

THE  
BOTANICAL EXCHANGE CLUB  
AND SOCIETY OF THE BRITISH ISLES

---

*Report for 1911*

BY THE  
Editor and Distributor  
J. A. WHELDON, F.L.S.

---

VOL. III. PART II.

---

PUBLISHED BY B. H. BLACKWELL,  
BROAD STREET, OXFORD.

June 1912.

PRICE 3s. 6d.

R.B. Williams

THE  
BOTANICAL EXCHANGE CLUB  
AND SOCIETY OF THE BRITISH ISLES

---

VOL. III. PART II.

---

*Report for 1911*

BY THE

Editor and Distributor  
J. A. WHELDON, F.L.S.

---

Parcels for 1912 should be sent post paid on or before 1st  
December 1912, to

JOHN CRYER,  
182 Bradford Road,  
Shipley, Yorks.

---

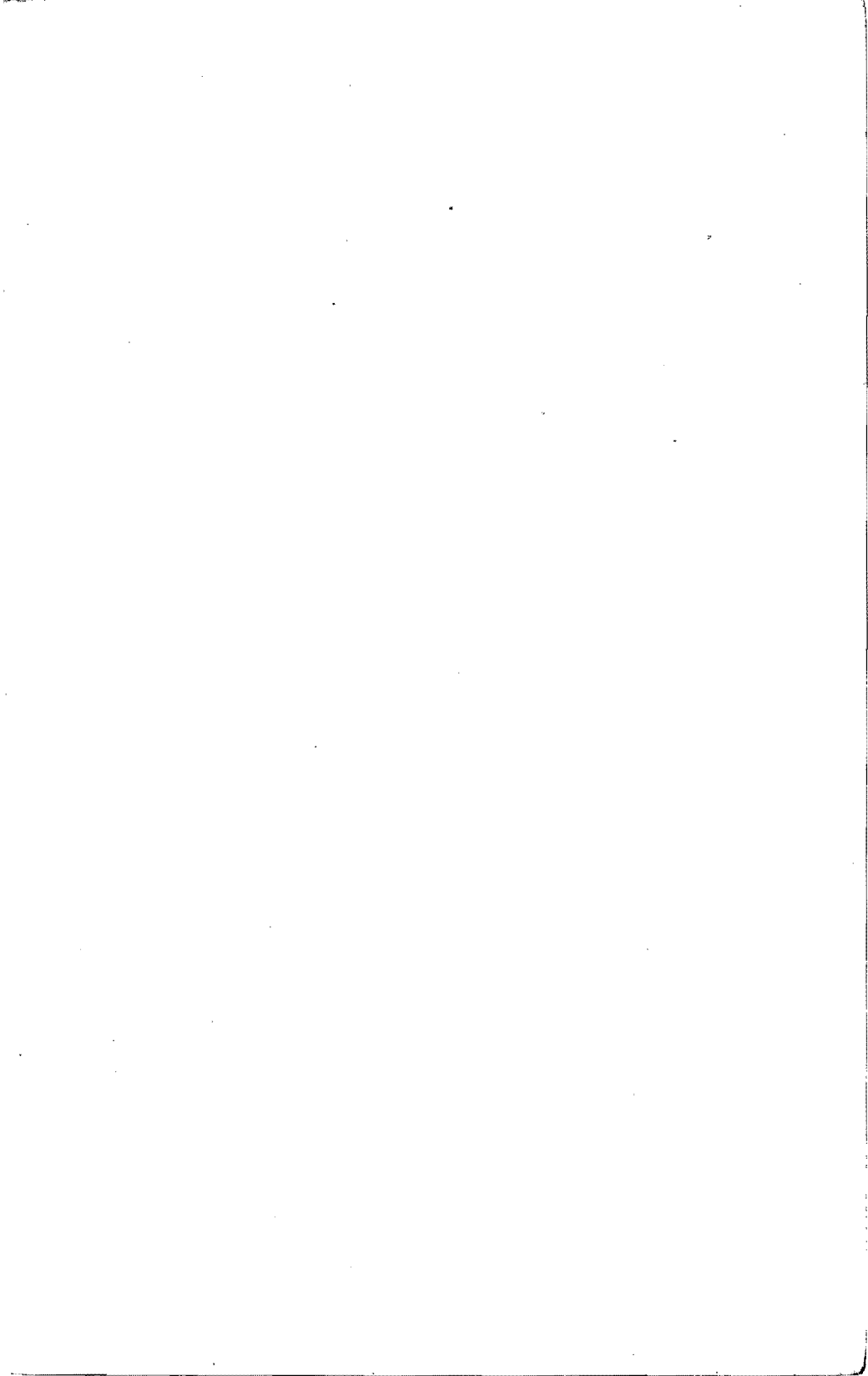
The Subscription, 7s. 6d. per annum, and Non-contributing Members' Subscription of 5s. per annum, should be paid to the Treasurer and Secretary,

G. CLARIDGE DRUCE,  
Yardley Lodge,  
9 Crick Road, Oxford.

---

PRINTED BY NEILL & CO. LTD., BELLEVUE, EDINBURGH,  
June 1912.







*Erigeron linifolius*, Willdenow, a native of tropical and subtropical countries,  
 Tweedside, Selkirkshire (see *Report*, p. 415, 1909).

Both these interesting aliens, which have been introduced with foreign wool, were dis-  
 from which these illustrations are produced. The



*Atriblex spongiosa*, F. von Mueller, a native of South Australia, Galafoot, at junction of Gala and Tweed, Selkirkshire (see *Report*, p. 396, 1908).

covered by Miss Ida Hayward, F.L.S., who has kindly presented to the Club the blocks plants have appeared yearly since their discovery.





*REPORT OF THE DISTRIBUTOR FOR 1911.*

It is rather unfortunate that in my first effort to serve the Club as Distributor the record number of nearly 5400 sheets should fall into my inexperienced hands. This is considerably in excess of the average of the past twenty years, which is 3684.

As a rule, great care was taken in complying with such regulations as are made to save trouble to the Distributor, which has greatly facilitated the work. The specimens, on the whole, were excellently prepared. A few, perhaps, should have been discarded, but one hesitates to do this. Some of the newer members sent several different gatherings under one cover, which practice leads to difficulties in refereeing. Greater care should be taken in seeing that specimens are mature enough to exhibit the diagnostic features, when these depend upon the nature of the fruit. It would be an advantage if fewer species were submitted, but a larger number of examples in each cover. Two or three sheets only are sometimes sent, and these are absorbed by the Referees, leaving nothing to be distributed, and it seems hardly worth printing the Referee's notes when only the sender can find them of any practical value.

In dividing a number of specimens into separate sheets for distribution, some members do not take sufficient care to see that the examples under each label are tolerably uniform—*i.e.* on one sheet will be a flowering plant, on another a fruiting one, etc. This leads to contradictory statements from those who criticise them.

With regard to the Roses, Mr. Barclay says: "The specimens are as a rule fair. What should be sent is a branch with branchlets. If that does not show mature prickles, a bit of *old* stem should be added with fully developed prickles. A shoot of the year is neither necessary, nor as a rule advisable. Several bits from the end of a flowering or fruiting branch are not nearly so valuable as a branch with its branchlets, the larger the better, for even then it is but a scrap of a whole plant."

Major Wolley-Dod adds: "The specimens of *Rosæ*, with two or three exceptions, have been gathered in a condition much more suitable for naming than in former years, so that where I have failed to be definite the fault is mine, not that of the collector. I would

again impress upon members the importance of gathering well-advanced fruit, and specimens with a portion of the previous year's stem attached. This is especially important with the *Villosæ*."

Messrs. H. and J. Groves make the following comments:—"Most of the water *Ranunculi* sent this year are either poor specimens or the plants are not in a satisfactory condition for determination. With such extremely variable plants it is essential that mature and complete specimens should be collected. In the young stages they are often not characteristic, and, with the exception of *R. hederaceus*, *Lenormandi*, *lutarius*, and *tripartitus*, they are not, in a normal season, really in good condition until late in May or the beginning of June. Specimens should have at least three fruiting heads on a stem, so as to show the direction and length of the peduncle and the fully-formed fruit. When flowers cannot be dried entire, loose petals should be preserved. Sub-terrestrial forms are by themselves unsatisfactory, and normal aquatic specimens can usually be collected in the neighbourhood. In the case of plants from swiftly-running streams or rivers it is desirable, if possible, to also collect them in the still or slow-flowing water of a pool or backwater. Floating leaves can frequently be found on a river form where the plant is in the densest masses, though absent elsewhere. There are few plants that will make more beautiful herbarium specimens than water ranunculi if they are properly treated, while if carelessly collected and dried none can present a more sorry and draggled appearance. The habitat should be fully stated on the labels."

There has been a considerable reduction in the number of *Rubi* sent in, and the *Characeæ* were represented by a single species, but all other critical groups appear to have been receiving attention.

The thanks of the members are due to the following gentlemen who acted as Referees in special groups of critical plants:—Mr. E. G. Baker, Mr. W. Barclay, Mr. A. Bennett, Miss Cardew, Dr. E. Drabble, Mrs. E. R. Gregory, Messrs. H. and J. Groves, Dr. E. Hackel, Mr. A. B. Jackson, Pfarrer Kükenthal, Rev. E. F. Linton, Mr. W. H. Pugsley, Rev. W. Moyle Rogers, and Dr. F. N. Williams.

Also to those members of the Club participating in the distribution, who have contributed notes, and whose names will be found in the body of the Report. My own labours were much lightened by the great help cheerfully given by Mr. W. G. Travis, during the preparation of the return parcels.

*LIST OF PARCELS RECEIVED.*

	No. of Specimens.
Bailey, Charles, <i>M.Sc., F.L.S.</i> ... ..	37
Bickham, S. H., <i>F.L.S.</i> ... ..	90
Britton, C. E. ... ..	169
Brown, G. C. ... ..	211
Comber, John ... ..	130
Cowan, M'Taggart, jun. ... ..	240
Cryer, John ... ..	205
Druce, G. Claridge, <i>M.A., F.L.S.</i> ... ..	817
Foord-Kelcey, Mrs. E. ... ..	53
Fox, Rev. H. E., <i>M.A.</i> ... ..	27
Goddard, H. J. ... ..	30
Hayward, Miss Ida, <i>F.L.S.</i> ... ..	114
Hodge, William ... ..	108
Horwood, A. R. ... ..	31
Jackson, A. Bruce ... ..	80
Little, J. E., <i>M.A.</i> ... ..	444
Marshall, Rev. E. S., <i>M.A., F.L.S.</i> ... ..	226
Melville, J. Cosmo, <i>M.A., M.Sc., F.L.S.</i> ... ..	121
Riddelsdell, Rev. H. J., <i>M.A.</i> ... ..	798
Salmon, C. E., <i>F.L.S.</i> ... ..	42
Shoolbred, W. A., <i>M.R.C.S., F.L.S.</i> ... ..	259
Travis, W. G. ... ..	105
Trower, Miss Alice ... ..	20
Vigurs, C. C., <i>M.D.</i> ... ..	215
Waddell, Rev. C. H., <i>B.D., F.L.S.</i> ... ..	25
Waterfall, Charles, <i>F.L.S.</i> ... ..	187
Webster, Alfred ... ..	9
Wheldon, J. A., <i>F.L.S.</i> ... ..	450
White, J. W., <i>F.L.S.</i> ... ..	34
Wilson, A., <i>F.L.S., F.R.Met.S.</i> ... ..	69
Total ... ..	<u>5346</u>

J. A. WHELDON,  
*Editor of the Report and*  
*Distributor for the Club, 1911.*

60 HORNBY ROAD, WALTON,  
 LIVERPOOL.

*Thalictrum minus*, L. The Heath, Royston, Herts, 29th June 1907. Stem leafy below. Auricles of stipules reflexed. Flowers drooping or erect. *T. Jacquinianum*, Koch., in Pryor, *Fl. Herts.* Flowers abundantly in some years, e.g. 1907, but being depastured by sheep does not reach the stage of ripe fruit.—J. E. LITTLE.

*T. majus*, Crantz, var. *capillare*, N.E. Br. (vide *Suppl. Eng. Bot.*, 3rd ed. p. 4). Woody banks of Coniston Lake, N. Lancs., v.-c. 69, August 1911.—J. COMBER. "This is one of the stations given for the variety by Mr. N. E. Brown (*l.c.*). The characters appear to agree with his description. The fruit on my specimen is not full-grown."—EDWARD S. MARSHALL.

*Anemone apennina*, L. For many years naturalised in a shrub-bery at Meole Brace, Salop, April 1911.—J. COSMO MELVILL.

*Ranunculus Flammula*, L., var. *radicans*, Nolte. Shores of Coniston Lake, three feet below high-water mark, where submerged for fully six months in the year. Only exposed when the lake is exceptionally low, so seldom flowering. August 1911, N. Lancs., v.-c. 69.—J. COMBER. "I think that this may pass; for the nomenclature see Dr. Moss's note in the *Report* for 1910."—EDWARD S. MARSHALL. "The greater part of these specimens are *R. reptans*, L., as is shown by the strongly arcuate creeping stems, and Dr. Glück believes it to be a good species."—G. C. DRUCE. "All mine is certainly a robust form of what we have called *R. reptans*, L. The flowers are only about one-fourth the size, and the habit different from that of *R. Flammula*, var. *radicans*, Nolte, which occurs in the same locality. Whether regarded as forms or varieties of *R. Flammula*, these two plants seem to have a distinct and recognisable status."—J. A. WHELDON.

*R. trichophyllus*, Chaix (terrestrial form). Pond between Easthall Farm and Rusling End, Knebworth, Herts, 21st May 1911. Pond near Bushwood, Weston, Herts, 1st June 1911.—J. E. LITTLE. "Yes, the aquatic and the mud form."—G. C. DRUCE. "My specimen (from Bushwood) is good *trichophyllus*."—J. A. W. "We think the Bushwood plant correct, but there are no flowers. The Knebworth plant we do not think is *R. trichophyllus*, but it is not in a condition to name."—H. and J. GROVES.

*Ranunculus*. [Ref. No. 5102.] In a pond near the turnpike road from Bicester to Aylesbury, near Grendon, Bucks, May 1911. This is, I believe, *R. trichophyllus*, Chaix, of our floras, a name considered by Dr. Williams to be a *nomen nudum*, since Chaix (Villars, *Hist. Pl. Dauph.*) simply gives the name and a reference to Haller 1162 (*Hist. Helv.*, ii. 69, n. 1162) and therefore quotes it only from

its revival by Grenier and Godron (*Fl. Fr.*, i. 1848). But Schinz and Keller (*Fl. Schweiz*, 219, 1909) use the name *R. flaccidus*, Pers. (in *Ust. Ann. Bot.*, xiv. 39, 1795) and quote as synonymous *R. fœniculaceus*, Gilib., and *R. divaricatus*, Schrank. Therefore unless *flaccidus*, Pers., is chosen it would perhaps be more definite to write *R. trichophyllus*, Chaix (Gren. and Godron).—G. CLARIDGE DRUCE. "*R. flaccidus* seems to be a singularly inappropriate name for this particular segregate of the old *R. pantothrix*, if it really comes under *R. trichophyllus*, Chaix, which I doubt."—J. A. WHELDON. "I am disposed to regard it as *Drouetii*  $\times$  *peltatus* or *heterophyllus*."—G. C. BROWN. "Apparently large-flowered *trichophyllus*."—H. and J. GROVES.

*Ranunculus*. [Ref. No. 5100.] Twinstead, Essex, N., June 1911.—G. C. DRUCE. "*R. Drouetii* (F. Schultz) apparently."—J. A. WHELDON. "I know this locality well (on clay), and I think these specimens are luxuriant *Drouetii*."—G. C. BROWN. "It is *R. Drouetii*."—H. and J. GROVES.

*R. Drouetii*, Schultz. (A) Shallow drains, Ickleford Common, Hitchin, 23rd May 1911; (B) pond, same place and date.—J. E. LITTLE. "The Ickleford specimens marked 'A' suggest *R. trichophyllus*, the leaf-segments being short and rigid. 'B,' with darker foliage, I am inclined to put to the same species, but it is by no means easy in dried or even fresh specimens to make a hard and fast line between *R. Drouetii* and *R. trichophyllus*."—G. C. DRUCE. "'A' is probably correct, but there is no ripe fruit. 'B' is apparently a sub-terrestrial state of *R. Drouetii*, but too poor to be worth distributing."—H. and J. GROVES.

*Ranunculus*. [Ref. No. 5101.] In a pond on the Oxford Clay near Water Eaton, Oxfordshire, May 1911. Probably *R. Drouetii*, Schultz, which is linked, it appears to me, by intermediate forms with *R. trichophyllus*, Chaix=*R. paucistamineus*, Tausch. I am not yet convinced that the nomenclature suggested by Mr. F. N. Williams is correct, therefore I use *R. Drouetii* for this plant, which in its large petals somewhat recalls *R. heterophyllus*, Weber, var. *submersus*, Bab. Unfortunately the weather dried up the pond early this year, so that I was unable to see if it produced floating leaves.—G. CLARIDGE DRUCE. "It is unfortunate that these specimens are so young, but they have, as Mr. Druce suggests, a very strong resemblance to *R. heterophyllus*, Web., var. *submersus*, Bab., and the fairly large flowers and many-veined petals, as also the hairy stipules, show decided approach to that. A flower on my specimen contained thirty stamens. It would be interesting to know if *R. heterophyllus* and *Drouetii* grow in the vicinity, although there is no indication of hybridity in the pollen grains. It is questionable

whether hybrids between these closely related 'species' would be sterile."—J. A. WHELDON. "Is, I think, *R. heterophyllus*, var. *submersus*, but leaf segments shorter than in my specimens. The absence of fully-developed pedicels make it very difficult."—G. C. BROWN. "May be *R. heterophyllus*, var. *submersus*, but too immature for determination."—H. and J. GROVES.

*R. heterophyllus*, Weber *forma*. Near Maghull, S. Lancs., v.-c. 59, July 1901. Leaflets frequently stalked, and on the lower leaves occasionally with a few capillary segments also; but this character is inconstant.—J. A. WHELDON. "Yes; a form of *R. heterophyllus*, Web."—G. C. DRUCE. "I have not met with this form of *R. heterophyllus* before."—G. C. BROWN. "Rightly referred to this species, I believe."—EDWARD S. MARSHALL. "Yes; the transitional leaves are particularly characteristic of some forms of the species."—H. and J. GROVES.

*R. heterophyllus*, Weber. (a) Pool in field, Coddington, near Ledbury, Herefordshire, v.-c. 36, May 1903; (b) Stone Creek, Keyingham, S.E. Yorks., v.-c. 61, June 1901; (c) brackish pools, Salt End Common, near Hedon, E. Yorks., v.-c. 61, Aug. 1901, and other stations in E. Yorks.; (d) near Withernsea, S.E. Yorks., v.-c. 61, June 1897.—CHARLES WATERFALL. "(a) Correct."—J. A. WHELDON. "(d) is a form of *R. heterophyllus*, under var. *submersus*, Bab. (c) Looks like *R. Baudotii*, but the fruit is too young for certainty, as also in the case of specimens marked 'Stone Creek, Yorks.' Aquatic Ranunculi should be gathered when several heads of fruit are nearly ripe, at which time flowers are also usually available, often on the same stems. It is not advisable to send several gatherings under one cover. Of some of these gatherings only one or two examples were sent—quite a useless supply for an Exchange Club."—J. A. WHELDON. "Correctly named. The specimens from Withernsea are badly prepared, and show no floating leaves; they may be the var. *submersus*, Bab."—G. C. DRUCE. "(a) A curious plant with glabrous carpels. The imperfect fruit suggests hybridity. (b) We should have thought *R. trichophyllus*, but there is not a single petal. (d) We should say *R. heterophyllus*, var. *submersus*, but the specimen is poor."—H. and J. GROVES.

*R. peltatus*, Schrank. In a pond, drying up, Burleigh Meadows, Langley, Hitchin, 25th May 1910.—J. E. LITTLE. "Yes."—G. C. DRUCE. "Probably correct; but young, starved, and poor material, not worth collecting."—EDWARD S. MARSHALL. "Yes; towards var. *truncatus*."—H. and J. GROVES.

*R. peltatus*, Fries. [Ref. No. 330.] Stream at Kemble, W. Glos., v.-c. 34, 5th June 1911.—W. I. GREENWOOD; S. H. BICKHAM. "Yes."—J. A. WHELDON. "The Messrs Groves

saw specimens of this plant which I sent them, and put it to *R. peltatus*, with some relationship to *R. heterophyllus*."—H. J. R. "A very robust form. Schinz and Thellung in their new *Flora der Schweiz* use *R. aquatilis*, L., instead of *R. peltatus*."—G. C. DRUCE. "Apparently a form of *R. peltatus*, Schrank, judging by the large petals, fruit, etc.; but the submerged leaves seem to collapse more or less, as in *R. heterophyllus*."—EDWARD S. MARSHALL.

*R. peltatus*, Schur.; form approaching *floribundus* (?) Dyke in salt-marshes, Great Wigborough, N. Essex, v.-c. 19, 11th May 1911.—G. C. BROWN. "I much doubt this being *peltatus*; there are no floating leaves, and the flowers are small. Is it not a form of *R. Baudotii*?"—G. C. DRUCE. "The stamens are very few for *R. peltatus*. It seems to me nearer to *R. trichophyllus* than *peltatus*. The carpels are hispid."—J. A. WHELDON. "Looks like a large form of *R. trichophyllus*, but it is too young and the specimens are too fragmentary."—H. and J. GROVES.

*R. peltatus*, Schrank. Pond, Aldham, N. Essex, v.-c. 19, 16th May 1911. Some might perhaps be referred to var. *floribundus* if it were not for the slightly tapering pedicels.—G. C. BROWN. "Correctly named."—G. C. DRUCE. "Weak *peltatus*, I think."—EDWARD S. MARSHALL. "Yes; apparently var. *truncatus*. A neat little form with very much rounded fruits."—H. and J. GROVES.

*R. confusus*, Godr. Dyke in salt-marshes, Langenhoe, N. Essex, v.-c. 19, 18th May 1911. "These specimens may, I think, be safely referred to *confusus* from shape of carpels, and also stamens exceeding styles."—G. C. BROWN. "I fail to see how this differs from *R. heterophyllus* (Weber). My specimen has some leaves with stalked segments, and the peduncles are shorter and more slender than in *R. confusus* or *R. Baudotii*. It does not differ in any substantial manner from Mr. Brown's Gt. Wigborough specimens."—J. A. WHELDON. "Too immature to determine."—H. and J. GROVES.

*R. Baudotii*, Godr. Large pond on salt-marsh, Gt. Wigborough, N. Essex, v.-c. 19, 11th May 1911.—G. C. BROWN. "Yes."—E. S. MARSHALL. "I should call this *R. heterophyllus*, Web. The very numerous stamens are longer than the pistils, the peduncles shorter and more slender than in *R. Baudotii*, and when mature strongly recurved at the base. *R. heterophyllus* is frequently sub-maritime in this district (Lancashire)."—J. A. WHELDON.

*R. Baudotii*, Godr. Dyke in salt-marshes, Langenhoe, N. Essex, v.-c. 19, 30th April 1911.—G. C. BROWN. "Yes, but immature."—H. and J. GROVES.

*R. Baudotii*, Godron. [Ref. No. 4961.] Brackish trench near Aldeburgh, Suffolk East, v.-c., June 1911.—G. CLARIDGE DRUCE. "Yes."—E. S. MARSHALL. "Yes; a fine robust form."—H. and J. GROVES.

*R. Baudotii*, Godr., var. *marinus*, Arrh. and Fr. Large pond on salt-marshes, Gt. Wigborough, N. Essex, v.-c. 19, 11th May 1911.—G. C. BROWN. "The achenes are hardly those of *R. Baudotii*, and the stamens are very few. Either *R. trichophyllus* or *R. Drouetii*, in my opinion."—J. A. WHELDON. "May be correct; but the material sent to me is poor. I do not know why this stands in our list as of Arrh. and Fr.; it was originally described as *Batrachium marinum*, Fr., *Mant.*, iii. pp. 51-2 (1843), and afterwards as *Ranunculus marinus*, Fr., *Summa Veg. Scand.*, p. 141 (1846). Under the latter name I have a specimen from Coll, with more erect foliage and smaller carpels; but another from Lydd, E. Kent, is more like this one, and was determined by Messrs. H. and J. Groves. The carpels of Mr. Brown's plant are really glabrous (as they ought to be) but covered with mould; and his label is gummed down on to the newspaper, which should never be done."—EDWARD S. MARSHALL. "We should say *R. trichophyllus*."—H. and J. GROVES.

*R. repens*, L., var. *reptabundus*, Jord. (?) By mountain stream, Allt Cuaide, Dalwhinnie, E. Inverness, v.-c. 96, 29th July 1911.—W. A. SHOOLBRED. "This is a very striking little plant, which we found growing on the wet, gravelly margin of the stream, over quite a limited area, at about 1200 feet. It agrees well with Rouy and Foucaud's description (*Fl. de France*, i. p. 100) of *R. reptabundus*, Jord. (*Diagn.*, p. 83; Jord. et Fourr., *Icon.*, t. 25), of which *R. repens*, var. *subacaulis*, Bréb., and var. *prostratus*, Gaud., are given as synonyms. 'Plante beaucoup plus grêle; tige couchée, radicante, mollement et courtement velue; feuilles plus profondément divisées à divisions cunéiformes, à lobes plus étroits, à dents plus aiguës.' Mr. Arthur Bennett writes: 'I do not know Jordan's plant, but your plant looks much like a Dutch plant called var. *prostratus* DC.' De Candolle, however, does not mention this in his *Prodromus*, vol. i. p. 38 (1824); so Gaudin's may be the right varietal name. I think that Mr. Shoolbred is growing this, to test its permanence."—EDWARD S. MARSHALL. "I believe this is a small neat high-level form of the var. *reptabundus*, Jord. (= *prostratus*, Gaud.). Whether it is also the same as var. *subacaulis*, Bréb. (as Rouy states) is doubtful. Brébisson's description reads 'Tige florifère très-courte, dépassée par les feuil. radicales qui sont très-découpées.'"—C. E. SALMON. "The var. *prostratus*, Gaud., which I think this is, is not given in DC. *Systema*."—G. C. DRUCE.



*Aconitum Napellus*, L. By a stream, from Ford to below Milverton, v.-c. 5, S. Somerset, 2nd June 1911. This station is given in Murray's *Flora of Somerset*; it appears to be a natural one.—EDWARD S. MARSHALL.

*Papaver Rhæas*, Linn. forma. [Ref. No. 197.] Banstead, Surrey, v.-c., 17th July 1911.—C. E. BRITTON. "In June last Mr. A. B. Jackson and myself noticed a cornfield at Banstead wherein grew *Papaver Rhæas*, *P. dubium*, *P. Argemone*, *P. hybridum*, and *P. somniferum*. On the occasion of a visit in July I found that an abundant poppy in the field was one that seemed to be neither of those mentioned, but to be intermediate between *P. Rhæas* and *P. dubium* in the character of the capsule. The hairs on the peduncles, as will be seen from the specimens distributed, are spreading as in *P. Rhæas*, and the oblong capsule, attenuated at the base, is intermediate between the globular capsule of this species and the clavate capsule of *P. dubium*. I have endeavoured to dry the specimens without compressing the capsules, as pressure alters the characteristic shape. Besides the form distributed, I have other plants from the same field that seem to be other links in a chain connecting *P. Rhæas* and *P. dubium*. One (Ref. No. 197) has the same kind of capsule but the peduncles bear appressed hairs (as in *P. dubium*), and a third kind (Ref. No. 184) bear a capsule intermediate in shape between that of the form I distribute and *P. Rhæas*. Of the many forms of *P. Rhæas* described by Rouy and Foucaud (*Fl. de France*, i. pp. 154-6) the description of *P. intermedium*, Beck., seemed to come nearest to my plant. But I have been unable to compare my plant with an example of this, as Becker's plant is not represented in the herbarium of the Natural History Museum at South Kensington, and my plant does not agree with the representation of Becker's plant in Reichenbach's *Icones*, t. xvi. f. 4478. Mr. Wilmott and I were unable to find any *Papaver* that matched my plant at South Kensington. Some years ago the late Mr. George Nicholson distributed a form of poppy apparently intermediate between *P. Rhæas* and *P. dubium*, from Surrey, but I have not been able to see an example of this."—C. E. BRITTON. "Habit of *P. Lecoqii*, spreading hairs as in *P. Rhæas*, capsule intermediate in shape between *P. Rhæas* and *P. dubium*. As these species occurred there, it seems highly probable that this may be *P. Rhæas*  $\times$  *dubium*."—J. A. WHELDON. "Unfortunately my set of this species is small and imperfect, but the very narrow capsules do not agree with Rouy and Foucaud's definition of restricted *P. Rhæas*, which should prove that organ 'subglobuleuse ou largement ovale, arrondie à la base.' I cannot name this."—EDWARD S. MARSHALL. "Leaves and spreading hairs point to *Rhæas*, shape of capsule and stigma-disc to *dubium*. In three capsules examined I could find no healthy seeds but only shrivelled (and evidently non-fertile) ones.

Hence I suggest *P. Rhæas* × *dubium*. Rouy (*Fl. Fr.*, i. p. 156) expresses the opinion that *P. Rhæas*, var. *strigosum* (Boenn.) is this hybrid, but with this suggestion I do not think British botanists will agree."—C. E. SALMON. "I believe this to be *P. dubium* × *Rhæas*. It is in many points like what I remember Mr. Nicholson's plant to be, which he showed me in the fresh state, but it is not like a hybrid I once gathered in Berkshire."—G. C. DRUCE.

*Fumaria capreolata*, L. (?) Road hedge near Dunster, Somerset, v.-c. 5 or 6, 16th June 1906. The name is Ley's suggestion.—Coll. A. LEY; Comm. H. J. RIDDELSDELL. "The usual British form of *F. capreolata*, L."—H. W. PUGSLEY. "Yes; it is locally frequent there, and at Minehead (*F. pallidiflora*, Jord.)."—EDWARD S. MARSHALL.

*F. major*, Badarro, in *Brugnat Giorn. Fis.*, ii., ix., 1826. Gilly Tresamble, Perranworthal, Cornwall, W., v.-c. 1. Among potatoes, cabbage, and marigolds in a field that has not been broken for ten years. I visited the spot early in September 1911, but the plants were not forward enough for collecting, so the original discoverer, Mr. F. H. Davey, kindly sent me fresh material, which I have endeavoured to do justice to. Dr. Graebner and Dr. Fedde, the monographer of the *Papavaraceæ* in Engler's *Pflanzenreich*, named the plant for Mr. F. H. Davey (see *Report*, page 535, 1910), but its identification has been queried.—G. CLARIDGE DRUCE. "Also sent from same station, 11th October 1911. Coll. Miss Davey and C. C. V.; Comm. C. C. Vigurs. Owing no doubt to the remarkably dry summer the racemes are fewer-flowered than usual, and the plants are more branched and more compact. On the other hand, the plants were there by the thousand, to the total exclusion of all other fumitories, and most other weeds. To Mr. Davey's certain knowledge this field was in permanent pasture for at least ten years previously; and we agree in thinking that it is more probable that the seeds were in the ground quiescent for that period, rather than that they were introduced during cultivation."—C. C. VIGURS. "Not *Fumaria major*, Badarro, which is a species characterised by broad spreading margins to the lower petal, and large, coarsely rugose fruits. This Cornish plant, as well as another stronger form which I found growing with it in September 1907, is fully dealt with in my paper which is now appearing as a supplement to the *Journal of Botany* [recently named (*Jour. Bot. Supp.*, p. 31) *F. paradoxa* by Mr. Pugsley.]"—H. W. PUGSLEY.

*F. Borai*, Jord., var. *muraliformis*, Clavaud. Meole Brace, Salop, August 1911. "A single plant near my residence, not far from the place where authenticated examples of the same variety occurred a few years ago. I had thought the plant had disappeared from the neighbourhood."—J. COSMO MELVILL. "Probably this,

but rather weak."—H. W. PUGSLEY. "This seems to be the same as Mr. Pugsley's plants from a shady hedge-bank at Barnes, Surrey, 1902."—EDWARD S. MARSHALL.

*F. occidentalis*, Pugsley. Cultivated ground, Rock, N. Cornwall, August 1910.—H. E. FOX. "Correct."—H. W. PUGSLEY.

*F. parviflora*, Lam. Found in quarry of the Middle Oolites at Seamer, near Scarborough, altitude 200 ft., 14th August 1911, v.-c. 62. Name confirmed by Mr. Pugsley.—JOHN CRYER. "Yes."—H. W. PUGSLEY and E. S. MARSHALL.

*Radicula Nasturtium-aquaticum*, R. and B., var. *microphylla*, R. and B. [Ref. No. 30.] Ponds, Lower Morden, Surrey. The usual form of watercress in small ponds in the fields about Lower Morden.—C. E. BRITTON. "May, I suppose, pass, but it is distinctly a large form of it."—A. BENNETT. "I suppose comes under var. *microphylla*, but it can hardly be called an extreme example of the form."—H. J. RIDDELSDELL. "The so-called var. *microphylla* is a mere growth form, and much more extreme states than these from Lower Morden readily assume ordinary proportions under suitable conditions."—J. A. WHELDON. "Yes, but not the extreme form. Rendle and Britten have nothing to do with the varietal name; it is an error of the *Lond. Cat.* See *Journ. Bot.*, 125, 1908."—G. C. DRUCE. "What passes as this variety in Britain; but I think that it is only a depauperate state."—EDWARD S. MARSHALL. "Correct, I believe; but it is a *state* only, I think."—C. E. SALMON.

*R. amphibia*, Druce. Submerged leaves from deep ditch full of water, Southcoates Lane, Hull, E. Yorks., v.-c. 61, 6th May 1901. These leaves may be common. I note that they are mentioned in Hooker (8th edition) and Babington (9th edition). I have only seen them once myself—when I got these specimens, so thought I would send them up for distribution. They do not seem to me to flower, but were growing entirely under water. After they have withered away, the flowering form comes up, as there does not appear to be any trace of them with the flowering form.—C. WATERFALL. "Yes; these are the submerged leaves but badly prepared. Such plants require special treatment. Carefully selected examples having been properly cleaned in running water, should be put in a shallow tray of clean water and lifted out by means of a sheet of white paper, carefully floating out the parts in a natural position. This should be covered with another sheet of white demy. Each specimen thus prepared is to be placed between eight or ten sheets of drying paper and submitted to considerable pressure—28 to 56 lb. In not less than twelve hours change the sheets of white paper into fresh drying paper without disturbing the specimens. Three changes will be sufficient in most cases."—G. C. DRUCE.

*Barbarea vulgaris*, Ait., var. *transiens*, Druce (*Fl. Berks.*). Field-border by the Wellsway, Bath, 6th June 1910. Passed by Mr. Druce.—JAS. W. WHITE. "Mr. Druce makes no mention of this (1897) variety in his (1909) edition of *Hayward's Pocket Book*, so one concludes he has abandoned it. The original description (p. 44) refers to plants 'forming a passage to *B. intermedia*,' but Mr. White's plant does not seem to tend that way either in silicle or leaf-cutting."—C. E. SALMON. "It must not be concluded that because a variety is omitted from *Hayward's Pocket Book* that the author had abandoned it. That small work did not admit of many of the critical forms being given, as I had only a limited space at my disposal. If the earliest trivial is kept up, this should be *B. lyrata*, Asch., var."—G. C. DRUCE.

*B. vulgaris*, Br., var. *sylvestris*, Fr. Ditches near Sefton, S. Lancs., v.-c. 59, 16th June 1911. "This agrees well with a form of *B. vulgaris* which occurs on Clifton Ings, near York, with *B. stricta*, of which Mr. J. G. Baker says, 'a form which might easily be taken for *B. stricta* and is probably var. *sylvestris*, Fr.' It resembles *B. stricta* very closely in appearance, and is often recorded for it, but it has larger flowers, no hair on apex of buds, etc."—J. A. WHELDON.

*B. intermedia*, Br. Blackford Hill, v.-c. 83, 11th July 1911.—M'TAGGART COWAN, Jun. "Seems correct. Rev. E. S. Marshall found it as a casual in Scotland."—A. BENNETT. "Yes."—ED. S. MARSHALL. "This is, I suppose, a form of *B. intermedia*, but it differs from what I have gathered for it in Surrey, by its more slender silicles and rather longer beak—not, however, so long as those of *vulgaris*. The coarse ciliation upon the upper leaves points to *intermedia*, and is a feature mentioned by Boreau. The pods (upon the example sent me) are too young to show satisfactorily the seed character mentioned in *Hayward's Pocket Book*, p. 15, 1909 ed., but the immature seeds do not seem to be 'shaping' well to the form assigned there to those of *intermedia* ('as long as broad')." —C. E. SALMON. "The relatively short pods seem to indicate *B. intermedia*. Corbiere (*Flore de Normandie*) states that *B. praecox* may be distinguished when fresh from *B. intermedia* (and all other species) by its pleasant cress-like flavour."—J. A. WHELDON.

*Arabis petraea*, L. N. side of Braeriach, above Loch Coirean-Lochain, alt. 3600-4000 ft., Easternness, v.-c. 98, June 1911.—ALBERT WILSON. "The specimens show a remarkable range of variability as to amount and position of hairs. Some are densely hispid almost everywhere, others are very thinly hairy about upper parts of stems and calyx, with leaves, etc., nearly glabrous, or distantly ciliate. All, I suppose, come under var. *hispidula* DC."—J. A. W.

"Yes; the usual hispid form of the Cairngorm range = var. *hispidula* DC."—G. C. DRUCE. "My label reads '98 Easternness'; it should be 96. These are var. *hispidula*, the hairy form, which is more frequent in the Cairngorms than the glabrous type. In a recent letter, unfortunately mislaid, Dr. F. N. Williams tells me that in his opinion the species should be cited on the authority of Koch, *Synopsis*, ed. 2, p. 44 (1843), as it is not Lamarck's plant. Koch divides it into *a. glabrata* and *β hirta*: 'fol integerrima vel basi utrinque dentibus 2-3 minutis instructa, pilis brevioribus bi-trifurcatis plerumque densius tecta,' but it is quoted by him as of Lamarck."—EDWARD S. MARSHALL. "As to its being the *petraea* of Lamarck, see *Journ. Bot.*, 153, 1895, where I state that the locality cited by Lamarck yields *Sisymbrium arenosum* but not *A. petraea*, and that there is no specimen in Lamarck's herbarium at Paris. Lamarck, however, cites our Snowdon plant as synonymous."—G. C. DRUCE.

*A. perfoliata*, Lam. Gravelly soil by roadside near Goldings, Hertford, 1st July 1911.—J. E. LITTLE. "Yes; the plant now called *A. glabra*, Bernh."—G. C. DRUCE.

*A. glabra*, Bernh. Bromoberrow, v.-c. 34, 1st June 1911. A few sheets of this species, to confirm its occurrence in West Gloucester. Mr. H. H. Knight of Cheltenham kindly supplied them. See *Journ. Bot.*, p. 226, 1911.—H. J. RIDDELSDELL.

*C. pratensis*, L., var. *dentata*, Schultes. Drain by May Hill Station, Monmouth, v.-c. 35, 24th April 1911. The leaflets are only feebly dentate, and do not make good specimens of the variety. This form is fairly common on dry shady banks and wood borders from Monmouth to Stanton in Gloucestershire; it is not dependent on soil or situation, I believe. The finest *dentata* I have seen was on the exposed top of a bank, behind a low hedge, near Axminster, in v.-c. 9, Dorset, where it was remarkably luxuriant and in great quantity. Of course, leaf varieties such as this are at best poor things.—H. J. RIDDELSDELL. "This matches *C. dentata*, Schultes, distributed by Mr. Geo. Nicholson from Kew in 1880, very well indeed."—J. A. WHELDON. "Apparently correct. Koch gives *β dentata*, Rchb., as the varietal name, instead of Hayne and Welwitsch. Rouy and Foucaud make *C. palustris*, Peterm. (1849), a later synonym of *C. dentata*, Schultes."—EDWARD S. MARSHALL. "*C. dentata* may be synonymous with *C. palustris*, but *C. palustris*, Peterm., is not synonymous with *C. dentata*, Schultes. It is our common form (teste Kerner) of *C. pratensis*. See *Fl. Berks.*, p. 47. These specimens may pass as Schultes' plant."—G. C. DRUCE.

*C. pratensis*, var. *Hayneana*, Welw. (?). First found in 1908, in company with Mr. Shoolbred, in meadows, mostly on dry shallow

soil, about Anward Farm and Pighole, Tidenham, v.-c. 34 (W. Gloucester). Fairly constant. *C. pratensis* type and *C. hirsuta* grow in the neighbourhood. Flowers much smaller than those of *C. pratensis*, always white. Roots were transplanted into heavy clay soil at Llandaff, and flowered in 1910 and 1911 very freely; no ripe fruit is ever produced, but the plant spreads and produces new colonies, no doubt by means of pieces of the vegetation breaking off and rooting. In the cultivated state it varies considerably. Flowers sometimes very pale lilac, almost white, anthers 6, yellow. The vegetation always has a very fragile, almost diaphanous appearance; but flowering stems vary considerably in size and robustness, under cultivation, more so than in the native state. Flowers usually dry to some shade of lilac, even when pure white in growth."—H. J. RIDDELSDELL. "My specimens of *C. Hayneana*, Welw. (Mortlake, 1880, Nicholson), have flowers less than half the size and paler than these, and the divisions of the upper leaves are fewer and broader. I doubt whether this is any more than a depauperate state of the type."—J. A. WHELDON. "Not identical with the plant so named by G. Nicholson from Mortlake, the flower being much larger; it is nearer the plant I call var. *fragilis*, Lloyd."—G. C. DRUCE. "What I have is this from Rev. E. F. Linton, cultivated at Bournemouth from a root found at Shapwick, Dorset; is almost certainly *C. flexuosa* × *pratensis*; it ripened no fruit. Mr. Riddelsdell's plant is very similar in habit; but the petals are pale lilac, fully twice as long, and much broader. Hooker describes var. *Hayneana* as having the 'flowers small white, petals narrower'; Rouy and Foucaud place *C. Hayneana*, Welw., as a 'form' (between subspecies and variety) of *pratensis*, with 'fleurs blanches ou rosees, petites.' If *Hayneana* is really a hybrid, this Gloucestershire plant can hardly be it, as the characters are those of a small *pratensis*; but I have not seen an authentic specimen."—EDWARD S. MARSHALL.

*Draba muralis*, L., Wytham Woods, Berks., June 1911. A new county record, probably introduced here with ash saplings, since it grows on a limestone soil (coral rag) in an ash wood, the ashes having been planted there, being removed, the Earl of Abingdon informs me, from another plantation on the estate. The origin of the saplings at present I have been unable to ascertain. The *Draba* is now extremely abundant and thoroughly naturalised, but quite limited to the space occupied by the plantation. It was discovered by my friend Mr. H. C. Napier.—G. CLARIDGE DRUCE.

*Cochlearia* —? Origin, Coverack, Cornwall, 1910. Cult., Putney, May 1911.—H. E. FOX. "*Cochlearia danica*, L., a slender state. Ripe seeds on some examples. Does this species ever flower

so late as August, as stated in *Bab. Man.*? It does not, in my experience."—J. A. WHELDON. "Is *C. danica*, L."—G. C. DRUCE and E. S. MARSHALL.

*Malcolmia africana*, R. Br. Cinder track, and about brickworks. Arlessy, Beds., 15th May 1911. A cornfield weed of the Mediterranean area.—J. E. LITTLE. "The *Wilckia africana*, F. v. Muell, of my list. *Wilckia*, Scop., is much earlier than Brown's genus."—G. C. DRUCE.

*Sisymbrium pannonicum*, Jacq. Railway siding, near Buildwas, Shropshire, July 1910.—J. COSMO MELVILL. Belgrave, Leicestershire, v.c., Sept. 1911.—Coll. G. E. MERCER; Comm. A. R. HORWOOD. "Yes; *S. altissimum*, L."—G. C. DRUCE.

*Brassica Rapa*, L., var. *Briggsii*, Wats.; Higher Nutsworthy, S. Devon, June 1911.—G. C. DRUCE. "Appears to be the plant described by Briggs, which is apparently the annual state of *Brassica asperifolia*, Lamk., having the lower leaves bristly. This, according to Corbière (*Fl. Normandie*, p. 54, 1893), in addition to an annual and perennial wild form, embraces the two cultivated states: 1, *esculenta*, G. and G. (*B. Rapa*, L.), and 2, *oleifera* DC. (*B. campestris*, L.). *B. Napus* is described as having four parallel states."—J. A. WHELDON.

*Lepidium perfoliatum*, L. A pretty European alien found on the ballast heaps at Par, Cornwall, July 1911.—G. CLARIDGE DRUCE.

*L. ruderales*, L. 1. Newbury, Berkshire, June 1191. Sent in order to draw attention to the necessity of carefully examining this species, since it so closely resembles *L. neglectum*, Thellung, but the latter species has seeds with a narrow wing, which in true *ruderales* is absent. *L. neglectum* is probably of American origin.—G. CLARIDGE DRUCE. 2. Cinder track by railway near Hatfield, 24th June 1911, and near Knebworth Golf Club, 23rd October 1910.—J. E. LITTLE. "Both *L. ruderales*, with wingless seeds."—J. A. W. "Knebworth plant probably correct, but my specimens are too young to be certain. The Hatfield specimens are not *L. ruderales*, but, I believe, an American species."—G. C. DRUCE.

*L. campestre*, Br., var. —? Hedgebank, Mochdre, near Colwyn Bay, v.c. 50, May 1911. This seems to agree with the book characters of *L. campestre*, var. *longistylum*, More. In its long trailing habit, very long lower leaves and long styles, it is different from what I understand as typical *campestre*, and has maintained these differences under cultivation in my garden.—W. HODGE. "My specimens have no flowers, but surely the long styles take it to

*L. Smithii*, Hook., var. *leiocarpum*, Thell.—G. C. DRUCE. "The specimen I retained is, I think, *L. campestre*, var. *longistylum*, More. Although the style is longer than in other examples of that form, I think the anthers of my plant have been yellow. The radical leaves are very long and narrow for *L. Smithii*, and the half-developed pouches show a distinct scaliness. But Thellung allows for this in his description of var. *leiocarpum*: '*Silicula laevis vel minutissime papillosa*' (Monogr., 1906, p. 99). But Thellung considers this synonymous with var. *longistylum*, More. I must say that I think More was right in placing it under *L. campestre* rather than *L. heterophyllum*."—J. A. WHELDON. "Style longer than the notch; I think that it must go under *L. heterophyllum*, Benth., var. *canescens*, Gren. and Godr. (*L. Smithii*, Hook.), though the foliage is greener and less hairy than usual. Material scanty; no root-leaves. Fruiting raceme much longer than usual in my specimen."—EDWARD S. MARSHALL.

*L. Smithii*, Hook. Railway bank near Thornielee, Peebles, v.-c. 78, 4th July 1911. Also Banks of Tweed, Roxburgh, v.-c. 80, 28th July 1911.—IDA M. HAYWARD. "Yes, the var. *leiocarpum*, Thellung."—G. C. DRUCE. "Yes."—EDWARD S. MARSHALL.

*Thlaspi alpestre*, Linn. Near the lead mines Trefriw and Llanrwst, v.-c. 49, August 1911.—WM. HODGE. "The long style and (when ripe) divaricate lobes point to this being the var. *occitanicum* (Jord.)."—G. C. DRUCE.

*T. perfoliatum*, L. Railway side, G.W.R., near Sapper-ton Tunnel, v.-c. 34, West Glos., 30th April 1911. Coll. W. J. GREENWOOD. Not recorded for W. Glos. until now, though long known from W. Glos. localities. See *Journ. Bot.*, 1911, p. 228.—H. J. RIDDELSDELL.

*Isatis tinctoria*, Linn. Orgin, Tewkesbury. Cultivated in garden at Haymesgarth, Cleeve Hill, near Cheltenham, N.E. Glos., 2nd July 1911.—CHARLES BAILEY.

*Rapistrum rugosum*, Berg. Par, Cornwall, July 1911.—G. CLARIDGE DRUCE. "Rather young, but one pouch may be seen on my example, showing that it is *R. rugosum* and not *R. orientale*."—J. A. WHELDON.

*Reseda* —? Railway siding, near Buildwas Station, Shropshire, July 1910. "If not a separate species, this *Reseda*, of which I was only able to obtain a very few specimens, is a very unusually slender and fruitful form of *R. lutea*, L. It looked remarkably different when growing."—J. COSMO MELVILL.



*Viola Riviniana*, Reich., var. *diversa*, Gregory. Newbattle, v.-c. 83, 23rd May 1911. "This seems to be much commoner than the type in this district, and seems to be spread over districts exhibiting varying edaphic conditions."—M<sup>r</sup> TAGGART COWAN, jun. "Agrees in all essential characters with the same var. gathered on Whinnie Brae, Selkirkshire, 23rd May 1910."—E. S. GREGORY.

*V. epipsila*, Ledeb., near Morton Hampstead, S. Devon. By a stream under the shade of *Alnus*, and sometimes on open moorland, 24th June 1911.—G. CLARIDGE DRUCE. "Also among sphagnum under *Alnus*, Killarney, Co. Kerry, August 1911. New to Ireland."—G. C. DRUCE. "Mr. Druce certainly found *V. epipsila* at Moreton, Hampstead, but I should judge the dried examples now sent to be intermediates (of which there are many) between *V. palustris* and *V. epipsila*. The examples from Killarney are excellent *V. epipsila*."—E. S. GREGORY.

*V. epipsila*, Led. [Ref. No. 4310.] Near Burghfield, Berks., July 1911, in an alder swamp among sphagnum, and on the borders of a trench dug through the bog, in shelter and partly shaded; a new county record.—G. CLARIDGE DRUCE. "Capital *V. epipsila*, Ledeb. Note the dense hairiness of petioles (a character not referred to by Ledebour) which accompanies all British and Irish specimens of *V. epipsila*. Ledebour remarks of the leaves, '*demum subglabrum*.'"—E. S. GREGORY.

*V. arvensis*, var. *Déséglisei* (Jord.). Waste place, by the railway station, Helsby, v.-c. 58, 19th May 1911.—W. HODGE. "Yes; but broader leaves than usual."—E. H. DRABBLE.

*Viola arvensis*, Murr., var. *agrestis* (Jord.). Cultivated ground, Shipbrook, near Northwich, v.-c. 58, August 1911.—W. HODGE. "Yes."—E. H. DRABBLE.

*Viola* —? On pebbles, Tweedside, Selkirkshire, v.-c. 79, 25th July 1911.—IDA M. HAYWARD. "This is a plant which has been submitted to me repeatedly. I have it under observation and am not yet prepared to give it a name."—E. H. DRABBLE.

*Polygala oxyptera*, Reichb. Sand-dunes, Fairhaven, W. Lancs., v.-c. 60, 8th June 1911.—J. A. WHELDON.

*Dianthus plumarius*, L. Old Walls, Fountains Abbey, near Ripon, N. Yorkshire, June–July 1911.—J. COSMO MELVILL.

*Saponaria Vaccaria*, L., alien. Docks near Fleetwood, W. Lancs., v.-c. 60, July 1904.—J. A. WHELDON.

*S. officinalis*, L., var. *puberula*, Wierzb. River Lune, between Caton and Halton, W. Lancs., v.-c. 60, Aug. 1900.—J. A. WHELDON.

*Silene maritima*, Withering, var. *parvifolia*, Druce. On the beach at Par, East Cornwall, v.-c. 1, 16th Sept. 1911. Vide *Journ. Bot.*, 1906, p. 30, and *Report* for 1906, p. 196. Although not quite so extreme as the plants from Mr. Druce's original locality at Looe Bar, West Cornwall, they agree very well with the description.—C. C. VIGURS. "If this represents Mr. Druce's plant, it is a form that is equally common with the type in N.E. and N.W. England. I have examples with much smaller and narrower leaves from Yorkshire, Westmorland, and Lancashire, some with solitary and others with more numerous flowers."—J. A. WHELDON. "Not identical with the plant from Looe Bar."—G. C. DRUCE.

*S. latifolia*, R. and B., var. *puberula* (Jord.). Hawthornden, v.-c. 83, 3rd July 1911.—M'TAGGART COWAN, jun. "Is this quite Jordan's plant? *Bab. Manual* (p. 55) describes calyx as downy; here it is glabrous, except on part of the teeth."—H. J. RIDDELSDELL. "Our midland plant has paler foliage, with almost hoary pubescence. Jordan names this *S. puberula* as a species. It appears better to call this by its earlier name, var. *hirsuta* (Gray), but it is by no means certain under what specific name it will have to be placed."—G. C. DRUCE. "This may come under Jordan's *S. puberula*; but it is by no means extreme."—EDWARD S. MARSHALL. "The ciliate leaf margins and crisped hair of the lower part of the stem are characters which Corbière quotes for Jordan's species, and these are well indicated in my specimen of Mr. Cowan's plant. But '*feuilles pubescentes*' is also given, which does not apply, and it is possible, as Mr. Druce suggests, that this is not identical with Jordan's plant."—J. A. WHELDON.

*S. noctiflora*, L. Cornfield on Milbury Heath, West Gloucester, June 1910.—JAS. W. WHITE.

*Sagina nodosa*, Fenzl., var. *moniliformis* (G. F. W. Meyer), Lange. Wet hollows among sand-dunes, near Freshfield, South Lancs. (59), 9th July and 16th September 1911.—W. G. TRAVIS. "Yes. See *New Phytologist*, 310, 1911, and *Report*, p. 14."—G. C. DRUCE.

*S. nivalis*, Fr. [Ref. No. 66.] Small hill north-east of Ben Lawers, v.-c. 88, 27th September 1910.—M'TAGGART COWAN, jun. "Excellent specimens."—E. S. M.

*S. maritima*, Don. Sand-dunes between Hall Road and Freshfield, South Lancs., v.-c. 59, 15th July 1911.—J. A. WHELDON. "Yes."—E. S. MARSHALL.

*S. procumbens*, L., var. *maritima* (Gren.). Sea wall, Fairhaven, W. Lancs., v.-c. 60, 18th June 1910. A very fleshy plant, with short internodes growing in dense cushions. The old plants have stout rhizomatous roots.—J. A. WHELDON. "Is this more than a form?"—G. C. DRUCE. "It is not a good variety, in my opinion, equal to such plants as *Lotus corniculatus*, var. *crassifolius*, *Urtica dioica*, var. *angustifolia*, and many other mere growth-forms which have names conferred upon them."—J. A. WHELDON. "It looks like a maritime form, or state, with short, perhaps rather fleshy upper leaves; but hardly worth varietal distinction, though it has a peculiar look."—ED. S. MARSHALL. "This is *Sagina maritima*, D. Don, var. *densa*, Aschers, in *Verhandl. Bot. Ver. Brandenburg*, iii. iv. p. 390 (1862). The tufts are much more compact than in the type, approaching in aspect thus to *S. procumbens*; and the ovary is somewhat stalked, which in the usual form of *S. maritima* is quite sessile. See *Lond. Cat.*, ed. 10, p. 10, n. 252d, but the correct authority for the variety is not given. You will find this variety figured in Jordan's *Obs. Fragm.*, iii. p. 49, t. 3, f. B."—F. N. WILLIAMS. "I think this is, as Mr. Wheldon surmises, a fleshy maritime form of *S. procumbens*. Whether it should bear the name var. *maritima*, Gren., seems doubtful. It should probably be called var. *littoralis*, Reichb. (*Fl. Germ. Exs.*, 794, 1832), the description of which—'*succosior mutica*'—though concise, seems correct for this Fairhaven plant. Gürke (*Pl. Europ.*, ii., f. 2., 245, 1899) quotes as synonyms for this var. *littoralis*, both  $\beta$  *maritima*, Fries. (though not of Salis.), and var. *crassifolia*, Nolte. I can find no mention of var. *maritima*, Gren., in his work, but Corbière (*Fl. Norm.*, 107, 1894) places *S. maritima*, G.G., as a form of *S. maritima*, Don. Apparently Mr. Wheldon's plant cannot come under the latter, on account of its more or less woody root (*i.e.* not annual), peduncles curved after flowering, stems rooting, etc."—C. E. SALMON.

*Spergularia rupestris*, Lebel. Cliffs near Southwell, Dorset, 21st August 1911. This plant has been called *S. Lebeliana* by Rouy in *Bull. Herb. Boiss.*, iii. p. 223, and bears that name in Rouy et Foucaud's *Fl. France*, 1896, p. 305.—C. E. SALMON.

*S. media* (Pers.), Presl., var. *glandulosa*, Druce. Salt-marsh near Preesall, West Lancs., v.-c. 60, June 1911.—J. A. WHELDON. "Yes; *S. marginata*, Kittel, var. *glandulosa*."—ED. S. MARSHALL. "Druce says of his var. 'stem and leaves strongly glandular,' but my examples of Mr. Wheldon's plant do not agree with such a description. The habit, peduncles, size of capsule, etc., all point to *S. media*, Pers. (= *S. marginata*, Kittel), but the interesting variation is that some of the seeds are scarcely, if at all, winged. I do not know Mr. Marshall's var. *aptera*, but the Preesall plant would seem a step in such a direction."—C. E. SALMON.

"Glandular examples of *Spergularia media* are not infrequent; cf. Willkomm and Lange (*Prod. fl. Hisp.*, iii. 166), but I think that is hardly sufficient to make a varietal distinction of the glandular plant."—F. N. WILLIAMS.

*Spergula sativa*, Boenn. Cultivated field near Langsett, Yorks., August 1911.—A. B. JACKSON and T. E. ROUTH. "Yes; less hairy than usual. *S. sativa* is the commoner form in the North Riding of Yorkshire, in my experience, although that does not seem to be the case in Lancashire."—J. A. WHELDON. "Right."—E. S. MARSHALL.

*Montia fontana*, Linn., var. *major*, All. Rapid-running stream, Yewdale, Coniston, N. Lancs., v.-c. 69, August 1911.—J. COMBER. "Not seen by me."—G. C. DRUCE.

*M. verna*, Neck., var. *major* (Allioni) = var. *rivularis* (Gmelin). Near Higher Nutworthy, S. Devon, v.-c. 3, 25th June 1911.—G. CLARIDGE DRUCE.

*Hypericum androsæmifolium*, Vill. [Ref. No. 324.] At the base of stones in rock garden, Underdown, Ledbury, v.-c. 36, 22nd June 1911. This plant appeared some ten years ago at the bottom of my rock garden, and also on some rough uncultivated land about a quarter of a mile away. It increases in the damper parts of my rock garden, liking to get its roots under the larger stones or among mossy Saxifrages; it seeds freely, and is established.—S. H. BICKHAM.

*Malva sylvestris*, Linn., var. *lasiocarpa*, Druce. Bank of the river Weaver, near Acton Bridge, Cheshire, v.-c. 58, July 1911.—WM. HODGE. "Yes."—G. C. DRUCE.

*Linum*, —? Waste ground, docks, Birkenhead, Cheshire, v.-c. 58, August 1909. In these plants the stems are numerous, capsules dehiscent, and the carpels ciliated internally. They are, therefore, not referable to *L. usitatissimum* (A.) *vulgare*, in which the capsules are indehiscent and the carpels glabrous internally. According to Dr. Heer's diagnosis of the forms of *L. usitatissimum*, quoted in *Journ. Bot.*, 1872, p. 87, my plants must come either under *L. crepitans*, Boenn., or *L. ambiguum*, Jord., in *Cat. Semin. Herb. Dijon*, 1848, p. 27; *Walp. Ann.*, ii. 114. *L. crepitans*, whilst described as having the capsules splitting open elastically and the carpels ciliated internally, is keyed under a group having the stem solitary and erect. *L. ambiguum* is described as having the roots annual or perennial, stems numerous, capsules .28 in. long, carpels slightly ciliated internally, seeds .16 in. long, shortly rostrate at apex, leaves all acuminate at apex. Nothing is said as to whether the capsules are dehiscent or not. This form of flax, which is not the

usual cultivated form, is frequently met with on rubbish about the banks of the canal at Aintree, near Liverpool, and Mr. Wheldon has already submitted it to the Club (see *Report* for 1892, p. 360). His specimens had the fruit too immature for satisfactory determination.—W. G. TRAVIS.

*Geranium sylvaticum*, L., under var. *Wanneri*, Brigue. [Ref. No. 2934.] Roots from Spittal of Glenshee, v.c. 89, E. Perth, 1906; cultivated at West Monkton, June and August 1911. Leaves of the type; inflorescence of the variety.—EDWARD S. MARSHALL.

*G. modestum*, Jord. Par, Cornwall, July 1911. I think this must be referred to this species. It has yellow anthers, and very small, almost zygomorphic flowers from the two upper petals being somewhat separated from the three lower ones. The plant nearly glabrous below.—G. CLARIDGE DRUCE.

*G. Robertianum*, L., var. *rubricaulis*, Hornem. [Ref. No. 4977.] See Willk. and Lange, *Prod. Fl. Hisp.*, iii. p. 531, "Plante multicaule, a rameaux nombreux, rouges ainsi que les feuilles." Near Sapperton Tunnel, Gloucestershire, July 1911.—G. CLARIDGE DRUCE.

*Erodium cicutarium*, L'Herit, var. —? Sand-dunes near North Berwick, v.c. 82, 4th June 1911.—M'TAGGART COWAN, jun. "Too young. All the forms which occur on the sandhills commence as 'rosette' plants, but the stems ultimately lengthen and the rosettes die away. These show no fruit, and indeed are hardly in flower. Some note as to marking of petals should be sent."—J. A. WHELDON. "Are these not seedling forms? perhaps of *micranthum*, Beck., but one would like to see more mature specimens."—G. C. DRUCE.

*Oxalis Acetosella*, L., var. *subpurpurascens* DC. Origin Hampden Woods, Bucks.; cult., Kimble Rectory Garden, Bucks., May 1911.—F. L. FOORD-KELCEY.

*Ononis repens*, L. forma. Sand-dunes, Hall Road, S. Lancs., v.c. 59, 15th July 1911. Agrees with *O. maritima*, Dum., in being glandular-villose and in the floral leaves falling short of the calyx. It is prostrate and stoloniferous, but quite espinose.—J. A. WHELDON. "This extremely hairy form is not uncommon on sand-dunes in Glamorgan, and between Folkstone and Hythe in Kent; cf. Hanbury and Marshall, *Fl. Kent*, p. 85. The present specimens are more compact than any I possess."—H. J. RIDDELSDELL. "This seems to be Rouy's *a inermis*, Lange, or, in other words, the type."—EDWARD S. MARSHALL. "May this not be the *O. repens*, var. *prostrata*, Bréb. (*Fl. Norm.*, 1880, p. 95)—'Pl. couchée, très-velue';

feuill courtes; fl. peu nombreuses'? My specimen is quite unarmed.—C. E. SALMON. "The later edition of *Fl. Normandie* (1894) reduces var. *prostrata*, Bréb., to a synonym of *O. maritima*, Dum."—J. A. W.

*O. spinosa*, L., var. In a field, Westbury-on-Severn, close to the river, 15th July 1911. Miss Tuckey of Newnham pointed this out to me. The points of difference from type are:—Stem taller and more branched; stem and main branches sometimes rather flexuose; stipules very large; leaves and leaflets smaller and narrower; flowers very few and smaller than in *O. spinosa*; calyx more conical, teeth longer, narrower, straighter (less sickle-shaped), and much more deeply veined. I should think it a very good variety. Fruit is desirable, and may give evidence of specific difference.—H. J. RIDDELSDELL. "Does not differ materially from our West Lancashire plant, which I suppose comes under *vulgaris*, Lange."—J. A. W. "Our usual British form apparently; I have plants exactly matching it from near Sandwich, E. Kent, and Little Eccleston, W. Lancs."—EDWARD S. MARSHALL.

*Medicago Falcata*, L. Gravel pit on Mardley Heath between Welwyn and Knebworth, 1st July 1911. No record in *Herts Flora* except Doody in Ray before 1706. W. Graveson reports from Ware brickfields.—J. E. LITTLE. "Yes; but I suppose only casual, as in other localities in Herts."—G. C. DRUCE.

*Trifolium pratense*, var. *americanum*, Harz, St. Fillans, Perthshire, W., v.-c. 87, 19th September 1911.—M. TAGGART COWAN, jun. "Yes."—G. C. DRUCE.

*Astragalus glycyphyllus*, L. Marl pit, Shefford, Southhill, Beds., 27th June 1911, and Brampton, near Northampton, August 1883.—J. E. LITTLE.

*Vicia*, —? [Ref. No. 4990.] Gardenweed, Oxford, July 1911.—G. C. DRUCE. "This is *V. amana*, Fisch., ex DC. Prod. ii, 355, an eastern species which has a curious history. In 1910 the Hon. Mrs Glyn went with me to Fyfield to see the *Lathyrus tuberosus*, which was in plenty; as I had not time to dig up a root I asked a cottager near to obtain a root for me. This I duly received and planted, but instead of the Fyfield Pea it proved to be this species. I must visit the spot again in order to see if there are others in the field. I do not think it is in cultivation."—G. C. DRUCE.

*Lathyrus sylvestris*, L. Roadside hedges, Polton and Shefford-Southhill, Beds., June 1911.—J. E. LITTLE. "The Polton plant is typical *L. sylvestris* but the Shefford specimen comes under the aggregate var. *platyphyllus*, Retz."—G. C. DRUCE.

*L. tuberosus*, L. In a rough field with *Genista tinctoria* and other native species, between woods, near Peppard, Oxfordshire, with Miss Ridley, to whom I am indebted for the knowledge of the occurrence of this interesting addition to our flora, July 1911. For an interesting paper on the occurrence of *L. tuberosus* in England, see a paper by Mr. Miller Christy (*Journ. Bot.*, 170, 1910), where his conclusions are, that it is an introduced and not a native plant. The Oxford habitat is a curious one, since there is only a large patch in the field which does not appear to have been under recent corn-culture, as is proved by the abundance of *Genista tinctoria*, yet the turf is not, I believe, the original turf of the downs. The field is in a sequestered part of the country between woodlands, and buck-wheat has been sown in the vicinity, but since the pea has been noticed. Perhaps at some distant date the turf was pared off, leaving the deep perennial root of the *Genista* in the soil. The pea is not in cultivation in the district.—G. CLARIDGE DRUCE.

*L. hirsutus*, L. Field near Billingshurst, 1st July 1911.—ALFRED WEBSTER.

*Rubus macrophyllus*, Wh. and N. (teste, W. M. R.), Elston Wood, W. Lancs., v.-c. 60, 2nd August 1902.—J. A. WHELDON. "Quite doubtful, I fear; I saw specimens of this species from Elston Wood, collected by Mr. Wheldon in 1902, but they were not like those now submitted. There seems to have been some mixture of material."—W. M. ROGERS. "Yes; these were labelled and then discarded, in 1902, on Mr. Rogers stating that they were mixed, and should have been destroyed. Will members who received the few examples distributed, kindly destroy them now?"—J. A. WHELDON.

*R. Lettii*, Rogers. Marshbrook, Salop, v.-c. 40, July 1909. Coll. A. LEY. In a hedge,  $1\frac{1}{4}$  miles from Marshbrook, on Plowden Road.—H. J. RIDDELSDELL. "Though this is not identical with my strongly-marked Irish type as described in *Journ. Bot.*, 1901, 381, Mr. Ley and I were agreed in thinking it not specifically distinct. We saw it in considerable quantity at Marshbrook (left bank of stream), and it seems linked with the type by other plants occurring on Wenlock Edge (Salop), Bolston Wood (Herefordshire), and Cwm Einon (Cardigan)."—W. M. R.

*R. anglosaxonicus*, Gelert, near var. *vestitifolius*, Rogers. Cowleigh Park, v.-c. 36, 9th August 1904; also hilly wood borders behind Underdown, Ledbury, v.-c. 36, 8th August 1904.—Coll. A. LEY; Com. H. J. RIDDELSDELL. "The Ledbury plant is rightly named, I believe, though the one sheet submitted to me is exceptionally weak and less glandular and aciculate than usual. I have seen the typical plant in great quantity in Firth Wood, Ledbury.

Perhaps 'near *vestitifomis*' for the Cowleigh plant (as on the label) is a safer determination than '*R. vestitifomis*, f. *umbrosa*,' which might be correct. The thin unfelted leaves and the strongly cordate terminal leaflet are certainly 'off type.' The panicle, however, is that of ordinary *vestitifomis*."—W. M. R.

*R. anglosaxonicus*, Gelert, var. *setulosus*, Rogers. Roadside near Lisvane, v.-c. 41, 21st July 1911. Mr. Rogers agrees to the name, and adds: "Many of the panicles exceptionally luxuriant." Also Mitcheldean Meend, v.-c. 34, 11th July 1911, "but leaflets with shorter points than usual," W. M. R.; and Dixton, v.-c. 35, 10th July 1911.—H. J. RIDDELSDELL. "Yes."—W. M. ROGERS.

*R. pallidus*, Wh. and N., var. *leptopetalus*, Rogers. Mitcheldean Meend, v.-c. 34, 11th July 1911.—H. J. RIDDELSDELL. "Yes."—W. M. ROGERS.

*R. rosaceus*, Wh. and N., var. *silvestris*, R. P. Murr. Eastham Wood, Cheshire, v.-c. 58, August 1911. Covers considerable tracts with its low trailing stems in shady woods, on both sides of the Mersey, and seems to maintain its characters as distinct from var. *hystrix*.—J. A. WHELDON. "Yes; just Mr. Murray's plant, which, however, I consider to be only a shade form of *R. hystrix*; so that I should prefer labelling this *R. rosaceus* (Wh. and N.), var. *hystrix* (Wh. and N.), f. *umbrosa*. See *Hbk. Brit. Rub.*, p. 80, 1st paragraph."—W. M. R.

*Rubus*, sp. The prevailing species in a small oak wood at Squiloer, Stiperstones, Salop, at about 1000 feet.—J. COSMO MELVILL. "Looks like a very slender shade form of *R. macrophylloides*, Génév. The plant is but poorly represented in my sheet. Better specimens might enable me to give a positive determination."—W. M. R.

*R. Kœhleri*, Wh. and N., var. *cognatus*, N.E. Br. Hedges, High Steep, Jervis Brook, E. Sussex, v.-c. 14, August 1911.—J. COMBER. "*R. dumetorum*, Wh. and N. Apparently somewhat intermediate between vars. *ferox* and *diversifolius*, though on the whole nearer to the latter. Only one sheet seen."—W. M. R.

*R. divexiramus*, P. J. Muell. Roadside, and Buckstone Wood, Staunton, great plenty, v.-c. 34, 22nd July 1911; also Wyaston Lays, Monmouth, v.-c. 35, 10th July 1911. Mr. Rogers agrees to my naming, and says: "A splendid lot of *divexiramus*! The leaves in 1911 were plainly far more frequently 5-nate than they were in 1892, when Ley showed it to me in same locality."—H. J. RIDDELSDELL. "Yes."—W. M. ROGERS.



*R. hirtus*, Waldst. et Kit., var. *rubiginosus*, P. J. Muell. Hedges, High Steep, Jervis Brook, E. Sussex, v.-c. 14, August 1911.—J. COMBER. "Certainly *R. Bloxamii*, Lees, though my sheet is not very characteristic, the stem-pieces especially being too scrappy."—W. M. R.

*Potentilla Anserina*, L., (*b*) *concolor*, Wallr. Abercorn, Linlithgow, v.-c. 84, 27th May 1911.—M'TAGGART COWAN, jun. "In my specimen the barren plant is concolorous, but the flowering one has some of the leaves green above and only sparingly hairy."—G. C. DRUCE. "Rouy treats this as the type; but I think that our usual British form is *discolor*, Wallr., which has the leaves green above."—EDWARD S. MARSHALL.

*P. verna*, L. Sent for comparison with those from Grassington in 1909. They have been prepared from plants grown in my garden at Shipley, originally from Bullen Bank, Ledbury, sent me by Mr. S. H. Bickham, June and July 1911.—JOHN CRYER. "Correct. In my garden dwarf specimens from the coast of Gower, Glamorgan, have become very luxuriant."—EDWARD S. MARSHALL.

*P. mixta*, Nolte = *P. procumbens* × *reptans*. Large quantity on and by cinder path leading by side of railway to Tidenham Station, v.-c. 34, 5th and 9th October 1911. Mr. Ley in 1910 came to the same conclusion as to this form.—H. J. RIDDELSDELL. "Gathered too late in the year; this hybrid (*P. procumbens* × *reptans*) is usually much larger, but the dry summer and autumn may account for this. Hardly pure *procumbens*, I think; though the evidence of *reptans* is not very clear, and the plant is remarkably glabrous."—EDWARD S. MARSHALL.

*Alchemilla vulgaris*, L. (*a*) Roadside near Crouch Green, Knebworth, 21st June 1911; (*b*) Box Wood, Stevenage; (*c*) Hitch Wood, 17th May 1911. All in Hertfordshire.—J. E. LITTLE. "These are *A. vulgaris*, var. *minor*, Huds. (*Fl. Angl.* ed. ii. 1778), *A. minor*, Huds. (*Fl. Angl.*, 1762) = *A. filicaulis*, Buser, forma *vestita*, Buser. I have a specimen collected by Miss Blake in Herts in 1820."—G. C. DRUCE. "*A. minor*, Huds., which seems to be generally distributed in the British Isles."—EDWARD S. MARSHALL. "Both of these sheets represent *A. minor*, Hudson. M. Buser some years ago claimed our small hairy British plant as his *A. filicaulis*, and I of course accepted his naming. But Mr. Harald Lindberg has shown that we have too readily given up Hudson's name. Our plant, with stems more or less pilose throughout, leaves hairy on both sides, petioles, pedicels and ovaries more or less strongly pilose, is *A. minor*, Huds. *A. filicaulis*, Buser, Mr. Lindberg places as a more glabrate variety under *A. minor*, with the stems glabrous

in the upper parts, petioles and leaves less hairy or even subglabrous, and the same with the pedicels, the ovaries bring slightly pilose."—E. F. LINTON.

*A. vulgaris*, L., var. *acutidens*, Buser. Ben Lawers, Mid Perth, August 1911. See *New Phyt.*, p. 312, 1911, and *Rep. B. E. C.*, p. 18, 1912.—G. CLARIDGE DRUCE. "Is this a new name for *A. alpestris* (Schmidt)? I do not see any material difference."—J. A. WHELDON. "This agrees very well with the figures and description in Harald Lindberg's *Die nordischen Alchemilla vulgaris Formen* (Helsingfors, 1909), of *A. acutidens*, Buser, Lindb. fil. ampl. Dr. Moss tells me that, on receiving a Ben Lawers specimen to figure, Mr. Hunneybun wrote that he had already drawn what seemed to be the same thing from material sent by me in 1905 from Inchroary, v.-c. 94, Banff, as *A. vulgaris*, var. *alpestris*, Schmidt; this is quite probable, as I did not then know anything about *A. acutidens*. H. Lindberg believes that *A. vulgaris*, L., was made up of these two closely allied plants (*alpestris* and *acutidens*), and that its identification with *A. pratensis*, Schmidt, is wrong. The Linnean Herbarium should be consulted; as, if he is right, the name *A. vulgaris*, L., will apparently replace either *A. alpestris*, Schmidt, or *A. acutidens*, Buser."—EDWARD S. MARSHALL. "I believe rightly named."—E. F. LINTON.

*Agrimonia odorata*, Mill. Roadside, Clovenfords, Selkirk, v.-c. 79, 26th December 1911. The commoner species in this neighbourhood, and widely distributed.—IDA M. HAYWARD. "Yes."—J. A. WHELDON and E. S. MARSHALL. "Yes; and I believe a new county record for 79 Selkirk."—G. C. DRUCE.

*Rosa arvensis*, Huds., var. *gallicoides*, Baker. Field by railway below Brampton Abbots, Ross, v.-c. 36, 6th July 1911.—H. J. RIDDELSDELL. "This comes under the type. The var. named has considerable glandular and acicular development on the stem and branches."—W. BARCLAY. "This fits the description of *R. gallicoides*, Déségl., except that the leaflets are no larger than in ordinary *R. arvensis*, at least on the flowering branches (I have no barren shoot); it may be rightly placed there. As Mr. Baker published the variety under *R. stylosa*, his name cannot stand, as is pointed out in *Journ. Bot.*, 1910, *Supplement*, p. 6."—EDWARD S. MARSHALL. "Quite correct for the plant intended, but Baker called it *R. stylosa*, var. *gallicoides*. It is, however, either a species (*R. gallicoides*, Déségl.), or more probably a hybrid between *R. arvensis* and *R. gallica*."—A. H. W.-D. "I believe Mr. Bagnall (*Fl. Warw.*, 105) named this form of *arvensis* as var. *setosa*. I see no evidence of *gallica* in these specimens."—G. C. DRUCE.

*R. arvensis*, Huds., var. *gallicoides* (Baker)? Near Caton, W. Lancs., v.-c. 60, August 1900. A large-flowered strong form, with large leaves, which comes near a plant from the Ribbles Valley, for which Mr. Rogers suggested this name some years ago.—J. A. WHELDON. "Comes under the type, not the variety."—W. BARCLAY. "In var. *gallicoides* the upper part of stem is very glandular. It is not so in these specimens."—H. J. R. "Glands on the pedicels very few. I do not see how this can be distinguished from the type."—EDWARD S. MARSHALL. "There is no trace of *R. gallica* in my specimen. See above as to nomenclature."—A. H. W.-D.

*Rosa* —? New Pound near Billingshurst, 26th August 1911.—ALFRED WEBSTER. "Some features, especially the long fruit and conical disk, look like *R. stylosa*, but perhaps it is only a form of *R. dumalis*, Bechst., with nearly glabrous styles and very elongated fruit. I should like to see further specimens gathered at an earlier stage."—W. BARCLAY.

*R. stylosa*, Desr., var. [Ref. No. 1392.] Field, Wallhope Farm, Tutshill, v.-c. 34, 27th September 1911. I think it must come under this species, though the stem was sometimes as green as that of *R. avensis*. Thorns not at all like *R. stylosa*.—H. J. RIDDELSDELL. "I don't think this is a *stylosa* form. In spite of a few hairs on the midrib, apparently deciduous, I should call it a form of *R. dumalis*, Bechst."—W. BARCLAY. "I doubt its belonging to the *stylosa* group, though the habit suggests this."—EDWARD S. MARSHALL. "Not *R. stylosa*, but apparently an aberrant form of that group, near *R. virginica*, from which it differs chiefly in its pubescent midribs. It is quite a different form from No. 1383, and both show how the group may sometimes approach the *Eu-caninae*."—A. H. W.-D.

*R. virginica*, Rip. Field side, Wallhope Farm, Tutshill, v.-c. 34, 7th and 9th October 1911. [Ref. No. 1383.] Agrees very well with description of Horsebridge plant referred to by W.-Dod under *R. virginica*.—H. J. RIDDELSDELL. "Towards *R. virginica*, but not characteristic. Most of the midribs are thinly villous, the leaflets are more or less biserrate, and the petioles are glandular, the last two features being very unusual in the group. I think it is at least as near *R. parvula*, Sauz. and Maill."—A. H. W.-D.

*R. rubelliflora*, Rip. [Ref. No. 34.] Open ground, Maldon, Surrey, 13th June 1911. Flowering examples to show the rich red flowers of this species.—C. E. BRITTON. "I see nothing in this but a form of *R. dumalis*, Bechst., with more highly coloured flowers than usual."—W. BARCLAY. "This agrees well with the short description given by Major Wolley-Dod in *Journ. Bot.*, 1910,

*Supplement*, p. 45."—EDWARD S. MARSHALL. "Gathered rather early for determination, but to judge from the colour of the flowers, and from what I can see of the other characters, I should say correct."—A. H. W.-D.

*R. canina* (*gr. dumalis*), *R. viridicata*, Puget. Hedge, Saintfield, Co. Down, 28th July 1911. I think this is the same plant for which Major Wolley-Dod suggested this name two years ago.—C. H. WADDELL. "A variation of *R. dumalis*, Bechst. I don't know anything of *R. viridicata*, Pug."—W. BARCLAY. "Seems to fit Major Wolley-Dod's diagnosis, *l.c.*"—EDWARD S. MARSHALL. "Yes; but approaching *R. biserrata*, Mér., in its strongly biserrate leaflets and roundish fruit, and indeed quite equally near that species."—A. H. W.-D.

*R.* —? [Ref. No. 9.] Near Toome, Co. Antrim, 18th August 1909.—C. H. WADDELL. "I should place this to an unusually strongly biserrate form of *R. viridicata*, Pug."—A. H. W.-D.

*R. Beatricis*, Burn. and Grem. [Ref. No. 102.] Open ground, Malden, Surrey. Flowers, 13th June 1911; fruit, 5th September 1911. "I send flowering and fruiting examples of the rose to which Major Wolley-Dod has applied the preceding name. It is abundant in the locality of Malden, and is noticeable by reason of its decided grey-green foliage. The leaflets are more or less folded, and the grey-green 'bloom' is readily removed from the surface by a touch of the finger. The corolla is blush at first but becomes white later. Major Wolley-Dod associates with this rose, under the same name, a more glandular plant with fine acicles on the flowering shoots, and marked also by broader and greener flat leaflets and deeper coloured flowers. I have found this latter form in several places by the Beverley Brook between Malden and Wimbledon Common, and I hesitate to follow Major Wolley-Dod in applying the name of *R. Beatricis* to this form, but think the affinities of this are with the *Rubiginosæ*."—C. E. BRITTON. "That *R. Beatricis*, a rose confined to the Maritime Alps, a district which, according to Dr. Christ, impresses the stamp of its peculiar climate upon all its roses, should be found in one or two isolated places in the south of England, is so utterly unlikely that it will require most convincing evidence to be believed. The plants sent seem to me to be best put under *R. vinacea*, Baker."—W. BARCLAY. "The flowering specimen is certainly the plant I refer to in my *List of British Roses*, p. 21; the fruiting piece sent with it is less satisfactory, and lacks the subfoliar glands; its petioles also are less uniformly densely glandular, and the leaflets somewhat less biserrate, but it may be a form of the same species. A second specimen, with the same reference number, but sent in fruit only, is more typical."—A. H. W.-D.

*R. canina*, var. *fallens* (?), Déséglise. Hedgerow (a rather tall straggling form), Davenham, N. Northwich, v.-c. 58, June 1911.—WM. HODGE. "This is *R. dumetorum*, Thuill, of the group *urbica*, Lem."—W. BARCLAY. "Not *R. fallens*, the leaflets having hairy midribs and veins beneath. It is too young to determine, but may be *R. trichoneura*, Rip., or *R. Gabrielis*, F. Ger."—A. H. W.-D.

*R. subcristata*, Baker. [Ref. No. 1380.] Bushy place at top of Banegar Rocks, summit of a steep wood above the Wye, Lancut, v.-c. 34, 6th October 1911.—H. J. RIDDELSDELL. "It is not var. *subcristata*, Baker. If a *glauca* form at all, it belongs to the *subcanina* group, but from the specimen it is impossible to say whether that or a glaucous form of var. *dumalis*, Bechst."—W. BARCLAY. "Sepals mostly caducous; those remaining are loosely reflexed or subpatent. Styles slightly hairy, not villous. I think that this belongs to the *biserrata* or *dumalis* group of *R. canina*, rather than to *R. glauca*."—EDWARD S. MARSHALL. "Not one of the *Glauca* group, but one of the *Dumales*, like a strongly biserrate *R. viridicata*, Pug."—A. H. W.-D.

*R. dumetorum*, Thuill, var. *concinna* (Baker). [Ref. No. 1391.] Hill of Eton, Brampton Abbots, Ross, v.-c. 36, 5th July 1911.—H. J. RIDDELSDELL. "I have not seen specimens of Baker's var., but if the view be correct that it is really a variety of *R. obtusifolia*, Desv., with hispid peduncles, I doubt if this specimen can be brought under it. This seems from the shape and clothing of the leaflets, and above all from the deep, narrow, irregular and often incurved leaf teeth, as well as from the sepals, to be indeed a var., *R. dumetorum*, Thuill, of the Déséglisei group rather than a var. of *obtusifolia*."—W. BARCLAY. "This agrees with the description of var. *concinna*, but has not the very broad, almost orbicular leaflets of the type of that variety in Borrer's herbarium at Kew. It is at least equally near *R. incerta*, Déség., to which I think it had better be referred. Var. *concinna* is exactly *R. obtusifolia*, Desf., with glandular peduncles."—A. H. W.-D.

*R. caryophyllacea*, Christ. [Ref. Nos., flowers, 4821; fruit, 2782.] Ashton, Northants, June 1911 and September 1910.—G. C. DRUCE. "This naming is no doubt founded on a misunderstood determination of Dr. Dingler with regard to a similar plant from Catsworth, Hants. Dr. Dingler separates one variety of Christ's species, var. *Friesiana*, from that species, and along with a number of closely allied forms found along with it in Rhenish Bavaria, near Gründstadt, makes it a new variety of *R. tomentella*, Lem., which he provisionally calls var. *anonyma*. It was to this var. *anonyma* that he joined the Catsworth plants. To follow his opinion, then, the present plant should be called *R. tomentella*, var. *anonyma*. I quite agree that it is a form of *R. tomentella*, but I think further observa-

tion and study is needed before deciding that it comes under Dr. Dingler's var. *anonyma*. In any case it has no connection with the true *R. caryophyllacea*, which is a mountain rose closely allied to *R. glauca* and *R. coriifolia*, and confined to the Lower Engadine and Western Tyrol."—W. BARCLAY. "Quite correct."—A. H. W.-D. "I quite agree with Mr. Barclay, and utterly distrust its identification with *R. caryophyllacea*, as I have already told my friend Major Wolley-Dod. The rose is quite a distinct form. M. Sudre had at one time named it *R. rubiginosa*, var *Montini*, and afterwards as *R. permixta*. It has no odour of sweet brier, but has the resinous scent of *mollissima*. I believe it to be a distinct race of the *R. Borreri* group which requires a name. The Hon. N. Charles Rothschild is cultivating it at Ashton, where it is not uncommon."—G. C. DRUCE.

*R. tomentosa*, Sm. (a) St. Ippollitts, Herts, 18th June 1911; (b) hedges Royston, Herts, 15th June 1911.—J. E. LITTLE. "I can only say from the specimen that it is a variation of *R. tomentosa*, Sm. (Agg)."—W. BARCLAY. "Both specimens are, I fear, too small and too young to judge from."—A. H. W.-D.

*R. tomentosa*, Sm. [Ref. No. 10.] Near railway station, Saintfield, Co. Down, 20th July 1911.—C. H. WADDELL. "I think a member of the *Tomentosæ* in spite of subpersistent sepals. I should label it *R. pseudocuspidata*, Crép."—A. H. W.-D.

*R. tomentosa*, Sm., *forma* (?) [Ref. No. 12.] Saintfield, Co. Down, 13th August 1909.—C. H. WADDELL. "Apparently a form of *R. tomentosa*, Sm., but my specimen is hardly sufficient to judge from."—A. H. W.-D.

*R. tomentosa*, Sm., *forma* (?) [Ref. No. 11.] Saintfield, Co. Down, 28th July 1911.—C. H. WADDELL. "Not of that group at all, but *R. subcristata*, Baker, with occasional subfoliar glands on the primary nerves, thus showing an approach to *R. stephanocarpa*, Déségl. and Rip."—A. H. W.-D.

*R. Jundzilliana*, Baker. [Ref. No. 1362.] Hedge by Limestone Road, above Lancut, v.-c. 34, 26th and 28th September 1911. Seen only in fruit; tall, climbing. I think the plant is as above named, or else *R. fetida*, Bast.—H. J. R. RIDDELSDELL. "I know nothing of *R. Jundzilliana*, Baker, a variety which Baker himself dropped, and which probably should not be resuscitated. This specimen appears to me closely allied to *R. sylvestris*, Woods, and might be placed under that name. The shoot of the year in May forms has very large leaves and often abnormal prickles, and should

not as a rule be gathered."—W. BARCLAY. "Not *R. Jundzilliana*, Baker, which is very much larger and stouter, and has glabrous styles. I think it is *R. pseudocuspidata*, Crép."—A. H. W.-D.

*Rosa*. Linton Ridge, v.-c. 36, September 1907, and 27th June 1908.—Coll. A. LEY; Comm. H. J. RIDDELSDELL. "To give a properly founded opinion on this rose more or better specimens are needed. Apparently it is a form of *R. tomentosa*, Sm., of the group to which *scabriuscula*, *sylvestris*, etc., belong, but it has one or two rather strange features."—W. BARCLAY. "One of the sub-group *Tomentosa*, but with very peculiar fruit, and for which I can give no definite name."—A. H. W.-D.

*R. omissa*, Déségl. By side of river Neath, at Aberpergwm, v.-c. 14, 23rd June 1911. Fruit on 30th or 31st August. [Ref. No. 1351.] —H. J. RIDDELSDELL. "This seems to me to be a form of *R. mollis*, Sm."—W. BARCLAY. "I see nothing to keep this from *R. mollis*, from considerably further south than I have seen it before. The sepals do not seem to be quite persistent, but all the other characters point to it. The habit of the plant should be conclusive; this cannot be seen in dried specimens."—A. H. W.-D.

*R. pseudocuspidata*, Crépin. [Ref. No. 1369.] In a field on Wallhope Farm, Tutshill, v.-c. 34, 28th September 1911.—H. J. RIDDELSDELL. "Is *R. tomentosa*, Sm., var. of the *Omissa* group."—W. BARCLAY. "If this is really referable to the sub-group *Tomentosa* it is correctly labelled, but I should say that the persistent sepals and the very short peduncles indicate the *Omissa* group. It seems very near *R. omissa*, Déségl."—A. H. W.-D.

*R. omissa*, Déségl. Field about 650 feet above sea-level, Pencaderain Farm, Pontneathvaughan, v.-c. 41, 28th June 1911. [Ref. No. 1355.] I think the gathering is homogeneous.—H. J. RIDDELSDELL. "Is *R. tomentosa*, Sm., of group *Omissa*, Déségl."—W. BARCLAY. "Too young to determine for certain. I doubt its being *R. omissa*, though its habit resembles that group."—A. H. W.-D.

*R. mollis*, Sm. (?) On the sandy heath by the racecourse, Ayton Moor, near Scarborough, E. Yorks., 12th August 1911.—W. HODGE. "This small-fruited form is frequent about Scarboro'. Similar plants collected in Cayton Bay were referred to *R. mollis*, Sm., for me by Messrs. Christ, Nicholson, and Baker many years ago. It seems quite a different plant from the *R. mollis*, Sm., of the Lancashire hills."—J. A. W. "*R. mollis*, Sm., with many subfoliar glands and rather small fruit."—W. BARCLAY. "Yes; certainly the form with subfoliar glands."—A. H. W.-D.

*R. pomifera*, Herrm. (?) Daren y Cwm, Brecon, v.-c. 42, 17th September 1907.—A. LEY. "From a lofty mountain cliff."—Comm. H. J. RIDDELSDELL. "This is very different from cultivated *R. pomifera*."—J. A. W. "It is certainly not *R. pomifera*, Herrm. Apparently a form of *R. mollis*, Sm., but the specimen is so poor that I have no certainty."—W. BARCLAY. "Not *R. pomifera*, Herrm., though perhaps *R. Grenierii*, Déségl., to which some of Ley's gatherings from this county have been referred by foreign critics. I see nothing to take it from *R. mollis*, but have not found very definite characters by which to separate *R. Grenierii* from that species."—A. H. W.-D. "Almost all Mr. Ley's *pomifera* seem to me wrongly named."—G. C. DRUCE.

*R. spinosissima* (Agg.) × *dumetorum* (Agg.) or *coriifolia* (?) (Agg.), f. *Margerisoni*, f. nov. Wolley Dod, *List of British Roses*, p. 9, 1911 (on p. 51 it is put under *R. pimpinellifolia*). Under the above somewhat lengthy name Major Wolley-Dod put the hybrid rose found by our member Mr. Margerison in Knipe Wood, Kettlewell, York, N.W., 65. These specimens were sent me in October by Mr. Margerison, but the dry weather sadly withered them in their journey here; members, however, may be glad to have them until better ones can be obtained. In the arrangement adopted in my *List* the above rose would appear as × *Rosa involuta*, Sm., var. *m. Margerisoni* (Wolley-Dod), a somewhat less cumbersome and perhaps more consistent name, for this super-*spinosissima* hybrid.—G. CLARIDGE DRUCE. "Mr. Margerison, the discoverer of this plant, kindly sent me a root and I have therefore had it in cultivation for two years. To Major Wolley-Dod's description (*List of British Roses*, p. 9) I would add that the leaflets are at first thinly hairy on both surfaces, but the upper surface soon becomes bare and the hairs on the under surface persist only on the midrib; the sepals are quite persistent and do not disarticulate; the fruit is not orange red, as the Major says, but of a clear bright red which gradually becomes of a darker shade. The plant sets fruit much more freely than most *spinosissima* hybrids, and these fruits contain up to about six or seven more or less well-developed achenes, about a fourth of what a *spinosissima* fruit contains. It leans so much to the side of *R. spinosissima* that it is difficult to say what the second parent may be. But from the shape of the leaflets, which are, moreover, uniformly blunt at the point, from the slender subulate prickles, though many of the larger are somewhat strongly bent, and also from the fact that the sepals do not at any stage disarticulate, I am of opinion that it is an involuta form, i.e. *R. spinosissima* × *tomentosa* (Agg.). In all known *hibernica* forms I believe that the sepals, though they may persist for a considerable time, are finally deciduous. But I admit that the problem of the second parent is a difficult one."—W. BARCLAY. "My material is rather scanty; but this seems to be a good form of *R.*



*hibernica*, Templeton. It differs from the Co. Down plant in the more coriaceous foliage, with prominent nerves beneath; in both the pubescence is almost confined to the petioles and midrib, and the styles are densely woolly. I think that they are more likely hybrids of a *R. coriifolia* than of a *R. dumetorum* form with *R. spinosissima*.—EDWARD S. MARSHALL. "Quite correct; but it is hoped that better dried specimens may be distributed next year."—A. H. W.-D.

*R. Wilsoni*, Borrer. (*R. involuta*, Sm., var. *Wilsoni*). From the original station on the banks of the Menai Straits, Carnarvonshire side. Collected by the late Mr. Thomas Rogers of Manchester, June and July 1886.—J. COSMO MELVILL. "In these fine specimens the leaves are not so far removed either in shape or size from the ordinary forms of this hybrid as one would suppose who had seen other specimens of this plant with large, cordate elongate leaflets. No doubt here also are many leaflets with the characteristic shape of *R. Wilsoni*, but there are also many which do not differ materially from the more usual form. To me this is *R. pimpinellifolia* × *spinosissima*, with, except in its leaves, more of the latter than of the former parent."—W. BARCLAY. "Quite correct."—A. H. W.-D.

*Pyrus Malus*, L., var. Near old shed, Neddfechan Glen, v.-c. 41, 20th June 1911. Leaves narrow, long pointed, base more cuneate, with longish petioles, strongly crenate, serrate, occasionally biserrate. No flower or fruit seen. The form is not, I think, due to hedge-clipping.—H. J. RIDDELSDELL. "An interesting form which it would be worth while to collect in flower and young fruit."—G. C. DRUCE. "Foliage only; leaves glabrous but for some long hairs on the petioles, mostly oval, the upper ones lanceolate, remarkably cuspidate. I can suggest no name."—EDWARD S. MARSHALL.

*P. latifolia*, Syme. Oxford Botanical Garden, October 1911. "I am sending this to see if experts agree as to the above name."—G. CLARIDGE DRUCE. "Correct. Just like my *E. Ross* plant named *Sorbus latifolia* by Hedland."—EDWARD S. MARSHALL.

*Crataegus monogyna*, Jacq., var. *glabrata*, Sond. Newbattle, v.-c. 83, 22nd May 1911.—M<sup>rs</sup> TAGGART COWAN, jun.

*C. Oxyacantha*, Linn., var. *aurea*, Hort. Tweedside, near Galashiels, Selkirk, v.-c. 79, 29th September 1911. "Flowers white, tinged with pink. Berries ranging from lemon to crimson; this year they were specially fine and abundant. This is the only tree in the district. Mr. Druce tells me that this variety grows true

from seed."—I. M. HAYWARD. "Yes; *C. monogyna*, Jacq., var. *aurea* (Hort.). I named this for Miss Hayward. It is described in Loudon's *Arboretum*."—G. C. DRUCE.

*C. monogyna*, Jacq., var. On the bank of a mountain torrent, at 700 feet, Rhigos, v.-c. 41, 19th and 22nd June 1911. Foliage light yellowish-green, very pale beneath; peduncles on younger twigs long, base of leaf wedge-shaped. I suppose only one of the more marked forms of this species, not worth a name.—H. J. RIDDELSDELL. "I think this comes under my *C. monogyna*, var. *cuneata*."—G. C. DRUCE.

*C. monogyna*, Jacq., var. *splendens*, Druce. Henfield Common, Sussex, 20th Sept. 1911. Mr. Druce says of it: "I think, although not extreme, it must go to var. *splendens*."—ALFRED WEBSTER. "Yes; this is the plant, or very near it, which I have named *C. Oxyacantha*, var. *splendens* = *C. monogyna*, var. *splendens*."—G. C. DRUCE.

*Saxifraga decipiens*, Ehrh., auct. (? *S. rosacea*, Moench). [Ref. No. 3670.] Originally from the Snowdon range (probably Tŵll Du), v.-c. 49, Carnarvon. Grown at West Monkton, 24th April and 6th June 1911. This was sent to me a few years ago by Mr. S. H. Bickham, who received the wild plant from a Snowdon guide named Williams, under the name of *S. caespitosa*, L. As Professor Bayley Balfour pointed out, when I forwarded him a root to grow, this cannot stand; it is what he knows as "hairy *decipiens*," and the same as Mr. Lloyd Praeger's plant from Clare Island, W. Mayo. Undoubtedly it is also the plant described by Smith as *S. palmata*, which he afterwards identified with *S. decipiens*, Ehrh., but the *English Botany* figure, though quite good upon the whole, has the leaves drawn too acute. I have not yet had an opportunity of independently studying the synonymy; at present it seems best to retain the name which is in general use, especially as Engler did so in his *Monograph*.—EDWARD S. MARSHALL.

*S. hirta*, Donn, also of D. Don, and of Smith and Syme, *English Botany*. Brandon Mountain, S. Kerry, June 14th, 1911. [Ref. Nos. 3658, 3656.] This is the prevailing "mossy" Saxifrage of the mountain; ranging from about 2000 feet to the summit (3140 feet), and varying a good deal. It has recently been combined by British botanists with *S. decipiens*, Ehrh. (or *S. rosacea*, Moench), but it is not identical with the Carnarvon and Clare Island *decipiens* (*S. palmata*, Smith, *Engl. Bot.*), either in the wild condition or when cultivated, and I think that it deserves specific rank. Engler makes it a synonym of *S. Sternbergii*, Willd.; but the plant of Black Head and the Aran Isles which has been named *S. Sternbergii* is

not the same thing, and maintains its difference under cultivation. D. Don quotes it as of Donn [*Hort.*] *Cat.*, 5th ed., 107, in the *Transactions of the Linnean Society* for 1821, p. 421. I have seen specimens from other Kerry stations (e.g. MacGillicuddy's Reeks), and from the Galtees, Co. Tipperary.—EDWARD S. MARSHALL. "I have cultivated this plant, which I gathered on Brandon Mt., and believe it to be a distinct species."—G. C. DRUCE.

*Saxifraga hirsuta*, L. [Ref. No. 3647.] Cliffs above Lough Doon, Connor Hill, S. Kerry, 19th June 1911. In *Species Plantarum*, 2nd ed., p. 574, Linnæus described this as "*foliis cordato-ovalibus retusis cartilagineo-crenatis*"; and his herbarium specimens have decidedly blunter and more crenate leaves, with broader (whitish) membranous edges, than those of the usual Irish plant, which this gathering quite well represents. *S. hirsuta* has been thought by some to be a hybrid between *S. Geum* and *S. umbrosa*, but I can see no trace of the latter species in any Irish *hirsuta*; and the Kerry *S. Geum* × *umbrosa*, while it varies considerably, is always a very different plant.—EDWARD S. MARSHALL.

*Chrysosplenium alternifolium*, L. Riever Wood, Berkshire, April 1911. Col. C. P. HURST. A new county record, and a most interesting addition to the *Berkshire Flora*. The wood is on the slopes of the chalk escarpment, and the elevation is probably over 750 feet.—Communicated by G. CLARIDGE DRUCE.

*Callitriche stagnalis*, Scop., *forma*. In ditches on a recently reclaimed salt-marsh, North of Southport, v.-c. 59, 14th June 1911. This form has smaller fruits, with a narrower and blunter margin than in var. *platycarpa*, especially when fresh. Is it var. *serpyllifolia*, Lönnr.?—J. A. WHELDON. "The leaves are towards Lönnroth's *serpyllifolia*, but his plant is a neater plant, with rounder leaves, etc."—A. BENNETT. "I cannot separate this from type. Var. *serpyllifolia*, Lönnr., is a more lax creeping plant, with smaller leaves, which occurs on muddy ground, periodically inundated. According to Rouy (*Fl. de France*, vol. xii. p. 184, *C. platycarpa*) Kuetz does not differ from type in the fruit-character, but only in its foliage; the lower leaves being linear or linear-spathulate, the upper oblong or oval."—EDWARD S. MARSHALL. "A characteristic tufted form of *C. stagnalis* as it occurs on mud and in shallow water. It does not agree with Lönnroth's var. *serpyllifolia*, which, however, that author apparently regarded merely as a state due to habitat; see *Bot. Notiser*, 1867, p. 3."—H. and J. GROVES.

*C. stagnalis*, Scop. [Ref. No. 4717.] Merton, Oxon., July 1911. A form growing on the muddy margin of a pond.—G. CLARIDGE DRUCE. "Correct."—A. BENNETT. "Mr. Druce does

not specify the particulars which distinguish this as 'a form.' I find the long styles to remain remarkably erect until the fruit is nearly ripe; indeed, on my sheet of about a dozen stems, all well fruited, I could not find a single reflexed style, although in one or two old fruits they had disappeared. In spite of this, all other characters indicate *C. stagnalis*."—J. A. WHELDON. "Right."—E. S. MARSHALL. "Yes."—H. and J. GROVES.

*Epilobium parviflorum*, Schreb., *forma*. Freshfield, South Lancs., (59), July 1911. This distinct-looking form, which may be called "*forma aprica, strictifolia*," occurs in fair quantity in wet hollows among the dunes. Its characters seem very constant in all the plants seen.—W. G. TRAVIS. "Yes."—E. S. MARSHALL.

*E. roseum*, Schreber. Brookside, Farthinghoe, Northamptonshire. Growing with and hybridising with *E. parviflorum*. A new county record which I have been long searching for.—G. CLARIDGE DRUCE. "Yes."—E. S. MARSHALL.

*E. lanceolatum* × *montanum*. Orig., Dixon, close to Monmouth, v.-c. 35; cult., Llandaff; 14th July 1911. I first saw these four plants in June 1910, in a garden, with no *lanceolatum* near that I could see. Mr. Ley agreed as to their likeness to *lanceolatum*, so I took them and grew them on. Leaves more pendulous than in *montanum*; flowers small for the latter.—H. J. RIDDELSDELL. "I believe that these are rightly named, though the hybrid is usually broader-leaved. At first sight the specimens suggest *E. lanceolatum* × *obscurum*; but the stem is quite terete, without decurrent lines."—EDWARD S. MARSHALL.

*E. palustre*, L. (?), f. *lavandulæfolia*. In grass on damp moory hillside, Caerphilly Common, v.-c. 41, 20th July 1911.—H. J. RIDDELSDELL. "A rather narrow-leaved form; but not var. *lavandulæfolia*, Lecoq and Lamotte."—EDWARD S. MARSHALL.

*Circæa alpina*, L. Origin, Ardrasar, Skye, June 1905; cult., Stansteadbury, Herts, 1911.—MISS ALICE TROWER.

*Mesembryanthemum edule*, Linn. East Pentire, Newquay, West Cornwall, July (flowers) and September (fruits) 1911. Coll. et comm. C. C. VIGURS. Frequently cultivated on walls, etc., and becoming rapidly established in and round Newquay. It is probably the same species that is also established at the Lizard, Loe Pool, Marazon, etc. Here the flowers are always pink; in the other places yellow-flowered plants are also found. It forms large dense evergreen patches of very many interlacing leafy branches, growing very rapidly (3-6 feet a year), sometimes hanging down a cliff 40 feet

or so, the branches having very little tendency towards rooting at the nodes, though cuttings "take" freely. The specimens give but a poor idea of the plant; but they are very difficult to prepare. The leaves are nearly equally triquetrous, the surfaces flat or slightly convex, each about 8·10 mm. wide and never exceeding "6 lines." Frequently one lower side and the upper surface are of equal width and flat, the other side slightly convex and somewhat wider. The upper surface is usually incurved towards the stem; the leaf is also often curved laterally, so that one of the two upper edges is frequently much more convex than the other, which may be straight, or even concave. The upper surface narrows gradually to the acute apex; the keel, after being nearly straight for four-fifths or more of its length, suddenly curves upwards to join the apex, this portion being hardened and usually coloured purple in a very narrow line, and finely and irregularly serrated. The leaves do not persist through the winter; but new branches are continually growing, so that the plant is always green. The number of calyx-segments is usually five, but often only four; two of these are always much longer than the others, but no two of equal length. There are about 14-16 cells in the capsule, and the seeds are "innumerable." Several of the foreign botanists during the botanical excursion at the Lizard last August positively named it *M. acinaciforme*.—C. C. VIGURS. "Under the name of *M. æquilaterale*, Haw., this plant is stated in Davey's *Fl. Cornwall* to grow luxuriantly on old hedges and banks, and in the Lizard district to have attained to the distinction of a local name, *i.e.* Sally-my-handsome. In Don's edition of Miller's *Gardener's Dictionary*, 1834, *M. edule* is said to have yellow flowers, and to rarely flower in gardens. All the other species of the group have reddish flowers. The capsule is said to be 5-celled. Mr. Vigurs' plant seems to be more at home under *M. acinaciforme*, L., and many botanists would regard the flowers of the specimens submitted to the Club as 'bracteate.'"—J. A. W. "The name of the *Mesembryanthemum* which is naturalised in Cornwall is scarcely as yet determined. It has been referred to *M. edule* in my *List* and to *M. æquilaterale*, Haworth, but Prof. Schröter and Prof. Graebner were induced to refer it to *M. acinaciforme*, L. See *New Phyt.*, 1911."—G. C. DRUCE.

*Astrantia major*, L. Stoke Wood, above Stokesay, Salop, June 1911. It is considerably increasing its area in the above locality where I traced it, in company with Mr. W. R. Price, this summer, to a distance of over 150 yards; it does not, however, penetrate far into the wood itself, but keeps to the border alone as much as possible, and has every appearance of a true native. No houses or cottages are anywhere near. I sent a few examples to the Club two or three years ago, and am glad now to be able to supplement them.—J. COSMO MELVILL.

*Bupleurum tenuissimum*, L. Salt-marsh, Pauli Holme, E. Yorks., v.-c. 61, September 1898.—C. WATERFALL.

*Apium Moorei* (Syme), Renishaw Canal, Derbyshire, October 1911. See *Fl. Derby*, p. 158, and *Rep. Bot. Exchg. Club*, 548, 1897. In that *Report* (with Mr. E. C. Baker) I felt inclined to refer the land-form which was sent, and which Mr. Linton says is the only one which occurred, to *Apium nodiflorum*, but subsequently having seen the Irish *Moorei*, consider it to be identical with the latter plant. Dr. Hugo Glück this year had been gathering the Irish plant, so I took him to see the Renishaw form, the specimens distributed being the aquatic form, which grew there rather sparingly. I believe it to be a distinct species from either *nodiflorum* or *inundatum* (under which it is placed in my *List*). Both the aquatic and the terrestrial forms offer substantial differences from either of the two other species.—G. CLARIDGE DRUCE. "The specimens collected in October are without inflorescence. This was sent to the Club from the same station in 1897, by Rev. W. R. Linton, who remarks, in his *Flora of Derbyshire*, p. 159 (1903), that 'a form [*Apium inundatum*] occurs near Renishaw on the edge of the canal, with many aerial leaves and no submersed ones.' Mr. E. C. Baker suggested *A. nodiflorum*, var. *repens*; Mr. Druce wrote:—'In facies it is very like (although smaller) *A. inundatum*, var. *Moorei*, which I have from Ireland through the kindness of Mr. S. A. Stewart. Herr Freyn considers it to be *A. inundatum*' (*Report* for 1907, p. 548). Last October Professor Hugo Glück, who had just gathered it at Renishaw with Mr. Druce, named my sheet as var. *Moorei*; but I still think that it is a *nodiflorum* variety, or state. See also Syme, *Eng. Bot.*, 3rd edition, vol. iv. p. 102-3)."—EDWARD S. MARSHALL.

*Carum Bulbocastanum*, Koch. Cultivated fields near Bygrave, 17th June 1911, and Wilbury Hill, Hitchin, 25th June 1911, Hertfordshire.—J. E. LITTLE.

*Pimpinella Saxifraga*, L., var. Comm. J. R. SHEPHERD. From Glynneth and (thicket in) Caswell Bay, v.-c. 41, July 1911. I was under the impression at first that this might be *P. major* and a new record for v.-c. 41. But it is certainly *P. Saxifraga*. Mr. Ley, early in 1911, showed me very similar intermediate forms (gathered, I believe, in Northants) in 1910, and we could not come to a conclusion then as to the species under which they should be placed. The living specimens sent me, and now distributed, are remarkable for their size and luxuriance, and for the likeness of their base-leaves to those of *P. major*, especially in the frequent three-lobed terminal leaflet. Style always very short in flower, lengthening in fruit, and sometimes equalling the young fruit, sometimes shorter. The upper leaves are those of *P. Saxifraga*; stem sometimes shows an approach

to that of *P. major*. It is clearly intermediate between the two species, but not a hybrid. (The influence of surrounding herbage is visible in the lengthening of some of the specimens, but this does not, of course, account for the peculiarities of the form.)—H. J. RIDDELSDELL. "I fail to see how this differs from the usual state of the species."—A. BENNETT. "*P. Saxifraga*, L. An unusually robust form."—J. A. WHELDON. "Is this not the var. *major*, Koch, which appears to be little more than a luxuriant form of the var. *poterifolia*, Wallr.? I see no suggestion of *P. major*, Huds."—G. C. DRUCE. "This appears to be a large and not uncommon form of the type, the *a major*, Koch (*Synopsis*, 2nd ed., ii. p. 316, 'foliolis ovatis, in foliis caulinis sæpe dissectis.' I have specimens collected in Surrey and West Sutherland; and there is a root from Somerset in my garden."—EDWARD S. MARSHALL.

*Chaerophyllum aureum*, L. Banks of the Teith, Callander, N. Perth, August 1911. The general opinion of the foreign members of the International Phyto-Geographical Excursion who saw it, was that it appeared to be a native species; but to me at present the localised distribution seems to suggest that it is an introduced species. I am sorry the specimens are so bad, but the plants were gone over, and the "strike" caused the parcels containing them to be delayed in delivery.—G. CLARIDGE DRUCE.

*Galium verum*, Linn., var. *maritimum*, DC. (?) Sand-dunes, Formby, South Lancs. (59), 30th July 1911.—W. G. TRAVIS. "Rightly named, I think; var. *littorale*, Bréb., seems to be identical. Whether it is more than a *state* due to the situation remains to be proved."—EDWARD S. MARSHALL.

*Galium palustre*, L., var. *lanceolatum*, Uechtritz in *Flora v.* 440, 1822 = *G. palustre*, L., var. *elongatum*, Syme, non Presl (which has "caule erecto elongato tetragono lævissimo") = *G. maximum*, Moris, *Stirp. Sard.*, 55, 1827. These specimens have asperities on the stem. [Ref. No. 4221.] Otmoor, Oxfordshire. Wet ditches or Oxford clay, July 1911.—G. CLARIDGE DRUCE. "A rather weak state of what we have been calling *G. palustre*, var. *elongatum* (Presl); it is markedly different from the type, and I think that it deserves to rank as a sub-species. Just the figure 1857 of *English Botany*! No doubt Mr. Druce is right in naming it var. *lanceolatum*, Uechtr.; it also agrees with the description of var. *ε Morisianum*, Rouy, *Fl. de France*, viii. 43, for which *G. maximum*, Moris, *Stirp. Sard.*, and *G. elongatum*, Gren. and Godr. (*pro parte*) are given as synonyms. I have a sheet from ditches near Preston, E. Kent, which is stronger, with stout, shining, decidedly square stems, smoother at the angles and thickened at the nodes; this approaches the description of Presl's *G. elongatum*, though it is not typical. In his general account

of *G. palustre*, L. (*E.B.*, 3rd ed., vol. iv. p. 221) Syme says that the stems are 'smooth or rough at the angles'; so the difference may perhaps be only one of degree."—EDWARD S. MARSHALL.

*G. tricornis*, Stokes. Near Langley and Ashwell, Herts, June 1911. Does this hybridise with *G. Aparine*?—J. E. LITTLE. "*G. tricornis*."—E. S. MARSHALL. "Correct; but I have never seen a hybrid with *Aparine*."—G. C. DRUCE.

*Valerianella olitoria*, Poll., var. *lasiocarpa*, Reichb. Sand-dunes, Frestfield, South Lancs., v.-c. 59, 1st May 1910.—W. G. TRAVIS. "The fruit on my specimens is glabrous, or with only a few hairs; var. *lasiocarpa* has them pubescent all over, so they only tend towards that. A similar small dune-state occurs in great abundance on the sandhills near Deal, E. Kent, near Carnsore Point, Co. Wexford, etc."—EDWARD S. MARSHALL. "None of the fruits on my examples are glabrous, and some are quite densely hairy. I should call it good var. *lasiocarpa*."—J. A. WHELDON. "Yes; a condensed state of the variety."—C. E. SALMON.

*Erigeron acris* × *canadensis* = *E. Hulsenii*, Kerner. On waste ground (site of abandoned ironworks) where the two species grow together in some quantity, Ashton Gate, Bristol, North Somerset, 16th August 1911. First observed by Miss Ida M. Roper, F.L.S. The hybrid seems to be extremely rare, as I find no mention of it in the French floras, and only one instance of its previous occurrence in this country. Dr. Focke, however, gives several localities in East Germany. These Ashton Gate plants form, probably, a better intermediate than Mr. Marshall's Surrey specimen (*Journ. Bot.*, 1907, p. 164), which he informs me was large and spreading, with considerably larger heads, the leaf and phyllary characters being practically identical in all. The achenes are intermediate in size, but contain no seed. Mr. Bucknall has noticed that *E. canadensis*, at Bristol, produces many infertile fruits.—JAS. W. WHITE. "Rightly named; found only once before in sandy ground near Tilford, Surrey, many years ago, by myself; it grew with the parents in both cases."—EDWARD S. MARSHALL. "This hybrid seems to be variable, as might be expected. The present plants are well on the side of *E. canadensis*, but show undoubted influence of *E. acris*."—J. A. WHELDON.

*Cotula coronopifolia*, Linn. In ditches. Leasowe, Cheshire, v.-c. 58, August 1911.—W. HODGE.

*Senecio sarracenicus*, L. Bank of river Dee, below Eccleston Ferry, Eaton, Chester, v.-c. 58, 14th August 1911.—C. WATERFALL.



*Cnicus arvensis*, Hoffm., var. *setosus*, Bess. On left bank of river Aire in alluvium, associated with type *C. arvensis* at Esholt, near Leeds, alt. 220 ft.; v.-c. 64. Both type and variety were in great abundance, the variety being six to nine inches taller than the type. Many plants were five feet six inches high, August 1911.—JOHN CRYER. "I should consider this good *C. setosus*, Bess. = *Cirsium arvense*, var. *integrifolium*, Koch."—J. A. WHELDON. "Yes. *Cirsium arvense*, Scop., var. *setosum*, C. A. Meyer."—G. C. DRUCE. "*Cnicus arvensis*, var. *setosus*, Besser (Esholt, Cryer). Yes; *C. setosus* Besser (as a species) = *Cirsium arvense*, var. *integrifolium*, Koch."—EDWARD S. MARSHALL. "This would seem to be correctly named (= *integrifolium*, Koch). Williams (*Prod. Fl. Brit.*, 51) contends that our commonest British form of *arvensis* is the  $\beta$  *mite*, Koch; this is at variance with the *Lond. Cat.*, 10th ed., arrangement. Rouy (*Fl. Fr.*, ix. p. 66) gives a var. *integrifolium*, Wimm. and Gr. (it does not say if also of Koch), the description of which agrees well with Mr. Cryer's specimen, particularly as regards the heads—'calathides souvent plus longuement pédonculées que dans les autres variétés.'"—C. E. SALMON.

*C. arvensis*, Hoffm., var. *mitis*, Koch. Waste ground, High Steep, Jarvis Brook, E. Sussex, v.-c. 14, September 1911.—J. COMBER. "Yes. *Cirsium arvense*, Scop., var. *mite*, Koch. I do not think Koch put his variety under *Cnicus*."—G. C. DRUCE. "Right, I believe; but Koch should not be given as the authority under *Cnicus*, as his name was *Cirsium arvense*, Scop.,  $\beta$  *mite*."—EDWARD S. MARSHALL. "*C. arvense*, var. *normale*, Williams = *Carduus arvensis*, var. *genuinus*, Syme, which, Dr. Williams says, corresponds to the  $\beta$  *mite* of Koch (*Syn. Fl. Germ. Helvet.*, p. 400 (1837))."—J. A. WHELDON.

*C. pratensis*  $\times$  *palustris* (Forsteri, Sm.). [Ref. No. 322.] Origin dry limestone hillside, Feenagh, near Ballyvaughan, Co. Clare, Ireland. Cult. Ledbury, 15th August 1911.—S. H. BICKHAM. "This is a cultivated specimen, and, moreover, the evidence of roots is lacking. This makes a final judgment rather doubtful, but two conclusions are clear: 1. There is no sign here of *C. palustris*; 2, the connection is either with *C. tuberosus* or *C. pratensis*. But I do not think it *C. tuberosus*; leaves and involucre are far more cottony than any British or foreign specimen of that species which I have seen, and the phyllaries are conclusive against *C. tuberosus*. In my opinion it is *C. pratensis*, differing, however, as a variety. E.g., stalks of most of the lowest leaves broadly winged; most leaves divided half way to midrib into lobes which overlap; stem leaves with large auricles; stem very leafy and a good deal branched. The anthodes are larger and have a more rounded base than in ordinary *C. pratensis*; they are more like those of *C. tuberosus* from Wiltshire. But the involucre and florets are those of *C. pratensis* (except that phyllaries are more

purple all over), to which it must go, as a variety going off towards *C. tuberosus*. The locality, 'a dry limestone hillside,' suits neither *C. pratensis* nor *C. palustris*, though it does all right for *C. tuberosus*; but it may be a western form of *pratensis*. For I have a specimen from Glamorganshire going a good way towards this from typical *C. pratensis*; it is not so cottony, nor are the leaves so much divided, but the anthodes are near it in size and shape."—H. J. RIDDELSDELL. "I am afraid I can see no evidence of *Cirsium palustre* in this specimen. I have seen the plant growing in the locality near Ballyvaughan, and believe it to be var. *polycephalus* of *Cirsium anglicum*, DC. (*C. britannicum*, Scop.), described as *Cnicus pratensis*, s.-v. *polycephalus*, in my *Fl. Berks.*, 392, 1897, but it would be interesting to see if any constant differences exist between the English and the Irish plants. See *Report*, 452, 1894, and 131, 1885, where the Lintons say they have grown it and that it produces good seed. Would Mr. Bickham grow it from seed, and notice the first year's plants?"—G. C. DRUCE. "It is difficult to imagine what characters here could be derived from *C. palustre*. It is also equally difficult to combine this under one name with *C. britannicum* as we know it in Yorkshire. It is a remarkable plant which is worthy of further investigation."—J. A. WHELDON.

*Centaurea Calcitrapa*, L. On waste ground, Reading, Berks., September 1911. A new county record, but only a plant of casual occurrence.—G. CLARIDGE DRUCE.

*Arnoseris pusilla*, Gärttn. Derelict sandy land between Gamlingay Great Heath and White Wood, inside the Cambs. boundary, 17th June 1911. Rosettes not yet in flower also found near Deepdale, between Sandy and Polton, Bedfordshire, 6th May 1911.—J. E. LITTLE. "Yes; *Arnoseris minima*, Schweig and Koerte."—G. C. DRUCE.

*Hieracium pratense*, Tausch. Origin, Leith Docks, July 1911. These specimens have been prepared from plants kindly sent to me by Mr. James Fraser of Leith and cultivated in my garden at Shipley.—JOHN CRYER. "Yes."—ED. S. MARSHALL.

*H. aurantiacum*, L. Origin, railway cutting near Barnstaple, Devonshire, September 1909. Cult., Stansteadbury, Herts.—MISS ALICE TROWER.

*H. Leyi*, Hanbury. Cwm glas fach, Snowdon; v.-c. 49, 13th July 1904. Col. A. LEY. Comm. H. J. RIDDELSDELL.

*H. Leyi*, F. J. Hanbury. [Ref. No. 3627.] Allt Choire Chuirn, near Dalwhinnie, v.-c. 96, E. Inverness, at or above 2000 feet, 14th July 1911. Styles yellow; ligule-tips glabrous. Heads

with many crisped hairs, and rather numerous shortly-stalked glands; outer phyllaries floccose-bordered. Leaves strongly ciliate, green, not glaucous. This seems to be practically identical with a Glen Callater (v.-c. 92, Forfar) plant which Rev. W. R. Linton referred to *H. Leyi*; it represents the Scottish rather than the typical Welsh form of the species.—EDWARD S. MARSHALL.

*H. Schmidtii*, Tausch., var. *eustomon*, Linton. Orig., Craig Gledsian, v.-c. 42. Cult. 23rd June 1902 and 18th June 1904.—A. LEY. At one time placed under *H. Leyi*.—Comm. H. J. RIDDELSDELL. "Very shabby specimens; but they look right."—EDWARD S. MARSHALL.

*H. Schmidtii*, Tausch., var. *eustomon*, Linton. Cliffs, Pwlldu, v.-c. 41, 2nd June 1903.—Coll. A. LEY. Comm. H. J. RIDDELSDELL.

*H. Schmidtii*, Tausch., var. *devoniense*, Hanb. Wall at Tuts-hill, v.-c. 34; cult., May 1911.—H. J. RIDDELSDELL.

*H. repandum*, Ley. Craig Rhiwarth, v.-c. 42, 10th June 1904. See *J. Bot.* 1909, p. 13. Coll. A. LEY; Comm. H. J. RIDDELSDELL.

*H. repandum*, Ley, var. *venosum*, Ley. High limestone ridge, 1250 feet west of Craig y Nos Castle, Breconshire, 1st August 1899 and 10th June 1904. Coll. A. LEY. Formerly distributed under the name of *H. calcaratum*, Linton. See *Rep. B. E. C.* 1904. Cf. *Journ. Bot.* 1907, p. 109, and 1909, p. 13.—H. J. RIDDELSDELL.

*Hieracium*, sp. [Ref. No. M. 20.] On heathy and rocky banks of G.W.R. at railway tunnel, Glynneath, v.-c. 41, 17th June 1911. Lig. very long and few, glabrous or sub-glabrous; heads few, two to five as a rule; cuneate based. Pappus about equal length of involucre. Foliage green or yellowish-green. This comes very near *H. pellucidum* (*lucidulum*, Ley), and may be var. *pulcherrimum*, Hanb., which was once found in the neighbourhood, but it does not quite match with plants from N. Wales named *pulcherrimum* by Mr. Ley.—H. J. RIDDELSDELL.

*H. hypochaeroides*, Gibs., var. *lancifolium*, W. R. Linton. These specimens, from several localities in Upper Wharfedale and Upper Airedale, were found growing in association with typical *H. anglicum*, Fr., and *H. hypochaeroides*, Gibs., in each locality. June and July 1909, 1910, and 1911; v.-c. 64.—JOHN CRYER. "Yes."—ED. S. MARSHALL.

*H. hypochaeroides*, Gibs., var. *saxorum*, F. J. H. (?) (styles yellow). Craigellachie, Aviemore, at 1000 feet. Easternness, v.-c. 98,

6th June 1911.—ALBERT WILSON. "Our *E. Ross* var. *saxorum* has much larger flowers; the head-clothing and foliage are different. I think that this is a form or variety of the closely allied *H. Sommerfeltii*, Lindeberg."—EDWARD S. MARSHALL.

*Hieracium* —? [Ref. No. 790.] By burn opposite Drumochter Lodge, E. Inverness, v.-c. 96, 11th July 1911. Styles livid; ligules very pilose; leaves light-green.—W. A. SHOOLBRED.

*Hieracium* —? [Ref. No. 763.] Cliffs over 2000 feet. Craig Dubh, Loch Ericht, E. Inverness, v.-c. 96, 31st July 1911.—E. S. MARSHALL and W. A. SHOOLBRED. "Styles yellow; ligules ciliate; leaves very entire."—W. A. SHOOLBRED.

*Hieracium* —? [Ref. No. 770.] Rocks by the Allt an Lochain Dubh, at about 1800 feet,  $4\frac{1}{2}$  miles from Cluny Castle, E. Inverness, v.-c. 96, 26th July 1911.—E. S. MARSHALL and W. A. SHOOLBRED. "Styles livid; ligules glabrous; heads very glandular and pilose; stem-leaf winged."—W. A. SHOOLBRED.

*Hieracium* —? [Ref. No. 773.] Choire Chuirn, E. Inverness, v.-c. 96, 14th July 1911.—E. S. MARSHALL and W. A. SHOOLBRED. "Styles yellow, ligules glabrous, heads shaggy, glands few, leaves green. ? near *H. nitidum*."—W. A. S.

*Hieracium* —? [Ref. No. 781.] By stream, south side of Ben Alder, E. Inverness, v.-c. 96, 15th July 1911. Styles dark; ligule glabrous; heads greenish; near *H. angustatum*?—W. A. SHOOLBRED.

*Hieracium argenteum*, Fr. Rocks behind Sow of Atholl, Mid-Perthshire, v.-c. 88, 18th July 1911.—W. A. SHOOLBRED. "Yes."—E. F. LINTON.

*Hieracium* —? [Ref. No. 783.] Burn at 2500 feet west of Dalnaspidal, Mid-Perth, v.-c. 88, 18th July 1911. Styles livid; ligule tips glabrous.—W. A. SHOOLBRED.

*Hieracium* —? [Ref. No. 748.] Rocky Burn at south end of Ben Alder, E. Inverness, v.-c. 96, 15th July 1911.—E. S. MARSHALL and W. A. SHOOLBRED. "Styles yellow; ligules glabrous."—W. A. S.

*Hieracium* —? [Ref. No. 751.] Stream side, west side of Ben Alder, E. Inverness, v.-c. 96, 15th July 1911.—E. S. MARSHALL and W. A. SHOOLBRED. "Styles very dark; ligules glabrous; petioles winged."—W. A. S. "My two specimens on this sheet are different. One is poor in condition, but seems to be a very entire-leaved plant, which we found in several places near Dalwhinnie; at present it is

undetermined. The other has cuneate-based black heads, dark styles, and glabrous-tipped ligules; the leaves taper into the petiole, which thus becomes more or less winged, and they have some minute stalked glands on their margins. I believe that it belongs to the sub-section *Alpina Nigrescentia*; I sent Rev. E. F. Linton a good series, but he has not yet examined them. We found it last year in about half a dozen distinct stations, and it is probably a new form, at least for Britain."—EDWARD S. MARSHALL.

*H. sagittatum*, Lindeb., var. *maculigerum*, W. R. Linton. Fairly abundant on the knolls of the Great Scar Limestone at elevations of 900 feet and upwards in Upper Wharfedale, July 1911; v.-c. 64.—JOHN CRYER.

*Hieracium* —? [Ref. No. 769.] Bank of burn, opposite Drumochter Lodge, E. Inverness, v.-c. 96, 17th July 1911. Styles rather livid; ligules ciliate.—W. A. SHOOLBRED.

*Hieracium* —? [Ref. No. 778.] Rocks at 1800 feet by the Allt an Lochain Dubh,  $4\frac{1}{2}$  miles north of Cluny Castle, E. Inverness, v.-c. 96, 26th July 1911. Coll. E. S. MARSHALL and W. A. SHOOLBRED. Styles yellow; ligules glabrous; leaves glabrous above, slightly hairy beneath; blue-green; veins very conspicuous.—W. A. S. "May be *H. pictorum*, but material too poor."—E. F. LINTON.

*H. serratifrons*, Almq., var. *grandidens*, Dahlst. Grassy bank bordering garden, Malvern Wells, v.-c. 37, June 1911.—Coll. R. F. TOWNDROW. Comm. S. H. BICKHAM.

*H. rotundatum*, Kit. [Ref. Nos. 3630-1-2.] From these stations in the neighbourhood of Dalwhinnie, v.-c. 96, E. Inverness, July 1911. Styles livid; ligules glabrous-tipped. Fairly frequent in this district, but nowhere abundant. The leaves are sometimes unspotted, as is the case with plants which I have in cultivation.—EDWARD S. MARSHALL. "Also from Choire Chuirn, E. Inverness, v.-c. 96, 14th July 1911."—W. A. SHOOLBRED. "Right."—E. S. MARSHALL.

*H. euprepes*, Hanb., between type and var. *divicolum*, Hanb. Limestone Rocks, Carn y Cugail, above Dyffryn Craunon; v.-c. 42, 26th July 1900. Coll. A. LEY; Comm. H. J. RIDDELSDELL.

*H. decolor*, sp. nov. (*Journ. Bot.*, Jan. 1909). *H. caesium*, var. *decolor*, W. R. L. From several stations in Upper Wharfedale and Upper Airedale. They illustrate the various states, glandular, almost eglandular, and eglandular.—JOHN CRYER.

*H. acroleucum*, Stenstr., var. *mutabile*, Ley. Llangoed, v.-c. 42, on rocks by river Wye, 26th June 1907; wood-bank of lane near Woodhampton, Wigmore; v.-c. 36, 10th Sept. 1907. Steep banks in Oak Woods, Annell Glen, Llangammaoch; v.-c. 42, 26th July 1907. A. LEY. Comm. H. J. RIDDELSDELL.

*H. sciaphilum*, Uechtr., *forma*. Forms of this very mobile plant from Baildon, altitude 650 feet; geological formation, Millstone grit; Bolton, near Bradford, altitude 600 feet, geological formation Elland Flagstones; Milcar Hill, near Bradford, altitude 600 feet, geological formation, coal measures; v.-c. 64, July and August 1910 and 1911.—JOHN CRYER. "Beautifully dried, as is always the case with Mr. Cryer's contributions. The ligule-tips are very ciliate; it is, I believe, a tall state of the type, probably drawn up through growing in shade. I have seen much the same thing in Surrey, etc., under such conditions."—EDWARD S. MARSHALL.

*H. sciaphilum*, Uechtr. Quarry, Radyr; v.-c. 41, 18th July 1910. A few sheets sent for comparison with the *f. paucifolia* also sent. There were also a few specimens intermediate. Even these have fewer leaves than the general run of *H. sciaphilum*. Named by A. L.—H. J. RIDDELSDELL. "Yes; weak type, probably starved, from growing on rocky ground. Ligules ciliate; leaves few."—EDWARD S. MARSHALL.

*H. sciaphilum*, Uechtr., var. *amplifolium*, Ley. [Ref. No. M. 24.] Rocky bank, Kerne Bridge; v.-c. 36, 2nd and 3rd July 1911. I believe this is right, but Mr. Linton has not seen the gathering.—H. J. RIDDELSDELL.

*H. sciaphilum*, Uechtr., *f. paucifolia*. Quarry, Radyr, v.-c. 41, 18th July 1910 and 3rd June 1911. Mr. Ley's report on the first gathering was: "These plants . . . are remarkable . . . In my judgment they fall under *sciaphilum*, Uechtr., but are a form I have never seen; leaves very few, large, broad, subcordate at base (1-3 stem leaves); the panicle short, widely spreading. Was there any species in the quarry (*e.g. rubicundum*) with which *sciaphilum* could have crossed, to produce this? Otherwise we must call it *sciaphilum, forma paucifolia*." The 1911 gathering was rather younger, and does not show the spread of the panicle so well. Some of the plants are very extreme; but the point in which all the specimens are constant are that they are *few-leaved sciaphilum*. This form was the prevalent one in the locality. I have not traced it further in the neighbourhood.—H. J. RIDDELSDELL. "The large gathering sent was very homogeneous, and the character of the leaves as to number, size, and shape, seemed very constant."—J. A. WHELDON. "These [three sheets] are practically identical. Ligules very ciliate-tipped.

From fairly deep, rich soil, I should guess. Cultivation would show whether the small number of leaves is permanent, of which I have some doubt."—EDWARD S. MARSHALL.

*H.* — [Ref. No. M. 14.] Ynyscynon, Aberdare; v.-c. 41, 11th June 1911. This is, I believe, the plant named for me (from the same spot) by Mr. Ley. *H. sciaphilum*, Uechtr., var. *amplifolium*. —H. J. RIDDELSDELL.

*H. sciaphilum*, Uechtr., var. *amplifolium*, Ley. [Ref. No. 25.] Brickwork of old bridge over the road from Aberdare to Hirwaun, v.-c. 41, 18th to 25th June 1911. I believe this to be correct. *Phyllaries floccose*.—H. J. RIDDELSDELL.

*H. cacuminatum*, Dahlst. Wall at Hengoed Junction, v.-c. 41, 14th June 1911. [Ref. No. M. 31.] I am not quite certain of this.—H. J. RIDDELSDELL.

*H. cacuminatum*, Dahlst. [Ref. No. M. 32.] Wall at Walford, near Ross, v.-c. 36, 3rd July 1911. This needs confirmation.—H. J. RIDDELSDELL.

*H.* — [Ref. No. M. 13.] Ynyscynon, Aberdare; v.-c. 41, 11th June 1911. I believe the same as the plant named for me (from this spot) by Mr. Ley *H. cacuminatum*, Dahlst., var. *barbaræfolium*, Lönnr.—H. J. RIDDELSDELL.

*H. crocatum*, Fr. Ling Gill, a narrow ravine near Ribbleshead. Altitude 900 feet, v.-c. 64, 25th July 1911.—JOHN CRYER. "This seems to have the foliage and heads (narrowing at the base into the dilated apex of the peduncle not truncate, as in *H. crocatum*) of *H. corymbosum*, Fr., var. *salicifolium* (Lindeb.), and matches some of my specimens fairly well. The plant sent to me bears only two flowers, and is rather weak; but it does not agree with any of my *crocatum* set."—EDWARD S. MARSHALL.

*Hieracium*. Maritime sandstone rocks, The Red Noses, New Brighton, Cheshire, v.-c. 58, 18th June 1911.—J. A. WHELDON. "Looks decidedly interesting; but my inflorescence is not sufficient to work upon, being only a secondary shoot; the main stem is broken off. Allied to *H. vulgatum*, Fr., I suspect."—E. S. M.

*H. sabaudum*, Linn., var. *rigens* (Jord.). [Ref. No. 326.] Railway cutting, Malvern Common, v.-c. 37, 18th September 1911.—Coll. R. F. TOWNDROW. Comm. S. H. BICKHAM.

*H. boreale*, Fr. N.W. end of Knebworth Great Wood, Langley, Hitchin, 3rd September 1911.—J. E. LITTLE. "The copious pubescence and greyish-green heads of this specimen suggest that it is var. *Hervieri*, Arvet-Touvet."—E. S. MARSHALL.

*H. umbellatum*, L., var. *dunale*. G. Mey, Southport, S. Lancs., v.-c. 59, August 1911.—G. C. DRUCE. See *New Phyt.*, pp. 315, 327, 1911 and *Report*, p. 23. "The lower leaves resemble var. *coronopifolium*, Fr., in outline, but are very hispid with long, stiff hairs on the underside; in the upper half of the stem they are remarkably small. I remember seeing a similar plant on the sandhills near St. Anne's-on-Sea, between Lytham and Blackpool, Lancashire, in 1895, but have kept no specimen. Very different from var. *littoreum*, Arvet-Touvet."—EDWARD S. MARSHALL.

*H. maculatum*, Sm.(?) Baldock.—J. E. LITTLE. "My specimen only bears one bud; the foliage is right for *H. maculatum*, Sm., but such material is not worth the trouble of detailed examination."—EDWARD S. MARSHALL.

*H. sylvaticum*, Sm., Datchworth.—J. E. LITTLE. "I believe this to be *H. sciaphilum*, Uechtr., var. *transiens*, Ley, as the ligules tips are glabrous; but I have not yet had a chance to examine this variety in a fresh state."—EDWARD S. MARSHALL.

The notes on the foregoing *Hieracia* will probably be supplied by the Rev. E. F. Linton in next year's *Report*.

*Sonchus asper*, var. *lacinatus*, Lej. Aberlady, Haddington, v.-c. 82, 23rd June 1911.—M<sup>rs</sup> TAGGART COWAN, jun.

*Jasione littoralis*, Fr. Sandhills, Shetland, Dorset, August 1911.—H. E. FOX. "*Jasione montana*, var. *littoralis*, Fr.; agrees with the description in DC. *Prodromus*, which is copied from the second edition of the *Novitiae Florae Suecicae*. Fries did not describe it as a species."—EDWARD S. MARSHALL.

*Campanula rotundifolia*, L., dwarf form. Chalk downs, Swanage, Dorset, September 1911.—H. E. FOX. "Like many other plants of the wind-swept chalk-downs on our southern coasts, this becomes stunted. It is a state, not a variety, nor even a permanent form."—EDWARD S. MARSHALL. "I think this is only a state due to dry soil and exposure, but it would be worth while to grow it first from root, then from seed."—G. C. DRUCE.

*Calluna vulgaris*, Hall, var. *Erika*, Ascherson. Ben Lawers, Mid-Perth, v.-c. 88, August 1911. Pointed out by Dr. Graebner. Also, the Lizard, W. Cornwall, v.-c., August 1911. See *New Phyt.*, 315 and 327, 1911.—G. C. DRUCE. "A curious variety or sub-variety, which is said to remain constant in cultivation."—EDWARD S. MARSHALL. "I did not retain a Lawers specimen, but some of the Lizard examples are almost as hairy as the plant we have called var.



*pubescens*, Koch, the entire surface of the leaves being very densely pubescent. Other examples in the same cover are sub-glabrous, the margins of the leaves being ciliate. Probably both our varieties of *Calluna* produce this creeping *Erika* state. The most extreme example of var. *pubescens*, Koch, which I possess, an intensely hoary plant from near Worksop, has exactly the habit of Mr. Druce's specimen."—J. A. WHELDON. "This variety varies with white and normal coloured flowers and also as the sub-glabrous and densely pubescent plant; the earlier name of the latter is var. *pubescens*, Hull." See this *Report*, p. 24.—G. C. DRUCE.

*Erica ciliaris*, L. Near Parkstone Waterworks, Dorset, v.-c. 19, July 1899.—C. WATERFALL.

*Statice Limonium*, L. Brancaster, Norfolk, 5th October 1911.—J. E. LITTLE. "A small state of our common sea-lavender, *Limonium vulgare*, Mill."—EDWARD S. MARSHALL. "Is *Limonium vulgare*, Mill."—G. C. DRUCE and C. E. SALMON.

*Limonium humile*, Mill. Muddy seashore, Walney Island, N. Lancs., v.-c. 69, August 1911.—J. COMBER. "Yes."—E. S. MARSHALL and C. E. SALMON.

*L. binervosum*, C. E. Salm. Near Knott End, W. Lancs., v.-c. 60, June 1911.—J. A. WHELDON. "Yes; the form with shorter and more dense spikes and few (if any) barren branches."—C. E. SALMON.

*Statice maritima*, Mill. (a) Rocks on the estuary of the river Gannel, Newquay, 7th June 1908; occurs in large tufts, leaves glabrous or sometimes hairy, concave above. (b) On hedge-banks near the cliffs at Perth, Newquay, 15th June 1908; in large tufts, leaves glandular and hairy. (c) On rocks near the Lifeboat House, Newquay, 14th June 1908; leaves somewhat concave and glandular above. (d) On the salt-marsh mud of the Gannel estuary, 18th and 14th June 1908; in very small tufts, leaves flat above, convex beneath, glabrous; fruit apparently partially, if not quite pleurotrichous. I have provisionally placed these thrifts under *S. maritima*, Mill., the *Lond. Cat.* name which evidently includes them all. But there appears to me sufficient differences in the various gatherings to warrant the supposition that they may be segregated under other names. In habit the mud plant is very different from the others, and it appears to me to have few or no hairs between the ridges of the fruits. None of the plants have triquetrous or sub-triquetrous leaves.—C. C. VIGURS. "Of these forms (b) is the most striking, in its very short and narrow, rather densely hairy leaves. I can detect no glands either on (b) or (c), but perhaps they are less evident when dry (there is a small capitate mould occurring sparsely

on the leaves). The shape and channelling of the leaves is difficult to make out in dried examples. I have not found the pleurotrichous or holotrichous fruits constant in this district, and Dr. Vigurs' plant (*d*) is far from being absolutely pleurotrichous. But these plants would require careful observation in the fresh state to determine whether the slight differences are constant."—J. A. WHELDON. "The fruit characters of (*a*), (*b*), and (*d*) are those of *Statice linearifolia*, Lat. = *S. pubescens*, (*c*) being the holotrichous *S. maritima*, Mill."—G. C. DRUCE.

*Primula elatior* × *vulgaris*. [Ref. No. 3672.] Gamlingay Wood; both in v.-c. 29, Cambs., and 31, Hunts., 3rd May 1911. This year the hybrid was more abundant in the smaller part of the wood which belongs to Huntingdonshire; it varied greatly, and there can be little doubt that mongrels are frequent. The material is not so good as I could wish.—EDWARD S. MARSHALL.

*Fraxinus excelsior*, L., var. *heterophylla* (Vahl). Shawell, Leicestershire, July 1911.—A. R. HORWOOD. "*F. excelsior*, L., var. *diversifolia*, Ait."—G. C. DRUCE. "This very distinct variety of the common ash is fairly frequent in cultivation but is rarely found wild. I have seen two or three fine trees of it in Hyde Park. Messrs Elwes and Henry, in *Trees of Great Britain and Ireland*, describe this as var. *monophylla*, O. Kuntze, and state that it appears occasionally when a quantity of ash seeds is sown, and intermediate forms are found with three, four, and seven leaflets. Occasionally there is a large leaflet with one or two small leaflets at its base, which is the case in some of the specimens before me, showing the tendency of the variety to revert to type. This form is known as var. *monophylla laciniata*. Other names for the simple-leaved ash are *Fraxinus monophylla*, Desf., *F. heterophylla*, Vahl, *F. simplicifolia*, Willd., *F. excelsior*, var. *diversifolia* (Aiton). The name *heterophylla* cited on the labels is incorrect."—A. B. JACKSON.

*Gentiana Amarella*, Linn., *forma*. Barley, near Pendle Hill, South Lancs. (59); 23rd September 1911; leg.—C. R. RITCHINGS, Comm. W. G. TRAVIS. "This form of *G. Amarella*, with the calyx and corolla 4-cleft, occurs at several places in upland parts of South Lancashire. It is the prevailing form in the localities in question. Generally, the lobes of the calyx or corolla are equal or sub-equal in size, but sometimes two of the lobes are decidedly larger than the other pair, this difference in the relative sizes of the pairs of lobes being much more marked in the case of the corolla segments than in those of the calyx. Some notes on this form of autumnal gentian appear in the *Lancashire Naturalist*, 1910, pp. 247, 248."—W. G. TRAVIS. "Yes; a not uncommon condensed state of late summer.

Rouy (*Fl. Fr.*, x. p. 269) calls this f. with 4-partite calyx and corolla, '*G. tetramera*, Nob.,' but I have gathered *Amarella* with 4- and 5-cleft corollas on the *same plant*!"—C. E. SALMON.

*Gentiana baltica*, Murb. Sandhills, Freshfield, South Lancs., v.-c. 59, October 1909. The smaller plants (*a*) are no doubt *G. baltica*, and perhaps the intermediate-sized ones (*b*) also. The plants marked (*c*), however, I presume, are *eu-campestris*. All the specimens grew together in the one habitat.—W. G. TRAVIS. "*G. baltica*, Murb."—E. S. MARSHALL. "After carefully comparing a long series (from Scotland to Cornwall) with our local coast plant, I feel satisfied there is no specific difference between *G. baltica* and *G. campestris*, and it is difficult to find even a good varietal character, unless it be based on the duration of the root (in which herbarium examples do not help). The most marked feature in extreme examples is the small size of the flowers, but this varies greatly. Plants from Birkdale, Freshfield, and St. Anne's show flowers of various sizes, which are not correlated with any particular leaf-shape. I see Dr. Williams considers the names synonymous, and I think with reason."—J. A. WHELDON. "I agree with Mr. Wheldon in considering there is no specific difference between *G. baltica* and *G. campestris*, and I put it as a variety in my *List*."—G. C. DRUCE.

*Symphytum asperum*, Bieb. Near Blackford Hill, Edinburgh, v.-c. 83, 22nd June 1911.—M<sup>rs</sup> TAGGART COWAN, Jun. "This is near *S. asperum*, Lepech., but the calyx is not quite right, and the style is bent at the apex, which is said to be peculiar to *S. peregrinum*."—CEDRIC BUCKNALL.

*Mimulus Langsdorffii*, Donn, var. *guttatus*, D.C. The Dams, Via Gellia, Cromford, Derbyshire; v.-c. 58, 15th June 1911.—F. L. FOORD-KELCEY. "*Mimulus Langsdorffii*, Donn, var. *guttatus*, DC. It is hard to say what name this handsome form, which is naturalised in several counties, should bear. In the *Prodromus* (x. p. 370) De Candolle made his *M. guttatus* (*Cat. Hort. Monsp.*, p. 127) a synonym of *M. luteus*, L., combining the Chilean plant (which seems to be the true Linnean species) with that which grows in Western North America, from California to Unalaska. It does not appear that he distinguished clearly between the large-spotted form, which British botanists have lately been calling *M. Langsdorffii*, var. *guttatus*, and the more generally established *M. 'luteus'*, auct. angl. The plant sent by Mr. Travis is merely a colour-variety; and I doubt whether we can safely use the name *M. guttatus*, DC., for either. As it is alleged that the name *M. Langsdorffii*, Donn, is invalid, it at present remains to be seen what our gardens escape, which now frequently grows for long distances by streams, and looks as wild as any true native, should be called."—EDWARD S. MARSHALL.

*Mimulus Langsdorffii*, Donn. Var. with small cauline leaves from stream-side, Church Stretton, Salop, Aug. 1911.—J. COSMO MELVILL. "This looks very like a small '*nana compacta*' form much used by florists as a garden border plant."—J. A. W.

*Veronica Beccabunga*, L., *forma*. [Ref. No. 4214.] A slender form with pale rose or whitish blue flowers. In the muddy ridings of Monk's Wood, Hunts., June 1911. Probably the var. *humilis* (Brébisson, *Fl. Normandie*, 227, 869, "Tige naine; grappes courtes de fleurs pales un peu rosées").—G. CLARIDGE DRUCE. "Seems just a small state of the type and does not agree with any of the varieties in Rouy's *Fl. Fr.*, xi. p. 39."—C. E. SALMON.

*Veronica Anagallis-aquatica*, L., var. *montioides*, Boissier. Gravelly and muddy margin of Marsworth Reservoir, Herts, July 1911. [Ref. No. 3697.] Originally found and recorded by Mr. W. P. Hiern (*Journ. Bot.*, 321, 1898), but being only a seedling form is scarcely deserving of varietal rank. With this opinion Dr. Hugo Glück agrees.—G. CLARIDGE DRUCE.

*Veronica arvensis*, L., var. *eximia* (Towns).—On a bridge at Pulborough, Sussex, 18th July 1911.—ALFRED WEBSTER. "Yes; shows the distinctive characters fairly well."—J. A. WHELDON.

*V. arvensis*, Linn., var. *nana*, Poir. Blackford Hill, Edinburgh, v.-c. 83, 29th May 1911.—M'TAGGART COWAN, jun. "In the two specimens which I have received the sepals mostly exceed the capsule; this makes it small type, and not the variety."—EDWARD S. MARSHALL.

*Euphrasia brevipila*, Wettst. Grassy ground near Conninish, alt. 900 feet, Tyndrum, v.-c. 88, 22nd July 1911.—A. WILSON and J. A. WHELDON. "The glandular clothing varies very greatly in amount on these specimens, which, however, all grew together. No doubt Dr. Williams is right in regarding *E. brevipila* as a glandular form of *E. stricta*. These Conninish examples agree with the latter in relative length of fruit and calyx, and with the former in glandular clothing."—J. A. W. "Yes; *E. brevipila*."—H. J. R. "Yes."—E. S. MARSHALL. "Two specimens are probably *E. Rostkoviana* × *brevipila*; two are as labelled, but very sparingly glandular; and the two remaining specimens are apparently glandless. These may be the *f. eglandulosa*."—C. E. SALMON.

*E. brevipila*, Burnat and Gremli, alt. 650 feet, in a dry meadow, Pencaedrain Farm, Pontneathvaughan, v.-c. 41, June 1911.—H. J. RIDDELSDELL. "Yes."—J. A. W. "Yes; but the glands are very few."—E. S. MARSHALL. "I agree; the simple unbranched state."—C. E. SALMON.

*E. brevipila*, Wettst. Meadow near Crianlarich, alt. 520 feet, Perthshire (88), July 1911.—ALBERT WILSON and J. A. WHELDON. "Right."—H. J. R. "Very characteristic."—E. S. MARSHALL.

*E. brevipila*, Burnat and Gremli, near Ulverscroft, Leicestershire, 5th August 1910.—A. B. JACKSON and H. P. READER. "Right."—H. J. R., E. S. M., and J. A. W. "Yes; one example only on my sheet. Euphrasias should be better represented, I think."—C. E. SALMON.

*Rhinanthus stenophyllus*, Schur. [Ref. No. 3556.] Locally abundant in grassy places near the Calder river, Newtonmore, v.-c. 96, E. Inverness, 22nd July 1911.—EDWARD S. MARSHALL. Sent also by W. A. SHOOLBRED. "Yes, I believe so."—C. E. SALMON.

*Rhinanthus* (?) *stenophyllus*, Schur. 650 feet, in meadow on Pencaedrain Farm, Pontneathvaughan, v.-c. 41, 15th June 1911. I should say that this is neither good *R. minor* nor good *R. stenophyllus*, but intermediate. It is not the common form of *R. minor* found in v.-c. 41.—H. J. RIDDELSDELL. "Rightly named, I believe, as intercalary leaves are present, but not very characteristic."—E. S. MARSHALL. "This is, I believe, rather *R. minor*, Ehrh. I fancy *R. stenophyllus*, for one thing, would not be in good fruit by the middle of June."—C. E. SALMON.

*R. monticola*, Druce. [Ref. No. 3557.] Between Dalwhinnie Hotel and the Post Office, v.-c. 96, E. Inverness, at nearly 1200 feet, 22nd July 1911; not seen elsewhere in the neighbourhood.—EDWARD S. MARSHALL. "Also Bank of Truim, Dalwhinnie, E. Inverness, 13th July 1911."—W. A. SHOOLBRED. "Yes."—E. S. MARSHALL. "Seems to be a dwarf state of *R. stenophyllus*. In *monticola* I understand the branches should be all sterile; this cannot be said of Mr. Shoolbred's plant."—C. E. SALMON.

*Lathræa Squamaria*, L., by river Taff, below Llandaff, v.-c. 41, 8th May 1911. A voucher for the county, where I never saw this species before.—H. J. RIDDELSDELL.

*Utricularia vulgaris*, Linn. Hibernating buds. One of these buds, which I kept under observation, grew to a length of 14 inches in seventeen days. Pond on the Golf Course, Helsby, Cheshire, v.-c. 58, February 1911.—WM. HODGE.

*U. ochroleuca*, Hartm. Growing in water 6–10 feet deep, Coniston Lake, N. Lancs.; v.-c. 69, August 1911.—J. COMBER. "I should rather have called this a deep-water f. of *U. intermedia*. Certainly it does not agree with specimens I have, gathered by Hartman himself at the original station in Helsingland, Sweden, in

1871."—A. BENNETT. "*Utricularia ochroleuca*, Hartm. It agrees well with my herbarium sheets, so named by Prof. Hugo Glück, last October."—EDWARD S. MARSHALL. "Yes; beautiful specimen of *U. ochroleuca*, Hartm., and a new county record. To this Dr. Glück agrees."—G. C. DRUCE.

*Mentha rotundifolia*, Huds. By the railway near Hampstead Norris Station, Berks., 18th September 1911.—A. B. JACKSON, N. C. R. "Yes, but not typical. Usually the leaves are almost felted with grey pubescence on the underside; here they are smaller, greener, and less densely hairy. It may be the var. *glabrescens*, Timb., described as follows by Rouy, *Fl. de France*, xi, p. 360:—'Feuilles verdâtres et ± pubescentes ou glabrescentes à la page inf., ord. minces et incisées-dentées.' I have not seen anything else quite like this."—EDWARD S. MARSHALL.

*M. longifolia*, Huds. (var. or ×). Ditch or chalk soil between Kimble and Ellesborough, Bucks. Mr. Druce called this *M. longifolia*; but in the Watson *B. E. C. Report* 1911, p. 304, the Rev. Mr. Marshall writes, "The influence of *M. rotundifolia* seems very clear, especially in the foliage." The Rev. E. F. Linton says it "bears a very close resemblance to Wirtgen's *Herb. Menihar Rhenan*, 3rd ed., No. 16; *M. sylvestris*, L., var. *nemorosa*, auct.; *M. nemorosa*, Willd., forme *fol. ovatis stamin. inclusis*." I think it is this, though it is also very near No. 25, *M. rotundifolia* × *nemorosa*, Wirtg., a more hoary plant with stamens slightly exserted." Mr. Arthur Bennett says "It is not the *nemorosa* of Willdenow's herb!" —F. L. FOORD-KELCEY, 18th December 1911. "Apparently a small state of var. *nemorosa*."—EDWARD S. MARSHALL. "I simply named this *longifolia* in an aggregate sense. I collected it in the same place in September 1896 and sent it to M. Malinvaud of Paris, who thought there were traces of *rotundifolia* in it; so far the latter plant has not been seen in North Bucks., so that it is probably a descendant of a cultivated race."—G. C. DRUCE.

*M. longifolia*, Huds., var. *mollissima* (Borkh). Hedge bank, Nant-y-glyn, Colwyn Bay; v.-c. 50, October 1911.—WM. HODGE. "Leaves green above, with short, appressed hairs; so it cannot be *mollissima*. Poorly developed specimens, which look starved."—EDWARD S. MARSHALL.

*M. aquatica*, Linn., var. *subglabra*, Baker. Marshy ground under trees, Hurst Park, Prescott, South Lancs. (59), August 1911, leg.—REV. M. TOOLEY, S.J. COMM. W. G. TRAVIS. "I do not know Baker's variety. This is a glabrescent plant, with very thin leaves; those on the lower half of the stem are patent, with much longer stalks than in any specimens of mine. Material indifferent. Possibly a hybrid."—EDWARD S. MARSHALL.

× *M. verticillata*, L., var. *paludosa* (Sole). [Ref. No. 399.] Bog, Wimbledon Common, Surrey; v.-c. 18th August 1911.—C. E. BRITTON. "A hybrid between *M. aquatica* and *M. arvensis*, no doubt. I do not see the use of keeping up quasi-specific names for such variable crosses, or even mongrels (secondary hybrids)."—EDWARD S. MARSHALL.

*M. gentilis*, L. Orig., Wyeside, Aberedw, v.-c. 43. Cult., July and August 1911. Mr. Ley named it.—H. J. RIDDELSDELL.

*M. gracilis*, Sm., var. *cardiaca*, Baker. Origin, near Ripley, Surrey. June 1910. Cult., Wembley, 18th August 1911.—A. B. JACKSON. Mr. E. M. Holmes, in an interesting account of the Oil of Spearmint in the *Perfumery and Essential Oil Record* for September 1911, p. 198, states that this was one of the species of garden mint cultivated in the Middle Ages. He identifies it with the plant described and figured by Fuchs in 1543 under the name of *Mentha hortensis* or Herz-Kraut, and adds that Morison (*Hist. Oxon.*, 1699) figures it under the name of *Mentha hortensis verticillata Ocimi odore*. Parkinson includes it with spearmint, under which name it was cultivated in gardens in his day, and is still grown as the true garden mint, especially in Wiltshire, Somersetshire, and in some parts of Kent, replacing in many gardens the *Mentha viridis* of the Pharmacopœia. By the old herbalists it was considered inferior to *M. viridis* as a febrifuge, but as a stomachic and cardiac it was believed to be superior, whence its name. We have used the leaves of *Mentha Cardiaca* for mint sauce at Wembley, but found them somewhat inferior in flavour to those of the ordinary garden mint (*M. viridis*).—A. B. JACKSON. "It has also been cultivated in Oxfordshire as a 'mint,' and for some time it was naturalised in great quantity near the brickyards on Shotover Hill, near Oxford."—G. C. DRUCE.

*M. rubra*, Sm. Tayside, Perth, E., August 1911.—G. CLARIDGE DRUCE. "The shape and greater hairiness of leaf, clothing of calyx teeth, etc., all point to *M. gentilis* rather than *rubra*, and I have little doubt it should be so named. I think, too, I can detect its sweeter and characteristic odour."—C. E. SALMON. "The consensus of opinion of the foreign specialists who were with me when I gathered it was in favour of its being *M. rubra*."—G. C. DRUCE.

*M. arvensis*, L., var. *genuina*, Syme(?). Burleigh Meadows, Langley, Hitchin, 3rd September 1911.—J. E. LITTLE. "Very probably a small state of the type; but much better and fuller material is needed; this is a mere scrap."—EDWARD S. MARSHALL.

*Thymus Serpyllum*, L., *Fl. Suec.* Railway bank, Thornielee, Peebles, v.-c. 78, 29th June 1911.—IDA M. HAYWARD. "Yes;

*T. Serpyllum*, L., *Fl. Suec.*—A. B. JACKSON. "But why write *Fl. Suec.*? We cannot have two species of *Serpyllum*."—G. C. DRUCE.

*T. Serpyllum*, L., diffuse form. On pebbles, Tweedside, Selkirk; v.-c. 79, 30th July 1911.—IDA M. HAYWARD. "My sheet of this consists of detached pieces of stem and stolons which are not of much use for purposes of determination. In a critical genus like *Thymus* the material needs to be very good indeed, and the habit of the plant ought always to be shown. Probably best placed under *T. Serpyllum*, L., *Fl. Suec.*"—A. B. JACKSON.

*T. Serpyllum*, L., *forma*. Sand-dunes, Hightown, South Lancs., v.-c. 59, 15th July 1911. A form with strong, much-branched underground stems, leaves ciliate all round, and very thick and prominent venation. The same form occurs on sandhills near Jurby, Isle of Man.—J. A. WHELDON. "Yes; a form coming under the var. *hirsutus*, Reichb., I think."—A. B. JACKSON.

*Calamintha Nepeta*, Savi. Dry banks of earthworks, Clare Castle, Suffolk, 28th September 1911. Stems more rigid and erect, and much longer than *C. officinalis*, of which one sheet of Herts specimens is sent. The flowers of *C. Nepeta* from Clare are of a deeper colour than Herts *C. officinalis*.—J. E. LITTLE. "Correct."—G. C. DRUCE and E. S. MARSHALL.

*Salvia verticillata*, L. Arlesey, Bedfordshire, 8th July 1910, and Mardley Heath, between Welwyn and Knebworth, 1st July 1911. "Appears to be coming to stay."—J. E. LITTLE. "Yes."—G. C. DRUCE.

*Prunella vulgaris*, L., with white flowers. Saintfield, Co. Down, July 1910. And with rose-coloured flowers, on limestone, near Askeaton, Co. Limerick, 20th June 1908.—C. H. WADDELL.

*Stachys sylvatica*, L., monstrosity. Shipton, Oxford, July 1911.—G. C. DRUCE. "This curious form has been noticed in the same spot for several years, and by Miss Ridley's kind direction I was enabled to gather it. It grows in considerable quantity, and varies considerably. The conspicuous form is one in which there is dialysis of the carpels, in which, owing to imperfect disjunction, the bilobed carpels are changed into, a nearly one-celled capsule. With this is a great reduction in length of the corolla tube, while the corolla is less labiate than usual. For notes on the abnormal gynoecium in this species, see A. W. Bartlett in *New Phyt.*, 139, 1909; and Knuth, *Handb. Poll.*, 191. The same week Mr. C. P. Hurst sent me a similar form from near Riever Wood, Berks."—G. C. DRUCE.



*Teucrium Scordium*, L. On the bank of a dyke, very local; near Cowbit, S. Lincoln, v.-c., October 1911. An interesting occurrence of a plant which our valued member the Rev. E. A. Woodruffe Peacock tells me has not been recorded for nearly half a century.—G. C. DRUCE.

*Plantago Coronopus*, Linn., var. *pygmaea*, Lange. Limestone rocks, Silverdale Cove, W. Lancs., v.-c. 60, 12th June 1911. New to v.-c. 60.—J. A. WHELDON.

*P. maritima*, Linn., var. —? [Ref. No 130.] Glen Isla, Perthshire, v.-c. 89, Sept. 1911.—M. TAGGART COWAN, jun. *P. maritima*, L. (*genuina*, Koch, Sym.). "The narrow-leaved form which Syme distinguished as var. *linearis*. Its narrow carinate leaves separate it from var. *serpentina*, Brand, and that and the equidistant veins from *P. alpina*, L. The latter character can be readily made out after soaking in hot water."—J. A. WHELDON. "I do not see by what slight character this in any way differs from the common form of *P. maritima* described on p. 360 of the *Prodromus*, except that I add '*scapis interdum pileiscentibus*.'"—F. N. WILLIAMS.

*P. lanceolata*, L. (1) Form of dry limestone pasture land, Silverdale, v.-c. 60, June 1911.—J. A. WHELDON; (2) var. *sphaerostachya*, Roehl., but without the woolly neck which was a noticeable feature of the Welsh plants sent out in 1909. Ben Laoigh, at 1800 feet, Perth., v.-c. 88, July 1911.—ALBERT WILSON and J. A. WHELDON. "I still think that mere drought is not entirely responsible for the narrowly lanceolate leaves and round heads of var. *sphaerostachya*, although it may account for the woolly neck. Mr. Marshall dismissed both the sandhill plant (1910) and the Welsh hill plant (1909) I previously sent, as forms of type due to starvation. Even so, they were very different plants. Of these sent now, (1) from dry limestone, agrees quite well with the sand-dune plant, and is, as I suggested in my note of 1910, but a modification of the type; (2) seems to me to be a form of var. *sphaerostachya*, agreeing with the Welsh specimens in all particulars, except that it is more glabrous. This plant (2) grew in a very moist situation, by a mountain burn, amongst hygrophilous mosses and hepatics, which indicated that the habitat never suffered from absolute drought. A specimen of each plant is sent in one cover."—J. A. WHELDON. "(1) Here the neck is very woolly; but it seems to be only a state caused by the situation, quite unworthy of a special name. (2) I do not believe in the permanence of this alleged variety; and the presence or absence of woolly hairs appears to be dependent on local conditions."—EDWARD S. MARSHALL. "(1) A small example of the usual form. (2) Yes; this seems to be a condition of var. *sphaerostachya* in which the usual hairiness at the neck of the rhizome is reduced to a minimum."—F. N. WILLIAMS. "Your *Plantago* No. 1 is a form of *P. lanceolata*, L.,

hardly separable from large states of var. *sphaerostachya*, Mert. and Koch. It is, however, of considerable interest, as it seems to us to agree with specimens and description of *P. dubia*, Linn, *Fl. Suec.*, 2nd ed. p. xvi and p. 46 (1755), the name appearing on p. xvi, and the description on p. 46. It differs from type *P. lanceolata*, Linn., in its small size, 3-nerved leaves, which are lanuginose at the base. The scapes are about twice as long as the leaves and the flower heads sub-globular. Retzius (*Floræ Scand. Prod.*, 1779) and Liljeblad (*Svensk. Flora*, 1798) retain it as a species and place it between *P. lanceolata* and *P. maritima*, but in the second edition in 1816 Liljeblad makes it a variety of *P. lanceolata*. Hartman (*Handbok i Skand. Flora*, 1879) also considers it a variety of *P. lanceolata*, and records it from East Gothland. Your *Plantago* No. 2 is also a form of *P. lanceolata*. intermediate in size; length of scape is between *P. dubia*, L., and var. *capitellata*, Koch, but differing from both in the absence of silky hairs at the base of the leaves."—R. M. CARDEW and E. BAKER.

*Chenopodium rubrum*, Linn., var. *pseudobotryodes* (Wats.). Sandy ground, Hightown, S. Lancs., v.-c. 59, July 1911.—J. A. WHELDON. "Yes; var. *pseudobotryodes*, Wats., who did not write it as a species."—EDWARD S. MARSHALL. "Yes; it has been stated that this reverts to type in culture. Will someone test it?"—G. C. DRUCE.

*C. hybridum*, L. Cultivated sandy land near Sandy, Bedfordshire, 3rd August 1911.—J. E. LITTLE. "Yes."—E. S. MARSHALL. "Yes; no personal voucher for Bedfordshire in *Top. Bot.*"—G. C. DRUCE.

*C. leptophyllum*, Nutt. Reading, Berks., September 1911.—G. CLARIDGE DRUCE. "This is a native of N. America from Manitoba and the North-West Territory of Canada, south to N. Mexico and Arizona. This is the type of the species, a variety occurring wholly green."—A. BENNETT. "Sometimes placed as a var. of *C. album*, but it is apparently a good species."—J. A. WHELDON.

*Atriplex littoralis*, Linn. Bank of Creek, Landermere Wharf, parish of Thorpe-le-Soken, N. Essex, v.-c. 19, 24th August 1911. Also approaching var. *marina*, Linn., from salt-marsh by the Creek, Salcott, N. Essex, 21st September 1911. The latter approach the var. *marina*, Linn., in their size, habit, and occasionally serrate leaves, but perianth different. They were abundant in a field beside the Creek, formerly a reclaimed salting but reverting fast into salting again, although apparently not overflowed by the tide. The other sheets represent the ordinary form in the district, and generally occur on sea-walls and drier places.—G. C. BROWN. "My specimen tends towards var. *marina*, the lower stem leaves being serrate."—EDWARD S. MARSHALL. "My examples are only flowering tops, and are quite insufficient for naming."—J. A. W.

*A. littoralis*, var. *serrata*, Moq. Waste ground, West Dock reservation, Hull, E. Yorks, v.-c. 61, October 1904.—C. WATERFALL. "Certainly not *A. littoralis*; apparently *A. hastata*, L."—H. J. R. RIDDELSDELL. "Specimens bad; probably *A. patula*, var. *erecta*, Huds." testibus J. A. WHELDON, A. BENNETT, and E. S. MARSHALL.

*A. hastata*, L. (a) Beacon Hill, St Osyth, 31st August 1911; (b) sea walls, Landermere, Thorpe-le-Soken, 24th August 1911; (c) Salcott, 21st September 1911; (d) Pyefleet Creek, 29th October 1911, all in Essex; v.-c. 19.—G. C. BROWN. "Although the cusps of the leaves are a little out of the right angle, yet it seems correct, but is gathered too young."—A. BENNETT. "The leaves of all these, also of the plant labelled *A. Babingtonii*, have a curious shape not at all like our *A. hastata*, owing to the convex outline of the margin and the slightly deflexed lobes. Occasionally a leaf is of the ordinary *hastata* shape. I thought at first they might be *A. deltoidea*  $\times$  *hastata*, but as the plants are from five different localities, that seems unlikely, and it is best to regard them at present as representing a local form of *A. hastata*. Perhaps Mr. Brown will send it again with riper fruit."—J. A. WHELDON. "An interesting form, worth further study."—G. C. DRUCE.

*A. Babingtonii*, Woods. Sandy shore, East Mersea (Mersea Island), N. Essex, v.-c. 19, 3rd September 1911; also, sandy shore near Beacon Hill, St Osyth, N. Essex, 31st August 1911.—G. C. BROWN. "It is very different-looking from examples of *A. Babingtonii* from both the N.E. and N.W. coasts of England."—J. A. WHELDON. "Too young to be sure of; it is an interesting little plant, and I am not at all sure to what it can be referred. Anyhow, it is not typical *Babingtonii*."—A. BENNETT. "Much too young to name; it looks more like *A. deltoidea*, Bab., but is only in flower."—EDWARD S. MARSHALL. "My specimens are quite immature, but suggest a marine form of *A. hastata*, L. The older name for *A. Babingtonii*, Woods, in *Bab. Man.*, 3rd ed., 270, 1851 (*A. rosea*, Bab., in *E. B. Supp.* 2880, not of L.) appears to be that of *A. glabriuscula* (Edmonston, *Flora of Shetland*, 39, 1845), where it has a lengthy description referring doubtless to the var. *virescens*, Lange, which is common on the northern coasts. *A. glabriuscula*, therefore, should be considered the type, with var. *Babingtonii* (Woods), which is the plant with a more mealy inflorescence and often tinged with red. No reference to Edmonston's plant is made in *Index Kewensis*."—G. C. DRUCE.

*Salicornia radicans*, Sm. Saltings by the Pyefleet Creek, Langenhoe, N. Essex, v.-c. 19, 3rd September 1911.—G. C. BROWN. "Doubtless *S. perennis*, Mill. (*radicans*, Sm.), but the material is poor."—EDWARD S. MARSHALL. "In the *Flora Anglica* of 1754 Linnæus called it *S. fruticosa*."—G. C. DRUCE.

*S. europæa*, Linn. (form). Clayey side of dyke by creek, Beaumont-cum-Mose, N. Essex, v.-c. 19, 24th August 1911. This peculiar, small, and spreading form occurs very sparingly on the clayey bank of a dyke. Suspecting it to be unusual, I forwarded specimens to Mr G. C. Druce, who reports that it is "a form of *Salicornia europæa*, Linn., not at present separated from type."—G. C. BROWN. "Gathered too early; but it looks like *S. pusilla*, Woods. Not *S. disarticulata*, Moss, as the flowers are in threes, not solitary."—EDWARD S. MARSHALL.

*Salicornia* —? Penpoll Creek, 20th October 1911, and opposite Cheviot, 24th October 1911, both in river Gannel estuary, Newquay, West Cornwall. Coll. et comm. C. C. VIGURS. "*S. europæa*, L. type (forma *stricta*, Moss = *S. stricta*, Dumort)."—EDWARD S. MARSHALL.

*S. europæa*, Linn. (form). Clayey bank of dyke by the creek Beaumont-cum-Mose, N. Essex, v.-c. 19, 24th August 1911.—G. C. BROWN.

*Suaeda maritima*, Dum. (form). This peculiarly small and slender form I find plentifully on the clayey side of a dyke parallel with the creek Beaumont-cum-Mose, N. Essex, v.-c. 19, 24th August 1911. The leaves are much smaller and narrower than in any other form I have seen. The flowers and fruit are much smaller, while its procumbent and bushy habit are unusual.—G. C. BROWN. "I think that this is probably type *a vulgaris*, Moq., which Rouy describes as having subacute leaves and seeds  $1\frac{1}{4}$  to  $1\frac{1}{2}$  mm. broad, rather than *β macrocarpa*, Moq., with rather blunt leaves and seeds 2 mm. broad; but I am not sure."—EDWARD S. MARSHALL.

*Dondia maritima*, Druce, ? var. *macrocarpa*. [Ref. No. 4991.] = *Suaeda maritima*, Dum., var. *macrocarpa*, Moquin = *S. macrocarpa*, Moq. (*Ann. Sc. Nat.*, xxiii. 309); *Chenopodina maritima*, var. *macrocarpa*, Moq., in *DC. Prod.*, xiii. 161, 1852. Havant; S. Hants, September 1911. Gathered with Dr Moss, who suggested the varietal name. In the *Enum. Chenopod.*, 128, 1840, Moquin describes his plant as "*Caule prostrato aut erecto foliis sæpius obtusiusculis, fructibus majusculis.*" I find a considerable variation in the size of the seeds, i.e. from 2.5 mm. on a plant from Hunstanton, to 4 mm. on some of these specimens. Syme describes the seeds as striate, but to me they appear chagrined, and very similar to those of *Montia fontana* (*lamprocarpa*). This blunter-leaved and larger-fruited plant I gathered at Yarmouth in 1883, Isle of Wight 1899, Hythe, S. Hants, 1903, Gravesend, Kent, 1903, Crouch, Essex, 1910. The plant has a different facies when growing, and varies, as Moquin says, as being sometimes prostrate and at others erect.—

G. CLARIDGE DRUCE. "This has blunter foliage than Mr. Brown's specimens; the fruit is about the same size."—EDWARD S. MARSHALL.

*Polygonum* (? *mite*). By Lough Neagh, near Toome, Co. Antrim, 18th August 1909.—C. H. WADDELL. "*P. Persicaria*, L."—J. A. WHELDON. "Not *P. mite*; the ochreæ are glabrous. Hardly determinable, at least on my specimens, which are very poor; it may be starved *P. Persicaria*."—EDWARD S. MARSHALL. "A form of *Persicaria*."—G. C. DRUCE.

*P. mite*, Schrank. Near Cowbit, Lincolnshire, v.-c., October 1911.—G. CLARIDGE DRUCE. A new county record.

*P. minus*, Huds., var. —? (vide *Bot. Exch. Club Rep.*, p. 644, 1900). Near Hurst Castle, Berks., September 1900, ? var. *dubium*, A. Br.—G. C. DRUCE. "This seems to me the var. *elatum*, Marsson, *Fl. Neuworpommern*, p. 406, 1869, but I am not sure if this is the same as the var. *longifolium*, Braun, in *Flora*, 1824, p. 358. Marsson notes its likeness to *P. mite*."—A. BENNETT.

*P. aviculare*, L., var. *litorale* (Link.). Seashore, Ballyholme Bay, Co. Down, August 1911.—C. H. WADDELL. "*P. Roberti*, Lois."—J. A. WHELDON. "This is *P. Raii*, Bab. One of my specimens has unusually large leaves."—ED. S. MARSHALL.

*Rumex sanguineus*, Linn. Withernsea, E. Yorks, v.-c. 61, 11th August 1898.—C. WATERFALL. "Yes; the true *sanguineus*, L."—G. C. DRUCE.

*R. crispus* × *obtusifolius*. Border of field, Dalwhinnie, E. Inverness, v.-c. 96, 30th July 1911.—W. A. SHOOLERED. "I see no sign of *R. crispus* here. Is it not *R. domesticus*, Hartm., or perhaps the hybrid of that and *obtusifolius*, which is *R. conspersus*, but that has usually narrower leaves?"—G. C. DRUCE. "I think this is pure *domesticus*, Hartm. I have searched several times for *R. propinquus* (*crispus* × *aquaticus*) when both parents were plentiful in Scotland, but always in vain. The apparent denticulations of the sepals in these young plants are deceptive. They become mere 'waviness' as the sepals enlarge."—J. A. WHELDON.

*R. conglomeratus* × *obtusifolius*. [Ref. No. 214.] By the Thames, between Putney and Barnes, Surrey, v.-c. 19th July 1911.—C. E. BRITTON. "Several clumps of this dock grow along the river-wall, and are vigorous plants producing several stems from the root-stock. Very little fruit indeed is produced, and most of the flowers fall away, giving in consequence a bare appearance to the branches of the panicle. Hence it is difficult to find fertile flowers. These have large triangular-oblong inner sepals with two or three

ovoid tubercles. The influence of *R. obtusifolius* is shown by these sepals being rugose and dentate at the base, and the tips diverge."—C. E. BRITTON. "The habit favours this opinion; but it is too young to show the fruiting character."—EDWARD S. MARSHALL.

*R. Acetosa*, L. Forms from Worm's Head, 14th June 1910, and Newslade Bay (cliffs), 27th June 1910, v.-c. 41. "They are, I suppose, different ways in which the sorrel is reduced by exposure. The more extreme form is that from the Worm's Head. I should be glad of confirmation (or otherwise) of my opinion."—H. J. RIDDELSDELL. "Not varieties, I think, but states."—G. C. DRUCE.

*R. Acetosella*, L., var. *acetoselloides* (Bal.). The common British plant is *R. angiocarpus*, Murbeck, *Beitr. Fl. Sudbosc. and Herceg.* in *Acta Soc. Phys. Lund.*, xxvii, 46, 1892, in which the inner perigonal leaves are attached to the nut. In *R. acetoselloides* they are free and the nuts are slightly smaller, characters which I think justified Pospichal (*Fl. Oestr. Kustenl.*, i, 383, 1897) to reduce *angiocarpus* to a variety defined "Fruchtklappen der Frucht angewachsen Blüten winzig (1 mm.)." These specimens were pointed out to us on the International Phyto-Geographical Excursion near Chewbrook Clough, Yorkshire, by Dr Ostenfeld, in a situation where it might possibly be adventive; *R. angiocarpus* was seen in Norfolk, E. and W. Derbyshire, Yorkshire (near Greenfield), Lancashire (Southport), Cumberland, Westmorland, Perthshire (Lawers), etc. See *New Phyt.*, 319, 1911.—G. CLARIDGE DRUCE.

*R. Brownii*, Camp. Banks of Gala and Tweed, where I have noticed this wool alien and native of Australia for four successive years. It is to be found twelve miles down the river Tweed. v.-c.'s 79 and 80, August and September 1911.—IDA M. HAYWARD.

*Asarum europæum*, L. Rough plantation, Halton Reservoir, Bucks., 25th April 1911.—F. L. FOORD-KELCEY. "See *Report*, 591, 1910."—G. C. DRUCE.

*Hippophaë Rhamnoides*, Linn. Kilspindie, Haddingtonshire, v.-c. 82, 22nd September 1911.—M'TAGGART COWAN, jun.

*Euphorbia Cyparissias*, L. Well established on ground enclosed from the sand-dunes near Lytham, W. Lancs., v.-c. 60, 18th June 1911.—J. A. WHELDON.

*E. Paralias*, Linn. (seedlings). Freshfield, South Lancs., (59), 30th July 1911.—W. G. TRAVIS.

*E. Paralias*, Linn. St Helens, Dover, Isle of Wight, v.-c. 10, July 1907; the North Bull, Co. Dublin, Ireland, v.-c. 21; Slapton sands, Torcross, S. Devon, v.-c. 3, July 1903.—C. WATERFALL.

*E. Lathyrus*, L. In great quantity, and doubtless native in Monks Wood, Huntingdonshire. A new county record.—G. CLARIDGE DRUCE.

*Ulmus hollandica*, Miller. The Parks, Oxford, October 1911.—G. CLARIDGE DRUCE. "Yes."—A. B. JACKSON.

*U. hollandica*, Mill. (*U. major*, Sm.). *U. glabra*, Huds., var. *major* (Sm.). The "Dutch Elm." Penpoll, Crantock, near Newquay, West Cornwall, 8th October 1911. Coll. et comm. C. C. VIGURS. "Query—Is the amount of suberosity on the bark of this and other elms dependent on the exposure of the tree to strong winds? I think it is quite probable. The Cornish and Dutch elms are the only ones at all common in Cornwall; however, there are in Newquay specimens of *U. glabra*, Huds. (= *U. montana*) and of *U. campestris* (= *U. surculosa* of Ley's paper), the English elm; all named by Dr C. E. Moss."—C. C. VIGURS. "Yes; one of our most distinct elms, now considered to be *U. glabra*, Miller  $\times$  *montana*, Stokes."—A. B. JACKSON.

*U. (?) glabra*, Miller, var. *minor* (Miller). Native. One tree, by roadside on wild moor, about half mile from Pontneathvaughan towards Coelbren, v.-c. 41, 20th June 1911. Bark roughish. Tree 20 feet high; branches regularly disposed round trunk, mostly rather ascending, lowest horizontal, drooping at end. Is small, glabrous; twigs very much divided. The above name is only a suggestion.—H. J. RIDDELSDELL.

*U. glabra*, Mill. [Ref. No. 4962.] The Magdalen Elm, Oxford, July 1911. This splendid elm was blown down in the spring of this year, and these specimens were gathered from the prostrate monarch. This tree measured (*Gunther's Oxford Gardens*, 218) in 1910, at 5 feet from ground, 28 feet 3 inches in girth, and was 143 feet high. According to H. J. Elwes, Esq., it contained 2000 cubic feet of timber.—G. CLARIDGE DRUCE.

*U. glabra*, Mill. [Ref. No. 4269.] The Fyfield Elm, Berkshire. "And maidens from the distant hamlets come to dance round Fyfield elm in May" (Matthew Arnold). June 1911; fruit April 1910. [Ref. No. 2010.]—G. CLARIDGE DRUCE. "Typical *U. glabra*, I should say."—A. B. JACKSON.

*U. stricta*, Lindley (*U. glabra*, var. *stricta*, Ley = (?) *U. minor*, Miller). Trees by the Brent, near Park Royal, Middlesex, 3rd September 1911. These specimens were taken from about a dozen typical examples of the Cornish elm, which I discovered this summer in a field by the Brent, near Park Royal. They have the characteristic erect branches of *U. stricta*, which has not been

previously recorded from Middlesex. These trees kept their leaves a little later than the English elm, which Dr. Moss tells me is usually the case with the Cornish elm. I have not yet had an opportunity of comparing the flowering periods, but hope to do so in the spring.—A. B. JACKSON.

*U. stricta*, Lindley. [Ref. No. 4267.] The Cornish Elm, *U. minor*, Mill., Little Marlow, Bucks., July 1911.—G. CLARIDGE DRUCE. "From the look of the foliage, I should say the Cornish elm."—A. B. JACKSON.

*U. minor*, Mill. (*U. stricta*, Lindl.). Calan, Newquay, 5th October 1911; also, Quarry, Penpoll, Crantock, Newquay, 30th October 1911, both West Cornwall; v.-c. 1. The Cornish elm freely sends up "suckers" which become perfect trees as regards shape anyhow. This is doubtless the way that the rows of Cornish elms on our hedgebanks are frequently formed. I have not yet formed a decided opinion whether this elm is a native or not of Cornwall; but at present I am inclined to think it is.—C. C. VIGURS.

*U. sativa*, Mill. [Ref. No. 4901.] *U. surculosa*, Stokes. The English Elm, Hanwell, Oxon., September 1911.—G. CLARIDGE DRUCE.

*U. Plotii*, Druce. [Ref. No. 4271.] Near Fineshade, Northants, June 1911.—G. C. DRUCE. "Ditto. [Ref. No. 4272.] Near Banbury, Oxon., July 1911."—G. CLARIDGE DRUCE. See *Rep. B.E.C.* p. 30.

*U. —*. [Ref. No. 4902.] Near Banbury, Oxon., September 1911.—G. CLARIDGE DRUCE. "Looks like a form of the English elm."—A. B. J.

*Betula nana*, L. Uisige Gael at from 1600 to 2200 feet. E. Inverness, v.-c. 96, 26th July 1911.—W. A. SHOOLBRED.

*B. pubescens*, Ehrh., in flower. [Ref. No. 3676.] Woodwalton Fen, v.-c. 31, Hants, 5th May 1911. "Ascherson and Graebner retain this name in preference to *B. tomentosa*, Reitt. and Abel.; and I learn from Dr. C. E. Moss that the latter was described after Ehrhart's species."—EDWARD S. MARSHALL.

*B. pubescens*, Ehrh., var. [Ref. No. 3564.] Allt an t'Sluie, near Dalwhinnie, at about 1600 feet, v.-c. 96, E. Inverness, 28th July 1911. Foliage small, dark green, glabrescent; as a rule unusually elongate, narrow, and acute; catkins small; branches pendulous, though less decidedly so than in another tree much like this, which was found lower down, near the same stream. It is very near Reichenbach's figure of *B. carpatica*,  $\beta$  *sudetica*, which is hardly



separable (though the leaves are smaller, narrower, and less serrate) from that named *B. carpatica*, Kit., on the same plate. *B. pubescens*, var. *rhombifolia*, appears to be a much larger-leaved plant, approaching what is in Germany now considered to be true *B. carpatica*, Waldst. and Kit.—EDWARD S. MARSHALL. Also [Ref. No. 806] at about 1500 feet, same locality and date, by W. A. SHOOLBRED.

*B. pubescens*, Ehrh., var. *parvifolia*, Regel (*pro parte*) = *B. odorata*, Bechst., var. *microphylla*, Hartm., *Scand. Fl.*, first edition (1820). [Ref. No. 3563.] Birchwood, at 800 feet, by the road from Laggan Bridge to Dalwhinnie, about a mile south of the former place. A second form was gathered here, which has practically identical foliage, but shorter and much narrower catkins.—EDWARD S. MARSHALL. Also [Ref. Nos. 804 and 805] from near Laggan Bridge, E. Inverness, v.-c. 96, 26th July 1911.—W. A. SHOOLBRED.

*B. pubescens*, Ehrh., var. *Friesii*, Regel = *B. glutinosa*, Fr. (an Walroth?). [Ref. No. 3566.] Allt an t'Sluie, near Dalwhinnie, v.-c. 96, E. Inverness, at about 1600 feet, 28th July 1911. This seems to agree fairly well with the description in DC. *Prodromus*, xvi. 2, p. 168, of var.  $\delta$  *Friesii*, Regel:—"Trunco humili, foliis ramulorum fertiliū sæpissime e basi cuneata rhomboideis, rarissime e basi dilatata late ovato-rhomboideis, squamarum strobili lobis semper erectis. In Sueciæ montanis alpestribusque, in regione Uralensi, in alpestribus Bohemiæ, Germaniæ, Helvetiæ, et Scotiæ, in insula Island. . . . Arbor humilis vel suffrutescens. Ramuli glabri, eglandulosi vel novelli pubescentes. Folia ramulorum fertiliū glabra vel juniora subtus ad nervos pilosula vel tantum in venarum axillis pilosula, simpliciter vel duplicato-dentata, læte viridia, sæpe subcoriacea. Strobili erecti vel nutantes, elongato-cylindracei vel magis abbreviati. Samararum ala nucula sesqui-duplo latior vel rarius ea paullo tantum latior." Regel gives as synonyms *B. glutinosa*, Fr., and its forma *fruticosa*, *B. sylvestris*, *B. subalpina*, *B. cryptocarpa*, and *B. subæqualis*, Læst., *B. pubescens*, var. *carpatica*, Hartig. [non *B. carpatica*, Waldst. and Kit.]; *B. coriifolia*, Tausch, in *Herb. Schrad.*; *B. alba*,  $\delta$  *glutinosa*, *c. carpatica*, Regel Mon., *pro parte*. I have not seen a specimen so named; var. *Friesii* is placed by Regel between his vars.  $\gamma$  *Hornemannii* and  $\epsilon$  *rhombifolia* (*B. rhombifolia*, Tausch; *B. glutinosa*, Wallr.; *B. alba*, *Engl. Bot.*, t. 2198). The present examples came from a small tree about ten or twelve feet high; catkins erect, small (about  $\frac{1}{2}$  to  $\frac{3}{4}$  inch); lateral lobes of the scales remarkably erect, as a rule. It looked peculiar, though approaching var. *parvifolia* in habit.—EDWARD S. MARSHALL. Sent also by W. A. SHOOLBRED from the same locality. [Ref. No. 807.]

*Fagus sylvatica*, var. *heterophylla*, Loudon. Plantation at Minchinhampton, on a limestone soil, about 600 feet alt. Very

likely planted. It is described in Elwes and Henry's *Trees of Great Britain and Ireland*:—"The tree occasionally bears normal and cut leaves on the same twig, or normal and cut leaves on different twigs. It bears fruit occasionally, which, according to Bembury, is smaller than that of the common beech, the capsule being shorter in proportion to the nuts. The leaf-buds are considerably smaller than those of the common form, and the twigs are often very pubescent. In this case I *think* the two different kinds of leaves grew on different twigs; and the owner of the place and her gardener do not remember ever noticing any fruit on the tree."—F. L. FOORD-KELCEY. "This is a curious sport, bearing the normal leaves and the cut ones on the same tree."—G. C. DRUCE.

*Salix pentandra*, Linn. Male, near Driffield, E. Yorks., v.-c. 61, June 1904, and female, Pulfin Bog, near Beverley, E. Yorks., v.-c. 61, August 1904.—C. WATERFALL. "Rightly named."—E. F. LINTON and E. S. MARSHALL.

*S. daphnoides*, Vill., var. *pomeranica*, Willd., Southport, S. Lancs., v.-c. 59, August 1911.—G. C. DRUCE. See *New Phyt.*, 319, 1911.

*Salix* —? Rock ledges of mica schist at 1500 to 2000 feet, Ben Laoigh, Mid-Perth, v.-c. 88, July 1911.—ALBERT WILSON and J. A. WHELDON. "*S. Arbuscula*, L.; it is common in that district."—EDWARD S. MARSHALL. "Probably a form of *S. spuria*, Schleich., on the *Arbuscula* side, but catkins do not show pedicel and nectary well on my specimen."—E. F. LINTON.

*S. alba*, L.  $\times$  *triandra*, L. (= *S. undulata*, Ehrh.). [Ref. No. 458.] By the Thames between Putney and Barnes, Surrey, v.-c. Flowers, 10th May 1911; mature leaves, 6th August 1911.—C. E. BRITTON. "Correct."—E. F. LINTON.

*S. purpurea*, L. (*forma*). A small and-narrow leaved plant which grows in The Parks, Oxford, August 1911.—G. CLARIDGE DRUCE.

*S. aurita*  $\times$  *repens* = *S. ambigua*, Ehrh. Orig., moory hill-side, Cwmbach, Aberdare, v.-c. 41; cult., April and 21st July 1911. Terminal catkins open first.—H. J. RIDDELSDELL. "An interesting form."—E. F. LINTON. "Yes."—E. S. MARSHALL.

*S. aurita*  $\times$  *viminialis*. Orig., Aberdare, v.-c. 41; cult., April and 21st July 1911. Named by Rev. E. F. Linton. Terminal catkins open last.—H. J. RIDDELSDELL. "This seems to be rightly named. I have not seen the male plant before."—EDWARD S. MARSHALL.

*S. lapponum*, L. (f.?) [Ref. No. 798.] Allt Choire Chais, E. Inverness, v.-c. 96, 24th July 1911.—E. S. MARSHALL and W. A.

SHOOLBRED. "Broad-leaved, but abnormal only through having been cut back (or nibbled) close. *S. lapponum*."—E. F. LINTON.

*S. Lapponum*  $\times$  *repens* (?) male. [Ref. No. 3569.] Allt Choire Bhathaich, near Dalwhinnie, v.-c. 96, E. Inverness, 20th July 1911; with the supposed parents, at 2000 feet.—E. S. MARSHALL and W. A. SHOOLBRED. Rev. E. F. Linton has sent me the following note:—"If there is *S. repens* in this, it is only a quarter, at most (*S. Lapponum*  $\times$  *repens*  $\times$  *Lapponum*, say). The only signs I see are in:  $\alpha$ , lower (primordial) leaves on shoots green, and little pubescence;  $\beta$ , some smaller twigs yellowish and green. But for the rest it is typical *Lapponum*; buds all persistently silky, and *Lapponum* shape." I hardly think that it can be a secondary hybrid; and, at least in the dried state, it is very near *Lapponum* indeed. But many of the larger leaves and some of the smaller ones have revolute edges; a good sign of *repens*, which often has quite entire foliage in subalpine stations. The bush was also decidedly creeping—rooting, which pure *Lapponum* would hardly be; and its resemblance to *repens* was very marked, in the habit and general appearance. I still think that it may be the suggested hybrid, though of course it is open to much doubt.—EDWARD S. MARSHALL. "Evidence of *S. repens* very deficient."—E. F. LINTON.

*S. Lapponum*  $\times$  *repens*, male. Originally from the Lochy Burn, Glen Shee, v.-c. 89, E. Perth, 1906. [Ref. No. 2693B.] Cultivated at West Monkton, 20th April and 12th August 1911. Rev. E. F. Linton, who formerly distributed specimens under this name from cuttings of the same gathering which I had sent to him, recently suggested that this might be *S. caprea*  $\times$  *repens*. Although there are some points which favour that view, I am inclined to think that our first opinion was correct. The size has increased considerably; but the comparatively dwarf habit, wood, buds, etc., seem to me to favour a *Lapponum* rather than a *caprea* parentage. Female *S. Lapponum*  $\times$  *repens* grew close by; and although *S. caprea* occurs within a mile or two, I do not remember seeing any along the course of this stream, whereas there is plenty of *S. Lapponum*.—EDWARD S. MARSHALL. "Rightly named."—E. F. LINTON.

*Populus tremula*, L., var. *villosa* (Lang). Gamlingay Wood, v.-c. 29, Cambs., 3rd May 1911. [Ref. No. 3690.] A fine female tree; shown to me by Dr. C. E. Moss. Many of the catkins were infected by a beautiful golden-yellow fungus. In the tenth edition of the *London Catalogue* this was wrongly altered to "Lange," after the proof had left my hands; the describer was O. F. Lang.—EDWARD S. MARSHALL. "The fungus on the catkins is *Taphrina aurea*, Fr. (= *Ascomyces aureus*, Magn.)."—H. J. WHELDON.

*Salix* —? Bog near Aintree, S. Lancs., v.-c. 59, July 1911.—  
J. A. WHELDON. "Is *S. lutescens*, Kern. (*S. aurita* × *cinerea*)."—  
E. F. LINTON.

*Populus nigra*, L. ♀ tree in garden near Turnham Green Station, Bedford Park, Middlesex. Flowers, 4th May 1911; foliage, 27th September 1911. I have had this tree under observation for the past three seasons. Two years ago it ripened seed, which germinated *in situ*, but most of the seedlings succumbed, owing, no doubt, to the unsuitable environment. Some which I took to Kew, however, and had grown on under glass have developed into healthy young plants. It is possible that these have resulted from a cross with a ♀ Black Italian poplar, of which there are numerous examples close at hand. I do not know of any ♀ tree of *P. nigra* in the neighbourhood, although I frequently see single specimens in the parks and gardens about London, where it stands the smoke well. Apparently ♀ trees of *P. nigra* are quite rare; I know of no other specimen near here. Natural seedlings are still rarer, I believe. The leaves in these specimens have often two glands at the base of the lamina, which is not usually the case in *P. nigra*, I believe.—A. B. JACKSON.

*Populus* —. [Ref. No. 2291.] Marsworth, Bucks., July 1911.  
—G. C. DRUCE. "*P. nigra*, L. The shoots are glabrous, which is sometimes the case in the species, but they are more often hairy."—  
A. B. JACKSON.

? *Populus virginiana*, Foug. [Ref. No. 4969.] The Parks, Oxford, September 1911.—G. C. DRUCE. "Gathered in company with Mr. Druce. Whatever the right name of this poplar is, I feel quite sure that it is distinct from both *P. monilifera*, Loud., and *P. nigra*, L. There are two large ♀ trees of it in Kew Gardens, one of which bore the name of *P. nigra* for some years, and has several times been photographed as the true Black Poplar. It is now labelled *P. marylandica*. These Oxford specimens agree exactly with examples from the Kew trees in my herbarium, and with one from a tree at Glen Paira, Leicester, which Dr. Moss has personally named *P. virginiana*, Foug. (See note in *Rep. Wats. Exch. Club*, 311, 1910-11). It differs from *P. nigra* in its foliage, the leaves being larger and more distinctly serrated, the better developed leaves having strongly incurved teeth, and are more uniformly cuneate at the base."—A. B. JACKSON. "My query is as to the name to be used for this distinct Black Poplar; it can scarcely be *marylandica*, and the name *virginiana* given it by Dr. Moss is open to doubt. It is common in some parts of Norfolk and Suffolk."—G. C. DRUCE.

*P. virginiana*, Fougér. [Ref. No. 4726.] Growing with *P. serotina* and *P. nigra*, Needham Market, Suffolk, June 1911. With Dr. Moss.—G. C. DRUCE. Also [Ref. Nos. 2597 and 4963] near Marsworth, Bucks., July 1911.—G. C. DRUCE. "The Marsworth plant is the same as specimens so named by Dr. Moss."—A. B. JACKSON.

*Orchis Braunii*, Halaczy = *Orchis latifolia*, L. × *O. maculata*, L., Gibbons Brook, East Kent, alt. 300 feet, v.-c. 15. This is a perfectly natural hybrid, and occurs on this marshy ground in considerable abundance along with both its parents. *O. incarnata*, L., is also found there, June 1911. Confirmed by Mr. R. A. Rolfe of Kew.—JOHN CRYER. "Looks right. My own specimens of the hybrid are more slender-spiked, but no doubt it varies considerably. The separated dried flower seems just intermediate."—EDWARD S. MARSHALL.

*O. ericetorum*, Linton. These, associated with *O. maculata*, L., and *Habenaria albida*, Br., were found on a knoll of the Great Scar Limestone at Cam Houses, near the source of the river Wharfe, alt. 1500 feet, v.-c. 64, 10th June 1911.—JOHN CRYER. "Yes; this and Mr. Druce's plant are both *O. ericetorum*, Linton. Mr. Cryer's is apparently the white-flowered form, which is not uncommon, though seldom quite pure white. Its occurrence on the limestone is interesting, as this is predominantly a plant of peaty or alluvial soils; but I have found typical *O. maculata* on non-calcareous moors in Somerset and Dumfries, so that neither can be called strictly calcicole or calcifuge."—EDWARD S. MARSHALL.

*Orchis maculata*, L., var. *præcox*, Webster. [Ref. No. 2783.] Pasture near Oakley Wood, Northampton, June 1911; and meadow near Menmarsh, Oxfordshire, on the Oxford Clay, June 1910. This is identical, I believe, with the plant which the Rev. E. F. Linton described (*Fl. Bournemouth*, 208, 1902) as *O. ericetorum*, a sub-species of *O. maculata*, L.: the name given above was used by A. D. Webster in *British Orchids*, p. 54, 1886, a second edition of which appeared in 1898. He read a paper on "An unnamed British Orchid, accompanied by Living Specimens of the Plant," before the Bot. Soc. of Edinburgh, on 10th June 1886, "but as Professor Dickson considered the plant as a variety of *O. maculata*, Webster says it is now included as such, although my own convictions . . . are certainly strongly in favour of its being regarded as a new and distinct species." Webster gives a most excellent description which certainly covers the plant subsequently described as sub-species *O. ericetorum*, Linton, and for which specific rank is now claimed, and there is much to be said in favour of that view—but if so, the limestone analogue *O. maculata*, var. *Okellyi*, should be raised to specific rank as *O. Okellyi*. Comparative culture is still

very desirable. The mere bringing home of tubers and growing them in similar soil is no test, nor if the tubers are placed in garden loam is the test satisfactory, nor would it be quite a scientific culture if tubers of *præcox* from the acid soils were grown in basic soils, or those of *maculata* from basic soils grown in soils rich in humus, although illuminating results might occur. The true test would be to grow seeds of *præcox* on basic clay and true *maculata* on peat. *O. Okellyi* might also be subject to the same tests by first growing the tubers in clayey loam or peat, and then, more scientifically, the seeds in peat or clay. But in the absence of such knowledge Nature supplies some evidences which are suggestive. Both the localities from whence these specimens came yielded *maculata* and *præcox*, but the former was in the wetter, more clayey soil, the latter in parts where there was more drainage and where the soil had more humus; indeed, in the Oxford locality sufficiently ericetal in character to yield *Salix repens*. But there were many intermediate plants—that is, in some the leaves were those of *maculata* but the flowers nearly typical *præcox*, and again there were narrow-leaved forms of *O. maculata*. This variation I have also seen in Buckinghamshire, on Chailey Common in Sussex, in Wytham Wood, Berkshire, and in Caithness, and suggests to me that they may be (if not hybrids of two species) soil forms. Roughly speaking, the Orchid of basic soils is generally *maculata*, that of acid soils is usually *præcox*. With regard to the period of flowering, as a rule *præcox* is an earlier plant, but they often flower side by side, and in Yorkshire Mr. Crump of Halifax showed us *præcox* in flower in this hot season in August. The question has been asked, Is not *ericetorum* peculiar to Britain? and indeed an affirmative reply has been somewhat hastily given. In many places, even in Britain, *præcox* is really the *O. maculata* of *Lists* and *Floras*. The description of *O. maculata* in Brébisson's *Flore . . . Normandie*, "Labelle large, trilobé, dentelé, a lobe moyen, petit, court, aigu, entier," however, suggests *præcox*; moreover, he has a var. *trilobata* "*epi grele; fleurs petites; labelle à trois lobes profondes presque égaux*" and a var. *media*, "*Labelle a lobe moyen, allonge, obtus les lateraux arrondis, entiers*," which shows that his type *maculata* is not our restricted species. Judging by the figure of the flowers (see Lindman, *Svenska Vet. Akad.* 23, iii. No. 1 Afd.) as we might expect, *præcox* appears to be the common form in Sweden. Lindman has described nine forms, chiefly from the markings on the petals, but they do not follow the separation of the plants under discussion. The plant of the Linnean Herbarium is, I believe, restricted *O. maculata*. Mr. C. E. Britton (*Essex Nat.*, July 1902) says *ericetorum* is the prevailing form in Epping Forest, and shows that some of the characters given in the *Flora of Bournemouth* break down, but lays proper stress on the relative size of the lip-lobes and "the heathland habitat."—G. CLARIDGE DRUCE.

*Allium vineale*, L., var. *compactum* (Thuill.), viviparous form. [Ref. No. 3693.] Garden, West Monkton, 24th June 1911. Believed to have been sent by Mr. E. W. Hunnybun as a variety of *A. sphaerocephalum*, L., originally from Jersey. One root, which flowered in August, was without head-bulbils (*a. capsuliferum*, Koch, of the *London Catalogue*).—EDWARD S. MARSHALL.

*Muscari racemosum*, Mill. em. Lam. and DC., Chadlington, Oxfordshire, April 1911. Found by Miss Burlton. Here it is in immense quantity, giving a colour to the turf in an extensive upland pasture on the great Oolite, about five miles from the similar locality near Kiddington, and where it is almost certainly native, the villagers having long known of it. It is far distant from houses.—G. CLARIDGE DRUCE.

*Gagea lutea*, Ker-Gawl. Brickhill, Bucks., April 1910. A new county record.—G. C. DRUCE.

*Asphodelus fistulosus*, W. Dock alien, West Dock Great Reservation, Hull, E. Yorks., v.-c. 61, October 1904.—C. WATERFALL.

*Juncus ranarius*, Nees. Southport Dunes, S. Lancs., v.-c. 59, August 1911.—G. CLARIDGE DRUCE. "Very acceptable specimens. One may, perhaps, have passed this over as *J. bufonius*, var. *fasciculatus*."—E. S. MARSHALL. See *New Phyt.*, 321, 327, 1911, and *Rep. B. E. C.*, p. 35.

*J. castaneus*, Sm. Ben Laoigh, at 2200 feet, Perth, v.-c. 88, 23rd July 1911.—A. WILSON and J. A. WHELDON.

*Luzula pilosa*, Willd. From several woods near Stevenage, Weston, Knebworth, etc., in Hertfordshire, June 1911. I cannot find any characters by which this plant can be distinguished from average *L. pilosa* in flower or fruit. The habit is very vigorous, and makes one think of *L. sylvatica*. The leaves are often very long and broad. Not being able to find any *L. sylvatica* in Hitchwood, where it is recorded in *Fl. Herts*, I thought there might be an error in the record. But having since found *L. sylvatica* in Knebworth Great Wood, I think it quite possible it may occur in Hitchwood also. Dr. Moss thinks the Hitchwood form may amount to a distinct variety. If so, I think the same is applicable at any rate to the Knebworth Great Wood form; I send also specimens from four other woods.—J. E. LITTLE. "I see nothing but a robust form of *L. pilosa* here. If the larger size of the leaves were due to crossing with *L. maxima*, one would expect to trace its influence in the perianth and fruit, which are, however, quite normal."—J. A. WHELDON. "Forms of *pilosa*."—G. C. DRUCE.

*L. erecta*, Desv. On clay, Knebworth Great Wood, Herts, 13th June 1911.—J. E. LITTLE. "Yes; my specimens are the var. *congesta* (Lej.), which seems the more prevailing form."—C. E. SALMON. "The older specific name is *multiflora*."—G. C. DRUCE.

*L. maxima*, DC. Knebworth Great Wood, Langley, Hitchin, Herts, 13th June 1911. Does this differ from the Yorkshire plant? —J. E. LITTLE. "The only difference I see between these and average Lancashire and Yorkshire examples is in the greatly reduced panicles, which may be due to the dry season."—J. A. WHELDON.

*L. arcuata*, Wahl. Ben Muich Dhui at 4200 feet, Banffshire, September 1909.—A. WILSON and J. A. WHELDON. "Where it was first discovered by George Don in 1812."—G. C. DRUCE.

*Arum maculatum*, L., var. *immaculatum*, Gray. Tweed; near Hawick, 5th May 1910. Coll. W. T. BLACKWOOD; Comm. M'TAGGART COWAN, jun. "The spotting of the leaves does not appear to depend upon the nature of the soil or situation, spotless and spotted plants frequently growing adjacent to each other" (*Fl. West Lancs.*, p. 298). "If a character does not depend on local conditions, the presumption is that it is hereditary, and it might indicate a distinct variety. Cultural experiments would clear this up."—J. A. WHELDON. "As a rule, the spotted and unspotted forms grow together, at least in the south; and I hardly think that they are worth distinguishing, unless as 'forms.'"—EDWARD S. MARSHALL. "Gray's name should be bracketed, as he describes the variety under *Arum vulgare*. Mutel (*Fl. Franc.*, iii, 339, 1836). I put it under *A. maculatum*. Cultivation is desirable."—G. C. DRUCE.

*Wolffia arhiza*, Wimm. With *Lemna polyrrhiza* in a pond in the Home Park, Kingston-on-Thames, Surrey, 17th June and 20th August 1911. A fresh locality for this rare duckweed, pointed out to me by Mr. C. E. Britton, to whom it was shown by Mr. Holloway (see *Journ. Bot.*, 1910, p. 331). The plant occurred in great abundance for some distance round the edge of the pond, although there was no trace of it last winter.—A. B. JACKSON.

*Potamogeton coloratus*, Horn. Crowland, S. Lincolnshire, v.c. 53, June 1911. A new county record.—G. C. DRUCE. "Yes."—A. BENNETT.

*P. heterophyllus* (?) In pools, Harbour Island, Lough Neagh, Co. Antrim, 18th August 1911.—C. H. WADDELL. "Yes. Rare in Antrim. Praeg., *Irish Top. Bot.*"—A. BENNETT. "Better specimens are desirable, but I think rightly named. Submerged leaves remarkably narrow."—EDWARD S. MARSHALL.



*P. crispus*, L., *forma*? Carrickmornan Lough, Co. Down, June 1899.—C. H. WADDELL. "Ordinary non-flowering shoots of *crispus*; it may be one of Gandoger's splits, but we do not recognise these."—A. BENNETT. "A young state, apparently the *P. serratum* of Hudson; cf. his remark in *Fl. Anglica*, 2nd edition, p. 75 (1778): 'Foliis superioribus oppositis, subinde inferioribus alternis. Nimis affinis præcedenti'—i.e. to his *P. crispum*."—EDWARD S. MARSHALL.

*P. Lintoni*, Fryer. Renishaw Canal, Derbyshire, October 1911. The plant occurs in great quantity for a mile or more of the above canal, and about two miles south of the station, where it was originally gathered by our late member the Rev. W. R. Linton, who first thought it was a form of *P. obtusifolius*, to which it bears much resemblance. Mr. Alfred Fryer, however, described it as a hybrid of *P. crispus* and *Friesii*, under the above name. See *Flora Derbyshire*, p. 290, 1903. Dr. Hugo Glück was with me when I gathered it, and assented to its hybrid origin.—G. CLARIDGE DRUCE. "Correct. Ascherson and Graebner (*Pflanzenreich*, Heft 31, 133, 1907) place this as *P. crispus*  $\times$  *mucronatus*, an almost invariable practice of these authors, with, one must suppose, only one reason. They there say '*P. crispus*, var. *serrulato similis*.' This can hardly be held so, as that variety of *crispus* is most distinctly serrulate, this is not so."—A. BENNETT.

*P. acutifolius*, Link. Ditches near Wareham, Dorset, August 1910.—H. E. FOX. "Correct, but gathered too late. This species has often well-found fruit in the middle of June, and in early years the end of May; while *zosterifolius*, Schum., is rarely in fruit before the middle of July. Although in *Top. Bot.* under 'Lincoln N. Bank's hb.' is given, Dr. Lees in his *Outline Flora of Lincolnshire* (1892), p. 22, puts a query to *P. acutifolius*. But there are specimens in Bank's herbarium at the British Museum from N. Lincoln."—A. BENNETT. "I have seen it in Northants within a couple of miles of S. Lincoln."—G. C. DRUCE.

*P. pectinatus*, Linn. In the Canal, Netherton, South Lancs. (59), July 1911.—W. G. TRAVIS.

*Zannichellia pedunculata*, Reichb. (a) Brackish pools, East banks of river Humber, Hull, E. Yorks., v.-c. 61, 3rd June 1906, and Spurn Head, 9th July 1910, v.-c. 61.—C. WATERFALL. "Yes; identical with our West Coast plant so named."—J. A. WHELDON. "Yes; I believe correctly named."—C. E. SALMON. "I use the older, but perhaps more aggregate name of *Z. maritima*, Nolte."—G. C. DRUCE.

*Eriocaulon septangulare*, With. *Forma terrestris*, Glück ined., Roundstone, Galway, growing among sphagnum, August 1911.

The pipewort was first discovered in Skye by James Robertson in 1768, and published (*Phil. Trans.*, vol. lix. 241) in 1770, but Dr. Walker (Hook., *Fl. Scot.*, i. 270) attributes the discovery to Sir John Macpherson in 1764 (Clarke, *First Records*, p. 157). In the first edition Withering (*Nat. Arr.*, ii. 784*bis*, 1776) described it under the above name. But in an earlier work, that of Hill's *Herbarium Britannicum*, p. 66, 1769, there is a plate No. 66*bis*, with good dissections, showing the stamens, pistil, etc., labelled at the top *Cespa* and *Cespa aquatica*, *Water Turfwort* at the bottom. This plate is in my copy of the work, which once belonged to Bishop Goodenough, but it is not in that of two or three other copies which I have examined. Should it be found to be included in others it may stand as a publication (*Vienna Actes*), and our plant would become *E. aquaticum*.—G. CLARIDGE DRUCE.

*Cyperus longus*, L. Ulwell, Dorset, August 1910. Sent to confirm Ray's record. Recorded also by E. F. Linton, August 1910.—H. E. FOX. "A single example."—J. A. W.

*C. fuscus*, Linn. Edge of peaty pool on Shalford Common, Surrey, v.-c. 17, 26th September 1906.—C. WATERFALL.

*Eleocharis palustris*, Br., var. *uniglumis* (Schultes), Druce. Frodsham Marsh, Cheshire, v.-c. 58, June 1911. Mr. Clarke held that the character derived from the glume was unworkable, but to me it seems fairly constant, whereas that of the sheaths, truncate or slightly mucronate, varies on plants of a single tuft.—J. A. WHELDON. "Only in flower, but I think it may be *S. uniglumis*, though I have no specimen quite so tall, and the glumes are usually of a darker (chocolate) brown."—EDWARD S. MARSHALL. "It grew in a deep ditch, in shade, which might account for these departures from usual habit. It occurs on the shore in Lancashire an inch or two in height."—J. A. W. "I did not agree with Mr. Clarke in reducing it to a form of *E. palustris*, although of course it is closely allied to that plant."—G. C. DRUCE.

*Scirpus monostachys*. Little Sea, Studland, Dorset, August 1911.—H. E. FOX. "This is *S. filiformis*, var. *monostachys* [Hook. fil., under *S. Savi*]."—EDWARD S. MARSHALL. "Yes; the small form or state of *S. filiformis*, Savi."—C. E. SALMON.

*S. rufus*, Schrad. Salt-marsh, N. of Southport, S. Lancs., v.-c. 59, 17th June 1911. The locality was recently enclosed and drained, and the plant will probably soon disappear.—J. A. WHELDON.

*Eriophorum latifolium*, Hoppe. Clean Moor, between Wiveliscombe and Bathealton, v.-c. 5, S. Somerset, 2nd June 1911; locally

abundant in this station, and on two other neighbouring moors towards Milverton.—EDWARD S. MARSHALL.

*E. angustifolium*, Roth, var. *vulgare*, Koch. Bog near Aintree, S. Lancs., v.-c. 59, 12th June 1911.—J. A. WHELDON. "This is Koch's *a. vulgare*; but of course that denotes the type and is not a variety."—EDWARD S. MARSHALL.

*Schoenus nigricans*, Linn. Calcareous soil on shore of Haws-water Tarn, Silverdale, W. Lancs., v.-c. 60.—J. A. WHELDON.

*Carex acutiformis*, Ehrh., var. *spadicea* (Roth). Eaves Wood, Silverdale, W. Lancs., v.-c. 60, July 1911. The bracts of the female spikes are variable, but the lower ones especially show the character, distinguishing Roth's plant very well. N.C.R. for 60.—J. A. WHELDON. "Yes."—EDWARD S. MARSHALL.

*C. acutiformis*, Ehrhart. [Ref. No. 2596.] Halton, Bucks., June 1911. The typical plant, showing the rufous colour of the anthers.—G. CLARIDGE DRUCE. "Yes; type."—EDWARD S. MARSHALL.

*C. csomadensis*, Simonkai, *En. Pl. Trans.*, 556, 1887 = *C. riparia* × *vesicaria*. Growing with both parents in a marshy meadow on the Oxford Clay near Grendon Underwood, Bucks., and showing variations towards each parent. The commoner plant had nuts shorter than in *riparia*, but somewhat longer and larger than in *vesicaria*, leaves narrower than in *riparia*, but more glaucous than in *vesicaria*. Male spikes paler than in *riparia* and more slender female spikes longer exserted, with much shorter bracts than in *riparia*. Perigynia shorter and of a yellower green than *riparia*, less inflated than *vesicaria*, more abruptly narrowed than in *riparia*. Dr. Domin agrees to my determination. Mr. Arth. Bennett thought it was near *C. riparia*, var. *deformis*, Beurl., in *Bot. Not.*, 37, 1853.—G. CLARIDGE DRUCE. "A very striking plant which shows good evidence of both parents in the inflorescence; the fruit being, perhaps, a little on the *vesicaria* side. Ascherson and Graebner describe the leaves of the hybrid as broad—in Mr. Druce's plant they are curiously narrow for an offspring of *C. riparia*—and the fruits are abortive; whereas here they are well developed, and the nuts as if they would be fertile. I have never seen anything at all like it."—ED. S. MARSHALL.

*C. saxatilis*, Linn. Ben Laoigh, at 1800 feet, Mid-Perth, v.-c. 88, July 1911. The gathering includes a range of forms with larger or smaller spikes, distant or approximate, and a few sterile in which apparently the fruit did not ripen; also a few examples with stouter spikes, the terminal one having both male and female flowers.—

ALBERT WILSON and J. A. WHELDON. "Yes; = *C. pullu*, Good."—ED. S. MARSHALL. "Good *C. saxatilis*, L., which is very variable."—G. C. DRUCE.

*C. extensa*, Good., var. *minor*, Syme. Salt-marsh N. of Southport, S. Lancs. (59). A tall form of the variety, but merges into it in the same marsh.—J. A. WHELDON. "Yes; var. *pumila*, Anderss. = *minor*, Syme."—EDWARD S. MARSHALL. "Not an extreme form of the so-called variety."—G. C. DRUCE.

*C. glauca*, Murr., var. Near Thorpe Green, Surrey, 3rd June 1911. "This seems to be a form of variety of *C. glauca*, with the female spikes more approximate than usual and not drooping. The fruit is decidedly rough, almost hispid, and the female glumes shorter than in type. It is a plant of open damp meadows. None of the descriptions of varieties mentioned by Aschers. and Graeb. (*Syn. Mittel. Fl.*, 1902, p. 134) seem to fit this exactly."—C. E. SALMON. "Mr. Salmon's specimens have very erect female spikelets; the fruit much exceeds the glumes, which vary from blunt to acute. I do not know of any particular name for this form; the species is very variable."—EDWARD S. MARSHALL. "The name *C. glauca*, Murray (*Prod. Fl. Goett.*, 76, 1770), which Nyman, Richter, Kükenthal, etc., use, does not exist. It is true Murray, citing from Haller, refers to it in that work, but gives no name. Scopoli (*Fl. Carn.*, ii. 223, 1772) is the first author to use *C. glauca*, but one year previously Schreber (*Prod. Fl. Lips.*, app. n. 669, 1771) describes it as *C. flacca*, as I pointed out long ago (*Journ. Bot.*, 336, 1887), and this name has priority. It is very difficult for a correction to catch up an error."—G. C. DRUCE.

*C. flacca*, Schreb., *forma*. Salt-marsh, north of Southport, v.-c. 59, 17th June 1911. Differs from my inland examples in its slender cylindrical suberect spikes and fruit slightly scabrous, or very shortly spinulose near apex. Are there two states of this species? Plants from Silverdale, Gordale, and other limestone areas have the perigynia distinctly spinulose and not "slightly rough" as described in *Bab. Manual*.—J. A. WHELDON. "Female spikes erect, ascending, rather long, and remarkably narrow; they are very dark coloured, perhaps owing to the dry, hot season."—EDWARD S. MARSHALL.

*C. panicea*, L., var. *tumidula*, Læst. Near Thorpe Green, Surrey, 3rd June 1911. "This is apparently the var *tumidula*, but, considering its size, it hardly falls under the section assigned to it by Aschers. and Graeb. (*Syn. Mitteleur. Fl.*, 1902, p. 142)—i.e. 'Pflanze meist nur 0.5 dm. hoch oder Wenig höher.'"—C. E. SALMON. "Correct, I believe, though not extreme. This variety

seems to be commoner northwards, but I have seen it in Somerset." —EDWARD S. MARSHALL. "It was abundant with the type in Northants in 1911, but it seems a weak variety."—G. C. DRUCE.

*C. limosa*, L., Dalnaspidal, Mid-Perthshire, v.-c. 88, 18th July 1911.—W. A. SHOOLBRED.

*C. rariflora*, Sm. Near Dalwhinnie, E. Inverness, v.-c. 96, 14th July 1911.—W. A. SHOOLBRED.

*C. canescens*, L. (*curta*, Good.), var. *fallax*, Aschers. and Graebner. [Ref. No. 3571.]—E. S. MARSHALL and W. A. SHOOLBRED. Alpine bogs, at 2600 to 2800 feet, Allt a'Choire Chais, near Dalwhinnie, v.-c. 96, E. Inverness, 24th July 1911; also by the Allt a'Chama Choire, Atholl Forest, v.-c. 89, E. Perth, in the adjoining watershed. Identical with the Lochnagar plant, which Rev. W. R. Linton cultivated for many years, and found to be remarkably constant; also, I believe, with Syme's figures of *C. curta*, var. *alpicola*, in the third edition of *English Botany*. Frequently associated in both stations with *C. rariflora*, Sm.; but that is much scarcer.—EDWARD S. MARSHALL.

*Carex* —? Peaty ditch near Dye's Farm, Langley, Hitchin, Herts, 13th June 1911. This *Carex* appears to belong to Bentham's aggregate *C. caespitosa*; it may be *C. stricta*, but I cannot place it. It is much larger and more vigorous than *C. Goodenowii* of our swamps (see below). It is densely tufted, also stoloniferous. The leaves ultimately far outgrow the flower-stems, which become quite hidden among them.—J. E. LITTLE. "My specimen is not determinable, as it bears no inflorescence."—EDWARD S. MARSHALL. "The base of the stem is lacking, but I believe it to be *C. gracilis*, Curtis."—G. C. DRUCE.

*C. Goodenowii*, Gay. (a) Walsworth Spring, Hitchin, 5th May 1911; (b) dried-up swamp at Hertford Heath, 29th July 1910; (c) moist ditches, Langley, Hitchin, 25th May 1910.—J. E. LITTLE. "(c) is a small, narrow-leaved form."—E. S. MARSHALL. "(c) may be *recta*, Fleisch."—G. C. DRUCE.

*C. Goodenowii*, Gay, var. *juncella*, Asch. [Ref. No. 108.] Bog near Aintree, S. Lancs. (59), 12th June 1911.—J. A. WHELDON. "Seems to be *C. vulgaris*, var. *junceae*, Fr., *Mant.*, iii. 154 (1842), which he altered to var. *juncella* in *Bot. Not.*, 1843."—EDWARD S. MARSHALL.

*C. Goodenowii*, Gay, var. —? [Ref. No. 110.] With the preceding, and perhaps a form of it; but it grows in extremely densely caespitose tufts, rivalling those of *C. elata*, All.—J. A. WHELDON. "Also var. *juncella*, Asch., I believe."—ED. S. MARSHALL.

*C. Goodenowii*, Gay, var. —? [Ref. No. 200.] Frodsham Marsh, Cheshire, v.-c. 58, 10th June 1911. Quite distinct from the Aintree plant in not forming compact tufts, and in its long broad leaves.—J. A. WHELDON. "I suppose that this comes under the var. *elatio*r, Kükenthal."—ED. S. MARSHALL.

*C. axillaris*, Good. Roadside ditch, Reed, W. Suffolk, v.-c. 26, 10th June 1911. The habit appears to be unstable. In some specimens the spikelets are very much crowded towards the upper end of the flower stem. The two plants from which specimens are sent were found after examination of many hundred *C. vulpina* and *C. remota* growing abundantly along several miles of roadside ditches in heavy clay. I did not discover any *C. muricata*.—J. E. LITTLE. "Yes; *C. remota*  $\times$  *vulpina*."—EDWARD S. MARSHALL and G. C. DRUCE.

*C. paniculata*, Linn., *f. simplicior*, And. (a) Hatchmere, Delamere Forest, Cheshire, v.-c. 58, June 1900; (b) boggy ground near Driffeld, E. Yorks., v.-c. 61, June 1903.—C. WATERFALL. "Ascherson and Graebner (*Synopsis*, ii. 47) give this as var. *simplex*, Petermann (1846); Andersson's name dates from 1849. I incline to think it a form rather than a good variety."—EDWARD S. MARSHALL. "S. F. Gray (*Nat. Arr.*, ii. p. 46, 1821) is the earliest authority for the var. *simplex*, diagnosed as 'panicle simple; lower spikelets distant.'"—G. C. DRUCE.

*C. paradoxa*, Willd. Marsh near Mildenhall, Suffolk, W. Growing in great plenty, June 1911.—G. CLARIDGE DRUCE. "Very characteristic. I found this in May 1887 near Ticklingham, not far from Mildenhall, in a marsh near the river Lark—possibly the same station."—EDWARD S. MARSHALL.

*C. disticha*, Huds., var. Itchington Moor, West Gloucester, 14th June 1911. A peculiar form, constant, apparently sterile, attenuate and tall in stature, with long, interrupted spikes.—JAS. W. WHITE. "A tall form of the species, with loose flowering female spikes, but does not seem to be named, unless one specimen is the var. *longibracteata*, Schleich.; the bract is one inch longer than the spike; only the two top spikelets seem to have male flowers, four others seem wholly female; in aspect it certainly looks very different to the ordinary form, though the species varies much."—A. BENNETT. "I have a good series of this species, but none with spikes so long, or so much interrupted below. It may be Marsson's var. *remota*; but I do not possess his *Flora von Neuor Brunswickee*r, etc. Ascherson and Graebner do not mention it."—EDWARD S. MARSHALL. "I should call this forma *interrupta*, Druce (*Fl. Berks.* 534)."—G. C. DRUCE. "Schleicher (*Cat. Pl. Helv.*, ii. 1815) describes *longibracteata* as

a species. I reduced it to a variety (*Journ. Bot.*, 232, 1890), but, as with the analogous variety of *pilulifera*, there are many transitional forms."—G. C. DRUCE.

*C. divisa*, Huds. Beside brackish ditch, Clacton-on-Sea, N. Essex, v.-c. 19, 5th June 1911.—G. C. BROWN. "Correct. I have collected it there."—EDWARD S. MARSHALL.

*Leersia oryzoides*, Sw. Canal near Byfleet, Surrey, 16th September 1911. The spikelets drop very readily when the panicle expands. The name of this species, in Aschers. and Graeb., *Syn. Mittel. Fl.*, 1898, p. 12, is given as *Oryza clandestina*, A. Br. —; where names (*f. patens*, Wiesb., and *f. inclusa*, Wiesb.) are to be found that have been applied to the expanded-panicle and included-panicle forms respectively. The warm summer of 1911 encouraged some of these panicles to emerge from their sheaths, but the specimens sent are nothing like so fine as examples in Holmesdale Nat. Hist. Club Herb. from Brockham Bridge, Surrey, coll. in 1859 by John Linnell, who made a note as follows: "Large patches . . . 6 feet high." It would be interesting to know if that year was phenomenally warm.—C. E. SALMON. "Mr. Albert Wilson has ascertained that in 1859 the temperature rose to 79°° in April (!), to 77°° in May, to 81°·3 in June, to 93°° in July (!), to 91°·3 in August, to 76°° in September, and to 81°° in October (!). The year 1859 was one of the hottest of the last seventy. Mr. Wilson further suggests that the *Leersia* was not so fine in 1911 (which exceeded 1859 in temperature) because of the drought, moisture with heat, of course, having a greater effect than heat alone."—J. A. W. "Yes; it was flowering freely there in 1911. The older name is *Homolocenchrus oryzoides*, Mieg., which is arbitrarily rejected by the *Vienna Actes*. Schinz and Thellung, in the *Flora der Schweiz*, give it as *Oryza oryzoides*, S. and T., which complies with them."—G. C. DRUCE.

*Anthoxanthum Puelii*, Lecoq. Between Gamlingay and Everton, Cambs. and Beds., 17th July 1911.—J. E. LITTLE. "Right."—E. S. MARSHALL. "If the relative length of glume and awn is a decisive character, it must be *A. Puelii*."—J. A. WHELDON. "*A. aristatum*, Boiss."—E. HACKEL. "*Aristatum* and *Puelii* are synonymous."—G. C. DRUCE.

*Phleum alpinum*, Linn. [Ref. No. 72.] Canlochan Glen, Forfar, v.-c. 90, 23rd July 1910.—M'TAGGART COWAN, jun. "Yes; the usual British form, var. *commutatum*, Gaudin."—G. C. DRUCE.

*Alopecurus bulbosus*, Gouan. Meadows by the river Ouse, Clifton Ings, York, June 1888. The stem is by no means always erect. It is often as geniculate as in *A. geniculatus*, yet it keeps quite

distinct from *A. geniculatus*, although far removed from haloid influence, and was reported from this station in the first edition of Baker's *North Yorkshire* in 1863.—J. A. WHELDON. "One specimen on my sheet is certainly *A. geniculatus*; the other is *A. bulbosus*, I think, but it is not a good example of it."—H. J. R. "My specimens are *bulbosus*."—G. C. DRUCE. "*A. bulbosus*."—E. HACKEL.

*Phleum Boehmeri*, Schrad. Wilbury Hill, Hitchin, Herts, 25th June 1911.—J. E. LITTLE. "Yes; *P. phleoides*, Simonkai."—E. S. MARSHALL and G. C. DRUCE.

*Agrostis alba*, Linn., var. *maritima*, Meyer. Damp sands, Hightown, S. Lincs., v.-c. 59, 15th July 1911. Frequent on the coast on damp flats which are not much overgrown, where it is often associated with *Erythræa littoralis*.—J. A. WHELDON. "What Prof. Hackel so named for me, from Betty Hill, W. Sutherland, though varying considerably in luxuriance, is very different from these dwarf, delicate specimens, with their hair-like foliage and small, narrow dark inflorescence. I do not think they can be combined under one name."—EDWARD S. MARSHALL. "Yes; like Mr Bailey's specimens from the vicinity, which Hackel named var. *maritima*."—G. C. DRUCE. "Var. *maritima*, Meyer."—E. HACKEL.

*A. canina*, L., var. *mutica*, Doell. Pond in wood, near Pencae-drain Farm, Pontneathvaughan, v.-c. 41, 28th June 1911. Floating on the surface of the pond.—H. J. RIDDELSDELL. "A curious-looking plant, unlike any of my examples of *A. canina*, having the aspect and foliage of *A. palustris* but the characters of *A. canina*. In all the specimens there is a distinct awn, which in the upper florets of the panicles much exceeds the glumes, and is very evident; its habit of growth and broad leaves are quite unlike our northern forms of var. *mutica*, Doell, and I think it cannot be referred to it. Many of the flowers appear to be sterile. The var. *mutica* of our district has usually purplish glumes and branches, and leaves half the breadth of these specimens, and the awn quite obsolete. The luxuriant sterile radical shoots are unusually developed."—J. A. WHELDON. "My specimens have long awns to the flowers, and therefore cannot be var. *mutica*. Inflorescence very green; this is apparently due to shade."—EDWARD S. MARSHALL. "Gaudin is the authority for the var., but my specimens are awned, and therefore not *mutica*, but probably both forms occurred since I noticed that the specimens I sent to Hackel had only a very few awned florets, and he names it *mutica*, Doell."—G. C. DRUCE.

*A. canina*, Linn. Shore of Loch Laidon, at 930 feet, Rannoch Moor, v.-c. 88, July 1911.—ALBERT WILSON and J. A. WHELDON. "Very like a sheet gathered by W. R. Linton in N. Derbyshire



labelled var. *capillaris*, All., with setaceous root leaves and awnless flowers. One of my examples of the Rannoch Moor gathering is awned; the other is awnless, as in our var. *mutica*, Doell.—EDWARD S. MARSHALL. "One of my specimens is var. *mutica*, Gaudin, as was the one sent to Professor Hackel."—G. C. DRUCE.

*Calamagrostis canescens*, Druce (= *C. lanceolata*, Roth). Great Oakley Wood, Northants, June 1911. In great abundance, growing with *C. epigeios*.—G. CLARIDGE DRUCE.

*Deyeuxia neglecta*, Kunth. Margin of Oakmere, Cheshire, v.-c. 58, 25th June 1911.—WM. HODGE. "*Calamagrostis neglecta*, Beauv., Dalla Torre (*Gen. Siphon.*), merge *Deyeuxia* in *Calamagrostis*."—E. HACKEL.

*D. neglecta*, Kunth, var. *Hookeri* (Syme). Marshy shore of Lough Neagh, Ellis' Cut, Co. Down, 29th July 1911.—C. H. WADDELL.

*Deschampsia cespitosa*, Beauv., var. *pallida*, Koch. Woods, Rosslyn, v.-c. 83, 3rd July 1911.—M<sup>rs</sup> TAGGART COWAN, jun. "Yes, but Koch's varietal name was published under *Aira*; also, I believe, S. F. Gray's earlier name, var. *argentea*."—EDWARD S. MARSHALL. "Yes; but the more correct and earlier name is *D. cespitosa*, var. *argentea*, S. F. Gray, *Nat. Arr.*, ii. 137, 1821."—G. C. DRUCE. "Yes."—E. HACKEL.

*Molinia caerulea*, Moench., var. *subspicata*, Figert. Banks of Loch Earn, Perthshire, v.-c. 87, September 1911. Growing in large tufts upon the shingle along the side of the Loch. *Fide* A. Bennett.—M<sup>rs</sup> TAGGART COWAN, jun. "Typical *M. caerulea*, Moench."—E. HACKEL.

*Poa palustris*, Linn., var. *effusa*, Aschers. and Graebn. [Ref. No. 328.] Old clay pits, Upton-on-Severn, v.-c. 37, July 1911.—Coll. RT. TOWNDROW; Comm. S. H. BICKHAM. "Yes, but rather gone over, and general appearance altered by the loss of portions of the spikelets."—J. A. W. "Yes. This discovery finally establishes it as a native species on the Severn in Worcestershire and Gloucestershire. No doubt it will be found in other localities."—H. J. RIDDELSDELL. "*P. palustris*, L."—E. HACKEL.

*P. bulbosa*, L., f. *vivipara*. Pebble beach, Cold Knap, v.-c. 41, 18th May 1911. Much increased since first saw it here; it extends a good half-mile.—H. J. RIDDELSDELL. "The viviparous form is rare in Britain, although very common in Spain."—G. C. DRUCE. "Yes."—E. HACKEL.

*Glyceria*. By the Tay, Mid-Perth, v.-c., July 1907.—G. C. DRUCE. "Near to the plant which Professor Hackel once named for me as *G. plicata*, var. *depauperata*, Crepin, which is probably synonymous with *G. declinata*, Bréb."—G. C. DRUCE. "*G. plicata*, ad. var. *triticea accedens*."—E. HACKEL. "Is *G. declinata*, Bréb."—EDWARD S. MARSHALL.

*G. distans*, Wahl., var. *prostrata*, Beeby. Pebble beach, Cold Knap, v.-c. 41, 18th May 1911. Forming round prostrate tufts. I do not know anything of Mr Beeby's variety.—H. J. RIDDELSDELL. "A well-nourished form of *P. annua* which often occurs about docks, etc., in Lancashire."—J. A. WHELDON. "The plant sent to me is certainly *P. annua*, L.; the prostrate habit and the flowers (variegated with purple) seem to make it var. *supina* (Schrad.)."—EDWARD S. MARSHALL. "All the var. *supina* I have seen has come from Alpine localities, and does not look at all like these specimens."—J. A. W. "Is this not the robust maritime perennial creeping form of *P. annua*, L.? A similar plant from Wigtown was named by a well-known English expert as *G. maritima*! I have exactly this plant from the Caithness coast."—G. C. DRUCE. "*P. annua*, L., var. *reptans*, Hausskn., in *Thür. Bot. Ver.*, ix, 7, 1891."—E. HACKEL.

*G. maritima*, M. and K., var. *hispida*, Parn. Salt-marsh, N. of Southport, S. Lincs., v.-c. 59, June 1902. Panicle branches spinulose, especially just below the spikelets. I find that all my *maritima* has the panicle branches more or less asperous. Parnell lays stress on the panicle branches being smooth *to the touch*, but they are not so under a lens. In his description of var. *hispida* he does not refer to the roughness of the rachis, and *Bab. Man.* also refers only to panicle branches being rough. But Parnell's figure shows the rachis to be equally rough with the branches, therefore, although my specimens may be considered as agreeing with the description, they cannot be regarded as the same as the plant Parnell figures.—J. A. WHELDON. "Only type, apparently; the rachis in my specimens is quite smooth, and the panicle branches are smooth or very slightly asperous."—ED. S. MARSHALL. "I do not think Hackel separates Parnell's *hispida* from the type as it gradually passes into it."—G. C. DRUCE. "*G. maritima*, M. and K."—E. HACKEL.

*G. maritima*, M. and K., var. *riparia*, Towns. Bursledon Bridge, Hants, 13th July 1911.—H. J. GODDARD. "Probably correct, as it is from Townsend's station, but the material is poor. He described it as a variety of *Schlerochloa maritima*, Lindley."—ED. S. MARSHALL. "A very welcome plant to the Club, but whether it is more than a condition of *maritima* I am not certain. Townsend gives a long

description in the *Flora of Hants* as a *Schlerochloa*, and these specimens are from the classic locality where I saw it in 1911."—G. C. DRUCE. "Seems to agree in all respects with the description, except that for its height it can hardly be called 'more slender.'"—J. A. WHELDON. "*G. maritima*, M. and K."—E. HACKEL.

*G. maritima*, Wahl., var. [Ref. No. 2814.] A neat form growing in sand at the Gunnel, near Newquay, Cornwall, but perhaps scarcely separable from type. July 1911.—G. CLARIDGE DRUCE. "Inflorescence very small and narrow. There is nothing like this among my series."—EDWARD S. MARSHALL. "Not separated by name from the type by Professor Hackel."

*Festuca rubra*, L., var. *glaucescens*, Hack., *Monogr.* Limestone rocks on seashore, Silverdale, W. Lancs., v.-c. 60, and also occurring on the similar rocks to the north in Westmorland, v.-c. 69, 12th June 1911. When small this closely resembles *F. ovina*, var. *cæsia*, Sm., but has larger spikelets, a longer awn, less caespitose leaves, and a creeping root, which latter is bad to extract from the rock crevices, and is not so well shown on some of the specimens as on others. It is an intensely glaucous plant when fresh, and quite different in habit from *F. ovina*, var. *cæsia*, Sm., which occurs on the scar limestone in the same district.—J. A. WHELDON. "Hackel, *l.c.*, p. 139, gives his short description:—'Ut *a* [type, the *a. genuina* of Gren. and Godr.] sed folia glauco-viridia, cum spiculis sæpe pruinosa.' Mr. Wheldon's plant is very like my Nos. 1294 and 1295 from near Bigbury, S. Devon, so named by Hackel in *B. E. C. Report* for 1894, p. 463. Var. *pruinosa*, Hackel, comes near it, but is more intensely glaucous and usually stouter in its foliage; this is not described in the *Monograph*."—EDWARD S. MARSHALL. "Yes; but Hackel named it as sub-var. *glaucescens*, and he agrees to this being the plant he named."—G. C. DRUCE.

*F. rubra*, Linn., var. *arenaria*, Fr. Sand-dunes, Formby, South Lancs., v.-c. 59, June 16, 1911.—W. G. TRAVIS. "Only a state of the type, I should say."—EDWARD S. MARSHALL. "Not var. *arenaria* of my *List*."—G. C. DRUCE. "*F. rubra*, L., *duriuscula*, Gaud. (*F. rubra*, sub-var. *junceæ*, Hack.)."—E. HACKEL.

*F. rubra*, var. *barbata*, Hackel. Sand-dunes, Clacton-on-Sea, N. Essex, v.-c. 19, June 5, 1911.—G. C. BROWN. "Yes; very good *barbata*, which Hackel described as a sub-var. of *F. rubra*."—G. C. DRUCE. "Sub-var. *barbata*, but the innovationary leaves are absent."—E. HACKEL.

*F. dumetorum*, L. On the coarse sand of the Skegness coast in great quantity July 1911, which I visited last July in order to gather this somewhat dubious species. Linnæus (*Sp. Pl.*, 109, 1762)

describes it from Spain as *F. panicula spicaforme pubescente, foliis filiformibus*. Hackel (*Mon. Fest.*, 145, 1882) gives it sub-specific rank, while Nyman (*Consp.*, 827) makes it a full species, giving, however, some Scottish localities which require confirmation. The affinities with *F. rubra*, var. *arenaria*, Fries., are very close. Yet when I saw it at Skegness it seemed a form new to me. Usually the very pubescent glumes distinguish it, but the var. *barbata* of *rubra* is also but less densely and consistently hairy. The rigid pungent leaves are also characteristic, but the leaves of *rubra* forms are not always obtuse. Here, too, I found that when the plant grew in wet sand the leaves were no longer enrolled, and I distributed some this year which Professor Hackel (in lit.) names *f. planifolia*. Despite these cross characters the plants of *F. dumetorum* have a facies of their own. In the habitat it is a dominant species, and over a great area forms of *Agropyron* and of *F. rubra*, L., are absent. I add the contrasting macro features of *F. dumetorum*, *F. ovina*, and *F. rubra*, as given by Hackel:—

*F. ovina*. Vaginæ foliorum innovationeni (non transverse rugosæ) modo varia longitudine fissæ modo integræ (parte integra absque sulco profundo) 3–8 nerves, nervis omnibus vel exceptis submarginalibus in laminam ingredientibus, emarcidæ aut dejectis lamineis persistentes, indivisæ, aut retentis laminis, in fibros irregularaes solutæ. Ligulæ foliorum innovationum, manifeste biauriculatæ. Laminæ omnes conformes, plus minusve complicatæ (saltem cum apice).

*F. rubra*. Vaginæ foliorum innovationum omnino integræ absque sulco longitudinali, arcte adpressæ 5–9 nerves, nervis omnibus vel exceptis marginalibus in laminam ingredientibus, tenues, plus minusve cito marcescentes, emarcidæ fuscæ, plerumque in fibros irregulares solutæ, raro subintegræ, laminas emortuas retinentes. Ligulæ foliorum innovationem brevissimæ, ad marginem scariosum ubique æquilatum nec auriculatum redactæ foliorum culmeorum inæqualiter biauriculatæ vel tantum uniauriculatæ omnes glabræ. Laminis sæpius diffformes, rarius conformes.

*F. rubra*, L., var. *arenaria*, Osbeck. Laminæ obtusæ, diffformes vel raro conformes 5–7 nerves. Longissime repens. Folia rigidiora, subjuncea, culmea sæpe sub-complicata. Panicula major, spiculæ majores, elliptico-lanceolatæ, 9–10 mm. lg. et ultra, dense longequæ hispidæ vel villosæ.

*F. dumetorum*, L. Laminæ acutæ vel acutiusculæ, conformes, complicatæ, junceæ, subcylindricæ, 7–11 nerves, intus elevatissime 5 plus pluricostatæ, Culmi elatiores 20–40 cm. alti. Laminæ 1 mm. diam. et ultra, rigidæ, glaucescentes, extus glaberrimæ intus puberulæ, in acumen plerumque tenue pungensque attenuatæ, ecarinatæ, Panicula oblonga . . . rhachi ramisque lævibus, glumæ . . . sæptissime villosæ.”—G. CLARIDGE DRUCE.

*F. sciuroides*, Roth. (a) Between Gamlingay and Everton(?) county, 17th June 1911; (b) same date, labelled *F. intermedia*. These two plants, if they are two, were growing together. What I take to be *F. bromoides* of Bentham has a panicle with a droop. The ? *F. intermedia* was erect. *F. myurus* proper of Bentham is abundant at Sandy, but I saw none in this spot (between Gamlingay Great Heath Wood and White Wood). I cannot reconcile Bentham's sub-species with those of Hooker. The characters seem to be transposed.—J. E. LITTLE. "Is *F. Myurus*, L., certainly."—H. J. RIDDELSDELL, EDWARD S. MARSHALL, and E. HACKEL. "The *intermedia* is *F. dertonensis*, var. *Broteri*, A. and G. E. Hackel, = *F. bromoides*, L., var. *Broteri* (B. and R.), Druce, in *Report B. E. C.*, 511, 1910."—G. C. DRUCE.

*Bromus* — ( ? ) Gravel pit and cornfields, Hitchin, Herts, July 1911.—J. E. LITTLE. "*Bromus secalinus*, L., var. *velutinus* (Schrad.)."—H. J. R. "A large-flowered form of var. *velutinus* (Schrad.), perhaps the var. *grossus*, Lam. and DC., *Fl. France*, iii. 68, non. Desf."—EDWARD S. MARSHALL. "Is *B. secalinus*, L., but although hairy is scarcely the var. *velutinus*."—G. C. DRUCE. "*B. secalinus*, var. *velutinus* (Schrad.), I should say."—A. B. JACKSON and C. E. SALMON. "Is *B. secalinus*, L."—E. HACKEL.

*B. maximus*, Desf. Par, E. Cornwall, v.-c. 2, August 1911.—C. C. VIGURS. "Found by Mr A. O. Hume in 1901. An older name is *B. rigens*, L."—G. C. DRUCE. "*B. villosus*, Forsk. (*B. maximus*, Desf.). General Munro says the *B. rigens* of Linn. Herb. is *B. scoparius*, L."—E. HACKEL.

*B. hordeaceus*, L., var. *glabratus*, Druce, maritime form. Sea-shore, Fairhaven, W. Lancs., v.-c. 60, 18th June 1911.—J. A. WHELDON. "Is it not the same as *B. hordeaceus*,  $\beta$  *leptostachys*, Beck., *Fl. Nieder-Oestreich*, p. 109 (1890) = *B. mollis*, var. *leptostachys*, Pers. (1805) = *B. mollis*, var. *glabratus*, Doell? I infer this from Asch. and Graebn., *Syn.*, ii. 616."—EDWARD S. MARSHALL. "Yes; I have already said that it cannot be kept apart from *leptostachys*, Beck."—G. C. DRUCE.

*B. hordeaceus*, Fr. Among long grass on sea-walls by Virley Creek, N. Essex, v.-c. 19, 1910-11. This form, which appears quite constant, may, I think, be referred to the above species despite its erect habit, which is undoubtedly caused by growing in rank grass. Small specimens of *B. mollis* (*hordeaceus*, Linn.) growing with it can be instantly recognised despite the few spikelets. I find a very few specimens of the typical *hordeaceus*, Fr. On sandy shore on Mersea Island the spikelets exactly resemble these specimens, but stem semi-prostrate.—G. C. BROWN. "A dwarf, probably starved form, or

rather state; it may be the *contractus* of Ascherson and Graebner's *Syn.*, ii. 616 (= *B. nanus*, Weig.).—EDWARD S. MARSHALL.  
 "Approaching the var. *leptostachys*, Beck."—G. C. DRUCE.

*B. hordeaceus*, L., var. *leptostachys* (Pers.), Beck. Near Combe Wood, Oxfordshire, June 1906.—G. C. DRUCE. "Yes; = var. *glabratus*, Druce."—E. S. MARSHALL.

*B. interruptus*, Druce. Near Hadleigh, W. Suffolk, June 1911. Also seen in East Suffolk, East and West Norfolk.—G. CLARIDGE DRUCE.

*Agropyron junceum* × *repens*? (*acutum*, auct. angl.). Shore of R. Mersey, Hale, South Lancs. (59), 1st July 1911.—W. G. TRAVIS.  
 "I do not see the *junceum* influence here; a maritime form of *A. repens*."—J. A. WHELDON. "I fail to see any trace of *A. junceum* in this; it seems to be only *A. repens*."—EDWARD S. MARSHALL.  
 "I cannot see *A. junceum* in these dried specimens."—G. C. DRUCE.

*A. junceum*, Beauv., *forma*. Sandy beach, Fairhaven, W. Lancs., v.-c. 60, May 1910.—J. A. WHELDON. "I think this is *A. junceum*, Beauv., var. *megastachyum* (Fries.)."—G. C. DRUCE. "A broad-leaved form of *junceum*."—E. HACKEL.

*A. littorale*, Reichb. Sea-walls, Goldhanger, N. Essex, v.-c. 19, 20th July 1911. This may, I think, be referred to the above species from its glaucous involute leaves, etc.; it occurs very commonly on banks and dry places, on marshes and saltings in most parts of the Essex coast, *A. pungens* being very scantily represented.—G. C. BROWN. "I believe *A. pungens*."—G. C. DRUCE.

*A. pungens*, Roem. and Schult. River side, Westbury-on-Severn, v.-c. 34, 15th July 1911. Two forms: one growing on top of the dry bank, with revolute edges to leaves; the other growing in the mud, much taller and more luxuriant, leaves nearly flat, spikes larger and fuller. I take them to be forms of one species, for the ribs of the leaves are just about equal in depth and width, but I do not feel quite certain.—H. J. RIDDELSDELL. "Yes."—G. C. DRUCE and E. HACKEL.

*A. pungens*, R. and S., var. *pycnanthum* (G. and Godr.). Dry field bordering on the Leven Salt Marshes, Hurst Castle, S. Hants, August 1911.—J. COSMO MELVILL. This is *A. campestre*, Gren. and Godr. (leaves with weaker nerves than in *pungens*, otherwise hardly different).—E. HACKEL.

*A. repens*, Beauv., var. [Ref. No. 4192.] A most dominant plant on the coast of the muddy creek near Borlesdon Bridge,

S. Hants, and oftentimes of very luxuriant growth 4 or 5 feet high; the foliage intensely glaucous. I thought it was a hybrid of *A. pungens*  $\times$  *repens*.—G. CLARIDGE DRUCE. "*A. pungens*, forma *cæsia*."—E. HACKEL.

*Triticum* —. Waste ground at Docks, Birkenhead, Cheshire (58), July 1911.—W. G. TRAVIS. "*T. vulgare*, Vill."—E. HACKEL.

*Equisetum pratense*, Ehrh. High Force, Teesdale, Yorkshire, 9th July 1910.—C. E. SALMON.

*Dryopteris spinulosa*, Kuntze, var. (analogous to the var. *nana*, Newm., of *D. aristata*). Origin, rock clefts on Braeriach at 2800 feet, Easternness, July 1909.—A. WILSON and J. A. WHELDON. "These examples, grown on at Walton for two years, in soil from the original station, show no increase in size. Although they resemble *D. aristata* rather than *D. spinulosa* in aspect, the scales are concolorous, and the indusium (examined microscopically at various ages) is quite eglandular. Has this form ever been named? I regret that the supply is scanty, and only one or two fronds sent out are in fruit."—J. A. WHELDON. "Only one immature frond was received by me, not determinable. I should have thought it more likely to be a variety of *Lastrea aristata*, Britt. and Rendle, from its broad outline. According to my experience, *spinulosa* is a lowland species."—EDWARD S. MARSHALL. "From the breadth of the frond, and from its scales, I believe this to be the Alpine form of *D. aristata* (Vill.), var. *alpina*, Druce. Dr. Stansfield, to whom I referred it, reports: 'Yes; it is *L. dilatata*, var. *alpina*, Moore (*L. alpina*, Wollaston).'—G. C. DRUCE.

*Cystopteris montana*, Link. Mossy rock ledges on mica-schist, at 1800 feet, Ben Laoigh, Mid-Perth, v.-c. 88, 23rd July 1911.—A. WILSON and J. A. WHELDON.

*Isoetes lacustris*, L., forma *longifolia strictior*, Caspary. Lough Camelaun, near Cloghane, S. Kerry, 17th June 1911. [Ref. No. 3662.] So named by Mr. Arthur Bennett, who writes that these specimens (8 to 11 inches long) are stouter than the Lough Bray ones (18 to 21 inches long); duller in aspect; no light membranous bases to leaves, etc. He has specimens from Aber Lake, Carnarvon, very like them. He says that the whole aspect of this plant is coarser than Moore's from Lough Bray. Professor Hugo Glück, who recently examined this Kerry gathering, told me that the Lough Bray plant was about the same size, last season, which was unusually dry. This Lough Camelaun form grew in 2 to 4 feet of water, and was remarkably constant; in Lough Doon, Connor Hill, and in a muddy pool on Brandon Mountain, at about

2000 feet, I only saw the normal form.—EDWARD S. MARSHALL.  
 "So, I believe, Caspary would have named this, judging by specimens  
 named by him."—A. BENNETT. "Comes very close to, if indeed  
 separable from, var. *Morei*, Syme."—G. C. DRUCE.

*Chara hispida*, Linn., sub-sp. *rudis*, Leonh. Loch Rae, Blair-  
 gowrie, Perthshire, August 1911 (*fide* H. and J. Groves).—  
 M'TAGGART COWAN, jun.

---

CORRECTION.

P. 55, delete *Wolffia*. Mr. Bruce Jackson tells me he now finds  
 the specimens came from Surrey.

---

NOTE.

To save expense, will members and critics kindly condense their  
 remarks as much as possible?—G. C. DRUCE



