

THE BOTANICAL SOCIETY
AND EXCHANGE CLUB
OF THE BRITISH ISLES.

REPORT FOR 1920

OF THE

BOTANICAL EXCHANGE CLUB
(CONVENIENTLY ABBREVIATED REP. B.E.C.)

BY THE

EDITOR AND DISTRIBUTOR,

G. C. BROWN.

VOL. VI. PART II.

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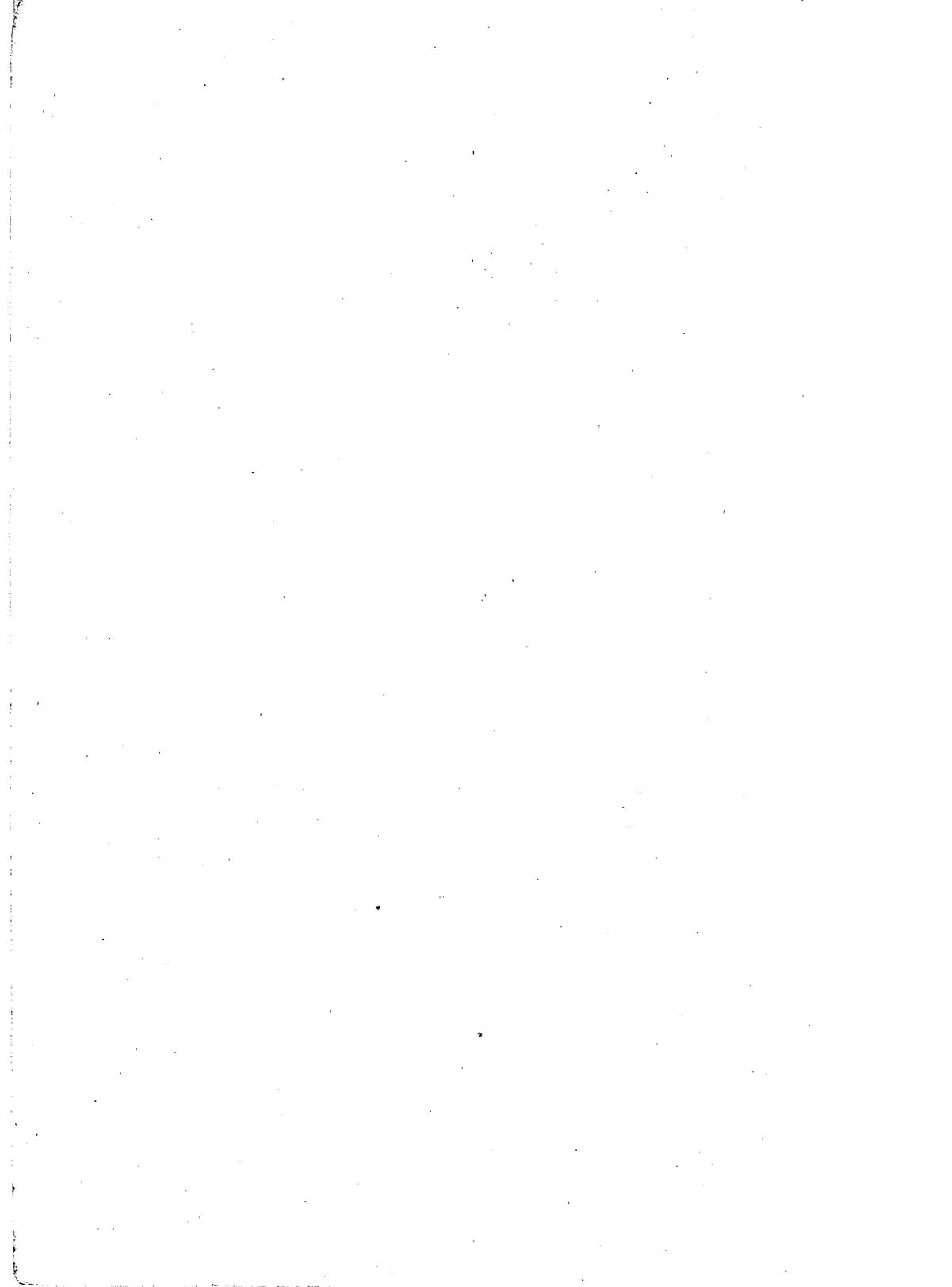
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REPORT OF THE DISTRIBUTOR FOR 1920.

The number of sheets contributed by the members for the 1920 distribution amounted to 4837, a number slightly less than the average received for the past few years. It will be noticed that the names of several well-known contributors are absent from the list of parcels received, and the loss of the excellent specimens one had grown to expect from them each year tends to reduce both the quantity and quality of the material. Several new members have contributed plants of considerable interest.

The quality of the specimens was, on the whole, high, some might well have been rejected but one hesitates to adopt drastic measures. The Club is much indebted to Rev. H. J. Riddelsdell for his excellent and extensive series of *Rubus*, *Rosa*, and *Hieracium*; to Mr C. E. Salmon for his series of the new var. *leptochila* of *Epipactis viridiflora*; to Mr W. H. Pearsall for his further contribution of *Hydrilla* and other excellent specimens. Among critical genera, which were well represented, were *Euphrasia*, *Mentha*, *Centaurea*, and *Potamogeton*. *Ranunculus* and *Erophila* received little attention.

The thanks of the Club are due to Messrs W. Barclay, W. C. Barton, A. Bennett, C. E. Britton, C. Bucknall, Drs E. Drabble and G. C. Druce, Mr J. Fraser, Mrs E. S. Gregory, Messrs J. Groves, A. Bruce Jackson, W. H. Pearsall, H. W. Pugsley, C. E. Salmon, and the Revs. H. J. Riddelsdell and T. Stephenson for their kindness in supplying comments on the plants submitted to them, and also to members whose notes appear in the *Report*.

G. C. BROWN.

16 Lion Walk,
Colchester.

Ranunculus Flammula L., forma. By the Dart, S. Devon, September 1920. Coll. E. S. TODD; comm. G. C. DRUCE.

R. sardous Crantz. Waste ground, Bradford, v.-c. 64, July 13, 1920. All the specimens were prepared from one plant, which bore 730 flowers and fruiting heads, besides scores of unopened buds.—J. CRYER.

R. [Drouetii F. Schultz]. Pond, Llandough-juxta-Cardiff, v.-c. 41, May, 1920.—A. E. WADE. "*R. trichophyllus* Chaix."—PEARSALL.

R. trichophyllus Chaix, var. *tripartitus* Koch. Pond near old lead mines on limestone ridge, South of Castleton, Derbyshire, June 13, 1920. I am afraid the material is rather scrappy.—R. S. ADAMSON. "Is f. *Godronii* (Hiern). In my judgment Koch's var. *tripartitus* is more nearly synonymous with var. *triphyllus* (Hiern)." —PEARSALL. "I do not know Koch's plant, but these specimens seem to come under aggregate *R. heterophyllus* rather than *R. trichophyllus*. I have never seen an undoubted *R. trichophyllus* with the ultimate segments of the leaf so elongate and filiform."—WHELDON.

R. heterophyllus Weber, var. *triphyllus* Hiern. Ditch, Grange-town, Cardiff, v.-c. 41, May, 1920.—A. E. WADE. "Yes, of Hiern (with very slightly hairy carpels, peduncles equalling leaves, and petals 9-veined) but not of Wallroth, which is described as having glabrous carpels, long peduncles, exceeding leaves and petals 7-veined."—WHELDON. "Is characteristic *R. Baudotii* Godr."—PEARSALL.

R. Ficaria L., var. *incumbens* F. Schultz. In a coppice, Ashton Park, N. Somerset, March 24, 1920. The variety depends on the overlapping lobes of the lowest leaves and is rather a poor thing, not often met with in an extreme state. I distributed specimens from the same locality some years ago. There is no doubt, therefore, that the variety, such as it is, is a permanent one, coming true from seeds or bulbils.—J. W. WHITE. "No doubt, but the real value of this variety is shown by the presence on the stem of one leaf, which is strongly sinuate and divergent."—RIDDELSDELL. "None of the leaf-lobes on my example overlap, so it is difficult to realise how it can come under F. Schultz's *incumbens*."—SALMON. "Yes, var. *incumbens* Schultz, but not an extreme example."—ADAMSON. "In the *Camb. Flora* it is treated as a soil condition, of which at present we lack experimental proof. The forma *luxurians* (l.c. iii., 126) seems to be open to a similar suggestion. It grows with its feet in the water. The form with divergent leaf-lobes is *divergens* (F. Schultz), not *decumbens* as given in the *Camb. Flora*."—DRUCE.

R. Ficaria L., forma. [1673]. Hedgebank, Stoke-by-Nayland, W. Suffolk, v.-c. 26, April 11, 1920. Leaves more deeply dentate than usual, plants forming a continuous bed though not obviously stoloniferous. Is it Horwood's var. *sinuata*?—G. C. BROWN. "A striking form which I have found but for which I do not know a name. The forms of this plant need careful culture experiments before any should be raised to varietal rank."—ADAMSON. "Under Horwood's var. *sinuata*."—DRUCE.

Fumaria Bastardi Bor. Sandy fallows, Rush sandhills, Co. Dublin, Ireland, September 15, 1920.—C. WATERFALL. "Correct."—PUGSLEY.

F. parviflora Lam., var. *acuminata* Clav. [443]. Cultivated land, Watton, v.-c. 28, July, 1920.—F. ROBINSON. "Apparently so, but the specimen sent is weak and shade grown and shows no flowers."—PUGSLEY.

Radícula palustris Moench. [938]. Marshy loch-side, 10 feet above sea-level, Loch of Garson, North Ronaldshay, Orkney, August 21, 1920. Native, rare.—H. H. JOHNSTON. "Correct."—RIDDELSDELL. "A rare plant in the Islands, it was first recorded in *Rep. B.E.C.* 54, 1909. Strictly speaking the name should be *R. islandica* (Oeder) which preserves the earliest trivial."—DRUCE.

R. amphibia (L.) Druce. Ditch near Park Farm, Bosham, Sussex, June, 1920.—R. J. BURDON. "Is var. *indivisa* Druce, with upper leaves entire or occasionally with one or two minute teeth."—PEARSALL.

Barbarea verna Asch. Gravel pit, Nuns Close, Hitchin, Herts, v.-c. 20, June 23, 1920. Petals only twice as long as sepals.—J. E. LITTLE. "Yes, upper leaves without marginal cilia below."—WHELDON.

B. vulgaris [R.Br.] Ait., var. *arcuata* Fr., subvar. *brachycarpa* A. B. JACKSON. Wymondley Road, Hitchin, Herts, v.-c. 20, June 20, 1920. Same plant from which specimens were distributed in 1917, 1918, 1919. Vide *Rep. B.E.C.* 807, 1919.—J. E. LITTLE.

Arabis petraea Lam. Ben Laoigh, W. Perth, 2200 ft. alt., July 16, 1881. Coll. T. ROGERS; comm. J. COSMO MELVILL. "This is the var. *grandifolia*."—DRUCE.

Erophila verna Meyer. Burr ridge Heath, N. Wilts, May, 1920. Coll. C. P. HURST; comm. G. C. DRUCE. "I should think very large *E. vulgaris* DC."—ADAMSON. "A rather long-leaved form of

Draba majuscula Rouy & Fouc."—WHELDON. "This robust plant with broad leaves, stout stems, large oblong silicles on pedicels thrice their length, large petals twice the length of sepals, with many bi- or trifold hairs would be placed under *E. majuscula* Jord. by those who separate it from *E. verna* (*E. vulgaris* DC.). Boreau and Clavaud do not admit the latter as a segregate name. The less robust forms (*Draba vulgaris* R. & F.) also come under their *E. majuscula*."—LITTLE.

E. stenocarpa Jord. ? Dry sandy bank near Mildenhall, W. Suffolk, April 20, 1920.—R. S. ADAMSON. "Seeds far too numerous, and silicles about double the width of those of *Draba lanceolata* Neillr. which = *E. stenocarpa* Jord. I think it agrees better with *D. majuscula* R. & F., and is perhaps nearest to var. *occidentalis* (Jord.) R. & F."—WHELDON. "Yes."—LITTLE.

Cochlearia anglica L. Estuary of R. Taff, Cardiff, v.-c. 41, May, 1920.—A. E. WADE.

C. danica L. Base of walls, Walton, Liverpool, v.-c. 59, March 30 and April 15, 1920.—J. A. WHELDON.

Wilckia (*Malcolmia*) *maritima* Scop. Naturalised on shingle beach, Kingsdown, Kent, April 3, 1920.—H. E. FOX. "Yes, its earliest name is *Wilckia maritima* Scop. An alien from Europe and a well-known garden plant."—DRUCE.

Sisymbrium Sophia L. Sandy fallow on roadside near Rush, Co. Dublin, Ireland, September, 15, 1920.—C. WATERFALL.

S. orientale L. Sommersdale Gravel Pit, Chichester, Sussex, June 14, 1920.—R. J. BURDON. "Yes."—DRUCE, RIDDELSDELL, and THELLUNG. Also from waste ground, Grangetown, Cardiff, v.-c. 41, June, 1920.—A. E. WADE. "This is forma *irioides* Thell."—THELLUNG.

Bursa pastoris Weber, var. *batavorum* (Almq.). [W. 20]. The Parks, Oxford, July, 1920.—G. C. DRUCE. "*C. batavorum* appears to be a common British form. I have gathered it at several Surrey localities, as well as in Kent, on the evidence of Prof. Almquist, who has identified my plants. The species exhibits a good deal of variation in the radical leaves, ranging from almost entire forms to leaves deeply pinnatifid as in the plant before me, which has leaves characteristic of *C. Bursa-pastoris*, var. *stenocarpa-coronopifolia* Mott. This type of leaf is the distinguishing feature of Schull's elementary species *Bursa bursa-pastoris heteris*. Apart from the variable forms of radical leaves, a common feature of the plants

that Almquist places to his *bataworum* is the equilateral triangular form of the capsule."—C. E. BRITTON.

B. pastoris Weber. Shingle by the sea, Walmer, E. Kent, April 5, 1920.—H. E. FOX.

B. pastoris Weber, var. *densifolia* (Mott). Waste ground, Grangetown, Cardiff, v.-c. 41, May 1920.—A. E. WADE.

Brassica alba Boiss. Potato patch, Glentana, Foxrock, Co. Dublin, Ireland, August 1, 1920.—C. WATERFALL. Also garden weed at Clifton, Bristol, July and August, 1920.—J. W. WHITE. "Yes, admirably displayed."—PEARSALL.

B. incana Doell. Waste ground, Bradford, v.-c. 64, alt. 300 ft., July 30, 1920.—J. CRYER. "Correct, as far as can be seen without fruit."—RIDDELSDELL. "Young, but characteristic."—PEARSALL. "Yes."—THELLUNG.

Diplotaxis [*tenuifolia* DC.]. Sandy fallow, Rush sandhills, Co. Dublin, Ireland, September 15, 1920.—C. WATERFALL. "No, this is *D. muralis*, var. *Babingtonii*. *D. tenuifolia* has narrower leaf segments, larger flowers on longer pedicels, etc."—SALMON, RIDDELSDELL, & DRUCE.

Lepidium latifolium L. Banks of River Taff, Grangetown, Cardiff, v.-c. 41, August 1920. Coll. A. E. WADE; comm. Nat. Mus. of Wales. "Long known as a Glamorgan plant. There is a Neath specimen (no doubt native) dating from 1840-50 in Motley's herbarium."—RIDDELSDELL.

L. ruderale L. Garden weed at Failand House, N. Somerset, July 1920. Collected with Miss Agnes Fry.—J. W. WHITE. "*L. neglectum* Thell."—LITTLE, PEARSALL, DRUCE, SALMON, THELLUNG, and WHELDON.

L. virginicum L. Taplow Gravel Pits, Bucks, June 18, 1920.—A. WEBSTER. "Is not this *L. ruderale*?"—SALMON. "This is *L. densiflorum* Schrad."—THELLUNG.

Viola Riviniana × *canina*. [953]. Hedgebank, Earls Colne, N. Essex, v.-c. 19, May 12, 1920. "There is evidently some admixture of *canina* here. Mark the broader stipules with processes rather than teeth and the rounded capsule." Mrs GREGORY *in litt.*, January, 1920.—G. C. BROWN. "The Vienna rules exact that the names of hybrids should follow alphabetical order; therefore *canina*

precedes *Riviniana*. The sessile upper leaves of these plants suggest the form (not var.) *pseudo-mirabilis*."—GREGORY.

V. hirta L. [1672]. Chalk pit, Somersham, E. Suffolk, v.-c. 25, April 2 and June 17, 1920. Flowers purplish-blue, spur lighter, strongly hooked, stipules green, strongly fringed, young leaves dull green, rootstock greenish-white.—G. C. BROWN. "*V. hirta* L., var. *hirsuta*, approaching f. *nudiflora* (hairs on lateral petals almost absent)."—GREGORY.

V. hirta L., var. *hirsuta* (Schultes) Lange. [1688]. Bank, Edwardstone, W. Suffolk, v.-c. 26, May 13, 1920. Cleistogamous stage. Flowers bluish-violet, imperfect.—G. C. BROWN. "*V. hirta* L., var. *hirsuta*, f. *nudicaulis*. The imperfect flowers are semi-cleistogamous. With reference to the name of Schultes see note on p. 24 of *British Violets*; wherefore our *hirsuta* (which otherwise fully deserves its name) is clearly not the var. *hirsuta* of Schultes."—GREGORY.

V. arvensis Murr., var. Waste ground near Penarth Ferry, Glamorgan, July 1920.—A. E. WADE. "Is *V. subtilis* Jord."—PEARSALL.

V. segetalis Jord. Among oats on reclaimed peat moor near Foxfield "Mosses" at Wreak's Bridge, Causeway End, N. Lancs, v.-c. 69b, September 28, 1920.—W. H. PEARSALL. "Yes, *segetalis*."—DRABBLE.

V. arvatica Jord. Among oats, Sawrey, N. Lancs, v.-c. 69b, August 5, 1920.—W. H. PEARSALL. "Yes, very good *arvatica* as it usually grows in this country."—DRABBLE.

V. Curtisii Forster. [1753]. Sutton Common, E. Suffolk, v.-c. 25, June 13, 1920. My Ref. No. 100 sent to the Club in 1913, vide *Rep. B.E.C.* 457, and passed as above by Dr Drabble, was from the same station, but wrongly labelled "Bromeswell Walks."—G. C. BROWN.

Dianthus prolifer L. Pagham, Sussex, July 12, 1920.—A. WEBSTER.

Silene maritima With., inland form. Amongst shale on bank, Grange-in-Borrowdale, Cumberland, v.-c. 70, June 21, 1920.—C. WATERFALL.

S. latifolia Rendle & Britton, var. *puberula* (Jord.). Waste ground near Penarth Ferry, Glamorgan, July 1920.—A. E. WADE.

"Rightly named as per the *London Catalogue*, but more usually cited as *S. inflata* Sm. or *S. Cucubalus* Wibel."—PEARSALL.

Cerastium nigrescens Edm. (the oldest name). Balta Sound, Unst (locus classicus), July 1920.—G. C. DRUCE. "Yes, *C. arcticum* Lange, forma *nigrescens* Druce."—ADAMSON. Also as *arcticum*, var. *Edmondstonii* Beeby from the same place.—R. J. BURDON.

C. nigrescens Edm., var. *compactum* (Syme). Ben Nevis, Inverness, July 1918.—G. C. DRUCE.

C. subtetrandrum Murb.? Burrafirth, Unst, July 1920.—G. C. DRUCE. "I gathered a plant very similar to this on Yarmouth Denes in 1914 which Mr A. Bennett named for me *C. tetrandrum* × *semidecandrum*."—F. ROBINSON. "I do not pretend to know Murbek's plant, but this certainly differs from his description of it in having long floriferous branches from below the middle, and even to base of stem; and the seeds are as in the ordinary *C. tetrandrum* Curt. 6 mm. in diameter."—WHELDON. "Prof. Lindman refers this to *tetrandrum*. It differs much from the usual Shetland form, where *semidecandrum* is not recorded."—DRUCE.

Stellaria neglecta Weihe. Damp hedgebank, valley of River Bollin, Cheshire, April 24, 1920. Very common in moist situations in N. Cheshire.—R. S. ADAMSON. "My example has no fruit but the other characters point to the correctness of the name."—SALMON.

S. Holostea L., forma. Birdlip Hill, v.-c. 33, April 18, 1920. Coll. J. W. HAINES. One homogeneous patch, about 5 yards long, by the roadside, ordinary *Holostea* surrounding it. The petals are reduced and the sepals apparently have a rather stronger tendency to ciliation than in type, but the latter difference is slight.—H. J. RIDDELSDELL. "This approaches the var. *angustifolia* R. & F. Fl. Fr. iii., 232, which has smaller flowers than the type and leaves 2-3 mm. broad. These are 3-4 mm. In the type they are 5-10 mm. broad."—DRUCE. [Mr Haines reports that the same form persisted in 1921.]

Arenaria norvegica Gunn. On serpentine, Balta Sound, Unst, Shetland; July 24, 1920.—R. J. BURDON.

A. serpyllifolia L., var. *macrocarpa* Lloyd. Par Sands, v.-c. 2, May 28, 1920. This agrees with the descriptive note in *Bab. Man.*, ed. viii., p. 61. The sepals are hairy but I can see no glandular hairs.—F. RILSTONE. "This appears to be *A. Lloydii* Jord. (= var. *macrocarpa* Lloyd), rather than var. *sphaerocarpa* Tenore. The

Camb. Brit. Flora gives a singularly meagre contrasting account of these two closely allied plants."—SALMON.

A. tenuifolia L. In great quantity on railway ballast, Rodmarton, v.-c. 34, July 15, 1920. Also seen by roadside near Cherrington, and on railway at Bourton-on-the-Water, v.-c. 33. It is certainly native in some of its Gloucestershire localities, especially on the Cotteswolds.—H. J. RIDDELSDELL. "Yes, *Alsine tenuifolia* Crantz, var. *Vaillantiana* DC."—ADAMSON.

Sagina apetala Ard. Dry rock face, Polperro, v.-c. 2, June 7, 1920.—F. RILSTONE. "Yes, the more frequent form, var. *barbata* Fenzl."—SALMON & PEARSALL.

S. maritima Don. Par Sands, v.-c. 2, May 28, 1920.—F. RILSTONE. "Yes, leaves eglandular, glabrous, muticulous, but capsules smaller than usual."—PEARSALL. "Yes, many of the examples exactly match *E.B.*, t. 2195."—SALMON. "A weak and small state of var. *debilis* Jord., having decumbent stems, flexuous peduncles, and no central rosette."—WHELDON.

S. maritima Don, var. *prostrata* Townsend, in *Rep. B.E.C.* 438, 1894. Cliffs north of Peel, Isle of Man, July 6, 1920. Quite prostrate, leaves of central rosette blunt, calyx usually closed in fruit, capsule larger than in the type. This seems to be a good and striking variety. It is very unusual to see the basal rosette persisting in *S. maritima* without the central axis elongating and flowering.—J. A. WHELDON. "Agreed."—PEARSALL. "This interesting plant is perhaps best left as labelled, but Townsend, *Rep. B.E.C.* 438, 1894, distinctly states his plant is glabrous. In the two examples before me fine cilia may be detected upon some of the pedicels, stems, and leaves, but the majority are entirely glabrous. Thus Mr Wheldon's plant makes some approach to var. *ciliata* Nordst., *Report* 131, 1914, and it may prove that this variety and Townsend's *prostrata* are too closely allied to be kept apart."—SALMON. "Is this more than a forma? *A. & G. Syn.*, v. 805, place var. *prostrata* Towns. under var. *debilis* (Jord.) Bab., which has elongated stems and internodes."—ADAMSON.

Spergularia salina Presl. Among shingle, Penarth Ferry, v.-c. 41, July 1920.—A. E. WADE. "No, it is *S. marginata* Kit."—RIDDELSDELL. "Is not this *S. media* Presl = *S. marginata* Kit.? In the *Cambridge Flora* Presl's name *S. media* (established for this species in *Flora Sic.* i., 161, 1826) is rejected for the much later one of *S. marginata* Kit. on the ground of its being a *nomen confusum*, but evidence as to this is not conclusive."—DRUCE. "All *S. media* Presl."—ED.

Montia fontana L., var. *intermedia* Druce in *Camb. Brit. Flora*. [466]. Stream head at 2000 ft., Brecon Beacons, v.-c. 42; September 4, 1920. N.C.R. for v.-c. 42, I believe.—W. C. BARTON. “*M. chondrosperma* Fenzl, var. *intermedia* Beeby. Marginal tubercles more pronounced.”—SALMON. “Yes.”—ADAMSON. “If the two *Montias* are kept as distinct species it should be *M. verna*, var. *intermedia* Druce in *Rep. B.E.C.* 332, 1908. Beeby named it a var. of the sub-species *minor*.”—DRUCE.

Althaea hirsuta L. St Ouen's, Jersey, July 1902. An adventive species here. Coll. F. PIQUET; comm. G. C. DRUCE.

Linum angustifolium Huds. Roadside, Barry, Glamorgan, May 1920. Coll. A. E. WADE; comm. Nat. Mus. of Wales. “Yes, not uncommon in v.-c. 41.”—RIDDELSDELL.

Geranium phaeum L. Origin, near Alderley, W. Gloster, cult. Clifton, Bristol, May 15, 1920. Believed to be of garden origin wherever found in Britain, but there is no geographical reason why it should not occur as an indigenous native.—J. W. WHITE. See *Flora of Bristol*. Also from H. E. FOX, origin, woods near Durham, cult. Putney, May 20, 1920.

G. rotundifolium L. Banks near Penarth Ferry, v.-c. 41, July, 1920.—A. E. WADE. “Correct.”—RIDDELSDELL. Also from gravel pit, Whyke, Chichester, May 28, 1920.—R. J. BURDON. “Yes, a N.C.R.”—DRUCE.

G. Robertianum L., var. *rubricaulis* Hornem. Shingle beach, Barry, v.-c. 41, July, 1920.—A. E. WADE. “I know the plant well in the locality named, and hope that it is correctly placed under this variety.”—RIDDELSDELL.

Oxalis Acetosella L., var. *subpurpurascens* DC. Hedgebank, Tongwynlais, Glamorgan, May, 1920. Coll. A. E. WADE; comm. Nat. Mus. of Wales. “De Candolle (*Prod.* 1700) describes a var. *caerulea* and a var. *subpurpurascens*. These belong to the latter. Reichenbach (*l.c. Fl.* 4898b) also has a var. *vilacina*. Rouy & Foucaud reduce them all to subvarieties. Culture experiments are needed to test their permanence.”—DRUCE.

Impatiens parviflora DC. Weed in waste ground and gardens, Putney, Surrey, August, 1920.—H. E. FOX.

Genista anglica L. Lizard Downs, W. Cornwall, May 4, 1920.—C. V. B. MARQUAND.

Medicago arabica Huds. Cliffs west of the Lizard, W. Cornwall, May 6, 1920.—C. V. B. MARQUAND.

M. lupulina L., var. *scabra* Gray, also var. *Willdenowii* (Mérat). Side by side in a piece of fallow land between Wotton-under-Edge and Nailsworth, v.-c. 34, July 16, 1920. Whether a distinction in name is worth making between eglandular and glandular hairs—which is a distinction in fact—is a disputable point.—H. J. RIDDELSDELL. “I fail to see that the legumes are ‘rough with many tubercles’ which characterise Gray’s var.”—DRUCE. Var. *Willdenowii* Mérat. I think this is var. *Willdenowii* Boenn. (non Mérat), i.e. the plant Rouy calls sub-var. *glandulosa* Neir.—SALMON. “Yes, var. *Willdenowiana* Koch = var. *Willdenowii* Asch. This is better treated as a sub-var. as is done by Rouy.”—ADAMSON.

Trifolium suffocatum L. Newton Abbot, S. Devon, v.-c. 3, June 28, 1920. Coll. Miss E. PARKINSON; comm. W. H. PEARSALL. “Unmistakable *T. subterraneum* L.”—BRITTON, DRUCE, RIDDELSDELL, WHITE, &c.

T. repens L., forma. Witley Common, Surrey, July 15, 1920.—A. WEBSTER. “A monstrosity, frequent in this species, and in *T. hybridum*, especially on waste ground.”—RIDDELSDELL. “Proliferous state.”—CRYER. “This is the so-called var. *phyllanthum* Seringe, a monstrosity in which the calyces become foliaceous; first recorded by Merrett in the *Pinax* of 1666.”—DRUCE.

Coronilla varia L. [1203]. Adventitious with other aliens in garden, Countess Wear, S. Devon, v.-c. 3, September, 1920. Introduced with manure from a cowyard in 1910, completely naturalised. The only previous record for Devon is in Ravenshaw’s *List of Flowering Plants and Ferns of Devon*, “Lynton; rocks at Berry Head, Dr Blomfield.”—W. S. M. D’URBAN. “Yes.”—DRUCE. “Beautifully prepared specimens.”—Ed.

Ornithopus verpusillus L. Small grassy common, Braithwaite, near Keswick, Cumberland, v.-c. 70, June 15, 1920.—C. WATERFALL.

Hippocrepis comosa L. Gog-Magog Hills, Cambridgeshire. June 7, 1919.—C. V. B. MARQUAND.

Vicia Cracca L., f. Barry, Glamorgan, September, 1920. Coll. P. H. HOLLAND; comm. Nat. Mus. of Wales. “A form of *V. villosa* Roth, with smaller leaflets than usual. The calyx is too asymmetrical at the base, the teeth more elongated and more filiform, and the corolla much too long for this to be any form of *V. Cracca*.”—BRITTON. “Not a *Cracca* form surely; I believe it is *V. villosa*”

Roth."—SALMON. "Belongs to the aggregate *V. villosa* Roth. Although the cilia of calyx teeth are fairly long and spreading and the peduncles short, I should refer it to *V. dasycarpa* Ten., of which it might be var. *angustifolia* Rouy (*V. pseudocracca* Mérat) on account of its fewer and smaller leaflets and flowers and its slender habit."—WHELDON. "I should not refer this to *villosa*."—DRUCE.

Lathyrus tuberosus L. Barry, Glamorgan, September, 1920. Coll. P. H. HOLLAND; comm. Nat. Mus. of Wales. "A frequent ballast plant, e.g. at Lydney, v.-c. 34. Several strong patches maintained themselves at Cardiff Docks for some years."—RIDDELSDELL.

L. palustris L. Wicken Fen, Cambridge, July, 1920.—T. STEPHENSON.

L. pratensis L., luxuriant form. Near Wroxton, v.-c. 23, June 23, 1920. This luxuriance was frequent, especially among the Leguminosae, at the period when this gathering was made. It was not due to a wet season, for it was noticeable before the wet period of 1920. Was it due to the mild winter? H. J. RIDDELSDELL. "A luxuriant form but with flowers much smaller than those of the Shetland plant, which I call var. or sub-var. *speciosus*."—DRUCE.

L. montanus Bernh. Wood near Southam, Warwick, July, 1920. A stout erect form.—G. C. DRUCE.

L. montanus Bernh., var. *tenuifolius* Roth. On bank of colliery tramway, Coalpit Heath, W. Gloster, v.-c. 34, April 19, 1920.—I. M. ROPER. "Neither of these is an extreme form of the narrow-leaved plant which Roth named *Orobis tenuifolius* and Rouy and Foucaud *Fl. Fr.* v., 271, name a 'forme' = *L. Rothii*, under which the very narrow-leaved plant is put as β *angustissimus*. Here again the width of the leaves seem independent of soil or situation and the matter calls for culture experiments; the name should be *L. montanus* Bernh., var. *tenuifolius* (Roth) Garcke."—DRUCE. "I think Miss Roper's plant is best left under type."—SALMON. Also from near Jedburgh, July 1, 1920.—R. J. BURDON. "Yes, good though not extreme examples of the variety. Miss Roper's are not so good."—RIDDELSDELL.

Spiraea Ulmaria L., var. *denudata* Boenn. Old Park, Chichester, June 24, 1920.—R. J. BURDON.

Rubus incurvatus Bab. Four Shire Stone, v.-c. 33, August 14, 1920. Quite the type.—H. J. RIDDELSDELL.

R. incurvatus Bab., between type and var. *subcarpinifolius*

Rogers MS. Four Shire Stone, v.-c. 33, August 14, 1920. I have also found the variety at this spot which thus exhibits a satisfactory series of *R. incurvatus*.—H. J. RIDDELSDELL. "Sudre (*Rubi Eur.* 24) makes it a subordinate species of *R. vulgaris* W. & N."—DRUCE.

R. Lindleianus Lees. Four Shire Stone, v.-c. 33, August 14, 1920.—H. J. RIDDELSDELL.

R. argenteus Wh. & N. [1207]. Climbing over a large Rhododendron bush, Countess Wear, S. Devon, v.-c. 3, June, 1920. The most abundant bramble about this place, climbing to a height of 12 to 15 feet. Fruit of good size and juicy.—W. S. M. D'URBAN. "May be, but if so, very untypical. The stem looks Silvatican in character, but the material sent me is too scanty for even a decent guess, especially in the absence of collector's notes."—RIDDELSDELL.

R. nemoralis P. J. Muell. In great beauty and luxuriance at Four Shire Stone, v.-c. 33, August 14, 1920. The bit of heathy ground where these brambles grow extends into Warwickshire and perhaps slightly into Worcestershire; not into Oxfordshire, I believe.—H. J. RIDDELSDELL. "Sudre (*l.c.* 68) places it subordinate to *rhamnifolius*."—DRUCE.

R. ———? [27]. Field border, Polperro, v.-c. 2, July 29, 1920.—F. RILSTONE. "The union of a very strong, furrowed, hairy stem with a highly glandular panicle is puzzling. But for the glands on the panicle, and the green underleaf, it might well go to *Godroni* Lec. & Lam. It cannot, I think, belong to the *Egegrii*, nor do I suspect admixture. The least unsatisfactory procedure will perhaps be to put it to *macrophylloides* Genev."—RIDDELSDELL.

R. ———? [26]. A very tall, handsome plant growing in alluvium by stream, Longcombe Valley, Polperro, v.-c. 2, September 16, 1920.—F. RILSTONE. "*R. Questierii* Lefv. & Muell. I feel sure; very typical and N.C.R. for v.-c. 2."—RIDDELSDELL.

R. hirtifolius Muell. & Wirtg., var. *mollissimus* Rogers. Coopers Hill, v.-c. 33, July 10, 1920. The large plateau at the top of Coopers Hill (between Cheltenham and Stroud), produces a number of good brambles, as does the similar but much larger top of Haresfield Hill. This small form of *mollissimus* is in some quantity, and accompanies *R. Marshalli*, *dasyphyllus*, *botryeros*, etc.—H. J. RIDDELSDELL. "Sudre put it as a var. of *R. danicus* and cites *Brit. Rubi* No. 85."—DRUCE.

R. leucostachys Schleich., forma *umbrosa*. Princethorpe Wood, Warwick, v.-c. 38, July 20, 1920. A form in which the metallic

felt on the under side of the leaves has wholly disappeared.—L. CUMMING.

R. cinerosus Rogers. Park Corner, v.-c. 23, July 28, 1920. In some quantity at this spot, but not in very good condition.—H. J. RIDDELSDELL. "This, Sudre (*l.c.* 133) puts as a var. of *R. apiculatus* Weihe, and he cites *Brit. Rubi* No. 19."—DRUCE.

R. mucronatus Blox., var. *nudicaulis* Rogers. Bournemouth, S. Hants, June 18, 1920.—H. J. RIDDELSDELL. "Sudre (*l.c.* 113) considers *nudicaulis* belongs to the Sylvatical, not to Mucronifer, which name he adopts for Bloxam's plant. The name is invalid as there is already a *mucronatus* Seringe of 1825."—DRUCE.

R. Borreri Bell-Salt. Four Shire Stone, v.-c. 33, August 14, 1920. The only record for E. Gloster, I believe, though the species grows in quantity in W. Gloster. Here it will likely be found to extend into Warwick, but I only saw one plant in v.-c. 33, and that was a form with rather small panicles, very different-looking from the luxuriant bushes found in Dorset and S. Devon.—H. J. RIDDELSDELL.

R. Radula Weihe. [22]. Field border by stream, Polperro, v.-c. 2, July 15, 1920. Plant very low growing. The October leaves were very convex.—F. RILSTONE. "Apparently Radulan, and in that case going best to *R. podophyllus* P. J. Muell. Leaflets with longer points than usual in that species. Notes, however, are lacking, and I do not feel confident enough to make it a N.C.R. for v.-c. 2."—RIDDELSDELL.

R. echinatoides Rogers. Hook Norton, v.-c. 23, August 16, 1920. Specimens in Herb. Rogers justify this being placed under *echinatoides*.—H. J. RIDDELSDELL. "Sudre (*l.c.* 129) places it subordinate to *R. aspericaulis* L. & M."—DRUCE.

R. oigoclados M. & L. [25]. A strong, low-growing plant with pale pink petals, abundant in many parts of the Polperro valley, v.-c. 2, July 23, 1920.—F. RILSTONE. "Yes, apparently, though sepals show considerable tendency to rise."—RIDDELSDELL. "Sudre places *oigoclados* M. & L. subordinate to *R. fusco-ater* Weihe, but says Rogers' *oigoclados* is a different species belonging to the Virescentes and he gives it the name *R. cenomanensis* Sudre, based on Rogers' plant in the *Handbook*, p. 27, and his No. 65 of the *Brit. Rubi*."—DRUCE.

R. scaber Wh. & N. Park Corner, v.-c. 23, July 28, 1920. Already known from the escarpment of the Chilterns elsewhere.—H.

J. RIDDELSDELL. "Sudre (*l.c.* 193) says *scaber* W. & N. is not British at present. Rogers' *scaber* is a different species, the *R. conspectus* Genev."—DRUCE.

R. hostilis Muell. & Wirtg. In quantity in a wood, Wolford Heath, Warwickshire. This locality adjoins the Gloucestershire, Four Shire Stone, and Lower Lennington area, and like that produces *R. nemoralis*, etc. I found *R. hostilis* here some years ago.—H. J. RIDDELSDELL.

R. Koehleri Wh. & N. Field border, Polperro, v.-c. 2, July 30, 1920. Plentiful in the Polperro valley. A low-growing plant but of striking appearance on account of the bright red acicular and glandular clothing of the panicle. A proportion of the new growth is fertile, producing very robust panicles.—F. RILSTONE. "*R. hystrix* Wh. & N."—RIDDELSDELL.

R. Koehleri Wh. & N., var. *cognatus* N. E. Brown. Twelve O'clock Drive, Brandon, Warwick, v.-c. 38, September 1, 1920. As far as I know a record for v.-c. 38.—L. CUMMING. "I hesitate a little between this and *R. hystrix* and should call it *R. cognatus* N. E. Br., going off towards *R. hystrix*. Pink petals and shape of leaflet make for the latter, but the thick, soft foliage, broad panicle, fruit sepals not clasping, and on the whole the stem armature make for *cognatus*. Stem pieces, which I retained earlier when going through Mr Cumming's gatherings, are more convincing than those received through the Club, but I am not sure that some *hystrix* was not among them. But Rogers' *Handbook* points out the great variability of the *cognatus* armature, and the difficulty of distinguishing between herbarium specimens of *hystrix* and *Koehleri*. N.C.R. for v.-c. 38."—RIDDELSDELL.

R. Kaltenbachii Metsch. Open woodland, Leigh Woods, N. Somerset, July and August, 1920.—J. W. WHITE. "Beautiful specimens, correctly named."—RIDDELSDELL. "A beautifully prepared and quite homogeneous gathering."—ED. "This again Sudre (*l.c.* 228) says is not British, Rogers' plant being in part *R. Menkei* Weihe. He cites *Brit. Rubi* 48 and 163 for it. *R. tereticaulis* Rogers' *Handb.* p. 91 (not of P. J. Muell.) also belongs to *Menkei*."—DRUCE.

R. hirtus Waldst. & Kit., var. *flaccidifolius* (P. J. Muell.). Haresfield Hill, v.-c. 33, July 13, 1920. In great variety over a large area, extending to Pitchcombe Wood, etc. Seen by Mr Rogers in 1912 (coll. E. M. Day) and named by him. "*Flaccidifolius* I think, and if so new for Gloster."—RIDDELSDELL. "This, Sudre

(l.c. 215) places as synonymous with *R. napophiloides* Sudre. He says it is not Mueller's plant."—DRUCE.

R. dumetorum Wh. & N. By garden wall, Polperro, v.-c. 2, July 12, 1920.—F. RILSTONE. "Yes, var. *raduliformis* Ley. N.C.R. for v.-c. 2."—RIDDELSDELL.

R. Bucknalli J. W. White. Westridge Wood, Wotton-under-Edge, v.-c. 34, July 16, 1920. The original locality.—H. J. RIDDELSDELL.

R. caesioides L. Four Shire Stone, v.-c. 33, October 14, 1920. I suppose this is, judging by the sepals, etc., but it is unusually fine, and very late flowering for the species. The flowers were large enough for *R. Balfourianus*.—H. J. RIDDELSDELL.

R. caesioides L., var. *mollifolius* Sudre. By pond, Nailsea, N. Somerset, v.-c. 6, August 14, 1920. This name was kindly given to me by Mr R. A. Rolfe, A.L.S., but I cannot trace it. The plant is being cultivated at Kew.—I. M. ROPER. "*R. caesioides* L.; certainly. Focke *Species Ruborum* 1914, does not index *mollifolius*."—RIDDELSDELL. "Sudre describes it in his *Rubi Eur.* p. 234. He says it is the var. *agrestis* of Authors and perhaps of W. & N."—DRUCE.

Alchemilla alpestris Schmidt. Grassington, v.-c. 64, alt. 850 ft., June 11, 1920.—J. CRYER. "This is the plant common in the hilly parts of Glamorgan, which I have been used to refer to *A. alpestris*."—RIDDELSDELL. "Yes."—SALMON and ADAMSON.

A. alpina L. Abundant on the shores of Wastwater, Cumberland, v.-c. 70, at the foot of the "screes," October 2, 1920.—W. H. PEARSALL. Also from rocky edge of footpath behind Castle Crag, near Grange-in-Borrowdale, Cumberland, v.-c. 70, June 21, 1920.—C. WATERFALL.

Poterium Sanguisorba L., forma. [2193]. Lane by Epsom Downs, Surrey, June 2, 1920. A curious form in which the principal stems develop from the head of flowers a number of smaller secondary heads borne on slender pedicels.—C. E. BRITTON. "I should like to see this in fruit. There is none, unfortunately, on my example. The habit reminds me of *P. muricatum*."—SALMON. "A curious monstrosity in which the central stem has developed into a paniculate inflorescence."—DRUCE.

Rosa arvensis Huds., var. *biserrata* Crép. [2041]. Near Upper Gatton, Surrey, v.-c. 17, August 20, 1920. This is not so

good a form as the one from Hollington, Derbyshire, coll. W. R. Linton, but may pass for the var., which is a very rare one. Some degree of irregular serration is, however, not infrequent. The fruit, which is absent from some specimens, is subglobose or broadly ovoid. The labels are dated August 28 in error.—A. H. WOLLEY-DOD. "A very interesting plant, with prickles unlike typical *arvensis*."—BARCLAY.

The following Roses have all been examined and named by Col. A. H. Wolley-Dod. Wherever his naming is qualified the label reproduces the fact.—H. J. RIDDELSDELL.

R. sphaerica Gren. Near Wigginton, v.-c. 23, September 14, 1920.—H. J. RIDDELSDELL. "Yes, a round-fruited *Lutetiana*."—BARCLAY.

R. dumalis Bechst. Hook Norton, v.-c. 23, August 28, 1920.—H. J. RIDDELSDELL. "I think *R. dumalis* Bechst., but hardly more biserrate than is often found in the *Transitoriae*."—A. H. W.-D. "Yes."—BARCLAY.

R. canina L., var. *transitoria* R. Kell. Wigginton Heath, v.-c. 23, September 11, 1920. Irregularity of serration slight.—H. J. RIDDELSDELL. "Yes."—BARCLAY.

R. canina L., var. *transitoria* R. Kell. South Newington Hill, v.-c. 23, August 24, 1920.—H. J. RIDDELSDELL. "I should call this *R. canina* L., var. *transitoria* R. Kell., but I think Dingler would consider it biserrate enough for *R. dumalis* Bechst."—A. H. W.-D. "Yes."—BARCLAY.

R. leiostyla Rip. Near Bourton-on-the-Water, v.-c. 33, September 4, 1920. "Yes, I agree."—BARCLAY. Also from Wigginton, v.-c. 23, September 11, 1920.—H. J. RIDDELSDELL. "Yes, a form of *dumalis* with glabrous styles."—BARCLAY.

R. sphaeroidea Rip. Near Bourton-on-the-Water, v.-c. 33, September 4, 1920.—H. J. RIDDELSDELL. "Towards *R. biserrata* Mér., but certainly not that."—A. H. W.-D. "Yes, a *dumalis* form with subglobose fruit which may be called *R. sphaeroidea* Rip."—BARCLAY.

R. verticillacantha Mérat. Wigginton, v.-c. 23, August 19, 1920.—H. J. RIDDELSDELL. "I agree."—BARCLAY.

R. verticillacantha Mérat. Hook Norton, v.-c. 23, August 28, 1920.—H. J. RIDDELSDELL. "Under *R. verticillacantha* Mérat,

but the small leaflets and globose fruit are abnormal."—A. H. W.-D. "The presence of sub-foliar glands on secondary nerves, few on some leaflets, more numerous on others, as well as its glandular peduncles, shows that this specimen belongs to the group of *R. Blondaeana* Rip."—BARCLAY.

R. Blondaeana Rip. Road from Stow-on-the-Wold to Bourton-on-the-Water, v.-c. 33, September 4, 1920. Colonel Wolley-Dod says:—"One of the *Blondaeana* group, but it takes some searching to find sub-foliar glands, and the peduncles are very little hispid. It is best under *R. Blondaeana* Rip. for want of a closer varietal name." All from one bush by the roadside.—H. J. RIDDELSDELL. "In examining with the microscope, I could only find on seven or eight leaflets one gland on a secondary nerve of one leaflet. This, therefore, cannot belong to *R. Blondaeana* Rip., but is a somewhat weak form of *R. verticillacantha* Mérat."—BARCLAY.

R. dumetorum Thuill., f. *semiglabra* (Rip.). Hook Norton, v.-c. 23, August 28, 1920.—H. J. RIDDELSDELL. "Yes, hardly differs from *R. urbica* Lém."—BARCLAY. Also from Swerford Heath, v.-c. 23, August 24, 1920.—H. J. RIDDELSDELL. "Would fit *R. sphaerocarpa* Rip. quite as well as *semiglabra* Rip."—BARCLAY.

R. sphaerocarpa Pug. Wigginton, v.-c. 23, August 19, 1920.—H. J. RIDDELSDELL. "Yes."—BARCLAY.

R. tomentella Lem. Wigginton, v.-c. 23, September 12, 1920. Towards *R. sclerophylla*.—H. J. RIDDELSDELL. "Yes, but I don't see any tendency towards *R. sclerophylla*."—BARCLAY.

R. Carionii Chab. Wigginton Heath [650], v.-c. 23, October 5, 1920. "I put all plants with very biserrate, hairy leaflets in the *Tomentellae*, as I have no name for them in the *Dumetorum* group, but I am not sure that it is sound. This specimen has, however, a decided *Tomentella* look."—A. H. W.-D.—H. J. RIDDELSDELL. "If the name refers to a form of *R. tomentella* without or with only a trace of sub-foliar glands, I agree it is *R. Carionii* Déségl. and Gillot."—BARCLAY.

R. scabriuscula Sm. South Newington Hill, v.-c. 23, August 1920. "A most peculiar plant, certainly one of the *Scabriusculae* with leaflets like those of *R. sylvestris*, but eglandular and prickles untypical. It must go under that aggregate."—A. H. W.-D.—H. J. RIDDELSDELL. "Yes."—BARCLAY.

R. omissa Déségl, teste A. H. W.-D. By the Windrush above

Bourton-on-the Water, v.-c. 33, September 4, 1920. With unusually smooth peduncles. On record already for v.-c. 33.—H. J. RIDDELSDELL. "Yes."—BARCLAY.

R. spinosissima L., with yellow petals. [V. 72]. Fairnlie, Selkirk, August 1919. "This large growing yellow-flowered rose is often to be seen in cottage gardens in the Lowlands, but I do not know its correct name, nor was Miss Willmott able to fix it. The flowers are a dull orange yellow."—G. C. DRUCE.

Crataegus monogyna Jacq. (*Oxyacantha* L.). Seedlings, under hedge in field, Alphamstone, N. Essex, v.-c. 19, May 9, 1920.—G. C. BROWN.

C. Oxyacantha × *oxyacanthoides*. South Newington, v.-c. 23, styles 1-2. Also Wigginton, v.-c. 23, May 21, 1920.—H. J. RIDDELSDELL. "It seems that both gatherings have the suggested parentages."—DRUCE.

C. oxyacanthoides Thuill. [Q. 64]. Cuckoo Lane, Freeland, Oxon, September, 1918.—G. C. DRUCE. Also from South Newington, where it is frequent, v.-c. 23, May 21, 1920.—H. J. RIDDELSDELL.

Saxifraga stellaris L. Swamps on side of Eel Craggs Pass, above Grange-in-Borrowdale, Cumberland, v.-c. 70, June 21, 1920.—C. WATERFALL. Also from Nant Francon, v.-c. 49, May 24, 1920. In great abundance.—J. CRYER.

Callitriche ———. [442]. Ditch, Rocklands, v.-c. 28, May 31, 1920. From the same locality as my [387] sent in 1918.—F. ROBINSON. "There are evidently two species growing in this water. In 1918 Mr A. Bennett's specimen was *C. verna* L. and mine was *C. stagnalis* Scop. This year my sheet shows one species (fruiting) which is undoubtedly *C. stagnalis*, and another (without fruit) having longer internodes and narrower leaves with the laminae tapering at both ends. In the absence of fruit it is impossible to name it with certainty."—PEARSALL.

C. ———. [441]. Ditch, Great Hockham, v.-c. 28, May 28, 1920.—F. ROBINSON. "With small keeled fruit and very long persistent reflexed style it suggests *C. polymorpha* Lönnr. [442] does not contain mature fruit and is rather different."—RIDDELSDELL. [441] is *C. stagnalis*."—PEARSALL. "I see no suggestion of *polymorpha*."—DRUCE.

Lythrum Hyssopifolia L. Waste ground, Bradford, v.-c. 64,

September 11, 1920. In great abundance.—J. CRYER. Also from Marais, Jersey, July, 1870. Coll. J. PIQUET; comm. G. C. DRUCE.

Epilobium hirsutum L., var. *villosissimum* Koch. Hedge, Crox Bottom, Bishopsworth, N. Somerset, v.-c. 6, September 4, 1920.—I. M. ROPER. "Yes, very good examples of the variety."—ADAMSON & DRUCE.

E. obscurum Schreb. Woodchester, v.-c. 34, July 14, 1920. I do not find that the book description of the leaves of *E. obscurum* as sessile (see Bab. *Man.* ed. ix.) always holds good; they are often distinctly though shortly stalked.—H. J. RIDDELSDELL. "Yes."—ADAMSON.

E. obscurum Schreb. [464 A & B]. Allotment, Manor Road, Richmond, Surrey, v.-c. 17, July 16, 1920. Coll. J. FRASER; comm. W. C. BARTON. This gathering was sent to me under another specific name, but I cannot separate any specimens from *E. obscurum*. I send it to the Club as illustrating variation in a common plant all grown apparently under the same conditions. The plants labelled [464 A] seem to show more or less the characters of var. *lucidum* Rouy & Camus Fl. Fr. vii., 182—"Tiges à lignes peu visibles; feuilles molles, translucides, moins nettement dentées; fleurs souvent d'un blanc rosé." In *Journ. Bot.* 144, 1889, and 5, 1890, the Rev. E. S. Marshall quotes Haussknecht (*Monographie der Gattung Epilobium*): "Of constant varieties I have hitherto met with no instance." He gives, however, a number of forms and of these specimens some among [464 A] would appear to come under f. *annua* (a seedling plant in its first flowering season) or f. *strictifolia*; some among [464 B] under f. *ramosissima* (much branched from the base, branches curved upwards) or possibly f. *crassicaulis* (a luxuriant state often four feet high, with stem nearly as thick as a goose quill).—W. C. BARTON. "Probably right, but leaves not much rounded at the base and fruit incurved."—ADAMSON.

Enothera odorata Jacq. Coast sandhills, between Aberdovey and Towyn, Merioneth, May and June, 1919. Becoming locally well-established here, and to all appearances wild, its spindle-shaped root penetrating deep into the sand. It flowers and seeds profusely.—J. COSMO MELVILL.

Carum verticillatum Koch. [469]. Boggy meadows, Colbren. W. Brecon, v.-c. 42, August 31, 1920.—W. C. BARTON. "Yes, a frequent plant of wet ground among the hills of S. Wales."—RIDDELSDELL.

Oenanthe silaifolia Bieb. Cherwell meadows, near Aynhoe,

Northants, June 14, 1920. See *Journ. Northants Nat. Hist. Soc.* 174, 1920.—G. C. DRUCE. Also from the same locality, June 28, 1920. In the meadows by the Cherwell I found it lower down the river at Somerton, Oxon, last year, and at Dr Druce's suggestion tried this locality in Northants this year, and found it there, a N.C.R. in plenty.—H. J. RIDDELSDELL.

Galium Mollugo × *verum*. Kingswood-Chipstead Lane, Surrey, v.-c. 17, July 17, 1920. A good intermediate with abortive fruit.—A. H. WOLLEY-DOD. "Yes, nearer *verum*, especially in foliage. Agrees fairly with hybrid A of Miss Armitage's paper in *New Phytologist* viii., 1909, Nos. 9 and 10."—RIDDELSDELL.

G. ———. Ratley, Warwickshire, v.-c. 37, September 29, 1920. In a quarry near Edge Hill. Clearly intermediate between *G. erectum* Huds. and *G. Mollugo* L., one link in a series which completely unites the two species, and very difficult to assign to either, though its systematic position is pretty obvious, especially if the whole gathering is considered.—H. J. RIDDELSDELL. "A somewhat diffuse form of *G. erectum* Huds. It agrees with *G. cinereum* Smith in having stem leaves 8 in a whorl and branch leaves 6, and its diffuse habit (it is *G. diffusum* Hook.), but it is kept distinct from that plant by the leaves more lanceolate than linear, and copiously reticulated with veins. *G. cinereum* is described as having them "destitute of reticulations."—WHELDON. "One of the many forms of *G. erectum* Huds. Bagnall (*Fl. Warwick.*) records it from this place."—DRUCE.

G. ———? Diseased form, West Chilton Common, September 2, 1920.—A. WEBSTER. "*G. hercynicum* Weig., with the inflorescence disfigured by the gall, *Eriophyes galiobius*. Named by Mr Swainston."—DRUCE.

Valerianella eriocarpa Desv. Chalford, v.-c. 34, June 3, 1920. N.C.R. On a disused piece of cultivated ground near the railway and canal, the same surroundings as at Portland. The fruit shows variations paralleled in other species (*olitoria* and *dentata*). My Portland plants are nearly to quite glabrous in fruit character; these are hispid. Has the glabrous-fruited var. received a name or is the fact simply that the hairs drop off the fruit as it matures? My impression is that the fruits on the present specimens were more hispid when gathered than they are now.—H. J. RIDDELSDELL. "Yes, a most interesting find."—SALMON.

Solidago Virgaurea L. Steep side of ravine, moorlands near Carrickmine, Co. Dublin, Ireland, August 12, 1920.—C. WATERFALL.

Filago gallica L. Cornfield, Berechurch, N. Essex, v.-c. 19, November 4, 1920. In quantity in its old station where it was gathered during the autumn by Mr A. W. Trethewey.—G. C. BROWN. "Yes, very acceptable."—PEARSALL and RIDDELSDELL.

Gnaphalium sylvaticum L. Four Shire Stone, v.-c. 33, August 14, 1920. On a piece of heathland which produces *Juncus squarrosus*, *Agrostis canina* and many *Rubi*. This species is not common in E. Gloster.—H. J. RIDDELSDELL.

Chrysanthemum Leucanthemum L. Pasture near Alveston, W. Gloster, v.-c. 34, June 7, 1920. A pretty form when growing, as the outer ligulates have turned to tubular florets, or are in an intermediate state. See *Journ Bot.* 43, 1918.—I. M. ROYER. "This plant with very short ligules and scarcely auricled leaves does not match any of my specimens. I suppose it will come under var. *pratense* Franzl."—ADAMSON. "Seems to come under var. *pinnatifidum* Lecoq and Lamotte (= var. *subpinnatifidum* Fernald). Heads smaller than in type and stem leaves narrowly oblong or oblanceolate, pinnatifid at the base."—PEARSALL. "This is a curious teratologic condition, found in some Compositæ, when the ray-flower becomes tubular."—DRUCE.

Matricaria suaveolens Buch. Grassy roadside, Foxrock, Co. Dublin, Ireland, August 5, 1920.—C. WATERFALL. Also from cornfield, Cranborne Chase, N. Dorset, September 1920. Also seen at Milford, Hants, in August.—J. COSMO MELVILL, and at Poole, Dorset, 1904; Basingstoke, Hants, 1907.—G. C. DRUCE.

Senecio aquaticus Huds., forma vel var. *ornatus* Druce. [V. 797]. Near Loch Asta, Shetland, July 1920. [Sent as *spectabilis*]. See *Report* 25, 1921.—G. C. DRUCE. "A curious compact and hoary form looking as if it grew on drier ground than usual, though some of the most luxuriant *S. aquaticus* I ever saw grew on the dry slopes of a coal tip."—RIDDELSDELL. Also from Lerwick, Shetland, July 11, 1920.—R. J. BURDON. "A small series, plants considerably varying in stature, and exactly matching Dr Druce's plant."—ED.

S. squavidus L. Waste ground, Grangetown, Cardiff, v.-c. 41, May 1920.—A. E. WADE. "Again a species extremely variable, both in foliage and size of anthode. It hybridises occasionally with *vulgaris* at Cardiff."—RIDDELSDELL. "Correctly named."—DRUCE.

S. vulgaris L., var. *radiatus* Koch. Waste ground, Grange-

town, Cardiff, v.-c. 41, May 1920.—A. E. WADE. "Very common and variable about Cardiff, Bristol, etc. The length and number of rays are most inconstant."—RIDDELSDELL.

S. vulgaris L., var. Pasture at Sapperton Tunnel, v.-c. 34, June 2, 1920. Is it Trow's *erectus*?—H. J. RIDDELSDELL.

Centaurea obscura Jord. [478]. Rocky banks of River Wye, Boughrood, Radnor, v.-c. 43, August 30, 1920.—W. C. BARTON. "All the specimens included in this gathering have the habit and large globose heads of *C. obscura* Jord., under which they must be placed. The phyllary-appendages recall those of *C. nemoralis* Jord. ranging in shape as they do from subulate, lanceolate-linear, at the base of the capitulum, with the upper series lanceolate and ovate-lanceolate, the uppermost only being roundish. The appendages of *C. obscura* Jord. should be broadly ovate, roundish or reniform. The plant is certainly not *C. nemoralis* Jord., which besides the character of the linear-lanceolate phyllary-appendages, is distinguished by its smaller ovoid heads borne on more numerous branches. The appendages of this River Wye plant are black or blackish-brown, closely imbricated or spaced and then allowing the green phyllaries to be seen. The lowest series of appendages may be spreading or recurved. I associate this plant with others known to me, to which I have given a MS. varietal name denoting the resemblance to *C. nemoralis* Jord. Dr Druce has also gathered somewhat similar forms in Essex and Caithness."—BRITTON. "Yes, in addition to other characters separating it from *C. nemoralis*, Savouré emphasises the stout, erect branches, few in number. Neither this nor the next have been collected so as to show the stem-base, which in all forms of *C. obscura* is described as decumbent, in *C. nemoralis* erect."—WHELDON.

C. nigra L. (*obscura*?) [X. 783]. Twinstead, N. Essex, September 1920.—G. C. DRUCE. "This has the habit and the heads of *C. obscura* Jord., but differs by the phyllary-appendages being lanceolate or ovate-lanceolate, not broadly ovate as described by Jordan. The lower series of appendages have also a tendency to spread or to become recurved, a character that is also apparent in Mr W. C. Barton's plant from the banks of the River Wye. Although dissimilar at first view, both forms are sufficiently alike to go together as a variety under *C. obscura* Jord., and I place them with forms from Surrey, etc., that I am provisionally distinguishing by the MS. name of var. *subnemoralis*."—BRITTON. "Not typical *obscura*, although the heads are of characteristic shape and colour. Can it be *C. obscura*, var. *ramosa*, which has elongate branches and is branched to the base?"—WHELDON.

C. nemoralis Jord. [2278]. Horsley, Surrey, September 5, 1920. This is the most frequent representative of *C. nigra* L. in southern Britain, and is easily known from the allied *C. obscura* Jord. by its more branched habit, narrower leaves, ovoid heads and phyllary-appendages (excluding the teeth) of a lanceolate form. Jordan attributed to his two species different habitats, *C. nemoralis* being a plant of grassy, bushy places, and *C. obscura* preferring upland pastures.—C. E. BRITTON. "Yes, identical with Mr Barton's No. 476, but younger and more luxuriant."—WHELTON.

C. nemoralis Jord. [476]. Epsom Downs, Surrey, v.-c. 17, September 22, 1920.—W. C. BARTON. "Forms of *C. nemoralis* Jord. showing an approach to *C. microptilon* G. & G. by reason of the very narrow, spreading-erect appendages."—BRITTON. "Yes, readily distinguished from *C. decipiens* Thuill., var. *microptilon* G. & G. by the crowned achenes. In the latter they are naked."—WHELTON.

C. pratensis Thuill. Meadows, Badgeworth, Cotteswolds, E. Gloster, v.-c. 33, July 17, 1920. Mr Bucknall and I feel satisfied that this is the right name.—J. W. WHITE. "Not *C. pratensis* Thuill., but *C. nemoralis* Jord., f. *radiata*. It has no particular character to separate it from the radiant forms of *C. nemoralis* found on the Chiltern Hills and the South Downs."—BRITTON.

C. Scabiosa L., var. *Gelmi* Briq. [1841]. Hort. West Barnes, Merton, Surrey, July 1920. A further set of the cultivated plant originating at Effingham, Surrey, in which county a second locality was found last year. A very short time before his lamented death, the late Rev. E. S. Marshall informed me of his concurrence in applying this name to the Surrey plant.—C. E. BRITTON. "A beautiful set of a very welcome plant."—ED.

C. Scabiosa L., var. *spinulosa* Koch (non *C. spinulosa* Rochel). [2279]. Fallow field, Effingham, Surrey, September 5, 1920. This is a variety of the Great Knapweed, distinguished by the phyllary-appendages terminating in a slender spine about 5 mm. in length ("fimbria terminali foliolorum involucri in spinam longiusculum validiorem mutata." Koch *Syn.*). To the variety Koch referred *C. spinulosa* Roch. bann. p. 76, t. 36, f. 76, but the *Plantae Banatus variores* shows that though allied to *C. Scabiosa* L. Rochel's plant is a well-marked species with linear, elongated leaf-segments, and the blackened area of the phyllary-appendages more confined to the apex, etc. Specimens of *C. spinulosa* Roch. from south east Europe in *Herb. Brit. Mus.* support the view that Rochel's species is quite distinct from *C. Scabiosa* L. I am not aware that

Koch's variety has previously been found in Britain, though a plant referred to *C. spinulosa* Roch. has been gathered at Gloucester Docks (*Journ. Bot.* 254, 1911). The plant distributed occurred in fair quantity among ordinary *C. Scabiosa* in a fallow field, and was otherwise distinguished by the numerous erect stems and thick, soft, dark-green leaves.—C. E. BRITTON. "Seems to agree with Koch's description of his *spinulosa*, but I have not compared my example with authentic material. The longer terminal spine to the bud; the scales drawn in *E.B.* t. 56 and Coste *Fl. Fr.* ii., p. 390, are quite different."—SALMON.

C. melitensis L. Waste ground, by maltings, Hythe Quay, Colchester, v.-c. 19, June 30, 1920. All from one large plant.—G. C. BROWN. "Yes."—DRUCE and RIDDELSDELL.

Hieracium aurantiacum L. Adderbury, v.-c. 23, June 8, 1920. In the churchyard as is frequently the case with this species.—H. J. RIDDELSDELL. "Correct, not easily mistaken."—CRYER. "This is not true *H. aurantiacum* L. but my *H. brunneo-croceum*. Vide *Journ. Bot.* 60, 1921, where these species are dealt with in detail. The specimen sent has been cut too high to show the characteristic leafy stolons."—PUGSLEY.

H. cambricum F. J. Hanb. Great Orme's Head, v.-c. 49, May 27, 1920.—J. CRYER. "Agrees exactly with my Glamorgan specimens (near Treorchy, 1903)."—RIDDELSDELL. "I agree."—PUGSLEY.

H. pachyphyllum Purchas. Symonds Yat, v.-c. 34, May 28, 1913.—H. J. RIDDELSDELL. "Correctly named."—CRYER. "I think correct."—PUGSLEY.

H. serratifrons Almq., var. *Stenstroemii* Dahlst. Cray Gill, M.-W. Yorks, v.-c. 64, July 2, 1920.—J. CRYER. "I cannot think that this plant is any form of *H. serratifrons*. It agrees closely with both Hanbury's and Linton's descriptions of *H. rivale*, particularly in the thickened peduncles and apparently obconic heads, but I am not confident that it should be so named."—PUGSLEY.

H. serratifrons Almq., var. *lepistoides* Johanns. Prinknash Park, v.-c. 33, June 26, 1912.—H. J. RIDDELSDELL. "I think so, though the leaves are not quite characteristic in my specimen."—CRYER.

H. serratifrons Almq., var. *crassiceps* Dahlst. Wall at Chalford, v.-c. 34, June 3, 1920. Agreeing with a plant growing close by named by Mr Ley as above. One of the scarcest of the *serratifrons*

forms on the Cotteswolds.—H. J. RIDDELSDELL. “Probably correct, although the heads are not so large or thick as those of typical *crassiceps*.”—CRYER. “This seems indistinguishable from Scotch specimens so named.”—PUGSLEY.

H. serratifrons Almq., var. *cinderella* Ley. High railway banks, Glynneth Tunnel, v.-c. 41, June 17, 1911. These are seedlings. Distributed also in 1911 (see *Rep. B.E.C.* 101, 1911) without name [Ref. No. M. 20]. I feel sure it is now rightly identified. Also from Perddyn Glen, v.-c. 41, June 15, 1911—H. J. RIDDELSDELL. “Correctly named.”—CRYER.

H. serratifrons Almq., var. *grandidens* Dahlst. Under trees, Amberley, v.-c. 34, June 3, 1920. I follow Ley's guidance in this determination. I believe *grandidens* is not infrequent on the Cotteswolds, at any rate in their southern half. Also from Toadmoor Woods, Stroud, E. Gloster, v.-c. 33, June 14, 1911. Coll. E. M. DAY; comm. H. J. RIDDELSDELL. Both assented to by CRYER.

H. serratifrons Almq., var. *torticeps* Dahlst. Wood, Sheepscombe, v.-c. 33, June 24, 1912.—H. J. RIDDELSDELL. “So I should name it.”—CRYER.

H. subulatidens Dahlst. Origin: wall at Curt Colman, Bridgend, v.-c. 41, August 8, 1912. Named by Mr Cryer. See *Rep. B.E.C.* 575, 1916.—H. J. RIDDELSDELL. “Abnormally luxuriant as might be expected in a cultivated plant.”—PUGSLEY.

H. vulgatum Fr., var. *sejunctum* W. R. L. Railway bank between Tintern and Tidenham, v.-c. 34, June 14, 1912. The plant was very distinct-looking as it grew, foliage yellowish.—H. J. RIDDELSDELL. “The clothing of the stem and the shape and clothing of the phyllaries will not do for var. *sejunctum* W. R. L. Although not typical, it is best placed under *H. diaphanoides* Lindeb., which is a variable plant. Mr Riddelsdell assents to this.”—CRYER. “I do not think this should come under *H. vulgatum*. From its oval leaves and densely glandular heads the example sent seems to be very near to *H. irriguum* Fr.”—PUGSLEY.

H. maculatum Sm. Railway banks at the mouth of Sapperton Tunnel, v.-c. 34, June 2, 1920. See *Rep. B.E.C.* 384, 1908. This gathering is earlier than the previous one, and does not show so well the characteristic long lower panicle branches.—H. J. RIDDELSDELL. “Yes.”—CRYER. “This appears to be a form of *H. maculatum*, but it does not agree with the description in Linton's *British Hieracia* in that its peduncles are eglandular, its phyllaries only

sparingly glandular, and its ligules distinctly pilose-tipped."—PUGSLEY.

H. sciaphilum Uechtr. Roadside, Hook Norton, v.-c. 23, June 26, 1920. Styles yellow, ligules slightly hairy.—H. J. RIDDELSDELL. "Yes, typical."—CRYER. "The form with pilose-tipped ligules, markedly floccose-edged phyllaries and very dark glands."—PUGSLEY. Also from various localities in Gloucestershire, etc. Mr Cryer has seen all these sheets and agrees to the name.—H. J. RIDDELSDELL.

H. sciaphilum Uechtr., forma *paucifolia*. Quarry, Radyr, v.-c. 41, June 3, 1911. Det. A. Ley. See *Rep. B.E.C.* 104, 1911.—H. J. RIDDELSDELL. "This seems to me distinct from *H. sciaphilum*, and near *H. pulchrius* Ley."—PUGSLEY.

H. sciaphilum Uechtr., var. *amphifolium* Ley. [M. 14]. Ynyscynon, Aberdare, v.-c. 41, June 11, 1911. See *Rep. B.E.C.* 105, 1911.—H. J. RIDDELSDELL. "Correctly named."—CRYER and PUGSLEY.

H. Adlerzii Almq. Banks of Menai Straits, v.-c. 49, May 28, 1920. In abundance.—J. CRYER. "Agrees remarkably with a plant from near Llanwrtyd, v.-c. 42, which I gathered in company with Ley in 1907. This had originally been put to *Adlerzii*, but in 1907 was assigned by Ley to *H. septentrionale* Arr.-Touv., var. *amphibolum* Lindeb.; and under this name it was distributed through the Club in 1907. Ley, however, left it at last in his herbarium under *Adlerzii* Almq., and to that species I believe both the Llanwrtyd and Menai plants belong. Linton's *Handbook*, however, gives a description which does not exactly fit but the differences (*e.g.*, stem leaves glabrous above, subtruncate heads, etc.) are slight."—H. J. RIDDELSDELL. "I do not think the example sent to be *H. Adlerzii*, which should have larger, more ovate and less toothed leaves. The leaf-cutting of this plant and the clothing of its heads recall *H. porrigens* Almq., but I cannot name it."—PUGSLEY.

H. corymbosum Fries. [514]. Mellte Glen, W. Brecon, v.-c. 42, August, September 2, 1920. The gathering could be separated more or less satisfactorily into two groups, of which one had leaves darker and more dentate than the other. They do not, however, correspond very well with the description in *Brit. Hier.* of either type or var. *salicifolium*. All have at least some leaves \pm floccose, but even when sub-entire they are hardly less acute. The plants seemed to me to vary in leaf and habit according to soil conditions and exposure much in the way that *H. umbellatum* does.—W. C. BARTON. "I should say *corymbosum* and var. *salicifolium* (with

narrow, nearly entire leaves, etc.)."—RIDDELSDELL. "There are two plants on my sheet, one of which has longer, broader, and more toothed leaves. This I put under type. The other, with smaller, more entire, and floccose leaves, is better placed to the var. *salicifolium*. Very near type."—CRYER. This, too, is the opinion of PUGSLEY.

Hypochaeris glabra L. [V. 789]. Near Byfleet, Surrey, September 1918.—G. C. DRUCE. "Yes, this is the most frequent form, the *genuina* of Godron, in which beaked and non-beaked fruits occur in the same head. It is remarkably abundant in many sandy fields in the Lower Wey drainage area."—SALMON and WHELDON. Also from heathland, Thetford, v.-c. 26, June 4, 1920.—F. ROBINSON. "Yes, type."—RIDDELSDELL.

Taraxacum "*bercheriense*," sp. nov. [X. 920]. Marcham, Berks, September 1920. This is *T. naevosum* Dahlst. See *Report* 29, 1920.—G. C. DRUCE.

T. lacistophyllum Dahlst. [X. 6]. Oxford, May 1920.—G. C. DRUCE.

T. ———. [X. 79]. Marcham, Berks, September, 1920. I am still awaiting a name for this handsome form.—G. C. DRUCE.

Lactuca saligna L. Abundant on a clay bank bordering the R. Ouse, Ely, Cambs., August, 1920.—T. STEPHENSON.

Sonchus asper Hill, var. [T. 47]. Wytham, Berks, July, 1920.—G. C. DRUCE. "Is *S. asper*, var. *glandulosus* Coss. & Germ."—WHELDON. "It is a glandular form of var. *pungens* Bisch. which has come true from seed."—DRUCE.

Lobelia Dortmanna L. [as *Isoetes*]. At the edge of Lough Magillie, east of Stranraer, W. Wigtownshire, v.-c. 74, September 28, 1883. Coll. CHAS. BAILEY; comm. G. C. DRUCE.

Limonium humile Mill. Salt marsh, The North Bull, Dublin, August 16, 1920.—C. WATERFALL. "Mr Waterfall sent me similar examples from the same locality in 1905. They come under the forma *nana* Neum. Sveriges Fl. 205, 1901."—SALMON.

L. binervosum C. E. Salm. Drier parts of salt marsh, The North Bull, Dublin, August 16, 1920.—C. WATERFALL. "Yes."—C. E. SALMON. Also from Barry Island, Glamorgan, July, 1920.—A. E. WADE. "This small, neat form of *S. binervosum*, with spreading

spikes, simulates *Statice recurva*, but the latter has a stouter and rougher scape, different leaves, and the outer bracts longer compared to the inner, etc."—SALMON.

Primula elatior Schreb. Balsham Wood, Cambs., hybridising with *P. vulgaris*, April, 1920.—T. STEPHENSON.

P. veris L. [658]. Short, natural, shell-sandy pasture near the sea-shore, 20 feet above sea-level, links of Tuquoy, Westray, Orkney, May 29, 1920. Native, very common over several acres of the links, plants in full flower. Confirms the first record of this species from Orkney by the Rev. George Low in his *Tour through the North Isles and part of the Mainland of Orkney in the year 1778*, 10, 1915, viz. :—"Westra. In my way from the manse of Pierowall discovered *Primula*, foliis dentatis rugosis floribus luteis fastigiatis, probably an unique in Orkney."—H. H. JOHNSTON. "Welcome specimens from such a northerly locality. It also occurs in Sweden. The plants are slightly more farinose than the southern form."—DRUCE.

Vinca minor L., flore pleno. Big Wood, Portishead, N. Somerset, v.-c. 6, March 16, 1920.—I. M. ROPER.

Gentiana Amarella L., var. *praecox* Raf. Chanctonbury Ring, Sussex, May 30, 1920.—A. WEBSTER. "Yes, I think we should label it *G. lingulata* C. A. Agardh, var. *praecox* Towns."—SALMON.

Polemonium caeruleum L. Abundant in an old gravel pit, not very near houses, at Ollerton, Cheshire, on the road to Peover, June, 1920. I have known it to occur here annually, for the past eleven years at least, in increasing quantity. It occasionally varies here with white flowers. This summer I noticed an instance of teratology in the blue corolla becoming so abortively abbreviated that the yellow stamens became the predominant feature when the panicle was surveyed at a slight distance.—J. COSMO MELVILL.

Myosotis lutea Pers. = (*M. Balbisiana* Jord.). St Catherine's, Jersey, April, 1920.—G. C. DRUCE.

Cuscuta Epilinum DC. Twinstead, N. Essex, September, 1920.—G. C. DRUCE.

Antirrhinum Oronitium L. Garden weed, Foxrock, Co. Dublin, September, 1920.—C. WATERFALL.

Scrophularia alata Gilib. Scoulton Mere, W. Norfolk, v.-c. 28, July 30, 1919.—F. ROBINSON.

Veronica scutellata L., var. *hirsuta* Weber. Pond, Donyland Heath, N. Essex, v.-c. 19, May 27, 1920.—G. C. BROWN. "Yes, a good variety in my opinion, not determined by habitat."—ADAMSON. "Excellent examples of the var. *villosa* Schum. Enum. Pl. Saelland 7, 1801. Weber did not name it *hirsuta* but merely alluded to a hairy variety."—DRUCE.

V. acinifolia L. Near Milford, Surrey, June, 1920. I was directed to the spot by Mrs C. H. Wilde and Mr E. B. Bishop. See Report 730; 1919, and 34, 1920.—G. C. DRUCE.

V. verna L. Thetford Heath, v.-c. 26, May 5 and 21, 1920. Exceptionally fine and abundant this year. Coll. Miss A. B. COBBE; comin. G. C. DRUCE.

Mixed gatherings and imperfect specimens of Euphrasia, in consequence of cost of printing, are not inserted.—SECRETARY.

Euphrasia stricta Host? [497 & 497A]. Valley of Craig y pwl du between Boughrood and Erdwood, Radnor, v.-c. 43, August 20, 1920. I believe this is identical with plants so named in the Report, but I am not happy about naming. I can draw no definite line between these and *nemorosa* gatherings from several parts of the country (cf. some under [483]) and think we are not justified in putting them to a separate species. They are, however, sufficiently distinct from the familiar *nemorosa* and the case would perhaps be met by placing them as var. *strictiformis* under *nemorosa*. It seems probable that further work may show the species *nemorosa* to be rather wide and to include several well-marked forms worth distinguishing by a varietal name.—W. C. BARTON. "*E. stricta* Host."—PEARSALL, LUMB and BUCKNALL. "The bracts have the broad non-cuneate base of *E. stricta* and I should call it that, although stems so strongly flexuose are unusual in this species."—WHELDON. "[497 A]. Yes, *E. stricta* Host."—BUCKNALL. "Although these examples show some likeness to *E. stricta*, I think they are really forms of *E. nemorosa*. *E. stricta* Host is recognised by Wettstein, Townsend and Chabert as identical with *E. erictorum* Jord., and the Austrian and French *exsiccata* cited by these authors clearly belong to one relatively well-marked species. These specimens from Radnor differ because they lack the characteristic "strict" habit, and their branching is distinctly more basal, the teeth of their leaves and bracts are fewer and less aristate, their flowers are smaller and not of the lilac colour usually seen in *E. stricta*, and the calyces are more or less inflated and accrescent in fruit, with relatively broad teeth."—PUGSLEY.

E. stricta Host. Among hay-grass, near the village of Near

Sawrey, Hawkshead, N. Lancs, v.-c. 69b, August 5, 1920.—W. H. PEARSALL. "Yes, good *E. stricta* Host."—BUCKNALL. "This is quite past flowering, and all of the leaves and many of the bracts are fallen. I should certainly not call it *E. stricta*. I should judge by the very broad bracts (the lower obtusely toothed) and the accrescent fruits that it is *E. borealis*."—PUGSLEY.

E. nemorosa H. Mart. [600]. Monks Cave, Cardiganshire, July 23, 1919, see *Rep. B.E.C.* 833, 1919.—C. V. B. MARQUAND. "As in 1919, *E. nemorosa*."—PEARSALL, LUMB and PUGSLEY. "All certainly *brevipila*."—BARTON.

E. nemorosa H. Mart. Llandough-juxta-Cardiff, Glamorgan, July, 1920. Coll. A. E. WADE; comm. Nat. Mus. of Wales. "*E. brevipila*."—PEARSALL, LUMB and BARTON. "Numerous short-stalked glands are visible. The habit is that of *nemorosa*. It is a plant which I have seen in several places round Cardiff, and also in E. and W. Gloster. Mr Bucknall once placed it under *E. campestris* as var. *neglecta*, but now, I understand, he regards it as a glandular variety of *E. nemorosa*."—RIDDELSDELL. "*E. nemorosa*, var. *ciliata*."—WHELDON. "*E. nemorosa*."—BUCKNALL. "I think these are varying forms of *E. nemorosa*."—PUGSLEY. "Mr Wade's sheets were sent out exactly as received."—ED.

E. ———? [482]. Quarry grounds, Penywilt, Brecon, v.-c. 42, August 26, 1920. Short stalked glands few or none.—W. C. BARTON. "*E. nemorosa*, var. *ciliata*, sometimes with a few short glandular hairs."—PEARSALL and LUMB. "My specimen is quite eglandular. Perhaps *E. curta*, var. *glabrescens*."—WHELDON. "Poor specimens, probably *E. nemorosa*."—BUCKNALL and PUGSLEY. "I am not ready to admit this or any other glandular plants at present as *E. nemorosa*."—DRABBLE.

E. nemorosa H. Mart., var. *ciliata* Drabble. [483]. Edge of quarry, Penywilt, Brecon, v.-c. 42, August 23, 1920.—W. C. BARTON. "Not hairy enough for var. *ciliata*, I think."—BUCKNALL. "I think *E. nemorosa*, var. *ciliata*."—DRABBLE and PEARSALL. Also [491]. Craig Gleisiad, Brecon, v.-c. 42, at 1700 ft., August 25, 1920.—W. C. BARTON. "Rightly named."—PEARSALL, LUMB, WHELDON, and DRABBLE. "*E. minima* Jacq."—BUCKNALL. "I suppose a form of *E. nemorosa*, but a few of the specimens have obtuse teeth, and the bracts are peculiar."—PUGSLEY. Also [492]. Craig Gleisiad, Brecon, v.-c. 42, at 1500-1600 ft., August 25, 1920.—W. C. BARTON. "Yes."—PEARSALL. "*E. minima* Jacq."—BUCKNALL. "I think a form of *E. nemorosa*, but the habit and foliage recall *E. Kernerii*."—PUGSLEY.

E. nemorosa H. Mart. [29]. Growing with *Bartsia viscosa* in a boggy meadow, Silverwell, v.-c. 1, August 3, 1920.—F. RILSTONE. "One of the many forms of *E. nemorosa*."—PUGSLEY and BUCKNALL. Also moorland pastures above Woody Bay, N. Devon, [A] June 20, 1920, and [B] July 14, 1920.—H. E. FOX. "[A] *E. nemorosa* H. Mart."—BUCKNALL, BARTON, and PUGSLEY. "Young *E. nemorosa*, var. *ciliata*."—PEARSALL and LUMB. "[B] Some of the flowers are brightly coloured like those of *E. Kernerii*."—BUCKNALL. "*E. nemorosa*, var. *ciliata*."—PEARSALL and LUMB. "*E. nemorosa*."—PUGSLEY and BARTON.

[Ref. Nos. 481-497]. Each of these numbers covers plants from one spot as gathered, and sheets were sent out to show as far as possible the range of plants in the gatherings. This may be more useful than any sorting of specimens. [481] included a few specimens of *brevipila* and a few glandular plants similar to eglandular ones. [482] included both eglandular plants and plants with an occasional gland; a few had several short-stalked glands. In [483] and [485-492] I failed to detect any glands.—W. C. BARTON.

E. nemorosa H. Mart., var. *ciliata* Drabble. [481]. Penywilt, Brecon, v.-c. 42, August 26, 1920.—W. C. BARTON. "Three plants, one undoubted *E. brevipila*, one glandular *E. nemorosa*, and one *E. nemorosa*, var. *ciliata*."—DRABBLE, PEARSALL, and LUMB. "Not hairy enough for var. *ciliata*."—BUCKNALL. "I agree."—PEARSALL. [485, 487-90]. Marshy ground at foot of Craig Gleisiad, Brecon, v.-c. 42, August 25, 1920.—W. C. BARTON. [485]. "*E. minima* Jacq. Branched on account of damage to main stem. Quite different from the Exmoor *E. confusa* Pugsley."—BUCKNALL. "I think rightly named."—PEARSALL, LUMB, WHELDON, and DRABBLE. "Another slender form of *E. nemorosa*, some specimens approaching in their flexuous habit the Exmoor *E. confusa*."—PUGSLEY. [487]. "Yes."—PEARSALL and LUMB. "The very small number of hairs seems hardly sufficient to justify a varietal name."—ADAMSON. [488]. "Yes."—PEARSALL and LUMB. "I think forms of *E. nemorosa*."—PUGSLEY. "*E. nemorosa* Jacq. Some of the specimens are branched because of damage to the main stem."—BUCKNALL. [489]. "Yes."—PEARSALL and LUMB. [490]. "I think a form of *E. nemorosa*."—PUGSLEY. "Type, not variety."—WHELDON. "I think *E. nemorosa*, var. *ciliata*."—DRABBLE.

E. occidentalis Wettst., var. *praecox* Bucknall. Slopes above Polperro, v.-c. 2, A—May 31, B—June 9, C—June 21, 1920. I presume these are all var. *praecox*. Early June was dry and the plants matured rapidly. By June 9 many were almost past flowering. Gathering C is from a densely crowded growth on cushions of thyme.—F. RILSTONE. "Yes, with few or many short-stalked

glands."—PEARSALL and LUMB. "Apparently *E. occidentalis* with very few glands, but twice the size assigned to var. *praecoq.*"—BUCKNALL and WHELDON. "I think correctly named. These three gatherings make a fine series of a plant which is rarely well represented in herbaria. The specimens show the scattered, sessile glands more clearly than any that I have hitherto seen."—PUGSLEY.

E. confusa Pugsley. [41]. Moor near Helman Tor, v.-c. 2, alt. 500 ft., July and August 1920, and downs north of St Clear, v.-c. 2, alt. 900 ft., August 1920. Flowers white, with yellow throat. Mr Bucknall saw the Helman Tor in July, and considered it different from the Exmoor plant only in the less yellow flowers. Later I had an opportunity of submitting specimens of both gatherings to Mr Pugsley, who named both *E. confusa*.—F. RILSTONE. "Both specimens so named seem to come well within the range of *E. minima*, and Wettstein's opinion of the original Exmoor plant seems equally to apply to these, comprehended without doubt in *E. minima*; more branched, somewhat more pointed leaves and larger flowers, but these characters are not sufficient to separate it as distinct from *E. minima*, as they are all within the possible variations of that species. Should the said characters of the English plant be found to be constant, I should propose to classify it as a separate variety such as *E. minima*, f. *anglica*. Mr Pugsley considers the Exmoor plant remarkable as the only yellow-flowered *Euphrasia* found in Britain, and suggests it being a new species. We are of the opinion that much of the present confusion arises from over-emphasis by British botanists of this yellow colour and consequent lack of consideration of other colours. Mr Pugsley fails to see in it any real resemblance to *E. minima* excepting its small yellow corollas and emarginate capsules. Wettstein states that *E. minima* is a most difficult and variable species which took him five years of difficult study to thoroughly understand. He admits our plants differ from continental forms but considers their variations to come within the range of the species. So it appears to us, and we submit that the parallel polymorphism between British and continental specimens of *E. minima* is a resemblance which Mr Pugsley has overlooked. A mere glance at Wettstein's trivials—*minor*, *elatior*, *maxima*, *subaristata*, *flava*, *bicolor*, *grandiflora*, *glandulosa*, *hispidula*, *subglandulifera*, *alba*, *pallida*, and *purpurascens*—shows that the species is extremely polymorphic, and that therefore we may expect to meet with plants differing widely from those we have previously examined from any different habitat. An examination of British and continental examples of this species brings out the following points of resemblance. (a) Both are very variable in size. We have a sheet of British plants, the largest of which is 17.3 cm.—passed by Mr Bucknall as *E. minima*, f. *grandiflora*, and by Dr

Drabble as probably *minima*, found growing with undoubted *E. minima* of normal character, and Wettstein gives an even larger range (25 cm.) for continental specimens. (b) Branching is very variable in both, but more so in British examples. (Examine the figure of Jacquin's original, photographed by Wettstein. Is that little branched? Indeed is it not possibly rebranched?) We have British and Engadine examples which are rebranched. (c) The clothing of the leaves, bracts and calyces is variable in each. In either British or continental plants it may be sparse or plentiful—in extreme cases comparable to that of *E. curta*—and at times glandular. An examination of continental specimens and a study of Wettstein's trivial proves this for European examples and a microscopic investigation of British plants reveals the same diversity, and confirms Mr Hiern's description of the calyces as being more or less hispidulous, with scattered pallid hairs and sometimes with very short gland-tipped setae, or nearly glabrate. (d) The leaves may be few or many in British or continental *E. minima*, and they may also be broad or narrow. We cannot agree that they are typically subrotund or at least always distinctly broad, nor are they necessarily few in number. (e) The teeth of the leaves and bracts, however, are commonly few, \pm obtuse, and at times aristate in both. (f) The spike shows wide variation in laxity or condensation in both. (g) The flowers of each exhibit almost identical diversity of size and colour. Wettstein's description of the corolla of *E. minima* and its varieties includes numerous diversities and mixtures of colours, and Mr Hiern says, 'accompanying the yellow-flowered *Euphrasia* there grew in greater abundance specimens having whitish or pale-purplish or purplish flowers.' Moreover, neither Wettstein nor Jacquin describes the corolla as having subequal lips, nor is it figured so. The amount of gape, too, varies along similar lines—the lower lip being varyingly depressed in both British and foreign examples. (h) The capsules of each show the same variation of form. In British as in continental plants we find the obovate capsule drawn by Hiern, and also the ovate-cuneate form figured by Wettstein. We have, therefore, come to the conclusion that the only difference we can see is in the more branched habit of these British plants, and that appears to us merely to indicate an ecological state rather than a distinct species."—PEARSALL and LUMB. "This seems inseparable except for its white flowers from the Exmoor plant formerly referred to *E. minima*, and described in *Journ. Bot.* lvii., 169, 1919, as *E. confusa*. In 1919 I visited Mr Marshall's locality for this plant at Simonsbath, and found that the majority of the plants there produced white and not yellow flowers. This strengthens the contention that this plant is not related to *E. minima*."—PUGSLEY.

E. Rostkoviana Hayne. Rough hillside, Polperro, v.-c. 2, June

23 [25], June 29, 1920 [26]. Except that some of these Polperro plants are much branched they represent the prevalent East Cornwall type with shaggy green leaves and small white flowers. A form with showy violet-purple flowers occurs on Caraden Hill [30] and Kit Hill.—F. RILSTONE. "Yes."—PEARSALL, LUMB and WHELDON. [25] "Yes."—BUCKNALL. "A small-flowered form with very broad fruits somewhat resembling the plant lately distributed from N. Devon as *E. fennica* Kihl."—PUGSLEY. "Correct."—BARTON.

E. Rostkoviana Hayne. [31]. Cheesewring Downs, v.-c. 2, August 1920. Small flowered.—F. RILSTONE. "Yes."—BUCKNALL. "This appears to be a slender form of *E. Rostkoviana*, small in all its parts and with relatively short, glandular hairs. It may be regarded as a connecting link between the form collected by Mr Barton at Myrtleberry Cleeve, N. Devon, and *E. Vigursii*. There's also one specimen of *E. nemorosa* on the sheet sent."—PUGSLEY.

E. Rostkoviana Hayne. [30]. Slopes of Caraden Hill, v.-c. 2, August 6, 1920. A form with showy violet-purple flowers much resembling *E. Vigursii* Davey, but with the long flexuous glandular hairs of *Rostkoviana*. It occurs sparingly with the white-flowered form—the latter plentiful.—F. RILSTONE. "Agreed."—PEARSALL and LUMB. "Yes, this shows the purple flowers of *E. Vigursii* with the typical hair-clothing of *E. Rostkoviana* and foliage intermediate between the two."—PUGSLEY and BUCKNALL.

E. Rostkoviana Hayne. [484]. Marshy ground below Craig Gleisiad, Brecon, v.-c. 42, August 25, 1920.—W. C. BARTON. "Correct."—PEARSALL, LUMB, and BUCKNALL. "A small-flowered slender form approaching *E. hirtella*."—PUGSLEY.

Melampyrum pratense L., var. *latifolium* Schueb. and Mart. Wood, Weston-in-Gordano, N. Somerset, v.-c. 6, July 29, 1920.—I. M. ROPER. "Yes, a most striking plant. It seems to run down to *M. pratense* L., sub-sp. *M. vulgatum* (Pers.) Beauv., var. *vulgatum* Beck., f. *ovatum* Beauv. = *M. vulgatum* Pers., var. *ovatum* Spenser."—ADAMSON. "If members will turn to the *Report* 44, 1917, they will find that Beauverd has shown that the var. *latifolium* of Schueb. and Mart. (which was erroneously reported by Babington) is not known for Britain, but is of European and eu-Asian distribution."—DRUCE.

Orobanche elatior Sutton. In some quantity by the side of the main road between Benson and Nettlebed, v.-c. 23, July 28, 1920. Not a rare species, I believe, in Oxfordshire.—H. J. RIDDELSDELL. "Yes, *O. major* L., long known from this station."—DRUCE.

Mentha longifolia Huds. Naturalised on ditch banks, Foxrock, Co. Dublin, September 19, 1920.—C. WATERFALL. "Yes."—FRASER. "A pretty form of *longifolia* near var. *rugosa* Wirtgen Menth. Rhein. It is allied to *Nicholsoniana* Strail."—DRUCE.

M. ———? Origin: near Bourton Downs, v.-c. 33, cult. 1920. Very much reduced in garden soil. The perfume suggests a close relation to *M. aquatica*.—H. J. RIDDELSDELL. "The single, rather poor stem that has come my way I can make nothing more of than *M. hirsuta*, but I should like to see fuller material. The foliage is rather more thinly hairy than usual but the specimen cannot, I think, come under Baker's *subglabra*."—SALMON. "A curious Mint with the habit of *aquatica* of which it has the bristly pedicels and therefore is taken out of the *gentilis* and *rubra* group, but it is glandular and has the agreeable scent of the *gentilis* set. Its parentage may be *aquatica* × *odorata*, the latter hybrid giving the odour, the former species the habit and clothing. The plant itself may be of old cultivation."—DRUCE. "A small, starved state of *M. aquatica* L., var. *hirsuta* (Huds.)."—FRASER.

M. sativa L? Braunstone Pool, near Leicester, v.-c. 55, August 1919.—A. E. WADE. "This interesting mint (but unfortunately only one whorl on my two examples is in flower, the rest being immature) seems to come under *arvensis* rather than any form of × *sativa*. It seems it might come under Baker's var. *Allionii* (*Journ. Bot.* 253, 1865), but it is scarcely the *M. Allionii* of Boreau."—SALMON. "I think a shade form of one of the *arvensis* varieties."—DRUCE. "*M. arvensis* L., var. *Allionii* Bor. Teeth of sepals very short; pedicels glabrous (I detected three hairs on one pedicel); stem glabrous below, hairy above; leaves nearly glabrous, hairy on nerves beneath. A broad leaved form."—FRASER.

M. cardiaca Baker. Marston brick-yards, Oxford, October 1920.—G. C. DRUCE. "I agree."—FRASER. "My example does not show the lower part of the stem, but it seems correctly named. The leaves are rather more hairy than in Surrey specimens examined which conform more exactly with Baker's original description."—SALMON.

Thymus ovatus Miller. (*T. Chamaedrys* Fl. Angl., non Fries). Between West Lodge and Stubhampton Bottom, Cranbourne Chase, N. Dorset, September 14, 1920. The prevailing species of Wild Thyme in the westerly portion of Cranbourne Chase. It grows here remarkably luxuriantly, far more so than I have seen elsewhere.—J. COSMO MELVILL. "Yes."—ADAMSON. "Yes, under var. *subcitratus* Beck."—JACKSON and BARTON.

T. Serpyllum L. [31]. Cold Knap, Barry, Glamorgan, July 1920.—A. E. WADE. "Of sheets seen, all under sub-var. *Linneanus* (G. & G.)."—JACKSON and BARTON. [32]. Cliff top, Barry, Glamorgan. "Some pieces under *Linneanus*, others nearer *angustifolius*."—JACKSON and BARTON. [33]. Caerphilly Common, Glamorgan, July 1920. "I suppose these must all come under *T. Serpyllum* L., sensu stricto, following Domin and Jackson in *Journ. Bot.* 1908. According to Rouy's key I bring them to *T. Chamaedrys* Fr., which Domin and Jackson regard as = *T. glaber* Mill., which does not fit these plants. With No. 33 is a small piece of a plant of a rather lighter green, and both stem and leaves very much more hairy."—ADAMSON. "Some pieces might be placed to *angustifolius*, though not extreme, others are intermediate between the two sub-vars."—JACKSON and BARTON.

Satureia montana L. Summit of ruined walls of cloisters at Beaulieu Abbey, S. Hants, v.-c. 11, July, 1920. The specimens I sent to the Club recently were gathered too late, viz, October. This year I have been more fortunate in obtaining them earlier. I hope, therefore, they will prove acceptable, as being in good flowering condition. For past remarks upon this plant see *Rep. B.E.C.* 573, 1919.—J. COSMO MELVILL. "A bountiful and excellently preserved supply of a very acceptable plant."—ED.

S. Calamintha Scheele. Cothill, Berks, September, 1920.—G. C. DRUCE.

S. Nepeta Scheele. Near Linton, Cambs., September, 1920.—G. C. DRUCE.

Scutellaria galericulata L. Procumbent form with white flowers. Countess Wear, Devon, v.-c. 3. A patch of this plant about two yards wide has been growing for some years on low alluvial soil on the border of a wood, occasionally liable to flooding by brackish water, and rather shaded. Tall upright plants of the ordinary form grow by the side of a ditch 50 yards away.—W. S. M. D'URBAN. "An interesting *albiflora* form, which is rare."—DRUCE.

Prunella vulgaris L., forma *floribus pallidis*. Origin: Badby Wood, Northants, v.-c. 32, 1913; cult. in hort., July 12, 1920. Flowers nearly white. It soon established itself in my garden and has produced a fresh generation of seedlings every year. Amongst all the plants that have flowered I have been unable to find one with a tendency to revert to the type, which is common on my own lawn as well as on a piece of common adjoining. Does this persistence of type, now maintained through seven generations under natural conditions, give the plant any title to specific rank and if not, why

not? There is little to distinguish the plant from the type except a hoary appearance due to greater pubescence.—L. CUMMING.

P. laciniata L. Hardwick Cambs., July, 1920. The blue form quite frequent, in large clumps, the cream form much less.—T. STEPHENSON.

Plantago Edmondstonii Druce. [V. 29]. Balta Sound, Unst, Shetland, July, 1920.—G. C. DRUCE. See *Report* 41, 1920.

P. major L. Garden weed, Putney, Surrey, August, 1920.—H. E. FOX.

Scleranthus annuus L., forma. [U. 782]. Pyrford, Surrey.—G. C. DRUCE.

Atriplex laciniata L. Sand dunes, North Bull, Co. Dublin, August 16, 1920.—C. WATERFALL.

Suaeda maritima Moq., var. *macrocarpa* Moq. Sandy salt marsh, Burton, Cheshire, September 25, 1920. This seems to be the only variety present in this locality. I suppose that the species must be quoted as *S. maritima* Moq., following *Camb. Brit. Flora* ii.—R. S. ADAMSON. "The prevailing form on the Essex and Suffolk saltings, where it assumes the procumbent or erect form according to its habitat."—ED. The older name, adopted by Britton & Brown, *Ill. Fl. North. States*, is *Dondia maritima*. *Suaeda* is conserved in the *Actes*."—DRUCE.

Polygonum maculatum Trimen & Dyer. Manure heap, Swalcliffe Grange, v.-c. 23, July 24, 1920.—H. J. RIDDELSDELL. "This is surely *lapathifolium*. Nuts too large and orbicular for *maculatum*."—SALMON. "I should place this under *P. lapathifolium* × *Persicaria*."—ADAMSON. "Yes, much more robust than usual, and with pinker perianths, and approaching *P. biforme* Wahl. in some respects. Too young to show fruit character. It may be a hybrid."—WHELDON.

P. (Roberti) Lois., = *P. Raii* Bab. Sea sands, Killiney Strand, Co. Dublin, September 7, 1920.—C. WATERFALL. "*P. Roberti* Lois. and *P. Raii* Bab. are not synonymous. The former is a plant of the Mediterranean area, apparently not reaching British shores, and distinguished by its biennial or perennial root, achenes much smaller than in *P. Raii* and polished almost as much as in *P. maritimum*. The plant distributed is *P. Raii* Bab."—BRITTON. "Yes."—RIDDELSDELL. "In excellent fruit, known in this spot since 1842."—SALMON.

Rumex elongatus Guss. [2199]. By the Thames between Putney and Hammersmith Bridge, Surrey, June 29, 1920. Occurring at intervals on the banks of the River Thames from Putney to above Kew, on the Surrey side of the river. The specimens distributed are quite identical with specimens in *Herb. Brit. Mus.* collected many years ago by the late H. Trimen, who first recorded this form as a British plant. Other specimens, labelled *R. crispus*, var. *elongatus*, at South Kensington, are plainly different from the Thames-side *elongatus*, and appear to be ordinary poorly-developed *R. crispus* ("left bank of the Itchin above Southampton, August 11, 1882," Aug. Ley), or *R. crispus*, var. *trigranulatus* ("muddy tidal banks, Tintern, Mon., July 30, 1878, Aug. Ley, and also from the same locality, July 28, 1911; coll. Rev. W. Butt"). A feature of *R. elongatus* is the markedly glaucous character of the foliage.—C. E. BRITTON.

Euphorbia amygdaloides L. Woods, Dinas Powis, Glamorgan, May, 1920.—A. E. WADE.

E. virgata W. & K. Marcham, Berks, July, 1920.—G. C. DRUCE.

Mercurialis annua L. Garden weed, Glentaner, Foxrock, Co. Dublin, September, 1920.—C. WATERFALL.

M. annua L., var. *ambigua* (L.). St Helier's, Jersey, August, 1911. Coll. J. PIQUET; comm. G. C. DRUCE.

[*Populus tremula* L.], seedlings, peaty ground by Stoneycroft Beck, Cumberland, June 12, 1920.—C. WATERFALL. "Seedlings of *Betula alba*."—BRITTON & DRUCE.

Salix ———. [Q. 72]. Bletchington, Oxon, September, 1919.—G. C. DRUCE. "*S. triandra* L., f. *concolor* Wimm. et Grab."—PEARSALL.

S. aurita L. Crox Bottom, Bishopworth, N. Somerset, v.-c. 6, March 18, September 16, 1920.—I. M. ROPER. "Correct."—PEARSALL. "I agree to this, but catkins should be collected when they just come into bloom to show the true shape of the ovary and the proper length of the style."—FRASER.

S. aurita × *caprea*. (*S. capreola* J. Kern.). Birchwood Lane, Houndstreet, N. Somerset, v.-c. 6, April 24, 1920.—I. M. ROPER. "Probably so, stipules smaller than usual."—PEARSALL. "The catkins are too old and the leaves too young for forming a proper estimate of this."—FRASER.

Hydrilla verticillata Casp. Esthwaite Water, N. Lancs, v.-c. 69b, August 4, 1920. See *Rep. B.E.C.* 167, 1914. This has very considerably increased since its discovery in 1914, and the members of the British Ecological Society saw it under most favourable conditions during their recent visit. Upon ecological grounds *Potamogeton praelongus* was expected to make its appearance in the same water, and was duly discovered here for the first time on July 23, 1920.—W. H. PEARSALL. "Beautiful specimens, fully equal to those contributed in previous years by Mr Pearsall."—ED.

Helleborine palustris Schrank. Sandhills, Pendine Burrows, Carmarthenshire, August 1, 1919.—C. V. B. MARQUAND.

Epipactis atroviridis W. R. Linton. [2245]. Wood by Fetcham Downs, Surrey, August 4, 1920. All the specimens included in the set of plants contributed exhibited the essential characters of *E. atroviridis*. Since the plants were gathered the Messrs Stephenson have published their view that W. R. Linton's plant is not a valid species, and should be merged into *E. latifolia* and the name allowed to lapse. After an acquaintance with *E. atroviridis* in several Surrey localities, I am in full agreement with this conclusion.—C. E. BRITTON. "The leaf-type of this fine specimen is very much more orbicular than that of Linton's plate. That would not be in itself a matter of importance, but we doubt the distinctiveness of this species. We should call the plant *latifolia*."—T. & A. STEPHENSON. "So I should name it."—CRYER. "Varying somewhat in stature but agreeing in flower characters throughout the gathering."—ED.

E. viridiflora Reichb., var. *leptochila* Godfery. Near Woodchester, W. Gloster, July 26, 1920. These examples agree well with Col. Godfery's description of his variety and with specimens from the original locality. On close examination the reproductive organs were seen to be adapted for self-fertilisation, the rostellum being invisible in the open flower. Examples of the labellum were dissected out and pressed separately to show the characteristic form, and a packet containing these is placed with every sheet. See *Journ. Bot.* 20, 1921.—C. E. SALMON. "An interesting and important identification, which throws much light on difficulties which I have found in this genus as represented in Gloster."—RIDDELSDELL. "A perfectly homogeneous gathering which is most welcome."—ED. "I am sorry to see these plants appear under *Epipactis*. Elsewhere I have shown that the true generic name is *Helleborine*, and this is adopted in the *British Museum List* by Rendle and Britton and by Lindman, Schinz, Thellung, and other recent workers. Moreover, *Epipactis* dates from Adanson's *Famille des Plantes*, a work put under an interdict in the *Cambridge Flora*."—DRUCE.

Orchis morio L., forma *Churchillii* Druce. Marshy pastures near St Ouen's Pond, Jersey, April, 1920. See *Report* 47, 1920.—G. C. DRUCE.

O. Fuchsii Druce. Wytham Wood, Berks, July, 1920.—G. C. DRUCE. "A robust habit, with typical broad lowest leaf, and side lobes of leaf much crenulate."—T. & A. STEPHENSON. "All plants typical."—ED.

O. laxiflora Lam. St Ouen's, Jersey, June, 1902. Coll. F. PIQUET; comm. G. C. DRUCE.

Narcissus Pseudo-Narcissus L., var. *lobularis* Haw. Tenby, Pembrokeshire. Coll. W. GUNTER, 1917; comm. Nat. Mus. of Wales. "Correct."—ED.

Juncus subnodulosus Schrank. R. Windrush, above Bourton, at the 7 Springs, v.-c. 33, September 4, 1920. A very late flowerer. Very local in Gloucestershire.—H. J. RIDDELSDELL. "Yes, rather immature."—ADAMSON.

J. Kochii F. Schultz. Peaty common, Sulham, Surrey, June 21, 1920.—R. J. BURDON. "My specimen has only three stamens and must come under *J. bulbosus* L. (*J. supinus* Moench)."—ADAMSON. "Prof. Glück considers that the number of stamens is not a decisive character. He named similar specimens *Kochii*."—DRUCE.

J. squarrosus L. Four Shire Stone, v.-c. 33, August 14, 1920. The only locality in E. Gloster, I believe.—H. J. RIDDELSDELL.

J. bufonius L., forma. Waste ground, Bradford, v.-c. 64, July 30, 1920.—J. CRYER. "This is a distinct-looking form of dry places with the inner perianth only just exceeding the capsule. I do not think it is constant."—ADAMSON.

Potamogeton natans L. A very abundant and common form in slow peaty streams in N. Lancs. Nearly choking the Kirkby "Pool" at Wreak's Bridge, N. Lancs, v.-c. 69b, September 28, 1920.—W. H. PEARSALL. "Nearest the var. *ovalifolius* of Fieber."—BENNETT.

P. polygonifolius Pourr. [1696]. Semi-terrestrial state. Sphagnum bog, Tiptree Heath, N. Essex, v.-c. 19, May 16, 1920. Exposed leaves firmer in texture, no fruit present.—G. C. BROWN. "I hardly understand Mr Brown's 'firmer texture.' As a rule *polygonifolius* has much thicker leaves than these have, even in the floating state. The leaves are remarkable for their tenuity as a

' semi-terrestrial ' form, and the nervation is peculiar and much more like *coloratus* than *polygonifolius*, but there is no fruit, and Mr Brown (*in litt.*) has never seen it fruiting. *P. polygonifolius* is given for Tiptree Heath in Gibson's *Flora of Essex* 333, 1862."—BENNETT. " Yes."—PEARSALL.

P. perfoliatus L. Coniston Lake, N. Lancs, v.-c. 69b, August 21, 1920. This is var. *lancoelatus* Blytt or, according to Dr Hagström, var. *gracilis* Ch. et Schl., f. *lancoelatus* Blytt. Abundant at the north end of Coniston and rapidly increasing in Esthwaite Water, 5 miles distant.—W. H. PEARSALL. " A very pretty translucent-leaved form that approaches the *oblongifolia* of Mertens and Koch *Fl. Deut.* 1823. It is somewhat between that and the var. *lancoelatus* Blytt, but *perfoliatus* over its area of growth is so variable that it is difficult to name many forms absolutely. Hagström *Crit. Res. Pot.* 256, has γ *oblongus* Spenner (β *oblongifolius* Dum.), but both are later than Mertens and Koch's name of 1823."—BENNETT.

\times *P. Lintoni* Fryer. In the Canal near Lichfield, Stafford, last July, when botanising with Sir Roger Curtis we noticed a pondweed growing in masses, specimens of which are now distributed. With it grew *P. crispus* and *mucronatus* Schrad. (*Friesii*), and although not quite the same form as the original *Lintoni* from the Chesterfield Canal in Derbyshire, yet I could suggest no other possible combination. Specimens have been sent to Dr Hagström and he assents to the determination *P. crispus* \times *mucronatus*. It is the second known locality in Britain. Like the original one it grows in canal-water with a rather high percentage of dissolved or suspended mineral constituents from the passing canal-boats stirring up mud. Perhaps it is this strain upon the life-factor of the parents that has caused them to cross. When a plant nears its extreme range of latitude or altitude or is placed under additional stress I suspect the mutual sterility or objection to cross becomes lessened or breaks down so that these curious crosses occur. Like other hybrids it is vegetatively very vigorous.—G. C. DRUCE. "*P. crispus* \times *Friesii* (Index) in Hagström's *Crit. Res. on Potamogeton*. Ascherson and Graebner in *Das Pflanzenreich* 133, 1907, make it *crispus* \times *mucronatus*, while the original was *P. Friesii* \times *crispus*. It varies somewhat in breadth of leaf, Dr Druce's specimens being the widest, and with a deeper tint of red prevailing. On present knowledge it is confined to the British Isles. A new record for Stafford, v.-c. 39. It is evident that this is nearer *crispus* than the other British specimens."—BENNETT. " Correctly named, most interesting."—PEARSALL.

P. obtusifolius M. & K. [446.] Pool on heathland, Stow

Bedon, v.-c. 28, August 19, 1920.—F. ROBINSON. "The usual form of these places, and closely resembling an original specimen sent by M. Koch in 1824 in De Candolle's herbarium at Geneva. Queried for W. Norfolk in *Top. Bot.* 415, 1883, but found by Canon Bullock-Webster in September 1897."—BENNETT. "Correct."—PEARSALL.

P. rutilus Wölg. Loch of Tingwall, Shetland, August 1920.—G. C. DRUCE. "I think this is a narrow-leaved form of the plant in habit more like the *P. caespitosus* of Nolte Reich. *lc. Fl. G. et Helv.* vii., 15, t. 23, f. 41, 1845, *Hansen Herb. ex* No. 1007 (1843). It differs from most of the specimens of *rutilus*, by the narrower leaves, shorter internodes, and smaller spikes. I have types of both."—BENNETT. "*P. rutilus*, teste HAGSTRÖM."—DRUCE. "Yes, this removes the ? in *Potamogetons of Brit. Isles* 83."—PEARSALL.

P. ———? [\times 1012]. Thames, near Eynsham, Oxon, October, 1920.—G. C. DRUCE. "Probably the autumn state of *P. flabellatus* Bab."—BENNETT. "Only a young shoot of *P. pectinatus*."—PEARSALL. "Hagström rejects *flabellatus* as a species and calls this robust plant *pectinatus*, forma *pinguis*."—DRUCE.

P. pectinatus L. Brackish pools, Burton salt marsh, Cheshire, v.-c. 58, June 30, 1920.—C. WATERFALL. "A form of *P. pectinatus*, but not enough to refer to any named form."—BENNETT. "Yes, var. *ungulatus* Hagstr."—PEARSALL.

Zannichellia pedunculata Reichb. Dyke in meadows, Virley, N. Essex, v.-c. 19, May 20, 1920.—G. C. BROWN. "It seems to me that the name for the plant with a general as well as partial peduncles is *Z. pedicellata* Fries Fl. Danica, t. 2610."—BENNETT. "Yes, better under *Z. palustris* L."—PEARSALL.

Alisma ———? Edge of pond by Grand Junction Canal, Tring, Herts, August 24, 1920. Is this *A. arcuatum* Mich.? Plant about 3 ft. high. All the specimens are from one tuft. All branches of the inflorescence are umbellate; carpels bisulcate on back; leaves narrowed at both ends.—R. S. ADAMSON. "*A. arcuatum* Mich.'s described as having, *inter alia*, the branches of the stem recurved. In Mr Adamson's specimen before me this point is not easy to see but some of the pedicels are arcuate. I should have thought my example was *A. lanceolatum* With."—SALMON. "Not at all like my Spanish *arcuatum*."—DRUCE.

Eriophorum latifolium Hoppe. [480]. Boggy ground west of Torpantau Station, Brecon, v.-c. 42, N.C.R., August 19, 1920. In

Journ. Bot. 146, 1885, Mr W. Bowles Barrett records:—"An interesting plant with downy peduncles in a mountain bog, about 500 feet above and on the west side of Torpantau Railway Station. Mr J. G. Baker remarks that it has the peduncles and fruit, but not the leaves of *E. gracile* Koch." I examined a large number of plants in the locality from every piece of boggy ground within some distance. Most were *E. angustifolium*, but at the spot indicated was growing this form with scabrid peduncles, unfortunately in poor condition owing to heavy rains. I have little doubt this is the plant recorded above, but the specimens now distributed will, I think, make it clear that the record should be *E. latifolium* Hoppe.—W. C. BARTON. "Although the specimens were gathered too late, and are thus poor, yet the habit is of the above plant, certainly not *E. gracile* Koch, and I think Mr Barton is justified in naming it as he does."—BENNETT. "I have a Breconshire (Craig Cille) specimen which I gathered in September 1903."—RIDDELSDELL.

Carex lasiocarpa Ehrh. Shores of Esthwaite Water, N. Lancs, v.-c. 69b, August 6, 1920. In open patches among the reed-swamps, usually associated with *C. rostrata* Stokes, which grows in slightly shallower water. The lake was much higher than usual, the plants past their best, and therefore very soft below. It was almost impossible to pull up entire plants from 3 ft. of water. None possessed more than 2 fertile spikes and these were usually not obtuse.—W. H. PEARSALL. "On record for Westmorland, but it seems quite well that Mr Pearsall suggests that Lake Lancashire should be separately recorded under v.-c. 69b."—BENNETT.

C. Oederi Retz. [445]. Shore of Loch Tay, Fearnan, Perth. June, 1920.—F. ROBINSON. "Correct."—BENNETT. "This comes under *C. flava* L. = *C. flava* L., var. *oedocarpa* Körn."—ADAMSON.

C. ericetorum Poll. Roadside, Eriswell, v.-c. 26, May 20, 1920.—F. ROBINSON. "In good fruit, the peculiar fringing of the glumes disappears to a great extent as the plant fruits, but when in flower it is most distinct, and at once separates it from *C. caryophyllea*, which it was at first taken for when gathered in Cambridgeshire."—BENNETT. "Yes."—ADAMSON. "My flowering example is most characteristic."—ED.

C. montana L. Park Gate Forest, Isle of Wight, N.C.R. Found, March, 1920.—G. C. DRUCE. "It shows the mildness of the climate. I have never seen it in flower in cultivation before April 3rd."—BENNETT.

C. tomentosa L. Near Marston Maisey, Wilts, June, 1906.—G.

C. DRUCE. " Good specimens with the characteristic stolons, which it largely develops in cultivation."—BENNETT.

C. flacca Schreb., var. vel forma. Buckland Hills, Surrey, v.-c. 17, June 11, 1920. In this form the female spikelets are shortly pedicelled and more or less erect, giving so different an appearance to the plant that I at first sight took it for a tall *C. Goodenowii*. It does not agree with either *C. erythrostachys* And., or *C. serrulata* Biv. On some plants it was mixed with the type, so it can hardly be more than a state.—A. H. WOLLEY-DOD. " This seems to be practically the same as the Thorpe Green (Surrey) plant that I distributed through the Club in 1911 (*Report* 134), though these examples are rather taller and more luxuriant and the female spikes not so approximate. The upright fruiting spikes give the plant a distinct appearance. I could not find a name for the plant in 1911, nor can I now."—SALMON. " The spikes are rather more erect, and the fruit is arranged in a more regular manner than usual, but beyond this I do not see any difference."—BENNETT. " The more correct name is *C. diversicolor* Crantz, a most variable species, of which I consider this only a form as yet undescribed."—DRUCE.

C. limosa L. Brookhouse Moors, between Holmes Chapel and Congleton, Cheshire, June 29, 1881. Coll. T. Rogers. A rumour having reached me that the interesting locality named above either has been or is about to be reclaimed, prompts me to forward to the Club all the specimens I have in duplicate, collected there nearly 40 years ago by the late Mr Rogers.—J. COSMO MELVILL. " Lord de Tabley observes in the *Flora of Cheshire* 328, 1899, ' The Knutsford plant differs from the Brookhouse one; the former is exactly typical *limosa*; the latter getting on to *C. irrigua*.' An additional Cheshire station for *limosa* is ' Wybunbury, 1906, gathered by Mr A. H. Evans.' "—BENNETT. " I gathered it at Wybunbury with Mr Evans. This had broader leaves than the type."—DRUCE.

C. salina Wahlb. By the Wick River, Caithness, August, 1920.—G. C. DRUCE. " This member of the *salina* group of Carices is treated by Finnish and Swedish botanists as under *C. salina* × *cuspidata* a *kattogatensis* Fries. Some Swedish authors associate it with *C. haematolepis* Drejer, but the original plant from Greenland figured in *Flora Danica* t. 2370 differs as Lange shows in *Nov. Fl. Danica* 139, 1887, where he contrasts it with *kattogatensis*, *cryptocarpa* and others. It is a more slender plant, with the spikes on longer peduncles, &c. *C. kattogatensis* is a rare plant occurring in Finland, in Norway near Christiansand, and in the two Swedish provinces of Halland and Bohuslan. Recent alterations at Wick have destroyed much of the Carex, but it is still in plenty higher up

the river, to Sibster three miles up. It is found almost entirely on the north bank of the river, but occurs sparsely on the south, near the Milton Burn. For its distribution see *Ann Scot. Nat. Hist.* 179, 1904.—BENNETT. "Lindman considers it only a form *kattegatensis* of the sub-species *cuspidata*. I got these specimens with a very robust form of *aquatilis* on the south side of the river."—DRUCE.

C. divulsa Stokes. Waste ground by roadside, Lambourne Hill, v.-c. 1, June, 1920.—F. RILSTONE. "Correct."—BENNETT.

C. diandra Schrank. Darkadale, Orkney, August, 1920, N.C.R. See *Report* 54, 1920.—G. C. DRUCE.

C. divisa Huds. Bank of the tidal Avon at Rownham, below Bristol, N. Somerset, v.-c. 6, June 25, 1920. Extremely rare in the county although there would appear to be many suitable localities along the Bristol Channel and its tidal affluents. The spot whence the present gathering was obtained had been enclosed for ten years or so within a high fence of the "White City" in Ashton Fields, and the plant thus protected from traffic. It is a rather weak form, approaching var. *chaetophylla* Daveau.—J. W. WHITE. "In flower and good condition."—BENNETT. "Yes."—ADAMSON.

Mibora minima Desv. (*M. verna* Beauv.). Fallow field, Monthéry near Paris, April 15, 1911. I send a few sheets of this plant from a continental locality for comparison with the much smaller form which I have already distributed from Guernsey, and the still smaller plant of the Anglesea sandhills.—C. V. B. MARQUAND.

Agrostis canina L. With other heathland species at Four Shire Stone, v.-c. 33, August 14, 1920. There is only one previous trustworthy record for E. Gloster, "Heath, Windrush," in *Herb. St. Brody*.—H. J. RIDDELSDELL.

Calamagrostis [lanceolata Roth]. Wicken Fen, Cambs., July, 1920.—T. STEPHENSON. "Surely *C. epigeios* Roth."—DRUCE. "All *C. epigeios*."—ED.

Deyoukia strigosa Kunth. Marsh, Loch Watten, Caithness, August, 1920.—R. J. BURDON. "This is not the true *strigosa* of which at present we lack an authentic record for Britain. This is a form of *D. neglecta* Kunth. The true *strigosa* is considered by Hackel to be a hybrid of *epigeios* (which does not occur in the area) and *stricta*. These specimens are not quite my var. *scotica* which has longer and more longly acuminate glumes and a more diffuse panicle."—DRUCE.

Aira aggregata Timeroy. [2222]. Cultivated field, Chelsham, Surrey, July 25, 1920. This is allied to, but is not identical with *A. multiculmis* Dum., which is to be recognised by its erect, spreading panicle branches, whereas in Timeroy's plant the panicle has widely spreading or divaricate branches. Both agree and are to be distinguished from forms of *A. caryophyllea* in the long naked panicle branches with the spikelets clustered at the extremities. *A. aggregata* is a more elegant plant than *A. caryophyllea* and attains a taller stature, reaching in favourable seasons about 18 inches high. Owing to the dry season of the spring of 1920 this grass failed to attain the luxuriance it showed in previous years. The locality in which it grew was a cultivated field situate on the pebbly beds of the lower London Tertiaries.—C. E. BRITTON. "Under *A. multiculmis* Dum. Are the two separable? Husnot *Gram.* treats them as synonymous and Rouy reduces *A. aggregata* to a var. of *A. multiculmis*."—ADAMSON.

Holcus mollis L., forma. Shady bank in open, Withington, Manchester, July 25, 1920. This looks very different from the ordinary woodland form of the species.—R. S. ADAMSON. "A handsome form such as I have seen in damp sandy woods under shady conditions, or is it more?"—DRUCE. "I found a shade form in the Belgian forest area exactly resembling this."—ED.

Trisetum flavescens Beauv. Benslow, Hitchin, Herts, v.-c. 20, June 22, 1920.—J. E. LITTLE.

Koeleria cristata Pers. Cliffs, north of Peel, Isle of Man, July 6, 1920. A form between type and var. *britannica* Domin. It approaches Welsh plants referred to *K. albescens* but the leaves are less enrolled and they are not villous as are those of specimens in my herbarium named by Domin.—J. A. WHELDON.

K. gracilis Pers. [1752]. Chalk pit, Somersham, E. Suffolk, v.-c. 25, June 17, 1920.—G. C. BROWN.

Poa polynoda Parn., var. *denticulata* Parn. Wymondley Road, Hitchin, Herts, v.-c. 20, June 21, 1920. Flowering glumes not webbed, denticulate on midrib. Dr Druce writes:—"According to description the plant must be near to *P. polynoda*, var. *denticulata*. Babington got this from Oxford, but I could never induce Hackel to pronounce it other than a form of *compressa*. Your plants, however, are more slender and graceful."—J. E. LITTLE.

P. bulbosa L., forma *vivipara*. Shingle beach, Barry, Glamorgan. Coll. A. E. WADE, May, 1920; comm. Nat. Mus. of Wales. "I distributed it from Barry in 1906-07. Native."—RIDDELSDELL.

Glyceria maritima Wahl. \times *procumbens* Dum., nov. hybrid [T. 194]. Near Chichester Harbour, W. Sussex, growing with the putative parents, July, 1920. Only two or three plants. They differ from any form of *maritima* in the wiry stem and narrow spikelets arranged in a very open panicle with stiff branches. The lower part of the stem has somewhat arcuate internodes. From *procumbens* it is distinguished by its more erect growth, larger size, and larger spikelets, and in facies it looks a good intermediate which I do not think has been previously described. Some authorities use *Atropis* as the generic name. Our plant is then *A. maritima* \times *procumbens*. Holmberg, however, rejects the trivial *maritima* for our common seashore species, and if his view is correct it must be *A. spectabilis* \times *procumbens*. Holmberg and other botanists reject both *Glyceria* and *Atropis* and use *Puccianella* = *P. maritima* vel \times *procumbens*.—G. C. DRUCE.

Lobium perenne L., forma. Taplow, Bucks, June 19, 1920.—A. WEBSTER. "Placed by Hackel under var. *cristatum* Doell."—RIDDELSDELL. "A poor state of the var. *compressum* Sibth."—DRUCE.

Agropyron repens Beauv., forma *trichorrhachis* Rohland? Wymondley Road, Hitchin, Herts, v.-c. 20, July, 1920. The sheets now sent have the flowering glume shortly awned and would apparently come under var. *dumetorum* Gray. But the character of a hairy rachis may also in this neighbourhood be seen upon plants with flowering glume acute but un-awned which corresponds to var. *arvense* Schrank. Between the latter, however, and var. *barbatum* Duval-Jouve we appear to have a connecting series.—J. E. LITTLE.

Ceterach officinarum DC. Old walls near Rush, Co. Dublin, September 15, 1920.—C. WATERFALL.

Cystopteris fragilis Bernh. On a wall at Bray, Berks, v.-c. 22, April 25, 1920. Probably introduced deliberately.—H. J. RIDDELSDELL. "Yes, a very rare plant in Berks, in which county it is doubtless adventive. It was first recorded by Mr Cope in 1911 from Finchhampstead. I omitted to include it in the *Suppl. to Berkshire Flora*."—DRUCE.

Botrychium Lunaria Sw. Field below Fron Henlog, near Wrexham, Denbigh, v.-c. 50, June 2; 1920.—C. WATERFALL.

Azolla filiculoides Lam. In quantity in R. Ouse at Ely, Cambs., July, 1920.—T. STEPHENSON.

Nitella opaca Agardh. Winter state, in about a foot of water

in a mill-stream at Harbertonford, S. Devon, v.-c. 3, February 1, 1918.—C. V. B. MARQUAND. "No doubt correct, the dactyls being definitely mucronate, but I never feel quite happy in discriminating *N. opaca* from *N. flexilis* when sterile."—GROVES.

N. [flexilis Agardh]. Flooded cart track, The Lizard, W. Cornwall, May 6, 1920.—C. V. B. MARQUAND. "*N. opaca* Agardh, ♀ and ♂."—GROVES.

Chara [aspera Willd]. Small quarry pool, The Lizard, W. Cornwall, May 5, 1920.—C. V. B. MARQUAND. "*C. canescens* Loiseleur = *C. crinita* Wallroth."—GROVES.

C. fragifera Durieu. Quarry pool on the Lizard Downs, W. Cornwall, May 5, 1920.—C. V. B. MARQUAND. "It is interesting to have the earlier state of this plant which is usually collected in late autumn."—GROVES.

CORRECTION IN DISTRIBUTOR'S REPORT 1912, p. 273.

With reference to "*Euphrasia curta* Wettst., var. b. *glabrescens* Wettst., damp pasture on hillside, 300 ft. above sea level, Wart Hill, Hoy, Orkney, August 15, 1912. . . . H. H. Johnston," in *Rep. B.E.C.* 273, 1912, I gathered more specimens on September 1, 1919, and July 31, 1920, and forwarded them to Mr Cedric Bucknall, who (November 13, 1920) says,—"*E. caerulea* Tausch. I have compared this carefully with Wettstein's description in *Bot. Zeitschrift* 95, 1894, and still believe that it is correctly so named." This identification cancels *E. curta* Wettst., var. b. *glabrescens* Wettst., as above cited, and removes the ? before Orkney in line 13 from bottom of page 12 of *British Euphrasiae*, 1917, by Cedric Bucknall. In my specimens of *E. caerulea* Tausch the stem is simple, or rarely with one, two or four branches below the middle; leaves 2-10 toothed; and corolla lilac (not violet or violet-blue), with dark purple lines, and a yellow spot on throat of lower lip.—H. H. JOHNSTON.

In *Rep. B.E.C.* 272, 1912, line 18 from top of page, after "Orkney, July 19, 1912," add the Rev. E. S. Marshall writes:—".

ADDITIONAL NOTES FOR DISTRIBUTOR'S REPORT FOR 1916.

Salix cinerea × *viminalis* = *S. Smithiana* Willd. S. Croxton, 1916.—HORWOOD. "The catkins of this are large enough for *S. acuminata* Sm., a hybrid of uncertain origin. The leaves supplied are too young and undeveloped, but the degree of hairiness and the rounded base mentioned by Mr Pearsall are also suggestive of *S. acuminata*."—J. FRASER.

S. cinerea L., f. *oleifolia* (Sm.). Nailsea, 1919, I. M. ROPER. "I agree, but the leaves would have shown their characters better if collected in August or September."—J. FRASER.

S. aurita × *cinerea* = *S. lutescens* A. Kern. Shirehampton, 1919.—I. M. ROPER. "This seems rightly named."—J. FRASER.

S. aurita × *caprea* = *S. capreola* J. Kern. Minera Lime Works, 1919.—C. WATERFALL. "This seems to be *S. aurita* × *caprea*, but catkins would have been evidence in the adult state. *S. caprea* is often stunted in dry chalky situations and, even when quite typical generally, may have glabrous leaves on some of the shoots or branches."—J. FRASER.

CORRECTION IN DISTRIBUTOR'S REPORT 1919, p. 815.

Rubus [calvatus]. Mr Riddelsdell writes, August 1920:—"Your [435] is *villicarilis* not *calvatus*. The same form is in Rogers' herbarium with the name corrected from *calvatus*."—W. C. BARTON.

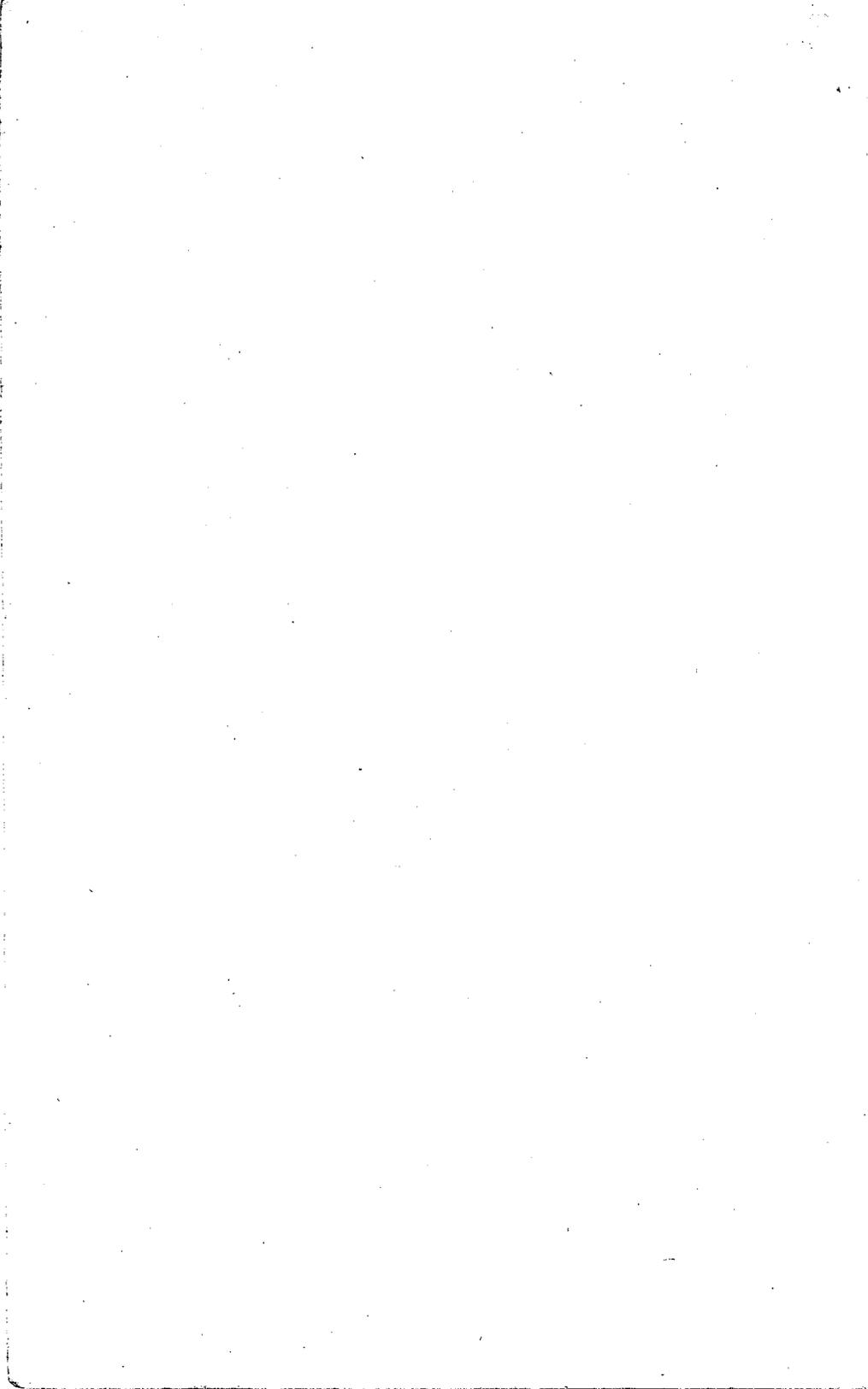
ADDENDA.

RUMEX PARAGUAYENSIS Parodi [verus autor est E. Munk], in Anal. Soc. Cient. Argent. v., 160, 1878, et Contrib. Fl. Paraguay ii., 52, 1878. E. grege *R. pulchri* L. s. lat. Descr. emend.: saepius humilis, parce ramosus ramis erecto-patentibus. Folia inferiora breviter petiolata, ovato-elliptica vel ovato-oblonga. (nec panduriformia), obtusiuscula, margine subtiliter undulato-crispulata. Florum verticillastra omnia folio conspicuo obovato-elliptico (basi

magis sensim attenuato quam apice) acuto suffulta, densa et satis multiflora. Pedicellus perigonio fructifero subaequilongus, plerumque paullo infra medium articulatus. Sepala interiora fructifera triangulari-ovata, latitudini aequilonga vel paullo longiora, apice acuta, valde reticulata et foveolata, omnia callifera callo rubello-flavido oblongo valde undulato-granuloso-crenato, margine dentata dentibus utrinque 2—5 subulato-setaceis apice subrectis vel leviter incurvato-hamatis longitudine valde variabilibus (diametrum sepali longitudine subaequantibus usque ultra duplo brevioribus) interdum bifidis. Differt a *R. pulchro* L.: caulo non divaricato-ramoso; foliis integris (nec panduriformibus) latioribus, superioribus (et bractealibus) ad formam oblongo-spathulatam tendentibus; pedicellis fructiferis longioribus (perigonio subaequilongis); sepalorum interiorum multo magis acutorum dentibus plerumque longioribus gracilioribus multo minus rigidis subsetaceis, callo etiam crassiore valde undulato-crenato. Differt a *R. dentato* L.: foliis latioribus ad formam obovatam tendentibus, nequa-quam panduriformibus; sepalis interioribus latioribus in utroque latere calli huic aequilatis vel latioribus valde reticulato-foveolatis, callo valde undulato-crenato. Valde affinis quoque videtur *R. nipponicus* Franchet et Savatier Enum. Pl. Japon. ii., 471, 1879 (= *R. pulcher* Franchet et Savatier, *l.c.* i., [1875] 393, nec L.) e Japonia, qui tantem differt: foliis angustioribus, inferioribus ± panduriformibus, superioribus et bractealibus ± lanceolatis (basi magis subito contractis quam apice), verticillastris superioribus subaphyllis, callo sublaevi minore (dimidiam longitudinem sepali vix attingente).—Hab.—in America australi, Paraguay: Cordillere, ad domos (sec. PARODI, *l.c.*); Argentina: Posadas (Misiones, ad limites Paraguay). leg. L. NABOULET, November 1918; comm. L. HAUMAN). Introd. in Angliam (vide infra) et in Germaniam (Prov. Rhenana: Essen, Neuss, Emmerich, Verdingen, introd. verisim cum seminibus oleaginosis, 1911-16, leg. BONTE) et in Hollandiam: Wormerveer, prope fabricam farinarum, 1915 (leg. A. W. KLOOS).—A. THELLUNG.

ANGL.: Elland [B. 73], coll. E. C. HORRELL; comm. G. C. DRUCE, i., 1918. Tingley, York [B. 79], comm. G. C. DRUCE, vi., 1918. Ware, Herts, coll. 1914; comm. G. C. DRUCE, 1918. Glasgow, R. GRIERSON, August, 1920. Bristol, NOEL SANDWICH, 1920; comm. G. C. DRUCE, iv., 1921.

TILLAEA AQUATICA L. was discovered on September 1, 1921, by Mr R. W. Butcher, on the mud-margin of a piece of water at Adel, near Leeds, growing with *Limosella*. The Secretary visited the locality with the fortunate discoverer on September 17, and the plant appears to be native. Details will be given in next *Report*.



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