hybrids throughout the country between the period during which the collection was made and the present day. Naturally, there are losses in some areas, principally where there has been expansion of the larger towns and cities. There are, for instance, a number of records which at first sight appear astonishing nowadays because the collections were made in what are now solidly built-up areas of Greater London. Only one species shows a marked change in frequency. This is *Rosa agrestis* Savi. There are about 20 specimens of this species in Wolley-Dod's collection, from scattered localities all over the southern part of England. Nowadays this appears to be a very rare species in England, though it is still frequent in parts of Ireland. What has caused this decline in frequency is not known. The other two sweet briar species, *R. rubiginosa* L. and *R. micrantha* Borrer ex Smith, appear to have undergone little or no change in frequency since Wolley-Dod's time.

In his *Revision of the British Roses*, Wolley-Dod (1930–31) repeatedly refers to this herbarium, but he did not re-label the specimens to conform with the nomenclature of that work. The names are those of the multiplicity of species described in his earlier works (Wolley-Dod 1908, 1910). The research which he undertook is reflected in additional comments attached to the sheets. As well as those of Sudre and Keller already mentioned, there are Wolley-Dod's own type-written or hand-written comments, and cuttings from Botanical Exchange Club reports. One cannot help feeling that in the light of modern opinion the work undertaken to elaborate all the Groups, varieties and forms described in *Revision of the British Roses* was an unprofitable expenditure of time that could have been more usefully employed. Indeed, Wolley-Dod himself later expressed doubt and dissatisfaction, stating that rarely in the field did one find specimens which corresponded closely or even remotely with the author's description of a named variety (Wolley-Dod 1936). Keller was more nearly on the right lines, as he frequently suggested the possibility of hybridity. It is a pity that

Wolley-Dod did not pay more attention to Keller's comments, but he would not recognize a *Rosa* hybrid unless the hips showed complete or partial sterility. In the course of the recent examination of this herbarium, we were able to label many specimens as definite hybrids between two species, a large number where there was plainly slight introgression of another named species, some where there was introgression of another indeterminate species, and a few which were such a mixture as to be impossible to determine. As regards the latter category it is not worth spending time on them; there are plenty of roses which can be determined and recorded. Many modern taxonomists allow inclusion of the second and third categories above as permissible variants of a named species (Stace 1975; Webb 1951). There are still unsolved problems in *Rosa* taxonomy and nomenclature, but the appalling difficulties which Wolley-Dod faced, and with his researches laid the foundations for later work, have now largely been overcome.

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ADDITIONAL RECORDS OF SORBUS LANCASTRIENSIS E. F. WARBURG (ROSACEAE)

Following documentation of the known sites of *Sorbus lancastriensis* E. F. Warburg (Rich & Baecker 1986), a number of additional populations have come to our attention, including two on Silurian rock, two about Grange-over-Sands, and one west of the Leven Estuary. This note lists the additional sites (we have visited all new localities in June 1991), and updates our previous list. Full details have again been lodged with the vice-county recorders, English Nature, the local Naturalists' Trusts and the Biological Records Centre, Monks Wood.

W. Lancs., v.c. 60:

Gait Barrows N.N.R. (SD/4.7). Three plants have now been found, with *Sorbus aria*, confirming the Ratcliffe (1977) record queried by Rich & Baecker (1986).

Westmorland, v.c. 69:

Farleton Knott, one plant on top of cliff (SD/5.7), and two plants on cliff face, about 300 m north of the above plant (SD/5.8). These confirm the Ratcliffe (1977) record not found in 1982. Furness, v.c. 69b:

Birkrigg Common (SD/2.7). "One small tree in limestone pavement on summit", F. L. Woodman & K. A. Gunning, 27 May 1982 (LANC). This is the first known site west of the Leven Estuary; we have been unable to re-find the plant.

Kirkhead (SD/3.7). About 30–40 plants in scrubby woodland on the west side, with a few *Sorbus rupicola*. This is probably the same locality as found by C. Bailey in 1881 on "exposed limestone ridges near Wray's Holme Tower" (CGE, BM).

Old Park Wood (SD/3.7). We under-estimated the population size of this site; there are over 100 plants mixed with a smaller number of *S. rupicola* plants.

Grange-over-Sands (SD/4.7). One plant by B5277 at west edge of golf course.

Witherslack and Yewbarrow (SD/4.8). Isolated plants occur on roadsides, in hedges and on limestone rocks in at least six separate localities around the villages. One plant, to the N.E. of Witherslack, is in a shady hedge on Silurian baserock, a very atypical habitat.

Poolbank (SD/4.8). One small tree on woodland edge by roadside, first found by G. Halliday in 1974 (LANC). This is a second site on the Silurian slate; the soil pH is about 6–6.5, equivalent to the pH of many of the limestone soils on which it occurs.

Latterbarrow Nature Reserve (SD/4.8). At least four plants on the reserve, and about ten on the S.W. edge in woodland above the old A590. This is almost certainly the same locality as plants collected in 1937 by E. F. Warburg near The Derby Arms (**BM**).

Currently, there are thus approximately 2000 plants known from about 35 sites in eight 10-km squares, with one extinct population.

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