

THE BOTANICAL SOCIETY
AND EXCHANGE CLUB
OF THE BRITISH ISLES.

REPORT FOR 1934.

OF THE

BOTANICAL EXCHANGE CLUB

(CONVENIENTLY ABBREVIATED REP. B.E.C.)

BY THE

EDITOR AND DISTRIBUTOR

N. Y. SANDWICH, Esq., M.A.

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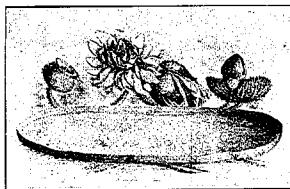
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CAMBRIDGE UNIVERSITY PRESS

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(VOL. X. PART VI.)

Victoria Regina.



Floreat flora.

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N. Y. SANDWITH, Esq.,

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JUNE 1935.

date. Such a revision would naturally be a long and difficult task, and would require the collaboration of experts in various groups; it would be one of the duties of the authors of a new British Flora, but it might well be undertaken previously and the results published in the form of a new List. Whatever may be said about this, it will surely be agreed that our present Lists are very unsatisfactory and ignore not merely the painstaking researches of nomenclatural experts but also what appears to be a more enlightened scientific attitude towards certain genera. It is believed that, by constant repetition and writing, a revised nomenclature of the British flora would quickly become both familiar and inoffensive; sentimentality and prejudice would not, of course, stand in the path of the progress of members of this Club!

All the Exchange members will mourn the loss of Mr J. Fraser and Mr J. E. Little, who had been valued contributors and critics for many years. Mr Fraser's mastery of *Mentha* and *Salix* inspired confidence; it was so far in advance of that of any other British botanist, and the Club had relied on him for so long, that we cannot hope to fill his place, above all as a critic of Willows, for many seasons.

The thanks of the Club are due to the following botanists for their kind help: Mrs H. Drabble, Rev. H. J. Riddelsdell, Col. A. H. Wolley-Dod, Messrs G. M. Ash, E. B. Bishop, C. E. Britton, P. M. Hall, W. H. Pearsall, H. W. Pugsley, and A. E. Wade; Messrs A. J. Wilmott, A. H. G. Alston and A. Bruce Jackson, of the British Museum; and the Distributor's colleagues at Kew, Dr W. B. Turrill, Messrs J. S. L. Gilmour, H. K. Airy-Shaw and E. Nemes, and Mr C. E. Hubbard who has contributed some valuable notes on the Gramineae.

N. Y. SANDWITH.

The Herbarium,
Royal Botanic Gardens,
Kew, Surrey,
30th April 1935.

LIST OF PARCELS RECEIVED.

	No. of Sheets.	No. of Gatherings.
G. M. Ash	44	4
P. G. Beak	41	3
Prof. K. W. Braid	20	1
C. E. Britton	169	12
G. C. Brown	149	13
Preb. R. J. Burdon	93	6
J. Chapple	135	10
Prof. B. H. Danser	47	1
E. S. Edees	28	3
H. Foster	40	4
†J. Fraser	207	14
J. D. Grose	114	8
P. M. Hall	281	16
Col. H. Halcro Johnston	59	3
R. Knowling	41	4
†J. E. Little	11	1
J. W. Long	85	8
J. E. Lousley	267	18
R. Melville	44	3
W. H. Pearsall	63	5
F. Rilstone	68	6
R. W. Robbins	43	4
Miss I. M. Roper	23	2
W. A. Sledge	64	5
H. S. Thompson	119	19
National Museum of Wales	55	5
E. C. Wallace	413	23
W. Watson	72	11
A. Wilson	64	4
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	2879	216

Papaver lateritium Koch. Limpsfield, Surrey, August 1933. A garden weed in the district. Flowers light brick-red.—R. W. ROBBINS. "*Papaver lateritium* C. Koch is a native of Armenia and was originally described from material cultivated in Berlin. It is now common in gardens, but it does not appear to have been figured beyond the black and white figures of leaf and capsule in the *Pflanzenreich*, iv, 104, 361 (1909), where also a description and bibliographical references will be found. The specimen received from Mr Robbins does not agree over-well with wild material at Kew, but the differences may be due to the effects of cultivation. Ripe fruit and seeds should have been included in the material distributed."—TURRILL.

Barbarea verna Asch. Railway embankment near Appleby, Westmorland, v.-c. 69, June 1, 1934. (Ref. No. 12).—W. A. SLEDGE.

Barbarea intermedia Bor. Lower Birtley Farm, Witley, Surrey, July 1934.—G. M. ASH.

Arabis Turrita L. Garden, Newport, Isle of Wight, August 1933.—J. W. LONG.

Draba muralis L. Manifold Valley, N. Staffs, June 9, 1934.—E. S. EDEES.

Erophila verna Meyer, var. *hirtella* Jord. Sandy field, Old Swindon, Wilts, v.-c. 7, April 30, 1934 (Ref. No. 633).—J. D. GROSE. "Certainly not *E. verna*, var. *hirtella* (Jord.) in the sense of O. E. Schulz, *Pflanzenr.*, iv, 105, 353 (1927). It appears rather to be the var. *cabillonensis* (Jord.) O. E. Schulz, e descr. *l.c.*"—TURRILL.

Diplotaxis muralis (L.) DC., var. *Babingtonii* (Syme). By the sides of the railway, between Freshfield and Ainsdale, near Southport, S.W. Lancashire, September 21 and 22, 1883.—Coll. CHARLES BAILEY, Manchester. Comm. by J. CHAPPLE. "Syme's name, which was published in the third edition of *English Botany* as a variety of the subspecies *muralis* of *Brassica brevipes*, is antedated both by the var. *caulescens* Kittel (1844) and the var. *ramosa* Neilr. (1846)."—ED.

Viola lactea Sm. × *Riviniana* Reichb. Stoborough Heath, Dorset, v.-c. 9, May 20, 1934 (Ref. No. 1056). These specimens illustrate quite well the combination of the characters of the parents but it is impossible in dried specimens to do justice to the beauty of this plant, which grows in large and very floriferous clumps.—P. M. HALL.

Viola hirta L., forma. Copse of conifers, Fleam Dyke, Cambs, May 5, 1934 (Ref. F.28). I have been observing this violet, which seems to have some affinity with *V. calcarea* Gregory (whatever that species may be worth), for several years. In leaf shape it agrees well with specimens of *V. hirta*, f. *pinetorum* Wiesbaur, collected by the author at "Kalks-

burg bei Wien" in 1877 and in my herbarium, but these authentic specimens have much larger flowers which (contrary to the description) mostly exceed the leaves, and a looser habit than the Fleam Dyke plants. On some of my specimens gathered last year P. M. Hall wrote, "This is a rather unusual form of *hirta* with the leaves overtopping the small flowers; but I am not prepared to go so far as to say that it is var. *pinetorum*. The stipules should be longer for that var. It looks to me like a shade form." It should be noted that the character "stipules 2-4 cm." was added by Neuman (*Sveriges Flora*, p. 269 (1901)), and that Wiesbaur treated his plant as a "form"—it being raised to varietal rank by Beck (*Fl. Nieder-Österr.*, p. 511 (1893)).—J. E. LOUSLEY. "This gathering exhibits some differences from the normal forms of *V. hirta*, more especially in the outline of the leaves; some leaves are narrower, some more triangular in shape and less deeply cordate at the base (in some cases almost truncate) than is usual in British specimens. It is possible that this plant when fully developed might come under var. *pinetorum* Wiesbaur, but the stipules do not appear to be long enough for that variety and I consider that any peculiarities, which this gathering may have in outline of leaf and size of flower, are only such as are to be expected in shade-grown plants approaching the cleistogamous state."—HALL.

Viola hirta L., var. *propera* (Jord.) Gill. Minster Lovell, Oxon, April 20, 1934.—J. CHAPPLE. "Correct."—HALL.

Viola lutea Huds. Lamancha, Peebles-shire, July 7, 1934.—R. J. BURDON. "Quite typical."—HILDA DRABBLE.

Silene maritima With. From an inland low-level station (175 feet), near Bettws-y-Coed, Caernarvonshire, v.-c. 49, September 1, 1934.—A. WILSON. "The occurrence of isolated inland populations of *Silene maritima* is a matter of some importance. One such population, from Red Scar, west of Richmond, Yorkshire, has been fully analysed and the results are to be published later in the series of papers on *Silene* appearing in the *Kew Bulletin*. It is probable that some of these inland populations are of a relict nature and represent a formerly more continuously widespread distribution of the species. It seems, from the great mass of data now accumulated for this species and for *S. Cucubalus* (*S. vulgaris*), that *S. maritima* survived the Ice Age or Ages in the British Isles, while *S. Cucubalus* was probably introduced, many times, after the last Ice Age. It is unfortunate that the material recorded at the head of this note has no ripe fruits and seeds. Specimens and seeds of *Silene* will be gratefully received by the writer, who, with a colleague, is making an intensive study of the genus."—TURRILL.

Cerastium pumilum Curt. Banstead Downs, Surrey. Ref. No. F.34a, May 1933, and Ref. F.34b, May 1934. Conspicuous on a bright day from the star-like flowers and reddish colour of the plants.—J. E. LOUSLEY.

Stellaria neglecta Weihe. Roadside bank east of Stanton Drew, N. Somerset, May 15, 1934.—H. S. THOMPSON.

Arenaria serpyllifolia L., var. *scabra* Fenzl. Calbourne, Wight, v.-c. 10, June 15, 1934. (Ref. No. 1098). A slender eglandular plant found growing in crevices of a stone wall and hanging down in long trailing mats.—P. M. HALL.

Arenaria serpyllifolia L., var. *sphaerocarpa* Tenore. Winspit, Worth Matravers, Dorset, v.-c. 9, May 20, 1934. (Ref. No. 1048). A stout and densely glandular plant from exposed maritime turf, the correct varietal name of which is doubtful. It seems to me to come best under *sphaerocarpa* Tenore which, according to Drabble, *Journ. Bot.*, lxxviii, 372, 1930, is the glandular counterpart of the eglandular *macrocarpa* Lloyd. It is doubtful, however, whether the capsules and seeds of my plant, though certainly larger than normal (cf. my Ref. No. 1098), are large enough to admit it to the grade of *macrocarpa* and therefore of *sphaerocarpa*, if Drabble's measurements are to be adhered to exactly. This plant, however, would appear to agree well with the original description of Tenore, except in regard to "caulibus erectis" and the procumbent, rosetted habit may in this instance be due to exposure. Of the other glandular forms dealt with by Drabble, *viscidula* Roth may be ruled out, being a small, slender form: this leaves us with *glandulostriata* Drabble, the glandular counterpart of *stricta* Towns. This is a stout plant with dense inflorescences at the ends of the branches but there is no mention in the descriptions of either var. of larger capsules or seeds than in the type. In a near but distinct and slightly less exposed habitat were seen some eglandular but otherwise exactly similar plants.—P. M. HALL. "This has not the indumentum of authentic specimens of *A. sphaerocarpa* Ten. in Herb. Mus. Brit. The glandular clothing is that of the var. *viscidula*. The habit is due to conditions of growth, and may not exclude it from being var. *viscidula* Roth. The capsule is as large as in *A. sphaerocarpa* Ten. and *A. Lloydii* Jord."—WILMOTT.

Spergularia salina Presl. Chichester, W. Sussex, v.-c. 13, June 1916.—Coll. G. C. DRUCE. Comm. J. CHAPPLE. "My sheet of this is *S. marginata* Kittel. The large capsules on long pedicels, and exceeding the sepals, rule out *S. salina*. As the seeds are wingless it is var. *aptera* E.S.M."—WALLACE. "This is *Spergularia marginata* Kittel, var. *aptera* (E. S. Marshall in *Journ. Bot.*, 268, 1901, sub *Levigonum*). The woody stem, larger size, habit, pale petals, etc., distinguish this plant at a glance from any form of *salina* in spite of the apterous seeds. Moss considered Marshall's plant a possible hybrid of the two species, but the present specimens could scarcely be so referred."—LOUSLEY.

Tamarix gallica L. On the edge of the sand dunes, Rose, Perranporth, West Cornwall, October 1, 1934. Davey's *Flora of Cornwall*, like most books in general use, gives the flowering period as July to Septem-

ber. These bushes, as will be noticed, were only just coming into flower on October 1.—F. RILSTONE.

Geranium pratense L., var. *lilacinum* Celak. Origin: Banks of R. Avon, Rock Meadow, Bubbenhall, v.-c. 38, Warwickshire.—J. GRIMES. Now extinct owing to destruction by flood. Cult: Cardiff, Glam., July 1934.—A. E. WADE. Comm.: DEPT. OF BOTANY, NATIONAL MUSEUM OF WALES. Note: The flowers tend to darken somewhat in drying. "Apparently a new name to the British Flora. Most authors of the larger floras of neighbouring countries mention that the flowers of *G. pratense* may occasionally be lilac, but do not introduce a special name. Is there any reason to suppose *lilacinum* more than a casual colour form?"—LOUSLEY. "Celakovsky distinguished it merely by the "wässerrig-lila-farben" flowers. He found it only in Eastern Bohemia, mainly on calcareous marl; in one locality it was the only form seen, in another it was growing with the typical plant."—ED.

Geranium purpureum Vill. Waste ground, Wookey Hole, N. Somerset, v.-c. 6, August 20, 1934. Flowers small. Anthers yellow.—IDA M. ROPER. "An untypical (? shade) form, but apparently correct, judging from flowers and indumentum. Fruits not well developed."—WILMOTT.

Erodium maritimum Smith. In great abundance on a limestone hill to the south-west of the Little Ormes Head, Llandudno, N.E. Caernarvonshire, September 17 and 27, 1879. Coll. CHARLES BAILEY, Manchester. Comm. by J. CHAPPLE.

Medicago falcata L., var. *diffusa* Schur. Waste ground by Isis Hotel, Ifley Lock, Oxford, v.-c. 23, September 17, 1933. (Ref. No. Z.601). Diffuse bushy herb. Flowers rich yellow. Pods dark brown.—P. G. BEAK. "Yes, var. *diffusa* Schur, see *Rep. B.E.C.*, 21, 1926. The var. *procumbens* Bess. has a very similar habit, but differs chiefly in its larger leaflets, and has also been reported from Britain (*Rep. B.E.C.*, 281, 1918, and C. E. Salmon, *Fl. Surrey*, p. 230 (1931))."—LOUSLEY. "This is the alien plant with almost straight pods which has been named var. *tenuifoliolata*. Schur describes the pods of var. *diffusa* as falcate."—WILMOTT. "This is one of the small-leaved alien forms of *Medicago falcata* with only slightly curved pods which occur in many parts of Britain. The forms of this species show almost every combination of characters (see genetical and agricultural literature), and it is therefore difficult to fit individual plants with any certainty to any definite name. This gathering seems to come under the description of var. *diffusa* Schur."—GILMOUR.

Trifolium hybridum L., var. *elegans* (Savi). Ware, Herts, September 1928.—Coll. G. C. DRUCE. Comm. J. CHAPPLE.

Lathyrus sylvestris L. Sharkham Pt., S. Devon, July 4, 1934.—H. FOSTER.

Lathyrus Nissolia L. Matfield, W. Kent, July 27, 1934.—W. H. PEARSALL. "Foreign authorities have divided this species into two subspecies or races:—(a) *genuinus* Uechtr. Pods shortly hairy. Leaves 6-8 mm. broad. (b) *gramineus* Freyn. Pods glabrous. Leaves about 3 mm. broad. Each of these has considerable synonymy. The former is the usual plant of W. and S. Europe, the latter of Eastern Europe and N. Germany. Mr Pearsall's examples, like most of the specimens of this common plant of Southern England in my Herbarium, comes under *gramineus*. While I am not convinced that the distinction can be satisfactorily applied in this country, it might well be worth while to work out the distribution of the forms for phytogeographical purposes."—LOUSLEY.

Rubus nitidus Weihe & Nees, var. *albiflorus* Weihe? Danbury Common, S. Essex, v.-c. 18, July 7, 1934. (Ref. No. 2496). Petals white, stamens equalling styles, sepals patent in flower, reflexed in fruit. Apparently identical with my Ref. No. 1489 from the same spot in 1919, but the drought conditions here have been extreme this year.—G. C. BROWN. "I should say so."—RIDDELSDELL. "*R. nitidus*."—WATSON.

Rubus rhodanthus W. Watson. Ashtead Woods, Surrey, v.-c. 17, July 28, 1934. Petals obovate, rose pink. Stamens deep rose pink at base, pink above, twice as long as the pinkish styles. Anthers reddish, pilose. Young carpels pilose. Syn.: *R. carpiniifolius*, var. *roseus* W. & N., *R. rhombifolius* auctt. plur. non Whe.—W. WATSON. "Too overdeveloped for me to criticise."—RIDDELSDELL.

Rubus Banningii Focke. Cultivated, from Eltham, W. Kent, v.-c. 16. Petals pink, oval-obovate. Stamens white, exceeding the reddish styles. Carpels subglabrous. Robust with large showy flowers. Panicle branches racemose, not cymose. True from seed.—W. WATSON. "Focke's plant has eglandular stems. This plant has abundant glands on stem. I have no specimen of Focke's to consult, but it is difficult in view of the description to place Watson's plant here. The suggestion I prefer is that of a *rhamnifolius* hybrid."—RIDDELSDELL.

Rubus cardiophyllus L. & M., a small genetic form. Milford Heath, Surrey, v.-c. 17, September 1934.—W. WATSON. "*R. cardiophyllus* as described by Mueller has very coarse nettle-like tothing; and (apparently) not a very long-stalked terminal leaflet. These sheets come between *rhamnifolius* and *cardiophyllus*, as does most of our English '*rhamnifolius*'."—RIDDELSDELL.

Rubus Salteri Bab. Ex Apse Castle Wood, I. of W., v.-c. 10, cultivated at Bickley. I do not find the plant stoloniferous as stated by Salter, and it is clear that it belongs to the *Silvatici*. Petals narrow obovate notched incurved, pure white. Stamens white, slightly longer than the yellowish-green styles, connivent. Carpels glabrous.—W.

WATSON. "No doubt the true *Salteri* from the original locality."—RIDDELSDELL.

Rubus egregius Focke (typical). Boars Hill, Berks, v.-c. 22, July 21, 1934. Petals white. It grows in and near a hedge between Boars Hill village and the Fox Inn; and there is a large bush on the north slope of Boars Hill at the back of the Post Office.—W. WATSON. "Not quite the Continental type, as Rogers (*Handb.*, p. 34) points out. It may come under the name *egregius* or *bracteatus* Bagn., the latter ranking now as a variety of *egregius*. I have seen *egregius* from a number of English counties, but never quite in typical form."—RIDDELSDELL.

Rubus mucronatus Blox. ? Embankment of the Roman Road, Berechurch Park, N. Essex, v.-c. 19, July 15, 1934. (Ref. No. 2503). Petals white, stamens much exceeding styles, sepals patent in flower and later.—G. C. BROWN. "No! A *leucostachys* hybrid."—RIDDELSDELL. "*R. Drejeri* G. Jensen (forma *homoeacantha*)."—WATSON.

Rubus Gelertii K. Frid. Old Park Wood, Plumstead, W. Kent, v.-c. 16, July 29, 1934. Petals obovate, faintest pink to white. Stamens white, anthers cream, slightly longer than the ivory styles. Carpels glabrous. Sepals \pm reflexed during and after flowering.—W. WATSON. "A neat plant which it is tempting to place under *Gelertii*, but critical examination will not allow it. See especially the 3-nate leaves very strigose above with toothing quite different from Friderichsen's robust 2 sheets in my herbarium; and the absence of dense tomentum, etc., on the panicle. The glandular development has a different look, too."—RIDDELSDELL.

Rubus setulosus Rogers. Danbury Common, S. Essex, v.-c. 18, July 7, 1934. (Ref. No. 2501). Petals white, sepals patent in flower, then rising, stamens red at base, exceeding styles.—G. C. BROWN. "The Wye Valley plant is far less glandular, and has strongly felted young leaves, and bright red stems. Brown's plant lacks these and other points, though its resemblances are considerable, and apparently its connection is close."—RIDDELSDELL. "*R. hystrix* Wh."—WATSON.

Rubus Bloxamianus Coleman. Cultivated, ex Tunbridge Wells, W. Kent, v.-c. 16. Petals pinkish. Stamens white, not much longer than the honey-coloured styles. Anthers cream, slightly pilose. Sepals patent in flower then reflexed, but soon becoming patent again and remaining so. Bagnall says that the petals are white; I have always found them pinkish, viz., at Tilburstow (Surrey), at Bostall Woods (North Kent), at Arnos Grove (Middlesex) and at Tunbridge Wells.—W. WATSON. "The peculiar glandular development of *Bloxamianus* and its very narrow, long, interrupted panicle are wholly missing here. The gathering is more akin to *rudis* with which it should be compared."—RIDDELSDELL.

Rubus fuscicortex Sud. Syn. *R. podophyllus* Rogers, non P.J.M. Coombe Wood, Wimbledon Common, Surrey, v.-c. 17, August 1934. Petals pink. Stamens white, equalling the reddish-based styles.—W. WATSON. "This highly glandular plant with its predominantly 5-nate leaves does not fit the description in Sudre, nor the Festiniog plant from which Sudre drew up the description."—RIDDELSDELL.

Rubus fuscus Wh. & N. ? Danbury Common, S. Essex, v.-c. 18, July 7, 1934. (Ref. No. 2502). Not typical but apparently under this. Petals pink, sepals reflexed in flower, then rising, exceeding styles, leaves very soft.—G. C. BROWN. "Not *fuscus*, though related to *fuscus* and *foliosus*. I cannot give an exact name."—RIDDELSDELL. "*R. hystrix* Wh."—WATSON.

Rubus uncinatus P.J.M. non Rogers. Cultivated, ex Tooting Common, Surrey, v.-c. 17. Petals pinkish, notched at apex. Stamens white, slightly longer than the yellowish styles. *R. uncinatus* Rogers = *R. fuscus*, var. *macrostachys* Rogers. The cause of the confusion seems to be that *R. uncinatus* P.J.M. grows mixed with *R. macrostachys* P.J.M. at Wissembourg, the classic station for each species. Focke must have gathered *R. macrostachys* there in mistake for *R. uncinatus*, as he identified the Troy Park Wood similar (but not identical) *R. macrostachys* as *R. uncinatus*. Rogers called all the Dorset and the Branksome "*R. macrostachys*" *R. anglicanus*—see his remarks in the Mansell-Pleydell Herbarium in the Dorchester Museum—and no doubt showed some of this to Focke as "*R. anglicanus*," as Focke says that *R. anglicanus* = *R. macrostachys*.—W. WATSON. "Not at all like Mueller's plant, of which I have seen one of Mueller's own 1858 specimens. The hooked prickles of stem and rachis seem to have misled W. Watson. This gathering is much more like the *Colemanni* of Surrey, but has a great appearance of hybridity, especially in the curious leaves."—RIDDELSDELL.

Rubus horridisepalus Sud. Cultivated, from Bigberry, Canterbury, E. Kent, v.-c. 15. Petals white, stamens white, slightly exceeding the greenish styles. Sepals patent to erect after flowering. Sepals green, white-bordered, glandulose and aculeolate. Habit of *R. gratus* and *R. chaerophyllus*. Fruit large, perfected.—W. WATSON. "I have no authentic specimen of *horridisepalus* to go by, and can give no opinion."—RIDDELSDELL.

Rubus rosaceus Wh. & N., aggr. ? By the Roman Road, Berechurch Park, N. Essex, v.-c. 19, July 15, 1934. (Ref. No. 2504). A large and luxuriant bush. Petals white, stamens exceed styles, sepals patent in flower, closely reflexed in fruit.—G. C. BROWN. "May be right; I have no continental specimens to compare. But I should expect a much broader panicle."—RIDDELSDELL. "*R. scabripes* Genev."—WATSON.

Rubus dasycphyllus Rogers, forma? Gravel pit, Friday Wood, Berechurch, N. Essex, v.-c. 19, July 31, 1934. (Ref. No. 2505). Petals pink, sepals patent in flower and after, eventually rising, stamens exceed styles. The panicle leaves are felted and the panicles more slender and longer than usual, but it is somewhat shade grown.—G. C. BROWN. "Not *dasyphyllus*, but quite possibly a hybrid of it."—RIDDELSDELL. "*R. scabripes* Genev."—WATSON.

Rubus Schleicheri Weihe. Cultivated at Bickley from seed obtained from a station between Tunbridge Wells and Hawkenbury, W. Kent, v.-c. 16, where it grows in fair quantity under hedges. Petals narrow, obovate, pink. Stamens white, equalling or some exceeding the white (rosy-based) styles. Sepals reflexed in flower (July 6), gradually patent after flowering, dropping to loosely reflexed when the fruit is deep crimson (August 23). It extends to Crowborough, E. Sussex, v.-c. 14.—W. WATSON. "In the light of 5 sheets in my herbarium this seems right; the only points of difference from type lying in the far less hairy stems, and the shorter ultra-axillary part of panicle. The name may thus be introduced into the British *Rubus* list; it will probably be found that we have it in our herbaria already from other localities, most likely as a form of *serpens*."—RIDDELSDELL.

Rubus sp. Blackburn, Jedburgh, July 23, 1934.—R. J. BURDON. "Apparently *R. nemoralis* (or *R. macrophyllus*), var. *glabratus* Bab., as conceived by Rogers. But what material!"—RIDDELSDELL. "*R. Scheutzii* Lindeb."—WATSON.

Rubus sp. Danbury Common, S. Essex, v.-c. 18, July 7, 1934. (Ref. No. 2500). Petals white, sepals patent in flower, leaves very soft, light green. This seems to be the same (though not from the same bushes) as my Ref. No. 1521, July 31, 1919, on which Rev. H. J. Riddelsdell wrote, "It cannot be *anglicanus* but it fits fairly well to *podophyllus* if you can admit so much hair and felt," but later (July 30, 1920) he says, "I cannot get beyond Radulan." These specimens are young.—G. C. BROWN. "This plant has clearly puzzled me in the past, but with Jensen's original description before me I feel fairly confident in assigning it to *R. Drejeri*. None of the continental or English specimens in my herbarium shows a *dense* clothing of acicles and glands on the stem, as they should. This specimen, however, is on the small side."—RIDDELSDELL. "*R. criniger* Linton."—WATSON.

Rosa stylosa Desv., var. *systyla* (Bast.) Baker, f. *lanceolata* Lindl.? Bampton, Oxon, August 1934. (Coll. No. Z.693).—P. G. BEAK. "Although a few fruits in these gatherings might well pass as subglobose, the majority incline too much to ovoid to fit *lanceolata*. If my only choice were between that f. and *systyla* I should prefer the latter. But, in my opinion, these spreading to suberect sepals entitle it to pass as *cristata*, a rather weak form, weak, that is, in symmetry

of the "crest" which is the distinctive character of that variety. I should label it *Rosa stylosa* Desv., var. *cristata* W.-Dod. N.C.R. for v.-c. 23, which is but the fourth v.-c. from which it has been recorded."—BISHOP. "Certainly not var. *lanceolata* but it may go under var. *cristata* with Bishop's reservations. Few of the sepals are really sub-erect, as they all are in the two specimens in my herbarium."—WOLLEY-DOD.

Rosa canina L. [var. *Pouzini* (Tratt.)], f. *Wolley-Dodii* Sudre. Cooper's Hill, Runnymede, Surrey, v.-c. 17, September 11, 1932, and July 2, 1933. (Ref. No. 284). Please note two gatherings, the older to show the long, exerted column of styles, and the younger to get better leaves, which fall early in this variety.—J. FRASER. "Seen by Col. Wolley-Dod from this locality and certainly correctly named. It is a Rose with which I am not well acquainted, and I had no idea that its leaflets ever attained the size of the largest of those of some sheets before me."—BISHOP. "Yes, f. *Wolley-Dodii*. The leaflets in the majority of the specimens are about of normal size. I have written separate slips on two sheets which have them larger than usual, but even here they are not so large as I have seen on specimens from the *locus classicus* on Ham Common."—WOLLEY-DOD.

Rosa canina L., var. *hirtella* Chr.? (See *Rep. B.E.C.*, 1933, p. 525.) Vigorous, very prickly bush, 8 feet high. Bampton, Oxon, August 1934. (Coll. No. Z.541).—P. G. BRAK. "For those who adopt the nomenclature, etc., of Wolley-Dod's *Revision*, this must be called *R. canina* L., var. *verticillacantha* (Mér.) Baker, f. *Lemaitrei* (Rip.) W.-Dod. For those inclined to segregate further, following Keller, it comes under var. *hirtella* Chr. In Keller's *Synopsis* the assemblage of Roses which corresponds to Group *Andegavenses* (of Wolley-Dod) is sub-divided, primarily by serration, and var. *hirtella* embraces 19 of his 22 weakly biserrate (or *Transitoriae*) formae. I prefer not to segregate still further into any particular f., but to leave this gathering under aggregate *hirtella*."—BISHOP. "I have not yet adopted the name of f. *hirtella* Chr., a name which hitherto has only been applied to specimens from this bush, and, wrongly, to a form of var. *Pouzini*, f. *Wolley-Dodii*. Apart from this I should hesitate to say whether the specimens under this number, taken collectively, can be considered as other than simply serrate, though some of the more biserrate examples might be graded into a *Transitoriae* Group of the *Andegavenses* if such were adopted. Keller has a similar Group in practically all his Roses and their leading varieties, and the question as to whether it is wise to follow this is too wide a one to discuss in this Report. Personally, I should label these *R. canina*, var. *andegavensis*, f. *agraria*, a form approaching, in respect of some of the specimens, var. *verticillacantha*, f. *Lemaitrei*, but this is not constant, and my decision is based on consideration of the average of the gathering, not on certain individuals."—WOLLEY-DOD.

Rosa Afzeliana Fr., var. *glaucophylla* W.-Dod. Warlingham, Surrey, September 13, 1934. (Ref. No. 4169).—C. E. BRITTON. "Yes, *Rosa Afzeliana* Fr., var. *glaucophylla* (Winch) W.-Dod, from a new (and third) Surrey station. By comparison with my bush on Dunsfold Common, that of Warlingham has smaller leaflets, and fruit usually more approaching subglobose, whilst its sepals are not so persistent as on my even riper fruit. Also its prickles are less stout, and its habit (apparently) less robust. I have my theory that this welcome settler in Surrey is the product of seeds voided in autumn by southward migrating birds."—BISHOP. "Correct. A very rare rose in all the south-east counties."—WOLLEY-DOD.

Rosa tomentosa Sm., var. *scabriuscula* W.-Dod. Farley, Surrey, September 25, 1934. (Ref. No. 4172).—C. E. BRITTON. "Unlike any specimen of var. *scabriuscula* Sm. (or indeed of any member of the *Tomentosae*) either in my herbarium or in my experience, but I can make no better suggestion. Its general appearance does not strike me as quite *tomentosa*-like, neither do these small to very small leaflets. As is usual when puzzling over *Villosae*, Keller's *Synopsis* gives me no help."—BISHOP. "This is *R. tomentosa*, var. *scabriuscula* Sm. I agree that the leaflets are decidedly small, but I can match them by three or four specimens in my herbarium, and there is little else to take it off that variety."—WOLLEY-DOD.

Pyrus Aria L. Whim Lamancha, Peebles-shire, July 5, 1934.—R. J. BURDON. "I think Hedlund would call this *Sorbus incisa* (Rchb.). It is not typical *S. Aria* (L.) Crantz."—WILMOTT.

Tillaea aquatica L. Shores of Adel Dam, near Leeds, v.-c. 64, July 11, 1934. (Ref. No. 14).—W. A. SLEDGE. "The genus *Tillaea* is now merged in *Crassula*, and our British species will in future be known as *Crassula aquatica* (L.) Schoenl. and *C. muscosa* (L.) Roth."—ED.

Cotyledon Umbilicus-Veneris L. Hedgebank near Frensham, in Headley parish, N. Hants, v.-c. 12, July 8, 1934. (Ref. No. 1226). A small gathering to vouch for the occurrence of this species in v.-c. 12. Townsend, *Flora of Hants*, ii, 167, 1904, gives two records, one at Ropley, 1890, but not seen the following year, and the other an early record for Headley Parish. This authority is quoted by the Second Supplement of *Topographical Botany*, but I have seen no other record for N. Hants. The plants now distributed came from a considerable colony on the banks of a sandy lane in Headley Parish, near Frensham, and only a few yards on the west side of the Hants-Surrey boundary.—P. M. HALL. "This plant, scarce on the eastern side of Britain, occurs also in Surrey, near Frensham."—WALLACE. "We must surely learn to call this *Umbilicus pendulinus* DC., since our plant, by modern taxonomic standards, is generically distinct from the African genus *Cotyledon*."—ED.

Epilobium obscurum Schreb. × *parviflorum* L. Kitchen garden, Lower Birtley Farm, Witley, Surrey, August 1, 1933. (Ref. Ep. 88).—G. M. ASH.

Epilobium Lamyi F. Schultz. Cult., Kew, from Beaconsfield, Bucks, v.-c. 24, July 11, 1934. A short-petioled form. It produces good autumnal rosettes when the rainfall is average, and that is the only part that lives after fruiting.—J. FRASER. "In my opinion most of these plants are *Epilobium tetragonum* L. sec. Curt.; I have labelled the two or three sheets which I think are not. The parallel sides and numerous small teeth to the leaves, the limbs of which are noticeably decurrent, are characters of *Epilobium tetragonum* and not of *Epilobium Lamyi* Schultz. The length of the pods and the seeds too agree with *Epilobium tetragonum*. The colour of the plants is due to richer or looser ground. I have a specimen of *Epilobium Lamyi*, Cult., Kew, from Beaconsfield, Bucks, gathered by Mr Fraser on July 11, 1931, which is very different from the plants distributed this year, and I can only suggest that there has been some mistake."—ASH. "Yes, *E. Lamyi*; see the cylindrical stem closely downy in the upper part, the deep green, opaque, shallowly denticulate leaves, with lamina not decurrent on the stem, and the deeply-coloured flowers."—WATSON. "Most of these specimens were surely *E. tetragonum*, in contrast, as Mr Ash notes, to a former cultivated gathering of Mr Fraser's which was correctly named *E. Lamyi*."—ED.

Epilobium adenocaulon Hausskn. Pond edge, near Worplesdon, Surrey, August 21, 1934. (Ref. Ep. 154).—G. M. ASH. "A paper on the appearance of this North American species in Britain and on the Continent has been written for the *Journal of Botany*."—ED.

Epilobium adenocaulon Hausskn. × *palustre* L. Edge of Fleet Pond, N. Hants, July 23, 1934. (Ref. Ep. 133).—G. M. ASH.

Epilobium anagallidifolium Lam. Calcareous spring at 2450 feet, from Yoredale Limestone strata, west side of Great Dun Fell, Westmorland, v.-c. 69, July 11, 1931.—A. WILSON.

Falcaria vulgaris Bernh. (= *Prionitis Falcaria* Dumort.; *Falcaria Falcaria* Karsten; *Falcaria Rivini* Host, etc.). Near North Foreland, East Kent, August 11, 1934. (Ref. F.19). Although previously recorded from another locality in Kent, and one in Hants, probably the first British record of this as permanently established was from Preston, near Wingham, Kent, where it was found by G. Dowker in 1858 (*Journ. Bot.*, 1889, 272), and where it was still growing in 1890 (Hanbury & Marshall, *Fl. Kent*, p. 164). The present gathering was from a locality to which I was directed by Mr A. H. Carter where the plant grew by the side of a "green road" in the same corner of Kent as Dowker's station. It now seems well established in Oxfordshire, Berks, Herts, and Kent, and the species well deserves a place in our Floras. Several observers

have remarked that *Falcaria* never appears to ripen fruits in this country. Many of the specimens distributed exhibit formed fruits, which, however, appear to shrivel up and drop off before maturity. All the stations known to me are on calcareous soils.—J. E. LOUSLEY.

Selinum Carvifolia L. Chippenham Fen, Cambs. (Ref. F.18). Flowers, August 19; fruit, October 11, 1934. This plant is now known from N. Lincs, Notts, and Cambs. It was first recorded for Britain from Lincs by Lees (*Rep. Bot. Record Club*, 1881), fuller notes appearing in *Proc. Manchester Lit. and Phil. Soc.*, 1882/3, p. 44, and *Journ. Bot.*, 1882, 129, plants being distributed through the B.E.C. in 1882. At the same distribution Ar. Bennett distributed specimens from Fordham, Cambs—by which the present station was intended. Here he did not consider the plant native (*Journ. Bot.*, 1899, pp. 244 and 359), but his doubts were well answered by Lees (*Journ. Bot.*, 1899, p. 326), and Druce (*Rep. B.E.C.*, 1903, 19). The species has also been found by Prof. J. W. Carr near Mansfield, in Notts (*Journ. Bot.*, 1909, 71). At Chippenham the plant is probably quite as abundant as it ever has been, and this dry summer rather strangely seemed to suit it well. The plants distributed probably come under the very weak subspecies *pratense* (Sprengel).—J. E. LOUSLEY.

Linnaea borealis L. Pine woodlands and heaths formed therefrom, near Banff, Scotland, July 1931.—K. W. BRAID.

Galium Mollugo L., var. *angustifolium* Leers. Walton Downs, Surrey, August 22, 1926. (Ref. No. 2942). A reduced form of the sub-var. *subpubescens* H. Br., probably due to the exposed chalky habitat. *G. Mollugo* L. is very much influenced by habitat as may be seen when growing on shingle beaches or sandy shores.—C. E. BRITTON.

Galium Mollugo L., var. *pycnotrichum* H. Br. Ashtead and Headley, Surrey. Various dates. (Ref. Nos. various). From several Surrey localities. An account of this var. appears in *Journ. Bot.*, 1934, p. 246, where it is identified with *G. scabrum* of Withering's *Arr. Brit. Pls.*, ed. 3, 2, p. 190.—C. E. BRITTON.

Galium Vaillantii DC. In the allotment fields at Littlebury, near Saffron Walden, N. Essex, July 8, 1934. (Ref. No. F.29). These specimens are from one of Gibson's original and best known stations, where he discovered it about 90 years ago. In spite of the efforts of several generations of allotment holders to eradicate the plant, it is probably quite as plentiful as formerly. The plant was gathered in the company of Mr A. L. Still, and we both at once noticed that it seemed very different from the *Vaillantii* of the Somerset peat moors which we have both seen in the field in recent years. In view of the fact that the Somerset plant has been distributed several times recently, the present specimens may be useful for comparison. The Somerset plant is

much larger in all its parts, the fruits are larger and far less numerous, and the general appearance in the field is very different. Other observers have evidently not been satisfied that it is the same as the French plant (*Rep. B.E.C.*, 1913, 471/2; *Rep. Watson Club*, 1915/16, 541). It cannot be very different from *G. Aparine*, var. *pseudo-Vaillantii* Ar. Bennett, of which the description runs: "A *G. Aparine* cymis ramosis, floribus viridioribus et magis numerosis, fructibus minoribus differt" (*Salmon, C. E., Fl. Surrey*, p. 363 (1931)). Salmon points out that *G. Vaillantii* has still smaller fruits, and more branched cymes—which is just the difference between the Somerset and Essex plants. I do not think this variation in the Somerset plant is entirely accounted for by the peaty earth in which it grows.—J. E. LOUSLEY. "I have only seen one gathering of the Shapwick plant (coll. C. & N. Sandwith, September 1919, in *Herb. Kew.*); the fruits in that are distinctly smaller than those of Mr Lousley's specimens. Examination of a long series of specimens collected by Gibson and others in Essex, and comparison of these with the above Shapwick specimen, shows that there is no essential difference between the Somerset and Essex plants. The species evidently varies considerably from year to year, at least in its Essex localities. Mr Lousley's 1934 gatherings are, as he notes, remarkably fructiferous, a condition almost certainly attributable to the exceptionally dry summer."—H. K. AIRY-SHAW.

Guizotia abyssinica Cass. Waste ground, Dagenham, Essex, September 29, 1934.—R. MELVILLE. "Should be written *Guizotia abyssinica* (L. f.) Cass."—ED.

Cnicus pratensis Willd. Stanton, N. Staffs, June 23, 1934.—E. S. EDEES. "The best name under International Rules seems to be *Cirsium anglicum* (Lam.) DC., if Druce was right in rejecting F. N. Williams' application of *C. britannicum* Scop."—ED.

Hieracium serratifrons Almq., near var. *lepidoides* Johans. Det. H. W. PUGSLEY. Railway bank S. of Winchester, S. Hants, v.-c. 11, June 12, 1934. (Ref. No. 1087).—P. M. HALL.

Hieracium subravusculum (W. R. Linton). Limestone quarry, Micklefield, West Yorks, v.-c. 64, June 24, 1933. (Ref. No. 11).—W. A. SLEDGE. "In W. R. Linton's *British Hieracia subravusculum* was described as a variety of *H. vulgatum* Fr. Mr Sledge's plants clearly belong to *H. vulgatum* as understood by British botanists, but hardly seem referable to var. *subravusculum*, as this should have eglandular phyllaries. A single specimen on one sheet differs from the rest and has the phyllaries wholly glandular. This appears to be a small example of *H. diaphanum* Fr."—PUGSLEY.

Hieracium sp. Abbotsford, Roxburgh, July 30, 1934.—R. J. BURDON. "This seems to belong to the aggregate *H. serratifrons* Almq., but

not identical with the forms occurring in the south of England. The specimens are not very satisfactory."—PUGSLEY.

Gaultheria Shallon Pursh. Naturalised on the slopes of Leith Hill, Surrey, September 2, 1934. (Ref. F.24). Recorded from here in *Journ. Bot.*, 1914, 250, and 1915, 279, and repeated in *Rep. B.E.C.*, 1933, 533, and duly noted in Salmon's *Fl. Surrey*, p. 441, this plant appears very much at home on the steep slope of Leith Hill, where it is probably still spreading. It obviously originated in the garden of the house immediately below, in which it is still growing. The plant has been noticed as naturalised in the New Forest (*Journ. Bot.*, 1908, 198, and *Rep. B.E.C.*, 1928, 746), in Forfarshire (*Rep. B.E.C.*, 1915, 273), West Ross (*op. cit.*, 1926, 123), and Derbyshire (*op. cit.*, 1928, 746), but so far I have not traced any record that it is established in any continental country. *Gaultheria Shallon* is a native of North America, where it is known as "Sallal" or "Shallon," and is occasionally seen in cultivation in this country. Unfortunately many of the specimens distributed were over flower, but they show the berry-like capsules with fleshy non-adherent edible calyx with scarlet bracts, which are a feature of the plant.—J. E. LOUSLEY. "Hegi, *Ill. Pl. Mitt.-Eur.*, vii, 196 (1931), records both this species and *G. procumbens* L. as long established near Bremen, North Germany. It is not strictly accurate to speak of the 'berry-like capsules'; the berry-like fruit is composed of a normal, dry, loculicidal capsule surrounded by the eventually blue, fleshy, accrescent calyx."—H. K. AIRY-SHAW.

Pyrola rotundifolia L. Newham, Cheviotland, v.-c. 68, June 27, 1934. (Ref. No. 1136).—P. M. HALL and W. A. SLEDGE.

Limonium vulgare Mill. By the estuary of the Rivers Stour and Avon, Mundeford, Christchurch, S. Hants, v.-c. 11.—J. FRASER. "*Limonium* for the Sea-lavenders has been unanimously rejected in favour of *Statice* L. em. Willd. by the International Committee which recently considered the claims of numerous proposed additions to the list of *genera conservanda*. Our common Sea-lavender must therefore be known once more as *Statice Limonium* L."—ED.

Fracinus Oregona Nutt. Near Tenterden, E. Kent, v.-c. 15, July 19, 1934.—W. H. PEARSALL. "Doubtless a planted tree. It is the common Ash of North-west America, and is occasionally met with here as a cultivated tree. It was introduced more than half a century ago."—A. B. JACKSON.

Phacelia tanacetifolia Benth. Waste ground by maltings, Hythe Quay, Colchester, v.-c. 19, May 24, 1934. (Ref. No. 2499). In great quantity, less hispid than Dr Druce's specimen from Horsepath, Oxon, June 1922, but otherwise apparently identical.—G. C. BROWN. "Not *P. tanacetifolia*, but *P. ciliata* Benth. as understood by American botanists."—ED.

Benthamia Menziesii Lehm. Waste ground by maltings, Hythe Quay, Colchester, N. Essex, v.-c. 19, May 24, 1934. (Ref. No. 2498). Apex of nut acute, corrugated, corolla very prominent.—G. C. BROWN. "Dr I. M. Johnston, the American specialist in Boraginaceae, referred all our Bristol material of this genus, including specimens very similar to these, to *Amsinckia intermedia* Fisch. et Mey. The name *Benthamia* cannot be used for this genus under International Rules since it is a later homonym of *Benthamia* Rich."—ED.

Myosotis alpestris Schmidt. Dry Yoredale limestone turf at 2350 feet, Little Fell, above Hilton, Westmorland, v.-c. 69, June 5, 1933. Some members may be glad to have specimens from this very remote locality (first discovered there, I believe, by James Backhouse in 1852). The plant is very plentiful over about half a mile of ground on the S. side of the fell at 2300-2400 feet, both within the drainage area of the Teesdale Lune, and that of the Eden.—A. WILSON.

Myosotis sylvatica Hoffm. Manifold Valley, N. Staffs, May 31, 1934.—E. S. EDEES. "Correct. The length of the inflorescence in relation to the height of the plant is rather shorter than in the commonly cultivated form of *sylvatica*."—WADE.

Myosotis sylvatica Hoffm. Left bank of R. Chew, below Chew Magna, N. Somerset, May 1934, see *Journ. Bot.*, 1934, p. 320.—H. S. THOMPSON. "Correct. A robust form, probably due to habitat and suggesting *M. dissitiflora* in the size of the leaves."—WADE.

Cuscuta Trifolii Babington in *Annals & Mag. Nat. Hist.*, xvi, pp. 1-3 (1845), in three forms (see below). Pilgrim's Way, east of Wrotham, West Kent, August 15, 1934. (Ref. F.15). This Dodder grew in masses on native vegetation for about 40 yards by a chalky track, where it was discovered by A. H. Carter in 1933 when he noted it on at least ten different host plants of very various affinities. It occurs in three forms as now distributed:—(a) With large heads of waxy white flowers—perhaps chiefly on Labiatae; (b) an intermediate form, and (c) with much smaller flowers, distinctly coloured with red (especially on the calyces)—predominantly on *Lotus*. These three forms well agree in having the scales well down in the corolla tube with a rounded sinus between them, and with having usually much closer spirals than in *Epithymum*. They are not definitely linked to their respective host plants, neither is (c) a young state of (a) since the flowers are fully open. No one could reasonably doubt that they represent different growth forms of the same species. The question arises "What is *C. Trifolii* Bab.?" Babington himself appears to have changed his idea of his plant in the course of time. He had been engaged in a very thorough investigation of the corona (scales inside the corolla tube) of *Cuscuta* which led him to the published opinion that these represented aborted stamens, when, in 1843, C. G. Gibson sent him a Dodder which had been found rampant in the

clover fields of Essex and other counties. In the *Phytologist*, i, p. 467 (1843), Gibson published some correspondence from Babington on this plant, in which "*Trifolii*" was mentioned as a "provisional" name. This is the reference for the species given in *Index Kewensis* and elsewhere, but it is clear that at that time Babington did not fully understand his own species. In the *Annals and Magazine of Natural History*, xiii, p. 252 (1844), Babington gave a better description and an illustration clearly showing the saccate interstices between the corona segments. In the same periodical, vol. xvi, pp. 1-3, t. 1 (1845), he states that there were errors in his previous paper, and he describes his plant afresh. In the writer's opinion it is upon this last reference that we should rely. It is also apparent, in view of the work in which he had been previously engaged, that Babington's attention at this time was rather focussed on the corona character. Regarding this as the essential character in a variable plant we find it well illustrated by Babington (*l.c.*), Sowerby (*E.B.S.*, t. 2898), and Hegi (vi/3, p. 2097, fig. 3066), but the plant drawn in Butcher & Strudwick (fig. 264) does not agree. The present specimens all exhibited the rounded sinus between the scales in the corolla tube, together with the funnel shaped calyx as described by Babington. It may be added that the doubts expressed by Crépin (*Notes*, Fasc. 4, pp. 28-32 (1864)) as to the existence of a rounded sinus are probably explained by the Belgian plants which he had examined not being identical with the British. Babington stated that the flowers of *Trifolii* were "rather larger than those of *Epithimum*," and his description "Flowers small white" in various editions of the "Manual" must be read as contrasting with *C. europaea*. Probably the plant Babington had in mind was near to my form (b). My form (c) may be the var. *Muelleri* Rouy (*Fl. France*, x, p. 358 (1910)).—J. E. LOUSLEY. "This is a very interesting series and one would like a series of coloured plates of the "forms" made from living material. The population described might well repay more detailed analysis than is indicated in Mr Lousley's useful note. Are the three "forms" always clearly differentiated? Do they "come true" from seed? If so, what are their genetic relationships? The overcoming of obvious technical difficulties in cultivating such parasites would no doubt in itself throw light on some aspects of the still obscure subject of parasitism."—TURRILL.

Linaria spuria (L.) Mill. Cultivated field near The Rest, Porthcawl, v.-c. 41, Glamorgan.—Coll. Miss E. M. THOMAS; comm. DEPT. OF BOTANY, NATIONAL MUSEUM OF WALES.

Scrophularia alata Gilib. Near Scoulton, West Norfolk, October 11, 1934. (Ref. F.32). Goddijn & Goethart consider that the British plant is more correctly named as *S. Neesii* Wirtgen. (*Rep. B.E.C.*, 1931, 568/9). Further notes on this species will be found in *Trans. Bot. Soc. Edin.*, i, p. 57 (1843); *Journ. Bot.*, 1877, 306; *Irish Naturalist*, 1896, 182; and *Rep. B.E.C.*, 1915, 359.—J. E. LOUSLEY.

Limosella aquatica L. Breamore, S. Hants, v.-c. 11, August 26, 1934. (Ref. No. 1251).—P. M. HALL. "British botanists will be gratified to learn that their var. *tenuifolia* has at last been recognised as an independent species, see a very important paper by Prof. H. Glück in Engler, *Bot. Jahrb.*, 66, Heft 5 (1934). The correct name for the plant as a species is apparently *L. subulata* Ives."—Ed.

Veronica praecox All. Plentiful in three fields south of Barton Mills, West Suffolk, May 6, 1934. (Ref. F.17). See *Journ. Bot.*, 1933, 159/160; *Rep. B.E.C.*, 1933, 478. This plant extends over a considerably larger area than was at first thought, and whereas last year it was only noticed in fallows it has now been seen in several different crops. The Spring of 1934 being exceptionally late it was not to be found in flower in March, though the plants had almost attained the normal size of maturity. Five weeks later, when the present gathering was made, care had to be exercised not to gather specimens too far in fruit to press well!—J. E. LOUSLEY.

Euphrasia confusa Pugsley, f. *grandiflora* Pugsley. North-east side of Ward Hill, Hoy, Orkney, Scotland, August 20, 1934. (Ref. No. 4989).—HENRY HALGRO JOHNSTON. "*Euphrasia confusa* Pugsley, f. *grandiflora* Pugsley, with unusually fine-pointed leaf-segments and remarkably fine flowers. I think this year's gathering is identical with last year's."—PUGSLEY.

Euphrasia occidentalis Wettst. Lundy Island, N. Devon, July 1934. Leg. Dr F. R. E. WRIGHT; comm. W. H. PEARSALL. "Yes, rather dwarf *E. occidentalis* Wettst."—PUGSLEY.

Euphrasia anglica Pugsley. Rough hillside near Polperro, East Cornwall, July 21, 1934.—F. RILSTONE. "Yes, rather small specimens with small flowers, but otherwise quite characteristic."—PUGSLEY.

Euphrasia sp. Moor near Rothbury, Northumberland, July 31, 1934.—R. J. BURDON. "Is *E. confusa* Pugsl. (f. *albida*); not good specimens. A vice-county record for Cheviotland (v.-c. 68)."—PUGSLEY.

Euphrasia sp. Whim Lamancha, Peebles-shire, July 13, 1934.—R. J. BURDON. "Is *E. nemorosa* Löhr, var. *collina* Pugsl., gathered young, a v.-c. record for Peebles (v.-c. 78)."—PUGSLEY.

Euphrasia sp. Sharkham Point, S. Devon, July 4, 1934.—H. FOSTER. "Stunted *E. nemorosa* Löhr; poor material. Is this not Sharpham Point?"—PUGSLEY.

Melampyrum arvense L. In wheat, on clay subsoil, Newton Blossomville, Bucks, v.-c. 24, July 4, 1934.—Coll. A. W. PREVITE; comm. J. E. LITTLE. "Mr Little wrote that he sent a note on *M. arvense* to the

autumn issue of *Countryside*, 1934. The plant is abundant in some parishes in Essex, where it is known as 'Hogmeteg.'—ED.

Melampyrum pratense L., var. *ericetorum* D. Oliv. Abinger Common, Surrey, June 13, 1934. (Ref. No. 4125). For the knowledge of this locality I am indebted to my friend Mr A. Beadell, who brought to me from "Leith Hill" fresh examples of a Cow-wheat with purple flowers. On visiting the locality the variety was seen growing abundantly on roadside banks associated with *Vaccinium Myrtillus*, and was very noticeable owing to the prevailing purple hue of the flowers. At first the flowers are yellow, but, presumably as an after-effect of pollination, become ultimately a deep rose-purple hue. Var. *ericetorum* D. Oliver is represented in herbaria from several localities in the Leith Hill and Hurt Wood districts of Surrey, and was gathered by myself several years ago near Friday Street in the same area. All Surrey examples of this variety are of comparatively small dimensions, even at maturity.—C. E. BRITTON.

Melampyrum pratense L., var. *commutatum* Schoenh. Felbridge, Surrey, July 3, 1934. (Ref. No. 4140).—Coll. A. BEADELL; comm. C. E. BRITTON. Also from Ottershaw, Surrey, July 5, 1931. (Ref. No. 3808).—C. E. BRITTON. "*Melampyrum pratense* L., var. *commutatum* (Tausch) Beck. The authority for the varietal name is, following Beauverd, that now given, not "Schoenh.," as inadvertently given on the labels. The gatherings from Ottershaw (3808) and Felbridge (4140) obviously belong to an identical form, for which I can find no better name than the one applied. Var. *commutatum* was distinguished by Beauverd from its nearest ally, var. *vulgatum* "(Pers.) Beck" chiefly by reason of the more numerous intercalary leaves (2-5 pairs in var. *commutatum* against 0-2 pairs in var. *vulgatum*). The specimens distributed from both localities possess two or three pairs of intercalary leaves, and some plants bore four pairs. It may here be allowable to mention that the character of the number of pairs of intercalary leaves present in any variety is a remarkably constant feature, but can only be appreciated by examination of numerous individual plants of a gathering. Typically var. *commutatum* should possess rather broader leaves, both cauline and intercalary, than those of the plants distributed. I have seen other plants from England which are more satisfactory in that respect.—C. E. BRITTON.

Melampyrum pratense L., var. *lanceolatum* Spenn. Chelsham, Surrey, June 15, 1934 (Ref. No. 4127A). *Ibid.*, July 10, 1934 (Ref. No. 4127B). Near Broxbourne, Herts, June 28, 1930 (Ref. No. 3641). Horsey Common, W. Kent, July 5, 1934 (Ref. No. 4144). This variety is the common form of the species and occurs chiefly on argillaceous and siliceous soils. Attention is directed to the earlier and later gatherings from Chelsham, Surrey, showing differences in habit due to the age of the plants. The later gathering emphasises the need of securing

fully developed plants with both flowers and fruit. It is also essential for identification that complete specimens should be gathered. Too often *M. pratense* is seen in herbaria represented by the upper part of the plant only.—C. E. BRITTON.

Mentha rotundifolia Huds. Wet ditch by a hotel, Woolacombe, North Devon, August 12, 1934.—R. KNOWLING. "All the specimens correct, but some of them from the wetter part of the ditch had abnormally large leaves, deep teeth and very thin tomentum. Others were normal in these respects."—FRASER.

× *Mentha cordifolia* (Opiz) Fraser (*M. rotundifolia* × *spicata*). Grafham, near Bramley, Surrey, v.-c. 17, September 4, 1934.—Coll. A. L. STILL; comm. E. C. WALLACE. "Notice the exerted stamens. Can this be a sport from, say, *M. alopecuroides*, of which there was a vigorous plant in the midst of the plant contributed? The habit of the inflorescence in this plant and in *M. alopecuroides* is identical."—WALLACE. "The terminal spike is 4-6.5 cm. long and the flowers are purple. After the flowers drop, the spike will look very slender, especially when the whorls become separated. I would place this under *M. cordifolia* (Opiz) Fraser, var. *dourensis* Fraser. This makes my fourth British record of the variety."—FRASER. "The very deep colour of the flowers is surely unusual for × *Mentha cordifolia* Opiz. In view of this, and the deep serrations of the leaves, might this not be *Mentha spicata* Huds. × *M. alopecuroides* Hull?"—KNOWLING.

× *Mentha cordifolia* (Opiz) Fraser. Cult. Sutton, from Exmoor, S. Somerset, v.-c. 5, August 1934.—E. C. WALLACE. "I agree it is this hybrid, but it differs from the original in having oblong to narrowly oval leaves, instead of leaves of more ovate outline. All the other technical characters are present. The hybrid varies a little in Britain. I have one from near Norwich, with bright rose flowers, and the var. *dourensis* from N. Aberdeen, which has a slender terminal spike, up to 9 cm. long, the only one I considered worth a varietal name."—FRASER.

× *Mentha cordifolia* (Opiz) Fraser, var. *brevifolia* Fraser. Cult. Kew, from Abrook Common, Surrey, v.-c. 17, July 27, 1934. (*M. rotundifolia* × *spicata*). Both the hybrid and the variety were known to Sir J. E. Smith, who described them as varieties of *M. viridis*, without names.—J. FRASER.

× *Mentha cordifolia* (Opiz) Fraser, var. *dourensis* Fraser. Cult. Kew, from The Dour, New Aberdour, N. Aberdeen, v.-c. 93. The chief distinctions of the variety are the longer and more slender spikes, taking more after that of *M. spicata*, but with darker flowers than *M. rotundifolia*, and the leaves are more acute than those of × *M. cordifolia*. In seasons of more rain, the spikes can be longer and the leaves broader.—J. FRASER. "This plant is exactly like plants previously distributed under the name 'var. *dourensis* Fraser'."—WALLACE.

× *Mentha mollis* Fraser (*M. rotundifolia* × *spicata*). A sport from × *M. cordifolia* (Opiz) Frazer. Cult. Kew, Surrey, August 12, 1933, and August 11, 1934. I have noticed this sport in an isolated bed of × *M. cordifolia* for many years but separated it from the rest in 1933. The leaves can be broader, resembling *M. rotundifolia*, but it has had two very droughty seasons in our sandy soil. In 1929 I sent specimens of another sport from the same parent to the Watson Exchange Club. This had linear-lanceolate leaves, making an approach to *M. spicata*, but more hairy.—J. FRASER.

Mentha longifolia (L.) Huds., var. *pulverulenta* (Strail). By River Darent, Farningham, West Kent, September 23, 1934. (Ref. F.27). Although past their best these specimens may be useful to members as illustrating the persistence of a very rare mint. Specimens from this station were collected by James Groves in 1881 (*Rep. B.E.C.*, 1886, p. 156) and by Marshall in 1893 (*Rep. B.E.C.*, 1894, 458). Guided by these records, Mr A. L. Still rediscovered the plant this year after a special search, and directed me to the spot. The only other British station known to me is Tadworth, Surrey, whence I distributed specimens through both clubs in 1928, and where it still exists.—J. E. LOUSLEY. "All the gathering is uniform and correct. The leaves are very much smaller than usual, occasionally short and broad. The mealy character is present as usual on the upper surface chiefly, but the base of the hairs that give this appearance are brown or black. These changes show how drought can affect Mints."—FRASER.

Mentha spicata Huds. Swampy part of Coldharbour Common, near village, Surrey, v.-c. 17, August 6, 1934. Plants 1-2 m. high, with long-toothed narrow leaves, glabrous.—E. C. WALLACE. "Very fine specimens indeed. It is many years since I have seen *M. spicata* so free from rust (*Puccinia menthae*) which is the bane of this species, mostly everywhere at present, wild or cultivated. The height of the stems, and the narrowness of the leaves are also notable, and I hope Mr Wallace will give an opinion as to any local causes that may have conduced to these excellent results."—FRASER.

Mentha piperita L. Holmwood Common, amongst nettles and gorse, Surrey, v.-c. 17, September 1, 1934. This is not the usual plant with tapering cuneate leaf bases, nor is it quite the var. *subcordata* Fraser. A greater supply of moisture at the roots would probably, however, cause this plant to be well marked *subcordata*.—E. C. WALLACE. "Beautiful, very tall and very floriferous specimens. The very short spikes, short, broad leaves, rounded at the base, and suddenly narrowed to the apex make this *M. piperita* L., var. *subcordata* Fraser. Only the upper leaves are inclined to be subcordate, but they are easily obtained in a garden or small stream. The typical *M. piperita* has longer spikes, longer leaves more gradually acuminate and decidedly cuneate at the base."—FRASER. "Is this the type? The small heads

and small upper leaves with their rounded and subcordate bases seem to bring the plant near to Sole's var. *vulgaris* and Briquet's var. *Druceana*. The serratures are too many and too deep for the latter, and as the lower leaves are decidedly cuneate at the base I suggest var. *vulgaris*."—KNOWLING.

Mentha aquatica L., forma. Brook, Pebmarsh, N. Essex, v.-c. 19, September 6, 1934. (Ref. No. 2506). Plant soon reddening, and flowers deep in colour; it has signs of *verticillata* influence.—G. C. BROWN. "Not the typical *M. aquatica*, but *M. aquatica* L., var. *major* Sole, which has longer, more acuminate leaves, and more or less narrowed or cuneate at the base. It might be a cross between the two, but I consider all the modifications due to excess of moisture. In semi-liquid mud the leaves may turn red, brown or violet."—FRASER.

×*Mentha hircina* (Hull) Fraser. Hort. Streatham; root from R. F. Towndrow. August 19, 1934. (Ref. No. F.33). Of this plant Mr Towndrow writes: "It was found for the first time in Worcestershire on the Leigh Brook, Alfrick, and I have not seen it elsewhere, though it occurs for some distance along that brook. It was found by the late A. R. Waller and myself in 1884, and is included in the *Bot. Record Club Rep.* of 1887. The *Botany of Worcester* makes it a hybrid of *aquatica* and *longifolia*." To judge from other specimens and descriptions the plant has become less hairy, and the leaves broader and less coarse in cultivation.—J. E. LOUSLEY. "Rather this is ×*M. palustris* (Sole) Fraser. The chief difference between it and Sole's Plate 6 is that the terminal spike of the latter is narrowed to an obtuse point, whereas J. E. Lousley's specimens are distinctly capitate with a broad head, showing the influence of the *M. aquatica* parent very clearly. There has been no distribution of the typical ×*M. hircina* for many years past—only the tomentose variety of it."—FRASER. "In my opinion this is ×*Mentha palustris* (Sole), which has the same parentage as ×*Mentha hircina* (Hull), but differs in having the leaves much nearer in shape to the *aquatica* parent, whereas in ×*Mentha hircina* (Hull) they are nearer the *longifolia* parent."—KNOWLING.

×*Mentha verticillata* (L.). Penhallow, Perranzabuloe, West Cornwall, September 8, 1934.—F. RILSTONE. "Not the type of Linnaeus, but ×*M. verticillata* (L.), var. *ovalifolia* (Opiz) H. Braun. Leaves oval, with a very convex margin. The leaves are more hairy than usual for a plant most frequent by pools, ponds and river banks."—FRASER. "Yes, and I presume one of the many forms of var. *rivalis* Briquet, as the leaves are more or less attenuate at the base."—KNOWLING. "Is covered by the name var. *paludosa* Sole."—WALLACE.

×*Mentha verticillata* (L.), var. *paludosa* (Sole). Wet meadow, Braunton Burrows, North Devon, August 14, 1934. This answers to ×*M. verticillata*, var. *paludosa* Sole, but is not the variety really simply

a form? The characters seem to be inconstant enough, and the subspicate inflorescence—which appears to be the best character—is often verticillate.—R. KNOWLING. “All the specimens are the var. *paludosa* (Sole), but one sheet was made up of six miniature specimens with small leaves and a crowded inflorescence. They should have been distributed singly on other sheets. If they had been less densely hairy they could have been passed as the var. *adulterina* Briq., and could not have given a beginner a good idea of var. *paludosa* (Sole).”—FRASER. “Rather immature, but even so scarcely var. *paludosa* Sole.”—WALLACE.

Mentha aquatica × *arvensis* (*sativa* L.). Sharpham Peatmoor, N. Somerset, August 25, 1934. In considerable variety there.—H. S. THOMPSON. “One of the pieces has rather broad leaves, and two other pieces have small leaves and much larger bracts (floral leaves). I have seen *M. arvensis* doing this in the garden, and wild state, when June was dry, and July or August wet. All the others in the gathering have small leaves similar to those of *M. arvensis*, but with the calyx teeth of the hybrid. I name it ×*M. aquatica* × *arvensis*, var. *Lintoni* or, as Briquet had it, ×*M. verticillata* (L.), var. *Lintoni* Briq. Some of the pieces are very much branched but there is nothing out of the way in that. In *Menthae Britannicae* I described the stem as apparently simple, because that was due to the single stem given me to describe.”—FRASER. “Two different plants on my sheet.”—WALLACE.

×*Mentha gentilis* L. Ditches about Llangennith, Gower, Glamorgan, v.-c. 41, August 1934.—Coll. A. L. STILL; comm. E. C. WALLACE. “This plant closely resembles a sheet in Herb. Brit. Mus. from E. F. Linton's collection, labelled *M. gentilis*, var. *Pauliana* F. Schultz, ‘near Penard Castle, Gower.’ It bears a note ‘agreed to by Malinvaud.’ I could not find any *M. gentilis* in that locality, and Linton's sheet is of a late gathering and not a very good specimen, but I think this Llangennith plant is the same thing. Whether it is var. *Pauliana* is another question. This is not a very well-defined variety.”—A. L. STILL. “The hairs on the calyx teeth are better developed, the stems are stronger, more branched, with shorter internodes, and the leaves are larger than those of the Leith Hill specimens. The stems and leaves are mostly distinctly less hairy. All these characters I attribute to the moister, more equable, climate of Wales, except the branching stems, which is the usual character of ×*M. gentilis*, where not too crowded in itself or with other vegetation. Smith called it the Bushy Red Mint.”—FRASER. “The hairs on the calyx teeth are very long and numerous, so that this might well be Schultz's variety *Pauliana*.”—KNOWLING.

×*Mentha gentilis* L. Swamp by stream, Broadmoor, Leith Hill, Surrey, v.-c. 17, August 6, 1934. Discovered here in 1933 by A. L. Still.—E. C. WALLACE. “All the gathering uniformly ×*M. gentilis*. The hairs on the calyx teeth are short, sometimes few, but much better on the unopened buds. Other features are small leaves, long, slender,

and little or not branched stems, a good example of how drought and environment can modify Mints."—FRASER.

Mentha arvensis L. Hedgerow, Woolacombe, N. Devon, August 13, 1934. The specimens are very starved, due to shallowness of soil and over-abundance of stones. Leaves broadest at the base, and pedicels hairy. This would appear to bring the plant under \times *Mentha verticillata*, but the calyx teeth are too short. The capitate inflorescence on some of the specimens is unusual for *M. arvensis* L.—R. KNOWLING. "Correctly named. A dry situation and a droughty season account for the dwarf habit, contracted inflorescence, and both sides of the leaves being densely hairy. These variations are not uncommon. I also have a variety of \times *verticillata* (L.), with the stem ending in a capitulum."—FRASER. "Mr Knowling labelled his specimens *M. arvensis*, var. *densifoliata* Briq., but Mr Fraser omitted the varietal name in returning his criticism, so that his 'correctly named' may merely refer to *M. arvensis*."—ED.

Mentha arvensis L. Wet meadow, Dumnagiass, Struy, Inverness-shire, August 18, 1934.—R. KNOWLING. "All are *M. arvensis* with elliptic leaves more or less hairy on both sides. The type of Linnaeus has glabrous pedicels and few are of this character; but most of them have more or less hairy pedicels and would come under f. *hirtipes* Fraser, though this character is not of great importance."—FRASER.

Lamium hybridum Vill. Northern Bye-Pass, Oxford, May 30, 1934.—J. CHAPPLE.

Lamium hybridum Vill. Waste ground, Brislington, N. Somerset, v.-c. 6, May 2, 1934. The shape of the leaves and the length of the corolla tube suggest *Lamium purpureum*, var. *decepiens* Sond., but as there is no ring of hairs in the tube it is probably *L. hybridum* Vill.—IDA M. ROPER. "The leaf shape in my specimen is that of *L. hybridum*, not that of *L. purpureum*, var. *decepiens* Sond. The length of the corolla tube depends on whether the flowers are cleistogamous or entomophilous (see *Rep. B.E.C.*, 1912, 277)."—WILMOTT.

Herniaria hirsuta L. A garden weed since introduction in 1923, Newport, Isle of Wight, September 1932.—J. W. LONG.

Chenopodium rubrum L. Moist hollow among sand dunes, Perranporth, West Cornwall, October 1, 1934. All the plants collected were prostrate and comparatively small but there were many equally small erect plants and a few enormous prostrate ones. The erect plants had apparently flowered earlier; they were too far gone for collecting.—F. RILSTONE. "This comes under the variety or form *pseudo-botryoides* Syme, but these plants are not identical with some sent in 1932 from Byfield, Northants."—WALLACE.

Chenopodium Botryodes Sm. Northney, Hayling Island, v.-c. 11, September 7, 1934. (Ref. No. 15).—Leg. P. M. HALL and W. A. SLEDGE. Comm. W. A. SLEDGE. "*C. intermedium* Mertens et Koch."—WATSON. "*C. intermedium* Mert. et Koch is treated by authors as a variety or form of *C. urbicum*. Mr Watson would not presumably put any such interpretation on Dr Sledge's plant."—ED.

Chenopodium urbicum L. or var. *intermedium* (M. et K.) Moq. Border of waste ground by bank of R. Avon, Feeder Road, Bristol, August 11 and September 3, 1934. By September 3 the top of this much-branched plant had been cut or knocked off.—H. S. THOMPSON. "*C. rubrum* L."—ED.

Salicornia ramosissima Woods. Ditch by R. Colne, Alresford, N. Essex, v.-c. 19, September 16, 1934. (Ref. No. 2507).—G. C. BROWN. "Correctly placed under this aggregate name, but these forms need further subdivision."—WILMOTT.

Salicornia appressa Dum. Muddy depression in salt marsh, N. Hayling, S. Hants, September 30, 1933. (Ref. No. 994).—P. M. HALL. "Although I named this for Mr Hall last year, I think it is best put under *S. Smithiana* Moss, having since seen it *in situ*."—WILMOTT.

Salicornia disarticulata Moss. N. Hayling, S. Hants, September 30, 1933. (Ref. No. 993).—P. M. HALL. "Correct."—WILMOTT.

Salicornia spp., general note. "Without notes on many points which are lost in drying, it is impossible at present to make satisfactory determinations from dried material alone. I should be glad if contributors who propose sending material of this genus for distribution would send me some of the material fresh."—A. J. WILMOTT.

Polygonum maculatum Trim. et Dyer? Small, hoary, nearly prostrate form; ?due to position on sun-scorched, sandy waste. Sandown, Isle of Wight, June 30, 1934.—Jas. W. LONG. "Gathered too early in the season, as most of the plants are only at the beginning of the flowering period. Ripe fruit is essential in the determination of *Polygona*, and very few mature nutlets can be found in the entire gathering, but those present are characteristic of *P. lapathifolium* L., not of *P. nodosum* (*P. maculatum* of English collectors). It will be recognised that these plants do not represent the ordinary field form of *P. lapathifolium*, but belong to the var. *tomentosum* (Schrank) Beck, as a small prostrate form."—BRITTON.

Polygonum nodosum Pers., var. *incrassatum* Rouy, f. *stenophyllum* C. E. Britton. Staffhurst Wood, Surrey, August 14, 1934. (Ref. No. 4161).—C. E. BRITTON; coll. A. BEADELL.

Polygonum nodosum Pers., var. *erectum* Rouy × *P. Persicaria* L.? Roadside weed, Buckingham Place, Clifton, v.-c. 34, September 7, 1934.

See C. E. Britton's note (on plants from same ground) in *B.E.C. Rep.*, 1933, 230.—H. S. THOMPSON. "Has the habit of *P. Persicaria* L., var. *ruderales* Meisn., but I do not think it is that, although it may be an impure strain of the species in question, arising from a former crossing with an allied species marked by the glandular development of the peduncles and perianths, e.g., *P. lapathifolium* or *P. nodosum*. The feature that first attracts attention is the presence of scattered sessile or pedicelled glands on the peduncles and the abundant mostly small glands on the perianths. The ochreae display mixed characters as they are lax (as in *P. lapathifolium*) but strongly fringed (as in *P. Persicaria*). The marginal bristles moreover are not uniform in length (as in *P. Persicaria*) but include many of lesser size, and smaller marginal bristles are characters of *P. lapathifolium* and *P. nodosum*. The mature nutlets also exhibit mixed characters and there is a good deal of minor variability among them. The following forms may be recognised: (1) Broadly ovate in outline, tri-lobed, lobes compressed; (2) compressed, broadly ovate, concavo-convex; (3) compressed, orbicular-ovate, one surface convex and gibbous, the other concave; (4) compressed, orbicular-ovate, one surface convex, more prominently gibbous than the preceding, the second surface depressed, with a central broad keel about $\frac{1}{4}$ the length of fruit; (5) compressed, orbicular-ovate, convex and gibbous on one surface, plane on the other; (6) compressed, orbicular-ovate, bi-convex, both surfaces with an obscure central ridge. In the case of *P. nodosum* and *P. lapathifolium* the compressed nutlets are orbicular or orbicular-oval bi-concave, with or without indications of a central ridge; rarely the nutlets are tri-lobed. In *P. Persicaria* the nutlets are tri-lobed or plano-convex, the plane surface occasionally showing traces of a central ridge. It will be seen from the details given of the Clifton plant that the fruits differ from those of *P. Persicaria* and *P. nodosum* and exhibit characters of each. Whilst the plants certainly appear close to *P. Persicaria* in major characters, they also appear, in my opinion, to possess features derived from a second species, viz., *P. nodosum* (the small glands indicate this rather than *P. lapathifolium*). I would write the name *P. nodosum* \times $<$ *P. Persicaria*."—BRITTON.

Polygonum lapathifolium L., var. *tomentosum* (Schrank) Beck. Cultivated field, Llanrumney, v.-c. 35, Monmouthshire, coll. A. E. WADE, October 3, 1934; comm. DEPT. OF BOTANY, NATIONAL MUSEUM OF WALES. "This would appear to come under the var. *tomentosum* Beck., although not an extreme form of it."—WADE. "Scarcely characteristic of the variety. I like to see the leaves really white-felted before applying the varietal name, not greenish-grey, as most of these are."—BRITTON.

Polygonum Bungeanum Turcz. Cultivated in 1934 in the Groningen Botanic Garden (Holland) from seeds of a specimen collected in 1933

by W. A. Sledge, Olympia Sidings, Selby (*Rep. B.E.C.*, 1933, vol. x, part iii, p. 481).—B. H. DANSER.

Rumex salicifolius Weinm. Near Mitcham, Surrey, August 28, 1934. (Ref. F.22). See *Journ. Bot.*, 1913, 280, and *Rep. B.E.C.*, 1926, 48. Danser has recently made two subspecies under this name (*Nederl. Kruid. Arch. Jaarg.*, 414, 1925), but I do not know under which of these the present plant comes. *R. salicifolius* has become a much more frequent alien in recent years, and, although it is probably pure coincidence, it is noticeable that most of the British records are from railway banks or sidings. The present specimens were from a station found by Mr A. H. Carter, where a few plants grew by some houses in course of erection near a railway.—J. E. LOUSLEY.

Salix aurita × *Caprea*. (*S. capreola* Kerner). Merstham chalk-pits, Surrey, April 14, 1929 and July 10, 1932. (Ref. No. 442).—J. FRASER.

Salix aurita × *lapponum*. With both parents beside Allt an Loch, Glen Callater, alt. 620 m., South Aberdeen, v.-c. 92, July 12, 1934. (Ref. No. S.5).—R. MACKECHNIE and E. C. WALLACE. "All uniformly correct for one form of this variable hybrid. *S. aurita* is seen in the obovate, rugose leaves with acute, twisted apex, crenate serratures (if any), undulate margins, glabrous and shining year old wood and buds. To *S. lapponum* belong the mostly entire leaves, grey-green, woolly pilose upper surface, and grey tomentose under surface of the leaves and short shoots."—FRASER.

Salix atrocineria × *aurita*. (*S. Charrieri* Chass.). Whyteleafe, Caterham Valley, Surrey, v.-c. 17. (Ref. No. 579). Some collected May 1, 1932; August 28, 1932; others March 26, 1933; August 28, 1932, but all from the same bush. The pseudospecific name was given by Chasagne to this hybrid in France, where *S. atrocineria* is rare.—J. FRASER.

Salix (arenaria) × *repens*. (*S. fusca* L.). Littleworth Common, Surrey, v.-c. 17, May 3, August 9, 1931. (Ref. No. 759). It will be noticed that *S. arenaria* is written within brackets; that means that Dr Floderus was a little doubtful if it was one of the parents of this hybrid. The underside of the leaves has, however, the satiny gloss of *S. arenaria*, a little obscured by the darkening of the leaves. The other parent could not have been *S. aurita*, because I have that in its smallest form, and the leaves are shorter and broader than those of this plant.—J. FRASER.

Salix repens L., ♀. Tiptree Heath, N. Essex, v.-c. 19, May 20, 1934. (Ref. No. 2497). Quite prostrate.—G. C. BROWN. "Correct; a small leaved form of the usual run of *S. repens*. Dr Floderus, of Stockholm, claims that *S. repens* should have glabrous ovaries and pedicels, and a long style. I have fifty sheets or more of the group, but only a very few of two varieties have glabrous ovaries. A larger number have

glabrous fruits, owing to glabrescence during the growth of the fruit. The pedicels of my varieties with glabrous ovaries have downy pedicels. Dr Floderus classes all those with hairs on any part as *S. arenaria* × *repens*. I retain all names given by Linnaeus, Smith and Wulfen, merely writing the above parentage on the covers. This mixture pervades the whole of Britain. Glabrous pedicels are extremely rare. *S. arenaria* of Dr Floderus is *S. argentea* Sm., a maritime variety."—FRASER.

Empetrum nigrum L. Craig-y-Cilau, near Crickhowell, Breconshire, v.-c. 42, coll. H. A. HYDE, June 20, 1932.—COMM. DEPT. OF BOTANY, NATIONAL MUSEUM OF WALES.

Juncus maritimus L. Berrow salt marsh, N. Somerset, October 10, 1934. Only one large clump seen. It had 50 heads, and was associated with *Scirpus maritimus*, *Aster Tripolium*, etc. Very rare in Somerset.—H. S. THOMPSON.

Juncus bulbosus L., var. *fluitans* (Lam.). Black Pond, Esher Common, Surrey, v.-c. 17, July 26, 1931. I have not been able to supply fruiting pieces in all cases, but have aimed at getting rosettes of the filiform, floating or submerged leaves.—J. FRASER. "Yes, *Juncus supinus* Moench, subsp. *eu-supinus* Asch. & Graeb., var. *fluitans* (Lam.). To be distinguished from the var. *confervaceus* St Lager, which is a form of deeper water with longer, filiform, less divaricate leaves. Plants mentioned in *Rep. B.E.C.*, 137/8, 1885, and 423, 1893, as var. *fluitans* are more probably var. *confervaceus*, but I have not seen specimens. These very interesting water forms are well worth naming as they differ so greatly in appearance from the land forms of *J. supinus* that they prove serious stumbling blocks to beginners unless attention is directed to them."—LOUSLEY.

Juncus compressus Jacq. Pixey's Mead, Oxford, July 3, 1934.—J. CHAPPLE.

Juncus compressus × *Gerardi*. (×*J. transiens* Druce). Pegwell Bay, East Kent, August 11, 1934. (Ref. F.16). This plant occurred under ideal conditions for the name suggested. There was a large patch of *J. compressus* Jacq. with rich dark green leaves, a patch of *J. Gerardi* with lighter green leaves, and between them the "hybrid" of an intermediate shade. Closer inspection showed that the rhizomes of the hybrid were intermingled with those of the two supposed parents at several places, but the general effect as seen from the path was very noticeable. Whether these colour differences in the leaves obtain generally for the parents is doubtful—I have not noticed it elsewhere. The hybrid was perhaps first noticed by Haussknecht (*Mitth. Geogr. Ges. Thür.*, ii, 217 (1884)), and is mentioned in Buchenau's Monograph of the genus, where he says "Probabiliter frequentius formatur." In this country the name has been suggested for several gatherings, but

opinion of the Referees has differed. The present plants, although bearing occasional capsules, had a markedly infertile weakly general appearance in the field, even where intermixed with the supposed parents. As the "hybrid" had a strong rhizome, and the gathering was fairly uniform it is possible that it only arose once, and that the whole colony was formed by vegetative reproduction. However, the clay in which they were growing had become extremely hard, and it was impractical to obtain more than a few fragments of the underground parts for distribution. Owing to the great difficulty of finding a sufficient number of reliable characters to distinguish between the putative parents I should not feel justified in describing these plants as the hybrid without expressing some doubt, but of three points I feel quite certain: (1) The plants distributed are not a shade form. On bare mud they were merely dwarfed, while remaining essentially the same. (2) They are not merely an immature form. Some had capsules formed, while the fact that a large patch was in the same conditions is against this view. (3) They differ from the normal form of both *compressus* and *Gerardi*, and at once impressed me as something new. I cannot trace that Druce ever published a description of his *J. transiens*.—J. E. LOUSLEY.

Juncus macer S. F. Gray. Pathside in a pasture near Gwaelod-y-Garth, Taff's Well, Glamorgan, v.-c. 41, coll. A. E. WADE, July 8, 1934.—Comm. DEPT OF BOTANY, NATIONAL MUSEUM OF WALES.

Luzula albida (Hoffm.) Lam. et DC. Garden, Newport, Isle of Wight, August 1933.—J. W. LONG. "Yes, and perhaps the correct name under International Rules, the combination *L. nemorosa* (Poll.) E. Mey. being invalid owing to the previous combination *L. nemorosa* (Host) Baung. (1816) based on *Juncus nemorosus* Host, non Poll. This is the form with white perianth segments (var. *leucanthema* Wallr. and the later var. *typica* Beck), other Kew sheets from Britain—woods between Tintern and the Wyndcliffe, Monmouth, SANDWICH; Dumfries, ENOCH—being referable rather to the var. *erythranthema* Wallr. = *L. rubella* Hoppe)."—ED.

Potamogeton polygonifolius Pourr., var. *lanceifolius* (Ch. & Schl.) Asch. et Gr., f. nov. *attenuatus* Pears. Lundy Island, N. Devon, v.-c. 4, July 1934, leg. Dr F. R. E. WRIGHT.—Comm. W. H. PEARSALL. None of the existing descriptions of the varieties of *P. polygonifolius* is entirely applicable to these plants. They rarely produce floating leaves and these are not the normal coriaceous leaves of this species but merely subcoriaceous, transparent, and having a cancellate venation suggesting that of *P. coloratus*. Moreover, their submerged leaves are normally only half the width (5-6 mm.) of the narrowest similar leaves of the var. *lanceifolius* as originally described. (See Plant Notes). I propose therefore to describe them as a new form under that variety. F. nov. *attenuatus* Pears. *Folia omnia lanceolata; natantia pauca*

subcoriacea cancellata, submersa numerosa tenuissima angustissime lanceolata, ca. 5-6 mm. lata, basi apiceque longe attenuata. Fructus non visus. In aqua stagnante. Typus in Herb. Mus. Brit. So far I have only seen examples of this form from some of the deeper English Lakes—e.g. Wastwater and Ullswater—and from Lundy Island. Normally these plants are sterile, neither flowers nor fruits having been seen. All leaves are of very delicate texture, the floating being few in number—or more often absent—subcoriaceous, transparent, and of cancellate venation. The submersed leaves are unusually narrow, most often 5-6 mm. at their widest part, sometimes less and seldom more. They taper very gradually to each end and are therefore relatively very long, ca. 10-18 cm. Their margins are quite entire and smooth, the midrib broad and prominent with rows of elongate reticulate lacunae on either side. The petioles are long, ca. 5-8 cm., and may be shorter than the laminae (most often), or occasionally as much as twice the length. The var. *lanceifolius* frequently occurs in running water and the leaves owe their lanceolate shape to the constant mechanical strain of the current, but the same result is obtained when the leaves are produced in still water under the adverse conditions of low light-intensity due to depth or turbidity—suspended peaty matter or the frequent disturbance of the bottom by diving wildfowl. The f. *attenuatus* has hitherto only been seen from still water in which the latter conditions obtain.—

PEARSALL.

Potamogeton lucens L., var. *longifolius* DC. Det. W. H. PEARSALL. R. Avon, Sopley, S. Hants, v.-c. 11, August 26, 1934. (Ref. No. 1067).—P. M. HALL. "This variety is characteristic of our southern chalk streams and other rivers (e.g. R. Wye at Symond's Yat) having a heavy 'pull.' It is *P. lucens* L., var. *longifolius* DC. (*Fl. Fr.*, vi, 311, 1815). Other synonymous names are *P. macrophyllus* Wölg. in Roem. et Schultes, *Mantissa*, iii, 358, 1827; *P. longifolius* Gay in Lamarck, *Encycl. méth. Bot.*, 535, 1816, and *P. lucens* L., var. *longifolius* (Gay) Cham. et Schlecht. in *Linnaea*, ii, 198, 1827. It is not the *P. longifolius* Bab. in *E.B.S.*, t. 2847, 1840. This is the Lough Corrib plant (1835) not re-found, the *P. Babingtonii* Ar. Benn. in *Journ. Bot.*, 204-5, 1894 (*P. lucens* × *praelongus*). Below will be found an account of another plant × *P. decipiens* Nolte, var. *longifolius* Hagstr., gathered at the same time in the same place. Such an opportunity for comparison and contrast so seldom occurs that I propose to adopt this invaluable method of describing both plants in some detail, alluding to *P. lucens* L., var. *longifolius* DC., as the former, and to × *P. decipiens* Nolte, var. *longifolius* Hagstr., as the latter. As their names imply, both possess very long leaves—up to 9 in. (22.8 cm.) or more in length—and both exhibit some or all of the characters of *P. lucens*. In the absence of fruit the leaf-bases and margins, together with the venation, afford the best diagnostic characters and need very careful examination. The use of a good microscope is essential for the study of the leaf-margins and it is necessary to remember that all their minute projections are easily abraded by

the constant friction between the leaves caused by any river current. They are, therefore, often absent from the older leaves but may always be found on the young leaves, especially those at the stem or branch tips. Normally the leaves of *P. lucens* show fine forward-pointing serrulations and between each pair there is a shallow and long concave sinus suggesting the curve of a horse's back with a serrulation at the forward end taking the curve of the animal's neck. This character is well shown in the former and occasionally found in the latter. In *P. perfoliatus* the marginal projections are smaller—denticulations rather than serrulations—are more erect (patent) and less forwardly-directed, less numerous and have between them a straight line of the marginal cells. These denticulations may be found in varying degree on the youngest leaves of the latter, often together with some of the *lucens* serrulations already described. As a rule no lens magnification is needed for an examination of the venation. It will usually be sufficient to hold a leaf up to the light and to look through it. Between the principal longitudinal veins and the short transverse veins joining them are what I have termed 'nerve-spaces'—the larger of which are roughly oblong in form, much longer than broad. These oblongs are best shown in the latter (*decipiens*) plant and run longitudinally, parallel to the midrib, and are in that direction often very long (infl. of *perfoliatus*). In the former (*lucens*) plant these oblongs run transversely at an angle of 60°-75° to the midrib, somewhat like the branches of a tree. This character of the nervation has hitherto received little attention but is of very considerable diagnostic value. The leaf-bases of these two very similar plants are quite different. In the former they are the normal leaf-bases of *P. lucens*, narrowed, neither rounded nor amplexicaul but very shortly petiolate, or often apparently sessile owing to the decurrent lamina. In the latter (*decipiens*) plant the leaf-bases are rounded, sessile and ± amplexicaul, through the greater influence of *perfoliatus*. As regards length, there is little to choose between the two plants. The largest leaves of the former measured 23.5 × 3.0 cm. and 23.8 × 3.7 cm. Those of the latter were 21.2 × 2.4 cm. and 21.7 × 2.0 cm. In neither case were the leaves fully grown at this early date, May 21, 1934."—PEARSALL.

Potamogeton lucens L., var. *longifolius* DC. R. Avon, near Sopley, S. Hants, May 21, 1934.—W. H. PEARSALL.

×*Potamogeton decipiens* Nolte, var. *longifolius* Hagstr., f. *upsaliensis* (Tis.) Hagstr. Det. W. H. PEARSALL. R. Avon, Sopley, S. Hants, v.-c. 11, August 26, 1934. (Ref. No. 1066A).—P. M. HALL. "×*P. decipiens* Nolte, var. *longifolius* Hagstr., f. *upsaliensis* (Tis.) Hagstr. (= *P. upsaliensis* Tis., f. *geminus* Tis. Potamog. suec. exs. nos 79-80). This very distinctive form was first gathered in Britain by Miss Ida Roper in June 1916 from a millpond near Wool, Dorset, and queried as '*P. lucens* f.' (see *Journ. Bot.*, 348, 1917). In May 1917 it was collected by the late Dr G. C. Druce at Bindon, Dorset (*Rep. B.E.C.*,

252, 1917). In both cases the plants were determined by the late Mr Arth. Bennett. On May 5, 1934, Mr P. M. Hall and I collected further plants for distribution from the R. Avon near Sopley, S. Hants. The nomenclature of this particular form of the hybrid $\times P. decipiens$ Nolte ($P. lucens \times perfoliatus$) is very involved and the correct citation of the name is therefore a matter of some importance. It cannot be cited as var. *upsaliensis* Tis. (cf. *L.C.*, 1954c) as Tiselius included several different forms under his *P. upsaliensis* Tis. and we are here only concerned with one of them, f. *genuinus*. Moreover, there was already in existence a var. *upsaliensis* Asch. et Gr. (*Synops. Mitteleurop. Fl.*, i, 332, 1897) based upon the same *P. upsaliensis* Tiselius but wrongly given (*l.c.*) as a variety of another hybrid, $P. lucens \times praelongus$. The simplest and most unequivocal citation would be *P. upsaliensis* Tis., f. *genuinus* Tis. (as above), but that would hide the fact that the plant is the hybrid $P. lucens \times perfoliatus$ and it is agreed that all the varying forms of this should be included under the common name of $\times P. decipiens$ —as all the forms of the hybrid $P. gramineus \times perfoliatus$ are included under $\times P. nitens$. The citation given at the head of this note, although cumbersome, is unambiguous and definitely bases the name upon two well-known exsiccata. A further reason for not retaining var. *upsaliensis* Tis. is that Ascherson and Graebner in their more recent work (*Synops.*, ii, 506, 1913) still wrongly include it under $P. praelongus \times lucens$ —which is known only from Denmark and possesses leaves with smooth margins (infl. of *P. praelongus*). The British plant is unquestionably a form of the hybrid $P. decipiens$ ($P. lucens \times perfoliatus$)—the R. Avon plants of *P. lucens*, var. *longifolius \times perfoliatus*, with both of which they were growing. The evidence for *P. lucens* is seen in the longer leaves—twice the length of any *P. perfoliatus* can show—the presence of fine marginal serrulations (in addition to the more minute denticles of *perfoliatus*) on many of the leaves and often an acuminate apex. The evidence for *P. perfoliatus* is even stronger, the rounded, sessile, \pm amplexicaul leaf-bases, the minute marginal denticulations and the lighter-coloured parallel principal longitudinal veins, usually readily visible to the unaided vision.”—PEARSALL. “No trace of any flowering or fruiting spikes were found on any visit, and the plant appears to be completely barren.”—HALL.

Potamogeton pusillus L., det. W. H. PEARSALL. Canal, Odiham, N. Hants, v.-c. 12, July 8, 1934. (Ref. No. 1215).—P. M. HALL.

Potamogeton pusillus L., var. *tenuissimus* M. & K., det. W. H. PEARSALL. Pond in grounds of Botleigh Grange, Botley, S. Hants, v.-c. 11, August 5, 1934. (Ref. No. 1248).—P. M. HALL.

Potamogeton trichoides Cham. & Schlecht. Hedge Court Mill-pond, Surrey, July 28, 1934. (Ref. F.30).—J. E. LOUSLEY. “Correctly named but gathered too late in the season. Usually this species shows very

numerous fruiting spikes but only 2 sheets of this gathering possessed any, and the fruits were few in number. All these very narrow-leaved *Potamogetons* shed their fruits quickly, and very rapidly turn black. It is extremely difficult to collect them just at the right time, showing green leaves and mature fruits. This species has been known from the same habitat since 1879, and *P. pusillus* also occurs there. In the Stockholm Hbm. is a specimen collected by Beeby which Dr Hagström considered to be the hybrid between these two species. Mr Lousley's plants are *P. trichoides*, and although there are few fruits they are extremely interesting, being quite smooth on their margins. This is the var. *liocarpus* Asch. (*Fl. Prov. Brandenb.* (1864), 665), agreeing with Chamisso's description, figure and specimens in the Berlin Hbm. The more common form, however, possesses warts, bosses or protuberances along its margins in varying degree, and is the var. *tuberculosis* Reichb., *Ic. fl. Germ. Helv.*, vii (1845), 13, t. xxii, f. 35 (*P. condylocarpus* Tausch)—the so-called var. *Trimmeri* Casp. Good fruiting examples of this were sent me this year by Lady Davy from near Weston-super-Mare. The leaves of this species are always 3-nerved, the midrib is very prominent but the two lateral veins are near the margin and very faint, joining the midrib much further from the apex than in the case of *P. pusillus*. There are no parallel lines of lacunae on either side the midrib, and the very acute apex further distinguishes this species." —PEARSALL.

Potamogeton sp. Drain near Mepal, Cambs, August 19, 1934. (Ref. F.40).—J. E. LOUSLEY and E. C. WALLACE. "These are *P. decipiens* Nolte, var. *brevifolius* Hagstr. The sheets have been carefully prepared but are rather uneven, some consisting mainly of the upper stem-leaves and others of the larger and different lower leaves. All the leaves show abundant minute serrulations or denticulations right down their margins. The upper leaves are shortly oblong—ca. 45 × 13 mm.—very rounded—obtuse at the top and shortly but markedly acuminate at the actual apex. They are ± rounded below and sessile but not amplexicaul. The lower leaves are much larger—ca. 115 × 22 mm.—not obtuse, but tapering to a longer acuminate apex more suggestive of *P. lucens*. They are rounded below and occasionally semi-amplexicaul. In the dried state all the stipules appear to be narrow and very acute. As a matter of fact, they were when fresh moderately broad and quite blunt at the apex. Stipules are so extremely thin that when drying commences both their margins curl inwards and the apex—which is shaped like the end of a garden trowel—becomes pointed. Notes on their length, keel (or keels) and apex should be made when taken from the water. In these Mepal plants the influence of *P. lucens* is more in evidence than that of *P. perfoliatus*. It is seen in the uniformly acuminate apex of the leaves, the marginal serrulations, the shape of the lower leaves and their divergent nerve-spaces. That of *P. perfoliatus* is found in the oblong-elliptical upper leaves suddenly and shortly acuminate, the ± rounded bases of all leaves (sometimes half-clasping),

and the irregular disposition of the weakened marginal serrulations."—PEARSALL.

Cyperus fuscus L. Breamore, S. Hants, v.-c. 11, August 26, 1934. (Ref. No. 1250).—P. M. HALL.

Eleocharis acicularis R. & S. On damp clay ground (over limestone) where water had stood, Knipe Moor, near Bampton, Westmorland, v.-c. 69, June 27, 1934. Altitude 1090 feet. It was accompanied by *Peplis* and *Littorella*. A new county record.—A. WILSON. "This genus is in future to be spelled *Heleocharis* in accordance with International Rules."—ED.

Scirpus maritimus L. By pond on Shalford Common, Surrey, v.-c. 17, in abundance, August 11, 1934. A rare species inland, recorded for the adjoining county of Berkshire, see Druce's *Flora of Berks*. There is no trace of this species now at Iville Farm, the station recorded in the *Flora of Surrey*.—E. C. WALLACE.

Carex lepidocarpa Tausch. Ribblehead, West Yorks, v.-c. 64, June 29, 1934. (Ref. No. 13).—W. A. SLEDGE. "Excellent examples of this species as defined by Kükenthal. The stems appear to be quite smooth above in the specimen received by me—hence forma *laevigata* Peterm.—but this form usually grows mixed with "type." In my experience *lepidocarpa* only grows in habitats approaching to very wet fen, and it would be interesting to know if other members' observations agree."—LOUSLEY. "This agrees with specimens named and cited by Kükenthal, and seems to be a rather common English plant. Kükenthal's interpretation of *C. flava* L. is in accord with the 1753 type specimens in the Linnean Herbarium. There are no symbols on the sheet and no notes in Linnaeus' interleaved copies of the *Species Plantarum*, ed. i, nor in the late Mr Daydon Jackson's Catalogue. There are three specimens on the sheet, one of them a complete plant with root. They are 14-20 cm. high, to the top of the male spike; the leaves are 3.2-4.5 mm. wide; the bracts are long and leafy, up to 12 cm. long and 2.5-3 mm. wide; the female spikes are 3, congested, or the lowest separated by an interval of 1.8 cm.; the fruits are upwards from 4.5 mm. long, the beak being 1.5 mm. to nearly 2 mm. long; the male spike is more or less sessile above the females. Such a plant is well-marked in Scandinavia and in Central Europe, but seems—from the evidence of the Kew Herbarium—to be rare in this country and to occur chiefly in the north. Dr Sledge's plant from Roundsea Wood, Haverthwaite, N. Lancs (see *B.E.C.*, 1930 *Rep.*, 529, 1931) is surely to be placed under it. Meanwhile, the relations of this typical *flava* to *lepidocarpa* and other segregates still await investigation."—ED.

Carex extensa Good. Berrow salt-marsh, N. Somerset, October 10, 1934. Much extended in quantity since 1932. Stems up to 3 ft. high.—H. S. THOMPSON.

Carex montana L. On the cliffs at Carbis Bay, West Cornwall, v.-c. 1, June 13, 1934. New to v.-c. 1, and only recorded from v.-c. 2 from one station on the strength of a specimen in Herb. Arthur Bennett.—J. E. LOUSLEY. "Correct."—NELMES.

Carex diversicolor Crantz. By pond on Denge Beach, East Kent, v.-c. 15, June 3, 1934. My excuse for sending this species (which is variable) is that the female spikelets seem unusually long and tapering.—E. C. WALLACE.

Carex rariflora Sm. Boggy slopes on the Tolmount, alt. c. 1000 m., S. Aberdeen, v.-c. 92. Frequent on the tableland from the Glas Maol to Lochnagar, July 12, 1934.—E. C. WALLACE. "Correct."—NELMES.

Carex Hudsonii Ar. Benn. Large tussock in ditch west of Roydon Fen, East Norfolk, v.-c. 27, June 17, 1934. (Ref. No. 1998).—E. C. WALLACE. "Correct."—NELMES. "Yes, excellent *Hudsonii*, a characteristic and abundant plant of East Anglian fenland."—LOUSLEY.

Carex gracilis Curt. Ditch by Newark Mill, Ripley, Surrey, v.-c. 17, May 25, 1934. (Ref. No. 1999). Some of the riper spikes were gathered a week or so later.—E. C. WALLACE.

Carex aquatilis Wahl. Thicket by the Dee, Braemar, S. Aberdeen, v.-c. 92, July 19, 1934. (Ref. No. 2014).—R. MACKECHNIE; comm. E. C. WALLACE. "Very young, but undoubtedly *aquatilis* and probably similar to the slender riverside form collected by E. S. Marshall at Kingussie (*Rep. B.E.C.*, 591, 1898), which was ultimately described as forma *angustata* by Kükenthal."—LOUSLEY.

Carex elongata L. Very fine in ditch by Newark Mill, Ripley, Surrey, v.-c. 17, May 27, 1934. A well-known Surrey station for this local sedge.—E. C. WALLACE. "Correct."—NELMES.

Carex canescens Lightf., var. *fallax* F. Kurtz. Boggy slopes and stream-sides on the Tolmount, alt. c. 1000 m., South Aberdeen, v.-c. 92, July 12, 1934. (Ref. No. 2005). This plant from the tableland of the Aberdeen-Angus border has often been named var. *robustior* Blytt, which it is not. These specimens grew with type *canescens* and *C. echinata*. It will be observed that they bear a resemblance to examples of *C. helvola* Blytt.—R. MACKECHNIE and E. C. WALLACE. "The mountain forms of this sedge are extremely difficult and not well defined, but these specimens appear to agree with Marshall's idea of the var. *fallax*, which he stated was the plant depicted in *E.B.*, sub. nom. *alpicola* (*Rep. B.E.C.*, 135, 1911)."—LOUSLEY. "This has not the short fruit of *C. canescens* and its poor variety called '*fallax*.' The long rough-edged beak recalls that of *C. stellulata*: ? *canescens* × *stellulata*, although not identical with the Lawers plant, which has been so identified."—WILMOTT.

× *Carex helvola* Blytt. (*C. canescens* × *Lachenalia*). Bog above Lochan nan Eun, Lochnagar, alt. c. 1100 m., South Aberdeen, v.-c. 92, July 8, 1934. (Ref. 2017). Specimens from the original station may be welcome as this plant does not seem to have been distributed for some years.—R. MACKECHNIE and E. C. WALLACE. "Undoubted and welcome specimens of this rare hybrid. It is a pity the altitude is not stated on the labels as there are several Lochnagar stations for this plant, of which the largest specimens appear to be those from the higher altitude (*Rep. B.E.C.*, 246, 1906). There is a specimen in Herb. Kew. which has apparently been passed by Kükenthal, C. B. Clarke, and N. E. Brown, which was collected by Sir W. J. Hooker on 'Ben-y-Mac-Duich,' Grampians, in 1822. This is a considerably earlier 'First evidence for Britain,' than that mentioned in *Comital Flora* or in Bennett's papers. The rather similar plant collected by Druce from Ben Lawers is probably of a different parentage; some of the important notes which have appeared on these two plants being as follows:—*Journ. Linn. Soc.*, xxxiii, p. 458 (1898); *Ann. Scot. Nat. Hist.*, 238, 1909; *Rep. Watson Club*, 315/6, 1924/5; 116, 1906/7; 263, 1909/10; *Trans. Bot. Soc. Edinb.*, 30, 1917; 361, 1886; *Journ. Bot.*, 149, 1886; *Ann. Scot. Nat. Hist.*, 232, 1900."—LOUSLEY. "Correct."—NELMES. "This appears to be sterile and agrees well with some of the × *C. helvola* from Lochnagar, which is far from uniform in that locality."—WILMOTT.

Carex divulsa Stokes. Ditch in lane, Burdocks, near Strood Green, West Sussex, v.-c. 13, July 29, 1934.—E. C. WALLACE.

Carex diandra Schrank. Swampy margin of pond on Denge Beach, Dungeness, East Kent, v.-c. 15, June 3, 1934.—E. C. WALLACE. "Correct."—NELMES. "Yes, rather more slender examples than I have previously seen from this station. The lower stem is absent from these specimens, which fail to show the characteristic habit."—LOUSLEY.

Carex rupestris All. Dry rocks about the Breakneck Fall, Glen Callater, South Aberdeen, v.-c. 92, July 10, 1934. Fruiting poorly in this well-known station.—E. C. WALLACE. "Correct."—NELMES. "Useful specimens of this shy flowering Arctic-alpine sedge, from the station whence it was first discovered for Britain in 1836."—LOUSLEY.

Panicum frumentaceum (Link). River dredgings, Newport, Isle of Wight, October 1932.—J. W. LONG. "=*Echinochloa colonum*, var. *frumentacea* Ridley (*Panicum frumentaceum* Roxb., 1820, non Salisb., 1796, *Echinochloa frumentacea* Link, *E. crus-galli*, var. *frumentacea* W. F. Wight, *E. crus-galli*, var. *edulis* Hitchc., *Panicum crus-galli*, var. *frumentaceum* Trimen). This cultivated grass has probably been derived from *Echinochloa colonum* (L.) Link, for which reason it is treated as a variety of that species.—HUBBARD.

Spartina stricta (Ait.) Roth. Decoy Point, near Heybridge, Blackwater Estuary, N. Essex, August 4, 1934.—E. C. WALLACE. "Correctly

named! Fernald (in *Rhodora*, xviii, 180, 1916) has proposed the name *Spartina maritima* (Curtis) Fernald, based on *Dactylis maritima* Curtis (*Enum. Brit. Gr.*, 4, 1787), for this species. Curtis's publication under *Dactylis* comprised the following:—'2. Maritima. H.43. *Cynosuroides*. R.393. 4. Sea.' H.43 is an abbreviated reference to Hudson, *Fl. Anglica*, ed. 2, p. 43 (1778), where *Dactylis cynosuroides* L. is included as a British plant. Linné's species is based on two distinct elements, 1. N. American (Virginia, Canada), 2. European (Lusitania). There is nothing, however, to show that Curtis was separating one of these as a new species; his name 'maritima' must therefore be treated as a superfluous name for *D. cynosuroides* L. On the other hand, Aiton (*Hort. Kew.*, 103-104, 1789) clearly retained *D. cynosuroides* L. for the N. American plant and described the Lusitanian and British plant as a distinct species, *D. stricta* = *Spartina maritima* Roth."—HUBBARD.

Spartina Townsendii H. & J. Groves. Brightlingsea Creek, Colne Estuary, N. Essex, August 9, 1934.—G. C. BROWN. "Correctly named! An interesting paper by Pierre Senay on *Spartina Townsendii*, with a good bibliography, has appeared in the *Bull. Soc. Bot. France*, vol. lxxxi, 632-643 (1934)."—HUBBARD.

Sorghum Halepense (L.) Pers. Waste ground, Dagenham, Essex, September 29, 1934.—R. MELVILLE.

Alopecurus aequalis Sobol. Coate Water, v.-c. 7, August 21, 1934. Anthers pale yellow turning to bright orange. Some specimens rooting at the nodes—such plants grew in the mud on the lake-margin where there was little opposition. Other plants growing further back amongst denser vegetation assumed a more erect habit.—J. D. GROSE. "Superb examples."—ED.

Polygonum lutosus (Poiret) Hitchcock = \times *littoralis* (With.) Sm. Farlington, S. Hants, v.-c. 11, July 9, 1934. (Ref. No. 1231).—P. M. HALL. "Correct."—HUBBARD.

Calamagrostis neglecta Beauv. Near Hockham, West Norfolk, July 7, 1934. (Ref. No. F.21). Although only discovered in Norfolk 21 years ago, this rare grass is now known from about half-a-dozen stations in the county—two stations near Hockham, Shropham Hundreds, Stow Bedon, Nayland Hundreds, and from a locality near Kings Lynn communicated to me by Mr C. E. Hubbard. It thus ranges over a considerable area of country, and it seems remarkable that it was not discovered earlier, especially as capable field botanists are known to have carefully listed the flora of several of the stations. The plants now distributed were obtained from part of Cranberry Rough, which is on the site of Cranberry Mere, partially drained in 1795. Now the drainage of this most delightful little fen is being completed to give work to the unemployed. Unfortunately, it was not possible to make the gathering homogeneous, as five very different forms of the plant were collected

CORRECTIONS TO DISTRIBUTOR'S REPORT FOR 1933.

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- P. 750. *Viola monticola* Jord. In line 5 of paragraph, for "normal" read "vernal."
- P. 751. *Viola variata* and *V. lepida*. For Sandridge read Sundridge.
- P. 767. *Mentha longifolia* (Opiz) Fraser, var. *dourensis* Fraser. For *longifolia* read *cordifolia*.
- P. 773. For *Zostera nana* Roth read *Zostera marina* L., var. *angustifolia* Hornem. "Further experience of *Zostera* in 1934 in Sussex, Hants, and Dorset convinces me that the gathering distributed was *angustifolia*. Both *nana* and *angustifolia* I now find grow at Prinstead. There may be specimens of *nana* in the gathering but I believe now that it was all *angustifolia*. Mr Pearsall's note probably referred to plants of *nana* sent to him previously and not necessarily to the gathering distribution, and should therefore be deleted in reference to that gathering. The blame for the confusion is entirely mine."—P. M. HALL.

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