THE BOTANICAL SOCIETY AND EXCHANGE CLUB OF THE BRITISH ISLES.

REPORT FOR 1919

OF THE

BOTANICAL EXCHANGE CLUB

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

BY THE

EDITOR AND DISTRIBUTOR,

JAS. W. WHITE, F.L.S.

VOL. V. PART VI.

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REPORT OF THE DISTRIBUTOR FOR 1919.

On taking up this office once more after the lapse of years, and noting the parcels sent in to be dealt with, the Distributor is sadly reminded of the Club's heavy losses in the interval. Several of the more prominent supporters have departed this life; others are no longer able to work; their valued opinions and typical specimens have ceased to come in; and as a body we are appreciably poorer. Such trials are, however, inevitable in the life of any Society. It remains for those who survive to raise the standard of their output, where practicable, to a still higher level. Fortunately we have yet with us members who yearly send out for exchange examples of the best description. Their plants, collected in reasonable quantity, are carefully pressed, well dried and placed on decent paper of even size. Their labels are not scrawled on odd bits of used stationery, nor typed with tinted dyes that fade, but are neatly written in ink on printed blanks. They even take the trouble to put the several species into separate covers and to furnish a list of their contributions arranged in order of the *London Catalogue*. In short, they bear in mind the rules of their Club, and the toil of Distributors and Referees. One of the latter, moved by the poorness of material on which he was asked to report, gives vent to his irritation in the following outburst :—

> " 'Tis a thankless job with never a root,
> And lacking as much as a half-ripe fruit,
> To tack on a name—in fact it's a shame
> To expect a chap with a book and a lens
> To identify rubbish that naebody kens!"

There is surely nothing about a botanical hobby that directly leads on to indifference and carelessness, so we will hope that our weakly ones may mend their methods and eventually produce specimens worthy of a place in herbaria—good enough to serve in turn as object lessons for recruits in the future.

Thirty-six members have contributed 6257 sheets, representing 422 gatherings. To this total the Distributor has added 1190 of his duplicates in an effort to fill the gaps shewn in a number of marked catalogues. The main divisions of Phanerogams (if the *Floridæ* be

excepted) are well represented, although there is a decided falling off in the more difficult genera. A larger assortment of Roses, Mints, and Willows would have been welcome. Members are indebted for dried seedlings to Dr Druce and Messrs Brown, Wade and Waterfall; and to Mr Bickham for 80 packets of seeds. A special mention, too, is deserved by Mr Bickham's splendid series (from his garden) of the Steep Holm Pæony, so difficult to obtain from its native fastness in the Bristol Channel.

Contributors will do well to remember that at least ten sheets of a gathering should be prepared for exchange. As was lately pointed out by Mr Barton, comments in the *Report* are of little use to members who have not received the plants. For that reason the present Editor omits all mention of those contributions that comprise less than six examples.

For help in the determination of doubtful specimens the Club is deeply thankful to the referees whose names appear in the *Report* attached to the notes they have written. And the Distributor gratefully acknowledges the assistance given him by Miss Roper in carrying through the work at considerable inconvenience to herself.

JAS. W. WHITE.

18 Woodland Road,
Clifton, Bristol.

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Wheldon, J. A., ...	30
White, J. W., ...	162
Wilson, A., ...	122
Total, ...	6257

Clematis Vitalba L. [2124]. West Horsley, Surrey, v.-c. 17, July 23, 1919. A form, hairier than usual, with small entire leaflets.—C. E. BRITTON. "A weak, diminutive state with no marked distinctive character. We have a similar plant from La Turbie, above Monte Carlo."—BUCKNALL & WHITE. "It is the var. *integrata* DC."—DRUCE & SALMON.

Ranunculus trichophyllus Chaix. Pond on hill above Hamilton, Leics., May 7, 1916.—A. R. HORWOOD. "Rightly named, but too young, no fruit, and only one flower."—PEARSALL.

R. [*trichophyllus* Chaix]. Langenhoe marshes, N. Essex, May 11, 1919.—G. C. BROWN. "Is *R. heterophyllus* Weber, var. *submersus* Bab."—PEARSALL. "Very young, but is undoubtedly the var. or hybrid."—WHITE.

R. [*trichophyllus* Chaix, var. *radians* (Revel)]. Hamilton, Leics., May 19, 1915.—A. R. HORWOOD. "Not *radians*, but probably *R. heterophyllus* Weber, var. *triphyllus* Hiern; poor material, no flrs., only one head of immature carpels, and the floating leaves mostly doubled up."—PEARSALL. "Yes, *triphyllus*, I believe."—WHITE. "I think this comes under *radians* and is best placed as a variety of *heterophyllus*; this plant is quite unlike *R. trichophyllus* to my eye."—SALMON.

R. heterophyllus Weber. [1402]. Dyke, Langenhoe marshes, N. Essex, v.-c. 19, May 11, 1919.—G. C. BROWN. "Probably right, but no fruit, and only one flower."—PEARSALL.

R. Baudotii Godr. [1422]. Dyke, E. Donyland marshes, N. Essex, v.-c. 19, May 28, 1919.—G. C. BROWN. "Well prepared, typical specimens."—PEARSALL.

Ranunculus ——? Ditch near the lighthouse, Leasowe, Cheshire, v.-c. 58, May 31, 1919.—W. G. TRAVIS. "Very acceptable specimens of *R. Baudotii*, f. *confusus*."—PEARSALL.

Páeonia corallina Retz. Origin, Steep Holm Island; cult. Ledbury, May 28, 1919. Owing to the dryness of the Spring I have been able to make very good specimens: the stamens often mildew in drying.—S. H. BICKHAM. "*Peregrina*, not *corallina*."—WHITE.

Papaver Rhoeas L., var. [Q. 761]. Wootton, Berks, July, 1919. This seems to be the var. *Hoffmannianum* Kuntze. The leaf-cutting is unusual and fairly constant; the petals are black-spotted at the base with often a whitish margin to the spots.—G. C. DRUCE.

Fumaria muralis Sond., subsp. *Boraei* Jord. [309 A]. Rough open ground, Brendon, N. Devon, v.-c. 4, August 13, 1917.—W. C. BARTON. "This seems to differ slightly from [309 B] and [309 C] in that the bracts are longer, the sepals a little larger and the fruit relatively longer. It is perhaps simply a variant, but I should not apply the varietal name *britannica* to it, as it is not typical and should prefer to leave it under *F. muralis*, subsp. *Boraei*. I notice that the fruits of all these plants tend to show a small apiculus: I have seen this in other N. Devon and N. Somerset examples of var. *britannica*."—PUGSLEY.

F. officinalis L., var. *Wirtgeni* Hausskn. Cornfield, Keynsham, N. Somerset, v.-c. 6, May 20, 1918.—IDA M. ROPER. "Yes; but fruit a little broader than in some forms. A good set."—PUGSLEY.

F. parviflora Lam., var. *acuminata* Clav. Barton Hills, Beds. v.-c. 30, July 13, 1918. In quantity on bare chalk on the scarp of the hill; absent on the top where capped with glacial loam. Growing with it were *F. officinalis*, var. *Wirtgeni* Hausskn. (det. H. W. Pugsley) and *F. micrantha* Lag.—J. E. LITTLE. "Yes; a fine set of specimens."—PUGSLEY.

F. [*Vaillantii* Lois.]. Waste ground, Limpsfield, Surrey, July 1, 1913. And another Fumitory, a garden weed at Putney, July, 1919.—H. E. FOX. "We consider both gatherings to be forms of *officinalis* and not of *Vaillantii*. They differ in the truncate or retuse fruit and in their large sepals nearly 2 mm. long."—BUCKNALL & WHITE. "Both are depauperate *officinalis* without flowers and showing scarcely any fruit. Quite worthless."—PUGSLEY.

Radicula islandica Druce = *R. palustris* Moench, var. *microcarpa* = ***Roripa palustris*** Bess., β *microcarpa* Beck *Fl. N. Œsterr.* p. 466 = *Roripa palustris* Bess., "forme" *arvensis* Rouy & Foucaud *Fl. de Fr.* ii., p. 194. [2162]. West Barnes, Merton, Surrey, v.-c. 17, Sept. 14, 1919. This differs from the common form of the species by its shorter and stouter pods each with a more prominent style. Though the specimens distributed were taken from a plant occurring as a garden weed this variety is probably not infrequent in localities less moist than are the situations favoured by the species. All the examples sent are not of equal maturity, therefore there may be an apparent want of complete agreement with the descriptions of Beck and Rouy & Foucaud. With the fully mature fruits before one, however, there is seen to be the closest resemblance to the descriptions of these authors. Beck describes his variety as differing from the type in possessing pods more elliptical, at the most 4 mm. long, shorter, or as long as their stalks, with the style 0.5-0.7 mm. long. The French authors grade their plant as a "forme," a term

for which Rouy afterwards substituted the term "race." In giving this rank, Rouy & Foucaud regarded their plant as being of more than varietal importance, but English botanists will probably prefer to treat the plant as a variety only. As with Beck, Rouy & Foucaud distinguish their plant solely by the fruit differing from the type in being smaller (4-5 mm. long) and elliptical. The style in the type is described as almost absent, and, in the "forme," longer than usual. In the specimens distributed, the style at times reaches the length of 1 mm.—C. E. BRITTON.

Barbarea ——? Luffenham, Rutland, June 15, 1916.—A. R. HORWOOD. "Although the young pods show a tendency to arcuation, the plant is most probably a *vulgaris* form. The specimens are undeveloped."—BUCKNALL & WHITE. "This is the var. *arcuata* Rchb."—TRAVIS.

B. vulgaris R. Br. By Max Mill, Winscombe, N. Somerset, v.-c. 6, June 21, 1919.—IDA M. ROPER. "Approaches var. *arcuata* but is not typical, being intermediate between that and the var. *campestris*. See *Journ. Bot.* 207, 1916."—JACKSON.

B. arcuata Rchb.? Near Monmouth, June, 1919. Seen also by roadsides in Hereford, Carmarthen and Brecon.—G. C. DRUCE. "Not one of the best examples of *arcuata*, perhaps, as it shades a little towards var. *campestris* of *vulgaris*."—WHITE.

B. vulgaris [R. Br.] Ait., var. *arcuata* Fr., subvar. *brachycarpa* A. B. Jackson. Determined by Mr Jackson. Wymondley Road, Hitchin, Herts, August 20, 1919. This one plant, from which specimens were distributed in 1917 and 1918, has produced pods for the third year in succession, and is putting out radical leaves for a fourth season.—J. E. LITTLE. "The fig. (tab. 121) of *arcuata* in Syme *E. B.* is a much better representation of *brachycarpa*."—WHITE.

Malcolmia maritima Br. Naturalised on a shingly beach, Kingsdown, Kent, March 30, 1918.—H. E. Fox. "Yes. Although found in Kent at some former time (Bab. *Man.*) it was unknown to the authors of the county *Flora*."—WHITE. "This favourite garden annual, native of the sea-coasts of Southern Europe, has frequently been noticed as an escape in Britain."—Dunn's *Alien Flora*. Nyman observes "Planta culta (quæ in hbb. sæpe obvia) gracilior, glabrior."

Arabis perfoliata Lam. Gerard's Cross, Bucks, May 30, 1919. —ALFRED WEBSTER. "Immature, but seeds in two rows and stem

clothed with forked hairs at the base as described by Syme."—WHITE.

Erophila majuscula Jord. Edge of footpath, Arncliffe, Upper Wharfedale, W. Yorks, May 23, 1913.—C. WATERFALL. "Correct."—BUCKNALL & WHITE.

E. affinis Jord.? Hedgebank, Elmstead, N. Essex, v.-c. 19, May 1, 1919. Hairs bifid; pet. at first white then pale violet; l. tinged violet; silicules 6 by 2-2.25 mm.; seeds 18-20 in each loculus.—G. C. BROWN. "We would rather put this to *E. majuscula*."—BUCKNALL & WHITE.

E. propinqua Jord.? Bank, Alphamstone, N. Essex, v.-c. 19, April 6, 1919. Hairs mostly trifid; flowers about 3.5 mm. diam.; l. narrow, some sparingly toothed; silicules 6-6.5 by 2-2.5 mm.; seeds averaging 25 in each loculus.—G. C. BROWN. "This runs down readily to *E. leptophylla* Jord. and we see no reason for differentiating further. The description of *propinqua* by Rouy & Foucaud is insufficient, and the name does not occur in the *Diagnoses*."—BUCKNALL & WHITE.

Erophila ——? On cinders, Grove Mill, Hitchin, Herts., April 28, 1913. Pubescence of l. simple, bi-tri-quadri-fid, or branched from base; laminæ hairy above, nearly glabrous below; silicules 4 by 2 to 5 by 2.5 mm., tapering slightly towards either end.—J. E. LITTLE. "Nearest to *E. brevifolia* Jord. *Diagn.* p. 243. By Rouy & Foucaud it would be placed under *E. majuscula* although the stems seem to be decumbent."—BUCKNALL and WHITE.

Cochlearia alpina Wats. Edge of Foxup Beck, Upper Wharfedale, West Yorks, v.-c. 64, May 21, 1918. At 1700 ft.—C. WATERFALL.

Capsella Bursa-pastoris Medic, f. *auriculata*, forma nova. Chipping Campden, E. Glouc., May 27, 1916. Planta altissima, satis rigida; folia auriculata, lata, fere multa; silicula ut in f. *stenocarpa*.—A. R. HORWOOD. "This has been published by request. But as regards other spp. contributed by Messrs Adamson, Britton and Horwood, it is suggested that as Prof. E. Almquist is at present engaged on a study of the British Capsellas it may be well, pending the result of his examination and culture of our native forms, to withhold all criticism."—WHITE. "Yes, I quite agree that it will be better to wait than to indulge in mere guessing on inadequate data. We hope to have Almquist's notes in next *Report*."—DRUCE.

Lepidium latifolium L. Ditches on marshes by the Severn Sea, Westbury, West Glouc., v.-c. 34, Sept. 13, 1919. Looking quite native. I know no reason for suspecting the species to be an introduction here.—H. J. RIDDELSDELL.

L. Draba L. Botley, Oxford, July, 1919. This comes under forma *viridescens* Druce in *Rep. B.E.C.* 402, 1916. The leaves are almost free from tomentum.—G. C. DRUCE.

Reseda——? Railway embankment and siding, Buildwas, Salop, June 7, 1919. I sent this plant to the Club from the same locality a few years ago, but no definite conclusion respecting it was arrived at. Is it by any chance *R. gracilis* Tenore?—J. C. MELVILL. "After careful comparison we consider this to be a slender, graceful form of the very variable *R. lutea* L., in the direction of *R. gracilis* but not that. It does not precisely match either of the named varieties."—BUCKNALL and WHITE. "Is var. *longifolia* Ten. according to Thellung."—DRUCE.

Helianthemum polifolium Mill. Daddy Hole Plain, Torquay, S. Devon, v.-c. 3, May 12, 1919.—C. WATERFALL.

H. Breweri Planch. Hort., Bangor; seeds from Holyhead, July, 1919.—J. E. GRIFFITH.

Viola odorata L., var. *subcarnea*. Hedgebank, Moulton, Cambs., April 8, 1919. Coll. Miss Wellsman; comm. F. ROBINSON. "The colour of flower is well retained in these examples of *subcarnea*, but it is a pity to send out sheets with leaves only."—GREGORY.

V. [*odorata* × *hirta*]. Stambourne, N. Essex, v.-c. 19, April 18, 1919. Flower bluish-purple with white eye; spur lighter.—G. C. BROWN. "I see no sign of hybridity in these plants. The direction of hairs is spreading as in *V. hirta*, of which I should name it var. *propera* with small leaves and large flowers."—GREGORY.

V. hirta L., var. *Foudrasi* Jord. Chalk bank, Saffron Walden, N. Essex, v.-c. 19, April 18, 1919. Flowers very small, light blue; leaves less hairy than in type; some stipules gland-ciliate.—G. C. BROWN. "Yes, correctly named; but the plants are too much broken to show their beauty."—GREGORY.

V. Riviniana Rchb., var. *diversa* Greg. [1405]. Danbury Common, S. Essex, v.-c. 18, May 8, 1919.—G. C. BROWN. "Rightly named, but poor and scanty examples."—GREGORY. Upon another gathering [1406] from Fordham Heath, N. Essex, v.-c.

19, May 5, and August 14, 1919, which Mr Brown evidently considered to be identical with a former contribution (see *Rep. B.E.C.* 559, 1916) Mrs Gregory reports:—"These are good examples, in two stages, of *V. Riviniana* f. *minor*. Habit, texture and stipules all point to f. *minor* rather than to var. *diversa*."

V. Riviniana Rchb., var. *diversa* Greg. Long Spinney, Scraptoft, Leics., May 7, 1916. Col. A. R. Horwood; comm. A. E. WADE. "Yes; in the early stage. Needs at least one later gathering."—GREGORY.

V. Riviniana Rchb., f. *minor* Murb. ined. [1370]. Autumn stage. Failand, near Bristol, N. Somerset, v.-c. 6, October 4, 1919.—IDA M. ROPER. "Right."—GREGORY.

V. canina L., var. *lanceolata* Mart.-Don. Menmarch, Oxon., locus classicus, June, 1919.—G. C. DRUCE. "Yes."—GREGORY.

V. lactea SM. Mead End, Hordle, Hants. Near the sea in damp peaty ground among gorse and heather, June, 1918.—J. C. MELVILL. "If the flowers had been placed between wads of thick paper and the drying paper, when first put into press, a better result would have been obtained."—GREGORY.

V. arvensis Murr., var. *agrestis* Jord. Allotments, Groby Road, Leicester, v.-c. 55, August, 1919.—A. E. WADE.

V. arvensis Murr., f. *Déséglisei* Jord. Hall Road, South Lancs., v.-c. 59, September 8, 1919.—W. G. TRAVIS.

V. arvensis Murr., var. *obtusifolia* Jord. Sand dunes, Formby, S. Lancs., v.-c. 59, June, 1918.—J. A. WHELDON. "No; *ruralis*."—DRABBLE.

V. ——? Allotments, Bumpas Lane, Sealand Road, Chester, v.-c. 58, September 5, 1917.—C. WATERFALL.

V. ——? [381]. Highest part of dry heath, Croxton, W. Norfolk, v.-c. 28, May 16, 1918. I have never seen anything like this in Norfolk before; it covers the highest and driest part of the heath.—F. ROBINSON. "*V. Pesneaui*. I have previously seen *Curtisii* pansies from this district. There does not seem any reason why they should not occur anywhere in deep sand; maritime conditions are probably unnecessary."—DRABBLE.

V. lutea Huds. Beoska Moor, Upper Wharfedale, W. Yorks, v.-c. 64, alt. 1700 ft., May, 1918. And from upland moors, Llandrindod Wells, v.-c. 43, June 2, 1919.—C. WATERFALL.

V. lutea Huds., var. *amœna* Symons. Upland Moors, Llandrindod Wells, v.-c. 43, June 4, 1919.—C. WATERFALL.

Polygala austriaca Crantz. Wye, Kent, June, 1919.—G. C. DRUCE. "Typical Kentish specimens which differ from the Grassington plant in the less condensed habit, shape of leaves, and smaller flowers more scattered on the stem. Prof. Chodat, in a second letter to me, again names the Grassington milkwort *P. amarella* Crantz (*P. amara* auct. vet., non Jacq.)."—CRYER.

Cerastium tetrandrum Curt. Sandy shore, E. Mersea, N. Essex, v.-c. 19, May 11, 1919.—G. C. BROWN. "Yes."—DRUCE & PEARSALL.

C. tetrandrum Curt. Sandhills, Meols, Cheshire, May 31, 1919. —W. G. TRAVIS. "I agree."—SALMON.

Cerastium ——? Sandy heath, Thetford, v.-c. 28, June 29, 1919.—F. ROBINSON. "*C. semidecandrum* L., very glandular and closely tufted. Calyx and capsule smaller than in var. *congestum* C. E. Salmon (*Journ. Bot.* 17, 1913)."—BUCKNALL & WHITE. "Yes; a slender and rather short-capsuled form of var. *glandulosum* Koch."—DRUCE & SALMON.

C. viscosum L. Roadside near Ledbury, v.-c. 36, June 4, 1919. And var. *apetalum* Dum. from rough ground in the same district, June 7, 1919.—S. H. BICKHAM. "Excellent specimens, well worthy of distribution."—WHITE.

C. triviale Link, var. *hirsutum* Fr. On broken limestone, Castleton, Derbyshire, August 17, 1919.—R. S. ADAMSON. "Being hairy, not at all glandular, and with narrow leaves, this should be *C. vulgatum*, var. *typicum* Beck (*Fl. N. Oesterr.*), but is too young to show the shorter capsule specified in the description. As we have a similar plant from Scotland it is probably the northern form in Britain of a very variable species."—BUCKNALL and WHITE. "Yes; in fact the typical form. Fries divided the species into *α hirsutum* and *β Holosteoides* the rarer more glabrous plant."—SALMON. "True; Fries (*Novitiæ Fl. Suec.* 125, 1828) localises *hirsutum* 'in locis siccioribus, ubique,' evidently meaning the common form of *C. vulgatum* L. Fries goes on to show that the Linnean name *vulgatum* is correctly applied to this species. It follows, therefore, that if Mr Adamson places his plant (in a sense accurately) under *triviale* Fries' name should be in brackets. I myself prefer to retain the name *vulgatum* under which Fries put his *hirsutum*. The Castleton plant, however, is not the common form, but is one which occurs on limestone soils in various parts of Britain."—DRUCE.

Stellaria aquatica Scop. Bank of river Alyn, Denbighshire, N. Wales, v.-c. 50, August 13, 1918.—C. WATERFALL. "My specimen comes under var. *scandens* Godr., with leaves slightly cordate."—PEARSALL.

S. apetala Ucria. Walls, Wigginton, v.-c. 23, May 30, 1919. This appears to me to be the same plant as occurs on sand-dunes in Glamorgan and elsewhere, named as above. The contrast of foliage-colour with *S. media* was as marked here as there.—H. J. RIDDELSDELL. "Yes; under the microscope the tuberculation of seeds is identical with our dune plant, and there is no difference in any other feature than the slightly more elongate internodes of the stem."—WHELDON. "I think correct. Many of the flowers show abortive petals, 2 or 3 stamens with dark red anthers—or one such and two abortive filaments and occasionally 3 arcuate styles."—PEARSALL. "Yes; *S. Borœana* Jord., I believe."—SALMON.

S. neglecta Weihe. Lanes about Torquay, S. Devon, v.-c. 3, May 27, 1919.—C. WATERFALL. "Yes."—PEARSALL.

S. neglecta Weihe, var. *decipiens* Marshall. Baggrave Park, Leics., May 28, 1916, coll. A. R. HORWOOD, comm. A. E. WADE. Does not Weihe's aggregate cover the *S. umbrosa* Opiz and this hairy plant? Marshall's *decipiens* no doubt refers to the latter.—WADE. "Yes, there are only two forms, *umbrosa* with glabrous pedicels and sepals and acutely tubercled seeds; and *decipiens* with the former organs hairy and seeds with rounded tubercles. For information on the synonymy, priority of names, &c., see *Journ. Bot.*, 151, 1904."—WHITE.

Arenaria tenuifolia L., var. Barton Seagrave, v.-c. 32, June 1918.—GEO. CHESTER. "By the *Manual* this glabrous plant is seen to be the type of the species. In the more minute analysis of Rouy & Foucaud it stands as var. *genuina* Willk. = *Vaillantiana* DC."—BUCKNALL & WHITE. "I agree; a very local plant in Northants."—DRUCE. "Best under type."—PEARSALL and SALMON.

Alsine [*rupicola* Hiern]. Sea rocks, Land's End, Cornwall, July, 1910.—H. E. FOX. "This is *A. rubra* = *Spergularia rubra* Pers. *Lond. Cat.* ed. X. The station is an unusual one."—BUCKNALL and WHITE.

Montia verna Necker. Gravel pit, Gt. Totham, N. Essex, v.-c. 19, May 8, 1919.—G. C. BROWN. "*M. chondrosperma* Fenzl."—SALMON. "*M. verna* Necker is the older name. See *Rep. B.E.C.* 331, 1908."—DRUCE.

Hypericum quadrangulum L. North Leigh, Oxon, September, 1919.—G. C. DRUCE. "Is *H. tetrapterum* Fries. The Linnean name seems too ambiguous to employ for this plant."—SALMON.

H. perforatum L., var., with very obscure dots. Burgh St Margaret, Norfolk, July 15, 1919.—R. J. BURDON. "Although the leaves possibly are rather narrower than usual, my example seems better left under type (*i.e.*, var. *vulgare* Neilr.) rather than under var. *angustifolium* DC., which has leaves still narrower and also narrower sepals, petals and fruit."—SALMON.

Geranium rotundifolium L., f. *Thurstonii* Druce. Cliff, East Looe, Cornwall, May and June, 1919. Coll. E. Thurston; comm. —G. C. DRUCE. See *Report* p. 551.

G. Robertianum L., form with laciniate leaves, growing in shade. Aberystwyth, Cardiganshire, 1919.—T. STEPHENSON. "An interesting variation, of which Mr A. J. Wilmott, who is working on this group, would certainly be glad to receive a full representative example."—WHITE.

G. Robertianum L., subsp. *celticum* Ostenfeld. [222]. Seeds from Ballyvaughan, Co. Clare, 1911; cult. hort. bot. Haun, 1916.—(See *Report* p. 551) C. H. OSTENFELD.

Erodium Botrys Bert. Waste ground, Bradford, v.-c. 64, June 19, 1919. First seen in 1912, and has since spread until this year I counted over a hundred plants. Teste E. G. Baker.—JOHN CRYER.

Staphylea pinnata L. In the grounds near Baldon House, Oxford, in some plenty, but of course planted. *Lilium Martagon*, *Pulmonaria officinalis*, *Ruscus*, and *Iris foetidissima* are also well naturalised here.—G. C. DRUCE.

Ononis reclinata L. Daddy Hole Plain, Torquay, S. Devon, v.-c. 3, May 12, 1919.—C. WATERFALL.

Medicago lupulina L., var. *eriocarpa*. Pasture, Leicester, v.-c. 55, August, 1919.—A. E. WADE. "Rouy did not elevate this to a higher rank than *sub*-variety and quite lofty enough, too! Mr Wade's plant seems to come under Rouy's name."—SALMON.

Trifolium Molinerii Balb. The Lizard, Cornwall, June 12, 1919. —F. ROBINSON.

T. suffocatum L. The Denes, Lowestoft, v.-c. 26, May 30, 1919. —F. ROBINSON.

T. procumbens L., ? var. *majus* Koch. Saxby, Leics., June 17, 1916.—A. R. HORWOOD. "No, not the variety, just the typical plant."—WHITE.

Lens esculenta Moench = *Ervum Lens* L. From a rubbish-tip, Bristol, West Glouc., v.-c. 34, June 13, 1919.—IDA M. ROPER. "Yes, the more correct name is *Lens culinare* Medik, which is earlier, as yet we have not adopted the duplication of the trivial which would make it *Lens Lens* (L.)."—DRUCE.

Vicia altissima Desf. Spontaneous in my garden at Haymesgarth, Cleeve Hill, near Cheltenham, September 29, 1919.—C. BAILEY. "Yes, a native of the south-eastern Mediterranean region, and of rare occurrence in Britain."—WHITE.

V. sepium L., var. or forma *dunensis* Druce. Reay, Caithness, July, 1919.—G. C. DRUCE. "Just a condensed maritime state, apparently."—WHITE.

Lathyrus palustris L. Muckfleet Ware, Burgh St Margaret, Norfolk, June 30, 1919.—R. J. BURDON.

Spiræa canescens Don. Naturalised in a wood below Causand Beacon, Devon, August, 1919.—H. E. Fox. "This is probably of recent importation; I do not find it mentioned by Loudon, Gandoger or Druce."—WHITE.

Rubus idaeus L., var. *obtusifolius* (Willd.). Garden weed, Wigginton, v.-c. 23, May 30, 1919.—H. J. RIDDELSDELL. A curious form of this variety with a remarkably bracteate inflorescence is contributed by the Rev. T. Stephenson from "near Aberystwyth, Cardiganshire." Miss Roper remarks that it seems to be a recognised form of bramble-phyllody. See Masters, *Vegetable Teratology*, p. 279.

R. plicatus Wh. & N. [430]. Open ground near Willeys, Sticklepath, v.-c. 4, August 30, 1919: The whole of my gatherings have been seen by the Rev. H. J. Riddelsdell, and his naming accepted. All specimens under the same reference number were taken from one bush or group of bushes.—W. C. BARTON.

R. argenteus Wh. & N. [416, 421, 434, 446]. South Tawton quarries, N. Devon, v.-c. 4, August and September, 1919. Also [395] Belstone, v.-c. 4, August 13, 1919 ("not quite typical"—Riddelsdell).—W. C. BARTON.

R. incurvatus Bab. Tackley Copse, v.-c. 23, July 31, 1919. In great quantity and beauty. Not the S. England form described in

Rogers' *Handbook*, p. 27 at bottom, but the Wye Valley form (p. 28). Both these forms occur in East Gloucester. The S. England form was latterly called var. *subcarpinifolius* by Rogers (MS.). N.C.R. for Oxon.—H. J. RIDDELSDELL.

R. Bakeri F. A. Lees. Sheen Common, Surrey, August 13, 1919. —A. B. JACKSON & R. A. ROLFE. "Excellent examples of an interesting plant. It differs in several features from *R. rhamnifolius*, of which it is classed as a sub-species."—WHITE. And from Rodway Hill, Mangotsfield, v.-c. 34, July 25, 1919. Named for me by Mr Riddelsdell, who says that *Bakeri* had been already recorded from the Forest of Dean in West Gloucester. This is, however, an addition to the flora of Bristol.—IDA M. ROPER.

R. calvatus Bloxam. [435]. South Tawton quarries, N. Devon, v.-c. 4, September 2, 1919. Named by Mr A. B. Jackson.—W. C. BARTON. "I do not know *calvatus* and your specimens were gathered very late, but they seem to agree fairly well with description and specimens of *calvatus*, especially in the stem and leaflets. The chief weakness lies in the panicle foliage, a matter, however, of very varying value. I should say *calvatus* and N.C.R."—RIDDELSDELL.

R. thyrsoideus Wimm. South Newington Hill and Swalcliffe Common, v.-c. 23, July and August, 1919.—H. J. RIDDELSDELL.

R. Godroni Lec. & Lam., var. *clivicola* Ley. Several places in the Cotteswolds in E. Gloucester, August, 1919. All at about 800 ft. to 900 ft. The var. earns its name at any rate in v.-c. 33. The only important divergence from description is that the term. lt., in these specimens is rather narrow. Some years ago when I first gathered the var. in E. Gloucester it was quite normal in this respect. —H. J. RIDDELSDELL.

R. lentiginosus Lees. Lyndhurst, S. Hants, v.-c. 11, July 21, 1919.—L. CUMMING. "Mr Cumming's gatherings are authentic." —WHITE.

R. macrophyllus Wh. & N., aggr. Wood, S. Newington Hill, v.-c. 23, July 15, 1919. The stem pieces would do for *Schlechtendalii*; but the panicle, besides being very small and shade-grown, is too narrow for the var. So the gathering must go under the aggregate species.—H. J. RIDDELSDELL.

R. macrophyllus Wh. & N., var. *Schlechtendalii* Weihe. Badby Wood, Northants, v.-c. 32, July 25, 1918.—L. CUMMING.

R. anglosaxonicus Gelert. [428]. South Tawton quarries, N. Devon, v.-c .4, August 31, 1919.—W. C. BARTON. "Yes; with more

of ultra-axillary panicle and the term. lt. longer stalked than usual, but quite good."—RIDDELSDELL.

R. anglosaxonicus Gelert, var. *raduloides* Rogers. Swalcliffe Common, v.-c. 23, August, 1919. I regard this as good typical *raduloides* and as a first record for Oxfordshire.—H. J. RIDDELSDELL. "Doubtless; but I miss the white-felted undersurfaces of our Bristol plant."—WHITE.

R. radula Weihe, var. *anglicanus* Rogers, teste H. J. R. [433]. South Tawton quarries, N. Devon, v.-c. 4, August 31, 1919.—W. C. BARTON. Also from South Newington and Great Tew, Oxon, v.-c. 23, July and August, 1919. I think undoubtedly right for most of the sheets now sent. N.C.R.—RIDDELSDELL.

R. radula Weihe, var. *echinatoides* Rogers. Ballard's Copse, Heyford, v.-c. 23, June 26 and July 16, 1919. Clearly a *radula* form though not under type; I think better under *echinatoides*, though not good. The hairy stem is matched in some Surrey specimens I have, which Mr Rogers himself placed under the var. The prickles both on stem and panicle make for the var., as do the colouring and the leaf-toothing.—H. J. RIDDELSDELL. Also from Hook Norton, v.-c. 23, July 11 and 26, 1919. Of this plant the stems of the year were much cut: the ternate leaves of July 11 were from the secondary shoots, and the difference in hairiness and armature between them and the primary leaves is worth noting. As with the Ballard's Copse plant, I consider this gathering to be better placed under the var. than under *radula* itself, though not good *echinatoides*.—H. J. RIDDELSDELL.

R. fuscus Wh. & N., var. *nutans* Rogers. Between Lyndhurst and Minstead, S. Hants, v.-c. 11, July 13, 1919.—L. CUMMING.

R. fuscus Wh. & N., var. *macrostachys* P.J.M. Buckholt Wood, Cranham, v.-c. 33, August 19, 1919. Named by Mr Rogers in 1912, when I gathered and distributed the var. from the same bushes. Some of the specimens grew in deeper shade, but on the panicle, at any rate, traces of white-felting on the underleaf are plain.—H. J. RIDDELSDELL.

R. pallidus Wh. & N., var. *leptopetalus* Rogers. Tackley Copse, v.-c. 23, July 31, 1919. When Mr Rogers saw plants from this locality some years ago his final judgment was "*leptopetalus* apparently." The hesitation can be understood on reference to the *Handbook* description. The foliage is yellowish; the panicle branches are less slender and more compact than usual. But I think the diffe-

rences are not enough to take the form away from var. *leptopetalus*. —H. J. RIDDELSDELL.

R. foliosus Wh. & N. Ilfracombe, v.-c. 4, August, 1918. In great quantity in a wood. Leaves 5-nate as a rule; term. lt. tending to be obovate with coarse and lobate toothing, especially in the larger leaves. Panicle top broader and closer than usual. But undoubtedly *R. foliosus*.—H. J. RIDDELSDELL.

R. rosaceus Wh. & N. Boar's Hill, Oxford, v.-c. 22, July 24, 1918. A form with narrow leaflets. Seen and approved by Mr Rogers.—H. J. RIDDELSDELL.

R. [*rosaceus* Wh. & N.]. Pendale, Perranzabuloe, v.-c. 1, August 23, 1919.—F. RILSTONE. "This is *R. Bloxamianus* Colem., quite typical except in leaf-toothing. It is necessary to warn members that pieces cut from near the base of the stem may be un-radulan in armature, and are not angular in section. Such stem-pieces will reach some members in this distribution. Collectors should avoid the mistake of cutting them. It would be of great help to a referee whose knowledge is very limited if those who send *Rubi* for determination would adhere *as strictly as possible* to the instructions given in Rogers' *Handbook* p. viii. This gathering of Mr Rilstone's was happily sent to me in its entirety; the angular pieces cut from mid-stem gave me a necessary clue."—RIDDELSDELL.

R. hystrix Wh. & N. Ilfracombe, v.-c. 4, August, 1918. These were seen and approved by Mr Rogers.—H. J. RIDDELSDELL.

R. plinthostylus Genev. Roadside near Penballow, Cornwall, v.-c. 1, August 11, 1919.—F. RILSTONE. "Although the stem pieces supplied for distribution are insufficient this agrees very well with Cornish specimens in my possession that were named by the Rev. W. Moyle Rogers."—RIDDELSDELL.

R. Bellardii Wh. & N. Badby Wood, Northants, v.-c. 32, August 12, 1919.—L. CUMMING.

R. dumetorum Weihe, var. Between Willenhall and Binley, Warwickshire, v.-c. 38, September 1, 1919. Mr Riddelsdell says this lies between the vars. *pilosus* and *rubriflorus*, being nearer the latter. I think either would be a record for the vice-co.—L. CUMMING. "So far as one can judge from the material, *rubriflorus* should be agreed to."—WHITE.

Rubus ——? [440]. South Tawton Quarries, N. Devon, v.-c. 4, September 6, 1919.—W. C. BARTON. "? *dumetorum* hybrid."—RIDDELSDELL.

R. Balfourianus Blox. Hook Norton, v.-c. 23, July 26, 1919. This gathering is not so characteristic as that sent last year from Swerford, the stem leaves being particularly *dumetorum*-like in shape; but it is clearly rightly named.—H. J. RIDDELSDELL. Sent also from 12 o'clock Drive, Brandon, Warwickshire, v.-c. 38, August 14, 1919.—L. CUMMING.

?*R. Bucknalli* J. W. White. Ballard's Copse, Heyford, v.-c. 23, June 26 and July 16, 1919. I put this at first to *R. corylifolius* Sm., var. *conjungens* Bab., but maturer consideration leads me to prefer the name *Bucknalli*. The plant covers a big area of rough, bushy ground, and occurs in very small prostrate bushes. The stem is very hairy in the June specimens, besides being slightly acicular, but loses much hair as it matures. The leaves are of *corylifolius* texture, especially the under surface. The panicle is very small and not densely hairy; otherwise it answers to description. Petals very pale pink after drying; white (or nearly so) when fresh. Styles reddish- or brownish-green. On the whole I should say under *R. Bucknalli*, but going off towards *corylifolius*.—H. J. RIDDELSDELL. "As indicated by Mr Riddelsdell's hesitation this neat little plant is very difficult to place. It leans somewhat from *corylifolius* towards *Bucknalli*, but we cannot accept it as belonging to the latter. Although we have nothing to match it we believe its position will prove to be intermediate between *corylifolius* and *dumetorum*. It has the dark purple stem with stellate down and scattered glands of *fasciculatus* P.J.M.; the leaflets, too, are imbricate and grey-felted beneath, and the sepals reflexed. From that plant it differs chiefly in the absence of pricklets and small acicles, and in the finer leaf-serration."—BUCKNALL & WHITE.

R. Chamæmorus L. Moorland at about 2000 ft., Penyghent, Upper Wharfdale, W. Yorks, v.-c. 64, May 21, 1918.—C. WATERFALL.

Potentilla norvegica L. Purwell Field, Hitchin, Herts, v.-c. 20, September 10, 1919. In some quantity on land which had been laid down to temporary pasture (rye-grass and lucerne). Two years ago it was broken up for allotments, but a strip was left for a road and on this strip the plant—at least biennial and probably perennial—was found by me this year.—J. E. LITTLE.

P. Anserina L., var. *concolor* Wallr. Side of path in a cultivated field, Beaumont Ley, Leics., v.-c. 55, August, 1919. This form (not so extreme as I have seen it) seemed to be confined to sides of paths in cultivated fields in this locality. Leaves of plants in neighbouring meadows were practically glabrous on the upper surface.—A. E. WADE.

Rosa pomifera Herrm. St Margaret's, Kent, June, 1919, from the same bush as I noticed 18 years ago.—G. C. DRUCE. "This is correct, but the specimens are very unsatisfactory."—BARCLAY. "Naturalised. It certainly is not native in S.-E. England, even if it is anywhere in Britain."—WOLLEY-DOD. Sent also (unnamed) from below the cliffs at Kingsdown, Kent, by the Rev. Preb. H. E. Fox, probably from the same locality.

Rosa ——? Mountain pasture at 950 ft., near Combe Scar, Dentdale, N.W. Yorks, v.-c. 65, July and September, 1919. I suppose this is a form of *R. mollis* Sm. Bushes erect, 3-4 ft. high, neat in habit and remarkably small-leaved. Petals white, tipped with rose.—A. WILSON. "A *mollis* form undoubtedly, under var. *cærulea*, but I never saw it so small-leaved. Rouy has a var. *Bolqueriana*, which I only know from his key characters. 'Fruit small, spherical, umbilicate at base, shorter than peduncles. Leaflets small or very small. A sub-shrub, creeping, in fissures of rocks.' If this habit agrees it might go to that."—WOLLEY-DOD. "A variety of *R. mollis* with smooth peduncles. This form occurs occasionally, but the peduncles are seldom smooth over the whole bush. Specimens should not consist of several branchlets or ends of them, but of a fair-sized branch with the branchlets attached."—BARCLAY.

R. Eglanteria Huds. (*R. rubiginosa* L.). Moorland pasture above the Minera Lime Works, Denbigh, N. Wales, v.-c. 50 at 1000 ft., September 9, 1918.—C. WATERFALL. "Yes; possibly var. *apricorum* Rip."—BARCLAY. "*R. apricorum* Rip."—WOLLEY-DOD. Sent also by Mr Waterfall from Arncliffe, Upper Wharfedale, W. Yorks, v.-c. 64. On this Col. Wolley-Dod remarks—"The Distributor kindly sent me three sheets but none has flowers or fruit, so I can only say it is certainly not *R. Eglanteria*, but it may be a small form of *R. mollis* like Mr Wilson's Dentdale plant."

R. micrantha Sm., var. *trichocarpa* Rouy. Cadbury Hill, Yatton, N. Somerset, v.-c. 6, October 6, 1919.—IDA M. ROPER. "I should put this under *R. micrantha* Sm., typica, which may often have glandular fruit, but the leaflets are remarkably eglandular."—WOLLEY-DOD.

R. dumetorum Thuill., var. *hemitricha* Rip. Lane in Filton Meads, W. Gloucester, v.-c. 34, June 17 and September 22, 1919. Has long drooping branches; leaflets biserrate, hairy on mid-rib; petioles villous and glandular; flowers brilliant pink.—IDA M. ROPER. "I should describe the leaves as uniserrate, hardly even irregularly so, and label it *R. dumetorum*, var. *semiglabra* (Rip.), though some of the fruits look like those of *R. ramealis* Pug., which is near it. The colour of the flowers is exceptional."—WOLLEY-DOD.

" The leaf-serration is not double enough for var. *hemitricha*. It may be called var. *semiglabra* Rip., if it be worth while distinguishing from *urbica* Lem."—BARCLAY.

R. coriifolia Fr. of group *Bakeri* Dégl. Buckie Braes, Mid-Perth, August 29, 1918. This was sent to the Watson Club in 1908 as No. 15, and under the same name as I now give it on the present labels. But I found afterwards that the parcel then sent contained specimens of a very similar but different form, and this led to misunderstanding. The present sending is pure and the naming is undoubtedly correct.—W. BARCLAY. " Almost typical *R. Bakeri*."—WOLLEY-DOD.

Pyrus scandica Aschers. Haresfield Hill, v.-c. 33, August 22, 1919. A number of large trees planted on top of the hill. I think they are identical with the *Pyrus* from a cliff near Cefn, Breconshire, which Mr Ley put to *scandica* Aschers. This year there was practically no fruit to be had.—H. J. RIDDELSDELL. " Foliage only reached me. I hope flowers and ripe fruit can be collected next season. It seems very near the *P. scandica* of Syme from Arran."—SALMON.

P. minima Ley. Craig Cille, Brecon, June, 1919.—G. C. DRUCE. " Excellent examples of the plant in flower."—WHITE.

P. cordata Dégl., non Desv., nec Boiss. Border of an ancient track on Yate Lower Common, West Gloucester, flower May 13, and fruit July 20, 1919. Two large trees in a new locality half a mile or so north of the original station. See *Journ. Bot.* 40, 1918. The wood in which this pear was first observed by Mr Bucknall and me has since been cut down, and therefore the trees yielding the accompanying specimens are of special value.—J. W. WHITE. " For this I suppose the more correct name would be *P. cordata* Desv., var. *Déséglisii* (Rouy & Camus)."—DRUCE.

Saxifraga stellaris L., var. *fontana* Druce. Carnedd Llewellyn. Carnarvonshire. In some plenty on rill-borders. Seen also on the north side of Cairngorm, August 1919.—G. C. DRUCE.

Tillæa muscosa L. St Martin's Point, Guernsey, May 2, 1919.—C. V. B. MARQUAND.

Drosera anglica Huds. Cannock Chase, Staffs, September 1919. Shewn me by Captain Vevers. A new county record.—G. C. DRUCE.

Epilobium hirsutum × *parviflorum*. [2138]. Ockham, Surrey, v.-c. 17, abundant, July 30, 1919.—C. E. BRITTON. " We cannot

see any *parviflorum* here. Flowers rather small, certainly, but otherwise as in *hirsutum.*''—BUCKNALL & WHITE. '' A pretty form with shining leaves and elegant habit; but doubtless super *hirsutum.*''—DRUCE.

Trinia glauca Rchb. (*Apinella glauca* O. Kuntze). Berry Head, near Brixham, S. Devon, v.-c. 3, May 19, 1920.—C. WATERFALL. '' The immature staminate plant alone reached me.''—WHITE.

Cicuta virosa L. Filby Broad, Norfolk, July 3, 1919.—R. J. BURDON. '' Acceptable specimens of a plant that seems to be dying out in this country.''—WHITE.

Falcaria vulgaris Bernh. (labelled *Ammi majus* in error). A nice lot in a cornfield near Swalcliffe Grange, v.-c. 23, August 7, 1919.—H. J. RIDDELSDELL. '' Yes, *Prionitis Falcaria* Dum. = *F. vulgaris* Bernh.''—THELLUNG. Sent also by Dr Druce from a pasture at Culham, Oxon, where, although now well established, it must have been introduced since 1897. Pointed out by Mr Gambier-Parry. '' A weed of cultivation distributed throughout Continental Europe. In Britain it occurs somewhat rarely as a casual, being on record from Lincs, Oxon, Hants, Kent, and Somerset. Such an appearance is well described in *Journ. Bot.* 279, 1874. The characteristic radical leaves often wither before the fruit forms.''—WHITE.

Carum verticillatum Koch. Among sphagnum in a boggy field near the Lake, Llandrindod Wells, v.-c. 43, June 13, 1919.—C. WATERFALL.

Oenanthe silaifolia Bieb. Amberley, Sussex, June 12, 1919.—A. WEBSTER. '' Probably; it does grow there; a poor specimen.''—SALMON. '' Yes, I saw it there in 1917.''—DRUCE.

Siler trilobum Crantz. [433]. Origin, Cherry Hinton; cult. Watton, July 26, 1919.—F. ROBINSON. '' What a pity to send out so great a rarity damp and mildewed! ''—WHITE.

Anethum graveolens L. Alien on waste ground, Bradford, v.-c. 64, Sept. 13, 1919.—JOHN CRYER.

Daucus gummifer Lamark, var. *intermedius* Corb. Sea cliffs near Mevagissey, August 1919. The plants from this East Cornwall locality correspond with those gathered by me at Bedruthan near Newquay, on the western side of the county, in 1912. The latter, however, were immature, whilst those now distributed have fruit well developed. I have noticed that the mature umbels are as a rule flat and only occasionally convex. C. E. Salmon (*Journ. Bot.* 320, 1917),

suggests that the length of involucre in relation to the umbel is likely to vary with the flowering stage, and that is evidently so. Although young plants in early flower do match Withering's drawing of his *D. maritimus* and have the character on which Rouy & Camus established their (equivalent) *D. gummifer*, var. *Witheringianus*, in the fruiting stage this character fails, as the divisions of the general involucre then fall short of the umbel. For this reason we should agree with Mr Salmon that it will be better to place these coast Carrots which are not true *gummifer*—their leaves not being dark green and shining—under Corbière's variety. Some of us have doubted if *gummifer* itself be more than a variety of *D. Carota* shading into the type through intermediates such as are now discussed; but the experiment recorded by E. F. Linton (*Rep. B.E.C.* 1896), proving that in cultivation seedlings of the British plant from Durlstone Head come true with great uniformity, certainly supports its grade as a species.—J. W. White. "Yes, this is my idea also of Corbière's plant."—Salmon.

Hedera Helix L., var *sarniensis* Druce. La Haule, Jersey, April, 1919.—G. C. Druce.

Sambucus nigra L., var. or forma. [2073]. Headley Heath, Surrey, v.-c. 17, June 15, 1919. A curious plant, distinguished by the markedly concave leaflets which are incise-serrate and terminated by an isolated entire linear acute acumen about 10 mm. in length; and by the asymmetrical-based upper pair of leaflets. This Elder forms thickets in full exposure on the side of a dry chalk valley. I have not elsewhere met with any similar native specimens, but have seen an exact counterpart from Slesvig-Holstein which is included in the cover of *S. laciniata* Mill. in *Herb. Br. Mus.* The latter, of course, is very different from the Headley *S. nigra*, though the coarse cutting of the leaves of this suggests an approach to that of Miller.—C. E. Britton. "A very peculiar variation. In some hands it would certainly get a varietal name."—White.

Viburnum Lantana L., var. *viride* Kerner. Wytham, Berks, July 1919. See *Rep. B.E.C.*, p. 560.—G. C. Druce.

Galium Mollugo × *verum* (*G. ochroleucum* Wolf.). [1450]. With the parents on a gravelly bank, Langham, N. Essex, v.-c. 19, July 13, 1919. Flowers deep cream colour; stem suberect. The *Mollugo* parent was weak and trailing, not a scandent form.—G. C. Brown. "Shows very little of the *verum* influence."—Bucknall and White. "Yes, super *Mollugo*.—Druce.

Valerianella rimosa Bast. Headington, Oxon, May 1893.—G. C. Druce. "Yes, fruit unmistakable."—Salmon.

Bellis perennis L. Growing on a grass lawn at Putney and showing effects of drought, June 1919.—H. E. Fox.

Inula squarrosa Bernh. Murford Woods, Denbigh, N. Wales, v.-c. 50, August 1918.—C. Waterfall. "Poor specimens of a rather common plant."—White.

I. britannica L. Cropston, Leicester, September 1919.—G. C. Druce.

Matricaria inodora L., var. *salina* Bab. Sea coast, Mevagissey. E. Cornwall, August 5, 1919.—J. W. White.

M. maritima L., var. *phœocephala* Rupr. Bressay, Shetland, v.-c. 112, August 28, 1919.—L. V. Lester-Garland. "A plant of much interest, little known to British botanists in general. Although *M. maritima* was described by Linnaeus as a species and accepted as such by certain authors of distinction it has been less highly rated by the majority. Syme, while noting the differing fruit-characters, considers the plant of the North of Scotland to be too intimately connected with *inodora* by intermediates to rank even as a subspecies. In the last (German) edition of Koch's *Synopsis* and by Rouy (*Fl. de France*) *maritima* is classed as a variety or "forme" of *inodora*, no mention being made of phyllaries or fruit. Yet in the third (Latin, 1847) edition of the *Synopsis maritima* was well distinguished, separated from *inodora*, and this statement added :—' *Tripleurospermum maritimum* Koch. . . . Marginem autem squamarum involucri, dilutius saturatiusve coloratum, sicut in generibus affinibus, variabilem reperi.' Still, in neither of these works does *phœocephala* Rupr. find a place although it had been published at an earlier date. Mr Wilmott informs me that Ruprecht describes his plant as a var. of *M. inodora* in the *Flores Samojedorum Cis-Uralensium* (1845), stating it to be a native of the Arctic regions and that it may vary in height and leaf-characters according as the station is more or less maritime. He says, further, emphatically :—' in specc. e 12 diversis locis maris glacialis reportatis et alibi etiam a me examinatis nunquam squamas anthodii margine scarioso pallescente ut in communi planta ruderali, sed fusco-nigricante et plerumque latissimo ornatas video.' Ruprecht's material was evidently of more stability than that reported on by Syme. It may be added that Mr Bucknall and I find the fruit of these specimens to differ from those of *M. inodora* in size, shape, colour, and rugosity. We feel satisfied, therefore, with the determination. This little group of Compositæ has been so much confused by those who have written about it that it will be most useful if Mr Lester-Garland, who is understood to be working on the subject, can clear up the obscurity that now troubles us. Among more important matters one would like to know what are the 'allied

genera' in which Koch found the phyllaries to vary so much in colour."—WHITE. "The fruit in my specimen is not ripe enough to make sure they are tetragonous. This has the habit of my Sutherland *phœocephala* which, however, materially altered in cultivation."—DRUCE.

Artemisia maritima L., var. *gallica* Willd. Edge of a sluice on the coast of Pevensey Bay, Sussex, v.-c. 14, October 12, 1905.—CHAS. BAILEY.

A. gnaphalodes Nutt., teste Turrill. [Q. 71]. Beaumaris, Bangor, August 1919.—G. C. DRUCE.

Doronicum Pardalianches L. Wood, Shropham, v.-c. 27, May 19, 1919.—F. ROBINSON. "Correct."—DRUCE.

Senecio vulgaris L., f. *rubricaulis* Trow. Kibworth, Leicester, April 19, 1916. Coll. Miss M. E. WHITTON; comm. A. R. HORWOOD. And f. *multicaulis-radiatus* from seed, 1919.—T. STEPHENSON.

S. squalidus L., var. *subintegrus* Druce. Oxford, August 1919.—G. C. DRUCE.

S. sarracenicus L. Turner's Hill, Sussex, August 20, 1919.—A. WEBSTER. "As amended by Koch this is the *S. fluviatilis* Wallr."—DRUCE.

S. paludosus L. Probable origin, Wicken Fen, Cambs, cult. Ledbury, July 20, 1919. Sent because it is good this year and new members may be content to have it.—S. H. BICKHAM.

Cirsium britannicum Scop. Boggy field near the Lake, Llandrindod Wells, v.-c. 43, June 13, 1919.—C. WATERFALL. "Yes, but the name must be changed to *C. pratense*; see *Rep. B.E.C.* 417, 1916, shewing reasons for the change."—DRUCE.

Centaurea Jacea L. [1832]. Hort. West Barnes, Merton, Surrey, v.-c. 17, July 3, 1919. Cultivated examples of the Knapweed from Epsom Downs, wild specimens of which were distributed through the Club in 1917 (see *Report*). This form belongs to the subspecies *eu-Jacea* Gugler.—C. E. BRITTON.

C. nigra L., var. *radiata*, teste Dr Rendle. Hedgerows, S. Tawton, Devon, August 1919.—H. E. FOX. "Well prepared specimens retaining the tints of the leaves and flowers of the living plant. As the heads are ovoid with narrow bract-scales this must be placed under

C. nemoralis Jord. Gugler, who monographed the South-eastern European forms of the genus, divides *nemoralis* (which he ranks as a subspecies of *C. nigra* L.) into two varieties—(1) *Jordani*, marked by the bract-scales, including teeth, being black and flowers non-radiate; and (2) *Nevadensis*, distinguished by its narrower brown scales and radiate flowers. Mr Fox's plant evidently comes under the last-named variety, with which I hope it may also be possible to associate most of the British plants that have been named either *nigra-radiata* or *nigra-decipiens*. Whilst one may refer the S. Tawton plant to var. *Nevadensis* Gugler, it is desirable to point out that among other characters, Boissier attributes to the species *C. Nevadensis* Boiss. & Reut. leaves wholly entire, the lower never more than subundulate, whereas the plant now distributed shews (in the more vigorous examples) shallowly pinnatified lower leaves. Many of the radiant-flowered forms of chalk hills in the south of England make a closer agreement with the Spanish plant described by Boissier."—BRITTON.

C. pratensis Thuill. [2113]. Woldingham, Surrey, July 15, 1919. Mr White reminds me that according to Nyman this, being a native of Central and Eastern Europe, should be an alien in this country; and further, that Nyman places it as a variety of *C. nigrescens* Willd., a non-British species. This implied suggestion that *C. pratensis* is therefore unlikely to be a British species is very easily met. In the first place it is essentially a plant of Western Europe, the species having been established by Thuillier in his *Flore de Paris*, where it is called ' Centauree des prés'. Rouy says it is found in all France, and the habitats given by him ' lieux boisés et prairies, bords des fosses ' are similar to the situations in which the plant grows at Woldingham, where, in the dry chalk valleys, it is found abundantly among the turf bordering roads, in scrub-grown pastures devoted to grazing, and in hayfields. As to the association of this plant with *C. nigrescens* Willd., many Central European botanists appear to have followed too closely Koch's *C. Jacea*, z. *pratensis* ' involucri foliola appendice acuta elongata remotius fimbriata saepe recurvata,' a diagnosis which covers forms related to *C. microptilon* Gren. which, in opposition to French views, Gugler places under *C. nigrescens* Willd., *sensu lato*. Mr F. N. Williams is another author who, in my opinion, appears to prefer Koch to the French botanists, although they presumably should be in a position to know Thuillier's species. Later on I hope to deal with *C. pratensis* at greater length elsewhere. —C. E. BRITTON. " If *C. pratensis* Thuill. is the same as that of Vaillant it should have naked achenes and radiant flowers. Judged by Savouré's Key (*Bull. Soc. Linn. Normand.*) this plant seems to be very near *C. nemoralis* Jord."—WHELDON. " Yes, this is my idea of *C. pratensis* Thuill. which Coste separates from *C. nigra* as a species. Usually—though not invariably—rayed as in these specimens."—SALMON.

C. nigra L., var *obscura* (Jord.). [079]. Twinstead, N. Essex, August 1919. A pretty plant from the variegated appearance of the phyllaries and the bright rose-red florets.—G. C. DRUCE. "Certainly not Jordan's *obscura* but rather, judging by the lanceolate disks of the scales, the allied form *C. nemoralis* Jord. Consequently I do not think this is the same as the plant from the same locality which I named *C. obscura* for Mr Druce."—BRITTON. "In *C. obscura* Jord. ap. Billot the appendices are appressed on the bracts, and orbicular to widely elliptic in outline, so that the heads look very dark. In these they are lightly recurved or loosely appressed above, and more strongly so or even reflexed at the base. I should think this is nearer *C. Debeauxii* G. & G., or perhaps more likely *Debeauxii* × *obscura*. The rachis of the appendix is rather narrowly elliptic to isosceles-triangular."—WHELDON.

C. Scabiosa L., var. Crickley Hill, v.-c. 33, August 18, 1919. Heads very small and apparently rayless. One clump by the roadside. Is it a *lusus* or a real variety? If the latter, it certainly deserves a name of its own.—H. J. RIDDELSDELL. "We fear that no existing name can be fitted to this form with long-stalked heads and appendages hiding the remainder of the phyllaries."—BUCKNALL and WHITE. "A slender form with small capituli—scarcely larger than those of *C. nigra*. The heads are remarkable for the way in which the appendages cover the phyllaries to an extent that is unusual in this species. I know of no named form quite like this, and have failed to match it with any example in *Herb. Brit. Mus.* at S. Kensington."—BRITTON.

Arnoseris pusilla Gaertn. Derelict sandy field near Cholham Ridge, Surrey, July 18, 1919.—A. B. JACKSON.

Crepis capillaris Wallr., var. *runcinata* (Bisch.). Port Meadow-side, Oxford, growing in chalk rubble brought from Upton, Berks, June 1893.—G. C. DRUCE.

C. nicæensis Balb. King's Weir, Oxon, June 1893; and var. *eglandulosus* Crép. Headington Wick, Oxon, June 1893.—G. C. DRUCE.

Hieracium aurantiacum L. Railway bank, Baildon, v.-c. 64, June 25, 1919. Established here over twenty years and now abundant.—JOHN CRYER.

Hieracium ——? Root from Clova, Forfar, 1912; cult. Hort. Bot. Haun. C. H. Ostenfeld, 1915.—G. C. DRUCE. "Branching from base; ligules slightly ciliate; styles a little livescent. I think this is *H. chrysanthum* Backh."—CRYER.

Hieracium ——? Cautley Crag near Sedbergh, N. W. Yorks, v.-c. 65, alt. 1700-2100 ft. on Coniston Grit, August 1919.—A. WILSON. "The tall habit, outline and nature of the leaves, branching of the stem, the fairly large heads, the clothing of the phyllaries and the yellow styles place this under *H. decolor* Ley = *H. cæsium* Fr., var. *decolor* Linton. I have it from Settle, Grassington and the Great Orme. It has a strong resemblance to, and is very near, *H. Leyi*, to which some of the Yorkshire plants were at one time placed. The late Rev. Aug. Ley (*Journ. Bot.* 10, 1909) raised *decolor* to specific rank and removed it from Group *Cæsia* to *Oreadea*, next to *H. Leyi*. The late Rev. W. R. Linton approved and endorsed this change."—CRYER. "As novices, provokingly ignorant of hawkweed problems, and without a description of *decolor* (it is not indexed in Linton's work and so we missed it) we ran this plant down to *H. Leyi* and feel encouraged. But what a liquid genus must *Hieracium* be if a plant can be put back into a 'better hole' behind fifty intervening species (see *Lond. Cat.*) without the ruffling of a ligule!"—BUCKNALL & WHITE.

H. Sommerfelti Lindeb. ? Root from Clova, Forfar; cult. hort. Oxon, August 1919.—G. C. DRUCE. "Stem with fine white spreading hairs and stellate floccum. Leaves *not* gradually narrowing into the petiole. Heads smaller and more numerous. Phyllaries more glandular and more thickly clothed with grey black-based hairs. Styles darker. These characters distinguish it as *H. Sommerfelti* Lind., var. *splendens* F. J. Hanb."—CRYER.

H. pellucidum Laest. Miller's Dale, Derby, v.-c. 57, June 11, 1919. In abundance on limestone rock.—J. CRYER.

H. cymbifolium Purchas. On rock near Peveril Castle, Castleton, Derby, v.-c. 57, June 12, 1919.—J. CRYER.

H. vulgatum Fr., var. *amplifolium* Ley? Stonework of canal bridge crossing the Mersey between Stratford and Sale, v.-c. 58-59, July 25, 1919. The larger and more complete specimens were quite inaccessible.—R. S. ADAMSON. "Ley placed *amplifolium* under *H. sciaphilum* Uechtr., but this remarkable and interesting hawkweed is not that. I have nothing like it in my herbarium. The leaves are ciliate with long greyish-white hairs and almost an equal number of small glands. The stem, branches, bracts, peduncles, and phyllaries are densely covered with stiff black glands. The ligules, too, are tipped with glands and a few are scattered on the surfaces of the corollas. It seems to me to be a new species."—CRYER.

H. maculatum Sm. Roadside near Bagshot, Surrey, July 18, 1919.—A. B. JACKSON. "Yes; but not the truly wild plant. A garden escape, I presume."—CRYER.

H. protractum Lindeb. Origin, Unst, Shetland; cult. Ledbury, July 21, 1919.—S. H. BICKHAM. "Correct; the characters of the species are emphasised in this beautiful cultivated specimen."—CRYER.

H. umbellatum L. To shew variation in the E. Lyn Valley, N. Devon, v.-c. 4, August 1917.—W. C. BARTON. "There is marked variation. One specimen has leaves almost entire; in another the leaves have triangular teeth pointing upwards."—CRYER.

Hypochœris radicata L., ? var. *hispida* Peterm. [327c]. Lyn Valley, near Brendon, N. Devon, September 14, 1917.—W. C. BARTON. "In the specimens examined the phyllaries are without pectinate hairs and are minutely ciliate only at the tip. We should leave this with the type. In other gatherings from Mr Barton (same locality and same date, Nos. 327A. and 327B.) the phyllaries are hispid throughout and may well mark the variety."—BUCKNALL & WHITE.

H. radicata L., var. *leiocephala* Regel. [327D]. The Lyn Valley, near Brendon, N. Devon, September 14, 1917. Much less frequent than var. *hispida*.—W. C. BARTON. "This equals var. *typica* Beck—the ordinary plant."—BUCKNALL & WHITE. "Yes, the 327c I should leave under type, and treat 327d as Mr Barton has done."—DRUCE.

Leontodon autumnale L. Four gatherings [328 A, B, C, D.] from the Lyn Valley, near Brendon, N. Devon, v.-c. 4, September 1917.—W. C. BARTON. Ill-health has unfortunately prevented the contributor from working up his critical notes on the forms of this species. He hopes they will be available for the next *Report*.

Taraxacum ——? [Q. 714]. Root from Galashiels, Selkirk; cult. hort. Oxon., July 1919. Dahlstedt tells me this is a new species allied to *T. Dahlstedtii* Lindm. f. which occurs in Russia, Finland and Scandinavia. It is the plant I distributed as O. 42 [without note or comment] from Moulsford, Berks, through the Club in 1915. I hope to induce Dahlstedt to name and describe it for our next *Report*.—G. C. DRUCE. "Compared with existing descriptions—which seem to have become obsolete—this comes under *T. officinale* Weber, var. *typicum* Beck (*T. Dens-Leonis* DC.), agreeing in every respect."—BUCKNALL & WHITE.

T. obliquum Jord. Garden path, Wigginton, v.-c. 23, May 17, 1918. I am not sure that all the specimens distributed are correctly named. Some suggest a hybrid origin—*officinale* × *obliquum*. It would be interesting to have opinions on the point.—H. J. RIDDELS-

DELL. "In a wide sense the naming is correct."—DRUCE. "To us the gathering appears to be well named; we see no hybrid."—BUCKNALL & WHITE.

T. erythrospermum Andrz. Wall, Lockington, v.-c. 55, May 5, 1916. Coll. A. R. Horwood; comm. A. E. WADE. "The name is untenable; in a broad sense the plant is *T. lævigatum* DC., but I think the specimen is near *T. lacistophyllum* Dahlst."—DRUCE.

Vaccinium intermedium Ruthe. Cannock Chase, Staffs, September 1919.—VEVERS & DRUCE. See *Report* p. 567.

Microcala filiformis Hoffmgg. & Link. Littlesea, Dorset, June 13, 1919.—H. J. RIDDELSDELL.

Centaurium umbellatum Gilib. (*Erythræa Centaurium* Pers.), var. *conferta* Wheldon (ined.), forma flor. alb. [*E. Centaurium* forma inflorescentia conferta Wittr. (non *E. conferta* Pers.)]. Sand dunes, Hightown, South Lancs, v.-c. 59, August 1911.—J. A. WHELDON.

C. scilloides Druce, var. *portense* (Brot.) Druce. Newport, Pembroke, June 1919. See *Report* 290, etc., 1918.—G. C. DRUCE.

Gentiana Amarella L., var. *calycina* Druce. Reay, Caithness, July 1919. See *Report* 329, 1913. The corolla is pale-coloured, pinkish white or dull lilac, and scarcely protrudes beyond the calyx-segments. It occurs also in Sutherland.—G. C. DRUCE.

[*G. lingulata* C. A. Agardh], var. *praecox* Towns. Heathland, Perranporth, v.-c. 2, June 20, 1919.—F. ROBINSON.

Limonium bellidifolium Dum. Blakeney Point, Norfolk, July 11, 1919.—R. J. BURDON. "Yes, *S. bellidifolia* DC. Dumortier's name should not be used. The sod of earth attached to my example makes it a quite impossible herbarium specimen; it is really easy to detach the adherent salt-marsh when the plant is gathered."—SALMON.

Primula polyantha Mill. Near Beedon, W. Sussex, May 1919.—G. C. DRUCE.

P. veris × *vulgaris* = *P. variabilis* Goupil. Hilly woodland, Litton Woods, Upper Wharfedale, v.-c. 64, May 18, 1918, alt. 1200 ft.—C. WATERFALL.

P. vulgaris Huds., dwarf form. Plants grown in good soil two years, 1919.—T. STEPHENSON. "This form appears to correspond

to a sheet in *Herb. Brit. Mus.* '*P. vulgaris* Huds., var. *Chloe* C. B. Clarke, from Dole's, Andover, Hants, Leg. C. B. Clarke, May 17, 1900; N. 49796'. As to this there is in *Proc. Linn. Soc.* 41, 1903, the following note:—'Mr C. B. Clarke, F.R.S., F.L.S., showed specimens of a variety of the Primrose (*P. vulgaris* Huds.) with remarkably small flowers, to which he proposed to give the varietal name *Chloe*. (He subsequently considered that it was probably a hybrid between the Primrose and a form of the Cowslip which he had found on the Hants Downs).' As in Mr Stephenson's plants, Mr Clarke's specimens have leaves much reduced in size and breadth of lamina, with relatively long petiole into which the lamina is not or scarcely decurrent. It may be noted, however, that the distinctions given in Babington's *Manual*, 1856, in the forms of the leaves of *P. vulgaris*, *P. veris*, and *P. elatior*, while broadly applicable, are subject to great variation, as is evident from a comparison of the sheets in *Herb. Brit. Mus.* There is nothing in Mr Stephenson's material to suggest hybridity—such a question is more easily determined from fresh specimens—but if he could supply the origin of the plants he distributed and say if *P. veris* was present in the neighbourhood it would be helpful."—LITTLE. "This is well worth growing from seed. I have a similarly small-flowered plant from Berkshire in which also the leaves are remarkably small. If constant it may be well worth separating as var. *nana*."—DRUCE.

P. farinosa L. Damp pasture near Arncliffe, Upper Wharfedale, v.-c. 64, May 1918, alt. 1200 ft.—C. WATERFALL.

Androsace maxima L. Grown at Billingshurst from seed of specimen sent from rubbish-heaps at Glasgow by Mr Lee, May 4, 1919.—ALF. WEBSTER. "Yes; one would like to know the method of its introduction—hortal, lanal, carinal, agrical? Dr Thellung agrees with my determination."—DRUCE. "We think it most doubtful if this be correctly named; or if it be European. We have plenty of Continental *maxima* for comparison. Note the peculiar habit with one long flexuose branch from the umbel, and the calyx wide open both in flower and fruit whereas in *A. maxima* it is always closed."—BUCKNALL & WHITE. "I cannot match this plant at Kew or at S. Kensington. I should like to know more about it."—LESTER-GARLAND.

Lysimachia punctata L. Edge of lake, Scoulton Mere, v.-c. 28, July 24, 1919.—F. ROBINSON.

[*Collomia coccinea* Lehm.] Grown at Billingshurst from seed of specimen from waste heap at Glasgow sent me by Mr Lee, July 8, 1919.—A. WEBSTER. "This is *C. linearis* Nutt."—DRUCE. "A native of N.W. America, and has been observed as a garden weed in this country."—WHITE.

Symphytum asperum Lepechin. Root from near Cockburnspath, East Lothian, J. Fraser; cult. at Clifton, Bristol, July 1919.—C. BUCKNALL.

Pulmonaria ——? [609]. Leaves variable, mostly spotted; corolla pink, turning blue. Copse near Dartington Cross, S. Devon, v.-c. 3. Flowers April, summer leaves June, 1919.—C. V. B. MARQUAND. "Dr Stapf names this *P. affinis* Jord., known from France and Belgium. An interesting record, see Secretary's *Report*."—DRUCE. "Nyman places *affinis* as a subspecies of *P. saccharata* Mill. This plant seems to differ in the soft glandular hairiness of the upper stems which should be bristly."—BUCKNALL & WHITE.

Scrophularia aquatica L., var. *appendiculata* Mér. [2074]. Among *Sambucus nigra* scrub, on the side of a dry chalk valley near Headley, Surrey, June 15, 1919.—C. E. BRITTON. "Beautiful examples of the variation."—WHITE.

S. alata Gilib. Compton Abdale, v.-c. 33, August 21, 1919. For a short distance in the same stream as *Mentha rubra*. This figwort was distributed from E. Gloucester a few years ago. Fruiting specimens now sent.—H. J. RIDDELSDELL.

Mimulus moschatus Dougl. [379]. Taw valley below Belstone, N. Devon, v.-c. 4, August 11, 1919. Plentiful in the streamlets; probably escaped from a cottage garden, but now naturalised. Quite scentless, but see *Journ. Bot.* 285, 1919. This may probably be the locality indicated by Mr Hiern, "apparently wild, July 9, 1887," in *Journ. Bot.* 334, 1908.—W. C. BARTON. Sent also from wet places below Causand Beacon, Devon, by the Rev. H. E. Fox, who thought it fully naturalised. "I saw it last summer on a wild moor in E. Cornwall."—WHITE.

Veronica peregrina L. Killiow, near Truro, v.-c. 1, June 12, 1919, with Mr F. Robinson.—F. RILSTONE.

Euphrasia brevipila Burnat & Gremli. Wigginton, v.-c. 23, July 10, 1919. Distributed last year in younger state. Perhaps maturer specimens may make agreement among experts possible.—H. J. RIDDELSDELL. "*E. brevipila*, with very numerous short-stalked glands, especially on calyx-teeth."—PEARSALL. "Although it shows some of the shortly stalked glands characterising *E. brevipila*, this still seems to me to be nearer, on the whole, to *E. borealis* Towns."—PUGSLEY. "This differs from typical *E. brevipila* in the denser spike, the less spreading bracts with shorter, less aristate teeth, and the smaller, more included flowers. In some respects it comes near to *E. occidentalis*, but that is a plant of the sea coast and differs in

gregariously but as solitary individuals, July 1919. A most beautiful plant from its corolla-margin having a line of carmine-red about 1 mm. broad, the corolla being clear yellow with a pale tube. Life is hardly long enough to give the full name as used by M. Beauverd—*M. pratense* L., subsp. *Eu-pratense* Beauv., var. *alpestre* Beauv., subvar. *scotianum* Beauv., but the plant seems well worth varietal rank. It has been sent me also by our member Mrs Paul Ascherson from moorland above Tongue, W. Sutherland; and Mrs Wedgwood and I saw it on Cairngorm.—G. C. DRUCE.

Orobanche minor Sm., var? [1301]. Slipton, Northants, June 1918. Rare in Northants; appeared in one clover field only.—G. CHESTER. "Not ordinary *minor*. I should like to see fresh specimens. Was *major* there? I have the same form from Surrey."—DRUCE. "I can make nought but *minor* of this."—SALMON. "Nor can we."—BUCKNALL & WHITE.

Utricularia major Schmidel (*neglecta* Lehm.) probably, fide A. Bennett. Mud in shallow water, Loch of Græmeshall, Holm, Mainland, Orkney. Plants neither in flower nor fruit were common among the stems of *Scirpus Tabernæmontani* at the west side of the loch, August 25, 1916. See *Rep. B.E.C.* 497, 1916.—H. HALCRO JOHNSTON. "Probably correct, but Prof. Glück held strongly that flowerless specimens were insufficient for accurate determination between *vulgaris* and *major*."—DRUCE.

Mentha spicata L. North Leigh, Oxon, completely naturalised, July 1919.—G. C. DRUCE.

× *M. hircina* Hull. (*M. aquatica* × *longifolia*). In a damp shady lane above Weston-in-Gordano, N. Somerset, Sept. 8, 1919. This has leaves like those of *M. longifolia* but they are petiolate as in *M. aquatica*. The calyx is intermediate in size and in the relative length of its teeth between those of the two species. This appears to be very near to a specimen of *M. piperita sylvestris* collected by Sole himself at Lyncombe Spa, Bath, but is more hairy and the leaves are rather narrower. Mr A. Bennett has kindly compared it with specimens in his herbarium and tells me that it is similar to a plant from Prah Sands, Cornwall, which Mr Baker passed as his idea of *M. pubescens*, var. *hircina* Hull.—C. BUCKNALL. "This does not correspond with Syme's figure 1027 in *E.B.* nor with his description (*E.B.* vii., 11) which is that of a subglabrous plant. Syme cites Sole's plate 24 for it, but a peppermint sweet-smelling (piperis odore gravi) plant does not agree with *hircina* and suggests rather a *rotundifolia* parentage. I have a form similar to Mr Bucknall's from Cornwall which I leave under *M. pubescens* Willd. although I am not sure if that be a tenable name for a *longifolia* hybrid. Baker took a similar view to Syme (see

Journ. Bot. 243, 1865) and cites Sole's plate and description. Smith (*Eng. Fl.* iii., 77) says *hircina* is less agreeable than the other Peppermints."—DRUCE.

M. rubra Sm. Plentiful in a roadside stream at Compton Abdale, v.-c. 33, Sept. 11, 1919. There is a record of this Mint for E. Glouc. in *Phyt.* ii., 884; but there is no recent trustworthy account of its occurrence in the vice-co. until now.—H. J. RIDDELSDELL. "Yes, under × *M. rubra* (Sm.)—DRUCE. "I agree; scent unmistakable."—SALMON.

Satureia montana L. Ruined walls of Beaulieu Abbey, S. Hants, Oct. 12, 1919. On my first visit to the Abbey in 1912, I saw this plant growing mostly in somewhat inaccessible situations, about 20 ft. from the ground, and at the time considered it might be a slender form of *Hyssopus officinalis*, which for 250 years or so has been known to exist in the same locality. Others besides myself have been of the same opinion. I was, however, never satisfied with this conjecture, and on obtaining fresh specimens this year I determined it as above. Mr E. G. Baker has kindly confirmed the naming, and Dr Druce has informed me that Miss C. E. Palmer noticed it at Beaulieu in 1900, naming it *Hyssopus*, and he himself gathered it in 1908 but omitted to record it. It has been reported as an alien in Sussex (*Rep. B.E.C.* ii., 350) though I do not know the exact locality. From close observation at Beaulieu I conclude that *Satureia montana* has been as long naturalised there as the Hyssop or *Dianthus plumarius*, and consequently should be admitted to a place in our lists on the same grounds, as probably introduced by the monks before 1539, the date of the dissolution of the establishment, temp. Henry VIII.—J. COSMO MELVILL. "Correct."—BUCKNALL & WHITE. "Yes, I think the var. *rigidula* Jord. & Fourreau. See *Report* p. 573.—DRUCE.

Hyssopus officinalis L., f. *alba*. A seedling of a plant of usual colour which came from the ruins of Beaulieu Abbey, Hants, cult. Ledbury, July 21, 1919.—S. H. BICKHAM.

Salvia verticillata L. On a railway embankment at Buildwas Junction, Salop, June 27, 1919. In a few years this has thriven exceedingly and has now increased ten-fold, not however extending beyond the railway.—J. C. MELVILL.

Scutellaria minor L., with calyx and pedicel glandular. The Taw valley below Belstone, N. Devon, v.-c. 4, Sept. 1919.—W. C. BARTON. "The commoner British form; the glabrous plant is rare."—DRUCE.

Stachys germanica × *alpina*. From seedlings furnished by C.

E. SALMON. See *Journ. Linn. Soc.*, May 1919. Cult. Ledbury, June 25, 1919.—S. H. BICKHAM. "Very welcome."—WHITE.

× *S. ambigua* Sm. Wayside, S. Tawton, Devon, July 20, 1919. —H. E. FOX. "An excellent example."—BUCKNALL & WHITE.

× *S. ambigua* Sm. Bank of stream, Polperro, v.-c. 2, July 10, 1919.—F. RILSTONE. "Yes, the large-flowered form."—DRUCE. "Mine is a beautiful specimen of *S. palustris* × *sylvatica*, well matching Sowerby's plate of Smith's *ambigua* in *E.B.* XXX., t. 2089." —SALMON.

S. arvensis L. Wansford, Northants, v.-c. 32, Sept. 1918. Rare in Northants.—G. CHESTER.

Galeopsis speciosa Mill. Among corn, Stribers, N. Lancs, July 12, 1919.—W. H. PEARSALL.

Teucrium Botrys L. Near Sapperton, v.-c. 33, native, August 26, 1919. I distributed it from this locality some years ago.—H. J. RIDDELSDELL.

T. Chamædrys L. Camber Castle, Sussex, Sept. 8, 1919.—A. WEBSTER. Also from Haresfield Hill, v.-c. 33, August 22, 1919. Well established on the bare hillside, but quite close to a garden.—H. J. RIDDELSDELL.

Ajuga reptans L. In a very wet meadow, Parkway near Ledbury, July 18, 1919. The ground was so wet that the lower leaves had rotted. I could find no stolons, but this was possibly occasioned by the swamp-like state of the meadow.—S. H. BICKHAM. "It seems that the only described variety agreeing with this in the absence of stolons is *A. alpina* Vill. Dauph. 2, p. 347, non L., nec All. = *A. reptans*, var. *alpestris* Gremli and *A. Candolleana* Rouy. This is a mountain plant and we do not know if it be usually found under conditions corresponding to those described by our contributor."— —BUCKNALL & WHITE.

Corrigiola littoralis L. On shingle in profusion, Slapton Ley, S. Devon, v.-c. 3, Sept. 4, 1919, coll. E. M. Reynolds; comm.—F. ROBINSON. And from the same locality, three days earlier.—A. B. JACKSON.

Scleranthus perennis L. Sandy heath, Thetford, v.-c. 28, July 29, 1919.—F. ROBINSON.

Amaranthus Thumbergii Moq., var. *maculatus* Thell. Waste ground, Bradford, v.-c. 64, abundant each year since 1907, August 9, 1919.—JOHN CRYER. "Yes, see *Rep.* 306, 1918."—DRUCE.

Chenopodium polyspermum L., var. *cymosum* Moq. Cultivated ground, Weybridge, Surrey, August 1918, coll. J. W. Beck; comm. —G. CHESTER. "Agrees well with the description of *C. polyspermum* L., var. *cymosum* Chevallier given in the *Camb. Brit. Flora*." —BUCKNALL & WHITE.

Salicornia ——? Hayling Island, Sept. 1, 1919.—R. J. BURDON. "The two specimens are undoubtedly *S. herbacea*, f. *stricta* Moss and Salisbury."—SALISBURY.

S. herbacea L., seedlings. Saltings by the creek, Alresford, N. Essex, v.-c. 19, May 20, 1919.—G. C. BROWN. "Regarding *Salicornia* seedlings it is impossible to determine the species of these in a dried condition. These might quite well be *S. ramosissima* and not *S. herbacea* as suggested."—SALISBURY.

S. ramosissima Woods, forma. [342 A]. Drier part of salt marshes, Pagham harbour, W. Sussex, v.-c. 13, Sept. 12, 1918.—W. C. BARTON. "These are I think merely a state of *S. ramosissima* which approaches *S. gracillima* in habit. It is a form occurring when the plants are abundant or densely crowded and have suffered from intertidal drought."—SALISBURY.

S. radicans Sm. Wet sand, Chesil Beach, Dorset, August 3, 1896.—J. W. WHITE.

Polygonum Raii Bab. In loose sand on the coast, west of Criccieth, Carnarvonshire, July 24, 1880.—CHAS. BAILEY. Also from the shore of Clarach Bay, Cardiganshire, 1918.—T. STEPHENSON. "Right."—WHITE.

Rumex maritimus L. Walmour Common, W. Glouc., v.-c. 34, Sept. 13, 1919. I found this species some years ago near Arlingham in West Glouc. It has been known many years in East Glouc. (Coomb Hill Canal).—H. J. RIDDELSDELL. "Yes."—DRUCE. Also from ditches near Acle, Norfolk, July 24, 1919.—R. J. BURDON. "My specimens are young, but are they not × *limosus* Thuill.? "—DRUCE.

R. obtusifolius L., ? var. *macrocarpus* Dierbach. Littleport, Cambs, v.-c. 28, July 14, 1919. Plant about four feet high, much branched.—J. E. LITTLE. "This must come under *obtusifolius*, but I do not recollect seeing more *limosus*-looking teeth on fruiting segments. They are like those figured in *Camb. Brit. Fl.* ii., t. 145, fig. g., which is a more extreme drawing than that in Trimen's plate (*Journ. Bot.* 1873, t. 131, fig. 2a)."—SALMON. "Yes, the plant agrees well with figure and description of the variety in the *Cambridge Flora*."—BUCKNALL & WHITE.

Euphorbia Cyparissias L. Cornbury, Oxon, June, 1919, in a part of Wychwood Forest where planting had been done. Doubtless adventive and at no remote date.—G. C. DRUCE.

Ulmus vegeta Lindley? Windmill Hill, Hitchin, Herts, v.-c. 20, Sept. 1919. This was distributed in 1917 as *U. nitens*. I now send the mature leaves as desired by Mr Jackson. No samaras were produced this year.—J. E. LITTLE.

Urtica dioica L. [460 A], and var. *angustifolia* Wimm. and Grab. [460 B]. Wet ground under trees, South Tawton, N. Devon, v.-c. 4, Sept. 2, 1919. These two forms grew in distinct groups some distance apart, and a form with typical leaves was plentiful near by. Both male and female plants occurred in each group. As Dr Druce noted on his specimens from North Stoke (1912), the form 460B was much less virulent than the type.—W. C. BARTON. "Yes; and to *angustifolia* (although less characteristic) may be put No. 400."—DRUCE.

Alnus glutinosa Gaertn., var. *macrocarpa* Loudon. One tree, 16 ft. high, near Perryfield, Petworth, W. Sussex, v.-c. 13, September 17, 1918. Prof. Henry has seen this and agrees to the naming.—W. C. BARTON. "Yes, this comes under Loudon's var. which is described as having 'leaves and fruit rather larger than those of the species.' This is amplified in *Camb. Fl.* into pistillate catkins 3 cm. long; in these specimens they are not more than 25 mm."—DRUCE. "The largest catkin in my example measures 22 mm."—WHITE.

Salix aurita × *cinerea* = *S. lutescens* A. Kern. Shirehampton Marsh, near Bristol, v.-c. 34, April 22, and July 4, 1919.—IDA M. ROPER.

S. aurita × *caprea* = *S. capreola* J. Kern. Limestone rock near the Minera Lime Works, Denbigh, N. Wales, v.-c. 50, June 16, 1919. —C. WATERFALL. "This is *S. caprea* in the main, but the serration of leaves, slender tangs, &c., indicate another species in combination, which is probably *S. aurita*."—LINTON.

S. cinerea L., f. *oleifolia* Sm. Bank of rhine, Nailsea Moor, N. Somerset, v.-c. 6, May 20, and July 5, 1919.—IDA M. ROPER.

S. cinerea × *viminalis* = *S. Smithiana* Willd. S. Croxton, Leicester, v.-c. 55, April 24 and May 28, 1916, coll. A. R. Horwood; comm. A. E. Wade. "None of the leaves on my specimen is lanceolate. All seem too wide and rounded below for this. I should prefer *caprea* × *viminalis* = *S. mollissima* Sm."—PEARSALL.

Pinus Pinaster Ait. Bournemouth, April 16, 1919, coll. W. ELSEGOOD; comm. F. ROBINSON.

Helleborine longifolia Rendle & Britten. (*E. palustris* Crantz). Sandhills between Brill and Pendine, Carmarthenshire, August 1, 1919.—C. V. B. MARQUAND. "Beautifully dried."—WHITE. "The correct name is *Helleborine palustris* Schrank; the trivial *longifolia* is a nomen confusum."—DRUCE.

Orchis praetermissa Druce. Rudley, S. Hants, June 1919.—G. C. DRUCE. Dr Druce distributed also some examples from "Somerset Flats," coll. J. BOYS; and from "St Ouen's, Jersey," coll. T. ATTENBOROUGH.

O. praetermissa Druce. Itchington Common, Tytherington, W. Gloucester, v.-c. 34, May 31, 1919.—IDA M. ROPER. "Yes."—DRUCE.

O. maculata × *Fuchsii* = *O. transiens* Druce. [1162]. Langham Moor, N. Essex, v.-c. 19, June 17, 1919.—G. C. BROWN. "Yes; this is often mislabelled *O. latifolia* in herbaria."—DRUCE.

Allium sibiricum L. Lizard Downs, Cornwall, v.-c. 1, June 18, 1919.—F. ROBINSON.

Muscari racemosum L. Dry heath, Lakenheath Warren, Suffolk, v.-c. 26, April 21, 1919.—F. ROBINSON. "Too young, really."—WHITE.

Ornithogalum umbellatum L. Besilsleigh, Berks, May 19, 1919. The hot season induced this plant to flower profusely and therefore it revealed itself in many new localities where its presence had been unsuspected. In this one the pasture was a splendid sight from the abundance of blossom. It is probably native in Berks and Oxon.—G. C. DRUCE.

Juncus bufonius L. [450—458]. A number of gatherings from localities in Guernsey, N. Devon and N. Wales. The series gives some idea of the extreme variability of the species, and will, I hope, enable members to test the conclusion reached in my note in last year's *Report*. The perianth segments often vary in length even on the same plant and show a tendency to shorten in plants grown on dry soil or in exposed places.—W. C. BARTON. "Instructive examples of the plastic condition of this protean species. Nos. 456, 457, from Petit Bot, Guernsey, come very near to var. *halophilus* Buchenau & Fernald. See *Rhodora* v., 391, 1902."—DRUCE.

J. compressus Jacq. Roadside south of Redhill, Surrey, December 2, 1918. In 1918 Col. A. H. Wolley-Dod informed me that a

Juncus, either *Gerardi* or *compressus*, grew in the locality stated on the label. It was not until December 2nd, however, when botanising is usually quite over, that I was able to visit the spot, where the plant occurred in quantity over a small area. Although so late in the season when most of the capsules had shed their seed, it was possible to gather, what I hope members will consider, passable herbarium examples of undoubtedly *J. compressus*. The foliage particularly interested me and I have distributed a leafy shoot with each sheet, believing it to be a good distinguishing feature of this species about which I hope, later on, to write a further note.—C. E. SALMON. Another gathering, probably from the same locality—Salford, near Redhill, August 14, 1919—is contributed by L. V. Lester-Garland. "Luxuriant and typical."—BUCKNALL & WHITE. "Yes, our inland plant."—DRUCE.

J. tenuis Willd. Roadside, Glen Nant, Argyll, v.-c. 98, September 9, 1919.—L. V. LESTER-GARLAND. "Doubtless introduced here, as elsewhere, with American forage."—DRUCE.

J. effusus × *conglomeratus*? One tuft amongst *J. conglomeratus* by a pond near Chelford, Cheshire, August 9, 1919. Certainly not type *effusus* and flowering distinctly earlier than *effusus* would.—R. S. ADAMSON. "This may possibly be the hybrid suggested. I should, however, incline to name it *J. diffusus* Hoppe (*effusus* × *inflexus*). The panicle certainly is not particularly loose or widely branched, but rushes are apt to vary a good deal in that respect. Of more importance is the finely striate stem and characters of perianth and capsule."—WHITE.

Luzula campestris DC., forma? Billingshurst, Sussex, May 18, 1919.—ALFRED WEBSTER. "This is the *Juncoides campestre*, var. *umbellata* (Syme) of *Fl. Berks.* 505, 1897."—DRUCE. "The seeds are not ripe, but they seem to be those of *multiflora* rather than *campestris*."—SALMON.

L. pallescens Bess. Origin near Pyrford, 1910; hort. Reigate, August 1918. See *Journ. Bot.* 188, 260, 1910.—C. E. SALMON.

Potamogeton polygonifolius Pourr. Dyke on moor between Wrexham and Ruthin, v.-c. 50, North Wales, September 24, 1918.—C. WATERFALL. "Correct."—BENNETT.

P. nitens Weber. R. Leven, Haverthwaite, N. Lancs, v.-c. 69b. July 17, 1919.—W. H. PEARSALL. "Yes."—BENNETT.

P. densus L., var. *angustifolius* Wallr. [424]. Pool on heath. Stow Bedon, v.-c. 28, May 22, 1919.—F. ROBINSON. "Ascherson &

Graebner *Das Pflanzenreich* iv., 11, 1907, refer this to *P. setaceum* L. *Sp. Pl.* ed. i., 127, 1753. ' Potamogeton foliis lanceolatus oppositis acuminatus.' There is no specimen under this name in the Linnean Herbarium, so that I agree with Dr Hagström *Crit. Res. Potamogeton* 262, 1918, in rather using Wallroth's name *Sch. Crit.* 66, 1822. It is the *P. oppositifolium*, *β angustifolium* Lam. et DC. *Fl. France* v., 311, 1815."—BENNETT.

P. Friesii Rupr. Ditches, Burgh Common, Norfolk, June 30, 1919.—R. J. BURDON. " Correct."—BENNETT.

P. pusillus L. Poaka Beck Reservoir, N. Lancs, v.-c. 69b, August 21, 1919.—W. H. PEARSALL. " Probably correct."—BENNETT.

P. Sturrockii Ar. Benn. Coniston Lake, N. Lancs, v.-c. 69b, September 18, 1919. Ullswater Lake, Westmoreland, v.-c. 69a, August 13, 1919. Crummock Water, Cumberland, v.-c. 70, August 29, 1919. During the past five years we have gathered this beautiful and interesting species in 10 of the English Lakes—the foregoing three and also Windermere, Esthwaite Water, Buttermere, Derwentwater, Wastwater, Hawes Water, and Ennerdale. Only in one of these—Esthwaite Water—does the species flower and occasionally fruit, but although we waited till the end of September in the hope of gathering it there in fruit, it had only developed flowers and was in very poor condition. The usual method of propagation in the lakes is by means of winter-buds (turios). I sent Dr J. O. Hagström a series of the plant from five of our English lakes, last year, and will quote the main points of his reply:—" A new species? No! I can find no qualities distinguishing it from *P. pusillus*, with which all its properties coincide. Stem terete, thread-like, branched, with internodes and anatomy just as in *pusillus*. Nervation and form of leaves and sheaths, peduncles and spikes—likewise! Your *P. Sturrockii* of the English lakes is to my opinion pure *P. pusillus* L.; but with the obtusest leaves (f. *obtusissimus*). And it is an interesting fact that you have in the neighbourhood also the acutest form (f. *acutissimus*)—your plants from Poaka Beck." As the two forms referred to are included in this year's distribution I thought this opinion might well accompany them. These Lake District specimens were all named *Sturrockii* by Mr Ar. Bennett. I thought them quite distinct from Scotch specimens so named, and Mr Corstorphine, too, thought them different, but Mr Bennett holds to his opinion. I may refer to this again next year.—W. H. PEARSALL.

Zannichellia gibberosa Rchb. Wyke, West Surrey, July 1917.—G. C. DRUCE.

Scirpus pauciflorus Lightf. Small form with reflexed barbs of bristles longer than usual. Wet sand on coast near Freshfield, S.

Lancs, v.-c. 59, June 21, 1919.—J. A. WHELDON. "Yes, a small state. The barbs on the bristles are no longer in these examples than those on my Somerset (Mendip) gathering."—SALMON. A similar dwarf plant is contributed by the Rev. H. J. Riddelsdell from Littlesea, Dorset, June 12, 1919.

S. nanus Spreng. In enormous quantity but mostly barren, on the muddy margin of brackish water at Pwlheli, Carnarvonshire, August 1919, where Miss Cobbe discovered it in July 1919. A very welcome find, since in the other British localities it has disappeared or become scarce. The plant has been described as annual, but it perennates by means of the curious and characteristic bulbils.—Mrs WEDGWOOD & G. C. DRUCE.

S. maritimus L. Pond, Boarstye Green, N. Essex, v.-c. 19, 10 miles inland, June 26, 1919. Very abundant in deep water on a clay subsoil, quite removed from haloid influence and at a considerable elevation, thus negativing the possibility of former tidal connection with the Blackwater estuary. Plentiful on the coast, but I have never previously noticed it much beyond the limits of brackish marshes.—G. C. BROWN.

Carex disticha Huds., forma. Ashwell, Rutland, June 3, 1916.—A. R. HORWOOD. "Yes, forma *interrupta*."—DRUCE. "Two of the three examples on my sheet possess a bract equalling or overtopping the spike; these would come under 'var. *longibracteata* Schleich,' which seems, at the highest estimation, to be no more than a *forma*."—SALMON.

C. aquatilis Wahl. Side of Blelham Beck, Windermere, N. Lancs, August 16, 1919. This is sent as confirmatory of Mr R. L. Praeger's original record for this station.—W. H. PEARSALL. "First found here by Miss Knowles and Mr Praeger, of Dublin, 'August 1895, on the north bank a short distance from the mouth.' It has been found in Cumberland by Mr C. E. Salmon, and the English specimens (apart from the Welsh) agree with those from Co. Limerick (Philips). In them the spikes vary from 5 cm. long to 3 cm. In Caithness where *aquatilis* grows with *C. kattegatensis* Fr. it seems to assume the same characters of glumes and spikes. In specimens of *aquatilis* (Marshall) from the Wick river the spikes are 7-10 cm. long, and the glumes twice as long as the fruit (var. *cuspidata* Fr.), while in some Irish specimens the glumes are only three-quarters the length of the fruit. The habitats of this *Carex* so far south in Ireland, England, and Wales are remarkable. In Sweden it is rare in Smaland and Ostergothland, not becoming general till farther north; it is not on record for Denmark, and in Russia does not occur south of Jugria. In Asia it is found along Siberia to Greenland. Herr Kükenthal

doubts if the var. *cuspidata* of *aquatilis* 'be pure *aquatilis*, from the stalked spikelets and the acute glumes. I suspect a cross with *salina*.' But here I think the writer is wrong; however much it may apply to the Caithness specimens it certainly does not to specimens from Kirkcudbright (M'Andrew) which, in *Ann. Scot. Nat. Hist.* 236, 1910, I named var. *rigidus*; here the glumes are quite as long and acute as the Caithness ones, and the spikes are sessile. There is no *salina* there."—BENNETT. " Perhaps this is var. *virescens* Anders."—DRUCE.

C. Goodenowii Gay. Black Essett Tarn, Westmoreland, v.-c. 69, June 1919.—A. WILSON. " Is f. *fuliginosa* A. Br. = *melœna* Wimm."—BENNETT. "I think var. *recta* Fleisch."—DRUCE.

C. Goodenowii Gay, var. Littlesea, Dorset, v.-c. 9, June 13, 1919. Fertile spikes reduced. I hardly think the form is due to the drought, which had only lasted some six weeks when the gathering was made. It might be due to the extremely inclement and wet autumn and winter of 1918-19.—H. J. RIDDELSDELL. "Single specimens like this are difficult to name, but probably it would come under Fries' *juncea* (*sub-vulgaris*), but the spikes are shorter than usual. It may be the var. *angustifolia* (*sub-vulgaris*) of Blytt's *Norges Flora*, 1861, but I have not seen specimens; or *recta* of Asch. et Graeb."—BENNETT.

C. Goodenowii Gay, var. *juncea* Fr. Shores of Ullswater, v.-c. 69a, August 5, 1919. Very abundant all round the lake.—W. H. PEARSALL. " Fries placed his variety under *C. vulgaris* Fr. in *Mant.* iii., 154, 1842, but in his *Sum. Veg. Scand.* 250, 1846, he altered the name to var. *juncella*. It is the var. *uliginosa* of Syme's *Eng. Bot.* ed. 3, and in Boott's herbarium at Kew there is a specimen named '*C. aquatilis* Wg., var. *nardifolia* Wg. from Wahlenberg himself.' "—BENNETT.

C. salina Wahl., var. *kattegatensis* (Fries). By the Beauly River, Easterness, July 1919, where I discovered it in 1888. It is limited to a very small space and the summer drought was not helpful to its growth.—G. C. DRUCE. " Corresponds well with a specimen so labelled gathered at Beauly by Marshall in 1892."—BUCKNALL. " *Carex salina* is an aggregate species having under it 16 subspecies, varieties or forms. Our plant, which well agrees with Swedish examples, is subspecies *cuspidata* Wg., var. *kattegatensis* (Fr.) Almq. As a rule the Caithness specimens are larger than the Beauly ones. Alteration at the mouth of the Wick River, Caithness, has considerably reduced the large areas of *C. salina*; but there is plenty of it farther up the river, as far as Sibster—three miles."—BENNETT.

C. diversicolor Crantz, var. *aggregata* Rchb. Headington Wick, Oxon, July 18, 1893.—G. C. DRUCE. " Reichenbach, in the *Icones*

Fl. Germ. et Helv. viii., tab. cclxix, fig. 648, 1846, put this under *C. glauca*, of which it is a mere form—hardly even that. There are actually 30 names under *C. glauca* in Asch. et Graeb. *Syn. Fl. Mitt. Eur.*! and in that work this is simply placed under the type."—BENNETT. "Surely a state only and not a true variety. Ascherson & Graebner mention this as *C. glauca, cladostachya*, but the rank they give it is not clear."—SALMON.

C. magellanica Lam. Abundant amongst *Sphagnum* in a deep bog on Mansergh Common, Westmoreland, v.-c. 69, June 27, 1919.—A. WILSON.

C. flava L., var. *lepidocarpa* Tausch. Caldecote Fen, W. Norfolk, v.-c. 28, July 7, 1919, coll. J. F. LUDDINGTON and J. E. LITTLE. "Yes, so I should name it."—SALMON.

C. flava L., var. *lepidocarpa* Tausch. Swamp in the clay pits, Newton Abbot, S. Devon, v.-c. 3, May 21, 1919.—C. WATERFALL. "Tausch describes his plant as having the stems *scabrid*. I do not think these are so, nor are the male spikes *long*. I think only a small form of *flava*."—BENNETT. "This is interesting. My specimens have the general habit of *C. Oederi*, var. *œdocarpa*, but many of the fruits have deflexed beaks, and moreover the nuts appear abortive. From this I suggest the plant may be *C. Oederi*, var. *œdocarpa* crossed with a member of the *flava* group."—SALMON.

C. fulva Host, sterile. Shingham Fen, W. Norfolk, v.-c. 28, July 15, 1919. Dr Druce has seen a sheet and suggests "*C. flava* aggr. × *fulva*, nearer *C. fulva*." In Caldecote Fen (two miles away) I found a little sterile *C. lepidocarpa* which Dr Druce thinks may be crossed with *fulva* though nearer *lepidocarpa*. Mr A. H. Evans, who has not seen the sheets, suggests that sterility may be due to the exceptionally dry season.—J. E. LITTLE. "Not *fulva* Host (=*Hornschuchiana* Hoppe) pure and simple, but I believe this interesting plant to be a hybrid between that species and *flava*, var. *lepidocarpa*. It seems entirely sterile and I should much like to know if *lepidocarpa* grew in the neighbourhood, as it seems to show evidences of that plant rather than any *Œderi* form. This particular hybrid is mentioned in Corbière's *Additions to Fl. Normandie* 112, 1895, under the name × *C. Chevalieri* Corb., having been found by Chevalier at Domfront, which is apparently a district where *flava* proper is not known to occur."—SALMON. "As the specimen sent seems quite sterile it cannot be *C. fulva* Host, which is fertile. Is it not *C. xanthocarpa* Degl.?"—BENNETT. "We thought it *xanthocarpa*, certainly."—BUCKNALL & WHITE.

C. lasiocarpa Ehrh. Caldecote Fen, W. Norfolk, v.-c. 28, July 7, 1919, coll. J. F. LUDDINGTON and J. E. LITTLE.

Homalocenchrus oryzoides Poll. Amberley, Sussex, September 14, 1919.—A. WEBSTER.

Mibora verna Beauv. (*Chamagrostis minima* Borkh. *Knappia agrostidea* Sm.). Sandy ground near Llyn Coron, Anglesea, v.-c. 52, April 12, 1884, coll. THOS. ROGERS, ex herb. This tiny grass is so early in its appearance, flowering from February to April, that it is unlikely to have been gathered by many when in perfection. Indeed, a month or two later I have sought for it in vain, no trace of any kind remaining. I purchased the whole of the late Mr T. Rogers' collections in 1901, and finding these specimens I send them in hope that they may be acceptable. I may add that the Essex habitat for this plant has never been confirmed; the late Dr Knapp was supposed to have sown it in its one recorded Scotch habitat (Haddington) where, at all events, it is no longer to be found; and that Aberffraw with its immediate neighbourhood remains its sole locality in Great Britain proper. In the Channel Islands, however, it is not uncommon.—J. C. MELVILL.

Phleum asperum Jacq. Waste ground, Bradford, v.-c. 64, June 25, 1919. A few plants only of this rare grass made their appearance this year.—J. CRYER. "Yes, more correctly *P. paniculatum* Huds." DRUCE.

Agrostis alba, var. *coarctata* Hoffm. Marine Parade, Lowestoft, v.-c. 26, July 3, 1919.—F. ROBINSON. "I have not seen Hoffman's *coarctata* but I take this plant to be a reduced state of the *stolonifera* of Smith, *E.B.* 1532. A much better figure of this, however, very like the example now before me, may be seen in Martyn *Fl. Rustica*, iv., 120, 1795."—SALMON. "Is *A. alba* L., var. *condensata* Hack."—DRUCE.

A. verticillata Vill. [606]. Vale Parish, Guernsey, C., June 1913.—C. V. B. MARQUAND. "Yes, from the locality where I discovered it in 1906."—DRUCE.

Calamagrostis canescens Druce. Burgh St Margaret, Norfolk, June 25, 1919.—R. J. BURDON.

Ammophila baltica Link. Sand dunes, Hemsby, Norfolk, July 14, 1919.—R. J. BURDON. "See *Rep. B.E.C.* 384, 1915, and *Journ. Bot.* 192, 1919.—WHITE.

Aira præcox L., f. *prostrata*. [1409]. Coast sands, St Osyth, N. Essex, v.-c. 19, May 29, 1919. Possibly a "state" only. Three forms occur on the shore here:—(1) Perfectly erect with pale green stems and spikes, growing amongst Marram and other herbage. (2) Erect

with purplish stems and greyish-green spikes, on open sand. (3) The quite prostrate form now sent which is confined to blown sand; a few examples have a supplementary panicle from the inflated upper sheath.—G. C. BROWN. "This is f. *prostrata* of *Fl. Berks* 565, 1897."—DRUCE. "An unusual and pretty variation, possibly resulting from exposure."—WHITE.

Phragmites communis L. [377]. Marsh between Sidlesham and Pagham, W. Sussex, v.-c. 13, September 12, 1918. Growing on the drier ground at the edge of the marsh. Still further reduced forms appeared on the sandy banks near the sea and seem to agree with the description of var. *nigricans* Gren. & Godr. Is the latter more than a form?—W. C. BARTON. "A small dry ground state, showing an approach to var. *nigricans*."—BUCKNALL & WHITE. "*P. vulgaris* (Lam.) Druce, under var. *flavescens* Cust., but too dark a brown to be strictly that variety. The plant is probably from the end of a stolon as the panicle seems starved."—DRUCE.

Catabrosa aquatica Beauv. Damp ground, Great Henny, N. Essex, v.-c. 19, June 15, 1919. A scarce plant in N. Essex generally, but fairly plentiful in this part of the Stour valley and the adjoining meadows on the Suffolk side of the river.—G. C. BROWN.

Briza media L., var. *palustris* (var. nova). Sutton Heath, Northants, June 15, 1916. Planta luxurians, caulis quam typo major, albidus; habitans paludes et loca aquatica, cum *Festuca rubra*, var. *barbata*.—A. R. HORWOOD. "The description does not amount to much; is the plant more than a state?"—DRUCE.

B. minor L. Oatfield near the Lizard, Cornwall, August 19, 1913. —J. W. WHITE.

Poa glauca Vahl. Root from Caenlochan, Forfar; hort. Oxon, August 1919.—G. C. DRUCE.

P. nemoralis L., var. [Q. 341]. Caenlochan, Forfar, 1917; hort. Oxon, August 1919. This was named *Balfouri* by one of our critical botanists now alas no longer with us, but cultivation seems to prove it merely a pretty form of *nemoralis*.—G. C. DRUCE. "On some grasses of this group collected in the Highlands by the late Rev. E. S. Marshall it was remarked by Prof. Hackel (*Journ. Bot.* 71, 1897) 'that probably no clear line can be drawn between *P. Balfourii* and the alpine forms of *nemoralis*."—WHITE.

P. pratensis L., forma. [1417]. Coast sands, S. Osyth, N. Essex, v.-c. 19, May 29, 1919. This has the habit of var. *subcærulea* but is not glaucous. It looks quite different from the type when

growing. Is it Parnell's var. *arenaria*?—G. C. BROWN. "A condensed maritime state, most nearly approaching var. *subcærulea* Sm. We frequently find plants of *P. pratensis* that do not exactly correspond with any described variation."—BUCKNALL & WHITE.

Glyceria maritima Wahl. [1463]. Sewage farm, Colchester, on mud dredged from the river Colne, v.-c. 19, July 16, 1919. Forming immense tufts; culms all prostrate, leaves flat; panicle very luxuriant, mostly exceeding the leaves.—G. C. BROWN. "A sample of the gross, rank produce of a sewage farm."—WHITE.

Eragrostis curvula Nees, teste Dr O. Stapf. Waste ground, Bradford, v.-c. 64, September 4, 1919. More abundant this year than last when only a few plants appeared.—J. CRYER. "Referred to the S. African *E. chloromelas* by Dr Thellung."—DRUCE.

Festuca membranacea (L.) Druce. Coast sands, St Osyth, N. Essex, v.-c. 19, May 29, 1919.—G. C. BROWN. Also from Clymping Sands, Littlehampton, W. Sussex, June 8, 1918. It had been observed there previously for it is recorded in Arnold's *Fl. Sussex* as *F. uniglumis* Soland.—R. J. BURDON.

F. ovina L. [378]. Arthog, Merioneth, v.-c. 48, June 14, 1915. Each cover contains two forms which grew together on ant-hills under identical conditions; of these one has the glumes almost glabrous, the other distinctly hairy.—W. C. BARTON. "The form with hairy glumes should be compared with the plant I sent from Coniston, 1913 (see *Report* 512, 1913) named by Hackel subvar. *hirtula* Hack. In the Coniston plant the hairs on the glumes are finer and more appressed than in Mr Barton's. His plant, in my example, is also shorter and more caespitose with shorter leaves than the Coniston ones, and could hardly go under var. *capillata*."—TRAVIS.

F. ovina L., var? Inchnadamph, W. Sutherland, July 1919.—G. C. DRUCE.

F. tenuifolia Sm. = *ovina* L., var. Sandy ground in shade, Milford-on-Sea, S. Hants, June 1919. These specimens agree with authenticated examples in my herbarium from S. Europe, collected by Bourgean and others; no doubt near *capillata* Hackel which occurs not far off, also at Milford, but differing in its larger growth and more extended panicle.—J. C. MELVILL. "Yes, a shade grown plant and not characteristic. The authority for *tenuifolia* as a species is not Smith but Sibthorp; as a variety *paludosa* seems the oldest combination, but it appears well deserving of specific rank. It is the plant of acid soils, whereas *vulgaris* is the basic soil plant."—DRUCE.

F. rubra L., var. *vulgaris* Gaud., subvar. *grandiflora* Hackel. [1416]. Coast sands, St Osyth, N. Essex, v.-c. 19, May 29, 1919.—G. C. BROWN. "The spikelets are not large enough. I should leave it under *F. rubra*."—DRUCE.

F. rubra L., var.? Sandhills between Aberdovey and Towyn, Merioneth, N. Wales, May 25, 1919.—J. C. MELVILL. "This, too, I should leave under type."—DRUCE.

F. rubra L., var. *barbata* Hackel. Sutton Heath, Northants, June 15, 1916.—A. R. HORWOOD. "Yes, this may pass as Hackel's sub-variety."—DRUCE.

F. sylvatica Vill., var. *decidua* Sm. Woodland stream-side, Low-wood, Westmoreland, v.-c. 69, August 9, 1919. Whole plant smaller and leaves narrower than with the type.—S. H. BICKHAM. "This agrees with var. *decidua* and the locality is right."—BUCKNALL & WHITE.

Bromus madritensis L., var. *rigidus* Bab. = *B. rigidus* Roth. St Sampson's, Guernsey, June 10, 1919.—C. V. B. MARQUAND. "I have seen this grass on several occasions in the Channel Islands and am persuaded that it is specifically distinct from *B. madritensis* which grows so abundantly here at Bristol. They are well separated in Druce's *List*."—WHITE.

B. secalinus L. Field at Blaenwann, near Whitland, Carmarthenshire, August 1, 1919.—C. V. B. MARQUAND. "Yes, the var. *velutinus* Schrad."—DRUCE.

Hordeum jubatum L. Waste ground, Bradford, Yorks, July 24, 1919. Many very large tufts.—JOHN CRYER. "We cannot agree to the name, but the plant is unknown to us."—BUCKNALL & WHITE. "Close examination showed me this was not the American *jubatum*, and at first I was inclined to refer it to *H. violaceum*. It would not fit that, however; and Dr Thellung has identified it with *H. comosum* Presl. New to our List."—DRUCE.

Cryptogramme crispa Br. Rocky ground above Dale Beck, near Melmerby, Cumberland, July 28, 1919.—C. WATERFALL. And from Glyder Fawr, 1800 ft., N. Wales, July 10, 1919.—C. V. B. MARQUAND.

Asplenium lanceolatum Huds. Rock crevices, above Black Head, S. Devon, May 9, 1919.—C. WATERFALL.

A. viride Huds. Limestone rock, Hesleden Ghyll, W. Yorks,

May 21, 1918.—C. WATERFALL. "For want of a little care in pressing these good ferns their value as specimens has been lost."—WHITE.

Lastraea Thelypteris Bory. Wicken Fen, Cambs, v.-c. 29, June 13, 1919.—C. V. B. MARQUAND.

Equisetum palustre L., var. *ramulosum* Milde. Walton Moor, Clevedon, N. Somerset, v.-c. 6, May 29, 1919. Stem with 8-10 furrows.—IDA M. ROPER.

Isoetes lacustris L. Floating on Llyn Gwynant, Carnarvonshire, v.-c. 49, August 5, 1918.—C. WATERFALL.

Chara fragilis Desv. [1407]. Shallow pits, Aldham, W. Suffolk, v.-c. 26, May 22, 1919.—G. C. BROWN. "Is *C. vulgaris*."—GROVES.

C. hispida L. Peaty ditch, Clapton Moor, N. Somerset, September 28, 1903.—J. W. WHITE.

CORRECTIONS IN DISTRIBUTORS' REPORTS FOR 1912 *AND* 1913, *AND SECRETARY'S REPORT FOR* 1916.

"With reference to '*Euphrasia curta* Wettst. (*fide* E. S. Marshall), heathy and grassy pasture, 90 ft. elevation, Black Crag, Stromness, Mainland, Orkney, August 19, 1912, H. H. Johnston,' *Rep. B.E.C.* 273, 1912, I gathered fresh specimens in fl. and fr. from the same station on August 4, 1919, and September 5, 1919, respectively, and forwarded them to Mr C. Bucknall, who reports *in litt.* October 18, 1919, as follows:—'*E. latifolia* Pursh. These specimens agree with Wettstein's description in bearing a few stipitate glands on the leaves and bracts. Having been gathered rather late in the season they lack the large stem leaves with broad, obtuse terminal lobe which is so characteristic of *E. latifolia*, and being glandular they might easily be taken for *E. occidentalis*. This actually happened to a sheet of specimens from the same locality in *Herb. Druce*, gathered in 1912, which were variously named *E. curta*, *E. borealis*, and *E. occidentalis*. I have no doubt that these were the same as the present (1919) gatherings, and I have no hesitation in naming them *E. latifolia*.' This identification confirms Mr Marshall's record of *E. latifolia* from the Black Crag, in 1900; *Journ. Bot.* xxxix., p. 270; and therefore it cancels the following, viz.:—(1) *E. curta* Wettst. in *Rep. B.E.C.* 273, 1912; (2) *E. borealis* Towns. in *Rep. B.E.C.* 1913; *Trans. Bot. Soc. Edin.* vol. xxvi., 213, 1914, and *Fl. Orcadensis* by Magnus Spence, 133, 1914; and (3) *E. occidentalis* Wettst. in *B.E.C. Secretary's Report*, 497, 1916." H. H. JOHNSTON.

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