Short Notes

RUBUS SPRENGELII WEIHE IN SCILLY

After many years of combing Cornwall and western Devon for brambles, Rilstone (1952) was able to report *R. sprengelii* Weihe—perhaps the most distinct of all the British species—in only a single locality: near Penzance, W. Cornwall, v.c.1. There was also one old record from Valency in the literature that he believed correct.

In view of this great rarity in the Cornish peninsula it was with some surprise that in a fortnight's visit to the Isles of Scilly in June 1975 I came across the species in no fewer than four places. Three of these were on Tresco: small patches by two successive cross-paths on Middle Down and a patch bordering bracken by the south tip of the Great Pool. On St Mary's, which I sampled much more cursorily, it was frequent under bracken round Innisidgen burial chamber. Similar habitats occur in plenty almost throughout the islands and there seems no reason why the species should not prove widespread. On the other hand it was not among the *Rubi* that F. Townsend collected on his major exploratory visit in 1862—the only extensive sampling of the Scilly brambles hitherto (Lousley 1971).

There are other plants, such as *Ornithopus pinnatus* (Mill.) Druce, that occur widely in Scilly but are missing from the Cornish mainland, but it is unexpected that a member of a genus so readily dispersed by birds should exhibit this pattern.

REFERENCES

LOUSLEY, J. E. (1971). Flora of the Isles of Scilly. Newton Abbot. RILSTONE, F. (1952). Rubi from Dartmoor to the Land's End. Watsonia, 2: 151–162.

D. E. ALLEN

CAREX POLYPHYLLA KAR. & KIR. AND C. LEERSIANA RAUSCHERT

Since the writing of David's paper (1976) on the nomenclature of the Carex muricata L. aggregate, we have, through the kindness of the curator of the herbarium of Moscow University, been able to examine the type material of C. polyphylla Kar. & Kir. in MW. There are two sheets, both carrying the tickets of Karelin and Kirilov, 1841, and both determined as C. polyphylla Kar. & Kir. by Kreczetowicz in 1937. They bear no localities, but can be assumed to originate 'in sylvaticis ad torrentem Tscheharak-Assu, circa montes Tarbagatai, 1840' in E. Kazakhstan. These are the only specimens collected by Karelin and Kirilov that are extant and that can be considered type material. One, numbered 2075 and 227279, is labelled 'Isotypus' in recent hand-writing, and contains one specimen so incomplete that we cannot be certain what it is. The other, numbered 2081 and 227274, is labelled 'Typus' in the same recent hand-writing, and contains two very adequate specimens, in excellent condition, which we here take the opportunity of designating as Lectotype. (Alekseev (1973) commented that one must reckon as the type the specimen in MW bearing both Karelin and Kirilov's and Kreczetowicz's labels, but did not mention that there are two sheets to choose from.) The lectotype material corresponds in every respect with C. leersiana Rauschert (C. leersii F. W. Schultz, non Willd.). Further, more recent, collections in MW, determined as C. polyphylla by Kreczetowicz and others, from the southern parts of the U.S.S.R. ranging from the Crimea to Lake Baikal, exactly match the lectotype and indicate that this taxon is widespread in the area.

Thus, if *C. leersiana* Rauschert is considered as a distinct species, its correct name is *C. polyphylla* Kar. & Kir. The extreme form of the taxon (as in the type) is indeed very different from the extreme form of *C. divulsa* Stokes, but these extremes are linked by a series of intermediates so that no clear morphological dividing line can be drawn. The same conclusion was reached by Medovič (1960),

who, in a comprehensive series of statistical analyses, failed to separate *C. leersiana* from *C. divulsa*. In our opinion, the only possible course, unless further studies succeed in establishing some means of separation, is to regard *C. polyphylla* Kar. & Kir. as a subspecies of *C. divulsa*, and at this rank the correct name of the taxon remains *C. divulsa* subsp. *leersii* (Aschers. & Graebn.) W. Koch.

REFERENCES

- ALEKSEEV, Yu. E. (1973). Carex polyphylla Kar. et Kir. i blizkie ej vidy iz vostochnoj Evropy. Vest. mosk. Univ., nauch. Zh., ser. 6, 28 (5): 66-71.
- DAVID, R. W. (1976). Nomenclature of the British taxa of the *Carex muricata* L. aggregate. *Watsonia*, 11: 59-65.
- Medovič, J. (1960). Súborný druh Carex muricata L. na Slovensku. Acta Fac. Rerum nat. Univ. comen., Bratisl. (Bot.), 5 (1-2): 1-116.

R. W. DAVID & A. O. CHATER

CHROMOSOME NUMBERS OF BRITISH PLANTS, 5

	Chromosome number	Grid reference and locality
Hippocrepis comosa L.	n = 7 and back	21/89.76 St Bride's Valley, Glamorgan, v.c. 41
	n = 7	21/57.87 Pwlldu, Gower, Glamorgan, v.c. 41
	n = 7	20/92.62 Daddyhole Plain, Torbay, S. Devon, v.c. 3
Juncus articulatus L.	2n = 80	28/50.57 Loch Ussie, E. Ross,
		v.c. 106
	2n = 80	35/83.31 Sand Sike, Upper
		Teesdale, Durham, v.c. 66
Carex paupercula Michx.	n = 29	35/81.29 Cow Green, Upper Teesdale, Westmorland, v.c. 69
	n=29	26/68.32 Glengavel, Lanark, v.c. 77
Alopecurus alpinus Sm.	n = 50	35/70.33 Little Dun Fell, Westmorland, v.c. 69
	211 111	37/16.76 Glas Maol, Forfar,
		G. M. FEARN

PHYTEUMA SCHEUCHZERI ALL. NATURALIZED IN OXFORD

Phyteuma scheuchzeri All., a native of the southern Alps from Piedmont and Valais to Croatia, and first recorded in cultivation in Britain in 1816 (Sims 1816), has in recent years become established on the wall of St Johns College gardens, Oxford. A specimen collected by me in 1960 is in OXF. Allied to P. tenerum R. Schultz, it may be distinguished as follows:

Basal leaves (in the Oxford plant) ovate to lanceolate, long-petioled, cordate to truncate at base; stem-leaves few, linear-lanceolate, distinctly stalked; leaves all with shallow, distant teeth, or the uppermost subentire. Inflorescence capitate. Bracts linear-lanceolate, conspicuous, much exceeding inflorescence, often curving downwards. Corolla deep blue, straight in bud; stigmas three. Flowering late May to June, the withered heads persisting.

From enquiries made, *P. scheuchzeri* seems to have first appeared on the wall about 1951. It evidently originates from St Johns College gardens to which, as Mr K. E. Bull has suggested to

me, it may have been introduced by Rev. H. J. Bidder (1847–1923), a former bursar of the college who collected many choice plants in the Alps and Pyrenees for the rockeries (Druce 1924). But it has now spread to the outer side of the wall, both in Parks Road and the court of the School of Agricultural Science, and to pavements nearby, and seems at least as worthy of record as such aliens as *Chondrilla juncea* L. and *Melica ciliata* L., which temporarily established themselves on Oxford walls in the past (Druce 1886).

REFERENCES

DRUCE, G. C. (1886). The flora of Oxfordshire, pp. 179, 342. Oxford.
DRUCE, G. C. (1924). Obituary of Rev. H. J. Bidder. Rep. botl Soc. Exch. Club Br. Isl., 7: 148-149.
SIMS, J., ed. (1816). Curtis's Botanical Magazine, 43: t. 1797.

R. C. PALMER

WHITE-FLOWERED BLUEBELLS (END YMION NON-SCRIPTUS (L.) GARCKE)

Despite the wide distribution and abundance of *Endymion non-scriptus* (L.) Garcke in Britain, very little is known of the white-flowered form, which appears to be equally widespread although sporadic and never common. The following observations on this form have been prompted partly by Harborne's (1967, p. 257) statement that a general 'characteristic of white flower mutants of coloured forms is their unthriftiness as plants'.

A population of white-flowered plants in a wood north-west of Cronton, S. Lancs., v.c. 59, was studied between 1967 and 1971. Although the wood contains an estimated 60,000 blue-flowered plants, the number of white-flowered individuals seen annually ranged from 16 to 22. Populations with this proportion of white-flowered plants appear to be fairly general. Over the above five-year period counts were made of the number of flowers, capsules and seeds per inflorescence. It was found that white-flowered plants had a mean of 4·7 flowers (blue-flowered 5·5) 2·1 capsules (3·7) and 23 (45) seeds per inflorescence, the average number of seeds per capsule being rather similar in each. It was not possible to follow all the original flowering plants through to seeding, so the sample-size progressively decreased.

Four plants of each colour, transplanted to a garden from the Wrekin, Salop, v.c. 40, produced the same number of flowers per inflorescence, although the white-flowered plants had fewer capsules. It may be that the latter plants flower less freely when in competition with blue-flowered ones in the wild.

Germination of seeds collected in the wild from white- and blue-flowered plants and sown in a garden was similar, mostly 20–30% after eight months from collection. All 26 plants raised from seeds collected from white-flowered individuals proved ultimately to be blue-flowered.

These observations confirm Harborne's suspicions on the generally lower reproductive efficiency of albino plants and they also demonstrate a high level of outbreeding in the bluebell.

REFERENCE

HARBORNE, J. (1967). Comparative biochemistry of the flavonoids. London & New York.

at the notice of the following control of the second control of the second of the seco

POLYGONUM MINUS HUDS. × P. PERSICARIA L. IN ANGLESEY

In July 1975 a plant which appeared to have a combination of the characters of *Polygonum minus* Huds. and *P. persicaria* L. was found on the muddy shore of Llyn Coron, near Aberffraw, Anglesey, v.c. 52. This is the only known Anglesey locality for *P. minus*, but this species occurs here in good

numbers and often grows intermingled with *P. persicaria*, occasionally with plants of the two species actually touching.

The features which made the plant conspicuous in the field were the decumbent habit and narrow, interrupted inflorescence as in *P. minus*, and the blotched leaves as in *P. persicaria*. Although a careful search of the site was made, no other plant of the same kind was seen. As the plant was branched from the base and rooting at the lower nodes, a portion was removed and potted in compost kept moist by standing in a pan of water, where it grew vigorously.

Further observations on this plant showed that it was intermediate between the putative parents in a number of characters. A comparison of it with *P. minus* and *P. persicaria* from the same locality is shown in Table 1.

TABLE 1. COMPARISON OF *POLYGONUM MINUS* HUDS., *P. PERSICARIA* L., AND THE PUTATIVE HYBRID

	P. minus	Hybrid	P. persicaria
Habit	Decumbent	Decumbent	Upright or ascending
Stem	Slender	Intermediate	Stout
Inflorescence	Very slender (c 3 mm wide); interrupted at base	Slender (c 5 mm wide); interrupted at base	Stout (c 7–9 mm wide); scarcely interrupted at base
Leaf width	Up to 7.5 mm	Up to 9 mm	Up to 12 mm
Leaf length: width ratio	7–8	4.5-5.5	4-5.2
Leaf venation	Inconspicuous beneath	Fairly conspicuous beneath	Conspicuous beneath
Leaf marking	None	Blotched	Usually blotched
Perianth colour	Pink	Greenish, tinged with pink	Greenish, tinged with pink
Seed length and breadth (mean of ten seeds)	1.7×1 mm	$2 \cdot \hat{1} \times 1 \cdot 3 \text{ mm}$	2.6×2.1 mm

The pollen appeared to be normal, though the pollen grains were smaller (c 40 μ m diameter) than in either of the parents (c 50 μ m in P. minus; c 44 μ m in P. persicaria). Seed production also seemed to be normal, but the seeds were intermediate in size and shape between those of the parents.

Herbarium specimens taken from the plant later in the season were sent to Dr J. Timson of the Department of Medical Genetics, University of Manchester, who (Timson *in litt*. 1975) agreed that 'it may well be the hybrid since all the characters are intermediate'. The specimens have been deposited in NMW.

Timson (1965) has pointed out that interspecific hybrids in *Polygonum* Section *Persicaria* appear to be extremely rare in Britain; out of seven herbarium sheets of putative *P. minus* × *P. persicaria* examined by him, only one could be identified as the hybrid and that rather uncertainly. This specimen (**BM**) was collected by B. Welch in September 1955, on Ham Common, Richmond, Surrey, v.c. 17. There are unsubstantiated records of this hybrid from v.c. 11–14, 22 and 23 (Timson 1975), but, apparently because of his uncertainty, Timson (1975) did not cite the Surrey record.

The chromosome numbers of P. minus and P. persicaria are very close to one another: P. minus has 2n = 40, P. persicaria has 2n = 44. It is possible, as Timson (1965) has suggested, that their hybrid may be capable of some satisfactory meioses and thus account for the production of the normal-looking pollen and seeds.

REFERENCES

Timson, J. (1965). A study of hybridization in *Polygonum Section Persicaria*. J. Linn. Soc., Bot., **59**:155-161. Timson, J. (1975). *Polygonum Section Persicaria*, in Stace, C. A., ed. *Hybridization and the flora of the British Isles*, pp. 274-277. London.

R. H. ROBERTS

VULPIA HYBRIDA (BROT.) PAU, NOMEN AMBIGUUM

In an earlier note (Stace & Cotton 1976) we pointed out that the plants which occur in this country as wool aliens under the name *Vulpia australis* (Steudel) Blom are in fact identical with the southern European *V. broteri* Boiss. & Reut., for which the correct name is *V. muralis* (Kunth) Nees. Our reasons for using the name *V. muralis* were not, however, stated adequately, and the purpose of this note is to rectify the omission.

The basionym of *V. muralis* (Festuca muralis Kunth) was published in 1822, and easily predates the publication of *V. broteri* Boiss. & Reut. in 1852. However, the name *V. hybrida* (Brot.) Pau, based on Festuca hybrida Brot., published in 1804, has also been used for the same plant and, of course, if it could be typified accordingly it would be the correct name. There is, unfortunately, uncertainty as to the application of the name Festuca hybrida, as indicated by Boissier & Reuter's (1852) unwillingness to use it for the plant they named *V. broteri*. As pointed out by Hackel (1880) and by Kerguélen (1975, p. 285), it seems that Boissier & Reuter considered that Brotero confused two plants, or that his description and type did not match.

It appears that Brotero's herbarium has been lost or destroyed (Paunero 1964, p. 94; A. Fernandes *in litt*. 1973) and, in view of this and the uncertainty of the application of the name *F. hybrida*, we (like Paunero) prefer to treat it as a *nomen ambiguum*. Until such time as *Festuca hybrida* can be typified, the name used for the plant in question must be *V. muralis* (Kunth) Nees.

REFERENCES

Boissier, E. & Reuter, G. F. (1852). Pugillus plantarum novarum africae borealis hispaniaeque australis, pp. 128–129. Geneva.

HACKEL, E. (1880). Catalogue raisonné des Graminées du Portugal, p. 24. Coimbra.

Kerquélen, M. (1975). Les Gramineae de la flore française essai de mise au point taxonomique et nomenclaturale. *Lejeunia*, 75.

Paunero, E. (1964). Notas sobre Gramineas, 2. Consideraciones acerca de las especies españolas del genero *Vulpia* Gmel. *An. Inst. bot. A. J. Cavanillo*, **22**: 83–114.

STACE, C. A. & COTTON, R. (1976). Notes on two alien Vulpias in Britain. Watsonia, 11: 72-73.

C. A. STACE & R. COTTON