

PLANT NOTES

6/33. *RANUNCULUS FICARIA* L. The discovery by Miss M. B. Bing of clones of both var. *ficaria* and var. *fertilis* in the north of the Isle of Man* recently gave me the chance to lay fresh material of the two races side by side and examine them in the hope of finding some obvious morphological distinctions other than the presence or absence of bulbils, since this last character has the drawback of only being usable comparatively late in the season. This is the result:

var. <i>ficaria</i> (2n=32)	var. <i>fertilis</i> (2n=16)
Plant more slender, usually forming dense patches.	Plant more robust, usually in thinnish patches.
Leaves clear light green; cordate; strongly veined beneath.	Leaves darker, more blotchy, often almost variegated; cordate-sagittate, the basal lobes somewhat narrower, less strongly veined beneath.
Petals 10 × 5 mm., yellowish on both sides.	Petals 18-19 × 6-9 mm., strongly purplish beneath.
Anthers 2 mm., hooded.	Anthers 3 mm., not hooded.
Carpels densely pilose below.	Carpels thinly pilose to subglabrous below.

These are merely two local clones. It is quite possible that most, or even all, of the characters useful for separation in this particular case will prove worthless in other areas. Perhaps others will examine their local populations and in turn report on any distinctions that seem to hold good?—D. E. ALLEN.

100/3. *CERASTIUM ALPINUM* L. *C. alpinum* L. was recorded from Ben Avon, v.c. 94, by Druce (*J. Bot.*, **23**, 40 (1890)). He says "Not the *lanatum* of Lamarck, but that pubescent lighter green plant which is, I believe, Bentham's var. *piloso-pubesens*".

This record has been carried forward to the *Comital Flora* under *C. alpinum*. A specimen in Hb. E. S. Marshall (Hb. Univ. Cantab.) labelled *C. alpinum* var. *pubescens* Syme was collected in the Great Corrie of Ben Avon at c. 3000', 31.7.1905. Marshall writes on the label "very local; the only form observed there". The specimen, however, appears to be of *C. arcticum* Lange. It seems likely that both Druce and Marshall were referring to the same plant and that both mistook it for a form of *C. alpinum*. In the absence of confirmation of true *C. alpinum* from Banff, v.c. 94 should perhaps be deleted from the *Comital Flora*.—F. H. PERRING.

151/7(2). *Ononis salzmanniana* Boiss. & Reut., 1852, *Pugill. Pl. Nov.*, 34, E. Kent; a single plant growing more or less by itself

*See also p. 66.—ED.

at the base of the frontal masonry of the Bell Hotel, Sandwich, 1957, R. A. GRAHAM and R. M. HARLEY, det. R. A. GRAHAM, R. D. MEKLE and N. Y. SANDWITH. (Specimen in herb. R. A. Graham, no. 5402.) This Lusitanian-Moroccan species is closely allied to the more central Mediterranean *O. alopecuroides* L. from which it differs in having trifoliolate bracts, trifoliolate as well as simple leaves, a shorter inflorescence, narrower stipules and larger, more setaceous calyx teeth. Our specimen is rather atypical.—R. A. GRAHAM and R. M. HARLEY.

396/16. *Cirsium italicum* D.C., 1813, *Cat. hort. Monspel.*, 96-97 (*Carduus italicus* Savi, 1818, *Botanicon Etruscum*, 3, 140-141; *Cnicus italicus* Bertol., 1819, *Amoen. Ital.*, 213-4). 54, N. Linc.; grain alien, Glemsby Docks, August 31, 1956, D. McCLEINTOCK. Allied to *C. vulgare*, but less robust and with very much smaller heads, this species is easily separated by the following characters:—Stem slender, c. 45 cm.; cauline leaves very shortly decurrent with the terminal lobe linear and not more than 5 mm. wide; upper leaves overtopping the small, c. 1 cm. wide, ovoid heads; involucre bracts yellowish-green, narrowed abruptly into a yellow spine, and with a dark keel-like callosity at the base of the spine. Native of Italy, Corsica, Sardinia, Albania, Thessaly, Thrace, Bithynia—has been found in France at Montpellier as an alien and reported from Pyrenées-Orientales. I am grateful to Dr. A. Melderis for assistance with the identification.—J. E. LOUSLEY.

497/2 × 4. *Symphytum tuberosum* × *uplandicum*. 33, E. Glos.; Woodbridge, near Withington, with both parents, 1955, E. MILNE-REDHEAD, conf. A. E. WADE (*Hb. Kew*). In size and general appearance this hybrid was intermediate between *S. tuberosum* and *S. ×uplandicum*, with which it was growing. It had the tuberous rootstock of the former species.—E. MILNE-REDHEAD.

506/4 × 1. *Myosotis caespitosa* × *scorpioides*. This hybrid does not appear to have been previously recorded from the British Isles, but it is probably overlooked rather than rare.

Two plants of it were found on the 25th June 1956 when a special search was made in a meadow, where the parent species grow together, by the river Wnion at Dolgelley, Merioneth, v.c. 48. There was a patch of it in the same place in 1957.

On the 20th June 1957 a complex hybrid population involving the same species was discovered on marshy ground by the river Glaslyn, near Minffordd, Penrhyndendraeth, near the well-known station of *Limosella subulata*. Many of the hybrid plants were somewhat fertile; they were very variable and graded into the parent species, especially *M. scorpioides*.

It follows that a description of the hybrid cannot be very satisfactory. The determination of a suspected hybrid should be based on as many characters as possible, and what pure species of *Myosotis* were growing with it should be taken into account.

Usually the hybrid can be distinguished from both parents by its intermediate-sized corolla limb (5-7 mm.; against 2-4 mm. in *M. caespitosa*, and 8-13 mm. in *M. scorpioides*), the style about equalling the nuts in fruit (much shorter than the nuts in *M. caespitosa*; much exceeding them and nearly, or quite, equalling the calyx in *M. scorpioides*), the pollen grains of irregular size and shape, and the calyces having only 0-2 developed nuts; the calyces with no developed nuts soon become noticeably brown and shrivelled.

The hybrid often differs also from *M. caespitosa* in producing sterile perennating shoots in the autumn, and from *M. scorpioides* in being more slender and in the calyx exceeding the corolla tube.

Specimens:—Dolgelley, v.c. 48, 1956, P. M. BENOIT (*Hb. Mus. Wales*); Penrhyndeudraeth, v.c. 48, 1957, P. M. BENOIT (*Hb. Kew & Hb. Mus. Brit.*).—P. M. BENOIT.

506/9. *MYOSOTIS RAMOSISSIMA* Rochel in Schult., *Oesterreichs Flora*, ed. 2, 1, 366 (footnote), 1814. This is synonymous with and must replace *Myosotis hispida* Schlecht. which was published in 1817, not 1814 as given in *Index Kewensis*. Through the kindness of Dr. K. H. Rechinger of the Naturhistorisches Museum, Vienna, I have been able to examine Rochel's specimen.—A. E. WADE.

572/5. *Scutellaria altissima* L., 1753, *Sp. Pl.*, 600. G. C. Druce has identified a Skull-cap found by H. T. Baker in a wooded glen near Mells, N. Somerset, v.c. 6, in 1929 as *Scutellaria columnae* Tenore, a native of the Mediterranean region (*Rep. Bot. Soc. & E.C.*, 9, 34). A re-examination of the Somerset plant reveals that it is in fact *S. altissima*, which occurs in S.E. Europe, reaching Hungary and Galicia in the north-west. It is often cultivated in gardens in central and northern Europe and has escaped to become naturalised in many places.

S. altissima is characterised by having glabrous leaves (hairy only on the nerves beneath) and short glandular hairs in the upper portion of the stem; the corolla is 15-18 mm. long with a bluish-purple upper lip and \pm whitish lower lip. In *S. columnae* the leaves are hairy on both surfaces; the upper portion of the stem is covered with long glandular hairs; the corolla is much longer (20-28 mm.) and reddish in colour.

In addition to Druce's specimen from near Mells, there are in the herbarium of the British Museum (Natural History) specimens collected from the same locality by A. H. G. Alston in 1941, and from Wadbury Valley, near Frome (also N. Somerset) by Mrs. N. Wycherley in 1957.—A. MELDERIS.

588/1. *PLANTAGO INDICA* L. (*P. arenaria* Waldst. & Kit.; *P. ramosa* Aschers.). 26, W. Suffolk; A fine colony of hundreds of plants in new and old turf by an arable field near Eriswell, 1957, L. H. WILLIAMS and C. C. TOWNSEND. I visited this interesting colony on September 10, 1957, and found that the plantain extended in great quantity for nearly

half a mile. It grew on a wide uncultivated sandy verge between a shelter belt of pines and two arable fields. The distribution was not continuous, it was almost confined to the uncultivated ground and no plants could be found on the other side of the shelter belt.

The plantain was associated with the following species:—

<i>Carex arenaria</i> —ab	<i>Crepis capillaris</i> —occ
<i>Conyza (Erigeron) canadensis</i>	<i>Senecio jacobaea</i> —occ
—f	<i>Galium verum</i> —occ
<i>Linaria vulgaris</i> —f	<i>Campanula rotundifolia</i> —l
<i>Agrostis tenuis</i> —f	<i>Ononis repens</i> —l
<i>Cynoglossum officinale</i> —occ	<i>Echium vulgare</i> —l
<i>Sedum acre</i> —occ	<i>Trifolium arvense</i> —r
<i>Acinos arvensis</i> —occ	

The following also occurred:—

<i>Anisantha sterilis</i>	<i>Melandrium album</i>
<i>Dactylis glomerata</i>	<i>Reseda luteola</i>
<i>Medicago minima</i>	

P. indica appears to be native in southern, eastern and mid-Europe, but in northern France, Belgium and Holland it is found in less permanent colonies and its status is doubtful. The warm sandy habitat at Eriswell is very similar to those recorded from the adjoining parts of the Continent in the countries mentioned. In Britain it is a rather frequent alien on rubbish-tips, at docks, and in waste places when it occasionally persists for a few years. On Burnham sand-dunes, N. Somerset, it was strongly established from about 1859 to 1867 or so (White, J. W., *Bristol Fl.*, 502, 1912) and then disappeared.

Unless it was deliberately sown at Eriswell, which seems most unlikely, the colony has probably been there for some years, since time would be required to spread over a distance of nearly half-a-mile. Although the locality is very close to Foxhole Heath it is one easily overlooked by botanists, since it is entirely surrounded by shelter belts, and the area enclosed looks uninviting at first sight. No other aliens were seen in the vicinity apart from *Conyza canadensis*, *Sisymbrium altissimum*, and *Veronica persica*, which are all common in the Breck. *Plantago indica* is growing in the Suffolk locality under conditions where it is more likely to persist than in previous occurrences in Britain.—J. E. LOUSLEY.

690/2. *ASPARAGUS OFFICINALIS* L. subsp. *OFFICINALIS*. The cultivated asparagus has long been known as an established plant on dunes and salt-marshes on our coasts (its abundance at Burnham-on-Sea, N. Somerset, and Sandwich, E. Kent, are familiar examples). Away from the sea it is found occasionally, but usually as isolated bird-sown plants which seldom spread. Attention does not appear to have been drawn previously to its abundance in the Breck of W. Suffolk, where it is thoroughly established and has spread rapidly in recent years.

In many places in the Breck, as for example near Foxhole Heath, it occurs along hedges and shelter belts in spots where the source of

introduction is not immediately apparent. In and near Twelve Acre Wood, about 2 miles N.E. of Barton Mills, there is a clear demonstration of how a field of cultivated asparagus in an area of sandy soil can serve as a source from which the plant can be spread. The cultivated field is on the road leading to Mildenhall a short distance from its junction with the main Norwich road, and asparagus is common on the edges of and inside near-by woods. Its distribution is consistent with birds having fed on the fruits and then resorted to trees to roost, dropping the seeds below.—J. E. LOUSLEY.

718/27. *Juncus ensifolius* Wikstr., 1823, *Vet. Akad. Handl. Stockh.*, 2, 274. V.c. 58, Chester; bank of canal, Christleton, Chester, 1956, A. M. STIRLING, det. G. TAYLOR. Stems 2-edged, 20-60 cm. high, arising from slender, creeping rootstocks, compressed. Leaves flattened laterally and distinctly equitant, auricles wanting; blade 7-15 cm. long, 2-5 mm. wide. Panicle of (2)3-6(7) rather large many-flowered heads, or compound with numerous and small heads, often only 3-6-flowered. Perianth 2.5-3.5 mm. long, dark brown or black to pale brown or greenish, the segments \pm equal, narrowly lanceolate, acuminate; stamens 3, $\frac{1}{2}$ to $\frac{3}{4}$ as long as the perianth, the filaments longer than the anthers; capsule oblong, slightly longer than the perianth, abruptly contracted to the beak. Seeds broadly fusiform, sharply reticulate.

Native of N.W. America from Alaska and Canada to California and the Sierra Nevada, and eastwards to Utah. Locally known as Dagger-leaved Rush.—D. H. KENT.

737/17 \times 13. *Potamogeton* \times *cadburyae* Dandy & Taylor (*P. crispus* \times *lucens*), *Kew Bull.*, 1957, 332. V.c. 38, Warwick; Seeswood Pool, Nuneaton, with the parent species; without flowers or fruits, 1948, DOROTHY A. CADBURY (holotype in Hb. Mus. Brit.; paratype in Hb. Kew). A most surprising cross, but there is no doubt about the parentage, as examination of the material will quickly show. The plant looks rather like a narrow-leaved form of *P. lucens* but the influence of *P. crispus* can be seen in the obtuse leaf-apex and in the leaf-base, which though narrowed is truly sessile; other characters show intermediacy. Subsequent visits to the Warwickshire locality have failed to reveal more of the plant.—J. E. DANDY.

737/19 \times 22. *Potamogeton* \times *pseudofriesii* Dandy & Taylor (*P. acutifolius* \times *friesii*), *Kew Bull.*, 1957, 332. V.c. 27, E. Norfolk, ditch near Buckenham Ferry, Strumpshaw, along with both the parent species; without flowers or fruits, 1952, DOROTHY A. CADBURY (holotype in Hb. Mus. Brit.; paratype in Hb. Kew). At first sight this hybrid looks like *P. friesii*, and like that species it has tubular stipular sheaths. Examination of the leaves, however, reveals the presence of scattered broken sclerenchymatous strands which indicate *P. acutifolius* as the other parent species. Sclerenchymatous strands (often mistaken for true nerves) are characteristic of the leaves of *P. acutifolius* and *P. compressus*

but are never found in *P. friesii* and other true "pusilloid" species. As *P. × pseudofriesii* was found with *P. acutifolius* and *P. friesii* there can be no doubt about its parentage.—J. E. DANDY.

762/1(2). *Eleusine africana* O'Byrne, 1957, *Kew Bull.*, 1957, 65-72. V.c. 17, Surrey; rubbish-tip, Earlswood, 1957, U. DUNCAN and B. M. C. MORGAN, det. C. E. HUBBARD. V.c. 30, Bedford; Flitwick, 1949, J. G. DONY (*Herb. Kew*). V.c. 37, Worcester; Evesham sidings, 1955, C. M. GOODMAN and J. E. LOUSLEY (*Herb. Kew*): Pinvin, in beet field, 1955, C. M. GOODMAN and J. E. LOUSLEY (*Herb. Kew*): Pinvin, fields maturated with "shoddy", 1955, C. W. BANNISTER (*Herb. Kew*): "shoddy" field, Evesham, 1957, C. W. BANNISTER (*Herb. Kew*). V.c. 63, S.W. York; waste ground, Bradford, 1917, J. CRYER (*Herb. Kew*). All material from Herb. Kew was determined by J. KENNEDY O'BYRNE.

Eleusine africana is closely allied to *E. indica* (L.) Gaertn. but is a taller ((15)-30-90 cm.) more robust plant than the latter ((8)-30-45 (-90) cm.) and the spikelets are 6-7.5 mm. long × 3-4 mm. wide (4-5 mm. long × 2-2.5 mm. wide in *E. indica*).

E. africana is a native of S. Africa and appears mainly to be introduced into Britain as a wool-alien. Mr. O'Byrne informs me that in his opinion *E. indica* is a rare introduction into Britain, and that much of the material so-named is probably *E. africana*.—D. H. KENF.

797/2. *Cynodon incompletus* Nees, 1832, *Linnaea*, 7, 301. 30, Bedfordshire; Wool adventive, Flitwick railway sidings, 1950, J. E. LOUSLEY and J. G. DONY—root grown on at Streatham flowered October 1951 and October 1952, material determined by C. E. HUBBARD.

A low, creeping grass, resembling *C. dactylon* (L.) Pers., culms slender, glabrous, smooth, 2-3-noded; sheaths glabrous or hairy, bearded at the top; ligules membranous, truncate; blades linear, acute, villous, flaccid, and glaucous; spikes 3-4, straight, 3-4 cm. long, rhachilla not produced; glumes lanceolate, acute, keeled, ciliolate, lemma boat-shaped with stout keels scabrid above. Native over a wide area in South Africa, and introduced in New South Wales (Maiden, J. H., 1912, *Agric. Gaz. N.S.W.*, 23, 296).

The following key is given by Stapf in *Fl. Capensis*, 7, 635, 1900:—

Culms many-noded with the leaves mostly crowded at the base;
ligule a ciliate rim; rhachilla produced *C. dactylon*
Culms 2-3-noded; ligule membranous; rhachilla not produced
C. incompletus

—J. E. LOUSLEY.

830/3. *AGROPYRON CAMPESTRE* Gren. & Godr. This species has been recorded from Chichester Harbour, W. Sussex, v.c.13, by Druce (*Rep. Bot. Soc. & E.C.*, 7, 73). It has been included by him also in the second edition of the *British Plant List* (1928) and in his *Comital Flora of the British Isles* (1932).

Druce's specimen from Chichester, kindly loaned by the Curator of the Druce Herbarium, Oxford, for examination, occupies an intermediate position between *Agropyron pungens* and *A. repens*. It has shortly-pubescent lower leaf-sheaths (a character of *A. repens*), and the margins of the leaf-sheaths are ciliate (a character of *A. pungens*). The nerves of its leaves, \pm approximate and not very prominent, show the influence of *A. repens*. The narrow non-dehiscent anthers with angled, shrivelled, empty pollen-grains support a suggestion that this plant is a hybrid between *A. pungens* and *A. repens*.

Another specimen of "*A. campestre*" from Herb. Druce, collected at the Leven Salt Marshes, Hurst Castle, S. Hants., v.c. 11, in 1911, by J. C. Melvill, is *A. pungens*.—A. MELDERIS.

847/1. *PTERIDIUM AQUILINUM* (L.) Kuhn. Recent published work on bracken suggests that, at any rate in the north, reproduction from spores is very rare (Conway, 1953). This is contrary to my experience in south-east England where I find small colonies of bracken sporelings rather common (Lousley, 1936, 1939, 1946). They are most frequently observed on damp brickwork of walls, railway bridges, and bombed sites, and on refuse tips, but occasionally in rabbit holes, pits and quarries. The greater frequency on brickwork is probably due mainly to favourable conditions but it must be remembered that sporelings are much more conspicuous in such places, and easily overlooked when associated with other vegetation. However that may be, it is extremely rare to find them in *large* colonies in a more or less natural habitat.

On July 6, 1957, I found a colony of many thousand sporeling bracken on Ockham Common, Surrey. This extended in a belt for 150 yards along the west side of a wood of *Pinus sylvestris* near Currie's Clump—the National Grid reference being 51/082587. For most of its length the belt was only a few yards wide, but at one point it extended for some 50 yards into the wood. The sporelings were so close together that they formed a pale green band conspicuous from a distance. They were particularly abundant in shallow rut-like depressions running parallel to the edge of the wood. These depressions may have originated at some distant date from ploughing for a fire-break or ruts from army vehicles, but the wood appears to be self-sown, with the pines of very varied ages and irregularly spaced at intervals up to 10 feet apart. In addition to the band of sporelings there were smaller scattered colonies farther into the wood.

Ockham Common is on Bagshot Beds. The sporelings were growing on soil about two inches deep, rich in pine litter and humus, on sand. The soil is not markedly acid (*pH* 5.5) although only a few yards away there was *Callunetum* with *Erica cinerea*. On a second visit, on July 20, fresh prothalli were still plentiful, and sporelings were seen covering every stage from these to the first production of fronds of mature type. While I do not know the rate of growth of bracken sporelings

under natural conditions, it seems likely that at least some of the spores germinated about the end of May when there was a short period of hot weather.

There was very little other vegetation in the belt where the bracken sporelings were so abundant. Only the following were observed:—

Chamaenerion angustifolium—occ.

Pinus sylvestris, seedlings—r.

Ulex europaeus, seedlings—several.

Stellaria media—vr.

Epilobium adenocaulon—vr.

Sonchus oleraceus—one.

I hope to keep the colony under observation.

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—J. E. LOUSLEY.