THE BOTANICAL SOCIETY AND EXCHANGE CLUB OF THE BRITISH ISLES.

REPORT FOR 1917

OF THE

BOTANICAL EXCHANGE CLUB

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

BY THE

EDITOR AND DISTRIBUTOR,

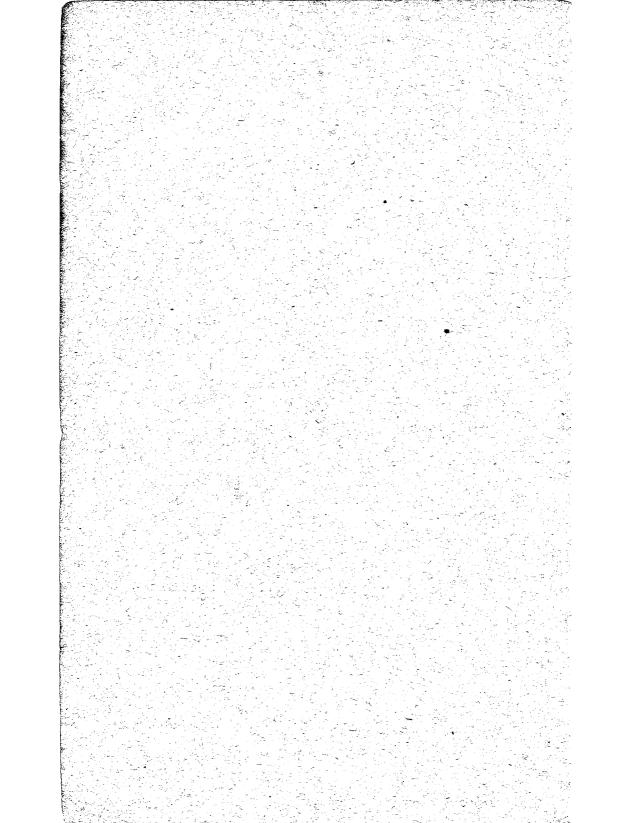
C. E. BRITTON.

VOL. V. PART II.

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The Subscription, 7s 6d per annum, and Non-Contributing Members' Subscription of 5s per annum, become due on January 1, 1918, and should be sent to

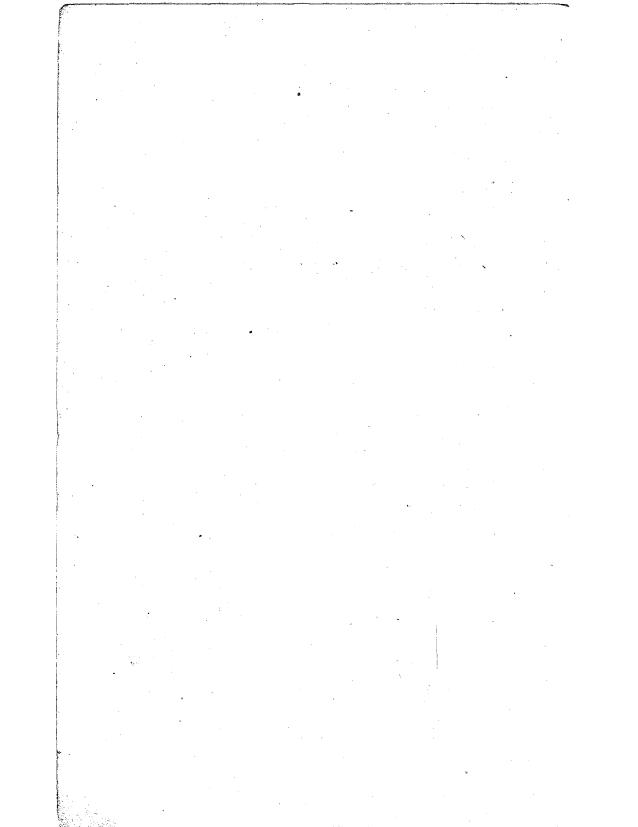
G. CLARIDGE DRUCE, YARDLEY LODGE, 9 CRICK ROAD, OXFORD.

Cheques for three or four years in advance save much trouble and expense in postage.

Parcels for 1918 should be sent post paid, on or before 11th December 1918,

W. C. BARTON, Esq., 43 Rosary Gardens, London, S.W.

PRINTED BY T. BUNCLE & Co., ARBROATH.
October 1918.



REPORT OF THE DISTRIBUTOR FOR 1917.

The number of sheets of specimens contributed by the members for the 1917 distribution reached the rather large figure of 6222. This is in excess of the number received by the distributors in 1916, though considerably below the figures of 1915, when the huge total of 8153 specimens was distributed. Owing to pressure of business, war occupations, decreased travelling facilities, &c., some of the older members of the Exchange Club were prevented from sending their usual contributions, and it is to be feared that with the raising of the age for military service another year will see other members being compelled to relinquish club work. Here, it is pleasing to record that parcels were received on behalf of three members on active service, Messrs G. C. Brown, C. V. B. Marquand, and A. E. Wade.

With regard to the specimens contributed, the interest seemed to be in no way inferior to those received for distribution in previous years. Some of the members, it is true, appear to aim at quantity rather than quality, as there are far too many specimens distributed which show haste in the selection and carelessness in the preparation and drying. Specimens of this character make but a poor return to those members (their names will suggest themselves) whose well-selected and carefully dried specimens are beyond all praise.

The genera that received most attention in 1917 were Sagina, Euphrasia, Orchis, and Glyceria, the Secretary's hybrids and other forms of the latter genus being especially noteworthy. Rubus received a fair amount of attention; Rosa and Hieracium showed a considerable falling-off in the number of specimens contributed, whilst Erophila, which a few years ago seemed to be advancing to a foremost position in the ranks of the "critical" genera, was wholly unrepresented.

To Mr Spencer H. Bickham the members are indebted for a generous supply of packets of seeds of *Paeonia corallina*, *Barbarea arcuata*, and *Dianthus deltoides*.

The thanks of the members are due to the following botanists who so kindly supplied notes and comments on the specimens submitted:—Messrs W. Barclay, A. Bennett, C. Bucknall, Dr Drabble, J. Groves, W. P. Hiern, Augustine Henry, A. Bruce Jackson, C. E. Salmon, J. A. Wheldon, Revs. E. F. Linton, E. S. Marshall, H. J. Riddelsdell, and to the various members whose notes are incorporated in the *Report*.

C. E. BRITTON.

70 Adela Avenue,
West Barnes Lane,
New Malden,
Surrey, April 11, 1918.

LIST OF PARCELS RECEIVED.

LIST OF	PARCE	LS RE	CEIVE	D.		
						No. of Specimens
Bailey, Charles, M.Sc., I	7.L.S.		• • •	•••	• • • •	40
Barclay, W				• • • •		19
Barton, W. C., M.A						704
Bickham, Spencer H., F						198
Britton, C. E					• • •	194
Brown, G. C						74
Bucknall, Cedric, Mus. Bo	-					6
Burdon, Rev. R. J						306
Chester, G						45
Corstorphine, Mr and Mi			s > 797	. II.		22
Cryer, John						397
Cumming, L., M.A				•••		74
Druce, G. Claridge, M.A.			1			665
Jackson, A. Bruce			•••		•••	27
Little, J. E., <i>M.A.</i>			•••	•••		101
Lumb, D			• • •			193
Marquand, Lieut. C. V. B			•		• • • •	191
Marshall, Rev. E. S., M.A						172
Melvill, J. Cosmo	,					71
Pearsall, W. H		••••	•••			319
Riddelsdell, Rev. H. J., M	.A					282
Rilstone, F					• • • •	$\overline{112}$
Robinson, Fred						409
Roper, Miss Ida, F.L.S.						234
Salmon, C. E., F.L.S.					•••	59
Travis, W. G	•••		•••			15
Waterfall, Charles, F.L.S.					•	618
Wade, A. E	•••		•••			36
Waddell, Rev. C. H	• • • •					72
Webster, Alfred				•••		72
Wheldon, J. A., F.L.S.			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		•••	139
White, J. W., $F.L.S.$						254
Wilson, A., F.L.S., F.R.					•••	102
#11 7 ; 17 = 1 -11 1 7 ; 1-11	,			1	•••	%
	Total,			•••	(.)	6222
	. *					

Thalictrum flavum L., (a) sphærocarpum Lej. & Court. Mow Fen, Shouldham, Norfolk W., v.-c. 28, July 27, 1917.—J. E. LITTLE. "In these specimens the fruits are infected with a gall and thus give the swollen appearance. I should not call it var. sphærospermum." DRUCE.

T. minus L. Hedge-bank on ascent of Pyder Mountain, near Glanwydden, Lfandudno, Carnarvonshire, July 7, 1917.—C. Waterfall. "Leaflets deeply cut, more or less glandular-hairy on both sides, as are the petioles. In these and other characters it seems to agree rather well with the description of T. odoratum Gren. and Godr. Fl. de France i. 6, 1848. It may also be T. minus, var. glandulosum Koch Synopsis ed. ii. 4, 1843. The stem is finely glandular as seen under a strong lens."—Marshall.

Ranunculus acris L., var. Waste ground, Walton, Lancs S., June 15, 1916.—J. A. Wheldon. "Under R. Boræanus Jord. I think that it may be referred to R. tomophyllus Jord."—MARSHALL. "Is it not R. Boræanus Jord.?"—DRUCE.

- R. Lingua L. Ditches on Formby Moss, Lancs. S., July 14, 1917.—C. WATERFALL. "Yes, the narrow-leaved plant."—DRUCE.
- R. heterophyllus Weber. Pool near Kemble, v.-c. 34, June 1912.—W. J. Greenwood. "This is Mr Groves' final decision though at first he wrote, 'But for the densely hairy carpels I should have thought R. Drouetii, var. Godronii." In later gathered specimens these hairs have mostly dropped."—Riddelsdell. "Yes, just the plant figured in Syme E.B. ed. iii. as R. heterophyllus Bab. It seems to me a good species, distinct from all forms of R. peltatus."—Marshall. "A weak small-flowered form."—Groves. "Yes, a small form."—Druce. "R. Godronii Gren,"—Hiern.

Ranunculus ——? [7]. Dyke, St Osyth Marshes, Essex N., April 28, 1912. The carpels of the few fruiting specimens sent appear to bring this under R. Baudotii, and I should suggest the var. marinus Arrh. & Fries.—G. C. Brown. "Apparently R. salsuginosus Pall."—Hiern. "I should say R. heterophyllus, var. submersus, a very characteristic plant of salt marshes. The carpels are bristly, not glabrous as in R. Baudotii, and the peduncles are short; whereas in Baudotii they are conspicuously long, often with a double curve."—Groves.

R. sphærospermus Hiern. Ampney St Peter, v.-c. 33, May 30, 1915.—W. J. GREENWOOD. "Determined by Mr J. Groves."—RIDDELSDELL. "R. sphærospermus Boiss. & Blanche."—HIERN.

R. hederaceus L., f. Near Lyndhurst, Hants S. This semifloating form has in Britain usually been referred to omiophyllus Tenore (cf. Bab. Man. 10) but the claims of omiophyllus Ten. (coenosus Guss.) to replace Lenormandi have been urged by Dr Moss. In that case the floating form may be called forma natans, for the distinctions have scarcely varietal value.—G. C. Druce. "R. omiophyllus Ten."—Hiern.

Papaver hybridum L. Near Wilstone, Wilts, July 1917.—G. C. DRUCE and Hon. S. TENNANT.

Meconopsis cambrica Vig. Quite established and has been so for many years at Meole Brace, Shrewsbury, Shropshire, July 1917.— J. Cosmo Melvill.

Fumaria Bastardi Bor. Bangor, Carnarvonshire, August 1917. —G. C. Druce.

F. Vaillantii Lois. Stow Bardolph Hall, Norfolk W., v.-c. 28, July 23, 1917. All the sheets from the same plant. Leaf segments flat. Not recorded for Norfolk in Nicholson's Flora.—J. E. LITTLE.

Matthiola incana Br. Cliffs near Freshwater, Isle of Wight, May 20, 1892.—Coll. J. H. A. Steuart; comm. J. A. Wheldon.

Radicula Nasturtium, var. siifolia Druce. Ewelme, Oxon, June 1917.—G. C. Druce.

R. palustris Moench. Whyke gravel pit, Chichester, June 6, 1917.—R. J. Burdon. "A form with narrower, less turgid silicules than usual."—Britton.

Barbarea—? Hedge-bank, Rocklands, v.-c. 28, June 7, 1917.—F. Robinson. "Past flower and only in young fruit. Certainly under B. vulgaris (aggregate); it may be var. arcuata Fr. (B. arcuata Reichb.) as the pods are spreading and curved, but seems too immature for certainty."—Marshall.

B. arcuata Reichb. Alien. Walton, Lancs. S., v.-c. 59, July 15, 1917.—J. A. Wheldon. "This is B. vulgaris, var. arcuatu Fr., not specifically distinct from B. vulgaris. "A smaller specimen from same locality is rather poor material, but probably comes under the plant I call B. vulgaris, var arcuata, subvar. brachycarpa." See Journ. Bot. 207, 1917."—Jackson.

B. intermedia Bor. Weed in garden, Grey Abbey, Co. Down, June 1917.—C. H. WADDELL. "Correct. Easily distinguished

from *vulgaris* when in fruit by the shorter style of the pods; when in flower, by the more deeply divided stem leaves which have narrower segments, and by the paler colour of the flowers. I regard this as a colonist in England, as nearly all the specimens I have seen are from cultivated ground and it is often found in clover fields."—Jackson.

Arabis hirsuta Scop., forma. Heath land, Stow Bedon, v.-c. 28, June 1917.—F. Robinson. "Why forma"! It looks to me the ordinary state of A. hirsuta. It would be much more interesting if collectors would state on the label in what way the growing plant differed from type, when a variation is indicated."—Salmon.

A. petræa Lam., var. grandiflora Druce. Ben Laoigh, Perthshire, July 30, 1917.—R. J. Burdon. "Yes, which does not agree with description of ambigua Fries (Mantissa iii., 71)."—Druce.

Cardamine bulbifera Crantz. Near Kingsfold Farm, Rusper, Sussex, May 24, 1917.—R. J. Burdon. "No flowers, but a few of the characteristic, rarely ripening pods."—Pearsall.

Alyssum incanum L. Ship Docks, King's Lynn, v.-c. 28, July 24, 1917.—F. Robinson. "Yes, excellent specimen. Thellung put it to Berteroa."—Druce.

A. maritimum Lam. Limestone rocks on coast near the West Shore, Llandudno, Carnarvonshire, October 16, 1916.— C. WATERFALL.

Cochlearia anglica L. Chichester Harbour, Sussex, May 12. 1917.—R. J. Burdon. "No radical leaves; immature pods; an unusual form."—Pearsall.

Sisymbrium orientale L., var. Waste ground, Billingshurst, Sussex, July 23, 1917.—A. Webster.

Sisymbrium ——? Ship Docks, King's Lynn, v.-c. 28, July 24, 1917. All specimens taken from one large spreading plant that smelt atrociously when drying. Rapistrum in young state.—F. Robinson. "Is Rapistrum perenne All."—Thellung.

Diplotaxis tenuifolia DC. Ship Docks, King's Lynn, v.-c. 28 July 24, 1917.—F. Robinson. "Correct."—RIDDELSDELL and DRUCE.

D. tenuifolia DC. Edge of footpath, Llandudno, Carnarvonshire, October 1916.—C. WATERFALL. "No, D. muralis DC., var. Babingtonii."—RIDDELSDELL, BRITTON and DRUCE.

Capsella Bursa-pastoris Moench. Cultivated land, Watton, Norfolk, June 20, 1917.—F. Robinson. "Mott's stenocarpa-lyrata." Pearsall. "A very interesting uniform series, which I would refer to var. stenocarpa-lyrata Mott. Mr Robinson's plant, with radical leaves not more than pinnatifid, is decidedly less common than a related form with pinnatipartite radical leaves and a similarly narrow capsule quite as much attenuate at the base, which must be placed to Mott's var. stenocarpa-coronopifolia. The capsule of Mr Robinson's Shepherd's Purse is narrowly cuneate, with the notch very shallow or almost absent. In these characters it somewhat differs from var. stenocarpa-lyrata in which the capsules are deeper notched, elongate-obovate with, of course, the lateral margins distinctly curved; whereas in Mr Robinson's plant the sides of the capsules are almost straight."—Briton.

C. Bursa-pastoris Moench, var. stenocarpa-lyrata Mott. Dalton-in-Furness, Lancs.—W. H. Pearsall. "Yes, a form with broader capsules than Mr Robinson's plant."—Britton.

Lepidium latifolium L. St Philip's Marsh, Bristol, Gloster W., May 14, 1903.—J. W. White.

L. heterophyllum Benth., var. papillosum (Dunn). [298]. About Coombe Farm, near Brendon, Devon N., v.-c. 4, October I, 1917. The pods are distinctly papillose, but this is a slight character.—W. C. Barton. "Form or sub-variety seems quite a high enough rank."—Marshall. "Yes."—Thellung.

? Myagrum perfoliatum. Garden weed, Dalton-in-Furness, v.-c. 69b, August 9, 1917.—D. Lumb. "Characteristic examples of this species."—Britton. "Yes, beautiful specimens."—Druce and Thellung.

Rapistrum perenne Bergeret. Waste ground near Helsby Stn. Cheshire, August 4, 1915.—C. Waterfall. "Yes. Nice fruit, showing the wartless ridges."—Wheldon, Thellung, and Druce.

Raphanus Raphanistrum L. Wheat-field, Foulden, v.-c. 28, June 16, 1917.—F. Robinson. "All examples sent belonged to the yellow-flowered form."—Britton. "Yes, var. flavum (Gray 1821) Druce Fl. Berks 70. This comes true from seed as does the yellow variety of R. maritimus. Rouy and Fouc. ii., 66, 1895, made it a sub-var. sulfurea but under R. silvestre Lam., rejecting the Linnean trivial because it is tautological!"—Druce.

Viola sylvestris Kit., var. punctata Druce. From various localities in Tidenham parish, v.-c. 34, and Condicote, v.-c. 33, May

- 1917. Mostly seen and approved by Mrs Gregory.—H. J. RIDDELS-DELL.
- V. silvestris × V. silvestris, var. punctata (det. E. S. Gregory). Wymondley Road, Hitchin, Herts, v.-c. 20, May 6, and June 3, 1917.

 —J. E. LITTLE.
- V. Riviniana Reichb., var. diversa Gregory. All seen and named by Mrs Gregory. Parish of Tidenham, v.-c. 34, May 1917. It has been found also in several places in v.-c. 33.—H. J. RIDDELSDELL.
- V. canina L., var. ericetorum Schrad. Amongst gorse, Scanning Common, v.-c. 28, May 12, 1917. See Rep. B.E.C. 326, 1915.—F. ROBINSON.
- V. lactea × < Riviniana. Sandhills near Rock St Enodock, Cornwall, v.-c. 4, May 23, 1916.—J. W. White. "Yes, nearer to V. Riviniana in flowers, intermediate in leaves."—Marshall. "A capital set of V. lactea × < Riviniana violets. Colour of flowers when fresh the darker blue of V. Riviniana, and calyx appendages not only lobed but frilled. The small, rounded, lowest leaves (not present in all the specimens) and long, slender peduncles point to the joint parentage of V. lactea."—Gregory.
- V. hirta L., var. propera Jord. On oolite pasture, Wick, Gloster W., v.-c. 34, April 18 and June 26, 1917.—Ida M. Roper. "The small leaves and large flowers suggest var. propera of V. hirta. Sepals should be broad."—GREGORY.
- V. lepida Jord. Lampeter, v.-c. 46, June 24, 1913. All sheets seen and named by Dr Drabble.—Riddelsdell. "Good shoots but no roots. Flowers short stalked; lower petal not sufficiently large and truncate. My specimen seems to be Lejeunii."—Lumb. "From the single specimen submitted to me I cannot name this pansy."—Drabble.
- V. Lejeunii Jord. Low Wood, Haverthwaite, v.-c. 69b, September 15, 1917.—W. H. Pearsall. "The specimen sent to me was Lloydii. It has the broad sepals and broad leaves characteristic of Lloydii."—Drabble.
- V. variata Jord., var. sulphurea Drabble. Sandy ground, Wigginton Heath, April 23, 1915. All sheets seen and named by Dr Drabble.—H. J. RIDDELSDELL.
- V. Lloydii Jord. Llandaff, y.-c. 41, July 19, 1913.—H. J. RIDDLESDELL. "A very beautiful specimen of the pale-flowered form of Lloydii."—DRABBLE.

V. arvensis Murr., var. obtusifolia (Jord.). Cultivated ground, Shipham, Som. N., v.-c. 6; June 20, 1917.—Ida M. Roper. "Yes."—Drabble.

V. nana Godr. Lancresse Common, Guernsey, April 1913.—C. V. B. Marquand. "Yes."—Drabble.

V. Curtisii E. Forst., forma. Sand dunes near Birkdale, Lancs. S., v.-c. 59, June 11, 1916.—W. G. Travis and J. A. Wheldon. "Var. Pesneaui (E. G. Baker)."—Drabble.

Dianthys Armeria L. Cult., Polperro, July 18, 1917. Seed from Hayle, v.-c. 1.—F. RILSTONE.

Silene maritima With., ? var. parvifolia Druce. Walney Island, v.-c. 69b.—D. Lumb. "Matches the plant of Loe Bar, Cornwall W. (Mr Druce's original station) very well; but I believe it to be only a state due to exposure and poor sandy soil."—Marshall. "Very nearly parvifolia under which it may be put, but the leaves are nearly twice as long as the Looe specimens, which also occurred at Southsea, Hants."—Druce.

S. noctiflora L. Oatfield, Tydyn-y-gwynt, Rhyd-y-newyn, Flintshire, August 19, 1916.—C. Waterfall.

Lychnis Flos-cuculi L. Ewelme, Oxon, June 1917. In Rep. B.E.C. 405, 1916, I drew attention to the red-veined and green-veined calyx forms of this species. This is the type with the red veins.—G. C. Druce.

Cerastium pumilum Curt. In three places on the Downs between Worth Matravers and Dancing Ledge, Dorset, May 1917. In the Flora of Dorset it is given on the Rev. W. W. Newbould's authority, but without locality. Mr C. B. Green has also sent me specimens gathered by him from Swanage Quarries. It is included in Top. Bot. on the authority of Pleydell Cat., but oddly its editor, on whose authority it rested, did not mark it as having been seen by him.—G. C. DRUCE.

Arenaria serpyllifolia L., var. viscidula Roth. [299]. Rough hilly pasture near Brendon, Devon.N., v.-c. 4, September 1, 1917. In some specimens the branches are long and slender, but the capsules are all ovoid and brittle. The distinction between serpyllifolia and

leptoclados seems somewhat slight to justify separation as species.—W. C. Barton. "Yes, in a rather slender form with a different habit from our maritime states of it. It certainly resembles A. leptoclados in the smaller capsules and gracile habit, but it has not the leptodermous capsules of this latter."—Wheldon. "These are A. leptoclados Guss., var. viscidula Rouy & Foucaud. Opinions differ as to the specific rank of A. leptoclados; personally, I incline to keep it separate."—Marshall.

Sagina ——. Weed on garden paths, Wigginton, v.-c. 23. Keeping very distinct in colour from S. procumbens which grew with it. It is dark sage-green and very hairy; the hairs on leaves are long and eglandular; shorter and glandular on peduncles. It is not absolutely prostrate in habit, at any rate on the less trodden and softer edges of the paths. I suppose it is a hairy form of S. apetala. The abnormal season is not responsible for extra hairiness, for it was here in 1916.—H. J. RIDDELSDELL. "Apparently a weak state of S. apetala, var. prostrata Bab."—MARSHALL. "I should call this apetala, glandular in a ± common way."—Lumb. "S. apetala." -Pearsall. "S. ciliata, var. ambigua Corb. My idea is that Corbière's plant is a cross between S. eiliata and S. procumbens. which results in a procumbens-like plant with the clothing of S. ciliata."—Wheldon. "I should call these S. apetala, var barbata (Fenzl)."—SALMON.

Sagina ——! [57, Pearsall] and [58, Lumb]. Abbey Road near Furness Abbey, v.-c. 69b, July 16 and August 27, 1917.-W. H. PEARSALL and D. LUMB. Mr Pearsall first gathered this plant. the actual specimens being glabrous. We have both been anxious to see glabrous apetala and hurriedly concluded this must be it. Further study however made us waver, and others have wavered about it. It grows on a red-sandstone wall, mostly from cushions of moss Along the bottom of the wall grows apetala from which it could not be distinguished, i.e., growing, by simply looking for the maltese-cross sepals. Both plants showed many of these spreading sepals, a feature which has nearly disappeared from the pressed plants. In other particulars the plants were markedly different. The "book" characters of maritima are fairly evident, but where, in this district, maritima is found the plants are very very few indeed; it would be a task to gather a representative sheet. bear no resemblance to these. - D. Lumb. "Remarkably upright with erect or erect-patent branches and very few glands. I can find no difference between Nos. 57 and 58, which seem to come under var. imberbis Fenzl, as defined by Rouy & Foucaud Fl. de France iii. 288."—Marshall. "S. maritima, var. elongata G. & G. (S. debilis Jord.). Mr Lumb's sheet contains a slight admixture of S. apetala." -Wheldon. "[58]. This is, in the bulk, S. maritima and would come under the ± stiff erect state which I call f. stricta (Fr.). I say "in the bulk" because, on my sheet, I see one plant which is undoubtedly not maritima. Mr Lumb will perhaps investigate this as the solitary example seems to be either S. apetala or S. Reuteri. [57]. The same remarks made upon [58] apply here, with the exception that on my sheet it is all S. maritima."—Salmon. "[57]. Yes, coming under var. imberbis (Fenzl) rather than var. barbata (Fenzl). Beautiful examples."—Salmon. "[57]. This is S. maritima. [58]. A mixed gathering—S. apetala and S. maritima."—Travis.

S. maritima Don, f. stricta (Fries). Anglesey, close to Holyhead Station, June 23, 1916. The majority of the plants in this gathering were much more erect and apetala-like in habit than the normal more-or-less spreading-ascending plants of our coasts, and I thought they might come under the stricta of Fries. This author (Nov. Fl. Suec. ed. ii., 58, 1828) segregates his plant into a alpina and β. maritima, and whilst the description of his aggregate S. stricta satisfactorily defines this Holyhead plant, he quotes the English Botany plate, f. 2195, for maritima, which is not very happily included under the stricta diagnosis. There is thus a slight confusion of names. Grenier and Godron (Fl. Fr. i. 246, 1848) evidently use the name stricta for a different plant having sepals "lancéoléssubaigus "; Fries (l.c.), on the other hand, mentions the characters "calyce obtuso" and "foliola calycina ovata, concava, obtusa, obsolete nervosa." Lloyd (Fl. de l'Ouest Fr. 57, 1898) distinguished the two forms of maritima under discussion but did not give them names. He says: "Dans les lieux ras cette plante est plus ou moins couchée, à tiges et pédoncules ascendants et ayant au milieu une rosette de feuilles. Dans les lieux herbeux, la tige est dressée ainsi que le pédonc, et la rosette centrale manque." The first would be the English Botany maritima; the latter, forma stricta.—C. E. Salmon. "Yes, agrees much better than a plant I submitted from Lancs. W. and referred to this by Mr Druce (vide Report 1906). These plants I should now call var. elongata G. & G."—Wheldon.

Spergularia rupestris Lebel. Manghold Head, Isle of Man, August 7, 1917.—J. A. Wheldon.

Polycarpon tetraphyllum L. St Andrews, Guernsey, April 1913. —C. V. B. MARQUAND.

Claytonia perfoliata Donn. Waste ground, Formby Moss, Lanes. S., July 14, 1917.—C. WATERFALL.

Montia fontana L., subsp. minor Gmel., var. intermedia Beeby. Rill below County Gate, Devon N., v.-c. 4, September 15, 1917.—W.

C. Barton. "Yes, rightly determined, but in the Camb. Fl., the parturition of which has been so long delayed, I treat M. fontana L. (lamprosperma) and M. verna Neck. as two distinct species; under the latter var. intermedia (Beeby) is placed. This occurs in the uplands of Devon and in Ireland."—Druce.

Hypericum undulatum Schousb. Marshes near Perranporth, v.-c. I, September 2, 1916.—F. RILSTONE.

Malva sylvestris L., f. alba. Iffley, Oxford, June 1917.—G. C. DRUCE.

Malva —— ? [454]. Wytham, Berks, August 1917. M. pusilla With., which has persisted there for some years.—G. C. DRUCE. Agreed to by Thellung.

M. pusilla Sm. [1876]. Cultivated field, Chessington, Surrey. August 12, 1917. Plentiful.—C. E. Britton.

Linum catharticum L., f. dunensis. Braunton Burrows, Devon N., July 1917.—Coll. C. P. Hurst. See Report 1917. Comm. G. C. Druce.

Geranium sylvaticum L. Wood on high ground, Sporle, v.-c. 28, June 9, 1917.—F. Robinson. "In the Flora of Norfolk it is said to be not indigenous."—DRUCE.

G. Robertianum L. [294]. Wall at Oare, Somerset S., v.-c. 5, September 4, 1917. All from one very large plant with a distinct look, but I can find no tangible character to separate it from type. Many plants in the district answered to the description of var. rubricaule Hornem. which seems to me no more than a form of exposed situations.—W. C. Barton. "Under type, I should say. My series of var. rubricaule named by Dr Moss, both from the coast and from inland stations, is characterised by a shorter, more compact habit, glabrous or glabrescent calyces, more finely divided leaves and small petals, their limb not exceeding the claw."—Marshall.

Erodium bipinnatum Willd., var. sabulicolum Lange, a form approaching E. Lebelii Jord? Maritime sands, Point of Ayre, Isle of Man, August 6, 1917.—H. J. & J. A. Whellon. "This seems to agree with Dumortier's description of his E. glutinosum. We have dissected the solitary flower on our example of Mr Wheldon's plant and the filament character is not that of either E. bipinnatum or E. sabulicolum."—Salmon.

Oxalis corniculata L. Weed in nursery ground, Ledbury, Hereford, v.-c. 36, August 17, 1917.—S. H. BICKHAM. "On my sheet

there are two very different plants; one (diffuse, 1-3 flowered) appears to be luxuriant O. corniculata, (a.) genuina Rouy; the other has leaves twice as large, a very different manner of growth, branching from near the base, with remarkably long lower peduncles (up to 6 in. or more); flowers many (up to nine) in terminal umbels. This comes nearer to O. stricta L., but I do not think it can belong to that."—Marshall.

Oxalis ——? A persistent garden weed, Ledbury, Hereford, v.-c. 36, July 18, 1917.—S. H. BICKHAM. "O. corniculata L. approaching var. minor Lange."—THELLUNG.

Ilex Aquifolium L. Seedlings. New Forest, near Lyndhurst, Hants, v.-c. 11, May 24, 1917.—W. C. Barton.

Acer campestre L., forma. Wootton, Berks, September 1916.—G. C. Druce. "Acer campestre L."—Henry.

Genista pilosa L. Exposed downs above cliffs near Perranporth, v.-c. 1. In fruit. Examples which show well the characteristic twiggy growth of the plant. On these wind-swept downs it grows densely matted with heather (Erica cinerea) and dwarfed furze.—F. RILSTONE.

Spartium junceum L. Abundant on steep railway cutting at Ledbury, June 19, 1917.—S. H. BICKHAM.

Ulex Gallii Planch. Lane-side on descent of Moel Fama, Flintshire, August 30, 1916.—C. WATERFALL. "Yes, but very weak and short-spined; this may be due to shade. It agrees well in appearance with one sheet from Cornwall (collected by Davey) of var. humilis."—MARSHALL.

Ononis procurrens Wallr. = O. spinosa L., var. mitis L. Clay banks, shore of Dee estuary, Dawpool, Cheshire, v.-c. 58, August 18, 1917.—W. G. Travis.

O. maritima Dum. Sandy ground, Point of Ayre, Isle of Man, August 6, 1917.—H. J. & J. A. WHELDON.

Medicago Falcata L. Kingston-on-Sea, Sussex, August 10, 1917.—A. Webster. "Right, I believe, but very small. The size of the flowers varies greatly in my specimens from native stations."—MARSHALL.

M. Falcata L., var. tenuifoliolata Vuych. [1869]. Steer Lane, Oxshott, Surrey, August 5, 1917. Alien. One very large plant pro-

ducing hundreds of flowering shoots.—C. E. Britton. "Agrees fairly well with the description of this variety given by Mr Druce in Rep., B.E.C., 17, 1911, but the 'gris' hairs are not very apparent and the inflorescence is scarcely 'few-flowered, often reduced to 2-3.'"—Salmon.

M. sylvestris Fries. Kingston-on-Sea, Sussex, August 10, 1917.

—A. Webster.

M. apiculata Willd., f. confinis. Waste ground at Billingshurst, Sussex, July 29, 1917.—A. Webster. "M. hispida Gaertn., var. confinis Burnat."—Thellung.

Melilotus arvensis Wallr. Newport, Isle of Wight, August 1915. Coll. F. Stratton; comm. G. C. Druce.

Melilotus ——? Army camping ground, Thetford, v.-c. 28, October 27, 1916. Plant prostrate; root very large and succulent.—F. Robinson. "No flowers; fruit of arvensis. Noted as being prostrate; this makes it sub-var. supinus. Sennen ex Rouy Fl. de France v., 59."—Marshall. "M. arvensis Wallr."—Thellung & Druce.

Trifolium subterraneum L. Field near Perranporth, v.-c. 1, June 1, 1917.—F. RILSTONE.

T. hybridum L., f. prolifera. Roadside near Neston, Cheshire. June 25, 1917.—C. Waterfall. "Var. phyllanthum Seringe."—Druce & Thellung.

Lotus uliginosus Schkuhr, var. pilosus Beeke. Damp hollows in sand-dunes, Ainsdale, Lancs. S., v.-c. 59, August 20, 1915.—J. A. Wheldon.

L. uliginosus Schkuhr, var. glabriusculus (Bab.). Roadside bank near Bride, Isle of Man, August 6, 1917. Although much less hairy than the Ainsdale plant sent, it was growing in a far drier situation.—J. A. Wheldon.

L. angustissimus L. Slopes above cliffs, Polperro, v.-c. 2, June 14, 1917.—F. RILSTONE.

Vicia tetrasperma Moench. Creeping over bushes, Maslow Woods, Rossett, Denbighshire, June 13, 1917.—C. WATERFALL. "No, this is V. hirsuta S. F. Gray, var. angustifolia."—Druce.

Lathyrus Aphaca L. Borders of fields, Portland, Dorset, July 18, 1890, &c.—J. W. White.

Spiraea Douglasii Hook. Edge of swampy pool, Delamere Forest, near Cuddington, Cheshire, July 25, 1917.—C. WATERFALL. "Yes, frequently planted. It is a beautiful North American species named after the intrepid explorer David Douglas."—Druce.

- S. salicifolia L. Delamere Forest, near Cuddington, Cheshire, July 1917.—C. WATERFALL.
- S. Ulmaria L., var. denudata Boenn. [301]. Lyn Valley, wood by Hoar Oak Water, Devon N., v.-c. 4, August 7, 1917. With intermediates between var. and type. A few specimens with the underside of the leaves quite glabrous among hundreds of the type. All grades of intermediates occurred from specimens with small bald patches to others in which a little down could be detected near the margin of some leaflets.—W. C. Barton. "Yes. Leaves quite glabrous beneath."—Marshall. "Yes, for cultural experiments of this variety see Ann. Bot. xxv., July 1912, by Prof. Yapp, and Rep. B.E.C., i., 170, 1887."—Druce.

Rubus affinis Wh. & N. A small gathering from Tidenham Chase, v.-c. 34, July 28, 1917. W. M. Rogers agrees.—H. J. RIDDELSDELL. "I agree."—MARSHALL.

- R. affinis Wh. & N. "The Moors," Alphamstone, Essex N., v.-c. 19, September 7, 1916.—G. C. Brown. "Correct."—RIDDELSDELL.
- R. argenteus Wh. & N., forma. Durdham Down, Bristol, West Gloucester, July, September, 1917.—J. W. White. "Yes."—RIDDELSDELL. "Yes, serration more uneven than usual."—Marshall.
- R. dumnoniensis Bab. Gravel pit, Barton Common, Hants S., August 18, 1917. "Yes, with small poor panicle."—RIDDELSDELL. "A strongly armed form of this, I believe; fruiting panicle, no flowers."—Marshall.
- R. lacustris Rogers. Coppice at Glencoign, west bank of Ullswater, Cumberland, August 6, 1917.—S. H. BICKHAM. "No doubt."—RIDDELSDELL.
- R. mercicus Bagnall. Barton Common, Hants S., August 20, 1917. Mr Rogers says "a record for Hants."—L. Cumming. "Agrees well with description and specimens except in strongly cordate base of terminal leaflet."—RIDDELSDELL.
- R. leucandrus Focke. Gravel pit on Barton Common, Hants S.. August 17, 1917.—L. Cumming. "A species I do not know well; it

seems to agree with description, but panicle is very small."—

- R. pyramidalis × rusticanus. Lyde Green, Pucklechurch, Gloster W., July 17, 1917.—Ida M. Roper. "I much doubt this identification, though the plant seems a hybrid. Is there not corylifolius in it?"—RIDDELSDELL.
- R. leucostachys × rusticanus. Tidenham Chase, v.-c. 34, July 1917. I took this for R. iricus, but Mr Rogers puts it to the hybrid. It is sent as a rather unusual and beautiful form, though in very small quantity, I am sorry to say.—H. J. RIDDELSDELL.
- R. lasioclados Focke, var. angustifolius Rogers. Durdham Down, Bristol, Gloster W., July 15 and 24, 1917.—J. W. White. "Yes, a form bearing strong suggestion of its hybrid origin. Mr Rogers agreed last year with my naming of this gathering of Mr White's."—RIDDELSDELL.
- R. mucronatus Blox., var. nudicaulis Rogers. Road between Hordle and Fratton, Hants S., August 12, 1917.—L. Cumming. "No doubt correct."—RIDDELSDELL.
- R. anglosaxonicus Gelert (aggr.). Hillside, Clapton-in-Gordano, Somerset N., July 11 and August 16, 1917.—J. W. White. "Certainly R. dumetorum Wh. & N., and, I believe, under var. diversifolius (Lindl.)."—RIDDELSDELL.
- R. Drejeri Jensen, subsp. Leyanus Rogers. Barton Common, Hants S., August 20, 1917.—L. Cumming. "No doubt correct."—RIDDELSDELL.
- R. radula Weihe, subsp. anglicanus Rogers. By the railway bridge at Ashley, New Milton, Hants S., August 10, 1917.—L. Cumming. "Yes."—RIDDELSDELL. "Poor material; but it agrees with authentic material."—MARSHALL.
- R. fuscus Wh. & N., f. Wood above West Wycombe, v.-c. 24, August 17, 1917. In some woods along the road between West Wycombe and Stokenchurch, Bucks and Oxon, August 1917. I took the species to represent a weakly glandular form of R. fuscus. Leaves generally ternate. Mr Rogers agreed:—"A weak woodland form, though I seem to have nothing very like it in my herbarium." He does not admit a hybrid origin. "On the whole, and especially in habit, it seems nearest to my var. nutans, but it has none of its special features in leaves or panicle strongly marked enough, and so it must, I consider, be kept distinct from that, and be simply labelled

a weak woodland form, in some respects recalling var. nutans, though keeping distinct from it."—H. J. RIDDELSDELL.

R. fuscus Wh. & N., var. nutans Rogers. Copse at Ashley, New Milton, Hants S., August 9, 1917.—L. Cumming. "Yes."—RIDDELSDELL.

R. mutabilis Genev., var. Naldretti J. W. White. Grassy roadside, Thakeham, Sussex W., July 4, 1917.—J. W. White. "Beautiful specimens of a local form, of which Mr White speaks with authority. An interesting point is the unusually irregular and compound dentation of some of the larger leaflets. In at least one case the leaf is in this respect indistinguishable from that of the type plant."—RIDDELSDELL.

R. corylifolius Sm., var. sublustris (Lees). Wiggenholt Common, Sussex W., July 4, 1917.—J. W. White. "Undoubtedly under sublustris though stems show some angularity."—RIDDELSDELL. "Good sublustris."—MARSHALL.

Potentilla erecta × procumbens. Ham Common, Surrey, July 7, 1917.—C. E. Britton. "I agree. Nearer (on the whole) to erecta in flowers and stipules, but approaching procumbens in foliage."—MARSHALL.

P. norvegica L. Dickson's Nurseries, Chester, October 1916.—C. Waterfall. "Yes, norvegica, but specimens of alien Potentillae should always be accompanied by the radical leaves."—Druce and Thellung.

Rosa canina L., sub-gr. dumales, var. recognita Rouy. Kingston Seymour, Som. N., September 17, 1917.—I. M. ROPER. "This is a variety of the group of R. dumalis Bechst., distinguished by its long narrow fruit and large more or less orbicular leaflets. Of var. recognita Rouy I know only the description given by Major Wolley-Dod in 'A List of Brit. Roses' p. 16, viz., 'remarkable for both its leaflets and its fruit being narrow and attentuate at each end.' That applies to the fruit of the present specimen but certainly not to the leaflets."—BARCLAY. "Wolley-Dod (List of Brit. Roses. p. 16) writes of R. recognita that this species is remarkable for both its leaflets and its fruits being narrow and attenuate at each end, and Rouy's own description points to a rose with oval acute or oval lanceolate leaflets. Now, Miss Roper's rose is especially characterised by its broad leaflets—orbicular-elliptical—with a tendency to be cuspidate. It exhibits a general resemblance to the Surrey and Brecon roses referred to Rouy's species, in the unarmed flowering branches and elongated fruit, but the broad leaflets are quite sufficient to

prevent this rose being placed to Rouy's species, though clearly it is related to that."—Britton

Rosa — ? [1487]. Chislehurst Common, Kent W., August 1, 1915.—C. E. BRITTON. "This is rather a puzzling form. Apart from its styles, the other characters would not, I think, suggest that it was a member of the Stylosae, but would make one think of a very thinly hairy variation of the group R. dumetorum Thuill. with irregular, But the styles arranged in a protruded sometimes double, teeth. column, united or free, almost quite glabrous, and in some cases at least with a fairly prominent disk, make one pause and ask if the sum of the characters exclude it from the Stylosae in spite of its styles. With some degree of doubt, I think they do, and that it must be considered, as I have said, a variation of the group of R. dumetorum Thuill."-BARCLAY. "Near urbica; but leaflets thinly hairy on the mid-rib beneath alone, fruit ultimately subglobose. It seems to agree fairly well with Wolley-Dod's description (l.c., pp. 23, 24) of R. sphaerocarpa Pug. Leaflets rather small; styles thinly hairy. Colour of flowers not stated."--MARSHALL.

R. leucochroa Desv. [1847]. Headley, Surrey, July 6 and August 26, 1917.—C. E. Britton. "I think this is correct."—Barclay. "Wolley-Dod points out (l.c., pp. 13-15) that true R. leucochroa Desv. is only R. systyla Bast., with yellowish-white flowers; this he gives for Devon S., Kent E., and Surrey. Mr Britton's plant is not a systyla form. It very closely approaches the R. leucochroa auct. angl., of South-West England, but has somewhat stouter-based, shorter, less markedly hooked prickles. I have observed this abundantly in Devon S., but only in flower. My one fruiting specimen (Hants S., Rogers) has practically identical hips. The difference is so trifling that I cannot separate them. An eastward extension of this plant's English range."—Marshall.

R. Borreri Woods. [1609]. Tow-path by the Thames above Molesey Hurst, Surrey. Flowers, June 23, 1916. Fruit, September 2, 1917.—C. E. Britton. "Yes. I think this is a variation of R. tomentella Lem. = R. Borreri Woods. The leaflets are not quite characteristic for the most part, and are much less hairy than usual, but taking the sum of its characters I think it is correctly named."—Barchay.

R. glauca Vill. of group fugax Gren. Bank of River Almond, Mid-Perth, September 1917. It is not easy to know the proper name for this variation of R. glauca, but R. fugax Gren. is certainly of the same group, thence I join it to that. It differs from the group to which subcristata Baker belongs by its glandular peduncles, glandular pedicels, and glandular backs of sepals. This group is not very common.—W. BARCLAY.

R. sub-coriifolia Barclay. Near Loch Fithie, Forfar, October 7, 1917.—R. & M. CORSTORPHINE. "This is correct, the bush has been rather late in ripening as in this neighbourhood of Perth all the sepals have usually fallen by the middle of September."—BARCLAY. "Analogous to the subcanina group of R. glauca, having reflexed sepals. It is noteworthy that the figure of R. coriifolia in English Botany, ed. iii., has them reflexed even on the rather immature fruit."—MARSHALL.

R. recondita Pug. Tidenham Chase, v.-c. 34, July 1917. Formerly distributed as R. pomifera. In larger quantity than I have ever seen it before in this locality. One good bush was found some way into the woods. There can be little doubt that it is native here. The naming is as given by Wolley-Dod in his monograph on the British Roses. -H. J. RIDDELSDELL. "I know this in a living state and believe that it is native. Though Major Wolley-Dod has referred it to R. recondita, 'which seems to be nothing whatever but a form of R. pomifera with more subfoliar glands than usual ' (A List of British Roses, Journ. Bot., 39, 1911), I do not think that the glands are numerous enough here to take it off the type. Mr Ley's Welsh examples named R. recondita are much more thickly glandular, have smaller leaflets, and approach R. mollis rather closely."—MARSHALL. "This is, no doubt, a variation of R. pomifera Herm., and as it has a certain number of subfoliar glands, it may be named R. recondita Puget = R. pomifera Herm., forma recondita Christ, Rosen der Schweiz. This variety is simply R. pomifera Herm. with subfoliar glands, Christ remarks that the stronger or weaker usually numerous. glandularity, on the ground of which Déséglise has separated his three forms (viz., R. pomifera, without subfoliar glands; R. recondita, subfoliar glands present; and R. Gaudini, both sides of the leaflets glandular) completely fluctuates and changes on the same It is the case, I believe, that R. pomifera occurs but specimen. rarely without some subfoliar glands. In R. mollis Sm. forms parallel to the above three occur, and in Scotland at least R. mollis with leaflets destitute of glands is comparatively rare. opinion R. pomifera Herm. in any of its varieties is not indigenous in Britain."-BARCLAY.

Pyrus Pyraster, var. Déséglisei Rouy & Camus. Yate Lower Common, Gloster W., August and September 1917. Leaves and fruit of a large tree growing with another large and several smaller ones on the margin of a wood bounded by a small stream. Attention was first drawn to these trees in the spring of this year by the profusion of blossom which they bore, and this was followed by an abundant crop of fruit at the end of the summer. The leaves being suborbicular, cordate, finely serrate, glabrous and shining on the upper surface, this must be placed in the Pyraster section of P. com-

munis L., although they are thinly downy beneath even when mature. In the small globose fruit it appears to come nearest to the var. Déséglisei Rouy & Camus. The branchlets occasionally end in rather stout spines.—C. Bucknall. "Agrees well with the description, except that the leaves can hardly be called "rélativement grandes," being somewhat smaller than those of average British P. cordata Desv. (wrongly reduced by Rouy & Camus to a var. Desvauxii of P. Pyraster, as the flowers and fruit are very distinct), often rather square in outline, and not seldom truncate or slightly retuse at the top. I incline to think that var. Déséglisei should be raised to specific, or at least subspecific rank, judging by this material; but one would like to see flowers. If the characters are constant, it may be named P. Déséglisei."—MARSHALL. "Welcome and excellent examples of a plant intermediate between cordata and Pyraster. Rouy & Camus place both as varieties of P. Pyraster. It differs from cordata (called Desvauxii in Fl. Fr.) in the fruits being the size of a cherry (in cordata of a small nut), and in the rather larger leaves. The authors are doubtless correct in refusing specific rank to cordata."—Druce.

- P. Aucuparia Ehrh. Seedlings. Wood in East Lyn Valley, above Watersmeet, Devon N., August 27, 1917.—W. C. Barton.
- P. latifolia Syme. [284]. East Lyn Valley, wood above Watersmeet, Devon N., August 25, 1917.—W. C. Barton. "Yes, but leaves narrower and less deeply cut than in my specimens from the Conan River, East Ross, which Dr Hedlund named Sorbus latifolia Pers. The foliage closely resembles that of Mr Bickham's gathering from Watersmeet (labelled \$\beta\$. decipiens), but the fruit is much larger. I think that both may fairly come under the type, though somewhat tending towards the variety."—Marshall.
- P. latifolia Syme, var. decipiens (Bechst.) E. & H. [285]. East Lyn Valley, wood above Watersmeet, Devon N., August 25, 1917.—W. C. Barton. "Yes, just like the Minehead plant figured as S. scandica in Syme E.B., ed. iii., and by Mr N. E. Brown (figures 483, c., d., d., decipiens."—Marshall.

Cratægus monogyna Jacq., f. subcristata Druce. Cadbury Hill, Yatton, Som. N., v.-c. 6, May 29 and October 15, 1917.—I. M. ROPER. "Yes. See Rep. B.E.C. 196, 1915."—DRUCE.

C. Crus-galli L. Near Moreton, Dorset, July 1917.—Coll. T. H. Leach. This North American thorn is plentifully naturalised in the neighbourhood of Moreton, Dorset, whence Lieut. T. H. Leach sent these examples. Comm. G. C. Druce.

Saxifraga Sternbergii Willd., var. (gracilis ined.). [4406]. Originally from Black Head, Co. Clare (S. H. Bickham); grown at West Monkton Rectory for about twelve years. Very different from the typical Brandon Mountain plant sent to the Club last year. It seems to be the prevailing Irish form of S. Sternbergii.—E. S. Marshall.

S. rosacea Moench (S. decipiens Ehrh. Exsiccata No. 5!; S. palmata Smith!). [3670]. Originally gathered on or near Snowdon, Carnarvon, v.-c. 49, by a guide named Williams; I had it from Mr S. H. Bickham. Cultivated at West Monkton, May 12, 1917. Ehrhart's name unfortunately cannot stand as he never published a description.—E. S. MARSHALL.

Saxifraga, spec. nov. (S. Drucei ined.). [3900]. Root from near the summit of Brandon Mountain, Kerry S., 1911; garden. West Monkton, May 29 and June 10, 1916. This plant is quite distinct from any of our named segregates; I hope to describe it in due course. Mr G. C. Druce was apparently the first to gather it in 1906. —E. S. Marshall. "For a full description of this new species see Journ. Bot. 65, 1918."—Editor.

S. hirta Sm.! [3901]. Brought (1911) from Brandon Mountain; fl. garden, West Monkton, May 22, 1917. Closely allied to S. rosacea (decipiens), but quite distinct. It forms a dense, greygreen, hairy mat. Barren shoots mostly in one plane, straight, or nearly so. S. hibernica Haworth appears to be the same thing. This is the typical form; it varies a good deal in habit and pubescence on Brandon.—E. S. Marshall.

Tillaea muscosa L. South Cliffs, Guernsey, April 1913.—C. V. B. MARQUAND.

Drosera anglica Huds. Moor, Coninish, Tyndrum, Perthshire August 8, 1917.—R. J. Burdon.

Callitriche obtusangula Le Gall. Moorland streamlet on ascent of Moel Fama, Flintshire, August 30, 1916.—C. WATERFALL. "The fruit will not do at all for C. obtusangula; I call this C. stagnalis, var. serpyllifolia Lönnroth."—MARSHALL. "The fruits have a ± transparent wing to each of the four free edges; I should therefore name it stagnalis."—Lumb. "Under aggregate stagnalis; the angles of the solitary fruit in my specimen are acute."—DRUCE. "C. platycarpa Kütz."—Bennett.

C. intermedia Hoffm. New Forest, Hants S., May 8, 1917.—G. C. Druce. "A form with narrow leaves."—Marshall. "Simulates the northern plant which Dr Williams (Prod. Fl. Brit. 9, 509,

1912) refers to the C. angustifolia of Hoppe, but which many German authors refer to C. vernalis Kütz (palustris L.)."—Bennett.

- C. truncata Guss. [4409]. In the Bridgwater and Taunton Canal at Charlton, parish of Creech St Michael, Somerset S., v.-c. 5, July 17, 1917. A fair amount of fruit (some sessile, some shortly stalked) was present.—E. S. Marshall. "In the same canal as Mr Marshall records it in his Supp. Fl. Somerset 81, 1914, as growing between Bathport and Durston, the present station a little south of Charlton, where it was plentiful."—Bennett.
- C. truncata Guss. Stream near Grand Mare, Guernsey, August 1912.—C. V. B. MARQUAND. "Rightly named."—MARSHALL. "Yes, in this locality it is, I believe, always barren. It is the var. occidentalis (R. & F.) (see Rep. B.E.C. 169, 1912), as is Mr Marshall's Somerset plant. Both are beautiful examples."—DRUGE.

Peplis Portula L., var. dentata Druce. [289]. Marshy ground, Badgeworthy Valley, Devon N., August 22, 1917.—W. C. Barton. "Rightly named, but this species varies so much in the calyx teeth that it can hardly be reckoned as a constant variety."—MARSHALL.

Epilobium montanum × roseum? In ditch near moors, Baildon, v.-c. 64, August 18, 1917. Altitude 800 ft. The parents occur in the immediate neighbourhood. Name suggested by Mr Druce.—J. CRYER. "As usual with his plants, Mr Cryer has dried this beautifully, but my specimen is a tall, slender, narrow-leaved E. roseum with no evidence of E. montanum."—MARSHALL. "In my opinion all the plants sent by Mr Cryer under this name were but forms of E. roseum."—BRITTON.

E. hirsutum × palustre (= × E. Waterfalli Marshall). Swampy edge of sheet of water near Helsby Station, Cheshire, August 12, 1916.—C. WATERFALL. "This is rightly named; but the original specimen described by me is stronger and branches freely."—MARSHALL.

Ludvigia palustris Ell. New Forest, Hants S., June 1917. These were gathered before flowering and are sent to show that the plant still exists.—G. C. DRUCE.

Circæa alpina L., var. intermedia (Ehrh.). Bank of stream, Meole Brace, Shropshire, September 1917.—J. Cosmo Melvill. "No, the type, rather luxuriant. Ehrhart's C. intermedia is much larger and approaches C. lutetiana in appearance."—Marshall and Pearsall.

Helosciadium repens Koch. Binsey Common and Port Meadow, Oxford, v.-c. 23, July and August 1917. Members may be glad of further examples. Those sheets from Port Meadow which are labelled as H. repens, f. contain plants gathered from the soft mud of a very shallow pond, which is only wet and soft in rainy weather. They indicate well the direction in which the species changes as it gets on wetter ground. The habit of the creeping stem is laxer, the plant coarser, the foliage longer, and the leaflets rather longer and less divided. But the series is continuous with the plant as it appears in great quantity on the drier parts of Port Meadow. H. nodiflorum was not there; and there is no admixture as in the case of the Binsey Common plants distributed last year. I hope to explore Port Meadow still further in 1918.—H. J. Riddelsbeell.

Apium inundatum H. G. Reichb. Derwent Water, v.-c. 70, August 6, 1917.—W. H. Pearsall. "Mostly type; one specimen comes very near var. fluitans Fr."—RIDDELSDELL. "Excellent examples of the submerged state."—MARSHALL.

Anthriscus sylvestris Hoffm., var. latisecta Druce. Near Druce, Dorset, May 1917 (see Rep. B.E.C. 412, 1916).—G. C. Druce. "Very interesting; I have never seen such broad foliage. In this respect it seems to agree closely with Rouy & Camus's description (Fl. de Fr. vii. 303) of A. alpestris Wimm. & Grab. = A. sylvestris \(\beta \). alpestris Wimm. "—Marshall. "With broad obtuse apiculate ultimate leaf-segments. There is no figure quite matching this form in Petersen's Indledende Studier over Polymorphien Hos Anthriscus silvestris."—Britton.

A. sylvestris Hoffm., var. angustisecta Druce. See Rep. B.E.C. 412, 1916. The Glen and Traquair, Peebles, September 1917. Not an extreme form. It is the prevailing plant in Scotland where it is much scarcer than in England and thins out northwards.—G. C. Druce. "This is not identical with, but appears to approach rather closely the group of Anthriscus sylvestris called by Petersen Aciphylla minor."—Britton.

Peucedanum officinale L. Gathered in early June on stiff claybanks near Kirby-le-Soken, Essex N., before the flowering period. The statement in the British floras that it is a salt marsh plant is not correct. Here, as at Whitstable, it does not enter the marshland proper, but luxuriates on clay-banks above tidal influence.—G. C. Druce.

Daucus gummifer All. Holyhead, Anglesey, August 1917. See Rep. B.E.C. 1917. Mr Salmon has referred the Holyhead plants to the var. intermedius Corbière. Rouy & Camus say that it differs from the type in the "Feuilles non luisantes." The fruit-prickles

are a millimetre long, not $\frac{1}{2}$ mm., as in true gummifer.—G. C. DRUCE. "My example has not any ripe fruit, but it looks to me like var. intermedius Corb. See Journ. Bot. 320, 1917."—Salmon.

Galium boreale L. West shore of Derwent Water, Cumberland, August 6, 1917.—W. H. Pearsall.

- G. Mollugo × verum. [1846]. Roadside near Leatherhead, Surrey, July 6, 1917.—C. E. Britton. "A per-verum form of the hybrid."—Marshall. "Beautiful examples of this interesting hybrid which is rare in Surrey. Mr Britton enabled me to examine the plants in situ, and one was able to note on the growing specimens features of both parents—Mollugo (elatum) and verum—with which it grew."—Salmon.
- G. verum, var. maritimum × G. Mollugo, comb. nov. Hayling Island, Hants S., July 1917. See Rep. B.E.C. 32, 1917. This is a new combination for the second parent is not true verum, but the duneland form called var. maritimum DC. All shades from pure white to deep yellow occurred as the hybrid approached one or the other parent. The narrow leaf seemed a dominant character.—G. C. DRUCE. "A small form of G. Mollugo × verum, approaching G. verum. Whether it is legitimate to append comb. nov." to a varietal hybrid seems questionable; in any case, our so-called British var. maritimum is hardly more than a starved state, growing in seasand (perhaps the var. littorale Brébisson) and does not agree with the description of G. maritimum DC. in the Prodromus iv., 603:— 'Caule demisso ramosissimo basi glabro apice villoso, ovariis glabris.'"—MARSHALL.
- G. palustre L., var? Moist places, River Welland at Wakerley, v.-c. 32, July 7, 1917. Differs from var. elongatum (Presl) in the broader and more obtuse leaves, fewer flowers and entire absence of fruit.—G. Chester. "I think that this may come under var. lanceolatum Uechtr. (G. elongatum auct. angl., non Presl), though weak and tending somewhat towards the type."—Marshall. "A broad-leaved form of the var. lanceolatum Uechtritz. The stem angles are very rough. It differs from var. maximum in the few-flowered cyme."—Druce.
- G. verum L., var. maritimum DC. Sand-dunes near Hull Road, Lancs. S., v.-c. 59, July 21, 1917. Some of the examples show well the underground ramifications which are so extensive in this plant. They often greatly exceed the parts above ground in length.—J. A. Wheldon. "Yes, the same as var littorale Bréb."—Salmon.

Valeriana officinalis L. = Mikanii Syme. [291]. Abundant on Bury Hill, Sussex W., June 18, 1917.—W. C. Barton. "Lower

leaves absent, but it looks like V. officinalis (Syme's Mikanii)."—MARSHALL.

V. rimosa Bast. (= V. Auricula DC.). Oatfield, Tydyn-ygwynt, Rhyd-y-myn, Flintshire, August 19,1916.—C. WATERFALL. "Rouy makes V. rimosa Bast. (1814) synonymous with V. dentata DC., but states that it is not V. dentata Pollich; under this he places V. Auricula DC., as β. Auricula Rouy."—MARSHALL. "My specimen is V. dentata Poll."—DRUCE.

Scabiosa Columbaria L., f. alba. Roots gathered on side of a ravine, Great Orme's Head, August 1916; flowered at Ledbury, July 14,1917.—S. H. BICKHAM. "Yes, and like my own gathering from Llandudno has much divided leaf segments. Could Mr Bickham next year supply ripe fruit?"—DRUCE.

Aster angustifolius Willd. A casual in the gravel of a new road at Ashley, New Milton, Hants S., August 20, 1917.—L. Cumming.

Erigeron acris L. Small quarry on Bodafon Hill near Craig-y-don, Llandudno, Carnarvonshire, September 30, 1916.—C. WATER-FALL.

E. acris L. Tottenhill, Norfolk W., July 27, 1917. Coll. J. E. Little and Anna Luddington. White pappus.—J. E. LITTLE. "Pappus whiter than in any of my series, but it may tend to darken in the herbarium. Linnaeus made the genus neuter. Rouy writes E. acer L., which makes a man say what he has not said."—MARSHALL. "This is var. corymbosum Wallr."—DRUCE.

Ambrosia artemisifolia L. [336]. Army camping ground. Thetford, v.-c. 28, October 27, 1916.—F. ROBINSON. "Yes."—DRUCE.

Bidens pilosa L. Waste ground, Bradford, v.-c. 64, September 17, 1917. Teste G. C. Druce.—J. CRYER.

Galinsoga parviflora Ruiz and Pav., var. adenophora Thell. [1880]. Cultivated fields, Ham, Surrey, August 21, 1917. Distributed for the purpose of ascertaining whether any other non-glandular form occurs in this country.—C. E. Britton. "All my British specimens (Kew and Milford, Surrey; Oxford) have glands on the peduncles."—Marshall.

Achillea Millefolium L., f. conspicua. See Rep. B.E.C. 34, 1917. The Parks, Oxford, September 1917. This form with large prominent ligule seems to occupy distinct areas. It was plentiful about

Beddgelert, Carnarvon and was noticed near Pyrford, Surrey, and is doubtless widely spread.—G. C. DRUCE.

- A. Millefolium L., var. lanata Koch. [288]. Countisbury Common, edge of cornfield at 1000 feet, Devon N., v.-c. 4. Koch (Syn. ed. i., 373, 1837) says:—Type "foliis lanato-villosis vel subglabris" and var. lanata "caulis, folia et corymbus lanato-villosa; ceterum formam vulgarem refert." Specimens sent are not extreme though they answer to the description. The variety seems to be only a form of exposed ground.—W. C. Barton. "Not distinguishable from type. My specimens of the variety from Shetland and Caithness are quite woolly, and only four to eight inches high. Mr Arthur Bennett believes that var. villosum Hartman Handb. Skand. Fl. ed. i., 319, 1820, is the proper name for this."—Marshall. "Although hairier than the type it is not, I think, sufficiently clothed to be called lanata."—Druce.
- A. nobilis L. Near flour-mill, Par, v.-c. 2, July 14 and September 7, 1917 (South Europe). The odour when fresh is distinctly a mixture of the odours of A. Millefolium and Tanacetum vulgare with the tansy smell predominant.—F. RILSTONE. "Yes."—DRUCE.
- Anthemis ——? Waste ground, St Philip's, Bristol, June 15, 1911.—J. W. White. "A. Wiedmanniana Fisch. and Mey. A native of Asia Minor; also adventive in Germany."—Thellung.
- A. Cotula L. Near Neston, Cheshire, v.-c. 58, June 23, 1917.—C. WATERFALL. "Our examples are Matricaria Chamomilla L."—MARSHALL and DRUCE.
- Artemisia gallica Willd. Chichester Harbour, Sussex, September 18, 1917.—R. J. Burdon. "Yes. It seems to deserve sub-specific rank."—Druce.
- A. Stelleriana Besser. [4389]. Sandy coast, Marazion, Cornwall W., v.-c. 1, June 26, 1917. Mr F. J. Hanbury, with whom I gathered it, told me that he had seen it there about forty years ago.— E. S. Marshall.
- Petasites fragrans Presl. Hedge-banks near Torquay, Devon S., February 1917.—C. WATERFALL.
- Senecio squalidus L. Railway banks at Brymbo Station, Denbighshire, September 8, 1916.—C. WATERFALL. "Yes, the type with hairy achenes; and a N.C.R."—DRUCE.
- S. viscosus L. Waste ground, Saltney, Flintshire, August 18, 1917.—C. WATERFALL.

S. lautus Forst. Waste ground, Bradford, v.-c. 64 (in abundance), September 27, 1917. First noticed by the contributor on July 8, 1908, on the same ground.—J. Cryer. "S. inaequidens DC. Spec. Austro-Africana. S. lauto persimilis mihi potius videtur."—Thellung.

Cryptostemma calendulaceum Br. Waste ground, Bradford, v.-c. 64, August 28, 1917.—J. Cryer. "Yes. Conveyed by Cape sheep to Australia, &c., where it is called the Cape Weed. Now a most conspicuous feature around Adelaide. It comes to Britain in Australian and Cape wool. The correct name is Cryptostemma Calendula (L.) Druce. Robert Brown altered the Linnean trivial unnecessarily."—Druce.

Centaurea nigrescens Willd. $\lceil 1832 \rceil$. Epsom Downs, Surrey, July 2, 1917. Foliage bright green in colour; radical leaves longstalked, lamina oblanceolate; lower cauline leaves stalked, oblongoblanceolate; upper stem leaves sessile, lanceolate, all entire. Stems simple, bearing at the apex usually geminate, sessile or shortly peduncled capituli. Scales of the phyllaries brown, spaced, shortly and irregularly fimbriate. Outer florets radiate, all rosy-pink. "Koch (Synopsis, ed. ii., 469) Pappus absent.—C. E. Britton. describes C. nigrescens Willd. as having the involucral appendages pectinate-fimbriate, the fimbriae about equalling the breadth of the disk. I have nothing to match it under C. nigra; it looks nearer to C. Jacea."-MARSHALL. "The phyllaries are very unlike those of our normal C. nigra and remind one of C. Jacea."—Salmon. "C. Jacea L., forma subdiscoidea."—Thellung.

Crepis biennis L. Railway-bank, Nailsea, Som. N., v.-c. 6, June 11, 1917. Two plants only were seen in 1900, and now the banks are covered with it, and it has spread freely into the permanent pastures near.—I. M. ROPER.

C. capillaris Wallr., ? var. diffusa (DC.). The Haggs, Dalton-in-Furness, v.-c. 69b. This looks poor material, but it represents the plant as it grows. It seems never to stray from the shortly-grassy hedge-banks. The flower before pressing is about § inch in diameter. Have large plants ever been grown from seeds of such as these?—D. Lumb. "In DC. Prodromus vii., 162, where it is called C. polymorpha Wallr. (= C. virens L.), var. diffusa Wallr., the variety is thus defined:—'Caule decumbente diffuso, pedicellis filiformibus, foliis inferioribus caulinisque amplexicaulibus lanceolato-linearibus parce dentatis'; C. diffusa DC. and Lapsana capillaris L. being given as synonyms. C. agrestis Waldst. and Kit. is here reckoned as a distinct species, four numbers later, following C. tectorum L.''—MARSHALL. "Yes, this may pass."—Druce. "Yes, rightly named I believe. It agrees with DC.'s description in Fl. Fr. vi.,

448 (1815), but I have not by me his earlier diagnosis of the plant in Cat. Hort. Monsp. 98 (1813)."—Salmon.

Hieracium Pilosella I., var. ? Barrow Hill Quarry, Potters Marston, Leicester, v.-c. 55, June 1917.—A. E. Wade. "Type. We see no varietal character."—Marshall and Linton.

H. silvaticum Gouan, var. tricolor W. R. Linton. Silverdale v.-c. 60, June 4, 1917. Also specimens from Silverdale collected in 1915 grown in my garden at Shipley at the Rev. E. F. Linton's suggestion, June 14, 1917. Named H. cymbifolium by the late Rev. A. Ley. The Rev. E. F. Linton on first seeing specimens wrote:—
"I believe this is dwarf H. expallidiforme Dahlst. The Rev. E. S. Marshall suggested H. sanguineum Ley. See Rep. B.E.C. 150, 1915. Rev. E. F. Linton having seen both wild and cult. spec. named it var. tricolor W. R. Linton.—J. CRYER. "These agree well with my named material from Yorks W., &c.''—MARSHALL.

H. pellucidum Laestad. On walls, Grey Abbey, Co. Down, July 16, 1917.—C. H. Waddell. "Not the type (Ley's lucidulum), but very like the larger plant, formerly considered to be typical. Neither of these is given for any Irish station in W. R. Linton's British Hieracia."—Marshall.

H. maculatum Sm. Old walls, Chichester, June 6, 1917.—R. J. Burdon. "Yes."—Marshall and Linton.

H. cacuminatum Dahlst. [3197]. Originally (1907) from Porlock Weir, Somerset S., v.-c. 5, fl. garden, West Monkton, July 5, 1917. Styles yellow, ligules golden-yellow tips pilose; heads very glandular, floccose, epilose, narrow in bud.—E. S. Marshall.

Hieracium ——? [3198]. Originally from Culbone, Somerset S., v.-c. 5, fl. garden, West Monkton, July 6, 1917. Styles yellow. Rev. W. R. Linton, in 1907, wrote that this was near H. cacuminatum and H. vrriguum, but was probably a new form. It cannot be referred to either, I feel sure. From [3197] it differs as follows:—Ligules lighter yellow, tips glabrous; heads less densely glandular, more grey-floccose, on longer peduncles; leaves thinner, narrower, less frequently and less deeply toothed.—E. S. Marshall.

Hieracium ——? Strathfillan, Perthshire, August 9, 1917.—R. J. Burdon. "H. Dewari Boswell (Syme). I found it there by the river in 1888."—MARSHALL. "H. Dewari."—LINTON.

H. gothicum Fr., forma. [2867]. Roots from near Bridge of Brown (near Tomintoul) just within Inverness E., v.-c. 96, close to

the Banff border (1906); fl. West Monkton, July 5, 1917. Remarkable for its numerous, strongly toothed leaves, and for the absence of glands on the heads which are more pilose than usual. Styles livescent. Named by Revs. E. F. and W. R. Linton, on wild material.—E. S. Marshall.

H. crocatum Fr. Origin, Winch Bridge, Teesdale, v.-c. 64. Cult., Shipley, July 27, 1917. Teste Rev. E. F. Linton.—J. CRYER. "Rightly named, I think; foliage much broadened by cultivation, but heads very like those of the Scottish form. Backhouse records it from Teesdale."—MARSHALL.

Taraxacum laevigatum DC. Sand dunes, Hall Road, Lancs. S., July 8, 1917. Fruits of this and of T. erythrospermum sent for comparison.—J. A. Wheldon. "Yes, but laevigatum DC. is synonymous (teste Handel Mazetti) with erythrospermum (Andrz.); our old laevigatum is obliquum Dahlst."—Druce.

Lactuca Serriola L. [359]. Grown from seed gathered near Woolwich in 1916, August 16, 1917.—F. Robinson. "No, this is L. saligna L., an unarmed form of var. runcinata Gren. & Godr."—Druce.

Vaccinium Vitis-idæa L. Moorlands near Bwlch Gwyn, Denbighshire; flowers September 18, 1916; fruit September 1917.—C. WATERFALL.

Andromeda polifolia L. Moss, Morecombe, v.-c. 60, August 6, 1917.—J. CRYER. "A. polifolia L."—DRUCE.

Loiseleuria procumbens Desv. Tyndrum, Perthshire, August 13, 1917.—R. J. Burdon.

Boretta cantabrica O.K. Connemara, Ireland, August 16, 1907.

—J. W. White.

Limonium vulgare Mill. Chichester Harbour, Sussex, July 10, 1917.—R. J. Burdon. "Yes."—Salmon.

L. vulgare Mill., var. pyramidale Druce. Chichester Harbour, Sussex, July 10, 1917.—R. J. Burdon. "Yes. Rather weak."—Marshall. "Three sheets were sent me containing plants averaging 9 in. high; f. pyramidale is usually far more luxuriant. I believe these examples are L. vulgare crossed with L. humile, the latter parent not very obvious but showing up in the long spikes with loosely-set spikelets."—Salmon.

L. humile Mill. Chichester Harbour, Sussex, July 10, 1917.—R. J. BURDON. "Yes."—MARSHALL. "Of three sheets sent me,

one seems certainly correctly named and almost typical, the second appears to be *L. humile* × *vulgare*, whilst the third sheet, containing four panicles, may, I believe, be also put under this hybrid, the *humile* parent much predominating."—Salmon.

Primula elatior × veris. Cultivated at Ledbury, May 7, 1917. For about eight years I have grown at Ledbury a colony of some fifty or more plants of P. elatior Jacq., and among them have four roots of P. veris. Every year artificial pollination has been attempted, but until last year no sign of hybridity was seen among the seedlings of P. elatior, which come up abundantly. One plant then appeared different from the others and has continued so this year. The flowers are yellower in colour, and more drooping than in P. elatior and the leaves more resemble those of P. veris. On the other hand the hairiness of the scape as also the calvx tech are those of P. elatior. The Rev. E. S. Marshall, to whom I sent a specimen, writes "In essential characters your P. elatior × veris, though fewer-flowered and smaller-leaved agrees quite well with my two sheets (1886) of the wild hybrid from near Saffron Walden."—S. H. Bickham.

Lysimachia ——? Swamp, Lake Windermere, Lancashire, August 1, 1895.—C. WATERFALL. "We should name this stricta Aiton."—Lumb and Pearsall. "This is L. racemosa Lam. (L. stricta Ait.)."—Druce. Agreed to by Thellung.

Centaurium umbellatum Gilib. Near Mollington, Cheshire. July 28, 1917.—C. WATERFALL. "Yes, typical."—MARSHALL.

Gentiana Pneumonanthe L. Near Holyhead, Anglesey, August 1917.—G. C. Druge and Hon. Mrs Guy Baring.

G. Amarella L. (1) Slag heaps, Minerva Lime Works, Denbighshire; (2) near Cileen, Flintshire.—C. WATERFALL. "Right."—MARSHALL.

Polemonium caeruleum L. Malham, v.-c. 64, June 17, 1917.— J. Cryer.

× Symphytum lilacinum Bucknall (S. officinale (a) ochroleucum × (β) purpureum × > peregrinum). Bank of the Frome, Oldbury Court, Bristol, Gloster W., June 6, 1917.—J. W. White.

Lithospermum purpureo-cœruleum L. Borders of woods near Congresbury, Somerset N., May 14, 1894.—J. W. WHITE.

Volvulus sepium Medic. Flowers pink. Thicket by roadside near Rhyd-y-mwyn, Flintshire, August 29, 1916.—C. WATERFALL.

"Convolvulus dahuricus Sims ob pubescentiam manifestam mihi potius videtur."—Thellung.

Solanum nigrum L. Dickson's Nurseries, Chester, October 1916.

—C. WATERFALL.

S. nigrum L., var? In abundance on waste ground, Bradford, v.-c. 64, August 23, 1917.—J. CRYER. "I have a plant from Witley, Surrey, which comes very near this."—MARSHALL. "S. nigrum L., var."—Thellung.

S. nigrum L., var. miniatum (Bernh.). Origin Quenvais, Jersey (W. R. Attenborough). Coll. E. W. Hunnybun, September 8, 1917, who grew it at Ventnor and sent it fresh.—S. H. Bickham. "Yes. Rouy (Fl. de France x., 366) calls this S. alatum Moench (1794) = S. miniatum Bernh. apud Willd. Enum. 236 = S. nigrum, var. miniatum Mert. & Koch Deutschslands Flora ii., 231."—Marshall. "This seems well deserving of sub-specific or even specific rank since the leaf-cutting is different as well as the red berries, and it keeps constant in culture. I should label it by its old name S. rubrum Mill."—Druce.

Physalis ——? On waste land, Bradford, v.-c. 64, September 11, 1917. Also at Meanwood, Leeds, and at Girlington, Bradford. —J. CRYER. "Probably minima L."—DRUCE. "Minima L."—THELLUNG.

Nicandra physaloides Gaertn. Waste ground, Bradford, v.-c. 64. In abundance. A very fine series of plants, September 21, 1917.—J. CRYER. "Yes."—DRUCE.

Verbascum nigrum × V. olympicum, hybr. nov. See Rep. B.E.C. 39, 1917. This new hybrid arose spontaneously at Oxford with the two parents, August 1917, and is a good intermediate. Some of the plants had narrow leaves unlike either parent.—G. C. Druce.

Linaria repens × vulgaris. Railway side near Oxford, August 1917, where it has persisted since 1890 (see Flora Berks, 368). These may possibly persist as perennials or may come true from seed. Only very few roots of repens are now left, but the hybrid is quite conspicuous and plentiful.—G. C. Druce. "On the repens side."—Marshall.

Veronica spicata L. [361]. Sandy heathland, Garboldisham, v.-c. 28.—F. Robinson.

V. hybrida L. Amongst scrub on common land, Gloddaeth. Llandudno, Carnarvonshire, July 7, 1917.—C. WATERFALL.

V. humifusa Dickson (V. serpyllifolia, var. borealis Laestadius). [4411]. Root from the mountains north of Loch Laggan, v.-c. 97, Inverness W. (1916); fl. garden, West Monkton, June 5, 1917. V. tenella All. seems to be another plant not occurring north of the Alps. I possess one of Dickson's own specimens. Ordinary V. serpyllifolia grows within a few yards of the ground on which I planted this, and the differences were strongly marked when fresh. I have never met with V. humifusa below 2000 feet in Scotland. It is noteworthy for its more prostrate habit and thinner, duller coloured, usually larger leaves; the flowers are much bluer and larger, and the capsules are glandular-hairy all over. Syme makes it a subspecies; Watson (Top. Bot.), a species, which I incline to think is its true rank, having seen no intermediates. I have gathered a form with pure white flowers.—E. S. MARSHALL. "This seems to It keeps quite constant in warrant the specific rank given it. culture."—Druce.

Euphrasia stricta Host. (1) Hawkshead Moor, v.-c. 69b, July 27, 1917; (2) Highfield, Dalton-in-Furness, July 1, 1917.—W. H. "In E. stricta the teeth of bracts and leaves are often much more aristate than in Mr Pearsall's plants, but I'think they come under that species."—Salmon. "Very different in appearance from plants so named by Townsend, but according to Mr Bucknall's key it must be that species. If it is, then Rouy's key is misleading, as the flowers should be 6-10 mm. long (as against 4-6 mm. for other species). The largest flower on my sheet of this gathering is slightly under 6 mm. long, but the shape of the sepals and the short capsules, &c., mark it off distinctly from E. nemorosa." -Wheldon. "This has much larger, broader foliage than in any of my stricta sheets, the upper leaves and bracts are very broad-based (not cureate, as described by Wettstein), with blunter, only occasionally aristate teeth. It agrees much better with several gatherings referred to E. borealis by Townsend or Wettstein, and should, I believe, be so named."—MARSHALL. "(1) This is more like E. stricta than Mr Pearsall's specimens from Highfield. Teeth of bracts too acute for E. borealis. (2) This is like E. brevipila in habit, but is quite eglandular. It may be the var. subeglandulosa."—BUCKNALL. "(1) We have received three plants. One is clearly borealis, the other two may be stricta. (2) Our specimens seem to be borealis updrawn owing to their situation. The upper cauline leaves are obtuse and have obtuse teeth. In habit they approach stricta somewhat."—E. & H. Drabble.

E. borealis Towns. (1) Limestone scars above Dinkling Green, Lancs. W., September 14, 1917. (2) Banks of the Hodder below Whitewell, Yorks W., September 16, 1917.—W. G. Travis and J. A. Wheldon. "(1) Like the plant from banks of Hodder, Whitewell,

- cf. E. Kerneri, forma. (2) Teeth of leaves and bracts too acute for E. borealis. As some of the corollas show a tendency to elongate, this may be a form of E. Kerneri."—Bucknall. "(1) E. nemorosa. The leaves in the specimens that we have received have acute teeth, and the general habit is not that of borealis. (2) This comes under Kerneri as we at present understand this plant."—E. & H. Drabble.
- E. occidentalis Wetts. St Ives, Cornwall, v.-c. 1, July 20, 1917. Coll. Miss E. M. Parkinson; comm. W. H. Pearsall. "Yes."—BUCKNALL and E. & H. DRABBLE.
- Sandy ground north of Ramsey, Isle of Man. E. curta Fr. A large, very hairy form, which looked hoarier August 5, 1917. than any of the mainland plants I have seen .- J. A. Wheldon. "I think that this can scarcely be included with E. curta. The branching is different, the lower internodes are much longer, although the spike is very dense at the top; the leaves are larger and of a different shape; the stem, leaves, and bracts are more shaggy, with longer hairs. In these characters it agrees with, and in habit closely resembles Italian specimens of E. tatarica Fisch. The flowers in Continental specimens are sometimes large and showy, but often comparatively small and inconspicuous. The moderate size of the flowers of the Isle of Man plants, therefore, does not exclude them from the E. tatarica group, if, as appears to me, they agree in other particulars. This name is at present only a suggestion, and further study of more abundant material and of the geographical conditions is necessary to prove whether or no it is tenable."—Bucknall. "These plants differ from E. tatarica Fisch. in the undermentioned respects:—The hairs on the stem are long; the teeth of the bracts are not aristate; there are no glandular hairs on the corolla or base of calyx; the corolla is small. We think it is E. curta, and have thus named specimens from Ramsey and from Helvellyn which agree closely with Mr Wheldon's plants. The plants are unusually hairy, no doubt owing to the habitat."—E. & H. DRABBLE.
- E. curta Wetts., var. glabrescens Wetts. Hawkshead Moor, Lancs. N., v.-c. 69b, July 20, 1917.—W. H. Pearsall. "Correct."—E. & H. Drabble.
- E. curta Wetts., var. glabrescens Wetts. High Haulme, Dalton-in-Furness, v.-c. 69b, August 27, 1917.—D. Lumb. "Yes, some of it. Some plants with leaf-serratures more acute, and capsule (nearly ripe) markedly shorter than sepals are, apparently E. Kerneri."—Wheldon. "Perhaps correctly named, but the flowers are unusually large. Cf. E. Kerneri, forma."—Bucknall. "Correct."—E. & H. Drabble, Salmon, and Marshall.

- E. brevipila B. & G. [155a]. Dolgelley, Merioneth, v.-c. 48, August 9, 1915. Fide C. Bucknall. Sent for comparison with No. 276.—W. C. Barton. "Unquestionably."—Marshall.
- E. nemorosa H. Mart. [147]. Wet ground, Arthog, Merioneth, v.-c. 48, August 5, 1915. Det. C. Bucknall. The rigid and regular branching of some of these specimens is unlike anything in my herbarium, and the bracts are more deeply divided than usual.—W. C. Barton. "Yes."—Wheldon.
- E. nemorosa H. Mart. [270]. Simple form, roadside, Southern Wood, Brendon, Devon N., September 1, 1917.—W. C. Barton. "Correct."—E. & H. Drabble.
- Euphrasia ——! [1378]. Roadside, White Colne, Essex N., v.-c. 19, September 16, 1915.—G. C. Brown. "Weak specimens of E. nemorosa H. Mart., I believe."—Bucknall.
- E. nemorosa H. Mart. Near Tydyn-y-Gwynt, Rhyd-y-Mwyn, v.-c. 51, August 24, 1916.—C. Waterfall. "Cf. var. ciliata of E. curta. I have never seen type nemorosa with calyx ribs and margins so densely covered with white hairs."—Wheldon. "Yes, nemorosa."—Bucknall. "A strong, many-branched form of nemorosa."—Marshall. "Nemorosa, var. ciliata."—E. & H. Drabble.
- Euphrasia —— ! Old quarries near Afonwen, Flintshire, August 25, 1916.—C. Waterfall. "E. nemorosa."—Bucknall. "Nemorosa, var. ciliata."—E. & H. Drabble.
- E. campestris Jord., var. neglecta Bucknall. [276]. Rough, hilly pacture (with nemorosa), Brendon, Devon N., v.c. 4, September 1, 1917. Det. C. Bucknall. I sent this to Mr Bucknall, queried brevipila, as the growth differed from any I had seen before, and was similar to nemorosa, which grew with it. Only these two forms occurred in the field. Two specimens were much nearer to nemorosa than those now distributed, but with the same short-stalked glands.—W. C. Barton. "We fully agree with Mr Pearsall in regarding this plant as 'a huge robust brevipila." It is quite unlike Jordan's campestris and cannot be a variety of that species."—E. & H. Drabble.
- E. gracilis Fr. [360]. Chalk Heath, South Pickenham, v.-c. 28, August 16, 1917.—F. Robinson. "Typical gracilis."—Marshall. "E. scottica. The hairs on the stem are reflexed. The leaves bear marginal hairs, the teeth of the leaves are obtuse. The teeth of the middle and upper bracts are acute or shortly acuminate."—E. & H. Drabble.

E. minima Jacq. [48]. (1) Boggy ground on Catbells, above Derwent Water, v.-c. 70, August 14, 1917. (2) Rocky sheep track, 2000 feet, on Sail, Cumberland, v.-c. 70, August 15, 1917. (3) Wet bogs, Bigland, v.-c. 69b, September 8, 1917.—W. H. Pearsall. "(1) We think this may pass as minima."—E. & H. DRABBLE. (2) This differs from E. scottica in the very obtuse leaves, with few obtuse teeth, which are densely ciliate with minute hairs. Some of the specimens on this sheet, however, do not conform to this description, but they all differ greatly in habit from E. scottica."—Buck-NALL. "This seems to be rightly named, and is a most interesting discovery for North Lancashire."—Salmon. "There are two forms on my sheet; the taller, with more acutely toothed bracts, may be var. variabilis Rouv. The shorter, with very obtuse teeth, var. nana Rouy. So far as can be gathered from dried material, the subforms bicolor (Gremli) Rouy and alba (Farrat) Rouy are also represented "This is the usual kind of station for E. here."—WHELDON. scottica, to which I would rather refer these small plants. stein specially dwells on the close alliance between these two segregates, and Ostenfeld refers E. scottica to E. minima. examined thousands of living E. scottica, I prefer to keep it up as distinct. It is mainly a plant of lowland (or subalpine) wet bogs, whereas E. minima is, as a rule, quite alpine, with no preference for " Probably minima."—E. & H. moist ground."—Marshall. DRABBLE.

E. minima Jacq., var. arbuscula Bucknall. [47]. Short turf on rocks, Bigland, v.-c. 69b, September 8, 1917.—W. H. Pearsall. "Yes."—Bucknall. "This seems to be what Mr Bucknall calls minima, var. arbuscula. We feel considerable doubt about its relationship to minima."—E. & H. Drabble.

E. Kerneri Wetts. [238]. Steep bank of sunken road, Apesdown, Isle of Wight, v.-c. 10, September 15, 1916. I noticed this first in 1912 when its large whitish flowers made a fine show for a Mr Marshall then wrote:—"These space of about fifteen yards. plants are larger and more straggling than any of my herbarium series of Kerneri, but they seem nearer to that than any other. don't know how far *Kerneri* can vary, but I cannot suggest any other name." Flowers showy, 6-8.5 mm. on back. Leaves eglandular, with stiff hairs on margin and nerves of lower surface, shining, dark green; the lowest 13×10 mm. The largest plants were 32 cm. (13) inches) high and not drawn up by vegetation. The description in Townsend's Monograph covers these plants except that he gives the length of the corolla as 10-13 mm.; but small-flowered Kerneri is now recognised. On the bare down above were growing plants similar to the usual Kerneri of the Wiltshire and Surrey Downs. All the plants on the bank were of the same appearance, and I am confident they

are not hybrids. Mr Bucknall writes:—"I agree with Mr Marshall that this is unlike ordinary Kerneri. The habit is that of E. nemorosa, but the flowers are larger and more conspicuous than in that species. I have a similar form from Devonshire and from the Cotswold Hills on oolite." And in hit. "The larger-flowered plants like E. nemorosa are puzzling, and I cannot yet decide as to whether they should be called E. Kerneri or E. nemorosa with large flowers." Also [273] a few sheets for comparison. Mr Bucknall names these E. Kerneri. The largest plant was 33 cm. high.—W. C. Barton. "E. Kerneri [238]. A luxuriant form, with very patent branches."—Marshall. "Yes."—Wheldon. "It is difficult to say whether this should be placed with E. nemorosa, of which it has the habit, as a large-flowered form, or with E. Kerneri. The short corolla-tube is against the latter determination. See remarks on pp. 25 and 26 of my 'Revision.'"—Bucknall. "Kerneri."—E. & H. Drabble.

- E. Kerneri Wetts. ? [369]. Chalk pit; Saham Toney, v.-c. 28, September 22, 1917.—F. Robinson. "Yes, all but one plant, which I should refer to E. nemorosa."—Wheldon. "There is, I think, a mixture here. One of my specimens appears to be E. curta, var. glabrescens; the rest I should rather refer to E. nemorosa. Not very well selected or prepared."—Marshall. "Probably a small form of E. Kerneri Wettst."—Bucknall. "This comes under Kerneri as we understand it in this country at present."—E. & H. Drabble.
- E. Kerneri Wetts. Mouzell, Dalton-in-Furness, Lancs. N., September 1, 1917.—W. H. Pearsall. "Yes."—Wheldon, Marshall, Bucknall, and E. & H. Drabble.
- Euphrasia ——? [366]. Heathland, Little Ellingham, v.-c. 28, September 10, 1917.—F. ROBINSON. "E. Kerneri."—Buck-Nall and E. & H. Drabble.
- E. Kerneri Wetts. [273]. Brendon, Devon N., August 10, 1917.—W. C. Barton. "Apparently Kerneri, but it is not typical."—E. & H. Drabble.
- E. Rostkoviana Hayne. (1) [155b]. Dolgelley, Merioneth, v.-c. 48, August 9, 1915. (2) [151]. Arthog, 800 feet, Merioneth, August 5, 1915. (3) [257]. Badgeworthy Water, among long grass, September 8, 1917. (4) [261]. Kipscombe Hill, 1000 feet, Countisbury, Devon N., September 7, 1917. [151], [155b], and [257] are sent for comparison with E. fennica, [277].—W. C. Barton. (1) "Yes."—Wheldon. Marshall, Salmon, Bucknall, and E. & H. Drabble. (2) "We think this is not Rostkoviana; an identification at present would be insecure."—E. & H. Drabble. (3) "This sheet has very weak specimens with small flowers, and is

perhaps E. fennica rather than Rostkoviana."—BUJKNALL. (3 and 4) "E. Rostkoviana."—E. & H. DRABBLE. (4) "I have a similar dwarf, small-flowered form from Savernake Forest, Wilts N.; also from the Brendon Hills, Somerset S. (Wolley-Dod)."—MARSHALL.

E. fennica Kihlman. [277]. Above Myrtleberry Cleave, East Lyn Valley, 800 feet, Devon N., v.-c. 4, August 21, 1917. Mr Bucknall and Mr Druce assent. Quite distinct in appearance when fresh from Rostkoviana, of which at first I thought it a variety, and still think the differences insufficient to constitute a species. slope no other form occurred, whether in the open or among bracken. But I found plants which Mr Bucknall agrees must go to fennica in several stations within a few miles (one on the Somerset side of the River Lyn), generally in company with Rostkoviana and nemorosa. Mr Druce's station, I understand, was on the southern side of Exmoor in Somerset. N.C.R.-W. C. BARTON. "I have not a description at hand. These, though apparently conspecific with Mr Druce's Exmoor specimens (which he kindly lent me a few years ago), are far weaker, and might well pass for small E. Rostkoviana. The following note was made on them at that time:—' A stout, erect plant, 6 to 12 inches high. Stem simple, or with few, erect branches. Leaves and bracts hairy (the latter mostly aristate); glands like Rostkoviana. They look very distinct.' " Corolla small; tube hardly exserted. -Marshall. "I agree with Mr Barton that E. fennica is very near to E. Rostkoviana, only differing from it in the stem being simple, or nearly so, and in the smaller flowers."—Bucknall. "We are not prepared to deal with E. fennica Kairamo at present."—E. & H. DRABBLE.

Euphrasia ——? [363]. Roadside, Rocklands, v.-c. 28, September 3, 1917.—F. Robinson. "Weak form of E. nemorosa Ĥ. Mart. I cannot detect any glands on this."—Bucknall. "Slender, drawn-out states of E. curta, var. glabrescens, I think."—Marshall. "Very few stalked glands are present. It is campestris Jord., but rather poorly developed."—E. & H. Drabble.

Euphrasia ——! [362]. Sandy heath, Garboldisham, v.-c. 28, February 1, 1917 (sic)—F. Robinson. "E. gracilis Fr."—Bucknall. "E. curta, var. glabrescens. It is very much attenuated and the bracts are very small."—E. & H. Drabble.

Rhinanthus major Ehrh. × minor Ehrh. (× R. fallax)? [4252]. Damp pasture, Laggan Bridge, Inverness E., v.-c. 96, July 24, 1916. This seemed fairly intermediate in habit, appearance, and cnaracter; but I am not at all sure about its being the hybrid, though it agrees fairly well with Sterneck's description of his × Alectorolophus fallax (A. minor, var. fallax Wimm. & Grab.). If not that, it may

be R. stenophyllus. Stems black-striolate. Bracts pale green.

Appendage of upper lip usually more patent than in R. minor.—E.
S. Marshall. "This is R. Crista-galli L., f. vittulatus (Gremli)
mihi tantum videtur."—Thellung. "I see no evidence in the
flowers of major."—Druce.

Melampyrum arvense L. Near St Lawrence, Isle of Wight, August 1917. Coll. J. Green; comm. G. C. Druce.

Orobanche major L. Wilstone, Wilts, July 1917.—G. C. DRUCE.

Mentha longifolia Huds. (= M. sylvestris L.). Bank of Chew, Compton Dando, Som. N., August 4, 1896. Coll. D. Fry; comm. J. W. White.

M. sylvestris L. Bank of Avon above Bristol, September 2, 1890.

—J. W. White.

M. longifolia Huds., var. mollissima (Barck.). A large bed, where it has been noticed for fifty years, in old lane near Baildon, v.-c. 64, August 8, 1917.—J. CRYER. "Apparently this; but I have no undoubted specimen of the variety."—MARSHALL. "This beautiful plant differs from the commoner form in having a short dense whitish tomentum on leaves, stem, &c., which gives the whole plant a greyish tone. I believe it has passed before as mollissima, but I have seen no types, and synonymy is confusing."—Salmon. "Nearest var. sapida (Tausch) Briquet. See Rep. B.E.C. 332, 1913."—Druce.

M. piperita L. By the Tweed, near Galashiels, Roxburgh, September 19, 1917. N.C.R. In the adjacent county of Peebles it has much the look of a native plant as it grows alongside the small burns among the hills.—G. C. DRUCE. "This would come under officinalis Hull—the usual form."—Salmon.

M. subglabra Baker, ? forma. By a small creek of the Rea Brook, Meole Brace, Shrewsbury, Salop, August 24, 1917. It assimilates, occasionally, both M. rubra and M. gentilis, the former in colour, the latter in foliage. It does not agree with a Warwickshire specimen I have, so authenticated by Mr J. G. Baker himself, this specimen having much broader foliage and capitate inflorescence.

—J. C. Melvill. "A glabrescent M. aquatica × arvensis, which may come under × M. sativa L., var. subglabra Baker."—Marshall. "× M. verticillata, var. subglabra (Baker)."—Druce. "Yes, I believe this comes under Baker's var. subglabra. Mr Melvill kindly sent me a fresh specimen last summer, and it had, quite

distinctly, the scent of M. aquatica, so different to that of any gentilis or rubra forms."—Salmon.

× M. verticillata Huds. Beechamwell Fen, Norfolk W., v.-c. 28, July 30, 1917. Coll. J. E. L. & Anna Luddington. Nicholson (Flora of Norfolk) speaks of M. verticillata as being scarce in that county.—J. E. Little. "Yes. M. aquatica × arvensis; the state coming under rivalis."—Salmon.

M. aquatica × arvensis, var. [364]. Ditch, Woodrising, v.-c. 28, September 6, 1917.—F. Robinson. "Under × M. verticillata L., var. paludosa (Sole), but it is nearer to var. subspicata Beck., which I have also from Devon, Brecon, and Derry."—Druce. "Yes, this hybrid, but my specimen cannot be called either typical rivalis or typical paludosa—an intermediate state."—Salmon.

M. rubra Sm. [368]. By rivulet, Sturston, v.-c. 28, September 15, 1917.—F. Robinson. "Yes."—Druce.

M. arvensis L., var. [365]. Little Ellingham, v.-c. 28, September 10, 1917. [367]. Heathland, Stow Bedon, v.-c. 28, September 15, 1917.—F. Robinson. [365]. "I have nothing which quite matches this; but it may be a small form of var. praecox (Sole). The calyx-teeth are right for that, as is the scanty pubescence."—Marshall. "I think this pretty mint may be a small state of parietariæfolia Beck."—Salmon. [367]. "Nearest to var. Nummularia (Schreb.), but not quite that plant."—Druce. "Agrees in some points (small rounded lower leaves, &c.) with the description of M. Nummularia (Schreb.)."—Salmon:

Calamintha Nepeta Savi. [370]. Hedgebank, Saham Toney, v.-c. 28, September 22, 1917.—F. Robinson. "Yes, Satureia Nepeta Scheele, with the corollas well shown."—Druce.

Salvia pratensis L. Orig., Rogiet, v.-c. 35; cult. Wigginton. Sent as far as possible in pairs to illustrate the note in Rep. B.E.C., 426, 1916. On the whole, I regard it as very probably introduced at Rogiet. When I first saw it there some years ago there was one clump only consisting of a mixture of the two forms and a very few scattered single plants. A year or two ago the large mixed clump was still there, and a very large number of small clumps and isolated plants had been formed. The species is spreading rapidly in this locality. If it was not recently introduced, there seems no accounting for the fact that the field has not always been covered with it.—H. J. RIDDELSDELL. "Dr Shoolbred took us to this station. The light blue flowers do not seem to be combined with any marked difference in foliage."—Marshall. "Perhaps cultivation has something to

do with the remarkable shape of the uppermost pair of leaves on the specimen received—broadly-lanceolate, with petioles c. I cm. long. I do not find these features in wild examples from Kent and Surrey, nor have I ever seen native plants bearing pale blue flowers. Rouy (Fl. Fr.), however, states that this species has 'corolle bleue, rarement bleuâtre, rose ou blanche.' "—Salmon.

Stachys alpina L. Border of wood above Wotton-under-Edge, Gloster W., June 16, 1917.—J. W. WRITE.

S. palustris L. [300]. Cultivated ground, Brendon, Devon N., August 24, 1917. Plant rigid, yellowish green; stem with stiff hairs ± deflexed.—W. C. Barton. "Nothing untypical about this, when dry, so far as I can see."—Marshall. "Verging towards var. canescens Lange."—Druce.

S. ambigua Sm. Tyndrum, Perthshire, August 20, 1917.—R. J. Burdon. "Yes, rather on the palustris side. We have seen it in that neighbourhood."—MARSHALL and DRUCE.

Lamium intermedium Fries. Weed in garden, Grey Abbey, Co. Down, October 1917. This is a common weed of cultivated ground in Co. Down. The specimens sent correspond to some so named by S. A. Stewart, who says, in his Flora of N. E. Ireland, it is frequent in Co. Down and Antrim. I am not sure if they are correctly named—they may be L. hybridum? I would like to be sure.—C. H. Waddell. "My specimen of this gathering is a remarkably strong large-leaved L. hybridum Vill."—Marshall. "I cannot see the hairs in tube which intermedium should possess; neither do the calyxteeth seem right for that. Is not Mr Waddell's plant luxuriant L. hybridum growing in rich soil?"—Salmon. "The specimens sent by Mr Waddell appeared to me to be L. hybridum."—Britton.

Plantago lanceolata L., var sphaerostachya M. & K. [321]. Hillside track, Willsham, near Countisbury, Devon N., August 12, 1917.—W. C. Barton. "Yes, but it is scarcely a true variety and reverts in culture."—Druce.

 $P.\ major\ L.$, var. nana Tratt. [325]. Cart track on Countisbury Common at 1000 feet, Devon N., v.-c. 4, September 13, 1917. The only form in the near neighbourhood. Trattinick, Arch. der Gewächskunde t. 42 (not 23 as Rouy states) gives two figures 'one of the largest and one of the smallest plants.' The larger depicts a plant of diam. 9 cm. with leaves 2 cm. broad and 5-nerved, spikes $1\frac{3}{4}\cdot 2$ cm. long; the smaller, a plant of diam. $2\frac{3}{4}$ cm. with leaves $1\frac{1}{2}$ cm. long and 3-nerved, spikes $\frac{1}{2}\cdot 1$ cm. long. My gathering exactly covers this range, except that a

few are smaller in spike and leaf than his smaller figure. According to description and habitat my smallest specimens might come under var. microstachya Wallroth Sched. Crit. * but the specimen in Herb. J. Gay at Kew sent by Wallroth himself is quite different in appearance, resembling a reduced form of var. agrestis Fries. On the other hand Wallroth's own specimen of his var. brachystachya (for which he gives minima DC. as synonym) in Herb. Gay is very similar in general appearance, but that is a plant of wet ground (cp. Williams Prodromus 355, P. uliginosa F. W. Schmidt as a species). The plants sent to the other club in 1916 by the Rev. H. J. * 'Foliis ovatis depressis Riddelsdell are, I believe, identical. minutissimis, scapo illa subaequante brevissimo declinato, spica ovata depauperata ex flosculis 4-5 composita. Planta ex hoc genere "De Candolle (Prodromus xiii., 1, minima.'—W. C. Barton. 695) makes P. nana Tratt. and P. minima DC. Fl. France synonyms of c. minima DC., but describes the leaves as glabrous; they are very hairy beneath and fairly so above in these specimens. The altitude and a poor soil combined would tend to diminish the size and increase the pubescence; and I doubt whether this is more than a depauperate state of P. intermedia DC.''—MAR-

Amaranthus retroflexus L. Waste ground, Bradford, August 20, 1917.—J. CRYER. "Young, but doubtless right."—MARSHALL.

A. chlorostachys Willd., var. aristulatus Thell. In abundance on waste ground in three separate stations, Bradford. Also at Meanwood, Leeds, v.-c. 64, August 29, 1917.—J. CRYER. "This must be a misplaced label. The plant is a form of A. Thunbergi."—DRUCE.

Chenopodium rubrum L. Sands by sea-shore, Ballywalter, Co. Down, September 1917.—C. H. WADDELL. "Yes."—DRUCE.

- C. murale L. Waste ground, Bradford, v.-c. 64, August 5, 1917.

 —J. CRYER. "Yes."—DRUCE. "Yes, near sub-var. microphyllum Coss. et Germ."—PEARSALL.
- C. opulifolium Schrad., var. betulifolium. Waste ground, Billingshurst, Sussex, August 31, 1917.—A. Webster. "C. opulifolium Schrad."—Thellung.
- $C.\ striatum \times album\ (=C.\ pseudostriatum\ Zschacke).$ Botley, Oxon, September 1917. On waste ground growing with both parents. This rather handsome plant had brilliant crimson-red striae on the stems under the nodes, which make it very conspicuous. Unfortunately these specimens cannot now be submitted to Dr J. Murr, so that one is a little timorous in giving a positive name.—G. C. Druce.

- C. leptophyllum Nutt. [333]. Army camping ground, Thetford, v.-c. 28, October 26, 1916.—F. Robinson. "Yes."—Druce.
- C. leptophyllum Nutt. Waste ground, Billingshurst, August 4, 1917.—A. Webster. "C. album, var. leptophyllum Moquin. Perianth segments strongly carinate."—Pearsall. "Leptophyllum, a good species."—Druce.
- C. hircinum Schrad. Waste ground, Bradford, v.-c. 64, September 12, 1917. In great abundance.—J. Cryer. "Yes."—Druce.
- C. hircinum Schrad. Waste ground, Bradford, v.-c. 64, August 25, 1917. Probably var. subtrilobum.—J. Cryer. "Var. subtrilobum."—Druce.
- C. polyspermum L., var. cymosum Moquin. [358]. Watton, v.-c. 28, August 12, 1917.—F. Robinson. "Type, not var."—Pearsall. "Near type; i.e., var. acutifolium Gaud."—Druge.
- C. ambrosioides L. Waste ground, Bradford, v.-c. 64, September 13, 1917.—J. CRYER. "Yes."—Druce and Thellung.
- C. Botrys L. Waste ground, Bradford, v.-c 64, September 4, 1917.—J. CRYER. "Yes."—DRUCE.

Atriplex laciniata L. Sands by shore, Ballywalter, Co. Down, September 1917.—C. H. Waddell. "Yes, of British authors, but laciniata L. is restricted to a different species. The name suggested in Camb. Fl. is antedated by A. maritima Hallier, which this plant should be strictly called."—Druce.

Salicornia herbacea L., f. stricta Moss & Salisbury. [311a]. Tidal mud, Yarmouth, Isle of Wight, v.-c. 10, September 15, 1916. Teste E. J. Salisbury.—W. C. Barton.

S. ramosissima Woods. [312A-D]. Mud on salt fallows, Brading Harbour, Isle of Wight, v.-c. 10, September 8, 1916. Dr Salisbury comments:—'All these appear to be quite good S. ramosissima. A and D well illustrate the normal range of variation in habit of the larger specimens.'—W. C. Barton. "I agree. This species varies greatly in habit."—MARSHALL.

Polygonum amphibium L., var. terrestre Leers. [1879]. Cultivated ground, Ham, Surrey, August 21, 1917.—C. E. Britton. "Excellent material; this is the land-form but not a true variety."—MARSHALL.

P. aviculare L., var. rurivagum (Jord.). On gravel drive, Grey Abbey Rectory, Co. Down, August 27, 1917.—C. H. Waddell. "So I should name it."—Marshall. "I believe that this is a small form of P. heterophyllum Lindm., var angustissimum Lindm. rather than Jordan's rurivagum."—Salmon.

Rumex limosus Thuill. [371]. Mud by edge of lake, Scoulton Mere, v.-c. 28, September 27, 1917.—F. Robinson. "Tubercles much too small for that; it is R. maritimus L."—Marshall and Salmon. "All the plants sent by Mr Robinson under [371] seemed to me to be R. maritimus."—Briton.

R. Brownii Campd. Waste ground, Bradford, v.-c. 64, September 11, 1917. Also at Meanwood, Leeds.—J. CRYER. "Yes, one of the few Australian species which may become naturalised in Britain."—DRUCE.

Euphorbia hiberna L. [308]. Wood on east side of Badgeworthy Water, Somerset S. (I believe the only recorded locality in the county), September 4, 1917.—W. C. BARTON.

- E. coralloides L. Slinfold, Sussex, June 23, 1917.—R. J. Burdon.
- E. Esula L. Whyke gravel pit, Chichester, June 6, 1917.—R. J. Burdon.
- E. Esula L., var. pseudo-Cyparissias (Jord.). Waste ground near Helsby Station, Cheshire, August 12, 1916.—C. WATERFALL. "No; this is typical E. Esula. Jordan's E. pseudo-Cyparissias is quite different."—MARSHALL.

Ulmus nitens Moench. Windmill Hill, Hitchin, Herts, May and June 1916; April, May, and June 1917.—J. E. LITTLE. "U. nitens Moench."—Henry. "I consider this to be the Huntingdon elm \times U. vegeta Lindley, but mature foliage is desirable."—Jackson.

- U. vegeta Lindley. Stansteadbury, Herts, June 12, 1915. Det. A. B. Jackson.—J. E. Little. "U. vegeta."—Henry.
- U. minor (? Miller) Reichb. Roadside, Long Whatton, Leicester, July 22, 1917.—A. B. JACKSON and T. E. ROUTH. "U. nitens Moench, var. This does not agree with U. minor Reichb., in my opinion."—HENRY.

Urtica dioica L., var. microphylla Hausm. [282]. Coombe Farm, Brendon, Devon N., v.-c. 4, September 9, 1917. A number

of plants all similar, about 3 feet high, on garden refuse where growth was luxuriant. All leaves were as shown in the specimens. A useful note on the small leaved forms of U. dioica appeared in Rep. B.E.C. 184, 1905.—W. C. Barton. "Yes, these are rather subvars. or forms than good varieties."—Druce and Marshall.

U. dioica L., var. angustifolia Wimm. & Grab. [281]. Road-side, Brendon, Devon N., v.-c. 4, August 25, 1917. Growing among the type under the same conditions. In some plants a few of the lower leaves were broad and cordate as in the type.—W. C. Barton. "Yes."—Druce. "Under that; leaves small, so that it approaches var. microphylla."—Marshall.

Betula ——? [2951]. Root from swampy, peaty ground at about 2800 feet, descending from the Lochnagar plateau towards the Dhu Loch, Aberdeen S., v.-c. 92, July 1906. Garden, West Monkton, May 21, 1917. When growing wild this was a very small, creeping-rooting shrub, less than six inches high, with foliage quite intermediate in outline between B. nana and B. pubescens, but remarkably hairy. After eleven years it has grown into a strong bush nearly six feet in height, but has produced no catkins. The leaves now closely resemble those of B. pubescens, var. microphylla; but I have never observed that species above 2500 feet in Scotland. I still think that it may be a hybrid with B. nana, though very much nearer to B. pubescens.—E. S. MARSHALL. "B. pubescens Ehrh."—Henry.

Salix alba L., var. vitellina (L.). Border of rhine, Pilning, Gloster W., May 5 and July 19, 1917.—Ida M. Roper. "Leaves too large for this, I think; seems nearer var. cærulea Sm."—Pearsall. "Probably correct, as the last year's bark is shining, and of the right colour. Mr Linton does not seem to have seen the male plant."—Marshall. "S. alba, no doubt, but not very good for S. vitellina; the leaves seem to be too persistently pubescent."—Linton.

S. triandra L., var. Hoffmanniana (Sm.). Bank of Chew, Chewton Keynsham, Somerset N., May 12 and July 21, 1917.—IDA M. ROPER. "Certainly not this, nor any form of pure S. triandra Much nearer to S. fragilis; but I believe it to be S. fragilis x triandra (S. alopecuroides Tausch)."—MARSHALL. "Not this; ls. much too long, not rounded below; fls. have only 2 stamens. Is S. fragilis L."—Pearsall. "S. triandra fairly typical, with no leaning towards S. Hoffmanniana."—LINTON.

Salix ——? Kidlington, Oxon, May 1917.—G. C. DRUCE. "S. viridis Fr. (S. alba × fragilis)."—LINTON.

- × S. rubra Huds. Leaves only. Tweedside, Galashiels, Selkirk, September 1917.—G. C. Druce. "Yes, a form of this (S. purpurea × viminalis) with very narrow, parallel-sided leaves."—MARSHALL. "A good foliage specimen of S. rubra Huds."—LINTON.
- S. viminalis? × ——? Abingdon, Berks, September 1917.—G. C. Druce. "Poor specimens (leaves only) of S. cinerea × viminalis."—Linton. "A gathering in 1918 convinced me it is viminalis × aurita."—Druce.
- S. Caprea × cinerea = S. Reichardti A. Kern. (1) Roadside, Coalpit Heath, Gloster W., April 28 and June 23, 1917. (2) Engine Common, Rangeworthy, Gloster W., April 30 and June 25, 1917.—
 IDA M. ROPER. (1) "Caprea is certainly one of the parents, but is not aurita also present?"—Druce. "I can see no trace of S. cinerea here. Possibly a S. aurita × Caprea, much nearer to Caprea; but more probably a form of S. Caprea."—Marshall. "S. aurita × Caprea; that is all that is certain; but it is possible that there may be S. cinerea in it as well."—Linton. (2) "The leaves show no influence of S. cinerea; there is some favourable evidence in the slender catkins and capsules, and in the darkish, puberulous bark of the last year's wood, but I think that it is only a slight modification of S. Caprea."—Marshall. "I should prefer to name this S. aurita × Caprea."—Linton.
- S. aurita L. Birchwood Lane, Pensford, Som. N., May 3 and September 10, 1917.—IDA M. ROPER. "I agree."—LINTON.
- Populus canescens Sm. Kidlington, Oxon, May 1917. Young shoots (alba-like).—G. C. DRUCE. "Yes."—HENRY.
- P. deltoidea Marsh. × nigra L. ? South-east corner of Tingley Wood, Herts, May 3 and June 12, 1917.—J. E. LITTLE and R. MORSE. "Better specimens of foliage necessary to determine whether it is one or other of the two planted female hybrid poplars, P. regenerata Schreider or P. marilandica Bosc. See Rep. B.E.C. 209, 1915."— HENRY. "This closely resembles specimens I have from a tree (since beheaded) near Turnham Green Station which I originally (see Rep. B.E.C. 126, 1911) called P. nigra, but which Moss and Henry considered to be P. deltoidea \times nigra, Henry naming it P. Lloydii (see Elwes and Henry, Trees of Great Britain vii., 1831, 1913). Little showed me this Tingley Wood tree in July 1916, and I was then unable to name it definitely. It appears to differ only from P. Lloydii in its glabrous shoots. It is not P. marilandica which Henry considers to be the P. canadensis of German dendrologists, as that has more prominent leaf serratures. I hope to give a further report on the Hertfordshire tree at a later date."—Jackson.

Helleborine violacea Druce. Woods by the road between West Wycombe and Stokenchurch, Bucks and Oxon, August 1917. Careful examination on the spot showed that the Helleborine was of one type only in these different localities, and I put it with some hesitation under H. violacea. It is clearly not H. atroviridis (W. R. Linton). The foliage and clustered habit at once separate it from that species, though the "hunches" closely resemble those of atroviridis. The stems were sometimes solitary but usually clustered (20-30 from a root); label broadly triangular-cordate, point almost always recurved; fl. white or purplish.—H. J. RIDDELSDELL. "Yes, the more correct name is H. purpurata (Sm.) Druce. Smith well described it, and his immature spec. preserved at the Linn. Soc. is certainly this plant."—Druce, Bennett, Marshall, and Salmon.

Orchis incarnata L. (vera). [229a and 229b]. Marshy ground of fen, Mildenhall, Suffolk W., v.-c. 26, June 9, 1916. In [229b] the lateral margins of lip somewhat less reflexed than in [229a] and the marking darker; the whole flower suffused with rose-purple. Mr Druce tells me he is familiar with this form in a number of localities. [229a] corresponded closely with the description in Rep. B.E.C. 339, 1913.—W. C. Barton. "Yes."—Druce. [229b]. "Yes. The colour is very variable; sometimes the flesh-coloured form occurs alone; at others, the dark or medium purple one alone; or every gradation may be found, as in meadows near Christchurch, Hants S., without any marked structural modification. Near Fleet Pond, Hants N., and doubtless elsewhere, a white-blossomed form is locally plentiful."—Marshall.

- O. incarnata × praetermissa. [229c]. Marshy ground of fen, Mildenhall, Suffolk W., v.-c. 26, June 9, 1916. Flowers dark or light purple, much nearer to those of praetermissa, but the lateral margins somewhat reflexed.—W. C. Barton. "The influence of O. incarnata is marked even in a dry state."—Marshall. "Yes, this seems to be the hybrid. It is much less frequent than praetermissa × Fuchsii or × maculata."—Druce.
- O. praetermissa Druce. (1) Mundham, Sussex W., July 1917.—G. C. Druce and R. J. Burdon. (2) Near Wool, Dorset, June 1917. See Rep. B.E.C. 155, 1917.—G. C. Druce.
- O. praetermissa Druce. Max Bog, Winscombe, Somerset N., v.-c. 6, June 27, 1917.—Ida M. Roper. "Yes."—Druce.
- O. praetermissa Druce. [229d]. Marshy ground of fen, Mildenhall, Suffolk W., v.-c. 26, June 9, 1916. All under this number from one marshy field where in addition to those now sent I found O. Fuchsii Druce and the hybrid O. Fuchsii Druce × praeter-

missa Druce which I agree with Mr Druce is the form usually named O. latifolia in this country. The plants were sorted fresh when the characters were easily distinguished. All forms varied much in size and in width of leaf, a character which I believe to be of no diagnostic value; and it is worth noting that all were gathered on the same day.—W. C. Barton. "Yes, excellent specimens."—Druce.

O. praetermissa × maculata. Meadow about a mile from the canal near Chichester, Sussex W., July 1917. Growing with both species. Some of the specimens were remarkably luxuriant, reaching nearly a metre. See Rep. B.E.C. 154, 1917.—G. C. DRUCE.

Ophrys sphegodes Mill. Near Swanage, Dorset, May 1917.—G. C. DRUCE.

Habenaria viridis Br. Slag heaps at Minerva Lime Works, Denbighshire, June 16, 1917.—C. WATERFALL.

H. viridis Br., var. bracteata A. Gray. Yarnton, Oxon, June 1917.—G. C. Druce.

Romulea Columnae Seb. & Maur. Petit Bot Cliffs, Guernsey, April 1913.—C. V. B. MARQUAND. "The suggested name, H. parviflora, for this species is, Mr Williams tells me, untenable."—Druce.

Ruscus aculeatus L. Shiphay Lanes, near Torquay, April 3, 1917.—C. Waterfall.

Allium Scorodoprasum L. Banks of Trent, Gainsborough, Lines. N., July 10, 1917.—A. Webster.

- A. vineale L., var. Hurst, Berks., July 1917. A bicephalous form.—G. C. Druce. "Var. compactum (Thuill.); in my plant there are twin heads."—MARSHALL.
 - A. triquetrum L. Guernsey, April 1913.—C. V. B. MARQUAND.
- A. oleraceum L. Meadow above Long Ashton, Bristol, Somerset N., July 30, 1917.—IDA M. ROPER.

Ornithogalum nutans L. [340]. Woods (both wet and dry), Bodney, v.-c. 28, May 15, 1917.—F. Robinson.

Gagea lutea Ker-Gawler. Woods, &c., Balsaddle Wood, v.-c. 32, April 28, 1917. Rare in Northants.—G. Chester.

Narthecium ossifragum Huds. Roydon Common, near King's Lynn, v.-c. 28, October 2, 1917.—F. Robinson.

Juncus glaucus Ehrh. × effusus L. Near Epsom Common, Surrey, September 9, 1916. This form of the hybrid, close to glaucus, is likely to be often overlooked, as, except for its continuous pith and blunt mucronate capsule, it has much of the colouring and general facies of that species. A few of the capsules are inclined to be acuminate, but on the same panicle may be seen the typical ones of "diffusus." Syme (E.B. ed. 3), says that the seeds are abortive, but these Epsom specimens appear to possess plenty of good seed, extremely like those of glaucus, but a little paler in colour.—C. E. Salmon. "Seems right, though to all appearance fertile, as are some of my own plants, passed by Mr Bennett. A small form of the hybrid."—Marshall.

J. tenuis Willd. Footpath, High Bentham, York Mid-West, v.-c. 64; August 1917.—A. Wilson. "Yes, is not this an addition to v.-c. 64?"—Salmon. "Now on record for 31 counties and vice counties. I have specimens from 19 of these."—Bennett.

J. tenuis Willd. By an old track beside the Soldiers' Camp at Barry, v.-c. 90, October 6, 1917. Coll. Mrs Wedgwood. The only previous records for this plant in Forfar are those of G. Don and D. Don. They recorded it as found by a rivulet in marshy ground among the mountains of Clova near their summits.—R. & M. Corstorphine. "I am a little sceptical about the identity of Don's plant with tenuis, but will report later."—Druce.

Luzula sylvatica Gaud. Headley, Surrey, May 31, 1917. Some members may not possess examples from this county, where it is decidedly scarce. These specimens are from the single station recorded in Brewer's Flora (1863), but it is now known in some half-dozen localities in the county.—C. E. Salmon.

L. multiflora DC. Alpine form or state at 2500 feet, Coire nan Gall, Laggan, Inverness W., v.-c. 97, July 28, 1916.—E. S. Marshall. "I am well acquainted with this handsome form on the Scottish hills; it may be worth distinguishing as a form."—Druce. "Habit of var. alpinus (Hoppe), var. nivalis Rich., but more open in flower."—Bennett.

Arum italicum Mill.? Near Druce, Dorset, May 1917. Lieut. C. Marquand who was with me when I gathered it last May agreed that it was the same as the Guernsey italicum (with which he was well acquainted) without the white veins to the leaves, which make the true plant so conspicuous. Ordinary A. maculatum also grew in the same area. One would be glad to have members' opinions on this plant, which is not separated from maculatum easily.—G. C. Druce. "Only A. maculatum, I think; leaves thin and inflorescence small."—Marshall.

Acorus Calamus L. Canal near Broughton, Cheshire, v.-c. 58, July 28, 1917.—C. WATERFALL.

Sparganium minimum Fr. [354]. Pool on heath-land, Thompson, v.-c. 28, July 19, 1917.—F. Robinson.

Potamogeton alpinus Balb. ? × lucens. Bendon, Dorset, May 1917. In a locality to which Mr C. B. Green directed me. The plant was then showing no sign of flower. Mr Arth. Bennett kindly examined the set of my gathering (not these identical specimens) and referred them to × P. decipiens Nolte, var. longifolius Hagström (= × P. upsaliensis Tis.). Lieut. T. H. Leach sent me other specimens from the same place in late July, but he was unable to find any fruiting specimens.—G. C. DRUCE. "P. upsaliensis Tiselius."—Bennett.

P. gracilis Wolfg. Loch Moraig near Blair Atholl, East Perth, August 25, 1917. Found by me on 14th August 1916 in Loch Moraig about $2\frac{1}{2}$ miles from Blair Atholl, and identified by Mr Arthur Bennett, who gives a full account in the Proc. Perthshire Soc. of Nat. Science vi., iii., p. exxv. As the Loch was swollen and muddy I had to take the specimens this year from those driven ashore, and I fear they had been rather long uprooted.—W. BARCLAY.

P. pusillus L. Stream flowing into Holywell Bay, v.-c. 1, August 23, 1915. I believe identical with the plant distributed in 1915 by Mr Druce. I send these examples to call attention to the length of the peduncle. Babington's Manual says:—" Spikes \frac{1}{2} or \frac{2}{3} shorter than the slender ped.," with which our usual Cornish P. pusillus agrees; but this, from a rather rapid stream, is different.-F. Ril-"Relative lengths of spikes and peduncles are perhaps sometimes of use locally, but applied to the whole area of the species are valueless. Here, of course, it might be said the stream induces the lengthened peduncles, but longer are produced on a var. of the species on Sable Island off the Canadian Coast, where the plant grows in a lagoon. Still this specimen has some characters that are unusual, such as the lengthened stipules, and the habit of the plant is what Dr Hagström in his recent work (Critical Researches in Potamogeton, 1916) calls "stretched," and the spikes are very short, much like the Canadian plant (var. capitatus). By description, in which I have little faith, it seems to fall under & cuspidatus Fischer, f. pauciflora Fischer. In fact, as Dr Hagström remarks, (l.c.)Fischer's descriptions are so involved that it is difficult to follow them, and he considers they are of little account."—Bennett.

Zannichellia gibberosa Reichb. Wyke, Chichester, Sussex W., July 1917. Locally abundant, a new county record.—G. C. Druce. "Yes."—Marshall.

Z. maritima Nolte. Kirby-le-Soken, Essex N., June 1917.—G. C. Druce. "This agrees well with the description of Z. pedicellata Fr. Mantissa i., 18, 1832. Fruits mostly 3 or 4 together, long-pedicelled, but not peduncled, with a membranous border on the back, muricate when fully ripe. According to Rouy, Fl. de France, xiii., 299, Z. maritima Nolte usually has the carpels in pairs, sessile or subsessile, generally not divaricate."—Marshall. "Yes, equals Z. pedunculata Reichb., β. maritima Nolte, and Z. palustris L., var. pedicellata Wahl."—Salmon.

Naias flexilis R. & S. Esthwaite Water, v.-c. 69b., July 27, 1917.—W. H. Pearsall.

Carex riparia Curt. [342]. Wet wood, Thompson, v.-c. 28, May 31, 1917.—F. ROBINSON. "Yes."—MARSHALL.

- C. vesicaria L. [352]. Scoulton Mere, v.-c. 28, July 10, 1917. —F. Robinson.
- C. lasiocarpa Ehrh. [347]. Heath-land, Foulden, v.-c. 28, June 16, 1917.—F. Robinson.
- C. hirta L. [350]. Watton, v.-c. 28, June 23, 1917.—F. Robinson.
 - C. helodes Link. Broadfield, Berks, May 1917.—G. C. DRUCE.
- C. ericetorum Poll. [338]. Chalky heath-land, Elveden, v.c. 26, May 10, 1917.—F. Robinson. "Yes, in excellent condition, showing the beautiful hyaline margins of the glumes."—DRUCE.
- C. elongata L. Canal near Billingshurst, Sussex, June 17, 1917.

 —A. Webster.
- C. muricata Linn. Herb. ! (C. Pairaci F. Schultz). Mullion, Cornwall W., v.-c. 1., June 25, 1917.—E. S. MARSHALL. "Not the muricata of L. Sp. Pl., which has priority."—DRUCE.
- C. diandra Schrank, var. major Koch = C. Ehrhartiana Hoppe. Seaman's Moss Pits near Timperley, Cheshire, v.-c. 58. Collected by the late John Hardy of Manchester in June 1853. A few weeks ago I turned up unexpectedly some examples of this form, collected by Mr Hardy himself, and which may be interesting to the members as coming from this station. During my long residence in Manchester I was never able to meet with the plant on the spot cited. In view of the disappearance of the species from its old station, the examples now sent will be of some interest to the members of the Club.—C.

"Yes, but the variety has been dropped as being not sufficiently well marked. See Watson B.E.C. Reports 30, 1900-1901; 22, 1901-1902."—SALMON. "Exactly the figure of E.B. ed. 3; but it does not agree at all well with the description, being more slender than the normal form, with smaller, shorter, more compact spikes. Koch Synopsis ed. 2, ii., 867, describes his var. major (= C. Ehrhartiana Hoppe.) as 'duplo saepe altior, radice magis caespitosa, spica crassiore magisque composita.' Rouy says that it is robust, with leaves broader; spike stouter and laxer, sub-panicled. The present plant does not fit these definitions, except in being extraordinarily tall: it looks like a local, attenuated state, probably due to shade or "Recent investigations have surrounding herbage."—MARSHALL. convinced me that some of the plants ex Herb. John Hardy sent to the Club this year by Mr C. Bailey are Gibson's pseudoparadoxa; that some other plants from Seaman's Moss, named pseudoparadoxa, are wrongly named; that the plants themselves and the whole discussion in the *Phytologist* settle the position of Gibson's plant between 2618 and 2620 in Mr Druce's List; that the Rescobie plant belongs to paĥiculata and is quite distinct from pseudoparadoxa in stem, perigynium and nut. In the two characters last-mentioned some of the Seaman's Moss plants are markedly distinct, but further investigation may prove that both diandra and the var. Ehrhartiana exhibit "The above note by Mr Lumb, for the same extremes."—Lumb. which we are greatly indebted, has been made after a most careful microscopical examination of all available specimens, including those in Mr Gibson's Herbarium at Halifax. From this it will be seen that Gibson's pseudoparadoxa has nothing to do with paniculata, and that the Rescobie plants do not belong to it. Kükenthal (Pflanzen.) and Ascherson & Graebn. (Syn.) are both wrong in placing Gibson's plant as a variety of paniculata; they may have been misled by wrongly labelled plants. Unfortunately I followed them in The British Plant List; subsequently I felt doubtful, so I did not include the variety in Hayward's Pocket Book. As Mr Lumb says its alliance is with diandra and paradoxa. Syme (E. B. x., 88) it will be remembered put it under the former species, making it synonymous with Ehrhartiana (major), but the two plants are not identical, and it may be found well to retain both names. We hope Mr Lumb will supply further details to clear up this point."—Druce.

- C. arenaria L., f. remota (Marss.). Abundant on Coates Common, Sussex W., June 23, 1917.—C. E. Salmon.
- $C.\ dioica\ L.\$ Carbrook Fen, v.-c. 28, June 2, 1917.—F. Robinson.

Panicum Crus-galli L. Waste ground, Bradford, v.-c. 64, September 27, 1917.—J. CRYER.

Panicum — ? Waste ground, Bradford, v.-c. 64, September 28, 1917.—J. CRYER. "P. laevifolium Hackel, var. amboënse Hackel. Afr., Austr., adv. in Gall., Helv., Germ. New to our list."—Thellung.

P. miliaceum L. [335]. Army camping ground, Thetford, v.-c. 28. October 27, 1917.—F. Robinson.

Setaria verțicillata Beauv. Waste ground, Bradford, v.-c. 64, September 13, 1917.—J. CRYER.

Phalaris canariensis L. [334]. Army camping ground, Thetford, v.-c. 28, October 27, 1916.—F. Robinson.

P. minor Retz. Vale, Guernsey, August 1913.—C. V. B. MAR-QUAND.

Alopecurus aequalis Sobol. Reservoir, Knypersley, Stafford N., July 17, 1888.—J. W. White.

Milium effusum L. [341]. Wood, Attleborough, v.-c. 28, June 2, 1917.—F. Robinson.

Phleum pratense L., var. intermedium (Jord.). See Rep B.E.C. 54, 1917. Nuffield, Oxon, Druce, nr. Salisbury, June 17, 1917.—Druce and Goddard. "Differs from nodosum in its larger size and longer spike (8-10 cm.). The stems are obliquely bent at base. These plants agree with the specimens cited by Rouy in Billot's Exdicc. 2760. Rouy alters the original description which has no reference to the colour of the anthers—a character of trifling value. The plant from Cranford (see Rep. B.E.C. 593, 1916) belongs here."—G. C. Druce. "Agrees very well with Billot's and Genevier's specimens and should come under the bulbous-rooted nodosum rather than under the fibrous-rooted pratense."—Marshall.

P. phleoides Simonk. Wilbury Hill, Hitchin, Herts, June 12, 1916. Coll. H. C. Littlebury; comm. G. C. Brown.

Mibora minima Desv. Vazon, Guernsey, April 1913.—C. V. B. MARQUAND.

Agrostis setacea Curt. Roadside near Perranporth, v.-c. 1, June 1917.—F. RILSTONE.

A. nigra With. On heavy cultivated land, Ledbury, Hereford, v.-c. 36, July 23, 1917.—S. H. BICKHAM. "Yes, a new county record."—DRUCE. "Perhaps so, but different from the Fortingal

plant distributed by Marshall (Rep. B.E.C. 508, 1913) and confirmed by Hackel. Griffith sent a specimen from Bangor, passed by Bennett (Rep. B.E.C. 1890) which seems very different in appearance from both the above. Perhaps we could have more specimens of A. nigra in future distributions."—Wheldon. "May pass, I think, though the inflorescence is not so dark as usual. It is nearer Syme's Balmuto specimens than my Fortingal ones of 1913."—Marshall. "Seems to agree fairly well."—Bennett.

Polypogon monspeliensis Desf. Thorney Island, Sussex, October 1, 1917.—R. J. Burdon.

Calamagrostis canescens Druce. Goldmire Wood, Dalton-in-Furness, v.-c. 69b, August 6, 1917.—D. Lumb.

Deyeuxia borealis Laestad. (1) Near Loch Tay, Perth M., August 1917. Coll. Rev. Preb. Burdon. (2) Same locality. Coll. J. Fraser. See Rep. B.E.C. 288, 1888. Near Loch Tay. Rediscovered in 1917 by Mr J. Fraser within a mile of the original locality, and he and the Rev. Prebendary Burdon have sent specimens which are now distributed. See Rep. B.E.C. 133, 1917. If the plant is treated as a variety of D. neglecta I am afraid, according to the Actes, it must be called var. clatior (Hartm. in Anders. Skand. Vaxt. ii., 95) under Calamagrostis neglecta Gaertn., Mey., & Schb. Fl. Wett. i., 24, 1799, or C. neglecta, var. clatior Hartm. It is one of the most interesting gatherings of the year. Comm. G. C. DRUCE. "This is most acceptable as it was believed to be extinct. Hackel (see Rep. B.E.C. 139, 1911) considers that Deyeuxia should be merged in Calamagrostis; so the name will be C. neglecta Beauv., var. borealis (Laestad.)."—Marshall.

Lagurus ovatus L. Lancresse Common, Guernsey, August 1912.
—C. V. B. Marquand.

Aira caryophyllea L. Moss-side near Woodvale, Lancs. S., June 30, 1917.—W. G. Travis.

Deschampsia flexuosa Trin. Railway cutting, Kettering, v.-c. 32, July 9, 1917. Rare in Northants.—G. Chester.

Arrhenatherum elatius Mert. & Koch, var. bulbosum Presl. Beanfield, Wick, Gloster W., June 26, 1917.—IDA M. ROPER. "Just as there are two good species of Oak, of Betula and Urataegus, so too there are of Arrhenatherum in Britain. The differences which separate the common elatius from the Onion-couch-grass are certainly specific or sub-specific. Not only are there the root and nodal characters, but there are differences in the flower, and these are transmitted.

unchanged to their offspring even when grown in different soils. The statement that the Onion-couch is limited to agrestal situations is incorrect. Both species are found in cultivated or uncultivated ground. Doubtless if an area in which one species grew was brought under agriculture, the plant would be more widely spread by its operations. See Rep. B.E.C. 391, 1892 and 29, 1914. The name for the species is A. tuberosum (Gilib.)."—DRUCE. "Mine is a beautiful example, showing the 'bulbs' extremely well developed."—Salmon.

Eleusine indica Gaertn. Waste ground, Bradford, v.-c. 64, September 27, 1917.—J. CRYER. "Yes."—DRUCE and THELLUNG.

Phragmites communis Trin., var. effusa (Uechtr.). Wood Perry, Oxon, September 1916.—G. C. Druce. "Agrees best with the description in Ascherson and Graebner's Synopsis ii., 1, 329, of var. flavescens Custer in Gaudin Flora Helvetica vi., 341 (1830):— "Panicle light yellow-brown, mostly rather lax, with slender, overhanging branches. Spikelets few-flowered, therefore thin, almost linear." "—MARSHALL.

Poa palustris L., var. muralis Asch. Waste cindery ground between Walton Gaol and Bootle, Lancs. S., v.-c. 59, July 1917.—W. G. Travis.

- P. Chaixii Vill. Brooklands Avenue, Sale, Cheshire, June 1917. Coll. G. A. Holt; comm. C. Bailey. "Yes. A new county record."—DRUCE.
- P. Balfouri Parn. ? Origin Caenlochen, Forfar; cult. hort. Oxon, August 1917.—G. C. DRUCE. "I agree, though the ligules are shorter than usual."—MARSHALL.
- P. polynoda Parn. (P. compressa, var. \(\beta\). Bab. Man.). Waste ground by canal, Bollington, Cheshire, v.-c. 58. July 1917. Coll. G. A. Holt; comm. C. Bailey. "Collected rather too late, but the flowers appear to be free, and the ligule is prominent and blunt. Probably right."—MARSHALL.
- P. bulbosa L. Littlehampton, Sussex, May 15, 1917.—R. J. Burdon.
- $P.\ remotifiora\ Murb.$, f. exilis C. E. Salm. Jersey, May 27, 1913. Mr Hunnybun kindly sent me these specimens, in a fresh state, in 1913, with the following note:—" You say anthers twice as long as broad. It will be more correct to say anthers $1\frac{1}{2}$ as long as broad until they develop x when they are square. Dwell on the minute size of anthers, because starved specimens of $P.\ annua$ growing with

it mimic its colour and habit. I feel sure that many botanists will find these starved specimens of P. annua on well-trodden paths and say that P. exilis is a fraud." Members may like to compare these examples with the dwarf specimens of P. annua sent through the Club in 1912 by Mr D. Lumb. (Rep. B.E.C., iii.-iv., 302, 1913).—C. E. Salmon.

- Glyceria maritima Wahl. [v. 731]. Pagham, Sussex W., June 1917.—G. C. Druce. "Rachis and panicle-branches rough; stems compressed. Apparently a form of var. hispida Parnell, with very narrow spikes."—Marshall.
- G. maritima Wahl. [v. 746]. Chichester Harbour, Sussex W., July 1917.—G. C. Druce.
- G. maritima Wahl., sub-var. caespitosa. (1) [v. 728]. Pagham, Sussex W., July 1917. (2) [v. 760]. Chichester Harbour, Sussex W., July 1917. See Rep. B.E.C. 62, 1917.—G. C. DRUCE. "Hardly pure G. maritima. Is it not G. distans × maritima, with somewhat larger flowers than the other plant so named by Mr Druce?"—MARSHALL.
- G. maritima Wahl., var. hibernica Druce. G. festuciformis Praeger not of Heyn (not Foucaudii). [v. 740]. Pagham, Sussex W., June 1917. See Rep. B.E.C. 62, 1917. Agreed to by Dr Stapf and W. B. Turrill. Dr Stapf agrees that those are not separable from Praeger's Irish festuciformis. He has not seen the true plant from the British Isles.—G. C. Druce. "A difficult grass, which is, I think, rightly referred to G. maritima, var. It approaches the weaker specimens of so-called G. festucaeformis from Co. Down, which Dr Stapf refers to Atropis Foucaudii Hackel, apud Foucaud, in Bull. Soc. Bot. Rochell., 43, 1893 = Glyceria Foucaudii Hackel in litt; but the spikelets are fewer and smaller-flowered than in G. Foucaudii, and the upper pale is not ciliate."—Marshall.
- G. maritima Wahl., f. distantiformis. [v. 741]. See Rep. B.E.C. 62, 1917. Chichester Harbour, Sussex W., June 1917. This is probably the var. deflexa (Syme). See l.c. The plant with purple spikelets is sub-var. amethystina.—G. C. Druce.
- G. Borreri × maritima = × G. Burdoni. [v. 755]. Pagham, Sussex W., July 1917. See Rep. B.E.C. 61, 1917. Turrill thinks it is a maritima form. Regarding maritima we may add an important statement from Martin H. Sutton who has grown it in the grass garden at Reading for many years and in spite of the situation and soil, dry and gravelly, . . . 'it remains true to type year after year. Naturally, however, the specimens are not so fine

- as by the sea-shore, where the species varies considerably. G. festuciformis true does not to our knowledge appear in the British form of maritima."—G. C. Druce. "The influence of G. Borreri is very clear. I should say that the other parent is either G. maritima or G. Foucaudii."—Marshall.
- G. distans Wahl. Kirby-le-Soken, Essex N., June 1917.—G. C. DRUCE.
- G. distans Wahl. [1898]. Lower Morden, Surrey, September 22, 1917.—C. E. Britton. "I presume a native in this station? If so, extremely interesting as my few records for the county are of ancient date. Watson (Top. Bot.) remarked:—'17. Surrey? Probably so.'"—Salmon. "An unusual form; the panicle has ascending branches (or the lowest patent-ascending) even in fruit, never deflexed. Stems, spikelets and leaves slender. It seems to come very near Rouy's description (l.c. xiv. 195) of Atropis distans Grisebach, var. tenuis Uechtr. = G. minutula Foucaud in litt."—Marshall. "It approaches var. tenuifora Gren. & Godr."—Druce.
- G. distans Wahl. Waste ground near the sea, Ballywalter, Co. Down, September 21, 1917.—C. H. Waddell.
- G. distans Wahl. × G. maritima Wahl. [724]. Pagham, Sussex, July 1917. See Rep. B.E.C. 61, 1917.—G. C. DRUCE. "Looks quite right; very interesting."—MARSHALL.
- Festuca elatior L. Waste ground, Eastville, Bristol, Gloster W., July 2, 1917.—IDA M. ROPER. "Yes, a form (which I have from Warwick, Oxford, &c.) with larger spikelets than usual."—Druce.
- F. sylvatica Vill. Near Hawkshead, Lancs., v.-c. 69 b., July 27, 1917.—W. H. PEARSALL. "I should put this under var. decidua (Sm.)."—DRUCE.
- F. rubra L., var fallax Hackel. Barrow Hill, Potters Marston, Leicester, June 1917.—A. E. Wade. "Probably, but with rootstock inadequate for certainty."—Druce and Marshall.
- F. rubra L., var. Sea wall between Milford-on-Sea and Hurst Castle, Hants S., June 4, 1917.—J. Cosmo Melvill. "Yes, F. rubra L., forma."—Druce. "Insufficient material, but probably a small form of the type."—Marshall.
- Festuca ——! Army camping ground, Thetford, v.-c. 28, July 5, 1917.—F. Robinson. "F. elatior L., var. pratensis (Huds.)."—Druce.

Bromus madritensis L. [353]. Lucerne field, Threxton, v.-c. 28.—F. Robinson. "No, it is B. rigens L. (maximus Desf.)."—Druce. "B. villosus Forsk = B. maximus Desf."—Thellung.

- B. hordeaceus L., var. glabrescens Druce. Walton, Lancs S., v.-c. 59, June 27, 1917.—J. A. Wheldon. "B. hordeaceus L., var. leptostachys Beck (1890) = B. mollis L., var. leptostachys Pers. (1805), the oldest varietal name."—Marshall.
- B. hordeaceus L. Sea walls by the creek, Virley, Essex N., v.-c. 19, 1911. Approaching var. leptostachys Beck, vide Rep. B.E.C. 143, 1911.—G. C. Brown. "Var. glabratus (Doell), as is also my specimen from Wheldon, which is glabrescent."—Druce. "Only a starved state of the type; the flowers are very hairy."—MARSHALL.
- B. hordeaceus L., var. Dry bank by the sea, Portpatrick, Wigtonshire, v.-c. 74, June 1916.—A. Wilson. "The awns are rather straight and the spikelets less softly hairy, yet, I think it may be put under molliformis."—Druge. "Apparently this is var. contractus Asch. & Graeb. = B. mollis, f. contractus Lange = B. Ferronii Mabille."—Marshall.

Brachypodium sylvaticum R. & S. Shady bank above Ullswater, Westmorland, v.-c. 69, August 11, 1917. Approaching var. glabrescens Syme.—S. H. Bickham. "Yes, much less hairy than usual, except at the nodes."—Riddelsdell. "This agrees with Rouy's definition (Fl. de Fr. xiv., 298) of var. glabrescens Coss. & Germ., an older authority than Syme:—'Tiges et feuilles glabrescentes; épillets glabres.'"—Marshall. "Yes, but Cosson & Germain (1845) put it under Festuca, not Brachypodium."—Druce.

Lolium ——! Sewage Farm, Colchester, v.-c. 19, July 7, 1913. —G. C. Brown. "L. perenne L."—Thellung and Druce.

L. perenne × Glyceria plicata. Meadows, Chichester, Sussex W., July 1917. These specimens require a longer notice than can be given here. Three authorities agree with the above suggestion.—G. C. Druce. "Nyman, Conspectus, p. 830, mentions G. loliacea Godron = Brachypodium loliaceum Fries. Herb Norm. viii., 96, an alleged hybrid between G. fluitans and L. perenne, as occurring in England, Denmark, Scandinavia, Germany, France, &c. Mr Druce's grass has, I think, some such origin; the plicate sheaths favour G. plicata, rather than G. fluitans, which the other characters suggest. In such cases, observation of fresh material is a great advantage, so the determination is most likely correct."—MARSHALL. "The 3 sheets from Chichester have been examined microscopically with great minuteness by our botanist, and it appears that two of these may be rejected as showing no distinctive variation from

Festuca loliacea. The sheet 2824, bearing also specimens of the suggested parents, did, however, call for more minute investigation and comparison with our own numerous types of F. loliacea; but even here sufficient deviation from these could not eventually be found to warrant the conclusion that it is a new hybrid, though one would not wish to be absolutely positive as to this without further research at Chichester. Our own collection of F. loliacea contains extremely varying types, and it is quite an easy matter to select spikes with acute and obtuse glumes and also some distinctly awned."—MARTIN H. SUTTON.

Agropyron repens L., var. The Haggs, Dalton-in-Furness, v.-c. 69 b., September 3, 1917.—D. Lumb. "Var. Leersianum Gray." DRUCE and MARSHALL.

Secale dalmatica. Waste ground, Uxbridge, Middlesex, June 4, 1917.—A. Webster.

Taxus baccata L. Limestone pavement, Bodafon Hill (Little Orme), Carnarvonshire, September 3, 1916.—C. WATERFALL.

Equisetum sylvaticum L. Near Bwlch Gwyn, Denbighshire, September 18, 1916.—C. WATERFALL.

E. palustre L., var. polystachyum Vill. Charterhouse-on-Mendip, Som. N., June 18, 1917.—Ida M. Roper. "Yes."—Marshall. "One of the two specimens I received has the main stem perfect, an unusual condition in this form."—RIDDELSDELL.

Ceterach officinarum DC. Walls near Compton Castle near Galmpton, Devon S., April 3, 1917.—C. WATERFALL.

Isoetes hystrix Dur. Lancresse Common, Guernsey, August 1912.

—C. V. B. MARQUAND. "A very welcome species."—RIDDELSDELL.

Chara vulgaris L., forma. Ditch on Nailsea Moor, Som. N., July 27, 1914.—J. W. White. "A form with broad secondary cortical cells."—GROVES.

- C. hispida L. Pool near Zealand, Lancs. W., v.-c. 60, August 1916.—A. Wilson. "Yes, excellent specimens."—Groves.
- C. vulgaris L. Swamp, Tydn-y-gwynt, Rhyd-y-mwyn, Flints., September 5, 1916.—C. Waterfall. "Yes, C. vulgaris; seems better able to live in a semi-terrestrial condition than any other species."—Groves.

C. vulgaris L., var. ? Pond, Little Maplestead, Essex N., July 17, 1913.—G. C. Brown. "C. fragilis Desv."—Groves.

Mr T. A. Dymes of Carthona, 5 de Burgh Crescent, West Drayton, Middlesex, proposes to investigate the fruits and seeds of native species of Orchidaceae and will be grateful for correctly named and localised fruiting spikes or whole plants that can be grown on to seed.

A certain amount of fresh material is in every case essential to carry out his plan completely, but a great deal can nevertheless be done with fruits and seeds from the Herbarium.

The objects of this investigation are:—

- (1) To record the adaptations to dispersal.
- (2) To examine and describe the fruits and seeds with a view to ascertaining if any light can be thrown therefrom upon systematic questions.
- (3) To discover if any appreciable and constant difference exists between species which are by common consent considered to be closely related.
- (4) Whether, generally speaking, species, genera and tribes, so far as the British flora is concerned, can be distinguished by their fruits or seeds, or both.

The Secretary greatly regrets the delay in issuing the Report, which is solely due to the abnormal circumstances caused by the war.