



THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1904-1905.

The number of specimens contributed this year (by 24 members) was 1,991, more than 300 in excess of last year, owing mainly to the very large contribution from Mr. Bickham, whose excellently prepared plants proved most acceptable. It is a pleasure to add that the plants sent in were, on the whole, most satisfactory, although in several instances an improvement might have been possible.

Unfortunately many of the critical genera have been omitted altogether or are only sparingly represented, and consequently much of the usefulness of the Club is lost. The Ranunculi and Rosæ are less numerous than could be wished, whilst the Rubi, Euphrasiæ and Fumariæ are quite up to the average of recent years: of the latter a good supply of fine specimens of F. occidentalis, Pugsley, and of an unnamed form, enabled the Distributor to provide most members with specimens.

A great decrease was noticeable in the number of aliens sent in as compared with several previous years; this is much to the benefit of the Club, as most members prefer British plants only. It is, however, to be regretted that many members contributed plants that are not in the Desiderata List. This forgetfulness of the rule involves additional work for the Distributor, who, moreover, usually has to dispose of such plants to members who have not asked for them. It is desirable that those who wish to include in their parcels good specimens of any rare or critical species and varieties that are not in the List should first communicate with the Distributor.

I cannot too strongly impress upon some members the necessity for sending better labels. Collectors generally like to preserve the original stamped labels with their specimens, and these to be worth keeping should either be printed or neatly written.

The thanks of the Club are due to the Referees and to the following botanists for examining and reporting upon the critical species: Mr. A. Bennett, Mrs. E. S. Gregory, Messrs. H. and J. Groves, Mr. A. B. Jackson, Mr. H. W. Pugsley, Mr. C. E. Salmon, Mr. Townsend and Major A. H. Wolley-Dod, and also to the Rev. W. Moyle Rogers for kindly sending a parcel of 27 Rubi for distribution.

The following is a statement of the specimens sent in by each contributing member:—

Mr. E. J. Allard	28	Rev. E. S. Marshall 68
Mr. W. Bell	175	Mr. H. W. Pugsley 45
Mr. S. H. Bickham	575	Mr. T. E. Routh 22
Mr. E. Cleminshaw	25	Mr. C. E. Salmon 25
Mr. F. C. Crawford	30	Mr. A. Somerville 46
Mr. A. J. Crosfield	27	Mr. R. S. Standen 41
Mr. F. H. Davey	125	Mr. H. S. Thompson 69
Mrs. Foord-Kelcey	90	Dr. W. A. Vice 55
Mr. G. Goode	27	Rev. C. H. Waddell 65
Mrs. E. S. Gregory	44	Mr. J. W. White 165
Mr. C. B. Headly	40	
Miss D. M. Higgins	32	
Mr. A. Hosking	152	1991
Mr. A. B. Jackson	20	

The return parcels were distributed during April and May, and judging from the tone of the acknowledgments general satisfaction has been given.

I offer my grateful thanks to the friends who have so readily helped and advised with the distribution.

WILLIAM BELL, Distributor for the year 1904—1905.

It was with deep regret that we received from Mr. Bennett, early in the year, an intimation that in consequence of illness he was compelled to resign the post of General Referee which he had held since the commencement of the Club in 1884. We cannot look back upon the years of our minority—now just completed—without realising how impossible it is to appraise too highly the services which Mr. Bennett has rendered by so generously placing his time and his unrivalled knowledge of the British Flora at our disposal. The share of the work he retains, though more limited, shows the keen interest he still takes in all that concerns the Club.

Our gratitude is due to Mr. H. S. Thompson for his services as Hon. Sec. The success of the Club during the past five years was owing in a large measure to his untiring energy and interest in the work and it is unfortunate that, through the pressure of other duties, he has felt it necessary to resign.

To Mrs. Cotton we are indebted for kindly presenting some of the Reports—especially those for the earlier years. A complete set has now been formed and bound into a volume, which can be lent, for a limited time, to those members who wish to look up the records of plants that have been sent to the Club.

The Hon. Treasurer suggests that members might, without being applied to, kindly send in during January their subscriptions, which fall due at the beginning of each year, as this would lighten the labours of the office, and be to the advantage of the Club.

We are very sorry to announce the death of Mr. D. Nicolson, of Wick, who had been a member of the Club since 1887.

GEORGE GOODE,

Hon. Secretary.

Thalictrum dunense, Dum. Aberdeen Links, v.c. 92, 6 Aug., 1904.—W. A. Vice. Correct.—E.S.M.

Ramnculus ——. Blaby Brook, Leicestershire, v.c. 55, 30 June, 1904.—W. A. Vice. This is one of the river forms usually labelled R. pseudo-fluitans, but which is quite distinct from the characteristically Irish plant apparently entitled to that name.—H. and J.G.

R. Drouetii, Godr., var. Godronii (Gren.). Drains by Belfast Harbour, co. Down, July, 1904.—S. A. Stewart. Comm., C. H. Waddell. We should incline rather to refer these specimens to a small form of R. heterophyllus.—H. and J.G.

R. heterophyllus, Web. ex p. Harlyn Bay, St. Merryn, W. Cornwall, v.c. 1, 4 May, 1904.—W. Barratt. Comm., F. H. Davey. Floating leaves not developed. Fide H. and J.G.

R. peltatus, Schrank., var.——. Aughnadarragh Lake, co. Down, 11 July, 1904.—C. H. Waddell. R. peltatus, var. truncatus (Hiern).—H. and J.G.

R. ophioglossifolius, Vill. Cult., Botanic Gardens, Cambridge, June, 1904.—A. Hosking. Yes.—H. and J. G. Cultivated specimens, as a rule, should not be sent to the Club; but they are acceptable in such cases as this, where very rare plants are practically extinct in their natural habitats.—W.B.

Trollius europæus, L., Windermere, Westmorland, v.c. 69, 7 June, 1904.—W. Barratt. Comm., F. H. Davey.

Meconopsis cambrica, Vig. (1) Restormel, Lostwithiel, E. Cornwall, v.c. 2, 14 May, 1904.—F. H. Davey. A set of very beautiful specimens.—W. B. (2) Rocky ledges, Cader Idris, Merionethshire, v.c. 48, 1 Aug., 1904.—E. Cleminshaw.

Chelidonium majus, L., var. laciniatum, Stokes. Hedge outside a cottage garden, near Ledbury, Herefordshire, v.c. 36, 14 May, 1904. Doubtless an escape, but I cannot find where it is cultivated.—S. H. Bickham.

Fumaria occidentalis, Pugsley. Abundant in a potato field near Newquay, W. Cornwall, v.c. 1, 6 Oct., 1904.—S. H. Bickham and C. C. Vigurs. The Fumaria sent is a typical specimen of F. occidentalis.—H.W.P.

F. pallidiflora, Jord. Padstow, W. Cornwall, v.c. 1, I June, 1904.—F. H. Davey. This specimen, which shows

no fruit, appears to be a form of *F. capreolata*, L., with the sepals shorter than usual, and thus simulating *F. speciosa*, Jord.—H.W.P.

F. Borai, Jord., var. serotina, Clavaud. Saintfield, co. Down, Sept., 1903.—C. H. Waddell. Comm., H. W. Pugsley.

F. confusa, Jord. Cultivated fields near Morthoe Railway Station, N. Devon, v.c. 4, 7 Sept., 1903.—H. W. Pugsley.

F. confusa, Jord.? Weed in garden, Saintfield, co. Down, Sept., 1904.—C. H. Waddell. These specimens belong to a variety or ally of F. confusa, and are identical with those from the same locality referred to on page 7 of the Club's Report for 1902-3.—H.W.P.

Gilly Tresamble, Perran-ar-worthal, W. Cornwall, v.c. 1, 8 Oct., 1904. The plant occurs in plenty in several potato, turnip, and cabbage fields, over an area of two miles in the parish of Perran-ar-worthal, and was found later twelve or fourteen miles distant, near the North coast. The wonder is that so striking a plant should have escaped our notice until now.—F. H. Davey. Your plant is undoubtedly allied to F. Borai and F. confusa, and is probably nearer the latter, from which it differs in the dark-tipped corolla, slightly larger and broader sepals, still shorter bracts, and rugulose acute instead of rugose, more obtuse fruits. It may, in fact, be regarded as a confusa, with the colour of Borai and muralis, and the fruits of muralis somewhat enlarged. It is almost identical, according to Jordan's description, with his F. vagans, a French species which, with F. confusa, was united by Haussknecht with F. Gussonii, Boiss, under the latter name. There is no doubt in my mind, though, that it is as different from F. confusa as F. muralis is from F. Borai, perhaps more so. I shall hope to compare it with specimens at the British Museum during the winter and will write further.—H.W.P.

(Later). This plant, which was found in more than one locality last Autumn by Mr. Davey, cannot be referred to any of the British species and I am unable, at present, to name it. The fruits on the specimen sent have all been crushed in the press and are thus worthless.—H.W.P.

F. Vaillantii, Loisel. (1) Chalk pits and cultivated ground, Gogmagog Hills, Cambs., v.c. 29, 12 July, 1904.—A. Hosking. (2) Cornfields on Beacon Hill, near Devizes, N. Wilts., v.c. 7, 15 May, 1904.—E. S. Marshall. Both gatherings correct.—H.W.P.

F. parviflora, Lam. Turnip field, under Badbury Down, Dorset, v.c. 9, 23 Sept., 1904.—E. S. Gregory and R. P. Murray. Correct: vide Jl of Bot., April, 1905.—H.W.P.

Barbarea pracox, R. Br. Ponsanooth, W. Cornwall, v.c. 1, 4 May, 1903.—F. H. Davey. This is very young and shows no seed pods in the specimen I have. The flowers, root, stem leaves, etc, point to B. intermedia, Bor. rather than pracox, which has usually larger flowers and differently cut leaves.—C.E.S.

Cardamine amara, L., var. erubescens, Petermann. plant was found on May 15, 1905, growing in abundance between Black Boy Wharf and New Head Bridge, on the Canal, Addlestone, N.W. Surrey. It differs chiefly from the type in its small flowers, the petals of which are distinctly tipped with pink, so that it is probably the same as the var. Opicii Presl. forma lilacina Beck (Fl. Nied. Oestr. II, 1, page 453). Otto E. Schulz, the author of the Monograph of the genus Cardamine in Engl. Jahrb. XXXII (1903), p. 501, who has seen a specimen, calls it "C. amara, L., var. erubescens, Petermann, or more exactly C. amara, L., var. subglabra Schur., sub-var. erubescens, Petermann," and he thinks it the first British record though there is said to be a very similar plant in Herb. Brit. Mus. from Lodsworth, Sussex (Rev. E. S. Marshall), named C. amara, the flowers of which, however, are less coloured than in the Surrey Plant. In Bot. Exch. Club Rept. for 1888, p. 200, Mr. Druce has a note on a pink flowered form of C. amara from Heyford, Oxon., and in his Flora of Oxfordshire, p. 28, is noted a hybrid C. amara x pratensis growing at the same place, "the flowers darker in colour than pratensis, having more of a purplish tint, but slightly smaller than amara: the anthers violet as in amara but the style nearer that of pratensis. There appears to be no reference to this hybrid in the European Floras." Miss Katherine Fitzgerald, who discovered the plant in Surrey and submitted specimens to Kew, says that "the plant nearest the water is quite white, the pale lilac being found some feet from the water and in less abundance." This note is published here on the suggestion of Mr. W. B. Hemsley, F.R.S., Keeper of the Kew Herbarium, from information supplied by Mr. H. S. Thompson, F.L.S.-G.G.

Draba aizoides, L. (1) Penard Castle, near Swansea, Glamorgan, v.c. 41, 24 March, 1904.—F. L. Foord-Kelcey. (2) Cliffs, w. of Pwll-du Head, Gower, Glamorgan, v.c. 41, 12 April, 1904.—E. S. Marshall. A fine set: in excellent

fruit.-W.B.

"This plant is aboriginal on limestone rocks on the coast of Gower. I doubted this for a long time; but I have frequently sought along the cliffs, and have found it in so many different situations, and under such conditions, that I do not retain the slightest doubt upon the subject now. The plant was first discovered on Pennard Castle-the most easily accessible of its localities—and consequently is frequently given in handbooks as simply from 'Pennard Castle'; and this has prejudiced many minds against it. But it does not occur there in its greatest quantity. It occurs from Pwll-du Head to Worms Head: (1) for several miles of coast from the former to Pennard Castle; and (2) much further west about Mewslade Bay and Worms Head. In the former locality it is in great profusion. Its extremes of distribution are (in a direct line) 12 miles apart. I have not found it on the limestone N. of Worms Head.—H. I. Riddelsdell." From B. Exch. Cl. Rept., 1904, p. 10.

Erophila pracox, DC. (1) Thatch, Blaby, Leicestershire, v.c. 55, 17 April, 1902.—W. A. Vice. (2) Golf Links, Hunstanton, W. Norfolk, v.c. 28, 20 April, 1902.—W. A. Vice. Yes, both lots under E. pracox.—E.S.M. (3) Gravel Walk, Blaby, 17 April, 1902.—W. A. Vice.—Under E. pracox, DC. Leaves very curious—no doubt the French have a special name for this.—E.S.M.

Sisymbrium officinale, Scop., var. leiocarpum, DC. Blaby Mill, Leicestershire, v.c. 55, 17 July, 1903.—W. A. Vice.

S. Columnæ, Jacq. Blaby Mill, Leicestershire, v.c. 55, 9 June, 1903.—W. A. Vice. An alien which is obtaining a footing in waste places by mills and railways in many parts of the kingdom.—W.B.

Brassica ——. Cornfields, Castle Donington, Leicestershire, v.c. 55, 22 June, 1904.—W. Bell. B. Rapa, L., var. Briggsii, H. C. Wats.—H.P.R.

B. Cheiranthus, Vill. Par, E. Cornwall, v.c. 2, 18 June, 1904.—F. H. Davey.

Thlaspi alpestre, L., var. occitanum (Jord.). Shipham, N. Somerset, v.c. 6, 20 April, 1904.—E. S. Gregory. Probably correct from this locality; but it is impossible to satisfactorily determine in the absence of fruit.—W.B.

Euclidium syriacum, R.Br. Blaby Mill, Leicestershire, v.c. 55, 9 June, 1903.—W. A. Vice. Alien, imported with foreign corn.—W.B.

Helianthemum Chamæcistus, Mill, var. hirsutum, Koch. Maggs Hill, Gogmagogs, Cambs., v.c. 29, June, 1904.—A. Hosking. Teste A. Bennett.

Viola silvestris, Reich. (= Reichenbachiana, Bor.). Shady bank by canal, Edenderry, near Belfast, co. Antrim, 4 April, 1904.—C. H. Waddell. Probably correct; but the specimens sent are not of the best. The flowers are poor, and it is desirable that the spur and veining of the petals should be in a good state to satisfactorily determine here.—W.B. No doubt correctly named, though they are badly dried, and do not sufficiently show the central rosette of leaves only.—E.S.G.

V. ericetorum, Schrader, var. flavicornis (Sm.)? Sandhills, Dundrum, co. Down, 26 April, 1902.—C. H. Waddell. The smaller plants I should like to call V. calcarea, Reichb., as described by Rouy et Foucaud in their "Flore de France." Flavicornis, Sm. (= sabulosa, Reichb.) has a distinct taproot, though very small, in all its parts. The larger plant I take to be V. ericetorum, Reichb., maritime form.—E.S.G.

Dianthus cæsius, Sm. Cheddar Cliffs, N. Somerset, v.c. 6, 7 July, 1904.—F. L. Foord-Kelcey.

Saponaria officinalis, L., var. puberula, Wierzb. Tolgus, near Redruth, W. Cornwall, v.c. 1, 2 Sept., 1903.—F. H. Davey.

Cucubalus baccifer, L. Cult., University College Garden, Clifton, 20 June, 1904.—J. W. White. Most of the members will be glad to possess a well dried cultivated example of this plant, as it has long since disappeared from its only naturalised locality in England. According to the "Flora of Middlesex" it was last gathered in the Isle of Dogs about 1852.—A.B.J.

Elatine hexandra, DC. (1) Gravelly shore of lake, Carrickmannan, co. Down, 11 July, 1903.—C. H. Waddell. (2) Cutmill Pond, near Godalming, Surrey, v.c. 17, 31 July, 1904.—H. W. Pugsley.

Althwa hirsuta, L. Cult., Underdown, Ledbury. Seed from a specimen gathered by the late Dr. D. T. Playfair in 1902, at Cobham, Kent, 1 Sept., 1904.—S. H. Bickham.

Tilia cordata, Mill. Leigh Wood, near Abbots Leigh, N. Somerset, v.c. 6, 2 Aug., 1904.—J. W. White.

Geranium phœum, L. Riverside, Ponsanooth, W. Cornwall, v.c. 1, 26 May, 1903.—F. H. Davey.

G. Robertianum, L., var. modestum (Jord.). Padstow, W. Cornwall, v.c. 1, May 10, 1904.—W. Barratt. Comm. F. H. Davey. This appears to be a short grown form of the type: it is not modestum, which is altogether of finer growth and more recumbent.—W.B.

Impatiens Noli-tangere, L. Nannau Wood, Dolgelly, Merionethshire, v.c. 48, July, 1904.—E. Cleminshaw.

I. biffora, Walt. Syon Park, Middlesex, v.c. 21, Aug., 1904.—D. M. Higgins.

Anthyllis Vulneraria, L. var. ———. Exposed Downs, Newquay, W. Cornwall, v.c. 1, 4 Oct., 1904.—S. H. Bickham. This is clearly A. Vulneraria, var. coccinea, L. (= A. Dillenii, Schultz).—E.S.M.

Vicia Orobus, DC. Elliot Links, Arbroath, Forfarshire, v.c. 90, 24 June, 1904.—J. Smith Nicoll. Comm. A. Somerville.

** Specimens of all the Rubi have been seen by the Rev. W. Moyle Rogers, who agrees with the names except where otherwise stated.

Rubus suberectus, Anders. Pitts Wood, Harborne, Worcestershire, v.c. 37, 8 Aug., 1901, (flowers 25 June).—H. S. Thompson. Not R. suberectus, but apparently a form of R. plicatus, with rather long stamens and unusually fine leaf-toothing. I cannot quite match it.—W.M.R.

R. durescens, W. R. Linton. Hedge near Packington, Leicestershire, v.c. 55, 24 July, 1904.—A. B. Jackson.

R. nemoralis, P. J. Muell, var. Silurum, A. Ley. Mitcheldean Meend, W. Gloucestershire, v.c. 34, 18 Aug., 1904.—S. H. Bickham and A. Ley.

R. pulcherrimus, Neum. Border of Swithland Wood, Leicestershire, v.c. 55, 8 Aug., 1904.—W. Bell.

R. villicaulis, var. Selmeri (Lindeb.). Wyre Forest, Salop, v.c. 40, 25 Aug., 1904.—S. H. Bickham and A. Ley.

R. ——. On the debris of a stone quarry near Cowleigh Park, Malvern, Worcestershire, v.c. 37, 18 Aug., 1904.—S. H. Bickham. A very handsome plant, unknown to me. Apparently allied to R. rhombifolius, Weihe.—W.M.R.

- R. gratus, Focke. Mitcheldean Meend, W. Gloucestershire, v.c. 34, 18 Aug., 1904.—S. H. Bickham and A. Ley. All correctly named, I believe, although the panicles—so cylindrical, with such small flowers, and sepals, so nearly or completely reflexed—are without exception remarkably untypical.—W.M.R.
- R. ——. Pitts Wood, Harborne, Worcestershire, v.c. 37, 8 Aug., 1901, petals pink.—H. S. Thompson. R. Godroni, Lec. and Lam. (R. argentatus auct. Brit. prius). Nearly or quite identical with the common Herefordshire form, represented by No. 30 in the set referred to in my Handbook British Rubi, page 39.—W.M.R.
- R. thyrsoideus, Wimm. Barkby, Leicestershire, v.c. 55, Aug., 1904.—W. Bell.
- R. Salteri, Bab. Aconbury Hill, Herefordshire, v.c. 36, 5 Sept., 1904.—A. Ley. Comm. S. H. Bickham.
- R. orthoclados, A. Ley. Mitcheldean Meend, W. Gloucestershire, v.c. 34, 18 Aug., 1904.—S. H. Bickham and A. Ley.
- R. hirtifolius, Muell and Wirtg. Mitcheldean Meend, W. Gloucestershire, v.c. 34, 18 Aug., 1904.— S. H. Bickham and A. Ley.
- R. pyramidalis, Kalt. (eglandular). (1) Cowleigh Park, near Malvern, Herefordshire, v.c. 36, 9 Aug., 1904.—S. H. Bickham and A. Ley. (2) Roadside near Nanpantan, Leicestershire, v.c. 55, 7 Aug., 1904.—T. E. Routh.
- R. leucostachys, Schl. Ulverscroft Lane, Leicestershire, v.c. 55, 1 Aug., 1904.—W. Bell.
- R. lasioclados, Focke, var. angustifolius, Rogers. Mitcheldean Meend, W. Gloucestershire, v.c. 34, 18 Aug., 1904.—S. H. Bickham and A. Ley.
- R. curvidens, A. Ley. Caradoc Wood, near Sellack, Herefordshire, v.c. 36, 2 Aug., 1904.—S. H. Bickham and A. Ley.
- R. infestus, Weihe, var. virgultorum, A. Ley. Wyre Forest, Salop, v.c. 40, 25 Aug., 1904.—S. H. Bickham and A. Ley.
- R. radula, Weihe. Bridlington to Boynton Woods, S.E. Yorks., v.c. 61, 8 Aug., 1903.—Coll. H. Fisher. Comm. W. M. Rogers.

- R. radula, Weihe (f. umbrosa). Bridlington to Sewerby, S.E. Yorks., v.c. 61, 13 July, 1903.—Coll. H. Fisher. Comm. W. M. Rogers.
- R. radula, var. sertiflorus (P. J. M.). Riggs Wood, near Sellack, Herefordshire, v.c. 36, 2 Aug., 1904.—S. H. Bickham and A. Ley.
- R. echinatus, Lindl. Swithland Wood, Leicestershire, v.c. 55, 8 Aug., 1904.—W. Bell.
- R. oigocladus, Muell and Lefv., var. Newbouldii, Bab. Lady Arbour Wood, Eardisley, Herefordshire, v.c. 36, 6 Sept., 1904.—S. H. Bickham and A. Ley.
- R. oigocladus, M. and L., var. Bloxamianus (Colem.).
 (1) Robin Cross, Repton, Derbyshire, v.c. 57, 28 Aug., 1904.
 T. E. Routh. (2) Newtown Linford Mill, Leicestershire, v.c. 55, 1 Aug., 1904.
 W. Bell.
- R. rudis, W. and N. (1) Oadby Oaks, Leicestershire, v.c. 55, Aug., 1903.—W. Bell. (2) Knighton Spinney, Leicestershire, v.c. 55, 19 Sept., 1904.—C. B. Headly. Leaflets remarkably roundish.—W. M. Rogers.
- R. Lejeunei, W. and N., var. ericetorum, Lefv. Lady Arbour Wood, Eardisley, Herefordshire, v.c. 36, 6 Sept., 1904.—S. H. Bickham and A. Ley. All R. ericetorum, Lefv., I fully believe, but most of the leaflets have abnormally short points for it.—W.M.R.
- R. obscurus, Kalt., Cowleigh Park, Herefordshire, v.c. 36, 9 Aug., 1904.—S. H. Bickham and A. Ley. In spite of the white petals and only partially erect fruiting sepals, it seems impossible to keep this distinct from ordinary Herefordshire R. obscurus, Kalt.—W.M.R.
- R. pallidus, W. and N., var. leptopetalus. Wood, near Mitcheldean, W. Gloucestershire, v.c. 34, 18 Aug., 1904.—S. H. Bickham and A. Ley.
- R. rosaceus, var. hystrix, W. and N. Whitney Wood, Herefordshire, v.c. 36, 6 Sept., 1904.—S. H. Bickham and A. Ley.
- R. rosaceus, var. Purchasianus, Rogers. Caradoc Wood, near Sellack, Herefordshire, v.c. 36, 2 Aug., 1904.—S. H. Bickham and A. Ley.
- R. rosaceus, var. infecundus, Rogers. Wooded Hill, Worle, near Weston-super-Mare, N. Somerset, v.c. 6, Aug., 1904.—E. S. Gregory.

- R. dasyphyllus, Rogers (R. pallidus, Bab. non W. and N.). Builth, Breconshire, v.c. 42, 15 Aug., 1898.—W. M. Rogers.
- R. Marshalli, F. and R. Mitcheldean Meend, W. Gloucestershire, v.c. 34, 18 Aug., 1904.—S. H. Bickham and A. Ley.
- R. fusco-ater, Weihe. Edge of a thicket, Wyre Forest, Worcestershire, v.c. 37, 25 Aug., 1904.--S. H. Bickham and A. Lev.
- R. viridis, Kalt. Winforton Wood, near Eardisley. Herefordshire, v.c. 36, 6 Sept., 1904.— S. H. Bickham and A. Ley. I think most probably R. viridis, Kalt., but I feel that I understand that species imperfectly, and cannot positively determine here.—W.M.R.
- R. acutifrons, A. Ley. Riggs Wood, near Sellack, Herefordshire, v.c. 36, 2 Aug., 1904.—S. H. Bickham and A. Ley.
- R. serpens, Weihe. (1) Wyre Forest, Salop, v.c. 40. 25 Aug., 1904.—S. H. Bickham and A. Ley. I think best under aggregate R. serpens.—W. M. R. (2) Winforton Wood, Herefordshire, v.c. 36, 6 Sept., 1904.—S. H. Bickham and A. Ley. I think R. serpens. The German R. serpens, Weihe, as represented in my herbarium by specimens of Dr. Focke's, is a weaker plant than this, and more densely aciculate in panicle; but there seems no sufficient grounds for considering them specifically distinct. The Bellardians, as a rule, seem remarkably variable.—W. M. R.

Alchemilla vulgaris, L., var. pratensis (Schmidt). Roadside, Newhaven, Derbyshire, v.c. 57, 4 June, 1904.—A. B. Jackson.

A. vulgaris, L., var. alpestris (Schmidt). Cultivated in garden two years, plant from Hendall Farm, Buxted, E. Sussex, v.c. 14, 30 July, 1904.—R. S. Standen. One of the two root-leaves sent to me has the petiole thinly hairy; in the other it is glabrous. Nearer to alpestris than the type (pratensis).—E.S.M. Correct. In my paper on this group (Jl Bot., 1895, p. 110), I expressed the desire that the record for Sussex could be verified; and I am glad to learn that it occurs at Buxted, as well as at Maresfield.—E.F.L.

Poterium polygamum, Waldst.and Kit. Par, E. Cornwall, v.c. 2, 18 June, 1904.—F. H. Davey. Nice specimens, but in the absence of ripe fruit it is impossible to determine under which of the segregates to place them.—W.B.

Rosa tomentosa, Sm., var. pseudo-mollis E. G. Baker. Cowleigh Park, Herefordshire, v.c. 36, 4th July and 9th Aug., 1904.—S. H. Bickham. I do not know pseudo-mollis, but this plant does not remind me of mollis. The leaves are perhaps more hairy than usual, but not more so than in many of my specimens of tomentosa, which species also frequently has equally persistent sepals. Possibly much of our so-called tomentosa would be better placed under mollis.— A. H. Wolley-Dod. "I do not remember where or when Mr. E. G. Baker's pseudo-mollis was described; and it is not given in Groves' Babington (Man. ed. IX.). But you will find there under R. tomentosa a var. cuspidatoides Crépin described, with which your rose seems to agree precisely. Still I have not specimens of either variety. Crépin did not allow the Yorks. specimens (which I have) of var. cuspidatoides."-In lit. E.F.L.

R. canina, L., var. arvatica, Baker. Bullen Bank. Ledbury, Herefordshire, 6th July, 1904.—S. H. Bickham. This may be rightly named, but I am not clear as to what Baker means by his arvatica. He says "non Puget," but Déséglise in his Cat. Raisonné, p. 269 (1877), makes Baker's and Puget's plants synonymous, and classifies them in his sub-section Pseudo-rubiginosa, which have glands all over the under surface of the leaflets, such as this plant certainly has not. It matches very closely a Cheshire plant, named R. cæsia Sm. for me last year by Mr. Rogers and Mr. Ley, except that in the latter the leaflets are more rhomboidal. The paucity of prickles on the flowering branches, large doubly dentate leaflets very hairy beneath, very glandular petioles and short naked peduncles are the same, but R. cæsia should have glandular peduncles and sepals glandular on the back. Perhaps both plants should go under R. canescens Baker = R. canina var. incana, Baker, and I should provisionally label them as such .-- A. H. Wolley-Dod. "I agree to R. arvatica, about which I should say there could be no doubt."-In lit. E.F.L.

R. arvensis × systyla. Hedge, Brace's Leigh, near Malvern, Worcestershire, v.c. 37, 30 June, 1904, and 22 Oct., 1903.—S. H. Bickham and R. F. Towndrow. I should say R. systyla Bast. I see no evidence of arvensis. The shape, size, and spacing of the leaflets, and their being more or less hairy beneath, also the pinnate sepals, short thick style column, shape of fruit, and—as far as I can judge—colour of petals all point to systyla.—A. H. Wolley-Dod. This

rose has much of the appearance of a R. systyla form, and the specimens shew little sign of any divergence. But the reported habit of the plant, and its tendency to sterility, coupled with the rather long peduncles, are fair evidence of the suggested R. arvensis parentage, and the sub-glabrous leaves fall in with this theory. R. arvensis often has ovoid fruit.—E.F.L.

R. arvensis, Huds. var. bibracteata (Bast.). Hedge, Pickersleigh, near Malvern, Worcestershire, v.c. 37, 29 June and 29 Aug., 1904.—S. H. Bickham and R. F. Towndrow.

Cratægus — . Kingston Hill, Surrey, v.c. 17, 18 May, 1904.—F. L. Foord-Kelcey. I should name this monogyna, Jacq. with deeply cut leaves.—C.E.S. C.monogyna var. laciniata.—E.S.M.

Sedum rupestre, L. Cheddar Cliffs, N. Somerset, v.c. 6, 7 July, 1904.—F. L. Foord-Kelcey.

Circæa alpina, L., var. intermedia (Ehrh.). (1) Weed in garden, Saintfield, co. Down, July, 1904.—C. H. Waddell. (2) Patterdale, Westmorland, v.c. 69, Aug. 1903.—A. J. Crosfield. Correct.—E.S.M.

Bupleurum Odontites, L. Blaby Mill, Leicestershire, v.c. 55, July, 1903.—W. A. Vice. A very pretty alien.—W.B.

Carum Carvi, L. Falmouth Docks, W. Cornwall, v.c. 1, 21 May, 1904.—F. H. Davey.

Anthriscus Cerefolium, Hoffm. (1) Hedgerow, near Banwell, N. Somerset, v.c. 6, 27 May, 1904.—E. S. Gregory. (2) Roadside, Ross, Herefordshire, v.c. 36, June, 1899.—Coll. E. Armitage. Comm. A. Hosking.

Seseli Libanotis, Koch. Cherry Hinton, Cambs., v.c. 29, Sept., 1903.—C. B. Headly.

Caucalis daucoides, L. On made ground near the Feeder Canal, Bristol, W. Glos., v.c. 34, 15 June, 1904.— J. W. White.

Lonicera Caprifolium, L. (1) Thickets, Cherry Hinton, Cambs., v.c. 29, June, 1904.—A. Hosking. (2) Do., May, 1901.—G. Goode.

Galium Vaillantii, DC. Waste ground near the Feeder Canal, Bristol, W. Glos., v.c. 34, 14 July, 1904.—J. W. White.

Valeriana Mikanii, Syme. (1) Roadside hedge, near Tintern, Monmouthshire, v.c. 35, 14 June, 1904.—S. H. Bickham. (2) Woodchester Park, W. Glos., v.c. 34, 16 June, 1904.—F. L. Foord-Kelcey.

Valerianella carinata, Loisel. (1) Lathkil Dale, Derbyshire, v.c. 57, 5 June, 1904.—A. B. Jackson. (2) Old Limestone Quarry, Breedon-on-the-Hill, Leicestershire, v.c. 55, 7 June, 1904.—T. E. Routh. (3) Brimscombe, E. Glos., v.c. 33, June, 1904.—F. L. Foord-Kelcey. Correct.—E. S. M. The Breedon specimen, by its fruit—corky and with large barren cells—must go under V. olitoria, Poll.—a rather condensed state.—C.E.S. It is evident there must have been a mistake here, as the specimen I examined was certainly V. carinata.—W.B.

Gnaphalium uliginosum, L., var. pilulare (Wahl.). Aldingbourne, W. Sussex, v.c. 13, 4 Sept., 1904. Fruit papillose under a 1" power.—C.E.S.

Galinsoga parviflora, Cav. Waste land, Kew, Surrey, v.c. 17, June, 1904.—H. S. Thompson.

Matricaria discoidea, DC. Waste ground round Falmouth, W. Cornwall, v.c. 1, 29 Sept., 1904.—S. H. Bickham. See F. H. Davey's tentative "Flora of Cornwall." This alien is fast becoming a common weed near Railways, Docks and Mills all over the kingdom.—W.B.

Senecio vulgaris, L., var. radiatus, Koch. Portishead Station-yard, N. Somerset, v.c. 6, 30 May, 1904.—J. W. White. The variety seems to occur usually in the neighbourhood of the sea; also at Killarney, where there are large sheets of water.—E.F.L.

S. viscosus, L. Granite quarries, Groby, Leicestershire, v.c. 55, Sept., 1904.—A. R. Horwood. Comm. A. B. Jackson.

S. albescens, Burbidge and Colgan, (= S. Jacobæa × maritima). Bot. Gard., Cambridge, July, 1904, roots from Vico, Dalkey, co. Down, 1903. See Jl Bot. Dec., 1902.—A. Hosking.

Arctium intermedium, Lange. Patterdale, Cumberland, v.c. 70, Aug., 1903.—A. J. Crosfield.

Centaurea Calcitrapa, L. Waste ground, St. Philips, Bristol, W. Glos., v.c. 34, 11 Aug. 1904.—J. W. White.

C. solstitialis, L. Made ground near the Feeder canal, Bristol, W. Glos., v.c. 34, 29 July, 1904.—J. W. White.

C. melitensis, L. Blaby Mill, Leicestershire, v.c. 55, 17 Aug., 1903.—W. A. Vice. Named at Kew.—W.B.

Arnoseris pusilla, Gærtn. Sandy field, Habberley, near Kidderminster, Worcestershire, v.c. 37, Aug., 1904.—E. Cleminshaw.

Hieracium Pilosella, L., var. nigrescens, Fr. Glen Clova (about 800 ft.), Forfarshire, v.c. 90, 30 June, 1904.— E. S. Marshall.

H. murorum, L., var. pellucidum, Laestad. (1) Selsley Wood, near Stroud, W. Glos., v.c. 34, June 16, 1904.—S. H. Bickham and E. F. Linton. Passed by the Rev. A. Ley. (2) Lypiatt Woods, E. Glos., v.c. 33, June, 1902.—Coll. E. Armitage. Comm. A. Hosking.

H. murorum, L., var. pachyphyllum, Purchas. Railway bank, Symonds Yat, W. Glos., v.c. 34, 30 May, 1904.—S. H. Bickham and A. Ley.

H. vulgatum, Fr., var. amplifolium, A. Ley. Roadside bank, near Tintern, Monmouthshire, v.c. 35, 14 June, 1904.—S. H. Bickham and A. Ley. "Shewn me growing at this station by Rev. A. Ley, who published it as a var. under H. vulgatum, Fr. It stands now as H. sciaphilum, Uechtr. var. amplifolium, W. R. Linton, in Brit. Hier., p. 68. These are characteristic specimens.—E.F.L." From B. Exch. Cl. Rept. 1904, p. 30.

Lactuca virosa, L. Bank of pit, Portishead, N. Somerset, v.c. 6, 2 Sept., 1904.—J. W. White.

Specularia Speculum, A.DC. Blaby Mill, Leicestershire, v.c. 55, June, 1903.—W. A. Vice.

Arctostaphylos alpina, Spreng. Kierfea Hill, Rousay Island, Orkney, v.c. 111, 15 July, 1901.—A. Somerville.

Primula acaulis × veris. Highlands Wood, Minchinhampton, W. Glos., v.c. 34, 2 May, 1904.—F. L. Foord-Kelcey. Correct.—E.S.M.

P. scotica, Hook. Rousay Island, Orkney, v.c. 111, 13 July, 1901.—A. Somerville.

Cyclamen hederæfolium, Ait. Private wood, Congresbury, N. Somerset, v.c. 6, 14 Oct., 1904.—Coll. Mrs. James. Comm. E. S. Gregory. "'Naturalized' would be probably correct for this plant, at present it is growing apparently wild in a little wood and increasing every year."—E.S.G.

Erythræa ———. Exposed Downs, Newquay, W. Cornwall, v.c. 1, Oct. 3, 1904.—S. H. Bickham. (1) E. pulchella. (2) E. sphærocephala. (3) Two plants look so intermediate, I don't know where to place them, unless (?) hybrids between the two.—E.F.L. New county record for E. sphærocephala.

Gentiana Amarella, L. Kilconquhar Links, Fifeshire, v.c. 85, 15 Aug., 1900.—A. Somerville.

Cynoglossum germanicum, Jacq. Ashstead, Surrey, 6 Aug., 1904.—C. E. Salmon.

Asperugo procumbens, L. Stackyard, Blaby, Leicestershire, v.c. 55, 3 June, 1904.—W. A. Vice. Can only be claimed as a casual here.—W.B.

Symphytum asperrimum, Bieb. Naturalized near Wrington, N. Somerset, v.c. 6, 9 July, 1904.—J. W. White. "I take this to be a form of the fodder plant referred by Sir Joseph Hooker (Bot. Mag., 1879, t. 6466) to S. peregrinum, Ledeb. Sir I. Hooker remarks (l.c.):—'That it is not the true S. asperrimum of Donn, figured by Sims in this work (t. 929) is obvious from a comparison of that plate in which the calyx is correctly represented as short, and shortly 5-cleft to the middle only, with obtuse lobes, and which has curved prickles on the stem arising from conspicuous white tubercles.' If, as Mr. Baker (B.E.C. Report, 1879, p. 24) suggests, the British S. peregrinum is a hybrid between S. officinale and S. asperrimum, that would account for its variability. In the present plant the calyx-teeth are certainly shorter and blunter than in that collected by Mr. White at Brass Knocker Hill in 1894. It would be interesting to know whether or not these plants produce seeds.—J.G." From B. Exch. Cl. Rept., 1904, p. 32.

Verbascum virgatum, Stokes. Cultivated at Clifton, 25 July, 1904. Origin near Plymouth.—J. W. White.

Linaria supina, Desf. (1) Par, E. Cornwall, v.c. 2, 18 June, 1904.—F. H. Davey. (2) Par sands, St. Blazey Bay, E. Cornwall, v.c. 2, 23 Sept., 1904.—S. H. Bickham. Two beautiful series of this charming plant and nicely prepared.—W.B.

Euphrasia ——. Thorpe Cloud, Derbyshire, v.c. 57, 24 June, 1904 —W Bell. A small state of E. curta, var. glabrescens, or between that and the type.—E.S.M. E. brevipila, B. and G.—F.T.

E. ————. Carlops, Pentlands, Peeblesshire, v.c. 78, Aug. 3, 1904.—W. A. Vice. There is a mixture here; most of my specimens are E. curta, var. glabrescens, but two are slightly glandular and may be hybrids with E. brevipila.—E.S.M. E. brevipila, forma.—F.T.

E. ——. Saltway, Leicestershire, v.c. 55, Sept., 1904.—C. B. Headly. Mixture: (1) The larger specimens E. nemorosa, H. Mart., (2) smaller ones E. curta, Fr. var. glabrescens Wettst.—E.S.M. (1) E. nemorosa, H. Mart. (2) E. stricta, Host.—F.T.

E. curta, var. glabrescens? Holkham Bay, W. Norfolk, v.c. 28, Aug., 1900.—A. B. Jackson. Poor and apparently starved. Mostly right; but my largest specimen is hairy enough to be called type-curta.—E.S.M. E. nemorosa, H. Mart.—F.T.

E.—. Lount Wood, Leicestershire, v.c. 55, 26 June, 1904.—W. Bell. A peculiar plant; I cannot remember seeing anything quite like it before. The foliage reminds one rather of E. brevipila, but it is quite eglandular. In some respects it resembles E. curta, var. glabrescens; but the upper leaves and bracts have remarkably obtuse teeth, not in the least awned. I cannot venture to suggest a definite name.—E.S.M. E. nemorosa, H. Mart., abnormal.—F.T.

E. ——. Above the Falls, Arthog, near Barmouth, Merionethshire, v.c. 48, Aug., 1902.—W. Bell. E. curta

glabrescens .- F.T.

E.—. Coast near Arbroath, Forfarshire, v.c. 90, 7 Sept., 1904.—E. S. Marshall. I am not sure where to place this. In habit it closely approaches E. latifolia, Pursh., forma glandulosa, from Sutherland, and I think it is referable to that rather than to E. brevipila, Burnet and Gremli.— E.S.M. E. latifolia glandulosa.—F.T.

E. Rostkoviana, Hayne. Shortly cropped pasture, Ulverscroft, Leicestershire, v.c. 55, 8 Aug., 1904.—W. Bell. Very small specimens. The numerous long-stalked glands indeed point to E. Rostkoviana; but the habit, the small flowers, the shape of the leaves and their abundant stiff, short, eglandular pubescence strongly recall E. curta. I found a very similar plant last year in a grassy ride (on gravel), on the outskirts of Savernake Forest, N. Wilts; but Mr. Townsend has not hitherto been able to name it. In that case, hybridity seems quite unlikely, as only one form appeared to be present.—E.S.M. Passed by Mr. Townsend.

E. —. Via Gellia, Derbyshire, v.c. 57, 22 June, 1904.—W. Bell. E. Rostkoviana, Hayne.—F.T.

E. brevipila × Rostkoviana. Near Tyn-y-groes, Merionethshire, v.c. 48, July, 1904.—E. Cleminshaw. I think this opinion is correct, though E. Rostkoviana is "the predominant partner"; the short-stalked glands are very few in comparison with the long-stalked ones. If both species were present there is little room for doubt.—E.S.M. Passed by Mr. F. Townsend. Vide Report, 1902—1903.

Bartsia Odontites, Huds., var. verna (Reichb.). (1) Roadside, Oadby, Leicestershire, v.c. 55, Aug., 1904.—W. Bell. (2) Barrow-on-Soar, Leicestershire, v.c. 55, Sept., 1904.— F. L. Foord-Kelcey. Both correct.—E.S.M. (2) I should call this B. serotina; but the specimens sent me are very badly pressed.—C.É.S. The forms verna and divergens appear to be connected by a long chain of intermediates under the name of serotina; but as to how far removed from the forms verna and divergens specimens should be before coming under the latter name is a very arbitrary point Since distributing the Club specimens I have received an authentic specimen of B. verna (fide Baker) and I find the Leicestershire specimens are much more spreading in their growth than the type, in which the branching is close and upright; but are they sufficiently removed to be placed under B. serotina? Serotina is not a very satisfactory name as the season or habitat would, no doubt, be accountable for the time of flowering; and the foliage test is not fully warranted as I have late flowering specimens which approach B. verna very closely in leafage.—W.B.

B. Odontites, Huds., var. divergens, Balb. Lindfield, E. Sussex, v.c. 14, 8 Aug., 1904.—R. S. Standen. I do not know divergens; but this plant is, surely, only a luxuriant verna.—E.S.M. Branches leaving the stem hardly at right angles (as in divergens) and I should name this B. serotina. The late flowering, shorter bracts, shape of leaves, etc., support this idea.—C.E.S.

Melampyrum arvense, L. Stagsden, near Bedford, v.c. 30, 9 Aug., 1904.—D. M. Higgins. A new county record.

Mentha viridis, L., var. crispa, Hook. Waste land, Bissoe Kea, Cornwall, v.c. 1, 1 Oct., 1904.—S. H. Bickham and F. H. Davey. I think correctly named. Very glandular. I suppose the leaves of this var. are usually much broader than in viridis type —C.E.S. I consider rightly named, but

I do not know the genus well.—E.S.M. I don't see any reason to question the name given. Judging from notes I have of the plants in the Boswell Herbarium, collected by Dr. St. Brody from Bullow Pill, Glos., and quoted by Syme (E.B., 3rd ed.) as the var *crispa*, this is the same thing from Cornwall. Hooker (Brit. Flora, ed. 5, 1842) calls it var. *crispa* (Benth.)—E.F.L.

M. rubra, Sm.? Edge of Llyn Padarn, Llanberis, Carnarvonshire, v.c. 49, 28 Sept, 1903.—S. H. Bickham. The plant from which these flowering specimens were taken was collected by me at the station named in Llanberis in Sept., 1903, but the flowers were over and the specimens sent were gathered in my garden at Ledbury in Sept., 1904.—S.H.B. This seems to me to be the M. resinosa, Opiz, in "Naturalientausch," X., p. 195 (1825). "M. gentilis C. Tausch! M. rubra C. Nenning! differt a M. rubra Sm.: foliis superioribus lanceolatis, nec subrotundis." A. Déséglise in "Menthæ Opizianæ," 1881. This plant is less robust, with longer and narrower leaves and resinous calices, etc., than ordinary M. rubra.—A.B.

M. Pulegium, L., var. erecta, Syme. (1) Meadows near Ponsanooth, W. Cornwall, v.c. 1, 15 Aug., 1900.—F. H. Davey. (2) The same, 1 Oct., 1904.—S. H. Bickham and F. H. Davey. (3) Scaynes Hill, near Hayward's Heath, E. Sussex, v.c. 14, 16 Aug., 1904.—R. S. Standen. All correct.—E.S.M.

Thymus Chamædrys, Fr. On a sandy bank, Wyre Forest, Worcestershire, v.c. 37, 25 Aug., 1904.—S. H. Bickham. Correct.—E.S.M.

Melittis Melissophyllum, L. Lane between woods, near Totnes, S. Devon, v.c. 3, June, 1904. Coll. C. E. Green. Comm. W. Bell.

Stachys alpina, L. Outskirts of Westridge Wood, (alt. 600 ft.), W. Glos., v.c. 34, 6 July, 1904.—J. W. White.

Plantago lanceolata, L., var. Timbali, Reichb. f. Waste ground, Wimbledon, Surrey, v.c. 17, Oct., 1903.—H. W. Pugsley.

Chenopodium Vulvaria, L. Waste places, South Denes, Yarmouth, E. Norfolk, v.c. 27, July, 1904.—A Hosking.

Polygonum Persicaria, L., var. elatum, Gren. and Godr. Waste places, Coe Fen, Cambridge, v.c. 29, Sept. 1904.—A. Hosking. Fide A. Bennett.

- P. maculatum, var. densum, Trim. and Dyer—Waste ground, Coe Fen, Cambridge, v.c. 29, 6 Sept., 1904.—E. J. Allard. This is P. maculatum, Trim. and Dyer, and if the vars. are worth distinguishing this may be called densum. But I think our principal Floras and the "London Catalogue" are right in ignoring these varieties; even Mr. Druce (Fl. Berks.) refers to them only as forms.—E.F.L.
- P. Bistorta, L. Windermere, Westmorland, v.c. 69, 7 June, 1904.—Coll. W. Barratt Comm. F. H. Davey.

Rumex scutatus, L. Craigmillar Castle, Midlothian, v.c. 83, 24 June, 1904 — F. C. Crawford.

Asarum europæum, L. Chalk Lane, Redlynch, near Salisbury, S Wilts., v.c. 8, 15 May, 1904 — F. L. Foord-Kelcey.

Salix triandra, L., var Hoffmanniana, Sm. Bank of R. Wye, near Sellack, Herefordshire, v.c. 36, 16 May and 2 Aug., 1904.—S. H. Bickham. Correct.—E.F.L.

- S. triandra × viminalis (hippophæfolia, Wimm. et. Grab.). Bank of Wye, near Sellack, Herefordshire, v.c. 36, 16 May and 2 Aug., 1904.—S. H. Bickham. Yes. S. hippophæfolia, Thuill.—E.F.L.
- S. fragilis × alba (viridis, Fr.). Malvern Link, Worcestershire, v.c. 37, 5 May and 26 Aug., 1904.—S. H. Bickham and R. F. Towndrow. I believe the late Dr. Buchanan White thought the tree from which these specimens were gathered to be S. viridis. I send a couple of specimens on the chance that it may be worth while to gather more.—S.H.B. The chief peculiarity about this form is the breadth of the leaves, which, however, is not a feature of S. alba. In a male specimen like this there is not much to go by, and I should prefer to call it S. fragilis form, as I see no distinct trace of S. alba in it. The young foliage is rather less silky than average S. fragilis, and in S. viridis it should be more so. Mr. Bickham is apparently right in identifying this tree with one sanctioned by Dr. B. White as S. viridis. I have similar specimens gathered by Mr. R. F. Towndrow in May and Aug., 1889, and accepted by Dr White as "a good intermediate condition" (of S. viridis Fr.) in B. E. C. Report, 1889, p. 268, but I have transferred them to S. fragilis type.—E.F.L.
- S. fragilis × alba (viridis, Fr.). Link Elms, near Malvern, Worcestershire, v.c. 37, 5 May and 29 Aug., 1904—S. H. Bickham. I call this also S. fragilis type; and while the

other is a broad-leaved form, this would be the f. angustifolia, a mere leaf variety. The leaves alone offer, by their smaller and neater outline, a suggestion of the influence of S. alba; but in the flowering branch the size of the catkins and the clothing of the young leaves and catkin scales, which are far more important for this diagnosis, contribute no corroborative evidence. All female specimens which I have—which are more certainly recognised as the hybrid by their fruit—show some traces at least of their alba parentage by the pubescence of the young leaves. And male specimens which have not this nor any other clear evidence of alba, can only be relegated to S. fragilis or its variety.—E.F.L.

S. alba, L., ? vitellina, L. Malvern Link, Worcestershire, v.c 37, 15 May and 29 Aug., 1904.—S. H. Bickham and R. F. Towndrow. Exactly the plant. Very nicely selected and beautifully dried specimens.—E.F.L.

Goodyera repens, R.Br. Under fir trees, near Bervie, Kincardineshire, v.c. 91, 7 Aug., 1903.—A. Somerville.

Orchis ustulata, L. Ebbesbury Hill, Wishford, S Wilts., v.c. 8, 31 May, 1904.—E. S. Marshall. Some of the members may be glad to have fine and carefully dried specimens of this local plant. Every one was carefully cut, so as not to injure the tubers.—E.S.M. That is so. Would that every member used a knife when gathering the rarer orchids—W.B.

- O. incarnata, L. Limbury, near Luton, Beds., v.c. 30, 17 June, 1902.—D. M. Higgins.
- O. latifolia, L. Flitwick, Beds., v.c. 30, 17 June, 1904.—D. M. Higgins. Correct.—note the cylindrical spur (not conical, as in O. incarnata), and the flat-tipped foliage. A narrow-leaved form.—E.S.M. Rightly named.—E F.L.

Crocus nudiflorus, Sm. Trent Meadows, Nottingham, v.c. 56, 2 Oct., 1904.—F. L. Foord-Kelcey.

Allium oleraceum, L. Bank of R. Avon, below Bristol, W. Glos, v.c. 34, I Aug., 1904.—J. W. White.

A. Schænoprasum, L. (1) Orig. limestone, S. of Lough Mask, E. Mayo, 1895 (native). Flower garden, Keevil, Wilts., 8 June, 1904.—E. S. Marshall. In the Irish station I found this (1895-6) scattered thinly over about two miles of rocky limestone ground, remote from houses and from cultivation. Owing to the great drought of those two

summers it was much dwarfed and quite flowerless Therefore the few specimens sent may be acceptable—E.S.M. (2) Rocky bed of R. Wye, near Erwood, Breconshire, v.c. 42, 9 June, 1904.—S. H. Bickham.

Muscari racemosum, Mill. Hedge banks, Cherry Hinton, Cambs., v.c. 29, 16 April, 1904.—E. J. Allard.

Lilium Martagon, L. Copses (naturalized), Mickleham, Surrey, v.c. 17, 26 June, 1904.—H. W. Pugsley.

Luzula Forsteri × vernalis (Borreri). Rough bank under a wood, Symonds Yat, W. Glos, v.c. 34, 17 June, 1904.—S. H. Bickham and E. F. Linton. Correct; I have gathered it there.—E.S.M. A beautifully prepared series.—W.B.

Sparganium minimum, Fr. Wicken Fen, Cambs., v.c. 29, Aug., 1900.—G. Goode.

Ruppia spiralis, Hartm. Loch Stennis, Orkney, v.c. 111, 29 Aug., 1904.—F. C. Crawford.

Scirpus carinatus, Sm. Tidal river-bank, between Kew and Mortlake, Surrey, v.c. 17, 6 Aug., 1904.—H. W. Pugsley.

- S. triqueter, L. (1) Thames, near Mortlake, Surrey, v.c. 17, June and Sept., 1904.— H. S. Thompson. (2) Tidal river-bank, between Kew and Mortlake, Surrey, v.c. 17, 6 Aug., 1904.—H. W. Pugsley. In addition to the characters given by Syme in "English Botany," ed. 3, this plant would seem to differ from S. lacustris and S. Tabernæmontani by its lower bract wanting the scarious dilation at the base which appears in the other two, and being nearly entirely herbaceous, almost forming a continuation of the bluntly trigonous upper portion of the stem.—H.W.P.
- S. maritimus, L., var. monostachys, Sonder. Perranwarf, W. Cornwall, v.c. 1, 9 June, 1901.—F. H. Davey.
- S. sylvaticus, L. By Dalmuir burn, Dumbartonshire, v.c. 99, 9 July, 1903.—Coll. L. Watt. Comm. A. Somerville.

Carex paradoxa, Willd. Askham bog, near York, v.c. 64, 20 June, 1903.—H. S. Thompson. Correct.—E.F.L.

C. Leersii, F. Schultz. Hedge-bank, near Tintern, Monmouthshire, v.c. 35, 14 June, 1904.—S. H. Bickham and E. F. Linton. So I named it in the field, and the nut being subsessile I was inclined to keep to that naming; but I now doubt the value of this character, and should refer the plant to C. muricata, L.—E.F.L. This is of course a

- split off our old *C. muricata*. L., *C. muricata*, L., var. *Leersii*, Kneucher. The name *Leersii* is really not admissible as there is a *C. Leersii*, W., 1787, a syn. of *C. echinata*, Murray; and Schultz's name only dates from 1870.—A.B.
- C. limosa, L. Loch Knock Marsh, near Port Ellen, Islay, v.c. 102, 20 June, 1904.—Coll. Dr. T. F. Gilmour. Comm. A. Somerville.
- C. rariflora, Sm. Bogs on the high ground between Glen Clova and Glen Isla, Forfarshire, v.c. 90, 27 June, 1904. The locality whence the species was first described.—E. S. Marshall.
- C. digitata, L. On a rough sheltered bank, Symonds Yat, W., Glos., v.c. 34, 30 May, 1904.—S. H. Bickham.
- C. ventricosa, Curtis. Cult., Underdown, Ledbury. Plant from a Surrey Wood. 30 July, 1904.—S. H. Bickham.
- C. binervis, Sm. Moors above Kilpatrick, Blackwaterfoot, Arran, v.c. 100, 2 July, 1904.—A. Somerville. Fine specimens of this well marked species.—W.B.
- C. diluta, Bieb. La Grande Mare, Guernsey, June, 1894.—Coll. Rev. J. D. Gray. Comm. R. S. Standen.
- C.——. Aylestone Meadows, near Leicester, v.c. 55, 17 Aug. 1904. Growing with typical C. paludosa, and may be a form thereof. The C. paludosa, and C. riparia were plentifully spread along the banks of the brook; but these specimens were from two or three dense tufts quite separate and distinct looking.—W.B. C. paludosa, Good., 1794 = C. acutiformis, Ehrh, 1788. Rather stricter in habit than usual.—A.B.
- C. Loch of Park or Drum, S. Aberdeenshire (formerly Kincardineshire), v.c. 92, 10 Aug., 1904.—W. A. Vice. C. obtusangula, Ehrh (= C. ampullacea, Good.). This is fairly typical of the species.—A.B. This is C. rostrata, Stokes.—A.B.J. A slender, narrow-leaved C. rostrata, Stokes, which I have gathered at Wybunbury Bog, Cheshire, etc.—E.S.M.

Phleum phalaroides, Koel. Furze Hills, Hildersham, Cambs., v.c. 29, July and Sept, 1904.—A. Hosking. A mixture here: two of the stems on my sheet are P. prateuse, L.—A.B J.

P. greecum, Boiss. Blaby Mill, Leicestershire, v.c. 55, 30 June, 1903.—W. A. Vice. A very handsome grass from the Levant, introduced with foreign grain. Named by Prof. Hackel.—W.B.

Mibora verna, Beauv. Sandhills, near Maelog Lake Hotel, Anglesey, v.c. 49, 15 April., 1904.—Coll. C. P. Hurst. Comm. E. S. Marshall. I send a few specimens on the chance of some members wishing for Welsh examples.—E.S.M.

Agrostis setacea, Curtis. Ponsanooth, W. Cornwall, v.c. 1, 23 June, 1904.—F. H. Davey.

Gastridium australe, Beauv. Clifton Down, Bristol, W. Glos., v.c. 34, 9 July, 1904.—J. W. White.

Poa pratensis, L., var. subcærulea (Sm.)? Ponsanooth, W. Cornwall, v.c. 1, 8 July, 1904.—F. H. Davey. No; leaves much too narrow and habit different.—E.S.M.

Glyceria plicata, Fr., var. declinata (Bréb.). Blackwaterfoot, Arran, v.c. 100, 13 Aug. 1904. Stagnant marshy spots in pasture fields close to sea.—A. Somerville. This is luxuriant G. declinata (Bréb.); which, from a good many years experience, I consider to be a distinct species.—E.S.M.

- G. festucæformis, Heyn. Among wet rocks just below tide mark, with G. maritima, Portaferry, co. Down, July, 1904.—C. H. Waddell. I am not sure if all the smaller plants in this gathering are correctly named, as the line which separates small festucæformis from large maritima does not seem to me to be well defined. I have sent all—large and small—without selecting, as they were gathered.—C.H.W. The tall specimen on the sheet submitted is Glyceria festucæformis, Heynhold; the rest is all G. maritima, Wahl.—E.F.L. Vide J. of Bot., 1903, p. 353.
- G. Borreri, Bab. Porchester, S. Hants, v.c. 11, 26 Aug., 1904.—R. S. Standen. Correct, I believe.—E.S.M. Agrees with specimens authenticated by Hackel.—W.B.

Festuca procumbens, Kunth. Waste places near the sea, Gt. Yarmouth, E. Norfolk, v.c. 27, July, 1904.—A. Hosking. Right.—E.F.L.

Festuca pratensis × Lolium perenne. In a damp meadow near Cowleigh Park, Worcestershire, v.c. 37, 4 July, 1904.—S. H. Bickham. I sent up three sheets to the Rev. E. S. Marshall—two of them are in this parcel—the other five

sheets he has not seen; they were all collected at the same time and apparently from the same plant.—S.H.B. (= F. loliacea, Huds.). This is certainly not a Lolium as there are two glumes. I suppose it is the plant intended by Hudson, but am not sure.—A.B. Right.—E.F.L.

Bromus ramosus, Huds., var. Benekenii (Syme)? Bullen Wood, Ledbury, Herefordshire, v.c. 36, 30 July, 1904. —S. H. Bickham. Syme placed this as β under B. asper, Murray, protesting against Dr. Trimen's taking up Hudson's name. Mr. Bickham's specimen certainly seems to accord better with this than with B. serotinus Benek. = (B. ramosus)type). Does Mr. Bickham make any remark on its nativity, as the true Benekenii has not yet been satisfactorily made out as a native form?—A.B. In reply to this question Mr. Bickham writes:—"The specimens I sent labelled Bromus Benekenii (Syme)? were gathered in a coppice some half-mile above "Underdown" and far removed from the woodman's cottage, which is the only building in the coppice and is itself some quarter of a mile distant from the nearest specimens. Whatever the Bromus may be it is as undoubtedly native as any plant in the coppice—we are on Wenlock limestone."—S.H.B. Though the upper sheaths are subglabrous, the other characters of var. Benekenii are wanting. I should call it serotinus. -E.F.L.

- B. madritensis, L. St. Vincent's Rocks, Clifton, Bristol, W. Glos., v.c. 34, 20 July, 1904.—E. S. Gregory. Yes, all. This species frequently assumes a beautiful crimson hue towards the end of the season.—W.B.
- B. tectorum, L. Blaby Mill, Leicestershire, v.c. 55, 9 June, 1903.—W. A. Vice.
- B. interruptus, Druce. Sainfoin and Clover fields, Dullingham, Cambs., v.c. 29, 29 May, 1904. In quantity and growing with B. mollis, sterilis and commutatus.—A. Hosking. Correct.—E.F.L.
- B. arvensis, L. Falmouth Docks, W. Cornwall, v.c. 1, 21 May, 1904.—F. H. Davey.

Agropyron junceum, Beauv. Sandy shore, Blackwater-foot, Arran, v.c. 100, 13 July, 1904.—A. Somerville. Fide A. Bennett.

Hordeum sylvaticum, Huds. In an open wood near Symonds Yat, W. Glos., v.c. 34, 17 June, 1904.—S. H. Bickham.

H. Caput-medusæ, Lt. and B. Blaby Mill, Leicestershire, v.c. 55, 9 June, 1904.—W. A. Vice. Named by Prof. Hackel.

Trichomanes radicans, Sw. Merionethshire, v.c. 48, Aug., 1904.—A. J. Crosfield.

Equisetum hyemale, L. Sandy field, Weston-super-Mare, N. Somerset, v.c. 6, 17 Sept., 1904.—H. W. Pugsley. Reported in the "Fl. Bath Suppl." by Dr. Davis as occurring "On the canal bank" near Bath. The Rev. R. P. Murray in his Fl. of Somerset, p. 406, 1896, remarks "Probably a misnomer." This species is a very rare plant in the South. It occurs in plenty in Surrey (Salmon sp.), and I have seen specimens from East Kent. Both this and E. arenarium, Newman, were found by Messrs. Murray and White in 1901, and recorded in the Exchange Club Report for 1901. Mr. White remarks "Probably unknown in the County until observed, as I understand, by Mr. Corder of Taunton." It is not named as a Weston plant in Dr. St. Brody's "Flora of Weston," 1856.—A.B.

E. variegatum, Schleich. (1) Waste ground, near Railway, Weston-super-Mare, N. Somerset, v.c. 6, 28 Sept., 1901.—E. S. Gregory. This is the form usually called arenarium, Newman.-H. and J.G. (2) Sandy fields, Westonsuper-Mare, 17 Sept., 1904.—H. W. Pugsley. In the "Flora of Somerset" this is quoted from Top. Bot., ed. 2, for N. Somerset, with no locality known. I do not remember whether it has been reported since. It is the ordinary form. - E.F.L. This occurs in Devonshire on the cliffs near Salcombe, and was reported for "Somerset north?" in Topl. Botany. On this the Rev. R. P. Murray, Somerset," p. 406, remarks "I have no further information." I have some recollection of its having been so reported to one of the meetings of the Phytological Club circa 1845-6, but am not sure, and cannot put my hand on the reference. Farther north its next occurrence is in Carnarvon! and Anglesea!—A.B.

E. variegatum, Schleich, var. arenarium, Newman. Sandhills, Magilligan, co. Derry, May, 1904.—H. W. Lett and C. H. Waddell. No. This is a small coast-form of E. palustre, L., var. nudum, Newm., or near it.—E.S.M. This is the small sandhill form of E. palustre.—H. and J.G.

Chara hispida, L. Ditch, Ken Moor, N. Somerset, v.c. 6, 17 Sept., 1904.—J. W. White. A small form.—A.B.

Nitella flewilis, Agardh. Catsfield, near Battle, E. Sussex, v.c. 14, July, 1895.—E. S. Salmon. Beautifully prepared specimens.—W.B.

Copies of some of the back numbers of the Report can be obtained from the Hon. Sec. at 6d. each.

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ALEX. SOMERVILLE,





THE

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OF THE

WATSON

Botanical Exchange Club,

1905-1906.

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" Labor omnia vincit."

CAMBRIDGE:

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THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1905-6.

It is pleasing to be able to report two very noticeable features in regard to the distribution of plants this season; namely, that the number of sheets sent in was 2846, or about 800 more than last year; and that the specimens were—on the whole—better prepared, and equally, if not more, interesting than those contributed last season; there is, however, still room for improvement. I must once more impress upon members the importance of paying greater attention to the critical genera, in most cases they are poorly represented this year.

Mr. Bickham again has the premier honours with 403 sheets; and Mr. A. R. Horwood, a new member, comes next with 379 sheets.

The following is a list of the contributors:—

0	
Mr. C. Bailey 133	Mr. A. Loydell 30
Mr. W. Bell 122	Rev. E. S. Marshall 174
Mr. S. H. Bickham 403	Rev. H. P. Reader 40
Mr. E. Cleminshaw 105	Mr. T. E. Routh 37
Mr. F. C. Crawford 40	Mr. C. E. Salmon 39
Mr. F. H. Davey 187	Mr. A. Somerville 18
Mrs. F. L. Foord-	Mr. R. S. Standen 33
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Miss A. Geldart 9	Rev. C. H. Waddell 76
Mr. G. Goode 104	Mr. J. W. White 255
Mr. J. E. Griffith 76	Maj. A. H. Wolley-Dod 101
Mrs. E. S. Gregory 47	Specimens presented
Mr. C. B. Headly 57	by Non-Members 103
Miss D. M. Higgins 48	
Mr. A. R. Horwood 379	2846
Mr. A. B. Jackson 29	

In a few instances I have taken the liberty of dividing overcrowded sheets, or of combining some which were rather poor, so that the figures given above may not in every case correspond with the actual number of sheets sent in.

Through the generosity of Mr. Lloyd Praeger it has been possible to supply all the contributing members with specimens of *Glyceria festucæformis*, Heynh. The Rev. W. Moyle Rogers and the Rev. E. F. Linton have very kindly presented parcels of plants.

Mr. Davey writes to say that the Geranium from Padstow sent to the Club last year was G. modestum, (Rept. 1904—5, p. 11). On further reference this is found to be so.

I offer my thanks to the members who have lightened the work of distribution by adhering strictly to the Rules of the Club,—others please note,—and I express my gratitude to the referees and all who have assisted by examining and reporting on critical species for their kind consideration and help.

WILLIAM BELL,

Distributor for the year 1905—1906.

The death, on December 16th, 1905, of Mr. Frederick Townsend, F.L.S., is deeply regretted by all botanists, by whom he will always be remembered with gratitude for the help he so courteously gave in the determination of the *Euphrasiæ*. Even so recently as last October the Club was indebted to him for naming some specimens which were distributed in the 1905 parcels; this was probably his last botanical work.

Our thanks are due to Mr. Bell for acting as the Club's Distributor during the past two years, and for his kindness in presenting the illustration which is given in this Report, also to Mr. Mennell for generously sending for the Club a parcel of his duplicate Reports.

Mr. Bickham has kindly undertaken to distribute next year, and parcels of plants should be sent to him at Underdown, Ledbury, by January 31st. If members will take note of this it will not be necessary to send round a special circular.

Section (b) of Rule 3 has now been altered and will in future read: "Each plant or sheet of plants must bear a label with at least the heading and outline printed ..."

A complete set of the Club Reports (bound together) and a set of the Reports of "The Botanical Exchange Club of the British Isles" from 1877 to 1905 (in separate numbers) are now kept by the Secretary, and will be lent for a limited time to any member who wishes to refer to them.

If any members possess copies of the 1st to 5th and 8th Reports, for which they have no further use, the Secretary would be glad if they would communicate with him, as those numbers are wanted by several members.

It is proposed that Reports 1—20 should form Vol. I., for which it is hoped that an index may be prepared. The present Report is No. 2 of Vol. II., and the paging is made continuous with last year's Report.

The Hon. Treasurer suggests that members might, without being applied to, kindly send in during January their subscriptions, which fall due at the beginning of each year, as this would lighten the labours of the office and be to the advantage of the Club.

GEORGE GOODE, '

Hon. Secretary.

June, 1906.

ERRATUM IN REPORT 1904-5.

On p. 25 Mr. Pugsley's note on Scirpus carinatus was inadvertently placed under Scirpus triqueter.

**** Some plants that were unaccompanied by notes or critical comments have been omitted from the Report.

Clematis Vitalba, L. Martinshaw Wood, Leics., v.c. 55, Sept., 1905. I am sending a few specimens of Clematis as it has hitherto been recorded as naturalized, or an escape, for Leicestershire. In the Martinshaw it is found in great plenty on the rocks and disused quarries, and appears to be indigenous.—C. B. Headly. This is certainly the best record we have; but the Clematis is almost exclusively a chalk plant, and I fear we cannot claim it as indigenous for Leics., unless it should be found on the oolite on the Eastern border of the County.—W.B.

Ranunculus ——. Lowesby, Leics., v.c. 55, May, 1904.—W. Bell. R. peltatus, as far as I can judge from the material.—E.F.L.

R. peltatus, Schrank., var.——. Galloway's Field, Stoney Stanton, Leics., v.c. 55, May 7, 1904. The large flowers and floating leaves covered the surface of a large pond.—W. Bell. I think R. peltatus, Schr. var. floribundus (Bab.).—A.B.J. This seems to be R. floribundus (Bab.); my sheet has no well developed fruit.—E.S.M.

R. tripartitus, DC. Catsfield, E. Sussex, v.c. 14, 1894.
—Coll. E. S. Salmon. Comm. C. E. Salmon. A very pretty but puzzling Batrachian. Named "peltatus, var. truncatus," "intermedius" and "ololeucos" during the past three or four years by well known botanists. Major A. H. Wolley-Dod says that "the almost free stipules remove it from any peltatus form, and its small flowers are against this, too." R. ololeucos, Lloyd, must be very similar to this plant, but the fruits of that species have longer beaks, and the petals are wholly white. Prof. Corbière very kindly sent me a specimen. These Catsfield examples show well-developed capillary submerged leaves, and appear to be large-flowered R. tripartitus, DC. The flowers were usually of Lenormandi size.—C.E.S.

R. acris, L. var.——. Near Leicester, v.c. 55, June, 1905.—C. B. Headly. Apparently R. Boræanus (Jord.), but, though the rootstock is well represented, there is not a single rootleaf on the sheet sent me.—E.F.L.

R. Ficaria, L., var. incumbens, F. Schultz. Ashton Park, N. Somerset, v.c. 6, April 8, 1905.—J. W. White.

Caltha radicans, Forster. Frequent near Tomintoul, Banff, v.c. 94, July 15, 1905.—The foliage differs from the original plant of Forster, and agrees better with var. zetlandica; Beeby. But I find that its leaves vary much, even in the same plant, and agree with Mr. Beeby's later opinion that the rooting is the only essential character.— E. S. Marshall.

Fumaria Boræi, Jord. West Monkton, S. Somerset, v.c. 5, May 9, 1905.—E. S. Marshall. "Typical except for the fruit, which is unusually small and globose."—H. W. Pugsley, in litt.

- F. Boræi, Jord., var. serotina, Clavaud. Roadside between Cheddon Fitzpaine and Kingston, S. Somerset, v.c. 5, June 8, 1905. Fruit mostly rather pointed when fresh (this appears to be unusual).—E. S. Marshall. "When plants of this kind, as in your specimens, have small and more or less globular fruits they require to be carefully compared with F. muralis (vera)."—H. W. Pugsley, in litt.
- F. ——. (The same as sent last year). Gilly Tresamble, Perran-ar-worthal, W. Cornwall, v.c. 1, Oct. 7, 1905.—F. H. Davey.

Barbarea vulgaris, R. Br., var. divaricata, Dyer. Banks of River Soar, Belgrave, Leics., v.c. 55, July 14, 1905.—A. R. Horwood. Only the type, I should say. The var. divaricata should have arcuate pods, simulating B. arcuata; in these specimens they are not so.—E.S.M. Surely the type. I do not know var. divaricata, Dyer, but the pods of this plant, which are divaricate, or, rather curved out, are comparatively few, and more or less imperfect, looking as if they had suffered some injury. The perfect pods are straight, erect, and typical.—E.F.L.

B. stricta, Andrz. Ditchside, Upton on Severn, Worcs., v.c. 37, Sept. 29, 1905.—S. H. Bickham. Correct, I believe.—E.S.M. I agree.—E.F.L.

B. intermedia, Boreau. Saintfield, co. Down, June 10, 1905.—C. H. Waddell. Right; but poor material.—

E.S.M. Just the plant which I have gathered in Hants and so named.—E.F.L. Yes, I do not see what else it can be—pods and leaves right—but it is much larger and coarser than I have seen it in Surrey.—C.E.S.

Cardamine bulbifera, R. Br. Old Park Wood, Harefield, Middlesex, v.c. 21, April, 1903.—A. Loydell.

Erophila præcox, DC. Frequent on the Green, Lytham, at the Ansdell end, W. Lancs., v.c. 60, April 29, 1905.—C. Bailey. Typical; exactly Jordan's E. brachycarpa.—E.S.M.

Cochlearia alpina, H.C. Wats.? Ben Lawers (3000 fc.). Mid. Perth, v.c. 88, Aug., 1903.—E. Cleminshaw. These are my C. micacea; usually a smaller, neater plant than our ordinary C. alpina, the ripe pods being quite without reticulate veining. Ben Lawers is the original station in which I detected it in 1887.—E.S.M.

Sisymbrium officinale, Scop., var. leiocarpum, DC. Burwardsley, W. Cheshire, v.c. 58, Aug. 10, 1905.—A. H. Wolley-Dod.

S. strictissimum, L. In rough ground surrounding the bleach works of Messrs. Melland & Coward, on the right bank of the River Mersey, Heaton Mersey, S.W. Lancs., v.c. 69, June 26, 1905.—Coll. J. E. McDonald, Comm. C. Bailey. "The Heaton Mersey plant appears to have a more vigorous and ample growth than obtains in continental examples, but the chief difference which it presents is in the length of the pods, or siliques; these are from 1 to $1\frac{1}{4}$ in. long, or half the normal length of continental specimens. The fruiting heads are flat-topped, and the minute seeds are produced in profusion; the seeds are readily wind-borne, so that the plant may occur elsewhere than in its present station. The flowers are of a full vellow, in crowded spikes." Mr. C. Bailey in Proc. Manchester Lit. and Phil. Society. More foliaceous, greener and less pubescent, than my specimens; a change that often takes place with change of climate.—E.F.L.

Lepidium ruderale, L. (1) In profusion on the sandy ground between the gas works and Langney Point, near Eastbourne, S.E. Sussex, v.c. 14, Oct. 13, 1905. Growing with Bupleurum tenuissimum.—C. Bailey. (2) Abundant

on cindery ground between the lines of the goods siding, Dudbridge Station, W. Glos., v.c. 34, in 1904 and 1905, June 9, 1905.—F. L. Foord-Kelcey. A starved state, only.—W.B. Seedling plants with simple stems are not often seen in herbaria.—E.F.L.

L. heterophyllum, Benth. (L. Smithii, Hook). Abundant on a bank near Kingsthorpe, Northants., v.c. 32, June 10, 1905.—H. N. Dixon and A. B. Jackson. plant appears to be the same as that referred to in Jl. Northants. Nat. Hist. Soc., vol. 1, 1880, p. 95, by Mr. G. C. Druce, who found it on banks between Kingsthorpe and Brampton. It differs from typical Smithii in its shorter style and yellow anthers; and from campestre by its habit. Mr. Druce informs me that the original locality has probably been destroyed by alterations to the railway. The pods appear much longer in the herbarium specimens than in the living plant, owing probably to shrinkage in drying.—A.B.J. My specimen is only the upper part of the plant, without root-leaves, which are so characteristic in L. Smithii. The style is fully twice as long as the notch; therefore I think that it must be so named.— E.S.M. This is on the contrary a form of L. campestre, R. Br., with long styles. It agrees with the description of var. longistylum More (Bab. Man. Ed. IX., p. 38), as far as that description goes; also with the fuller description of var. foliosum, Rouy & F. (Fl. France, R. & F., ii. 82), which is probably the same variety and, if so, a later name.—E.F.L.

Viola floribunda, Jord. Cobham, W. Kent, v.c. 16, March, 1904.—Coll. E. W. Hunnybun. Comm. E. S. Gregory. (For description see Rouy & Foucaud's "Flore de France" and Jordan's "Pugillus").

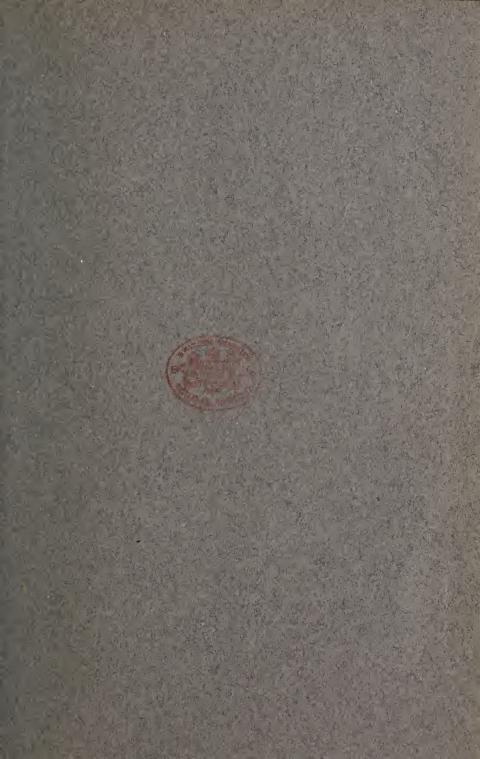
V. calcarea, Greg. (1) Among gorse, Worle Hill, Weston-super-Mare, N. Somerset, v.c. 6, May 7, 1905. (2) Court Hill, Clevedon, N. Somerset, v.c. 6, Apl. 22, 1905.—E. S. Gregory. See Jl. Bot., 1904, p. 67, and B. E. C. Rept., 1904, p. 4.

V. Riviniana, Reichb., forma minor. Worle Hill, Weston-super-Mare, N. Somerset, v.c. 6, May 17, 1905. Named by Prof. Murbeck. This plant grows on hill-sides, on the same soil, and at about the same level, as

V. calcarea, Greg. I have examined the violets in our herbaria at Kew and the British Museum, where this plant figures chiefly as the form flavicornis Sm. of canina. It may be the flavicornis, Forst. of Riviniana; but of this plant I can find no examples in our herbaria. The following description (written when the plants were fresh) shows its affinity with V. Riviniana, where Prof. Murbeck has since placed it as a forma minor. Plant dwarf with rosette of leaves, secondary flowering branches not usually developed; flowers few (often only one to a full grown plant). Leaves roundish-cordate, very small, shining and dark-coloured below; peduncle long; flowers large, mauve freckled with white; veining and long thick spur of Riviniana. The anther-spurs are those of Riviniana, and quite unlike those of canina.—E. S. Gregory. Merely a starved state, in my opinion, and not deserving a special name.—E.S.M.

V. silvestris, Reichb. By Llyn Cynwch, near Dolgelley, Merionethsh., v.c. 48, Aug. 31, 1905.—W. A. Vice. Spur too thick for silvestris, Reichb. Possibly nemorosa (= Riviniana) with dark spur, which may turn out to be a hybrid between silvestris and Riviniana.— E.S.G.

V. canina, L., var.——. Dry river-bed, Clogher, co. Tyrone, May, 1905.—Coll. Miss Peck, Comm. E. S. Gregory. Description of Irish violet after examining fresh specimens. "Has the habit of V. Riviniana with a central rosette of leaves. It is, however, more fleshy, and there are suggestions of canina, especially as regards the Roots and stems fleshy; stem slightly hairy, with a groove on one side, which is ciliate, with exceedingly short hairs. Radical leaves on long petioles, roundish, slightly longer than broad, crenatures few and broad, underside glabrous with dark veins, hispid above with erect hairs having a tubercular base, deeply cordate with a narrow sinus; stipules 1 cm. long, deeply laciniate, broad at base, tapering to a long fine point; upper leaves roundish, longer than lower ones; peduncles long (7-8 cms.), bracts (sometimes below the middle) entire, except at the base. Flowers very large, pale lilac, petals all veined with branched lines; spur (sometimes yellow, sometimes dark) 1 cm. long and \(\frac{1}{2}\) cm. broad; anther-spur





PCLYGALA SERPYLLACEA, WEIHE, VAR. VINCOIDES, CHODAT.

falcate, measuring 5 mms., exactly the length of anther, with its special scale. Capsule roundish, slightly angled. Prof. Murbeck writes of this plant, Dec. 14, 1905:— "V. canina, L., forme qui se rapproche un peu de la variété crassifolia Grönvall."—E.S.G. I cannot see any close approach to V. ericetorum, Schrader, (V. canina, auct. mult.) in habit, inflorescence, shape, texture, or veining of leaves; nor can I understand how it differs from V. Riviniana.—E.S.M.

V. ——. Sand-hills, Birkdale, S. Lancs., v.c. 59, May 23, 1905.—W. A. Vice. V. canina, L., var. ericetorum, Reichb.—E.S.G.

V.——. Sandy fields between Gomshall and Peaslake, W. Surrey, v.c. 17, May 6, 1902.—Mr. E. G. Baker reports on this:—"It does not appear to me to correspond exactly with any of the Continental named plants. It belongs to the tricolor series, of course. Perhaps the nearest named plants are V. Lloydii, Jordan, and V. variata, Jordan, in Billot Annot. Fl. Fr. et Allem. p. 166. Specimens have been sent to Prof. Borbas, but he has not yet reported upon them."—C. E. Salmon.

Polygala ———. Heathy field, near Swithland Wood, towards Roecliffe, Leics., v.c. 55, Aug. 1905.—W. Bell. P. serpyllacea, Weihe, I think. My specimens are too young to shew the fruiting character.—E.S.M. The Polygala wants getting in whole plants and in fruit for determination.—W.R.L. P. serpyllacea Weihe.—E.F.L.

P. serpyllacea, Weihe, var. vincoides, Chodat, in litt. Carnmarth and Wheal Clifford Downs, Gwennap, W. Cornwall, v.c. 1, Oct. 31, 1905.

Through the spontaneous kindness of Mr. Bell, we are able this year to make a departure which will, I believe, meet with the full approval of every member of the Club. The half-plate photo which Mr. Bell has prepared from a dried specimen of Polygala serpyllacea, Weihe, var. vincoides, Chodat, is satisfactory in every detail, and does full justice to a well-marked variety. A note on this addition to the British Flora appeared in the "Journal of Botany," 1906, p. 34. The plant was found by me in September, 1905, on the same day when Ulex

Gallii, Planch., var. humilis, Planch., and Potentilla Tormentilla, Sibth., var. sciaphila, Zimmeter, were added to the Cornish list. It was growing sparingly on an exposed barren down at the eastern extremity of the parish of Gwennap, about midway between the towns of Redruth and Truro. A few weeks later I found it in greater abundance on the summit of Carnmarth Hill, near Redruth, nearly 700 feet above the sea. Through Mr. Arthur Bennett, fresh specimens were sent to Dr. Chodat, of Geneva, who has monographed the genus, and his reply stated that it was the most striking form he had ever seen, quite deserving varietal, if not even sub-specific rank. Dr. Chodat's description of the little stranger reads as follows:—"Leaves elliptical, shortly pointed, subimbricate, mostly opposite, only the upper ones alternate, racemes terminal, short, not at all involucred, wings more elliptical than oblong, crest but little divided, about 8-lobed, the marginal lobes wider and incised, style not at all longer than the ovary, seeds ellipsoidal, smooth, rather patent, sparingly hairy."—Fred. Hamilton Davey.

Dianthus Caryophyllus, L. Rochester Castle walls, E. Kent, v.c. 15, June 24 and Sept. 30, 1905.—Coll. Miss C. E. Pye. Comm. S. H. Bickham. This evidence of its continued existence at Rochester is welcome: the authors of the "Flora of Kent" believed it still survived, but had no recent evidence.—E.F.L.

Silene conica, L. Minehead Warren, S. Somerset, v.c. 5, May 18, 1905. Clearly native, and in profusion, at Minehead Warren; its only station in the county, and apparently its most western English locality.—E. S. Marshall.

S. gallica, L. Sandy slope, near St. Helier, Jersey, July 5, 1905.—Coll. S. Guiton. Comm. S. H. Bickham. The usual S. of England form.—E.F.L. Prof. Corbière says—"Le S. anglica, L., à pédicelles fructifères étalés, les inférieurs parfois même divariqués ou réfléchis, n'est qu'une simple forme qui se rencontre çà et là mèlée au type, auquel elle passe fréquemment." Most botanists do not separate them.—C.E.S.

S. gallica, L., var. rosea. Sandy slope, near St. Helier, Jersey, July 5, 1905.—Coll. S. Guiton. Comm. S. H.

Bickham. When received they were rose-coloured—some deeper than others.—S.H.B. A rose-coloured variety of the usual form, I suppose. There is a var. rosella J. & F., and a var. parvula, J. & F., with rose petals, but these are distinguished by other characters, and are S. European.—E.F.L.

S. quinquevulnera, L. Sandy slope, near St. Helier, Jersey, July 5, 1905.—Coll. S. Guiton. Comm. S. H. Bickham. There are three varieties given in Rouy and Foucaud's "Fl. de France," but with dried specimens they are not easy to distinguish.—E.F.L.

S. dubia, Herbich (= S. transsilvanica, Schur.). (1) Sandgate, E. Kent, v.c. 15, July 6, 1905.—F. L. Foord-Kelcey. (2) On exposed rocks near Thirst House Cave. Deep Dale, Buxton, Derbysh., v.c. 57, July 13, 1905. Detected as British by Mr. C. E. Salmon. Confounded with S. nutans, L. Mr. Salmon has been good enough to separate this plant from my sheets of S. nutans; both nutans and dubia occur in Derbyshire, and of the latter I have examples from Ashwood Dale, Miller's Dale, Wormhill, and near Alstonfield.—C. Bailey. Yes. believe that this, which I formerly thought to be S. italica, Pers., is frequent at intervals on the coast between Dungeness and Deal. It seems to be a distinct species from S. nutans, L., which is a much coarser plant.—E.S.M. Though some Derbyshire specimens from Dove Dale have been so named by Mr. C. E. Salmon, Mr. Bailey's plant is identical with my gatherings from the Dales which Mr. Salmon has confirmed as S. nutans.—E.F.L. Rept. B. E. C., 1904, p. 13, and Jl. Bot. 1905, p. 127. Sandgate plant is clearly S. dubia, Herbich. Is this the plant referred to under S. nutans, "On Sandgate Castle," in "Flora of Kent," p. 56 (Hanbury & Marshall) ?—C.E.S.

Arenaria serpyllifolia, L., var. Lloydii, Jord. Sandy shore, Skegness, N. Lincs., v.c. 54, June 13, 1905.—A. R. Horwood. No; A. Lloydii is eglandular. This is the glandular form (or var.) of A. leptoclados, Guss., a much more slender plant.—E.S.M. I should refer this to the type.—E.F.L. Not condensed enough, nor are the pedicels short enough, for this variety, I should say.—C.E.S.

Spergula arvensis, L., var. sativa (Bœnn). Ponsanooth, W. Cornwall, v.c. 1, Oct. 12, 1905. Around Ponsanooth this form is quite as common as S. arvensis, L., and both grow together.—F. H. Davey. The seeds are without papillae, but I have never seen sativa so nearly eglandular; usually it is densely viscid.—E.S.M. I agree.—E.F.L.

Hypericum undulatum, Schousb. Ponsanooth, W. Cornwall, v.c. 1, Sept. 8, 1905.—F. H. Davey. Good examples.—E.F.L.

Acer campestre, L., var. leiocarpon, Wallr. Scraptoft, Leics., v.c. 55, June 18, 1905.—Coll. A. R. Horwood. Comm. F. L. Foord-Kelcey. Correct.—E.F.L.

Ulex Gallii, Planch., var. humilis, Planch. Gwennap. W. Cornwall, v.c. 1, Oct. 14, 1905.—Abundant on exposed downs all over the county, but not previously recorded as a distinct variety. The old records for *U. nanus*, Forster, are clearly referable to this plant, as that species is still unknown for the mainland, although Mr. A. Somerville has presented me with an undoubted specimen from the Scilly Isles. I am indebted to Mr. Arthur Bennett for Planchon's description:—" var. β. humilis, depressed, branches humifuse, branchlets and leaves crowded; flowers a little smaller than in the typical race." des Sc. Nat., April, 1849, p. 213. The plant cannot be easily mistaken. It grows in dense patches about eighteen inches high, over which one can walk without touching the ground. The primary spines are shorter than in the type, and more densely branched at the base. Young shoots from plants which have been cut down, or destroyed by fire, lie close to the ground, and are furnished with a greater number of flowers than older branches.-F. H. Davey.

Medicago denticulata, Willd. forma——. (Nos. 1142 & 1157). Wool aliens. Galashiels, Selkirksh., v.c. 79, Oct., 1904.—Coll. W. Shaw. Comm. E. S. Gregory. Medicago denticulata, Willd.—E.F.L.

M. ——. (No. 1152). Growing wild in garden at Galashiels, Oct. 1904.—Coll. W. Shaw. Comm. E. S. Gregory. M. denticulata, Willd.—E.F.L.

M. denticulata, Willd. 2 forms. (No. 1154). Wool aliens. Galashiels, Oct., 1904.—Coll. W. Shaw. Comm. E. S. Gregory. The fruiting specimen is M. Soleirolii, Duby, a S. European species. The larger piece is, I think, the same stimulated by richer soil.—E.F.L.

M. ——. (No. 1159). Wool alien. Galashiels, Oct., 1904.—Coll. W. Shaw. Comm. E. S. Gregory. M. denticulata, Willd., var. apiculata (Willd.).—E.F.L.

Trifolium ochroleucon,, Huds. Between Mare Way and Eversden Quarry, Cambs., v.c. 29, June 24, 1905.—Coll. R. H. Goode. Comm. G. Goode.

Anthyllis Vulneraria, L., var. coccinea, L. Aberffraw, Anglesey, v.c. 52, July 10, 1905.—Coll. E. J. Cooper. Comm. A. Loydell. Right.—W.B.

Vicia——. The Warren, Minehead, S. Somerset, v.c. 5, June 17, 1905.—A. Loydell. Comes under V. villosa, Roth., but seems to differ from that species in the points by which V. Godroni, Rouy (Cracca villosa, G. & G., Vicia villosa, Clav.), is distinguished in the "Fl. de France." The specimen is very incomplete for naming—no fruit, no root, only a middle portion of a stem.—E.F.L.

V. bithynica, L. Dry slopes, near Wyke-Regis, Dorset, v.c. 9, July 6, 1899.—J. W. White. One of the very few stations in Dorset for this Vetch.—E.F.L.

*** The Rev. W. Moyle Rogers has seen specimens of all the Rubi distributed; and except where stated concurs in the naming.

Rubus plicatus, W. & N., var. hemistemon (P. J. Muell). Edge of a bog in Lyonshall Park, Herefordsh., v.c. 36, Aug. 17, 1905.—S. H. Bickham and A. Ley. Most characteristic specimens of R. hemistemon of L. C., ed. IX., and of my "Handbook" as understood by me; but see Jl. Bot., 1905, p. 199—200, as to author of name.—W.M.R.

R. Rogersii, Linton. On peaty ground, Creevy Lough, Saintfield, co. Down, July 6, 1905.—C. H. Waddell.

R. holerythros, Focke. St. Leonard's Forest, W. Sussex, v.c. 13, Aug. 2, 1905.—J. W. White.

- R. carpinifolius, W. & N. Dry bank in pasture field, Lyonshall Park, Herefordsh., v.c. 36, Aug. 17, 1905.—S. H. Bickham and A. Ley.
- R. Scheutzii, Lindeb. Rock of Stirling, Stirling, v.c. 86, July 25, 1898.—Col. Stirling and C. H. Waddell.
- R. mercicus, Bagnall, var. chrysoxylon, Rogers, (see "Flora of Anglesey and Carnarvonsh.," p. 43). Nant Offeren, near Bangor, Carnarvonsh., v.c. 49, Aug. 21, 1905.—J. E. Griffith.
- R. leucandrus, Focke. West Cliff, Bournemouth, S. Hants., v.c. 11, July 1, 1905.—W. M. Rogers.
- R. ramosus, Briggs. Ponsanooth and Roadside near Gwinear Road Station, W. Cornwall, v.c. 1, Aug. 8, 1905.—Not unfrequent around Ponsanooth, but not always typical. Named by Rev. W. M. Rogers.—F. H. Davey.
- R. hirtifolius, Muell & Wirtg, var. danicus, Focke. New Monkland, Lanarksh., v.c. 77, July 21, 1898.— C. H. Waddell.
- R. mucronatus, Blox., var. nudicaulis, Rogers. Bournemouth, S. Hants., v.c. 11, June 28, 1905.—Coll. H. Fisher. Comm. W. Moyle Rogers.
- R. criniger, Linton. (1) Wood, Symonds Yat, W. Glos., v.c. 34, July 27, 1905.—S. H. Bickham. (2) Hedge near Calke Abbey, Derbysh., v.c. 57, Aug. 27, 1905.—T. E. Routh and A. B. Jackson.
- R. infestus, Weihe, var. virgultorum, Ley. Ebnal, Cheshire, v.c. 58, Aug. 6, 1905.—A. H. Wolley-Dod.
- R. hibernicus, Rogers. Saintfield, co. Down, July 16, 1905. Leaves convex when fresh.—C. H. Waddell. Yes, in the aggregate sense in which the name is applied in Jl. Bot., 1897, p. 48; but compare Jl. Bot., 1901, p. 382. This 1905 specimen has the leaves exceptionally broad (and leaflets imbricate) for the segregate hibernicus, and so far approaches my other segregate dunensis. But Mr. Waddell knows both, and is probably right in this instance.—W.M.R.

- R. radula, Weihe, var. echinatoides, Rogers. Hedge near Belton, Leics., v.c. 55, July 24, 1904.—T. E. Routh and A. B. Jackson. Yes; but weak.—W.M.R.
- R. oigocladus, Muell & Lefv., var. Bloxamianus (Colem.). Near Billesdon Coplow, Leics., v.c. 55, Aug., 1905.
 —A. R. Horwood.
- R. Griffithianus, Rogers. Penhower Road, near Bangor, Carnarvonsh., v.c. 49, Aug. 23, 1905 (see "Flora of Anglesey and Carnarvonshire," p. 48).—J. E. Griffith.
- R. Babingtonii, Bell Salt. Bigwood, Wormbridge, Herefordsh.; v.c. 36, Aug. 4, 1905.—S. H. Bickham and A. Ley.
- R. castrensis, W.-Dod. (1) Larkton Lane, Cheshire, v.c. 58, July 31, 1903; and (2) near Harthill, Cheshire. Aug. 4, 1905.—A. H. Wolley-Dod. Vide Jl. Bot., 1906, p. 63.
- R. scaber, W. & N. On a steep bank in a wood near Titley, Lyonshall, Herefordsh., v.c. 36, Aug. 17, 1905.—S. H. Bickham and A. Ley. I think there can hardly be any doubt as to the correctness of the name in spite of the curiously abnormal terminal leaflet and very slender stem.—W.M.R.
- R. dasyphyllus, Rogers. Rough roadside bank, edge of a moor, Pateley Bridge, Mid W. Yorks, v.c. 64, Aug. 31, 1905.—S. H. Bickham. Quite the typical dasyphyllus of the North, where it seems at home as the commonest of glandular brambles.—W.M.R.
- R. divexiramus, P. J. Muell. Wood near Symonds Yat, W. Glos., v.c. 34, July 27, 1905.—S. H. Bickham and A. Ley.
- R. acutifrons, A. Ley, var. amplifrons, A. Ley. Big Wood, Wormbridge, Herefordsh., v.c. 36, Aug. 4, 1905.—S. H. Bickham and A. Ley.
- R. Bellardi, W. & N. Wood, Cowleigh Park, Herefordsh., v.c. 36, July 31, 1905.—S. H. Bickham and A. Ley.
- R. Kaltenbachii (Metsch.). Wood Lane, Quorn, Leics., v.c. 55, July 30, 1905.—Coll. A. B. Jackson. Comm. F. L. Foord-Kelcey.

R. velatus, Lefv. Shady bank in Cowleigh Park, Herefordsh., v.c. 36, July 31, 1905. The original station whence this plant was named as "British" by Prof. Babington.—S. H. Bickham and A. Ley. I agree: very strong.—W.M.R.

R. Bucknalli, White. Hedges and open woodland, at an elevation of over 600 ft., on oolitic hills between North Nibley and Wotton-under-Edge, W. Glos., v.c. 34, Aug. 7, 1903. See Jl. Bot., 1899, p. 389.—J. W. White.

Potentilla hirta, L. Waste ground near Ealing Common, Middlesex, v.c. 21, July 26, 1905.—A. Loydell. Yes.—W.B.

P. Tormentilla, Sibth., var. sciaphila, Zimm. Carnmarth, W. Cornwall, v.c. 1, Oct. 17, 1905. Growing with the new var. of Polygala serpyllacea on Carnmarth and Wheal Clifford Downs, Gwennap, and in one or two other places in Cornwall. This is the first time it has been noticed for the county. Mr. Arthur Bennett writes that the above is the nomenclature "according to an authentic British specimen named by Dr. Wolf, who is monographing the genus."—F. H. Davey.

P. ——. Hill above Barmouth, Merionethsh., v.c. 48, Aug. 31, 1905.—W. A. Vice. A dry-ground state of P. procumbens, Sibth.—E.S.M.

Rosa involuta, Sm., var. Robertsoni, Baker.—Near Ham Common, Surrey, v.c. 17, June 21, 1905. Sent from a well-known station, where—I am sorry to say—it is in great danger of extermination by building.—A. H. Wolley-Dod.

R. cæsia, Sm. Near Edge Park, Cheshire, v.c. 58, July 18, 1905. This is the Rose referred to by me in last year's Report, page 15. In addition to the difference in the shape of the leaflets these specimens shew more hairiness than Mr. Bickham's specimens of arvatica and the peduncles are occasionally glandular, which character was not present in my last year's specimens. My observations on other species tend to show that the glandular development varies from year to year. These flowers were almost white.—A. H. Wolley-Dod.

R. glauca, Vill. Hedge, Saintfield, co. Down, Aug. 31, 1905. From a bush from which I once had specimens so named.—C. H. Waddell.

Pyrus Aria, Ehrh, var. rupicola, Syme. A single tree on limestone cliffs above the Builg Burn, near Inchrory, Glen Avon Forest, S. Banffsh., v.c. 94, July 17, 1905. Prof. Trail, in Annals of Scottish Natural History, has recently questioned the native rank of P. Aria in Scotland. Whatever may be the case about Braemar the present plant is undoubtedly indigenous.—E. S. Marshall.

P. latifolia, Syme. Leigh Wood, N. Somerset, v.c. 6, May 31 and Aug. 8, 1905.—J. W. White. P. Aria, Ehrh., var. decipiens (Bechst.). I think the var. decipiens should stand thus. This plant is a slight modification of P. Aria, and not a P. latifolia (Syme) form.—E.F.L.

P. intermedia, Ehrh. The Lord's Wood, Gt. Doward, Herefordsh., v.c. 36, May 25, 1905. Mr. Ley was with me and showed me the tree.—S. H. Bickham.

Cratægus Oxyacantha, L., var. kyrtostyla (Fingerh.). Scraptoft, Leics.. v.c. 55, May 26, 1905.—A. R. Horwood. Too young to shew the style-character well; the young style is somewhat bent. A form or var. of C. monogyna, Jacq.—E.S.M.

C. Oxyacantha, L., var. monogyna (Jacq.) (one and two styled form). Scraptoft, Leics., v.c. 55, June 28, 1905. This form is certainly the commonest variety in the Midland Counties. The var. oxyacanthoides—though more often met with in that area than is usually the case elsewhere—is less abundant than the one-styled form monogyna. The form distributed, which is an intermediate possessing fruit of both types, the one-styled and the two-styled forms, is not uncommon locally; and other connecting forms between the four varieties also occur.—A. R. Horwood. This I suspect to be C. monogyna × oxyacanthoides; both the variability of the style-number on the same branch and the foliage favour it.—E.S.M.

Cotoneaster integerrimus, Medic. Grown at "Lyndhurst," De Freville Avenue, Cambridge, from the plant which was brought from the Gt. Ormes Head by Prof. Babington in 1880. Gathered June, 1905.—G. Goode.

Saxifraga Geum, L. Valencia, Co. Kerry, June 1, 1903.—F. C. Crawford.

S. umbrosa, L., var. serratifolia, Don. Rocks, Lover's Leap, Buxton, Derbysh., v.c. 57.—Coll. Rev. E. Foord-Kelcey. Comm. F. L. Foord-Kelcey. No. This is the crenate-serrate (Pyrenean) plant; serratifolia has much more sharply-cut teeth.—E.S.M.

S. cernua, L. Near summit of Ben Lawers, Mid. Perth, v.c. 88, July, 1905. I found this plant in considerable quantity near the top of Ben Lawers, some flowering and many just going to flower. This is interesting, considering the number of "Floras" which mention this plant as being "almost extinct."—E. Cleminshaw.

Sedum Telephium, L., var. purpureum, L. Barmouth Hill, Merionethsh., v.c. 48, Aug. 30, 1905.—W. A. Vice. Doubtless S. Fabaria, Koch; very unlike our ordinary S. Telephium, L. (S. purpurascens, Koch).—E.S.M.

Callitriche ——. Spring on hill, Barmouth, Merionethsh., v.c. 48, Aug. 26, 1905. No submerged leaves; fruit peduncled; sharply keeled.—W. A. Vice. Fruit immature. Apparently C. stagnalis.—E.S.M.

C. obtusangula, Le Gall. Pond near Sawley Bridge, Leics., v.c. 55, June, 1905. This Starwort appears to be quite distinct from the plant collected in an adjoining ditch two years ago and distributed through the Club as C. obtusangula by Mr. A. B. Jackson, which the Rev. E. S. Marshall suggested might be C. Lachii, Warren.—T. E. Routh. Most of the fruit is immature; styles ultimately reflexed, persistent. Not, in my opinion, C. obtusangula, but a form of C. stagnalis, Scop.—E.S.M.

C. ——. Pond, Staines, Middlesex, v.c. 21, July 30, 1905.—A. Loydell. Young and poor; very few (sessile) fruits on my sheet, and those immature. Undoubtedly, by the foliage, this is C. hamulata, Kuetz.—E.S.M.

Epilobium ——. Waste ground, Harrow, Middlesex, v.c. 21, Aug. 1905.—H. P. Reader. E. adnatum, Grisebach (E. tetragonum, Curtis), in its first year ("forma annua" Haussknecht).—E.S.M.

 $E.\ observed x\ roseum$. Timber yard, Malvern Link, Wores., v.c. 37, July 31, 1905.—S. H. Bickham and R. F. Towndrow. Correct. There was, however, some admixture of $E.\ parviflorum \times roseum$ in this gathering.

E. alsinefolium × obscurrum. By the Conglass Water (1,000—1,100 ft.) near Tomintoul, Banff, v.c. 94, July 25, 1905, with the parents. Several fine plants were found. So far as I know, this hybrid had only once before been obtained in Britain. A good intermediate.—E. S. Marshall.

Astrantia major, L. Hort. cult. Clifton, June 30, 1905.—J. W. White. It would make the plants more interesting if cultivated specimens had upon their labels their original habitats.—C.E.S.

Pimpinella Saxifraga, L., var. dissecta, With. Leicester, v.c. 55, Aug. 1905.—A. R. Horwood. Right.—E.S.M. This seems to me to be a forma dissecta of var. nigra (Mill); it is so much more pubescent than usual. Var. dissecta, With. is a var. of the more ordinary subglabrous type.—E.F.L.

Heracleum Sphondylium, L., var. angustifolium, Huds. Aylestone, Leics., v.c. 55, June, 1905.—A. R. Horwood. It might be worth while collecting the fruit of these narrow-leaved forms; in France they have two, and the only one of which I have gathered well formed fruit does not coincide with either of them.—E.F.L.

Viburnum Opulus, L. (yellow-fruited form). Narborough, Leics., v.c. 55, July, 1904. This form, which was first pointed out to me by Mr. A. B. Jackson, is remarkable in that the berries never become red, but retain their yellow colour until they fall. The bushes from which these specimens were gathered presented a striking contrast to those close by that bore berries of the normal red colour, these latter being red practically as soon as the fruit is formed. Beyond this characteristic there is no essential difference between the fruit of the type plant and that of the form, except, perhaps, in that

the berries of the latter may be said to be less globose.—A. R. Horwood. The yellow-fruited Guelder-rose has been known at Narborough Bogs for many years; and it is quite constant in the colour of its fruit. I know no other station. Is it worthy of a varietal name or of being raised to a specific form? Some plants with less differentiation and constancy have been so honoured.—W.B. A yellow-fruited form would seem to be of rare occurrence. I have not found any reference to it in books, and have it only from Ednaston, S. Derbysh.—E.F.L.

Valerianella olitoria, Poll., var. lasiocarpa, Reichb. (or near it). Bank near Alport, Derbysh., v.c. 57, June 4, 1904.—A. B. Jackson and T. E. Routh. The fruit is merely puberulous—i.e., nearly glabrous. In the variety the pubescence is far more pronounced.—E.S.M. I should have said, not the variety.—C.E.S.

Erigeron alpinum, L. Ben Lawers, Mid Perth, v.c. 88, Aug. 1902.—E. Cleminshaw.

Anaphalis margaritacea, Benth. and Hook. fil. An escape. Stennis, Orkney, v.c. 111, Aug. 16, 1905.—F. C. Crawford.

Matricaria discoidea, DC. Waste ground, Syston, Leics., v.c. 55, Sept., 1905.—Coll. A. R. Horwood. Comm. H. P. Reader.

Petasites fragrans, Presl. (1) Clevedon, N. Somerset, v.c. 6, Dec. 2, 1904.—F. L. Foord-Kelcey. (2) Lickety Lane, Egg Buckland, Plymouth, S. Devon, v.c. 3, Jan. 28, 1906.—A troublesome weed near market gardens, where it is remembered for upwards of 60 years, and is recorded from this station in Key's "Flora of Devon and Cornwall," 1866—70.—C. B. Headly.

Senecio ——. Railway bank (G.W.R.), Acton, Middlesex, v.c. 21, July, 1904.—A. Loydell. S. squalidus, L., frequent on the G.W.R. between Oxford and London.—W.B.

S. spathulæfolius, DC. On the cliffs near South Stack, Holyhead, Anglesey, v.c. 52, June 9, 1905 (see "Flora of Anglesey and Carnarvonshire," p. 81).—J. E. Griffith.

Carduus nutans × crispus. Lowesby, E. Leics., v.c. 55, July 8, 1905. This hybrid is abundant on a hill of 700 ft. elevation, and apparently the only thistles growing there are C. nutans and crispus, with a few plants of arvensis, which, apart from the characters the specimens exhibit, points to the parentage indicated. The seeds of the hybrid—as is usually the case—are less developed than those of the parent plants. There are some of these plants—the majority, in fact—that show a nearer relationship to nutans than to crispus and a few that exhibit a closer alliance with crispus.—A. R. Horwood. I suppose correct; but the flowers are much nearer to C. nutans than is usual in this hybrid.—E.S.M. Correct.—E.F.L. Yes.—C.E.S.

Saussurea alpina, DC. Rocks on the sea-shore, Thurso, Caithness, v.c. 109, Aug. 12, 1905. These plants, from their position, must have been splashed by salt water.—F. C. Crawford.

Centaurea aspera, L. Vazon Bay, Guernsey, June 19, 1905.—Coll. Miss C. Bickham. Comm. S. H. Bickham. I agree.—E.F.L.

Hieracium pseudonosmoides, Dahlst. Tomintoul, Banff, v.c. 94, July 18, 1905.—E. S. Marshall. New county record.

H. serratifrons, Almq., var. lepistodes, Johanss. Rocky slope on Great Doward, Herefordsh., v.c. 36, July 16, 1905.
—S. H. Bickham.

H. gothicum, Fr.——a form or var. Near Bridge of Brown, E. Inverness, v.c. 96, July 24, 1905. Named by Rev. W. R. Linton, and endorsed by the Rev. E. F. Linton. Heads eglandular; styles yellow. The leaves are narrower than usual, much more deeply toothed and rather glaucous. It was locally abundant, and appears to me to deserve varietal rank.—E. S. Marshall.

H. rigidum, Hartm., var. tridentatum (Fr.). Roadside, near Wych Cross, E. Sussex, v.c. 14, Aug. 31, 1905.—R. S. Standen. This is H. boreale, subsp. dumosum; not tridentatum.—W. R. L.

H. ——. Hallgates, Leics., v.c. 55, Sept., 1905.—
W. Bell. This appears to me to be H. rigidum, var. lineatum, Dahlst. (with glabrous heads).—W.R.L. New County record.

- H. boreale, Fr. Hallgates, Leics., v.c. 55, Sept., 1905. —W. Bell. Some of these with the leaves subsimilar are near var. rigens, Jord. Those which have long leaves below, and rapid reduction to short leaves a little way up the stem are type boreale.—W.R.L. Only those of this gathering separated by the Rev. W. R. Linton as near rigens were distributed.—W.B.
- H. boreale, Fr., var. Hervieri, Arv. Touvet. Near Edmondsham, Dorset, v.c. 9, Sept. 8, 1905.—E. F. Linton.
- H. umbellatum, L. Hallgates, Leics., v.c. 55, Sept., 1905.—W. Bell. Var. coronopifolium (Bernh.).—W.R.L.

Campanula rotundifolia, L., var. ——. Roadside near Nannau, Dolgelley, Aug. 31, 1905, and Cader Road, Dolgelley, Sept. 2, 1905, Merionethsh., v.c. 48.—W. A. Vice. I do not see how this differs from type.—E.S.M.

Pyrola rotundifolia, L., var. arenaria, Koch. Near Freshfield, between Liverpool and Southport, Lancs., v.c. 59, Sept. 14, 1905.—Coll. C. P. Hurst. Comm. J. E. Griffith. Right.—E.F.L.

 $Primula\ acaulis \times veris.$ Perranzabuloe, W. Cornwall, v.c. 1, April 6, 1905.—F. H. Davey. Well-dried specimens. —E.F.L.

P. scotica, Hook. (1) Howton, near Stromness, Orkney, v.c. 111, 1849.—Coll. J. B. Syme. Comm. E. F. Linton. (2) Reay, Caithness, v.c. 109, July, 1888.—E. F. Linton.

Gentiana lingulata, Agardh, var. præcox, Townsend (Murb.). Porth Towan, W. Cornwall, v.c. 1, June 21, 1905. Confirmed by the Rev. E. S. Marshall. New to the county. A week later only a few flowering specimens were to be seen; but there were thousands of gaping capsules.—F. H. Davey. I agree.—E.F.L.

G. baltica, Murb. Connor Downs, W. Cornwall, v.c. 1, Sept. 15, 1905. Here again I have to thank Mr. Marshall for assistance. G. campestris, L., was previously recorded from this locality, but it certainly does not occur there. Nor do I think we can any longer retain it in our Cornish list.—F. H. Davey.

Limnanthemum peltatum, S. P. Gmel. (1) Thames backwater, Isleworth, Middlesex, v.c. 21, July, 1905.—D. M. Higgins. (2) Old West R. between Flat Bridge and Aldreth Bridge, Cambs., v.c. 29, July 5, 1905.—G. Goode.

Lithospermum purpureo-cæruleum, L. In great abundance near Aller, N. Somerset, v.c. 6, May 11, 1905. A new station. Growing in thickets, old hedgerows, and wood-borders, for fully a mile.—E. S. Marshall.

Echium plantagineum, L. St. Aubin's Bay, Jersey, June 26, 1905.—Coll. Miss C. Bickham. Comm. S. H. Bickham. Most of the foliage had fallen; but the branching of the inflorescence is very characteristic.—W.B.

Cuscuta Trifolii, Bab. (1) Bedford Road, Luton, Beds., v.c. 30, Aug. 21, 1905.—D. M. Higgins. Right.—E.F.L. (2) Clover field by the Windmill, Castle Donington, Leics., v.c. 55, Aug. 1905.—T. E. Routh.

Linaria supina, Desf. Par, E. Cornwall, v.c. 2, Sept. 13, 1905. This plant occurs in great abundance along the sandy beach, all around the harbour, along the St. Blazey-Fowey railway line, and by the roadsides, and I think it has every claim to be considered a native. It has been known as one of the common plants of that district for quite 60 years.—F. H. Davey.

L. purpurea, L. (1) Churchyard and old walls (naturalised) Hythe, E. Kent, v.c. 15, July 7, 1905.—F. L. Foord-Kelcey. (2) Old walls, near Ledbury, Herefordsh., v.c. 36, June 18, 1905. The flowers changed colour when in the press: they were deep purple when gathered.—S. H. Bickham.

Scrophularia Scorodonia, L. (1) Hedgerow near Newquay, W. Cornwall, v.c. 1, June 12, 1903.—A. Loydell. (2) Hedgebank, Guernsey, June 19, 1905.—Coll. Miss C. Bickham. Comm. S. H. Bickham.

Mimulus luteus, L. Walkham Vale, S. Devon, v.c. 3, May 29, 1905. This species is very plentiful on the banks of the river Walkham. There are large masses of its yellow blooms for a distance of 7 or 8 miles. In Mr. Archer Briggs' "Flora of Plymouth" this station is not

mentioned. These specimens differ from those from the Dove in Derbyshire, in that these are mostly upright and rooting from the two or three lower nodes only, while the Derbyshire ones are more recumbent and root at least three-fourths of the length of the stem.—C. B. Headly. M. Langsdorfii, Donn.—E.S.M.

M. luteus, L., var. guttatus, DC. Same locality as the above, but the area more restricted.—C. B. Headly. Closely approaches var. guttatus; but the chocolate blotches do not appear to be heavy enough for the variety.—W.B. I do not think that De Candolle described it as a species; he does not so treat it in his "Prodromus." M. Langsdorfii, Donn., form (or var.) guttatus. It only differs from type in the colour of the flowers.—E.S.M.

M. Langsdorfii, Donn., var. guttatus, DC. Abundantly naturalised along the Conglass Water, near Tomintoul, Banff, v.c. 94, July 15, 1905. I think this is var. guttatus, DC. I have only seen it here and at Reay, Caithness.—E. S. Marshall.

Euphrasia ———. Ingarsby, Leics., v.c. 55, Aug., 1905.—A. R. Horwood. I think this is an unusually "strict" form of *E. curta*, var. glabrescens.—E.S.M. Mr. C. Bucknall, who saw three sheets, reports: "This is very puzzling. Most of the specimens have bracts with acute awned teeth and calyx teeth exceeding the capsule and must, I think, go to *E. stricta*, Host, but others with broader, less acute teeth, capsule equalling the calyx and simple stems look very much like *E. borealis*, Towns. At the same time, some with simple stems have acute teeth and short capsules."

E. stricta, Host. South Croxton, Leics., v.c. 55, Aug.,
1905.—A. R. Horwood. I should say decidedly E. curta,
var. glabrescens, not E. stricta.—E.S.M. Yes, E. stricta.
—C.B. See B. E. C. Rept., 1905, p. 40.

E. ——. Near Cymmer Abbey, Dolgelley, Merionethsh., v.c. 48, Aug. 30, 1905.—W. A. Vice. E. curta, var. glabrescens, I believe.—E.S.M. No. 3, E. stricta, Host, but one piece looks more like E. nemorosa, but is damaged.—C.B.

E. stricta, Host? Near Rhaiadr Mawddach, Merionethsh., v.c. 48, Sept. 1, 1905.—W. A. Vice. Four specimens on my sheet. One is, I believe, E. stricta, the others appear to me identical with Cardiganshire plants of mine which Prof. Wettstein named E. curta, var. glabrescens. I believe that this is correct; but the line between that and E. nemorosa is sometimes difficult to draw.—E.S.M. No. 5, E. nemorosa, H. Mart.—C.B.

E. curta, Fr., var. glabrescens, Wettst. (1) Precipice Walk, Dolgelley, Merionethsh., v.c. 48, Aug. 31, 1905.—W. A. Vice. Small; but quite characteristic.—E.S.M. No. 6. Correct.—C.B. (2) Marshy ground, lower slopes of Cader Idris, Merionethsh., v.c. 48, Sept. 2, 1905.—W. A. Vice. Four small plants are the usual heath form of E. curta, var. glabrescens; two others I am inclined to think are the same, but a larger form with strongly aristate upper leaves and bracts.—E. S. M. No. 7. E. Scotica, Wettst.—C.B.

E. Salisburgensis, Funk. On carboniferous limestone pastures, Castle Hewson, near Askeaton, Co. Limerick, Aug. 11, 1905.—C. H. Waddell. None of the plants before me are at all like E. Salisburgensis. The bulk of the sheet is E. curta, var. glabrescens; two decidedly glandular specimens are a form of E. brevipila, and the remaining one-which has a few glands on the bracts, but the general habit of the other--I suspect to be a hybrid between them. -- E.S.M. Certainly not E. Salisburgensisthe form of the leaves is different, and the teeth too close and too numerous, the capsule also being hairy. Some of the specimens are glandular and others eglandular, but in other respects there seems to be no difference between them. I think they must go to E. brevipila, B. & G., although they look so different from ordinary forms of that species. I have the same form from Roundstone, Connemara.—C.B.

E. gracilis, Fr. Moor above Pateley Bridge, M. W. Yorks., v.c. 64, Aug. 31, 1905.—S. H. Bickham. Yes.—C.B.

E. ——. Amongst grass, lower slopes of Cader Idris, Merionethsh., v.c. 48, Sept. 2, 1905.—W. A. Vice. On the sheet sent to me I find a regular mixture:—(1) E. Rostkoviana; (2) E. brevipila; (3) E. curta, var.

glabrescens Wettst., or between that and the type. Some of the specimens are mouldy.—E.S.M. No. 1. E. Rostkoviana, Hayne, and also E. nemorosa, H. Mart.? Very weak.—C.B.

- E. ——. Hill above Barmouth, Merionethsh., v.c. 48, Aug. 30, 1905.—W. A. Vice. Four specimens are E. Rostkoviana, the other five appear to me to be E. curta, var. glabrescens.—E.S.M. No. 2, E. Rostkoviana, Hayne.—C.B.
- E. Rostkoviana, Hayne. Plantation, Bala road. Dolgelley, Merionethsh., v.c. 48, Aug. 31, 1905.—W. A. Vice. E. Rostkoviana, very characteristic.—E.S.M. No. 4. Correct.—C.B.
- E. Rostkoviana, Hayne. Near Hengwrt, Dolgelley,
 Merionethsh., v.c. 48, Aug. 30, 1905.—W. A. Vice. Correct.
 —E.S.M. No. 8. Yes.—C.B.
- E. ——. In short turf above Rievaulx Abbey, N.E. Yorks., v.c. 62, Sept. 8, 1905.—S. H. Bickham. I am inclined to put this under E. Kerneri, but am not quite sure.—E.S.M. I think with Mr. Marshall the Euphrasia is E. Kerneri. It accords fairly well with specimens so named by Prof. Wettstein and Mr. Townsend. I see it is on oolite and that also makes it likely.—In litt., A. Bennett. E. Kerneri, Wettst.—C.B. Mine are small examples of Kerneri; in Surrey it occurs 9 in. high or more.—C.E.S.

Bartsia Odontites, Huds., var. divergens, Balb. (1) Roadside, Llanelltyd, Merionethsh., v.c. 48, Aug. 28, 1905.

—W. A. Vice. B. serotina (Reichb.).—W.B. This seems to be var. serotina from the habit and inflorescence; all the stem-leaves have fallen or are too shabby to shew their character.—E.S.M. (2) Hayward's Heath, E. Sussex, v.c. 14, Aug. 21, 1905.—R. S. Standen. The habit and foliage looks right for var. serotina; but the bracts are mostly shorter than the flowers. I doubt the constancy of these alleged varieties, verna and serotina.—E.S.M. (3) Lindfield, E. Sussex, v.c. 14, Sept. 8, 1905.—R. S. Standen. If the chief character of divergens is the patent branching then the Lindfield specimens will pass; but some of the specimens look as if they have been injured in growth.—W.B. I do not know this variety. The two

specimens sent to me agree with the description in Hooker's "Student's Flora;" "much branched; branches widely diverging"; but they are in poor condition. The tops are broken off or are otherwise injured, which may account for the habit; no stem leaves remain.—E.S.M.

Rhinanthus major, Ehrh. In clover fields, near Tomintoul, Banff, v.c. 94, July 13, 1905. A colonist. Seeds with a very narrow wing; thus it appears to be the var. stenoptera of Fries, which Dr. von Sterneck (I believe rightly) takes to be the type.—E. S. Marshall.

Melampyrum pratense, L., var. ericetorum, D. Oliver. Thickets near "America," Hayward's Heath, E. Sussex, v.c. 14, Aug. 23, 1905.—R. S. Standen. A form of the type, I think.—E.S.M.

M. pratense, L., var. montanum, Johnst. (1) Woods above the town, Dolgelley, v.c. 48, Sept. 2, 1905.—W. A. Vice. I believe this is only type; var. montanum is a plant of heaths, rather than woods, usually at a considerable elevation.—E.S.M. (2) Slopes of Cader Idris, Merionethsh., v.c. 48, Sept. 3, 1905.—W. A. Vice. Correct.—E.S.M.

Pinguicula lusitanica, L., (Alt. 700 ft.). Chagford, S. Devon, v.c. 3, Aug., 1905.—Alice M. Geldart.

Mentha longifolia, Huds., var. Nicholsoniana (Strail.). Bank of R. Wye, Whitney, Herefordsh., v.c. 36, Aug. 14, 1905.—S. H. Bickham.

M. piperita, L., var. officinalis (Hull). Roadside, Robin Hood's Bay, N. E. Yorks., v.c. 62, Sept. 4, 1905.—S. H. Bickham.

M. ——. Underdown, Ledbury. (Spontaneous weed in the Rev. A. Ley's garden at Sellack). Aug. 12, 1905.—S. H. Bickham. "I name it M. cardiaca, which is the plant M. Briquet in 'Bull. Herb. Bossier,' IV. (1896) p. 776, calls M. gentilis, var. cardiaca, and is considered by him to be a hybrid. See Wildeman and Durand's 'Flore de la Belge,' fasc. 12, p. 686 (1899)." G. C. Druce in Rept, B. E. C. 1903, p. 26.

Origanum vulgare, L., var. megastachyum, (Link). Bank under Coppice near Aymestrey, Herefordsh., v.c. 36, Sept. 12, 1905.—S. H. Bickham. See Rept. B. E. C. 1905, p. 43.

Calamintha parviflora, Lam. Roadside between Babraham and Little Abington, Cambs., v.c. 29, Aug. 12, 1905.—Coll. R. H. Goode. Comm. G. Goode.

Nepeta Glechoma, Benth., var. parviflora, Benth. (1) Lowesby, Leics., v.c. 55, May 21, 1905.—A. R. Horwood. (2) Scraptoft, Leics., May 18, 1905.—A. R. Horwood. (3) Sheet Hedges Wood, Leics., May 1905.—H. P. Reader. (1) According to Bab. Man., Ed. IX., this should be subglabrous; the present plant is very hairy. Mr. Beeby once remarked to me that the species was trimorphic, and that he did not believe in the alleged variety.—E.S.M. The small-flowered form is nearly as common in Leics. as the type, and is usually found in close proximity thereto.—W.B.

Ajuga Chamæpitys, Schreb. (1) Open place in wood, Headley Lane, Surrey, v.c. 17, Aug. 7, 1905.—A. Loydell. (2) Near Box Hill, Dorking, Surrey, July, 1905.—E. Cleminshaw. (3) Buckland Hill, Surrey, Aug. 21, 1905.—C.E. Salmon. (4) Barton, Beds., v.c. 30, Sept., 1905.—D. M. Higgins.

Plantago major, L., var. intermedia (Gilib). Near Billesdon Coplow, Leics., July 31, 1905, and Cropston Reservoir, Leics., v.c. 55, July 22, 1905.—A. R. Horwood. Both gatherings correct.—E.S.M. Correct.—E.F.L.

P. lanceolata, L., var. Timbali, Reichb. fil. (1) Queniborough, Leics., v.c. 55, July 6, 1905, and cultivated fields, Beacon Hill, Leics., June 15, 1905.—A. R. Horwood. (2) Cader Road, Dolgelley, Merionethsh., v.c. 48, Sept. 2, 1905.—W. A. Vice. Mr. Horwood's plants seem to be just between type and the variety.—E.S.M. Mr. Horwood's plant comes near my S. France specimen in the heads, but is not identical, still less in the leaves. Unfortunately the descriptions in our Floras do not assist in distinguishing P. Timbali, Jord., and P. lanceolata. By these most plants in cultivated land would be under the former. The Dolgelley plant I hardly think can go to the introduced variety.—E.F.L.

P. Coronopus, L., var. ceratophyllum (Rap.). Sandy shore, Skegness, N. Lincs., v.c. 54, June 13, 1905.—A. R. Horwood. Not mature enough to test by the principal character, in the fruit; by the other, less distinctive characters, it seems to be the type and not the variety.— E.F.L.

Herniaria ciliata, Bab. Housel Bay, Lizard, W. Cornwall, v.c. 1, July 17, 1905,—C. E. Salmon.

Chenopodium hybridum, L. Rubbish heap, near Ely, Cambs., v.c. 29, Sept. 26, 1905. Coll. W. J. Cross. Comm. S. H. Bickham. Right.—E.F.L.

C. urbicum, L., var. intermedium, Moq. (1) Underdown, Ledbury, Aug. 17, 1905. From seeds collected in farm-yard, St. Columb Minor, W. Cornwall, v.c. 1, Oct. 4, 1904.—S. H. Bickham. (2) Rubbish heaps, Ledbury Park, July 15, 1905. If it were not that I do not see how it is possible, I should be disposed to suggest that some seed collected by me on Oct. 4, 1904, in W. Cornwall, had been conveyed to Ledbury Park.—S. H. Bickham. Both right.—E.F.L.

Salicornia appressa, Dum. Thorney Island, W. Sussex, v.c. 13, Aug. 25, 1905. I came upon a patch of nearly half an acre in what I believe to be a hitherto unknown locality. One characteristic is entirely lost in pressing. The stems and roots go down perpendicularly into the ground, whilst the foliage lies closely pressed upon the surface, absolutely at right angles to the stem.—R. S. Standen. Likely enough to be right; but much too young for certain determination.—E.S.M.

Polygonum Raii, Bab. Coast near Dunster, S. Somerset, v.c. 5, July 8, 1905. I venture to send a few specimens of this plant, which is very rare in Somerset. It was abundant over twenty or thirty yards of beach, but was only seen in that one place.—E. S. Marshall.

Euphorbia hiberna, L. Dell, Waters Meet, near Lynton, N. Devon, v.c. 4, June 17. 1905.—A. Loydell.

Urtica pilulifera, L., var. Dodartii (L.). Cult., Underdown, Ledbury, July 4, 1905. These are self sown seedlings—the type (pilulifera) has vanished from my grounds, and this is the only form now found there. I forward a specimen of pilulifera (type) gathered in 1901. I believe that the late H. C. Watson noticed the same thing when he grew the plant.—S. H. Bickham. Mr. Bickham's specimen (1901) is quite typical, and shews no tendency to lose its dentation. It would be interesting if Mr. Bickham could give us notes of the stages through

which the plant passed during the period from 1901, shewing whether the divergence was gradual or whether it occurred in any one season; also whether he notices any reversion from variety to type. Very fine examples.—W.B.

Salix ——. Side of stream, Eastcote, Middlesex, v.c. 21, Junė 13, 1905.—A. Loydell. Leaves S. cinerea, L., and flowers S. purpurea, L.—E.F.L.

S. caprea × lanata. Produced and grown at Bournemouth; early May and end of June and July, 1904.— E. F. Linton.

S. ——. Devil's Tor, near Princetown, S. Devon, v.c. 3, May 17, 1905.—C. B. Headly. S. repens., L.—E.F.L.

S. viminalis × Caprea. Stream-side, Madresfield, Worcs., v.c. 37, April 6, 1905, and Aug. 8, 1905.—R. F. Towndrow and S. H. Bickham. Correct.—E.F.L.

Epipactis violacea, Boreau. Kenwards, Hayward's Heath, E. Sussex, v.c. 14, Aug. 14, 1904.—R. S. Standen.

Orchis latifolia \times maculata. Flitwick Marsh, Beds., v.c. 30, June, 1905.—D. M. Higgins.

Juncus effusus \times glaucus (= diffusus, Hoppe), nearpond, Blakesley, Northants., v.c. 32, July 17, 1904.—A. Loydell. On my sheet were one specimen of J. effusus and two of J. glaucus. The sign + would have been more appropriate than \times .—E.F.L.

Sparganium affine, Schnizl., var. microcephalum, Neum.? Pool between Orgill and Rackwick, Hoy, Orkney, v.c. 111, July 14, 1900. These are like W. Inverness plants of 1896, determined for me by Pastor L. Neuman; and Mr. W. H. Beeby recently wrote to Mr. C. E. Salmon:— "These are right."—E. S. Marshall.

Alisma ranunculoides, L., var. repens (Davies). Dowrog, St. Davids, Pembrokesh., v.c. 45, Aug. 24, 1905.— E. F. Linton.

Potamogeton rutilus, Wolfg. Ditches by the Military Road, Rye, E. Sussex, v.c. 14, July, 1902.—Coll. T. Hilton. Comm. C. E. Salmon. See Jl. Bot. 1900, p. 67.

Zannichellia polycarpa, Nolte. Drains, Victoria Park, Belfast, Co. Down, July, 1904.—S. A. Stewart and C. H. Waddell.—I agree.—E.F.L.

Naias flexilis, R. & S. L. of Clunie, Blairgowrie, E. Perthsh., v.c. 89, Aug. 1878.—Coll. J. B. Syme. Comm. E. F. Linton.

Cyperus fuscus, L. Ditch on Walton Moor, N. Somerset, v.c. 6, Sept. 10, 1904.—J. W. White.

Scirpus triqueter, L. Bude, E. Cornwall, v.c. 2, Sept., 1905.—Coll. C. B. Green. Comm. A. Loydell. No. S. maritimus, Linn.—W.B.

Cladium jamaicense, Crantz. (1) Chippenham Fen, Cambs., v.c. 29, July 12, 1905.—G. Goode. (2) Wicken Fen, Cambs., July 15, 1905.—Coll. R. H. Goode. Comm. G. Goode.

Carex Leersii, F. Schultz. (= C. virens, Koch). Near Seamills, W. Glos., v.c. 34, June 2, 1905.—J. W. White. Exactly like the type-specimen in Herb. Brit. Mus. Some years ago, Pfarrer Kükenthal wrote to me:—"C. virens, Koch, est inextricabilis"; so I believe the name should be dropped.—E.S.M. Whether we call this plant C. Leersii, or by Syme's name pseudo-divulsa, it should stand as a var. under C. muricata.—E.F.L.

- C. Bænninghausiana, Weihe. Barres Moor, near Ponsanooth, W. Cornwall, v.c. 1, July 6, 1905. Confirmed by Mr. A. Bennett. The only Cornish locality. The two supposed parents (C. paniculata and C. remota) very plentiful near.—F. H. Davey.
- C. helvola, Blytt. Summit of Lochnagar, S. Aberdeensh., v.c. 92, Aug. 8, 1905.—F. C. Crawford.
- C. acuta, L., var. ———. Groby Pool, Leics., v.c. 55, July 8, 1905.—A. R. Horwood. Gathered much too young, so that no fruit character appears. The female glumes are remarkably elongated; possibly it may be var. prolixa (Fr.), which I do not know. Should be collected again, if possible, at a lat stage.—E.S.M. C. acuta, L., var. prolixa (Fr.), has been recorded from this station.—W.B. I have gathered this form at Groby Pool, and consider it intermediate between the type and var. prolixa (Fr.).—E.F.L.

- C. magellanica, Lam. Sphagnum bogs, Kilpatrick Hills, Dumbartonsh., v.c. 99, July 1, 1905.—Coll. L. Watt. Comm. A. Somerville.
- C. capillaris, L. Creag an Lochain, Killin, Mid. Perth, v.c. 88, Aug. 1903.—E. Cleminshaw.
- C. Hornschuchiana, Hoppe. Swampy meadow, Colwall, Herefordsh., v.c. 36, June 30, 1905.—Coll. R. F. Towndrow. Comm. S. H. Bickham. Correct.—E.F.L.
- C. pulla, Good. Ben Lawers, Mid. Perth, v.c. 88, Aug. 1902.—E. Cleminshaw. Typical.—E.F.L.

Alopecurus hybridus, Wimm. River Soar, Birstall, Leics., v.c. 55, July, 1905.—A. R. Horwood. I fear there is some mistake here. The sheet submitted to me is pure A. geniculatus, L., and not the plant of Messrs. Bromwich and Jackson, and Father Reader.—E.F.L.

Phleum pratense, L., var. nodosum (L.). Lowesby, Leics., v.c. 55, July 15, 1905.—A. R. Horwood. Correct.—E.F.L.

Kæleria tuberosa, Pers. (1805) = K. splendens Druce (1905) non Presl (1820). Locally plentiful on mountain limestone, Uphill, N. Somerset, v.c. 6, June 7, 1905. Flower-spikes sometimes beautifully tinged with purplish red, when young. The rejection of the name given by the founder of the genus, involving, as it does, the re-naming of a recognised species, seems to me to be a reductio ad absurdum in the way of nomenclature.—E. S. Marshall. See Report B.E.C., 1904, p. 37, and Jl. Bot., 1905, p. 313.

Glyceria plicata, Fr., var. pedicellata (Townsend). Scraptoft, Leics., v.c. 55, June 28, 1905. Prof. Hackel, in confirming this determination, writes, Nov. 1905, "In my view G. pedicellata, Towns., is a form of G. fluitans, not of plicata. Your specimen agrees well with the authentic one in my own herbarium from Townsend."—A. R. Horwood. Mr. Townsend agreed that his G. pedicellata was G. fluitans × plicata; it never fruits.—E.S.M.

G. festucæformis, Heynh. Stony sea-shore, Craigaveagh, Strangford Lough, co. Down, July 10, 1905.—R. Lloyd Praeger. See Jl. Bot., 1993, p. 353.

Festuca rubra, L., var. vulgaris, Hack. Sandy shore, Skegness, N. Lincs., v.c. 54, June 13, 1905.—A. R. Horwood. Fide Prof. Hackel. If Prof. Hackel has named this there is no need of further comment. The specimen sent me seems correct.—E.F.L.

F. arenaria (Osbeck). Sand-hills, Skegness, N. Lincs., v.c. 54, June 13, 1905. Coll. A. R. Horwood. Comm. H. P. Reader. Naming confirmed by Prof. Hackel. This should have been collected so as to shew the root-character, which is important.—E.S.M. Festuca rubra, L., var. arenaria (Osbeck) of our Catalogue.—E.F.L.

F. elatior × Lolium perenne. Aylestone, Leics., v.c. 55, July 1, 1905.—A. R. Horwood. I see little sign of Lolium here, and think it is pseudo-loliacea, Hackel, a subsimple form.—E.F.L. Does not look like the hybrid, and seems nearest F. pratensis, Huds.—C.E.S.

Bromus madritensis, L. Planta rarissima in pascuis calcariis prope Bristolium habitat, v.c. VI., Julii xiv., 1903.—J. W. White. Very fine specimens.—E.F.L.

B. racemosus, L. Hallen, W. Glos., v.c. 34, June 9, 1905.—J. W. White. Sides of the lower pale seem angular, so this should be (by Syme) B. commutatus; strangely enough the pale-characters of B. commutatus and B. racemosus in Babington's Manual are exactly the opposite of those in Syme's Eng. Bot.! Continental authorities agree with Syme's diagnosis.—C.E.S.

Agropyron pungens, R. & S. Brading Marshes, I. W., v.c. 10, Aug. 2, 1905. Coll. Miss C. Bickham. Comm. S. H. Bickham. Right.—E.F.L.

Hordeum marinum, Huds. Kelling, E. Norfolk, v.c. 27, June 13, 1905.—C. B. Headly. H. murinum, L.—E.F.L.

Athyrium alpestre, Milde. Ben Lawers, Mid. Perth, v.c. 88, July, 1905.—E. Cleminshaw. I don't profess to know Ferns well; but the habit is that of a Lastræa, rather than that of A. alpestre.—E.S.M. Certainly not: I think Lastræa dilatata, Presl, which I have from Ben Lawers.—E.F.L.

Cystopteris fragilis, Bernh., var. ——. On shaded limestone rocks near the Avon, below Tomintoul, Banff., v.c. 94, July 20, 1905. I suppose that these, upon the whole, are best placed under var. dentata, Hook. The range of variation was great; some specimens decidedly approaching C. Dickieana. Those now sent are not so extreme.—E. S. Marshall.

Polystichum Lonchitis, Roth. Meall na Saone, Killin, Mid. Perth, v.c. 88, July, 1905.—E. Cleminshaw. Fine specimens.—E.F.L.

Phegopteris calcarea, Fée. Avening Wood, W. Glos., v.c. 34, Sept. 14, 1905.—F. L. Foord-Kelcey. Right.—E.F.L.

Equisetum sylvaticum. L., var. capillare (Hoffm.). Harthill, Cheshire, v.c. 58, Aug. 13, 1905.—A. H. Wolley-Dod. Correct.—E.S.M. Yes.—E.F.L.

E. limosum, Sm., var. fluviatile (L.). Aylestone, Leics., v.c. 55, July 1, 1905.—A. R. Horwood. Right.—E.S.M. Yes.—E.F.L.

Lycopodium alpinum, L., var. ——. Hill above Arthog, Merionethsh., v.c. 48, Aug. 22, 1903.—W. Bell. Best left under the type, though it tends rather towards var. decipiens, Syme.—E.S.M.

Copies of some of the back numbers of the Report can be obtained from the Hon. Sec. at 6d. each.

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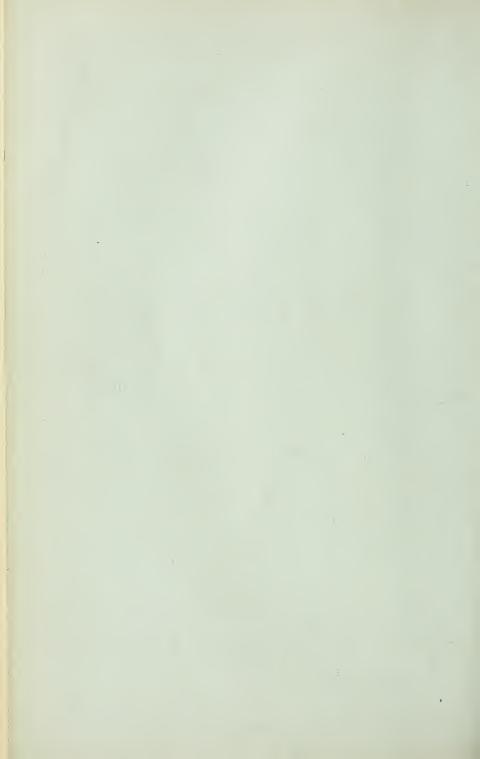
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30/31 December, 1905.

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THE

GWENTY-GHIRD HUNUAL REPORT

OF THE

WATSON

Botanical Exchange Club,

1906-1907.

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THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1906-7.

A larger number of specimens have been contributed this season than for many years past and most of them were well prepared. May I remind collectors of Rubi that in addition to very carefully selected panicles, two or three stem-pieces should be sent with each sheet and that they should be taken from near the middle of the stem. In several cases, at Mr. Moyle Rogers' suggestion, I have had to combine two sheets in order to make one representative example.

A few members still forget that except as a new v.c. record, for naming, or for some special reason, which ought to be stated, two or three specimens only of a plant are valueless to a Club—I have not recorded such contributions.

The following is the list of contributors:—

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Mr. A. Loydell 20	Mr. A. B. Jackson 44	3 427
	Mr. A. Loydell 20	

The Club is greatly indebted to the Rev. A. Ley, not only for his large and valuable contribution of specimens, but also for having assisted me by spending several days in examining the sheets with me.

The thanks of the Club are also due to the following gentlemen for their notes on the critical species:—Mr. A. Bennett, Rev. E. F. Linton, Rev. W. R. Linton, Rev. E. S. Marshall, Rev. W. Moyle Rogers, Mr. W. Barclay, Mr. C. Bucknall, Dr. E. Drabble, Messrs. H. & J. Groves, Mr. H. W. Pugsley, Mr. C. E. Salmon, Major A. H. Wolley-Dod, and to Mrs. Gregory.

SPENCER H. BICKHAM, Distributor for the year 1906—1907.

Parcels of plants should be sent, by Jan. 31, to Mr. F. H. Davey, who has kindly undertaken to distribute next year. It will be necessary to print an entirely new Desiderata List for next season, and, in order to make it as complete as possible, it is hoped that *all* members will remember to send in a copy of the L.C., marked up-to-date with the plants they want.

We deeply regret to record the death, on the 5th of this month, of our Treasurer, Mr. A. Somerville. The following has been written by Mr. Arthur Bennett, who was probably his oldest and most frequent botanical correspondent:—"You have asked me to say a few words about the late Mr. A. Somerville. I gladly do so, for although we never met yet the many years we have corresponded have gradually led to a nearer and more personal feeling than a botanical correspondence would ordinarily induce. Born in 1842, he was the eldest son of one honoured in Scotland, Dr. A. N. Somerville, for fiftytwo years Minister of Free Anderston Church in Glasgow and Evangelist in many parts of the world.* being educated at Glasgow Academy he chose a business career, and in 1865 went out to Calcutta as a merchant. But fifteen years of Indian climate resulted in his health failing, and, returning to Scotland, he attended the University classes and graduated B.Sc. in 1884. Marine Mollusca at first attracted him and he devoted his energies to dredging, taking a deep interest in and obtaining funds and gifts for the Marine Station at Millport, and also acting as President of the Natural History Society of Glasgow and of the Conchological

^{*} His life was written by Dr. George Smith, under the title of "A Modern Apostle, A. N. Somerville, 1813—1889" (London, 1890), and it is interesting to read in it (p. 274, etc.) how the father early instilled into the minds of his children a love for natural history.—G.G.

Society. Botany, however, was the subject he selected for the final examination for his degree, and this soon proved to have the greatest fascination for him. He became a Fellow of the Linnean Society, and, in 1885, joined the Watson Club, remaining a member until his death, with the exception of a short period (1890—2), and becoming Treasurer in 1901.

His botanical work is best described as 'thorough,' wherever he went he at once commenced to study the Flora, and took great trouble in sending living specimens for examination. Another great trait in his character was his extreme kindness to young botanists, no matter when or whence they came; he would assist them to the utmost, and (as I can personally vouch) take great trouble in helping them. Of his great liberality with his specimens many can speak, his constant remark being 'anything I have you are welcome to,' and they were so good one felt a pleasure in determining his plants when he was in doubt about them.

To the Topographical Botany of the West of Scotland, he contributed in a very large degree, especially to the Inner and Outer Hebrides, besides securing plants for other field botanists, and there were few in the kingdom with whom he was not in correspondence.

In other walks of life his letters show him to have been the kind, courteous and Christian gentleman, and I feel sure all the members will join in heartfelt sympathy with Mrs. Somerville and her children in their bereavement.

With me his death leaves a void it will be hard to fill. I am indebted to Mrs. Somerville and her daughter for the notice that appeared in the *Glasgow Herald*, from which some of the foregoing is taken."—A. Bennett.

Mr. S. H. Bickham has kindly consented to fill the post of Treasurer, and it is hoped that members will endeavour to lighten his work by sending in during January their subscriptions, which fall due at the beginning of each year.

GEORGE GOODE,

June, 1907.

Hon. Secretary.

*** A few plants that were unaccompanied by notes or critical comments have been omitted from the Report.

Thalictrum collinum, Wallr. Plantation near Devil's Ditch, Cambs., v.c. 29, July 12, 1906.—Coll. R. H. Goode. Comm. G. Goode. This is in flower only; fruit is necessary for a proper determination. No doubt, however, it is the T. saxatile Bab., now referred to T. collinum Wallr.—E.S.M. This name may stand for a flowering specimen. But ripe fruit from these Cambs. plants shows that there are two forms among them, one with the ordinary T. collinum fruit (oblique oblong), and another with the evenly ovoid fruit that distinguishes T. Kochii Fr. I have sown seeds of both forms to see if they keep their character.—E.F.L.

T. flavum, L., var. nigricans, Jacq. In large masses in several spots near Llangorse Lake, Breconsh., v.c. 42, July 26, 1906.—The black coloration of foliage and stem was conspicuous even in the fresh plant, and has become more marked when dried. The fruits, as usual, are often distorted and swollen by insects, but when not so, shew the outline of this variety fairly distinctly.— Augustin Ley. A similar plant was named T. gallicum Rouy & Foucaud by Herr Freyn.—E.S.M. I have known the plant under this name in the past, but cannot find out what T. nigricans Jacq. is. Rouy and Foucaud (Fl. de France) do not give it, though mentioning T. nigricans for two plants as "non Jacq." Herr Freyn named it T. gallicum Rouy and Foucaud for another Club, at the same time that I suggested T. rufinerve Lej. and Court. (T. nigricans auct. Gall. occid. non Jacq.); but T. gallicum is a plant very stoloniferous, with long stolons (Fl. de France I. 29), and Herr Freyn did not have roots; whereas I know from years of cultivation that it is densely cespitose. It is very shy of producing seed of any sort in the garden. If Mr. Ley could get honest fruit it might help much towards a fresh determination. Meanwhile it fits Rouv and Foucaud's description of T. rufinerve fairly well.—E.F.L.

Ranunculus peltatus, var. ———. Pond near Bracklebridge, Leics., v.c. 55, June 1906.—W. Bell and H. P. Reader. Good R. heterophyllus, Web.—E.S.M. This we prefer to put under R. heterophyllus, Web. in spite of one of the specimens having a long peduncle.—H. and J.G.

Fumaria capreolata, L. (1) Ponsanooth, W. Cornwall, v.c. 1, Sept. 21, 1906.—F. H. Davey. (2) Hedge, Minehead, June 17, 1906, and (3) Hedge, Dunster, June 19, 1906, S. Somerset, v.c. 5.—S. H. Bickham and A. Ley. Yes.—H.W.P.

- F. Boræi, Jord. Minehead, S. Somerset, v.c. 5, June 18, 1906.—S. H. Bickham and A. Ley. Yes, F. Boræi, var. ambigua, m.—H.W.P.
- F. Boræi, Jord. Old walls, Fowey, E. Cornwall, v.c. 2, June 18, 1906.—Coll. Mrs. Graham. Comm. R. S. Standen. Mr. Pugsley confirmed this, but pointed out that there was a specimen of confusa in the sheets sent him—I believe that I have eliminated the few others.—S.H.B.
- F. Boræi, Jord., var. serotina, Cl. forma. Potato-field, Ponsanooth, Cornwall, v.c. 1, Sept. 21, 1906. A very interesting form, on which Mr. Pugsley writes me as follows:—"A form of F. Boræi, v. serotina, with sepals smaller than usual and globose fruits. I have seen similar plants from the Channel Isles and elsewhere, and it no doubt approaches F. muralis and perhaps should be raised to separate varietal rank. In Guernsey it seems to keep constant, and I have had it under cultivation."—F. H. Davey.
- F. ———. Hedge near Minehead, S. Somerset, v.c. 5, June 18, 1906.—S. H. Bickham and A. Ley. F. Boræi, Jord., var. serotina, Clavaud.—H.W.P.
- F. officinalis, L., var. ———? Cornfield, Knighton Grange Road, Leicester, v.c. 55, July 1906. These plants were 2-3 ft. in height.—W. Bell. Clearly, I think, a form of F. officinalis, L. Note the retuse fruit, etc.—E.S.M. A form of F. officinalis, L.—H.W.P.

Mathiola sinuata, R. Br. St. Ouen's Bay, Jersey, June 26, 1905.—Coll. Miss C. Bickham. Comm. S.H.B.

Draba muralis, L. Top of walls, near Umbra, Co. Derry, 1905.—C. H. Waddell and Canon Lett.

Erophila ———? (ref. 207). On granite refuse, Croft Quarry, Leics., v.c. 55, May 1905. This, I fear, must go under præcox, although some of the pods are rather narrow for that form.—W. Bell. I think that this must

be referred to *E. præcox*, DC. in an aggregate sense; but it is not good *E. brachycarpa* Jord., which appears to be typical *E. præcox*.—E.S.M.

E. stenocarpa (Jord.), (ref. 208). Refuse, Old Quarry, Croft, Leics., v.c. 55, May 1905.—W. Bell. E. stenocarpa (Jord.), a remarkably handsome form.—E.S.M.

E.——? (ref. 209). The Old Quarry, Croft, Leics., v.c. 55, May 1905. This form appears to be intermediate between those under ref. Nos. 207 and 208. The pods are longer than 207 and broader than 208.—W. Bell. I should leave this under E. vulgaris, DC.—E.S.M.

E.——? Walls, Duston, Northampton, v.c. 32, May 1905.—W. Bell. The pods are decidedly turgid (not compressed, as in E. vulgaris, DC.). I think that it should be referred to E. inflata Hook. fil.; it is very like the Glen Shee plant so named.— E.S.M.

Brassica oleracea, L. Cliffs, Fowey, E. Cornwall, v.c. 2, May 30, 1906.—Coll. Mrs. Graham. Comm. R. S. Standen. Excellent specimens.—S.H.B. Correct, I believe.—E.S.M. I see no reason to question this.—E.F.L.

Iberis amara, L. Ballast-siding, Midland Railway, Helpstone, Northants, v.c. 32, Aug. 1, 1906.—Coll. E. Foord-Kelcey. Comm. F.L.F.-K. Correct.—A. Ley.

Viola——. Long grass by roadside, Long Drive, Bardon Hill, Leics., v.c. 55, June 2, 1906.—W. Bell. V. canina, L., var. ericetorum, Schrader.—E.S.G. V. ericetorum, Schrader (V. canina auct. mult.).—E.S.M. Yes, ericetorum, Schrader, but by no means typical.—E.D.

V. lactea, Sm. Chailey Common, E. Sussex, v.c. 14, May 29, 1906.—R. S. Standen. Yes, lactea, Sm.—E.D.

V. arvensis, Murr., app. Lloydii, Jord. Mowing grass, Cromford, Derbysh., v.c. 57, July 7, 1906.—W. Bell. ? V. variata, Jord.—A. Ley. Certainly not V. variata, Jord. I have seen Jordan's plant. I believe it is V. Lloydii, Jord.—E.D.

V. arvensis, Murr., var. obtusifolia, Jord. Amongst wheat, Knighton Grange Farm, Leics., v.c. 55, Sept. 1906. New County record.—W. Bell. V. arvensis, Murr., var. obtusifolia, Jord.—E.S.G. I agree.—A. Ley. Yes, this is the so-called V. obtusifolia, Jord. As a county record it is

probably new only in name, since this form (together with V. agrestis, Jord., which I believe to be varietally identical with obtusifolia) is the commonest of the arvensis set in most parts of England.—E.D.

V.——. Corn stubble, Racecourse, Oadby, Leics., v.c. 55, Aug. 1906.—Coll. C. E. Bell. Comm. W. B. ? V. arvatica, Jord.—A. Ley. V. arvatica, Jord., is probably a small form of V. agrestis (or obtusifolia). The present plant approaches arvatica, but the stipules are different. This plant must be called a small and delicate state of V. Timbali, Jord. Typically Timbali is more fleshy in habit, approaching agrestis, with which it probably should be united.—E.D.

V. arvensis, Murr., var. ———. Turnip field, Wash Common, Newbury, Berks., v.c. 22, Aug. 1906.—A. B. Jackson and W. Bell. V. arvensis.—E.S.G. This is a very long-leaved form of a plant which grows abundantly in several parts of England, and will prove, I believe, to be one of several varieties falling under V. Deseglisei, Jord.—E.D.

V. Curtisii, Forster. Sand Dunes, Llanaber, Merionethsh., v.c. 48, July 27, 1906.—G. Goode and R. H. G. Typical, I believe.—E.S.M. Yes, this is typical Curtisii as generally accepted.—E.D.

V. Curtisii, Forster, var. Pesneaui. Mochras Sands, Merionethsh., v.c. 48, July 1906.—Coll. D. A. Jones. Comm. A. Loydell. I do not think this should be called a Curtisii violet at all. It is certainly not the plant which has been accepted in England as V. Pesneaui, Lloyd and Foucaud. I think it is one of the saxatilis set.—E.D.

Violets of the *Melanium* section. Much confusion reigns in this group. We have at least three distinct forms of *V. agrestis* and some half dozen of *saxatilis* which I believe to be perfectly distinct *species*. The difficulty of unravelling the literature and herbarium specimens is considerable, but I hope shortly to publish an account of the British representatives of this section. In herbaria it is no uncommon occurrence to find two or more specimens apparently exactly similar with different names. This is not necessarily incorrect as it will be shown that many of the pansies have received several names, even from the same author. It is particularly desirable that no

violet should be named unless it has been compared with a specimen actually named by the author of the species or variety. Rouy and Foucaud's "Flore de France" is an invaluable work, especially on account of its references to literature and type specimens, but it must not be used alone for naming Violas—the actual plants must be compared.—E.D.

Polygala serpyllacea, Weihe, var. vincoides, Chodat. Carnmarth Hill, Gwennap, W. Cornwall, v.c. 1, Oct. 5, 1906. The normal time of flowering appears to be late autumn, only a few plants which manage to continue in bloom through the winter being found with flowers in spring. The plant, to my mind, is quite deserving specific rank. This year I have found it several miles distant from the two stations mentioned in last year's Report, and my friend Dr. Vigurs has also discovered it on Roborough Downs, S. Devon.—F. H. Davey.

Dianthus Armeria, L. Railway bank, near Luton, Beds., v.c. 30, Aug. 28, 1906.—D. M. Higgins. Such good specimens are welcome.—S.H.B.

D. cæsius, Sm. Cheddar Gorge, N. Somerset, v.c. 6, June 29, 1906. Growing in damp shingle; very luxuriant specimens.—S.H.B. I think this is, as you suggest, abnormal cæsius, and not a hybrid. The Brit. Mus. list calls this D. gratianopolitanus, Villars.—C.E.S. Focke does not mention any natural hybrid of D. cæsius. I incline to think this only a strong form, with the petals irregularly white-flecked.—E.S.M.

Saponaria Vaccaria, L. On ballast, M. Ry. siding, nr. Helpstone, Northants., v.c. 32, Aug. 1, 1906.—Coll. E. Foord-Kelcey. Comm. F.L.F.-K.

S. officinalis, L., var. hirsuta, Wierzb. ex Reich. Deutsch. Fl. 3, 120, 1842-3. Tolgus Road, near Redruth, W. Cornwall, v.e. 1, Oct. 6, 1906. According to a note which I have from Mr. Arthur Bennett, dated Oct. 1905, the above is the correct authority and reference for this variety. In "Jl. Bot." 1875, p. 279, Mr. J. T. Boswell, who adopted the name puberula for this var. (see Bot. Ex. Cl. Rept. for 1872-4, p. 11) has the following note:—"I can find no allusion to this puberulous variety in any of the Continental floras to which I have access."—F. H. Davey.

Silene Cucubalus, Wibel, var. puberula, Syme. Near Hathern Stn., Notts., v.c. 56, Aug. 4, 1906. This has been mentioned as var. puberula. Certainly some of the branches of the same plant are more puberulous than these, but they do not seem quite enough so for the var. It is strange that there are no specimens of it in the County Herb., Leicester, nor have I seen living plants in the County, yet Prof. Carr states that the var. is as plentiful as the type in Notts.—W. Bell. The clothing is rather weak for var. puberula (Jord.) but it may pass. I see no justification for "calyx downy" of Bab. Man. ed. ix., either in specimens or French descriptions.—E.F.L. I should certainly put this under var. puberula (the name really means rather weak pubescence) though it is often much more hairy.—E.S.M. Yes.—A. Ley.

Cerastium arcticum, Lange. Clogwyn d'yr Arddu, Carnarvonsh., v.c. 49, Aug. 11, 1906.—A. H. Wolley-Dod. Yes, I have gathered it there.—A. Ley. Right; beautiful specimens.—E.S.M.

Stellaria nemorum, L. Watersmeet, N. Devon, v.c. 4, June 14, 1906. I send a few specimens of this, which may be acceptable, since the plant is, I believe, a new record for the Peninsula.—Augustin Ley. Very interesting: new to v.c. 4, although I see in Top. Bot. that "Fl. Dev." had it for v.c. 3—a record H. C. Watson wished verified apparently.—C.E.S.

S. neglecta, Weihe. S. Croxton, Leics., v.c. 55, May 30, 1906.—A. R. Horwood. This has the seeds acutely tubercled, and therefore is not the S. neglecta of Babington, which I have called S. umbrosa, var. decipiens. By the law of priority, S. umbrosa, Opiz, must, apparently, rank as a variety of S. neglecta, Weihe; and I believe that this Croxton plant is type neglecta. Var. decipiens, which is certainly worth distinguishing, has bluntly tubercled seeds, in that respect coming nearer to S. media Vill. It should be called S. neglecta, Weihe, var. decipiens, mihi.—Edward S. Marshall. Tubercles acute. Pedicels and calyx hairy. Pedicels longer than flowering-calyx. I quite think true umbrosa—habit etc. right. I am no nomenclaturist, so do not pretend to say the correct name it should bear. Mr. Marshall says that this is, he believes,

type neglecta: how is that distinguished from umbrosa?
—C.E.S. We have in Britain three distinct forms:—

1. S. neglecta, Weihe. Pedicels and calyx hairy;

seeds acutely tubercled.

2. S. umbrosa, Opiz. (S. Elisabethae F. Schultz, apparently). Like the above, but with quite glabrous pedicels and calyx.

3. S. neglecta, var. decipiens. Like neglecta but for the bluntly tubercled seeds. Habit usually rather different

—nearer S. media.

I consider *S. umbrosa* (our usual form, at least in the West, and by far the most markedly different from *S. media*) the true "type" of the species; but one has to accept the Vienna rulings, so our arrangement must be:—

S. neglecta, Weihe.

b. var. umbrosa (Opiz).

c. var. decipiens, mihi. = S. neglecta Auct. angl. (non Weihe).—E.S.M.

S. media, Cyr., var. neglecta, Weihe. Narborough, Leics., v.c. 55, May 19, 1906.—C. B. Headly. Var. decipiens, Marshall, I think.—S.H.B. There are no ripe seeds on my specimen; but those which are present look as if they would be bluntly tubercled when mature, and the habit is that of S. neglecta, Weihe, var. decipiens, rather than of typical S. neglecta.—E.S.M. Tubercles rather rounded (compare with Croxton plant). Pedicels and calyx hairy; pedicels not longer (apparently) than flowering-calyx. Yes, I suppose a var. of media (the one which we have been calling neglecta) but which Mr. Marshall calls either "neglecta, var. decipiens," or "umbrosa, var. decipiens." Mr. Townsend (Fl. Hants., ed. II., 629) says that he cannot place neglecta, "as Mr. Marshall does, with S. umbrosa," but keeps it as a var. of media.—C.E.S.

Arenaria serpyllifolia, L., var. leptoclados (Guss.). Woodhouse Eaves, Leics., v.c. 55, June 19, 1906.—C. B. Headly. Not the variety; type.—S.H.B. and A.L.

Elatine hexandra, DC. Begbush Pond, W. Sussex, v.c. 13, Aug. 16, 1906.—H. S. Thompson. I daresay right: I see two flowering-specimens of Scirpus acicularis attached.—E.F.L. Seeds only slightly curved; so it appears to be correct. Mixed with it I find three flowering-

specimens of a tiny dark-glumed Club-rush, barely an inch high, which looks more like a dwarf *Scirpus pauciflorus* than *Eleocharis acicularis*, and deserves further attention. —E.S.M.

Malva verticillata, L. Rubbish heaps round "Underdown," Ledbury, Herefordsh., v.c. 36, July 8, 1906.—S. H. Bickham.

M. borealis, Wallmann, (= M. pusilla, Sm.). Growing intermixed with M. rotundifolia, Linn., on building land, previously sandhills, between Park Road and Orchard Road, St. Anne's-on-the-Sea, W. Lancs., v.c. 60, Sept. 22, 1906. The locality has been subsequently covered by houses. This plant is not native to St. Anne's, but is one of a large number of alien species introduced, as I believe, in grain-siftings and sweepings, as food for poultry. A list of the alien plants of St. Anne's is in the press, and, when published, a copy will be sent to the members of both the Watson Club and the Botanical Exchange Club of the British Isles.—Charles Bailey. In Bab. Man., ed. 9, the carpels of M. pusilla, Sm. are described as "meeting each other with a toothed edge." This plant has them straight-edged, and the inner sepals stellately pubescent; so I believe that it is M. rotundifolia, L.—E.S.M. Malva rotundifolia, L., with the fruit rather less pubescent than I have usually seen it, but not at all untypical. The fruit of M. borealis is usually still less pubescent, and easily distinguished from M. rotundifolia by its strongly reticulate and pitted dorsal surface.—E.F.L.

M. pusilla, Sm. Bissoe, W. Cornwall, v.c. 1, Sept. 6, 1906. In two spots; one near a grist mill, where it was mixed with M. rotundifolia, L., the other as a garden weed half-a-mile distant.—F. H. Davey. Rightly named.—E.F.L. I think that this is correctly named.—E.S.M.

Linum perenne, L. (1) Cherry Hinton, June 15, 1906.—E. J. Allard. (2) Fleam Dyke, June 20, 1906.—A. J. Crosfield. (3) Little Trees Hill, Gog Magogs, June 26, 1906.—Coll. R. H. Goode. Comm. G.G. Cambs., v.c. 29. All three sets are beautiful specimens.—S.H.B.

Geranium striatum, L. Smeeth, E. Kent, v.c. 15, July 9, 1906. Sent in case it may be a new v.c. record. Coll. E. Foord-Kelcey. Comm. F. L. F.-K. No—see Hanbury and Marshall's "Flora of Kent," p. 76.—S.H.B.

Acer campestre, L. Knighton Road, Leicester, v.c. 55, Aug. 1906. The bush from which these specimens were taken formed quite a conspicuous object in the hedge-row. The fruit was bright crimson when gathered, but it has lost much of the colour in drying.—W. Bell. I have seen this in a garden shrubbery: a striking tree. A gardener's variety.—E.F.L. (This bush is undoubtedly a wildling.—W.B.) The var. leiocarpon, Wallr. In sunny situations the fruit usually shews the crimson tinge here mentioned.—E.S.M.

Genista pilosa, L. Chapel Porth, St. Agnes, W. Cornwall, v.c. 1, June 6, 1906.—F. H. Davey.

Medicago sylvestris, Fr. Gravel Pit, Chippenham, Cambs., v.c. 29, July 15, 1905.—G. Goode.

M. falcata, L. Chippenham, Cambs., v.c. 29, July 12, 1905.—G. Goode. Probably correct, but the specimens are not matured.—A. Ley. I have no doubt correct though no fruit is shown. In flower it is distinguished from sylvestris chiefly by the flowers being a bright yellow and turning brown as they die off, whilst the yellow flowers of sylvestris soon become very greenish-yellow and then purplish—also falcata seems to be later in flowering than sylvestris.—G.G.

M. minima, Desr. Mildenhall, W. Suffolk, v.c. 26, June 16, 1906.—A. J. Crosfield. Yes.—A. Ley.

Astragalus alpinus, L. Little Craigindal, Braemar, S. Aberdeen, v.c. 92, July 19, 1906.—E. S. Marshall. Most beautiful specimens of a beautiful plant.—S.H.B.

Lathyrus Aphaca, L. Teversham, Cambs., v.c. 29, June 14, 1906. Coll. R. H. Goode. Comm. G.G.

Prunus domestica, L. In a hedge, Quorn, Leics., v.c. 55, May 4, 1906.—F. L. Foord-Kelcey. No. P. macrocarpa, Wallr.—A. Ley. Agrees well with description of P. fruticans, Weihe, in Townsend's Fl. Hants., ed. 2, p. 630.—C.E.S.

 $^*{}_*{}^*$ All Rubi have been submitted to the Rev. W. Moyle Rogers.

Rubus cariensis, Rip. & Genev. Bissoe, July 6, 1906; Pelean Cross Wood, Ponsanooth, July 31, 1906; Ponsanooth, Aug. 16, 1906; Goonorman Wood, St. Gluvias, Aug.

25, 1906, W. Cornwall. New record for v.c. 1. The only previous county record was for Bodmin, 1904, G. C. Druce; but in communicating it Mr. Rogers wrote—"Apparently this, but needs confirmation." Among my gatherings Mr. Rogers found several specimens "not quite typical."—F. H. Davey. Though I have thought that this Bissoe plant is only a form of R. cariensis, it is quite conceivable that it may be a hybrid:—R. argenteus Wh. & N. × R. cariensis. The Ponsanooth plant, on the other hand, is certainly R. cariensis in spite of the rather exceptionally small panicles.—W.M.R.

R. imbricatus, Hort. Lydbrook, Herefordsh., v.c. 36, July 21, 1906.—S. H. Bickham.

R. nemoralis, P.J.M., var. glabratus, Bab. Belmont Wood, near Hereford, v.c. 36, Aug. 23, 1906.—S. H. Bickham and A. Ley.

R. rhombifolius, Weihe, var. megastachys, W.-Dod. Walton Common, Surrey, v.c. 17, July 24, 1906. Differs from the type chiefly in larger panicle, and longer petals, consequently larger flowers. For a fuller description see "Jl. Bot.," Feb. 1906, p. 64.—A. H. Wolley-Dod.

R. ramosus, Briggs, forma. Ponsanooth, Cornwall, v.c. 1, Sept. 1, 1906. Passed by Mr. Rogers. Very common in woods and open places, but not always typical. Forms with very long peduncles are not unfrequent.—F. H. Davey.

R. pubescens, Weihe, var. subinermis, Rogers. St. Leonard's Forest, W. Sussex, v.c. 13, July 22, 1901.—J. W. White.

R. macrophyllus (sp. collect.), var. Schlechtendalii (Weihe). Ponsanooth, Mabe, Kea Playing Place Wood near Truro, and elsewhere, Cornwall, July and Aug., 1906. New record for v.c. 1. Passed by Mr. Rogers. Mostly off the type. On the Kea Playing Place specimens Mr. Rogers reports—"Panicle narrow and more pyramidal than usual. A beautiful form which occurs near Plymouth."—F. H. Davey.

R. hirtifolius, Muell. & Wirtg., var. mollissimus, Rogers. The Cairns, Ponsanooth, Cornwall, v.c. 1, July 18, 1906. New to Cornwall.—F. H. Davey. Slightly off type.—W.M.R.

R. radula, Weihe. Lydbrook, Herefordsh., v.c. 36, July 21, 1906.—S. H. Bickham and A. Ley.

R. mutabilis, Genev. var., fide Dr. Focke. Roadside waste in Thakeham parish, at the back of the South Downs, W. Sussex, v.c. 13, July 26, 1902. Known to me during the last fifteen years as occurring in abundance over a considerable area. Type mutabilis is stated by Mr. Rogers to be very imperfectly known in Britain. I have taken the Devon plant for comparison, and find that my W. Sussex gathering differs as follows:--Stem less hairy, but much more glandular with a dense armature of tubercular-based prickles and strong uneven aciculi. Lts. paler, smooth above, not rugose, less hairy, and with close grey felt beneath; margin truly dentate with simple shallow and nearly regular teeth; term. It. obovateelliptical cuspidate, differing widely in outline from the cordate-ovate-acuminate lt. of var. nemorosus. less strongly reflexed. The colour and texture of the foliage, with the marked chars of outline and margin strike me as specially noteworthy. In some respects the plant approaches R. rudis. If at any time it might be thought admissible to apply a distinctive name, I would suggest that of var. Naldretti, after an old Sussex family.—Jas. W. White. Certainly very distinct from the Devon var. nemorosus, and especially, as Mr. White points out, in the foliage and the paler colouring. The panicle also seems still more pyramidal in outline, in spite of its truncate top, while its prickles are far slenderer and more crowded. Thus while in the shape of the leaflets, though not in their toothing, hardly distinguishable from the Surrey R. mutabilis (which may stand for our type), in panicle it is further away from that than var. nemorosus is, and so may well claim varietal rank. Mr. White's Rudgwick plant (July 19, 1893) is, as he has pointed out, obviously different, and may, I think, go under the type.—W.M.R.

R. thyrsiger, Bab. The Cairns, Ponsanooth, W. Cornwall, July 11, 1906. A new record for v.c. 1.—F. H. Davey. There can, I believe, be no doubt as to the correctness of the name; but these sheets are hardly quite characteristic.—W.M.R.

R. plinthostylus, Genev. Ponsanooth, Cornwall, v.c. 1, Aug. 4, 1906. Very abundant in most of our woods, but

in such places "always an exceedingly weak state." On one plant gathered this year, however, in an open spot, Mr. Rogers reports as follows:—"R. plinthostylus, Genev. f. petalis albis. Except for its white petals ("d'un rose pâle," in Genevier) this agrees with G's description and with our Dorset plant better than any other Cornish plant that I have seen."—F. H. Davey. An exceedingly weak and (so far) uncharacteristic form, but connected—through a series of Cornish plants (Ponsanooth and Gwennap, W. Cornwall; Ennisworgy and Minster, E. Cornwall)—with the more typical Dorset (Foxholes Wood) plant. From Ponsanooth itself Mr. Davey has sent me examples of this species which are far more typical than these very weak woodland sheets.—W.M.R.

R. Marshalli, Focke & Rogers, var. semiglaber, Rogers. The Cairns, Ponsanooth, W. Cornwall, v.c. 1, Aug. 4, 1906. A new County record for the species.—F. H. Davey.

R. hirtus, W. & K., var. rubiginosus (P. J. M.)? Big Wood, Wormbridge, Herefordsh., v.c. 36, Aug. 24, 1906.—S. H. Bickham and A. Ley. Certainly not rubiginosus, which is much more strongly armed and less hairy and has an ovate gradually acum. term. lt. with coarser and partly patent teeth. Its best place, I think, is under aggregate R. hirtus, though hardly very near to the type, of which however I still have only a hazy idea.—W.M.R.

R. hirtus, W. & K., var. minutiflorus, P. J. Muell. Big Wood, Wormbridge, Herefordsh., v.c. 36, Aug. 24, 1906. —S. H. Bickham. Yes, this agrees admirably with the plant (Highlands, Mereworth, W. Kent) referred to at the foot of p. 89 of my Handbook, as having been named "R. minutiflorus, P. J. Muell (non Lange!)," by Dr. Focke, in 1896; and I can detect no real difference between them and a rather weaker specimen of Wirtgen's now in my herb.—W.M.R.

R. ochrodermis, A. Ley. Big Wood, Whitfield, Herefordsh., v.c. 36, Aug. 25, 1906.—A. Ley.

Poterium polygamum, Waldst. & Kit. Swithland Reservoir, Leics., v.c. 55, June 9, 1906.—F. L. Foord-Kelcey. Yes, but not mature enough to say which segregate.—S.H.B. & A.L.

Rosa pimpinellifolia, L. × mollis, Sm. Kinfauns, E. Perth, v.c. 89, July 20, 1900. (See "Annals of Scottish Nat. Hist." for 1896, middle of p. 118). In addition to what is said there of this rose, I may add that subsequently I sent specimens in flower, and that the final decision of Crépin was as follows: "Je pense comme vous que c'est bien le R. pimpinellifolia × mollis." Of the correctness of this determination I have no doubt, but there are some forms of the hybrid formerly known as R. involuta, Sm., of which, even studying them on the living bush, I have found it impossible to decide whether the second parent was R. mollis or R. tomentosa, Sm.—W. Barclay. back glandular, therefore recondita or carulea must be one of the parents.—A. Ley. Clearly a hybrid of R. mollis (aggregate) with R. pimpinellifolia. The former parent cannot be carulea, which has the fruit nearly or quite naked; in this plant the fruit is densely glandular-hispid. —E.S.M. Undoubtedly correct; but I do not know these hybrids well. Does not the prickly—not merely bristly fruit point to mollis and not to tomentosa as the second parent?—A.H.W.-D.

R. involuta, Sm., var. Wilsoni (Borr.). Cult. Ledbury, July 1906. I brought the plant from Menai Strait, Bangor. The sea is washing away the bank on which it grows and there is every prospect of the plant being lost.—S. H. Bickham. Crépin referred my wild herbarium-specimen of this to R. pimpinellifolia × tomentosa.—E.S.M. This rose, which I take to be a hybrid of pimpinellifolia × tomentosa, is much nearer to the former than most forms of the same hybrid. I have only seen one which in some respects is nearer still to pimpinellifolia. It was sent to me by the Rev. A. Ley, and was, I believe, first discovered by the late Mr. Purchas. It differed from var. Wilsoni chiefly in being totally destitute of glands on peduncle, fruit and back of calyx.—W. Barclay.

R. tomentosa, Sm. Shoulder of Mutton Hill, Leics., v.c. 55, Aug. 1906. This rose is from a bush by the side of a farm road. It first caught my eye on account of its very deeply coloured flowers. When I went to collect it I found the bush broken down and very nearly destroyed by the hay carts having been drawn over it. However, I secured a few fruits. The leaves are very downy and the

peduncles have a number of stalked glands—which are rather rare with our local roses.—W. Bell. R. tomentosa, Sm., in the direction of subglobosa Baker; there are intermediate forms connecting the two.-E.F.L. Leaf-back hairy, glandular; thorns large, falcate; sepals incurved, assurgent, persistent; R. Andrzeiovii, Steven.—A. Lev. I have not studied this group, but Mr. Ley has; my notes and Déséglise's "Cat. raisonné" credit R. Andrzeiovii, Stev. with eglandular lower surface of leaves, while these are strongly glandular. If a segregate name is sought will not R. cuspidatoides, Crépin, fit it?—A.H.W.-D. One of the numerous variations of R. tomentosa, Sm. R. Andrzeiovii, Steven, which I take to be the same as R. Andrzeiowscii, Steven, Crépin in "Rosae hybridae," p. 45, says that it is a hybrid of R. pimpinellifolia × tomentosa. The variations of R. tomentosa, Sm. have yet to be classed in a satisfactory manner.—W. Barclay.

R. tomentosa, Sm., var. cinerascens, Dum. Auchterarder, July 30, 1897, and Orchardneuk, Aug. 6, 1897, Mid Perth, v.c. 88. This variety of R. tomentosa with the leaf-teeth simple is certainly very rare in my experience. I have found it only in three stations, although there are other forms closely approaching it. Not having specimens enough from one station, I have sent some from each of two. The third station was near Comrie, but the last time I was there I failed to re-discover the bush, though I believe it is still in existence.—W. Barclay. Leaves not truly simply serrate, leaf-back hairy, glandular; thorns narrow, straightish; fruit ovoid; sepals assurgent, persistent: R. omissa, Déségl., var. resinosoides, Crép.—A. Lev. It is true that the leaves are not perfectly simply serrate but they are certainly very nearly so, whereas R. resinosoides, Crép. is said to have them "glandular biserrate." It agrees, however, in other respects more nearly with resinosoides than with cinerascens, but I should he sitate to assert that it was that species, though I do not know the group.—A. H. W.-D.

R. tomentosa, Sm., var. scabriuscula, Sm. Hedge-row, Stoughton, Leics., v.c. 55, Aug. 15, 1906 (fide J. E. Bagnall). This variety appears to be local in Leics., only two other stations being so far known, whilst the type itself is far from common.—A. R. Horwood. Caninae—

Leaves simply serrate (or nearly); sepals falsely persistent; thorns uncinate: R. subcanina or andegavensis. -- A. Ley. I agree with Mr. Ley in thinking this plant has nothing to do with R. tomentosa, and it equally certainly is neither R. andegavensis, which has leaves glabrous beneath, nor R. subcanina, which has eglandular peduncles. It is one of Déséglise's section Collinae, which includes Crépin's group Deseglisii. This is a section I have not studied, but it seems to me to be very near R. dumetorum, var. pseudocollina, Christ, which is the R. collina of most authors. not of Jacquin. This is not the same as Christ's var. sub-collina, which is a variety of R. corifolia, Fr.— A. H. W.-D. Material not well prepared. The petioles and undersides of the leaves are very hairy; so it cannot be either and equiversis or subcanina. May it not be a tomentosa form crossed with canina? I think that not improbable, from the characters.—E.S.M. The specimen I have received has no prickles, and is otherwise poor, so that I will not venture to say what it is till I see better specimens, which should be gathered later in the season. It is certainly neither subcanina nor andegavensis, which have glabrous leaflets. If it is a tomentosa it is not scabriuscula, Baker.—W. Barclay.

R. micrantha, Sm. Old Quarry, Quorn, Leics., v.c. 55, Oct. 11, 1906.—Coll. G. Frisby. Comm. F. L. Foord-Kelcey. "Yes."—A. Ley, W. Barclay, E.S.M.

R. ————? (flowers white). Blaby, Leics., v.c. 55, July 10 and Oct. 1, 1906.—W. A. Vice. I cannot name this.—A. Ley. Though not typical, I think this may be a luxuriant form of R. tomentella Leman.—E.F.L. This is a variation of R. tomentella, Lem. Serrations less compound and leaflets less rounded than in the usual form.—W. Barclay. One of Déséglise's section Pubescentes of the Caninae, and among British plants nearest, I think, to R. canescens, Baker, but by its white flowers and almost glabrous styles, and leaves, or at least some of them resembling those of R. obtusifolia, Desv., but biserrate, it very closely agrees with R. amblyphylla Rip. The pubescent peduncles are unusual—and though mentioned as a characteristic in one or two species—is not, I think, of importance.—A. H. W.-D.

R.——? (flowers pink). By brook, Blaby, Leics., v.c. 55, July 5, 1906.—W. A. Vice. R. lutetiana, f.—A. Ley. Though there is a strong tendency to biserration in some of the leaflets I am unable to make a better suggestion than R. lutetiana, Lem., forma.—A. H. W.-D.

R. canina, L. var. surculosa (Woods), (fide J. E. Bagnall). South Croxton, Leics., v.c. 55, Aug. 6, 1906. New record. The glabrous, distinctly shining leaves of this variety, together with their unusually orbicular outline and their thin texture, give this plant so distinct a character of its own as to render it a well-marked and good variety, differing entirely from any of the other British canina forms.—A. R. Horwood. Under lutetiana —not surculosa, which has robust, many-flowered clusters. --A. Ley. Yes [lutetiana].--E.S.M. R. canina, L., of the group lutetiana, Lem.—W. Barclay. This is certainly not R. surculosa (Woods) type, which has large clusters of flowers, nor is it—I think—his var. β, which has fewer clusters. Stalked glands on the peduncle are so frequent in Woods' species that Déséglise places it in his section Hispidae. The hairs on the petioles and other characters point towards R. fallens, Déségl., a common species on the Continent, and doubtless occurring in Britain, but the hooked prickles are against it. The next best suggestion is R. canina, var. nitens, Desv., but that, in addition to its very shining leaves, should have them more elongated than in R. canina type (i.e., R. lutetiana, Lem.), whereas these are decidedly broader than is usual in that species.— A. H. W.-D.

R. canina, L., var. ——? Battenberg Avenue, Leicester, v.c. 55, Aug. 1906.—W. Bell. R. canina, L., an intermediate between R. lutetiana and dumalis, nearer the former.—E.F.L. Under lutetiana.—A. Ley. Yes; R. canina, L., type (lutetiana).—E.S.M. No plant with petioles and midribs so obviously hairy is likely to belong to the section Lutetianae nor Biserratae (dumalis) and this certainly is not segregate R. lutetiana, Lem. nor R. dumalis, Bechst. It belongs to the section Pubescentes and closely agrees with R. semiglabra (Rip.), a species which differs from R. urbica, Lem. mainly in being hairy on midrib only. Plants from Yorks. and Devon have been thus named by Déséglise.—A.H.W.-D. More or less

hairy on midrib and veins of the underside of leaflets, so that it is neither *lutetiana*, nor *dumalis*, nor an intermediate. Probably belongs to group *dumetorum*, Thuill., but had better be gathered afresh and at a later date for certainty.—W. Barclay.

R. canina, L., var. dumalis, Bechst. Regent Road, Leicester, v.c. 55, July 1906.—Coll. L. M. Bell. The petals were nearly crimson and the bush formed a striking object when in full bloom. I visited the station late in August with a view to collecting fruit; but, alas! the hedge had been trimmed and not a single fruit was obtainable.—W. Bell. R. canina, L. var. dumalis, Bechst. The commonest rose in some districts.—E.F.L. Rosa dumalis, var. rubescens of Ripart, I believe.—A. Ley. Good dumalis.—E.S.M. Yes; flowers deeper in colour than usual.—W. Barclay. Correctly named. The leaves are too small for R. rubescens, Rip., and it differs in other respects, but it may be his var. erythrella, which differs in no respect from R. dumalis, Bechst. except in its bright rose flowers.—A. H. W.-D.

R. ————? (flowers pink). Blaby, Leics., v.c. 55, July 7, 1906.—W. A. Vice. Well marked dumalis.—A. Ley. This undoubtedly belongs to the section Biserratae (dumalis), but I should hesitate to call it well marked R. dumalis, Bechst. Its woolly styles place it at least equally near R. eriostyla Rip., a species which has been found in Devonshire and Cheshire. There are minor points in which it differs from both species, but on the whole I incline to R. eriostyla Rip.—A. H. W.-D.

R. ———? (flowers pink). Blaby, Leics., v.c. 55, July 7 and Oct. 1, 1906.—W. A. Vice. R. dumalis.—A. Ley. If this has not been cut from the identical bush that the last came from, it is at least identical in characteristics and I should label both R. eriostyla Rip., or for those who object to "undesirable aliens" R. dumalis, Bechst. var.—A. H. W.-D.

R. canina, L., var. ————? Braunstone, Leics., v.c. 55, Sept. 15, 1906.—W. Bell. R. canina, L. var. verticillacantha (Mérat.), very weak form.—E.F.L. I agree with Mr. Linton.—W. Barclay. Yes, either very weak verticillacantha or andegavensis.—A. Ley. The two

pedicels on my sheet have only one gland between them, and the leaf-serration is almost simple. Scarcely off type—canina (lutetiana).—E.S.M. Though my specimen has only one peduncle out of four very slightly glandular, I think this is more probably a weakly glandular example of the Hispidae section than of the Lutetianae or Biserratae, in which any glands at all on the peduncles are exceedingly rare. I have, however, seen them in R. Malmundariensis, Lej. and Lejeune admits them in his description, but its leaves should be much more glandular biserrate. Perhaps weak R. verticillacantha (Mérat.) is the best suggestion.—A. H. W.-D.

R. canina, L., group dumetorum, Thuill. Lochearnhead, Mid. Perth, v.c. 88, Aug. 25, 1898, etc. This rose I sent to Crépin in 1897. Like myself, he did not know what to make of it-"the styles are protruding and form a column exactly as in the R. stylosa, the stigmas staged one above the other and forming a little cone." "Sometimes, in drying, certain varieties of R. canina may simulate a column, but in that case the stigmas form a rounded head." The note is too long to quote in full but he seemed to think it might be a hybrid, of which R. arvensis would be one parent. I could not see how it could be a hybrid, and certainly R. arvensis could not be one parent, as there is no R. arvensis within miles of it, even in a garden. Next year, on getting specimens in flower, he hit upon what is undoubtedly the true solution of the difficulty. I translate his note in full. "This form, so interesting by its styles in a protruding column as in the R. stylosa, Desv., is probably in reality only a variety of R. canina, L., of the group R. dumetorum, Thuill. If this is so it must be confessed that it is very embarrassing for botanists who do not know well the R. stylosa and who, by reason of its protruding styles, would be tempted to call it R. stylosa. It is to be noticed that this protruding column is more or less pubescent, whilst in the R. stylosa it is always glabrous."—W. Barclay. Not dumetorum, Thuill. persistent; leaves hairy on veins beneath, glabrous above. ? implexa (Gren.).—A. Ley. I think that this is not truly "subcristate," and therefore not a form of R. coriifolia Fr., to which implexa belongs. The long pedicels and narrow bracts make for a canina variety. I believe it to be a northern form of urbica, which Crépin placed in the dumetorum group.—E.S.M. It is curious that Crépin should have made so much of the projecting styles, which is not at all an uncommon feature of the Caninae. This plant seems quite at home in the Pubescentes (dumetorum) section. The question is, are its sepals persistent? I think not, because it is very exceptional for plants of the group coriifolia, Fries, to which it would then belong, to have other than densely woolly styles, in a rather large head, so I do not see my way to go further than R. dumetorum, Thuill, sensu lato. It is not R. implexa, Gren., which has its leaves never more than slightly hairy on midrib only, while these are hairy all over beneath, not on veins only as Mr. Ley says. The leaves of dumetorum are often glabrous above but the petioles are very rarely prickly as in this plant.—A. H. W.-D.

R. glauca, Vill. Saintfield, Co. Down, July 18 and Sept. 3, 1906.—C. H. Waddell. Doubly serrate leaf and glandular petiole: good subcristata.—A. Ley. I agree. Fruit remarkably round.—E.S.M. Yes, of the group subcristata, Baker.—W. Barclay. Not glauca pure and simple but R. subcristata, Baker.—A. H. W.-D.

R. glauca, Vill., var. Reuteri (Godet), fide J. E. Bagnall. Lowesby, Leics., v.c. 55, July 1905. New record. Until the publication in 1904 (Jl. Bot.) of additions to the Flora of Leics. since 1886 there was no record of R. glauca, Vill. for v.c. 55. Then R. glauca (aggregate) and the vars. subcristata, implexa and Watsoni were added to the list. I have since found the var. subcanina, Christ, and the present var., if it can be considered as not the typical form. Since Mr. Bagnall first identified this plant for me from the above locality I have found it in several other stations.—A. R. Horwood. Not Reuteri—if the sepals rise and are persistent then subcristata.—A. Ley. Styles nearly glabrous; bracts not so broad as in R. glauca, etc. I think that it is R. canina var. dumalis.— E.S.M. Not Reuteri. If a glauca form, of which I have some doubt, then subcristata, Baker. Should be gathered later to make sure that it is not R. canina, var. dumalis, Bechst.—W. Barclay. In the first place R. Reuteri of Godet is regarded by most authors as synonymous with R. glauca, Vill., in fact it is usually taken as the type of the group. In the second place R. glauca, Vill. and

R. Reuteri, God. have uniserrate leaves, while these are rather strongly biserrate. The fruit is young to determine the direction of the sepals, but the general look of the specimen and its subglabrous, not woolly, style point to the Canina group; for British authors I think as aggregate R. dumalis would cover it. Continental botanists would perhaps name it R. insignis, Déségl., from which it differs in subglabrous style, or R. oblonga, Déségl., which should have straighter prickles.—A. H. W.-D.

R. glauca, Vill., var., Watsoni, Baker. Great Stretton, Leics., v.c. 55, July 29, 1906.—C. B. Headly. Not Watsoni: intermediate between lutetiana and dumalis.—A. Lev. Sepals strongly reflexed; leaves very slightly compoundserrate. Best called type R. canina (lutetiana).—E.S.M. Not Watsoni, Baker, but it has the short peduncles, large bracts and the stigmas of R. glauca, Vill., var. subcristata, Baker. For certainty it should be gathered later when the fruit is nearly ripe.—W. Barclay. This has nothing to do with R. glauca but belongs to the Biserratae (dumalis) section. I see no reason for supposing it to be intermediate between that and R. lutetiana. R. dumalis, Bechst. is not so strongly biserrate as appears to be commonly supposed, and many examples may be found named on good authority which are less biserrate than this. It agrees closely with R. cladoleia, Rip., a species closely allied to R. dumalis, Bechst. but remarkably unarmed, and with nearly glabrous styles. These styles are rather hairy but less so than in average dumalis.— A. H. W.-D.

Pyrus scandica, Asch. f., cultivata. Conigree Wood, near Ledbury, Herefordsh., v.c. 36, May 28, 1905.—S. H. Bickham. Correct.—A. Ley.

Sempervivum tectorum, L. On thatch, Blaby, Leics., v.c. 55, July 23, 1906.—W. A. Vice.

Epilobium montanum, L. Old masonry, Sewage Works, Leicester, v.c. 55, July 1906.—H. P. Reader and W. Bell. There must have been thousands of similar plants on the old masonry of the sewage tanks. None were over 15 inches in height, while many were not more than 2 inches, with a single flower. I have put it under E. montanum; but I am not certain whether it is a form

or hybrid. The local *E. montanum* is usually 2-3 feet high. —W.B. This is *E. montanum*, L., forma *minor aprica*, Haussknecht; merely a small state, due to the exposed situation and scarcity of soil.—E.S.M.

E. roseum × obscurum. Cropstone Reservoir, Leics., v.c. 55, July 20, 1905. This hybrid, specimens of which from this locality were identified as such by the Rev. E. S. Marshall for the late Rev. T. A. Preston, and recorded in the "Trans. Leic. Lit. and Phil. Soc.," Vol. III., p. 432, still continues to flourish on the silty ground of Cropstone Reservoir, growing in great profusion, and reaching a height of 3-4 feet, as mentioned by Mr. Preston.—A. R. Horwood. Rightly named. The lower leaves are not so long-stalked as usual, in the specimen before me.—E.S.M.

Enothera Lamarkiana, Ser. in DC. Prod. III., p. 47. On sandy ground (formerly sandhills) off Beach Road, and in Messrs. Porritts' timber yard, St. Anne's-on-the-Sea, W. Lancs., v.c. 60. Root leaves, 4th Aug.; flowering stems, 11th Aug.; separate flowers, 18th Aug.; fruiting spikes, 20th Oct., 1906. This is an American plant which has long been established on the sandhills at St. Anne's, and is the species which Prof. Hugo de Vries has made so memorable in his recent work entitled "Die Mutationstheorie. Versuche und Beobachtungen über die Entstehung von Arten im Pflanzenreich," Leipzig, Vols. I. (1901) and II. (1903). The history of this remarkable plant formed the subject of an address which I gave at the annual meeting of the Manchester Field Club, 29th Jan., 1907, and when ready a copy shall be sent to each member of the Club; the plates which accompany the present Report are taken from the paper in question. I have sent a copious supply of the plant, in its various stages, to the Club, as well as packets of seeds, so that members who have means to cultivate plants may follow up the experiments initiated by de Vries.—Charles Bailey.

E. odorata, Jacq. Burnham Sandhills, N. Somerset,
v.c. 6, Sept. 14, 1906. First recorded from there in 1859.
—H. S. Thompson.

Carum segetum, Benth. and Hook. fil. Bank by Churchyard, Hungarton, Leics., v.c. 55, Aug. 6, 1906. The only notice of this species in the "Flora of Leics," 1886, is

under "excluded species," p. 341, where it is mentioned as "Recorded by Thompson from 'plantations at West Cotes,' but probably an error." In Jl. Bot., 1904, p. 343, it is recorded from Barrow Lime-works, 1902, as found by Mrs. F. L. Foord-Kelcey, and from the above station in 1903 by the contributor. At the first-named locality it is certainly a recent introduction. At Hungarton, a secluded village, far from any place at which casuals might be expected to occur, it is well established, and it is difficult to account for its introduction. With it grow numerous plants of Caucalis nodosa and a single plant of Salvia Verbenaca, both local plants in v.c. 55. It is hoped that root-leaves may be contributed next year.—A. R. Horwood.

C. Bulbocastanum, Koch. Waste ground, Luton, Beds., v.c. 30, July 16, 1906.—D. M. Higgins.

Pimpinella Saxifraga, L., var. dissecta, With. Stony ground, Quorn, Leics., v.c. 55, Aug. 7, 1906.—F. L. Foord-Kelcey. Yes, but more root-leaves wanted.—A. Ley.

Enanthe Phellandrium, Lam. Saddington Reservoir, Leics., v.c. 55, July 26, 1906. Of the two species, E. Phellandrium and fluviatilis, the former is decidedly the commoner. At Saddington acres of it fringe the borders of the Reservoir, making progress in a boat difficult except in deep water. The standard British text-books do not make the distinction between Phellandrium and fluviatilis very clear, but in the "Flora of Herts." by Webb and Coleman (the latter at one time an energetic Leics. botanist) a very lucid account is given in the appendix by Coleman, who first distinguished fluviatilis as a species.—A. R. Horwood. Quite right.—E.F.L.

E. fluviatilis, Coleman. Canal back-water, Aylestone, Leics., v.c. 55, July 18, 1905. This species is more or less confined to the running water of streams and rivers, unlike E. Phellandrium, which is almost always to be found in the still waters of ponds or reservoirs. The submerged leaves differ entirely from those of Phellandrium in being wedge-shaped whilst those of the latter are mainly capillary.—A. R. Horwood. I think all right.—E.F.L.

Peucedanum palustre, Moench. Wicken Fen, Cambs., v.c. 29, Sept. 6, 1901.—S. H. Bickham.

Heracleum Sphondylium, L., var. angustifolium, Huds. Park Lane, Lindfield, E. Sussex, v.c. 14, Aug. 21, 1906.—R. S. Standen. An intermediate form.—S.H.B. and A.L.

Galium sylvestre, Poll. (1) Limestone rocks, Miller's Dale, Derbysh., v.c. 57, June 26, 1906.—F. L. Foord-Kelcey. (2) Rocky slopes, Cheddar Gorge, N. Somerset, v.c. 6, June 29, 1906.—S. H. Bickham. (3) On the limestone between Castleton and Tideswell, Derbysh., v.c. 57, June 27, 1906.—T. E. Routh. This last we think to be var. nitidulum (Thuill.).—S.H.B. and A.L. This [Castleton plant] is the G. nitidulum (Thuill.) of our Floras; but I have a note from Mr. Arthur Bennett that the name has been denied to our plant.—E.S.M.

Asperula taurina, L. Edge of rough shrubbery, near Colwall, Herefordsh., v.c. 36, June 6, 1906.—S. H. Bickham.

Valeriana sambucifolia, Willd. Leigh Wood, near Bristol, N. Somerset, v.c. 6, July 2, 1900.—J. W. White. Yes.—W. H. Beeby.

Solidago Virgaurea, L., var. cambrica (Huds.). Clogwyn d'yr Arddu, Carnarvonsh., v.c. 49, Aug. 11, 1906. Hudson's plant is said to have leaves hairy both sides. These are glabrous or subglabrous, and the narrower leaved forms may belong to S. Virga-aurea L., var. alpestris Gaud., which appears to be a glabrous narrow-leaved variety.— A. H. Wolley-Dod. I consider correctly named.—A. Ley. Not quite Hudson's S. cambrica, but more or less intermediate between that and the usual lowland plant. Only a state.—E.S.M. "Solidago (cambrica) foliis lanceolatis subserratis subincanis paniculis corymbosis terminalibus." Hudson, ed. 3, p. 367 (1798). "S. Virga aurea, δ alpestris, humilis foliis lanceolatis vel elliptico-lanceolatis fere glabris, racemis inferioribus folio fulcrante saepe brevioribus, capitulis maioribus: S. alpestris, Waldst. and Kit. plant. rar. Hung. t. 208. Gaudin, "Fl. Helv." V., 317 (Koch, ed. II., p. 390). It appears that we use the name cambrica as a variety, but Hudson described it as a species. The name of it as a variety seems to be S. V. aurea γ pumila. Gaud. "Fl. Helv." V., 316 (1829), but Smith made it γ cambrica, "Eng. Fl." III. 438 (1825).—A.B.

Another gathering by Major Wolley-Dod on the same day and in the same place was reported upon as follows:—These may represent the var. alpestris of Gaudin, which I do not know.—A. Ley. Both these specimens are hairy on the underside and ciliated on the margins of the leaves, so I do not see how they can be referred to Gaudin's alpestris.—A.B.

S. Virgaurea, L., var. cambrica (Huds.). Porth Towan, W. Cornwall, v.c. 1, Sept. 18, 1906.—F. H. Davey. Not S. cambrica: refer to the type.—A. Ley. I believe Mr. Ley is right in so referring it.—A. Bennett. This, I think, agrees with Hudson's description in "Flora Anglica" (ed. 2, p. 367): foliis lanceolatis subserratis subincantis [subincanis?], paniculis corymbosis terminalibus," except that the foliage is quite green. At best, it seems only to be a state of exposure, which I have seen decidedly more marked on cliffs near the Lizard.—E.S.M.

Inula crithmoides, L. Portchester, S. Hants., v.c. 11, Aug. 24, 1906.—R. S. Standen.

Pulicaria vulgaris, Gærtn. On the green at Bank, near Lyndhurst, S. Hants., v.c. 11, Aug. 20, 1906.—A. B. Jackson.

Ambrosia trifida, Linn. In profusion on building land, formerly sandhills, bounded by Park Road, Richmond Road, Orchard Road, and St. Thomas's Road, St. Anne'son-the-Sea, W. Lancs., v.c. 60, Sept. 22, 1906. Gathered in the fruiting condition. Transported examples germinated freely in the spring of 1907. The same ground from which these plants were derived produced other species of Ambrosia, viz., A. artemisifolia, Linn.; A. psilostachya, DC., and A. acanthicarpa, Hook. (=Gartneria acanthicarpa,Britton), as well as the allied Cyclachana xanthifolia, Nutt. The only one of these species which, so far, has secured permanent lodgment at St. Anne's is A. artemisifolia, Linn., (printed on my labels and in the Watson Report for 1903-4, p. 13, artemisia folia); there can be little doubt that this species is an old-established plant on the sandhills of St. Anne's, from what I have recorded in the "Manchester Memoirs," Vol. LI., No. 11.—Charles Bailey.

A. artemisifolia, L. From the same locality as the last, Sept. 15, 1906. By the courtesy of the Manchester Literary and Philosophical Society, one of the plates which

accompanied my paper in the "Memoirs," Vol. LI., is reproduced as Plate V. of the present Report.—Charles Bailey. (See B.E.C. Rept. 1902, p. 46 and 1903, p. 21).

Artemisia Stelleriana, Besser. Marazion Beach, W. Cornwall, v.c. 1, Sept. 15, 1906. This handsome species occurs in comparative plenty on the sandy beach, where it flourishes in company with Eryngium maritimum, Linn., and Cakile maritima, Scop. It was first recorded for that locality by the late Mr. W. A. Glasson, in the "Trans. Penzance Nat. Hist. and Ant. Soc." for 1888. Lady Smyth recently told Mr. Clement Reid that she has known the plant there for fully thirty years. Although there were scores of flowering branches in good condition in Sept., I could see that there had been a still greater number about two months earlier. There is no garden near, and nothing to point to the origin of this Kamschatkan species in such an unexpected locality. For further valuable information about this plant in Britain, see "Jl. Bot.," 1894, pp. 70-75, and 1895, p. 316, also Colgan's "Flora of County Dublin," p. 110.—F. H. Davey. Nice specimens and an interesting extension of the species. —E.F.L.

Carduus crispus, L., var. acanthoides, L. Newbold-on-Stour, Worcs., v.c. 37, Aug. 25, 1906.—C. H. Waddell. No: type.—S.H.B., A.L., E.F.L. This seems to be the C. acanthoides of some British authors. But it differs from a Scandinavian specimen, which I received from Mr. Beeby as true C. acanthoides, L., in the more crowded and somewhat smaller heads, and the very floccose underside of the leaves. I should leave it as C. crispus, L.—E.S.M.

Centaurea melitensis, L. Casual in garden, Blaby, Leics., v.c. 55, Sept. 1906.—W. A. Vice. Agrees with my specimens from S. of France and the Canaries.—E.F.L.

Crepis fætida, L. Seaford, E. Sussex, v.c. 14, July 8, 1906.—C. E. Salmon.

Hieracium: ordine W. R. Linton. ("Brit. Hier." 1905).

Hieracium anglicum, Fr., var. acutifolium, Backh. Near Braemar, S. Aberdeen, v.c. 92, July 17, 1906. Very characteristic.—E. S. Marshall. Yes.—W.R.L.

- H. Langwellense, F. J. H., forma, (styles livid, ligules ciliolate). By streamsides, near the Spittal of Glen Shee, E. Perth, v.c. 89, July 12 and 14, 1906.—E. S. Marshall. Best under H. Langwellense.—W.R.L.
- H. flocculosum, Backh., forma, (styles livid, ligules glabrous). Near the Spittal of Glen Shee, E. Perth, v.c. 89, July 10, 12 and 16, 1906. The Rev. W. R. Linton writes that he has had this plant in cultivation, and eventually decided that it was best placed under H. flocculosum. It mostly grew on river-shingles; which may account for its untypical appearance. Typical flocculosum occurs there.—E. S. Marshall.
- H. lima, F.J.H. Cheddar Gorge, N. Somerset, v.c. 6, June 21, 1906.—S. H. Bickham. Yes.—W.R.L.
- H. Leyi, F.J.H. Ystolion duon, Carnarvonsh., v.c. 49, July 14, 1904.—A. Ley. Yes.—W.R.L.
- H. eustomon, Linton. Penard Castle and cliffs, Glamorgansh., v.c. 41, June 1, 1903.—A. Ley. Yes: a variety of Schmidtii.—W.R.L. See B.E.C. Rept., 1903, p. 21.
- H. lasiophyllum, Koch, (styles yellow). Glen Slugain, Invercauld Forest (at 2,000 feet), S. Aberdeen, v.c. 92, July 19, 1906.—E. S. Marshall.
- H. planifolium, F.J.H. Symonds Yat, W. Glos., v.c. 34, May 30, 1904.—A. Ley. Yes. This is a variety, not a species.—W.R.L.
- H. rubicundum, F.J.H., (styles yellow). Near Braemar, S. Aberdeen, v.c. 92, July 1906.—E. S. Marshall. The same as the Dhuloch form of H. rubicundum, which differs a little from the Dumfries and the Welsh plant in having more glandular heads and sharply cut leaves.—W.R.L.
- H. nitidum, Backh., var. siluriense, F.J.H. (1) Glyn Collwng, Brecon Beacons, v.c. 42, July 26, 1900. See B.E.C. Rept. 1902, p. 51. (2) Glyn Tarell, Breconsh., July 25, 1901. (3) Origin, Nant-ddu, Glyn Taff, S. Breconsh. Cult. Sellack garden, June 23, 1902. No. 1 grew on limestone, and shews the plant in a small, somewhat starved form. No. 2 is the typical plant of the Brecon Beacon range. No. 3 shews the state which the plant assumes

when grown in light sandy garden loam.—A. Ley. May be right; some of the pieces don't look very typical.—W.R.L.

- H. Sommerfeltii, Lindeb., (styles yellow). Little Craigindal, Braemar, S. Aberdeen, v.c. 92, July 19, 1906.— E. S. Marshall. Yes.—W.R.L.
- H. hypochæroides, Gibs., var. saxorum, F.J.H. (1) Mountain rocks near Cellwen, W. Breconsh., v.c. 42, July 6, 1906. (2) Fan fawr, Breconsh., and Fan fechan, Carmarthensh. (v.c. 44), July 12, 1906. (1) This is one of the localities from which the plant was originally described. The blotches are always found on the early root-leaves and on the seedlings: on the later leaves they are usually absent: the plant may then be recognised by the perfectly glabrous tips of the acute phyllaries, which are erect in bud.—A. Ley. Yes.—W.R.L.
- H. scoticum, F.J.H., forma. Origin, Hepste Glen,
 S. Breconsh., v.c. 42: garden, Sellack, June 23, 1902. This plant remained for a long time without a name; the name under which it is now sent out was given by Rev. W. R. Linton: but it is very far from typical H. scoticum, F.J.H.—A. Ley.
- H. silvaticum, Gouan, var. micraeladium, Dahlst., (styles livid, ligules glabrous). Banks of the Ericht at Craighall, near Blairgowrie, E. Perthsh., v.c. 89, July 4, 1906. Confirmed by Rev. W. R. Linton.—E. S. Marshall.
- H. pellucidum, Laest., var. lucidulum, Ley. (1) Tarenyr-Esgob, Black Mountain, Breconsh., v.c. 42, July 9, 1898. (2) Craig Cille, Breconsh., June 9, 1903. (3) Ribbledale, M.W. Yorks., v.c. 64, June 1903.—A. Ley. Yes.—W.R.L.
- H. ciliatum, Almq., var. repandum, Ley. Craig Rhiwarth, W. Breconsh., v.c. 42, June 10, 1904. This plant is the most abundant Hawkweed upon several of the cliffs (both limestone and sandstone) of Breconshire.—A. Ley.—(See B.E.C. Rept. 1905, p. 175).
- H. serratifrons, Almq., var. Cinderella, Ley. Near Caerphilly, Glamorgansh., v.c. 41, June 1905. For a description of this plant see "Jl. Bot.," March 1907, p. 109.
 —A. Ley.

- H. sciaphilum, Uechtr. Rocks, Rowallane, near Saintfield, Co. Down, July 9, 1906.—C. H. Waddell. H. Cinderella.—A. Ley. Yes.—W.R.L. Unlike H. sciaphilum both in foliage and inflorescence. Identical with Mr. Ley's H. serratifrons, var. Cinderella, except that the head-glands are a little denser.—E.S.M.
- H. subulatidens, Dahlst. Taren-yr-Esgob, Black Mountain, Breconsh., v.c. 42, July 1901.—A. Ley. Yes, the plant so called; I am not sure whether identical with Dahlstedt's plant.—W.R.L.
- H. subulatidens, Dahlst., var. cuneifrons, A. Ley. Taren-yr-Esgob, Black Mountain, Breconsh., v.c. 42, July 1901. In extreme examples this variety stands very well marked from the type in the cuneiform base of the leaves; but is connected with the type by intermediates. It is feared that some of the examples now sent are intermediate.—A. Ley. Yes.—W.R.L.
- H. rubiginosum, F.J.H. (1) Ingleborough, July 1903, and (2) Kettlewell, July 1, 1904, M. W. Yorks., v.c. 64.—A. Ley. (3) Cheddar Gorge, N. Somerset, v.c. 6, June 21, 1906. (See B.E.C. Rept., 1905, p. 36).—S. H. Bickham. (3) Remarkably broad-leaved state; still I see that some of the W. Yorks. plants approach this Cheddar specimen in this feature.—W.R.L.
- H. holophyllum, W. R. Linton. Hesleden Glen, M. W. Yorks., v.c. 64, July 1904. The specimens sent are fairly characteristic of the species as seen in W. Yorks., but are small; probably seedlings of second or third year's growth.—A. Ley. (See B.E.C. Rept., 1904, p. 30).
- H. petrocharis, Linton. (Styles dull yellow, ligules ciliate). Glen Ey, Braemar, S. Aberdeen, v.c. 92, July 28, 1906.—E. S. Marshall. (Teste W. R. Linton).
- H. cymbifolium, Purchas. (1) Clapham Fells, June 30, 1903, and (2) Cray Gill, Buckden, June 30, 1904, M. W. Yorks., v.c. 64. The Cray Gill plant exhibits more hair than is usual on the phyllaries: but both parcels may be relied on as the true plant.—A. Ley. Yes, though not altogether typical.—W.R.L. (3) The Quarries, Wirksworth, Derbysh., v.c. 57, July 7, 1906.—W. Bell. Certainly. H. cymbifolium: luxuriant state.—W.R.L.

H. sagittatum, Lindeb., forma. Craig Gledsiau, Brecon Beacons, v.c. 42, July 4, 1905. This is one of several forms of this plant which grow in Breconsh.: the typical plant has not been found except in Scotland, (see "Brit. Hier.," p. 52).—A. Ley. This seems exactly the same as the Fan fechan, Carmarthensh. plant, which is near the var. maculigerum.—W.R.L.

H. sagittatum, Lindeb., var. maculigerum, W. R. Linton. Kettlewell, M. W. Yorks., v.c. 64, June 28, 1904. For a description of this plant see "Brit. Hier." p. 53.—A. Ley. The specimen submitted to me looks very off type for maculigerum; the leaves are narrow, and there are no stem-leaves; however the panicle is that of maculigerum.—W.R.L.

H. euprepes, F.J.H., var. glabratum, Linton, (styles livid). Various localities near the Spittal of Glen Shee, E. Perthsh., v.c. 89, and Braemar, S. Aberdeensh., v.c. 92, July 1906. These are all named, or confirmed by Rev. W. R. Linton.—E. S. Marshall.

H. cæsiomurorum, Lindeb., (styles livid). About Braemar, S. Aberdeensh., v.c. 92, July 7, 1906.—E. S. Marshall. (Teste W. R. Linton).

H. duriceps, F.J.H., var. cravoniense, F.J.H. Near Chapel-le-Dale, M. W. Yorks., v.c. 64, July 1902. (See B.E.C. Rept., 1902, p. 53).—A. Ley.

H. vulgatum, Fr. The Quarries, Wirksworth, Derbysh., v.c. 57, July 7, 1906.—W. Bell. Nearly typical.—W.R.L.

H. acroleucum, Stenstr., var. dædalolepium, Dahlst. (Styles livid: ligules glabrous: foliage purplish, coriaceous, veins pellucid). Shingles by Shee Water, E. Perthsh., v.c. 89, July 16, 1906.—E. S. Marshall. (Fide W. R. Linton).

H. acroleucum, Stenstr., var. mutabile, Ley. Cerrig Haffes, S. W. Breconsh., v.c. 42, Aug. 2, 1906.—A. Ley. Yes.—W.R.L.

H. pinnatifidum, Lönn. (1) Bank at the tubular bridge, Menai Strait, Carnarvonsh., July 10, 1904, and (2) Woods in the Ogwen Valley, between Bangor and Bethesda, Carnarvonsh., July 12, 1904, v.c. 49. For a short description

of this plant see Jl. Bot., 1907, p. 110.—A. Ley. This form is not identical with the Scandinavian plant, which has narrower leaves and heads with more numerous glandular hairs; still it is a form of it.—W.R.L. (3) Wall by side of Canal, Boro' Yard, West Bridge, Leicester, v.c. 55, Aug. 1906.—W. Bell. This is *H. pinnatifidum*, Lönn., or very near it.—W.R.L.

H. sciaphilum, Uechtr. The Quarries, Wirksworth, Derbysh., v.c. 57, July 7, 1906.—W. Bell. Yes.—W.R.L.

H. sciaphilum, Uechtr., var. amplifolium, Ley. (1) Shady bank, Kerne Bridge, Herefordsh., v.c. 36, July 27, 1906.—S. H. Bickham. Not first-rate.—A. Ley. (2) Symonds Yat, W. Glos., v.c. 34, June 21, 1900.—A. Ley.

H. cacuminatum, Dahlst. (1) Coniston Lake, N. Lancs., v.c. 69, July 14, 1905. (For a short description of this form see Jl. Bot. 1907, p. 111).—A. Ley. I think this form will have to be separated from H. cacuminatum, Dahlst., which has narrower, sharper toothed leaves, and all the stem-leaves petioled. This form I have from Kent to Lancs. and from several parts of Wales.—W.R.L. (2) Quarries, Wirksworth, Derbysh., v.c. 57, July 7, 1906. Plentiful in the highest quarry—nearest the High Peak railway.—W. Bell. I believe this to be H. cacuminatum, Dahlst., a form which I have from many parts of Britain, and which I have only recently identified as British. It used to be lumped with H. sciaphilum.—W.R.L.

H. pulchrius, A. Ley. (1) Craig-ddu, Breconsh., v.c. 42, July 3, 1905. (2) Fan fechan, Carmarthensh., v.c. 44, July 5, 1905.—A. Ley. Yes.—W.R.L.

H. tridentatum, Fr., var. setigerum, A. Ley. Hedgebank, Glais, Glamorgansh., v.c. 41, Aug. 9, 1905. (For description of this form, see "Brit. Hier.," p. 81).—A. Ley. I think right.—W.R.L.

H. rigidum, Hartm., var. trichocaulon, Dahlst., (styles dark). Near Kingston, S. Somerset, v.c. 5, Aug. 16, 1906.

—E. S. Marshall. Much like the English plant so named; the Scandinavian plant has longer, narrower leaves, less toothed, and many fine glands on the heads, so that your plant is not exactly it.—W.R.L. in litt.

H. corymbosum, Fr. (1) Pont-faen, Breconsh., v.c. 42,
Aug. 4, 1906.—A. Ley. Is not this nearer var. salicifolium?
—W.R.L. (2) Upper Tawe Valley, W. Breconsh., Aug. 2,
1906.—A. Ley. Yes.—W.R.L.

H. corymbosum, Fr., var. salicifolium, Lindeb. Great and Little Langdale, Westmorland, v.c. 69, July 1905. (See B.E.C. Rept., 1905, p. 179).—A. Ley.

H. Ogweni, Linton. Origin, Nant Francon, Carnarvonsh., v.c. 49. Cult. Sellack, July 1903.—A. Ley.

Lobelia Dortmanna, L. Llynau Crogenen, Arthog, near Barmouth, Merionethsh., v.c. 48, July 27, 1906.—G. Goode and R. H. Goode.

Phyteuma spicatum, L. Tilehurst Wood, Hailsham, E. Sussex, v.c. 14, June 14, 1906.—Coll. E. Bray. Comm. F. L. Foord-Kelcey. A most acceptable contribution.—S.H.B.

Campanula Rapunculus, L. For many years an occasional weed outside the kitchen garden at "Underdown," Ledbury, Herefordsh., v.c. 36, July 4, 1906. The garden is a very old one—was this plant formerly cultivated?—S. H. Bickham.

Statice Limonium, L., var. pyramidalis, Syme. Bosham Creek, W. Sussex, v.c. 13, Aug. 23, 1906.—R. S. Standen. Yes, I suppose Syme's "pyramidalis," which is surely only a luxuriant "state" (= Limonium vulgare, Mill, f. pyramidale), and this is not very good even for that.—C.E.S.

S. Neumani, C. E. Salmon, (S. Limonium × rariflora). Bosham Creek, etc., W. Sussex, v.c. 13, Aug. 23, 1906.—R. S. Standen. Yes, I agree, all forms of this variable hybrid.—C.E.S.

S. rariflora, Drej. Bosham Creek, W. Sussex, v.c. 13, Aug. 23, 1906.—R. S. Standen. Limonium humile, Mill. (= Statice bahusiensis, Fries). The name "S. rariflora, Drej." indicates both the hybrid with L. vulgare, Mill., and the f. nanum of L. humile, and should not be applied to this plant.—C.E.S.

Armeria maritima, Willd. (alpine form). Glen Lochy (2,000 feet), Glen Shee, E. Perthsh., v.c. 89, July 13, 1906.

"This is my S. [Statice] linearifolia, var. planifolia (Syme)." G. C. Druce in litt. Mr. Arthur Bennett considered the leaves too narrow for Syme's variety. It is not quite a usual coast-form.—E. S. Marshall.

Primula acaulis, L., var. caulescens, Koch. Hill Top Farm, Ledbury, Herefordsh., v.c. 36, April 15, 1906.—S. H. Bickham. Yes.—A. Ley. I agree to your Primula as being P. acaulis, var. caulescens. The flowers of Primrose are usually on a short submerged peduncle which is rarely exserted and so caulescent.—E.F.L. in litt.

P. scotica, Hook. Durness, W. Sutherland, v.c. 108, Aug. 11, 1906.—F. C. Crawford.

Lysimachia thyrsiflora, Ait. Stormont Loch, near Blairgowrie, E. Perthsh., v.c. 89, July 6, 1906.—E. S. Marshall. Lovely specimens of a plant badly wanted.—S.H.B.

Trientalis europæa, L. (1) Townhill Wood, Dunfermline, Fifesh., v.c. 85, June 14, 1900.—F. C. Crawford. (2) Woods at Culter, S. Aberdeensh., v.c. 92, July 4, 1906.—M. Skene. All very good specimens.—S.H.B.

Erythræa littoralis, Fr. Pegwell Bay, E. Kent, v.c. 15. Sent in case it may be a new v.c. record.—F. L. Foord-Kelcey. No.—E. pulchella, Fr.—S.H.B. and A.L. Certainly not littoralis. It is pulchella, which is recorded from Pegwell Bay in G. E. Smith's "Cat. Pl. in S. Kent," (1829). These plants are probably the "forma subelongata" of Wittrock.—C.E.S.

Gentiana germanica, Willd. Harlington, Beds., v.c. 30, Aug. 14, 1906.—D. M. Higgins.

Pneumaria maritima, Hill. (1) Sea-shore, Dounreay, Caithness, v.c. 109, Aug. 16, 1906.—F. C. Crawford. (2) Gravel-beach, W. of St. John's Point, Co. Down, July 15, 1902.—Coll. R. Ll. Praeger. Comm. C. H. Waddell.

Myosotis arvensis, Lam., var. umbrosa, Bab. Under shaded hedgerows, S. Croxton, Leics., v.c. 55, May 30, 1906. The fls. were as conspicuous as those of M. sylvatica, to which it bears a homœomorphic resemblance until examined more closely; but in the process of drying they quickly lose their character. The variety seems to be a much taller, more hirsute and more robust form of the type, the general facies being quite distinct, apart from the emphasized difference in the flowers.—A. R. Horwood. Yes.

—A. Ley and E.F.L. Hardly looks large-flowered enough for *umbrosa*.—C.E.S. In March, 1889, Prof. Babington wrote to me as follows:—"I have struck the word *umbrosa* out, and am sorry to find it in the L.C. I believe it to be only a shade-plant with broader leaves and larger flowers, but undeserving of special notice." It is expunged from Bab. Man., ed. IX.—E.S.M.

Cuscuta europæa, L. (1) Clover field, Hauxton, Cambs., v.c. 29, Sept. 1906.—E. J. Allard. Seems to me correct.—S.H.B. I should call this plant C. Trifolii, Bab. -E.F.L. I have never seen C. europæa growing Clover, or in cultivated fields, it occurs on very many species by roadsides, especially by streams on Nettles, Calvstegia, etc.—A.B. Fringed scales present in my specimens, but very hard to see in old flowers. I, too, have never seen this species on Clover.—C.E.S. (2) Hedgerow and field, Comberton, Cambs., Aug. 1906.—E. J. Allard. I think correct.—S.H.B. I am inclined to agree to this being C. europæa.—E.F.L. Both these plants seem to me not to be the true europæa, but the var. nefrens, Fries Herb. Normale, XI. 17. I am not sure of my premises, but I have failed to find the scales with corolla—if present they are so assimilated with the corolla in drying that I have failed to see them; when fresh, in the ordinary form, they are easily seen. If the scales are absent or nearly obsolete then it is Fries' plant. This form has been found in England (Thirsk, Yorks. and Twycross, Leics.), cf. Syme, Eng. Bot., Vol. VI. (1866), p. 90, but he considers it not native.—A.B. Lange ("Haandbog i den danske Flora," ed. IV., p. 483), says of the variety:—"Form β , which according to Fries is found on Vicia sativa, is perhaps a distinct species, which deserves further investigation." He identifies it (with a query) with C. Schkuhriana Pfeiffer (Bot. Zeit. 1846, p. 20). I do not know the var.—E.S.M.

Linaria repens, Mill. Railway bank, Luton, Beds., v.c. 30, July 28, 1906.—D. M. Higgins.

Veronica peregrina, L. Killiow, near Truro, W. Cornwall, v.c. 1, Aug. 4, 1906. Very abundant all over the grounds, and has been so established many years.—F. H. Davey. Matches specimens in my herb. so named by Rev. W. Hind from Belfast.—S.H.B. Rightly named.—E.F.L. Agrees with what I have under this name.—E.S.M.

Euphrasia Vigursii, Davey. Goonhavern, Perranzabuloe, W. Cornwall, v.c. 1, Sept. 23, 1906. This is the plant referred to by me in Journ. Bot., 1906, p. 132. In the course of a very lengthy and interesting letter, Prof. von Wettstein informs me the specimens gave him much trouble, and caused him to go over the whole of his English Euphrasia material. It comes nearest to E. Rostkoviana, but is distinct from all forms with which he is acquainted, and he leaves "the namegiving and publication to the discoverer." The plant differs from E. Rostkoviana in its smaller flowers, the much darker colour of its corolla, smaller leaves, and the slenderness and delicacy of all its parts. In some places the plant is but sparingly furnished with gland-tipped hairs, while plants gathered in other parts of Cornwall, and on Roborough Downs, in South Devon, simply bristle with them. Prof. von Wettstein thinks that, as E. campestris has formed itself out of E. Rostkoviana on the South-West border of its area, and E. fennica in the North-East of the area, so it might be possible that in the North-West such a representative plant as that under notice has formed itself.—F. H. Davey. Mr. Davey and Dr. Vigurs sent me this plant, fresh, from two stations; and I was of opinion that, while coming near E. Rostkoviana, it was distinct from all known British forms.—E.S.M. (See B.E.C. Rept. 1906, p. 237, and Jl. Bot. 1907, p. 217).

E. nemorosa, H. Mart. (1) In short turf, Bishop's Wood, Herefordsh., v.c. 36, July 27, 1906.—S. H. Bickham. Correct.—E.S.M. Yes. These specimens well shew the character of the spreading stem-leaves.—Cedric Bucknall. (2) Saltway, Leics., v.c. 55, Aug. 16, 1906.—C. B. Headly. E. nemorosa, H. Mart., I believe.—E.S.M. Certainly E. nemorosa, I think, although the calyx-teeth exceed the mature capsule.—C. Bucknall. (3) E.———. Saltway, Leics., Aug. 16, 1906.—C. B. Headly. E. nemorosa, H. Mart.—E.S.M. Yes. In this, also, the calyx-teeth exceed the capsule.—C. Bucknall. (4) E.———. Cross-in-Hand, E. Sussex, v.c. 14, Aug. 31, 1906.—W. A. Vice. E. nemorosa, H. Mart.: a tall form, looking as if drawn-up by surrounding herbage.—E.S.M. In these specimens the long capsule is typical of E. nemorosa.—C. Bucknall.

Rhinanthus monticola, Druce. Near Braemar, S. Aberdeensh., v.c. 92, July 30, 1906.—E. S. Marshall.

Orobanche elatior, Sútton. (1) Furze Hills, Hildersham, July 2, 1906, and (2) Cherry Hinton, July 5, 1906. Cambs., v.c. 29.—Coll. R. H. Goode. Comm. G.G. No doubt correct.—E.S.M.

Mentha hirsuta, Huds. Quenby, Leics., v.c. 55, Aug. 1905. A few specimens of this very handsome form are sent as being of more luxuriant growth than usual, and differing in some respects in the size and general outline and colour of the leaves.—A. R. Horwood. Round Ledbury it often grows as large.—S.H.B. Mentha hirsuta, Huds.—E.F.L.

M. sativa, L., var. paludosa (Eng. Bot.). Sheepwash Green, Freshwater, I.-W., v.c. 10, Sept. 25, 1906.— E. W. Hunnybun. Yes.—A. Ley. This mint seems to me just what we call paludosa, a var. more spicate-verticillate than M. hirsuta and less so than M. sativa.—E.F.L. in litt. M. aquatica × arvensis. I doubt whether it is worth while to keep up the varietal name for this polymorphic hybrid.—E.S.M.

Origanum vulgare, L., var. megastachyum, Link. Rough bank, Symonds Yat, W. Glos., v.c. 34, July 27, 1905.—S. H. Bickham. (See B.E.C. Rept. 1905, p. 183).

O. vulgare, L., var. Queried on the labels as var. c. humile, DC. Prod. xii., p. 193, = O. humile, Poir. On the flat tops of the cliffs, and on the sides of the railway, above the Warren, Folkestone, S.E. Kent, v.c. 15, Sept. 27, and Oct. 3, 1906. This form occurs in several places on the cliffs above Folkestone Warren. It grew with the type, and with var. b. megastachyum, Link, and was conspicuously distinguishable from both by its dense flattopped growth as though it had been cropped by shears, by its dwarf habit, and by its greater hairiness. It does not match any British or Continental examples in my herbarium, and Mr. A. B. Jackson, in the B.E.C. Report for 1906, p. 252, says that it is quite different from Continental examples of O. humile, Poir, in the Kew Herbarium. It wants a name.—Charles Bailey. Hardly, I think, the var. humile, of which it says (in DC. Prod.) "glabriusculum." Just a stunted dwarf state of the type, I think.—C.E.S. I

think a starved form and not the variety. Either poor soil, or rabbits, or both, may have produced a stunted plant.—E.F.L. This does not agree with the description in DC. "Prodomus," l.c. So far from being "glabriusculum," it has the stems and foliage densely villous; and the heads tend rather to be subglobose than corymbose. The var. humile is stated to be a plant of S. Europe (Alpes Maritimes, etc.); so one would not expect it to occur in Kent. I have never seen anything like these specimens before; most interesting.—E.S.M.

Salvia — Ballast-siding, M. R., near Helpstone Station, Northants., v.c. 32, Aug. 1, 1906.—Coll. E. Foord-Kelcey. Comm. F. L. F.-K. S. verticillata, L.—S.H.B.

Lamium intermedium, Fr. Oat fields near the Sea, Blackwaterfoot, Arran., v.c. 100, July 12, 1904. (Fide A. Bennett).—A. Somerville.

Ballota nigra, L., var. borealis (Schweig). Gloucester Docks, W. Glos., v.c. 34, July 30, 1906.—S. H. Bickham. Yes, but not extreme.—A. Ley.

Plantago lanceolata, L., var. sphaerostachya, Röhl. Downs above Lewes, E. Sussex, v.c. 14, May 28, 1906. (See Jl. Bot., 1906, p. 126, and 1907, p. 21).—Coll. W. E. Nicholson. Comm. C. E. Salmon.

Scleranthus perennis, L. Mildenhall, W. Suffolk, v.c. 26, June 16, 1906.—A. J. Crosfield.

Chenopodium album, L. (1) var. incanum, Moq. (2) var. viride, Syme. (3) intermediate between (1) and (2). New Humberstone, Leics., v.c. 55, Aug. 16, 1906. The plants sent appear to be as typical of Syme's variety as any seen, but growing with these were other varieties and forms of intermediate character, of which some specimens are sent for comparison. The var. paganum also grew in the same station, and C. ficifolium. Altogether thousands of plants might have been counted, many merging from one variety into another.—A. R. Horwood. I think these three specimens are rightly distinguished.—E.F.L. Being only varieties of one species they would notably merge into each other. I believe this can be seen wherever the species grows on rubbish, uncultivated ground, etc., but in cultivated ground the var. incanum prevails mostly.—A.B.

- C.——? Origin, rubbish heap near Malvern, Worcs., v.c. 37. Cult. Ledbury, Aug. 12 and 26, 1906.—S. H. Bickham. Unknown to me.—A.B. I suppose that this is a variety of C. album, L., but do not know it.—E.S.M. Is this anything more than luxuriant var. a., i.e. type?—E.F.L.
- C. ficifolium, Sm. New Humberstone, Leics., v.c. 55, Aug. 5, 1906.—A. R. Horwood. Rightly named.—E.F.L. Correct, I think. Messrs. Britten and Rendle identify this with C. serotinum, L. (Cent. Pl. II., p. 12, 1756).—E.S.M. Yes. Apparently an additional locality to those given in the "Flora of Leics.," p. 130 (1886).—A.B.
- Salicornia . Rye Harbour, E. Sussex, v.c. 14, Sept. 17, 1906. Apparently near pusilla, but scarcely delicate enough for that. It may be one of the many forms coming under S. intermedia, Woods.—C. E. Salmon. I believe this to be S. pusilla, Woods, var. gracillima, Towns., and not S. intermedia, Woods; but it is not exactly like my original Pagham plant, from which Mr. Townsend described his variety. Rather young specimens.—E.S.M.
- S. appressa, Dum. (1) On chalk at Seaford, E. Sussex, v.c. 14, Oct. 8, 1906.—H. S. Thompson. I believe correct. In these luxuriant plants the spikelets are less crowded than in the normal smaller form.—E.S.M. (2) Thorney Island, W. Sussex, v.c. 13, Aug. 25, 1906.—R. S. Standen. Rather young, but I think correctly named.—C.E.S. Though collected too early, this shews the prostrate habit well. I discovered this remarkably luxuriant state there in Sept. 1903; the station (no doubt the same) was a deep, muddy salt-marsh of small extent.—E.S.M. Mr. Standen writes that he has no doubt as to Mr. Marshall's station being identical with his.
- S. lignosa, Woods. Portchester, S. Hants., v.c. 11, Aug. 24, 1906.—R. S. Standen. Correct. The spikelets become much stouter in autumn.—E.S.M.

Polygonum aviculare, L. Waste ground, Battenberg Avenue, Leicester, v.c. 55, Aug. 4, 1906. I do not know the vars. of this plant, but I have not noticed a similar form about here before.—W. Bell. I am not well up in these plants; but the Rev. E. F. Linton has studied them.

This is, anyhow, neither rurivagum (Jord.), arenastrum (Bor.) nor microspermum (Jord.).—E.S.M. I have this form in my herbarium under var. agrestinum (Jord.), as a narrow-leaved form; it is quite common, yet not, I think, the agrestinum usually so described.—E.F.L. Seems to come best under the var. arenastrum (Bor.).—C.E.S.

P. aviculare, L., var. agrestinum (Jord.)? Blue Anchor, S. Somerset, v.c. 5, Sept. 20, 1906.—E. S. Marshall.

Rumex maritimus, L. By the River Lea, near Luton, Beds., v.c. 30, Aug. 1906.—D. M. Higgins.

Ulmus surculosa, Stokes, var. glabra, Mill. Baggrave Park, S. Croxton, Leics., v.c. 55, catkins May 28, leaves Aug. 6, 1906.—A. R. Horwood. This is the tree which I name U. suberosa, Ehrh. It is characterised by an inconspicuous bole, long spreading branches, leaves larger and more acutely pointed than in typical U. campestris, nearly smooth on the upper surface; the bark of the young shoots (of 2—3 years old) and the numerous suckers very suberous. It is common in upland situations and in mountain valleys when U. campestris is not found, and it has all the appearance of a native tree.—A. Ley.

Urtica — Lindfield, E. Sussex, v.c. 14, Oct. 8, 1906.—R. S. Standen. U. parvifolia, see B.E.C. Rept., 1905, p. 184.—A. Ley. I believe that this is U. dioica, L., var. parvifolia, Hausmann "Fl. Tirol."—E.S.M.

U. dioica, L., var. angustifolia, A. Blytt. Lindfield, E. Sussex, v.c. 14, Aug. 3, 1906.—R. S. Standen. Wants the lower leaves, and we get it much more extreme.—S.H.B. Quite so.—E.F.L. I believe that this is correct. E.S.M.

Betula intermedia, Thomas, (B. nana × pubescens). Glen Callater (about 1,700 feet), S. Aberdeensh., v.c. 92, July 23, 1906. A small tree, about 12 feet high. Decidedly nearer to B. pubescens, as usual; but I have hardly any doubt about its being a hybrid with B. nana. The original British intermedia was found not far off, but higher up.— E. S. Marshall.

Salix cinerea, L., var. aquatica, Sm. Woodlands, Knighton Road, Leicester, v.c. 55, June 1906.—W. Bell. Very good aquatica.—A. Ley. Yes.—E.F.L. I do not properly know aquatica, but should have thought this Leefe's oleifolia.—E.S.M.

- S. Caprea × Lapponum. Lochy Burn (1,800 feet), Glen Shee, E. Perthsh., v.c. 89, July 13, 1906.—E. S. Marshall. S. Caprea × Lapponum without doubt, and looks like Mr. Marshall's original bush.—E.F.L.
- S. ——— ? Holt Lowes, E.Norfolk, v.c. 27, June 7, 1906.— C. B. Headly. S. repens, L.—E.F.L. and E.S.M.
- S. repens, L., var. ———? Long Drive, Bardon Hill, Leies., v.c. 55, June 2, 1906. The vars. fusca, L., and ascendens, Sm., and the hybrid incubacea, L. (= ambigua Ehrh.), have been recorded from this station; this does not quite agree with any of these forms.—W. Bell. One of the numerous forms of S. repens, L.—W.R.L. So far as I can tell from the specimens it agrees with the var. parvifolia; but summer foliage is essential for determining a mere leaf var. like this.—E.F.L.
- S. viminalis × Caprea (S. Smithiana, Willd.). S. Croxton, Leics., v.c. 55, catkins May 12, 1906, leaves July, 1906.—A. R. Horwood and Miss O. M. Horwood. Yes, viminalis × Caprea or cinerea.—A. Ley. I agree.—E.F.L.

Populus nigra, L. Quorn, Leics., v.c. 55, April 13 and July 16, 1906.—F. L. Foord-Kelcey. P. Canadensis (Desf. Cat. hort. Par.) is the name given in De Candolle's Prodromus, XVI. (2) p. 329 for this Poplar, with P. monilifera Ait. as one of several synonyms. Spreading branches help to distinguish this species from P. nigra L.; and in male specimens the number of stamens, which are given as 20—30 in P. Canadensis and usually 6—8 in P. nigra. Much of the "Black Poplar" in this country is this American species.—E.F.L.

Leucojum æstivum, L. Meadow near Reading, Berks., v.c. 22, May 22, 1906.—Coll. Miss Olive Ellis. Comm. F. L. Foord-Kelcey. The specimens mostly want leaves—a good set of the plant would be welcome.—S.H.B.

Allium Scorodoprasum, L. Bambarroch, Wigtownsh., v.c. 74, Aug. 1904.—Coll. Miss E. K. Higgins. Comm. D. M. Higgins. Correct.—E.S.M.

Muscari racemosum, Mill. (1) Cavenham, W. Suffolk, v.c. 26, April 14, 1906.—Coll. R. H. Goode. Comm. G.G. (2) Near Fleam Dyke, Cambs., v.c. 29, April 25, 1906.—E. Spearing.

Ornithogalum pyrenaicum, L. Ursleigh Hill, N. Somerset, v.c. 6, April 18 and June 14, 1905. A few examples with leaves in good condition. The latter are not conspicuous amongst the spring herbage of woodland or hedgebank, and they wither before the scape rises. Herbarium specimens therefore are seldom complete. I could not supply bulbs, for they commonly lie under six or eight inches of stiff clay.—Jas. W. White. Beautifully prepared specimens.—S.H.B.

Fritillaria Meleagris, L. Harpenden, Herts., v.c. 20, April 25, 1904.—D. M. Higgins.

Colchicum autumnale, L. (Leaves) Hazel Wood, Avening, April 1906. (Flowers) May Hill, Sept. 15, 1906, W. Glos., v.c. 34.—F. L. Foord-Kelcey. Very good specimens in fruit.—S.H.B.

Juncus compressus, Jacq. Bosham Creek, W. Sussex, v.c. 13, Aug. 23, 1906. Growing round the edge of a small pond just behind the sea-wall, and well down in the water, which was brackish.—R. S. Standen. Correct, I believe. Especially interesting, as it is usually an inland plant in England. I saw it many years ago by a pond on "The Crumbles," near Eastbourne, which is practically a maritime station.—E.S.M.

J. tenuis, Willd. (1) Derry Island, near Seggieden, E. Perthsh., v.c. 89, Aug. 10 and Sept. 27, 1903; July 5, 1904. For particulars of the discovery and habitat of this plant see "Annals Scottish Nat. Hist.," 1904, p. 59. The plant still maintains itself in this station as plentifully as in 1903, though it does not seem to spread much.—W. Barclay. Very good and acceptable specimens.—S.H.B. (2) Waste ground near Belfast Harbour, Co. Down. Sept. 1905 and Oct. 1906.—C. H. Waddell.

J. acutus, L. Barmouth, Merionethsh., v.c. 48, July 28, 1906.—G. Goode and R. H. Goode.

Luzula Forsteri, DC. Park Lane, Lindfield, E. Sussex, v.c. 14, June 8, 1906.—R. S. Standen.

Potamogeton fluitans, Roth. Pond in Warboy's Wood, Hunts., v.c. 31, Aug. 15, 1906. (See Jl. Bot. 1897, p. 355).—E. W. Hunnybun and A Fryer. Yes.—A.B.

P. flabellatus, Bab. River Stour (at the bridge), Holford, Warwicksh., v.c. 38, Aug. 20, 1906.—C. H. Waddell. Yes, P. interruptus, Kitabel! in Schult "Oest. Flora," ed. II., p. 328 (1814) = P. flabellatus Bab. "Man. Brit. Bot." ed. III., p. 343 (1851).—A.B.

Scirpus fluitans, L. Port Lotha, Colonsay, (swift streamlet running into sea, on West side of the Island), v.c. 102, Aug. 30, 1906.—A. Somerville. Yes.—A. Ley.

S. rufus, Schrad. Scalasaig, Colonsay, v.c. 102, July 14, 1906.—A. Somerville.

Eriophorum angustifolium, Roth., var. triquetrum, Fries. Trevince Moor, Gwennap, W. Cornwall, v.c. 1, May 18, 1906. This well-marked variety was first noticed on British soil in 1905 by Dr. C. C. Vigurs, who found it on Trebiskin Moor, also in v.c. 1. It was not until last year that Mr. A. Bennett was able to settle its identity, and a note on the subject will be found in "Journ. Bot.," 1906, p. 279. It is a slender and rather diminutive plant, the spikes, even when fully matured, are less than one-third the size of the type, and are either sessile, or but very shortly-stalked. Perhaps a more important character is that triquetrum is quite a fortnight later than angustifolium in flowering.—F. H. Davey.

Carex helvola, Blytt. (C. curta × lagopina). N. Corrie of Lochnagar, at 3300 feet, S. Aberdeensh., v.c. 92, July 21, 1906. Associated with C. lagopina; the other parent was gathered lower down.—E. S. Marshall. "C. canescens × lagopina; very characteristic."—G. Kükenthal in litt. A grand set, beautifully prepared, as are all Mr. Marshall's.—S.H.B.

C. elongata, L. Ditch near Sandford Mill, Berks., v.c. 22, June 20, 1906.—A. B. Jackson. Right.—E.F.L. Yes, fine specimens of the species, usually smaller. It seems to answer to Kneucker's (f. or var.) umbrosa in Seubert—Klein Exc. Fl. Baden, 55 (1891). I have lately seen, through Mr. Somerville, the original specimens gathered by W. Wilson, "Moss Wilson," at Birch Farm,

Cheshire, in 1830. It was also found by him at Over in Cheshire in 1827, Jonathan Salt of Sheffield being the first finder in Yorks. (1809). Salt's Herb. is preserved at Sheffield.—A.B.

- C. lagopina, Wahl. Lochnagar, S. Aberdeensh., v.c. 92, July 21, 1906.—E. S. Marshall. Yes, nice specimens of this rare species. Messrs. Marshall and Shoolbred seem to have found it in the old locality on Lochnagar.—A.B.
- C. Hudsonii, Ar. Benn. (C. stricta, Good.). Twyford Meadows, near Winchester, S. Hants., v.c. 11, May, 1906.—A. B. Jackson. No roots!—A. Ley. This does not appear to me to be C. Hudsonii Ar. Benn. I cannot be sure whether the specimen submitted to me is forming fruit or sterile, but if the latter, as I rather suspect, it will probably prove to be C. acuta × Goodenowii.—E.F.L. C. acuta, L., but the specimens should have been gathered so as to show the characteristic leaf-sheaths near the base of the stem. Our C. acuta appears to be C. gracilis, Curt.—E.S.M. No! this is C. acuta, L., and C. acuta, L. var. gracilis, Almq.—A.B. (See B.E.C. Rept., 1906, p. 246).
- C. aquatilis × Goodenowii. In a small marsh near the Spittal of Glen Shee, E. Perthsh., v.c. 89, July 10, 1906. Fairly intermediate, and apparently sterile.—E. S. Marshall. I suppose Mr. Marshall had this named by Herr Kükenthal? I do not think this actual contribution has been named, but there is a C. arcuata, Laest. = C. aquatilis × vulgaris juncella, found in Lapland.—A.B. Mr. Marshall writes that he and Mr. Shoolbred identified these as the hybrid in situ and sees no cause to alter his opinion.
- C. Goodenowii, J. Gay, var. In a pool (about 2,500 feet) near Loch-nan-Eoin, Lochnager, S. Aberdeensh., v.c. 92, July 27, 1906. This was named by Herr Kükenthal as var. recta (Fleischer); which, I believe, is the same as var. recta Ascherson and Graebner. I should have thought it a strict, slender, alpine form of var. juncella.—E. S. Marshall. C. caespitosa β recta, Fleischer, Riedgr. Würtemb. p. 15 (1832) = C. Goodenoughii β recta, Ascherson and Graebner, Syn. mitteleurop. Fl. II. (2), p. 95 (1902)—I agree with Mr. Marshall.—A.B.

C. rariftora, Sm. Lochnagar, S. Aberdeensh., v.c. 92, at about 2,800 feet, July 27, 1906. Some members may be glad to have these specimens, which are the largest I have yet gathered. The locality is on the descent towards the Dhu Loch; it also grows near the summit, at 3,500 feet, but not so fine.—E. S. Marshall.

C. rostrata, Stokes, var. c. involuta (Bab.). Abundant by Lake Fawnog, near Colwyn, N. Denbighsh., v.c. 50. Coll. Mr. G. A. Holt, of Brooklands, Sale, June, 1906. The Rev. W. R. Linton, in the 1906 "Report of the Botanical Exchange Club of the British Isles," p. 247, refers this plant to type rostrata, and on re-examining the fruits of the Denbigh plants I find that it is the type, with slender leaves and stems.—Charles Bailey. I think narrow-leaved C. rostrata type, not the variety.—E.F.L. C. involuta Bab. is, I believe, a hybrid, C. rostrata \times vesicaria. This is, I should say, a slender, narrow-leaved C. rostrata; which I have gathered at Wybunbury Bog, Cheshire, and in Scotland.—E.S.M. I should not so name the specimens. I do not see how this differs from ordinary rostrata, Stokes (ampullacea, Good.). The fruit of involuta is narrower than in this and tapers more gradually to a less apparent beak, etc. C. vesicaria, L., \(\beta \) ? involuta, Bab. Man. ed. II., 370 (1847). C. ampullacea Good., var. involuta, Baker and Hunt in Rep. Bot. Ex. Club for 1863, 9 (1864). C. involuta, Syme Eng. Bot. ed. III., X., 168 (1870).—A.B.

Setaria verticillata, Beauv. Cultivated land, Ledbury, Herefordsh., v.c. 36, Sept. 3, 1906. A casual.—S. H. Bickham.

Spartina alterniflora, Loisel. Mud flats between Southampton and Milbrook, S. Hants., v.c. 11, Aug. 20, 1906.—A. B. Jackson. Correct.—E.S.M.

S. Townsendi, H. & J. Groves. Bosham Creek, W. Sussex, v.c. 13, Aug. 23, 1906.—R. S. Standen. Yes, the Rev. E. F. Linton and I discovered it at Bosham on Aug. 1, 1903.—E.S.M.

Anthoxanthum odoratum, L., forma longiaristata. Moor above Minehead, S. Somerset, v.c. 5, June 18, 1906.—S. H. Bickham and A. Ley. The Anthoxanthum which you have sent me agrees quite well with the description

of A. odoratum var. tenerum, Aschers. and Grbn. Syn. mitteleurop. Fl. II. (1) p. 26 (1898), a form which I have not seen as yet.—E. Hackel.

Phleum alpinum, L. Upper White Water, Clova, Forfarsh., v.c. 90, July 20, 1905.—F. C. Crawford. Yes; our British form. I have seen it in this station.—E.S.M.

P. pratense, L., var. nodosum, L. Tilton Hill, Leics., v.c. 55, July 7, 1906.—A. R. Horwood. Correct.—E.F.L.

P. phalaroides, Koel. Cambridge, v.c. 29, June 1906.
—A. J. Crosfield. Not phalaroides, Koel, but P. pratense, L., showing signs of nodosum.—S.H.B. & A.L. Certainly P. pratense, L., and probably undeveloped nodosum.—E.F.L.

Calamagrostis lanceolata, Roth. Damp places, Breedon Cloud Wood (Magnesian Limestone), Leics., v.c. 55, July 4, 1906.—Coll. A. B. Jackson. Comm. T. E. Routh. Yes; correct.—S.H.B. & A.L.

Deschampsia flexuosa, Trin., var. montana, Hook. fil. Carnedd Dafydd, Carnarvonsh., v.c. 49, Aug. 4, 1906. I am not sure that these are correctly named. The variety is said to have leaves much slenderer and shorter than the type; panicle contracted, at least after flowering; spikelets larger, glumes much darker-which does not agree very well. The variety is said to be very common on mountains, and as I saw no other form from 1500 to 3000 feet, while this one was certainly very common, I admit having jumped to the conclusion that it must be var. montana. Prof. Hackel, I believe, thinks very little of the variety.-A. H. Wolley-Dod. The var. montana (if it be one) has rather fewer and larger flowers than the This plant is the type.—E.F.L. The Scottish alpine plant has a very different habit, but resembles this in the beautiful ruddy colour of the flowers. I think that it is best left under the type.—E.S.M.

Avena pratensis, L., var. longifolia (Parn.). On the Lias limestone between East and West Leake, Notts., v.c. 56, July 1, 1906. Prof. J. W. Carr informs me that this is the only known station for this species in Notts. Howitt notes it from the locality in his "Nottingham Flora," published in 1839, so that this is the confirmation

of an early record.—A. B. Jackson. Rightly named, I believe.—E.S.M.

Poa glauca, Sm. Ystolion Duon, Carnarvonsh., v.c. 49, Aug. 9, 1906. Name confirmed by Mr. Marshall, who thinks the specimens somewhat drawn-up and shadegrown.—A. H. Wolley-Dod.

P. nemoralis, L., var. glaucantha, Reich. Twll Ddu, Carnarvonsh., v.c. 49, Aug. 8, 1906. Name confirmed by Rev. E. S. Marshall, who tells me he believes, but is not sure, that it is synonymous with var. cæsia, Gaud.—A. H. Wolley-Dod.

P. nemoralis, L., var. Linn of Corriemulzie, Braemar, S. Aberdeensh., v.c. 92, July 20, 1906. Rather glaucous. In 1886 Mr. F. J. Hanbury and I gathered this at the same spot; it was then referred to var. Parnellii, but I now incline to think it a weak, shade-grown state of var. divaricata, Syme, which is the dominant form on rocks by streams, in that district.—E. S. Marshall.

Glyceria plicata, Fr., var. pedicellata (Townsend). Scraptoft, Leics., v.c. 55, July 15, 1906.—A. R. Horwood. Correctly named.—A. Ley. Yes; G. fluitans × plicata. Always sterile.—E.S.M.

Agropyron acutum, R. & S. Bosham Creek, W. Sussex, v.c. 13, Aug. 23, 1906.—R. S. Standen. Form of pungens?—S. H. B. Yes.—A. Ley. Yes; A. pungens, R. & S. Our British A. acutum seems to be mainly, if not entirely, A. junceum \times repens (Triticum laxum, Fr.).—E.S.M. Yes, β littorale Syme in "Eng. Bot." XI., p. 180 (1872).—A.B.

Equisetum Moorei, Newman. Hort., "Underdown," Ledbury; (origin, sea coast, Co. Wicklow) Sept. 1, 1906.—S. H. Bickham. Your Wicklow Equisetum is greener and more slender than my herb. specimens of E. Moorei, but it agrees better on the whole with that than with E. trachyodon.—E.S.M. in litt.

E. variegatum Schleich. Weston-super-Mare, N. Somerset, v.c. 6, July 21, 1906. This has been recorded as the a. arenarium; but the habit is quite different from that, as I know it in Scotland; the stems being crowded,

erect or ascending, instead of prostrate. It agrees much better with Syme's description of his var. *majus*; of which, however, I have seen no authentic specimen.—Edward S. Marshall. (See B. E. C. Rept., 1906, p. 252).

Lycopodium alpinum, L., var. decipiens, Syme. Little Craigindal and Lochnagar, S. Aberdeensh., v.c. 92, July 19 and 21, 1906.—E. S. Marshall.

Chara polyacantha, Braun. Walton Moor, N. Somerset, v.c. 6, Sept. 10, 1903.—J. W. White. (See B.E.C. Rept., 1904, p. 40).

C. hispida, L. Peaty Ditch, Ken Moor, N. Somerset, v.c. 6, Sept. 17, 1904, Rare in the West country.—J. W. White.

C. vulgaris, L., var. longibracteata, Kuetz.? Nailsea Moor, N. Somerset, v.c. 6, Sept. 17, 1904. A form of this most variable aggregate approaching the variety if not sufficiently well-marked to be so named.—J. W. White. We should not include this under var. longibracteata. It approaches var. papillata.—H. & J.G.

C. vulgaris, L., var. crassicaulis Schl. Nailsea Moor, N. Somerset, v.c. 6, Sept. 10, 1904. I have attached the varietal name with great diffidence, doubting if the plant be really more than a small form of the type.—Jas. W. White. Not var. crassicaulis, but rather approaching var. papillata.—H. & J.G.

Copies of some of the back numbers of the Report can be obtained from the Hon. Sec. at 6d. each.

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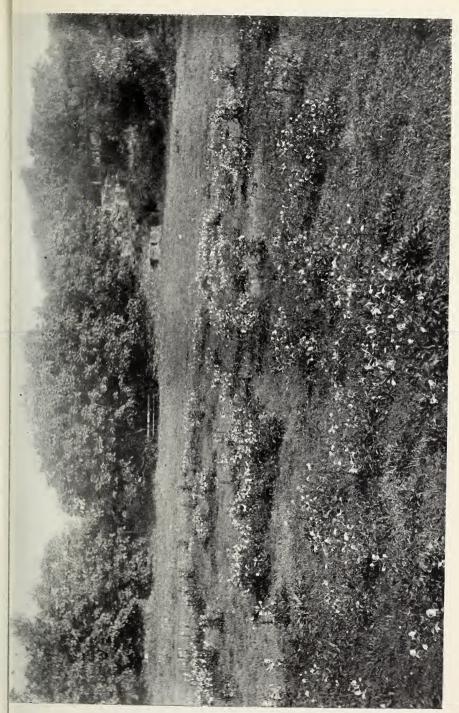
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31 December, 1906.

ALEX. SOMERVILLE, Hon. Treasurer.

EXPLANATIONS OF PLATES II. TO V.

- PLATE II. *Enothera Lamarkiana*, Ser. in DC. In a tennis ground within St. George's Gardens, St. Anne's-on-the-Sea, Sept. 17, 1906.
- PLATE III. *Œ. Lamarkiana*, Ser. in DC. View looking across the sandhills south-westward from the eastern end of Beach Road, St. Anne's-on-the-Sea, Aug. 1906.
- PLATE IV. Fruiting example of *Œ. Lamarkiana*, growing on the south side of Atherstone House, North Drive, St. Anne's-on-the-Sea, looking eastward, and within the building yard of Messrs. Porritt & Son, Oct. 1906.
 - PLATE V. View showing the dense growth of Ambrosia artemisifolia, L., on the sandhills on the north side of St. Thomas's Road, St. Anne's on-the-Sea, Oct. 9, 1906.



Œnothera Lamarkiana, at St. Anne's-on-the-Sea.





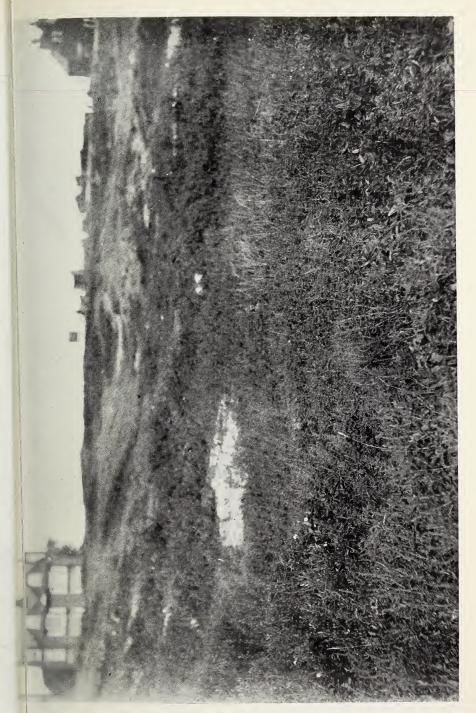
Enothera Lamarkiana, at St. Anne's-on-the-Sea.





Enothera Lamarkiana, at St. Anne's on-the-Sea.





Ambrosia artemisifolia, at St. Anne's-on-the-Sea.







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Vol. II., No. 4.

THE

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OF THE

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1907-1908.

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23 OCT 1908

THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1907-8.

With but few exceptions, the 2,918 sheets of plants received this year for distribution were well-selected and carefully pressed. They embrace also a wide range of critical subjects, though it is much to be regretted that Batrachian Ranunculi were represented by but one species, the genus Potamogeton by two, and that not a single specimen was sent of the order Characeæ, and only one (for identification) of Salicaceæ. Species of genera which recently have undergone revision are as much in request as those which enjoy a more restricted geographical distribution. To justify the Club's existence, members should be students rather than mere collectors of rarities.

In spite of several previous requests to the contrary, a few members persist in forwarding their specimens in sheets much above the regulation size. This imposes much unnecessary work on the distributor, and cannot, I feel sure, be of any advantage to the senders. In one instance I spent hours in reducing the size of the sheets as well as the enclosing boards. Will the erring ones kindly make a note for next year?

Mr. Bickham's generous parcel deserves special mention. Not only is he an easy first in point of number, but the care which he has bestowed upon his specimens, as well as the faultless manner in which they were packed, can be recommended to the few who have yet to learn that herbarium specimens need not of necessity be wretched apologies of their former selves.

The contributors are as follows:-

She	ets.	Sh	eets.
Mr. C. Bailey	172	Mr. A. R. Horwood	65
Mr. W. Barclay	101	Mr. A. B. Jackson	49
Mr. W. Bell	105	Mr. A. Loydell	19
Mr. S. H. Bickham	364	Rev. E. S. Marshall	186
Mr. Mc T. Cowan, jun	65	Mr. J. F. Rayner	25
Mr. F. C. Crawford	50	Mr. C. E. Salmon	69
Mr. A. J. Crosfield	43	Mr. M. Skene	25
Mr. F. H. Davey	204	Mr. E. Spearing	192
Dr. E. Drabble	188	Mr. R. S. Standen	133
Mr. P. Ewing	118	Dr. W. A. Vice	10
Mrs. F. L. Foord-		Rev. C. H. Waddell	82
Kelcey	135	Mr. J. W. White	155
Mr. G. Goode	91	Maj. A. H. Wolley-Dod	72
Mrs. E. S. Gregory	22		
Miss I. M. Hayward	17	Total	2918
Mr. C. B. Headly	95		
Miss D. M. Higgins			

The Club is indebted to the following gentlemen for their kindness in examining, and forwarding notes on, the more critical and interesting species:—Mr. Arthur Bennett, Dr. E. Drabble, Mr. A. B. Jackson, Rev. A. Ley, Rev. E. F. Linton, Rev. E. S. Marshall, Mr. H. W. Pugsley, Rev. W. Moyle Rogers, Mr. C. E. Salmon, Major Wolley-Dod, and to Mrs. Gregory.

F. HAMILTON DAVEY,

Distributor for the year 1907—1908.

It is with very deep regret that we record this year the deaths of the Rev. W. R. Linton (on Jan. 4) and Mr. F. C. Crawford (on Feb. 9), two members who could be ill-spared by our Club. The portraits, which we are very pleased to be able to give, have somewhat delayed the publication of the Report, but we are sure they will be greatly appreciated by the members. Mr. Somerville's (taken with his two sons in 1904) should be placed to face the title-page of the 23rd Report, to which it properly belongs, and Mr. Linton's (enlarged from a group taken in 1901) suitably accompanies the following notice which Mr. Ley has most kindly written:

"I am asked to write, for the Report of the Watson Botanical Exchange Club, a few words on the late Rev. William Richardson

Linton; and I willingly consent, although unable personally to add to what has been already published in the memoir of him by his brother, the Rev. E. F. Linton, which appeared in the "Journal of Botany" for March in the present year.

"I knew him with increasing intimacy during the last twenty-one years of his life, and learned to form a very high estimate of his unbounded patience and untiring perseverance. In field botany this shewed itself in the thoroughness of investigation to which he was wont to subject uninteresting as well as interesting localities. I recollect joining him at an inn in the Peakland of Derbyshire, at which he had been already stopping some time, and assisting him in the investigation of what appeared to me a singularly dry and uninteresting hill-side, which belonged however to the County the botany of which he had undertaken; and the fruits of this thoroughness are seen in the "Flora of Derbyshire" which he published after more than ten years of patient work of this sort. He never gave in, although, in many expeditions in which I have been with him, he was the least able of the party to bear the fatigue; with the result that, at the end of a long day, he had accomplished as much as the strongest of us. He was also extremely methodical in his habits; the daily walk which his state of the weather.

"In critical genera and groups of forms these qualities were seen at their best; and the change which his and his brother's researches have made in the intelligibility of the Salices and Hieracia of Britain can only be appreciated by those who endeavoured to grope their way in them in times previous to these helps. Once the light has rendered groups of this sort easy of study one is apt to under-rate the achievements of the light-bearers.

"Linton's excellences also rendered his work in all the Botanical Exchange and similar clubs dealing with British plants invaluable. The Botanical Record Club, the London Botanical Exchange Club, and the Moss Exchange Club owe him a large debt of gratitude; and not least is due to him from the Watson Club, of which I understand him to have been an active member from its beginning to the date of his death.

"His herbaria have been presented to the Liverpool University; they will thus, as he would entirely have wished, be still available to students."

AUGUSTIN LEY.

An additional copy of the Report will be sent to any member who informs the Secretary that he would like to have two for cutting up as well as one for preservation.

GEORGE GOODE,

Hon. Secretary.

Thalictrum dunense, Dum. The Links, Dornoch, E. Sutherland, v.c. 107, July 8, 1907.—R. S. Standen.

T. flavum, Linn., var. sphærocarpum, Lej. Edge of Llangorse Lake, Breconsh., v.c. 42, Sept. 30, 1907.—S. H. Bickham and A. Ley. A beautifully prepared set, and most welcome.—F.H.D.

T. flavum, Linn., var. nigricans, Jacq. Near Llangorse Lake, Breconsh., v.c. 42, Sept. 30, 1907.—S. H. Bickham and A. Ley. See last year's Report and also Jl. of Bot. 1908, p. 23. Mr. Ley writes that he has compared the type specimens of T. nigricans, Jacq., in the National Herbarium with the Llangorse plant, and considers them identical.—S.H.B.

Anemone apennina, Linn. Plantation near Cambridge, v.c. 29, April 20, 1907.—E. Spearing.

Ranunculus tripartitus, DC. Castle Killibury, near Wadebridge, E. Cornwall, v.c. 2, June 19, 1907. Sent me fresh by Dr. Vigurs, who writes: "It was found in this place by Mr. Clement Reid, F.R.S., in 1906, in a small portion only of one of the two circular ditches of an ancient earthwork situated on the top of a knoll. It existed in a very dense mass, the stems being comparatively tough and inextricably entangled. The leaf-segments of the submerged leaves are very slender and weak and completely collapse; all the floating leaves were yellowish-green in colour. Messrs. H. & J. Groves have passed some specimens of this gathering."—S. H. Bickham. Mr. Bickham has sent a liberal quantity of this muchneeded rarity.—F.H.D.

R. hederaceus, Linn., var. omiophyllus (Ten.). Growing on mud in a ditch, Saintfield, Co. Down, July 9, 1903.—C. H. Waddell. Looks to me nothing but R. hederaceus.—F.H.D. What I have seen named as var. omiophyllus always seemed to me to be rather a luxuriant floating state than a good variety. This, I think, is only rather luxuriant type.—E.S.M.

R. Flammula, Linn., var. pseudo-reptans, Syme. Growing on damp patches of the sandhills near the ditches at Freshfield, South Lancs., v.c. 59, Sept. 1907. Mr. Wheldon agrees with me that this must be called

pseudo-reptans.—E. Drabble. The specimens are identical with those which I have gathered on the shores of the Loe Pool, in Cornwall, and which have been passed by several good botanists as pseudo-reptans.—F.H.D.

R. acris, Linn., var. Boræanus (Jord.)? Barkby, Leics., v.c. 55, May 15, 1904.—W. Bell. The root-character is not shown; but I believe that it comes under Jordan's Boræanus.—E.S.M. Rootstock not, I think, perfect, but I believe it is that of Boræanus, Jord. Specimen much afflicted with mildew.—C.E.S.

R. acris, Linn., var. tomophyllus (Jord.). Pastures about Failand and Portbury, N. Somerset, v.c. 6, June, 1906, and July, 1907.—J. W. White. Near Jordan's R. tomophyllus; but scarcely villous enough, I think. Anyhow, it comes under Jordan's Boræanus.—E.S.M. Yes, I think correctly named.—C.E.S. (See B.E.C. Report, 1907, p. 270).

Caltha palustris, Linn., var. minor, Bab. Ben Lawers, Mid Perthsh., v.c. 88, July, 1907. Alt. 3000 ft.— P. Ewing. Yes.—A.L. Right.—E.F.L.

Eranthis hyemalis, Salisb. Naturalized in shrubberies, The Lammas, Minchinhampton, W. Glos., v.c. 34, Feb. 27, 1907.—F. L. Foord-Kelcey.

Fumaria ———. Gilly Tresamble, Perranarworthal, W. Cornwall, v.c. 1, Sept. 25, 1907. Another stranger on which Mr. Pugsley is now, or soon will be, engaged.—F. H. Davey.

F. ———. Near Truro, W. Cornwall, v.c. 1, Oct. 12, 1907.—F. H. Davey. These Truro plants do not seem to me like the last Gilly Tresamble plant, but nearer F. Boræi, var. serotina and F. muralis. I think they are identical with a form I have seen from other habitats between these two, and not yet named, so far as I know. June specimens of all these plants are desirable.—H.W.P.

F. purpurea, Pugsley. Roadside near a cabbage patch, top of Trebellen Hill, near Newquay, W. Cornwall, v.c. 1, Aug. 29, 1907.—Coll. C. C. Vigurs. Pressed and comm. S. H. Bickham. Prepared with Mr. Bickham's usual good taste.—F.H.D. These two sheets are my F. purpurea. I

should look through the remainder of the gathering to be sure there is no mixture. The large sepals are characteristic.—H.W.P.

F. Boræi, Jord. (1) Fowey, E. Cornwall, v.c. 2, Sept. 12, 1907.—Coll. Mrs. Graham. Comm. R. S. Standen. I rather think this to be var. muraliformis, although on two of the three sheets sent the large pointed sepals are not very noticeable; the third sheet, however, which I have retained is quite characteristic. The long bracts are also a feature of this variety.—H.W.P. (2) Perranarworthal, W. Cornwall, v.c. 1, Oct. 12, 1907.—F. H. Davey. Near the type. A very well-dried set.—H.W.P.

Cheiranthus Cheiri, Linn. Walls round Peterborough Cathedral, Northants., v.c. 32, April 29, 1907.— E. Spearing.

Arabis petræa, Lam. Ben Laoigh, Mid Perth, v.c. 88, July, 1907. Alt. 2,500 ft.—P. Ewing. Yes; var. ambigua, Fr., the only form of the plant which occurs there, I believe.—E.S.M.

Cochlearia alpina, Wats. Ben Lawers, Mid Perth, v.c. 88, July, 1907. Alt. 2,500 ft.—P. Ewing. Correct; pods net-veined, when mature. I think that my C. micacea only occurs near the summit.—E.S.M.

C. anglica, Linn., var. Hortii, Syme. Salt marshes at Bidston and Wallasey, Cheshire, v.c. 58. The lower round-based leaves were unfortunately lost in most of the plants, but the small fruits are well shown. Not recorded for the Cheshire side of the Mersey in Green's "Flora of Liverpool District."—E. & H. Drabble. The pods are not fully formed; but I think that the name is right.—E.S.M. Quite possible, but the specimen has neither mature pods nor any root leaves, and cannot be deemed satisfactory.—E.F.L.

Sisymbrium polyceratium, Linn. On broken ground on railway bank at Wallasey, Cheshire, v.c. 58, Sept., 1907.—E. & H. Drabble.

S. Loeselii, Linn. Bissoe, Kea, W. Cornwall, v.c. 1, June 7, 1907. Two or three large plants on a waste patch about 200 yards from a grist mill. New to Cornwall.—F. H. Davey.

S. Irio, Linn. Waste ground, Oxford, v.c. 23, Oct. 25, 1907.—F. L. Foord-Kelcey.

Brassica monensis, Huds. Abundant on the Wallasey Sandhills, Cheshire, v.c. 58, July, 1907.—E. & H. Drabble.

Sinapis juncea, Linn. On the sandhills between Beach Road, St. Andrew's Road, S., St. Leonard's Road, and the North Drive, St. Anne's-on-the-Sea, N.W. Lancs., v.c. 60, Sept. 7 and Oct. 12, 1907. This is a cultivated plant of China and Egypt which has found its way to this country, most probably in grain siftings or as bird-food. It does not seem to have spread much on the Continent, my only specimens thence coming from Pomerania. It is spreading in this country, as last summer examples were sent me from Heaton Norris, and from Accrington.—Charles Bailey. "Kew passed these examples, as well as others not distributed, as S. juncea."—C.B. in litt. Surely Brassica nigra, Koch.—A. B. Jackson. (See also Report B.E.C., 1907, p. 274).

Eruca sativa, Lam. Frequent last summer on the sites of old poultry grounds on the sandhills north and south of Devonshire Road, St. Anne's-on-the-Sea, N.W. Lancs., v.c. 60, Aug. 10, 1907.—Charles Bailey.

Viola odorata, Linn., var. ———. Weedon, Northants, v.c. 32, June, 1907.—W. Bell and F. S. Wilcox. I do not know of any varietal name for this.—E.S.M. I see no trace of hybridity.—A.L.

V. calcarca, Gregory. Perranporth sandhills, W. Cornwall, v.c. 1, July 9, 1907. New to Cornwall, and confirmed by Mrs. E. S. Gregory and Dr. Drabble.—F. H. Davey.

V. Riviniana, Reichb., var. minor, Murb. (= V. flavicornis, Forst.). Clogher, Co. Tyrone, April, 1907.—Coll. C. L. Peck. Comm. E. S. Gregory. I do not think that this is V. flavicornis, Forster, which has a slender, yellowish spur. The present plant is a mere state, not worth distinguishing.—E.S.M.

V. ericetorum, Schrader. Connor Downs near Hayle, W. Cornwall, v.c. 1, May 27, 1907.—F. H. Davey. V. lactea × ericetorum.—C.E.S. This has, I think, some

ericetorum characters—chiefly in the leaves—but approaches lactea far more closely. There is little doubt, in my mind, that it is a lactea × ericetorum hybrid.— E.S.G.

V. lactea, Sm. Sandhills, Great Yarmouth, E. Norfolk, v.c. 27, May 13, 1907.—A. J. Crosfield.

V. arvensis, Murr., f. segetalis (Jord.). Cornfield near Golspie, E. Sutherland, v.c. 107, Aug. 5, 1907.— R. S. Standen. Fide Dr. Drabble.

V. arvensis, Murr., var. obtusifolia (Jord.). Grindleford, near Bakewell, Derbysh., v.c. 57, and Wallasey, Cheshire, v.c. 58, June and July, 1907. The specimens are very typical; sometimes, however, the plant is branched from the base.—E. Drabble.

V. arvensis, Murr., var. ruralis (Jord.). Bidston, Cheshire, v.c. 58, and Wingerworth, Derbysh., v.c. 59, May, 1907.—E. & H. Drabble. This plant is readily recognisable on account of its stipules, which differ considerably from those of V. obtusifolia, to which ruralis sometimes appears to approximate in superficial characters.—E. Drabble.

V. arvensis, Murr., var. derelicta (Jord.). (1) Linacre Wood, near Chesterfield, Derbysh., v.c. 57, July 1907.—E. Drabble. (2) Glen Muick, S. Aberdeensh., v.c. 92, July, 1907.—Coll. C. Hay Murray. Comm. E. Drabble. Typical specimens. Occasionally the flowers become larger and may be touched with blue.—E.D.

V. lutea, Huds., var. amæna, Wats. Banks of the Dochart, near Killin, Mid Perth, v.c. 88, July, 1907. In pastures at 400 ft.—P. Ewing.

Polygala oxyptera, Reichb. Sandhills and dry grassy slopes near the sea, Wallasey, Cheshire, June, 1907. I think these plants must be called oxyptera, although the veining of the sepals is not quite characteristic of the plants described under the name by the late A. W. Bennett. I am not convinced that the veining of the sepals is a good character. P. vulgaris, L. approaches oxyptera in habit on the sandhills, but the two are always readily

distinguished, I believe.—E. Drabble. I think that this is a variety of *P. oxyptera*. In this country blue flowers are very unusual; they are normally white, tinged or tipped with magenta.—E.S.M. Yes, this seems to be the coast form of *P. oxyptera* which bears the name of *P. dunensis*, Dum. in some books.—C.E.S.

P. oxyptera, Reichb. The Links, Dornoch, E. Sutherland, v.c. 107, July 12, 1907.—R. S. Standen. I should call it oxyptera, from its capsule, secund close spike, shape of leaves, etc.—C.E.S. Though the capsule is rather broader than the fruiting sepals, I consider this rather a form of P. vulgaris than of P. oxyptera; the whole habit is in favour of that view.—E.S.M.

Cerastium arvense, Linn., var. Andrewsii, Syme. Orig. Hunstanton, 1904. Cult. at Blaby, July 26, 1907.—W. A. Vice. This is decidedly hairy, and is not var. Andrewsii. I cannot separate it from C. arvense, Linn., type.—E.S.M. I do not know this plant.—A.L. I should say not Andrewsii, which is much more glabrous on the leaf, etc.—C.E.S. Var. Andrewsii, Syme, is something more than a glabrescent form of C. arvensis, which is all that this is. That variety has rather a strict habit, with rigid leaves having a prominent midrib, besides being subglabrous. This plant, which I have seen in other parts of Norfolk with the type, has only the last character.—E.F.L.

Stellaria umbrosa, Opiz. Edge Park, Cheshire, v.c. 58, Aug. 13, 1907. This is not asked for, and I would not have sent it if I had not believed that some members do not know it.—A. H. Wolley-Dod. Very characteristic. Now placed under S. neglecta, Weihe, an earlier name.—E.S.M.

Arenaria balearica, Linn. Covering an old wall between a field and the Vicarage grounds at Wooler, Northumberland, v.c. 67, Aug. 1907.—Coll. Miss Hayward. Comm. E. S. Gregory. This plant is gradually making its way into our flora and some members of the Club may like to add a naturalised specimen to their collections. The memory of the oldest inhabitant of Wooler does not go back to the time when the old wall, skirting the Vicarage premises, was not gay with the starry blossoms,

through spring and summer, and green with the mossy foliage through autumn and winter.—E.S.G. Correct, but probably planted. This was once claimed as a native ("Phytologist;" New Series, Vol. 5, 1861), on even more slender grounds!—E.S.M.

Spergula sativa, Boenn. Leasowe, Cheshire, v.c. 58, Sept., 1907.—E. and H. Drabble.

Alsine rupicola (Hiern). Sea coast, Portaferry, Co. Down, Sept., 1905.—C. H. Waddell.

Claytonia perfoliata, Linn. (1) Leasowe, Cheshire, v.c. 58, May, 1907. This plant is very abundant at Leasowe, near the golf links. In this situation it has been known since 1887 (R. H. Day). It is now spreading in all directions, and has reached Hoylake on the one side and New Brighton on the other.—E. and H. Drabble. (2) Roadside, Ampthill, Beds., v.c. 30, May 21, 1907.—D. M. Higgins.

Althæa officinalis, Linn. Between Winchelsea and Rye, E. Sussex, v.c. 14, Aug. 22, 1907.—Coll. R. H. Goode. Comm. G. Goode. Very fine and well-pressed specimens.—F.H.D.

A. hirsuta, Linn. Orig. Chalk Downs near Reigate, Surrey, v.c. 17. Hort. Reigate, Aug., 1907. See J. of B. 1902, p. 409. It is satisfactory to be able to state that this plant still occurred in 1907. It may, also, not be out of place here to mention that since writing the note in 1902 upon A. hirsuta, three more scattered plants of Salvia pratensis have been found upon the Downs—recalling strongly the Kent station for the two species mentioned.—C. E. Salmon.

Malva moschata, Linn., var. heterophylla, Lej. Buckland Hill, Surrey, v.c. 17, Sept. 1, 1907. This appears to be a smaller and more slender plant than var. laciniata, Lej., (the common British form). French floras would call this var. intermedia, Gren. and Godr., I understand.—C. E. Salmon.

Tilia platyphyllos, Scop. Laneside, Buckland Hill, Surrey, v.c. 17, Sept. 14, 1907. May well be native here and in woods along the chalk downs (where it should be

looked for). I name it platyphyllos from the leaves hairy beneath, strongly ribbed fruit, few-flowered corymb, and buds tipped with hairs.—C. E. Salmon. Yes.—A.L. Not the same as T. platyphyllos Scop. from other parts of England, the fruits of which are much more strongly ribbed, the buds and bracts longer, the leaves larger. It is apparently the same as a sheet of T. mutabilis Host. sent me by Dr. Halacszy from Austria; of this I have not found a description or synonym.—E.F.L.

Geranium striatum, Linn. Near Alnwick, Northumberland, v.c. 68, Sept., 1907.—Coll. Lady Muriel Percy. Comm. D. M. Higgins.

G. sylvaticum, Linn. Near Alnwick, Northumberland, v.c. 68, Sept., 1907.—Coll. Lady Muriel Percy. Comm. D. M. Higgins.

Genista tinctoria, Linn., var. humifusa (Dickson). The Lizard, W. Cornwall, v.c. 1, Sept. 4, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing.

Medicago lupulina, Linn., var. Willdenowiana (Koch). Garden ground at Mortlake, Surrey, v.c. 17, one large plant, Sept. 23, 1907.—A. B. Jackson.

M. denticulata, Willd., var. apiculata (Willd.). Galashiels, Selkirkshire, v.c. 79, Oct. 18, 1907.—I. M. Hayward. I should call it M. denticulata.—F.H.D. I agree.—C.E.S.

M. denticulata, Willd., var. apiculata (Willd.). Galashiels, Selkirksh., v.c. 79, Oct., 1904.—Coll. W. Shaw. Comm. E. S. Gregory. Are any of these var. apiculata? To me they seem to be nothing but poor plants of denticulata.—F.H.D. These four sheets in this cover are in my opinion var. apiculata, though not the extremest form. The spines are very short and not hooked—these are more important characters than the number of flowers on a peduncle.—E.F.L.

M. denticulata, Willd., var. lappacea (Desr.). Wool alien from Galashiels, Selkirksh., v.c. 79, Oct., 1904.—Coll. W. Shaw. Comm. E. S. Gregory. Pods not nearly so large as in specimens of M. lappacea (Desr.) that were so named for me at the British Museum. I doubt if the

plant sent is anything but a robust form of denticulata.— F.H.D. Yes, not lappacea.—E.F.L.

Melilotus indica, All. (= M. parviflora, Desf.). In great plenty throughout the summer of 1907, on the sites of old poultry runs, on the sandhills of the North Drive, St. Anne's-on-the-Sea, v.c. 60, Aug. 31, 1907. Its usual habitat was under bushes of Sinapis nigra, species of Amsinckia, Secale cereale, etc.—Charles Bailey.

Trifolium arvense, Linn., var. prostratum, Lange. Shingly beach, Walmer, E. Kent, v.c. 15, July 16, 1907.— F. L. Foord-Kelcey. Surely only arvense.—F.H.D. Seems to be (according to Corbière's Fl. Normandie) T. arvense, L., var. agrestinum, Jord. (= var. littorale, Bréb. non Jord.). The var. prostratum, Lange, is given (in Fl. Kent) as a synonym of var. perpusillum, DC., which equals (according to Corbière) var. littorale, Jord. non Bréb.—C.E.S. I do not know var. prostratum, Lange; but var. perpusillum DC., given in the London Catalogue as a synonym, is described as having globose heads, which is not the case with the Walmer plant.—E.F.L. A prostrate maritime state, not worth distinguishing. I think that Lange's plant should have small, roundish heads; these are typical.—E.S.M.

T. procumbens, Linn. Apps Court, Surrey, v.c. 17, July 24, 1907. My excuse for sending so common a plant is that these specimens struck me as peculiar looking on account of their spreading hispidity. Most of those in the same neighbourhood had it adpressed. The character is of itself of little value in my opinion.—A. H. Wolley-Dod.

T. procumbens, Linn., var. majus, Koch. Clandon Downs, Surrey, v.c. 17, July 18, 1907. Gathered with Major A. H. Wolley-Dod. Not typical majus, which should have shorter peduncles, but best under that by its large heads, etc.—C. E. Salmon. Also sent by Major Wolley-Dod, who remarks,—"By the size of its leaflets and flower-heads, as well as by its subcrect habit, this should go to var. majus, but that is said to have shorter peduncles. Var. minus is a much smaller plant in all respects, but no hard and fast line can be drawn between them."—Type. Var. majus (not always

a large plant) has golden-yellow flowers, as in *T. agrarium*; in this plant they are pale yellow.—E.S.M.

Vicia gracilis, Loisel. Bude, E. Cornwall, v.c. 2, June 25, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing. Ordinary specimens of V. tetrasperma. V. gracilis is not known to occur in Cornwall.—F.H.D. V. tetrasperma, Moench. The hilum character is conclusive.—C.E.S.

V. angustifolia, Linn., var. Bobartii, Koch. Leasowe Sandhills, Cheshire, v.c. 58, May, 1907.—E. & H. Drabble.

V. bithynica, Linn. Dry slopes near Wyke Regis, Dorset, v.c. 9, July 20, 1899—J. W. White. One of the best sets of this plant that I have seen.—F.H.D. One sheet from Washford, S. Somerset, v.c. 5, Aug. 2, 1907. Coll. E. S. Marshall. Comm. J. W. White.

Lathyrus palustris, Linn. Wicken Fen, Cambs., v.c. 29, July 9, 1907. Coll. R. H. Goode. Comm. G. Goode.

Prunus domestica, Linn. Small spreading tree in hedge by G.C.R. line, near Quorn Station, Leics., v.c. 55, April 18, July 28, and Oct. 11, 1907.—F. L. Foord-Kelcey. This was considered to be P. insititia, L. by the referees to whom it was sent by the B.E.C. (see Rept. B.E.C. 1907, p. 283).

Spiræa salicifolia, Linn. Near Alnwick, Northumberland, v.c. 68, Sept., 1907.—Coll. Lady Muriel Percy. Comm. D. M. Higgins.

Rubus suberectus, Anders. St. Leonard's Forest, W. Sussex, v.c. 13, July 24, 1907. Open woodland on the edge of a drive, and in a damp clayey bottom towards the western limit of the Forest. The only known locality in the county.—J. W. White. A beautiful example of this species was sent to me from the same locality by Mr. White in 1900. But I have since seen specimens from 4 other Sussex localities:—2 in W. Sussex (Burton Rough and near Petworth); and 2 in E. Sussex (Downland Wood and Rocks Wood, Uckfield). In "British Rubi" it is also reported from "Ashdown Forest, E. Sussex (Borr.!)."—W.M.R.

R. Rogersii, Linton. On peat bank by Lake Creevy, Saintfield, Co. Down, Aug. 21, 1907.—C. H. Waddell. I agree.—W.M.R.

R. holerythros, Focke. Colgate, St. Leonard's Forest, W. Sussex, v.c. 13, July 20, 1907.—J. W. White. Rightly named, I believe.—W.M.R.

R. rhamnifolius, Wh. & N. Clifton Down, Bristol, N. Somerset, v.c. 6, Aug. 4, 1907.—J. W. White. Although deleted from the List of Desiderata, members will be glad to have such carefully-prepared specimens of this species.—F.H.D. Yes, the usual British form of this species.—W.M.R.

R. rudis, Wh. & N. Roadside hedge at Ponsanooth, Cornwall, v.c. 1, Aug. 20, 1907.—F. H. Davey. Beyond all doubt R. rudis, though with extraordinarily luxuriant panicles and large flowers.—W.M.R.

R. adornatus, P. J. Muell. Fay Gate, St. Leonard's Forest, W. Sussex, v.c. 13, July 24, 1907.—J. W. White. Though I see no reason for separating this from R. adornatus, it may be desirable to point out that our plant usually has a narrower panicle and leaflets with much less compound serrations than in this Fay Gate plant.—W.M.R.

Geum rivale × urbanum (G. intermedium, Ehrh.). Okehampton, Devon, v.c. 4, June 28, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing.

Potentilla argentea, Linn. Rocks, Groby Pool, Leics., v.c. 55, Aug. 9, 1907.—W. Bell. I believe this to be the var. tenuiloba (Jord.).—E.S.M.

Alchemilla vulgaris, Linn., var. alpestris (Schmidt). Ben Laoigh, Mid Perthsh., v.c. 88, July, 1907.—P. Ewing. A welcome contribution.—F. H. D.

Rosa pimpinellifolia, L. × rubiginosa, L. North Bank of Tay below Caputh Bridge, E. Perthsh., v.c. 89. Flowers July 28, fruit Aug. 14, 1907. This bush, or rather clump, was cut down to the root two or three years ago and has not yet fully recovered from the effect, so that I had difficulty in getting a sufficient number of specimens.

It grows on a gravelly haugh by the side of the river and there are plenty of R. pimpinellifolia and R. rubiginosa growing on the same haugh. The fruits soon dry up and drop off so that I have never seen them fully grown. Crépin, in a note on this rose, says that it differs from R. biturigensis, Bor. in having the pedicels and receptacles hispid-glandular, whilst the latter has them smooth.—W. Barclay. Clearly right, a good intermediate.—E.S.M. Exactly the Boxley Warren, Kent, plant recorded in Fl. of Kent. It is not R. biturigensis, Bor., it differs in several respects besides its glandular peduncles and calyx tube. The only other form of the hybrid I have seen described is R. $rubiginosa \times pimpinellifolia$ B. Friesiana, R. Kell. (Ascherson and Graebner Syn. mitteleur. Fl., Bd. VI. Abth. 1, 1902, p. 348).—A.H.W.-D.

R. involuta, Sm. (= R. pimpinellifolia, Linn. × tomentosa, Sm.). Near Auchterarder Railway Station, Mid Perth, v.c. 88, Sept. 14, 1907. For Crépin's note on this form see Annals of Scottish Natural History for April, 1896, page 117. The flowers are of a somewhat deep red. This plant forms, like other hybrids of pimpinellifolia, order to see the second secon rather a clump than a bush, extending to about 8 or 9 feet in length and about 5 or 6 feet high. In the Herbarium of the British Museum at South Kensington I saw a specimen labelled "R. Doniana horrida, Horticultural Society's Garden, 1824—Sowerby's Herbarium," which was quite as bristly on the pedicels and receptacles as this Auchterarder form. Its leaves, however, were much more thinly covered with glands on the under surface.-W. Barclay. A most beautiful rose. I can see no real evidence of R. rubiginosa, though the acicles and glands on the stem no doubt suggest that parentage. The leaflets are more or less cuneate-based, densely glandular on both sides. I should judge it to be a distinct species, unknown to me.-E.S.M. A peculiar plant. The densely glandular leaflets and clustered flowers are against R. Doniana (Woods). It agrees best with the description of R. involuta, var. Nicholsonii, Crépin, or it may be R. Sabini (Woods), but there seem to be almost as many forms of these hybrids as there are bushes. I suppose the parentage is R. pimpinellifolia × tomentosa but the leaflets do not show the influence of pimpinellifolia so strongly as usual. —A. H. W.-D.

R. hibernica, Sm. (probably = R. pimpinellifolia x dumetorum). Between Melville (Melvin) Hall and Bellyford Burn on the march between Mid and East Lothian, v.c. 82, Aug. 10, 1907. See Crépin's "Rosae hybridae," page 146, and also "Annals Scott. Nat. Hist." April 1899, page 118. This at present forms a dense clump about nine feet long and from four to five high. the date of gathering the fruits were dropping fast and although I have visited it in former years at a much later date I have not succeeded in finding ripe fruit on it. sepals on Aug. 10 were not closely reflexed but rather spreading horizontally. Until this last autumn this was the only station for the hairy-leaved form of R. hibernica known to me in Scotland, but in Sept. of this year I received from Mr. W. G. Craib, Aberdeen, specimens gathered by him near Banff, which belong to the same form and differ only in slight details.—W. Barclay. Leaflets smaller than in my Irish specimens of typical hibernica: but that is merely a matter of soil, or situation. They are simply serrate, hairy below, glabrous above. Like the original hibernica, this plant has a close head of woolly styles; a feature which clearly points to a corifolia. rather than a dumetorum parentage. R. coriifolia has the sepals frequently patent, or even loosely reflexed, in the earlier stages.—E.S.M. This is, I believe, typical R. hibernica, Sm., but the pubescent leaflets clearly indicate a dumetorum (or less probably corifolia) parentage, whereas R. hibernica in the aggregate sense is regarded as a pimpinellifolia × glauca hybrid.—A.H.W.-D.

R. tomentosa, Sm., var. cinerascens, Dum. Bank of Earn below Comrie, Mid Perth., v.c. 88, Sept. 7, 1907. Some further specimens of this variety from a different station may be acceptable to the Club. These do not differ materially from the Orchardneuk form of last year, though both differ from the Auchterarder form which has long pyriform fruits and which might be made into a separate variety by those who are fond of splitting. In all the serration cannot be described as anything but simple, although here and there a toothlet may be found. Even in my specimen from Belgium a minute examination will detect a few teeth not quite simple. The suggestion that any one of these can be R. omissa, Déségl., var. resinosoides, Crép. is certainly

wide of the mark. Not to speak of the serration, which in the latter is more or less composite glandular, the sepals in all my three forms are not persistent, as Mr. Ley rather rashly concluded, but only sub-persistent. The great bulk of them fall during the coloration of the fruit, as the specimens sent will show, and before it is fully ripe. In R. omissa and its varieties the sepals are not truly persistent, but they do not disarticulate till the fruit is quite ripe. So far as I know the occurrence in Britain of R. omissa or any of its varieties has not yet been satisfactorily established.—W. Barclay. Though my knowledge of this group is superficial, I quite agree that this cannot be R. omissa, Déségl. It answers better to the description of R. dumosa (Puget) than to that of R. cinerascens, Dum. Both have simply serrate leaflets, while R. dumosa differs in its more ovoid fruit and villous, not merely hispid, style. It is said also to have larger leaflets and more prickly petioles, but these are weak characters. Both have slender prickles and deciduous sepals and are evidently very closely allied.—A.H.W.-D.

R. rubiginosa, Linn., var. ——. Flowers white, tinged with pink on the outer surface of two or three petals. Appearing white when full blown. North Bank of Tay below Caputh Bridge, E. Perthsh., v.c. 89, July 23 and Aug. 14, 1907. "Cette var., à fleurs blanches ou blanchâtres et à folioles abondamment glanduleuses au dessus, est à ranger dans le voisinage des var. du R. rubiginosa, Linn. décrites sous les noms du R. Gremlii, Christ et R. rubiginosa Linn., var. Moutinii, Crép."—Crépin in litt. I have seen ordinary R. rubiginosa with leaflets more or less glandular above.—W. Barclay. I can say nothing about this, except that it agrees better with the description of var. Gremlii, Christ, than with that of var. Moutinii, Crép.—A. H. W.-D.

R. canina, Linn., var. vinacea, Baker. Between Edge and Tilston, Cheshire, v.c. 58, Aug. 15, 1907. Matches Mr. Baker's type specimen, No. 28, very closely.—A. H. Wölley-Dod. A very acceptable contribution.—F.H.D.

R. canina, Linn., var. urbica (Leman). Hedge-row, S. Croxton, Leics., v.c. 55, Sept. 1907.—A. R. Horwood. The only thing against R. urbica, Lem. is the thinly hairy

styles, but there are half-a-dozen species described which run so near it that it is almost impossible to distinguish them.—A. H. W.-D.

R. glauca, Vill., var. subcristata (Baker). Hedge N. of railway station, Saintfield, Co. Down, July 18, and Aug. and Sept., 1906.—C. H. Waddell. Good subcristata.—E.S.M. Either that or R. complicata (Gren.), if indeed the two names are not synonymous.—A.H.W.-D.

R. stylosa, Desv., var. systyla, Bast. Bullen Bank, Ledbury, Herefordsh., v.c. 36, Aug. 29, 1906, and Underdown, Ledbury, July 9, 1906.—S. H. Bickham. Yes, systyla, Bast.—A.H.W.-D.

Pyrus latifolia, Syme. Rocks at Symonds Yat, W. Glos., v.c. 34, July 8, 1907.—Coll. S. H. Bickham and A. Ley.

Cratægus Oxyacantha, Linn., var. oxyacanthoides (Thuill.). Hardwick Wood, Cambs., v.c. 29, May 21, 1907. —Coll. R. H. Goode. Comm. G. Goode. Correct.—A.L.

Saxifraga umbrosa, Linn. Cult. Saintfield, Co. Down, May, 1905. Roots from Coomeragh Mts., Co. Waterford. Coll. C. H. W. and Rev. H. W. Lett, July, 1902. Ordinary S. umbrosa was plentiful. This plant seemed to us different to the type when growing. I should like to know if it is a small form of the var. serratifolia. S. umbrosa finds its eastern limit in the Coomeragh Mountains, Co. Waterford.—C. H. Waddell. This was collected by Mr. George Nicholson in 1882 from the same district, and on account of the erect leaves and nearly round blade I have regarded it as var. punctata. The blade of the leaf gradually narrowing into the petiole connects it with var. serratifolia, but I think it more nearly punctata. There are many aberrant forms in Co. Kerry, where several varieties grow together.—E.F.L.

S. aizoides, Linn. Inisindaimh, Sutherland, Aug. 12, 1907.—F. C. Crawford.

S. hypnoides, Linn. Correifron, Moffat Dale, Dumfriessh., v.c. 72, July 20, 1907. A rather luxuriant subalpine state of the true plant, growing at from about 1300 to 1700 feet. We saw nothing of S. sponhemica, which

has been reported from this glen.—E. S. Marshall. A liberal contribution of fine specimens.—F.H.D.

Sedum villosum, Linn. St. Mary's Loch, Selkirksh., v.c. 79, July, 1907.—Coll. Mrs. Hall. Comm. E. and H. Drabble.

S. rupestre, Linn., var. minus, Syme. Shingly beach, Walmer and Kingsdown, E. Kent, v.c. 15, July, 1907.— F. L. Foord-Kelcey. I have never seen these peculiar long fibres on the leafy shoots in Cornish specimens.—F.H.D. Correct, I believe. I have seen S. rupestre (elegans, Lej.), flowerless, on Walmer beach. Not native here.—E.S.M. Yes, see "Flora of Kent," p. 148. The long fibres have grown after the plant was gathered, i.e., in the press.—C.E.S. Rightly named. These filamentary processes are frequent on my specimens of S. rupestre.—E.F.L.

Drosera obovata, Mert. and Koch. Sligachan, Skye, v.c. 104, Aug. 8, 1907.—F. C. Crawford.

Myriophyllum verticillatum, Linn., var. pectinatum, DC. Wicken Fen, Cambs., v.c. 29, July 31, 1907.—Coll. R. H. Goode. Comm. G. Goode. Is not this a short-leaved form which it might be well to send to the Referees? A German specimen in the Cambridge Herbarium is labelled M. pectinatum, var. brevifolium.—G.G. Correctly named.—E.S.M. Better left as var. pectinatum. The leaves are longer than these, it is true, in deeper pools, but they are as short as the Wicken Fen plant from similar shallow boggy pits, and shorter still when in a dry season the pits are nearly dry. Under the latter circumstances all the leaves and bracts become subsimilar and almost pectinate.—E.F.L.

Callitriche ———. Pond, Elmesthorpe, Leics., v.c. 55, Sept. 5, 1907.—A. R. Horwood. Ripe fruit is needed. I think it is C. stagnalis, Scop.—E.S.M. I should call this C. stagnalis, Scop.—E.F.L.

Epilobium Lamyi, F. Schultz. Turnip field, Malvern Link, Worcs., v.c. 37, Sept. 23, and (rosettes), Oct. 15, 1907.—S. H. Bickham.

Carum segetum, Benth. and Hook. fil. With reference to the remark in last year's Report, that this plant "is

certainly a recent introduction" at Barrow-on-Soar (v.c. 55), I have been informed by Mr. Wm. Harris, who first told me of it, that he has known it there for twenty years.—F. L. Foord-Kelcey.

Sium latifolium, Linn. By Old West River, near Stretham, Cambs., v.c. 29, Aug. 10, 1907.—Coll. R. H. Goode. Comm. G. Goode.

Ligusticum scoticum, Linn. (1) Bettyhill, near mouth of River Naver, N. Sutherland, v.c. 108, Aug. 18, 1907.—F. C. Crawford. (2) Portsoy, Banffsh., v.c. 94, Sept. 3, 1907.—Coll. B. P. Standen. Comm. R. S. Standen.

Galium Mollugo, Linn., var. Bakeri, Syme. Roadside bank near Ledbury, Herefordsh., v.c. 36, June 15 and Aug. 13, 1907.—S. H. Bickham.

- G. Mollugo × verum (ochroleucum, Syme). Roadside near Bunny, Notts., v.c. 56, July 27, 1907.—A. B. Jackson and T. E. Routh.
- G. palustre, Linn., var. Witheringii (Sm.). Shore of Loch Shin, Lairg, Sutherland, v.c. 107, July 25, 1907.—R. S. Standen. Yes, the usual Scotch plant.—E.S.M. Between type and var. Witheringii.—A.L.

Aster Linosyris, Bernh. Root from near Westonsuper Mare, N. Somerset, v.c. 6. Cult., West Monkton, Sept. 21, 1907. This is much increased in size through being grown in good garden-soil. As it is very rare in the County, and has not previously (so far as I am aware) been sent to our Club, specimens may be acceptable to some of the members, although only cultivated.—Edward S. Marshall.

Erigeron alpinum, Linn. Lochan-na-chait (N. of Ben Lawers), Mid Perthsh., v.c. 88, Aug. 1, 1904.—Mc T. Cowan, jun.

Filago spathulata, Presl. Hildersham, Cambs., v.c. 29, Oct. 2, 1907.—G. Goode. Yes.—C.E.S.

Gnaphalium supinum, Linn. Glen Feidh (or Fee, at head of Glen Clova), Forfarsh., v.c. 90, Sept. 20, 1904.—Mc T. Cowan, jun.

Pulicaria vulgaris, Gærtn. Norley Common, near Wonersh, Surrey, v.c. 17, Sept. 15, 1907.—C. E. Salmon. A most welcome set of beautiful specimens.—F.H.D.

Matricaria inodora, Linn.,? var. salina, Bab. Golspie shore, E. Sutherland, v.c. 107, Aug. 24, 1907.—R. S. Standen. Hardly looks fleshy enough in the leaf for salina. The phyllaries are very darkly coloured, so perhaps this is var. phæocephala, Rupr.—C.E.S. Var. phæocephala.—E.F.L. Not var. salina, Bab., which has short, rigid, fleshy leaf-segments, and is a more southern plant. It is var. phæocephala, Rupr., with the involucral scales paler than in the extreme form; the habit is quite right for that.—E.S.M.

M. inodora, Linn.,? var. phæocephala, Rupr. Golspie shore, E. Sutherland, v.c. 107, Aug. 24, 1907.—R. S. Standen. Yes, var. phæocephala.—E.S.M. No fruit with this sheet. It looks rightly named. A handsome plant.—C.E.S.

M. Chamomilla, Linn. Waste ground, Poulton, Cheshire, v.c. 58. June, 1907. There was no obvious possibility of starvation-effect, and the surrounding vegetation was normally vigorous.—E. and H. Drabble. The receptacle seemed hollow (as far as one could see) in one specimen I dissected, so evidently these are dwarf examples of the plant named.—C.E.S. Something in the soil probably accounts for these attenuated plants. I have seen Iberis amara reduced to like slender proportions.—E.F.L.

M. discoidea, DC. Poulton, Cheshire, v.c. 58, Aug., 1907. This alien is spreading rapidly in the Wirral Peninsula.—E. and H. Drabble.

Artemisia Tournefortiana, Reichb. Waste ground, roadside, Ledbury, Herefordsh., v.c. 86, Oct. 7, 1907. I have noticed this alien round Ledbury for years, and it seems to be spreading.—S. H. Bickham.

Senecio vulgaris, Linn., var. radiatus, Koch. Sandhills, Wallasey, Cheshire, v.c. 58, May, 1907. The ray florets were very well developed, but, owing to the ripening of the fruits in the drying specimens, the rays have shrivelled. They are quite evident, however, when examined with a lens.—E. and H. Drabble.

Arctium majus, Bernh., var. subtomentosum, Lange. (= A. tomentosum, Bab). East Langton, Leics., v.c. 55, July, 1907. New county record.—Coll. F. Brown. Comm. W. Bell. This has nothing to do with A. majus, Bernh.; nor, I think, had Babington's plant. It is much too young, and not a terminal shoot; but it probably may be A. nemorosum, Lej., var. subtomentosum, Ar. Benn.—E.S.M. Not majus, but probably intermedium, Lange, var. subtomentosum, Ar. Benn.—A.L. In spite of the solid petioles (which is not a constant character, I believe) I do not think this is a majus form. I should call it A. intermedium, Lange (= A. pubens, Bor.) var. subtomentosum, Ar. Benn.—C.E.S.

Picris hieracioides, Linn.,? var. arvalis (Jord.). Near Holford, Worcs., v.c. 37, Aug. 1906.—C. H. Waddell. I should call it P. hieracioides.—F.H.D. I have never gathered the var. arvalis; but this appears to me to be merely a few-headed form of the type.—E.S.M. Not the var.—A.L.

Crepis biennis, Linn. Fen Ditton, Cambs., v.c. 29, July 24, and Aug. 3, 1907.—R. H. Goode and G. Goode.

Hieracium centripetale, F. J. Hanb. Midlaw Burn, Moffat Dale, Dumfriessh., v.c. 72, July 23, 1907. Styles livid. Some members may be glad to have specimens from the headquarters of this endemic and characteristic species. Owing to the backward season, it was mostly in bud, but the heads are so peculiar at that stage that it is no great drawback.—E. S. Marshall.

H. ———. Shaly rocks, Craigmichen Scaurs, high up the Selcoth Burn, near Moffat, Dumfriessh., v.c. 72, July 25, 1907.—W. R. Linton and E. S. Marshall. A remarkable plant, with rather livid styles, glabrous ligules, and the leaves usually blotched, unless shade-grown. This was sent to Dahlstedt some years ago and then considered by him to be a new form, allied to, but distinct from, H. lasiophyllum and H. Schmidtii. The Rev. W. R. Linton lately sent to Dahlstedt better examples from the present gathering; it was his intention, should it still be considered as an undescribed species, to name it H. sordidum: but multis flebilis occidit. The affinity with H. lasiophyllum appears to me much more evident than

with H. Schmidtii; but I have never seen that with discoloured styles.—E. S. Marshall.

H. rubicundum, F. J. Hanb. Correifron, Moffat Dale, July 20, 1907, and Selcoth Burn, near Moffat, Dumfriessh., v.c. 72, July 25, 1907. Styles yellow.—E. S. Marshall.

H. stenolepis, Lindeb. var. anguinum, W. R. Linton. Correifron, Moffat Dale, Dumfriessh., v.c. 72, July 20, 1907. Styles livid; ligule-tips pilose.—E. S. Marshall.

H. silvaticum, Gouan, var.? Duff Kinnel Burn, near Moffat, Dumfriessh., v.c. 72, July 24, 1907.—E. S. Marshall and W. R. Linton. Styles livid; ligule-tips glabrous. This plant, which also occurred by the Frenchland Burn, was thought by W. R. Linton (who sent it to Dahlstedt for his opinion) to be a var. of H. silvaticum.—E. S. Marshall.

H. silvaticum, Gouan, var. micracladium, Dahlst. Near Moffat, Dumfriessh., v.c. 72, July 24, 1907. Styles livid.—E. S. Marshall.

H. sarcophyllum, Stenstr. Kinnel Burn and Selcoth Burn, near Moffat, Dumfriessh., v.c. 72, July 19, 1907. Styles yellow.—E. S. Marshall.

H. duriceps, F. J. Hanb., var. cravoniense, F. J. Hanb. Raehills Glen, near Moffat, Dumfriessh., v.c. 72, July 24, 1907. Styles livid.—E. S. Marshall.

H. ———. (a) The Quarries, Wirksworth, Derbysh., v.c. 57, July 7, 1906.—C. B. Headly. H. vulgatum, Fr., I believe. It may be a variety; I do not know the var. as rule alone subfasciculare, W. R. Linton.—E.S.M. H. pinnatifidum, Lönnr.—A.L. (b) The Quarries, Wirksworth, Derbysh., v.c. 57, July 7, 1906.—C. B. Headly. *H. vulgatum*, Fr., forma.—A.L. A form of *H. vulgatum*, Fr., I believe; nearly typical, but heads greyer than usual, and thus tending towards var. subravusculum, W. R. Linton.— E.S.M. There appears to be a slight difference between these two sheets: (a) with its more broadly lanceolate leaves, which are more glabrate, and heads slightly more glandular, is the same as the Longridge plant (suspected once as being H. diaphanum, Fr.) which Mr. Dahlstedt told me was typical H. vulgatum, Fr. The other plant

- (b) has narrower leaves, which are also more sharply dentate and distinctly ciliate and more pubescent, and the heads are slightly less glandular; but the specimens have had their main stem arrested in growth, and better examples than I have seen would be required to establish varietal distinction between the two forms.—E.F.L.
- H.——. On granite refuse, Mountsorrel Quarries, Leics., v.c. 55, Oct. 1, 1907. This hieracium, which is most abundant in this station, was last year distributed through the B. E. C. of the British Isles as var. mutabile, Ley. But the late Rev. W. R. Linton, after growing it from seed and transplanted plants, wrote (Sept. 27, 1907): "Dahlstedt, to whom I sent specimens, says it is not exactly mutabile, but another form. I see it is not quite the same, so may have to publish it as a var. I have not yet thought of a name but hope to work it out before long." I fear he was never able to do so.—F. L. Foord-Kelcey. Poor material—too poor, I consider, to name definitely. Not H. sciaphilum, as the ligules are glabroustipped.—E.S.M.
- H. subramosum, Lönnr. Coast, Pettycur, Fifesh., v.c. 85, July 18, 1907. Styles livid.—E. S. Marshall. (See Rept. B. E. C., 1907, p. 299).
- H. sciaphilum, Uechtr. (1) Cropstone, Leics., v.c. 55, July 24, 1906.—C. B. Headly. Rightly named, I believe; ligules strongly pilose-tipped. A state of exposure; the leaves are accordingly less strongly toothed than usual.—E.S.M. Yes.—A.L. Correctly named.—E.F.L. (2) Wirksworth, Leics., July, 1906.—C. B. Headly. Ligules ciliate-tipped; no doubt correct. But such ill-prepared specimens of a critical species are useless.—E.S.M.
- H. ———. Swithland, Leics., v.c. 55, July 23, 1906.—C. B. Headly. Only one sheet sent.—F.H.D. Under H. cacuminatum, Dahlst., of which species it is the prevailing British form.—A.L.
- H. ——.. Newly-made railway bank, Uxbridge, Middlesex, v.c. 21, Sept. 3, 1907.—A. Loydell. H. diaphanoides, Lindeb. A remarkable extension of this species, and, of course, a new County record.—E.F.L. Only one specimen sent.—F.H.D.

H. strictum, Fr. Ettrick Bridge End, Selkirksh., v.c. 79, Aug. 21, 1907. Styles with dark hairs.—I. M. Hayward. Yes; under H. strictum. Ligules somewhat pilose-tipped.—E.S.M. No, H. prenanthoides, Vill.—A.L. H. prenanthoides.—E.F.L.

H. boreale, Fr., subsp., dumosum, Jord. Roadside near Wych Cross, E. Sussex, v.c. 14, Sept. 12, 1907.—R. S. Standen. Fide W. R. Linton. This plant does not represent the group dumosum, Jord., as I understand it, which is characterised by the abundant hairs on phyllaries as well as stem, but answers very well to the description of H. obliquum (Jord.). "Leaves mostly small, broadly lanceolate, the lower narrowed to base; the others sessile, more or less rounded to base, pointed. Branches long, heads thick with hair and glands," (Schinz and Keller, Flor. Schweiz., 1905).—A.L. Mr. Standen sent me an example of this in 1905, and the Rev. E. F. Linton has recently reported upon it as follows:—"W. R. Linton named a similar form for me H. sabaudum, L., as a var. distinguishable from boreale. This would be the plant which stands as type in Lond. Cat. ed. 10 (only 3? v.c.)."—C.E.S.

Hypochαris glabra, Linn. Freshfield, Lancs., v.c. 59, Sept., 1907.—Ε. and H. Drabble.

Pyrola secunda, Linn. Cliffs near Lochan-na-Lairg (W. of Ben Lawers), Mid Perthsh., v.c. 88, July 24, 1905.—Mc T. Cowan, jun.

Limonium vulgare, Mill. f. pyramidale, Druce. Hunstanton, W. Norfolk, v.c. 28, Aug. 15, 1907.—A. J. Crosfield. My specimen (a poor one) is not good pyramidale, though tending towards it.—E.S.M. May pass as f. pyramidale, but not extreme.—C.E.S.

L. binervosum, C. E. Salmon. Hunstanton, W. Norfolk, v.c. 28, Aug. 15, 1907.—A. J. Crosfield. Very nice plants which have been passed by Mr. Salmon.—F.H.D.

L. bellidifolium, Dum. (= Statice reticulata, Linn.). Hunstanton, W. Norfolk, v.c. 28, Aug. 15, 1907.—A. J. Crosfield.

Primula scotica, Hook. Holburn Head, Caithness, v.c. 109, Aug. 16, 1907.—F. C. Crawford.

Trientalis europæa, Linn. Balhall, near Brechin, Forfarsh., v.c. 90, July 4, 1907.—Coll. Marion Nicholson. Comm. R. S. Standen.

Anagallis cærulea, Schreb. In broken sandy ground on the site of an abandoned poultry farm, south of Birkdale railway station, near Southport, S.W. Lancs., v.c. 59, Aug. 24, 1907. This locality was pointed out to me by Mr. Henry Ball, of Southport, who has found on the same spot a large number of other aliens.—Charles Bailey.

Erythræa Centaurium, Pers., var. capitata, Koch. Sandy waste near Penally, Pembrokesh., v.c. 45, Aug. 24, 1907.—S. H. Bickham.

E. littoralis, Fr. (1) Sandhills, Freshfield, S. Lancs., v.c. 59, Sept., 1907.—E. and H. Drabble. (2) Ladies' Links, Dornoch, E. Sutherland, v.c. 107, Aug. 9, 1907.—R. S. Standen. Yes, I have gathered the same form, not many miles away.—E.S.M. (3) Sea coast, Dornoch, E. Sutherland, v.c. 107, Aug. 10, 1907.—Coll. R. S. Standen. Pressed and comm. S. H. Bickham. Passed by Mr. Ar. Bennett. (See Rept. B. E. C., 1907, p. 302).

Gentiana nivalis, Linn. Ben Lawers, Breadalbane Mountains, Mid Perthsh., v.c. 88, Aug. 4, 1906.—Mc T. Cowan, jun.

Echinospermum Lappula, Lehm. Malpas Road, Truro, W. Cornwall, v.c. 1, Sept. 28, 1907. Two or three of the largest plants that I have seen.—F. H. Davey.

Anchusa officinalis, Linn. In the same station as that given for Anagallis cærulea, viz.: Birkdale, S.W. Lancs., v.c. 59, Aug. 24, 1907. Thousands of plants could have been collected, and the Anchusa must have been established there for many years.—Charles Bailey.

Solanum Dulcamara, Linn., var. marinum, Bab. Pebbly beach, Lydstep, Pembrokesh., v.c. 45, Aug. 28, 1907.—S. H. Bickham. Yes, good for the var., which I suspect would revert to type if cultivated; there are

connecting links on some shores (Essex, e.g.).—E.F.L. Scarcely Babington's plant, which looks very unlike the usual form.—A.B.

Verbascum Lychnitis, Linn., var. album, Mill. Penrecca Slate Quarry, Ashburton, S. Devon, v.c. 3, Aug. 13, 1907.—Coll. Miss M. Dale. Comm. S. H. Bickham.

Euphrasia Rostkoviana, Hayne. Woodford, co. Galway, Aug. 24, 1907.—J. W. White. Yes.—E.S.M.

E. Rostkoviana, Hayne. Small-flowered form. Grassy places in Savernake Forest, N. Wilts., v.c. 7, Sept. 14, 1907.—A. B. Jackson and F. Comyns. These are all, I believe, referable to E. Rostkoviana.—E.S.M.

E. —. In a field, Laxey, Isle of Man, Aug., 1903.—C. H. Waddell. E. Rostkoviana, Hayne.—E.S.M.

E. nemorosa, H. Mart., var. ———. Swithland, Leics., v.c. 55, July 8, 1907.—W. Bell. Surely too hairy for nemorosa.—F.H.D. E. nemorosa is never glandular-hairy. This is unquestionably E. Rostkoviana.—E.S.M.

E. ———. The Burrows, Tenby, Pembrokesh., v.c. 45, Aug. 29, 1907.—S. H. Bickham. "A difficult plant. I am doubtful about it, but would incline to call it a form of E. borealis, Towns."—E.S.M.

E. gracilis, Fr. Clifden, co. Galway, Aug. 16, 1907.— J. W. White. Quite typical, I should say.—F.H.D. I agree.—E.S.M.

E. ———. On limestone, between Askeaton and Beigh, co. Limerick, Aug. 12, 1905. This seems to have too narrow leaves for brevipila. Can it be a small form of E. salisburgensis? It was growing in dry places in a dry season.—C. H. Waddell. Quite unlike E. brevipila, which (moreover) is glandular. It is excellent E. salisburgensis, Funck, the habit and foliage being characteristic. I find, however, that the capsules, which should be glabrous, are somewhat hairy, though less so than in our other species.—E.S.M.

Rhinanthus major, Ehrh., var. aptera, Fr. Barley field at Culter, S. Aberdeensh., v.c. 92, Sept. 10, 1907.—M. Skene.

Melampyrum pratense, Linn., var. hians, Druce. Raehills Glen, near Moffat, Dumfriessh., v.c. 72, July 24, 1907.—E. S. Marshall.

Orobanche rubra, Sm. The Lizard, W. Cornwall, v.c. 1, Sept. 8, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing.

O. caryophyllacea, Sm. Sandy ground, near Golf Links, Sandwich, towards Shellness, E. Kent, v.c. 15, July 10, 1907.—F. L. Foord-Kelcey. A welcome contribution.—F.H.D.

O. ——? The Lizard, W. Cornwall, v.c. 1, Sept. 2, 1907. I rather think it is minor, but I am not sure. I found it near the Lizard growing on Leguminous plants.—Coll. C. C. Mountfort. Comm. E. Spearing. All minor.—F.H.D. This appears to be O. minor, and, as it was growing on Leguminous plants, there can be no doubt.—E.F.L.

Pinguicula lusitanica, Linn. Near Okehampton, Devon, v.c. 4, Aug. 20, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing.

Mentha longifolia, Huds., var. Nicholsoniana (Strail). Brookside, Three Cocks, Breconsh., v.c. 42, Sept. 30, 1907. —S. H. Bickham and A. Ley.

M. viridis, Linn., var. crispa, Hook. (= M. rotundifolia × spicata). Roadside wastrel near Carnon Downs, Kea, W. Cornwall, v.c. 1, Oct. 9, 1907. A very fine colony, perfectly naturalized, but undoubtedly originally an outcast from neighbouring cottage gardens.—F. H. Davey.

M. rubra, Sm. Porkellis Moor, Wendron, W. Cornwall, v.c. 1, Sept. 9, 1907. Not mentioned in the desiderata list, but sent because formerly it was reckoned among the rarest of Cornish plants. When I published my Tentative List of the plants of this county (1902) only one locality was known for this mint. On Porkellis Moor it is most abundant, and unquestionably native. Mr. C. E. Salmon thinks the plants very typical.—F. H. Davey.

M. arvensis, Linn., var. Nummularia (Schreb.). Bickley Moss, Cheshire, v.c. 58, Aug. 8, 1907.—A. H. Wolley-Dod.

M. arvensis, Linn., var. Allionii (Bor.). The Great Pond, Broadhurst Manor, near Horsted Keynes, E. Sussex, v.c. 14, Sept. 10, 1907.—R. S. Standen. Yes, comes best, I think, under this variety. Recorded before from this spot by Mr. W. Whitwell in J. of B. 1902, p. 105.—C.E.S. I have no specimens of var. Allionii with such short roundly ovate leaves, but it agrees well with the description of that var., and is, I think, rightly named.—E.F.L.

Clinopodium Nepeta, O. Kuntze. Dry roadside bank, Haffield, near Ledbury, Herefordsh., v.c. 36, Aug. 13, 1907.
—S. H. Bickham. Excellent examples of this pretty species.—A.B.

Plantago Coronopus, Linn., var. pygmæa, Lange. Rocks, sea coast, Tenby, Pembrokesh., v.c. 45, Aug. 29, 1907.—S. H. Bickham.

Herniaria glabra, Linn., var. subciliata, Bab. The Lizard, W. Cornwall, v.c. 1, Aug. 28, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing. Nothing but typical specimens of H. ciliata. Although credited for Cornwall by several of the early botanists, I have no hesitancy in saying that H. glabra does not occur in the Duchy.—F.H.D. Certainly, as you say, H. ciliata, Bab.—E.S.M.

Chenopodium album, Linn., var. incanum, Moq. Waste ground, New Humberstone, Leics., v.c. 55, Oct., 1907.—A. R. Horwood.

C. serotinum, Linn. (= C. ficifolium, Sm.). (1) Compton Dundon, N. Somerset, v.c. 6, Aug. 14, 1907.—E. S. Marshall. (2) A few bushes on the site of an old fowl run on Sandhills off the North Drive, St. Anne's-on-the-Sea, N.W. Lancs., v.c. 60, Oct. 12, 1907. This species also occurred in the Birkdale station for Anchusa officinalis.—Charles Bailey.

Salicornia appressa, Dum. Shoreham, W. Sussex, v.c. 13, Sept. 26, 1907. Prostrate.—C. E. Salmon.

Polygonum viviparum, Linn. Pinkie Braes, Culter, S. Aberdeensh., v.c. 92, Aug. 1, 1907.—M. Skene.

Oxyria digyna, Hill. Ben Lawers, Mid Perthsh., v.c. 88, Aug., 1904.—Mc T. Cowan, jun.

Rumex limosus, Thuill. Weston Zoyland, N. Somerset, v.c. 6, Aug. 28, 1907.—C. E. Salmon.

R. acutus, Linn. (R. pratensis, E.B.S.). On limestone rubble, Failand, near Bristol, N. Somerset, v.c. 6, July 31, 1907.—J. W. White. Young, but no doubt R. crispus × obtusifolius (R. acutus, Linn.).—E.S.M. Yes. Specimens of Docks are more interesting when some of the fruit is ripening.—E.F.L.

R. scutatus, Linn. Craigmillar Castle, Midlothian, v.c. 83, June 6, 1907.—F. C. Crawford.

Quercus Robur, Linn., var. intermedia (D. Don). Stoughton, Leics., v.c. 55, Sept., 1907.—A. R. Horwood. Right, I think. This "variety" may really be a hybrid.—E.S.M. I think correct. It is generally considered Q. sessiliflora × pedunculata.—A.B.J.

- Q. Robur, Linn., var. intermedia (D. Don). Hedgerow, Malvern Link, Worcs., v.c. 37, Sept. 23, 1907.—S. H. Bickham. This is Q. sessiliflora, characterised by the cuneate leaves, distinctly peduncled and pubescent on the lower surface.—A.B.J.
- Q. Robur, Linn., var. sessiliflora (Salisb.). Malvern, Worcs., v.c. 37, Sept. 23, 1907.—S. H. Bickham.

Populus nigra, Linn. Quorn, Leics., v.c. 55, Aug. 13, 1907. Very tall tree, probably planted. The flowers were over before Mr. Jackson asked me to send it up again.— F. L. Foord-Kelcey. Specimens from the same tree were sent to the Watson Club last year under the name P. nigra L. but the Rev. E. F. Linton called them P. monilifera Aiton, which surely they are not. Foord-Kelcey showed me this tree in a field at Quorn last summer and I found it to be a very fine typical example of the true Black Poplar. This can be distinguished at once from P. monilifera (Black Italian Poplar), by its rough burred trunk, denser foliage, and the leaves having a cuneate and not truncate base. I have since seen a photograph of the Quorn tree which shews well the characteristic bole. P. monilifera, another name for which is P. serotina, Hartig, is very common in this country as a planted tree and is no doubt the Black Poplar of many botanists. (See W. B. E. C. Rept. 1906-7,

p. 114).—A. Bruce Jackson. According to De Candolle's Prodromus (vol. XVI., part 2), which I chiefly rely on for distinguishing these introduced poplars, the base of leaf of *P. canadensis* (*P. monilifera* Ait.) is so variable as to be a poor character to distinguish it from *P. nigra*. The distinction in the male flowers is very decisive on the other hand, and till I know a great deal more about poplars than at present, I am content to take the Prodromus as a guide.—E.F.L. From the mention of a "very tall tree," I think that this is more likely to be *P. canadensis*.—E.S.M.

P. nigra, Linn. Ingarsby, Leics., v.c. 55, May, 1906. Male flowers and leaf-branches.—A. R. Horwood. No, this is P. monilifera Aiton, which is very common in cultivation in England, and is probably of American origin.—A.B.J.

Cephalanthera pallens, Rich. (1) Plantation, Gog-Magogs, Cambs., v.c. 29, June 11, 1907.—Coll. R. H. Goode. Comm. G. Goode. (2) In a wood, Harlington, Beds., v.c. 30, June 17, 1907, and (3) Park Road, Luton, Beds., June, 1906.—D. M. Higgins.

Epipactis violacea, Boreau. Chiltern Green Wood, near Luton, Beds., v.c. 30, Aug. 20, 1907.—D. M. Higgins. Doubtless right; but more characteristic specimens should be taken.—E.S.M. Specimens much too poor to judge.—A.L. Looks more like E. media, Fr., to my eye, and not like any of my specimens of E. violacea, Bor., but it is not a satisfactory specimen to name.—E.F.L.

Orchis incarnata, Linn., var. angustifolia, Bab. Botcheston Bog, near Ratby, Leics., v.c. 55, July, 1907.—Coll. Miss M. Bell. Comm. W. Bell. Certainly not the var. angustifolia. These plants are very difficult, especially when dried; but I do not think it is O. incarnata at all. That (as I understand it) has the leaf-tips hooded and the spur conical. I should call this O. latifolia, Linn.—E.S.M. I can add nothing here.—A.L. I should say O. latifolia, more narrow-leaved than usual.—C.E.S.

O. incarnata, Linn., var. ———. Botcheston Bog, Leics., v.c. 55, July, 1907.—Coll. Miss M. Bell. Comm. W.

Bell. O. incarnata, Linn., I believe. The specimens labelled O. incarnata, Linn., var. angustifolia, Bab., only differ from it in being smaller.—E.S.M. I can add nothing here.-A.L. I can see no signs of the leaves being hooded; this, and the fact of the specimens being gathered in July, lead me to the conclusion that this is O. latifolia and not O. incarnata. There is no note as to colour of flowers.—C.E.S. In this case a note should have accompanied the specimen describing the markings of the lip. They are the most important character of O. incarnata, and are sometimes evanescent on well-dried specimens, and these have lost their colour as well as marks. Such as are discernable seem to be discontinuous. I should call all these specimens O. latifolia, L., and those labelled O. incarnata var. angustifolia are certainly not that variety, but the same as those labelled O. incarnata. -E.F.L.

O. latifolia × maculata. Flitwick bogs, Beds., v.c. 30, July, 1907.—D. M. Higgins. Probably correct; but such extremely critical plants need more care in drying.—E.S.M. Very curious.—A.L. Where is the maculata part of this? It has the hollow stem, little divided lips, short spur and leaves of latifolia.—C.E.S.

Scilla verna, Huds. Bude, E. Cornwall, v.c. 2, April, 1907.—Coll. C. C. Mountfort. Comm. E. Spearing.

Tofieldia palustris, Huds. (1) Ben Lawers, Mid Perthsh., v.c. 88, July, 1907. Alt. 2000 ft.—P. Ewing. (2) Craig Cailleagh (Creag na Caillich, near Killin), Mid Perthsh., v.c. 88, Aug. 24, 1907. Found very few at this date.—W. Barelay.

Juncus tenuis, Willd. Near Lochgilphead, Argyllsh., v.c. 98, Oct. 1907. First found Sept. 27, 1902.—P. Ewing.

J. filiformis, Linn. Loch of Loirston, Kincardinesh., v.c. 91, Aug. 29, 1907.—M. Skene.

J. castaneus, Sm. Ben Laoigh, Mid Perth, v.c. 88, July, 1907. Alt. 2750 ft.—P. Ewing.

J. biglumis, Linn. Ben Lawers, Mid Perth, v.c. 88, July, 1907. Alt. 3000 ft.—P. Ewing.

J. triglumis, Linn. Craig Cailleagh (Creag na Caillich, near Killin), Mid Perthsh., v.c. 88, Aug. 24, 1907. This was a bad season for mountain plants and Craig Cailleagh on Aug. 24 was poor indeed.—W. Barclay.

Luzula pallescens, Besser. Woodwalton Fen, Hunts., v.c. 31, June 13, 1907.—Coll. E. W. Hunnybun. Comm. S. H. Bickham. "This may possibly be fairly abundant on the Fen, but there is such a matted growth of sedges and grass that except, as in the present instance, where a small piece of land had been dug over to plant willow cuttings, it would be almost impossible for it to grow."—E. W. Hunnybun. "We have again examined the Luzula, and have come to the conclusion that it should be referred to L. pallescens, Besser, though differing somewhat from Wahlenberg's specimen, named Juncus pallescens, in the Natural History Museum."—James Groves, in litt. (See also Rept. B. E. C., 1907, p. 312).

Alisma Plantago-aquatica, Linn., var. lanceolatum, Afz. Ditch, Upton-on-Severn, Worcs., v.c. 37, July 18, 1907.—S. H. Bickham.

Potamogeton falcatus, Fryer. Ditch in Stocking Fen, near Ramsey, Hunts., v.c. 31, Aug. 7, 1907. Coll. E. W. Hunnybun and A. Fryer. Comm. S. H. Bickham. This cannot spread without difficulty as the Fen drain or ditch is a small one and almost a cul-de-sac. The tenant told us that he cleans the ditch out every year, but still the plant is abundant.—E.W.H. This has been found in Notts. by Prof. Carr.—A.B.

P. lucens, Linn. Saddington Reservoir, Leics., v.c. 55, July 20, 1906.—C. B. Headly. Good typical lucens, L., of the Linnean herbarium! and of the Sp. plant, ed. I.—A.B.

P. crispus, Linn. Cooling tanks, pumping station, Belgrave, near Leicester, v.c. 55, July 15, 1907.—W. Bell. P. crispus L., but I do not see that it is any variety. Its (perhaps) peculiar appearance seems induced by the incrustation—the styles may be a little longer than usual.—A.B.

Scirpus acicularis, Linn. Mr. Thompson writes from Geneva (13 Feb., 1908), with reference to the small Club-

rush that was mixed with the specimens of *Elatine hexandra* sent by him for distribution last year (see Rept. 1906—7, p. 82). "This little *Scirpus* attached to my Elatine was so obvious I did not draw attention to it, and especially as I was not sure of the species, for I could not exactly match it in my herbarium. I hoped it might be *S. parvulus*, which was not well represented in my herbarium, but to-day at the Conservatoire Botanique I find it could not have been that species (the glumes are light green), nor is it a dwarf *S. pauciflorus*, and I believe Mr. Linton was right in calling it *S. acicularis*, L. (= *Eleocharis acicularis*, R. Br.). On the same day I noticed *E. acicularis* grown more normally in an adjoining pool."

Carex vaginata, Tausch. Ben Laoigh, Mid Perth, v.c. 88, July 22, 1907.—P. Ewing.

- C. capillaris, Linn. Cam Chreag, near Killin, Mid Perth, v.c. 88, July, 1907. Alt. 2750 ft.—P. Ewing.
- C. Œderi, Retz., var. ædocarpa, And. Shore of Loch Shin, Lairg, E. Sutherland, v.c. 107, July 25, 1907.—R. S. Standen. I consider this to be the frequent hybrid, C. fulva (Hornschuchiana) × Œderi, var. ædocarpa.— E.S.M. There appear to be two varieties here under one label. Those with the larger greener spikelets and short-stalked male spikelet are very likely var. ædocarpa, and the specimens with small yellowish fruiting and longer stalked male spikelets are I believe var. cyperoides, Marss. But complete specimens with root-leaves should be sent for identification.—E.F.L.
- C. vesicaria, Linn., var., alpigena mihi (non Fries). Ben Laoigh, Mid Perthsh., v.c. 88, July 27, 1907. I have named this Carex vesicaria, var. alpigena, non Fries. If this plant is compared (even in its half-developed state) with Fries' description (in Nov. fl. Suec., Continuatio, Mantissa III., p. 142) it will be seen that they do not agree in various points. In this plant the male spikes are commonly two; the female spikes, when the fruit is mature, are always dark black and hanging on long thread-like peduncles; leaves are not subconvolute as in C. pulla or C. Grahami. I know that this plant has been confused with C. Grahami, but when seen growing together in the

same marsh, as was the case with the plants sent herewith, there is no difficulty in distinguishing them, even in the young state.—P. Ewing. Why not C. Grahami (Boott)? Fruit very different to ordinary vesicaria. Mr. Ewing says this is "var. alpigena mihi, non Fries." Now if this example is C. Grahami, that is, according to Syme, equal to the alpigena of Fries. The latter is described as having "spica mascula solitaria,.....squamis latis ovalibus," which does not fit Mr. Ewing's plant. Syme says, of Grahami, "male spikes often 2.....glumes of female flowers oval-lanceolate, subacute..... "which may be applied to the specimen under discussion.-C.E.S. Rather young C. vesicaria, Linn., var. Grahami (Boott), in my opinion. Mr. Ewing's suggested name is obviously invalid.—E.S.M. A very interesting sedge, neither var. alpigena, Fr., nor var. Grahami (Boott); possibly a hybrid of C. vesicaria, if it prove to be sterile. It is well worth cultivating, to study it in different stages of growth.-E.F.L.

C. pulla, Good. Roots cult. in garden. Orig. Ben Lawers, Mid Perthsh., June, 1903.—C. H. Waddell. Right, no doubt.—A.L.

C. pulla, Good., var. Grahami (Boott). Ben Laoigh, Mid Perthsh., v.c. 88, July 27, 1907. I have named this plant C. Grahami (Boott) as it is so called in the 9th ed. Lond. Cat., but why it is placed under C. pulla I do not understand; it is neither more nor less than a hill form of C. vesicaria and has nothing in common with C. pulla, unless it is its ability to exist at the same altitude.—P. Ewing. Right, no doubt.—A.L. I believe that this is C. Grahami (Boott). But it is certainly a variety of C. vesicaria, Linn.; the habit, glumes, and fruit do not at all closely resemble C. saxatilis, Linn. (pulla, Good.).—E.S.M.

Spartina alterniflora, Loisel. Mudflats, Southampton Water, S. Hants., v.c. 11, Oct. 1, 1907.—J. F. Rayner. Gathered a little late.—F.H.D.

Alopecurus alpinus, Sm. Caenlochan, N.W. Forfarsh., v.c. 90, July, 1904.—P. Ewing.

Phleum alpinum, Linn, Caenlochan, N.W. Forfarsh., v.c. 90, July, 1904.—P. Ewing.

Agrostis palustris, Huds., var. stolonifera (Linn.). Wallasey, Cheshire, v.c. 58, Aug., 1907.—E. and H. Drabble.

A. palustris, Huds., var maritima, Mey. Sandhills, Wallasey, Cheshire, v.c. 58, Aug., 1907.—E. and H. Drabble.

Apera Spica-venti, Beauv. (1) Blaby Mill, Leics., v.c. 55, July 30, 1903.—Coll. W. A. Vice. Comm. W. Bell. (2) On a rubbish-heap at Bissoe, Kea, W. Cornwall, v.c. 1, Aug. 5, 1907.—F. H. Davey.

Avena pratensis, Linn., var. longifolia (Parn.), or near it. Limestone bank in Cressbrook Dale, Derbysh., v.c. 57, July 24, 1907.—A. B. Jackson and T. E. Routh. I do not know.—A.L. Not so pronounced as Mr. Jackson's specimens distributed last year from Notts., though doubtless approaching "longifolia." I do not think this variety is recognised on the Continent, and has it anything beyond the longer leaves to separate it from type? If not, I cannot see much in it.—C.E.S. This may perhaps be placed under the variety, but all my specimens of longifolia (Parn.) have longer leaves than these; on one of them Hackel remarked "a very slight variety," which still more applies to the sheet submitted to me.—E.F.L. I believe rightly named. The leaves are unusually narrow, probably on account of the dry situation.—E.S.M.

Poa pratensis, Linn., var. angustifolia (Linn.). Stony ground on railway embankment at Reading, Berks., v.c. 22, May, 1907.—A. B. Jackson.

P. palustris, Linn. Bank of the Tay between Orchardneuk and Elcho, Mid Perthsh., v.c. 88, Aug. 21, 1907. For a notice of the discovery of this plant see Trans., Bot. Soc., Edinb., 1889, p. 265. In that notice Dr. White states the arguments for and against the plant being indigenous on the bank of the Tay. The point is a difficult one to resolve and I am by no means satisfied that it is really indigenous there or at Bennybeg pond near Crieff, where we also found it the same year. On the Tay bank the plant is quite as abundant as it was on its first discovery, but it has not spread much. It cannot easily spread downwards as there is a huge bed of Phragmites immediately below, and it has not spread upwards. It grows luxuriantly, attaining a height of five

feet. My gathering was made at too late a period in the season, but I found some young plants which, with an older panicle, will give a good idea of its appearance before and after flowering. In the full flowering stage it has not the same likeness to Poa nemoralis which it has before the panicle spreads out. In the notice above alluded to Dr. White says "we made it out to be P. palustris," but the identification was made by himself as I failed to make anything of it.—W. Barclay.

Bromus erectus, Huds., var. villosus, Bab. Bullen Bank, Ledbury, Herefordsh., v.c. 36, July 29, 1907.—S. H. Bickham.

B. unioloides, H.B. and K. Waste ground by roadside, Ledbury, Herefordsh., v.c. 36, Oct. 7, 1907.—S. H. Bickham. This plant seems to be spreading.—A.B.

Lolium multiflorum (Lam.). (1) Growing in profusion with Secale cereale, Linn., Sinapis nigra, and other aliens, on ground which had been used for housing poultry, on the sandhills off the North Drive, St. Anne's-on-the-Sea; N.W. Lancs., v.c. 60, July 20 and Aug. 3 and 9, 1907.—Charles Bailey. Another very welcome lot.—F.H.D. This exactly resembles a grass which was abundant last year in the Arboretum, Kew Gardens, and was considered by Dr. K. Domin to be L. perenne × multiflorum.—A. B. Jackson. (2) Waste ground, Wallasey, Cheshire, v.c. 58, Sept. 1907. There are no barren shoots, and Mr. Wheldon agrees that it is multiflorum.—E. and H. Drabble. Very good examples of multiflorum.—F.H.D.

L. temulentum, Linn. Blaby Mill, Leics., v.c. 55, Aug. 1907. A casual.—Coll. W. A. Vice. Comm. W. Bell.

Secale cereale, Linn. In great plenty, on the site specified for Lolium multiflorum, St. Anne's-on-the-Sea, N.W. Lancs., v.c. 60, July 20, Aug. 3, and Oct. 9 and 12, 1907. The plants associated with it were Sinapis nigra, two species of Rapistrum, two species of Malva, Amsinckia lycopsioides and angustifolia, Bupleurum rotundifolium and protractum, and many other aliens.—Charles Bailey.

Woodsia hyperborea, R. Br, Lochan-na-Lairg (W. of Ben Lawers), Mid Perthsh., v.c. 88, Aug. 3, 1906.—Mc T. Cowan, jun.

Cystopteris montana, Link. Ben Laoigh, Mid Perthsh., v.c. 88, July, 1907.—P. Ewing.

Lastræa æmula, Brackenridge. Hedge-bank, Tonaghmore, Saintfield, co. Down, Sept. 7, 1907.—C. H. Waddell.

Equisetum arvense, Linn., var. alpestre, Wahl. Cam Chreag, near Killin, Mid Perthsh., v.c. 88, July 13, 1907.—P. Ewing.

E. variegatum, Schleich. Leasowe Golf Links, Cheshire, v.c. 58, June, 1907.—E. and H. Drabble. This has nothing to do with variegatum, of which Newman's arenarium represents the type. It is, I believe, small E. palustre, Linn.—E.S.M.

E. ———. On mud, Chard Reservoir, S. Somerset, v.c. 5, Sept. 16, 1907. Stems scabrid at the angles. Central tube very small, exceeded by the 6-7 lateral ones. This has mostly been referred by my correspondents to E. palustre; but one of them sees nothing to keep it from E. arvense. No fructification was present. The station would, I think, be under water in normal seasons; this is against arvense, which I have never seen in very wet situations. The habit is very peculiar, and I thought that a possible solution might be hybridity between these two species. In any case, it is an interesting form.—E. S. Marshall. This appears to be a form of E. palustre L. and agrees very well with some N. American specimens so named at Kew.—A.B.J.

Lycopodium clavatum, Linn. Birchin Grove Wood, near Luton, Beds., v.c. 30, Nov. 2, 1907. Mr. Saunders,

our local botanist, found this in Oct., 1907. He tells me it has not been found in Bedfordshire for one hundred years, and then it was not near the present locality.—D. M. Higgins.

Selaginella selaginoides, Gray. Glen Feidh (or Fee, at head of Glen Clova), Forfarsh., v.c. 90, July 26, 1905.—Mc T. Cowan, jun.

Copies of most of the back numbers of the Report can be obtained from the Hon. Sec.

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THE

GWENTY-FIFTH ANNUAL REPORT

OF THE

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1908-1909.

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10 MAR.1910

THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1908-9.

The plants sent in for distribution this year were, on the whole, well prepared and included many interesting things. The number of sheets contributed was 2,834 as compared with 2,918 last year, and critical generaespecially Hieracium and Mentha—were satisfactorily represented. Several members still persist in ignoring Clause c of Rule 3, which states that at least six sheets of each species should be sent. This practice, except in the case of very rare plants, ought not to be encouraged, as such contributions are quite useless for Club purposes and give the distributor a great deal of trouble. One or two members, however, erred in the opposite direction and collected several rare plants in too large a quantity. It must be remembered that the Club does not exist for the extinction of rarities, and their attention is called to the remark at the commencement of the list of desiderata, that in gathering plants they are to take care they run "no risk of destroying or appreciably diminishing a plant in any locality."

The contributions were as follows:—

The contributions were a	s follows:—
Sheets.	Sheets.
Mr. C. Bailey 254	Mr. A. Loydell 17
Mr. W. Barclay 91	Rev. E. S. Marshall 383
Mr. W. Bell 70	Mr. H. T. Mennell 45
Mr. S. H. Bickham 354	Mr. J. F. Rayner 25
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Mr. A. R. Horwood 48	Maj. A. H. Wolley-Dod 50
Mr. A. B. Jackson 12	
Rev. A. Ley 408	Total 2,834
Rev. E. F. Linton 120	

The Club is again indebted to the Rev. Augustin Ley for a large and valuable contribution, particularly of *Hieracia*.

Useful notes on critical species were received from Mr. W. Barclay, Mr. A. Bennett, Dr. E. Drabble, Prof. E. Hackel, Mr. J. R. Drummond, Mrs. Gregory, Messrs. H. and J. Groves, the Revs. A. Ley, E. F. Linton, E. S. Marshall, and W. Moyle Rogers, Mr. H. W. Pugsley, Mr. C. E. Salmon, and Major Wolley-Dod.

A. BRUCE JACKSON, Distributor for the year 1908—9.

The Secretary greatly regrets that the publication of the Report has been unavoidably delayed this year.

Dr. Eric Drabble has kindly undertaken to distribute next year, and parcels of plants should be sent to him at 13, Claverley Grove, Church End, Finchley, London, N., before January 31.

GEORGE GOODE,

November, 1909.

Hon. Secretary.

Thalictrum minus L., var. odoratum (Gren. & Godr.). Origin, Erwood, Breconsh., (on shady river-side rocks), v.c. 42. Cult. Aug. 4, 1908. Named for me by Rev. E. F. Linton in 1907, var. pubescens Schleich., (see B.E.C. Rept., 1907, p. 268), so that my labels will have to be altered by members. The whole plant is broader and more straggling in growth than any other variety of T. minus which I have seen.—A. Ley. The panicle in this Erwood plant is much broader than in any other form of T. minus I have seen.—E.F.L.

T. Kochii Fr. Origin, Langdale, Westmorland (on river-sides), v.c. 69. Cult. Aug. 4, 1908. Named for me by the late Rev. W. R. Linton, in company with whom I picked it in 1905 (see B.E.C. Rept., 1905, p. 152). In the garden the fruits are not subject to insect attacks.—A. Ley.

The fruits on these August specimens look like the ordinary oblique or unequal-sided fruits of *T. collinum*, but the shape of the ripe fruit is the criterion, and these should be collected in late Sept. or Oct.—E.F.L.

Adonis annua L. Telscombe, E. Sussex, v.c. 14, July 10, 1899.—A. G. Gregor.

Ranunculus fluitans Lam., var. cambricus (Ar. Benn.). Llyn Coron, Anglesey, v.c. 52, July, 1892.—Coll. J. E. Griffith, comm. A. Bennett, and C. E. Salmon.

R. acris L., var. ————? (ref. No. 3351). Meadows, Kilgwrrwg, about 7 miles from Chepstow, Monmouthsh., v.c. 35, May 29, 1908. Pointed out to me by Mr. W. A. Shoolbred. Root premorse. Apparently near R. Boræanus (Jord.) and R. tomophyllus (Jord.).—E. S. Marshall [see Rept. B.E.C., 1908, p. 357].

Eranthis hyemalis Salisb. Bishopthorpe, near York, v.c. 64, March, 1888.—H. T. Mennell.

Berberis Aquifolium × vulgaris (ref. No. 3171). Hedge near Bossington, S. Somerset, v.c. 5, June 9, 1908.—E. S. Marshall [see Jl. Bot., 1907, p. 393]. This is a Berberis not uncommon in the Kumaon-Chamba Himalaya at about 6,000—9,000 ft. alt., and referred by C. K. Schneider (see determ. tickets in Herb. Kew) to B. aristata DC., sensu stricto. It is not uncommon in cultivation.—A. B. Jackson and J. R. Drummond. I am glad that this has been identified at Kew by Mr. W. J. Bean as a species, B. aristata DC., [see Mr. Marshall's note, Jl. Bot., 1909, p. 74], for it has all along seemed to me impossible that two species which have a sessile stigma, as both the supposed parents have, should produce an offspring with a distinct style; this was to me fatal to the supposed origin.—E.F.L.

Also sent by Mr. Bickham from the same locality.

Fumaria Boræi Jord., var. muraliformis Clavaud? Old wall in an orchard, Fowey, W. Cornwall, v.c. 1, June 9, 1908.—Coll. Mrs. Graham. Rather poor specimens, I am afraid, for purposes of identification, but they seem to have the long bracts which Mr. Pugsley states are characteristic of this variety.—R. S. Standen. A slender, small-flowered form of F. Boræi Jord., somewhat intermediate between the varieties serotina and muraliformis, but hardly referable to either.—H.W.P.

Barbarea arcuata Reichb. Origin, side of drain-ditch. Upton-on-Severn, Worcs., v.c. 37. Cult. Ledbury, June 14 and Aug. 13, 1907.—S. H. Bickham. Right, I believe. Seeds longer than broad, corolla persistent.—A. Lev. Beautiful specimens of this plant, which is doubtless the B. arcuata of many English and Continental botanists. but it differs from the B. arcuata of Reichenbach ("Icones Fl. Germ." ii., Fig. 4356) in a character on which Syme ("E.B." ed. iii., vol. i., 173) lays great stress, namely in the seed being broad and short. In Reichenbach's type, which I have also examined, the seed is long and narrow, i.e., more than twice as long as broad. This Upton plant is what in "Flora of Berkshire," p. 44, I have called B. vulgaris, var. decipiens (= B. lyrata Aschers., var. decipiens); but if anything the flowers are a trifle larger, my plant being near to, if not identical with, the plant wrongly figured by Reichenbach in Sturm's "Deutschland Flora" as arcuata, and this may be the origin of the confusion respecting it by continental authors.—G. Claridge The seeds of this plant, though they vary somewhat, approach so closely to the character of those in Reichenbach's Icon. No. 4357 in Iconogr. Cent. xi., Pt. 2, that taking other marks into consideration there need be no doubt at all that Mr. Bickham's specimens are good examples of the true B. arcuata, Reichb.—J. R. Drummond and A. B. Jackson.

B. — Origin, from an old coal tip, Glais, Glamorgansh., v.c. 41. Cult. May 22 and July 21, 1908. See, on this plant, Rept. B.E.C. 1907, p. 273; where Mr. Jackson makes interesting suggestions concerning it. short silicles containing very few seeds suggest a deformity: the plant however grows, self sown, from seed. In the original locality it was scattered over a small area of old coal-pit debris which had become thinly covered with grass, and had the aspect of an introduction.—A. Ley. The adequate material now received from Mr. Ley leaves no question that this is Barbarea taurica DC. Specimens in the Kew Herb. which are in every respect identical, except as regards the development of the seed, with the Glamorganshire plant have been identified by Anderson and others unhesitatingly with the plant of the "Systema;" and Mr. Duthie, who has also seen the plant growing in Kashmir, agrees that Mr. Ley's specimens resemble the

conspicuous form which we have observed in the N.W. Himalaya. This may however be a good species, as it differs from all the others of this series by the spreading pedicels, combined with the comparatively short, often somewhat curved subulate pods, and tipped by a proportionately long and slender style. From B. plantaginea and B. arcuata this plant is distinguished by its much shorter pods with fewer seeds; by the denser cymes of bright golden-coloured flowers; and also by the foliage. The range of B. taurica is from Central and South Eastern Europe (in the Balkans) through the Caucasus to the mountains of Afghanistan, to the extreme N.W. of India. The poverty of seed in the introduced plant is doubtless due to unsuitability of climate. At the opposite end of its area, i.e., in Kashmir (at about 9000 feet above the sea) it is often partly sterile, the stamens being converted into petals.—J. R. Drummond.

Arabis petræa Lam. Beinn Laoigh, Mid Perthsh., v.c. 88, Aug., 1908.—P. Ewing. The var. ambigua Fr.; so far as I know, the only form which occurs on this mountain, which is its head quarters in Britain.—E.S.M.

Alyssum maritimum Linn. On a damp sandy flat in sandhills at the corner of St. Andrew's Road South, and St. Leonard's Road, St. Anne's-on-the-Sea, W. Lancs., v.c. 60, Aug. 1, 1908.—Charles Bailey. An alien, used for carpet-bedding, which, when thrown out with garden rubbish on sandy ground near the sea, becomes persistent, at least on the south coast.—E.F.L.

Erophila ———— (ref. No. 2286). Sandy ground, Milford, Surrey, v.c. 17, April 17, 1899. A very distinct looking plant, for which I have been unable to get a definite name. Leaves yellowish-green, narrow, gradually tapering into the rather long petiole, with many bifurcate and trifurcate hairs.—E. S. Marshall.

E. virescens Jord. (ref. No. 1216). Sandy ground, Milford, Surrey, v.c. 17, March 20, 1894. This plant prefers somewhat bare grassy ground; I have not seen it in cultivated land. Leaves in a flattened rosette, rather bright green, fleshy, glabrescent; thus differing greatly from all our other British forms. Jordan's figure of E. virescens represents a more luxuriant plant, with

broader capsules; but an authentic specimen in Brit. Mus. Herb. (unfortunately rather too young) seems to me indistinguishable from the present gathering.—E. S. Marshall.

Cochlearia alpina Wats. Aberlady Bay, Haddingtonsh., v.c. 82, June 22, 1908.—I. M. Hayward. My specimens are scrappy, and not easy to determine. I have never seen C alpina except in alpine or subalpine stations, and do not believe that this is it; I am much more inclined to consider the material before me as drawn-out C. granlandica L.—E.S.M.

C. grænlandica L. Aberlady Bay, Haddingtonsh., v.c. 82, June 22, 1908.—I. M. Hayward. Doubtless correct. Some of the pods are, however, remarkably narrow for this species; thus simulating the narrow-pouched form of my C. micacea.—E.S.M. New county record.

Sisymbrium Columnæ Jacq., var. stenocarpum Rouy & Foucaud. On the site of an old fowl-run on the sandhills off St. Andrew's Road South, St. Anne's-on-the-Sea, W. Lanes., v.c. 60, Aug. 29, 1908.—C. Bailey.

Brassica Cheiranthus Vill. Par, E. Cornwall, v.c. 2, June 9, 1908.—Coll. Mrs. Graham. Comm. R. S. Standen.

Rapistrum Linneanum Boiss. et Reut., var. glabrum Cariot. On the site of an old poultry-run on the sandhills east of the North Drive, St. Anne's-on-the-Sea, W. Lancs., v.c. 60, Oct. 12, 1907.—Charles Bailey.

Viola hirta L., var. Foudrasi Jord. Cadbury Camp, N. Somerset, v.c. 6, April, 1908.—J. W. White. Right.— E. S. Gregory.

V. calcarea Gregory. Brockley Coombe and Warren, N. Somerset, v.c. 6, April, 1908.—J. W. White. Right, but I found a small scrap of V. hirta on my sheet.—E.S.G.

V. ———. Rough shrubbery near Ledbury, Herefordsh., v.c. 36, May 13, 1908.—S. H. Bickham. I should call this V. sylvestris Kit., f. leucantha G. Beck.—C.E.S. This has been recently determined by Dr. Becker to be V. silvestris Reichb., f. luxurians.—E.S.G.

V. canina × Riviniana. Railway embankment, Malvern Link Common, Worcs., v.c. 37, May 11 and Aug. 5, 1908.—S. H. Bickham and R. F. Towndrow. This naming has been recently endorsed by Dr. Becker.—E.S.G.

V. arvensis Murr. Weed in a field, Laxey, Isle of Man, v.c. 71, Aug. 1903.—C. H. Waddell. Yes, forma segetalis Jord.—E. Drabble.

Lychnis alba × dioica. West Monkton, S. Somerset, v.c. 5, June 5, 1908.—E. S. Marshall. Mr. Marshall's comment "apparently fertile" does not fit very well with my specimens, which have stamens and no pistil.—E.F.L.

Cerastium alpinum L. Creag Mhor, Mid Perth, v.c. 88, July, 1908.—P. Ewing.

Stellaria ———. On the sea coast, Tara, co. Down, Sept., 1905.—C. H. Waddell. A state of S. media Vill., I believe.—E.S.M.

S. Holostea L., apetalous form. Malvern Link, Worcs., v.c. 37, May 11, 1908.—S. H. Bickham. Var. apetala Rostrup, in "Botanisk Tidsskrift," xiv., p. 118, 1879. Recorded for Denmark by Rostrup, l.c.—A. Bennett.

Arenaria rubella Hook. Ben Lawers, Mid Perth, v.c. 88, July, 1907.—P. Ewing.

A. norvegica Gunn. Near Inchnadamph, W. Sutherland, v.c. 108, July 14, 1908. Some of our members may be glad to have this very scarce plant. Not many specimens were taken.—E. S. Marshall.

A. sedoides Froel. Ben Lawers, Mid Perth, v.c. 88, Aug. 5, 1907.—McT. Cowan, jun.

Sagina saginoides Dalla Torre. Ben Lawers, Mid Perth, v.c. 88, Aug. 5, 1907.—McT. Cowan, jun.

Elatine hexandra DC. Pond near Uckfield, E. Sussex, v.c. 14, Aug. 29, 1898.—Coll. W. E. Nicholson. Comm. A. G. Gregor.

Althæa hirsuta L. Vale Castle, Guernsey, June, 1894. Coll. J. D. Gray. Comm. R. S. Standen. This is A. officinalis L.—A.B.J.

Malva parviflora L. Site of an old poultry-run at the corner of Devonshire Road and North Drive, St. Anne's-on-the-Sea, W. Lancs., v.c. 60, July 20, 1907.—C. Bailey. Not quite M. parviflora L., which has larger flowers and fruits, with broad rounded shortly-pointed calyx-lobes spreading out patently. Mr. Bailey's plant seems to agree exactly with the description of M. microcarpa Desf. which Rouy and Foucaud (Fl. de France, iv., pp. 39, 40) place under M. parviflora, and say it differs from that in the smaller flowers, fruits, and calyx, calyx-lobes not reddening, not spreading, but more ascending and more acuminate, carpels more strongly ridged. In these specimens the calyx-lobes are either ascending or pressed in on the fruit and rather acuminately pointed.—E.F.L.

Geranium Robertianum L., var. purpureum (Vill.), (ref. No. 3344). Shingly beach, Minebead, S. Somerset, v.c. 5, July 1, 1908. Anthers orange; carpels glabrous; calyx usually glabrous.—E. S. Marshall.

Oxalis corniculata L. Par, E. Cornwall, v.c. 2, June 9, 1905.—Coll. Mrs. Graham. Comm. R. S. Standen.

Cytisus scoparius Link, var. prostratus (Bailey). Pleimont, Guernsey, June 1894.—Coll. J. D. Gray. Comm. R. S. Standen. Identical with the Lizard plant. Not, in my opinion, a good variety; only a state, due to exposure.—E.S.M.

Medicago lupulina L., var. scabra Gray. With the typical form on limestone at Waterhouses, Staffs., v.c. 39, June 22, 1908.—T. E. Routh and A. B. Jackson. Correct, I believe. The description of the habitat seems to indicate that it is native here, which is interesting (see Mr. Beeby's note in Jl. Bot., 1895, p. 315). I have been unable to see a full description of Gray's var., but I am concluding it is identical with Koch's Willdenowiana, and not merely a diagnosis of the hairy-fruited state of lupulina.—C.E.S.

Trifolium pratense L., var. sylvestre Syme. Scraptoft, Leics., v.c. 55, June 22, 1905. The luxuriant and robust cultivated form of the red clover (sativum Schreb.) is very distinct from the ordinary meadow variety, and their habitat is different. The form sent is unusually hirsute,

compact, and small-leaved, the flower-heads being more numerous, and it contrasts strongly in habit with the usual form which is widely distributed. This form, which has been met with elsewhere in the district only rarely, has a preference for a hilly pasture-field. It is unfortunate that in the new edition of the London Catalogue it is regarded as the type and merged in *Trifolium pratense* L.—A. R. Horwood. Yes; a small form of it. But it seems absurd to take the *cultivated* plant as the type; and var. sativum accordingly stands as b. in Lond. Cat., ed. 10.—E.S.M.

 $T.\ stellatum$ L. Shoreham, W. Sussex, v.c. 13, June 8, 1899.—A. G. Gregor.

 $\it T.~glomeratum$ L. St. Mary's, Scilly Isles, v.c. 1, June 22, 1898.—A. G. Gregor.

Anthyllis Vulneraria L., var. ————. Bude, E. Cornwall, v.c. 2, June 10, 1908.—Coll. C. C. Mountfort. Comm. E. Spearing. I suppose var. coccinea L., which appears to vary with flowers wholly yellow, or with crimson keel, or with flowers wholly crimson.—C.E.S. This maritime plant has been variously called var. coccinea L., or var. Dillenii (Schult.); I am not sure about the right name for it. One of the stems on my sheet has yellow flowers, and looks different.—E.S.M. Var. Dillenii (Schult.) = var. coccinea (L.)—E.F.L.

Vicia hybrida L. Downs between Dover and Deal, E. Kent, v.c. 15, June 12, 1908.—S. H. Bickham [see Jl. Bot., 1908, p. 364].

Lathyrus palustris L. Closet river by Lough Neagh, co. Armagh, July 5, 1865.—Coll. Rev. S. A. Brenan. Comm. C. H. Waddell.

Spiræa salicifolia L. Near Alnwick, Northumberland, v.c. 68, July, 1908.—Coll. Lady Muriel Percy. Comm. D. M. Higgins.

Rubus plicatus Wh. & N., var. Bertramii G. Braun, Penderyn, S. Breconsh., and Mellte Glen, S.W. Breconsh., v.c. 42, Aug., 1908. Both gatherings seen by Rev. W. M. Rogers, and passed by him as "Bertramii, but not well marked."—A. Ley.

- R. affinis Wh. & N. New Radnor, v.c. 43, Sept. 10, 1908. Seen by Rev. W. M. Rogers. New county record.—A. Ley.
- R. Scheutzii Lindeb. Skiddaw Lane, Keswick, Cumberland, v.c. 70, Aug. 13, 1908.—R. S. Standen. Very characteristic, and identical with the plant seen by me at Threlkeld, in the same neighbourhood, in 1906 [see Jl. Bot., 1907, p. 9]. Stem pieces on some sheets immature, and so wanting fully characteristic leaves.—W.M.R.
- R. lacustris Rogers. Bank sloping to water, N.W. end of Thirlmere, Cumberland, v.c. 70, Aug. 25, 1908.—R. S. Standen. All the 26 sheets sent seem to belong to my R. lacustris [see Jl. Bot., 1907, pp. 9 and 10], but unfortunately a good deal of the material is too scrappy to represent it quite satisfactorily.—W.M.R.
- R. Godroni Lec. & Lam. Boxted Lane, Nayland, W. Suffolk, v.c. 26, Aug. 19, 1898.—Coll. J. D. Gray. Comm. R. S. Standen. None of these quite match var. robustus P. J. Muell, as I understand it. I should place them all under aggregate R. Godroni Lec. & Lam. (R. argentatus auct. brit. prius), though they go off a little towards var. robustus. But species and var. commonly show a great range of variation.—W.M.R.
- R. Colemanni Bab. Holme Fen, Hunts., v.c. 31. Picked in company with Mr. E. W. Hunnybun, Aug. 28, 1908. Named for me by Rev. W. M. Rogers. New county record.—A. Ley.
- R. ericetorum Lefv., var. cuneatus Rogers & Ley. On rough hill sides, Pontsticill, Breconsh., v.c. 42.—A. Ley. I agree. (See Jl. Bot., 1906, p. 59).—W.M.R.
- R. hystrix Wh. & N., f. umbrosa (R. silvestris R. P. Murray), fide W.M.R. In a wood above Ashness Bridge, Watendlath, Keswick, Cumberland, v.c. 70, July 29, 1908. New county record. In the "Handbook" Mr. Rogers calls this a weak woodland broad-panicled form of var. hystrix.—R. S. Standen.
- R. Marshalli Focke & Rogers, var. semiglaber Rogers. On banks near Pen-twyn Lake, Dol-y-gaer, Breconsh., v.c. 42, July 19, 1908. Seen by Rev. W. M. Rogers.—A. Ley.

R. Bellardii Wh. & N. Cowleigh Park and Birch Wood, Herefordsh., v.c. 36 (Districts 4 and 5, Herefordshire Flora), July 24, 1908. In Herefordshire a very local plant, not yet found outside these two districts.—A. Ley.

R. Balfourianus Blox. Near Ty Croes Station, Anglesey, v.c. 52, Aug. 1895.—J. E. Griffith. "I should rather say R. dumetorum Wh. & N. (sp. coll.). It cannot go to R. Balfourianus, I believe."—W.M.R. [CORRECTION.—Wats. Bot. Ex. Cl. Rept. for 1895-96, p. 7].

Potentilla Crantzii G. Beck. Creag Mhor, Mid Perth, v.c. 88, July, 1908.—P. Ewing.

Alchemilla vulgaris L., var. alpestris Pohl. Morridge, near Leek, Staffs., v.c. 39 (up to 1600 feet alt.), June 23, 1908.—T. E. Routh.

 but the white flowers are unusual. Var. Scheutzii Chr. is the only other white-flowered variety of mollis known to me, but it is not that.—A.H.W.-D.

R. mollis Sm., var. carulea Woods. On stony stream debris, Cerrig Haffes, W. Breconsh., v.c. 42, July, 1908. Sent to Dr. Hermann Dingler, of Aschaffenburg, and the name agreed to by him. Flowers are sent as well as young fruiting shoots, that the petals may be exhibited. are usually quite eciliate, but in rare cases a few ciliationhairs were present.—A. Ley. Correct. The obovate leaflets are peculiar. The specimens with smooth peduncles are the most characteristic, though some weak glandular development is permissible, as in the specimens from the same station distributed by Mr. Lev through the B.E.C. in 1906.—A.H.W. D. I believe correct. I have not seen Woods' description or his type specimen, but Mr. Ley's specimens agree well enough with Mr. Baker's diagnosis in the Monograph. The characters there given for the variety are, taken individually, so very variable that it is not easy to find specimens agreeing in all points. You find fruit smooth or more or less bristly on the same twig, and the clothing of the peduncles is nearly as variable. Pendent fruit is not at all confined to this variety, and even the shape of the fruit often varies to some extent on the same bush; nor is it always safe in R. mollis to take for granted that the ripe fruit will keep precisely the same shape which it had when half-grown. Mr. Baker says nothing of subfoliar glands, but it may be inferred that these should be few, from the phrase applied to the leaves, "softer and greyer than usual." Mr. Ley's specimens are very thinly glandular on midrib, and some of the principal veins, though the glands are not easily seen. No objection, therefore, can be made on this account to his naming his plant as var. cærulea. It is not uncommon to find plants which agree pretty closely with Mr. Baker's description of this variety, except that the leaves are densely glandular on the under-surface. As to Major Wolley-Dod's remark on the shape of the leaflets, you find a varying number of obovate leaflets on most variations of R. mollis. Usually these are obtuse at the point, but sometimes acute. occurrence of such leaflets will occasionally assist in distinguishing in herbarium specimens R. mollis from R. tomentosa, as obovate leaflets rarely occur in the latter species, and even when they do occur the contour is different from those of R. mollis. Observations on the living during the present season (1909) have convinced me that ciliation of the claws of some petals occurs occasionally both in R. mollis and in R. tomentosa, but that it is too inconstant to be utilised for the differentiation of species or varieties.—W. Barclay.

R. tomentosa Sm., var. ——. (No. 16). Near Auchterarder Railway Station, Mid Perth, v.c. 88, Aug. 15 and Sept. 23, 1908. Very few of the sepals were fallen, and I think this also should enter the omissa group. Its flowers are deep red, its leaves densely glandular beneath, and more or less thickly glandular on the upper surface; its pedicels are prickly as well as glandular. It grows close beside the involuta form which I sent last year, and is evidently one of its parents. The involuta is therefore spinosissima × a member of the omissa group.—W. Barclay. Certainly an omissa form, I think, and perhaps not identifiable with any known species. I should have felt inclined to label it R. resinosoides Crép., but as Mr. Barclay has pointed out to me, the best evidence against that is that Crépin, who has seen specimens from this or from similar bushes, failed to recognise it. Moreover, its fruit seems too elongate-obovoid, but this, I think, is not prohibitive. description, it would appear to come near R. omissa, var. Schulzei Kell. [Asch. and Graebn. Syn. mitteleur. Fl. vi., 1, p. 77], but I do not know that variety. It does not come near typical R. tomentosa.—A.H.W.-D.

R. tomentosa Sm., var. ————. (No. 10). Near Cargill Railway Station, E. Perthsh.. v.c. 89, July 3 and Sept. 5, 1908. This is a white-flowered form belonging to the omissa group, that is, its sepals persist till the fruit is fully ripe, and a good many till long afterwards. It was growing out from a hedge, and had most likely been cut down a year or two previously—which accounts for its large leaves. The leaflets are more or less glandular above and thickly glandular below. So far as I know it does not correspond with any named variety.—W. Barclay. An omissa form, but I can find none described with white flowers. It may be R. resinosoides Crép., which has them pale rose, and I do not know whether Crépin has seen this form. It agrees tolerably well with Déséglise's description

of *R. resinosa* Sternb. (Déséglise, "Essai monog. sur les roses," p. 126), which name he afterwards found had been misapplied by French authors, his description applying to Crépin's species, under which I should provisionally leave it.—A.H.W.-D.

R. tomentosa Sm., var. ———. (No. 20). Right bank of R. Earn below Comrie, Mid Perth, v.c. 88, Sept. 12, 1908. The sepals were mostly fallen at this date, so that it can hardly enter the omissa group. The prickles are very unequal. Leaflets glabrous above, moderately hairy and thickly glandular beneath, on the whole rather small and narrow.—W. Barclay. I feel very doubtful between the omissa and the tomentosa groups. There is a sub-group of the latter, which forms a connecting link between the two, into which it might be placed. As to the persistence of the sepals, Mr. Barclay is in the best position to express an opinion, as he has seen the growing plant, but out of 39 fruits on the whole of the specimens he sends, 19, or just half, have 4 or 5 (mostly 5) sepals still attached, while 18 have 3 or less, only 2 having none. This does not appear to me to bar the omissa group. If it belongs to that group it comes nearest to R. resinosoides Crép., though very different from Nos. 10 and 16, but on the whole I think it is nearer R. cuspidatoides Crép. in the tomentosa group. It can hardly be R. scabriuscula Sm.— A.H.W.-D.

R. tomentosa Sm., var. ————. (No. 24). On bank by roadside, near Cargill Railway Station, E. Perthsh., v.c. 89, Sept. 5, 1908. This seems to be a tomentosa form, and if so belongs to the section which includes scabriuscula Sm. and cuspidatoides Crép.; but it certainly is neither of these two, nor do I think it corresponds with any named variety. I have never before seen one like it, and there was only one bush.—W. Barclay. I think this is nearest R. scabriuscula Sm., but off type in shape, size and spacing of leaflets. It is certainly a good tomentosa form, and were not the type of Smith's species so indefinite, I should feel inclined to refer it to that. Its small close-set leaflets are unusual.—A.H.W.-D.

R. glauca Vill., of group subcristata Baker. (No. 19). Buckie Braes, Mid Perth, v.c. 88, Aug. 14, 1908. This form makes an approach to the group subcanina Chr.,

that is to say its sepals at this date were mostly reflexed or only spreading. A very few were spreading erect. fortnight afterwards they were practically in the same position and even when fully ripe were scarcely to be called more than spreading. It should be noted that the reddening of the fruits took place in the drying, as sometimes happens, and that the pressure of the paper gives the sepals the air of being more erect than they actually were.—W. Barclay. I can make nothing of this with so elongate-obovoid a fruit. It seems nearest var. pseudofalcata Kell. (Asch. and Graebn. Syn. mitteleur. Fl., VI. 1, p. 191), the leaflets being too biserrate for R. falcata Pug., which has a similar fruit. It is, I think, incorrect to assign plants with biserrate leaflets to var. subcanina Chr. His variety was not well defined, but certainly did not include biserration nor hispid peduncles. If such a name be used it must be R. subcanina Kell. (Bot. Centralbl. XLVII. (1891), p. 321), non Christ. But as Mr. Barclay points out, this plant only approaches that group; its sepals should be more fully reflexed before it can be placed therein. It cannot possibly be called good typical glauca on account of its fruit and its biserration.—A.H.W.-D.

R. glauca Vill., of group subcristata Baker. (No. 17). Buckie Braes, Mid Perth, v.c. 88, Aug. 14, 1908. This seems to me pretty typical, but is very curious in its short, stout, unequal prickles. The sepals, on the whole, were quite erect at this date.—W. Barclay. R. complicata (Gren.), which has its sepals usually less strongly erect; less persistent than R. subcristata. From the appearance of the dried specimens this makes just as near an approach to R. subcanina Kell. as No. 19.—A.H.W.-D.

R. coriifolia Fr., of group Lintoni Scheutz. (No. 8). Buckie Braes, Mid Perth, v.c. 88, Aug. 14, 1908. In this group I include forms of R. coriifolia Fr., with leaves more or less glandular beneath, and with peduncles and backs of sepals eglandular.—W. Barclay. Yes, var. Lintoni, but there are older and more comprehensive names which would cover such a group as is defined by Mr. Barclay, e.g., R. tristis Kerner (1881). I have no specimens named var. Lintoni from the continent, where the variety appears to be unknown.—A.H.W.-D.

R. coriifolia Fr., of group Bakeri Déségl. (No. 15). Buckie Braes, Mid Perth, v.c. 88, Aug. 14, 1908. In this group I include forms that differ from the last by having the peduncles and backs of sepals more or less hispid glandular. Both of these groups are pretty widely spread in Scotland, and may be either green or glaucous. They vary considerably in the hairiness and also in the degree of glandulosity of the leaves.—W. Barclay. R. Bakeri Déségl., with broader leaflets and longer peduncles than usual. The styles are villous, as I usually find them, and as this group (corifolia) should show, though Déséglise describes them as "thinly hispid or glabrous." The peduncles are somewhat hispid, which is permissible but not usual in this species. Mr. Barclay is wrong in separating R. Bakeri from R. Lintoni by the clothing of the peduncles. The shape of the fruit is the primary distinction, ovoid or ellipsoid in the former, subglobose in the latter.—A.H.W.-D.

Saxifraga Geum × serratifolia. Origin, rocks at head of Slaheny Valley, near Kilgarvan, S. Kerry, Ireland, 1903 (E. S. Marshall). Cult. Underdown, Ledbury, June 5, 1908.—S. H. Bickham. If serratifolia were one of the parents, a more oblong leaf, less truncate at the base, would occur on this plant. I think it probably is a hybrid, but with these round leaves, very few of them at all longer than broad, I should prefer to regard the plant as S. Geum dentata × S. umbrosa punctata. It differs but slightly from the specimens of S. hirsuta from the same original locality, and it is a question whether S. hirsuta (a somewhat unstable species) does not originate from S. umbrosa and S. Geum forms crossing.—E.F.L.

S. hirsuta L. Origin, same locality as last, 1903. Cult. Underdown, Ledbury, June 3, 1908.—S. H. Bickham. A typical form of S. hirsuta.—E.F.L.

Drosera longifolia L. (= D. intermedia Drev. & Hayne). South shore of Loch Assynt, near Inchnadamph, v.c. 108, W. Sutherland, July 18, 1908.—E. S. Marshall. This is D. anglica Huds.—A.B.J. "I find that my own herbarium sheet is not D. longifolia (intermedia); so Mr. Jackson's opinion is doubtless correct. I think that both species really occurred, though what was collected for luxuriant longifolia was only anglica."—E.S.M. in litt.

Callitriche intermedia Hoffm. (ref. No. 3252). Loanan River, near its outflow into Loch Assynt, Inchnadamph, W. Sutherland, v.c. 108, July 18, 1908. A particularly fine growth of a narrow-leaved form, frequent in Highland lochs and streams. It may deserve a special name, but I do not know of any such existing for it.—E. S. Marshall.

C. intermedia Hoffm., Fl. Germ. (1791), I. p. 2.

C. hamulata Kütz, var. tenuifolia Lönnroth, Obs. crit. pl. Suec. ill. (1854), p. 21.

= C. tenuifolia Persoon, Syn. plant. (1805).

= C. autumnalis, var. Goldbachii Kütz, Linnaea, VII.

(1832).

To this seems to belong the *C. hamulata* β homoiophylla Gren. et Godr., Fl. Fr. (1848), I. p. 591, = *C. angustifolia* Hoppe ex Koch, Syn. fl. Germ. et Helv. ed. 1, I. (1837). This occurs in Sweden in Scanica (Fries Fl. Scanica), Smoland (or Smaland), Halland, Bohuslän and Södermanland.

Mr. G. West (Proc. Roy. Soc. Edinb. XXV., p. 978 (1905), describes this as "extremely abundant in almost every loch in the Loch Ness area; a dominant plant." I have the same form from Scalloway, Shetland (R. M. Barrington); the Isle of Tiree, v.c. 103 (S. M. Macvicar); the only southern specimen I have seen like it is one from Earlswood Common, Surrey, 1870.—A.B.

Bupleurum falcatum L. Norton Heath, Ongar, N. Essex, v.c. 19, Aug. 26, 1908.—Coll. E. Rolleston. Comm. F. L. Foord-Kelcey.

Pimpinella major Huds. Bishopstone, E. Sussex, v.c. 14, Aug. 1908.—W. R. Sherrin. This is P. Saxifraga only; major may be at once distinguished by its much longer styles, regardless of leaf character. It is remarkably scarce in Sussex, being only known at Jevington and Wilmington, and one plant from near Robertsbridge.—C.E.S.

Meum Athamanticum Jacq. Near Hexham, Northumberland, v.c. 67, July, 1908.—Coll. E. K. Higgins. Comm. D. M. Higgins.

Heracleum Sphondylium L., var. angustifolium Huds. Lindfield, E. Sussex, v.c. 14, July 11, 1908. I am doubtful if the majority of these will pass muster for Hudson's var., but I send them quantum valeant.—R. S. Standen.

Better left as type, I think. Leaflets and segments are much longer and narrower in Hudson's variety.—C.E.S. Much nearer type than var. angustifolium Huds., I consider.—A.B.J.

Galium erectum Huds. Sandstone bank near Iron Acton, W. Glos., v.c. 34, June, 1908.—J. W. White. Very characteristic. In the South it is, according to my experience, a predominantly calcicole species.—E.S.M.

G. Aparine L., var. angustifolium Meyer? (ref. No. 3340). Roadside bank, Pwll Meyrie, near Chepstow, Monmouthsh., v.c. 35, May 30, 1908. A peculiar-looking plant, when growing, which caught my eye as Mr. W. A. Shoolbred and I were driving past. Unfortunately the specimens are rather too young. On a similar, but less luxuriant form from N. Sutherland, Mr. Ar. Bennett wrote in 1897: "This seems to be var. angustifolium Meyer = G. infestum Waldst. and Kit. Norman records it from Arctic Norway." But Nyman puts G. infestum as a synonym of G. Vaillantii DC., which is distinct from my plant.—E.S.M. There are similar narrow-leaved plants to this in the Kew herbarium: one from Braemar being exactly like it.—A.B.J. The a. angustifolium of Meyer seems to be referable to G. Vaillantii DC., as both Meyer and Ascherson agree in referring the G. agreete, β . echinospermum Wallr. to De Candolle's plant. G. tenerum Schleich. = G. Aparine, var. tenerum Döll, Rhen. Fl. (1843), p. 447. I do not know this plant, it certainly has a distinct look. My reference of Mr. Marshall's Sutherland plant was evidently an error.—A.B.

Valerianella rimosa Bast. Cornfield, Fowey, E. Cornwall, v.c. 2, June 25, 1908.—Coll. Mrs. Graham. Comm. R. S. Standen.

Inula salicina L. Curraghmore and Baynas Island, Lough Derg, N. Tipperary, July, 1895.—Coll. C. F. Lilly. Comm. C. H. Waddell.

Cultivated specimens of the same origin sent by the Rev. E. F. Linton from Edmondsham, Dorset.

Matricaria inodora L., var. salina Bab. Newhaven, E. Sussex, v.c. 14, Aug. 1908.—W. R. Sherrin. "Yes."—E.S.M.

Kelsey 1913.

Cotula coronopifolia Linn. In the sandy mud of ditches and damp places near the lighthouse, Leasowe, Wirral Peninsula, Cheshire, v.c. 58, Aug. 22, 1908.—C. Bailey.

Artemisia maritima L., var. gallica Willd. Rubbishheap in field, Cropston, Leics., v.c. 55, Sept. 5, 1908.— F. L. Foord-Kelcey. No; an alien species.—E.S.M. This is Artemisia pontica Wallroth, a native of dry hills from Central East Europe to the Caucasus. Commonly cultivated in English gardens under the name of "Russian Wormwood."—A. B. Jackson and J. R. Drummond.

Crepis capillaris Wallr. (C. virens L.), var. pinnatifida Willd. Brown Knowl, Cheshire, v.c. 58, Aug. 2, 1908. I fear the nomenclature is not quite correct. Willdenow describes it as a species and Mr. Williams makes it only a form of the typical plant, distinguishing it therefrom by the stem leaves being pectinato-pinnatipartite in the lower part, with the upper part of the blade entire. Whether these specimens be the plant intended by Willdenow I do not know, but they run into the type and seem far less worthy of distinction than other varieties of C. virens.—A. H. Wolley-Dod. Assuming the plant to be rightly named I think it should stand as follows—

C. virens L., a. stricta Meyer, Chloris Han., p. 427 (1836),
C. virens L., β. pinnatifida Boll, Fl. Mekl. (1860),
p. 265. But Boll there calls it C. virens Willd.—A.B.

Hieracium ———. Above Rhymers Glen, near Melrose, Roxburghsh., v.c. 80, July 6, 1908.—I. M. Hayward. This is Crepis paludosa Moench.—E.S.M.

H. præaltum Vill. Near Galashiels, Selkirksh., v.c.79, July 6, 1908.—I. M. Hayward.

H. anglicum Fr., var. cerinthiforme Backh. (Styles livid-yellow). Frequent about Inchnadamph, W. Sutherland, v.c. 108, July 13, 1908; mostly on limestone. Named by Rev. E. F. Linton.—E. S. Marshall.

*H. Langwellense F. J. Hanb. (Ref. No. 3270). Corriemulzie River, near Oykell Bridge, E. Ross, v.c. 106, July 11, 1908. Styles livid; ligules shortly pilose-tipped.

In the case of this and the other *Hieracia*, and the *Taraxacum*, marked with an asterisk, 106, E. Ross, should be substituted for 107, E. Sutherland; will members please correct the labels.—E. S. Marshall.

H. lingulatum Backh. forma. (Ref. Nos. 3275, 3276, 3280). Near Inchnadamph, W. Sutherland, v.c. 108, July, 1908. All the H. lingulatum that we met with in this neighbourhood had yellow styles. It descends to about 1000 feet.—E. S. Marshall.

H. rubicundum F. J. Hanb. Frequent near Inchnadamph, W. Sutherland, v.c. 108, July, 1908.—E. S. Marshall.

H. nitidum Backh., var. siluriense F. J. Hanb. Taffechan Glen, July 13, and Fan-las Waterfall, July 15, 1908: both localities in the Brecon Beacon range, v.c. 42. This plant is abundant in the Brecon Beacons, occurring on bleak mountain rocks at 2500 feet, river-side glens, and even hedge-banks as low down as 1000 feet. It varies greatly in stature and in the breadth and toothing of the leaves, often suggesting type nitidum; yet always really the variety.—A. Ley.

H. silvaticum Gouan, var. tricolor W. R. Linton. Origin, W. Yorks. Cult. June 8, 1908.—A. Ley.

H. ———. (Ref. Nos. 3284, 3285). Near Inchnadamph, on limestone, W. Sutherland, v.c. 108, July 15, 1908. I send my few remaining specimens (some of them not very good) of this peculiar hawkweed, as yet not identified. The Rev. A. Ley referred it to H. silvaticum Gouan, var. tricolor W. R. Linton; but it differs from the description of that (inter alia) by its very glandular heads and very ciliate ligules; nor should I consider it well placed under H. silvaticum. The Rev. E. F. Linton says that it does not match his Yorkshire specimens of var. tricolor, and writes: "To me, this is a new form. Points:-Leaves grass-green, at least in shade, often purple-marked. Heads extremely grey-floccose, with many glands. Phyllaries long, porrect in bud. Styles darkened. Ligules very ciliate...Confined to the limestone. Local species?" The leaves are fringed with long, white, crisped hairs. E. S. Marshall.

H. silvaticum Gouan, var. subcyaneum W. R. Linton. (Styles yellow). Ashwood Dale, July 17, 1903, and Blackwell Mill, Great Rocks Dale, July 9, 1903, Derbysh., v.c. 57; two of the original stations for this variety.—E. F. Linton.

*H. silvaticum Gouan, var. subtenue W. R. Linton. (Ref. Nos. 3318, 3319, 3320). Streamsides in the Oykell Bridge neighbourhood, E. Ross, v.c. 106, July 10, 1908.

Named by the Rev. E. F. Linton. It differs from the description in having usually pure yellow, not livid styles; but our plants match Mr. C. E. Salmon's from Canisp Mountain, S.W. Sutherland, exceedingly well. Also seen near Inchnadamph, W. Sutherland.—E. S. Marshall. (*See under H. Langwellense).

*H. serratifrons Almq.,? var. ——. (Ref. No. 3301). Glen Einig, near Oykell Bridge, E. Ross, v.c. 106, July 9, 1908. This grew on the rocky banks of the Einig River, locally plentiful, as a substylose form; but also associated with a ligulate plant (my No. 3302), which otherwise hardly differs. Leaves mostly grass-green, with impressed veins. Heads pilose and glandular, somewhat floccose. Styles dull yellow; ligules (when present) glabrous-tipped. The Rev. E. F. Linton has not yet been able to give it a definite name, but suggests that it is near var. morulum One specimen of No. 3302 is added.—E. S. Marshall. Of these, 3301 has efloccose phyllaries; 3302 distinctly floccose. 3302 agrees well with H. serratifrons Almq., var. Stenstræmii Dahlst., both in leaves and heads. 3301 may possibly be var. morulum Dahlst.; but on account of the close resemblance in leaves to 3302, I think it to be also var. Stenstræmii Dahlst. The stylose heads suggest that it is in a non-natural condition.—A. Ley. (*See under H. Langwellense).

H. serratifrons Almq., var. lepistoides Johanns. Spinney on Bear Hill, Rodborough, W. Glos., v.c. 34, June 18, 1908. Mr. Ley writes: "lepistoides Johanns has been very much misnamed and misunderstood: it appears to be quite rare in Britain."—F. L. Foord-Kelcey. This was also gathered at Symonds Yat and Coldwell, W. Glos. in 1908 by the Rev. A. Ley. New v.c. record.

H. serratifrons Almq., var. cinderella Ley. Symonds Yat, W. Glos., v.c. 34, June 22: Glyn Collwng (on riverside rocks), Brecon Beacons, v.c. 42, July 15, 1908.—A. Ley.

*H. sarcophyllum Stenstr., var. ampliatum W. R. Linton. (Ref. Nos. 3300, 3305 and 3304). Chonaghair Burn and its tributaries, near Oykell Bridge, E. Ross, v.c. 106, July 8 and 10, 1908. Styles livid. Nos. 3300 and 3305 are definitely so named by the Rev. E. F. Linton, who tells me that they are a good match with his series

from W. Yorks., the only vice-county for which this was previously known. No. 3304 he at first identified with the Braemar form of H. caesiomurorum; but he subsequently thought it the same as the others; and, after careful comparison, I can find no real difference. The phyllaries are very senescent.—E. S. Marshall. Heads rather less hairy, and leaves rather narrower than in the Yorks. plant: otherwise a good fit. This should now be quoted as H. ampliatum Ley. (See Jl. Bot. 1909, p. 47).—A. Ley. (*See under H. Langwellense).

H.———. (Ref. Nos. 3293, 3295). Near Inchnadamph, S.E. end of Loch Assynt, W. Sutherland, v.c. 108, July 18, 1908. The Rev. E. F. Linton refers these, with some doubt, to H. cæsium. As compared with my No. 3306 from Oykell Bridge, placed by him under H. cæsium, type, they have much blacker heads, with much more numerous glands and fewer simple hairs, less floccose; and I doubt their being cæsium forms.—E. S. Marshall. Surely very near No. 3304 H. ampliatum, I think the same.—A. Ley.

H. euprepes F. J. Hanb. Dyffryn Crawnon, Brecon Range, v.c. 42, July 14, 1908. On limestone, at about 1740 feet.—A. Ley.

H. euprepes F. J. Hanb., var. clivicolum F. J. Hanb. Dyffryn Crawnon, Breconsh., v.c. 42, July 14, 1908. With the type, but more abundantly.—A. Ley.

*H. cæsium Fr. (Ref. No. 3306). By the River Oykell, Oykell Bridge, E. Ross, v.c. 106, July 7, 1908. Styles dull yellow, ligules glabrous. This is placed under type cæsium by the Rev. E. F. Linton. No. 3304 B, from a station about two miles away, appears to differ only by its more livid styles.—E. S. Marshall. (*See under H. Langwellense).

H. vulgatum Fr., var. sejunctum W. R. Linton. (Ref. No. 3316). Inchnadamph, S.E. end of Loch Assynt, W. Sutherland, v.c. 108, July 14, 1908. The prevailing form of this species about Inchnadamph; mostly yellow-styled. Some of our gatherings were so named by the Rev. E. F. Linton; and I think that all belong to this variety, rather than the type, though the foliage is not always characteristic.—E. S. Marshall. Too near type to be given a varietal name.—A. Ley.

H. maculatum Sm. On rubble above Sapperton Railway Tunnel, W. Glos., v.c. 34, June 15, 1908.—F. L. Foord-Kelcey.

H. pinnatifidum Lönnr., var. vivarium Lönnr. In a wood and railway cutting, Titley, Herefordsh., v.c. 36, July 1, 1908. I believe this well represents the variety, which appears to be much rarer in Britain than the type.—A. Ley.

H. scanicum Dahlst. Symonds Yat, W. Glos., v.c. 34, June 22, 1908, and Craig-y-Nos ridge (at 1750 feet), W. Breconsh., v.c. 42, July 6, 1908.—A. Ley.

H. sciaphilum Uechtr. Near Titley, Herefordsh., v.c. 36, July 1, and near Gilwern, Breconsh., v.c. 42, July 2, 1908. A few specimens of the type sent, to contrast with the var. transiens Ley.—A. Ley.

H. sciaphilum Uechtr., var. transiens Ley. (1) Whitbourne, Herefordsh, v.c. 36, July 22 and 23, 1908. On this plant see Jl. Bot. Feb. 1909, p. 49.—A Ley. (2) Cheddar Cliffs, N. Somerset, v.c. 6, July 7, 1904.—F. L. Foord-Kelcey. (fide Rev. A. Ley).

H. ———. Symonds Yat, W. Glos., v.c. 34, and Herefordsh., v.c. 36, July 20, 1908. Falling certainly under H. sciaphilum Uechtr., and I think under var. transiens, a state analogous to the var. barbareæfolium of H. cacuminatum Dahlst.; but the head clothing shews that it is not true barbareæfolium Dahlst.—A. Ley.

H. sciaphilum Uechtr., var. strumosum Ley. Woods in the Mellte Glen, S.W. Breconsh., v.c. 42, Aug. 19 and 20, 1908. (Members kindly correct date on labels). This will have to be called now H. strumosum Ley, (see Jl. Bot. Feb. 1909, p. 49). Certainly identical with the plant first named by me H. sciaphilum, var. strumosum; unfortunately the strumose bracteoles, which have persisted in the original plant during many years of cultivation, are obsolete in these!—A. Ley.

H. septentrionale Arv.-Touv. Moorland, Col-bren, S.W. Breconsh., July 11, 1908; Glyn Collwng, Brecon Beacons, July 15, 1908; Dol-y-gaer, S. Breconsh., July 19, 1908, v.c. 42.—A. Ley.

- H. septentrionale Arv.-Touv., var. simplex Ley.
 Origin, Hepste Glen, W. Breconsh., v.c. 42; cult. June
 12, 1908. (L.C. 1035 var. Members kindly alter wrong numeral on label). On this plant see Jl. Bot. 1909, p. 50.
 —A. Ley.
- H. Scullyi Linton. Origin, Co. Kerry; hort. Edmondsham, Dorset, July 17, 1908.—E. F. Linton.
- H. protractum Lindeb. Origin, Shetland (W. H. Beeby); hort. Bournemouth, S. Hants., July 11, 1895.— E. F. Linton.
- H. gothicum Fr., var. basifolium Lindeb. Clova Valley, Forfarsh., v.c. 90, July 16, 1889. These were gathered for the "Set of British Hieracia," but never in sufficient quantity to issue in that Set. We also entertained some doubt whether the plant constituted a good and permanent variety. This plant matches Lindeberg's specimens well.—E. F. Linton.
- H. sparsifolium Lindeb., var. oligodon Linton. Origin, Co. Kerry; hort. Edmondsham, Dorset, July 3, 1908.— E. F. Linton.
- H. sparsifolium Lindeb., var. lingua Ley. Origin, W. Breconsh. (near Cellwen): cult., June 26, 1908.—A. Ley.
- H. tridentatum Fr., var. setigerum Ley. Hedge-bank and on railway-side, Torpantau, Breconsh., v.c. 42, July 13 and 17, 1908.—A. Ley.
- H. rigidum Hartm., var. nidense F. J. Hanb. Origin, Mellte Glen, S.W. Breconsh. Cult. Aug. 4, 1908.—A. Ley.
- H. strictum Fr. Ettrickbridge End, Selkirksh., v.c. 79, 1908.—I. M. Hayward. Not H. strictum, but I am pretty sure the far rarer H. prenanthoides Vill., var. subelatum Almq.—A. Ley. H. prenanthoides Vill.—E.F.L. and E.S.M. (see also Rept. B.E.C. 1908, p. 389).
- H. strictum Fr. Mellte Glen, S.W. Breconsh., v.c.42, Aug. 18, 1908. Achenes chestnut-coloured when ripe.A. Ley.
- H. strictum Fr., var. opsianthum Dahlst. (Ref. No. 2162). Banks of the Spey, Kingussie, E. Inverness, v.c. 96, Aug. 1898. Substylose; styles fuscous. Named by the Rev. W. R. Linton.—E. S. Marshall.

H. crocatum Fr. (Styles olive). Vale of St. John, Keswick, Cumberland, v.c. 70, Sept. 4, 1908.—R. S. Standen. This belongs to H. boreale Fr.—E.S.M. Leaves much too clasping and broad-based for crocatum, and flowering season too late: under boreale, aggregate.—A. Ley. H. boreale Fr.—E.F.L.

H. ———. Cropston, Leics., v.c. 55, Sept. 5, 1908.— F. L. Foord-Kelcey. H. boreale Fr., under group obliquum Jord., characterised by long hairs on peduncles but nearly epilose heads.—A. Ley. With these green pubescent heads I should call this var. Hervieri Arv.-Touv.—E.F.L.

H. boreale Fr. (dry ground form). Rocks at Bowderstone, Borrowdale, Cumberland, v.c. 70, Aug. 19, 1908.—R. S. Standen. H. boreale Fr., apparently from a dry bank, rock, or wall: a freak in the opposite direction to the next sheet.—E.F.L.

H. boreale Fr. (luxuriant form from damp spot by roadside). Vale of St. John, Keswick, Cumberland, v.c. 70, Sept. 4, 1908.—R. S. Standen. H. boreale Fr. in the main, but with very extraordinary foliage for that species. If hybrids were frequent in the genus, instead of exceedingly rare, I should imagine this was one, but the variation may be only a freak of luxuriance.—E.F.L.

H. umbellatum L., var. ———. Origin, Nant Francon, Carnarvonsh. Cult. Aug. 12, 1908. For the name of this plant see B.E.C. Rept. 1907, p. 301. I have given it here the varietal name "paniculatum Cariot," this name having been assented to by the Rev. W. R. Linton in 1906. It will be seen that the Rev. E. F. Linton (l.c.) questions this; and I think rightly.—A. Ley. On seeing better specimens and better dried than two years ago (see Rept. B.E.C. 1907, p. 301) I think this may be placed under var. paniculatum Cariot, at least temporarily. It differs from the Bangor plant in the colour of the styles, but has much the same habit, phyllaries and leaves.—E.F.L.

H. umbellatum L., var. coronopifolium Fr. Pointed out to me in Holme Fen, Hunts., v.c. 31, (in a part used for turf cutting), by Mr. E. W. Hunnybun; Aug. 28, 1908.

—A. Ley. I agree.—E.F.L. Very narrow-leaved for this variety; perhaps it is rather referable to var. linariifolium Wallr.—E.S.M.

H. umbellatum L., var. ———. Stony bank, Lynton Hill, N. Devon, v.c. 4, Aug. 27, 1908. On this gathering Mr. Ley remarks "some not distinguishable from type, the broader-leaved specimens approaching monticola Arv.-Touv., f. latifolia."—S. H. Bickham. I place this under the type as a form, not one of the named varieties. —E.F.L.

H. umbellatum L., var. ——. Bank near the Station, Lynton, N. Devon, v.c. 4, Aug. 25, 1908. Style yellow. This form with short leaves, usually subentire, but sometimes with one pair of large teeth, is allied to var. monticola Jord., but only in some respects; and therefore may remain as a form of the type.—E. F. Linton. Near var. monticola Arv.-Touv., form latifolia.—A. Ley.

*Taraxacum spectabile Dahlst. (Ref. Nos. 3248, 3249). Stream-sides near Oykell Bridge, E. Ross, v.c. 106, July 8 and 10, 1908. Determined by Mr. W. H. Beeby. Owing perhaps to the long drought not a single plant was seen in flower; and the fruit was mostly shed.—E. S. Marshall. (*See under Hieracium Langwellense).

Tragopogon pratense L. Scraptoft, Leics., v.c. 55, June 22, 1905. According to the "Flora of Leics.," (1886), p. 98, Tragopogon pratense L., type, is not found in Leics., only the var. minus (now recognised as a species) being noticed at that time. The type therefore is a new record for v.c. 55. These specimens were gathered in an upland meadow laid to grass, in association with Botrychium Lunaria, Spirae Filipendula, etc. It was first pointed out by the Rev. H. P. Reader, and has since been noticed at other localities in the county; so that the var. minus cannot be said to be the dominant form, as supposed.—A. R. Horwood. In the only open flower on my two plants the florets considerably exceed the phyllaries; this would appear to make it var. Symei Ar. Benn. (T. pratensis, var. grandiflorus Syme).—E.S.M.

Phyteuma spicatum L. Tilehurst Wood, Hailsham, E. Sussex, v.c. 14, June 24, 1908.—Coll. Miss E. Bray. Comm. F. L. Foord-Kelcey.

Statice plantaginea All. (= Armeria plantaginea Willd.). Quenvais, Jersey, July 9, 1895.—A. G. Gregor.

Microcala filiformis Hoffmgg. and Link. Flesk River, Killarney, Co. Kerry, July 23, 1908.—Coll. Mrs. Jenner. Comm. G. Goode.

Gentiana nivalis L. Ben Lawers, Mid Perth, v.c. 88, July, 1907.—P. Ewing.

Amsinckia lycopsioides Lehm. On an old fowl-run on the northerly side of Devonshire Road, St. Anne's-on-the-Sea, W. Lancs., v.c. 60, July 20, 1907.—C. Bailey.

Verbascum Lychnitis L. Waste ground near the sea, near Bossington, S. Somerset, v.c. 5, Aug. 17, 1908.—S. H. Bickham.

Linaria repens Mill. Just below the Dam, Thirlmere, Cumberland, v.c. 70, Aug. 25, 1908. Sepals overtopping ripe capsules, contrary to the descriptions of Babington, Coste, etc.—R. S. Standen.

Veronica spicata L. Origin, Cambridgeshire. Hort. Edmondsham, Dorset, Aug. and Sept., 1908.—E. F. Linton. Whatever this was in a wild state it is now in my opinion much nearer V. hybrida L., which is apparently only a luxuriant form of spicata with broader leaves.—A.B.J.

Euphrasia salisburgensis Funck. On limestone, Ballynort, near Askeaton, Co. Limerick, July, 1908.— C. H. Waddell. Right.—E.S.M.

Rhinanthus ———. Meadow by river, Askeaton, Co. Limerick, July, 1908.—C. H. Waddell. Only in an aggregate sense I believe it to be R. stenophyllus Schur. Though the lobes of the upper lip are smaller than the typical plant they have the right cut for R. major Ehrh., which I take this to be.—E.F.L.

Mentha crispa Hook. Origin, Bissoe Kea, W. Cornwall, v.c. 1. (See Rept. Watson Club, 1904-5, p. 21.) Cult. Ledbury, Aug. 21, 1908.—S. H. Bickham. This seems to be M. rotundifolia \times spicata, as Mr. Linton has placed it. But it is, clearly, not the plant figured and described by Syme as M. crispa Linn.—E.S.M.

M. rotundifolia × alopecuroides? Near Bossington, S. Somerset, v.c. 5, Aug. 17, 1908.—S. H. Bickham. The specimen received by me is, I think, only M. alopecuroides,

with remarkably short spikes; probably (as Rev. E. F. Linton has suggested) it may be a hybrid between aquatica and rotundifolia, and this individual is nearer the aquatica parent than usual. I believe, however, that Mr. Bickham and I did gather M. alopecuroides × rotundifolia in the locality.—E.S.M. This may be so, but certainly I do not see aquatica × rotundifolia in it. There is no sign of the aquatica section in the leaves at all. In these cases of suggested hybrids the gatherers are far the best judges.—A.B.

M. longifolia Huds., form or var. (? mollissima Borkh.). Origin, Lydbrook, W. Glos., v.c. 34 (A. Ley). Cult. Ledbury, July 28, 1908. Mr. Marshall writes: "I should say decidedly not mollissima. 'Leaves softly white, tomentose on both sides' (Bab. Man. ed. IX. p. 325). 'Spikes short and thick' (Syme, Engl. Bot.). Here the leaves are not even white beneath, and the spikes are remarkably slender. Of our first three Lond. Cat. forms it seems clearly to be nearest the type, and I really do not see why it should not go under that, as a form." Mr. A. Bennett writes: "This comes near to the var. mollissima (Borkh.) of Lond. Cat. = M. villosa, var. secunda, Sole's Brit. Mints (1798), tab. 2, p. 5." Sole's description is: "Spicis densioribus obsolete bracteatis, foliis superne glabrioribus, inferne villosis; caule rubescente, odore M. viridis." The colour of the flowers is remarkable, and has not changed in drying.—S. H. Bickham.

M. ———. Ditch, Cropston, Leics., v.c. 55, Sept. 5, 1908.—F. L. Foord-Kelcey. Poor specimen; only a form of M. hirsuta (aquatica). In the 1st ed. of the "Species plantarum" (1753), II., p. 576, Linnaeus has "3, M. aquatica," but says "planta non hirta," and mentions no hirsuta either in the Appendix or the two Addenda.—A.B.

M. pubescens Willd. Whitwell, E. Norfolk, v.c. 27, Aug. 28, 1883.—Coll. Rev. Kirby Trimmer. Comm. A. Bennett and C. E. Salmon. Ex. Herb. Brit. Mus. A very different form of M. aquatica \times longifolia; densely pubescent, but in other respects agreeing better with Syme's figure of β . hircina than with that of α . palustris. It seems needless to give special segregate names to these fluctuating hybrids.—E.S.M.

M. pubescens Willd., var. palustris (Sole). Origin, roadside ditch, St. Columb Minor, W. Cornwall, v.c. 1. Cult. Ledbury, Aug. 21, 1908. A singularly attractive mint with its rich deep purple flowers.—S. H. Bickham. I think that this comes near Syme's figure and description of a. genuina but the leaves are rounder. In fact if that is (as seems probable) M. aquatica \times longifolia the present plant is a good step nearer to aquatica, for which the leaves, taken alone, would quite well do. The inflorescence however has very strong evidence of longifolia, therefore it = M. aquatica × longifolia (pubescens Willd.).—E.S.M. What pubescens of Willdenow was is hard to say. I had all Willdenow's mints from the Berlin Herbarium over here, and there was no specimen of pubescens among them! In a "Révision des Menthes de l'Herbier de Lejeune" Déséglise, speaking of the M. nepetoides Lejeune (Rev. Fl. Spa, 1824), remarks "ad Mentham palustrem Sole propius accedere videtur."

According to Baker we have under pubescens—

a. genuina = M. palustris Sole, Brit. Mints (1798), tab. 6, p. 13.

hircina = M. hircina Hull, Brit. Flora, ed. 1,

(1799), p. 127.

The Abbé Strail in "Classification des Menthes en Belgique" places M. nepetoides Lej. under his section 2, Tribe 1, Piperiteæ. The specimen I have seen in the Berlin Herbarium of Lejeune's plant would make me agree with Déséglise's reference, i.e., M. pubescens (Willd.?) auct. pl. = M. nepetoides, Lejeune, in his "Rev. Flora Spa," 1824. Krause in Prahl's Krit. Fl. Sch.—Holstein (1890), p. 166, has "M. nepetoides (Lejeune) = M. gratissima Nolte!; M. latifolia Nolte!; M. aquatica, var. latifolia Nolte in Hansen's Herb. No. 1277; M. sylvestris-aquatica Döll; M. nemorosa × aquatica Krause." l.c.—A.B. (See also B.E.C. Repts. 1887, p. 187, and 1908, p. 395).

M. arvensis L., var. vulgaris. Lindean, near Galashiels, Roxburghsh., v.c. 80, July, 1908.—I. M. Hayward. The form of calyx-teeth takes this away from any arvensis vars. I think this should be called M. gentilis L., although the pedicels are not so glabrous as usual. The scent seems right.—C.E.S. Surely a sativa form (aquatica × arvensis).—E.S.M. I place this under M. gentilis L., var. Wirtgeniana (F. Schultz).—E.F.L.

Calamintha grandiflora Moench. (= C. sylvatica Bromf.). Origin, Apes Down, I. of Wight; cult. Edmondsham, Dorset, Aug. 1908.—E. F. Linton.

Galeopsis angustifolia Ehrh., var. canescens (Schultz.)? Crimscote Downs, near Newbold-on-Stour, Worcs., v.c. 37, Aug. 13, 1906.—C. H. Waddell. Yes; very good.—E.S.M.

Plantago Coronopus L., var. pygmæa Lange. Seabrook, E. Kent, v.c. 15, July 15, 1907.—F. L. Foord-Kelcey. In all the specimens of var. pygmæa which I have seen the leaves are much more slender and decumbent; this is a small form, but hardly Lange's variety.—E.S.M. The species, not the variety, which is a much more slender-leaved plant.—E.F.L.

Scleranthus annuus L., var. biennis (Reuter). Cornfield, Fowey, E. Cornwall, v.c. 2, June 25, 1908.—Coll. Mrs. Graham. Comm. R. S. Standen. No; biennis is a small, compact plant. This is the usual lax form of loose sand or cultivated ground.—E.S.M. S. annuus L., not var. biennis, whatever the relation between these two forms is.—E.F.L.

Salicornia ———. Marsh near the Naze, N. Essex, v.c. 19, Oct. 8, 1908.—Coll. R. H. Goode. Comm. G. Goode. I should have called this S. stricta Dum. It does not seem at all reddish.—C.E.S. This plant (or if there are two forms on my sheet, the one with stout long spikes) is the same as a frequent S. Hants. plant which I have gathered at Milford, etc., and which the Rev. E. S. Marshall issued as S. stricta Dum., No. 2514, from Hayling Id. (confirmed by Mr. Ar. Bennett) and No. 2593 from W. Sussex. I have it too from Newquay with stem halfprocumbent as in the Essex specimens. I have looked on these as S. stricta Dum., but I do not class with them Mr. Marshall's Romney Sand (No. 1082) plant, which appears to me to be young S. ramosissima Woods, and is perhaps the same as the New Romney S. ramosissima in the "Flora of Kent."—E.F.L. Excellent S. stricta Dum.— E.S.M.

- S. ———. Bay south of Portaferry, Co. Down, Sept. 1905.—C. H. Waddell. Nearest S. pusilla Woods. —E.S.M.
- S. ——. Killough, Co. Down, 1902.—C. H. Waddell. Best referred to S. pusilla Woods.—E.S.M.

Polygonum aviculare L., var. agrestinum (Jord.). Sandy plains on the Burrows, Tenby, Pembrokesh., v.c. 45, Aug. 29, 1907.—S. H. Bickham. I think that it comes under var. agrestinum.—E.S.M.

P. aviculare L., var. microspermum (Jord.). Abundant at Trent Station, Derbysh., v.c. 57, Aug. 7, 1908, and Barrow-on-Soar Station, Leics., v.c. 55, Sept. 10, 1908. F. L. Foord-Kelcey. I greatly doubt both these gatherings; they appear to be merely depauperate, owing to the situation.—E.S.M. A very typical example of this variety, if one may rely on Syme's description of Jordan's plant. It also agrees exactly with my best examples.—E.F.L. I think these [from Barrow-on-Soar] may pass, though the leaves are rather wider than in the specimens so named for me by Dr. Boswell Syme, and less acute: the internodes also are shorter.—A.B. Mr. Salmon remarks of this plant: "The late Rev. W. R. Linton informed me some time ago that microspermum has small "included" fruit. This description will not suit the Trent Station plant, which comes best, I think, under var. arenastrum (Bor.). Corbiére makes this a form of var. humifusum (Jord., Bor.), differing from it by its small oval-oblong leaves, which in humifusum are oblong-lanceolate." See B.E.C. Rept., 1908, p. 396.

P. aviculare L., var. rurivagum (Jord.). Granite quarries, Mount Sorrel, Leics., v.c. 55, Sept. 3, 1908.—
F. L. Foord-Kelcey. Evidently starved, but may be correct.—E.S.M. I agree to Mrs. Kelcey's identification.—E.F.L.

Asarum europæum Linn. Bank of Tay, near Elcho, Mid Perth, v.c. 88, May 30, 1908. Naturalized at this station, where I discovered it in the spring of 1900. There is a considerable patch of it.—W. Barelay.

Daphne Mezereum L. Near Lewes, E. Sussex, v.c. 14. Flowers, Feb. 10, 1898; leaves, May 7, 1898.—A. G. Gregor. Only one specimen sent.—A.B.J.

Euphorbia hiberna L. Bank of R. Lyn above Lynmouth, N. Devon, v.c. 4, Sept. 1, 1908.—S. H. Bickham.

E. Esula L. (1) Race Hill, Lewes, E. Sussex, v.c. 14, June 20, 1899.—A. G. Gregor. (2) Near Alnwick, Northumberland, v.c. 68, July, 1908.—Coll. Lady Muriel Percy. Comm. D. M. Higgins. The sub-species or species E. pseudo-Cyparissias (Jord.). Alnwick is a known station for it.—E.S.M.

E. exigua L., var. retusa L. Cornfield, Gog Magog Hills, Cambs., v.c. 29, July 2, 1908.—Coll. R. H. Goode. Comm. G. Goode. Yes, the more developed plants are excellent retusa.—E.S.M. The var. is much more marked, I call this the type.—E.F.L.

Ulmus glabra Mill., var. nitida Sm. The Close, Salisbury, S. Wilts., v.c. 8, Sept. 1, 1908.—E. F. Linton. The foliage of these specimens is exactly that of the Cornish Elm., U. campestris, var. cornubiensis Loudon, (= U. stricta Lindley), which is very common in Cornwall, where U. campestris is very rare or absent. Isolated trees of it are also found in other parts of England, but they are usually cultivated. It is no doubt a small-leaved form of U. glabra Mill., which appears to be the only form of the campestris group which has any claim to be considered wild in Britain. In common with other elms, U. glabra has been loaded with fruit this year and in several localities natural seedlings have made their appearance.—A.B.J.

U. stricta Lindley. Huntingdon, v.c. 31, Sept. 3, 1908.—Coll. E. W. Hunnybun. Comm. S. H. Bickham. In my opinion this is U. campestris, var. glabra Mill., but fruit should be gathered to make sure it is a campestris form.—E.F.L. I think best placed under U. glabra for the present. It differs from the typical form in its thinner, more acuminate leaves, which are slightly rough above.—A.B.J.

Urtica dioica L., var. angustifolia Wimm. & Grab. Glyn Collwng (in a mountain wood at about 1000 feet), Brecon Beacons, v.c. 42, Sept. 24, 1908.—A. Ley. My example is by no means extreme; the lower leaves, indeed, are as broad as usual. I should have placed it between the type and the variety.—E.S.M.

U. dioica L., var. microphylla Hausm. Edge Quarry, Cheshire, v.c. 58, Aug. 15, 1908. I feel doubtful about By description, the leaves being considerably smaller and narrower, hardly cordate, long pointed, is all that is required to characterize it. These peculiarities I think it possesses, but it ran into the type. The variety grew at the lower side of a Rubus, on the undisturbed, almost rocky soil of a roadside; but on the upper side of the bush, in the sandy debris of the quarry, the type only was to be found. In some of these examples an approach to the type can be seen in the more cordate leaves .--A. H. Wolley-Dod. Just like what I have, so named.— E.S.M. I do not think this is the plant described in Hausmann's Flora von Tirol (1858), II., p. 771. I had good examples of that plant but they were given to the late Mr. C. B. Clarke. I think it may bear the name of var. angustifolia; described by the following authors:—

β angustifolia Wimm. et Grab. Fl. Silesiæ, 1827-29.
 β angustifolia Petermann ex Opiz, Seznam Rostlin Kv. České, 1842.

β angustifolia Blytt, Veg. Sogn. (1869), p. 108.

β angustifolia Ledebour, Fl. Alt. (1829-33), VI., p. 240.

= U. angustifolia Fisch ex Hornemann, Hortus

Hafn. Suppl. (1819), p. 107.

A variety that I think has not been mentioned in British Floras is *U. dioica* L., var. *atrovirens* Gren. et Godr., Fl. Fr., (1855) III., p. 408. I have it gathered by Mr. E. Straker at Coulsdon, Surrey, 1881.—A.B.

Betula alpestris Fr.! (B. nana $\mathfrak{T} \times tomentosa \mathfrak{F}$). (Ref. No. 2449). N.E. base of Ben Loyal, at 800 feet, W. Sutherland, v.c. 108, Aug. 7, 1900. Exactly the plant of Fries, Herbarium Normale. Both parents grew close by. My remaining duplicates are now sent, as they may be acceptable to some of our newer members.—E. S. Marshall. (See Jl. Bot. 1901, p. 271).

Salix alba × ——. Brookside, Thurnby Court, Leics., v.c. 55, May 30, 1908. Several very large trees 60 feet or more high.—H. Quilter and W. Bell. S. alba type; 3 flowers only. I hope members will always get summer foliage and flowers from the same bush, when possible; 3 flowers are not easy to be sure of without foliage.—E.F.L.

- S.——? Plentiful by the River Wreake, Hoby, Leics., v.c. 55, July, 1908. Numerous large bushes, but very few catkins. Sent for determination.—W. Bell. Looks like S. alba × triandra.—E.S.M, S. alba L., a form with rather small catkins and leaves, which I have seen in the Midlands, and which is probably due to local circumstances.—E.F.L.
- S. caprea \times myrsinites. Made at Bournemouth by design; hort. Edmondsham, Dorset, May 1 and July 3, 1908. This hybrid was not issued in the "Set of British Willows," as the material at command could not be warranted. The plant now sent out was produced from S. myrsinites $\mathcal Z$ and S. caprea $\mathcal Z$, an important fact proving the caprea parentage, which might otherwise not have been suspected.—E. F. Linton.
- $S.\ caprea \times lanata.$ (No. 282). Produced and grown at Bournemouth early in May, 1903, and at Edmondsham, July 16, 1906.—E. F. Linton.
- $S.\ cinerea \times myrsinites.$ (No. 278). Made at Bournemouth. Hort. Edmondsham, Dorset. Catkins, May 10 and 12, 1908; foliage, July 4, 1908.—E. F. Linton.
- S. lanata \times repens. Produced by design from 3 S. lanata and 9 S. repens; hort. Bournemouth, May 25, 1898, and hort. Edmondsham, July 17, 1908. This is the same as No. 99 of the "Set of British Willows" (1894, etc.). The hybrid has not yet been discovered in nature.—E. F. Linton.
- S. myrsinites L., form procumbens (Forbes). The predominant form of this species on the limestone near Inchnadamph, between 300 and 1200 feet altitude, W. Sutherland, v.c. 108, July, 1908. Some of the specimens found are as extreme as I have seen anywhere. Only a few thin sheets are available.—E. S. Marshall. Good examples of procumbens (Forbes), which is very characteristic at Inchnadamph.—E.F.L.
- Orchis ———. (Ref. No. 3240). Inchnadamph, W. Sutherland, v.c. 108, July 21, 1908. I send a few sheets of a plant found by Mr. W. A. Shoolbred and myself; it is closely allied to O. maculata L., but remarkably distinct, when living, by its white flowers (often marked with rose on the labellum), narrower and often elongate inflorescence, concolorous leaves, slender habit, etc.—E. S. Marshall.

O. maculata seems to be an extremely variable species, judging from the material preserved under this name at the Kew and British Museum Herbaria.—A.B.J. (See also Rept. B.E.C. 1908, p. 397).

Colchichum autumnale L., white-flowered variety. Growing with the purple-flowered form on heavy soil about Bredfield, near Woodbridge, E. Suffolk, v.c. 25, Sept. 7, 1908.—F. L. Foord-Kelcey. This corresponds better with C. candidum Schott and Kotschy (see Baker in Jl. Linn. Soc. XVII., p. 429) than with typical C. autumnale L. Baker has reduced C. candidum to C. laetum Steven in Mem. Mosc. VII. 66, t. 13, but this seems doubtfully correct. Whether C. candidum may not be conspecific with C. autumnale we do not pretend to decide, but Mrs. Kelcey's plant is no doubt the C. anglicum album of Parkinson's Paradisus (1656), p. 153. The white flowered meadow-saffron would seem to have been, if anything, better known in Parkinson's time than the purple. Both have, in all probability, been originally introduced, but have since become established in Britain _J. R. Drummond and A. B. Jackson.

Juncus castaneus Sm. Ben Heasgarnich, Mid Perth, v.c. 88, Aug. 1908.—P. Ewing.

Potamogeton Friesii Rupr. Drain near Ponds Bridge (near Whittlesey), Cambs., v.c. 29, Aug. 3, 1908. Coll. E. W. Hunnybun. I hesitate to send this without fruit, but some members may care for it with the following note from Mr. Ar. Bennett.—S. H. Bickham. "Yes, I have seen Ruprecht's specimens. Of course it is better to have all specimens in fruit, but this cannot be misunderstood by one who knows it."—A.B.

P. pensylvanicus Cham. Canal at Salterhebble Bridge, near Halifax, S.W. Yorks., v.c. 63, June 21, and July 28, 1908.—Coll. Miss Vigurs. Comm. S. H. Bickham. The synonymy is as follows—

Potamogeton epihydrum, Rafinesque (1808).

! P. pensylvanicus Chamisso (1827). ! P. pumilus Wolfgang (1827).

! P. Claytonii Tuckerman (1843).

P. fluitans Pursh (non Roth) 1814.

P. Nuttallii Chamisso (1827) teste Morong in N. Am. Naiadaceae. There is little doubt that Rafinesque's name, published in "Medical Repository," 2nd Hex., V., p. 354 (1808), and 3rd Hex. II., p. 409 (1811), belongs to this plant, but I have seen no specimen so named by him, and so use pensylvanicus, of which I have seen the original specimens named by Chamisso in the Berlin herbarium. But in the Delessert herbarium at Geneva there is a specimen from Rafinesque named fluitans, but with no date unfortunately, and it is this plant. It is distributed fairly well in N. America. I have seen specimens from 22 of the States, and from 6 of the Provinces of Canada.—A.B. See also in "The Naturalist," 1908, p. 10, 373 and 375, where Prof. M. L. Fernald, of Harvard, states that "this is one of the commonest, if not absolutely the commonest species from the Gulf of St. Lawrence southward, and there is hardly a pond or sluggish stream in the Eastern United States where it does not grow. Consequently its fruit could easily have got into manufactured goods at almost any mill pond. But I cannot help wondering if your Yorkshire plant may not be native. Here are my reasons:—There are few, if any, clearly introduced Pondweeds. P. crispus is doubtfully native here, occurring very rarely away from the larger settlements, and usually only in more or less artificial ponds. Otherwise I know of no introductions in America. Nearly all the Potamogetons of Great Britain are native through the North Eastern United States and Canada, where they are associated with P. epihudrum (P. pensylvanicus)." A very interesting plant, represented by a beautiful series of specimens.—A.B.J.

Having all the circumstances under which the plant was found by Miss Vigurs before me, I cannot agree with Prof. Fernald that it may be a native species. The only species (and that a probable hybrid) that is found in the U.S.A. and in England only is P. varians (Morong) Fryer, which occurs in three English counties and in one of the States. The real test for such as this would be to grow the American varians in England, and the English plant in the U.S., and see the result. But so far as one can see they are identical, and in this Dr. Morong and Mr. Fryer

are agreed.—A.B.

P. filiformis Nolte? Shallow pond near the sea, Castletown, I. of Man, v.c. 71, July 31, 1903.—S. Kermode and C. H. Waddell. Is it not rather a P. pectinatus?

I have not seen a specimen or description of the var. salinus Voch; possibly this may be it.—E.S.M. This is P. pectinatus I., var. salinus Voch, = var. pseudomarinus Ar. Benn.—A.B.

Cyperus fuscus L. Peatponds between Shalford and Gomshall, Surrey, v.c. 17, Sept. 1888. The well-known old locality recorded in Brewer's Flora and elsewhere. At the above date the plant was very abundant, chiefly on the peaty soil which had recently been thrown out of the pond on to its margins. There was some fear of its being destroyed by the encroachment of buildings.—H. T. Mennell.

 $\it C.~longus$ L. Moulin Huet, S.E. Guernsey, July 10, 1895.—A. G. Gregor.

Scirpus americanus Pers. (= pungens Vahl). St. Ouen's Pond, Jersey, July 1895.—A. G. Gregor.

Carex chordorhiza Linn. fil. Altnaharra, W. Sutherland, v.c. 108, June 5 and July 6, 1900. As several years have passed since specimens were sent to the Club, a fresh supply of this rare species may be acceptable to those who have lately joined it.—E. S. Marshall.

C. gracilis Curt. (acuta auct.). Wet ditch, Aylestone Meadows, Leics., v.c. 55, July 1908.—W. Bell. A mixture of C. acuta (auct.) and C. paludosa Good.—A.B.J. Two of the specimens sent are C. acutiformis Ehrh. = C. paludosa Good., often called C. acuta. The other specimen is certainly not C. acuta, and I should name it C. stricta Good., β fallax Marsson, Fl. Neu-Vorpom. (1869), p. 530 (= C. elata All., var. fallax = C. Hudsonii Ar. Benn., var. fallax). "Foliis angustissimis, vaginis parcius fibrillosis; pseudocarpiis latis subrotundo-ellipticis." "Die Var. β . fallax besitzt ein sehr undeutliches Fasernetz und wird dadurch der C. Goodenoughii γ . turfosa ähnlich, unterscheidet sich aber durch den eigenthümlichen, kräftigen Habitus und den dicht polsterförmigen Wuchs, ohne Ausläufer." Marsson, l.c.—A.B.

C. limosa L. Near Oykell Bridge, E. Ross, v.c. 106, July 10, 1908. Sent in error as new record for E. Sutherland, v.c. 107. Will members kindly correct labels.—E. S. Marshall.

C. capillaris L. Creag Mhor, Mid Perth, v.c. 88, Aug. 1908.—P. Ewing.

Phalaris paradoxa L. Waste-ground, Uxbridge, Middlesex, v.c. 21, Aug. 29, 1908.—A. Loydell. After years of great scarcity it is refreshing to see this grass reappearing, especially with specimens so well grown and preserved.—E.F.L.

Agrostis alba L., var. armata Čelak (fide Prof. Hackel). Waste place in garden at Ivy Bank, Southampton, S. Hants., Aug. 1908.—J. F. Rayner. This is A. vulgaris. var. aristata Tausch, and quite different from A. alba, var. armata from the same station sent in 1906 [to the B.E. Club, see Rept. 1906, p. 248.] Compare the ligules, the form of the panicle, the proportion of the palea to the fertile glume in both. As to the right citation of this name I am not quite sure; I am not aware that Tausch himself published his var. aristata (of which I saw the type specimen in Herb. Prague), but it is quoted by Stebber v. Schröter (1899). There is also an A. vulgaris, var. aristata Griset published in Verh. Naturen. von Presburg. N.F. II. (1874), which may be the same. In my herbarium I have a British specimen from Mr. Bennett, quite like yours, labelled in his handwriting A. vulgaris, var. aristata Parn. If this is correct his would be perhaps the first published name.—E. Hackel. specimens sent by Mr. Rayner this year include both the forms mentioned above. Will members kindly note which they have received.—A.B.J.

Cynosurus cristatus L. (Small form). Dry place by the sea, Brown's Bay, Island Magee, Co. Antrim, June, 1905. This seems to be a remarkably dwarf form of the common Dog's tail. I suppose owing to situation and season.—C. H. Waddell. C. cristatus, dwarf form, no variety.—E. Hackel.

Koeleria gracilis Pers., var. britannica Dom. Stoughton Road, Leicester, v.c. 55, June 1908.—W. Bell. I believe this to be sub-sp. britannica Dom.—E.S.M. K. gracilis Pers., var. typica Dom.—E. Hackel.

K. cristata Pers., var. gracilis (Bor.)? (1) On limestone, Ballynort, near Askeaton, Co. Limerick, June 1908.
C. H. Waddell. K. gracilis Pers., var. typica Dom.,

forma pubiculmis.—E. Hackel. (2) Tilton Hill, Leics., v.c. 55, July 1908.—A. R. Horwood. Under K. gracilis Pers., and would probably be so named by Prof. Hackel. The flowers and rachis are somewhat hairy; and I think that Dr. Domin would refer it to his sub-species britannica.—E.S.M. K. gracilis Pers., var. typica Dom.—E. Hackel.

K. ——. Dry places by the sea, Brown's Bay, Island Magee, Co. Antrim, June 1905.—Coll. C. H. Waddell. K. gracilis Pers., sub-sp. britannica Dom.—E. Hackel.

Molinia cærulea Moench, var. major Roth. Rough pasture on Walton Moor, N. Somerset, v.c. 6, Sept. 15, 1908.—J. W. White. "This is var. genuina Syme. Var. major Roth, is a form with long spreading panicle-branches, while the present specimen shews the panicle coarctata which Linnaeus attributes to his true cærulea.—E. Hackel." (Rept. B.E.C., 1908, p. 404).

Briza minor L. St. Mary's, Scilly Isles, v.c. 1, June 22, 1898.—A. G. Gregor.

Poa glauca Vahl. Origin, Carnedd Dafydd, Carnarvonsh. Cult. June 12, 1908.—A. Ley. P. cæsia Sm.—E. Hackel.

P. nemoralis L., var. ———. Wood Lane, Quorn, Leics., v.c. 55, June 30, 1908.—W. Bell. The spikelets appear to be usually only 2-fld., a characteristic of var. angustifolia (Parn.), but it has not the "uppermost knot near the pan," as mentioned in Bab. Man. ed. IX., p. 498. Is angustifolia (Parn.) at best anything more than an elongated drawn-up form?—C.E.S. I think Mr. Salmon is right in referring this to var. angustifolia Syme (= P. angustifolia Parn.). Neither Richter (Plant. Europ. 1890, I. p. 85) nor Ascherson and Graebner (Syn. mitteleur. Fl., 1900, II., p. 408) mentions Parnell's plant.—A.B.

Bromus erectus Huds., var. villosus Bab. Bullen Bank, near Ledbury, Herefordsh., v.c. 36, June 24, 1908.—S. H. Bickham. Yes, B. erectus, var. villosus, but the first author who named it so was not Babington but Kunth, Enum. I. 418 (1833).—E. Hackel.

Lepturus filiformis Trin. Sea beach, Seaford, E. Sussex, v.c. 14, Aug. 1908.—W. R. Sherrin. One specimen sent me is L. filiformis Trin., the others (with the curved culms) are L. incurvatus Trin. I do not mean to say that

I distinguish this solely by the erect straight culm of the one and the decumbent curved one of the other, nor do I consider the culm base hidden in the upper sheath as a distinctive character of L. incurvatus, but please measure the anthers of your two specimens and you will find those of L. filiformis 2.8 mm. long, and those of L. incurvatus 0.6 mm. long, and so they are always whether you examine British, French or Mediterranean specimens of these two species. It is true, however, that the Mediterranean incurvatus has the sterile glumes somewhat longer than the fertile glume, but the difference is trifling and I should not try to exclude your British specimen from L. incurvatus on that account; perhaps it might be a variety of it which inclines somewhat to filiformis.—E. Hackel.

Woodsia alpina Gray (hyperborea Br.). Ben Heasgarnich, Mid Perth, v.c. 88, July 1908.—P. Ewing.

Cystopteris montana Desv. Ben Heasgarnich, Mid Perth, v.c. 88, July 1908.—P. Ewing.

Equisetum arvense L., var. nemorosum Braun. (Ref. No. 3236). Damp, shady bank of the Corriemulzie River, Glen Einig, near Oykell Bridge, E. Ross, v.c. 106, July 11, 1908. Stems erect, 2 to 3 feet high. A handsome form. This was distributed as from E. Suth., v.c. 107, will members please correct label.—E. S. Marshall.

E. limosum L. Palmer's Green, Middlesex, v.c. 21, May 1908.—Coll. R. H. Bunting. Comm. W. R. Sherrin. The var. fluviatile (L.), I believe.—E.S.M. I think Mr. Marshall is right. Linnaeus in the 1st ed. of the "Species plantarum," (1753), II., p. 1062 has,

"E. [fluviatile] caule striato, frondibus subsimplicibus."

"E. [limosum] caule subnodo lævi."

These names were discussed by Mr. H. C. Watson and Mr. E. Newman in the "Phytologist," Vol. 1 (pts. 1 and 2), 1841-43.—A.B.

Nitella opaca Agardh. (Ref. Nos. 2352-3, 2360-2). Loch Deerie (Loch an Dithreibh), near Tongue, W. Sutherland, v.c. 108, July 4 and 26, 1900. These gatherings looked so unlike, when growing, that I believed more than one species to be present. Messrs. H. and J. Groves wrote as follows: "All N. opaca. The Loch Deerie plants represent a very interesting series of forms."—E. S. Marshall.

SUBSCRIPTIONS, 1908.

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Vol. II., No. 6.

THE

GWENTY-SIXTH HUNUAL REPORT

OF THE

WATSON

Botanical Exchange Club,

1909--1910.

Referees:

Rev. AUGUSTIN LEY, M.A., Brampton Lodge, Brampton Abbots, Ross-on-Wye.

Rev. E. F. LINTON, M.A., Edmondsham Rectory, Salisbury.

Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

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5 SEP. 1910

THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1909-10.

The plants sent to the Club this year are in many instances of great interest and value. It would be invidious to select special contributions for particular commendation, but the Rev. A. Ley's set of Elms calls for mention.

The Referees and other experts have readily lent their aid, and the Club is deeply indebted to these gentlemen.

The Distributor's work has been rendered an easy and pleasant one by the continuous assistance of the Secretary, to whom the very real gratitude of the Club is due.

It would render the work of distribution lighter if the contributors would attend carefully to the few and simple rules of the Club. One member transgressed no less than five rules! It would also be a considerable help if one extra label were sent with each species for use in arranging the notes to be sent to the Secretary for the Report.

The contributors are as follows:

She	ets.
Mr. C. Bailey	59
Mr. W. Barclay	61
Mr. W. Bell 1	57
Mr. S. H. Bickham 2	39
Mr. W. A. Clarke	6
Mr. McT. Cowan, jun.	45
	54
	77
	31
	74
Miss A. M. Geldart	28
	33
	29
	58
Mr. A. R. Horwood	91
11. 12. 12. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	-

	S	heets.
Rev. A. Ley		429
Rev. E. F. Linton		197
Rev. E. S. Marshall		306
Dr. C. E. Moss		29
Miss I. M. Roper		177
Mr. C. E. Salmon		59
Mr. W. R. Sherrin		25
Mr. R. S. Standen		182
Rev. C. H. Waddell		65
Mr. J. W. White		64
Maj. A. H. Wolley-D	od	89
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Total 2764

Valuable notes have been received from the following experts, to whom specimens were submitted:—Mr. W. Barclay, Mr. Arthur Bennett, Mr. C. Bucknall, Prof. H. Dingler, Mr. S. T. Dunn, Mrs. Gregory, Messrs. H. & J. Groves, Mr. E. M. Holmes, Mr. A. B. Jackson, Rev. A. Ley, Rev. E. F. Linton, Rev. E. S. Marshall, Dr. C. E. Moss, Mr. H. W. Pugsley, Rev. W. Moyle Rogers, Mr. C. E. Salmon, Mr. T. A. Sprague, Mr. H. S. Thompson, Mr. J. W. White, and Major A. H. Wolley-Dod, to all of whom our thanks are due.

ERIC DRABBLE,

Distributor for the year 1909—10.

We deeply regret to announce the death of Mr. A. Loydell, who had been a member of the Club since 1903.

GEORGE GOODE,

August 1910.

Hon. Secretary.

CORRECTIONS (Report 1908—9).

- p. 188. Inula salicina L. My cultivated specimens are said to be of the same origin as the Rev. C. H. Waddell's N. Tipperary gathering. Mine however came originally from Rossmore, Co. Galway.—E. F. Linton.
- p. 197. Rhinanthus ——. Delete "Only in an aggregate sense I believe it to be R. stenophyllus Schur."

 Mr. Linton repudiates this sentence as not belonging to his note.

Myosurus minimus L. Border of arable land, Porthery, N. Somerset, v.c. 6, May 20, 1909. A recent discovery for the vice-county. The plant occurred in considerable quantity in a large cornfield and, as is usually the case, speedily disappeared when the crop developed. See Jl. Bot., 1909, p. 272.—I. M. Roper.

Ranunculus peltatus Schrank, var. truncatus (Hiern). Shallow Stream, Saintfield, Co. Down, June 30, 1909. This is, I think, correctly named. Some years ago it was gathered from the same place.—C. H. Waddell. Yes; or very near it.—E.S.M. Probably correct. The fruit is not developed, but this is no doubt due to its being a stream form and not to hybridity.—H. & J.G.

R. Flammula L. Gravelly north shore of Ullswater, Cumberland, v.c. 70, Aug. 31, 1909. Quite prostrate and occasionally rooting; growing with R. reptans L.—S. H. Bickham. Correct.—A.L. A rooting state, which no doubt is covered by the varietal name pseudo-reptans Syme; it is nearer to the normal plant than the radicans Nolte of Scottish lake-shores. The specimens received by me as a rule root freely.—E.S.M.

R. reptans L. Gravelly north shore of Ullswater, Cumberland, v.c. 70, Aug. 31, 1909.—S. H. Bickham. The sheet sent me exactly matches some specimens I gathered in 1892 on the Ullswater shore as reptans. On sending the specimens however to Mr. C. Bailey, he reported as follows:--"They are on the border land between pseudo-reptans and reptans without being either The Scandinavian reptans and the Loch Leven reptans are more slender than your specimens, being distinctly filiform. I have found a few Ullswater plants which I cannot distinguish from true reptans, but the gatherings which you send me are certainly the prevailing form there with all intermediates between them and coarse decumbent Flammula. Mr. J. G. Baker relies on the hooked style as the best character for reptans, but I have plenty of true reptans with the same beak as the Ullswater plant." Upon seeing the true reptans at Loch Leven in 1896, the truth of Mr. Bailey's interesting note was very apparent. It seems also that true reptans has a differently shaped carpel to those of Flammula forms, and of a different colour.—C.E.S. (See also Rept. B.E.C., 1909, p. 434).

R. acris L., var. Friesianus Rouy & Fouc. Pasture, Compton Greenfield, W. Glos., v.c. 34, July 17, 1909.—Ida M. Roper. I do not know R. Friesianus Jord., which is treated as a sub-species by Rouy and Foucaud; but the

specimen submitted to me seems to agree fairly well with their description. I think that it is either that or $R.\ vulgatus\ Jord.—E.S.M.$

R. acris L., var. Boræanus (Jord.). Corner of mowing pasture, Moorend, W. Glos., v.c. 34, June 29, 1909. This variety does not seem to form the bulk of R. acris in a field, but is generally found in small quantity on roadsides and field borders.—Ida M. Roper. Under R. Boræanus (Jord.). The narrow segments and hairiness suggest its being R. tomophyllus (Jord.), which I consider to be a form of Boræanus.—E.S.M.

R. acris L., var. Boræanus (Jord.), f. tomophyllus (Jord.). Sandy swamp, Weston-super-Mare, N. Somerset, v.c. 6, July 12, 1909.—Ida M. Roper. I believe so.—E.S.M.

R. Ficaria L. Edmondsham, Dorset, May 19, 1909. A troublesome weed in the stiff soil of this garden; sent on account of the extra fine development of aerial tubers.—E. F. Linton.

Caltha palustris L., var. minor Syme. Beinn Heasgarnich, Mid Perth, v.c. 88, July, 1909 (altitude 2500 ft.).
—P. Ewing. No doubt right, but material barely sufficient for a positive opinion.—E.F.L. I think correct. Huth in his monograph of the genus makes it C. palustris L., γ. typica f. b minor (Miller 1759 Sp.).—A.B.

Papaver Rhæas L., var. strigosum (Boenn.). Downton, near Salisbury, N. Wilts., v.c. 7, June 21, 1909. Several localities are given for this variety in Preston's "Flora of Wilts.," but none for this portion of the county, the basin of the Avon, south of Salisbury. Mr. H. N. Dixon (Jl. Bot. 1893, p. 310) made experiments and came to the conclusion that this variety is little more than a sporadic and unstable form! Unfortunately it is not likely that I shall have an opportunity of visiting my locality next year to make further observations.—Ida M. Roper. Looks right.—E.S.M. I agree.—E.F.L.

Fumaria purpurea Pugsley. Under a hedge near Little Stretton, Salop, v.c. 40, July 10, 1909. New County record?—A. Ley. Not purpurea, which has much larger sepals, thicker pedicels and truncate fruits. This is a critical plant which I think must be referred to F. muralis

Sond., although its fruits are larger than in the type and it is near forms that I have named *F. Boraei*, var. *serotina* Clavaud.—H.W.P.

F. occidentalis Pugsley. Newquay, W. Cornwall, v.c. 1, Sept. 8, 1909.—Coll. C. C. Vigurs and R. H. Goode. Comm. G. Goode. Yes.—H.W.P.

F. officinalis L., forma. Cornfield, Coalpit Lane, Braunstone, Leics., v.c. 55, June, 1909.—W. Bell. F. officinalis L. only.—H.W.P.

Barbarea intermedia Bor. Cultivated field, Odd Down, Bath, N. Somerset, v.c. 6, June 7, 1909.—Ida M. Roper. Yes.—A.L. I suppose so; the foliage is quite right, but the flowers are smaller than usual, and the young capsules remarkably slender. The inflorescence has a great look of B. stricta; but the leaves do not approach that species.—E.S.M. If not intermedia I do not know where to place it.—A.B. Correctly named, I think. The pods in the British Museum series of specimens vary somewhat in stoutness in the young state.—A.B.J.

Cardamine amara L., var. —. In great plenty by the Millpond, Hoby, Leics., v.c. 55, July, 1909. Flowers very small for C. amara; leaves very robust, and much larger than any local forms I have met with.—W. Bell. Yes. The plant sent to me looks as if it were shadegrown; it has larger leaflets than usual, and a weaker inflorescence—there is only one flower remaining on it.—E.S.M. I have collected this state in Surrey in shady situations; other plants growing near but in stronger light were quite normal.—E.D. No var.; a mere shade state.—E.F.L.

C. flexuosa With., var. —. A few plants under willows, Hoby Millpond, Leics., v.c. 55, July, 1909. This bears a strong resemblance to a form—umbrosa—sent in by Major Wolley-Dod.—W. Bell. This has a somewhat peculiar growth, and seeing that Mr. Bell had sent C. amara from the same locality I looked for evidences of hybridity. These I am unable to find, as the six stamens, yellow anthers, and shape of style all point to C. flexuosa.—C.E.S. This seems to be merely a state due to having grown in the shade.—E.D. A shade-form only, to judge by appearances.—E.S.M.

Erophila ——. Golf Links, Wallasey, Cheshire, v.c. 58, May 1907 and 1908. Pods terete or subterete.—E. & H. Drabble. I cannot name this interesting little plant. Foreign help is much needed for the determination of several curious British Erophilae.—E.S.M.

E. virescens Jord. Milford, Surrey, v.c. 17, April 17, 1899 and April 17, 1909.—Coll. E. S. Marshall. Comm. R. S. Standen.

E. inflata Hook. fil. Ironstone walls, Duston, Northamptonsh., v.c. 32, May, 1909.—Coll. F. S. Willcox. Comm. W. Bell. Plants from this wall were named E. inflata by the Rev. E. S. Marshall.—W. Bell. The capsules look rather more turgid than in ordinary E. verna (vulgaris DC.); but this character is easily obscured by pressure in drying, and I cannot feel at all sure that the present plants are true E. inflata Hook. fil.—E.S.M. If the figure in "Eng. Bot." is to be depended upon, I should say not inflata.—A.B.

Sisymbrium Columnæ Jacq. (= S. orientale L.). Birkenhead Docks, Cheshire, v.c. 58, Aug., 1907.—E. & H. Drabble.

S. hispanicum Jacq. Waste ground, St. Philip's Marsh, Bristol, W. Glos., v.c. 34, June 30, 1909. This alien has been well established for some years on ground that has been raised by tipping city refuse.—Ida M. Roper. The Sisymbrium will not do for S. hispanicum, which has sessile leaves and adpressed pods. It seems to me to come nearer to S. obtusangulum Schl., of which the leaves are pinnately lobed and obtuse with rounded sinuses. It is a native of Spain, and must, I suppose, have been brought from there with hay, or with some agricultural seed. I see the Index Kewensis refers S. obtusangulum Schl. to Brassica Erucastrum L. It is almost impossible to name Cruciferae unless the seed is fully formed.—E. M. Holmes. I believe this to be a form of Brassica elongata Ehrh.—S. T. Dunn.

 $Subularia\ aquatica$ L. Llyn Idwal, Carnarvonsh., v.c. 49, Aug. 6, 1909.—G. Goode.

Brassica Rapa L., var. Briggsii Wats. Station yard, Portishead, N. Somerset, v.c. 6, July 1, 1909.—Ida M. Roper. Yes.—A.L. Rightly named, I believe.—E.S.M.

Thlaspi perfoliatum L. Near Woodstock, Oxon., v.c. 23, May 4, 1909.—W. A. Clarke.

Iberis amara L. Plentiful in Chalk Quarries, Loosely Hill, Princes Risborough, Bucks., v.c. 24, July, 1909.— F. L. Foord-Kelcey. Yes.—E.S.M.

Raphanus maritimus Sm. In abundance between Sugary and Compass Coves, Dartmouth, S. Devon, v.c. 3, Aug. 3, 1909.—Coll. R. H. Goode. Comm. G. Goode.

Helianthemum Chamæcistus × polifolium. On limestone, Purn Hill, Bleadon, N. Somerset, v.c. 6, June 5, 1909. Growing scattered among the parents; it varies considerably, and I strongly suspect that it forms secondary hybrids with both of them.—E. S. Marshall.

H. polifolium Mill. Berry Head, S. Devon, v.c. 3, July 12, 1909.—Coll. R. H. Goode. Comm. G. Goode.

Viola canina L. (ericetorum Schrad.)? Open heathy field near Swithland Wood, Leics., v.c. 55, June, 1909. A few sheets sent for determination.—W. Bell. No, I think not. This is Riviniana, with a shorter spur than usual.—E.S.G. I think that this is V. Riviniana Reichb. The shape and texture of the leaves are unlike those of V. canina Fr. (ericetorum Schrad.). Sepaline appendages shorter than usual.—E.S.M.

V. canina × montana. Woodwalton Fen, Hunts., v.c. 31, June 8, 1908. Ref. No. 1427 (Flowers large, blue; spur greenish); 1429 (Fls deep blue; spur greenish); 1430 (Fls bright blue; spur greenish).—Coll. E. W. Hunnybun. Comm. E. S. Gregory.

V. lactea Sm. Chailey North Common, E. Sussex, v.c. 14, May 23, 1909.—R. S. Standen. A small form, described by Rouy and Foucaud ("Flore de France") under var. pumiliformi:—"Plante basse ou naine (4—10 cm.), feuilles oblongues-lancéolées, atténuées à la basse, décurrentes sur le pétiole court; port de V. pumila."—E.S.G.

V.—. Chailey North Common, E. Sussex, v.c. 14, May 23, 1909. Found growing close to a large patch of V. lactea.—R. S. Standen. Material scrappy. Three of my specimens look like V. lactea Sm.; the fourth has broader, crenate, cordate-based leaves, and may be V. lactea

imes Riviniana.—E.S.M. The stipules and narrow petals point to $V.\ lactea$; the leaves—sub-cordate at the base—suggest $V.\ canina$. Probably a hybrid; possibly only an intermediate form between the two. $V.\ lactea \times canina$.—E.S.G.

V. stagnina × canina. (Ref. No. 1378). Woodwalton Fen, Hunts., v.c. 31, May 29, 1907. Flowers nearly white. (Only one specimen sent). Coll.—E. W. Hunnybun.

Comm. E. S. Gregory.

The Woodwalton Fen violets are at once interesting and puzzling. In addition to the three species, V. stagnina, V. canina, b. crassifolia, and V. montana, there exists a series of intermediates, or hybrids; some of these, no doubt, possess characters referable to the three types; others appear to be crosses between two only of the typical species. In naming these, for club distribution, I have treated them as natural hybrids between the two species they most nearly approach in general appearance and in such characters as seem important. No artificial hybrids have been attempted in this group; there can be, therefore, no certainty of hybridity, although the fact of artificial hydrids having been successfully made by the late Mr. Beeby and other botanists, among the Canina—Riviniana groups, inclines one to the probability of hybrid origin. V. montana forms bushes from a foot to one-and-a-half feet high, the habit ascending, as in stagnina, not spreading as in canina b. crassifolia. The flowers—though not so rounded, nor so small as those of stagnina—are of the same pale colour, whereas those of canina are of a bright blue colour; the corolla spur of stagnina and montana is greenish, that of canina bright yellow. The leaves of montana are long, broad and unsymmetrical in outline; those of canina are thick and punctate, with a cordate base; those of stagnina are long, narrow and pointed.— E.S.G.

V. arvensis Murr., f. segetalis (Jord.). Misson, Notts., v.c. 56, Aug., 1908.—E. & H. Drabble.

V. arvensis Murr., var. obtusifolia (Jord.). Spital, Chesterfield, Derbysh., v.c. 57, Aug., 1908.—E. & H. Drabble.

V. arvensis Murr., var. —. Turnip field, Leicester Forest East, Leics., v.c. 55, Aug., 1909. Plentiful: a

handsome form.—W. Bell. *V. obtusifolia* Jord. The smaller-flowered plants are typical; some of those sent are unusually large-flowered.—E.D.

V. arvensis Murr., var. —. Plentiful in potato field, Knighton, Leics., v.c. 55, Sept., 1909. A very pretty form, unlike any I have hitherto seen.—W. Bell. V. arvatica Jord. The intermediate and upper leaves are less acute than in the majority of the plants of this species that I have seen, but the general habit is typical. I have previously seen arvatica collected in Leicestershire at South Knighton and at Cadby by Mr. Bell.—E.D.

V. arvensis Murr., var. subtilis (Jord.). Hellingly, E. Sussex, v.c. 14, June, 1908.—Coll. Miss E. Bray. Comm. E. Drabble.

V. arvensis Murr., var. agrestis (Jord.). Saltby, Leics., v.c. 55, Aug. 27, 1909.—A. R. Horwood. Not agrestis. I should refer this to V. subtilis Jordan.—E.D.

Polygala calcarea F. Schultz. Hilly pasture near Combe Hay, N. Somerset, v.c. 6, June 7, 1909. This was pointed out to me by my brother, Mr. Frank Samson, and is the subject of a note in Jl. Bot., Jan., 1910, by Messrs. C. Bucknall and J. W. White.—Ida M. Roper. Typical P. calcarea.—A.B.J.

Tunica Saxifraga Scop. At the foot of a land cliff on ground adjoining a public path near the Railway Station, Tenby, Pembrokesh., v.c. 45, Sept. 2, 1909. First sent to me for naming, in the summer of 1908, by Mr. G. Ginger, a Manchester botanist. I visited the spot in the summer of the following year, and found the plant in great plenty. It had evidently been established there for many years, and had most likely escaped from a garden at the top of the cliff. Mr. S. H. Bickham tells me he saw the plant in this station about three years ago, and that it occurs elsewhere in the same neighbourhood.—C. Bailey.

Tilia platyphyllos Scop. Limestone rocks, Craig Cille, near Crickhowell, Breconsh., v.c. 42, Aug. 23, 1909. (Alt. about 1300 ft.). In a position in which the tree could not possibly have been planted. See Jl. Bot., 1909, p. 432.—A. Ley.

Impatiens biftora Walt. Boxmoor, Herts., v.c. 20, Sept. 8, 1907.—D. M. Higgins.

Trifolium agrarium L. Cultivated field, Hutton-le-Hole, N.E. Yorks., v.c. 62, Aug. 17, 1909.—A. J. Crosfield. Correct.—E.S.M.

Lotus corniculatus L., var. crassifolius Pers. (1) Sandhills, New Brighton, Cheshire, v.c. 58, May and June, 1908. —E. & H. Drabble. Yes.—A.L. Seems right.—E.F.L. Apparently correct.—E.S.M. (2) Herne Bay, E. Kent, v.c. 15, July, 1909.—W. R. Sherrin. Probably correct.— Quite likely.—E.F.L. Right, I believe. suspect that the alleged variety is no more than a "state," the thickened foliage being due to its habitat. -E.S.M. This does not appear to be so extreme as the plants I have collected on the Cheshire and Lincolnshire coasts. addition to its fleshy leaves crassifolius, as I know it, has larger and brighter yellow flowers than the thin-leaved inland form. I quite agree with Mr. Marshall in regarding crassifolius as a mere "state."—E.D.

Coronilla varia L. Roadside banks, Kirkliston, Linlithgowsh., v.c. 84, July 2, 1909.—McT. Cowan, jun.

Vicia Cracca L., var. villosa (Roth). Refuse banks, riverside, Belgrave, Leics., v.c. 55, July, 1909. With Bromus unioloides. New County record. This appears about intermediate between forms from Iver, Bucks. (Druce) and Minehead, Som. (Loydell).—W. Bell. If this plant is not perennial, I think it is rightly named. V. villosa (Roth) is annual or biennial.—E.F.L. Yes, this is V. villosa Roth (1793) which, with Keller and Schinz and other botanists, I consider quite distinct from V. varia Host (1827) = V. dasycarpa Tenore (1829).—H.S.T.

 $V.\ melanops$ Sibth. & Sm. Rubble ground, near Ledbury, Herefordsh., v.c. 36, April 30, 1909.—S. H. Bickham. I believe this rare plant from Southern and S. Eastern Europe to be correctly named, particularly as the two superior calyx-teeth are short and connivant and the standard is glabrous; though all the calyx-teeth are longer than usual, and in this respect and in the 8 pairs of leaflets (5—7 in melanops) this specimen resembles $V.\ pannonica$ Crantz, $\beta\ purpurascens$ DC. (1813). In 1904 I found $V.\ pannonica$ in a half-made road at Kew. The

pods of that Vetch are smaller and more hairy than in V. melanops, and it is unfortunate there are no pods on the specimen from Ledbury sent me.-H.S.T.

Lathyrus maritimus Bigel. Felixstowe, E. Suffolk, v.c. 25, Sept., 1909.—Coll. E. P. Wilkinson. Comm. D. M. Higgins.

Rubus macrophyllus Wh. & N. Wood hedge near Cwm-y-oy (near Llanvihangel Crucorney), N. Monmouthsh., v.c. 35, Aug. 30, 1909.—A. Ley. Good R. sciaphilus Lange, I believe, and identical with a plant which Mr. Ley collected in the same neighbourhood in 1903. Similar as it looks to R. macrophyllus in some respects, it differs from that species in the more acicular deflexed prickles of its sulcate stem, and (most conspicuously) in the much shorter stalk of its terminal leaflet (little more than \frac{1}{4}, instead of nearly 1/2, length of leaflet), the coarser and somewhat lobate leaf-toothing, the 1-8 simple floral leaves and "petals always white." Further characters, usual in it but at least rare in R. macrophyllus, are the pedate leaves persistently hairy above, the broadly pyramidal panicle and the subpatent or only loosely reflexed fruit-sepals. The stout sulcate stem is usually rather pale—somewhat yellowish or (in exposure) bright red.—W.M.R.

R. silvaticus Wh. & N. Wood hedges and thickets near Cwm-y-oy, N. Monmouthsh., v.c. 35, Aug. 30, 1909. This and the next are very local brambles in this neighbourhood: they are both of them abundant in the valley of Llanthony, at the bottom of which Cwm-y-oy lies.— A. Ley. Apparently rightly named, though the specimen sent (collected late) is not especially characteristic.— W.M.R.

R. hirtifolius Muell & Wirtg. Mitcheldean Meend, W. Glos., v.c. 34, Sept. 8, 1909. Locally common in work n' moorland fences on Mitcheldean Meend, at an altitude of about 600 to 700 feet.—A. Ley. Yes.—W.M.R.

R. lasioclados Focke. Near Longville, Salop, on open wooded ground at the top of Wenlock Edge, v.c. 40, July 23 and Sept. 2, 1909. Panicle nearly typical; stem not typical, the prickles being less robust and less frequently curved than in type. Not a new County record.—A. Ley. Rightly named, I believe.—W.M.R.

- R. Boræanus Genev. Open ground in St. Leonard's Forest, Horsham, W. Sussex, v.c. 13, July 17, 1909.— J. W. White. Rightly named, I believe.—A. Ley. Yes.—W.M.R.
- R. mucronatoides Ley. Edge of a coppice under Vron hill, New Radnor, v.c. 43, Aug. 11, 1909. Gathered with Rev. A. Ley and confirmed by Rev. W. M. Rogers, to whom a specimen has been sent.—S. H. Bickham.
- R. Gelertii Frider. Gospel Oak, Clifford's Mesne, near Newent, W. Glos., v.c. 34, Aug. 27, 1909. Gathered in company with Rev. H. J. Riddelsdell, and sent by him to Rev. W. M. Rogers, who named it.—A. Ley.

Alchemilla vulgaris L., var. alpestris Pohl. Origin: Hendall Farm, Buxted, E. Sussex, v.c. 14. Cult. Townlands, Lindfield, Sussex, May 30, 1909.—R. S. Standen. A. alpestris Schmidt. In his recent exhaustive monograph on this group Lindblom fil. points out that A. vulgaris L. is a name of mixed or doubtful application. —E.S.M. Rightly named. There is a specimen of old date from Hendle Wood, Maresfield, in herb. Borrer at Kew, perhaps the same locality.—E.F.L. Yes, it is the same locality. Hendall (Hendle on old maps) Farm and Wood are a little nearer Maresfield than Buxted.—G.G.

Rosa pimpinellifolia L. × coriifolia Fr.? Melrose, near Banff, v.c. 94. Flowers, Coll. W. Barclay, July 9, 1908. Fruits, W. G. Craib, Sept. 27, 1907. Although I have put a mark of interrogation after the name of the second parent of this hybrid, I have very little doubt that the name is correct. An examination of the bushes, or rather clumps, at Mill of Melrose led me to form the opinion that R. coriifolia Fr. was the second parent and not R. dumetorum Thuill. This was confirmed by receiving last October one or two specimens from Mr. Yeats, of Banff, on which two or three fruits, which had not fallen off but had grown to nearly full size, showed the sepals plainly erect or sub-erect. Although about fullgrown they contained only two or three apparently good achenes. A notice of the discovery of this plant appeared in the Annals of Scottish Nat. History for Jan., 1908.— W.B. Likely to be correctly named.—A.L. This seems to be a good intermediate between coriifolia and spinosissima (pimpinellifolia); thus coming under R. hibernica Templeton, but nearer to spinosissima than the original Irish plant; especially in its very mixed armature. The hooked prickles and woolly styles, together with the pubescent foliage, seem to be decisive in favour of a coriifolia parentage.—E.S.M. Though acicles are almost absent from my specimen I think the general characteristics of the plant quite justify Mr. Barclay's naming, though I should have felt disposed to name it R. pimpinellifolia × dumetorum, i.e., R. hibernica Temp.—A.H.W.-D. R. pimpinellifolia × dumetorum probably.—H. Dingler.

R. hibernica Templeton, var. glabra Baker. shade, Tillysburn, Co. Down, July 23, 1909.—C. Waddell. Surely not the variety, since petiole and midrib are hairy, but the type.—A.L. This is not var. glabra. The hairs on the petioles and veins of the leaves seem to be, in part at least, deciduous. This, according to my specimens sent by Mr. Waddell from the original station, is also the case with Templeton's plant. It is also the case in the form I have sent to the Club this year and which I have named pimpinellifolia \times glauca. present specimen does not seem to be different from the original plant of Templeton, so far at least as the barren stems go.—W.B. The midrib and some of the principal veins beneath are thinly pubescent, with long, mostly appressed hairs. Apparently a hybrid between one of the more glabrous dumetorum group (perhaps urbica) and spinosissima.—E.S.M. Not var. glabra, since the midribs are hairy and the shape of the leaflets will not do. It is a weak form of typical R. hibernica Temp. (i.e., R. spino $sissima \times dumetorum$). The thinness of the hairs on the under surface of the leaflets is no doubt due to shade.— A.H.W.-D. R. pimpinellifolia \times canina probably.—H. Dingler.

R. pomifera Herrm. Mountain rocks, Taren-yr-Esgob, Black Mountain, Breconsh., v.c. 42, July 20, 1909. Maj. Wolley-Dod remarks of this, "Rather R. Grenierii, or even mollis, to judge from the pinnate sepals, small fruit, and eglandular, not parallel-sided leaflets." I agree, not typical pomifera: R. Grenierii Déségl. is, I believe, placed under R. pomifera Herrm. by most continental authors.

The leaflets vary much in shape in my plant, often shewing greater parallelism of the sides than I believe to be consistent with R. mollis Sm. The leaflets are not quite glandless.—A. Ley. This is a variation of R. mollis Sm.—W.B. I think this is R. Grenierii Déségl. rather than typical pomifera. Its foliage seems much too small for the latter. It is very difficult to name roses of this group except from a considerable series of specimens.—A.H.W.-D. R. mollis Sm., forma.—H. Dingler.

R. mollis Sm., var. cærulea Woods. Near Dron, Mid Perth, v.c. 88, Aug. 27, 1909. This must, I think, come under var. cærulea Woods. The leaves are more or less thickly covered with very small glands, scarcely visible except under a low power of the microscope. The fruits are remarkably unequal in size, owing probably to the fact that they were more numerous than the bush could well carry. A few on some specimens show to what size they would have attained had the crop been smaller.—W. Barclay. I would rather put this to the glandular form of mollis which needs a name. Subfoliar glands, numerous on some leaves, nearly absent from others.—A.L. Correctly named.—A.H.W.-D. R. mollis Sm., forma, very near var. cærulea Woods.—H. Dingler.

R. suberecta Lev. (Ref. Nos. 3355, 3358 to 3361, 3365). Common about Garve, E. Ross, v.c. 106, and Kyle of Loch Alsh, W. Ross, v.c. 105, July, 1909.—E. S. Marshall and W. A. Shoolbred. All these gatherings were referred to R. suberecta by Rev. A. Ley or Major Wolley-Dod, or both of them. They vary somewhat in the amount of glands on the leaves, and in the colour of the flowers (deep rosepink or white, or white tinged or tipped with pink). M. Sudre names them all as R. pomifera Herrm., var. vogesiaca Rouy, "Fl. de France," VI. 391. This appears, in France, to be confined to the departments of Vosges It is described by Rouy as having ovoidand Isère. orbicular or spherical fruits, not-or but slightly-attenuated at the base, and leaflets distinctly glandular beneath. In two of our gatherings the leaflets are also more or less glandular on the upper surface.—E.S.M. Ref. No. 3361. Yes: under suberecta Lev: not extreme.—A.L. Ref. No. 3358. It is desirable that complete specimens showing flowers and ripe fruit should be supplied by Mr. Ley to give a correct idea of what *suberecta* is.—W.B. Ref. No. 3360. Yes, well marked.—A.H.W.-D. *R. tomentosa* Sm., var., typical *suberecta* Ley, after my knowledge of these forms, which are very interesting.—H. Dingler.

R. suberecta Ley, var. glabrata Ley. (Ref. Nos. 3366, 3367). Leaves glabrous, glandular beneath; flowers white. Near Kyle of Loch Alsh, W. Ross, v.c. 105, July 21, 1909. These are confirmed by Rev. A. Lev, who remarks that No. 3366 is a form with few glands beneath. Strome Ferry, where it was first found in Britain by Messrs. Linton (and issued by them as R. mollis, var. glabrata), is not far off. M. Sudre names them R. Jundzilli Bess., var. trachyphylla (Rau). According to Rouy (Fl. de France, VI. 345), this occurs in the French Departments of Vosges, Lorraine, and Alsace; the geographical distribution of R. Jundzilli is from France eastwards, so that its occurrence in Scotland seems primâ facie improbable. -E. S. Marshall. No. 3366. This no doubt belongs to the glabrous group of R. tomentosa Sm., erroneously determined by Scheutz as R. mollis Sm., var. glabrata Fr. If I mistake not the original specimens sent to Scheutz had white flowers.—W.B. No. 3367. Correct.—A.H.W.-D. R. tomentosa Sm., var. A form which is very near to suberecta Ley, but there are differences; colour of flowers, much fewer glands, and glabrous. I have never seen it.— H. Dingler.

R. omissa Déségl., var. submollis (Ley). Marshbrook, Salop, v.c. 40, July 9, 1909. The prickles in this rose, as in other members of the Omissæ, seem to vary much in curvature. In the present plant they are nearer to submollis in form than to pseudo-mollis.—A. Ley. So far as the specimens show, the difference between this and the following is, to say the least, not very striking. This is by no means "mollis like."—W.B. This may be var. submollis Ley, but it makes a considerable approach to the group of R. tomentosa in its very flexuose stem, very acuminate leaflets, longish peduncles, and hispid not villous styles.—A. H. W.-D. R. tomentosa Sm. forma, inclining a little to the omissa group. Keller attributes a very similar form from our sea-coast to omissa (after W. O. Focke!). I think it nearer tomentosa.—H. Dingler. R. Andrzeiovii Déségl. (non Steven), var. pseudo-mollis Ley; Presthope, Salop, v.c. 40, July 14 and Sept. 2, 1909. I sent this to Major Wolley-Dod as submollis, which it certainly is not. He suggests pseudo-mollis with some hesitation; and that I feel sure it is.—A. Ley. R. tomentosa Sm., var., with a little inclination to the omissa group.—H. Dingler. This seems to agree pretty well with R. tomentosa Sm., var. pseudo-mollis Baker.—W.B.

R. uncinata Ley. Presthope, Salop, v.c. 40, July 14, 1909.—A. Ley. According to Mr. Ley's description of his R. uncinata, the prickles should be uncinate and the sepals nearly simple. In my specimen none of the prickles are uncinate and the sepals are not nearly simple.—W.B. Correct, I think, with more hispid fruit than usual.—A.H.W.-D.

R. scabriuscula Sm., var. sylvestris (Lindl.). Marshbrook, Salop, v.c. 40, July 19 and Sept. 3, 1909. Major Wolley-Dod remarks "R. scabriuscula Sm., I should say, but leaflets too hairy, and not universally glandular enough for sylvestris." The leaf glands vary in quantity, but are often numerous. In my judgment, quite over the borders of scabriuscula into sylvestris, to which it answers also in the shape and size of the leaflets.—A. Ley. I believe correct.—W.B.

R. cuspidatoides Crépin. Brampton Abbots, Herefordsh., v.c. 26, Aug. 13, 1909. I owe the suggestion of this name to Major Wolley-Dod, and I believe it to be correct.—A. Ley. I have not seen authentic specimens of Crépin's plant, but this does not differ materially from the last (R. scabriuscula, var. sylvestris). The sub-foliar glands are few, but in R. cuspidatoides Crép. they ought to be numerous. In this plant the sepals are certainly not "nearly simple," as Mr. Ley in his monograph states they ought to be in R. cuspidatoides Crép.—W.B.

R. obovata Ley (R. tomentosa, var. obovata Baker)? (Ref. No. 3364). Garve, E. Ross, v.c. 106, July 23, 1909. Leaflets mostly obovate, cuneate-based, hairy, very glandular beneath, and slightly so above. Flowers deep rose-pink; fruit naked. Rev. A. Ley considered this to be an extreme form of R. Bakeri Déségl. Major Wolley-Dod wrote:—"I think that this is perhaps R. tomentosa,

var. obovata Baker. It is, at any rate, one of those plants quite in the doubtful borderland between the Coriifoliæ and the Tomentosæ groups. The leaflets are smaller than in Baker's specimen, but quite as hairy above....."

M. Sudre remarked:—"R. tomentosa Sm., var. très curieuse," on the specimen submitted to him by Major Wolley-Dod. The prickles are, I think, too slender and not hooked enough for the Coriifoliæ.—E. S. Marshall. Better and more advanced specimens are needed to show what this really is. Prickles on young shoots should not be given, but full grown on older parts.—W.B.

R. canina L., var. rhynchocarpa Rip. Mountain-side, Crickhowell, Breconsh., v.c. 42, Aug. 23, 1909. I found a very similar plant last year at a mountain station about 8 miles from this one; this 1908 plant was sent both to Sudre and Dingler, and they did not think it exactly Ripart's rose.—A. Lev. Just my idea of R. rhynchocarpa Rip.—A.H.W.-D. This is one of those forms which in their serration stand midway between lutetiana and What Ripart's species is I do not know, except from Major Wolley-Dod's paper on the Eu-caninae, in which it is said to be distinguished by glabrous styles and beaked fruit. In Mr. Ley's plant the fruit is not at all well developed, and although in this stage it has its fruits, or rather some of them, somewhat beaked, it would be well to see fully developed mature fruit. Even then to conclude from description alone, without seeing the type specimen, that this is Ripart's plant would, in my opinion, be rather rash.—W.B. (See also Rept. B.E.C. 1909, p. 453).

R. canina L., var. biserrata (Mérat). (1) Brampton Abbots, Herefordsh., v.c. 36, Aug. 13, 1909. Maj. Wolley-Dod remarks "I should so label it."—A. Ley. A form of R. dumalis Bechst. with globose fruit and hispid styles. What R. biserrata Mérat really is seems to be an unsettled problem. Mérat describes his plant as having petioles glabrous, little or not prickly, little glandular. Sepals almost simple, very glandular. Fruit large. Mr. Ley's plant has not sepals almost simple, nor are they glandular. Déséglise describes R. biserrata as having petioles pubescent, glandular, prickly. Sepals erect on fruit, but not persistent. Styles short, very hispid. Mr. Ley's plant certainly has not the sepals erect on the fruit.

Erection of the sepals is certainly very rare in the whole of this group and is rather the mark of an aberrant individual than of a variety. Baker, Christ, Crépin and others look upon R. biserrata Mérat as only a form of dumalis with more compound teeth and greater development of glands. Major Wolley-Dod affirms that they are wrong, on what grounds I do not know, and says that the distinguishing marks are the globose fruit and very hispid styles. Mérat does not make any mention of hispid styles. I have seen forms of dumalis with woolly styles and fruit certainly not globose. The form of the fruit in the whole group of Eu-caninae is often so variable on the same bush as to be a very uncertain mark of distinction.—W.B. (2) Mountainside, Crickhowell, Breconsh., v.c. 42, Aug. 23, 1909. Major Wolley-Dod writes "Just about my idea of Mérat's plant, but the sepals have fallen. Erect on young fruit should be a feature." I agree.—A. Lev.

R. dumetorum Thuill. Mordiford, Herefordsh., v.c. 36, Sept. 14, 1909. I sent this to Major Wolley-Dod as R. obtusifolia (Desv.) along with two other similar, but not identical plants. He considers the present one as nearer to dumetorum than to obtusifolia. If so, the plant sent has smaller leaflets and fruit than I have been accustomed to attribute to dumetorum. The two plants (large leaflets, large fruit; small leaflets, small round fruit) are about equally common in Herefordsh., and keep in a usual way distinct from each other. The small-leaved and fruited plant now sent was named obtusifolia for me by J. G. Baker many years ago.—A. Lev. Yes.—W.B. I think that this belongs to R. obtusifolia (Desv.), which, in my opinion, should stand as the type of the Borreri (tomentella) group, rather than under dumetorum. Note the few, closely-set pairs of leaflets, and the small, globose fruit.—E.S.M.

R. dumetorum Thuill., var. Déséglisei (Bor.). Brampton Abbots, Herefordsh., v.c. 36, Aug. 12, 1909. Passed as this in 1908 both by Maj. Wolley-Dod and M. Sudre.—A. Ley. Yes.—W.B. Good typical R. Déséglisei (Bor.).—A.H.W.-D. R. dumetorum, var. Déséglisei (Bor.).—H. Dingler.

R. glauca Vill., var. subcristata (Baker). Hedge, Saintfield, Co. Down, Aug. 13, 1909. This was so named

for me before. (See Rept. W.B.E.C., 1907-8, p. 144).—C. H. Waddell. Yes.—W.B. Rather R. complicata (Gren.).—A.L. Near subcristata; but the fruit is globose, and the nerves of the leaflets beneath are rather prominent. I believe that it is either var. complicata (Gren.) or var. venosa (Déségl.).—E.S.M. This is what British botanists would so label, though it comes nearer R. complicata (Gren.); but the two are practically synonymous and Mr. Baker's name has priority.—A.H.W.-D. R. glauca Vill., group of var. complicata (Gren.). Identification with subcristata (Baker) is impossible without comparison with original specimens.—H. Dingler.

R. coriifolia Fr., forma. Dulnain Bridge, Elginsh., v.c. 95, Sept., 1909. Coll. Miss E. Armitage. Falling, I believe, under type coriifolia, in spite of elongate fruit and reflexed sepals, both of which points are quite untypical.—A. Ley. Very near R. subcollina Christ, I suspect. Styles and prickles characteristic of the coriifolia group; leaves not very thick, glabrous or thinly hairy above; sepals reflexed or patent on the almost fullydeveloped fruit.—E.S.M. This, in spite of its woolly styles, probably belongs to that group of intermediates between R. coriifolia and R. dumetorum, to one form of which Christ gave the name of R. coriifolia, var. subcollina, which name was extended by himself, Crépin and others to embrace the whole group.—W.B. This comes under an aggregate R. coriifolia, and its reflexed sepals indicate var. subcollina Christ as its proper place, though its peduncles are long for that variety.—A.H.W. D. R. coriifolia Fr., group subcollina Chr.—H. Dingler.

R. coriifolia Fr., var. Bakeri (Déségl.). (Ref. No. 3369). Garve, E. Ross, v.c. 106, July 23, 1909. Leaves hairy, glandular beneath. Styles woolly. Prickles uncinate. A low, compact bush. The Rev. A. Ley confirmed this confidently as R. Bakeri (Déségl.), and Major Wolley-Dod thought it perhaps nearest that, though approaching var. Watsoni in the fruit, which looks as if it would be subglobose when fully developed; though the leaves are usually less glandular beneath in that variety. M. Sudre wrote:—"A form of R. coriifolia, near var. pseudo-cinerea Rouy."—E. S. Marshall. I believe correct.—W.B.

R. stylosa Desv., var. systyla (Bast.). (1) Hedge, North Woods, near Winterbourne, W. Glos., v.c. 34, July 9, 1909, the flowers deep pink; and (2) Hedge, Woollard Hill, Pensford, N. Somerset, v.c. 6, July 15, 1909, the flowers pale pink.—I. M. Roper. Yes.—A.L. I suppose correct, but I know little of this group.—W.B. Both rather weak R. systyla (Bast.), I believe. My specimens do not shew the characteristic stem-prickles.—E.S.M. Unmistakeable R. systyla (Bast.), though gathered rather young. Bastard described this as a species, not as a variety.—A.H.W.-D. (2) R. stylosa Desv., var. systyla (Bast.), forma robusta typica.—H. Dingler.

Pyrus latifolia Syme (Sorbus latifolia Pers.). (Ref. No. 3370). By the Conan River, about a mile above the bridges, near Conan, E. Ross, v.c. 106, July 16, 1909. Dr. Hedlund has determined this, which I first found there in 1892, as Sorbus latifolia. A fine old tree, fully 40 feet high, and fruiting profusely. Although not obviously planted, I consider it a very doubtful native: but I am not aware of its being grown in the neighbourhood, nor is it very ornamental, when living, as the upper surface of the leaves is rather dull green. The known area of this species, however, makes its occurrence as a truly wild plant in N. Scotland primá facie improbable; and we saw some aliens near at hand, more or less well established, which may have been derived from the gardens at Brahan Castle, higher up the stream.—E. S. Marshall. Yes, confirmed by Prof. Hedlund.--A.L. (In Rept. B.E.C., 1909, p. 455, Mr. J. W. White remarks of this "Excellent latifolia, akin to the Minehead plant rather than to that of Bristol").

P. scandica Asch. (Sorbus scandica Fr.). (Ref. No. 3372c). Near the head of Loch Garve, E. Ross, v.c. 106, July 14, 1909. Named by Dr. Teodor Hedlund, the monographer of Sorbus, as S. scandica. The tree from which these specimens were taken is one of half-a-dozen found by Mr. Shoolbred and myself, and is clearly of great age, having a height of about 25 feet, and a trunk a foot in diameter; it fruited freely. The anthers are brownishpink. Scattered over about half-a-mile, this species has every appearance of a native; we saw none planted in the neighbourhood, and some of the trees cannot, from

their situation, have been directly introduced by man. It is evidently a near ally of the Arran S. arranensis Hedlund (I believe the P. scandica of Babington); to which, indeed, the Rev. A. Ley at first referred it.—E. S. Marshall.

Saxifraga umbrosa L., var. punctata (Haw.). Cult. Saintfield, Co. Down, July, 1909. Roots from Coomeragh Mts., Co. Waterford, July, 1902. This plant was so named for me before. (See Rept. W.B.E.C., 1907-8, p. 144).— C. H. Waddell. A very pretty and curious little plant, which I have not seen before, to my knowledge. Petiole, as a rule, very gradually narrowed into the blade, which is thus obovate-cuneate: in ordinary var. punctata the blade is suborbicular. These specimens are thus in some respects intermediate between reduced forms of punctata and serratifolia.—E.S.M. I agree with the opinion that this is a reduced form of punctata, but a very interesting one. I have specimens somewhat similar from Canon Lett, labelled "Kerry: Corcaguiny, Brandon near Cloghane," the leaves of mine are blunter in the serrations, but the aspect of the plants very similar.—A.B.

S. cernua L. Ben Lawers, Mid Perth, v.c. 88, Aug. 1, 1905, and Aug. 4, 1907.—McT. Cowan, jun.

S. Sternbergii Willd. Origin, Black Head, Co. Clare. Cult. Ledbury, May 21, 1909. Confirmed by Mr. Druce.
—S. H. Bickham.

Sedum album L. On old wall, Berry Pomeroy, near Totnes, S. Devon, v.c. 3, Aug. 5, 1909. Coll. R. H. Goode. Comm. G. Goode.

S. rupestre L. Cheddar Gorge, N. Somerset, v.c. 6, July 6, 1909. Coll. R. H. Goode. Comm. G. Goode.

Callitriche palustris L. (vernalis Koch.). Pit in a disused brickfield, Church Stretton, Salop, v.c. 40, July 18, 1909. Noticed in many places near Church Stretton and Marshbrook, Salop.—A. Ley. C. intermedia Hoffm. (hamulata Kuetz.), var. tenuifolia, with a few floating leaves, which—in Scotland at least—are rare in this variety. The name C. palustris L. is too vague for application to any one of the segregates.—E.S.M. (See Rept. B.E.C., 1909, p. 458).

C. intermedia Hoffm., var. tenuifolia Lönnr. Llyn Idwal, Carnarvonsh., v.c. 49, Aug. 6, 1909.—G. Goode. The same as my Inchnadamph plant, but much less luxuriant.—E.S.M. (See Rept. W.B.E.C. 1908-9, p. 187, and Jl. Bot., 1910, p. 111).

C. autumnalis L. Lough Neagh, off Harbour Id.,
Co. Antrim, Aug. 18, 1909.—C. H. Waddell. Clearly right.
—E.S.M.

Astrantia major L. Wood, near Stokesay, Salop, v.c. 40, July 20, 1909. It grew and flowered in great abundance in certain spots.—S. H. Bickham. (See Rept. B.E.C., 1909, p. 458).

Carum Bulbocastanum Koch. Luton, Beds., v.c. 30, June 22, 1909.—D. M. Higgins.

Sium latifolium L. Misson, Notts., v.c. 56, Aug., 1908.—E. & H. Drabble.

Pimpinella Saxifraga L., var. dissecta With. Lindfield, E. Sussex, v.c. 14, Sept. 10, 1909.—R. S. Standen. Yes.—E. S. M. Very likely; but specimens of these varieties should have root-leaves; mine have none.— E.F.L.

 $Peucedanum\ officinale\ L.\ Thorpe-le-Soken, N. Essex, v.c. 19, Aug. 30, 1909.—R. S. Standen.$

Galium erectum × verum. Woodwalton Fen, Hunts., v.c. 31, Aug. 26, 1909.—Coll. E. W. Hunnybun. Comm. S. H. Bickham. Confirmed by Mr. G. C. Druce. Mr. Hunnybun states that G. Mollugo does not occur there.— S.H.B. In June, 1908, Mr. James Groves went with me to Woodwalton Fen. In the rough part where Luzula pallescens Bess. grows he called attention to a Galium which we both at first thought was a cream-coloured form of erectum. As we could not find any verum we concluded that our sense of colour was at fault. Later on in the year Mr. Druce went with me to the same part of the Fen and at once called my attention to what he too thought was a cream-coloured form of erectum. At this time the Galium was in full flower, and we were soon convinced that many of the plants were positively creamcoloured. We could not find any verum. Later in the

day we went to another part of the Fen, about a mile distant, and there found plenty of erectum, verum and many intermediates in colour, the most beautiful being a very soft yellow, quite different from the rank yellow of verum. Last year I found that verum, erectum and the intermediates cover a large space in the rough Fen—30 acres or more.—E.W.H.

G. asperum Schreb. Downs above Reigate, Surrey, v.c. 17, June 6, 1909. According to Dr. Williams (Prod. Fl. Brit., part 5, p. 219), this Reigate plant should be labelled G. austriacum Jacq., leaving G. asperum to represent the scarcer plant with small fruits (1 mm. broad), densely hispid lower leaves and lower part of stem. The Reigate plant, on the other hand, has fruits 2 mm. broad, and non-pubescent (or only ciliate) lower leaves and lower part of stem. Certainly it is no form of G. erectum Huds, which has different petals, etc., and grows close by the Reigate plant. The fruits of "sylvestre" and Mollugo (including erectum) seem almost identical. Coste says of sylvestre "fruits.....finement chagrinés," — of Mollugo "fruits.....chagrinés." — C. E. Salmon. I think this is G. asperum Schreb. (=G. sylvestrePoll.), but I have seen a reduced state of G. erectum Huds. very like this on the downs above Paddlesworth, E. Kent, at 600 feet.—E.S.M.

Sherardia arvensis L., var. hirsuta Baguet. Near Churston, S. Devon, v.c. 3, Aug. 23, 1909.—A. H. Wolley-Dod.

Valeriana pyrenaica L. Carlowrie Woods, Linlithgowsh., v.c. 84, July 2, 1904.—McT. Cowan, jun.

Aster Novi-Belgii L. North Bank of Tay below Perth, East Perthsh., v.c. 89, Sept. 11, 1909. This American Aster is very abundant in marshy spots on both banks of the river below Perth. Nos. 1 and 3 are very different in appearance, but many years ago when I sent specimens of the different forms to Mr. Baker at Kew, he determined them all as forms of that "polymorphous plant Aster Novi-Belgii L." In No. 2 the flowers were either white or very slightly coloured.—W. Barclay.

Filago spathulata Presl. Fallow Fields, Fordham, Cambs., v.c. 29, Sept. 15, 1909.—A. J. Crosfield. Rightly named.—E.S.M. & E.F.L.

Inula Helenium L. Along a boundary ditch between arable and pasture land between Ingst and Aust, W. Glos., v.c. 34, Aug. 3, 1909.—Ida M. Roper.

Matricaria discoidea DC. (M. suaveolens Buchenau). (1) On the beach, and on the sides of the railway, between Oystermouth and Mumbles Pier, Sept. 3 and 8, 1909; and on waste land off Victoria Avenue, Castleton, Sept. 7, 1909; all in Glamorgansh., v.c. 41.—Charles Bailey. (2) Kirby Muxloe, Leics., v.c. 55, July 1, 1909.—A. R. Horwood.

Senecio vulgaris L., var. radiatus Koch. By railwaysidings, Portishead Station, N. Somerset, v.c. 6, May 22, 1909. This plant is well established and persistently appears every year. It was still blooming in December. —Ida M. Roper.

 $S.\ Cineraria imes Jacob a.$ Garden weed, Brampton Abbots, Herefordsh., Aug. 11 and Sept. 11, 1909. In 1908 I observed seedlings coming up in a garden where $S.\ Cineraria$ DC. had been cultivated for some years, looking different from the parents. These developed in 1909 into large bushy plants, of very vigorous growth, in habit, leaves and flowers just midway between $S.\ Cineraria$ and $S.\ Jacob a.$ —A. Ley.

Carduus pycnocephalus L. Shingly beach, Severn bank, New Passage, W. Glos., v.c. 34, July 5, 1909. This plant, which is abundant on the shingle, may be C. tenuiflorus (Curt.), but the distinction between the two is not very clearly given in Babington's "Manual."—Ida M. Roper. Not pycnocephalus, which has larger flowers, borne on peduncles naked at the summit, but C. tenuiflorus (Curt.), the common plant of the coast.—C.E.S. Yes; our usual English form (C. tenuiflorus Curt.), I think.—E.S.M. This seems to me the usual form in Britain, which Messrs. Groves say is var. tenuiflorus (Curt.).—E.F.L.

Cnicus eriophorus Roth. Shovel Nook, Knighton, Leics., v.c. 55, Sept., 1909. One plant, 7 ft. high, in hedgerow. The next nearest known station for this plant is six miles distant.—W. Bell.

C. acaulis Willd., var. caulescens Pers. Plentiful on chalk soil, Happy Valley, Chequers Park, Gt. Kimble, Bucks., v.c. 24, Sept., 1909.—F. L. Foord-Kelcey.

C. arvensis Hoffm., var. mitis Koch. Waste ground, St. Philip's Marsh, Bristol, W. Glos., v.c. 34, July, 1909. Two plants only were noticed. The published descriptions of these varieties are not in sufficient detail.—Ida M. Roper. Not mitis, which should have glabrous or subglabrous leaves. It is var. vestitus Koch.—E.D.

Arnoseris minima Schweigg & Koerte. Field near Abinger Hammer, Surrey, v.c. 17, June 23, 1909.—C. E. Salmon.

Crepis taraxacifolia Thuill. Henbury Hill, near Bristol, W. Glos., v.c. 34, June 21, 1902.—J. W. White. I agree.—E.F.L. Yes; growth weaker than usual in my specimens.—E.S.M.

Hieracium aurantiacum L. Riverside, Belgrave, Leics., v.c. 55, June, 1909.—W. Bell. Yes.—A.L. Right. —E.F.L.

H. rubicundum F. J. Hanb. (Ref. Nos. 3443, 3446, 3447). Various localities near Garve, E. Ross, v.c. 106, July, 1909. Some with styles yellow, others with styles livid. Confirmed by Rev. E. F. Linton.—E. S. Marshall. Yes.—A.L.

H. nitidum Backh. (Ref. Nos. 3427, 3428, 3429). Allt Giubhais Beg, near Aultguish Inn, E. Ross, v.c. 106, July 6 and 24, 1909.—W. A. Shoolbred and E. S. Marshall. Styles yellow; ligule-tips glabrous. Messrs. Ley and Linton concur in so naming them. The leaves are as a rule less sharply toothed than usual.—E.S.M.

H. hypochæroides Gibs., var. saxorum F. J. Hanb. (Ref. Nos. 3450, 3451). In plenty on rocks of Raven Craig and adjacent railway cuttings, near Achterneed (near Dingwall), E. Ross, v.c. 106, July 3, 1909.—Coll. W. A. Shoolbred. Comm. E. S. Marshall. Named by

Rev. A. Ley; agrees well with our Welsh herbarium specimens. No form of this species had previously been recorded from Scotland. Leaves blotched (No. 3451) or concolorous (No. 3450), firm, rather glaucous. Styles yellow. Ligules glabrous-tipped. Differs from *H. Sommerfeltii*, to which we at first sight referred it, by the broader, more truncate-based foliage, larger flowers, head-clothing, and habit.—E.S.M. (Ref. No. 3450). Matches some of the Welsh specimens, but for those being usually more or less blotched—in my specimens the leaves were concolorous.—E.F.L.

H. callistophyllum F. J. Hanb., var. cremnanthes F. J. Hanb. (Ref. Nos. 3437, 3438). Glascarnoch River, near Aultguish Inn, E. Ross, v.c. 106, July 6 and 24, 1909.—W. A. Shoolbred and E. S. Marshall. Determined by Rev. E. F. Linton. A good match with authentic specimens, except that the leaves are, on the whole, less deeply and irregularly toothed. The altitude (below 750 feet) is remarkable for this rare plant, which I do not remember to have seen much under 2500 feet in Perthshire or Argyle. Styles discoloured; young ligules ciliolate, ultimately glabrous-tipped. Foliage yellowish green.—E.S.M. (Ref. No. 3438). Yes.—A.L.

H. silvaticum Gouan, var. micracladium Dahlst. (Ref. Nos. 3452, 3454). Allt Giubhas Beg, near Aultguish Inn, E. Ross, v.c. 106, July 6 and 24, 1909.—W. A. Shoolbred and E. S. Marshall. Styles livid; ligule-tips ciliate. In this district the leaves are not unfrequently blotched. Confirmed by Messrs. Ley and Linton.—E.S.M.

H. silvaticum Gouan, var. subtenue W. R. Linton. 1. (Ref. Nos. 3423, 3425). Stream descending from Sgurr a' Mhuillin (Scuir Vuillin) to Loch Achanalt, E. Ross, v.c. 106, July 19, 1909. 2. (Ref. No. 3426). Allt a' Bheallaich, Strath Garve, July 8, 1909. These are so named by Messrs. Ley and Linton; the same yellow-styled form which we found in 1908 about Oykell Bridge and Inchnadamph.—E. S. Marshall.

H. serratifrons Almq., var. grandidens Dahlst. (1) Wood bank, near Marshbrook, Salop, v.c. 40, July 9, and Wenlock Edge, Salop, July 15, 1909. New county record?—A. Ley. (2) Roadside bank, Marshbrook, July

19, 1909. Gathered with Rev. A. Ley.—S. H. Bickham. (3) Under Yew hedge on limestone soil (alt. about 650 ft.), on one of the Cotswolds, at "Highlands," Amberley, W. Glos., v.c. 34, Aug. 2, 1909.—F. L. Foord-Kelcey. My specimen has nothing to do with serratifrons, but is H. sciaphilum Uechtr., var. transiens Ley.—A.L. The specimen sent me is near H. sciaphilum Uechtr., and far from serratifrons, but as it has only one inferior head, it is not worth examining.—E.F.L.

H. serratifrons Almq., var. torticeps Dahlst. Great Doward Hill, Herefordsh., v.c. 36, July 2, 1909. I am sorry the sheets are so few.—A. Ley.

H. Pictorum Linton. (Ref. No. 3435). Glascarnoch River, near Aultguish Inn, E. Ross, v.c. 106, July 6, 1909. Coll. W. A. Shoolbred. Comm. E. S. Marshall. Styles livid; ligule-tips glabrous. Named by Rev. E. F. Linton. Yes.—A.L.

H. rotundatum Kit. (Ref. No. 3455). Beallach Corrie, Wyvis Forest, E. Ross, v.c. 106 (at about 2000 feet), July 22, 1909. Flowers deep yellow; styles livescent; ligules very ciliate; buds senescent. Leaves thin, blotched. Previously only known in Britain from Forfarshire; in all essentials a very good match with my Clova specimens. Messrs. Ley and Linton concur.—E. S. Marshall.

H. vulgatum Fr., var. sejunctum W. R. Linton. (Ref. Nos. 3456, 3457). Railway banks and rocks, Kyle of Loch Alsh and Duirinish, W. Ross, v.c. 105, July 9, 1909.—Coll. W. A. Shoolbred. Comm. E. S. Marshall. No. 3456, styles livid. No. 3457, styles faintly livid. Both gatherings are so named by Rev. E. F. Linton; the head-clothing being alike, and the stem-leaves only one or two. He remarks that No. 3456 tends towards var. subfasciculare W. R. Linton, which var. and sejunctum are difficult to separate. I am quite satisfied that most of the specimens are correctly named.—E.S.M. Yes.—A.L.

H. maculatum Sm. Lindfield, E. Sussex, v.c. 14, June 23, 1909.—R. S. Standen. Not H. maculatum Sm., but H. Sommerfeltii Lindeb., var. splendens F. J. Hanb. This is a very unexpected find in Sussex, and if native is the first lowland station in which the plant has

been detected.—A.L. Later, on July 11, Mr. Ley again wrote, "I have to-day compared living specimens of the Lindfield (Sussex) Hieracium with living and dried specimens of the Carnarvonshire (Nant Francon) H. Sommerfeltii, var. splendens. The comparison shows the Sussex plant to be considerably less hairy, and to have the hair less coarse and stiff than the Carnaryonshire one. The leaves of the former are thinner than those of the latter when wild, but under cultivation the Carnaryonshire plant approximates to the Sussex. In general character and aspect the two plants are very near each other. I cannot see in the Sussex plant any resemblance, except the most superficial, to H. maculatum Sm."—A.L. This does not agree at all with my specimens of H. maculatum Sm., and has the characters of the section Oreadea: being fairly intermediate between Rev. W. R. Linton's wild and cultivated H. Sommerfeltii, var. splendens, from Nant Francon, v.c. 49, Carnarvon, but more "drawn out," probably owing to a shady situation. Extremely interesting.—E.S.M. With regard to the Lindfield H. maculatum, and the suggested naming H. Sommerfeltii, var. splendens. I note that the clothing of the heads in the specimens varies a good deal and that some are much less glandular than others, and so approach var. splendens in this respect. But the heads of fresh specimens sent me, which are not weather-worn, are glandular enough for H. maculatum: the styles are livid: the stem-leaves are 2-4; agreeing with important features in the description of H. maculatum, as distinguished from the Sommerfeltii variety; which has style yellow, stem-leaf 0 or reduced to a bract or a leaf low down (description), or two rarely on a strong plant. Some Lindfield specimens were seen and named maculatum by the late W. R. Linton, and I endorse the name for the present gathering.—E.F.L.

H. sciaphilum Uechtr., var. strumosum Ley. Steep limestone bank to the south of Stroud, W. Glos., v.c. 34, Aug. 3, 1909. I at first thought this plant to be H. diaphanoides Lindeb., var. divisum Jord., from which, however, it differs in having 5–6 instead of 1–2 stem leaves.—A. Ley.

H. sciaphilum Uechtr., var. transiens Ley. Wooded bank, near saw mill, on light soil on the borders of

Edmondsham, Dorset, v.c. 9, Aug. 4, 1909. A recent new record both of species and variety for the County. This is a widely-spread plant, hitherto usually looked on as *H. sciaphilum*, form with glabrous-tipped ligules. (See Jl. Bot. 1909, p. 49).—E. F. Linton. Correct.—A.L. I have received a better sheet of this gathering direct from Mr. Linton; the ligules are very pilose-tipped, and I should have been more inclined to think it a weak, probably shade-grown, state of the type than var. transiens Ley, as recently described: but I do not yet properly understand the variety.—E.S.M.

- H. diaphanoides Lindeb., var. divisum Jord. Steep rubbly limestone slopes of Cotswolds, Bear Hill, Rodborough, W. Glos., v.c. 34, Aug. 2, 1909. The Rev. A. Ley writes: "These are of much interest; they fall under diaphanoides Lindeb., of which I believe them to be var. divisum Jordan. This plant was recognized (from W. Yorks.) as British by W. R. Linton before his death, but is not in L. C. Ed. x., but see Jl. Bot. 1909, p. 51."—F. L. Foord-Kelcey. As far as the poorly-grown material on my sheet goes, it seems to agree well with the description in "The British Hieracia," p. 70, and has the right head-clothing. Whether H. divisum Jord. is really identical with H. diaphanoides Lindeb., (which name it would, in that case, supersede), I have no means of judging; clearly great caution is required in such cases.—E.S.M.
- H. Scullyi Linton ("Brit. Hier." p. 72). Roots from the original locality, by the R. Roughty, S. Kerry; grown on a rough garden bank among coarse herbage, Edmondsham, Dorset, Aug. 12, 1909. Wild specimens are scarcely attainable, which is a reason for sending garden-grown ones.—E. F. Linton. I agree with the naming.—A.L. Yes, I have seen this very distinct species in its native station, and cultivation has not modified it materially.—E.S.M.
- H. sparsifolium Lindeb., var. oligodon Linton ("Brit. Hier." p. 78). Roots from the original and only locality, along the banks of the R. Clydagh, N. Kerry, grown on a rough garden bank, Edmondsham, Dorset, July 24, 1909.—E. F. Linton. Correct.—A.L. Excepting for its somewhat greater luxuriance this is just like wild var. oligodon, shown me by its discoverer, Mr. R. W. Scully.—E.S.M.

H. tridentatum Fr. Roadside near Wych Cross, E. Sussex, v.c. 14, Aug. 16, 1909, fide E. F. Linton and A. Ley.—R. S. Standen. Rightly named, I think, judging by the foliage; the inflorescence of the two plants sent to me is, however, in very poor condition.—E.S.M.

H. umbellatum L., var. coronopifolium Fr. Roadside between Horsted Keynes and Chelwood Gate, E. Sussex, v.c. 14, Aug. 17, 1909.—R. S. Standen. H. umbellatum, L.; between type and var. coronopifolium Fr.—A.L. My specimen is best placed under H. umbellatum L., var. linariifolium Wallr., though slightly tending towards var. coronopifolium Fr.—E.S.M.

H. umbellatum L., var.? Wood bank in large quantity near Marshbrook, Salop, v.c. 40, Sept. 3, 1909. Plants often very tall; leaves long, broad, deeply toothed; panicle as in var. paniculatum Cariot, compound, elongate; but styles dark livid, and phyllaries not reflexed when fresh. Near var. paniculatum Cariot; but I believe it to be undescribed, so far as British varieties of this species go.—A. Ley. Probably an unnamed variety of H. umbellatum, as I suggested when Mr. Ley first sent me a specimen; most like a form I have had from Morfa Bychan, Carnarvonsh., and hardly differing from it except in the colour of the styles. It seems to me nearest var. coronopifolium of our named varieties.—E.F.L.

Hypochæris glabra L. Old gravel pit, Chippenham, Cambs., v.c. 29, Sept. 15, 1909.—A. J. Crosfield.

Tragopogon minus Mill. Chesterfield, Derbysh., v.c. 57, July, 1908.—E. & H. Drabble. Yes; the phyllaries far exceed the florets.—E.S.M. I agree.—E.F.L.

Campanula rapunculoides L. Woodwalton Fen, Hunts., v.c. 31, Aug. 26, 1909.—Coll. E. W. Hunnybun. Comm. S. H. Bickham. Sent because some botanists consider it native in this locality.—S.H.B.

Limonium vulgare Mill., var. pyramidale Druce. (Ref. No. 1850). Teign Estuary, S. Devon, v.c. 3, Aug. 16, 1909.—A. H. Wolley-Dod. Yes, the luxuriant form or state of L. vulgare, known as pyramidale. I think it is hardly a good variety.—C.E.S.

L. humile Mill. Bosham Creek, W. Sussex, v.c. 13, Aug. 25, 1909.—R. S. Standen. Excellent humile.—C.E.S.

L. humile \times vulgare. Bosham Creek, W. Sussex, v.c. 13, Aug. 25, 1909.—R. S. Standen. The one example sent me seems a very good intermediate. It has the general colouring of L. vulgare and its spreading spikes, but the arrangement of spikelets, branching of scape, etc. is entirely that of L. humile. The young capsules seem to contain no good seed.—C.E.S.

Centaurium pulchellum Druce, forma. (Ref. No. 1854). Berry Head, S. Devon, v.c. 3, Aug. 9, 1909. A dwarf subcapitate form growing in short turf. C. umbellatum, which grew with it, retained its normal form and did not approach its variety capitatum. It seems to be either Erythræa pulchella Fr., forma littoralis vulgaris Wittr., "sepals, petals, and stamens often tetramerous," or E. pulchella, f. contracta Wittr., "internodes scarcely or not developed, little branched." The flowers in these specimens are both tetramerous and pentamerous, the former predominating and not confined to the smaller examples.—A. H. Wolley-Dod. A small state, frequent on our exposed coasts.—E.S.M. The form this species assumes on the short turf of pastures exposed to sea breezes; very different looking to the more simple erect form of damp flats not so exposed.—E.F.L.

Gentiana germanica Willd. Harlington, Beds., v.c. 30, Aug. 25, 1909.—D. M. Higgins. Yes.—E.S.M.

Symphytum officinale L., var. patens (Sibth.). Broadway, near Weymouth, Dorset, v.c. 9, Sept. 17, 1909.—Coll. R. H. Goode. Comm. G. Goode. I have never seen patens with such blue flowers (they are usually pinkish to dingypurple), nor with such harsh, scabrid leaves; the late flowering-season is also against its being a S. officinale form. De Candolle in his Prodromus gives var. purpureum Tausch as equivalent to S. patens Sibth. I suspect this Weymouth plant to be some other species, but cannot suggest a name.—E.S.M. I should say certainly S. officinale, var. patens (Sibth.). There is a specimen exactly like it in the British Museum Herbarium, collected by the Rev. E. S. Marshall at Tilford, Surrey, June 14, 1898, and so named by him. The flowers are too small for S.

peregrinum Ledeb.—A.B.J. A very difficult genus to determine the species of. Certainly not officinale. We have now several in cultivation from Russia and other parts. It may be S. asperrimum Bieb.—A.B. I do not think this is any officinale form, the flowers appear to be blue. It looks like the same plant that was sent to the Club in 1904 by Mr. J. W. White, labelled S. asperrimum Bieb., but which was thought by various botanists not to be that but a form of S. peregrinum Ledeb. See Rept. Watson B.E.C., 1904-5, p. 19.—C.E.S. This plant is well known to me, occurring as it does with some frequency in the Bristol district and often in considerable quantity. take it to be a varying hybrid between S. asperrimum Bieb. and S. officinale, and am labelling it for the present ? S. peregrinum Ledeb. Plants from the various localities in this neighbourhood do not all exactly correspond; some are much more asperous than others and there are differences besides. They seem to vary as hybrids are wont to do in their relation to the respective parents. Good fruit is certainly produced by several of them. This specimen is one of the smoother forms. With us this is much more handsome than the Common Comfrey ever becomes. runs up to over four feet on occasion and there is always a distinct note of blue in the corolla. It seems hardly necessary to add that the plant we are considering has nothing to do do with "S. patens Sibthorp," which is only a red or purple-flowered officinale. A good deal of trouble in this connection has been caused by an erroneous figure in E.B. ed. iii., where S. peregrinum? is represented under the name of S. officinale, var. patens. See Jl. Bot. 1900, p. 279.—J.W.W.

S. peregrinum Ledeb. Bakewell, Derbysh., v.c. 57, Aug. 1908.—E. & H. Drabble. Apparently identical with a specimen of mine so named, from the Boswell herbarium, gathered at Bath by T. B. Flower.—E.S.M.

Lithospermum officinale L., var. pseudo-latifolium C. E. Salmon. (1) Örig. Isle of Wight. Cult. Reigate, July 1, 1909.—C. E. Salmon. (2) Orig. I. of Wight, 1900. Cult. Townlands, Lindfield, Sussex, Aug. 1, 1909. Fide C. E. Salmon.—R. S. Standen.

Cuscuta Trifolii Bab. Clover field, Luton, Beds., v.c. 30, Aug. 1905.—D. M. Higgins. Floral characters not

distinguishable in my material; but it has the closely twining habit of *C. Trifolii*, and is doubtless rightly named.—E.S.M.

Verbascum virgatum Stokes. Waste ground, Ashton Gate, Bristol, N. Somerset, v.c. 6, July 26, 1909. The locality is the site of some abandoned iron-works, where the plant has been known for several years and seems to be increasing.—Ida M. Roper. This is not V. virgatum but V. Chaixii Vill., a continental species which has been found as an alien in one or two places in England. A plant recently sent to the B.E.C. by Rev. H. J. Riddelsdell as a form of V. nigrum turned out to be V. Chaixii, which appears to have been doing duty for V. nigrum in Glamorganshire. It differs from nigrum in having a branched inflorescence, the groups of flowers being less approximate. The lowest leaves are not cordate, but are narrowed into the petiole, the leaf-margin being irregularly sinuate. See B.E.C. Reports, 1908, p. 390, and 1909, p. 466.—A.B.J.

Linaria supina Desf. Par, E. Cornwall, v.c. 2, Aug. 30, 1909.—Coll. R. H. Goode. Comm. G. Goode. This is very plentiful and fully established on the sands at Par.— E. & H.D.

Mimulus moschatus Dougl. Naturalised in a wet spot in woods, Downton, Herefordsh., v.c. 36, July 29, 1909. I only succeeded in obtaining a few sheets. The plant appeared to be scentless.—A. Ley.

Veronica serpyllifolia L., var. tenella All. Herne Bay, E. Kent, v.c. 15, July, 1909.—W. R. Sherrin. Var. tenella All., Bor., seems to be a plant with slender stems, entirely prostrate, except just at their flowering extremities, and with leaves almost orbicular. Mr. Sherrin's plant does not appear to agree with such a description.—C.E.S. No; only the type. V. tenella All. (or humifusa Dicks.) is a mountain plant. Material poor.—E.S.M.

V. alpina L. Caenlochan, Forfarsh., v.c. 90, (altitude 3000 feet), July, 1906.—P. Ewing. Yes.—E.S.M. Welldeveloped specimens.—E.F.L.

V. hybrida L. Gloddaeth, near Llandudno, Carnarvonsh., v.c. 49, Aug. 4, 1909.—G. Goode.

Euphrasia Vigursii Davey. Goonhavern, W. Cornwall, v.c. 1, Sept., 1909.—Coll. W. Tresidder. Comm. C. E. Salmon. According to Dr. F. N. Williams this name is synonymous with his f. rectipila of E. officinalis L. (= E. Rostkoviana Hayne), var. minor Gaudin. These specimens were given to me by Mr. Arthur Bennett.—C.E.S.

E. Kerneri Wettst. (1) Most abundant on chalk hills about Great and Little Kimble, Bucks., v.c. 24, Aug., 1909, and (2) Minchinhampton Common, W. Glos., v.c. 34, Aug. 2, 1909. The specimens from Minchinhampton Common are miserably poor, but are as good as I could find in August, 1909. I send them to shew the great difference in growth between these and the prevailing form about Kimble in the same month. Are the Gloucestershire plants dwarfed from poverty of soil or because the cattle, turned out to pasture on the Common, browse on them? F. L. Foord-Kelcey. Just like the Surrey E. Kerneri.— E. S. M. Yes, E. Kerneri Wettst.—C. B. The Kimble plants are excellent Kerneri Wettst. The dwarfing in the Minchinhampton plants is probably due to grazing animals.—E. & H.D. (3) Chipstead, Surrey, v.c. 17, Sept. 9, 1909.—R. S. Standen. Yes, E. Kerneri, very good material. —E. & H.D. Right.—C.B. & E.S.M.

E. scottica Wettst.? Cwm Idwal, Carnarvonsh., v.c. 49, Aug. 6, 1909.—G. Goode. A small alpine or sub-alpine state of E. scottica Wettst., I believe.—E.S.M. Yes, E. scottica Wettst.—E.D. This is an abnormally slender, weak form, almost as hairy as E. curta. It appears to have grown in boggy ground, and may therefore, I think, be safely named as above.—C.B.

Mentha rotundifolia Huds., var. Bauhini Ten. Origin: Wells, Norfolk. Cult. Ledbury, Aug. 20, 1909.—S. H. Bickham. This cultivated specimen, with leaves on the branches, shows a shading off to sylvestris (longifolia), but the main stem leaves show the "largement arrondies à leur sommet." The leaves of cultivated specimens are also less rugose, but show the irregular dentation well, and the flowers show the "exserted stamens."—A. B. This came, by way of my garden, from near Wells, where it was found by Dr. Long and named var. Bauhini by Mr. Ar. Bennett. It maintains its peculiar facies after years

of growth in undisturbed garden soil, and seems to deserve varietal distinction.—E.F.L.

Also sent by Rev. E. F. Linton from his garden at Edmondsham.

M. alopecuroides Hull. Origin: Essex. Cult. Clifton, Aug. 14, 1908.-J. W. White. Yes; a very hairy form, which strongly bears out the Rev. E. F. Linton's suggestion that M. alopecuroides is M. aquatica \times rotundifolia.— Yes; with spikes longer and more slender than many that I have seen.—E.F.L. It is a pity Mr. White does not give the Essex locality whence this came. believe Mr. Boulger many years ago shewed me specimens at the Brit. Museum from Dale's Herbarium gathered in Essex, but I am not sure of this. It is not recorded in Gibson's "Flora of Essex." Dr. Boswell Syme states that the only continental specimen he has seen is one labelled M. dulcissima Dum., and remarks that "Mr. Baker and most British botanists place this (i.e., alopecuroides) with M. sylvestris," while he holds that it belongs to the rotundifoliae. The Abbé Strail in "Classif. des Menthes en Belgique," p. 69, places it under his "Group 1, Rotundifoliae" (i.e., dulcissima) and gives "M. velutina Lej. Herb. No. 2, fol. 1 and 2" as synonym. Strail gives four places in Belgium where dulcissima grows. In the 2nd ed. of his Man. Brit. Bot., p. 243 (1847), Babington calls the British plant "M. rotundifolia, var. velutina." Déséglise in his "Révision des Menthes de l'herbier de Lejeune" does not give the plant as occurring (as dulcissima) in that herbarium, unless it be the Fol. 2 "reced. ad M. rotundifoliam du velutina," to which Strail refers dulcissima. Syme (Eng. Bot. 3rd ed., VII., p. 5) remarks "Sole states that Aiton had it sent to him by a correspondent who found it both in Kent and Essex." Messrs. Hanbury and Marshall do not admit it as a Kentish plant in their "Fl. of Kent" (1899), p. 270, but say that "Syme's account is too vague to allow of its admission to our list at present."—A.B.

With reference to the Essex locality, Mr. White writes: "The root came through Mr. Briggs from Plymouth to my friend, Mr. David Fry. I understood that Briggs had received it from Essex, but know not under what circumstances it grew in that county. Possibly it was

there an alien or denizen."

M. longifolia Huds. Barnbarroch, Wigtownsh., v.c. 74, Aug., 1900.—Coll. E. K. Higgins. Comm. D. M. Higgins. M. rotundifolia Huds.—E.F.L. Surely this is M. rotundifolia Huds., and so, I think, a new record for v.c. 74, Wigtown.—A.B.

M. longifolia Huds., var. Nicholsoniana (Strail). Cwm-y-oy (near Llanvihangel Crucorney), N. Monmouthsh., v.c. 35, Aug. 30, 1909. I think this is correctly named, but I do not even now understand the variety.—A. Ley. This has the long setaceous bracts of the variety, but the leaves are not very petiolate: however, I think it may pass.—C.E.S. This is described in the Exchange Club Report for 1887, p. 186, by the Abbé Ch. A. Strail, who remarks, "This species has certain relations with M. Eisensteiniana Opiz" (Naturalientausch, No. 131, p. 301). This latter is called by Durand in "Recherches sur les Menthes de la flore liégeoise" (1876), p. 8, "M. sylvestris L., var. glabrata." Déséglise in his "Menthæ Opizianæ" in Ann. Soc. Bot. Lyon, 1879–80, does not give any special station for Opiz's plant.—A.B.

M. aquatica L., var. citrata (Ehrh.). Cult. Ledbury, Aug. 15, 1909, from a root sent by Mr. J. W. White from Priddy Nine Barrows, on Mendip, N. Somerset (see Jl. Bot. 1906, p. 32).—S. H. Bickham. Surely this cannot be considered as the plant of Ehrhart! The specimen is not glabrous, either in stem, leaves or calyx, and the leaves are much too short-petioled for citrata. I should have named it M. piperita Huds., to which it accords in all its characters. M. citrata is described by Strail, Déséglise, Malinvaud and others, as absolutely glabrous. Besides the inflorescence of citrata is hirsuta (aquatica)-like; this is not so.—A.B. Assuming that this is the plant discussed in the Jl. Bot. 1906, p. 32, I think the shape of the spike is of more importance than the presence or absence of hairy clothing. M. citrata (Ehrh.) is identified by Baker, Syme and others, with M. odorata Sole. M. Malinvaud, in a well-reasoned article (Annotations au 4e fasc. des Menthae exs. pr. Gall.; extrait du Bull. Soc. Bot. Franc. t. xxviii.) on his No. 38, M. citrata Ehrh., agrees that Sole's M. odorata is probably (verisimiliter) this species. Now Sole's figure of M. odorata has the rounded head of M. aquatica, with a pair of axillary clusters

distant below supported by stalked leaf-bracts; Syme (E.B. ed. 3, tab. MXXIX.) shews a similar head with two pairs of detached whorls, each with a well-developed leafbract. In each figure the terminal head is broader than long, i.e., "depressed." But in Mr. Bickham's specimen there are no such leaf-bracts and distant whorls below. The lowest bracts are small amplexicaul, cordate acuminate, not like the upper leaves; the spike is cylindrical blunt-topped, with the lower whorls contiguous, not distant; and in these features and the inflorescence generally this plant will find its counterpart among the forms of M. piperita, var. vulgaris (Sole). The slight hairiness of the stem, leaves and calyx-teeth is here quite in keeping. I have a precisely similar plant from an allotment near Wareham, Dorset, a short-leaved form of M. vulgaris Sole. In my opinion, whatever may be thought of Sole's views on hairy clothing, and his uniting a hairy form and a glabrous form for his M. odorata, and then describing it as rather glabrous, it should be remembered that M. citrata Ehrh. and its synonym M. adspersa Moench are both described as glabrous.—E.F.L.

Thymus Chamædrys Fr., var. lanuginosus (Schk.). Orig. Roman Road, Gog-Magogs, Cambs. Cult. Huntingdon, July, 1909.—Coll. E. W. Hunnybun. Comm. G. Goode. This looks to me like a hairy form or variety of T. ovatus Mill.—E.F.L. A similar plant to this, which was also collected by Mr. Hunnybun from the same locality, was sent to me by Mr. Marshall and may be part of the same gathering. I should not refer them to T. lanuginosus Schk., which is a much smaller plant as I understand it, but should consider them somewhat intermediate between T. Serpyllum L. and T. ovatus Mill. Dr. Domin would possibly name them T. ovatus × Serpyllum.—A. B. Jackson.

T. ovatus Mill. Edmondsham, Dorset, v.c. 9, July 29, 1909.—E. F. Linton.

Galeopsis angustifolia Ehrh., var. canescens (Schultz). Abundant in a corn field on a chalk hill, above Princes Risborough, Bucks., v.c. 24, Aug. 27, 1909.—F. L. Foord-Kelcey. Good canescens F. Schultz.—E.S.M. I agree.—E.F.L.

Lamium maculatum L. Waste land, Stoneygate Avenue, Leicester, v.c. 55, July, 1909. A few sheets sent for record. The site where this plant has been known for ten or twelve years to hold its own is being rapidly absorbed by building operations on one side and "Urtica" on the other.—W. Bell.

Teucrium Botrys L. On chalk, Chipstead, Surrey, v.c. 17, Aug. 14, 1909. A very interesting discovery of Mr. C. E. Britton's, nicely filling up a gap in its distribution in Surrey between Croydon and Box Hill. Has anyone seen it in its Bookham locality (Fl. Surrey, p. 176) in anything like recent years?—C. E. Salmon.

Plantago Coronopus L., var. Leasowe, Cheshire, v.c. 58, June, 1907.—E. & H. Drabble. Dwarfed perhaps by situation, but not, I think, a variety.—E.F.L.

Herniaria ciliata Bab. Near Lizard Point, W. Cornwall, v.c. 1, Sep. 1, 1909.—Coll. R. H. Goode. Comm. G. Goode. Correct.—E.S.M.

Scleranthus perennis L. Mildenhall, W. Suffolk, v.c. 26, June 26, 1907, and Sept. 13, 1909.—A. J. Crosfield. Yes.—E.S.M. & E.F.L.

Amaranthus Blitum L. Lindfield, E. Sussex, v.c. 14, Oct. 9, 1909.—R. S. Standen. Not, I think, Blitum, which should have a non-leafy terminal spike besides smaller axillary clusters of flowers; nor albus, which has bracts and perianth more spiny, and fruit half the size. It may be A. silvestris L., the description of which it seems to fit, but I have no examples to compare it with.—C.E.S. This is Amaranthus silvestris Desf. It belongs to Koch's Second Section, in which the fruit has circumscissile dehiscence. It is distinguished from A. Blitum L. by its more erect habit, and its acute or sub-acute upper leaves. In A. Blitum the leaves are blunt or emarginate and mucronate.—A. B. Jackson and T. A. Sprague.

Atriplex littoralis L., var. marina (L.). Herne Bay, E. Kent, v.c. 15, July, 1909.—W. R. Sherrin.

Salicornia annua Sm. (= S. stricta Du Mort.). (1) Mouth of River Nene, S. Lincs., v.c. 53, Oct. 11, 1909.— C. E. Moss. Yes. My specimen is typical, though small. —E.S.M. Right.—E.F.L. (2) Bosham Creek, W. Sussex, v.c. 13, Oct. 5, 1909.—R. S. Standen. Correct. I have seen it abundantly about Bosham.—E.S.M. S. appressa Dum. Thorney Island, W. Sussex, v.c. 13, Oct. 5. 1909.—R. S. Standen. I should quite agree.—C. E. S. Yes; locally abundant there.—E. S. M. Yes.—E.F.L.

S. radicans Sm. Bosham Creek, W. Sussex, v.c. 13, Oct. 5, 1909.—R. S. Standen. I cannot see that this is creeping, and it has a distinctly woody root. I should call it S. lignosa Woods.—C.E.S. Apparently right; but my two examples do not well show the rooting character.—E.S.M.

S. lignosa Woods. Porchester, S. Hants., v.c. 11, Oct. 5, 1909.—R. S. Standen. Yes, I should so name it.—C.E.S. Very characteristic S. lignosa.—E.S.M.

Polygonum aviculare L., var. rurivagum (Jord.), form, not typical. On gravel of drive, Saintfield, Co. Down, Aug., 1909.—C. H. Waddell. Yes, I think rurivagum by its ochrae, narrow leaves and general colouring.—C.E.S. I should say, a small state of var. arenastrum; not rurivagum.—E.S.M. This may be placed under var. rurivagum very well. A variety chiefly characterised by narrow oblong leaves and fruit exceeding the sepals.—E.F.L.

Rumex limosus Thuill. Growing in earth from ditch, near Old Bedford River, Cambs., v.c. 29, Sept. 16, 1909.—A. J. Crosfield.

Euphorbia Cyparissias L. (1) Epsom Downs, Surrey, v.c. 17, May 16, 1909. Mr. C. E. Britton and I were pleased at finding a small clump of this—containing many hundreds of plants—on the chalk downs, amongst furze, etc., and looking quite native. It may probably be, as suggested by Mr. Dunn (Alien Flora, p. 169) a native of England, as it grows in Normandy, etc., in similar dry chalky situations. Other native stations in England would appear to be Dover, Kent (Fl. Kent, Hanb. and Marsh., p. 308); W. Glos. (Jl. Bot. 1908, p. 358); near Sulham Wood, Berks. (Fl. Berks., Druce, p. 438), and Whitbarrow, Westmorland (Eng. Bot. ed. 3, viii., p. 106).—C. E. Salmon. (See also Rept. B.E.C., 1909, p. 469). (2) Hillside, Whitewell Bottom, Hillesley, W. Glos., v.c. 34, June 12, 1909. (See Jl. Bot. Nov., 1908, p. 358).—Ida M. Roper.

Ulmus scabra Mill. (= montana Stokes). Sellack, Herefordsh., v.c. 36, May 10 and Aug. 14, 1909. For the nomenclature of this and other elms sent, see Jl. Bot. 1910, p. 65. This variety of the Wych Elm is notable for the samara being narrowed more than usual to the obtuse apex. I know no varietal name.—A. Ley.

 $U.\ glabra$ Huds., var. major Sm. (1) Roadside trees $1\frac{1}{4}$ miles from Monmouth on the Rockfields road, Monmouthsh., v.c. 35, May 10 and Aug. 26, 1909. Occurring at irregular intervals in the hedgerows: no evidence whether spontaneous or not.—A. Ley. (See also Rept. B.E.C. 1909, p. 471). (2) Near Ross, Herefordsh., v.c. 36. A single planted? tree. May and July, 1909.—A. Ley.

U. surculosa Stokes. (1) Hedge, Upton Bishop, Herefordsh., v.c. 36, Oct. 17, 1909. Sent to illustrate the occasional suberosity of the suckers and small twigs at the base of the bole: the rest of the tree being nonsuberous. As a rule this tree exhibits no suberosity on any part (in this differing from U. major Sm., which is always, I believe, suberous on the suckers and small boletwigs): and when it does occur it is produced very unevenly.—A. Ley. (2) Trees (planted) near Ross, Herefordsh., May 21 and July 28, 1909. This is the "English Elm;" samaras this year larger as well as more numerous than usual.—A. Ley. (See also Rept. B.E.C., 1909, p. 470–471).

U. surculosa Stokes (fide A. Ley). A row of trees in The Close, Salisbury, extending from near the North gate to the West front of the Cathedral, May 13 and Aug. 11, 1909; gathered for me by Mr. E. J. Tatum. This is not the same as U. campestris L. proper, nor is U. surculosa a synonym as in L.C. ed. x., rather a sub-species—see Rev. A. Ley's paper in Jl. Bot., 1910, p. 65.—E. F. Linton.

U. glabra (Mill.) (1) A frequent tree in The Close, Salisbury, Wilts., where it is distinguished from all other elms by its graceful habit; May 10 and Aug. 13, 1909. Fruit and leaves were not gathered from the same trees. Sent me at my request by Mr. E. J. Tatum.—E. F. Linton. Correct.—A.L. (2) Planted trees on the Ledbury road near Ross, Herefordsh., May 7 and July 28, 1909. Never (in my experience) found native, or even spontaneous in Herefordshire.—A. Ley. (See also Rept. B.E.C., 1909, p. 472).

U. cornubiensis (= U. stricta Lindley)., fide A. Ley. A drooping tree by the Verger's garden, the only one in The Close, Salisbury; a sample or two; May 10 and Aug. 11, 1909.—Coll. E. J. Tatum. Comm. E. F. Linton.

Betula alba L. (= verrucosa Ehrh.), form B. pendula Roth. (Ref. No. 3380). Borders of Torrachilty Wood, near Achilty, E. Ross, v.c. 106, July 15, 1909. Branches drooping vertically. Abundant and very beautiful in the neighbourhood of Garve and Strathpeffer.— E. S. Marshall.

 $B.\ alba\ (=verrucosa) \times tomentosa.$ (Ref. No. 3381). Garve, E. Ross, v.c. 106, July 20, 1909. The former parent was probably the form $B.\ pendula$ Roth, as the branches drooped. A good intermediate; nearer to alba in leaves, and to tomentosa in catkins. Lateral lobes of female catkin-scales patent or slightly falcate-reflexed.—E. S. Marshall. (See also Rept. B.E.C., 1909, p. 473).

B. alba × tomentosa. (Ref. No. 3382). Garve, E. Ross, v.c. 106, July 20, 1909. This is much nearer to alba (verrucosa) in catkins, and to tomentosa (pubescens) in leaves, though these shew decided influence of alba in their toothing and more or less acuminate apex. Branches drooping. I think that the tomentosa parent was most probably the glabrous form, var. denudata. Lateral lobes of female catkin-scales patent or somewhat falcatereflexed. Upon the whole a good intermediate.—E. S. Marshall.

B. tomentosa Reith. and Abel, var. parvifolia E. S. Marshall. (Ref. No. 3383). Garve, E. Ross, v.c. 106, July 20, 1909. Leaves small, cuneate-based. Catkins few, small, hardly exceeding those of B. nana in size. It seems to be the B. alba, var. parvifolia Wimmer. This is about the most extreme form of it that I have yet seen.—E. S. Marshall.

B. nana L. Gorge of a stream descending from Sgurr a' Mhuillin (Scuir Vuillin) to Loch Achanalt, E. Ross, v.c. 106, July 19, 1909. Some of the bushes were the largest that I have ever seen, up to four or five feet long. It is here protected from browzing animals, and fruited freely. Good material may be acceptable, though the plant is not asked for.—E. S. Marshall.

Alnus rotundifolia Mill., var. incisa, from the banks of the Cherwell, in and near the Parks, Oxford, v.c. 23, June 11, 1909. The same form I suppose as A. glutinosa Gaertn., var. incisa Syme.—E. F. Linton. (See also Rept. B.E.C., 1909, p. 473).

Quercus Robur L., var. sessiliflora (Salisb.). Llambedrog Head, Carnarvonsh., v.c. 49, Aug. 18, 1909.—A. M. Geldart. Yes, Q. sessiliflora Salisb. If Salisbury's plant be reduced to a variety, it must be quoted as Q. Robur, var. sessilis Martyn; but most botanists regard it as a species.—C.E.M.

- Q. Robur (= pedunculata) × sessiliflora. White Wood, Gamlingay, Cambs., v.c. 29, May 20 and Oct. 27, 1909. From same tree. (See Jl. Bot. 1910, p. 1).—C. E. Moss.
- $Q.\ Robur$ L., var. intermedia (D. Don.). Stoughton, Leics., v.c. 55, Sept. 1, 1909.—A. R. Horwood. No; the specimen is $Q.\ Robur \times sessiliftora$, but probably not the first cross. A new county record.—C.E.M.

Castanea sativa Mill. Thorpe Wood, near Norwich, E. Norfolk, v.c. 27, July 17, 1909.—A. M. Geldart.

Salix hippophæfolia Thuill. Low bushes on the right bank of the Wye near Ross, Herefordsh., v.c. 36, May 8 and Aug. 6, 1909.—A. Ley. A good intermediate form of this hybrid (S. triandra × viminalis), remarkable for the catkins—which are usually male above and below, and female through the middle part of each catkin.—E.F.L.

- S. fragilis L., female plant. Mitcheldean Meend, W. Glos., v.c. 34, May 17 and Sept. 8, 1909. Bark light yellow; foliage glaucous. I believe this to be type fragilis, not b. britannica: having the leaf more suddenly acuminate from a broader centre, and having twigs far more brittle than the variety. I have never before seen the female tree of fragilis growing.—A. Ley. Typical S. fragilis L.—E.F.L.
- $S.\ viridis$ Fr. River bank, Foy, Herefordsh., v.c. 36, May 25 and Sept. 6, 1909.—A. Ley. The foliage of this willow I readily assent to as $S.\ viridis$ Fr. ($S.\ alba \times fragilis$), being apparently the same as the foliage of a

willow sent to the other Club as " $S.\ alba \times --$ " of the same locality and date. But the catkins sent with this foliage are not the same as those sent with the other, and I fail to see anything but $S.\ fragilis$ in them. Note the long pedicels (when fully developed) and the longer tapering ovaries. Perhaps Mr. Ley would kindly gather further specimens of maturing catkins and leaves from this tree. E.F.L.

- S. Doniana Sm. (= S. purpurea × repens). Made by hand at Bournemouth, and grown at Edmondsham, Dorset, April 19 and July 19, 1909. This hybrid is so rare in Britain, that cultivated specimens will be of value, at least in the absence of wild ones.—E. F. Linton.
- S. caprea × myrsinites (No. 299). Made by hand at Bournemouth on a female bush of S. caprea, and grown at Edmondsham, Dorset, April 28, May 6, July 16 and 22, 1909. The bushes found in Scotland and assigned to this hybrid are difficult to name with certainty, and have not the perfect authenticity which this plant possesses. I therefore distribute specimens of this creation of mine, which seems a more glabrate form of the hybrid than one would expect in nature. S. myrsinites is far the most obvious parent, and S. caprea, being the female parent, though not apparent in the offspring, is most certainly there.—E. F. Linton.
- S. caprea × lanata (No. 282). Made by hand at Bournemouth and grown at Edmondsham, Dorset, April 19 and July 22, 1909. Though this hybrid has not yet been discovered in nature, it may yet possibly occur where the two species are found in the same district, as e.g. in Glen Doll; and this plant of mine may assist in the determination of suspected specimens of the hybrid.—E. F. Linton.
- S. aurita L. From a gravelly, upland waste, on the borders of Edmondsham, Dorset, v.c. 9, May 4 and July 13, 1909. Though not asked for, the species is scarce in Dorset, and this very neat small-catkined form seems well worth distributing.—E. F. Linton.
- S. cinerea × repens. From the bush first discovered for Britain by Rev. W. R. Linton and myself, at Armadale, N.E. Sutherland. Grown from cuttings at Edmondsham,

May 19 and July 19. Still one of the very rare hybrids; one or two other plants of it having been found by the Rev. E. S. Marshall.—E. F. Linton.

 $S.\ repens \times viminalis$ (No. 280). Made and grown at Edmondsham, Dorset. Male, early April; female, early May; foliage, July 24 and 25, 1909.—E. F. Linton.

Helleborine violacea Druce. Reigate Hill, Surrey, v.c. 17, Sept. 9, 1909.-R. S. Standen. I doubt the identity of this well-known Reigate Helleborine with H. purpurata Druce (Epipactis purpurata Sm.), which appears to be the same as E. violacea. On the other hand, it agrees exactly with the fine plate of E. sessilifolia Peterm. in M. Schulze's "Die Orchidaceen Deutschlands, Deutsch-Oesterreichs und der Schweiz," t. 54. Syme ("English Botany," ed. 3, p. 124) remarks:—"The Reigate and Claygate plants are the only ones [i.e. of E. media, var. β. purpurata] I have seen in a living state. These are not at all tinged with purple, and have the labellum sometimes as long as the calvx-segments, but usually a little shorter." I believe that two distinct species have long been confounded by British botanists (and others) under the name of E. purpurata or E. violacea. years ago Mr. F. Townsend wrote to me that E. sessilifolia Peterm. was different from our E. violacea.—E. S. M. I was with Mr. Standen when he collected this and recollect that most of the specimens had leaves and stems tinged with purple (which may be lost in drying). This matter of colouring, however, is not I believe a stable character, as I have seen Reigate Hill examples both bright purple (almost violet) and truly green. The purple colour is usually more evident in the young plants. I cannot understand Syme's description "labellum sometimes as long as the calyx-segments, but usually a little shorter." On Mr. Standen's examples the labellum was about 6 mm. broad and 4½ mm. long, with the basal bosses pink and strongly marked. I do not know E. sessilifolia Peterm. -C.E.S.

H. violacea Druce. Scrubwood, Ellesborough, Bucks., v.c. 24, Aug. 22, 1909.—F. L. Foord-Kelcey. Yes; the purple colour of the foliage is still evident in my dried specimen. Mr. Druce has lately shown that this species is Epipactis purpurata Sm. (Helleborine purpurata Druce).

It looks different from Mr. Standen's Reigate plants.— E.S.M. Yes, I think this is the same as the Reigate Hill plant, but the specimen sent to me is not sufficiently welldried to allow one to be certain. It would be very helpful if Mr. Marshall could kindly give the points of distinction between H. violacea and Epipactis sessilifolia Peterm.— C.E.S.

Orchis laxiflora Lam. Guernsey, July, 1909.—Coll. R. H. Bunting. Comm. W. R. Sherrin.

O. incarnata L. Boggy ground, Bransbury Common, N. Hants., v.c. 12, June 19, 1909. Specimens of this form with flesh-coloured flowers may be acceptable to some of the members, as they come from the locality described by Mr. C. B. Clarke in "Jl. Linn. Soc." vol. XIX., p. 206. On the occasion of my visit I found a fair quantity in bloom, but the plant was not so abundant as O. maculata.—Ida M. Roper. This looks right. It is recorded from this station.—E.S.M.

O. latifolia L., var.? Flitwick bogs, Beds., v.c. 30, June, 1909. Deep colour; no spots on leaves; stem hollow. —D. M. Higgins. This, I believe, is not at all like the continental "O. latifolia L." which possibly we do not possess in Britain. I saw it growing in Switzerland a year or two ago and it struck me that it was something I had never seen before. The rich purple flowers, and broad leaves (usually marked with purple) were noticeable features. I think Mr. Pugsley knows these plants.—C.E.S. I think this is the usual form (in Britain) of O. latifolia. —E.F.L. I believe that this is a variety of O. latifolia L. What we in England regard as the type (O. maialis Reichb.) usually has the flowers deep crimson-purple, and the leaves unspotted. I have myself only observed spotted foliage in the var. brevifolia Reichb. fil., which is not the present plant. There are no lower leaves on the specimens received by me. M. Schulze figures O. latifolia with spotted foliage.—E.S.M. This seems to me to be exactly what we in England refer to O. latifolia L., and not O. incarnata L. I find the under surface of the leaf a very good character for separating the two species in the fresh state. In latifolia the surface is duller, less smooth and with fewer, inconspicuous, stomata.-E.D. Although this plant is very different in appearance from the extreme

form of O. latifolia common in alpine marshes in Switzerland (of which I have never seen a British specimen), yet I think it cannot be referred to O. incarnata. The floral characters are not very obvious in the dry state, but the leaves seem too spreading and too narrowed below, with too close sheaths, for O. incarnata, and the specimen is apparently similar to the form with unspotted leaves that has usually been named O. latifolia by British botanists. I do not know the named varieties of these plants, but believe the extreme forms of O. latifolia, with broad, spreading, spotted leaves and deep purple, variegated flowers, and of O. incarnata, with narrow, erect, unspotted leaves and salmon coloured, speckled flowers, to be connected by a series of intermediates, on which I hope to write a paper at some future date.—H.W.P.

O. ericetorum Linton. By Maldry Wood, near Edmondsham, Dorset, v.c. 9, June 26, 1909.—E. F. Linton.

Habenaria viridis Br., var. bracteata A. Gray. Canlochan, Forfarsh., v.c. 90, July 24, 1905.—McT. Cowan, jun. A fair example of the British plant which has received the name var. bracteata A. Gray; but our plant is perhaps rather a climatic form than a permanent variety.—E.F.L.

Leucojum æstivum L. Wargrave, Berks., v.c. 22, June 16, 1907.—Coll. E. Hartop. Comm. D. M. Higgins.

Maianthemum bifolium Schmidt. Carlowrie Woods; Linlithgowsh., v.c. 84, July 2, 1909.—McT. Cowan, jun.

Allium Scorodoprasum L. Near Barnbarroch, Wigtownsh., v.e. 74, July, 1904.—Coll. E. K. Higgins. Comm. D. M. Higgins.

A. carinatum L. North Bank of Tay, below Perth, E. Perthsh., v.c. 89, Sept. 11, 1909. This plant has long been naturalized on both banks of the Tay below Perth. It is so abundant that in many places it forms the turf. The leaves are generally withering by the time the plant is in flower.—W. Barclay.

A. triquetrum L. Guernsey, July, 1909.—Coll. R. H. Bunting. Comm. W. R. Sherrin.

Alisma lanceolatum With. Burwell Lode, Cambs., v.c. 29, Sept. 14, 1909.—A. J. Crosfield.

Potamogeton heterophyllus Schreb. (Ref. No. 1403). Without floating leaves. Killarney, Co. Kerry, July, 1907.—Coll. Mrs. Jenner. Comm. E. S. Gregory. This specimen is near to P. intermedius Tiselius, but is probably nearer heterophyllus Schreb. Dr. Tiselius now calls his plant nitens, var. intermedius, and Mr. Fryer seems to concur in this. Of course your name is what would be generally given to it, but it is not exactly heterophyllus in any form.—A.B.

P. Zizii Koch. Ditch, Witcham Medlands, Cambs.,
v.c. 29, Sept. 9, 1909.—Coll. E. W. Hunnybun. Comm.
S. H. Bickham. Passed by Mr. A. Bennett.

P. varians Fryer. Woodwalton Fen, Hunts., v.c. 31, Aug. 27, 1909.—Coll. E. W. Hunnybun. Comm. S. H. Bickham. The doubt about this plant being a hybrid in America arises from Dr. Morong's remark that "a weighty argument against this view is the fact that neither of the supposed parents occurs in Mystic Pond." (Monograph N. Am. Naiad., p. 27, 1893). But Prof. M. L. Fernald in "Rhodora" (1906), p. 224, remarks "In view of Dr. Morong's positive statement, therefore, it is important to record the fact that in the Gray Herbarium there is a sheet of very characteristic P. angustifolius (Bercht. and Presl.), collected by the late W. Boott in 'Mystic Pond, Aug. 26' (presumably in the sixties), and that in both the Gray Herbarium, and in that of the New England Botanical Club there are characteristic specimens of P. heterophyllus collected in Mystic Pond by Messrs. E. and C. E. Fascon. There is then no reason, as maintained by Dr. Morong, why P. spathaeformis should not have originated by the hybridizing of P. angustifolius and P. heterophyllus in Mystic Pond as well as in Cambs., England." To explain the above it may be well to give here the names it has passed under.—

P. varians Fryer.

P. varians Morong in Herb.

P. spathaeformis Tuckerman in Herb.

P. gramineus, var. (?) spathulaeformis Robbins in A. Gray's Man. Bot. Northern U. States (1867 and 1870), p. 487.

P. spathulaeformis (Robbins) Morong l.c.

 $P.\ heterophyllus \times angustifolius$ (Zizii) Fryer.

Originally found by Mr. É. Tuckermán in 1850 and named by him as above.—A.B.

P. zostevifolius Schum. Roswell Pits, near Ely,
Cambs., v.c. 29, July 27, 1909.—Coll. E. W. Hunnybun.
Comm. S. H. Bickham. Passed by Mr. A. Bennett.

P. pusillus L., var. tenuissimus Koch. Off Harbour Island, Lough Neagh, Co. Antrim, Aug. 18, 1909.—C. H. Waddell. Yes, but the authority is Mertens and Koch.—A.B.

Naias marina L. Hickling Broad, E. Norfolk, v.c. 27, Aug. 20, 1901.—Coll. E. Corder. Comm. A. M. Geldart.

Carex divisa Huds., var. chætophylla Kükenth. Seaford, E. Sussex, v.c. 14, June 19 and 22, 1909.—Coll. H. S. Thompson. Comm. C. E. Salmon and G. Goode. Mr. Thompson remarks that specimens from Seaford were passed by the late Mr. C. B. Clarke.—G.G. Agrees with Husnot's figure and description of the variety.—E.F.L. Mr. Thompson has collected true C. chætophylla Steudel, in the south of France, I believe; so his opinion carries great weight. Though of course it comes very near divisa, the characters seem sufficient for specific separation.—E.S.M. This = C. chætophylla Steud. Syn. glum., II., p. 187 (1855). = C. setifolia Godr. Not. Fl. Monsp. 25 (1854), not of Kunze. Distrib. Riviera: Bordighera; Provence; Dauphiné.—A.B.

C. paniculata L., var. ——? By the side of a stream, Bradgate Park, Leics., v.c. 55, July, 1909. When the British Association met in Leicester (1907) this Carex was pointed out as a variety, but I have forgotten what it is. Will some member please state.—W. Bell. C. paniculata L. Simple spikes often occur on typical plants rather late in the season.—E.F.L. A weak, very late-flowering state of C. paniculata; perhaps due to its having been cut off, earlier in the year, and the growth thereby arrested.—E.S.M. C. paniculata L., var. simplex Peterm. Anal. Pfl. schl. (1846) = var. simplicior Anderss. Cyp. Soand. p. 67 (1849). Perhaps this tends towards the var. elongata Cèl. Prod. Fl. Böhm. (1867).—A.B.

C. helvola Blytt (= C. curta × lagopina). Orig. Lochnagar, S. Aberdeensh. Cult. Edmondsham, Dorset, June 26, 1909.— E. F. Linton. Yes: C. canescens × Lachenalii, according to our present nomenclature. Mr. Linton finds it constantly sterile. In one of its Lochnagar stations C. canescens, var. fallax Aschers. and C. Lachenalii grow very close to one another. Beautiful material.—E.S.M. These are like the Finnish specimens from Dr. Kitelman. A very full account of this plant will be found in "Medd. Soc. Fauna et Flora Fennica," XVI. (1888–91), p. 10–16 and 74, by Dr. Kitelman, where he also describes C. pseudo-helvola (= C. canescens × C. norvegica). See also "Ann. Scot. Nat. Hist.," 1909, p. 238, and Jl. Bot., 1909, p. 107.—A.B.

C. elata All. Edge of pool, Tickenham Moor, N. Somerset, v.c. 6, June 15, 1909. This sedge was discovered last year by Messrs. C. Bucknall and J. W. White, and makes a certain record for N. Somerset, in which vicecounty it had only previously been very doubtfully recorded. See Jl. Bot., Oct. 1908.—Ida M. Roper. doubt the carex intended by that name in L.C., ed. X.; C. Hudsonii Ar. Benn. of ed. IX., and C. stricta Good. previously.—E. F. L. Correct (C. stricta Good.). shining sheaths at the base of the stems are a marked feature in this species.—E.S.M. This seems to belong to the C. stricta of Goodenough. Herr Kükenthal in his monograph of Carex in "Das Pflanzenreich" uses my name C. Hudsonii because of the uncertainty of Allioni's elata being stricta or acuta, and there is no specimen known to be extant of Allioni's plant. C. stricta is given for Somerset in the Rev. R. P. Murray's "Fl. of Somerset," (1896), p. 368 only as "an excluded species." I have seen specimens gathered by Mr. White in that county, but I do not know whether in the N. or S. vice-county.—A.B.

C. acuta L. (= gracilis Curt.), var. ——. Plentiful below the mill, River Avon, Stratford-on-Avon, Warwicksh., v.c. 38, June, 1909.—W. Bell. C. gracilis Curt., var. gracilescens (Almq., under C. acuta), I believe.—E.S.M. A form with narrow glumes which might present some interesting feature, if gathered in maturer fruit. The mere breadth of the glume in this or the parallel species, C. acutiformis, is not enough for making a variety.—E.F.L.

One of the specimens shows a shading off to the var. personata Fries (1828).—A.B.

C. trinervis Degland. The Common at Ormesby St. Michael, E. Norfolk, v.c. 27, July 10, 1886.—Coll. H. G. Glasspoole. Comm. A. M. Geldart. C. trinervis was first found in Gt. Britain by Mr. H. G. Glasspoole (Jl. Bot., 1884, p. 125). After Mr. Glasspoole's death, in 1887, his herbarium was given to my father (H. D. Geldart), and these duplicate specimens, named by Mr. Glasspoole, were with it.—A. M. Geldart. Some doubt has been thrown on the Norfolk plant named C. trinervis, but one specimen I possess seems to belong to that species without doubt. It was seen by Sir J. D. Hooker, and assented to by him. I have lost some notes respecting Ormesby Common, given to me by the late Mr. Glasspoole, and I have only seen that place in passing to the Broad. I believe it has been suggested that this is Goodenowii × glauca—but where alauca comes in I fail to see.—A.B.

C. montana L. Moist woodland, Edmondsham, Dorset, v.c. 9, May 12, 1909. A recent discovery for Dorset, not reported by me till last year—E. F. Linton. I suppose a new county record. Beyond the counties given in Top. Bot., ed. 2 and the Suppl. it is now on record for:—2, E. Cornwall, Curnow, sp.; 41, Glamorgan, Miss Vachell, sp.; 42, Brecon, Ley ex Newbould (Record Club Rept., 1883, p. 62); 57, Derby, Waterfall, sp., raising its comital distribution to 15. I possess one of the original specimens gathered in May, 1843, and given to me by the finder, Mr. Mitten.—A.B.

C. vaginata Tausch. Beinn Heasgarnich, Mid Perth, v.c. 88, July, 1909. (Altitude 3000).—P. Ewing. Correct.—E.S.M. Of the three specimens on my sheet one is typical, with yellow-green leaves and light brown glumes; another is sterile, the leaves all dead, and may be the same plant; the third has so much darker glumes, and blunter on the male spikelet, and the leaves rather glaucous-green beneath, that it might be worth while looking out for a hybrid, say with C. panicea, if on the spot again.—E.F.L. A very fine specimen of this species; being rather taller than the extreme (15 inches) given by Syme in "Eng. Botany."—A.B.

- C. atrofusca Schkuhr. Beinn Heasgarnich, Mid Perth, v.c. 88, July, 1909.—P. Ewing. Yes.—E. S. M. Unmistakeable! A very fine specimen for Britain.—E.F.L. For an earlier report of this species see Ann. Scot. Nat. Hist. 1909, p. 55, also Naturalist, 1884, p. 70. It is to be hoped that botanists will gather this with care, it is not so abundant as to bear over gathering.—A.B.
- C. depauperata Curt. Orig.? Hort. Lewes, July, 1909.—C. E. Salmon. Not spoilt by cultivation, but is it worth sending out without the original locality?—E.F.L. Correct. Probably it came from Godalming, Surrey.—E.S.M. It is a pity it is not known whence the original specimens were obtained. It is becoming quite rare in its Surrey stations.—A.B.
- C. inflata (ampullacea) × vesicaria. (Ref. No. 3388). Swamp on island in the Conan River, near Conan, E. Ross, v.c. 106, July 16, 1909. Growing with abundance of the parent species; I have no doubt that it is a hybrid between them.—E. S. Marshall.

This = $C. rostrata \times vesicaria$ Figert.

 $= \times C.$ Pannewitziana Figert.

 $= C. ampullacea \times vesicaria$ Focke.

= C. vesicaria b. Friesii Richter, teste Ascherson and Graebner.

Distribution: Norway. Britain. France. W. & E. Prussia. Wurtemburg.—A.B. (See also Rept. B.E.C., 1909, p. 479).

C. vesicaria L. Valley of the Conan River, near Achilty, E. Ross, v.c. 106, July 15, 1909. Some members may be glad to have specimens from a station so far north.—E. S. Marshall.

Agrostis ——? Cleethorpes, N. Lines., v.c. 54, July, 1909.—E. & H. Drabble. A. alba L., var. maritima, Meyer?—E.F.L. It may be a starved form of var. maritima—which is usually a large plant with a diffuse panicle—but I should rather be inclined to refer it to var. compacta Bréb.—A.B.

Polypogon monspeliensis Desf. Thorney Island, W. Sussex, v.c. 13, Aug. 26, 1909.—R. S. Standen. Yes; locally abundant in this station.—E.S.M. Nice specimens.—E.F.L.

Deschampsia setacea Richter (= discolor R. & S.). Wet bog, between Achilty Inn and the Conan River, E. Ross, v.c. 106, July 13, 1909. I found this near Dingwall in 1892; but it has not been much distributed, and may be acceptable from this northern station, as it is quite a local species.—E. S. Marshall.

Poa alpina L. Beinn Heasgarnich, Mid Perth, v.c. 88, July, 1909. (Altitude 2500 ft.).—P. Ewing. Yes.—E.S.M. It is interesting to see a well-developed specimen which is not viviparous.—E.F.L.

P. nemoralis L., var. divaricata Syme. (Ref. No. 3389). Rocks near Garve, E. Ross, v.c. 106, July 10, 1909. Young and undeveloped; but I believe correctly named. This variety (or form) is especially partial to rocks, in the Highlands.—E. S. Marshall. I agree with Mr. Marshall.—A.B.

P. palustris L. Near Slateford Station, Edinburgh, v.c. 83, Sept., 1903.—Coll. J. McAndrew. Comm. C. E. Salmon. These specimens were given to me by Mr. Arthur Bennett.—C.E.S.

Glyceria Foucaudii Hackel (= Atropis Foucaudii Hackel ex Foucaudi. Tidal Mud at Robertston Creek, Limerick, Ireland, June, 1904.—Coll. Miss M. C. Knowles. Comm. A. Bennett. Yes. I believe that Prof. Hackel has agreed to specimens from this station.—E.S.M.

Bromus racemosus L. Pasture near Henbury, W. Glos., v.c. 34, June 14, 1909.—Ida M. Roper. Yes.—E.S.M. So I should call it.—E.F.L.

B. hordeaceus L., var. glabratus (Doell). Border of cultivated field, Winterbourne, W. Glos., v.c. 34, June 11, I909.—Ida M. Roper. I believe correct; but I have not yet learned to distinguish accurately between that and leptostachys.—E.S.M. I agree with Mr. Marshall.—A.B.

Lolium perenne L., var. multiflorum (Lam.), form. Thurmaston, Leics., v.c. 55, May, 1909.—Coll. E. E. Lowe. Comm. A. R. Horwood. L. italicum Br., I believe. I am not sure if that is really distinct from L. multiflorum Lam.—E.S.M. This plant possesses barren shoots and

apparently inrolled edges of the young leaves. On these characters and in the paler green of the foliage and inflorescence *italicum* seems to differ from *multiflorum* as I understand it.—E.D.

Agropyron pungens R. & S., var. littorale (Reichb.). Bosham Creek, W. Sussex, v.c. 13, Aug. 28, 1909. I hope these are correct. See Report for 1906-1907, p. 120.—R. S. Standen. Is this not, rather, the var. pycnanthum?—E.S.M. I think this may be placed under var. littorale.—E.F.L. I believe this to be correct.—A.B.

Hordeum europæum All. (= sylvaticum Huds.). Great Doward Woods, Herefordsh., v.c. 36, July 2, 1909. In large quantity in a part of the wood recently cut.—A. Ley.

Woodsia alpina Gray. Cliffs above Loch na Lairg, Mid Perth, v.c. 88, Aug. 4, 1907.—McT. Cowan, jun.

Equisetum variegatum Schleich, var. arenarium Newm. Wallasey Sandhills, Cheshire, v.c. 58, July, 1909. —E. & H. Drabble. Yes; more slender than usual.— E.S.M. Very good arenarium.—E.F.L.

Chara hispida L., approaching var. macracantha Braun. Glebe-pond, South Croxton, Leics., v.c. 55, July 22, 1909.—A. R. Horwood. C. hispida L., not approaching var. macracantha.—H. & J.G.

Copies of many of the earlier Reports can be obtained from the Hon. Secretary.

SUBSCRIPTIONS, 1909.

						£	s.	$d\cdot$
Allard, E. J	•••					0	5	0
Babington, Mrs. C. C	J					0	5	0
Bailey, C			•••			0	5	0
Barclay, W	•••			•••		0	5	0
Bell, W			•••	•••	•••	ŏ	5	Õ
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Bostock, E. D.	•••	•••				ŏ	5	ő
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Carr, Prof. J. W.		•••	•••	•••	•••	ő	5	0
Clarke, W. A.		••	•••	•••	•••	0	5	0
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Cotton, Mrs	•••	•••	•••	•••	•••	0	5	0
Cowan, McT.	•••	•••	•••	•••	•••	0	5	0
Crosfield, A. J.	•••	•••	•••	•••	•••	0	5	0
Davey, F. H	•••	•••	•••	•••	•••	0	5	0
Davy, Mrs	•••	•••	•••	•••		0	5	0
Day, Miss L	•••	•••	•••		•••	0	5	0
Drabble, Dr. Eric	•••		•••	•••	•••	0	5	0
Ewing, P	***				•••	0	5	0
Foord-Kelcey, Mrs.					•••	0	5	0
Fowler, Rev. Canon						0	5	0
Fraser, J	•••					0	5	0
Geldart, Miss A. M.						0	5	0
Goode, G	•••	•••	•••	•••	•••	ō	5	0
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Hayward, Miss I. M.	•••		•••	•••	•••	_		_
Headly, C. B	•••	•••	•••	•••	•••	0	5	0
Higgins, Miss D. M.	•••	•••	•••	•••	•••	0,	5	0
Horwood, A. R.	•••	•••	•••	•••	•••	0	5	0
Hunnybun, E. W.	•••	•••	•••	•••	•••	0	5	0
Jackson, A. B.	•••	•••	•••	•••	• • •	0	5	0
Jenner, Mrs. B. St. A	L.	•••	•••	•••	•••	0	5	0
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Somerville, Mrs. A.	•••	•••	•••	•••	•••	0	5	0
Spearing, E	•••	•••	•••		•••	0	5	0
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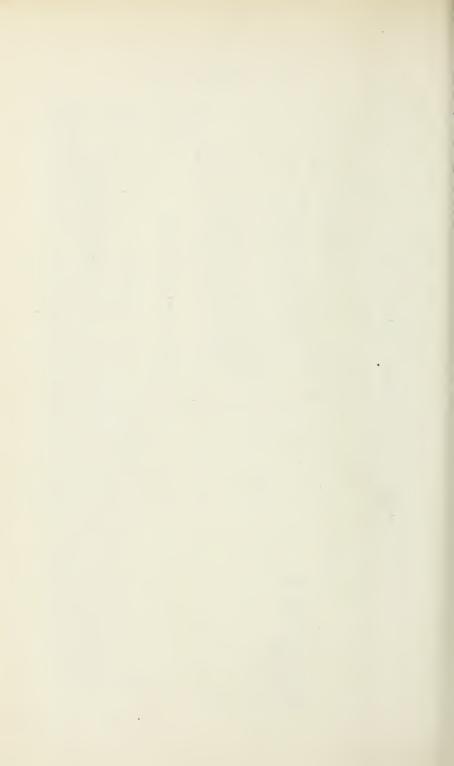
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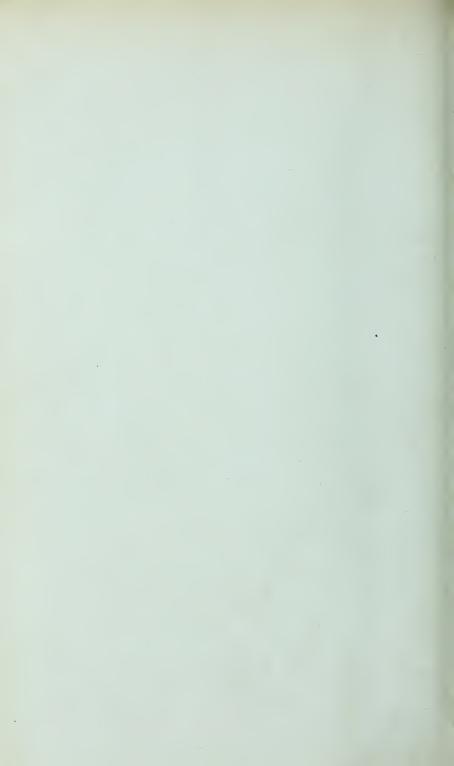
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SPENCER H. BICKHAM, Hon. Treasurer.







THE

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OF THE

WATSON

Botanical Exchange Club,

1910-1911.

Referees:

Rev. E. F. LINTON, M.A., Edmondsham Rectory, Salisbury.

Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

Rev. W. MOYLE ROGERS, F.L.S., Chetnole, Grosvenor Road, Bournemouth West.

C. E. SALMON, F.L.S., Pilgrims' Way, Reigate.

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Hon. Secretary and Editor:

GEORGE GOODE, M.A., Lyndhurst, De Freville Avenue, Cambridge.

CAMBRIDGE:

PRINTED BY J. WEBB & CO., ALEXANDRA STREET, 1911.



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Augustin Ley.
Aged 36.

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23 NOV. 1911

THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1910-11.

The plants sent in for distribution this year were in many cases of great interest and value, the critical genera being fairly well represented, *Hieracium* particularly so. The specimens, too, were generally well prepared, although more care might sometimes have been taken, especially in the drying of *Euphrasiæ*.

Most of the members have adhered to the rules of the Club, and thereby greatly facilitated the work of the distributor, but there are still some who send in sets of 2 or 3 of a species, which are quite useless for distribution purposes. This must only be done when the plants are sent for identification or record, as otherwise it much hinders the working of the Club.

Our gratitude is due to the Rev. W. Moyle Rogers for sending several interesting sets of Rubi.

The contributors for the year were:-

The contributors for the year were.—							
Shee		Sheets.					
Mr. C. Bailey	95	Dr. F. Long 22					
Mr. W. Barclay		Rev. E. S. Marshall 225					
Mr. S. H. Bickham 2	12	Dr. C. E. Moss 102					
Rev. H. Boyden	19	Rev. W. Moyle Rogers 28					
Mr. McT. Cowan, jun. 21	15	Miss I. M. Roper 221					
Mr. A. J. Crosfield	62	Mr. C. E. Salmon 35					
Mr. F. H. Davey	73	Mr. W. R. Sherrin 31					
Mrs.F.L.Foord-Kelcey	55	Mr. R. S. Standen 199					
Rev. H. E. Fox 1'	73	Mr. H. S. Thompson 76					
Mr. G. Goode	80	Rev. C. H. Waddell 82					
Miss I. M. Hayward	48	Mr. J. W. White 37					
Miss D. M. Higgins	35	Mr. A. J. Wilmott 44					
Mr. A. R. Horwood	50						
Rev. A. Ley 4	03	Total 2745					
	81						

The Club is much indebted to the following for valuable notes and help given:—Mr. W. Barclay, Mr. Arthur Bennett, Mr. C. Bucknall, Mr. F. H. Davey, Dr. E. and Mrs. H. Drabble, Mr. S. T. Dunn, Mrs. E. S. Gregory, Messrs. H. & J. Groves, Mr. A. B. Jackson, Rev. E. F. Linton, Rev. E. S. Marshall, Dr. C. E. Moss, Mr. H. W. Pugsley, Rev. W. Moyle Rogers, Mr. C. E. Salmon, Mr. J. W. White, and Major A. H. Wolley Dod.

McTAGGART COWAN, Jun.,

Distributor for the year 1910—11.

By the death of the Rev. Augustin Ley our Club has this year suffered a loss that will long be very keenly felt. We are indebted to the Rev. E. F. Linton, who knew him so well, for the following sketch of his life; and to those members who have helped to defray the cost of reproducing the photo, taken in 1878—when he was commencing his botanical work—and Mr. Hunnybun's drawing of Fumaria major.

Mr. C. E. Salmon has very kindly undertaken to act as general Referee.

GEORGE GOODE,

November, 1911.

Hon. Sec. and Editor.

We have to lament the loss of a valued Referee, who, though not a regular member of our club, has been for some years the largest contributor.

Augustin Ley, who died on the 23rd of April last, aged 69, was born at Hereford, the 3rd of April, 1842. His father, the Rev. W. H. Ley, moved to Sellack Vicarage the same year, and in that beautiful home by the Wye his two boys acquired under his tuition not only sound scholarship, but a good grounding in Natural History. At Oxford the younger son, Augustin, took a first class in Classical Mods., and a second in *Lit Hum.*; was Vicar of St. Weonards in Herefordshire, 1878 to 1885; assisted his father as Curate before and after, and succeeded him, on his death, as Vicar of Sellack and King's Capel in 1887.

From this centre he explored the county of Hereford, to carry on the work begun by the Rev. W. H. Purchas; in partnership with whom he published in 1889, as the result of their labours, the *Flora of Herefordshire*, a work which holds a high place for thoroughness among the best County Floras. This includes the Mosses and Fungi, the former section mainly due to Ley's persevering record work and solely to his editing.

His perseverance in difficult studies was a marked feature of his character. Under Mr. Purchas' early guidance he became well acquainted with British flowering plants generally; but, to borrow some remarks of mine from the admirable memoir by the Rev. W. Moyle Rogers (Journ., Bot., 1911, p. 201), "he took chief interest in the more difficult genera, and spent an immense amount of labour in collecting material and working out species and varieties new to Britain and to science. In the genus Rosa he revised the mollis-tomentosa group * * * In Hieracium he was a large contributor to the later fascicles of the "Set of British Hieracia," and he continued to work at the genus, on which he was consulted far and wide. The list of the London Catalogue, ed. 10, shows that he was responsible for five species endemic to the British Isles; and since its issue he has given specific rank to seven more * * * His unexpected removal from us is a grievous and irreparable loss to all who worked with him on this intricate genus. In his knowledge of Welsh Hawkweeds his opinion was invaluable. Another difficult genus that he knew in the field better than any other British botanist was *Ulmus*. The result of his work is given in the Journal of Botany for 1910, p. 65; and though some revision in the nomenclature may occur in the future, there is no doubt that he knew the British forms well, and that his distinctions will stand."

In another most perplexing genus Ley was an indefatigable worker. No county has been so well explored as Herefordshire by him for Rubi, or found to contain so many forms. Several of these were new, and of them eleven species or varieties were described by him. He was a contributor to the "Set of British Rubi" and joint editor in the final fascicle. He was a delightful companion in the field, with a most observant eye for

plant or animal life, ready to learn or to impart information, and to lighten a dull trudge home with interesting topics, looking at both sides of a question and able to discuss it with unfailing courtesy and good temper. Used to a plain style of living, with no self-indulgent habits and little relaxation but what botany afforded, he could dispense with comfort or put up with hardship more cheerfully than most men.

This is not the place to say much of his professional work. Augustin Ley was (l. c.) "in many ways an ideal priest of a country parish," said one of his clerical neighbours at a meeting in Ross, the day before the funeral in Sellack Churchyard; "kindly and generous-"hearted, yet withal shrewd and practical, he was one of "those lovable natures which attract to themselves all who "come in contact with them."

E. F. LINTON.

Ranunculus Flammula L. [var. radicans Nolte]. Wet ditch, Perran-ar-worthal, W. Cornwall, v.c. 1, Sept. 24, 1910. Most of the plants were taller than I am accustomed to find this var. in Cornwall, and there were no roots at the nodes of the stem. This may have been owing to the dense herbage among which they flourished. A few smaller plants, gathered in more open portions of the ditch, were prostrate and almost all the nodes showed roots.— F. H. Davey. I think this should not be placed under the variety, but left under type. I have sometimes seen plants with some of the branches which extended on to the bare mud or shingle quite prostrate and rooting at the nodes, while the rest of the plant-being in the long herbage beside the ditch—was ascending or upright, and exhibiting quite different leaf characters, making it appear that the mere fact of the plant being prostrate and rooting at the nodes is a slender character to base a var. upon.—McT. C. Nolte's plant is a small one, growing on stony or gravelly northern lake-shores; prostrate (or nearly so), rooting freely at the nodes. This will not even do for Syme's var. pseudo-reptans, which seems to include larger, coarser states; it is not really separable from the type, as it has erect or ascending stems, only slightly rooting near their base.—E.S.M.

R.—. Railway bank near Dalmeny, Linlithgowsh., v.c. 84, May 28, 1910. On railway embankment. Some two inches under the surface the soil was hard and largely mixed with cinders, which may be sufficient to account for the direction of the rootstock, which seems to me often to depend upon edaphic conditions, and not always to be relied upon as a specific distinction.—McT. Cowan, jun. Rootstock elongate, horizontal; clearly a form of the R. Steveni Andrz. group. In the absence of fruit no more can be safely suggested.—E.S.M.

R. bulbosus L., form. Chalk Downs, Freshwater, I.W., v.c. 10, June, 1910.—H. E. Fox. For me this is merely a state of situation. Superficially, at least, it closely resembles Mr. Druce's plant from the sand dunes, St. Ouen's Bay, Jersey; which he describes in B.E.C. Rept., 1910, p. 495, as a new variety, dunense [dunensis] Druce: adding that it is "near to R. valdepubens Jord., of which it may be a dune-form. Differs from R. bulbosus by its shorter growth and larger flowers, its corm being more densely clothed, and the leaves and petioles being covered with long shaggy hairs." I think that the characters relied upon are such as may well be due to local conditions; but my Jersey specimens are so young that they hardly warrant a definite opinion.—E.S.M.

Aconitum Napellus L. Whithorn, Wigtownsh., v.c. 74, Aug. 1910.—Coll. R. Dew. Comm. D. M. Higgins.

Corydalis claviculata DC. Brooklands Motor Racecourse, Weybridge, Surrey, v.c. 17, July 15, 1910. Sent because of its very peculiar habit.—Coll. Rev. E. Foord-Kelcey. Comm. F. L. Foord-Kelcey. This is merely stunted, owing to the situation. There is a var. minor in Rouy and Foucaud's "Fl. de France," I., p. 188, but their description does not tally with this plant.—E.S.M.

Funaria purpurea Pugsley. Allotment gardens, Malvern, Worcs., v.c. 37, Sept. 9, 1910.—S. H. Bickham. This is correctly named, and the specimens are fairly typical, except that the sepals are more than usually toothed.—H.W.P.

F. Boræi Jord., var. muraliformis Clavaud? Weed in an old garden, Penyard, Ross, Herefordsh., v.c. 36, Sept. 29, 1910. The variability in the curve of the pedicels in this plant is remarkable.—Augustin Ley. This appears right, but the sheet sent shows a weak, shadegrown plant, not at all normal, and with fruits peculiarly short and truncate for any form of F. Boræi. It almost looks like a starved F. purpurca, but the pedicels are too slender, the neck of the fruit too obscure, and the bracts too short for any form of that species in a state of starvation.—H.W.P.

F. major Badarro. The plant from Gilly Tresamble. Perran-ar-worthal, which I distributed in 1904 (See Report, 1904-5, p. 7) has been identified by Professors Schinz, Ascherson, and Gräbner, as well as by Dr. Fedde of Berlin, who is working out the genus Fumaria for Engler's "Pflanzenreich," as F. major Badarro. Every year since its discovery, on Oct. 8, 1904, I have seen thousands of plants of it among potato, turnip, mangel and cabbage crops in the parishes of Perran-ar-worthal and Gwennap. Rouy et Foucaud ("Flore de France," vol. 1, p. 176) place this plant with F. spectabilis Bischoff, under F. agraria Lag., and they describe it as follows: "Bractées lancéolées, égalant ou dépassant les pédicelles; sépales ovales, courts, égalant environ le quart de la longueur de la corolle, et à peine plus étroits qu'elle, profondément dentés, à nervure médiane, peu ou point carénée; silicule globuleuse à mucron cylindracé, mince; feuilles courtes, à lobes courts, peu écartés." None of the hundreds of Cornish specimens which I have examined have had the bracts more than one-half as long as the fruiting pedicel, and the small oval sepals are only rarely slightly dentate at the base. From all other species of Fumaria occurring in Britain F. major may be distinguished by its long, ultimately lax raceme of 20-25 large rosy-pink flowers, which often are much recurved. the Continent it is said to flower from April to June; in Cornwall its flowering season extends from the early part of September to late October.—F. Hamilton Davey.

Arabis scabra All. Rocks near Bristol, W. Glos., v.c. 34, April 26, 1910. The present condition of this rarity is very satisfactory. As it seeds freely early in the



b flower, natural size and magnified. sepals, magnified.

c upper petals, magnified. f fruit, magnified.

petals, magnified.

Reproduced, by permission, from the drawing prepared for The Cambridge British Flora by Mr E. W. Hunnybun



year plenty of new plants grow on the usual slopes and on many ledges in the old limestone quarries thereabout.
—Ida M. Roper.

Cardamine pratensis L., var. palustris Peterm. f. Arminghall, nr. Norwich, E. Norfolk, v.c. 27, April, 1910. On March 25, 1903, Mr. Arthur Bennett wrote as follows regarding specimens of this plant I then gathered:-"The specimen sent is Cardamine palustris Peterm., near var. dentata. The true C. pratensis L. is not figured in 'Eng. Bot.', but is in the 'Flora Danica.' In England we do not consider the difference sufficient to constitute a species, so we should name your plant C. pratensis L., var. palustris Peterm. f."--F. Long. As far as the material (flower and very young fruit) goes, this agrees rather well with Rouy and Foucaud's description of C. dentata Schultes, to which these authors refer with some doubt the later *C. palustris* Peterm. (1849); but they remark in a footnote ("Fl. de France," I., 233) that according to Haussknecht and Focke C. palustris Peterm. is a hybrid of C. amara and C. pratensis, resembling the non-hybrid C. dentata Schultes. The flowers of dentata are described by them as "white or pink, large." In my specimen of Mr. Long's gathering they are remarkably large and pinkish.—E. S. M.

Erophila verna E. Meyer, var. (1) Hallaton, Leics., v.c. 55, May 26, 1910.—A. R. Horwood. The pods look rather inflated, but it is hopeless, I think, to try and name Erophilas without root leaves!--C. E. S. three specimens sent to me are past flowering. I think that they can only be called E. verna, though the capsules are sometimes rather narrow, thus simulating E. stenocarpa Jord., while others on the same individual are broader. They seem to be somewhat starved; this would account for any deviation from type.—E. S. M. Glooston, Leics., May 26, 1910.—A. R. Horwood. Here, again, the capsules vary considerably; some are narrow and attenuate at both ends, recalling E. stenocarpa; whereas others are shorter and more rounded, approaching E. præcox DC. This appears to indicate insufficient nourishment; I believe them to be E. verna (vulgaris DC.).—E.S.M.

Cochlearia anglica L. Banks of River Looe, E. Cornwall, v.c. 2, May, 1910. New to Mr. Davey's district No. 3.—H. Boyden.

Sisymbrium Columnæ Jacq. Right bank of River Exe, nr. Exeter, S. Devon, v.c. 3, Sept., 1910. This plant I found last September in fair quantity and seemingly established, growing on the right bank of the Exe, near the water, entangled amongst other plants. I sent a specimen to Mr. Hiern, of Barnstaple, who named it as above, and this opinion was confirmed by the botanists at the British Museum to whom he sent a specimen gathered by himself in the place I had indicated.—H. Boyden. S. Columnæ Jacq., Fl. Austr. iv. 12, t. 323. Jacquin shows S. Irio L. and S. Columna in two consecutive folio plates which indicate clearly the close similarity between the two species in habit and upper leaf-characters. From his written descriptions of the living plants it is probable that the author relied upon the size of the flowers and the direction of the sepals to distinguish them. He represents S. Columnæ with flowers $\frac{1}{2}$ -inch long and erect sepals, while the other has flowers \frac{1}{4}-inch long and its sepals patent .- S. T. Dunn.

Brassica Erucastrum Vill., Newmarket Heath, Cambs., v.c. 29, Aug. 27, 1910.—A. J. Crosfield. There is a specimen (sub nom. Erucastrum inodorum Reich., var. Pollichii Schimp. & Spenn.) in the Cambridge University Herbarium from the same locality, collected in Aug., 1885. Mr. Druce showed me the plant last year growing on rubbish heaps by the side of the "heath." The plant, of course, is not indigenous.—C.E.M. Yes. Evidently an alien which our climate suits, as it appears to be spreading in England. Specimens collected by Mr. I. H. Burkill from the same locality were distributed through the Club in 1897, and it is interesting to know that it still exists there.—C.E.S.

Diplotaxis muralis DC. [var. Babingtonii Syme]. Cultivated ground, Rock, E. Cornwall, v.c. 2, Aug., 1910.—H. E. Fox. Not the variety.—E.F.L. Not Babingtonii of Syme, which is a much larger plant with leafy stems.—A.B. The plant sent to me is an annual, and therefore is not D. muralis, var. Babingtonii Syme; which, indeed, does not deserve to be distinguished, being merely a

luxuriant state which has lasted on into a second season. This is type.—E.S.M.

Lepidium heterophyllum Benth., var. leiocarpum Thellung. Ivory Hill, nr. Frampton Cotterell, W. Glos., v.c. 34, July 18, 1910.—J. W. White. If this differs at all from var. canescens Gren. and Godr. (L. Smithii Hook.), it can only be as a slight form or sub-variety. "Bab. Man.," ed. 9, describes the pouches as "smooth," and Hooker, "Stud. Fl.," ed. 3, as "nearly smooth." I doubt the advisability of distinguishing the present plant, which has quite glabrous pods, even when young.—E.S.M.

Reseda inodora Reichb. (1) Falmouth Docks, W. Cornwall, v.c. 1, Aug. 6, 1910; (2) Par, v.c. 2, July 18, 1910. There were only a few plants at Falmouth, but at Par this species for several years has been as thoroughly established as Coronilla varia and Verbascum phlomoides. It is not recorded in Dunn's "Alien Flora."—F. H. Davey. Probably a ballast-introduction; Nyman gives its European distribution as follows:—Illyria, Hungary, Croatia, Servia, Moldavia, Northern Thrace, Podolia, and Bessarabia.—E.S.M. This is one of the many forms of R. lutea L. Reichenbach, under the name of R. inodora, described and figured a very different plant with entire lower leaves and a capsule with acute serrate angles ("Ic. Fl. Germ." ii. 22, t. 99).—S.T.D.

Viola hirta L., f. lactiflora Reichb. Cadbury Camp, N. Somerset, v.c. 6, March 28, 1910. The plant is remarkably handsome, but as the purple veins disappear in the dry state the large petals appear as white as the centre.—Ida M. Roper. A well known and very beautiful plant, in this locality.—E.S.G.

V. hirta × odorata (= permixta Jord.). Hedge, Alveston Common, W. Glos., v.c. 34, March 30, 1910. There appears to be still some uncertainty in the minds of those botanists who have given special attention to this genus as to whether this true species may not be merely a primary hybrid, but there is no doubt that it occasionally produces good fruit and that plenty of seedlings spring up around it.—Ida M. Roper. Yes, I think correct.—E.S.G. Doubtless the suggested hybrid; nearer to V. odorata of the two.—E.S.M.

V. Riviniana × sulvestris. Wood Bank, Great Doward Hill, Herefordsh., April and July, 1910. Flowering abundantly at the earlier date, but almost or quite barren. -A. Ley. My material is rather scrappy, but looks right; the foliage approaches V. Riviniana, the floral characters seem to be fairly intermediate.—E.S.M. Mr. Ley's plant is, I think, a distinct variety of V. sylvestris. I have had this var. under cultivation for 25 years; it has increased considerably, but has in no wise altered in any of its original characters. A furrowed spur is a constant feature, which no doubt gave rise to the impression of its being a Riviniana hybrid. As such I cannot, however, regard it, else why should it dominate districts where V. Riviniana is not present? It approaches, in some important respects, to V. arenicola Chabert, but breaks down in (1) lower leaves larger, not obtuse, nor wholly glabrous; (2) central rosette has often flowers as well as leaves; (3) upper stipules do not exceed the petioles they subtend, nor are they entire. It is, no doubt, the sub-var. punctata of V. sulvestris, given in Rouy et Foucaud "Fl. France," III, p. 13, which is described as having "Pétale inférieur marqué à la base d'une tache violette," and better described by Boenninghausen ("Prod. Monasteriensis Westphalorum") under V. canina L., β maculata, in these terms:—"floribus minoribus pallidis ad basin petalorum maculis saturatioribus."—E.S.G.

V. [saxatilis Schmidt, var. lepida (Jord.)]. Flowering in a field after flax was pulled, Saintfield, Co. Down, Oct. 4, 1910.—C. H. Waddell. This is apparently annual, whereas V. saxatilis and its varieties are at least subperennial. What Dr. Drabble has named for me as V. lepida Jord. has much larger flowers and a more robust habit, though the colouring is very similar.—E.S.M. This is not lepida. It is very obviously an annual plant, being (at all events in the two plants sent to me) quite devoid of the subterranean perennating branches which are so characteristic of lepida. It comes under my group of the Tricolores. I am not prepared now to give it a name, though I have seen specimens from Scotland, and am quite familiar with the plant.—E.D.

Polygala ——? Near Aberystwyth, Cardigansh., v.c. 46, Aug., 1910.—W. R. Sherrin. P. serpyllacea Weihe.—

E.F.L. A straggling state of *P. serpyllacea* Weihe.—E.S.M.

Silene dichotoma Ehrh. Ash Farm, Bridstow, Herefordsh., v.c. 36, July, 1905.—Coll. Miss E. Armitage. Comm. S. H. Bickham. Correct. Presumably a weed in fields of sown grass, in which rôle it is sometimes abundant on sandy fields in Surrey.—S.T.D.

Lychnis Viscaria L., var. Blackford Hill, Edinburgh, v.c. 83, June 8, 1910. This form or variety grows in fair quantity over the same area as the type and is noticeable even from some distance away. The whole plant is a paler yellower green, with rather softer leaves and paler flowers; the calyx and stem just below the nodes are not tinged with red. I send some specimens of the type from the same locality.—McT. Cowan. Panicle a little more compact than usual, but surely not enough difference to constitute a variety. I have an exactly similar plant collected by W. Brand in 1841 on Arthur's Seat.—C.E.S.

Stellaria neglecta Weihe, var. umbrosa (Opiz). Hedge bank, near Sandplace, E. Cornwall, v.c. 2, May 19, 1910. —H. Boyden. No; S. umbrosa (Opiz) has the pedicels and calvees glabrous; here the former are hairy, and the latter are clothed with long-stalked glands. It appears to come under type neglecta, and is identical with a plant which I find not uncommonly in the neighbourhood of Taunton; for this I have suggested the name "forma glandulosa." The acute papillæ of the seeds distinguish it from my var. decipiens (S. neglecta Bab., non Weihe). E.S.M. Our Cornish Stellaria neglecta, var. umbrosa is somewhat variable. One could easily gather from different localities specimens which would show connecting links from the variety to the species, and it seems to me that these specimens could better be placed under umbrosa than under neglecta proper.—F.H.D.

Sagina procumbens L. [var. spinosa Gibs.]. Near Killin, Mid Perthsh., v.c. 88, Sept. 24, 1910. In the fresh state distinct ciliæ are seen under the lens, but in many specimens these almost entirely disappeared upon drying.—Mc.T. Cowan. I hardly think these are referable to the variety spinosa, as the specimens are almost glabrous, while in spinosa the leaves are quite obviously spinose-

ciliate.—H.W.P. I cannot find that the leaves are spinose-ciliate, even under a 1" power. It is evidently an unusual elongated form of *S. procumbens*, and seems to agree with the description of β . apetala Fenzl., sub.-var. humifusa Rouy and Fouc. ("Fl. France," III., 286).—C.E.S. Like all Mr. Cowan's contributions, this is beautifully dried. The var. spinosa is distinctly spinose-ciliate on the leaves under a lens; these specimens are mostly quite smooth-edged, or with a very occasional cilia. Not the variety, but type procumbens.—E.S.M. Not the plant of Gibson, which is distinctly spinose-ciliate.—A.B.

 $\begin{array}{c} \textit{Montia fontana} \text{ L., var. } \textit{rivularis} \text{ C. C. Gmel.} (= \textit{major} \\ \text{All.}). \text{ Near Aberystwyth, Cardigansh., v.c. 46, Aug. 1910.} \\ \text{-W. R. Sherrin. Confirmed.--E.F.L. Yes; } \textit{M. rivularis} \\ \text{Gmel. The only seed that I can find is dull brownish-black; so it is not } \textit{M. lamprosperma} \text{ Cham.--E.S.M.} \end{array}$

Geranium Endressi \times striatum. Garden origin. Cult. July and Sept., 1910. A spontaneous hybrid between these parents when grown together in a garden at Sellack Vicarage in 1906. When cultivated it proved a more vigorous plant than either parent, producing abundant blossoms and fertile seed.—A. Ley.

G. Robertianum L., var. modestum (Jord.). Shingle beach, Coverack, W. Cornwall, v.c. 1, July, 1910.—H. E. Fox. I think right.—E.F.L. Correct, I believe.—E.S.M.

Oxalis Acetosella L., var. subpurpurascens DC. (Ref. No. 33). Arniston Woods, Gorebridge, Edinburghsh., v.c. 83, May 14, 1910.—Mc.T. Cowan, jun. Lovely specimens of a fine colour-variety, for which I have long and vainly searched.—E.S.M.

Ulex Gallii Planch., var. humilis Planch.? Heath near Parkstone, Dorset, v.c. 9, Sept. 1910.—H. S. Thompson. This agrees with the description of what is at best a very slight variety.—E.F.L. Better, I think, left under type, as in my examples of humilis, gathered in Cornwall and Scilly Isles, the branches are shorter and denser, and the leaves much closer together.—C.E.S. A weak form of Gallii; I have seen U. minor (nanus Forster) stronger than this in West Surrey. There is

nothing in the material before me to shew whether this is or is not var. *humilis*; which I have not seen growing, but suspect to be only a state caused by exposure.—E.S.M.

Ononis repens L., var. horrida Lange. Luffness Links, Haddingtonsh., v.c. 82, Aug. 6, 1910. At this station there are large areas in the zone between the sand dunes and the closed grass formation of farther inland covered with the type, but the variety seems to be confined to several well marked areas of some few square yards each. I returned to the localities later but found that the plants had not fruited freely.—McT. Cowan, jun. Yes. On sand dunes, this form or variety is sometimes very abundant.—C.E.M. Yes (O. maritima Dumort.). I have only gathered this on both sides of Bridgwater Bay, Somerset.—E.S.M.

Trifolium [resupinatum L.]. Leigh-on-Sea, Essex, v.c. 18, Aug., 1910.—W. R. Sherrin. No. This is T. procumbens L., var. minus Koch (= T. campestre Schreb., β. Schreberi Rouy and Fouc.).—C.E.S. T. resupinatum belongs to the "Fragifera" section of the genus, this to the "Chronosemium" section, and is T. procumbens L.—A.B.

Anthyllis Vulneraria L., var. coccinea L. Dry banks, Polzeath, E. Cornwall, v.c. 2, Aug., 1910.—H. E. Fox. A. Vulneraria L., var. coccinea L. has flowers red, concolorous. Our plant named A. Dillenii Schultes is different; it has cream-coloured flowers, tipped with red. I have seen var. coccinea from S. Devon, Cornwall, and (strange to say) Ben Lawers, Perthshire, whence Mr. C. P. Hurst sent me fresh specimens a few years ago. A. Dillenii, which is always a small plant—I have gathered var. coccinea nearly a foot high, with larger heads—seems to be strictly littoral, ranging from E. Sussex! to W. Sutherland!—E.S.M.

Vicia gracilis Lois. Field of wheat, Coton, Cambs., v.c. 29, Aug. 23, 1910.—A. J. Crosfield. Yes, good gracilis, coming under the α. leiocarpa Gren. and Godr., as it has glabrous pods. I do not possess any examples of the hairy-podded form (β. eriocarpa, G. & G.), and do not know if it occurs in Britain. As mentioned in Journ. Bot. 1908, p. 264, V. gracilis may always be separated from any

forms of tetrasperma by the hilum and funiculus characters, and I noticed last year when gathering both near Billingshurst, Sussex, that in the former the standard and wings are clear lilac in colour, not striate or very faintly so, whilst in tetrasperma both are strongly veined with purple. I noted, too, that the upper calyx-teeth of gracilis are lanceolate and those of tetrasperma triangular-acute.—C.E.S.

Prunus spinosa L., var. macrocarpa Wallr. Parkstone, Dorset, v.c. 9, April 11, 1910.—Ida M. Roper. Probably correct, from the large flowers and the early foliage (= $P.\ fruticans$ Weihe). Fruit is, perhaps, needed for complete certainty.—E.S.M.

Rubus. The Rev. W. Moyle Rogers has seen all the brambles and, unless otherwise stated, confirms the names.

Rubus nitidus Wh. & N., var. opacus Focke. Very abundant on the peat moor, Shapwick, N. Somerset, v.c. 6, Sept. 14, 1910.—A. Ley.

R. nemoralis P. J. Muell, var. glabratus Bab. Kerne Bridge, Herefordsh., v.c. 36, Aug. 7, 1909.—A. Ley.

R. Godroni L. & L., var. robustus P. J. Muell. (1) Thickets west of Bridestowe Railway Station, N. Devon, v.c. 4, July 30, 1910. (2) Brentor, S. Devon, v.c. 3, July 28 and Aug. 2, 1910. (See "Journ. Bot." 1910, p. 317). Frequent and remarkably uniform; just opening into flower (and usually with imperfectly developed stem) two or three weeks later than most species.—W. Moyle Rogers.

R. iricus Rogers, forma minor. (1) Western Border of Dartmoor, from Bridestowe, N. Devon, to Bickleigh Vale, S. Devon, in great quantity; July and Aug., 1910. (See "Journ. Bot." 1910, pp. 318, 319). Less robust than the Irish type, with narrower and less straggling panicles and stem more densely hairy with its leaves narrower more deeply incised and of a deeper green.—W. Moyle Rogers. (2) Abundant in open woodland on Tidenham Chase, W. Glos., v.c. 34, Aug. 31, 1910. New County record.—A. Ley.

R. anglosaxonicus Gelert, var. curvidens Ley. Longcross, near Milton Abbot, S. Devon, v.c. 3, July 30, 1910. (See "Journ. Bot." 1910, p. 320). A very glandular and aciculate form, locally abundant and uniform along the western border of Dartmoor, from Okehampton, N. Devon, to Mary Tavy, S. Devon.—W. Moyle Rogers.

R. [uncinatus P. J. Muell.]. (1) Troy Park Wood, near Monmouth, v.c. 35, Aug. 16, 1910, with S. H. Bickham and A. B. Jackson. This is the station at which the plant was first found in Britain, by Rev. E. F. Linton. specimens are less good than I could wish, owing to the dense coppice wood.—A. Lev. (2) Troy Wood, Monmouth, Aug. 18, 1910.—S. H. Bickham. No! This is undoubtedly my var. setulosus of R. anglosaxonicus Gelert, though a weak and apparently rather shade-grown state of it, and so nearer than usual to the R. uncinatus discovered in the same locality in 1893 by the Rev. E. F. Linton. It still differs from that however by the very dissimilar colouring texture and (in a less degree) outline of the leaflets, the more Koehlerian armature of the more angular subglabrous stem and the panicle with laxer more ascending. branches above, and remarkably hairy (not to say woolly) carpels. These may seem to be chiefly differences of degree; but they are not, I believe, exclusively so; nor do I know of their being bridged over by the existence of intermediate forms.—W.M.R.

R. Borreri Bell Salt., var. dentatifolius Briggs. Meavy Valley, near Yelverton; Bickleigh Vale to Shaugh Bridge, S. Devon, v.c. 3, Aug. 5, 1910; in great quantity.—W. Moyle Rogers.

R. Drejeri G. Jensen. Durdham Down, Bristol, W. Glos., v.c. 34, July 11, 1910. The plant was pointed out to me by Mr. J. W. White and the naming had been confirmed by Rev. W. Moyle Rogers.—Ida M. Roper.

R. radula Weihe. (1) Ketton Heath, near Stamford, Rutland, v.c. 55, Aug. 8, 1910. (2) Woods near Wadenhoe, Northants, v.c. 32, July 29, 1910. Abundant at both stations. New County record for Rutland, though not for Leicester and Rutland, joined in a single Watsonian vice-county.—A. Ley.

- R. oigocladus Muell. & Lefv., var. Newbouldii Rogers. Near Bridestowe, N. Devon, and thence along the western edge of Dartmoor to Shaugh Bridge, S. Devon, common; July and August, 1910. Differs more or less from the North Country type in its more pruinose and less furrowed stem, longer and more gradually acuminate leaflets and greater tendency to the development of simple leaves in the upper part of the panicle. As in the type, this common Devon plant is nearly prostrate and has somewhat concave leaves.—W. Moyle Rogers.
- R. fuscus Wh. & N. (small form). Serridge (between Ruardean and Cinderford), Dean Forest, W. Glos., v.c. 34, Sept. 7, 1910.—A. Ley.
- R. viridis Kalt. Geddington Chase, Northants, v.c. 32, Aug. 1, 1910. Very abundant in this place. New County record.—A. Ley.
- R. Balfourianus Blox., forma. Hedges at Bridstow, near Ross, Herefordsh., v.c. 36, July, 1908, and Aug., 1909. This plant is white-flowered, and so not typical R. Balfourianus. It is abundant in the Ross neighbourhood; the typical plant being unknown in the County.—A. Ley.

Potentilla inclinata Vill. Side of Grange Road, Cambridge, v.c. 29, Sept. 25, 1910.—A. J. Crosfield.

Rosa pimpinellifolia \times rubiginosa. Port Seton, Haddingtonsh., v.c. 82, Oct. 1, 1910.—W. Barclay. (Nos. 1 and 4). Yes; like our usual British form rather than the continental R. biturigensis Bor.—A.H.W.-D. (Nos. 4 and 5). Confirmed by E.S.M.

- $R.\ pimpinellifolia imes mollis.$ Boyne Castle, near Portsoy, Banffsh., v.c. 94, Aug. 12, 1910.—W. Barclay. Undoubtedly of this parentage, and falling under the form usually labelled $R.\ Doniana$ (Woods).—A.H.W.-D. Undoubtedly right, I should say; an excellent intermediate. Fruit remarkably glandular-aciculate.—E.S.M.
- R. hibernica Templeton. Below basaltic escarpment, Bellair Hill, Carnlough, Co. Antrim, Aug. 1910.—C. H. Waddell. Foliage glabrous, leaflets simply serrate. Under

var. glabra Baker. Apparently type canina (lutetiana) × spinosissima, the form with glabrous pedicels, = R. pimpinellifolia L.—E.S.M. Yes, the var. glabra Baker.—W.B. (Ref. No. 4). Not type R. hibernica, though it resembles it. The type has the leaflets pubescent beneath, these are glabrous, It comes under var. glabra Baker, and if there is any real difference between that and var. Grovesii Baker, it is nearer the latter. It is at any rate a hybrid of R. spinosissima with a canina form, not with a dumetorum, as is type R. hibernica Templ.—A.H.W.-D.

R. mollis Sm. Mardale, Westmorland, v.c. 69, June 30, 1910. With leaves glandular on both sides. Petals white, flecked with red.—Augustin Ley. My specimen has the peduncles and lower half of fruit smooth, which brings it towards var. coerulea Woods, but the leaflets are eglandular. If, however, we allow a glandular mollis we should equally admit an eglandular var. coerulea. there appears to be a mixture, as a specimen from the same gathering was sent to me direct by Mr. Ley which had very decidedly glandular leaflets. I should label my specimen "R. mollis Sm. towards var. coerulea Woods," but if the bulk of the gathering has hispid peduncles and base of fruit, as well as more glandular leaflets, it should go to R. mollis Sm., f. glandulosa.—A.H.W.-D. Excellent R. mollis, which I cannot separate from type; fairly glandular, but I have seen it much more so.—E.S.M. Yes. In many districts of Scotland glandular forms of R. mollis Sm., often much more glandular than this, are more common than eglandular ones.—W.B.

R. suberecta Ley, varietas foliis subtus eglandulosis. Hartsop, Westmorland, v.c. 69, July 6, 1910. Clearly to be placed under this Rose; the leaves of which are usually highly glandular, but here almost or quite eglandular, except on the midrib. This form was abundant in the neighbourhood (Mardale, Hartsop, and Patterdale), but the typical plant also occurred.—A. Ley. There are glands on the petioles and leaf-margins, and long-stalked ones on the pedicels, so that the word "eglandular" is inexact; but I can detect none on the surface of the leaflets. Clearly a suberecta form.—E.S.M. No doubt a form of the omissa group. It seems doubtful if the fruit, when mature, would be "globose," as that of suberecta

should be from its description.—W.B. Yes, but the subfoliar glands, though small and inconspicuous, are by no means absent, at least not from all the leaflets.—A.H.W.-D.

R. suberecta Ley. Naddle Forest, Westmorland, v.c. 69, June 29, 1910.—A. Ley. I agree.—A.H.W.-D. The same remarks apply to this as to the last.—W.B.

- R. ——? (Ref. No. 4). Doran's Rock, Saintfield, Co. Down. Flowers July 13, fruit Sept. 9, 1910. Flowers white, tipped with crimson in bud.—C. H. Waddell. A form of R. resinosoides Crép.—A.H.W.-D. No doubt R. tomentosa Sm. of the Omissa group; not materially different from some of our Scottish white-flowered forms. It might be classed under three or four so-called varieties.—W.B.
- R. ——? Cowleigh Park, Malvern, Herefordsh., v.c. 36, Aug. 23, 1910.—A. Ley. I should say a form of R. tomentosa Sm. belonging to the scabriuscula group.—W.B. Extremely interesting; I have seen nothing else quite like it. Styles united into a rather short but distinct column; prickles strong, thick-based; leaflets lanceolate to linear-lanceolate, narrowed at both ends, glabrous above, very pubescent beneath, their teeth very acute, compound, and glandular; petioles hairy and glandular. From the combined characters I think it likely to be a hybrid of one of the Stylosae (probably R. systyla) with R. cuspidatoides, or a variety of that.—E.S.M. R. confusa Pug. I at first referred this to R. scabriuscula Sm., but the leaflets are too softly hairy, and sepals too spreading.—A.H.W.-D.
- R. Borreri Woods, variety. (1) Hedges, Wadenhoe, Northants, v.c. 32, July 1910. (2) Geddington Chase, Northants, Aug. 1910. Peduncles slightly aciculate.—A. Ley. Both of these may possibly belong to R. Borreri Woods, but they certainly are unusual forms. On the branches of one, if not both, there is some development of acicles and glands, and in the case of both the subfoliar hairs appear to be deciduous.—W.B. Both the Geddington Chase and the Wadenhoe specimens which have been distributed to me belong to the Tomentella group, but they are not R. Borreri Woods. They show a very close

approach to specimens from Catsworth, Hunts., which Dingler refers confidently to a form of R. caryophyllacea Chr. (non Bess.), to which he has given the name of R. tomentella, var. anonyma (ined.?). The form is remarkable for the glandular development on the branches, and the more or less numerous subfoliar glands. Dingler thinks it may be a hybrid with R. Eglanteria. I have seen somewhat similar forms from near Huntingdon and from Surrey. I fear that the Wadenhoe, and possibly the other gatherings, may contain a mixture. The late Mr. Ley told me that he gathered from several bushes what he believed to be the same form. I have in consequence received from him at least three forms, one of which belongs certainly to the Déséglisei sub-group, so probably a mixture has been distributed here also.—A.H.W.-D.

R. canina L., var. insignis Déségl. (1) Near Wadenhoe, Northants, v.c. 32, Aug. 3, 1910. (2) Near Ruardean, W. Glos., v.c. 34, Sept. 8, 1910. This is a composite parcel.—A. Ley. My specimen from Wadenhoe (with glabrous leaflets) is certainly R. insignis Déségl., but I understand that some of those distributed have the leaflets hairy on the midribs, so that they obviously cannot belong here.—A.H.W.-D. This cannot be R. insignis Déségl., whatever may be the worth of that as a species or variety. Here we have the midribs hairy, though the hairs seem to be partly, if not wholly, deciduous. I suppose it must be put as a var. of R. dumetorum Thuill., though it is one of those forms which show that the distinction between that and R. canina is sometimes very slight indeed.—W.B.

R. canina L., var. aspernata (Déségl.). Lyde Green, Pucklechurch, W. Glos., v.c. 34, June 27 and Sept. 21, 1910.—Ida M. Roper. I do not know this interesting rose; but the fruit of R. aspernata Déségl. should be ovoid, whereas these are globose. Styles villous; leaflets five, small, varying from lanceolate to orbicular-ovate, their teeth simple or slightly compound, mostly gland-tipped. The general appearance is that of a R. obtusifolia, with glabrous leaves and very glandular-hispid fruit, rather than of R. canina.—E.S.M. This agrees best with R. aspernata Déségl., but the armature of the peduncles in typical specimens is stouter.—A. H. W.-D.

I should say correctly named. It is practically identical with *R. verticillacantha* (Mérat), as commonly understood.—W.B.

R. glauca Vill., group subcanina Chr. Killin, Mid Perthsh., v.c. 88, Sept. 10, 1910.—W. Barclay. I should say, certainly in this group; but R. Reuteri, var. subcanina Christ, is described as having thinly pubescent petioles and nerves beneath the leaves, whereas they are absolutely glabrous in Mr. Barclay's plant. It seems nearest R. Crepiniana Déségl., though it differs from the author's description in minor points. I have not seen a specimen or description of R. transiens Kern., placed in Lond. Cat., ed. 10, as var. d of R. glauca. One fruit on my example has erect sepals; but this may be "accidental," as Prof. Crépin used to say; the rest vary from reflexed to patent.—E.S.M. Yes, though a different form from Mr. Waddell's No. 6, and perhaps even nearer Christ's variety.—A.H.W.-D.

R. stylosa Desv., var. systyla (Bast.). Woods, Dineham, Monmouthsh., v.c. 35, July 23 and 25, 1910.—A. Ley. Yes, typical.—A.H.W.-D. No doubt both correct.—W.B.

R. arvensis Huds., var. scabra Baker. Near Ruardean, W. Glos., v.c. 34, Sept. 8, 1910.—A. Ley. Correct.—A.H.W.-D. This cannot be a var. of R. arvensis Huds. The styles and upper part of the style column are hairy, which implies that it belongs to R. sempervirens.—W.B.

Saxifraga Geum L. Gap of Dunloe, Co. Kerry, May 28, 1910.—Coll. Mrs. B. St. A. Jenner. Comm. G. Goode.

- S. umbrosa L. Near Derrycunihy, Upper Lake, Killarney, Co. Kerry, May 27, 1910.—Coll. Mrs. B. St. A. Jenner. Comm. G. Goode.
- S. Hirculus L. Medwinhead, Pentland Hills, Peeblessh., v.c. 78, Aug. 1, 1910.—McTaggart Cowan, jun. Excellent specimens of a very rare plant.—E.S.M.

Ribes Grossularia L. Hedge, Portbury, N. Somerset, v.c. 6, April 30, 1910. I have examined a large number of bushes as they grow in a semi-wild state around Bristol

and I find that without exception the fruit is hairy and that the glabrous variety is confined to gardens.—Ida M. Roper.

Callitriche intermedia Hoffm., var. tenuifolia Lönnr. Llyn Idwal, Carnarvonsh., v.c. 49, Aug. 9, 1910.—G. Goode. Lönnroth's varietal name was published under C. hamulata Kuetz. I think that it may pass, though there are a few broader leaves (rudimentary rosette-leaves) on my sheet. Rouy ("Fl. de France," XII. p. 183) makes C. verna "L." (= vernalis Koch), var. tenuifolia Car. et St. Lag., a synonym of C. tenuifolia Pers., and cites our plant as C. hamulata, var. homoiophylla Godr. ap. Gren. and Godr. ("Fl. de France," p. 591); but, valuable and suggestive as this author often is, a good deal of his work is so crude and unsatisfactory on some critical genera (Salicornia, for instance), that I do not feel much confidence in this arrangement.—E.S.M. (See also 26th Rept., p. 236).

Epilobium hirsutum L., var. subglabrum Koch. Streamside, Fairland, N. Somerset, v.c. 6, Aug. 10, 1910. —J. W. White. This plant is by no means "subglabrous," and certainly has no sufficient claim to varietal rank. The species varies greatly in the amount of its pubescence; and no distinction based on such grounds alone is of any value.—E.S.M. (See also Rept. B.E.C. 1910, p. 563).

E. lanceolatun Seb. & Maur. On rock, Ivory Hill, Winterbourne, W. Glos., v.c. 34, July 16, 1910.—Ida M. Roper. Excellent material; the thickness and high colour of the foliage point to a sunny situation, so that it is a "forma aprica."—E.S.M.

E. Lamyi F. Schultz. Winningfort Wood, Northants, v.c. 32, Aug. 4, 1910.—A. Ley. Very characteristic specimens of this thoroughly distinct, but often misunderstood species.—E.S.M.

Galium Mollugo × verum. Hybrids A, B, and C, with specimens of the parent plants. Near Hoarwithy, Herefordsh., v.c. 36, July 1909. (See "New Phytologist," Dec. 1909).—Coll. Miss E. Armitage. Comm. S. H. Bickham. An interesting series. A is very near G. verum in foliage; B more intermediate; C approaches

narrow-leaved G. Mollugo. It is very likely that original hybrids can be fertilised by the pollen of either parent; if so, the great variability of these more or less intermediate forms is at once accounted for.—E.S.M.

Asperula taurina L. Wood near Abercorn, Linlithgowsh., v.c. 84, May 28, 1910. This has been well established here for many years.—McT. Cowan, jun. Correct.—S.T.D. Add the county to the labels. Not on record, so far as I know, for Linlithgow.—A.B.

Cotula australis Hook. f. Banks of the Tweed, near Galashiels, Selkirksh., v.c. 79, Aug. 1910. A wool-alien, introduced from Australia.—Ida M. Hayward.

Cnicus arvensis Hoffm., hybrid? Waste ground, Redland, Bristol, W. Glos., v.c. 34. July 22, 1910. I am unable to put any definite name to this plant. No other thistle grew near it.—Ida M. Roper. I see nothing to suggest hybridity. Is it not Cirsium arvense Scop., var. mite Koch ("Synopsis," ed. 2, p. 457), approaching var. integrifolium Koch (C. setosum Bieb., Cnicus setosus Besser)? I think that Koch is wrongly cited as the authority for this and var. vestitus (under Cnicus) in "Lond. Cat."—E.S.M. The scanty full-grown leaves on my specimen appear to be plane, and therefore I call this C. setosus Bess. (= Cirsium setosum M. Bieb., C. arvense, var. integrifolium Koch). If better specimens show undulate and more dentate leaves, it would be var. mite Koch, which under Cnicus would be mitis, and under Carduus I believe var. latifolius Bab.—E.F.L.

Centaurea nigra L., var. radiata auct. Wytch Heath, Corfe Castle, Dorset, v.c. 9, Aug. 7, 1910.—R. S. Standen. This rayed state of nigra is quite the prevailing plant in this district; it seems to equal the C. obscura Jord. (= C. nigra auct. angl.) sub. var. radiata Coss. & Germ.—C.E.S.

Hieracium Auricula L. From roots found by the late Mr. S. A. Stewart in 1898 on an old quarry spoil-bank, Cave Hill, Belfast, Co. Antrim. Cult. Saintfield, Co. Down, June 1902.—C. H. Waddell. Apparently correct, though it is considerably larger than my garden plant (originally from a pasture at Keevil, S. Wilts.) has ever

become, even in a good soil, which usually tends to luxuriance; the ground may have been manured. Careful search should be made, to ascertain whether it is not truly wild somewhere in the neighbourhood; quarries are often tenanted by bonå-fide natives, whose seed has been blown or otherwise conveyed from a considerable distance. Apart from my own case, I have only known one instance of H. Auricula being grown in gardens, a clerical neighbour of mine in Surrey having brought it from Norway as a curiosity. From its Continental distribution it should be found indigenous in Britain, and its claims to be so in Wilts. are by no means despicable, as I found it far from any house, though in small quantity; and I could not detect it in cultivation anywhere near.—E.S.M.

H. anglicum Fr. Dent Dale, N.W. Yorks., v.c. 65, June 1910.—Coll. Prof. Oliver. Comm. A. Ley. Type.—E.F.L.

H. anglicum Fr., var. cerinthiforme Backh. Hartsop, Westmorland, v.c. 69, July 6, 1910.—A. Ley. I agree.—E.F.L. I think that my specimens may pass. But can this name stand for the variety? It appears to be long antedated by one much more descriptive, i.e., var. amplexicaule Backh. in Bab. Man., ed. 5, p. 203 (1862), quoted in W. R. Linton's Monograph, p. 11. The later name H. cerinthiforme Backh. (in litt.) was used in a specific sense; now that the plant is again reduced to a variety it must, surely, disappear.—E.S.M.

H. eximium Backh., forma. (Ref. No. 3489). Ben More (at 3000 feet), Mid Perth, v.c. 88, July 16, 1910. Growing with H. chrysanthum; very local. Styles sooty; ligule-teeth with long ciliæ. Gathered for H. eximium Backh., to which it may really be referable; but it does not exactly agree with any of my fairly large and thoroughly representative series either in heads or foliage. Undoubtedly it belongs to the section Alpina Genuina.—E. S. Marshall. It seems best to leave this as H. eximium, f. The phyllaries are unusually broad, but I see nothing to separate it from that species.—E.F.L.

H. senescens Backh. (1) Ben More, Mid Perth, v.c. 88, scarce, at about 3000 feet. July 16, 1910.—E. S. Marshall.

Right.—E.F.L. (2) Meall nan Tigearn, near Dalmally, Argyllsh., v.c. 98, at or below 2000 feet, July 20, 1910. Styles yellow. Very typical.—E. S. Marshall.

H. chrysanthum Backh. Ben More, Mid Perth, v.c.
88, at about 3000 feet, July 16, 1910. Quite typical.
Styles yellow.—E. S. Marshall. Correctly named.—E.F.L.

H. nigrescens Willd. (Ref. No. 3494). Ben a' Bhuiridh, near Dalmally, Argyllsh., v.c. 98, at or over 2000 feet, on granite, July 12, 1910. Styles very dark; ligule-tips sub-glabrous; heads thickly clothed with black gland-tipped hairs, epilose, stem-leaf occasionally rather large. It clearly belongs to the section Alpina Nigrescentia. I believe it to be pretty typical H. nigrescens.—E. S. Marshall. I agree to these specimens as H. nigrescens Willd.—E.F.L.

H. Leyi F. J. Hanb. (1) Cliffs of High Street, Westmorland, v.c. 69, July 2, 1910. The plant sent is abundant (with much variation in size and leaf-toothing), not only on the cliffs of High Street, but also on those of Helvellyn, Westmorland. The late Rev. W. R. Linton, who gathered it on Helvellyn and Fairfield, Westmorland, in 1905, was inclined to ascribe it to a variety of H. Sommerfeltii Lindeb.; but after studying it in situ this year, I believe it must be placed under H. Leyi F. J. Hanb.—A. Ley. Less glandular than usual; but I agree to the name.—E.F.L. (2) Dollywaggon-Pike, Westmorland, v.c. 69, July 8, 1910.—A. Ley. Differing a little from the High Street plant, in leaves more coriaceous, and heads less hairy, but I think both are H. Leyi.—E.F.L.

H. pellucidum Laestad. Dent Dale, N.W. Yorks., v.c. 65, June, 1910.—Coll. Prof. Oliver. Comm. A. Ley. Correct.—E.F.L.

H. sparsidens Dahlst., var. elatius Ley. (1) Capel-yffin, Black Mountain, Breconsh., v.c. 42, July 20, 1909. (2) Origin, Taf-fechan Glen, Brecon Beacons. Cult. June 13, 1910. On this plant see Jl. Bot. 1910, p. 326.—A. Ley.

H. sciaphilum Uechtr., f. (1) On chalk hill, Whorley Wood, Chequers Park, and (2) Whiteleaf Wood, Bucks.,

v.c. 24, Aug. 22, 1910. The Rev. A. Lev, to whom these specimens were submitted, writes: "This is a form of H. sciaphilum which I know, and have been in the habit of calling sylvicola (ined.) in my own herbarium—with whitish heads, more hair and fewer glands than usual. Usually in woods." He recommends their distribution. Both localities (about 1 to 1\frac{1}{8} miles apart) were on steep rubbly ground on a limestone hill of the Cotswolds on the borders of thick beech woods.—F. L. Foord-Kelcey. I had thought of var. transiens for this, before seeing Mr. Ley's note; but as he called it his f. sylvicola, one of four forms into which he divided the species, I leave it there for the present; though my specimens lack the ciliate ligule of H. sciaphilum.—E.F.L. This rather weak material has not the habit of the type; nor can I find any trace of the ciliation on the ligule-tips, which is so characteristic of that plant. I believe it to be the var. transiens Lev.—E.S.M.

H. Dewari Bosw. Dalmally, Argyllsh., v.c. 98, July 25, 1910. Styles sooty; ligule-tips pilose. Characteristic specimens of this very distinct species.—Edward S. Marshall.

H. protractum Lindeb. Origin, S. Breconsh., Cult. July and Aug. 1910. I am sorry to have to question whether this plant originated in Brecon or not: but I searched for it in the Breconshire glens in 1908 without result: and the balance of probability is now in favour of its having originally come from a more northern county.—A. Ley.

H. stictophyllum Dahlst. Dalmally, Argyllsh., v.c. 98, July 5 and 6, 1910. Styles yellow. This is not unfrequent in the Orchy Valley; a form with unspotted leaves occurs sparingly with the normal plant.—Edward S. Marshall. Confirmed.—E.F.L.

H. strictum Fr., var. angustum (Lindeb.). (Ref. No. 3532). By the River Orchy, Dalmally, v.c. 98, Argyllsh., v.c. 98, July 25, 1910. Styles yellow; ligule-tips glabrous. In my opinion both H. angustum and H. reticulatum deserve specific rank, and are as well marked as a good many of our segregates in the genus; so that they ought

to be separated from *H. strictum*. The present gathering agrees well enough with my examples of *H. angustum*, some of which were determined by Lindeberg himself.—Edward S. Marshall. Leaves rather shorter than usual, but otherwise this agrees with typical plants.—E.F.L.

H. corymbosum Fr., var. salicifolium (Lindeb.). Origin,
Craig Dulyn, Carnarvonsh. Cult. Aug. 1910. Craig
Dulyn is the station at which this variety was first noted
from Britain in 1886, I believe by Dr. Lindeberg himself.
—A. Ley.

H. boreale Fr., var. Hervieri Arv. Touv. Edmondsham, Dorset, v.c. 9, Sept. 18, 1910, and three cultivated specimens of the same. These latter shew the points of the plant best, as the wild specimens were rather overgrown. It is not exactly the same as other Dorset specimens, but seems best placed under var. Hervieri.— E. F. Linton.

H. — ? Leigh-on-Sea, S. Essex, v.c. 18, Aug. 1910. —W. R. Sherrin. H. boreale Fr.—E.F.L. Under H. boreale Fr.; a variety, remarkable for its glabrescent foliage, which has extraordinarily long, acute, forward-pointing teeth. The phyllaries are not black, as in the type, but tend towards the grey-green colour of var. Hervieri.—E.S.M.

H. sabaudum L., var. calvatum F. J. Hanb. Origin, Aberedw, near Builth, Radnorsh. Cult. Aug. 16, 1910. I must speak with some doubt concerning the varietal name of this plant. It differs from the Carnaryonshire plant originally so named by Mr. Hanbury in having its leaves oval or broadly oval instead of broadly elliptic: but agrees in its glabrous stem, black phyllaries, and especially in the comparatively few leaves.—A. Lev. If var. calvatum be truly glabrous, as described, this form can only be called a form of H. boreale, making some approach to the variety.—E.F.L. I think that H. boreale Fr. (under which this variety was published) is the best name for our common British plant. Var. calvatum is described as glabrous; which is far from being the case in the specimen before me. The lower part of the stem is floccose, with a good many long, slender white hairs; the leaves have short, scattered oppressed hairs on their upper surface, and are still more pubescent beneath; nor are they by any means exceptionally few; the phyllaries are also pretty thickly clothed with hairs. I do not think that this determination can stand.—E.S.M.

H. umbellatum L., var. linariifolium Wallr. Roadside near Horsted Keynes, E. Sussex, v.c. 14, Aug. 24, 1910.—R. S. Standen. So I should name it, rather than var. coronopifolium Fr.—E.S.M. I agree.—E.F.L.

H.——? Pont-rhyd-y-groes (13 miles S.E. of Aberystwyth), Cardigansh., v.c. 46, Aug. 1910.—W. R. Sherrin. H. umbellatum L. Perhaps a strong form of var. linariifolium Wallr., with leaves a little broader than usual. Too nearly entire-leaved, I believe, to be placed under var. coronopifolium Fr.—E.S.M.

H. umbellatum L., f. latifolia Linton? Banks of Ouse, Lindfield, E. Sussex, v.c. 14, Aug. 27, 1910.—R. S. This plant has the phyllaries more clothed with hairs and glands than our f. latifolia. It needs consideration.—E.F.L. My example of this gathering is very incomplete, consisting only of the lower half of the stem, with three lateral flowering-branches. It has no resemblance, except in size, to my S. Devon H. umbellatum, var. monticola, f. latifolia; nor, indeed, can I believe that it is a form of H. umbellatum at all, as the phyllaries are decidedly, though somewhat sparsely pilose, instead of being nearly or quite glabrous. The root is not present, so that one cannot tell whether it is aphyllopodous; but I think it most probably a var. of aggregate H. rigidum Hartm., in the section with heads pilose, but nearly or quite eglandular, and not answering to any of our described varieties. The leaves are very many and crowded, with numerous irregular teeth; the styles of the dried plant are almost black. —E.S.M.

Taraxacum ——? Loose sand dunes, Hunstanton, W. Norfolk, v.c. 28, June 6, 1910. This does not appear to agree with the description of any of our recognised dandelions.—C. E. Moss. T. erythrospermum Andrz. The same form as occurs on the Haddingtonshire coast, with very pale achenes.—McT.C. This has the finely cut foliage of T. erythrospermum Andrz., but the achenes are paler in colour than usual.—A.B.J. Nearest to var.

laevigatum of our forms.—A.B. Handel-Mazzetti, in his Monograph of Taraxacum, has changed the names—I think wrongly. Dr. Moss's plant clearly comes under what we call T. erythrospermum Andrz., DC. The fruit is pale pinkish brown, not brick-red. Mr. W. H. Beeby informed me that we had probably one or two subspecies of that in Britain, besides the type.—E.S.M.

Calluna vulgaris Hull. Goatham, Edmondsham, Dorset, v.c. 9, Sept. 13, 1910. Not asked for, but sent as the growth was remarkably fine this year.—E. F. Linton.

Erica ciliaris × Tetralix. Growing with the parents on damp heath near Wareham, Dorset, v.c. 9, Sept. 17, 1910. Some specimens of ciliaris also sent.—H. S. Thompson. "The hybrid ciliaris × Tetralix (Watsoni Benth.) is also well worth cultivating, if it can be procured or raised artificially. It may be a distinctly English hybrid, for I see no notice of it in any Continental flora I have consulted. It is generally smaller in stature than ciliaris. and the wiry stems cannot so easily be pulled up from the rootstock, in which respect also it resembles Tetralix; but the foliage of what I saw in Dorset has more of the pretty ciliaris character about it. The flowers are longer than those of Tetralix, but they do not have the protruding deflexed style of the other parent, nor are they so urn-shaped. The colour of the hybrid plants I have observed is generally a pale pink, but with less of the waxy appearance of *Tetralix*." (Extract from "British and Irish Heaths," by H.S.T. in "The Gardeners' Chronicle," 5 Nov., 1910). In ciliaris the racemes of the flowers are much shorter than I am accustomed to see on Cornish specimens. Of ciliaris \times Tetralix the specimens received agree in every detail with thousands of plants which I have often examined near Truro, where H. C. Watson first found this interesting hybrid.—F.H.D.

Limonium binervosum C. E. Salmon, var. procerum C.E.S. Llandudno, Carnarvonsh., v.c. 49, Aug. 4, 1910.—G.G. and R. H. Goode. The example sent me is, I believe, best placed under the type. The low-branched scape, small leaves, etc. take it away from the variety.—C.E.S.

Cicendia [pusilla Griseb.]. Bog by Little Sea, Studland, Dorset, v.c. 9, Aug. 6, 1910.—R. S. Standen. This is

evidently a clerical error for Cicendia (= Microcala) filiformis.—McT.C.

Gentiana præcox Towns. Chalk Downs, Freshwater, Isle of Wight, v.c. 10, June, 1910.—H. E. Fox. This is G. lingulata C. A. Agardh, var. præcox "Towns.," Murbeck. I studied it carefully in Wiltshire, where it is usually associated with G. Amarella L., and came to the decided conclusion that they were specifically distinct. Probably all the alleged south-country inland stations given for G. campestris L. belong to this plant, which usually sheds its seeds before G. Amarella is in flower.—E.S.M.

Amsinckia angustifolia (Lehm.). Mill yard, Portishead, N. Somerset, v.c. 6, May 22, 1909.—Ida M. Roper.

Symphytum peregrinum Ledeb. (= S. uplandicum Nym., S. orientale Fr., non Linn.). Near stables on the outskirts of a wood on the north side of Southam House, between Prestbury and Bishop's Cleeve, near Cheltenham, N.E. Glos., v.c. 33. Flowering cymes, June 2 and 3; fruiting cymes, July 26; and root-leaves, Sept. 28 and Oct. 15, 1910. I have met with individual examples of the same plant at Woodmancote, near Bishop's Cleeve, v.c. 33, July 29, 1910, and at Broadway, S.E. Wores., v.c. 36, July 10, 1909. There is some doubt as to the correct nomenclature of this plant. I distributed Derbyshire examples of this species, under the same name, to British botanists as long ago as 1878.—Charles Bailey. S. uplandicum seems to be synonymous with asperrimum, but this plant is not that. Structure of calvx quite different. —J.W.W. Ledebour described S. peregrinum from plants cultivated in the Botanic Gardens of Dorpat, in the Russian Baltic provinces, but they were in all probability originally obtained from the Caucasian Province of Talish on the western shore of the Caspian Sea. speculation has been made as to the cultural and geographical origin of the semi-wild Comfrey of this country that it is well to bear in mind that the actual plants described by Ledebour were probably from S.E. Russia, which is also the home of S caucasicum and of S. asperrimum.—S.T.D. I have no doubt that this is correctly named S. peregrinum Ledeb. It is described and figured in a paper on the Caucasian species of the genus Symphytum by Prof. N. I. Kuznetsov, ("Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg," VIII^e Série, t. xxv. No. 5, 1910).—C.B.

Myosotis versicolor Sm., var. pallida Bréb. Buckland Wood, Upwey, Dorset, v.c. 9, May 17, 1910. The flowers when gathered were pure white.—Ida M. Roper. The flowers have dried brown, so that it is impossible to judge whether they were white, when fresh; my two specimens are also very young. I have only seen var. pallida on the coast, and rather doubt the correctness of the suggested name; but in this case it is impossible to form a definite opinion.—E.S.M.

Lithospermum officinale L., var. pseudo-latifolium C. E. Salmon. (1) Garden, West Monkton, Aug. 1, 1910. This was raised from seeds of the Isle of Wight plant (between Steephill and St. Lawrence) sent by Mr. Salmon. By degrees it has become thoroughly characteristic and now agrees admirably with the description in "Jl. Bot." 1906, p. 367. Grown in full southern exposure, West Monkton Rectory.—E. S. Marshall. (2) Origin, Isle of Wight. Cult. Townlands, Lindfield, Sussex, June 17, 1910.—R. S. Standen. Mr. Standen's examples are small upper shoots only, but both gatherings show the patent broadbased leaves and bracts, etc., of the variety.—C.E.S.

Solanum nigrum L., var. ochroleucum (Bast.). Allotments, near Poole, Dorset, v.c. 9, Sept. 9, 1910. Owing to the backward season, the berries on the specimens were not well matured, and few were turned yellow. I had the ground well searched in October, and only yellow berries were seen; my agent did not see any typical S. nigrum L. nearer than a spot in Parkstone, nearly a mile away. This is the same plant, from the same locality, I distributed in 1893, under the name of S. nigrum L., var. luteovirèscens Gmel. S. nigrum L., var. chlorocarpum Spenn. is another synonym.—E. F. Linton.

Linaria repens Mill. Scalford, Leics., v.c. 55, Sept. 3, 1910. New record.—Rev. H. P. Reader and A. R. Horwood.

Veronica arvensis L., var. Cavenham Heath, W. Suffolk, v.c. 26, May 16, 1910. I find this variety, or

perhaps form, is frequently gathered in mistake for *V. verna.*—C. E. Moss. Apparently this is the β . *glandulosa* Legr. in "Bull. Soc. bot. France," 30, p. 70. Rouy ("Fl. de France," vol. 11, p. 50) says of it "Plante très velue, glanduleuse." I have gathered it in a more extreme form on the sandhills between Deal and Sandwich, E. Kent; and it is probably not uncommon.—E.S.M.

Euphrasia ——? Leigh-on-Sea, S. Essex, v.c. 18, Aug., 1910.—W. R. Sherrin. E. nemorosa H. Mart.—C.B. This is certainly very near E. nemorosa in habit, and would have been so called by Mr. Townsend; but I have several similar gatherings, all of which were named E. curta, var. glabrescens by Prof. von Wettstein. It is too hairy-leaved for E. nemorosa; and the foliage agrees better with that of E. curta, var. glabrescens.—E.S.M.

E. Kerneri Wettst. Roman Road, Gog Magog Hills, Cambs., v.c. 29, Sept. 20, 1910.—Coll. R. H. Goode. Comm. G. Goode. I hope that specimens of this Eyebright, which I first gathered in 1901, will be acceptable to members.—G.G. The blue-flowered E. Kerneri is an uncommon form, I think, and one that I have not before seen. All that I have seen in Surrey are white in flower.—H.W.P. Yes, beautiful and typical specimens of E. Kerneri, I believe.—C.E.S. Quite matches the Chelsham, Surrey, specimens named by Dr. Wettstein.—A.B. Beautiful specimens of the typical large-flowered form.—E.S.M.

E. borealis Towns. Near the Lighthouse, Swanage, Dorset, v.c. 9, Aug. 7, 1910.—R. S. Standen. I think this is a form of E. borealis Towns., but it is very dwarf and thick-set, and the leaves are more hairy than usual. Very few "cauline leaves" are present on my specimens.—E.D. Correctly named, but not at all typical.—E.S.M. Yes, E. borealis Towns.—C.B.

E. stricta Host. S. Croxton, Leics., v.c. 55, July 8, 1910.—A. R. Horwood. Hardly stricta. It appears to be a slender and poorly developed nemorosa; the specimens are so badly dried, however, that it is not possible to deal with this material satisfactorily.—E. & H.D. The specimens received by me are quite unlike my No. 2500 from

Loch Fad, Bute, so named by Mr. Townsend, and differ greatly from Wettstein's figure and description. They are in poor condition; but, from the clothing and shape of the leaves, I believe that they should be referred to E. curta, var. glabrescens, rather than to E. nemorosa. Their spreading habit will not do for E. stricta. [Later] My specimens have decidedly spreading branches, so it seems clear that the gathering was a mixture.—E.S.M. Yes, the British form of E. stricta Host, which differs somewhat from the continental form. I should not name any specimens with a "spreading habit" E. stricta, even as a British form. Were the specimens I saw the same as those seen by Mr. Marshall?—C.B.

E. scottica Wettst. Cwm Idwal, Carnarvonsh., v.c. 49, Aug. 9, 1910.—G. Goode. Yes, E. scottica Wettst., but rather hairy. It agrees very closely with plants collected in the Lake District in 1905, and so named by Mr. Marshall.—E.D. Yes, I think this is rightly named, but scottica is very near gracilis. The colouring, coarser habit, long bracts, and capsule all point to E. scottica.—C.E.S. Yes; a reduced alpine or sub-alpine state.—E.S.M. Also confirmed by Mr. C. Bucknall and Mr. J. W. White.

Mentha rotundifolia Huds. (1) Whauphill, Wigtownsh., v.c. 74, Aug. 1910. Sent because found in Wigtownshire again this year (see Report 1909-10, p. 250). —Coll. E. K. Higgins. Comm. D. M. Higgins. (2) Near Hexham, where the North Tyne runs into the South Tyne, Northumberland, v.c. 67, Sept. 1910. There is a bed of this plant about 6 feet square on the East side of the river, i.e., the North Tyne. The plant is well established and quite wild. It grows among Broom, wild Roses, Elder and Blackberry bushes. New record?—Coll. E. K. Higgins. Comm. D. M. Higgins. Both gatherings correct. —E.F.L.

M. longifolia Huds. × —. Ditch by road between Kimble and Ellesborough, Bucks., v.c. 24, Aug. 15, 1910.— F. L. Foord-Kelcey. Probably M. longifolia × rotundifolia. The inflorescence of my specimens is small and undeveloped; but the influence of M. rotundifolia seems very clear, especially in the foliage.—E.S.M. This bears a very

close resemblance to Wirtgen's "Herb. Menthar. Rhenan." Ed. III., No. 16. "M. sylvestris L., var. nemorosa autt., M. nemorosa Willd. Forma fol. ovatis, stamin. inclusis." I think it is this, though it is also very near No. 25, M. rotundifolia × nemorosa Wirtg., a more hoary plant with stamens slightly exserted.—E.F.L. The specimen sent to me has no flowers, so I can say nothing as to that; but surely it differed from those sent to other referees, as it has no sign of rotundifolia in it. That it may be near the nemorosa quoted by Mr. Linton is likely, but it is not the nemorosa of Willdenow's herb.!—A.B.

M. rubra Sm. f. Old quarry near Ross, Herefordsh., v.c. 36, Sept. 29, 1910—A. Ley. This is the plant recognised by Malinvaud as M. rubra Sm. and gathered by him as a subspontaneous weed in the neighbourhood of houses in France. It should be noted that M. rubra Huds, is probably quite a different thing, which he describes ("Flora Anglica," 1798, p. 252-3) as "floribus verticillatis; caulibus diffusis; foliis subsessilibus, ovatolanceolatis, serratis, acutis, subnudis;" while his M. sativa is credited with "floribus verticillatis; caulibus erectis; foliis petiolatis, ovatis, serratis, acutis, villosis." Most British authors look upon M. rubra as a species or variety differing from M. sativa in its longer leaf-stalks, while Hudson regarded his M. rubra as differing from that species by having shorter petioles. Hudson should not therefore be cited as the authority for the plant with longish petioles usually referred to as M. rubra in British Floras.—S.T.D. This is near to M. ocymiodora Opiz, in "Naturalientausch," No. 10, p. 22 (1823), but differs in the exserted stamens, and the stem base nearly glabrous. —A.B. I agree to this as M. rubra Sm., and, according to my herbarium, it is the usual British form, though I am aware that it is not quite like the figure in "English Botany," ed. III. M. rubra, as I know it, has short roundish-ovate bracts, not so ovate or ovate-oblong as they are figured.—E.F.L.

M. gentilis L. Roadside ditch, near Malvern, Worcs., v.c. 37, Sept. 9, 1910.—S. H. Bickham. I think that this is not typical gentilis, which has calyx-teeth much more hairy, but rather var. Wirtgeniana F. Schultz, as it has the long-petioled leaves, stalked whorls, etc. of that form. I

see in Druce's "List of British Plants" that this variety is placed under M. rubra, but I think that L'Abbé Ch. A. Strail is right in regarding it as a form of gentilis.— C.E.S. M. gentilis L., approaching var. Wirtgeniana in the subglabrous stem and leaves and calvx thinly hairy, but failing in the points l'Abbé Strail (B.E.C. Rept. 1887, p. 187) emphasized, e.g., "the floral whorls are all stalked, the lower ones with very long stalks, in the variety." This plant has the whorls mostly sessile, a few only in the middle of the spike being shortly-stalked. This is borne out by Dr. Wirtgen's specimens of M. Wirtgeniana F. Schultz, No. 4 "Herb. Menthar. Rhenan." ed. III., which are also nearly glabrous in foliage.—E.F.L. The Abbé Strail, in "Essai de classification et descriptions des Menthes qu'on rencontre en Belgique" (Bull. Soc. roy. de botanique de Belgique, XXVI. (1887), p. 63–168) gives (1) Calice tubuleux, à dents longuement subulées etc. (M. Wirtgeniana Schultz); (2) Calice campanulé et à dents plus ou moins courtes (M. gentilis Smith). He gives "M. Wirtgeniana = M. rubra Lej. et Court., Comp. fl. Belg. et. Sm." On the whole it seems to me, judging by Strail's detailed descriptions, that this belongs to gentilis.—A.B.

Salvia pratensis L. Root from Reigate, Surrey, v.c. 17, Cult., West Monkton, May 27, 1910. As this is scarce in the Reigate station, where it was discovered by Mr. C. E. Salmon, and apparently seldom flowers, cultivated specimens may be acceptable. In two years it has increased from a scrap to a strong plant. Rev. E. F. Linton tells me that this species in his garden has much larger flowers.—Edward S. Marshall.

S. verticillata L. (1) Falmouth Docks, W. Cornwall, v.c. 1, Aug. 9, 1910. Evidently long established.—F. H. Davey. (2) Buckland Hill, Surrey, v.c. 17, Aug. 1, 1910.—A. J. Crosfield.

Melittis Melissophyllum L., var. grandiftora (Sm.). Bushy places near the sea, (apparently indigenous). Coverack and Lowland Point, W. Cornwall, v.c. 1, July, 1910.—H. E. Fox. The only mark of distinction is absent from my two specimens, the calyces being empty. Quite useless for determination.—E.S.M. Smith's description of this plant (Fl. Brit. II. 1800, p. 644) reads: "Melittis

calyce quadrilobo," and it is pointed out that the flowers are larger than those of M. Melissophyllum and particoloured, yellowish and violet. M. Melissophyllum he describes as "M. calyce trilobo," with flowers more or less unicoloured, flesh colour with spots of crimson. In his "English Flora," III., 1825, p. 112, Smith still keeps M. grandiflora as a species, with the characters given above and adds that the leaves are "rather broader and more acutely serrated." Rouy (Fl. France, XI., 1909, p. 278) places M. grandiflora as a variety of Melissophyllum and mentions that, besides the colouring of corolla alluded to above, its leaves are more or less attenuated at the base. In Bab. "Manual," ed. 9, 1904, p. 331, one reads "M. grandiflora (Sm. E.B. 636) is only a slight variety," whilst in Davey's "Fl. Cornwall," 1909, 363, it is wholly ignored. The specimen sent me, gathered by Mr. Fox, is not in flower, so it is impossible to say anything as regards corolla; by the look of the calyces remaining I do not think they can ever have answered to the description "quadrilobus, lobis utrinque duobus lateralibus, subequalibus, interdum erosis" of the variety grandiflora.—C.E.S.

Plantago lanceolata L., var. sphærostachya Röhl. Black Head, W. Cornwall, v.c. 1, July 11, 1910.—H. E. Fox. Starved plants, which have the round heads of this alleged variety. It seems to be quite unworthy of distinction, and would probably revert at once to type, if cultivated.— E.S.M.

Amaranthus sylvestris Desf. Waste ground, Lindfield, E. Sussex, v.c. 14, Sept. 16, 1910.—R. S. Standen. Correct. An excellent specimen, showing the characteristic circumscissile dehiscence of the capsule,—S.T.D.

Chenopodium album L., var. viride (L.). Potato field, Itchington, W. Glos., v.c. 34, Sept. 12, 1910. I consider these to be excellent examples of the variety.—Ida M. Roper. Yes, typical, I should say.—A.B.J. Correctly named.—A.B.

C. album L., var. paganum (Reichb.). Allotment, Kingswood, Bristol, W. Glos., v.c. 34, Sept. 26, 1910.— Ida M. Roper. I agree to this naming, but the varieties of C. album seem to be connected by intermediates.— A.B.J.

C. [rubrum L., var. pseudo-botryoides Wats.]. Damp places, Ross Links, N.E. Northumberland, v.c. 68, Aug. 1884, and July 1886.—H. E. Fox. My specimens (Aug. 1884) are C. glaucum L., and not C. rubrum L., var. pseudo-botryoides Wats.—C.E.S. Extremely interesting; it is a small state of C. glaucum L., similar to plants sent to me fresh in Sept. 1901 by Mr. E. Ferguson Shepherd from damp ground on Chobham Common, near Windlesham, Surrey; it grew there in profusion, associated with Littorella, Gentiana Pneumonanthe, etc., and appeared to be certainly native. I should suppose it to be equally so in Mr. Fox's locality, as it occurs in similar situations on the Continent. Distinguishable at a glance from C. rubrum, var. pseudo-botryoides by the sinuate foliage, very mealy beneath; the seeds are also quite different.—E.S.M.

Atriplex deltoidea Bab., var. salina Bab. By the sea, Portquin, near Padstow, E. Cornwall, v.c. 2, Aug. 1910.— H. E. Fox. A few of the leaves have the leaf-cusps decidedly spreading or declining and so the naming seems correct—A.B.

Salicornia stricta Dum. Bosham Creek, W. Sussex, v.c. 13, Sept. 27, 1910.—R. S. Standen. S. europæa L. forma stricta Moss (Jl. of Bot., 1911, p. 180).—C.E.M.

S. ramosissima Woods. Mouth of the Nene, S. Lincs., v.c. 53, Oct. 11, 1909. A very variable plant. Some specimens are quite unbranched.—C. E. Moss. (See also Rept. B.E.C., 1910, p. 585).

S. — sp. nov. Holme Salt Marsh, Hunstanton, W. Norfolk, v.c. 28, Oct. 16, 1910. Since the specimens were sent this has been named S. disarticulata Moss in Jl. of Bot., p. 183, t. 514 (1911). I consider this the most remarkable and distinct species of the whole genus. —C. E. Moss. (See also Rept. B.E.C., 1910, p. 586).

S. procumbens Sm. (Ref. No. 3548). On damp or dryish mud, about a quarter of a mile beyond Minehead Pier, towards Greenaleigh, S. Somerset, v.c. 5, Oct. 3, 1910. Quite prostrate, stiff, much tinged with red or red-brown; spikes short, blunt. The specimens are a good deal smaller than those of another gathering which grew on dry mud, but which is otherwise indistinguishable. I have

little doubt about the name, though I have not seen S. procumbens elsewhere either so rigid or so uniformly flat-growing. Dr. C. E. Moss had fresh material for examination; but his report has not yet reached me.—Edward S. Marshall. In this gathering there are typical specimens of S. Smithiana Moss (Jl. of Bot., 1911, p. 183) and some which appear to be hybrids of this and S.? prostrata Pall. I visited the salt marsh in company with Mr. Marshall this year, and we found S. europæa L., forma patula Moss, S. Smithiana Moss, and S.? prostrata Pall. Apart from hybrids, there appeared to be no other glassworts present.—C.E.M.

S procumbens auct., non Sm. Holme Marsh, Hunstanton, W. Norfolk, v.c. 28, Oct. 16, 1910.—C. E. Moss. (See also Rept. B.E.C., 1910, p. 586–7). Now named S. Smithiana Moss (Jl. of Bot., 1911, p. 183).—C.E.M.

S. perennis Mill. (1768) (= S. radicans Sm.). (1) Holme Salt Marsh, Hunstanton, W. Norfolk, v.c. 28, Oct. 16, 1910.—C. E. Moss (See also Rept. B.E.C., 1910, p. 588). (2) Wells next the Sea, W. Norfolk, Sept., 1910.—Coll. F. Long. Comm. C. E. Salmon. My specimens from Wells are all barren. S. perennis Mill. Gard. Dict. ed. 8, No. 2 (1768) = S. radicans Sm. E.B. t. 1691 (1807).—C.E.M.

S. lignosa Woods. Bosham Creek, W. Sussex, v.c. 13, Sept. 27, 1910.—R. S. Standen. Correct. My specimen is wholly barren, and no root is present.—C.E.M.

Ulmus scabra Mill. ×? Bishopswood, Herefordsh. (or W. Glos.), Sept. 8, 1910. This was a single tree, clearly spontaneous; with long drooping branches, and narrow, short-petioled, glabrous leaves. Beyond the suggestion of "scabra ×," I can suggest no name.—A. Ley. (See also Rept. B.E.C. 1910, p. 594).

U. glabra Mill., var. glandulosa Lindley. Terraces of Ludlow Castle, Salop, v.c. 40; several large trees; Sept. 5, 1910. This is the locus classicus, from which Lindley described his variety. Tree twigs and suckers sent.—A. Ley.

U. glabra Mill., var. minor Mill.? Wadenhoe, Northants, v.c. 32, July 1910. This variety was as common as the type in this part of Northants.—A. Ley. (See also Rept. B.E.C. 1910, p. 592).

Parietaria ramiflora Moench, var. fallax Gren. and Godr. Old wall, Winchelsea, E. Sussex, v.c. 14, July 6, 1910.—R. S. Standen. I have not specially studied our forms; but Mr. Standen's plant agrees well with Rouy's description of P. ramiflora, $\gamma.$ fallax Gürcke "Pl. Europ." II., p. 80, (= P. diffusa, $\beta.$ fallax Gren. and Godr.):— "Feuilles lancéolées-oblongues; tiges presque simples; port du P. erecta, dont elle diffère par les autres caractères du P. ramiflora." ("Fl. de France," XII., p. 276).—E.S.M.

Salix triandra L., var. Hoffmaniana (Sm.) $\mathcal J$. Banks of Ouse, Lindfield, E. Sussex, v.c. 14, catkins May 16, foliage Aug. 16, 1910.—R. S. Standen. A good form of the plant, which is more than a mere var. of S. triandra.—E.F.L.

- S. [decipiens Hoffm.]. Horsted Keynes, E. Sussex, v.c. 14, June 29, 1910.—R. S. Standen. Surely this is a narrow-leaved S. fragilis L.; the foliage is not quite right for S. decipiens, nor has it the very shining bark of that species.—E.S.M. I doubt if this is the same plant I named S. decipiens for Mr. Standen. It is probably a form of S. fragilis.—E.F.L. Later Mr. Linton wrote:—"Mr. Standen examined the spot again at my request, and found a bush of S. decipiens and of fragilis growing intermixed. The 2 specimens are from the latter."
- S. Doniana Sm. (= S. purpurea × repens), 3. Hort. Edmondsham, Dorset, April 4 and July 16, 1910. From a plant which I raised and distributed in the "Set of British Willows" (No. 83). Scarcely to be obtained from any wild situation.—E. F. Linton.
- S. cinerea L., f. aquatica (Sm.). Horsted Keynes, E. Sussex, v.c. 14, June 29, 1910.—R. S. Standen. Correct.—E.F.L.

 $Populus\ [monilifera]$, \circ . Plantation at Glen Parva, Leics., v.c. 55, June, 1910.—A. R. Horwood. Not $Populus\ monilifera\ Ait.\ (1789)=P.\ deltoidea\ Marsh.\ (1785)$, which

is very rare in Britain, even as a cultivated tree; nor is it P. monilifera Mich. fil. (= P. monilifera Loud.), which is the common "Black Italian Poplar" of cultivation; but it seems to be P. virginiana Fougeroux ("Mem. Soc. Agric. Par. 1787"). I have not seen this description, but I think this is the plant intended by continental writers (e.g., Ascherson and Graebner "Flo. Mitteleur.") by their P. virginiana. Some examples of it in Kew Gardens are named P. marylandica; but the description of "P. marylandica Bose" in Lamarck's "Encycl. suppl. IV." does not fit the plant. This poplar does not appear in any of the British floras or lists. However, it is subspontaneous in several fenny places in Suffolk, and this, I suppose, must count as its first British record. sometimes planted, as on the roadside in West Suffolk between Barton Mills and Icklingham, also in grounds and gardens, as in Cambridge. The following poplars belonging to this group are usually confused by British botanists:—(1) P. nigra Linn. (indigenous in southern and eastern England); (2) P. deltoidea Marsh. (very rarely cultivated in Britain; indigenous in N. America); (3) P. canadensis Moench (the "Black Italian Poplar"; commonly cultivated; origin unknown); and (4) \bar{P} . virginiana Foug. (cultivated; origin unknown). P. virginiana is usually (? always) a pistillate tree; P. canadensis is usually (? always) a staminate tree. The above three introduced poplars have 0, 1, or 2 glands at the base of each lamina: these glands are absent in P. nigra. deltoidea is slightly ciliate at the margin of the lamina. P. canadensis (the male tree) has terminal leaves which are decidedly less acuminate than those of P. virginiana (the female tree).—C.E.M.

Taxus baccata L. Durdham Down, Bristol, W. Glos., v.c. 34, March 19, 1910. The specimens are from wild trees common in the district on the limestone.—Ida M. Roper.

Orchis incarnata L.? Flitwick Marsh, Beds., v.c. 30, June 1908. The flowers of my specimen are not well enough dried to shew the distinctive characters properly; but I believe it to be O. latifolia L.—E.S.M.

O. ericetorum Linton. (1) Near Edmondsham, Dorset. v.c. 9, June 9, 1908.—Coll. E. F. Linton. Comm. S. H. Bickham. (2) West Moor, Bournemouth, Dorset, v.c. 9, June 13, 1910.—Ida M. Roper. Right.—E.F.L. specimens, which have not been pressed with sufficient care to shew the distinctive character of the labellum. One is certainly O. ericetorum: the others may also be rightly named, but their foliage is erect or ascending, with no tendency to be recurved; the spikes are narrow, oblong; and the labellum is more equally divided, and apparently narrower. These features point towards our restricted O. maculata; and I think that they are not improbably O. ericetorum × maculata, as their markings and some other indications seem to prove the influence of O. ericetorum. But I cannot venture on a decided opinion.—E.S.M,

Narcissus biftorus Curt. Pasture, Churchill, N. Somerset, v.c. 6, May 10, 1910. The habitat at Churchill is especially interesting. The plant covers an area of about half an acre in the middle of a very large pasture, and at the proper season the mass of flowers is conspicuous from a distance. The common Daffodil is also abundant in the immediate neighbourhood, but does not occur in the same field. Although not native it has certainly been established for over 50 years.—Ida M. Roper.

Juncus bufonius L. [var. fasciculatus Koch]. Banks of the Tweed, near Galashiels, Selkirksh., v.c. 79, Aug. 1909.—Ida M. Hayward. No; this comes under the type. The var. fasciculatus Koch is a very marked plant, although Buchenau, in Engler's "Pflanzenreich," IV. (1906) considers it unworthy of varietal rank. He also ignores var. ranarius, which has the perianth segments equal to, or shorter than, the capsule, and has, I think, very little claim to distinction.—McT.C. I should consider this to be a luxuriant form of the type. variety is described as a dwarf plant, two to three inches high, with the flowers in twos and threes. In the specimen sent me the flowers are solitary.—A.B.J. does not fit Koch's description of his variety, which is evidently a small stout plant (3-4 inches high) with flowers in twos or threes together.—C.E.S. Koch ("Synopsis," ed. 2, p. 845) thus describes his variety:—
"caule humiliore, robustiore, floribus binis ternisve
fasciculatis." The specimen before me is erect, about
ten inches high; flowers one or two, rarely three. It
seems intermediate between the type and the variety.
I have not seen a specimen or description of var. ranarius
Nees.—E.S.M.

- J. [compressus Jacq.]. Cropstone Reservoir, Leics., v.c. 55, July 28, 1910.—A. R. Horwood. The flowers are extremely small for J. compressus, the habit very slender, and the stems apparently trigonous in their upper part, rather than compressed. It looks to me more like J. Gerardi; but there is no trace of fruit, and it is not accurately determinable in this condition.—E.S.M. Specimens of this at the time of growth of the plant sent can only be assumed correct, as Leicester is an inland county (though there is a record of Gerardi for the county). It is impossible to be quite sure of this species unless in good fruit.—A.B.
- J. tenuis Willd. (1) Plentiful for nearly 100 yards on both sides of a byroad leading from Dalmally Bridge to a farmhouse called Craig, Argyllsh., v.c. 98, associated with several other species of Juncus; July 19, 1910.— Edward S. Marshall. (2) Near the terminus of a disused granite-quarry railroad, at 500 feet, about 2½ miles from Loch Awe Station, Argyllsh., v.c. 98, July 12, 1910. Scattered over about 30 yards. Although this station is an artificial one, I think that the plant may have spread from a natural habitat, like Potentilla Sibbaldi, which occurs on the same track, lower down; it is far from houses or cultivation.—Edward S. Marshall. (3) Roadside, Pillaton, E. Cornwall, v.c. 2, Sept. 6, 1910. Clearly native.—F. H. Davey.
- J. subnodulosus Schrank (= obtusiftorus Ehrh.). Locally abundant on Holme Moor, Slape Moor, etc., near Wiveliscombe, S. Somerset, v.c. 5, Aug. 22, 1910. New for the vice-county.—E. S. Marshall.

Sparganium simplex Huds., var. longissimum Fr. Pond in Glen Lochay, Killin, Mid Perthsh., v.c. 88, Sept. 16, 1910. In my opinion this is only a deep-water

state. In the shallow parts of the pond the type appeared as well as S. minimum Fr. S. affine which, I believe, was originally reported from here, did not occur, and I am inclined to think it must have been reported in error.-McTaggart Cowan, jun. I doubt if this deserves To me it is but a state, the result of varietal rank. growing in swiftly-running water. On one Moor in Cornwall, in the same stream, I have found this species in every stage, from the erect leaf form to the plant with long floating leaves. See "Flora Cornwall," p. 453.--F.H.D. This agrees, in its small heads and unusually narrow foliage, with a specimen of mine from Helston, W. Cornwall, endorsed by Mr. Beeby. He pointed out that the alleged variety longissimum was merely a deep-water state. There is a great resemblance in the foliage to S. affine; but the fruit is decisive. S. simplex Huds., forma.—E.S.M.

S. [affine Schnizl., var. microcephalum Neum.?]. Deep Pool, Wicken Fen, Cambs., v.c. 29, Sept. 9, 1910. This plant seems to be some form of natans (affine) on account of its long style, base leaves with the back convex at the base, and stem leaves with inflated sheaths. Yet it has, like minimum, only one or two male heads, and few female Since in Ascherson and Graebner's "Mitteleur. Fl.," I., p. 289, under the var. microcephalum the following points are given: "small, weakish, leaves 2-3 mm. broad, ... ? head 2 ... 3 heads single (or two)," I have tentatively called it this, but can obtain no specimens to compare it with.—A. J. Wilmott. The short beak of fruit, etc. is conclusive evidence that this is S. minimum. S. affine is not likely to occur so far south.—C.E.S. Certainly S. minimum Fr.; the fruit of S. affine is quite different. Leaves long, owing to the deep water.—E.S.M. [Later] I quite agree now that the plant is typical minimum, with floating leaves.—A.J.W. (in lit.).

Potamogeton lanceolatus Sm. Penrhos Lligwy, Anglesey, v.c. 52, Aug. 3, 1910.—Coll. R. H. Goode. Comm. G. Goode. Correct.—A.B.

Zannichellia palustris L. [var. repens (Koch)]. In shallow water, Hobson's Conduit, Cambridge, v.c. 29, Oct. 31, 1910.—A. J. Wilmott. This is not, I believe, Z. repens Boenn. ("Prod. Fl. Monast. Westphal." 1824, p. 272) which has stouter stems rooting at the nodes. This

Cambridge plant seems to have free floating stems and is, I think, our usual palustris, which I take to be Z. brachystemon Gay, and repens can only be a variety or even state of this. The fruits on my example are few and not in a good condition for determining species. I have not discovered the var. repens of Koch.—C.E.S. I do not understand this variety; the present plant seems to me merely a creeping state of our usual form, probably due to its growing in shallow water. Koch's account ("Synopsis," ed. 2, p. 782) does not indicate clearly that he meant to separate Z. repens Boenn. from Z. major Boenn., which he apparently treated as synonymous with Z. palustris L.—E.S.M. I should not name this repens.—A.B.

Z. palustris L., var. radicans Asch. and Graebn. Muddy edge of pond near Cambridge, v.c. 29, Oct. 29, 1910.—A. J. Wilmott. I have not seen the description in Asch. and Graebn. "Synopsis." This plant differs from the one named var. repens Koch by Mr. Wilmott in its long-stalked fruit and its much longer styles.—E.S.M. do not know Wallman's Z. radicans ("Bot. Not." 1840, p. 44), but Asch. and Graebn. give for it "Laubstengel und Blätter meist fein, fadenförmig," ("Mitteleur, Fl." I., p. 364, 1897).—A.B. This is an interesting plant and deserves study. In the specimen before me it is difficult to see if the stem is really rooting or whether the plants are small owing to the shallow water of the pond. Mr. Wilmott could doubtless give the information.* In any case, the plant comes under the "pedicellata" group, and if it is creeping would seem to fit very well Ascherson and Graebner's description of var. radicans. Whether this is the same as Wallman's Z. radicans I do not know. If the plant is floating, and not creeping, then it would be apparently var. pedunculata A. and G. (= Z. pedunculata,var. maritima Rchb. Fl. Germ. excurs. I. 7 (1830)). The Z. repens of Koch and Boenn, comes under the "genuina" group of Zannichellia (as arranged by Aschers. and Graeb.), which is distinguished by an almost sessile fruit with a much shorter style.—C.E.S.

* Mr. Wilmott states that the plant was growing in

shallow water and rooting.

Cladium Mariscus Br. Holme Moor, near Wiveliscombe, S. Somerset, v.c. 5, Aug. 22, 1910. This is a small marsh, only a few acres in extent; the Fen Sedge grows plentifully on its north and west sides. New for the vice-county; it was believed to be extinct in N. Somerset, but Mr. H. Corder has this year found one plant in the parish of Catcott.—Edward S. Marshall.

Carex divisa Huds. Marshy pasture near the tidal Wye, Beachley, W. Glos., v.c. 34, Sept. 15, 1910. New for the Chepstow neighbourhood; but Mr. J. W. White has sent specimens to the B.E.C. from St. Philip's Marsh, near Bristol, in this vice-county.—Edward S. Marshall. Not on record for v.c. 34 in "Topographical Botany" or the supplement.—A.B.

- C. paradoxa Willd. Between Rickmansworth and Harefield, Middlesex, v.c. 21, June 4, 1910.—C. E. Salmon. This Carex has increased in comital distribution from 3 in 1874 to 9 in 1910! Mr. Benbow some years ago found it in abundance near Uxbridge.—A.B.
- C. muricata L., var. Leersii (F. Schultz). Bank, under Sea Walls, Bristol, W. Glos., v.c. 34, June 22, 1910. —Ida M. Roper. Correct. I have the same plant collected in the locality by Mr. White five years ago.—A.B.J. I think correctly named. Lowest bract, glumes and fruit right, but glumes are not usually (as is stated) only half the length of fruit with beak, although they are noticeably shorter than in contigua (muricata).—C.E.S. C. Leersii was described as a species by F. Schultz; and I am not quite satisfied that is is only a variety of C. muricata L. (Pairæi F. Schultz), the facies of which, in my few specimens, differs considerably from it. The present plant is doubtless C. Leersii, though only in young fruit.—E.S.M.
- $C.\ axillaris\ Good.\ (=\ remota \times vulpina).\ (1)$ With the parents; frequent by roadsides near Coolham, W. Sussex, v.c. 13, Aug. 19, 1910. This hybrid is usually readily distinguished, at a glance, from $C.\ remota$, by it being a much taller plant with rather weak stems, obtaining some support from the hedgerow into which it often penetrates from the ditch below. Some of these examples were fully four feet high, and a few will be observed to have the spike bent at almost a right angle

at the lowest spikelet, a peculiarity I could not explain.—C. E. Salmon. Yes; but a form nearer to C. remota than usual.—E.S.M. (2) Hedgerow, near Bishop's Stortford, N. Essex, v.c. 19, June, 1910. Growing with the parents. Very typical, but rather young.—Coll. A. H. Evans. Comm.—C. E. Moss. Rightly named.—E.S.M.

C. trinervis Degland. Origin, Ormesby Common, E. Norfolk, v.c. 27. Cult. Ledbury, Oct. 1, 1910.—S. H. Bickham. Beautiful examples, not afflicted with fungus which, I understand, always caused the plants (orig. from Ormesby) in Rev. E. F. Linton's garden, to These plants of Mr. Bickham and those be barren. sent in to the Club last year, from the wild station, by Miss A. M. Geldart, show that C. trinervis may well stand as a British native, and that the bracket of doubt in Mr. Druce's "List of British Plants" may be removed. Specimens from Ormesby have been seen and passed by Herr Kükenthal.—C.E.S. The Ormesby Common form of C. trinervis, the exact equivalent of which I have not yet seen among continental specimens. A curious feature is that this Norfolk plant is always sterile. This is so in Mr. Bickham's specimens; though apparently in fruit, there is no nut.—E.F.L. A very interesting specimen, as the name has been queried and I have doubted it at times; but this specimen shews the creeping stolons well, and they are very like those figured in Drejer's "Symbolae Caricologicae," t. 7, 1844; they are not like the ordinary ones of Goodenowii. The late Mr. Beeby and I carefully dug up many roots of this latter sedge at Hedge Court, near Felbridge, in Surrey (where several forms of it occur) and traced the stolons, none of which were like these. Ormesby Common was a wild spot, as my late friend Mr. Glasspoole told me, and at one time may have been the borderland of the sea, as many pans (salinae) for evaporating sea-water have been found far inland in the Flegg Hundred (see Dutt's "The Norfolk Broads," (1903), p. 284).—A.B.

C. aquatilis Wahl., forma angustata Kükenth. (Ref. No. 3472). Bog on the east side of Ben More, Mid Perth, v.c. 88, in the hollow between that peak and Am Binnein (or Stobinian), July 16, 1910. A slender form, or state,

agreeing well with specimens so named for me by Pfarrer Kükenthal.—Edward S. Marshall.

- C. aquatilis Wahl. Mr. Arthur Bennett has identified as his var. rigida, the "Carex aquatilis Wahl., var. virescens Anders. Kenmure Holms, Loch Ken, Kirkeudbrightshire, Aug. 8, 1899.—D. T. Playfair" mentioned on p. 32 of the Watson B.E.C. Report, 1900-1901.—C.E.S.
- C. hirta L., var. hirtæformis Pers. Quarry, Tytherington, W. Glos., v.c. 34, July 12, 1910. A close mass of several square yards occurs here on old quarry ground under drier conditions than I have observed it elsewhere. —Ida M. Roper. May be under the variety, though neither leaves nor all the scales are absolutely glabrous. I have not seen a British plant of C. hirta that is.—E.F.L. the variety, which should have leaves and glumes glabrous. A.B.J. Persoon described this as a species; but, so far at least as British plants are concerned, I am convinced by experience that it is a mere temporary state. Miss Roper's specimens are too hairy, though they tend in that direction.—E.S.M. The var. β sublævis Horn. Fl. Dan. t. 1711, 1821 (= C. hirtæformis Pers.) is described as "Hele Planten, undtagen Frugterne, glat, græn" ("Lange's Haandbog i den Danske Flora," 1864, p. 704), and although the upper part of these specimens may be called subglabrous, yet below they are distinctly hairy, so can hardly be referred to Hornemann's variety.—A.B.
- C. acutiformis Ehrh. (= paludosa Good.). (Ref. No. 3475). Extremely local, growing in rather dry peat by the Lusragan Burn, about $2\frac{1}{2}$ miles from Connel Ferry, Argyllsh., v.c. 98, July 11, 1910. The foliage was yellowish and hardly at all glaucous above, giving the plant a very unusual appearance. Although it occurs as far north as Caithness, this species must be decidedly scarce in the Highlands; I had never observed it on any of my previous visits.—Edward S. Marshall. Smaller spikelets than usual (at least in the south), but the nuts appear fairly typical.—E.F.L. The Argyll acutiformis is a more even-spiked and neater plant than the Caithness one; and is just the form often named acuta.—A.B.
- $C.\ inflata \times vesicaria.$ (Ref. No. 3477). Strath Orchy, between Dalmally and the head of Loch Awe,

Argyllsh., v.c. 98, July 6, 1910. The parents grow together thereabouts in many places, and hybridize rather freely. Rev. E. F. Linton agrees with the determination.—Edward S. Marshall. Passed by Herr Kükenthal as C. rostrata (= inflata) × vesicaria for the other Club.—C.E.M. The specimen now sent me shews more evidence of C. vesicaria than of C. inflata; but it is sterile, and no doubt right: identity in a crop of hybrids is hardly expected now.—E.F.L. This seems a good intermediate between the two (C. Pannewitziana Figg.) but I do not think this is the same as C. Friesii Blytt.—A.B.

Spartina stricta Roth. Leigh-on-Sea, S. Essex, v.c. 18, Aug. 1910.—W. R. Sherrin. Correct.—E.F.L.

Agrostis verticillata Vill. Falmouth Docks, W. Cornwall, v.c. 1, Aug. 8, 1910. First noticed there in 1907, but as I was then unacquainted with this species I was, much against my own inclination, obliged to accept the verdict of a friend, who called it a peculiarly dense form of A. alba L., var. maritima Meyer. This past summer it was very plentiful over one part of the Docks.—F. H. Davey. The same plant which Mr. Davey sent out formerly as A. alba, var. maritima, and announced as A. verticillata Vill. in Jl. Bot. 1910, p. 80. An interesting discovery!—E.F.L.

Polypogon monspeliensis Desf. (1) Little Sea, Studland, Dorset, v.c. 9, Aug. 6, 1910.—R. S. Standen. (2) Banks of the Tweed, near Galashiels, Selkirksh., v.c. 79, Aug. 1909.—Ida M. Hayward.

Calamagrostis lanceolata Roth. [var. gracilis Lange (= C. gracilis Schum.)]. Filby Broad, E. Norfolk, v.c. 27, July, 1910.—F. Long. I do not know the variety, but the specimen sent me does not differ materially from those I have of the type from Leics. and Yorks.—A.B.J. I think we must refer this to C. lanceolata. It is not exactly typical, but I can find no name to apply to it.—A.B.

Deschampsia flexuosa Trin. [var. montana Hook. fil.]. Canlochan Glen, Forfarsh., v.c. 90, July 23, 1910. I send this, but I doubt if it is extreme enough for the variety,

though most of the specimens seem very near it.—McT. Cowan, jun. Glumes not red-purple enough for the variety, although these specimens somewhat approach it. On the summits of the Cairngorms and many others of the Grampians it is frequent and well marked.—E.S.M.

Poa Chaixii Vill. In a wood, Eddleston, Peeblessh., v.c. 78, July 1909.—Ida M. Hayward. This grass seems to be spreading in Britain, or has it been overlooked?—A.B.

P. pratensis L., var. angustifolia (L.). Roadside, Essendon, near Hatfield, Herts., v.c. 20, May 1910.— F. Long. Also coll. F. Long, June 12, 1910, comm. S. H. Bickham. Yes; although not nearly so extreme as it appears in my part of Scotland.—McT.C. I agree to these, though it is a poor variety.—E.F.L. Yes; gathered too late, but this does not obscure the varietal character.—E.S.M.

Glyceria declinata Bréb.? (Ref. Nos. 3541 and 3542). In a small roadside swamp, West Monkton, S. Somerset, v.c. 5, Aug. 19, 1910. Intensely glaucous; stems erect or ascending from a procumbent base. The habit may be caused by its growing in a rather shaded situation. I was at first inclined to think No. 3541, or indeed both of them, G. declinata × fluitans; but I now consider them to be a modification of G. declinata, due to the surround-Characteristic G. declinata, with prostrate or procumbent stems, occurs higher up the streamlet which feeds this swamp.—E. S. Marshall. Mr. Townsend's first name—nana; that of Crépin—depauperata; and of Fries -pumila, would lead one to suppose they meant a dwarf plant. Some Surrey specimens, collected by W. H. Beeby and authenticated by Mr. Townsend, are six inches high. Mr. Townsend says "sheaths smooth furrowed," these can hardly be so called. Again, "pale exceeding the fertile glume." I do not quite understand this, does it depend on age as in Bromus?—A.B.

Bromus madritensis L., var. rigidus Bab. (sent out with the label "Bromus rigidus Bab."). Sark, Channel Is., June 1909.—Ida M. Hayward. Confirmed.—E.F.L. Just like the Jersey plant. But why are our members so fond

of writing a varietal name as if it were specific? According to Babington, who reduced it to a variety, it is *B. rigidus* Roth.—E.S.M.

B. arvensis L. In a field of Sainfoin by Milbury Heath, W. Glos., v.c. 34, Aug. 10, 1910.—J. W. White. Passed as correct by Dr. Stapf for the other Club.—C.E.M. Confirmed.—E.F.L.

B. [patulus M. & K.]. Field, Milbury Heath, Thornbury, W. Glos., v.c. 34, Aug. 10, 1910.—Ida M. Roper. B. arvensis L. Curiously, a Brome named "B. patulus M. & K." sent to the other Club is also B. arvensis L.—C.E.M. This is B. arvensis L.—A.B.

Lolium perenne L., var. aristatum Schum. Pasture, Stoke Gifford, W. Glos., v.c. 34, Oct. 22, 1910.—Ida M. Roper. Correctly named.—E.F.L.

Agropyron pungens R. & S., var. littorale (Reichb.). Bosham Creek, W. Sussex, v.c. 13, Sept. 27, 1910.—R. S. Standen. Glumes apparently acuminate; I think correctly named, but gathered rather too late. The spikelets are brittle and fall to pieces very readily.—C.E.S. One spike fairly represents the variety: the other two are intermediate between the type and variety.—E.F.L.

Athyrium alpestre Milde. Meall Tarmachan, near Killin, Mid Perthsh., v.c. 88, Sept. 18, 1910. This rarely seems to produce fertile fronds in the Breadalbanes.—McTaggart Cowan, jun.

Chara fragilis Desv. var.? Pond, Ormeau Park, Belfast, Co. Down, June 1880.—Coll. S. A. Stewart. Comm. C. H. Waddell. C. fragilis, subsp. delicatula. A good example of the form barbata, with well-developed bract-cells and lower stipulodes.—H. & J.G.

Copies of many of the earlier Reports can be obtained from the Hon. Secretary.

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TREASURER'S BALANCE SHEET, 1910.

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31st December, 1910.

SPENCER H. BICKHAM, Hon. Treasurer.







B. S.5

THE

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OF THE

WATSON

Botanical Exchange Club,

1911-1912.

Referees:

Rev. E. F. LINTON, M.A., Edmondsham Rectory, Salisbury. Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

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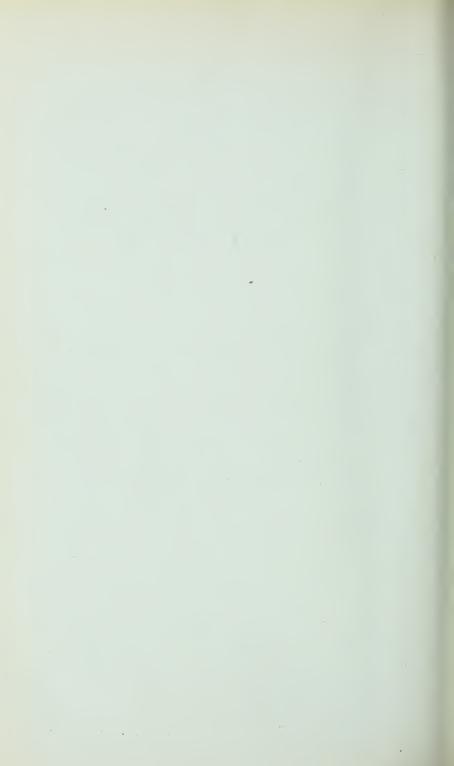
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CAMBRIDGE:

PRINTED BY J. WEBB & CO., ALEXANDRA STREET, 1913.





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12FEB.1913

THE WATSON BOTANICAL EXCHANGE CLUB.

REPORT FOR 1911-12.

Though not so numerous as in some former years, the plants sent in embraced many interesting species and varieties, which must have been very acceptable to those who received them. Large parcels were received from several members, that from Mr. Davey being the largest since 1904. Even in cases where the number of species was not large, their value was yet considerable.

The contributors were as follows:-

Shee	ets. Sheets.
Mr. C. Bailey 5	Miss I. M. Hayward 15
Mr. W. Barclay 2	
Mr. W. C. Barton 1	12 Mr. A. R. Horwood 41
Mr. W. Bell 16	36 Rev. E. F. Linton 193
Mr. S. H. Bickham 12	25 Dr. F. Long 57
Rev. H. Boyden	6 Rev. E. S. Marshall 223
Mr. J. Comber 18	Rev. W. Moyle Rogers 14
Mr. McT. Cowan, jun. 22	20 Miss I. M. Roper 196
Mr. F. H. Davey 48	
Miss L. Day 1	12 Mr. R. S. Standen 141
Mr. P. Ewing 15	65 Rev. C. H. Waddell 65
Rev. H. E. Fox 5	58 ——
Miss A. M. Geldart 8	Total 2460
Mr. G. Goode 1	15
Mrs. E. S. Gregory 2	22

Very little fault could be found with the preparation of the specimens. Almost all were well chosen, well laid out and well dried. In a few cases the number of sheets representing the species was insufficient, *i.e.*, less than half a dozen. When 12 to 20 sheets are sent, the distributor is enabled to make a much fairer distribution.

By the great majority of contributors the rules of the Club were carefully observed, but there were a few transgressors. What appears to a sender a very trifling omission or deviation may cause a very irritating amount of trouble to the distributor.

Mr. Movle Rogers, as Referee for the Brambles, and Dr. Drabble, the Referee for the Pansies, wish that all the sheets representing a species should be sent to them for examination, not merely a single sheet representative of the others. Where this is not done, their decisions refer only to the sheets which they have seen, not to the others which they have not seen. With this demand I sympathise, as there is no doubt but that in these genera, and, I may add from my own experience, in the Roses also, mixtures sometimes occur. In the case of the Brambles and Pansies, for which Mr. Rogers and Dr. Drabble are practically the sole Referees, the request can easily be complied with, but in the case of other genera, where there are generally several Referees, the same thing can hardly be done, as it would certainly lead to considerable delay in the distribution, and very probably to some confusion in the specimens. I believe, however, that in the case of the Brambles, the danger of admixture is greater than in any of the other genera.

Valuable notes were received from the following experts:—Mr. E. G. Baker, Mr. Arthur Bennett, Mr. C. Bucknall, Miss R. M. Cardew, Dr. E. Drabble, Mr. S. T. Dunn, Mrs. E. S. Gregory, Messrs. H. and J. Groves, Prof. E. Hackel, Mr. A. B. Jackson, Rev. E. F. Linton, Rev. E. S. Marshall, Dr. C. E. Moss, Mr. H. W. Pugsley, Rev. W. Moyle Rogers, Mr. C. E. Salmon, Mr. J. W. White, Mr. A. J. Wilmott, and Major A. H. Wolley-Dod, to whom we return grateful thanks.

W. BARCLAY,

Distributor for the year 1911—12.

Additional notes to former Reports.

14th Report (1897—8), p. 18.

Sparganium simplex Huds., var. longissimus Fries. Rydal Lake, Westmorland, v.c. 69, Aug., 1895.— C. Waterfall. My example of this has been determined by Prof. Rothert as S. affine Schnizl.— C. E. Salmon.

24th Report (1907—8), p. 156.

Quereus Robur L., var. intermedia (D. Don). Hedgerow, Malvern Link, Worcs., v.c. 37, Sept. 23, 1907.
—S. H. Bickham. This is named Q. Robur × sessiliflora by Dr. Moss.—C. E. Salmon.

26th Report (1909—10), p. 254.

Ulmus glabra Huds., var. major Sm. Near Monmouth, v.c. 35, May 10 and Aug. 26, 1909.—A. Ley. U. glabra Huds. non Mill. × nitens Mönch; near × U. hollandica mihi (= U. hollandica Mill).—C. E. Moss.

U. surculosa Stokes. The Close, Salisbury, May 18 and Aug. 11, 1909. Coll. E. J. Tatum. Comm. E. F. Linton. U. campestris L. (the English elm). U. surculosa Stokes is made up of several named varieties, of which only one (U. surculosa, var. latifolia Stokes) is the English elm.—C. E. Moss.

Ranunculus reptans L. Gravelly north shore of Ullswater, Cumberland, v.c. 70, July 21, 1911. I sent specimens of this plant from the same locality two years ago, gathered six weeks later. It was then growing almost in the lake. This year the lake was very low and the plants some yards away from it. The stems, it will be noticed, are slenderer and arch between the nodes in the manner characteristic of the Scotch plant. Mr. Marshall writes, "the specimens are very typical and just like those I once gathered in Switzerland."—S. H. Bickham. Correct.—E.S.M. and E.F.L. My specimens

are not in fruit, but they must pass, I think, as the reptans of Britain, as they are much the same as the Loch Leven form. The reptans of the Continent is more extreme, apparently.—C.E.S.

R. acris L., var. Marsh meadows, Duddingston, Edinburghsh., v.c. 83, June 4, 1911.—McT. Cowan, junr. This agrees better with Rouy and Foucaud's description of R. Friesianus Jord. than with that of R. Steveni Andrz.: it is less hairy than the latter; hairs tawny, rather short (not red); leaf-lobes contiguous.—E.S.M. This plant decidedly comes under R. tomophyllus Jord. In the London Catalogue tomophyllus is classed as a "form" of R. Boræanus Jord.; but it is as markedly distinct from the latter as either of the acris varieties.—J.W.W.

Caltha palustris L., var. minor Syme. Ben Lawers, Mid Perth, v.c. 88, July, 1911.—P. Ewing. Syme did not describe this as a species, as is implied by the labels. Apparently the original name is var. minor DC., Syst., I. 309. Roots sent by me to Mr. Hunnybun to grow increased greatly in size in a single season.—E.S.M.

Aconitum Napellus L. By a stream between Ford and Milverton, S. Somerset, v.c. 5, June 2, 1911. Abundant for fully four miles, and apparently a true native.—E. S. Marshall.

Fumaria Boræi Jord. Rothley Plain, Leics., v.c. 55, Aug. 1910. This has been named by Mr. Pugsley. It is believed to be a new county record. It was found on the border of a cornfield in great plenty, and had been known in the station for many years. The man on the farm stated that he had long known it as "Little Dill."—W. Bell. Correct. It is F. muralis Sond., subsp. Boræi, Pugsley in Journ. Bot., XL., 178 (1902).—H.W.P.

F. [major Badarro]. Gilly Tresamble, Perranarworthal, W. Cornwall, v.c. 1, Oct. 11, 1911. Abundant among turnips, mangolds, and potatoes in a field that for at least ten years previous had been in grass. Not a single plant could be seen during the last week in August. Racemes fewer flowered than in former years, probably owing to the very dry season.—F. H. Davey. The sheet sent is not F. major, but the F. paradoxa of my "Fumaria in

Britain," published as a supplement to the "Journal of Botany" [1912, p. 33].—H.W.P.

Nasturtium sylvestre R.Br., var. tenuifolium Tausch. Damp meadow among long grass, Framingham Pigot, E. Norfolk, v.c., 27, July, 1911. Mr. Bennett says "probably the var. tenuifolium of Tausch."—F. Long. A very striking plant; doubtless correct, but this variety is not mentioned in any work that I can refer to.—E.S.M.

Draba rupestris Br. Ben Lawers, Mid Perth, v.c. 88, July, 1911.—P. Ewing.

Cochlearia alpina Wats. Ben Lawers, Mid Perth, v.c. 88, July, 1911.—P. Ewing. Material rather scrappy; there are traces of veining on the nearly ripe pods, so it is probably right.—E.S.M.

C. micacca E. S. Marshall. Ben Lawers, Mid Perth, v.c. 88, July, 1911.—P. Ewing. Yes; my two (fruiting) specimens are the form or variety with long narrow pods.—E.S.M.

Sisymbrium pannonicum Jacq. (1) In some abundance over the waste ground of an old disused brickyard, East Grinstead, E. Sussex, v.c. 14, June 27, 1911.—E. F. Linton. (2) Belgrave, Leics., v.c. 55, Sept. 1911.—Coll. G. E. Mercer. Comm. A. R. Horwood.

S. strictissimum L. (Fruiting examples). Root from Heaton Mersey. Cult. Haymesgarth, Cleeve Hill, near Cheltenham, Aug. 12, 1911. (See also 22nd Rept., p. 40).—Charles Bailey. This is much more branched than any I have seen, with very numerous silicules, which are much shorter and with shorter styles than usual.—C. Bucknall.

Rapistrum rugosum All. Par, E. Cornwall, v.c. 2, Oct. 2, 1911. This has become very common during the past few years.—F. H. Davey.

Viola odorata L., var. imberbis Leight. Flax Bourton, N. Somerset, v.c. 6, March 25, 1911. This is the prevailing form of the white sweet violet in the Bristol district.— Ida M. Roper. Yes, forma imberbis. I think it scarcely deserves varietal rank.—E.S.G.

V. Riviniana Reichb., var. diversa Gregory. (1) Newbattle, Edinburghsh., v.c. 83, May 23, 1911. (2) Dundas Castle, Linlithgowsh., v.c. 84, May 23, 1911.—McT. Cowan, junr. Of this variety Mr. Cowan reports: "This seems to be much commoner than the type in this district, and seems to be spread over districts exhibiting varying edaphic conditions." It agrees in all essential characters with the same variety gathered on Whinnie Brae, Selkirkshire, May 23, 1910.—E.S.G.

 $V.\ canina \times lactea.$ Roadside, Chailey Common, E. Sussex, v.c. 14, May 14, 1911.—R. S. Standen. Correct.—E.S.G.

V. lactea Sm. Chailey Common, E. Sussex, v.c. 14, May 14, 1911.—R. S. Standen.

V. arvensis Murr., var. [obtusifolia (Jord.)] (1) Rothley Plain, Leics., v.c. 55, July, 1910.—W. Bell. Correct.—E.D. (2) Newtown Linford, Leics., v.c. 55, June 23, 1910. This was growing with Scleranthus and was common in cornfields above Newtown Linford. The lower leaves were obtuse almost to orbicular.—W. Bell. This is V. derelicta Jord.—E.D.

V. arvensis Murr., var. Lloydii (Jord.). Killarney, Co. Kerry, May, 1910.—Coll. Mrs. Jenner. Comm. E. S. Gregory. V. Lloydii, var. insignis.—E.D.

V. Curtisii Forster. Sand Hills, Walney Island, N. Lancs., v.c. 69, Aug. 1911.—J. Comber. This is var. Pesneaui E. G. Baker. It is quite like the W. Lancs. plant.—E.D.

Arenaria verna L., var. Gerardi Wahl. Lizard Downs, near Kynance, W. Cornwall, v.c. 1, May, 1911.— A. M. Geldart. This seems to correspond with the A. Gerardi Wahl. β. humilior of Rouy and Fouc. Fl. Fr. III, p. 270 (1896).—C.E.S.

Spergularia marginata Kittel, var. glandulosa Druce. Muddy shores of Walney Island, N. Lancs., v.c. 69, Aug. 1911.—J. Comber. Right.—E.S.M.

Polycarpon tetraphyllum L. Par, E. Cornwall, v.c. 2, Oct. 2, 1911. On a large heap of introduced sand with

Polygonum maritimum, Herniaria hirsuta, Centaurea aspera, Bromus maximus, and Cynodon Dactylon. First noticed in 1910.—F. H. Davey.

Montia fontana L., var. minor All. Lizard Downs, W. Cornwall, v.c. 1, May, 1911.—A. M. Geldart. M. chondrosperma Fenzl.—C.E.S. Apparently this is M. minor Gmel., a. chondrosperma Fenzl in Ledebour, "Fl. Ross." I. 152: Rouy and Foucaud, "Fl. de France," III. 316, describe it as having "graines opaques fortement tuberculeuses;" which agrees with the present plant.—E.S.M.

M. fontana L., var. major All. Running stream, Yewdale, Coniston, N. Lanes., v.c. 69, Sept., 1911.—J. Comber. Yes, I consider this to be a distinct species from M. minor Gmel. It is perennial, not annual, with a totally different habit; and the punctate seeds are somewhat shining, though far less so than those of M. lamprosperma Cham.—E.S.M. I do not know by what characters Mr. Marshall distinguishes this from M. lamprosperma Cham., which I should name it.—C.E.S.

Malva moschata L., forma alba. Perranarworthal, W. Cornwall, v.c. 1, Sept. 18, 1911. Two large plants.—F. H. Davey.

Erodium cicutarium L'Hérit., var. Sand dunes, Gullane, Haddingtonsh., v.c. 82, June 26, 1911.—McT. Cowan, junr. Under var. glandulosum Van den Bosch. But we have more than one glandular coast-form.—E.S.M.

Anthyllis Vulneraria L., var. coccinea L. (1) Dry banks, Polzeath, near Padstow, E. Cornwall, v.c. 2, Aug. 1910.—H. E. Fox. (2) Lizard Downs, near Kynance, W. Cornwall, v.c. 1, May, 1911.—A. M. Geldart. Apparently right; but the colour has been lost in drying.—E.S.M.

Lotus uliginosus Schk., var. glabriusculus Bab. Lindfield, E. Sussex, v.c. 14, June 20, 1911.—R. S. Standen. Rouy, "Fl. de France," V. 146, treats this as the type, and describes it as follows:—"Plante glabre ou glabrescente; ombelles 4—8—flores; fleurs relativement grandes, d'un jaune assez pâle, verdissant peu ou pas par la dessiccation."

Mr. Standen's plant agrees admirably. The variety is dropped in recent editions of Babington's "Manual."—E.S.M.

Vicia hybrida L. Downs, near Walmer, E. Kent, v.c. 15, May 27, 1908.—L. Day. Mr. Bickham sent me the plant some years ago from this station, where it seems to be native. In France, however, it is considered to be so only in the south. Rouy has named this species V. Linnæi, on the ground that it is not a hybrid!—E.S.M.

Prunus domestica L. Undercliff, Portishead, N. Somerset, v.c. 6, April 18 and July 1, 1911. This is an undoubtedly native locality for the wild plum. It occurs in abundance, which is unusual where there are no suspicious circumstances about the position.—Ida M. Roper. The characters of this specimen do not seem to fit our normal P. domestica at all well in some respects, so far as books go, though of course one ought to see the ripe fruit. My herbarium examples of P. domestica have a smooth and more or less shining bark, very unlike the dull, pubescent twigs of this Portishead plant.—E.S.M. The plum trees at Portishead have, for many years, been under observation by Mr. David Fry and myself; and the late Rev. Augustin Lev agreed with us that they afforded as good an illustration of native P. domestica as was likely to be met with. They are trees; are not spinous; the flowers and fruit are larger than those of the bullace, and the fruit is of a different shape. Still, Mr. Marshall's criticism is quite just, and it is to be feared that satisfactory typical specimens of the various forms in this aggregate must be rare. Without doubt there exists a long series of intermediates that connect our plum, bullace and sloe as described in books. This is well shown by Rouy and Foucaud in their "Flore de France," where sixty or seventy named segregates in this group are mentioned!-J.W.W.

Spiræa Ulmaria L., var. denudata Boenn. Moor, Walton by Clevedon. N. Somerset, v.c. 6, July 25, 1911.—Ida M. Roper. Correct.—E.S.M.

Rubus. "Mixed pieces" are unfortunately still so frequent in gatherings of this genus, and in some cases

are with so much difficulty avoided even by careful collectors, that it seems necessary for me to point out that only single "voucher" specimens have been submitted to me with a view to the following notes.—W. Moyle Rogers.

R. dumnoniensis Bab. Roadside near Sloop Inn, Lindfield, E. Sussex, v.c. 14, Sept. 9, 1911.—R. S. Standen. Specimen too late gathered and unrepresentative for satisfactory determination. The stem-piece may have come from a somewhat shade-grown bush of R. dumnoniensis, but the panicle (very weak) rather recalls R. rhamnifolius.—W.M.R.

R. Godroni Lecoq & Lamotte, var. [robustus (P. J. Muell)] Roadside near Sloop Inn, Lindfield, E. Sussex, v.c. 14, Sept. 9, 1911.—R. S. Standen. Not R. robustus, as I understand it. Apparently a rusticanus hybrid.—W.M.R.

R. rusticanus Merc. [× pyramidalis]. Ivory Hill, Winterbourne, W. Glos., v.c. 34, Aug. 19, 1911.—Ida. M. Roper. I agree in believing that this is of hybrid origin, and that it has R. rusticanus in it; but I see nothing to recall R. pyramidalis Kalt. Best as a form under my R. lasioclados, var. angustifolius, and due to a crossing between R. leucostachys and rusticanus.—W.M.R.

R. hypoleucus Lefv. & Muell. Staverton, S. Devon, v.c. 3, July 12, 1911.—W. Moyle Rogers.

R. pyramidalis Kalt. (1) Dart Meet, S. Devon, v.c. 3, Aug. 17, 1911; (2) Lower Dunstone, Widecombe-on-Moor, S. Devon, Aug. 24, 1911.—W. Moyle Rogers. (3) Near Widecombe, Aug., 1911.—Coll. Mary A. Rogers. Comm. W. Moyle Rogers.

R. leucostachys Sm., subsp. leucanthemus P. J. Muell.? Hengistbury (near the Barn), S. Hants., v.c. 11, July 30, 1906.—Coll. H. Fisher. Comm. W. Moyle Rogers. These specimens exactly represent the British bramble described in my "Hbk. Brit. Rub.," pp. 12, 51, and entered in Lond. Cat., ed. X., as No. "487, c. leucanthemus P. J. Muell.?," where the "?" implies that, though I have seen no continental specimens of Mueller's plant, Genevier's

description of it ("Ess. Mon.," No. 106) suits our plant so nearly as to justify our provisional adoption of the name. It keeps quite distinct from its allies *R. hypoleucus* and *R. leucostachys*, and is now known in twelve English vice-counties. Locally abundant near Bournemouth, Hants. and Dorset.—W.M.R.

R. mucronatus Blox., var. nudicaulis Rogers. Middle Chine, Bournemouth, S. Hants., v.c. 11, June 29, 1911.—W. Moyle Rogers.

R. oigocladus Muell. & Lefv., var. Bloxamianus (Colem.). Groby Pool, Leicestersh., v.c. 55, July 9, 1910. —W. Bell. Yes.—W.M.R.

R. [Babingtonii Bell Salt.]. (1) In a coppice at Pond Lye, Cuckfield, E. Sussex, v.c. 14, Sept. 2, 1911. (2) Lindfield, E. Sussex, v.c. 14, Sept. 13, 1911.—R. S. Standen. Apparently mixed pieces. Not R. Babingtonii Bell Salt.—W.M.R.

R. plinthostylus Genev. Perranarworthal, W. Cornwall, v.c. 1, July 15, 1911. A common and well-marked species throughout mid-Cornwall.—F. H. Davey. Yes, I think one of the very weakly developed forms of the species that occur with more typical ones in W. Cornwall. —W.M.R.

R. [hirtus Waldst. & Kit., var. rubiginosus P. J. Muell.]. Rocky Wood, St. Mary's Glen, Coniston, N. Lancashire, v.c. 69, Sept., 1911.—J. Comber. A somewhat shade-grown state of my R. dasyphyllus, though collected too late in the year for fully characteristic panicles.—W.M.R.

Potentilla ——. Perranarworthal, W. Cornwall, v.c. 1, Sept. 30, 1911. Many plants were in full flower the last week in December.—F. H. Davey. This appears to me to be a small form of P. reptans. All the flowers and most of the leaves on this specimen are 5-merous, so that I cannot see any trace of P. sylvestris in it.—C.B. I have never studied these Potentilla forms, but I should have thought Mr. Bucknall's description well fitted the specimen I have.—C.E.S. I see no clear evidence of anything but P. procumbens, except that no fruit appears

to be well-formed. Have we all the same plant?—E.F.L. I have a specimen similar to this from Evington, Leicestersh., which the late Mr. Beeby thought might be *P. reptans*, var. *microphylla* Tratt. Apparently a dry-ground state only.—A.B.J. I should name this *P. mixta* Nolte.—A.B. My specimen has excellent foliage, but only one flower; I think that it is *P. procumbens* Sibth., which roots more or less freely in late autumn, rather than the hybrid with *P. reptans* L. (*P. mixta* Nolte.). It should be collected earlier.—E.S.M.

P. Anserina L., var. concolor Wallr. Abercorn, Linlithgowsh., v.c. 84, May 27, 1911.—McTaggart Cowan, junr. Yes. Leaves more or less silky on both sides. The form with leaves greener and more glabrous on the upper side is the discolor of Wallr.—C.E.S.

Rosa Margerisoni Wolley-Dod (= R. pimpinellifolia L. × tomentosa Sm.). Cult. in Perth (from plant sent from Knipe Wood, Kettlewell, N.-W. Yorks., by Mr. Margerison, the discoverer), Sept. 12, 1911. This rose, described and named by Major Wolley-Dod, in "List of British Roses" p. 9, I have had in cultivation for two years. In 1911 it flowered well and set numerous fruits which, however, contained not more than up to about six full grown achenes, a greater fertility than these hybrids usually show. Major Wolley-Dod joins it to the hibernica group, making it R. pimpinellifolia \times dumetorum or coriifolia. To me it appears rather to belong to the involuta group, i.e., R. pimpinellifolia × tomentosa (agg.). I found my opinion on the shape of the leaflets, the quite subulate prickles, the sepals thoroughly persistent and never disarticulating, and, I may add, the earlier ripening of the fruit. In any case it leans much more to the pimpinellifolia side than to that of the other parent, whatever that may be.—W. Barclay. Correct, of course, for the plant intended, but I expressly described it as a form, not as a pseudo-species. Moreover I credited it with a dumetorum (or coriifolia), not a tomentosa parentage.—A. H. W.-D. (See also Rept. B.E.C., 1911, p. 90).

 $R.\ hibernica$ Sm., new form. (= $R.\ pimpinellifolia$ L. $\times coriifolia$ Fr., var. Watsoni (Baker). Port Seton,

Haddingtonsh., v.c. 82, Sept. 14, 1911. This rose, the discovery of which at Port Seton was noted in the "Journal of Botany," 1910, p. 332, is undoubtedly a form of the hibernica group, differing from all others—at least of the hairy leaved forms—hitherto recorded, in the composite glandular toothing of the leaflets. This might arise from either parent. But as no such form of pimpinellifolia has yet been found in Scotland we may conclude that the origin of this character must be found in the second parent. This might be (1) a form of R. tomentella (Lém.), (2) of R. dumetorum Thuill., or (3) of R. coriifolia Fr. The first has not been found in Scotland, and may be dismissed. Forms of R. dumetorum with composite serration are so rare—I have only met with one plant in Scotland—that it is hardly possible that this can be the second parent. On the other hand forms of R. coriifolia Fr. with composite glandular serration, of the group Watsoni (Baker) and cæsia (Sm.) are abundant all over the country, and therefore I conclude that this rose is R. pimpinellifolia \times R. coriifolia Fr., of the group Watsoni (Baker), or cæsia Sm., the latter if we consider the hispid peduncles as owing also to the second parent. This is highly probable, as it is certain that the form with smooth peduncles, i.e., R. pimpinellifolia L. is the prevalent form at Port Seton, although in such a multitude of bushes as exists there I should not like to affirm that R. spinosissima L., i.e., with hispid peduncles, does not occur at all. I may say that the sepals become erect and persist long, though they are not fully persistent, which strengthens the opinion that the second parent is a form of R. coriifolia Fr.—W. Barclay. A hybrid with some tomentosa form is quite a possibility, but I think Mr. Barclay has diagnosed his plant correctly, especially as he has had the advantage of seeing the growing bushes, with their associates.—A.H.W.-D.

R. [glauca Vill., var. ?]. (No. 6). In hedge, Saintfield, County Down, Aug. 3, 1911.—C. H. Waddell. Surely this is one of the *Villosae*; pedicels and base of fruit hispid, and leaves very hairy beneath.—E.S.M. Nothing to do with *R. glauca*, but, in my opinion, identical with Mr. Waddell's No. 8, viz., *R. omissa*, var. *submollis* Ley.—A.H.W.-D. This also is *R. tomentosa* Sm., of group *omissa* Déségl.—W.B.

- R. [omissa Déségl.]. (No. 161). Scraptoft, Leics., v.c. 55, Aug. 9, 1910. This is near to, and probably identical with, a form I have labelled R. omissa.—W. Bell. I do not think this belongs to the omissa group, but to that which is intermediate between it and the scabriuscula, sylvestris group, and which I should call group tomentosa proper.—W.B. Certainly not R. omissa, but an obscure form of the sub-group Tomentosae; best under R. pseudocuspidata Crép.—A.H.W.-D.
- R. —. (No. 160). Fox Covert, near Scraptoft, Leics., v.c. 55, Aug. 9, 1910. This rose was growing in the hedgerow and spreading its branches into No. 161, which I take to belong to the *omissa* group. The leaves, however, in 160, are not so "downy," and the stalked glands are absent from the peduncle.—W. Bell. This is R. tomentella Lém.—A.H.W.-D., E.S.M. and W.B.
- R. ——. (No. 168). Several large bushes by the brook, Thurnby Court, Leics., v.c. 55, Aug., 1910.—W. Bell. R. canina L., variation of the group Transitoriae.—W.B. R. insignis Déségl. & Rip., but not very typical.—A.H.W.-D.
- R. canina L., var. sphærica (Gren.). Sandy banks, Ballyholme Bay, Co. Down, Aug., 1911.—C. H. Waddell. Fruit not truly globose; it can hardly be sphærica, I think.—E.S.M. This belongs to group lutetiana Lém. The fruit is not spherical, so that it can hardly be var. sphærica.—W.B. Probably R. sphærica Gren., though, from my specimen, the habit appears to be rather the compact one of R. globularis Franch. But the flowering shoot has no lower leaves, so I cannot judge of the biserration.—A.H.W.-D.
- R. glauca Vill., var. subcristata (Baker). Wooded banks of Coniston Lake, N. Lancs., v.c. 69, Aug., 1911.—
 J. Comber. This looks right (R. Reuteri Godet).—E.S.M. R. subcristata (Baker), apparently shade-grown.—A.H.W.-D. This is correct. Care should be taken to gather specimens from the same bush, or at least if this is not done, to say so, and keep those from each bush separate. In this bundle one specimen was R. dumetorum Thuill., another—though perhaps a form of R. glauca—was not quite the same as the rest.—W.B.

R. stylosa Desv., var. leucochroa (Desv.). Hedge. Sea Mills, Bristol, W. Glos., v.c. 34, June 20 and Sept. 25, petals are pure white.—Ida M. Roper. Resembles the S. Devon plant called R. leucochroa Desv.; but I have only observed the living plant when in flower. —E.S.M. Correct for the true plant of Desvaux, i.e., R. systyla with white flowers. Not the R. leucochroa of British botanists.—A.H.W.-D. Not R. leucochroa Desv. as described in "Fl. Plym.," pp. 141-2 (cf. "Bot. Exch. Cl. Rept." 1888, pp. 216-7); but, I believe, R. pseudorusticana Crép. Both are locally frequent in S.W. England (leucochroa, Cornwall to Hants.; pseudo-rusticana Devon to Wilts.); pseudo-rusticana being the more thinly distributed. It is described in B.E.C. Rept. 1889, pp. 23. 24; and though the specimen sent is not a strikingly characteristic example of it, I see no reason for doubting the correctness of the name. I have never met with a bush that seemed to me intermediate between it and The right place for the latter seems to be between R. obtusifolia Desv. and R. systyla Bast., while pseudo-rusticana comes in best between R. systyla and R. arvensis Huds. This is the first Gloucestershire specimen of pseudo-rusticana that I remember to have seen; but leucochroa is recorded for v.c. 33 (E. Glos.) in Jl. Bot. 1911, p. 252.—W.M.R. Mr. Moyle Rogers knows this group so well that his opinion as to its relationship to var. pseudo-rusticana is probably correct.--W.B.

Cratægus monogyna Jacq., var. glabrata Sonder. (fide A. Bennett). Dalmeny, Linlithgowsh., v.c. 84, May 27, 1911.—McT. Cowan, junr.

Saxifraga Geum L. (Ref. No. 3639). Near Cloghane, S. Kerry, June 16, 1911. These specimens have foliage less sharply toothed than in the usual Irish form (var. serrata Syme), thus approaching the type; though I have seen Kerry plants with much more obtuse serration, and hardly separable from the prevailing Pyrenean form which is cultivated in our gardens.—E. S. Marshall. Between S. Geum and var. dentata; such forms are not unfrequent in Co. Kerry.—E.F.L.

S. umbrosa L., var. serratifolia D.Don. (Ref. No. 3648). Connor Hill, S. Kerry, June 19, 1911. A few

characteristic examples of this well-marked variety (or perhaps, rather, subspecies). It does not change appreciably when cultivated.—Edward S. Marshall. Very good var. serratifolia.—E.F.L.

S. decipiens Ehrh. (Ref. No. 3670). Cultivated at West Monkton, May 15 and June 6, 1911. Originally from near Snowdon (probably Twll Du), v.c. 49, Carnarvon; roots were sent me by Mr. S. H. Bickham (who had it from a guide named Williams) as S. cæspitosa L., which it clearly is not, at least in a segregate sense. It is believed to be extinct there, as I understand; so that cultivated specimens may be useful. Quite distinct from any other British saxifrage; Mr. Lloyd Praeger's plant from Clare Island, W. Mayo, appears to be identical. This is evidently the S. palmata of Smith, figured in "English Botany" with the leaves too pointed. If S. rosacea Moench is correctly identified with Ehrhart's species, it claims priority; for the present I prefer the better known name used by Smith, Syme, Engler, and botanists in general.—Edward S. Marshall.

Bupleurum fruticosum L. Established on Malvern Hills, near Wynd's Point, Worcs., v.c. 37, Aug. 23, 1911.—S. H. Bickham. Correct.—S.T.D. A Mediterranean (western) species, which grows to a height of about fifteen feet against the west wall of my house.—E.S.M.

Oenanthe pimpinelloides L. (1) Edmondsham, Dorset, v.c. 9, Aug. 7, 1911. This species, of which fruiting specimens are sent, is rather frequent in S.E. Dorset, especially along the line where the secondary and tertiary rocks are blended, and on the greensand near Swanage.—E. F. Linton. (2) Hedge, Upwey, Dorset, v.c. 9, June 4, 1911.—Ida M. Roper. Yes, showing well the characteristic root-leaves which fade away later.—C.E.S.

Galium verum L., var. maritimum DC. On blown sand, Walney Island, N. Lancs., v.c. 69, Aug., 1911.—J. Comber. Rightly named.—E.S.M. Evidently var. littorale Bréb., which Mr. J. W. White ("Fl. Bristol," p. 356) states is identical with maritimum DC.—C.E.S.

Aster salignus Willd. Par, E. Cornwall, v.c. 2, Oct. 2, 1911. I sent specimens to Dr. Graebner asking him to

compare them with Willdenow's in Berlin. He replied, "The Aster you sent me is quite the same plant as the specimens in Willdenow's Herbarium, only one specimen has slightly broader leaves."—F. H. Davey.

A. Linosyris Bernh. Limestone cliffs, Berry Head, S. Devon, v.c. 3, Sept. 13, 1911.—W. C. Barton.

Gnaphalium [norvegicum Gunn.]. Haughton, Alford, N. Aberdeensh., v.c. 93, Aug. 23, 1910.—Coll. Mrs. Wedgwood. Comm. R. S. Standen. This is a dark-flowered form of G. sylvaticum L., not uncommon in the north of Scotland. True G. norvegicum is, with us, a decidedly alpine species, readily distinguishable by its much broader leaves and short, still darker flower-spikes.—E.S.M.

Inula britannica L. Cropston Reservoir, near Leicester, v.c. 55, Aug. 20, 1911.—Coll. G. Mercer. Comm. S. H. Bickham.

Santolina Chamae-Cyparissus L. Sand hills, Rock, E. Cornwall, v.c. 2, Aug., 1911.—H. Boyden. This is naturalized in one or two places in Cornwall.—F. H. Davey.

Matricaria ——? Poole Harbour, Dorset, v.c. 9, Aug. 1911.—H. E. Fox. This looks like a very small-headed form, or state, of M. inodora L., var. salina Bab.—E.S.M. M. inodora, var. salina; not uncommon on the shore of Poole Harbour.—E.F.L.

Artemisia vulgaris L., var. coarctata Forselles. Newbold-on-Stour, Worcs., v.c. 37, Aug. 25, 1906.—C. H. Waddell. Correct; the prevailing form in Britain.—E.S.M.

Cnicus arvensis Hoffm., var. mitis Koch. Waste ground, High Steep, Jarvis Brook, E. Sussex, v.c. 14, Sept. 1911.—J. Comber. Koch [Synopsis (1844), p. 457] says, " β . mite fol. caulinis sinuatis, rameis integris vel dentatis mitius spinosis." Mr. Comber's plant is perhaps best placed under this, as it is away from type by its leaves not being pinnatifid and its branch-leaves being more or less entire.—C.E.S. Yes; but Koch's name is Cirsium arvense Scop., β . mite.—E.S.M. I think Cirsium

arvense, var. mite Koch, but being an intermediate form between type and var. setosum, it is not a well defined variety.—E.F.L.

Hieracium —. Allt Coire Luidhearnaidh (2500 feet), near Dalnaspidal, Mid Perth, v.c. 88. (Ref. No. 3616); also from a stream below Coire Chomlain, Ben Alder (Ref. Nos. 3613, 3614), and from the Allt an Lochain Dhuibh, between four and fives miles north of Cluny Castle (No. 3617), E. Inverness, v.c. 96, July, 1911.

All these appear to be the same species, for which I have no name, so far; but it seems to fit in best with the section Alpina Nigrescentia, and is evidently not uncommon in the Badenoch district, growing by mountain streams between 1800 and 2500 feet. The leaves are flaccid, hairy on both sides, light green in shade, often purplish in exposed situations; primordial root-leaves cuneate-based, oval, with 2-4 coarse forward-pointing teeth on each side, the rest lanceolate to ovate-lanceolate, cuneate-based, long-petioled, with 3-4 sharp, forwardpointing teeth, entire or nearly so in their upper third, acute; stemleaf one (rarely absent), placed near or (more commonly) below the middle of the stem, linear-lanceolate or lanceolate, attenuate-acute, with about 3 sharp, slender, forward-pointing teeth on each side, gradually narrowed into a more or less winged petiole, often a bract-like leaf occurs above. Stem shaggy below with white hairs, as are the petioles and leaf-margins. Peduncles floccose, with a good many stalked glands and a few spreading white hairs. Heads 1 to 3 (rarely 4 in large specimens), cuneate below; phyllaries linear, somewhat senescent, with many black-based hairs and glands, slightly floccose Ligules medium-vellow: Styles livid. glabrous.—Édward S. Marshall. There is a look of Nigrescentia about the foliage of these plants, but not in the heads, which are like some of the Silvatica. may be one of the connecting links between these two groups. I have no name for it.—E.F.L.

H. sordidum W. R. Linton MS. in herb. (Journ. Bot. 1911, p. 353), collected by the late W. R. Linton on Craig Michen Scaur, near Moffat, Dumfriessh., v.c. 72, July 25, 1907, in company with the Rev. E. S. Marshall, who contributed several sheets of this same Hieracium

to the Club unnamed (see Rept. 1907-8, p. 148). It had been known to my brother and myself (as our No. 37) for some years previously, but never found in sufficient quantity for distribution. It is allied to H. lasiophyllum Koch, but distinguished from that species by its livid styles, broader leaves, etc,—E. F. Linton. I was with Mr. Linton when he collected this; it is satisfactory to have authentic specimens, but these are poorly dried, and hardly do justice to such a fine plant.—E.S.M.

H. —. (Ref. Nos. 3602, 3603, 3605 to 3608. From several stations near Dalwhinnie, E. Inverness, v.c. 96, July, 1911; also gathered on rocks facing the west side of the Sow of Atholl, Mid Perth, v.c. 88. Ranges from 2000 to 2300 feet or more. This well-marked plant seems to be identical with a hawkweed (my Nos. 3284 and 3285) found by Mr. W. A. Shoolbred and myself only on the limestone near Inchnadamph, W. Sutherland, in 1908, whereas in these Invernessshire localities the soil is non-calcareous. The Rev. E. F. Linton suggested comparison with H. sanguineum Ley, and there are several points of resemblance, but also plenty of differences; and I believe it to be distinct from all our accepted British species.

Plant 6 to 16 inches high. Primordial root-leaves round to oval, entire or somewhat toothed at the base: the rest varying in shape from oval to oval-oblong or oblong-lanceolate, their tips rounded or acute, usually apiculate; truncate or rounded at the base; sometimes entire or very obscurely toothed, but frequently with many scalloped or repand teeth in their lower half; all grass-green (often purplish in exposure), fringed with rather long white hairs, glabrous above, more or less hairy below (chiefly on the midrib); stem-leaves subsessile, sometimes none in small plants, otherwise 1 to 2 (often one near the base, with a second minute, bract-like one subtending the inflorescence), variable in size, shape, and outline, but generally like a smaller edition of the rootleaves. Petioles a third to half the length of the blade, shaggy with white hairs, as is the base of the stem. Inflorescence often branching rather more than half-way up the stem in luxuriant specimens; peduncles nearly straight, rarely arcuate, the terminal often exceeded by

the second; densely floccose, with a good many stalked glands, and usually some scattered patent white hairs; the lower often very erect, and up to 3 inches in length. Heads 1 to 6, broadly campanulate; outer phyllaries short, blunt, linear to oblong; inner long, linear, tapering gradually from a narrow base to the acute, distinctly senescent tip, porrect in bud; all very floccose, with numerous stalked glands of unequal length, and a good many long, spreading, white hairs. Styles dark. Ligules rather light or medium yellow; their tips very deeply cut, with narrow teeth, which are strongly ciliate. Achenes black.

As will be seen from the above description, it is somewhat variable; but it can be readily distinguished, when growing.—Edward S. Marshall. I still think this species will have to be placed near *H. sanguineum* Ley; we have no nearer ally.—E.F.L.

- H. maculatum Sm. Lindfield, E. Sussex, v.c. 14, June 13, 1911.—R. S. Standen. This is identical with the plant (originally from Boswell-Syme's garden), issued under the same name as No. 68 of the Lintons' Set, and is the Chichester, Bath, etc. form, so called. It is much less glandular-headed than the mountain-limestone H. maculatum from Ingleton, W. Yorks. (No. 182 of the Set), and I doubt their being really one species. The N. Wilts. and N. Somerset plant from the Bath Oolite has the ligules distinctly pilose-tipped.—E.S.M. It is not unlikely the more glandular form may deserve to be distinguished, but the Rev. W. R. Linton left them together (see Brit. Hier., p. 67).—E.F.L.
- H. [tridentatum Fr.]. Roadside, near Wych Cross, E. Sussex, v.c. 14, Aug. 15, 1911.—R. S. Standen. This is certainly not a tridentatum, nor yet a rigidum form, but belongs to H. boreale Fr. I should name it var. Hervieri Arv.-Touv.—E.S.M. A narrow-leaved var. of H. boreale Fr., probably var. Hervieri Arv.-Touv.—E.F.L.
- H. [umbellatum L.,? var.]. Park Lane, Lindfield, E. Sussex, v.c. 14, Aug. 1911.—R. S. Standen. H. boreale Fr., var. Hervieri Arv.-Touv.; not any form of H. umbellatum.—E.S.M. This is more exactly H. boreale, var. Hervieri than the preceding.—E.F.L.

Hypochæris maculata L. Rocky downs, Kynance, W. Cornwall, v.c. 1, July, 1889.—Coll. J. W. Rimington. Comm. S. H. Bickham.

Taraxacum officinale Weber, var. affine (Jord.). Perranporth Sandhills, W. Cornwall, v.c. 1, May 6, 1911. Fide A. Bennett.-F. H. Davey. I do not know this plant, which Jordan published as a species. My two specimens each bear one flower-head, without fruit; they have been subjected to excessive pressure, so that the characters cannot be properly made out. The general appearance is that of T. officinale, dwarfed by an uncongenial habitat.—E.S.M. Jordan's affine is described as having the outer involucral scales "lancéolé-linéaires làches étalées à pointe redressée, quelques-unes réfléchies," which will not fit Mr. Davey's plant. It looks to me rather like T. palustre DC., but that is usually a plant of marshes, not sandhills. It looks quite interesting and well worth working out, but my examples are rather too scanty and more flattened out than is desirable.—C.E.S.

T. erythrospermum Andrz., var. laevigatum (DC.) Downs near Swanage, Dorset, v.c. 9, Aug. 1911.—H. E. Fox. This is the plant we always called "var. erythrospermum Andrz.", and which I understand Handel-Mazzetti considers synonymous with T. laevigatum DC. So the plant can hardly be labelled as Mr. Fox suggests.—C.E.S.

Erica cinerea L., forma. Carnon Croft, near Truro, W. Cornwall, v.c. 1, Sept. 2, 1911. A striking form with long and densely flowered racemes. It was seen in situ by members of the International Phytogeographical Excursion, all of whom considered it deserving a name. I have seen it in other parts of the county, but nowhere so fine as at Carnon Croft, where it has the company of E. ciliaris and E. ciliaris \times Tetralix.—F. H. Davey. A beautiful form with crowded whorls and much exserted styles, but I think only a form.—E.F.L. A very beautiful form, which, if it keeps constant, should deserve a distinguishing name.—C.E.S. This striking form is characteristic of the mild, moist districts of south-western England and western Ireland. It is abundant, for example, in Connemara. In the drier eastern England the form of E. cinerea is very insignificant compared with

this; but I do not doubt that every possible intermediate could be found connecting the extremes.—C.E.M.

Limonium vulgare Mill., [? var. pyramidale Druce]. Poole Harbour, Dorset, v.c. 9, Aug. 1911.—H. E. Fox. One specimen only sent; presumably for naming. The f. pyramidale does grow at Poole Harbour, but this example would not fall under that.—C.E.S.

Lysimachia [vulgaris L., var. angustifolia Wats.]. Boggy meadow, Windermere, Lancs., v.c. 69, Aug. 1911. Mr. Bennett says: "I can make nothing of your Lysimachia but L. vulgaris L., var. angustifolia Wats. It is not quadrifolia, or ciliata, or punctata, or stricta; all of which are alien species found in various parts. It does look very different to the usual vulgaris, but Mr. Watson sent me specimens of the variety, and I believe that is what it is."—F. Long. [Mr. Bennett was afterwards of opinion that it was probably not Watson's plant]. Not L. vulgaris at all. This is the plant recorded in the B.E.C. Rept., Vol. I., p. 186 (1887), by Mrs. Lomax as named by Mr. Baker L. stricta Ait.; issued a year before by Mr. G. E. Martindale under the same name, collected in Aug. 1886, from "the Lancashire shore of Windermere Lake;" and sent to this Club by Mr. C. Waterfall, unnamed, from "Edge of Bay, behind Ferry Hotel, Lake Windermere, Lancs., Aug. 1895" (Wats. B.E.C. Rept., 1895-6, p. 11). Mr. S. T. Dunn gives L. stricta Soland. in his "Alien Flora." stricta is mentioned in Baker's "Fl. Lake District" (1885). Whether the name attributed to Mr. Baker is correct I cannot say, as L. stricta is only represented in my herbarium by four gatherings of this plant; but the small flowers, short blunt (or mucronate) sepals and petals only slightly glandular near the base, and streaked with dark brown (orange when fresh) quite separate this from any near relation to L. vulgaris.—E.F.L. This has nothing to do with L. vulgaris L., but is an alien, L. stricta Ait., a North American species. Specimens from this locality were distributed through the Watson Club in 1895 (see Rept., 1895-6, p. 11) by Mr. C. Waterfall, unnamed. Mr. S. T. Dunn afterwards saw the plant, named it stricta, and included it in his "Alien Flora" (1906), p. 130, as occurring on the shores of Windermere.—C.E.S.

Centaurium umbellatum Gilib., var. capitatum Druce. Near North Berwick, Haddingtonsh., v.c. 82, July 22, 1911.—McT. Cowan, junr. Correct.—C.E.S. Yes; the Erythræa Centaurium Pers., β. capitata Koch, "Synopsis," ed. II., 566:—"corymbo etiam post anthesin compacto, nec elongato." I have seen this strong form of the variety occasionally; it cannot be due to browzing by sheep, etc., as it occurs in untouched plants.—E.S.M.

Symphytum [asperrimum Bieb.]. Near Blackford Hill, Edinburgh, v.c. 83, June 22, 1911.—McT. Cowan, junr. I have seen several specimens of this, and, although in some respects it approaches S. asperum Lepech (= S. asperrimum M.B.) I can only refer it to S. peregrinum Ledeb. It differs from S asperum in the larger calyx with acute segments, the style bent below the stigma, and the upper leaves slightly decurrent, not sub-petiolate.—C.B.

Lithospermum purpureo-cæruleum L. Border of wood, Weston-in-Gordano, N. Somerset, v.c. 6, May 19, 1911.—Ida M. Roper.

Cuscuta Trifolii Bab. Luton, Beds., v.c. 30, Aug. 29, 1911.—D. M. Higgins. Right.—E.S.M.

Verbascum pulverulentum Vill. Chalk pit, Eaton, near Norwich, E. Norfolk, v.c. 27, July, 1911.—F. Long.

Linaria supina Desf. Par Sands, E. Cornwall, v.c. 2, Oct. 2, 1911. This plant abounds all over the neighbourhood, and is truly native, but the finest specimens occur along the sandy foreshore.—F. H. Davey.

Scrophularia vernalis L. Falmouth, W. Cornwall, v.c. 1, April 16, 1911. The only known Cornish locality for this plant.—F. H. Davey.

Veronica arvensis L., [var. nana Poir.]. Blackford Hill, Edinburgh, v.c. 83, May 29, 1911.—McT. Cowan, jun. I have not seen Poiret's description; but this is not var. eximia Towns., though like it in habit, as the sepals decidedly exceed the capsule.—E.S.M.

Euphrasia —. Nether Hall, Scraptoft, Leics., v.c. 55, June 25, 1910. This Euphrasia was growing in the same district as one named E. "stricta" by the late Mr.

F. Townsend, but it does not quite agree with that plant in that it is more robust in habit. I send a few sheets for determination.—W. Bell. A form of E. nemorosa, with fewer branches than usual.—C.B. E. curta Wettst., var. glabrescens Wettst.—E.S.M.

E. nemorosa H. Mart., forma. Bagworth, Leics., v.c. 55, Aug. 1911. This form was plentiful on the railway bank near Bagworth Station. The hairs do not agree with those of typical nemorosa, but it does not appear to be referable to any other.—W. Bell. This is typical E. nemorosa.—C.B. No; this is E. curta, var. glabrescens Wettst. E. nemorosa is glabrous according to Wettstein.—E.S.M.

Odontites rubra Gilib., probably var. rotundata Ball. Field near the Spey, Nelty Bridge, E. Inverness, v.c. 96, Sept. 1909.—Coll. E. Armitage. Comm. S. H. Bickham. I have no description or specimen of Ball's variety for reference; but the leaves are mostly rounded at the base, not narrowed, as in B. serotina Dumort. Is not Hudson an earlier authority than Gilibert for the specific name?—E.S.M. Dr. F. N. Williams, in his "Prodromus," gives "rotundata Ball" as a synonym of "serotina Dum." The specimen looks interesting, but better material is necessary for critical forms; there seems hardly a true leaf left! Ball, apparently, described his plant in "Ann. & Mag. Nat. Hist." 1849, p. 30. I hope Miss Armitage will collect this again.—C.E.S.

Rhinanthus stenophyllus Schur. (Ref. No. 3556). Plentiful in grassy ground near the Calder River, E. Inverness, v.c. 96, July 22, 1911.—Edward S. Marshall.

Orobanche amethystea Thuill. (Ref. No. 325). On Eryngium maritimum, St. Helen's Spit, I. of Wight, v.c. 10, July 2, 1911.—Coll. Miss Coles. Comm. S. H. Bickham.

Utricularia ochroleuca Hartm. Growing in 6-10 feet of water, Coniston Lake, N. Lancs., v.c. 69, Aug. 1911.—J. Comber. I suppose correct.—A.B. Apparently correct. Agreeing with Hartman's description in the points by which he separates it from *U. intermedia*. Very nice specimens as far as the vegetative organs go, but one

would like flowers before being certain.—A.J.W. Yes; this agrees admirably with my series (gathered for *U. intermedia*), so named by Prof. Hugo Glück.—E.S.M.

Mentha rotundifolia Huds. Hicks Mill, Gwennap, W. Cornwall, v.c. 1, Aug. 23, 1911.—F. H. Davey. Very remarkable for its slender, unbranched habit, and small, neat, oblong foliage. I have seen nothing quite like this before; it may deserve a special name, as a variety or form.—E.S.M. A small rather elongated leaved form.—A.B.

M. rotundifolia Huds., var. Bauhini Ten. Orig. Norfolk. Cult. Edmondsham, Dorset, Sept. 16, 1911.— E. F. Linton. This has the most extraordinary calyx of any British mint I know. Dr. Williams (Prod. Fl. Brit., pt. 7, p. 374) says that M. Bauhini Ten. "exists solely in the imagination of its transcribers," but quotes M. Bauhini Strail. The latter authority, however, says nothing in his account of the Belgian Mints (1887) of the calyx form, but simply remarks "calice velu." Whatever the plant is the calyx is very odd.—A.B.

M. rotundifolia × spicata. Hicks Mill, Gwennap, W. Cornwall, v.c. 1, Aug. 24, 1911. Not quite the plant figured and described in "English Botany" as M. crispa L.—F. H. Davey. Yes; what we used to call "M. viridis, var. crispa."—C.E.S. Clearly correct, I should say; an excellent intermediate.—E.S.M. I agree.—E.F.L. This certainly seems correct.—A.B.

M. (rotundifolia × spicata) × rotundifolia. Hicks Mill, Gwennap, W. Cornwall, v.c. 1, Aug. 30, 1911. This grows within a few yards of the two suggested parents. It looks more like rotundifolia than rotundifolia × spicata, but differs from the first named by its large, compound panicle, reddish stem, and sharply serrate, instead of crenate, leaves.—F. H. Davey. Yes; I have practically no doubt that this is right.—E.S.M. I should have called this M. rotundifolia. In what way is spicata evident? I presume in shape of leaves only, but there are named forms of rotundifolia with leaves elliptical or ovate-elliptical, far narrower than in type, and quite as sharply toothed as this.—C.E.S. I cannot distinguish this (imperfect) specimen from M. rotundifolia. The short

rugose leaves, woolly beneath, and slender subsimple spikes of my specimen show no sign of any other species.— E.F.L. Double hybrids are very difficult to distinguish unless studied in situ. Doubtless there is in this the peculiar pungent smell of spicata, and the spikes are more suggestive of that species, whilst the leaves suggest rotundifolia.—A.B.

M. spicata L. (1) Hicks Mill, Gwennap, W. Cornwall, v.c. 1, Aug. 2, 1911. Whole plant more robust, leaves broader, whorls of flowers more contiguous than I am accustomed to.-F. H. Davey. Another puzzle! glabrous corolla is right for *spicata*, but the leaves, stem, etc. are much too hairy, and the shape of the leaves suggests sylvestris. Can it be spicata × sylvestris?— Is not this M. longifolia \times spicata?—E.F.L. This is far too hairy for M. spicata, pure and simple; apparently it is M. longifolia \times spicata.—E.S.M. I think correct, but the leaves are less subsessile than usual. might possibly be M. longifolia × spicata, but I doubt it. -A.B. (2) Cult. Edmondsham, Dorset, Sept. 17, 1911. Sent me by some one, and no note preserved. It seems to have rather short and wrinkled leaves for the species. -E. F. Linton. The upper leaves are very rugose on both surfaces; this and other characters lead me to regard it as a glabrate M. rotundifolia \times spicata. -E.S.M. I should rather agree with Mr. Marshall, but cultivated specimens are deceptive sometimes. It is not, I think, normal viridis.—A.B.

M. aquatica × arvensis. Perranarworthal, W. Cornwall, v.c. 1, Aug. 16, 1911.—F. H. Davey. Yes.—E.F.L. M. sativa L.; a very hairy form, with the aquatica habit.—A.B. I believe so; but on the aquatica side, and perhaps with a double dose of that species in it. The calyx-teeth are mostly linear-subulate or linear-lanceolate; not triangular-lanceolate, as in the first cross (M. sativa L.)—E.S.M. Yes, I think so; the form rivalis (i.e. on the arvensis side). My specimen must be different to those received by Messrs. Marshall and Bennett, as the habit is totally unlike that of aquatica!—C.E.S.

M. aquatica × arvensis, var. paludosa (Sole). Chyvogue, Perranarworthal, W. Cornwall, v.c. 1, Aug. 3,

1911.—F. H. Davey. I cannot quite match this. If it is the hybrid aquatica × arvensis (= sativa), it seems rather nearer "rivalis" than "paludosa," which has a terminal head of flowers.—C.E.S. Too near the usual form of M. sativa for var. paludosa Sole.—E.F.L. From my recollection of the plant of Sole, seen some years ago, this is rightly placed under it. The plant exactly agrees with specimens on which Mr. J. G. Baker reported in 1878, "good for M. paludosa Sole."—A.B.

 $M. aquatica \times arvensis$, [var. paludosa (Sole) forma]. Perranarworthal, W. Cornwall, v.c. 1, Aug. 16, 1911. Stem unbranched, perfectly erect, leaves rather more elliptical than in var. paludosa as generally accepted. F. H. Davey. M. paludosa Sole has by his description (No. 22, p. 50) the whorls of flowers fitting so close together as to resemble a spike, terminating in a round head of flowers. The plate (Pl. 22) shows the lowest whorl of flowers detached and all the whorls above contiguous. It is clear that this plant (and the other from Chyvogue) does not agree with Sole's plate or description. I call them both M. sativa L.—E.F.L. This is, I think, the old sativa L. (= aquatica \times arvensis), rather more inclining to the former than the latter, but perhaps not extreme enough to be the paludosa of Sole." _C.E.S.

M.—. Hicks Mill, Gwennap, W. Cornwall, v.c. 1, Aug. 30, 1911. To me a very difficult plant, for which I cannot suggest a name. Apparently near M. rubra, but certainly not that species, as I understand it.—F. H. Davey. The large corollas point to M. rubra, while the hair remaining on stem, leaves and calyx may evidence M. aquatica. The plant seems best explained by this combination.—E.F.L. A puzzling plant. Foliage and odour of M. aquatica, but pedicels and calyx different. Seemingly no good fruit is being produced. Possibly a hybrid of M. aquatica and ? M. rubra (or ?? spicata).—C.E.S. I agree with Mr. Salmon, but not as to spicata.—A.B. A puzzling plant; the combined characters seem strongly to suggest M. aquatica × piperita, var. vulgaris (Sole) as the right solution. I do not think that it is any form of M. aquatica × arvensis (sativa L.)—E.S.M.

M. aquatica \times longifolia. (1) Chyvogue, Perranarworthal, W. Cornwall, v.c. 1, Sept. 4, 1911. Abundant and luxuriant in a damp meadow. Foliage and inflorescence mostly tending towards longifolia, which, however, does not occur in the district. (2) Prah Sands, near Marazion, W. Cornwall, v.c. 1, Sept. 16, 1911. In foliage and inflorescence much nearer aquatica than the Perranarworthal specimens.—F. H. Davey. The following notes refer to the Chyvogue specimens. I agree.—E.F.L. This seems to me to be correctly named, and to agree with the form M. grandifolia Malvd., Rouy & Foucaud, Fl. de France, XI, p. 376.—C.B. Two sheets were sent me of this. Both, I think, are what would have been named "pubescens" in the past; the leaves show strong evidences of aquatica, but are more shortly stalked and more felted beneath; the inflorescence is more spicate. Is the hybrid aquatica \times rotundifolia known for Britain? -C.E.S. (a) There is excellent evidence of M. longifolia in the inflorescence; but the foliage is very much nearer to M. aquatica. Perhaps it may be a secondary hybrid, or mongrel, viz. M. aquatica \times (aquatica \times longifolia). (b) A second sheet, with sessile, bright green foliage, is considerably nearer to M. longifolia; and I believe that this is the simple hybrid, which, in the former case, has been crossed again with the aquatica parent.—E.S.M. M. sulvestri-aquatica Döll Rheinische Flora, p. 355 (1843). M. nepetoides Lejeune Revue Fl. Spa. p. 116 (1824), "862. M. nepetoides. N— spicis oblongis, staminibus corollae aequalibus; foliis subcordato-ovatis, acutis, inaequaliter acute serratis, hirsutis; caule piloso. Obs.menthe a de grands rapports avec le M. nemorosa Willd.; mais elle s'en distingue par son port plus élevé, par ses feuilles pétiolées, verdâtres, et par la forme de ses dents." As with most hybrids, the plants placed under M. pubescens by British botanists vary much, the Norfolk specimens being mostly much smaller in all parts, the Cornish much larger (owing to climatal influence?). The 10th ed. of the London Catalogue still keeps up the absolutely meaningless name of M. pubescens Willd.; Déséglise, Malinvaud and Strail all state that the name has no meaning, and there is not a specimen so named by Willdenow either at Berlin or in his herbarium! Ascherson & Graebner (Fl. nordostdeutschen Flachlandes, 1898-9)

drop that name and use "M. longifolia \times aguatica (M. dumetorum. M. nepetoides)." Curiously they write "Menta." Malinyaud, in his "Révision des Menthes de l'herbier de Lejeune" (Bull. Soc. Linnéenne de Normandie, Sér. III., Vol. 3, 1878-9, p. 15), mentions that there are in that herbarium seven specimens of M. nepetoides Lej., one of which served Lejeune for his principal description of the plant. Lejeune wrote on the label "Mentha nepetoides, specimen in Revue descriptum—ad M. dumetorum Compend, pertinere videtur secundum Nees junior." On this Malinvaud remarks, "Le Compendium ici mentionné est celui de Bluff et Fingerhuth (II., p. 11-12, 1825), et la description qu'on y trouve du M. dumetorum Schult. est applicable au M. nepetoides, ainsi que la remarque suivante qui la termine: 'ad M. palustrem Sole propius accedere En résumé, les M. palustris Sole, nepetoides Lej., dumetorum Schult., pubescens et hirta Willd. sont, sous divers noms, des formes hybrides de M. silvestris et aquatica." (See also B.E.C. Rept., 1887, p. 187; 1889, p. 279; and Watson B.E.C. Rept., 1892–93, p. 13.—A.B.

M. [gracilis Sm., var. cardiaca Baker]. Garden, Castleacre, Norfolk, Sept. 1911.—F. Long. This is, I think, quite good M. rubra Sm., but my specimen has the leaves considerably shrivelled in the pressing. It has no resemblance to either gracilis or cardiaca.—C.E.S. I do not know Baker's cardiaca; but Dr. Long's specimen seems to be the plant figured in "English Botany," ed. III., and is an almost entirely glabrous M. arvensis \times spicata. The only specimen I have under this name, from Shotover, Oxon., 1889 (G. C. Druce), is very different; the leaves are sparsely hairy on both sides, and the calvees are very pubescent. This I regard as a better intermediate; the present plant looks more like a compound of M. spicata with M. arvensis \times spicata. The influence of M. arvensis is pretty clear, in both cases.—E.S.M. We have studied the effect of cultivation on plants so little as yet that one hardly dares to suggest a name. But I should say not M. cardiaca, which is a much more slender plant. Where the characters of M. arvensis are I am quite unable to see.—A.B.

M. Hackenbruchii Briq. Cultivated in the garden of Haymesgarth, Cleeve Hill, near Cheltenham, Glos.,

Aug. 14, 1911. This was named for me by M. Briquet, of Geneva, in 1897. I have met with it, growing very freely, in the grounds of Dixton Manor, near Winchcombe; no doubt of garden origin.—Charles Bailey. This looks like a sativa form; perhaps M. aquatica, var. subglabra Baker × arvensis.—E.S.M.

M. arvensis L., [var. agrestis (Sole)]. Scraptoft, Leics., v.c. 55, Aug. 9, 1910. This form was very plentiful, especially in the lower and damper parts.—W. Bell. Leaves scarcely rugose and hairy enough to be good agrestis, but perhaps better left under that.—C.E.S. This is perhaps nearer the type M. arvensis.—E.F.L. I do not think that this can be separated from the type; Sole's M. agrestis is much taller, and somewhat larger-leaved.—E.S.M. I do not see in this the rugose leaves that are characteristic of Sole's plant.—A.B.

Thymus Serpyllum L., var. [praecox Opiz]. By the sea, Killard Point, Co. Down, June 17, 1911.—C. H. Waddell. A narrow-leaved form of T. Serpyllum L., approaching var. angustifolius G. & G. (= T. angustifolius Pers.).—A.B.J.

Salvia ——. (Ref. No. 329). Bank near railway, near Newton Abbot, S. Devon, v.c. 3, June 6, 1908.—Coll. W. M. Scott. Comm. S. H. Bickham. This is S. virgata Ait. I had not seen it before, and it constitutes an interesting addition to our introduced species.—S.T.D.

Lamium maculatum L., var. laevigatum L. Roadside, Leigh Woods, Bristol, N. Somerset, v.c. 6, April 15, 1911. The type is rather frequent about Bristol, but this variety is decidedly rare.—Ida M. Roper. This may very possibly be a native; I have never heard of the unspotted plant being cultivated in Britain. It was the only one which I observed near Marburg, Hesse, in 1880. Rouy divides L. maculatum L. into three "races" (Fl. de France, XI., 298): L. rugosum Ait. (L. maculatum auct. mult.; Smith, English Botany); L. hirsutum Lam.; and L. rubrum Wallr. (L. laevigatum All., L. pro parte), which is apparently Miss Roper's plant :- "Feuilles irrégulièrement incisées-dentées, ovales-cordées, à longueur égalant leur largeur à la base, acuminées; cilles 6-10-flores; plante de 2-4 déc., à feuilles assez petites, ordinairement maculées de blanc ou de noir, rarement vertes." I grow the plant commonly called L. maculatum, and its leaves are always blotched with white. Koch (Synopsis, ed. II., 649) says that L. laevigatum L. (Sp. Plant., 808), according to Bentham,—who examined the Linnean Herbarium for this [L. laevigatum Reichb.] and L. maculatum,—does not differ [from the type]; but so many of the Linnean specimens are badly dried and scrappy that I do not believe that his opinion carries much weight. The aggregate species is common in France, especially westwards, and occurs in Spain, Portugal, Belgium, Holland, etc.; so there is no primá facie reason why it should not be indigenous in England.—E.S.M.

Plantago lanceolata L., var. [Timbali Reichb. fil.]. Blackford Hill, Edinburghsh., v.c. 83, May 21, 1911. McT. Cowan, junr. This name, which has been on the British list some years, does not seem to be noticed by Dr. Williams in his "Prod. Fl. Brit.," pt. 7, 1909.—A.B. This is not P. Timbali Jordan Pugillus, p. 138. It appears to us to be P. lanceolata L., var. major Syme. The true P. Timbali of Jordan is a much smaller plant with narrow lanceolate-linear or linear leaves, which are 3-5 nerved, glabrous or with adpressed hairs, sublanate at the base; the scapes are erect or ascending; the spikes oblong-cylindrical, dense, short; the bracts ovate, attenuate acuminate, green on the back, the rest white, scarious; the anterior segments of the calyx are very obtuse, the posterior boatshaped and scarious. The specimens in the National collection at Kensington from Timbal-Lagrave agree with Jordan's description, but do not agree with var. Timbali figured in Syme's "English Botany."— R.M.C. & E.G.B.

- P. maritima L., var. Glen Isla, E. Perthsh., v.c. 89, Sept. 1911.—McT. Cowan, junr. This is, I believe, identical with Mr. Beeby's Shetland plant, which Prof. J. Lange named forma procerior.—E.S.M. This is forma procerior Lange, but it is also var. tenuifolia Hartman, an earlier name.—E.G.B.
- P. Coronopus L., [var. ceratophyllon Rapin]. Sea bank at Charmouth, Dorset, v.c. 9, Aug. 17, 1911. From

the original station, where Mr. E. G. Baker obtained the specimens, on which his paper (Journ. Bot. 1897, p. 257) was based.—E. F. Linton. [Later]. This was the only form of P. Coronopus on the coast at Charmouth. believe that the extremely dry season so reduced the leaves in length and breadth that the specimens have lost much of their varietal appearance, and so are not recognised as the same plant Mr. Baker found and wrote about.—E.F.L. Leaves far narrower than in the usual form; but I suppose that it may pass. Mr. E. G. Baker tells me that Dr. F. N. Williams's identifications of var. ceratophyllon Rapin with P. macrorrhiza Poir. cannot stand._E.S.M. This is not var. ceratophyllon Rapin, which has much broader and longer leaves. It appears to us to be between the type and var. maritima.—R.M.C. & E.G.B. Mr. Baker wrote later, "Var. ceratophyllon Rapin is a plant with a broad rachis to the leaf, and a trilocular capsule, 2 or 3 seeded (see Jl. Bot. XXXV., t. 371). Before expressing an opinion on the merits or demerits of this variety it ought to be cultivated in various situations and under as many different conditions as possible. Mr. J. A. Wheldon, who knows the plant at Blackpool, is inclined to consider it ought to be separated from P. Coronopus L."

Illecebrum verticillatum L. Sandy edge of pool, Chyendal (Chy-an-hal) Moor, W. Cornwall, v.c. 1, Aug. 9, 1911.—W. C. Barton.

Chenopodium polyspermum L., var. cymosum Moq. Chilworth, Surrey, v.c. 17, Aug. 26, 1911.—C. E. Salmon.

C. [urbicum L.]. (1) Brickfield at East Grinstead, E. Sussex, v.c. 14, Aug. 16, 1911.—R. S. Standen. When I saw this in the young state I thought it likely to be C. urbicum, and let Mr. Standen know of the station. Maturer specimens sent me later proved to be all C. rubrum.—E.F.L. This is C. rubrum, var. blitoides Wallroth Sched. Crit., 507 (1822); but it would have been more easy to identify had there been accompanying specimens with ripe seeds.—C.E.M. (2) From same locality, Aug. 29, 1911.—E. F. Linton.

Salicornia ramosissima Woods. Near Poole, Dorset, v.c. 9, Oct. 5 and 9, 1911.—E. F. Linton. Excellent

average specimens of this; it is often considerably larger. —E.S.M.

S. pusilla Woods. Near Poole, Dorset, v.c. 9, Oct. 5 and 9, 1911.—E. F. Linton. Doubtless right, but the unbranched specimens greatly resemble S. gracillima Moss, when dry.—E.S.M. I fear this is a mixed gathering. Some of the specimens are S. gracillima, others S. pusilla, and others perhaps hybrids of these.—C.E.M.

S. intermedia Woods. Hamworthy marshes, near Poole, Dorset, v.c. 9, Oct. 5 and 9, 1911. This is one of Woods' forms so named. It is probably S. europæa × one of the other species. S. pusilla and S. ramosissima were growing with it. Gathered in company with Dr. Moss.—E. F. Linton. S. europæa L. (= S. herbacea L.) × S. ramosissima Woods, which is only a part, and not the first part, of "S. intermedia Woods." See B.E.C. Rept. 1910, p. 585.—C.E.M.

S. procumbens Sm. (1) Dymchurch, Romney Marsh, E. Kent, v.c. 15, Sept. 4, 1911. I have left this under the aggregate procumbens Sm., not being able to decide whether the plant should go under Smithiana Moss or appressa Dum. The specimens were taken from a marsh behind the sea-wall—ground that would be seldom covered by salt-water.—Ida M. Roper. Excellent S. appressa Dumortier. S. Smithiana (procumbens auct.) has much stouter, blunt spikes, and a different habit; it is also usually smaller and more compact.—E.S.M. S. appressa Dumortier.—C.E.M. (2) Wells, W. Norfolk, v.c. 28, July, 1911. Unlike the ordinary form, this prefers the drier ground, and grows on mud flats that are only covered at high spring tides. The specimens are rather small, but the people of Wells will only gather this for pickling, although the ordinary form is quite as good, so that the flats are continually being picked over.—F. Long. Far too immature for accurate naming.—E.S.M. Not in flower, and therefore indeterminable. Herbaceous species of Salicornia cannot be named, unless in flower or fruit.--C.E.M.

Suaeda maritima Dum., var. macrocarpa Dumort.? Poole, Dorset, v.c. 9, Oct. 5 and 9, 1911. Gathered with Dr. Moss, who suggested this varietal name.—E. F. Linton.

Yes, S. maritima, var. macrocarpa Moquin Chenop. Monogr. Enum. 128 (1840).—C.E.M.

Polygonum ----, var. vel hybr. nov. ad Angl. Trodden cindery ground, Poole, Dorset, v.c. 9, Oct. 5 and 9, 1911. Dr. Moss, who was with me when we found this little novelty, will shortly describe it. Having the small fruit of P. microspermum Jordan, it seemed to me at first allied to that plant. By the leaves and habit it is nearer P. arenastrum, with which it was associated.—E. F. Linton. A small form of Boreau's plant.—A.B. I think that this pretty little plant is rightly placed as a variety, or form, of P. arenastrum. I have two gatherings tending towards it, in their small fruit and foliage, though they are more luxuriant and less extreme, found near Hothfield, E. Kent, in September, 1891, and on the sandy coast near Dunster, S. Somerset (with P. Raii Bab.), in September, 1906.— E.S.M. The relationship of this plant to *P. calcatum* Lindman *Bot. Notiser* 139 (1904), has to be considered. Last September I found this species (new to the British Isles) on Arthur's Seat, near Edinburgh. It has a fruit which is sub-bifacial and not trigonous, and which has convex and not concave faces. Professor Lindman, after seeing my specimens, writes:—"Your plant is indeed P. calcatum."—C.E.M.

Rumex crispus L. [var. elongatus (Guss.)]. Bank of R. Wye, Tintern, Monmouthsh., v.c. 35, July 28, 1911.—Coll. W. Butt. Comm. S. H. Bickham. Some of the fruits on my sheet contain 3 tubercles (I understand this is often a variable character), and there are frequently weak teeth on the enlarged petals, which are too linear to be described as cordate-ovate. Perhaps Gussone's original description, "valvulis cordato-ovatis integerrimis reticulatis unica granifera" must not be taken too literally, if this really is his plant.—C.E.S. This is no doubt R. crispus forma, but not the plant of Gussone.—A.B.

Ulmus glabra Huds. (= U. montana Stokes). In a field by the Church, Edmondsham, Dorset, v.c. 9, April 15, May 1, and Aug. 7, 1911. Gathered, since the late Rev. A. Ley suggested it might be U. nitida, but Dr. Moss and I see only U. glabra Huds. in it. As there has been so much rearranging of the Elms, members may like to have typical

x P. milo Shank. Farelan Haut CE Salmor Aug 20.1911 comm R.S Standen. specimens of this species.—E. F. Linton. Yes, on the grounds of priority Hudson's name is probably correct, but its adoption can hardly fail to cause confusion in view of the fact that the name *glabra* has so long been applied to a totally different tree.—A.B.J.

U. stricta Lindley. Edmondsham, Dorset, v.c. 9, Aug. 7, 1911. Named by Dr. C. E. Moss.—E. F. Linton. This agrees in foliage with all my specimens so named, but the habit of the tree should have been stated, as this is an important character in Ulmus.—A.B.J.

Betula pubescens Ehrh., var. (Ref. No. 3565). t' Sluie, at 1500 feet, near Dalwhinnie, E. Inverness, v.c. 96. July 28, 1911. A small tree, about twelve or fifteen feet high, with very pendulous branches; leaves dark green above, glabrous; lateral lobes of the female catkin-scales spreading. It does not agree well with any of the varieties described by Regel in De Candolle's "Prodromus" XVI., part 2, pp. 167—8 (1864); but the combined features appear to bring it nearest to his ϵ . rhombifolia. The foliage is cuneate below, and often rather long-pointed, with a rhomboid outline. Dr. C. E. Moss, who has seen this gathering. suggested that it might be a hybrid of var. parvifolia, with B. alba L. (verrucosa Ehrh.); but I did not observe B. alba within many miles of the locality, and it hardly seems to ascend above 1000 feet in the Highlands; nor, indeed, are the characters, as a whole, favourable to such an origin. Ascherson and Graebner retain Ehrhart's name, rejecting B. tomentosa Reith. and Abel. I learn from Dr. Moss that both were published as nomina nuda in 1790; B. pubescens was described in 1791 (Ehrhart, "Beitrage" VI., 98), B. tomentosa not until 1803. [Later.] No. 3565. I propose to call these B. pubescens, var. sudetica. They are very near Reichenbach's figure of B. carpatica, β sudetica, from which his drawing of B. carpatica Kit. appears to differ only by its larger, broader, more dentate and more deeply cut foliage. I have several Scottish gatherings, formerly named either carpatica or parvifolia by Prof. J. Lange, which seem to match Reichenbach's carpatica pretty closely. Reichenbach's figure of sudetica is quoted by Regel under his var. parvifolia; but I consider it varietally distinct, at least from the Scandinavian plant usually so called (B. odorata Bechst., var. microphylla Hartman, Skand. Flora, ed. 1 [1820]). No. 3566 is apparently B. pubescens, var. Friesii Regel = B. glutinosa Fries, Herb. Norm. (an Wallroth?). It is northern or alpine in its distribution, and probably common in Scotland. (See also B.E.C. Rept., 1911, p. 123).—E. S. Marshall.

B. pubescens Ehrh., var. parvifolia Regel. (Ref. No. 3562). Birch-wood on the road to Dalwhinnie, about a mile south of Laggan Bridge, E. Inverness, v.c. 96, at 800 feet, July 26, 1911. Another form, with foliage very like this, but stouter catkins, occurred with it. These appear to be a good form of B. pubescens Ehrh., var. parvifolia Regel, excluding the citation of B. carpatica, β sudetica Reichb. in Reichenbach's "Icones."—E. S. Marshall.

B. nana L. Uisge Geal, near Dalwhinnie, E. Inverness, v.c. 96, July 28, 1911. Apparently scarce in the district, as we saw it nowhere else; it grew at an altitude between 1600 and 2200 feet, and fruited freely along the upper part of the stream.—Edward S. Marshall.

Quercus Ilex L. Perranarworthal, W. Cornwall, v.c. 1, June 10 and Oct. 2, 1911. Two or three trees on the shore of the creek between Perranwharf and Devoran. From the tree from which the specimens now being distributed were gathered acorns and male and female flowers were sent to Mr. Hunnybun to prepare drawings for the new Cambridge Flora.—F. H. Davey.

Salix aurita × cinerea (lutescens A. Kern). Newick, E. Sussex, v.c. 14, June 1, 1911.—R. S. Standen. My specimen is very characteristic S. aurita; I do not see any trace of S. cinerea in it.—E.S.M. The two pieces on my sheet appear to be from different bushes, the leaves and stipules differ. They are, I think, rightly named, but are both more than usually on the S. aurita side.—E.F.L.

S. Smithiana Willd., var. ferruginea Anders. Long Ashton Brook, N. Somerset, v.c. 6, catkins April 3, foliage July 17, 1911. This form may not be worthy of distinction, but it differs from rugosa in the width of the leaves and the rugosity of their under surfaces.—Ida M. Roper. As S. Smithiana Willd. is now generally agreed to be a hybrid, there is no good reason for using the name in a specific sense. I do not know S. ferruginea Andersson; but the

specimens now sent seem to be S. caprea × viminalis.— E.S.M. I think S. caprea × viminalis, but a rather poor piece of foliage for certain determination.—E.F.L.

S. arbuscula L. Beinn Laoigh (at 2500 feet), Mid-Perthsh., v.c. 88, July, 1911.—P. Ewing. Yes.—E.F.L.

Juniperus [sibirica Burgsdorf]. Ben Heasgarnich, Mid Perthsh., v.c. 88, Sept., 1910.—McT. Cowan, jun. Leaves too long and too straight for that, I believe. Is it not J. communis L., var. intermedia Nyman (J. intermedia Schur)? My Tongue Bay and Little Craigindal specimens, so named, match it well.—E.S.M. Mr. Cowan's plant is apparently one of those which have been distinguished as var. intermedia Sanio in "Deut. Bot. Monatschrf." I. 51 (1883), and as J. intermedia Schur, in "Verh. Siebenb. Naturw." II. 169 (1850). Mr. Marshall's Tongue Bay plant seems to be the same thing, but his little Craigindal specimen seems nearer type. I have recently had the extreme form of J. nana with short leaves sent me from Fair Isle, between the Orkney and Shetland Is.—A.B.J.

Pinus sylvestris L. New Forest, S. Hants., v.c. 11, April 22, 1911.—R. S. Standen. This has considerably longer leaves than my native specimens of the Scotch Fir, and the bark is different. I am not well up in the European species, but it looks like the Austrian Pine (P. nigricans Host).—E.S.M. Undoubted P. sylvestris, I consider. The Austrian Pine (P. Laricio, var. austriaca) has longer leaves and quite different buds. The specimens were probably taken from a fairly young tree, which would account for the foliage being a little more robust than usual.—A.B.J.

Herminium Monorchis Br. Harlington, near Luton, Beds., v.c. 30, July 6, 1911.—Coll. R. Welsh. Comm. D. M. Higgins.

Potamogeton polygonifolius Pourr., var. cordifolius Asch. and Graebn. Ditch, near Loch Tay, Mid Perthsh., v.c. 88, Sept., 1911.—McT. Cowan, jun. Correct.—A.B.

P. [praelongus Wulf.]. Coniston Lake, N. Lancs., v.c. 69, Sept., 1911.—J. Comber. This is P. angustifolius Bercht. and Presl. (= P. Zizii Koch). It is a characteristic specimen of the var. elongatus Mert. and Koch (sub Zizii), Reich. Icones, VII. (1845) 24, t. 39, f. 68.—A.B.

Zostera marina L., var. stenophylla Asch. and Graebn. Aberlady Bay, Haddingtonsh., v.c. 82, Aug. 13, 1910.—McT. Cowan, jun. Correct, I believe, although the two lateral veins of leaves are rather nearer the margin than usual in this variety. They should be midway between the central rib and the leaf-margin, whereas in var. angustifolia Hornem. the lateral veins lie close to the margin, and the leaves are only 1½—2 mm. broad. The specimen before me has them 3 mm. broad.—C.E.S. I agree with Mr. Salmon.—A.B.

Scirpus maritimus L., var. conglobatus Gray. Swamp near Foxfield Station, N. Lancs., v.c. 69, Aug., 1911.—J. Comber. An earlier name is var. tuberosus, = S. tuberosus Desf. Fl. Atl. 1, p 50 (1798), or var. compactus Meyer, = S. compactus Hoffm. (1804).—A.B.

Carex arenaria L. Ferranporth Sandhills, W. Cornwall, v.c. 1, June 2, 1911. These specimens all have a few female flowers in the upper spikes, and this appears to be the general rule in Cornish plants of *C. arenaria*. It was probably this state which the late J. Cunnack, and a few others, insisted on calling *C. ligerica* J. Gay, a plant which 1 have never been able to detect on Cornish soil.—F. H. Davey.

C. paniculata L., var. or form. Ulverscroft Mill, Leics., v.c. 55, June 23, 1910. There were several large clumps of this Carex growing in a boggy place near Ulverscroft Mill, in close proximity to C. muricata on the bank above, and typical \bar{C} . paniculata a few yards lower down the stream. Is it C. paniculata \times muricata?—W. Bell. This seems to agree best with Ascherson and Graebner's sub-species, or micro-species (Abart), β pseudoparadoxa (C. pseudoparadoxa Gibson in "Phytologist," 1st series, VII., 178 [1844]), c. brevis Aschers. and Graebn., "Synopsis" II., pt. 2, 46 [1902]. They describe the difference of C. pseudoparadoxa from type as follows:—"Stem thinner and more slender. Inflorescence not panicled; even the lower spikelets short, erect." In c. brevis the "spicate inflorescence" is "very dense, short." I have not seen specimens of either type or variety of this sub-species. C. paniculata varies greatly in habit. The variety (or form) simplex Peterm. [1846] (= simplicior Anders. [1849])

has longer and more slender spikes.—E.S.M. Possibly a named form, but not, I believe, var. pseudoparadoxa Gibs., which, as I understand it, has a slender stem, narrow leaves, and small narrow compact spike, and simulates true C. paradoxa so closely that it requires a somewhat careful examination to separate. No such precaution is necessary with Mr. Bell's plant.—C.E.S. Certainly not Gibson's plant, which Ascherson and Graebner misunderstood entirely. I should call it C. paniculata L., var. subsimplex Bréb. Fl. Norm.—A.B.

C. canescens L. (C. curta Good.), var. fallax Aschers. and Graebn. (Ref. No. 3572.) (1) Allt Coire Chuirn, at 2600 to 2800 feet, near Dalwhinnie, E. Inverness, v.c. 96, July 14, 1911.—Edward S. Marshall. (2) Beinn Heasgarnich, Mid Perthsh., v.c. 88, July, 1911.—P. Ewing. I think that Mr. Druce has shown sufficient reason for retaining the name C. canescens L. in place of C. curta Good., as most Continental botanists have done, though there is some little uncertainty. This plant appears to be var. fallax F. Kurtz (ex Kükenthal in litt.), in Aschers. and Graebn., "Synopsis," II., part 2, 61 [1902], rather than var. tenuis Lang in "Linnæa," 538 [1851]; but these two varieties are very much alike.—E.S.M.

- C. helvola Blytt (= C. curta × Lachenalii). Root from Lochnagar, when the parents grew together. Hort. Edmondsham, June, 1911.—E. F. Linton. Beautiful specimens, just intermediate between the parents, C. canescens L. and C. Lachenalii Schkuhr (lagopina Wahl.). Cultivation has increased the height, and brought out the characters extremely well.—E.S.M. Very useful specimens, showing the plant well.—A.B.
- C. gracilis Curt., var. prolixa (Fr.). Bank of Boyd, Pucklechurch, W. Glos., v.c. 34, July 5, 1911. The varietal name was suggested to me by the Rev. H. J. Riddelsdell.—Ida M. Roper. I do not know var. prolixa; but this specimen agrees very well indeed with the description in Ascherson and Graebner's "Synopsis," Bd. II., Abth. 2, p. 92. They call it C. gracilis, β strictifolia; but this varietal name can hardly stand, as C. prolixa Fries, Mantissa III., 150 [1842], is older than C. strictifolia Opiz in Reichb., Icones VIII., 15 [1846].—E.S.M. Many of the

fruits seem sterile, and the specimens, though perhaps to be so named, are not good representatives of Fries' plant.

—A.B.

- C. Goodenowii Gay, var. recta Fleischer. Beinn Heasgarnich, Mid Perthsh., v.c. 88, July, 1910.—P. Ewing. I do not know this variety.—A.B.
- C. limosa L. Sub-alpine bogs, Dalnaspidal, Mid Perthsh., v.c. 88, at 1400, July 18, 1911. This is the highest station in Britain for the species, so far as I know.—Edward S. Marshall.
- C. [acutiformis Ehrh., var. Kochiana (DC.)]. Damp ground, Buckland Wood, Upwey, Dorset, v.c. 9, June 6, 1911.—Ida M. Roper. This is C. riparia Curt.; a form or variety, analogous to C. acutiformis, var. spadicea Ascherson and Graebner's "Synopsis," Bd. II., Abth. 2, p. 215 (C. spadicea Roth [1789]; \tilde{C} . Kochiana DC. [1813]). acutiformis usually has the female spikelets male at the top; and the fruit is very different.—Ē.S.M. My specimen has all the appearance of C. riparia Curt., with all the scales of the male spikelets long-cuspidate, and the perigynia terete when more matured. But I notice that the nut is not well-formed in the best fruits (none are near maturity), which raises a suspicion of hybridity. The plant does not resemble C. spadicea Roth (C. Kochiana DC.)— E.F.L. This is C. riparia, not a hybrid.—A.B.
- C. inflata Huds., var. brunnescens Huds. Beinn Laoigh, Mid Perthsh., v.c. 88, July, 1910.—P. Ewing. This may pass, though the inflorescence is often darker. Andersson described the variety under C. ampullacea Good.—E.S.M. C. rostrata Stokes, var. brunnescens Fiek [1881].—A.B.
- C. vesicaria L., var. Grahami (Boott). From Scotland, through Kew Gardens; hort. Edmondsham, June, 1911.—E. F. Linton. This originally came from the locus classicus, Glen Fiagh, Clova, Forfarshire. An examination of the specimens on my sheet shows my assertion that the stigmas "are invariably three" (Jl. Bot., 1911, p. 197) to be inexact, though I had hitherto always found this to be the case, when they were still present; here they vary from two to three on the same spikelet, with about equal

frequency, but it is possible that some have fallen off, and that there were three, at first, in all cases. Most of the spikelets had already shed them.—E.S.M.

Leersia oryzoides Sw. Canal near Byfleet, Surrey, v.c. 17, Sept. 16, 1911.—C. E. Salmon.

Agrostis alba L., var. coarctata (Hoffm.) Spring-head, Pill, N. Somerset, v.c. 6, July 18, 1911. This seems to agree with the published description.—Ida M. Roper. I think that this is A. coarctata Hoffmann, "Flora Germaniae," part I., p. 37 (1800), which he thus described:— "panic. divaricata capillari mutica, calycibus, subaequalibus, corollis brevioribus obtusis hispidulis, fol. angustis. Ehrh. gram. 133." It resembles specimens named for me by Prof. E. Hackel as A. alba, var. coarctata (Hoffm.).— E.S.M. This is A. alba L., var. coarctata Blytt Norsk Flora (1847), p. 149 = A. coarctata Hoffm. Deut. Fl. I., p. 37 (1800).—A.B.

A. lachnantha Nees. Banks of the Tweed, near Galashiels, Selkırksh., v.c. 79, Sept., 1911. A South African wool-alien.—Ida M. Hayward. Correct.—E. Hackel.

[Deyeuxia neglecta Kunth, var. Hookeri Syme]. Marshy shore of Lough Neagh, Co. Down, July 29, 1911.—C. H. Waddell and N. Carrothers. Certainly not a Deyeuxia. It is Agrostis alba, var. stolonifera.—A.B.

Deschampsia cæspitosa Beauv., var. pallida Koch. Woods, Rosslyn, Edinburghsh., v.c. 83, July 3, 1911.—McT. Cowan, jun. The oldest name for this appears to be Aira cæspitosa L., var. argentea Gray (1825, I think) = cæspitosa, β pallida Koch [1846]. An author's name is needed, under Deschampsia. Ascherson and Graebner ("Synopsis," II., part 1, 290) refer Koch's plant to their form 2 altissima of the type; but they describe this as a shade-form, usually taller (up to 1.5 metres); panicle with more numerous branchlets; glumes yellowish above—which does not fit our plant at all well. This is sometimes small, not much over a foot high, with silvery flowers; often, but by no means always, it occurs in shade. I regard it as an albino, rather than a real variety.—E.S.M. There is some difficulty in assigning the correct varietal name to this

form. It may be either *D. cæspitosa*, β parviflora Thuill (1790), or *D. cæspitosa*, β altissima Moench (1794).—A.B.

Koeleria [glauca DC.], var. albescens (DC.) Chesil Beach, Isle of Portland, Dorset, v.c. 9, June 7, 1911.—Ida M. Roper.

Molinia cærulea Moench, var. subspicata Figert. Banks of Loch Earn, W. Perthsh., v.c. 87, Sept., 1911.—Mc.T. Cowan, jun. Correct. I suppose there is some valid reason why M. varia Schrank, Baier. Fl., p. 336 (1789), should not be used?—A.B.

Poa bulbosa L. Walmer, E. Kent, v.c. 15, May, 1909. —L. Day.

P. nemoralis L., var. Perranarworthal, W. Cornwall, v.c. 1, June 6, 1911.—F. H. Davey. Rather weak type, I believe.—E.S.M. This does not seem to agree with any British variety in our books.—A.B. P. nemoralis L., var. vulgaris Gaud., forma colorata. This is not a published name, and tends only to state the fact that the spikelets of P. nemoralis vulgaris, which are pale green in shady places, become more or less coloured with violet, and often somewhat yellowish-brown if the plant grows in sunny spots. All grades of intermediates exist between the two forms, mostly dependent on the degree of insolation. Another effect of the insolation is a more vigorous development of the spikelets, which are mostly 2-flowered in the shade, 3-flowered (or more) in the sun.—E. Hackel.

P. palustris I., var. effusa Asch. & Graebn. The Rhydd, near Upton-on-Severn, Worcs., v.c. 37, July, 1911.
—Coll. R. F. Towndrow. Comm. S. H. Bickham. (See B.E.C. Rept., 1911, p. 139).

Glyceria fluitans Br., var. triticea Fr. Boggy pasture, Compton Greenfield, W. Glos., v.c. 34, June 10, 1911.—Ida M. Roper. This agrees well with specimens confirmed by Prof. Hackel.—E.S.M.

G. distans Wahl., var. pulvinata Fries. Coast sands, covered at high spring tides, Wells, Norfolk, v.c. 28, July, 1908.—F. Long. It is hoped that notes on this plant will appear in the next Report.—G. G.

Festuca rubra L., var. grandiftora Hackel, f. littoralis Hackel. Salt-marsh, Wells, Norfolk, v.c. 28, July, 1911. Named as above by Prof. Hackel, to whom specimens were forwarded by Mr. Arthur Bennett in 1887, when I first found the plant.—F. Long.

Bromus secalinus L., var. velutinus (Schrad.). Edmondsham, Dorset, v.c. 9, July, 1911.—E. F. Linton. Yes; B. velutinus Schrader [1806] = B. secalinus, β velutinus Koch [1837]. Asch. and Graebn. ("Synopsis," Bd. II., Abth. 1, pp. 604—5) place this under their § II. multiflorus (B. multiflorus Sm. [1800]), of which a grossus (B. grossus Desf. [1805], not of DC., which is velutinus), with smooth or rough glumes, is made the type.—E.S.M. B. secalinus L., var. β velutinus Koch Syn. Fl. Germ. et Helv., p. 945 (1844) = β velutinus Schrader, Fl. Germ. I. 349 (1806), = β multiflorus Sm. Fl. Brit. I., 126 (1800), so it seems to me the correct name is B. secalinus L., β multiflorus (Sm.).—A.B.

Azolla [filiculoïdes Lam. Botanique (Encycl. méth.), I., 343 (1783)]. From a dyke near Horning Ferry, E. Norfolk, v.c. 27, Sept., 1911. I find that I was mistaken in naming the Azolla I sent as filiculoides. I have recently sent some fresh specimens from the dyke to Kew, and they have reported it as A. caroliniana Willd.—F. Lorg.

Lycopodium annotinum L. Locally abundant on heathy moorland, about two miles south-east of Dalwhinnie, E. Inverness, v.c. 96, at 1700 feet, July 20, 1911. Not observed elsewhere in the district; I had never before seen it growing so low down, as it usually occurs above 2500 feet.—Edward S. Marshall.

Isoetes lacustris L., forma longifolia strictior Caspary (Ref. No. 3662). Lough Camelaun, near Cloghane, S. Kerry, June 17, 1911. Named by Mr. Arthur Bennett, who has similar examples from Aber Lake, Carnarvonshire. It grew in about two to four feet of water, and was fairly uniform in habit. Prof. H. Glück, of Heidelberg, told me that the Lough Bray var. maxima Blytt (Morei Syme) was much reduced in size, last year, and much resembled this; but Mr. Bennett writes that my plant is stouter

than Moore's, duller in aspect, with no light membranous bases to the leaves, &c.—Edward S. Marshall.

Chara contraria Kuetz. Rescobie Loch, Forfarsh., v.c. 90, Sept., 1911. Fide H. and J. Groves.—McT. Cowan, jun.

C. hispida L., sub-sp. rudis Leonh. Loch Rae, Blairgowrie, E. Perthsh., v.c. 89, Aug., 1911. Fide H. and J. Groves.—McT. Cowan, jun.

Copies of many of the earlier Reports can be obtained from the Hon. Secretary.

SUBSCRIPTIONS, 1911.

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Adamson, Mrs	•••	•••	•••	•••	0	5	0
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Fowler, Rev. Canon					0	5	0
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31st December, 1911.

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23 APR. 1914

B. S.5

Vol. II., No. 9.

THE

GWENTY-NINTH ANNUAL REPORT

OF THE

WATSON

Botanical Exchange Club,

1912-1913.

Referees:

Rev. E. F. LINTON, M.A., Edmondsham Rectory, Salisbury. Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

Rev. W. MOYLE ROGERS, F.L.S., Chetnole, Grosvenor Road, Bournemouth West.

C. E. SALMON, F.L.S., Pilgrims' Way, Reigate.

Distributor:

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SPENCER H. BICKHAM, F.L.S., Underdown, Ledbury.

Hon. Secretary and Editor:

GEORGE GOODE, M.A., Lyndhurst, De Freville Avenue, Cambridge.

CAMBRIDGE:

Printed by J. Webb & Co., Alexandra Street, 1914.









PETER EWING

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GWENTY-NINTH HUNUAL REPORT

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1912-1913.

Referees:

Rev. E. F. LINTON, M.A., Edmondsham Rectory, Salisbury. Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

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23 APR. 1914

THE WATSON

Botanical Exchange Club.

REPORT FOR 1912-13.

Although the number of contributors was fewer by four than last year, the number of sheets received was greater by 714. Mr. W. C. Barton sent a fine parcel of 679 sheets, almost the largest number that has ever been contributed at one time by any member. Mr. Bickham came next with 355, and then followed Mr. Comber with 347, Mr. Little with 298 and Miss Roper with 252.

The full list is as follows:—

	Sheets.		Sheets.
Mr. C. Bailey	25	Mr. J. E. Little .	298
Mr. W. C. Barton	679	Dr. F. Long .	90
Mr. S. H. Bickham	355	Rev. E. S. Marshall.	156
Mr. J. Comber	347	Rev. W. M. Rogers .	
Mr. McT. Cowan, jun.	124	Miss I. M. Roper .	252
Mr. A. J. Crosfield	73	Mr. C. E. Salmon .	23
Mr. F. H. Davey	93	Mr. R. S. Standen .	154
Mr. P. Ewing	65	Rev. C. H. Waddell .	4
Miss A. M. Geldart	38	Mr. J. W. White .	148
Mr. G. Goode	51		
Miss I. M. Hayward	49		
Miss D. M. Higgins		Total	3174
Mr. A. R. Horwood	41		

The specimens as a whole were very well selected and carefully dried. The number of sheets of each variety or species was, on the average, greater than was the case last year, enabling a more just and equal distribution to be made. On this occasion I have little reason to complain

of the non-observance of the rules by any one, and no reason at all in the case of the great majority of the contributors.

All the sheets of brambles and pansies sent in were submitted to the examination of Mr. Rogers and Dr. Drabble respectively, as requested by them.

Valuable notes were received from the following experts, to whom the Club is much indebted:—Mr. E. G. Baker, Mr. Arthur Bennett, Mr. C. Bucknall, Dr. and Mrs. Drabble, Mr. S. T. Dunn, Prof. H. Glück, Mrs. E. S. Gregory, Mr. J. Groves, Prof. E. Hackel, Mr. A. B. Jackson, Oberpfarrer G. Kükenthal, Rev. E. F. Linton, Mr. J. E. Little, Rev. E. S. Marshall, Dr. C. E. Moss, Mr. H. W. Pugsley, Dr. A. B. Rendle, Rev. W. Moyle Rogers, Mr. C E. Salmon, Dr. Stapf, Mr. A. J. Wilmott, and Major A. H. Wolley-Dod.

It is with a feeling of keen personal regret that I call attention to the loss which the Club has sustained by the death of Mr. Peter Ewing, who had been a member since the Club commenced in 1884, and whose activities in the Club's work are very noticeable in the present Report. Besides a wide knowledge of the flora of Western Scotland, he was intimately acquainted with the mountain flora of Clova and Breadalbane. He was a prominent member of the Glasgow Natural History Society for more than thirty years, a member of its Council during most of that period, and he also filled the office of Vice-President for some time with much ability. He contributed frequently to the Transactions and Proceedings of that body, exhibited specimens at its meetings, and acted as botanical leader of its excursions on numerous occasions. His first paper dates as far back as 1883, and characteristically enough was a list of the flora of Ben Laoigh, its phanerogams, mosses and hepatics. Several 'Contributions to the topographical botany of the West of Scotland' appeared at intervals from 1887 onwards, and the results of these were embodied in the "Glasgow Catalogue of native and established plants," published in 1899, a work which will always be valuable for reference. During his later years Mr. Ewing paid special attention to our mountain Carices, upon which he held views of his own which did not always coincide with those of experts. Few have so often explored the corries of our Highland hills, few could ascend or descend them with surer foot, and few took more delight in searching out and studying their rare or lovely floral treasures.

Born in 1849, Mr. Ewing was only in his 65th year when he died, and little did I think when walking up Glen Fee with him in the previous September, and when apparently he was quite strong and vigorous, that it was the last time I should look upon his face or hear his voice.

W. BARCLAY,

Distributor for the year 1912-13.

March, 1914.

Additional notes to former Reports.

13th Report (1896-97), p. 3.

"Cerastium pumilum Curt. Clifton Down, Glos. May, 1889. H. S. Thompson. I should call this C. tetrandrum Curt.—A.B." Prof. L. Corbière has examined this for me and considers it C. pumilum Curt., as originally labelled by Mr. Thompson, a decision with which I quite agree.—C.E.S.

26th Report (1909-10), p. 219.

"Barbarea intermedia Bor. Cultivated field, Odd Down, Bath, N. Somerset, v.c. 6, June 7, 1909.
—Ida M. Roper." This is not B. intermedia Bor., as I at first supposed, but a form of B. vulgaris, which comes under the var. transiens. It resembles B. intermedia somewhat in the pinnately cut upper leaves, but the pods have the long tapering styles characteristic of B. vulgaris R. Br.—A.B.J.

28th Report (1911-12), p. 331.

"Sisymbrium strictissimum L. Cult. Haymesgarth, Cleeve Hill, Aug. 12, 1911.—Charles Bailey." At first sight this appears to be distinct from Sisymbrium strictissimum in consequence of its bushy growth, shorter silicules and comparatively short style. On further investigation, however, it appears that the species is variable in these respects, and in the Herbarium at Kew there are examples with very similar fruiting characters, though with less copious branching.—S.T.D.

28th Report (1911-12), p. 355.

Lamium maculatum L. and var. lævigatum (All.) grow side by side in the Pyghtle of Stansfield Rectory, W. Suff., v.c. 26. I have known the plants there for more than 20 years, though it is probable that they have at some time spread from cultivation in the garden, just outside which they grow. My sheet of var. lævigatum shows leaves 28mm. wide × 27mm. long in the lamina, green without any white line along the midrib, incise-dentate with a tendency to a subdivision of the teeth, the general outline of the lamina being almost triangular. In Pryor's "Flora of Herts." there are no records of the species, but I found L. maculatum L. (our type) established by the roadside near Sandon Vicarage, Herts., v.c. 20, in 1912.—J.E.L.

28th Report (1911—12), p. 367.

"Glyceria distans Wahl., var. pulvinata Fries. Coast sands, covered at high spring tides, Wells, W. Norfolk, v.c. 28, July 1908.—F. Long." The following notes, with the exception of the one from Mr. Marshall, have been sent after an examination of the same specimens. Further investigation seems desirable.—G.G. This is no doubt some form of Sclerochloa with a simple spike. I do not remember to have seen this in either of our species, distans, maritima, Borreri or procumbens. I believe it is

Festuca distans L., var. capillaris Lilj. = Glyceria distans Wahl., var. pulvinata Fries.—A.B. The original description (Fries, Mantissa II, p. 11 [1839]) runs thus:—"*[in his opinion, probably a distinct species, I think] pulvinata, pumila, culmis stolonibusque divergentibus copiosissimis in pulvinulos densissimos compactis, panicula depauperata contracta, ramis abbreviatis imis subbinatis, glumis acutioribus. Herb. Norm. V. n. 90."... "Culmi vix pollicares cum stolonibus stipati decumbentes et undique divergentes, sed Stolones sub exsiccatione ut in non radicantes. plantis succulentis pronascuntur. Folia admodum tenuia, mollia, semper plana, licet in siccis passim convoluta appareant. Ramorum paniculae infimum par demum patet et fructiferum saepe refractum. Spiculae saepe pauciflorae." . . . Mr. Long's plant is very tall, with long, erect, involute-filiform leaves, and cannot be this variety. Nor does it agree well with Ascherson and Graebner's description of Festuca distans Kunth (Poa distans L.), var. capillaris Marsson (F. capillaris Liljeblad), which appears to be quite dwarf. A very interesting grass: I have not seen it before.—E.S.M. Atropis convoluta Gris.? (= Glyceria convoluta Gr. & Godr.). This specimen can scarcely be included in A. distans Gr. (certainly not in A. distans, var. pulvinata), the foliage and the shape of the panicle being those of A. convoluta (chiefly a Mediterranean species which is never found in the British Isles). But A. convoluta is a very critical species, whose extension towards A. distans is by no means clearly defined. For a safe judgment it would be necessary to see specimens in different stages of development (flowering and fruiting ones). I therefore hesitate to give a definite opinion on this plant.—E. Hackel. I have no doubt this grass is mere Atropis maritima in an advanced state, with the branches of the panicle adpressed to the rachis. We have specimens at Kew which are exact matches from the East and West coasts.—O. Stapf. I have examined this grass and would suggest that it is neither A. convoluta or A. maritima. But I should prefer not to hazard a name from the present material. The spikelets consist of nothing but the barren glumes. Dr. Long should send more satisfactory specimens.—A. B. Rendle.

28th Report (1911—12), p. 368.

"Azolla filiculoïdes Lam. Botanique (Encycl. méth.). I., 343 (1783). Dyke near Horning Ferry, E. Norfolk, v.c. 27, Sept. 1911.—F. Long." Dr. Long has kindly sent fresh fruiting specimens of the Azolla which he sent to the Club last year from I unhesitatingly name these specimens Norfolk. A. filiculoïdes Lamarck. I should be glad to receive, on loan or otherwise, fruiting specimens, either fresh or dried, of A. caroliniana Willdenow, The latter may be easily identified by its lying flat on the water, by its being a smaller plant, less branched, and thinner, and by the multicellular T-shaped hairs (or glochidia) in connection with the sporangia. A. filiculoïdes is a larger and more branched plant, of a paler or greyer green, with the "fronds" thicker and projecting above the water, while the glochidia are quite or almost non-septate. Dr. C. H. Ostenfeld (in "New Phytologist" xi, 127 (1912)), of Copenhagen, was the first to distinguish A. filiculoïdes in this country from A. caroliniana. Before this time, the two plants in this country had been confounded under the single name A. caroliniana.—C.E.M.

Ranunculus heterophyllus Weber, var. submersus (Hiern). Rhine, near the Severn, Lawrence Weston, W. Glos., v.c. 34, May 2, 1912.—Ida M. Roper. Yes, I should so label it.—J.G.

R. heterophyllus Fries [forma radians Revel]. Pond, Avonmouth, near Bristol, W. Glos., v.c. 34, April 30, 1912. —Ida M. Roper. Babington considered R. radians Revel to be a form of R. trichophyllus with floating leaves; Nyman puts Batrachium radians (Revel) Desml. as a variety of B. diversifolium (Schrank) Hiern, which he says is "perhaps

only a heterophyllous state of $B.\ trichophyllum$ " F. Schultz. I do not know $R.\ radians$, but should refer the present plant to $R.\ heterophyllus$ Weber, type.— E.S.M. One of the many forms put under $R.\ heterophyllus$. I do not know Revel's plant.—J.G.

- R. peltatus Schrank. Pond, near Dyes Farm, Langley, near Hitchin, Herts., v.c. 20, May 15, 1912.—J. E. Little. Yes.—J.G.
- R. Lenormandi F. Schultz. Ditch, near Littlefield Common, Surrey, v.c. 17, April 1912.—J. Comber. Yes.—E.S.M. & J.G.
- R. Lenormandi × peltatus (=Hiltoni H. & J. Groves). Abundant in a small pool on border of Copthorne Common, E. Sussex, v.c. 14, April 1912.—J. Comber. Yes.—E.S.M. & J.G.
- R. hederaceus L., var. omiophyllus (Ten.) Floating in about two feet of water, Ditch, near Mayford, Surrey, v.c. 17, April, 1912.—J. Comber. This is the state of moderately deep water, so named in this country. Whether it is really the plant of Tenore remains to be seen; that is placed by Nyman as a variety of Batrachium coenosum (Guss.) Nyman, which he makes a sub-species of B. hederaceum S. F. Gray. The British 'omiophyllus' has no obvious claims to such a rank.—E.S.M. The floating state of R. hederaceus which goes under this name.—J.G.
- R. Lingua L. (Early submerged leaves). Swamp, Kenn, N. Somerset, v.c. 6, April 13, 1912. These large leaves grow so early in the season and decay so long before the plant comes into flower that they are not often gathered. A few examples, therefore, may be acceptable.—Ida M. Roper. Very characteristic; seldom seen in herbaria, as they wither by the time of flowering.—E.S.M.
- R. Ficaria L., var. incumbens F. Schultz. Lane, Barrow Gurney, N. Somerset, v.c. 6, March 25, 1912. To me there seems to be very little in this variety.—Ida M. Roper. Rouy & Foucaud consider this a "forma," and its status cannot be higher, I think.—C.E.S. This may pass, though not extreme; some of the leaves have divergent bases.—E.S.M.

Papaver Rhæas L., var. strigosum (Boenn.). Chyngton Road, Seaford, E. Sussex, v.c. 14, June 14, 1912.—R. S. Standen. Yes, the plant we have been in the habit of so naming. Some say this is the hybrid between Rhæas and dubium, and the more elongated capsule—taken with the adpressed hairs—support this view. Mr. Standen's specimens are affected with mildew.—C.E.S. My specimen has quite the appearance of a hybrid between P. dubium and P. Rhæas; no capsule is present; but I have little doubt about its being that.—E.S.M.

P. Rhæas L., var. Pryorii Druce. Cornfield, Avebury, N. Wilts., v.c. 7, June 9, 1912. Here and there among the type, but easily distinguished. An occasional intermediate may have been a hybrid. In the same field I gathered var. strigosum and the white-flowered form of the type.—W. C. Barton. No doubt the plant so named, but not very marked.—C.E.S. Right.—E.S.M.

Chelidonium majus L., var. laciniatum Mill. Hedgebank, near Ledbury, Herefordsh., v.c. 36, May 14, 1912.—S. H. Bickham.

Fumaria Boraei Jord., var. britannica Pugsley. Vale, Guernsey, Aug. 8, 1912. Mr. Pugsley named a specimen of this gathering.—W. C. Barton. My material is too scanty to warrant a definite opinion; but it looks right.—E.S.M.

F. Bastardi Bor. In a neglected garden, Trefriw, Carnarvonsh., v.c. 49, July 8, 1912.—S. H. Bickham and E. S. Marshall. Both correct.—H.W.P.

Nasturtium officinale R. Br., var. microphyllum (Reichb.). Rockland marshes, E. Norfolk, v.c. 27, June, 1912.—F. Long. Yes, my sheet is quite good microphyllum, I believe. Reichenbach says (Fl. Germ. excurs., p. 683, 1830—32) "Habitus gracilis Card. amarae, foliola minora, flores medium tenent inter illius et Nasturtii officinalis; axillae absque radiculis, fructus Nasturtii brevis. . . ." Is it (with siifolium) of higher standing than a form? Rouy & Foucaud remark (Fl. Fr.) "On rencontre parfois, sur le même pied, des feuilles des var. . . . siifolium et genuinum."—C.E.S. Just what I have, so named; but I look upon it as a state, rather than a real variety.—E.S.M.

Erophila pracox DC. Dry gravelly ground, Fells' Nurseries, Hitchin, Herts., v.c. 20, Mar. & Apl. 1912. Sorted out and submitted to the Rev. E. S. Marshall, who considered them in the main to belong to this species.—J. E. Little. Yes, I think so (=brachycarpa Jord.).—C.E.S.

Sisymbrium altissimum L. (=S. pannonicum Jacq.). A few specimens are sent to record the great extension of area now occupied by this species at St. Anne's-on-the-Sea, W. Lancs., v.c. 60, July 15 & 19, 1912. When I first found this plant at St. Anne's, ten years ago, it occurred on both sides of the bridge over the railway in St. Thomas's Road, but it has now spread over the district between Blackpool and Lytham.—Charles Bailey.

S. Loeselii L. Waste heap of London rubbish, N. of Welwyn Tunnel, Herts., v.c. 20, Sept., Oct. & Nov. 1912.— J. E. Little. Yes.—C.E.S.

Brassica——?. Waste heap of London rubbish, N. of Welwyn Tunnel, Herts., v.c. 20, Nov. 2, 1912.—J. E. Little. My sheet contains no ripe pods; such are necessary for naming nearly all Cruciferae.—C.E.S. This is B. juncea Hook. f. & Thoms.—S.T.D.

- B. Rapa L. var. Briggsii Wats. Waste ground, Portishead Dock, N. Somerset, v.c. 6, July 1, 1909.— J. W. White. Yes.—E.S.M.
- B. adpressa Boiss. Coast, near Vale Castle, Guernsey, July 25, 1912.—W. C. Barton. Yes.—E.S.M.
- B. arvensis O. Kuntze, var. orientalis Asch. Weed in arable ground, Ledbury, Herefordsh., v.c. 36, Sept. 7, 1912.

 —S. H. Bickham. Yes; this agrees with B. orientalis Boiss.—S.T.D.
- B. Erucastrum Vill. Waste ground, near Newhaven, E. Sussex, v.c. 14, Aug. 14, 1912.—R. S. Standen. Correct.—S.T.D. & E.S.M. Two plants on my sheet. (1) Rightly named. (2) Diplotaxis muralis DC., var. Babingtonii Syme.—C.E.S.

Thlaspi alpestre L., var. occitanum (Jord.). Top of retaining wall. Llanrwst, Carnarvonsh., v.c. 49, June 27, 1912.—Coll. E. F. Linton. Comm. S. H. Bickham. This

is the name given to the plant in Babington's "Manual"; but it does not agree at all with Rouy & Foucaud's description of *T. occitanicum* Jord., which is glaucous, and appears to be confined to the south of France.—E.S.M.

[Unnamed Crucifer]. Waste heap N. of Welwyn Tunnel, Herts., v.c. 20, Oct. 10, 1912.—J. E. Little. This is Rapistrum rugosum Berg.—S.T.D.

Helianthemum canum \times vulgare. Great Ormes Head, Carnarvonsh., v.c. 49, June 28, 1912.—S. H. Bickham. I have described this in the "Journal of Botany," 1913, p. 182, as H. Chamæcistus \times marifolium = \times H. Bickhami (the "forma prima"). I feel no doubt as to its hybrid origin, the characters of the parents (with which it grew) being well mixed. Cistus canus L. appears to be distinct from H. marifolium Miller, the oldest name for what we have been calling H. canum Dunal.—E.S.M.

Viola canina L., var. sabulosa Reichb. Gravelly loam, Codicote High Heath, Herts., v.c. 20, Apl. 13, and May 22 1912.—J. E. Little. These specimens have the "souche pivotante" of var. sabulosa.—E.S.G.

V. 'canina L.', var. crassifolia (Grönv.) × stagnina. (Ref. No. 3753). Woodwalton Fen, v.c. 29, Hunts., June 5, 1912. Named as above by Mrs. Gregory, on the spot. A very beautiful violet, when growing; it shewed clear traces of the parents, among which it occurs, and formed large masses of flowering-stems, visible from a considerable distance.—E. S. Marshall.

 $V.lactea~{\rm Sm.} \times canina~{\rm L.}$ Chailey Common, E. Sussex, v.c. 14, May 10, 1912.—R. S. Standen. My material is rather poor, though I believe it to be right. It should be written $V.~canina~\times~lactea.$ —E.S.M. I think correct.—E.S.G.

V. lactea Sm., var. pumiliformis Rouy & Foucaud. Chailey Common, E. Sussex, v.c. 14, May 10, 1912.—R. S. Standen. This agrees very well with their description.—E.S.M. A note in "British Violets," p. 95, points out the probability of there being an admixture of V. canina, var. ericetorum in these plants.—E.S.G.

V.lactea × Riviniana (fide Mrs. E.S. Gregory). Perranar-worthal, W. Cornwall, v.c. 1, May, 1912.—F. H. Davey. More slender and "drawn-out" than most of my examples from Monmouth and S. Somerset; but I see no reason to call the name in question.—E.S.M.

V. arvensis Murr, var. agrestis (Jord.). Cornfields, Winchester, S. Hants., v.c. 11, May, 1912.—J. Comber. Yes, V. agrestis, but only the large well-grown plants are typical. The distribution of small untypical plants leads to much confusion.—E.D.

V. arvensis Murr., var. Lloydii (Jord.). Wood, near Brathay Village, N. Lancs., v.c. 69, Sept. 1912.—J. Comber. V. Lejeunii Jord. The well-grown plants are quite typical. The small ones do not show the characteristic upper leaves.—E.D.

V. arvensis Murr., var. ruralis (Corb.). Cornfield, near Albury, Surrey, v.c. 17, May 1912.—J. Comber. Yes, V. ruralis Jord. Some of the plants have unusually large flowers.—E.D.

Silene latifolia Rendle and Britten, forma. Cornfield, near King's Hedges, Chesterton, Cambs., v.c. 29, July 4, 1912.

—G. Goode. An interesting form.—S.T.D. Only a rather narrow-leaved and small-flowered form of the type, I think; it does not agree with any of the numerous varieties, etc., described by Rouy & Foucaud, "Fl. de France." vol. iii.— E.S.M.

Cerastium pumilum Curt. Brean Down, N. Somerset, v.c. 6, May 27, 1912.—W. C. Barton. Yes; I have gathered it there.—E.S.M. Four specimens on my sheet. Two rightly named; two C. tetrandrum Curt.—C.E.S.

C. semidecandrum L., var. or form? Gravel pit, Wilbury Hill, Hitchin, Herts., v.c. 20, May 2, 1912.—J. E. Little. Yes; a densely glandular form, with short pedicels and compact inflorescence.—E.S.M.

Stellaria neglecta Weihe. Wood, near Compton, Surrey, v.c. 17, April 1912.—J. Comber. This has the acutely tubercled seeds and pubescent calyx, etc., of the type; but

the hairs are gland-tipped, so that it is my forma glandulosa. In these specimens the petals are narrow, and shorter than the sepals; as a rule they are much more showy.—E.S.M.

Arenaria tenuifolia L., var. Cornfield near Welbury, Hitchin, Herts., v.c. 20, Sept. 8, 1912.—J. E. Little. Stamens apparently five. The habit, etc., of this seems to take it to var. laxa Willk., as described by Rouy & Foucaud (Fl. Fr.). I have not the original description by me.—C.E.S. are three pieces on my sheet. One is quite glabrous: another has a few of the calvees glandular; the third (a fine plant, seven inches high) has most of the calvees more or less glandular, as well as a few of the pedicels. I cannot regard this very slight divergence as varietal; but the specimens do not look quite like our ordinary plant. They agree better, on the whole, with Rouy & Foucaud's description of Alsine tenuifolia Crantz, B. laxa Willk., than with their a. Vaillantiana DC; but the petals are at least half as long as the sepals, instead of being "très courts ou nuls."-E.S.M.

A. leptoclados Guss., [var. viscidula Rouy & Foucaud] (Ref. No. 342). Walls at Gogarth, Great Ormes Head, Carnarvonsh., v.c. 49, July 9, 1912.—S. H. Bickham. Mr. Bickham admits (in litt.) that he was misled by the great scabridity of this form; it is not at all glandular, and belongs to the type (a. scabra Rouy & Foucaud).—E.S.M.

Sagina apetala Ard., var. prostrata Bab. Eastnor Park, Herefordsh. v.c. 36, June 1912.—A. J. Crosfield. A weak form of this, I believe, rather than S. Reuteri Boiss.; but the material is not very good.—E.S.M.

S. nivalis Fr. Ben Lawers (at 3000 ft.), Mid Perthsh., v.c. 88, July 1912. This is not a rare plant on the Breadalbane Range, but it seems to be dying out on Ben Lawers. I do not see it in the Eastern Ravine at all now. In the well known station on the Western Ravine the plants are only about ½—1 inch in diameter. I do not know any botanist (or collector) who knows the station these are taken from, though some of them are evidently very old plants.—P. Ewing.

S. nodosa Fenzl, var. moniliformis (S. F. W. Meyer). In bolt holes of old boiler plates, ironworks, Askam, N.

Lancs., v.c. 69, Sept. 1912.—Coll. D. Lumb. Comm. J. Comber.—Just like what I have received under this name.—E.S.M.

Spergularia [diandra Boiss.], var. atheniensis (H. & S.). Ref. No. 39. Lerée, Guernsey, Aug. 13, 1912. This agrees very closely with the authoritative De Heldreich "Herbarium Graecum Normale," No. 590, in British Museum, except that its growth is rather more compact, and it is less densely and coarsely glandular-hairy. I have since seen an apparently identical plant from Par, Cornwall, collected by Dr. Vigurs, and Mr. Druce tells me he has it from Aldeburgh sands, Suffolk. (See also B.E.C. Report, 1912, p. 238—9).—W. C. Barton. Correct.—C.E.S.

S. salina Presl, var. neglecta (Syme). (1) Lerée, Guernsey, Aug. 13, 1912. (Ref. No. 41). Growing within a few yards of my Ref. No. 39, from which it differs in growth, size of flower, fruit and seed, and in length of pedicel; it is less glandular-hairy, the leaves are scarcely 'mucronulate' and the cymes are leafy. Mr. Druce at first passed it as S. atheniensis, but agrees now that it cannot be put there. I see no place for it at present but under S. salina Presl, var. neglecta (Kindb.), as seeds are papillate and cymes leafy, but it is very distinct from specimens of that plant I gathered on Lihou Is. a mile away, and may prove to deserve a name. Indeed the forms grouped under S. salina seem to me to need further study and possibly (See also B. E. C. Report, 1912, p. 238-9). revision. W. C. Barton. My specimen is too fragmentary to name.— C.E.S. This has a great look of S. salina Presl, var. neglecta (Syme), = Lepigonum neglectum Kindb.; I have little doubt that this is right; but no ripe seed is present on my one small plant.—E.S.M. (2) Edge of pool, Lihou Island, Guernsey, Aug. 13, 1912.—W. C. Barton. The seed character brings this under neglecta Syme, but our Spergularias badly want revision. C.E.S. No; Lepigonum neglectum Kindb. is glandular, with papillose seeds. Mr. Barton's specimens are quite glabrous; their seeds (none winged) are smooth, and, as far as I can see, they have no thickened The capsule considerably exceeds the calyx; so they can hardly be L. medium Fr.—E.S.M. Salmon and Mr. Marshall said subsequently that they think this gathering was a mixed one, and that they received different plants.—G.G.

S. [salina Presl]. Mud-flats, Axmouth, S. Devon, v.c. 3, June 20, 1912.—Ida M. Roper. Apparently perennial; also too large and coarse for S. salina. The specimens were gathered too early; but they appear to be S. marginata, var. glandulosa Druce.—E.S.M.

Hypericum humifusum L. [var. magnum Bast.] St. Andrew, Guernsey, Aug. 5, 1912.—W. C. Barton. small plants were received; one has strongly revolute leaves, and appears to be very stunted H. linariifolium Vahl: the other I should name H. humifusum, type. E.S.M. (2) Castlemorton Common, Worcs., v.c. 37, June 1912.—A. J. Crosfield. One small specimen was sent to me, about four inches square. If this is var. magnum, of which I have no description, the name is particularly unsuitable! It agrees with Babington's account of H. decumbens Peterm. in having the sepals more or less (but usually less) serrate, with a few black glands beneath; but not at all well with Rouy & Foucaud's, where that is said to be "robust, with stems from 15 to 35 centimetres. diffuse, numerous, elongate-prostrate-rooting, ascending towards the centre." I can only see in Mr. Crosfield's plant a very slight deviation from type.—E.S.M. bank, below Colver's Hanger, near Albury, Surrey, v.c. 17, June 1912.—J. Comber. Still less "off type" than the Castlemorton Common specimen referred to above.—E.S.M.

Erodium eieutarium L'Hérit. (Ref. No. 35). Sandy hedge-bank above the marshes, Flixton, E. Suffolk, v.c. 25, Sept. 21, 1912. I have seen nothing quite like this plant, which was growing on a sandy hedge-bank two miles from the sea, but just above the marshes, that are now drained. Flowers large, light purple, without spots.—W. C. Barton.

E. cicutarium L'Hérit., var. glandulosum Bosch. (1) On sand among bracken, Lihou Island, Guernsey (Ref. No. 31), Aug. 13, 1912. An extraordinary plant, pointed out to me by Mr. Marquand; straggling over sand under bracken, especially at the mouth of rabbit burrows. The branches were as much as three feet long, with flowers and green foliage only towards the tip.—W. C. Barton. (2) Sandy Coast, Grand Havre, Guer. sey (Ref. No. 36), Aug. 21, 1912.

In plenty on the sandy coast, this small-flowered form was growing only in rosettes up to 12-in. diameter. I saw no plants developing long straggling branches as on Lihou Is. (my No. 31), and on Headon Hill (my No. 32).—W. C. Barton. This is our usual small form of barren sandy ground (heaths, etc.), which I suppose to come under type (= α vulgatum Syme). The species is, as a rule, more or less glandular.—E.S.M. (3) Headon Hill, I. of Wight, v.c. 10 (Ref. No. 32), Sept. 1, 1912.—W. C. Barton.

E. moschatum L'Hérit., var. (Ref. No. 38). Sandy Coast, Grand Havre, Guernsey, Aug. 21, 1912. I have not seen an authentic specimen of var. minor, Rouy & Foucaud, but my No. 38 agrees well with their description and seems probable from the habitat. I quote from Rouy & Foucaud: " var. β minor, Nob. Plante de 8-12cm. très réduite dans toutes ses parties; feuilles à segments petits (3-4 fois plus petits que dans le type), ordinairement profondément incisés ou subpinnatifides; pédoncules 2-4 flores, plus courts que la feuille; bec du fruit bien plus grêle, mais de même longueur. Cà et là dans les pelouses maritimes rases." The variety or form is frequent along the sandy coast from Grand Havre to Lerée. Mr. Marquand told me that, so far as he knew, it had been passed over as a dwarf form of Erodium cicutarium, of which also I send specimens (my No. 36). In British Museum there is a similar plant collected by Mr. Marshall (No. 2924, April 1, 1905, on limestone rocks, Purn Hill, Bleadon), on which he remarks, "very glandular, not musk scented, stamens (apparently) not bidentate at base."—W. C. Barton. From the broad stipules and other characters, this seems to be referable to E. moschatum, though the two specimens before me are rather far advanced. If so, it is extreme β minor Rouy (Mons. Foucaud died about 1897, when the fourth volume of their "Flore de France" was published).—E.S.M.

Acer campestre L., var. leiocarpon Wallr. (1) Hedge, Wedmore, N. Somerset, v.c. 6, May 29, 1912.—Ida M. Roper. (2) King's Hedges, near Chesterton, Cambs., v.c. 29, July 4, 1912.—G. Goode. Both correct.—A.B.J.

Genista tinctoria L., var. humifusa (Dickson). In turf on sea cliffs at the Lizard, W. Cornwall, v.c. 1, June 1912. —A. M. Geldart. [Medicago —— ?]. Kimpton Road, Luton, Beds., v.c. 30, Aug. 1912.—D. M. Higgins. This is Trigonella Besseriana Ser.—S.T.D.

Medicago falcata L., hybrid? Mill yard, Portishead, N. Somerset, v.c. 6, July 30, 1912. So few pods are produced, and these not typically sickle-shaped, that hybridity is suggested.—Ida M. Roper. Where is the evidence of hybridity? The pods are straightly sickle-shaped, and the flowers golden yellow. I see no trace of M. sativa, and should call it M. falcata L.; but I hardly know this, in a fresh state.—E.S.M. It is the narrow-leaved form of this species, frequently reported from waste ground in England. There appears to be no reason to suspect hybrid origin.—S.T.D.

Trifolium resupinatum L. Waste ground, St. Philip's Marsh, Bristol, W. Glos., v.c. 34, June 14, 1912.—Ida M. Roper.

Coronilla varia L. (1) Kimpton Road, Luton, Beds., v.c. 80, Aug. 2, 1912.—D. M. Higgins. (2) Made ground, Avonmouth, W. Glos., v.c. 34, Oct. 1, 1912. Found a mile away from the Dock premises; a large patch in magnificent bloom late in the season.—Ida M. Roper. Correct.—S.T.D.

Vicia villosa Roth. Mill yard, Portishead, N. Somerset, v.c. 6, July 24, 1912.—Ida M. Roper. Correct.—S.T.D.

Lathyrus maritimus Bigel. Beach, Abbotsbury, Dorset, v.c. 9, May 14, 1910.—Ida M. Roper.

Rubus holerythros Focke. Border of Hankley Common, Elstead, and damp ground near, in Churt parish, July 21–25; near Frensham Pond, Aug. 16, 1912; Surrey, v.c. 17. Very large clumps, conspicuous for their strongly suberect furrowed lustrous stems, large 5-nate plicate green leaves and very showy cuplike rosacean flowers with all the floral organs deep pink or purplish. In July the panicles are comparatively small and very irregular in outline, but they become more elongate by mid-August, with long-pedicelled straggling flowers. The stems then, after being erect for a time, bend towards the ground, but apparently never root.—W. Moyle Rogers.

R. imbricatus Hort. (1) Bury Camp, Moorend, W. Glos., v.c. 34, July 13, 1912.—Ida M. Roper. (2) Glen Frome, near Stapleton, W. Glos., v.c. 34, July & Aug. 1903.—J. W. White.

R. rhombifolius Weihe, forma umbrosa. Tilford and Hindhead Road, Churt, Surrey, v.c. 17, Aug. 6 & 13, 1912. This is the shade form referred to in the concluding paragraph of my description of R. rhombifolius on page 36 of "Handbk. Brit. Rubi." Very similar as this form is in dried specimens to some states of R. holerythros, the growing bushes may usually be distinguished readily enough by their arcuate-procumbent or climbing stems, their comparatively narrow and more sharply toothed leaflets, and their more regular panicle leafy above with more strongly falcate prickles and long lower branches rising at an acute angle. The flowers, though very similar, are also smaller and the sepals conspicuously reflexed, while those of R. holerythros are normally patent or ascending after the fall of the petals.—W. Moyle Rogers.

R. pubescens Weihe, var. subinermis Rogers. Lindfield, E. Sussex, v.c. 14, Sept. 3, 1912.—R. S. Standen. Correctly named.—W.M.R.

R. lentiginosus Lees. (Ref. No. 343). Rocky ground at Capel Curig, among low bushes on the ascent to Moel Siabod, Carnarvonsh., v.c. 49, July 11, 1912.—S. H. Bickham. A beautiful set of flowering specimens of Lees' type from his locality (Aug. 1849), as shown by the specimen now in the Babington Herbarium at Cambridge.—W.M.R.

R. [lasioclados Focke]. Bury Camp, Moorend, W. Glos., v.c. 34, July 15, 1912.—Ida M. Roper. Is not this a leucostachys form? Mr. Rogers now regards lasioclados as having originated from crosses between R. rusticanus and R. leucostachys. I do not see any sign of the former in Miss Roper's specimen.—E.S.M. I should name all the 8 sheets sent to me "good R. leucostachys Sm."—W.M.R.

R. mutabilis Genev. Churt and Hindhead, Surrey, v.c. 17, July 25 and Aug. 3, 1912.—Mary A. Rogers. Locally abundant and always easily recognized.—W.M.R.

R. fuscus Wh. & N. Leigh Woods, by Bristol, N. Somerset, v.c. 6, Aug. 1907.—J. W. White. A difficult form,

best under R. fuscus Wh. & N., though differing from type conspicuously in its elongate racemose (or subracemose) and usually nodding panicle-top which takes it off towards my var. nutans (see the interesting notes on R. Babingtonii and R. fuscus in Mr. White's "Fl. Bristol," (1912), pp. 282–3, and Dr. Focke's note in "Journ. Bot." 1890, p. 133). I have not seen anything that appears to me identical with this Leigh Woods plant from any other locality, though I have specimens that recall it from West Malvern and one or two other places. We have in fact a series of forms in (1) type fuscus; (2) this Leigh Woods plant; (3) my var. nutans; (4) my leptopetalus and (5) R. pallidus Wh. & N.; all more or less connected by somewhat intermediate plants.—W.M.R.

R. glareosus Rogers & Marshall ("Journ. Bot." 1912, pp. 309-311, 374). Tilford to Hindhead (chiefly in Churt Parish), Surrey, v.c. 17; fairly frequent, July and Aug. 1912. Mostly in partial shade, with stems rather less strongly angled and leaflets less deeply incised towards the point than in type; but always constant in habit and distinctive characters.—W. Moyle Rogers.

R. horridicaulis P. J. Muell. St. Leonard's Forest, near Horsham, W. Sussex, v.c. 13, July 18, 1908.—J. W. White. All the sheets are rightly named apparently, but they are not so strongly characteristic as the Glamorgan and Brecon horridicaulis usually is, nor as some other sheets of Mr. White's that I have seen, from the same locality. Usually the terminal leaflet is remarkably subrotund-truncate-cuspidate and the panicle broadly cylindrical in the ultra-axillary part; but in these specimens, gathered rather early in July, these features are not well developed.—W.M.R.

R. Koehleri Wh. & N., var. cognatus (N. E. Brown). Between Tilford and Hindhead, locally abundant on the borders of Heaths and Commons, Surrey, v.c. 17, July 24–26, 1912. Strong and very leafy plants, with long nearly prostrate stems and showy leaves which are incurved, and bright dark green above, with remarkably open compound serration. Petals apparently always white.—W. Moyle Rogers.

Potentilla norvegica L. Waste ground, Newhaven, E. Sussex, v.c. 14, Aug. 21, 1912.—R. S. Standen. Correct.—S.T.D.

- $P.\ erecta \times reptans.$ Silverhill, Perranarworthal, W. Cornwall, v.c. 1, June 1912.—F. H. Davey.
- P. procumbens × reptans. Greenwith Common, Perranarworthal, W. Cornwall, v.c. 1, June 1912.—F. H. Davey. All these specimens are, I believe, rightly named P. procumbens × reptans (P. mixta Nolte.)—E.S.M.
- P. Anserina L., var. concolor Wallr. (1) Ganghill Copse, Guildford, Surrey, v.c. 17, May 1912.—J. Comber. (2) Shingly shore, Conway beach, Llandudno, Carnarvonsh., v.c. 49, July 18, 1912.—S. H. Bickham.

Rosa pimpinellifolia × tomentosa. Near Selkirk, v.c. 79. June and Aug. 1912.—I. M. Hayward. Yes, this is one of the numerous forms of the hybrid R. involuta Sm.—W.B. Yes, under the form R. Sabini Woods.—A.H.W.-D.

- R.—— (Ref. No. 60). Bonchester Bridge, Roxburghsh, v.c. 80, July 6 and Aug. 27, 1912.—Ida M. Hayward. This, in my opinion, is a variation of R. mollis Sm.—W.B. I think this must go to the Omissa group, under R. submollis Ley, but the peduncles are decidedly long, at least in my flowering specimens, which may have come from a different bush from the fruiting ones.—A.H.W.-D.
- R. (Ref. No. 29). Banks of Tweed, Melrose, Roxburghsh., v.c. 80, July and Oct. 1912.—Ida M. Hayward. One of the *Lutetianæ*. I think R. separabilis Déségl.—A.H.W.-D.
- R. coriifolia Fr. (Ref. No. 30). Tweedside, Melrose, Roxburghsh., v.c. 80, July 1 & Oct. 9, 1912.—I. M. Hayward. Yes, R. coriifolia Fr., of the group typica.—W.B. I agree.—A.H.W.-D.
- R. coriifolia Fr. (Ref. No. 27). Banks of Tweed, Melrose, Roxburghsh., v.c. 80, July 1 and Oct. 9, 1912.—Ida M. Hayward. This, in my opinion, though the specimens do not clearly show it, is a form of R. coriifolia Fr. of the group Lintoni Scheutz.—W.B. I should have thought the sepals too deciduous for a Lintoni affinity. None of my

seven fruits have any attached, as I should have expected, even so late as 9th October. I should place this with No. 28. The Scottish species of the *coriifolia* sub-group require working out.—A.H.W.-D.

R. — (Ref. No. 28). Behind church, Melrose, Roxburghsh., v.c. 80, July 1 & Oct. 9, 1912.—I. M. Hayward. The note to No. 27 also applies to this.—W.B. I think one of the biserrate Sub-collina, but it does not correspond with any segregate known to me.—A.H.W.-D.

Cotoneaster integerrima Medic. A bush which came from Gt. Ormes Head, Carnarvonsh., v.c. 49, July 1912.—S. H. Bickham.

Saxifraga sponhemica Gmel. (Ref. No. 3717). On the main peak of Snowdon (up to 2500 feet or more), Carnarvonsh., v.c. 49, July 7, 1912. Herbage bright green. Very near my Nos. 3718 and 3719. These plants are not quite the form of sponhemica (auct. angl.) usually met with in Scotland.—E. S. Marshall.

S. sponhemica Gmel., var. (Ref. No. 3718). Cwm Idwal, Carnarvonsh., v.c. 49 (from 1400 to 2000 feet), July 13, 1912. A very striking, delicate plant, when fresh. Habit usually rather compact; foliage vivid green, with narrow, acute segments; flowers small. No. 3719 comes near this, but is more lax and straggling. The same form occurs on Snowdon.—E. S. Marshall.

Sedum reflexum L. On sandstone rocks, Bury Camp, Moorend, W. Glos., v.c. 34, Aug. 2, 1912. A plant rarely found on live rock.—Ida M. Roper. Correct.—E.S.M.

Callitriche autumnalis L. Spot Loch, Dunbar, Haddingtonsh., v.c. 82, July 1911. — McT. Cowan, Jun. Correct.—J.G. This is an additional record for v.c. Haddington.—A.B.

C. truncata Guss. Running stream, Grande Mare, Guernsey, Aug. 16, 1912.—W. C. Barton. Yes; collected too late for fruit.—E.S.M. A well known station for the plant.—A.B.

Daucus gummifer All. (1) Close turf, exposed west coast, Port Soif, Guernsey, Aug. 7, 1912.—W. C. Barton.

Is not this a stunted maritime state of *D. Carota L.*? Neither in foliage nor in fruit does it agree with any of my specimens of *D. gummifer.*—E.S.M. (2) Bedruthan Steps, N. Cornwall, v.c. 1, July 1, 1912.—J. W. White.

Erigeron mucronatus DC. Old walls, St. Peter Port, Guernsey, Aug. 4, 1912. A Mexican plant, established in Guernsey over forty years.—W. C. Barton. Correct.—S.T.D. In the "Species Plantarum" Erigeron is neuter; and I believe that we ought to follow this.—E.S.M.

Anaphalis margaritacea Benth. & Hook, fil. Disused quarry, Flax Bourton, N. Somerset, v.c. 6, Aug. 10, 1912.—Ida M. Roper. Correct.—S.T.D.

Ambrosia artemisifolia L. Waste ground, Arno's Vale, Bristol, N. Somerset, v.c. 6, Sept. 3, 1912.—Ida M. Roper. Correct.—S.T.D.

Matricaria suaveolens Buch. Roadside, Brentry, near Bristol, W. Glos., v.c. 34, July 2, 1912.—Ida M. Roper. Correct.—S.T.D.

Senecio vulgaris L., var. radiatus Koch. Sandy coast, Lerée. Guernsey, Aug. 13, 1912.—W. C. Barton. Yes; this is very probably a native station.—E.S.M.

S. squalidus L. × vulgaris L. Weed in Botanic Garden, Cambridge, v.c. 29, Sept. 1912.— A. J. Crosfield. No doubt correct; small, but quite intermediate in characters.—E.S.M.

Carduus [pycnocephalus L.]. Road-side, Acle, E. Norfolk, v.c. 27, Aug. 1912.—F. Long. Not the type, but our ordinary British plant, C. tenuiftorus Curt.—E.S.M.

Cnicus acaulis Willd., var. caulescens Pers. Barrington, Cambs., v.c. 29, July 1912.—G. Goode.

C. arvensis Hoffm., var. vestitus Koch, (=Cirsium arvense Scop., var. vestitum Koch,=Cirsium argenteum Vest.), fide C. E. Salmon. Waste ground at Newhaven, E. Sussex, v.c. 14, July 3, 1912.—R. S. Standen.

Hieracium Pilosella L., var. concinnatum, F. J. Hanb. Sandy field, near Grandes Rocques, Guernsey, Aug. 15, 1912.
—W. C. Barton. I agree.—E.F.L. Approaches this; but

the heads are not quite epilose, too densely glandular, and not cano-floccose enough. I should leave it as a dwarf state of the type, which very often has the ligules bright red beneath.—E.S.M.

H. Peleterianum Mérat. Cliffs, Les Sommeilleuses,
Guernsey, Aug. 5, 1912.—W. C. Barton. Very typical.—
E.S.M. Rightly named.—E.F.L.

H. [lima F. J. Hanb.]. Cheddar Gorge, N. Somerset,
v.c. 6, May 29, 1912.—Ida M. Roper. This is H. stenolepis
Lindeb. The leaves of H. lima are covered with stiff hairs.
—E.F.L.

H. hypochaeroides Gibs., var. saxorum F. J. Hanb. (Ref. No. 3725). Cliffs and rocks of Cwm Idwal, Carnarvonsh., v.c., 49 (between 1800 and 2200 feet), July 13, 1912. Styles yellow; ligules glabrous-tipped. Leaves firm, blue-green, often blotched. A puzzling plant, allied to H. Schmidtii, H. Leyi, and H. Sommerfeltii (which last I did not see there). The name which I adopt was suggested by Rev. E. F. Linton, and seems to fit it best. Near Auchterneed, E. Ross, a low-lying station, this variety is more luxuriant, with larger heads, but the leaves are either blotched or concolorous, as in this case.— E. S. Marshall. I think the name is right.—E.F.L.

H. cambricum F. J. Hanb. Great Ormes Head, Carnarvonsh., v.c. 49, July 2, 1912, Styles yellow.—E. S. Marshall. Good typical specimens of this very distinct species.—E.F.L.

H. pellucidum Laestad., var.? Old walls, Grey Abbey, Co. Down, Oct. 1912. This flowers from May till Oct. The styles yellow to livescent.—C. H. Waddell. Certainly under that, I should say; about right in foliage for Ley's 'var. lucidulum' (now said to be the type), but more like var. pulcherrimum in the inflorescence.—E.S.M.

H. serratifrons Almq., var. grandidens Dahlst. (Ref. No. 3760). Abundant in sandy lanes on Sheepwash Hill, near Molland, N. Devon, v.c. 4, May 31, 1912. Confirmed by Rev. E. F. Linton, as 'H. grandidens Dahlst.'; the same plant which Mr. F. N. Williams formerly referred to H. crebridens Dahlst. I am not sure whether Dahlstedt

published his grandidens as a species or as a variety; but it seems as well placed under H. serratifrons as vars. lepistoides and cinderella, which are nearly allied to it. Styles livid; ligules golden yellow, glabrous-tipped; heads epilose, somewhat floccose, densely clothed with black stalked glands.—E.S. Marshall. Yes; I have two gatherings of this plant from near Molland, which have been so named by Dr. Dahlstedt.—E.F.L.

H. maculatum Sm. Lindfield, E. Sussex, v.c. 14, May 29, 1912.—R. S. Standen. I have not seen Smith's type of H. maculatum; but my collection contains at least two plants under that name which can hardly be conspecific. The Rev. Augustin Ley was surely right in referring this Lindfield hawkweed to H. Sommerfeltii Lindeb., var. splendens F. J. Hanb. (H. Griffithii F. J. Hanb. prius); I have again carefully compared them, and find the resemblance, especially to cultivated var. splendens, exceedingly close. The only H. 'maculatum' of mine which Mr. Standen's plant approaches is that from old walls at Chichester, which is more pilose-headed than the rest, but far less shaggy-headed than these and other specimens from Lindfield. The occurrence of any Sommerfeltii-form, so far south, is a geographical puzzle. E.S.M. It has long appeared to me that we have two forms placed under this name; one form with longer hairs clothing the involucre and coarser ciliation of the leaves than the other. I am not prepared to say which is Smith's plant. The Lindfield plant seems to agree with specimens from Chichester walls, gathered by the late Rev. F. H. Arnold, and said by him to be from the station where Smith got the original specimens. I have not as yet seen these. It is not H. Sommerfeltii, nor var. splendens F. J. Hanb.—E.F.L. (See also 26th Rept. W.B.E.C. (1909–10), pp. 241–2).

H. diaphanoides Lindeb.? (Ref. No. 3735). On slate-debris by Dolwyddelan railway station, Carnarvonsh., v.c. 49, July 6, 1912. Styles livid; ligules glabrous-tipped. The Rev. E. F. Linton suggested that this might be either H. irriguum or H. Adlerzii; but he doubted whether the specimen sent to him, which branched from the base, was normal, and I think it was not. Many of the plants, like the H. sciaphilum which grew with them, were remarkably

fine; otherwise, they did not appear to differ materially from Capel Curig examples which Mr. Linton had agreed with me in naming *H. diaphanoides*. I think they are best referred to this, as a strong form, due to situation.—E.S. Marshall. I agree to this as *H. diaphanoides*—E.F.L.

H. diaphanoides Lindeb., a form or var. (Ref. No. 3733). On boulders of volcanic ash, Cwm Idwal, Carnarvonsh., v.c. 49 (between 1300 and 1800 feet), July 13, 1912. Styles livid; ligules glabrous-tipped; leaves much tinged with dark, purplish brown. I was inclined to consider this as only a dwarf state, due to exposure; but the Rev. E. F. Linton says: "I think H. diaphanoides; perhaps the form referred to in "British Hieracia," p. 70; or perhaps var. ornatum, since the phyllaries are more or less floccose." W. R. Linton wrote (loc. cit.):—"A form occurs in Cwm Idwal, Carnarvonsh., with more numerous leaves, very dark, short thick heads, and phyllaries incumbent." We saw no other form in the glen; very likely it is the same thing as var. ornatum Dahlst., which I believe was not known to him when he was preparing the monograph. Probably smaller than usual, as there had been a long spell of dry weather.—E. S. Marshall. I suggested that this was var. ornatum, as the plant is very like one from Clova, so named by the Rev. W. R. Linton for me. But I have no authentic specimen.—E.F.L.

H. gothicum Fr. By a streamlet, near Capel Curig, Carnarvonsh., v.c. 49, July 23, 1912. (Ref. No. 3741). Styles yellow; ligule-tips glabrous; phyllaries closely appressed. The Rev. E. F. Linton endorses the name.— E. S. Marshall.

H. [tridentatum Fr.]. Road-side near Wych Cross, E. Sussex, v.c. 14, Sept. 3, 1912.—R. S. Standen. Certainly not that, but H. boreale Fr., and perhaps a variety. One of my two examples is abnormal, owing to a gall, low down on the stem.—E.S.M.

H.——? Banks of Ouse, Lindfield, E. Sussex, v.c. 14, Sept. 4, 1912.—R. S. Standen. Under H. boreale Fr.; it agrees better with the description of var. virgultorum (Jord.) in W. R. Linton's "British Hieracia," p. 91, than with any of the other varieties mentioned there.—E.S.M.

A broad-leaved form of H. umbellatum which has no special name.—E.F.L.

Hypochæris glabra L. (1) Headon Hill, I. of Wight, v.c. 10, Sept. 1, 1912.—W. C. Barton. This is var. erostris Coss. & Germ. Fl. Paris (= var. nana Dunn, Jl. Bot., 1896, p. 476).—C.E.S. (2) Sandy banks, St. Martha's Hill, Guildford, Surrey, v.c. 17, June 1912.—J. Comber.

H. glabra L. [var. nana] Dunn. Lancresse Common, Guernsey, July 31, 1912.—W. C. Barton. The central fruits of this are clearly beaked, so it cannot be placed under var. nana Dunn (= erostris C. & G.). To me it is a poor starved state of the type.—C.E.S.

Leontodon hispidum L., [var. hastile L.]. Little Malvern Worcs., v.c. 37, June 1912.—A. J. Crosfield. The variety is described in "Bab. Man." ed. ix., p. 226, as being "almost glabrous throughout"; these specimens are very hairy.—E.S.M.

L. hispidum L., var. glabratum Gren. & Godr. Meadow, Malvern Wells, Worcs., v.c. 37, June 15, 1912.—Coll. R. F. Towndrow. Comm. S. H. Bickham. (See Rept. B.E.C., 1912, p. 266).

Lactuca Serriola L. Waste ground, Newhaven, E. Sussex, v.c. 14, Aug. 14, 1912.—R. S. Standen. Right.—E.S.M.

Trachelium cæruleum L. Old wall, St. Peter Port, Guernsey, Aug. 4, 1912. First recorded in Jl. of Bot., 1892.—W. C. Barton.

Pyrola rotundifolia L., form intermediate between type and var. arenaria. Grande Mare, Guernsey, Aug. 16, 1912. (See Marquand's "Flora of Guernsey" and "Jl. of Bot." Nov. 1893.) It is unfortunate that the habitat of this plant is being rapidly reduced. Only a very small area of La Grande Mare is still undrained; the large pools have disappeared and a few years will probably see the extinction of the marsh plants of the locality.—W. C. Barton. The plant received differs from all those in my herbarium by its smaller orbicular foliage and more numerous flowers (twelve, besides what looks like a rudimentary one at the apex); the fruit is also appreciably smaller. Of P. serotina

Mlcq. I have seen neither specimens nor description; Nyman makes P. rotundifolia, var. arenaria Koch a synonym, and gives N. W. France as one of its habitats, which brings it rather near to Guernsey. There is still one blossom with the petals unshed, though it was collected on Aug. 16; by which time typical rotundifolia would be long over in the south of England. I fail to see how this Guernsey specimen is intermediate between that and the W. Lancashire var. maritima, which tends to be rather dwarf; there are only two bracts (not very large or conspicuous) below the inflorescence.—E.S.M.

Statice Limonium L., var. pyramidalis Syme. Salt marsh, Wells, W. Norfolk, v.c. 28, Aug. 1912.—F. Long. My sheet contains an excellent example of the "form" called pyramidalis.—C.E.S.

S. humilis C. E. Salmon. Bosham, W. Sussex, v.c. 13, Aug. 1912.—C.E.S.

S. binervosa Sm. Salt marsh, Wells, W. Norfolk, v.c. 28. Aug. 1912.—F. Long. Correct.—C.E.S.

Lysimachia ciliata L. Edge of a rough shrubbery, near Bromesberrow, W. Glos., v.c. 34, July 24, 1912.—S. H. Bickham. Correct.—S.T.D.

Anagallis arvensis L., var. carnea (Schrank). Albecq, Guernsey, Aug. 16, 1912. The variety is frequent in Guernsey, especially near the sea, growing with the type. I saw no blue-flowered specimen in the island, and am convinced this is not a hybrid, as suggested by continental botanists and by Dr. Williams' "Prodromus," p. 431, but a colour form (see Jl. of Botany 1911, p. 44).—W. C. Barton. Correct.; the petals are distinctly glandular-ciliate.—E.S.M.

 \times Symphytum densiftorum Bucknall (= S. officinale, var. purpureum \times > S. peregrinum). Bank of the Land Yeo, near Gatcombe Mill, N. Somerset, v.c. 6, June 1912 (See Journ. Bot. 1912, p. 334). Specimens passed by Mr. Bucknall,—Jas. W. White. Characteristic specimens of the hybrid.—C.B.

 \times Symphytum discolor Bucknall (= S. officinale, var. ochroleucum \times < S. peregrinum). By the Land Yeo stream, near Gatcombe Mill, N. Somerset, v.c. 6, June 1912

(See Journ. Bot. 1912, p. 333). Specimens passed by Mr. Bucknall.—Jas. W. White. These, too, are characteristic of the hybrid.—C.B.

S. peregrinum Ledeb. (Fide C. Bucknall). By cart track between Manor Farm and King's Hedges Road, Chesterton, Cambs., v.c. 27, June 7, 1912.—G. Goode. S. peregrinum Ledeb., when growing on the banks of streams, is a tall, luxuriant plant, with flowers rose-coloured in bud, then bright blue, the stem without wings, and bearing abundant fruit. When growing in dry localities, the flowers remain rose-coloured or are only partially blue, and the entire plant is not so well developed as when growing in moister situations.

This species forms a series of hybrids with the white and purple flowered varieties of S. officinale, which have been described by the writer in the "Journal of Botany," vol. L., p. 332 (1912). These are distinguished by the more or less winged stem, by the colour of the flowers, which are white, rose-coloured, bluish or purple, always changing to a cinereous blue in the dried plant, and by the fruit being sparingly produced.

Typical S. peregrinum, as well as some of its hybrids, has often been named S. patens Sibth., but the latter is probably only S. officinale, var. purpureum with undeveloped fruit, and the calyx-lobes, in consequence, spreading after the flowering, instead of being connivent over the nutlets as is the case when they are well developed. S. peregrinum has also been confused with S. asperum Lepech. (S. asperrimum Donn and M.B.), which, in Britain, is a much rarer plant. It is distinguished by the small calvx with obtuse segments, the calyx in S. peregrinum being generally considerably larger with acute lanceolate segments. With regard to the clothing of hairs and prickles, and in other characters, both species are variable, and they are often difficult to separate except by the above-mentioned characters of the calvx; and when, owing to conditions of climate or situation, the flowers are imperfectly developed, even these characters are liable to be deceptive. It is probable that intermediates, and possibly hybrids, occur, and that they are sometimes the cause of the difficulty in the accurate determination of these plants.

Ledebour, in the "Flora Rossica," has well distinguished the two species, and complete descriptions, with remarks on the forms which occur both in the wild and naturalised state will be found in the writer's "Revision of the Genus Symphytum" in the "Journal of the Linnean Society, (Botany) XLI, Dec. 1913."—Cedric Bucknall.

Solanum Dulcamara L., var. marinum Bab. Shingle, Bordeaux, Guernsey, Aug. 11, 1912.—W. C. Barton. Yes; but it would be worth while to ascertain, by growing this in ordinary garden soil, whether the difference from type is permanent, or merely due to local conditions.—E.S.M.

S. triftorum Nutt. Alien from N. America. Wapping Wharf, Bristol, N. Somerset, v.c. 6, Aug. 22, 1912.—J. W. White. Correct.—S.T.D.

Verbascum [nigrum L.]. Sandhills, Devonshire Road, St. Anne's-on-the-Sea, W. Lancs., v.c. 60, July 13, 1912. I think this species has not been recorded for vice county 60.—Charles Bailey. Certainly not V. nigrum. I do not know this alien.—E.S.M.

Antirrhinum majus L. St. Ann's hill, Luton, Beds., v.c. 30, June 1912.—D. M. Higgins.

Veronica hybrida L. River-side rock, under Leigh Woods, Bristol, N. Somerset, v.c. 6, July 6, 1912. New county record. It is only this past summer that a few plants have become established on the Somerset side of the Avon.—Ida. M. Roper. Miss Roper sends one specimen for identification. This confirms the queried record in "Top. Bot.," ed. II., p. 288; which is most satisfactory.— E.S.M.

V. Anagallis-aquatica L., var. anagalliformis (Bor.). Gleaston Beck, outlet of Urswick Tarn, Dalton-in-Furness, N. Lancs., v.c. 69, Sept. 1912.—Coll. D. Lumb. Comm. J. Comber. What has been so called in Britain; the glandular plant, which I have found very constant in its stations. Boreau does not mention it in his "Fl. du cent. de la Fr.," ed. I., vol. II., p. 371 (1840); but Rouy (Fl. de France, XI, p. 38), who cites it as var. δ. anagallidiformis Franchet, refers it to Boreau's second edition, p. 489 (as V. anagallidiformis), so it seems to have been misspelt. Professor Hugo Glück names several of my series simply "good V. aquatica

Bernh.", ignoring the glandular inflorescence. Bernhardi's species is placed by Rouy as his 'Race I.', which I believe means an intermediate rank between a subspecies and an ordinary variety.—E.S.M.

Euphrasia nemorosa H. Mart., form. Groby, Leics., v.c. 55, July 1912.—A. R. Horwood. This appears to be shade-grown, or to have been drawn up amongst other herbage—C.B. Rather mouldy, but seems to be E. curta Wettst., var. glabrescens Wettst.—E. & H. D. This is the 'nemorosa' of Mr. Townsend, who is followed by Mr. Bucknall; but not of Wettstein, who says in his Monograph that E. nemorosa is quite glabrous. These examples have somewhat pilose leaves and bracts; they come under E. curta Wettst., var. glabrescens Wettst.!—E.S.M.

E.——? Chalk pit between Haslingfield & Barrington, Cambs., v.c. 29, Aug. 1912.—G. Goode. E. stricta Host.—E. & H. D. Three specimens are E. curta, glabrescens; the fourth is probably another form of this, but the stem is remarkably stout, and the foliage unusually large.—E.S.M. I have come to the conclusion that both this and Mr. Horwood's plant are E. nemorosa, although so different in appearance. This difference is probably due entirely to situation. In both there are very slender lower branches, which I think are only found in E. nemorosa.—C.B.

Bartsia Odontites Huds., var.? Chalk pit between Haslingfield and Barrington, Cambs., v.c. 29, July & Aug. 1912.—G. Goode. B. Odontites Huds., var. serotina (Dum.).—C.B.

Orobanche rubra Sm. On wild thyme, half a mile west of Lizard Lighthouse, W. Cornwall, v.c. 1, June 1912.

—A. M. Geldart.

Utricularia Bremii Heer. In ditch or drain in a peat moss, between Haverthwaite & Cark, N. Lancs., v.c. 69, Sept. 1912.—J. Comber. I think correct.—J.G. The separate flowers agree with specimens sent me by Dr. Glück, but the bladders are larger than in his specimens.—A.B. I have no good flowering material for comparison; but this very closely resembles specimens lately sent me by Prof. Glück from Hanau, Hesse, as well as my barren plants from Moss of Inshoch, near Nairn, v.c. 96, and

from Lochan Feoir, near Inchnadamph, W. Sutherland, v.c. 108. The floral characters agree well with Babington's description:—"short conic spur, and orbicular flat lower lip." First-rate material.—E.S.M. This is a strong example of typical *U. minor*. I have never yet seen true *U. Bremii* from Great Britain.—H. Glück.

Mentha sylvestris L., var. mollissima (Borkh.). Banks of Isla, near Meigle, E. Perth, v.c. 89, Aug. 1911.—McT. Cowan, Jun. Probably right. Except that the leaves are smaller, it agrees very well with my No. 2178, from the Muckle (or Brodie) Burn, two miles west of Forres, v.c. 95 (1898); this was sent to Mr. Arthur Bennett, queried as M. candicans Crantz—a name suggested, I think, by Mr. E. G. Baker—and he replied:—"M. candicans Crantz is probably the same as M. sylvestris, var. mollissima, = M. mollissima Borkh., teste Koch!"—E.S.M. I believe correct. Strail refers this to M. incana Willd. ex Pérard.—A.B.

M. piperita L.,? var. officinalis or vulgaris. Goonhaven,
W. Cornwall, v.c. 1, Sept. 1912.—Coll. C. C. Vigurs. Comm.
F. H. Davey. The more frequent variety, officinalis Hull.
—C.E.S. I believe under Sole's M. vulgaris. Probably a hybrid, or mongrel, of M. aquatica and M. spicata.—E.S.M.
I should say nearest to β vulgaris (Sole).—A.B.

M. aquatica L., var. subglabra Baker. Surlingham ferry, E. Norfolk, v.c. 27, Sept. 1912.—F. Long. I have not seen Baker's plant; but this looks right.—E.S.M. Although one might expect a more glabrous plant from the description of this variety in Hooker's "Stud. Fl.", yet it may pass, as it is similar to a specimen from Haslemere (in Hb. W. Whitwell) so named by J. G. Baker.—C.E.S.

M. dubia Schreb. Banks of Isla, at Alyth, E. Perthsh., v.c. 89, Aug. 1912.—McT. Cowan, junr. Apparently a sativa form; i.e. either a primary or a secondary hybrid between M. aquatica and M. arvensis. Nearer the second parent in habit; but there is abundant evidence of the first.—E.S.M. M. dubia Schreb. is considered by Rouy (Fl. Fr.) to be synonymous with M. arvensis L., var. lanceolata Becker. The calyx-teeth of Mr. Cowan's plant seem rather too long and narrow to come under arvensis, and I should suggest rather that the specimen I have

should be placed under that varying hybrid, arvensis × aquatica (=sativa), of which there are named narrow-leaved states.—C.E.S. This seems to answer fairly well to Strail's description in "Bull. Soc. roy. bot. Belg.", 1887, p. 119.—A.B.

M. sativa L., var. obtusata (Opiz). Banks of Isla, Alyth, E. Perthsh., v.c. 89, Aug. 1911.—Mc T. Cowan, junr. This seems to agree with Strail's description, but the leaves are less dentate.—A.B.

M. gracilis Sm., var. cardiaca Baker. Roadside near Ripley, Surrey, v.c. 17, Aug. 31, 1912. These specimens have the leaves less hairy on the veins beneath than in Baker's type in Herb. Mus. Brit., but agree in other particulars with the description and plate in "Jl. Bot." 1865, p. 245. I understand Mr. J. Fraser discovered this interesting mint in this Ripley station (see Rep. Bot. Ex. Club Brit. Isles, 1911, p. 113).—C. E. Salmon. This seems to represent the mint so called by Mr. Baker in his paper in "Jl. Bot." 1865.—A.B.

Scutellaria galericulata L., var. pubescens Benth. Stony shore, Fife Coast, v.c. 85, July 1912 (fide A. Bennett).—McT. Cowan, junr. A state, due to the situation, rather than a valid variety.—E.S.M.

Stachys germanica L. Orig. Green lane between Woodstock and Rousham, Oxon. Cult. Ledbury, July 23, 1912.—S. H. Bickham.

Plantago arenaria W. & K. Allotment ground, Ashley Hill, Bristol, W. Glos., v.c. 34, Aug. 10, 1912. The plant differs from other gatherings I have made in its luxuriant floral leaves: but, if European, it cannot be any other species.—Ida M. Roper. Correct.—E.G.B.

Chenopodium leptophyllum Nutt. (fide G. C. Druce). Waste heap of London rubbish, N. of Welwyn Tunnel, Herts., v.c. 20; Sept., Oct. & Nov. 1912. Habit very different from C. album, and possibly a distinct species.—
J. E. Little. This is Chenopodium album, var. leptophyllum Moquin in DC. Prodr. xiii, part ii, 71 (1849), naturalised or adventitious in Europe from North America. The name "C. leptophyllum Nuttall," often seen in systematic works,

is merely a name cited in synonymy by Moquin. Citation "C. album var. leptophyllum Nuttall" is also incorrect. The plant is very closely allied to the European forms of C. album, and is no species.—C.E.M.

- C. hybridum L. Cultivated ground, Swading Hill, Sandy, Beds., v.c. 30, Oct. 19, 1912. Sent chiefly for the seeds.—J. E. Little. Evidently a 'forma aprica' (leaves reduced in size, and beautifully coloured with purple); I never saw this state before.—E.S.M. An interesting colour-form unknown to me. Cf. C. hybridum, var. Paeskii [after Fritz Paeske] Ascherson and Graebner "Fl. nordöstd. Flachl." 279 (1898), known up to the present only in the province of Brandenburg, Germany.—C.E.M.
- C. botryodes Sm. Lihou Island, Guernsey, Aug. 13, 1912. The small specimens growing upright in shallow water at the edge of the pool; the larger on the shingle near. Some of the finest procumbent on shingle reached 24-in. diameter, but unfortunately all I gathered were spoilt before they reached England.—W.C. Barton. Typical.—E.S.M.

 $Atriplex\ littoralis\ L.,$ var. $marina\ L.$ Lerée, Guernsey, Aug. 13, 1912.—W. C. Barton. Very well marked specimens of the variety.—E.S.M.

A. [deltoidea Bab., var.salina Bab.]. In brackish ditches, near Mont Cuet, Guernsey, Aug. 10, 1912. These young plants show well the mode of growth which distinguishes the variety.-W. C. Barton. Far too immature to name confidently; but I believe it to be a form of A. patula L.— This is the salt-ground state of common A. hastata, var. genuina. Synonyms are A. deltoidea, var. triangularis Bab. Man. ed. 3 (= var. salina of later editions). One plant sent is quite typical, the other is immature and is a form in which the majority of the leaf laminae are ovate and elongated, only a few having lateral angles and a The form has often been named A. subcuneate base. patula, which it certainly is not, though it may be a hybrid segregate of crossing (which is extremely common in this genus) between A. patula and A. hastata, var. genuina, f. salina, these being often found together.—A.J.W.

Suæda maritima Dum., var. procumbens Syme. (1) Tidal pool, Grand Havre, Guernsey, Aug. 15, 1912.—W. C. Barton. Yes.—E.S.M. (2) Mud flats, Walney Island, N. Lancs., v.c. 69, Aug. 1912.—J. Comber. Under this, no doubt; the plant with large seeds.—E.S.M. (3) Salt marsh, Wells, W. Norfolk, v.c. 28, July 1911.—F. Long. Right.—E.S.M.

Polygonum dumetorum L. Copse, near Compton, Surrey, v.c. 17, Sept. 1912.—J. Comber. Yes; I have gathered it near Peperharow, a few miles away, but it only appears occasionally.—E.S.M. Yes. In the first edition of the "Species plantarum" Linnæus makes this a var. β of the American P. scandens, but in the second edition he makes it a species. In later years Dr. Gray, of the United States, combined the two, but Dr. Bromfield ('Phytologist,' iii (1850), p. 766), who knew them in both countries considered them distinct.—A.B.

Euphorbia exigua L., var. retusa L. Cornfields, Guildford, Surrey, v.c. 17, July 1912.—J. Comber, On the same stem may be seen leaves both truncate-mucronate and tapering to an acute point! The latter seem chiefly in the upper part. Scarcely a good variety; better as a "form" perhaps.—C.E.S. Correct.—E.S.M.

Ulmus hollandica Mill.? Lane, near Royston, Herts., v.c. 20, Feb. 29 and June 1912.—J. E. Little. I consider this to be probably the Huntingdon Elm (U. glabra Huds. $\times nitens$ Moench (= U. vegeta Ley).—A.B.J. $\times U$. hollandica Mill., or near it.—C.E.M.

U. campestris L., var. glabra (Mill.). Baggrave, Leics., v.c. 55. Fruit, April; leaves, Oct. 1912.—A. R. Horwood. A very bad specimen of what appears to be U. nitens Moench (=U. glabra Mill.). The idea of sending out photographs with specimens from trees is a good one, as it helps materially towards their identification.—A.B.J. Either a large-leaved form of U. nitens, or a form of U. glabra × nitens: it is impossible to decide which unless ripe fruits are supplied. The "fruits" on the specimen before me are very far from being ripe.—C.E.M.

Salix triandra L., var. Hoffmaniana (Sm.). On the Ouse, E. Mascalls, Lindfield, E. Sussex, v.c. 14, Catkins, Apl. 30, 1912. Foliage, Sept. 9, 1912.—R. S. Standen. Right.— E.F.L.

S. [purpurea L., var.] ?. Severn flats, near Pilning, W. Glos., v.c. 34, March 26 and July 2, 1912.—Ida M. Roper. There is some mistake here; certainly not S. purpurea, but what it really is I cannot say. The stem of the flowering branch is very shining, as in S. decipiens Hoffm.: the more or less recurved, slender catkins (rather young) average barely an inch in length. The mature foliage is most like S. fragilis L., but considerably resembles S. decipiens, the female plant of which is unknown in Britain. Can it be that? I have not seen a description of the inflorescence.—E.S.M. S. viridis Fr. (if British); but the very small catkins suggest the weeping willow? Can grown-up catkins be supplied?—E.F.L.

S. purpurea L. &. Withy-bed, Walton-in-Gordano, N. Somerset, v.c. 6, Mar. 27 and Aug. 13, 1912.—Ida M. Roper. Yes.—E.F.L.

S. purpurea L., var. [Woolgariana (Borr.)]. Swamp by R. Wey, north of Guildford, Surrey, v.c. 17, April and Aug. 1912—J. Comber. By the shape of the leaves, and the colour of the young branches, I judge this to be var. Lambertiana (Sm.).—E.F.L.

S. aurita L. [\times cinerea L.] ? and β. Meadow near Knebworth Great Wood, Herts., v.c. 20, April 1 and July 4, 1912.—J. E. Little. Pure S. aurita L.; typical in catkins, nor can I see any trace of S. cinerea L. in the leaves and stipules.—E.S.M. The β pieces may be right; the foliage and ? specimens are S. aurita L.—E.F.L.

 $Populus \times$ —? (Ref. No. 101). Planted along water-courses between Denston and Wickhambrook, W. Suffolk, v.c. 26, May, Sept. and Oct. 1912. P. serotina group, but distinct from P. serotina Hartig, and with smaller leaves, which are like P. nigra italica, but with 2, 1, or 0 glands at base of midrib, and of a pale green in spring, contrasting strongly with the coppery colour of P. serotina. Faint pubescence quickly vanishing on petiole, and on the leaf. The tree is also abundantly planted in

the valley of the Stour between Clare and Haverhill, W. Suffolk.—J. E. Little. It is hoped that notes on this will appear in the next Report.—G.G.

P. alba L. ?. On left bank of the Oughton, Burford's Ray, Hitchin, Herts., v.c. 20, Mar. 9 and June 25, 1912. One of a number of old P. alba in this district, of which I have sent measurements to Mr. Augustine Henry for his "Trees of Great Britain and Ireland." The largest are 80 feet high. Measurements of this one smaller; Height 54-ft. Girth at 3 feet from the ground 9 feet, spread 60 feet. Extremities of branches rugged with large pulvinus at the leaf scar. I think it has grown more slowly than the others.—J. E. Little. Yes; unusually tall for the white poplar. The male tree seems unknown in this country.—A.B.J. Correct, I think. The spring leaves are not lobed like the summer leaves.—C.E.M.

P. alba L. \(\). On left bank of the Ivel, between Norton Mill and Radwell Mill, Herts., v.c. 20, Mar. 25 and June 8, 1912. One of four large trees 80 feet high, of which measurements have been sent to Mr. Augustine Henry for his "Trees of Great Britain and Ireland." Girth at 3 feet from the ground (a large branch began just above), 13 feet, spread 70 feet.—J. E. Little. I agree.—A.B.J.

P. deltoidea Marsh. × nigra L. ("But very near P. nigra."—C. E. Moss). A staminate tree. Nearthe Ford at Ickleford, Herts. v.c. 20, Mar. 30, May 30 and Oct. 9, 1912. One of a series of trees under observation for two years. The occasional presence of glands at or near the base of the lamina of the leaf, especially in late summer leaves, seems to show a cross. Distinct from P. serotina Hartig. Petiole hairy in young state; lamina, buds and twigs glabrous.—J. E. Little. Certainly very near P. nigra,—as Dr. Moss suggests.—A.B.J. Yes, P. deltoidea × nigra, var. betulifolia. Cf. P. Lloydii Henry in Elwes & Henry "Trees of Great Britain and Ireland" vii, p. 1830 (1913). Cf. also "Cambr. Brit. Fl." ii, p. 11.—C.E.M.

Allium Ampeloprasum L., var. bulbiferum Syme. Cliffs below Fort George, Guernsey, Aug. 3, 1912.—W. C. Barton.

Lilium pyrenaicum Gouan. Thoroughly established near Molland, N. Devon, v.c. 4, May 31, 1912, It now occurs in a second station, about three-quarters-of-a-mile away from the original one.—E. S. Marshall.

Sparganium simplex Huds. Hose, Leics., v.c. 55, July 1912. Rare in this county.—A. R. Horwood. Correct, but when this is given as "generally distributed" in the "Fl. of Leicester," (1886), p. 156, why is it sent? It is gathered far too early. All Spargania should be well in fruit when gathered. If this had come from Scotland it would not have been easy to name it.—A.B.

Potamogeton alpinus Balb. Lunan Burn, near Marlee Loch, E. Perthsh., v.c. 89, Aug. 1912.—McT. Cowan, junr. Yes.—A.B.

- P. heterophyllus Schreb. Lunan Burn, at Marlee Loch, E. Perthsh., v.c. 89, Aug. 1912.—McT. Cowan, junr. Yes, correct. With it are fragments of P. Sturrockii Ar. Benn., thus giving another locality for that plant.—A.B.
- P.Lintoni Fryer (= $P.crispus \times Fricsii$). Near Shere, Surrey, v.c. 17, Aug. 31, 1912.—Mr. W. Biddiscombe first discovered this interesting plant in Surrey, and informed me that Mr. Fryer had named it \times P.Bennettii (crispus \times obtusifolius). Upon examination, however, it did not seem to me to agree well with the plate and description in "Jl. Bot." 1895, 1, particularly in the leaf veining, and I sent fresh specimens to Mr. A. Bennett. He wrote—"I should name it \times P. Lintoni Fryer, as the leaf-apex has too much serration for Bennettii."—C. E. Salmon.
- P. Sturrockii Ar. Benn. Loch Cluny, E. Perthsh., v.c. 89, Aug. 1912.—McT. Cowan, junr. Yes. Although made a variety of pusillus in the last ed. of Babington's "Manual," it is a good sub-species. As yet known only in Scotland and the United States (where it is rare).—A.B.
- P. marinus L. Rescobie Loch, Forfarsh., v.c. 90, Aug. 1911.—McT. Cowan, junr. Yes, this name will have to be used, as indeed it is on the continent, though the specimens so named in the Linnean Herbarium are simply pectinatus. I shall give reasons for this use of marinus in an account of the genus as left by Linnaeus.—A.B.

Ruppia maritima L. Newtown Marshes, I. of Wight, v.c. 10, Sept. 3, 1912.—W. C. Barton. Yes.—J.G. Linnaeus's "Sp. plant.," ed. I. p. 128 (1753) gives no description, so that the use of the name maritima as restricted to one of the forms is based on references only, as the plant of the Linnean Herbarium is R. rostellata Koch. This is one of the instances in which I think Syme is right in applying the Linnean name to the super-species, and giving the species names, i.e. R. spiralis and R. rostellata. Mr. Barton's plant is R. spiralis Hartm.—A.B.

Zannichellia pedunculata Reichb. Pond, Pill, N. Somerset, v.c. 6, May 27, 1912.—Ida M. Roper. Correct.—A.B. Z. pedicellata Fr. Gathered too early; the muricate projections on the back of the drupelets only develop at a later stage.—E.S.M.

Scirpus filiformis Savi, var. monostachys. (1) Lancresse Common, Guernsey, Aug. 5, 1912.—W. C. Barton. Correct; more depauperate.—E.S.M. (2) Roadside, above Petit Bot, Guernsey, Aug. 5, 1912.—W. C. Barton. Yes; fine and wellgrown. This is, as I have always believed, more than a mere state.—E.S.M.

Carex remota L. × vulpina L. In ditch by roadside near house called "Beale Oaken," near Nazeing Church, S. Essex, v.c. 18, May 28, 1912. With both parents.—J. E. Little. Yes (= axillaris Good.).—C.E.S. C. axillaris Good., which is said to be a hybrid between the two above species, or to be C. remota × muricata?—A.B.

C. Goodenowii Gay. Pond on Crouch Green, Knebworth, Herts., v.c. 20, June 11,1912.—J. E. Little. This is evidently only C. vulgaris Fr. (=C. Goodenowii Gay), but certainly a peculiar form, simulating the C. trinervis of Degland. There is a similar form in C. glauca (bulbosa). There does not seem to be any name that exactly covers it—you may call it f. pseudo-trinervis.—A.B. In my opinion nearest C. Goodenowii Gay, var. strictiformis L. H. Bailey. It scarcely differs by having broader leaves and utricles almost without veins.—G. Kükenthal.

C. rariflora Sm. Canlochan, Forfarsh., v.c. 90 (at 2500 feet), July 1912.—P. Ewing. Yes.—A.B.

- C. Hornschuchiana × flava, forma. Killin, Mid Perthsh., v.c. 88 (at 500 feet), July 1912.—P. Ewing. C. fulva Host × C. Oederi Retz., var, ædocarpa And.—E. S. M. C. Hornschuchiana × Oederi, forma sub-Hornschuchiana Kük. To be distinguished from C. flava × Hornschuchiana by its shorter and more shortly-beaked utricles.—G. Kükenthal.
- C. Oederi Retz., var. &docarpa And.? (1) Claypits, Ponsbourne Park, Herts., v.c. 20, June 18, 1912.—J. E. Little. C. Oederi Retz., var. &docarpa And. Perigynia less inflated than usual, giving it a look of C. lepidocarpa Tausch; but it is not that.—E.S.M. Correct, I believe.—A.B. (2) Wet riding in Great Wood, Northaw, Herts., v.c. 20, June 18, 1912.—J. E. Little. Both correct.—G. Kükenthal.
- C. inflata Huds. Walsworth Upper Common, Hitchin, Herts., v.c. 20, May 19 and July 17, 1911.—J. E. Little. Good typical specimens.—A.B.

C.inflata Huds., var. brunnescens (And.). Beinn Laoigh, Mid Perth. v.c. 88 (at 1500 feet), July 1912.—P. Ewing. Yes; C. ampullacea Good., var. brunnescens And.—E.S.M. Andersson described this under C. ampullacea Good. In the "Nya botaniska notiser," 1849, he gave a long paper dealing with the modifications of C. vesicaria and C. ampullacea. Under C. ampullacea, var. brunnescens he says, "the halm seldom exceeding 2 feet in height is quite obtuse, clothed below with conspicuous reddish scales, the leaves lighter than usual and shorter, male spikes always two." Mr. Ewing's specimens, though not exactly answering, must, I suppose, be so named, but the authority under C. inflata is "E. S. Marshall."—A.B. C. rostrata Stokes, var. brunnescens Anderss.—G. Kükenthal.

C. vesicaria L., var. Grahami (Boott). Beinn Laoigh, Mid Perth, v.c. 88 (at 3000 feet), July 1912.—P. Ewing. Right, I believe; some of the stigmas have fallen off my specimen, so that their number is not ascertainable.— E.S.M. Correct.—A.B.

Spartina [stricta Roth]. Saltpans, Newtown Marshes, I. of Wight, v.c. 10, Sept. 3, 1912.—W. C. Barton. Are not these S. Townsendi H. & J. Groves? Dr. Stapf considers

it to be a fertile hybrid between S. alterniflora and S. stricta. —E.S.M. This is S. Townsendi Groves, a form somewhat nearer to S. stricta than the type of Groves, which has 4–7 spikes, and is still more robust. The size of the spikelets, the nervation of the 2nd glume, and the large leaves are those of S. Townsendi Groves.—E. Hackel.

S. stricta Roth. Salt-marsh, Wells, W. Norfolk, v.c. 28, Aug. 1912.—F. Long. Correct.—E.S.M. & E. Hackel.

Phalaris minor Retz. Cultivated ground, Lerée, Guernsey. Aug. 13, 1912.—W. C. Barton. Type P. minor.—E. Hackel.

P. minor, Retz., var. (Ref. No. 30). Lerée, Guernsey, Aug. 13, 1912. Growing with the type on waste ground at Lerée. A distinct looking plant in growth, leaves, and shape of spike. Not connected with the type by intermediates. P. canariensis grew hard by, but I see no evidence of hybridity.—W. C. Barton. Surely only a depauperate form.—A.B. Forma gracilis Parl. Fl. ital. I. 70 (1848).—E. Hackel.

Agrostis verticillata Vill. Roadsides and quarries on diorites or syenites, near Vale Castle, Guernsey, Aug. 14, Confined, so far as my experience goes, to the quarries of 'granite', or the edges and drains of roads made with 'granite,' small particles of which are held tenaciously by the roots. I have a few specimens stoloniferous.— W. C. Barton. Right; capital specimens.—E.S.M. A. verticillata Villars "Prosp. de l'hist. des pl. de Dauphiné," p. 16 (1779). Its distribution is Portugal; Spain; France, south (abundant), north, west (Brest. Cherbourg, &c.); Italy; Dalmatia; Macedonia; Greece; Cyclades; Crete; Taurus; Bulgaria. Not given by Mr. Marquand in his "Flora of Guernsey," 1901. Presuming the plant is rightly named it is a pity the senderdid not give some particulars, but perhaps it has been gathered there before? Found at Falmouth Docks, W. Cornwall, in 1910, by Mr. F. H. Davey (see W. B. E. C. Rept., 1910-11, p. 319, and Jl. Bot. 1910, p. 80).—A.B.

Phragmites communis Trin., var. nigricans Gren. & Godr. Weymouth, Dorset, v.c. 9, Sept. 5, 1912.—E. S. Marshall.

Molinia cærulea Moench, var. Upland wood, on gravel and sand subsoil, near Norwich, Norfolk, v.c. 27, Aug. 1912.

—F. Long. It is easy to make 'varieties' out of these shade-grown plants; but I do not believe in them.—E.S.M. This seems to answer to the var. sylvestris Schlect. "Foliis latioribus, panicula viridescente majore, ramis laxiusculis"; = Enodium sylvaticum Link.—A.B.

Poa alpina L., var. acutifolia Druce? Lochnagar, S. Aberdeensh., v.c. 92, July 1897. I sent this plant to Mr. A. Bennett when I collected it in July 1897, and he considered it a form of P. alpina. Mr. G. C. Druce, in an able paper read before the Linnean Society (see Jl.—Botany xxxvi, pp. 421-429, 30 July, 1903), goes very fully into the opinions held by various botanists regarding P. laxa and P. stricta of the British Floras. The plants sent herewith were all gathered indiscriminately from Balfour's stations, on Lochnagar, and Mr. Druce has admitted a plant sent to him as his acutifolia. For my own part I see very little in common with P. alpina in these plants, unless it is the leafless sheaths at the base. Neither the leaf nor the ligule is that of any form of P. alpina I have seen either in this country or on the Dovrefjeld in Norway. the glumes—the plants being all viviparous no great stress can be placed on these organs.—P. Ewing. The altitude is given on my label as 6750 feet—an obvious slip for 3750. On February 26, 1902, Mr. Harry Fisher, who had made a special study of this genus (more particularly the alpine and arctic forms), wrote that Mr. F. J. Hanbury's specimens, collected at the same time as mine, were "P. laxa Haenke, var. vivipara, probably not found elsewhere. This plant has nothing to do with P. stricta Lindeb.; this only grows in montane Scandinavia. All the so-called stricta in the arctic Floras are colpodea Fr., which is nearer cenisia All., var. arctica (Br.)." In a letter of the same date he added:— "The arctic so-called *stricta* is a little nearer, especially that of Spitsbergen." As he named the companion-plant with normal inflorescence P. laxa Haenke, it is highly probable that the viviparous one is a mere variant of the same thing, and not of P. alpina L.; the foliage of these two Lochnagar grasses is practically identical. I have cultivated specimens from Mr. Hanbury's garden at Clapton, grown on for two years (1886-8); they naturally increased in size, but remained viviparous, and the difference from P. alpina is, if anything, exaggerated. I believe that Mr. Druce's 'P. alpina, var. acutifolia,' which is certainly the same as our examples and Mr. Ewing's, was published on account of Professor Hackel's decided opinion that this form belonged to P. alpina; but it is quite easy to confuse viviparous specimens of such closely allied species.—E.S.M. It is very difficult to form a decided opinion from such scanty material. The spikelets being viviparous, we can only rely on the leaves, which are not so different in P. alpina and P. laxa as to allow a safe judgment. It would be easy to decide between these two species if a whole sod were sent, or at least some innovation-shoots were present on the base of the flowering culm, For the innovationshoots of P. alpina are exclusively intravaginal, those of P. laxa (and P. cenisia) partly intra-, partly extravaginal. On the whole my impression (but not a fully based opinion) is that the specimen belongs to P. alpina vivipara. As to Mr. Fisher's remarks on the Lochnagar plant cultivated at Clapton, I must state that I am by no means convinced that in this locality (Lochnagar) P. laxa is the only Poa of that group growing there. Certainly P. laxa grows on Lochnagar; I have good specimens gathered by Mr. Druce, but I have also seen P. alpina from the same station (gathered by Mr. Druce). I have in my herbarium more than 100 specimens of P. laxa from all parts of its area, but none is viviparous, nor does any author mention a viviparous form of that species, while P. alpina is well known to present this state very often.—E. Hackel.

P. compressa L., var. Ill-drained pasture near Rudgwick, W. Sussex, v.c. 13, Aug. 1893.—J. W. White. P. compressa L., genuina.—E. Hackel.

Glyceria——. (1) Pond near Dalkeith, Haddingtonsh., v.c. 82, Aug. 10, 1912.—McT. Cowan, junr. Sheaths plicate; glumes as a rule hardly different from G. fluitans, though sometimes obscurely 3-toothed; no anthers are present. From the combined characters and the luxuriant habit I have little hesitation in calling it G. fluitans × plicata

(G. pedicellata Towns.). Leaves broader than in pure fluitans.—E.S.M. I think this is G. spicata, var. subspicata.
—A.B. (2) Old curling pond, Currie, Edinburghsh., v.c. 83, July 27, 1912.—McT. Cowan, junr. Material too far advanced; it looks like a weak state of G. fluitans, Br., var. triticea Fr.—E.S.M. G. fluitans, var. triticea Fr. (=G. fluitans, var. loliacea Aschers.).—E. Hackel.

Festuca rubra L., var. (Ref. No. 115). (1) Newbattle Park, Edinburghsh., v.c. 83, June 16, 1911.—McT. Cowan, junr. Nearer var. fallax than anything else I know; the flowers are much tinged with violet, probably owing to a sunny situation.—E.S.M. F. rubra L., var. fallax Hackel.—E. Hackel. (2) (Ref. No. 110). Shore, Dalmeny, Linlithgowsh., v.c. 84, June 6, 1911.—McT. Cowan, junr. Foliage in poor condition; but probably var. fallax Hackel (= F. fallax Thuill.).—E.S.M. F. rubra genuina.—E. Hackel.

F. elatior L., var. Margin of lake Windermere, Westm., v.c. 69, July 1912.—F. Long. This may be the form pseudololiacea Hackel; but I do not know that.—E.S.M. A reduced state.—A.B. This is an anomalous state of F. arundinacea Schreb., with reduced panicle.—E. Hackel.

Bromus hordeaceus L., var. glabratus Doell. Blackford Hill, Edinburgh, v.c. 83, June 8, 1911.—McT. Cowan, junr. Yes; B. mollis, var. glabratus Doell. = var. leptostachys Pers. (an older name).—E.S.M. Correct, I believe.—A.B.

B. hordeaceus L., [var. nanus (Weig.)]. Exposed coast, Lancresse Common, Guernsey, Aug. 14, 1912.—W. C. Barton. Starved plants; I have not seen the variety.—E.S.M. A reduced form from exposure.—A.B.

B. [patulus M. & K.]. Waste ground, St. Philip's Marsh, Bristol, W. Glos., v.c. 34, May 23, 1912.—Ida M. Roper. These specimens are B. tectorum L. In aspect B. tectorum is more like a reduced madritensis, while patulus is like an open reduced mollis or commutatus.—A.B. B. tectorum.— E. Hackel.

Brachypodium pinnatum Beauv., var., pubescens Gray. Little Malvern, Worcs., v.c. 37, June 1912.—A. J. Crosfield. Correct.—C.E.S. & A.B.

Agropyron [pungens R. & S., var. pycnanthum G. & G.]. (Ref. No. 50). Albecq, Guernsey, Aug. 16, 1912.—W. C. Barton. I suppose so.—E.S.M. I believe correct.—A.B. A. repens × junceum.—E. Hackel.

Cystopteris fragilis Bernh., var. dentata Hook (Ref. No. 3748). Frequent in Cwm Idwal, Carnarvonsh., v.c. 49, July 13, 1912.—Edward S. Marshall.

Equisetum arvense L., var. alpestre Wahl. Beinn Laoigh (at 2500 feet), Mid Perthsh., v.c. 88, July 1912.—P. Ewing. Yes; I have gathered it there.—E.S.M. Wahlenberg's description of this is, "β alpestre caulibus sterilibus decumbentibus"; "at β latera alpium inferiora saepius frequentat habitu longe alieno notabile." ("Fl. Lapp.," p. 296, 1812). Ledebour "Fl. Ross." iv, p. 486 (1853), gives a much longer description of a var. alpestre, but does not refer to Wahlenberg; whether they represent the same plant I do not know. But do these plants belong to arvense? They do not accord with specimens from Shetland named alpestre for Mr. Beeby by Prof. Lange—do they not belong to E. pratense?—A.B.

Isoetes hystrix Durieu. Damp ground, near Fort La Marchant, Guernsey, Aug. 8, 1912.—W. C. Barton. Dr. Syme in "English Botany," ed. iii, describes the plant as with leaves 1½ to 2½ inches long, but in specimens gathered in Guernsey by Mr. W. W. Reeves (June 18, 1885) they are 6 inches long.—A.B.

Chara polyacantha Braun. Marsh ditch, Weston-in-Gordano, N. Somerset, v.c. 6, Sept. 28, 1903.—J. W. White. Yes.—J.G.

Chara hispida L. Marsh ditch, Kenn Moor, N. Somerset, v.c. 6, Sept. 28, 1903.—J. W. White. A small form with the habit of C. vulgaris.—A.B.

Nitella gracilis Agardh. Perranzabuloe, W. Cornwall, v.c. 1, Dec. 1912.—Coll. F. Relstone. Comm. F. H. Davey. A notable extension of its known distribution.—J.G.

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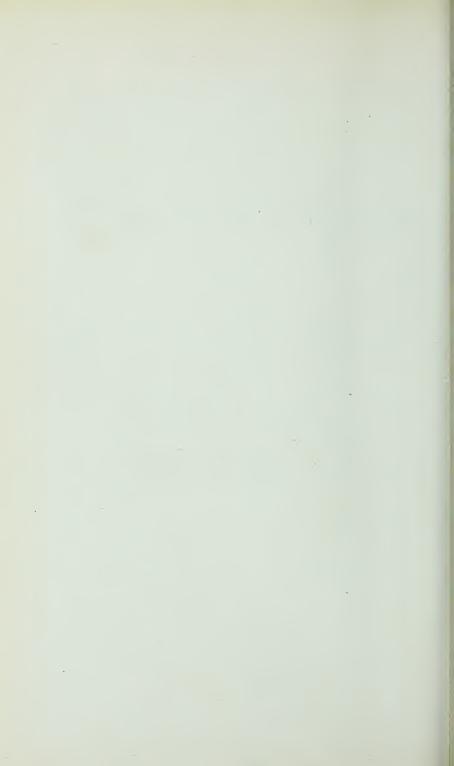






Photo: H. S. THOMPSON, F.L.S.



Photo: H. S. THOMPSON, F.L.S.

THE

Бнікліемн Диииаг Рерокл

OF THE

WATSON

Botanical Exchange Club,

1913-1914.

Referees:

Rev. E. F. LINTON, M.A., Edmondsham Rectory, Salisbury. Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

Rev. W. MOYLE ROGERS, F.L.S., Chetnole, Grosvenor Road, Bournemouth West.

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23 MAR. 1915

THE WATSON

Botanical Exchange Club.

REPORT FOR 1913-14.

Contributions of plants were received from the following members:—

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Mr. C. Bailey	71	Dr. F. Long	18
Mr. W. C. Barton	284	Rev. E. S. Marshall	238
Mr. S. H. Bickham	219	Rev. W. Moyle Rogers	36
Rev. H. Boyden	12	Miss I. M. Roper	315
Mr. J. Comber	176	Mr. C. E. Salmon	64
Mr. A. J. Crosfield	128	Mr. W. R. Sherrin	33
Mr. G. Goode	33	Mr. R. S. Standen	184
Rev. A. G. Gregor	81	Rev. C. H. Waddell	35
Miss I. M. Hayward	26	Mr. J. W. White	132
Miss D. M. Higgins			
Mr. A. R. Horwood	22	-	
Rev. E. F. Linton	26	Total 2	2710
Mr. J. E. Little	556	_	

Most of the specimens were well prepared and carefully dried, but a few sets were scrappy or had suffered in travelling. Some members sent too large a proportion of small sets. The work of the distributor is much increased if the rules of the Club are not adhered to. It is desirable to specify upon the spare labels the number of sheets sent in.

Vascular Cryptogams were poorly represented, but the main divisions of Phanerogams all received fair attention. Some beautifully prepared specimens of common plants sent in this year should help to raise the standard to which a good example ought to conform. Valuable notes were received from the following:—Mr. E. G. Baker, Mr. W. Barclay, Mr. A. Bennett, Mr. C. Bucknall, Dr. E. Drabble, Mr. J. Fraser, Mrs. E. S. Gregory, Mr. J. Groves, Prof. A. Henry, Mr. A. B. Jackson, Rev. E. F. Linton, Rev. E. S. Marshall, Dr. C. E. Moss, Rev. W. Moyle Rogers, Mr. C. E. Salmon, Mr. H. S. Thompson, Mr. E. J. Thomas, Mr. J. A. Wheldon, Mr. A. J. Wilmott, and Major A. H. Wolley-Dod, to whom our grateful thanks are due.

J. E. LITTLE,

Distributor for the year 1913—14.

The Club is greatly indebted to Mr. Little this year, not only for undertaking the arduous work of distributing the plants, but also for his magnificent parcel of 556 sheets; his generous gift of so many of his own duplicates—by which the recipients of parcels had the keen pleasure of seeing many of the gaps in their collections filled; his interesting article on the spread of *Spartina Townsendi*, and his translations of the keys to the sub-species of the *Erophila* section of the genus *Draba* from Rouy and Foucaud's and Clavaud's works, which we are confident will be a great help to understanding these puzzling little plants.

Our gratitude is due to Mr. H. S. Thompson, F.L.S., for his kind gift of the two pretty and interesting photographs which have been reproduced to illustrate Mr. Little's article.

It is with great pleasure that we have been able, to some small extent, to show our appreciation of Mr. Arthur Bennett's continuous help in the identification of difficult plants by presenting him with Mr. Linton's Supplementary Fascicles of Willows, so far as they have been issued, in continuation of the main set given to him by the Club in former years.

GEORGE GOODE,

Hon. Sec. and Editor.

December, 1914.

Spartina Townsendi H. & J. Groves

Our plate shows two photographs taken by Mr. H. S. Thompson, F.L.S., on a salt-marsh E. of Poole Harbour in September, 1910. In the near view are well seen the dense character of the clumps and the rigid leaves, "sharp as glass," as an Itchenor boatman described them. The more distant view has dense masses of Spartina with some Scirpus maritimus, intermixed with mudflats colonised by scattered clumps of Spartina, which, when the process is further advanced, will fill up the portions as yet unoccupied. On the upper limit of the vertical range of the Spartina appears Aster Tripolium.

Two interesting papers on *Spartina* have been written by Dr. Otto Stapf, F.R.S. One is printed in the "Gardener's Chronicle," Jan. 18, 1908, (reprinted in "Journ. of Bot." 1908, pp. 76–81): the other appeared in the 5th Vol. of the "Proceedings of the Bournemouth Science Society" (reprinted in "Journ. of Bot." Sept., 1914, p. 245).

In 1913-1914 I walked round the sea banks and foreshore from Prinsted to West Itchenor, W. Sussex, v.c. 13, and found almost all the mudflats from threequarters full tide level to within about 3 ft. of high tide mark more or less colonised by Spartina Townsendi. The smaller mudcreeks where there is less motion of the tide encourage the spread of the grass in dense unbroken masses, as at Nutbourne and above Bosham. Above Dell Quay the advance is not so marked. No Spartina alterniflora Lois. was detected. Dr. Stapf's map marks the eastern limit of this species at Hill Head (Titchfield Haven) in 1908. The Rev. F. H. Arnold, in his "Sussex Flora, 1907 (2nd ed., published postumously), gives "S. alterniflora Loisel. Thorney, not far from Pilsey; first found in Sussex by me, Sept. 18, 1900." Mr. C. E. Salmon (in lit. Nov. 14, 1914) writes "Before accepting Arnold's station ("Suss. Fl." 1907, p. 124), I would wish either to see a specimen, or to get someone to confirm the locality" "Mr. Standen and I had a long search this year in this particular locality for S. alterniflora. We saw S. Townsendi in milliards, and S. stricta Roth. in hundreds. We do not say it does not grow there, but confirmation of Arnold's station is desirable."

Between Prinsted and W. Itchenor, as mentioned, I only saw three small patches of S. stricta, one opposite Bosham, one opposite W. Itchenor, and one about half-a-mile south of Dell Quay. Making allowance for other undetected patches, it is still true to say that, in comparison with S. Townsendi, the areas which S. stricta occupies are altogether insignificant. Its vertical range also seemed more restricted, as all the patches were at about 4 feet below mean high water mark. Mr. Salmon (in lit. Oct. 12, 1914) writes "I think it is quite clear that S. Townsendi is spreading with remarkable rapidity and extraordinary robustness. It is not, I think, too much to say that it is gradually swamping S. stricta. It certainly seemed so this year in Thorney Island, where now S. stricta is very local. I am told, too, that S. alterniflora is now much less common than it used to be; and at Hill Head, near Titchfield, Hants., where we saw it this autumn, S. Townsendi looks the eventual victor." Mr. F. Stratton in "Journ. Bot." 1913, p. 294, says respecting the Isle of Wight stations: "Spartina Townsendi. This plant is taking the place of S. stricta on the creeks of the Medina below Newport. In 1867 there was only S. stricta to be found in these creeks and, I believe, elsewhere in the island. Now it is difficult to find S. stricta."

The ultimate effect of the spread of these dense beds of *Spartina* may very well be to diminish the total amount of water flowing up and down with the tide, and so to alter the conditions at the mouth of Chichester Harbour. I think I remember being told (about 1888) that reclamation on the creeks above the Hamoaze and on the Tamar above Saltash was discouraged on account of possible effects of this nature.

In 1914 I counted 20 clumps of S. Townsendi in Pagham Harbour, on the N.E. side near the Vicarage. Pagham Harbour* was originally formed by the inroads of a furious gale in A.D. 1345, but was reclaimed in 1879. In 1910 the sea breached the great shingle beach, and reasserted its dominion up to the walls of the garden of Pagham Vicarage, and up to Sidlesham Mill and Ferry. The barbed wire fences are now festooned with marine

^{*} See a most delightful little article on "Pagham and its Church," by the Rev. G. G. Knox, Vicar of Pagham, in the "St. Michael's Magazine" for July, 1914 (St. Michael's School, Bognor).

algæ, and the meadows covered with Salicornia. For S. Townsendi Pagham Harbour affords particularly favourable ground; and its first appearance, which probably does not date more than two years back, is worth recording. It is an eastward extension of the areas marked in Dr. Stapf's map, and one may anticipate that, if the same conditions continue, in 10 years' time Pagham will become like Poole Harbour on the western limit. Mr. H. S. Thompson (in lit. 15 Nov., 1914) writes, "I was much interested in hearing from the Rev. E. Ellman that S. Townsendi has been recently planted on the mud of the Bristol Channel, between Clevedon and Weston-super-Mare, to bind the mud and prevent it from being washed away. Some of the grass he saw actually being planted in rows a few weeks ago. Some had got more or less established, though planted only this year, I believe."

If it be not unnecessary pedantry, may I say that although Hooker gives the tonic accent as Sparti'na, yet in $\sigma\pi\acute{a}\rho\tau\iota \nu os$, the adjective, the ι is short, as it is presumably in $\sigma\pi a\rho\tau\iota \nu \eta$, and the word according to Latin accentuation will be Spar'tina?—J. E. Little.

" Σπάρτην λέγω τὴν Σπαρτιάδ', οὐ τὴν σπαρτίνην."

Cratinus, Nemesis (Mein. p. 25).

This shows that the ι in $-\iota\nu\eta$ is short, as a scazon verse would not be likely to occur in a comedy. The word apparently is not in Latin, and Hooker's scansion is a mistake.—E.J.T.

Thalictrum minus L., var. collinum (Wallr.). Cheddar Rocks, N. Somerset, v.c. 6, June 18, and July 1, 1913.—Ida M. Roper. Rightly named.—E.F.L. Good flowering and fruiting material of *T. minus*, var. collinum.—E.S.M.

T. majus Crantz? (Ref. No. 3774). Stony shore of Loch Tay, west of Fearman, Mid Perthsh., v.c. 88, July 28, 1913. A tall plant with large leaflets, bright green above. Mr. Arthur Bennett inclined to name this T. majus, var. capillare N. E. Brown in "Engl. Bot. Suppl." p. 4 (1892) = T. capillare Reichb. Dr. C. E. Moss, who had at first assented to its being T. majus, wrote

(Dec. 11, 1913) that he believed it to be T. elatum Jacquin, and that he had seen not only Jacquin's description and figure, but also his specimen. T. elatum, however, seems to be a plant of Austria and S.E. Europe, not known for Scandinavia; so its occurrence in Britain would be a geographical puzzle.—Edward S. Marshall. Mr. N. E. Brown ("Suppl. E. B." p. 4, 1892) distinguishes this species chiefly by its longer pedicels, together with the larger size of the leaves and of the whole plant. Marshall's specimen has these features: I should name it T. majus Crantz.—E.F.L. So far as I can judge, this is T. elatum Jacquin. I base my opinion on Jacquin's original description, his large original figure, and his type-specimen (in Herb. Mus. Brit.). Mr. Marshall's remarks on the distribution of T. elatum appear to be based on that as given by Nyman and others; but have these authorities seen Jacquin's specimen? The plant that passes for "T. elatum Jacquin" on the mainland of Europe is not, me judice, Jacquin's plant at all; and the distribution cited by Mr. Marshall applies to T. elatum auct. non Jacquin. I have known the plant (T. elatum Jacquin me judice) for twenty years as occurring locally on the margins of lakes in the Lake District and in Scotland. Formerly I regarded it as T. majus; and it is without doubt the T. majus of many British botanists, but not, according to my present opinion, of Jacquin or of Smith "Eng. Bot." Jacquin originally described his plant from a garden specimen. There is nothing in the British distribution of this lowland plant to suggest that it should not occur in central Europe. I should add that I do not for a moment believe the plant to be T. majus, var. capillare N. E. Brown (= T. capillare Reichenbach).— C.E.M.

Ranunculus circinatus Sibth. The Lake, Southill Park, Beds., v.c. 30, June 28, 1913. Dr. Moss tells me that this plant is, in his experience, more usually found in moving water.—J. E. Little. Correct.—E.S.M. Seems typical.—J.G.

R. ——. (No. 1). Marshes between Leigh and Benfleet, S. Essex, v.c. 18, April, 1913.—W. R. Sherrin. Apparently a form of R. heterophyllus Weber, without floating leaves; it may be var. submersus (Hiern).—E.S.M.

Possibly the saltmarsh form of R. heterophyllus, but too immature.—J.G.

R. peltatus Schrank, [var. penicillatus Hiern]. Mill stream, Cheddar, N. Somerset, v.c. 6, May 14, 1913.— Ida M. Roper. If a form of R. peltatus, certainly not penicillatus Hiern, which has "submersed leaves very long and sub-parallel." I am inclined to place it under f. sphaerospermus Hiern, which has larger flowers and long peduncles, and the leaves of which are short and tufted even in swiftly running water. It would be desirable to see fruit.—J.G.

R. ——. (No. 2). Marshes between Leigh and Benfleet, S. Essex, v.c. 18, April, 1913.—W. R. Sherrin. R. Baudotii Godron.—E.S.M. & J. G.

R. Flammula L., var. Peaty ditch by N.E. Railway, near Eller Beck, Goathland, N.E. Yorks., v.c. 62, Aug. 12, 1913. A narrow-leaved form, with creeping, often arcuate, stems, and small flowers. By the side of the Eller Beck it appeared to be mixed with, or to grade into, more normal R. Flammula, but upon the moor bogs had a more distinctive character, though here more difficult to follow out than in the recently cleaned-out ditch from which these specimens were taken. I submitted this plant to Mr. G. C. Druce, saying that it appeared to bear strong resemblance to R. Flammula L. collected by Col. H. H. Johnston, June 30, 1913, from Loch of Kirbister, Mainland, Orkney, and sent to the B.E.C. 1913. Mr. Druce replied, 21 Feb., 1914, "I believe the R. Flammula of Col. H. H. Johnston comes under var. tenuifolius Wallr."—J. E. This is a form or state due to special soil conditions, for which R. Flammula, var. tenuifolius Wallr. is the proper name. The var. pseudo-reptans Syme is the same thing. See B.E.C. Report, 1910, p. 538, for an interesting note on this plant.—A.B.J. Why var.? Is it not the ordinary form? Perhaps a little narrower-leaved than usual ?-C.E.S. Under var. radicans Nolte, I think; but not extreme.—E.S.M.

R. acris L., var. Boræanus (Jord.). Field, Beaminster, Dorset, v.c. 9, June 2, 1913.—Ida M. Roper. I agree.— E.S.M. & J.W.W.

Caltha palustris L., var. Guerangerii (Bor.). Botlands, Chew Magna, N. Somerset, v.c. 6, April 15, 1913.—Ida M. Roper. Doubtful, on the material received; carpels not developed. The sepals are rather narrow and distant. This station is accepted in the "Bristol Flora."—E.S.M.

Erophila. (See also Appendices).

The difficulty of dealing with the segregates of this rather fascinating little plant is enhanced by the fact that it is seldom possible in a natural state to make a pure gathering. I sent a number of gatherings to Mr. Marshall at the end of 1912, but most of them proved to be mixed, and therefore, with one exception, I have not made use of his determinations. I have tried, as far as may be, to avoid mixture in the forms now distributed, but will not venture to think I have altogether succeeded. Mr. J. A. Wheldon, on whose naming I rely for several sets, says that on the whole the plants I submitted to him are similar to those which he finds in Lancashire. The hairs on the leaves are most conspicuously different from the other sets in the plant which he refers to E. spathulæfolia Jord., of which I was only able to obtain a few, being obliged on examination with a lens to separate these from others intermixed which I had at first believed to be homogeneous with them. I have sent seed of E. stenocarna Jord. from St. Ippolyts (Ref. No. 60) to Dr. Moss to be tested under cultivation.—J. E. Little. Many of Jordan's forms are too near each other, and probably half a dozen or less names would suffice to represent the actual "micro" species, the remainder being more or less impure Mentha has been an object lesson in this respect, but of course in *Erophila* the conditions are different, as there is no vegetative reproduction to maintain the supply of hybrids, as in Willows and Mints.—J.A.W.

E. ——. (Ref. No. 69). Cult. ground N. of West Mill, Hitchin, Herts., v.c. 20, May 2, 1913.—J. E. Little. Pods rather short and broad; but I should leave this under E. verna E. Meyer.—E.S.M.

E. verna E. Meyer. (Ref. No. 82). Fells' Nurseries, Hitchin, Herts., v.c. 20, May 14, 1913. Hairs simple (a few), bifid (chiefly), trifid or aggregate (occasionally). Much variation in the silicles. Perhaps they may be

placed with specimens from the same place which Mr. J. A. Wheldon regards as degenerate *E. majuscula.*—J. E. Little. So I should name it.—E.S.M.

E. verna E. Meyer. (Ref. No. 54). Brick Pit, Arlesey, Beds., v.c. 30, April 18, 1912.—J. E. Little. Under E. verna, but this must be very near E. serrata Jord. Note the strong teeth on some of the leaves, and the silicles sometimes strongly narrowed below.—J.A.W. Rouy & Foucaud describe the leaf-pubescence as short in E. serrata Jord., which is not the case here. I cannot offer an opinion of any value.—E.S.M.

E. majuscula Jord. (Ref. No. 63). Fells' Nurseries, Hitchin, Herts., v.c. 20, May, 1913.—J. E. Little. How does this differ from E. verna? The petals do not appear to be veined (though it is true that they usually much exceed the calyx), nor are the pods rounded at the top.—E.S.M. These plants agree well with some named E. majuscula for Mr. Baker, who says that this is "the common plant" of N. Yorks., with which these examples also agree. I have never yet seen a plant with veined petals in Lancs. or Yorks.—J.A.W.

E. "near occidentalis Jord." Cart-track, Purwell to Nine Springs, Hitchin, Herts., v.c. 20, April 13, 1913.— J. E. Little. I do not know the segregate.—E.S.M. Most of this I think belongs to the stirps E. majuscula and is perhaps E. occidentalis.—J.A.W.

E. stenocarpa Jord. (Ref. No. 60). Stony loam, in corn, St. Ippolyts, Herts., v.c. 20, May, 1913.—This appeared to be a nearly pure gathering—somewhat unusual. Stems wiry, vibrating in wind. Associated with Myosurus and Sisymbrium Thalianum.—J. E. Little. Right.—E.S.M.

E. ——. (Ref. No. 69b). Cult. ground N. of West Mill, Hitchin, Herts., v.c. 20, May 2, 1913. (Narrower silicles than 69).—J. E. Little. My two specimens are E. stenocarpa Jord.!—E.S.M. I think this is perhaps robust E. occidentalis. One of the chief features of this species seems to be the attenuation below of the capsules (as in E. stenocarpa), and these examples show this and the spreading pedicels well.—J.A.W.

E. præcox DC. (Ref. No. 51). Sandpit at Lower Stondon, Beds., v.c. 30, April 18, 1912. Intermixed with other forms.—J. E. Little. Yes, E. præcox DC. (= E. brachycarpa Jord.!). I consider this a distinct species from E. vulgaris DC.—E.S.M. These are good E. brachycarpa Jord., I should say.—J.A.W.

E. præcox DC. Hitchin, Herts., v.c. 20, April 1912. Sorted out from a mixture of forms. What puzzles me about Mr. Marshall's reference here is that there is much greater tendency to pointing at both ends than in what I take to be typical E. præcox. This form with rather pointed boat-shaped ends in about proportion 3mm. × 1.5mm. is very abundant. The forms more in proportion 3×2 with rounded ends are less abundant, and can only be obtained by selection.—J. E. Little. I should refer the bulk of these to E. præcox DC. (= E. brachycarpa Jord.). A few are not quite characteristic.—E.S.M. So I think.—J.A.W.

E. spathulæfolia Jord.? (Ref. No. 55a). St. Ippolyts, Herts., v.c. 20, April 4, 1913. Leaves glabrescent, except for long simple scattered hairs on margin, bright green, long petioled. Hairs mostly simple, long, up to 0.5mm, often widely scattered. A few bifid hairs. Stem with few or no hairs. Leaf narrowed at base into relatively long petiole. Silicles 5—6mm. long × 1.5—2.5mm. broad. Calyx 2mm. long. Corolla 4mm. long.—J. E. Little. Forked hairs relatively few as compared with simple ones. I think no doubt under stirps E. glabrescens. Probably either E. spathulæfolia Jord. or E. vivaricola Jord. E. glabrescens Jord. is of course a group of forms and can only be used in an aggregate sense.--J.A.W. Rouy & Foucaud describe the leaves as being dark green, the sepals as reddish, and the pods as 5mm. broad by 3 long; my two specimens do not agree well with this.—E.S.M.

Lepidium [virginicum L.]. Disused chicken run, St. Helens, Hastings, July, 1913.—A. G. Gregor. No; this is L. neglectum Thell., without much doubt.—C.E.S.

Iberis amara L., var. ruficaulis Lej. et Court. Rough ground near Church Hill, Royston Heath, Herts., v.c. 20, June 26, 1918. Intermixed with type. It flowers some-

what earlier. Possibly some specimens are intermediate. —J. E. Little. The specimen seen scarcely agrees with the original description, viz., that of Lejeune (not "et Court.") "Fl. Spa" II., 58 (1811), "Diffère de l'espèce principale par ses feuilles ciliées plus étroites, par sa tige velue, et comme chargée d'un tomentum roux, et par son port plus petit." Since Lejeune and Courtois [in "Comp. Fl. Belg." II., 310 (1828)] also say "Foliis linearibus, dentatis, cauleque tomento rufo villoso tectis" it is difficult to imagine why the name should have been given to this plant. When compared with our [Herb. Mus. Brit.] series of the "espèce principale" it is not "plus petit"; the leaves are not linear, but are oblong, as in Lejeune's description of I. amara, and the stem is certainly not velvety with a rusty tomentum. If the use of the name is on account of the very slightly hispidulous leaves and stem, surely such a character were better added to the description of the species, rather than used as the basis for a varietal name. Has Mr. Little some other description? If so, why not quote "Lej. et Court. ex...," which would be accurate. We have no specimens of the variety in our collection for comparison.—A.J.W. At this place (Church Hill, Royston Heath) two forms of *Iberis amara* occur, one of which I have always assumed to be var. ruficaulis. I believe that the two forms (whatever they are) hybridise in this locality; and possibly Mr. Wilmott received an intermediate plant.— C.E.M.

Reseda lutea L., var. Grove Mill Chalk Pit, Hitchin, Herts., v.c. 20, Nov. 2, 1918. Similar to, but differing from, typical R. lutea:—Stem semi-fruticose below, branched, branches spreading to form low half-bush, 1 ft. high, 2 ft. 6 in. broad. Stems terete, with ribs, not so angular in appearance as R. lutea, with coarse deflexed projecting points, almost amounting to spinules. Leaves divided similarly to typical R. lutea, but less deeply channelled segments, the margins with more pronounced spinules, the segments more linear and somewhat fewer, less crisped or undulate, 2—3cm., but often nearly entire with a single lamina 4—5.5cm. long × 4—5mm. wide. Racemes rather narrower. Pedicels slightly dilated upwards (with same coarse spinules). Flowers yellowish

green. Sepals 6, obtuse, linear, 2—2.5 mm. long. Petals, 6. Two upper trifid (2.5 mm. long), two lateral bifid, two lower entire (2 mm. long), all with basal expansion, the latter having on it papillose projections. Stamens about 16—20, filaments with spinules. Ovary 3-merous. Stigmas 3. Ovary very rough with same warty papillose, spinuliferous projections. Capsule 7—11 mm. long × 4—5 mm.—J. E. Little. Capsules not formed. I think it is simply a late autumn state.—E.F.L. [Sent also to B.E.C. 1913. The following notes are from the Report, p. 454. "This appears to be the var. pulchella J. Müll.—C. E. Britton." "Acced. ad var. longifoliam Tenore.—A. Thellung"].

Helianthemum Chamæcistus Mill., var. pale primrose, petals smaller, narrower, not overlapping. Leaves narrower (one plant only). Lilley Hoo, Herts., v.c. 20, June 26, 1913. The type plant is abundant on Lilley Hoo.—J. E. Little. In these days of Mendelian analysis, characters should not be cited for vars. unless it is observed that they always occur together. The pale colour, small petals and narrower leaves are doubtless quite independent variations, and to cite them together only causes confusion should the variety be given a name. The pale primrose colour does not go with the other characters in Cambridgeshire, where I have seen both it and the form with orange petals. There the other characters were quite normal. I also fail to see that the leaves are narrower. Some are narrow, and others not, as is the usual case. The size of the flower varies in the normal form, as does the breadth of the leaves.—A.J.W.

Viola odorata L., var. subcarnea Jord. Hollow Lane, Ingst, W. Glos., v.c. 34, March 22 and July 12, 1913. The lowest petal does not appear to be invariably emarginate.—Ida M. Roper. Yes, correctly named. How much more interesting and useful violet collections would be, if the plants were taken at different stages of growth, in the way Miss Roper has done!—E.S.G.

V. lactea Sm. (1) Burley Moor, New Forest, S. Hants., v.c. 11, June 1, 1913.—R. S. Standen. (2) Barton Common, near Milton, S. Hants., v.c. 11, June 1913.—J. Comber. Both correct.—E.S.G.

V. arvensis Murr., forma. Near Narborough Bog, Leics., v.c. 55, May, 1913.—A. R. Horwood. Apparently V. variata, var. sulphurea, but the small-flowered plants are close to ruralis. I may remark that only whole plants can be dealt with.—E.D.

V. arvensis Murr., var. subtilis (Jord.). Abandoned iron works, Ashton Gate, Bristol, N. Somerset, v.c. 6, Aug. 1, 1913. Flowers creamy white tinged with mauve on the under surface of the top petals.—Ida M. Roper. Yes, I think this is subtilis Jord. The small plants are not typical and several of the larger ones are broader-leaved than usual.—E.D.

V. Curtisii Forster. Sandy coast, Dogs Bay, near Roundstone, Galway, Aug. 14, 1918.—W. C. Barton. Yes, very small Curtisii.—E.D.

V. Curtisii Forster. On the shingle of the northern end of a land-slip in the embankment at Fairhaven, near St. Anne's-on-the-Sea, W. Lancs., v.c. 60, May 14, 1906. As this species is asked for I send a parcel of selected examples, in the flowering stage.—Charles Bailey. Is not this the var. Pesneaui Rouy & Foucaud (= V. Pesneaui Lloyd & Foucaud)?—E.S.M. V. Curtisii Forster, var. Pesneaui (E. G. Baker). Some of these plants are narrow-leaved and match almost exactly the extinct New Brighton plants, thus approaching V. sabulosa Dumort. I have not seen true sabulosa from this locality.—E.D.

Dianthus deltoides L., var. glaucus (L.) Origin: Deganwy, near Conway, Cult., Underdown, Ledbury, June 27, 1913.—S. H. Bickham. I think it is the variety.—E.F.L.

Silene ——. Cliffs, E. of Folkestone, E. Kent, v.c. 15, June 18, 1894.—Coll. E. W. Gregor. Comm. A. G. Gregor. This seems to be the S. nutans of "Eng. Bot." t. 465, and not the S. dubia Herb. of Sussex and other counties, which has a narrower calvx, etc.—C.E.S.

S. nutans L. St. Brelade, Jersey, June 7, 1894.— J. W. White. I think this is S. dubia Herbich.—E.S.M.

S. dichotoma Ehrh. Waste ground, St. Philip's Marsh, Bristol, W. Glos., v.c. 34, May 30, 1918.—Ida M. Roper. Yes.—C.E.S.

Sagina [maritima Don], var.? Grassy cliff tops, Milford-on-Sea, S. Hants., v.c. 11, June, 1913.—J. Comber. Very interesting. I believe this to be a rather condensed state (due no doubt to situation) of S. ciliata Fr., var. ambigua Corb. (= S. patula Jord., var. glabra Lloyd). The shape of the leaves, etc., precludes any maritima form.—C.E.S.

S. apetala Ard., var. prostrata Gibs. Sand bed, Underdown, Ledbury, Herts., v.c. 36, June 9, 1913.—S. H. Bickham. I agree.—E.S.M.

S. nodosa Fenzl., var. monilifera Lange. Sandhills by the sea, Magilligan, Co. Derry, Aug. 1913. I shall be glad to know if this is var. monilifera, as it is a new record for Co. Derry.—C. H. Waddell. Yes; but it should be written "moniliformis."—C.E.S.

Spergularia marginata Kittel. Mud flats, Keyhaven, S. Hants., v.c. 11, Aug. 1913.—J. Comber. Correct.— E.F.L. Yes; var. glandulosa Druce.—E.S.M. Yes; but my examples do not come under var. glandulosa Druce.—C.E.S.

Malva pusilla Sm.? Bulverhythe, Aug. 14, 1909, and St. Leonards on Sea, Aug. 21, 1909, E. Sussex, v.c. 14.—A. G. Gregor. Yes, both of these gatherings represent the hairy-fruited form, which, so far, seems without a name. It could be called var. lasiocarpa conveniently.—C.E.S.

Erodium pimpinellæfolium Sibth. Near Potton, Beds., v.c. 30, July 5, 1913. Two upper (shorter) petals with a spot of whitish green, flecked with purple, with a trifoliate mark in red at the base. Hairs on calyx coarse, spreading, sometimes glandular.—J. E. Little. This is allied to E. commixtum Jord. The distinguishing characteristics of this species are:—(a) stems diffuse; (b) leaves incised pinnatifid; (c) petals reddish; (d) beak of fruit at length 36—40 mm. long.—E.B.

Impatiens [biflora Walt.]. Matlock, Derbysh., v.c. 57, June, 1913.—W. R. Sherrin. This is I. parviflora DC.—C.E.S.

Euonymus europæus L., form with white fruit. Bank of stream, Crox Bottom, Bishopsworth, N. Somerset, v.c. 6, October 28, 1913 (See "Journ. Bot." vol. 50, p. 377).

—Ida M. Roper.

Ulex europæus L., seedlings. Heathy ground, Boscombe, S. Hants., v.c. 11, April 26, 1913.—Ida M. Roper.

Lotus uliginosus Schkuhr., var. glabriusculus Bab. Kenwards, Lindfield, E. Sussex, v.c. 14, July 21, 1913.— R. S. Standen. This agrees with Rouy's description.— E.S.M. I suggested this name to Mr. Standen, but did not see the whole of the gathering. One of the plants on my sheet is good glabriusculus; the other could scarcely be so named.—C.E.S.

Vicia gracilis Loisel. Field near Hardwick, Cambs., v.c. 29, June 21, 1913.—A. J. Crosfield. Very typical, and clearly showing the stouter and stiffer habit than that of V. tetrasperma (V. gemella Crantz). Also the larger and more numerous flowers (4, 5 and even 6 on these specimens) on longer and stronger peduncles which are often shortly aristate. The leaflets are linear acute, longer and stiffer than in tetrasperma. The pods have 5 or 6 seeds, but sometimes only 4. The hilum of the seed is oval. "The length of the hilum appears a constant character in all the Vetches," as Boswell Syme and J. W. White have remarked. It is strange that Hooker and Arnott (1850) considered this a sub-species of tetrasperma, and that Sir J. D. Hooker (1884) and others could only make a variety of it. When once seen in the field it cannot be mistaken.-H.S.T.

V. sylvatica L. (1) Allt Odhar, Fortingal, Mid Perthsh., v.c. 88 (at 700 feet), July 26, 1913. Luxuriant, and in beautiful condition; so I send a few specimens, though it is not in the list of desiderata.—E. S. Marshall. (2) Railway cutting, Sandsend, N.E. Yorks., v.c. 62, Aug. 13, 1913.—J. E. Little. Both show well the remarkably subulate, almost capillary calyx-teeth, often tipped with black, and the setaceous teeth of the stipules. The leaflets of the beautiful Perthshire plant are rather narrower, in my specimen, than usual. This Vetch reaches as high a limit as any in the Alps. It is not

infrequent at 5000 feet in Switzerland, and I once saw low plants of it at 6500 feet near Engelberg, growing with Lilium Martagon and Hedysarum obscurum.—H.S.T.

V. angustifolia L., var. Bobartii Koch. Poor grass field, Milford-on-Sea, S. Hants., v.c. 11, June, 1913.— This seems correctly named.—C.E.S. A J. Comber. glance at Edw. Forster's "Observations on the Vicia angustifolia of the English Flora of Sir J. E. Smith" in "Trans. Linn. Soc." XVI. (1830) p. 435, where he briefly describes V. Bobartii as a species, shows what confusion this group of plants was in even then. Forster gave the name Bobartii to V. angustifolia of Smith (not of other botanists), but his description is meagre. V. angustifolia is one of the most polymorphic of plants, (Godron called it V. polymorpha); and the nomenclature of its various varieties and forms is still in a state of chaos. These nice specimens have the *solitary flowers. straight and patent pods (30-40mm. long) and narrow linear upper-leaflets of the var. Bobartii; but the Milford plants are by no means "prostrate," and the upper leaflets are truncate or slightly emarginate, with a short mucro, in which respect and the single flower they resemble those of V. peregrina L.; but that species is quite distinct, and it has larger dull purple flowers and broader pods. Hooker & Arnott remarked ("Brit. Flora," Ed. 6, 1850) "by cultivating Bobartii we observed it pass into V. angustifolia." To make certain of the plants in this perplexing group, it is advisable to cultivate them, and see if the characters remain constant. In the S. of France one finds three or four forms of this aggregate, each with two or three different names. One of these is V. heterophylla Presl., a form of which before me bears a strong likeness to Mr. Comber's plant, except that the leaflets of his are more truncate. I can suggest no better name for these Hampshire specimens than the one adopted.—H.S.T.

P.S.—Perhaps Koch did not know Forster's plant, because he says "et raro occurrit *floribus 3—4 in axilla foliorum, uno sessili, caeteris pedunculo elongato insidentibus." ("Synopsis," Ed. 2, 1843). Rouy actually calls V. Bobartii var. a typica of V. angustifolia Reichardt.—H.S.T.

Spiræa salicifolia L. Shore of Ullswater, Patterdale, Westmorland, v.c. 69, Sept. 3, 1913.—S. H. Bickham.

S. Ulmaria L., var. denudata Boenn. Tower's River Walk, Lindfield, E. Sussex, v.c. 14, July 28, 1913.—R. S. Standen. Correct.—E.F.L. & E.S.M.

Rubus nitidus Wh. & N., var. opacus (Focke). Peat moor, near Meare, N. Somerset, v.c. 6, Aug. 4, 1913.—J. W. White. Yes: characteristic.—W.M.R.

R. argenteus Wh. & N. Accommodation road, Sneyd Park, Bristol, W. Glos., v.c. 34, July 11 and Aug. 23, 1913.

—Ida M. Roper. Yes, these are luxuriant and very good examples of our common West of England form.—W.M.R.

R. lacustris Rogers. (1) Hedgerow, Vale of St. John, Aug. 25, 1913. (2) Roadside, Threlkeld, Aug. 25, 1913. (3) Coppice at Glencoign, west bank of Ullswater, Aug. 29, 1913. (4) Lane-side, Watermillock, Sept. 1, 1913, all Cumberland, v.c. 70, and (5) On slope above Ullswater, east side, Side Farm near Patterdale, Sept. 2, 1913, Westmorland, v.c. 69.—S. H. Bickham. I am satisfied that all these sheets (34 in number) are rightly put to my R. lacustris ("Jl. Bot." 1907, pp. 9 & 10); but owing to the exceptional circumstances under which they were collected, in a very dry autumn and after the hedges had been trimmed,—they are not quite so easily distinguishable from R. Lindebergii as usual. Several are even conspicuously uncharacteristic in the very contracted and elongated ultra-axillary panicle, as well as in the less compound leaf-serration—departures from my type which are quite natural under the circumstances. But even these exceptionally uncharacteristic specimens are distinguishable enough from the true Lindebergii of the Lakes, as of the rest of Britain. They are also plainly distinct from Continental named "forms," of which I have a good Scandinavian series collected by Dr. Elmgvist, all of which unmistakably belong to Lindebergii proper, in general habit, as well as in stem leaves and flowers. These Continental forms or states also have the uniformly grey sepals which are characteristic of Lindebergii, instead of the externally olive and white-margined ones of lacustris, which I now consider to be a variety of Lindebergii as yet observed only at the Lakes.—W.M.R.

R. leucandrus Focke. West Cliff, Bournemouth, S. Hants., v.c. 11. Panicles, June 19, 1912: Stems, Aug. 28, 1913.—W. Moyle Rogers.

R. thyrsoideus Wimm. Stow on the Wold to Moreton in Marsh, E. Glos., v.c. 33, July 19, 1913.—Coll. F. A. Rogers. Comm. W. Moyle Rogers.

 $R.\ leucostachys imes rusticanus$? Accomodation Road, Sneyd Park, Bristol, W. Glos., v.c. 34, Aug. 21, 1913. Flowers pale pink.—Ida M. Roper. Yes, one of a constantly varying series of forms that have arisen from crossings between these two species, including (as I have for years believed) Focke's $R.\ lasioclados$ and my var. angustifolius.—W.M.R.

R. Gelertii Frider. Reigate Hill, Surrey, v.c. 17, Aug. 30, 1913.—R. S. Standen. All the 23 sheets clearly belong to our R. Gelertii as confirmed from this locality by the late Mr. Gelert; but many of the panicles are unfortunately too weak to be characteristic, a circumstance due partly to the late date at which they were collected.—W.M.R.

R. Borreri Bell Salt. Brislington, Bristol, N. Somerset, v.c. 6, July 29, 1892.—J. W. White. I agree. Panicles exceptionally weak, as is not infrequent in this species.—W.M.R.

Potentilla norvegica L. Waste ground, Newhaven, E. Sussex. v.c. 14, July 12, 1913.—R. S. Standen. Correct.—E.F.L. & C.E.S.

P. intermedia L. Fowl run, Mildenhall, W. Suffolk, v.c. 26, June 7, 1913. Named at Kew.—W. C. Barton. No root-leaves on my specimen, but I think it is correctly named.—C.E.S. This agrees fairly well with plants so named by Dr. Theodor Wolf.—E.S.M.

P. mixta Reichb. (1) Ref. No. 67. Shingle, Selsey, W. Sussex, v.c. 13, Sept. 22, 1913. Colonising a patch of shingle on the inner face of the beach of Bracklesham Bay. As with Ref. No. 70, a single plant may have been the parent of the colony. No fruit seen.—J. E. Little. Apparently a small-flowered P. procumbens × reptans.—E.S.M. (2) Ref. No. 68. Hertford Heath, Herts., v.c. 20,

Oct. 2, 1913. Stems branching, creeping, often rooting. Sepals and Petals often 4, or Sepals 5, Petals 5, or Sepals 5, Petals 4. Achenes (?) scantily produced, granulate, without reticulation or striation. Specimens in Herb. Brit. Mus. labelled "P. procumbens Sibth.", from near Marshmoor, Herts., 1875; and from Northaw, Herts, 1874, collected by R. A. Pryor, may prove to be the same plant. The chalk area round Hitchin produces pure P. reptans L.; and P. erecta Hampe where there is a capping of clay or gravel. But so far as I know the plant here distributed is quite lacking from our immediate district.—J. E. Little. P. procumbens × reptans, I think.—E.S.M. (3) Ref. No. 70. Open ground in Mulgrave Woods, Sandsend, N.E. Yorks, v.c. 62, Aug., 1913. Growing in great abundance in grass, or on bare places in the turf covering lias clay. In the latter case forming a loose carpet that has apparently spread by rooting at the nodes in autumn, though no actual roots were discoverable at the nodes at this time. Possibly on account of the plants thus spreading being young the root-stock is not yet greatly thickened. Leaves: radical 5-foliate; stem leaves 3-5-foliate with large, often cut, stipules. Stems very slender like thin whipcord, sometimes branched, but largely simple, prostrate. Flowers (? indiscriminately) 4—5-merous.

Floral bracts (epicalyx, outer calyx) 4, Sepals 4, Petals 4
or ,, 5, ,, 5, ,, 4
or ,5, ,, 5, ,, 5

No fruit seen. Floral bracts as broad as sepals, not noticeably different. The leaflets resemble P. procumbens, in that the base is cuneate, not rounded (convex in outline), or even hollowed out (concave in outline) to point of petiolule; the serrations are longer and more acute than in P. reptans, but absent in the lower half of the leaflet. Stipules often large and much cut. The length of the claw of the petals apparently similar to those of P. reptans. Plants growing at Sandsend Station upon rockballast produced seed pretty freely, having achenes with diagonal striations with granulations between. seed character is to be relied upon, they should probably go under P. procumbens. Would some member collect from the Pennines, or further north, P. procumbens in full material, to show roots, leaves, flowers, and, more particularly, fruit.—J. E. Little. My material is too

scrappy to allow of a definite opinion; it may be a small form of P. procumbens \times reptans. I know nothing of P. mixta Reichb.—E.S.M. Yes, P. mixta Nolte ex Reichenbach Exsicc. No. 1742 (no description) = P. mixta Nolte ex Koch Syn. ed. 2, p. 239. This plant is usually regarded as a hybrid of P. procumbens and P. reptans; but I am not convinced of the correctness of the hypothesis. British distribution (so far as my own limited knowledge of it goes) of the three forms seems to be against the view that it is a hybrid. Personally, I have never found P. mixta in localities on the northern and western hills where P. procumbens and P. reptans grow. I have found it in southern and eastern England, usually in localities where P. procumbens is certainly absent. As to the form of abbreviated citation, "P. mixta Nolte" seems to me worthless, as it conveys no hint as to where one may find either the original specimen or the original description. P. mixta Nolte ex Reichenbach, or (better) P. mixta Nolte ex Koch will serve; but if the citation must be still further reduced, then I should much prefer P. mixta Reichenbach or (better) P. mixta Koch. My view is that the personal addition to the name of the plant—the binominal—should afford a hint as to where one may find the original description or the original specimen under the particular name in question.—C.E.M.

—. (Ref. No. 3885). Plentiful by a stream on Ben Lawers, Mid Perth, v.c. 88 (between 2000 and 3000 feet), Sept. 4, 1913. Pointed out to me by Dr. C. E. Moss as the plant named in this station by Ostenfeld as A. acutidens Buser; more abundant there than ordinary A. alpestris Schmidt, and looking distinct from it. understand, however, that H. Lindberg referred a specimen of the original (1911) gathering to A. alpestris, forma autumnalis.—E.S.M. [Later, Mr. Marshall said that he has grown the plant in his garden, and now agrees that it is A. alpestris Schmidt]. Clearly A. alpestris Schmidt. It does not at all present the features of A. acutidens.— C.E.S. I should call this A. vulgaris, var. alpestris (Pohl.) = A. alpestris Schmidt.—E.F.L. Both A. alpestris and A. acutidens grow on Ben Lawers, and frequently grow intermingled. Why should not hybrids also occur? If they do, the discrepancies in the naming of the forms which grow on Ben Lawers would be—in part, at least—explained. Mr. Marshall and I undoubtedly saw A. acutidens on Ben Lawers.—C.E.M.

Rosa spinosissima × rubiginosa. Near Abbotsford, Roxburghsh., v.c. 80, July 26 and Aug. 26, 1913. There is no dwelling within two miles of the station where this hybrid grows. Both parents are found close by in the same hedge. The flowers are pink with yellow at the base of the petals, and have the scent of the sweet-briar distinctly.—I. M. Hayward. A very good intermediate; but better labelled R. spinosissima × Eglanteria.—A. H. W.-D. This makes the third native station for this hybrid known to me in Scotland. The forms from all three stations, though of course showing a certain amount of variation, differ in no material point, and exhibit in the clearest manner a combination of characters derived from both parents.—W.B.

R. mollis Sm. Roadside hedge, Keswick, Cumberland, v.c. 70, Aug. 25, 1913.—S. H. Bickham. My specimen is a poor one, but looks right.—E.S.M. Correct. This, with its numerous small subfoliar glands and large fruit, belongs to what Mr. Ley called var. recondita (Puget). In this he was undoubtedly wrong, as R. recondita Pug. differs in nothing from typical R. pomifera Herrm., except in having more numerous subfoliar glands. The present specimen is clearly a variation of R. mollis Sm. It has fruit and peduncles perfectly smooth, which is unusual. To judge from what I have seen, however, some peduncles and some fruits on the same bush would probably show a few glands.—W.B. I would rather label this var. cærulea Woods, though I doubt whether the variety is worthy of distinction.—A.H.W.-D.

R. canina L., [var. Blondæana Rip.]. By the Land Yeo, Wraxall, N. Somerset, v.c. 6, June 17, and Oct. 18, 1913.—Ida M. Roper. I can detect no glands on the primary nerves beneath; the teeth are simply serrate, or nearly so, and it seems to come under the Lutetiana group.—E.S.M. Not R. Blondæana Rip., nor of the sub-group Scabratæ at all, but either Transitoriæ or Dumales. My material is not good, but it is most likely R. curticola Pug., less probably R. stenocarpa Déségl.—

A.H.W.-D. This does not belong to R. Blondana Rip. which has peduncles more or less hispid-glandular. comes under var. scabrata Crép., or, which is apparently a variation of the same group, var. vinacea Baker. It is nearer in the shape of its leaflets to Crépin's plant, of which I have an author's specimen from Rochefort, gathered in 1858. It differs, however, in having the styles longer and quite glabrous, whereas in the Belgian plant they are moderately hairy. In the latter also the subfoliar glands are larger and the fruit more nearly globose. Major Wolley-Dod in "List of Brit. Roses" says that "R. scabrata Crép., never having been described, is best excluded." Whether Crépin ever described it or not, I do not know, and in his later years he certainly used the name for a group, as indeed he did with nearly all the names which he employed latterly. But that it was originally the name of a special form is certain, and it was this form which was described by Dr. Christ in "Rosen der Schweiz." No doubt Dr. Christ considered it as a variety of R. tomentella Lém., but that does not affect his description, which was founded on specimens received from Crépin. Nor does it affect the name which he employs, R. scabrata Crép. So that if you deny Crépin's right to the name, you cannot deny that of Dr. Christ, and must therefore call it R. scabrata Crép. in Christ "Rosen der Schweiz." I think, however, that Crépin defined it well enough as a group name, and therefore I should label Miss Roper's plant as R. canina L. of group scabrata Crép.—W.B.

R. canina L., var. [sphærica (Gren.)]. Combe Glen, Westbury-on-Trym, W. Glos., v.c. 34, June 27 and Oct. 9, 1913. Flowers almost white.—Ida M. Roper. This is one of the thinly hairy forms of the group R. dumetorum Thuill. It is closely allied to R. urbica Lém., and may be put under that name.—W.B. Not R. sphærica Gren., as the midribs are decidedly hairy. It may be placed to R. semiglabra Rip.—A.H.W.-D.

R. [glauca Vill.], (with scattered sub-foliar glands, chiefly on the veins). By Railway Bridge near Abbotsford, Roxburghsh., v.c. 80, July, Sept. and Oct., 1912. Mr. Barclay tells me that this group of glauca forms is far from common in Scotland.—I. M. Hayward. Cannot be

this species, which has glabrous leaves; here they are hairy on both sides, and glandular beneath.—E.S.M. There may be some mixture here. My specimen is certainly no form of R. glauca. Its leaflets are hairy on both surfaces, as well as glandular on the back, and biserrate, and one or two peduncles are slightly glandular. It is a member of the corifolia group, but is much too young to say whether of the sub-group Corifolia or Subcollinæ, so I fear I can go no further.—A.H.W.-D. Miss Hayward sent me on two previous occasions specimens of a rose which seemed to me to be the same as one which I sent to Crépin many years ago and of which he said, "In this form the petioles are somewhat pubescent all round, but they become glabrous with age. The midrib is likewise somewhat pubescent, but that also becomes glabrous with age. This thin pubescence shows the tendency of this form to approach R. coriffolia." The present specimens are not, in my opinion, from the same bush as the former, and do not so clearly show the tendency to become glabrous, and specimens gathered at a later stage, say when the fruit is reddening, would be required to show if the pubescence does indeed wear off. In any case this and the others show a very close approach to R. coriifolia Fr., of groups Bakeri and Lintoni. Crépin gave no name to the form determined by him and I have not seen anywhere else a similar form described.—W.B.

R. stylosa Desv., var. systyla Bast. Combe Glen, Westbury-on-Trym, W. Glos., v.c. 34, June 27, and Oct. 9, 1913. Flowers pale pink.—Ida M. Roper. Correct.—E.S.M., W.B. & A.H.W.-D.

R. arvensis Huds. Gattonside, near Melrose, Roxburghsh., v.c. 80, Aug. 6, 1913. This rose is uncommon in Selkirkshire and Roxburghshire in a wild state.—I. M. Hayward. Probably correct; but weak and poor.—E.S.M. Correct.—A.H.W.-D. Correct. This rose is certainly not native in Scotland as a whole. In the extreme south it may be so.—W.B.

Ribes rubrum L., var. petræum (Sm.). River Bank, near Forest Row Station, E. Sussex, v.c. 14, May 14, 1910.

—R. S. Standen. This seems nearest to var. petræum, but does not quite fit Smith's description; flowers glabrous.

—E.S.M. Yes, I believe this is the plant that has been called R. sylvestre Reichb. (= R. petræum Sm. non Wulf.), the wild Red Currant. The cultivated form (var. sativum Reichb.) has glabrous leaves and racemes.—C.E.S.

Tillæa muscosa L. Heath, near Thetford, W. Norfolk, v.c. 28, July 13, 1918.—Coll. W. H. Burrell. Comm. S. H. Bickham.

Sedum purpureum Tausch. Ayot, Herts., v.c. 20, Sept. 10, 1913.—D. M. Higgins. Yes.—E.S.M.

Circæa lutetiana L., var. cordifolia Lasch. Sligo, Aug. 20, 1913.—W. C. Barton. I do not know this variety, but in my specimen the bases of the leaves are rather truncate than cordate.—E.F.L. In my specimen the leaves are but slightly, if at all, cordate at the base. Rouy places cordifolia as his a., apparently considering it to be the normal plant.—E.S.M. I believe our usual British form has the upper leaves ovate and the lower more or less cordate-ovate. Some of Mr. Barton's specimens clearly show this; others have them all cordateovate, and would thus seem to come under the cordifolia Lasch. I have not seen any examples with leaves that could be described as oval, yet Gray ("Arr. Brit. Pl.") called our species C. ovalifolia (following Stokes), though in his description he says the leaves are ovate! Rouy's description of var. ovalifolia Lasch seems to point to a plant with truly oval or elliptic leaves.—C.E.S.

C. alpina L. Glenade Cliffs (alt. 800 feet), Leitrim, Aug. 18, 1913.—W. C. Barton. Yes.—E.S.M.

Apium nodiflorum Reichb. fil., var. In lane on N. side of river at Pont-newydd, near Aber, Carnarvonsh., v.c. 49, Aug., 1913.—G. Goode. This is not exactly any of the named varieties. It is nearest to var. ochreatum DC., but this has 5—7 leaflets and roots at many of the nodes.—E.B.

Anthriscus Cerefolium Hoffm., (in fruit). Naturalised on sandstone rocks, Ross, Herefordsh., v.c. 36, June 12, 1913.—Coll. Miss E. Armitage. Comm. Edward S. Marshall.

Enanthe pimpinelloides L. Swamp, Milford-on-Sea, S. Hants., v.c. 11, Aug., 1913.—J. Comber. Yes; from a

locality mentioned in Townsend's "Flora of Hants."—C.E.S. Yes; but remarkably slender. In Somerset it is, as a rule, much more robust.—E.S.M.

E. silaifolia Bieb. Elstead, Surrey, v.c. 17, June 15, 1913.—W. C. Barton. Rightly named.—E.F.L. & E.S.M. Yes; a rare plant in the county.—C.E.S.

Peucedanum palustre L. Shapwick Moor, N. Somerset, v.c. 6, Sept. 25, 1913.—Edward S. Marshall.

Galium Vaillantii DC. (Ref. No. 3912). Locally plentiful in cultivated ground near Ashcott Station, N. Somerset, v.c. 6, Sept. 25, 1913.—Edward S. Marshall. (See B.E.C. Rept., 1913, pp. 471–2).

Senecio sylvaticus L., var. auriculatus Meyer. Roundstone, W. Galway, Aug. 14, 1913.—W. C. Barton. I think this is var. lividus Sm. (non L.), as it agrees with t. 2515 in "Eng. Bot." Perhaps auriculatus Meyer is a synonym.—C.E.S. If var. auriculatus Meyer is synonymous with S. lividus Sm. ("Engl. Fl." III., 429), I think this plant is rightly named.—E.F.L. I suppose so, but do not know the variety. It seems to be Smith's S. lividus.—E.S.M.

S. Jacobæa L., var. discoideus L. Sandy coast, Dogs Bay, near Roundstone, W. Galway, Aug. 14, 1913—W. C. Barton. Yes; but hardly more than a form.—E.S.M. This rayless form is very persistent in Dog's Bay, near Roundstone. My brother and I gathered it there in 1885, and it was sent by him to the older B.E.C. (Rept. 1885, p. 131) under the name S. Jacobæa L., var. flosculosus Jord.—E.F.L.

S. paludosus L. Probable origin, Wicken Fen, Cambs. Cult. Underdown, Ledbury, July 26, 1913.—S. H. Bickham. Beautiful herbarium specimens of this rare and nearly extinct British plant, not at all spoilt by cultivation. Certainty about the origin is desirable, if it can be obtained.—E.F.L.

Centaurea nigra L., f. radiata Williams (fide C. E. Salmon). Burley Street, New Forest, S. Hants., v.c. 11, June 17, 1913.—R. S. Standen.

Arnoseris minima S. & K. Potton, Beds., v.c. 30, July 5, 1913.—J. E. Little.

Crepis capillaris Wallr., var. agrestis (W. & K.)? Among grass in meadow, Grey Abbey, Co. Down, July 5, 1913. There may be two forms in this gathering. I send a few specimens also from open ground, not so drawn up by the meadow grass.—C. H. Waddell. This seems to have the robust habit, glandular hairs, large flowers, dark styles, etc., of agrestis, which, on the Continent, is usually given the rank of sub-species. All the sheets seem the same form.—C.E.S. A robust form like this occurs in some Dorset meadows, and is probably due to situation. This species varies much in the size of the flowers, and the clothing of the phyllaries. This Grey Abbey meadow plant has the larger and more glandular heads of var. agrestis, both variable characters. Willdenow observed of this form, "Involucrum plantae spontaneae glandulosohispidum fuit, in culta glabrum factum est" (Koch, "Syn. Fl. Germ. et Helv." ed. 2, 1844, p. 505).—E.F.L.

- C. capillaris Wallr., var. diffusa (DC.). Malvern, Worcs., v.c. 37, Aug. 25, 1913.—A. J. Crosfield. I have only found this variety where rabbits have constantly kept down the herbage.—E.F.L.
- C. [biennis L.]. Field, Axbridge, N. Somerset, v.c. 6, June 18, 1913.—Ida M. Roper. My plant appears to be C. taraxacifolia Thuill.; the achenes, though not mature, are distinctly beaked, and the foliage is characteristic.— E.S.M. C. taraxacifolia Thuill. This species has spread rapidly in the W. and S.W. of England in recent years.— E.F.L.
- C. mollis Aschers. (= C. succisæfolia Tausch). Locally plentiful to the north of Garth Castle, near Fortingal, Mid Perth, v.c. 88, July 21, 1913. Apparently a very scarce plant in Perthshire.—Edward S. Marshall.

Hieracium cyathis Ley. Cheddar Rocks, N. Somerset, v.c. 6, June 18, 1913.—Ida M. Roper. Correct.—E.S.M. and E.F.L.

H. pseudonosmoides Dahlst. Glen Lyon, Fortingal, Mid Perthsh., v.c. 88, July 1, 1913. Flowers of a remark-

able greenish-yellow tint, which Mr. Marshall informs me is quite a feature of this species.—C.E.S. Correct.—E.S.M. & E.F.L.

H. pellucidum Laestad. Old Walls, Grey Abbey, Co. Down, July, 1913.—C. H. Waddell. Rightly named, we believe.—E.S.M. & E.F.L.

H. [sciaphilum Uechtr., var. transiens Ley]. Rodway Hill, Mangotsfield, W. Glos., v.c. 34, July 10, 1913.—Ida M. Roper. I should rather call this H. diaphanoides Lindeb., which I have gathered on rocky slopes at Mangotsfield. H. sciaphilum and its var. transiens have more numerous stem-leaves and larger heads, with many hairs among the glands on the phyllaries.—E.F.L.

H. umbellatum L., var. linariifolium Wallr. (Ref. No. 3877). Near Fortingal, Mid Perth, v.c. 88, Sept. 2, 1913. Styles yellow.—Edward S. Marshall. I agree.—E.F.L.

Leontodon nudicaule Banks & Soland, var. lasiolænum Druce. Malvern, Worcs., v.c. 37, Aug. 1913.—A. J. Crosfield. The heads are hairy; so I suppose the name is correct.—E.S.M.

Lactuca Serriola L. Waste ground, Newhaven, E. Sussex, v.c. 14, Aug. 19, 1909.—A. G. Gregor.

L. saligna L. The Crumbles, Eastbourne, E. Sussex, v.c. 14, Aug. 28, 1909.—A. G. Gregor.

Campanula rotundifolia L. Rough quarry, Rowick, near Eastnor, Herefordsh., v.c. 36, July 21, 1913.—S. H. Bickham. Mr. A. Bennett, to whom I showed specimens, suggested that this might be var. elongata Hampe. In B.E.C. Rept., 1888, p. 224, the description of this var. is given as follows, "Stem elongated, length up to 0.50 m., leaves elongated, linear-lanceolate, radical leaves usually wanting."—C.E.S.

C. rotundifolia L., var. Lough Gill, Sligo, Aug. 17, 1913.—W. C. Barton. Var. hirta Koch:—"inferior pars plantae pilis rigidulis hirta." Koch "Syn. Fl. Germ. et Helv." Ed. II. 2, 538 (1844).—E.S.M.

Erica Mackayi Hook. Craigga Moor, W. Galway, Aug. 14, 1913.—W. C. Barton. Very good specimens.— E.F.L.

Monotropa Hypopitys L., var. hirsuta Roth. Bisham Wood, Berks., v.c. 22, June 22, 1913.—W. C. Barton. Yes, but the hairs are very few.—C.E.S. The gathering may have been mixed; my one small plant seems to be entirely glabrous, and does not fit Koch's description in any respect. He remarks that many intermediate forms are to be found.—E.S.M.

Limonium humile × vulgare. Itchenor, W. Sussex, v.c. 13, Sept. 24, 1913.—J. E. Little. I think you can well call all the plants in this cover the hybrid Statice Neumani Rouy (= S. Limonium × S. humilis).—C.E.S.

Symphytum cæruleum Petitmengin (= S. officinale, var. ochroleucum × peregrinum). Cultivated in the University Garden, Bristol, June, 1913. Habit and stature of S. peregrinum, but almost entirely sterile. (See C. Bucknall in "Jl. Bot." 1912, p. 335).—J. W. White. Correct.—C.B.

S. lilacinum Bucknall (= S. officinale, var. ochroleucum \times var. purpureum \times peregrinum). By the Land Yeo stream at Wraxall, N. Somerset, v.c. 6, June, 1912. (See C. Bucknall in "Jl. Bot." 1912, p. 334).—J. W. White. I believe this particular specimen is \times S. discolor and not \times S. lilacinum. The corolla is paler, and does not shew the purple tinge of the latter hybrid. The leaves also are broader in proportion to the length, as in S. discolor. I know that Mr. White gathered a good deal of \times S. lilacinum, but this specimen appears to have got in by mistake.—C.B.

Pulmonaria angustifolia L. (1) Minstead, New Forest, S. Hants., v.c. 11, April 25, 1913.—R. S. Standen. (2) Brockenhurst, S. Hants., v.c. 11, April 28 and July 19, 1913.—Ida M. Roper.

P. officinalis L., var. immaculata Opiz. Burgate Wood, E. Suffolk, v.c. 25, April 18, 1913. — W. C. Barton. Yes; P. obscura Dumort. Dr. Hind many years ago directed me to this station, where it appears to be a true native.—E.S.M.

"May 14, 1862. Pulmonaria officinalis grows in Burgate Wood, in the parish of Burgate. I think there can be no doubt about its being a genuine wild locality; for the plant is plentiful, it grows far in the interior of an extensive wood, and has as much the appearance of being truly wild as any of the plants near it. It is now more luxuriant than usual, in consequence of the underwood having been recently cut, a fact which I noticed last September when I was in the wood." (C. J. Ashfield in "The Phytologist," 1862, p. 351). "The wood was visited in the spring of 1885, and the plant was found in profusion, and in less quantity in Stubbing's Grove (Botesdale) about a mile to the westward." (Dr. Hind in "Flora of Suffolk," 1889, p. 243). A note on the plant, by the Rev. E. S. Marshall, will be found in B.E.C. Rept., 1894, p. 458. I am not sure, but I think Opiz's name is a nomen nudum in the 1852 Röstlin. It is the "\gamma Pulmonaria non maculoso folio" of Linnæus Sp. pl. ed. I., p. 135 (1753), and the P. obscura of Dumortier.—A.B.

Myosotis scorpioides L., var. strigulosa (Reichb.) Tower's River Walk, Lindfield, E. Sussex, v.c. 14, July 22, 1913.—R. S. Standen. My sheet is the variety.— E.F.L. So I should name it.—E.S.M. In my two plants the pubescence spreads too much to admit of them coming under the variety named, I believe. Reichenbach says, for his plant—"caule adpresse-striguloso"; in my specimens the hairs on the stem are patent-ascending, so there is evidently a mixture.—C.E.S.

Cuscuta Trifolii Bab. Lewes, E. Sussex, v.c. 14, Sept. 3, 1909.—A. G. Gregor. Yes.—E.F.L.

Verbascum Blattaria L. Made ground, Kingsweston Down, Henbury, W. Glos., v.c. 34, Aug. 16, 1913.—Ida M. Roper.

Mimulus moschatus Douglas. Well established in Glen Lyon, about five miles above Fortingal, Mid Perthsh., v.c. 88, July 16, 1913.—Edward S. Marshall.

Veronica Anagallis I. (genuina), var. glandulosa Druce. Swamp at junction of Ash Brook and Ippolyts Brook, Hitchin, Herts., v.c. 20, Aug. 26, 1913. I sent this plant to the B.E.C. 1912, (see B.E.C. Report, 1912, p. 271). I then stated that it was an annual form. This Mr. Marshall queried. In the autumn of 1912 the field, including the waterlogged portion where this plant grows, was ploughed up, but the plant appeared there in the same abundance in 1913. I went down to the field again on Jan. 16, 1914. Most of the plants which flowered are this year dead or dying, but there are fresh plants with creeping stems, which will flower this next season, if undisturbed. It is not, I think, a perennial form at any rate, as is stated by Mr. Druce (l.c.) to be the normal. It may be a biennial, or even merely an over-winter plant. If the latter, it comes close to being annual.—J. E. Little.

Euphrasia Kerneri Wettst. Colley Hill, Reigate, Surrey, v.c. 17, Aug. 30, 1913.—R. S. Standen. Correct.—E.D. & E.S.M. One specimen is typical Kerneri, but two others approach E. nemorosa in habit and in the smaller flowers. Does E. nemorosa also grow on Colley Hill?—C.B.

E. ———. Calcareous pasture, Saltby, Leics., v.c. 55, Aug. 1913.—A. R. Horwood. Too far advanced to be of any use; E. nemorosa, I think.—E.S.M. Possibly E. stricta Host., but the specimens are too old and dilapidated for determination.—C.B. Such bad specimens as these cannot be named.—E.D.

E. curta Wettst., var. glabrescens Wettst. Askham, Westmorland, v.c. 69, Aug. 1913.—Coll. D. Lumb. Comm. C. E. Salmon. Specimens sent in a fresh condition to me by Mr. Lumb, who was in doubt as to name. I believe the labelling is right according to Wettstein's Monograph.—C.E.S. Correct.—C.B., E.D., & E.S.M.

Melampyrum pratense, L., var. ericetorum Oliver? (Ref. No. 3799). (1) Grassy, bushy Knoll, above Inch Garth, near Fortingal, Mid Perthsh., v.c. 88, July 6, 1913. Plant hispid, reddish brown; corolla-tube whitish; upper bracts usually toothed. So named on the spot by Mr. C. E. Salmon. It seems to agree well enough with the original description in "Phytologist," p. 678 (1852), but I have not seen Irish specimens.—Edward S. Marshall. (2) Near Inch Garth, Keltney Burn (the same locality as

Mr. Marshall's gathering), July 6, 1913. Although not compared with Oliver's type, I believe this is correctly named. It agrees well with the original description in "The Phytologist," particularly in the following points— "Entire plant more or less hispid.....frequently equally large with M. pratense.....bracts frequently with one, two or three teeth.....leaves lanceolate or linear-lanceolatetube of corolla mostly, in the open flower, strawcoloured or white." Oliver also remarks, "I think it possible that var. montanum may be but a diminished altered form of this," a statement that deserves considerable attention, I think .- C. E. Salmon. two gatherings, I think, are not the variety. There are interesting notes on plants somewhat similar to this in B.E.C. Rept., 1888 (p. 226), where the verdict of Prof. Babington was against either being var. ericetorum. The pubescence of the Scotch (and North-Midland) pubescent forms is less pronounced and softer than in the Roundstone variety. The colour of the corolla tube is not material. Var. ericetorum Oliver is more condensed, internodes short, bracts frequently toothed—E.F.L. (See also "Jl. of Bot." 1914, p. 140, and "B.E.C. Rept." 1913, pp. 487-8).

Orobanche caryophyllacea Sm. Deal, Sandwich, E. Kent, v.c. 15, June 28, 1913.—W. C. Barton. I agree.— E.F.L.

Mentha rotundifolia Huds., var. Bauhini Ten. Roots from the original locality where Dr. Long discovered it. Grown in the garden, Edmondsham Rectory, Dorset, where it keeps its character unchanged, Sept. 20, 1913.—E. F. Linton.

M. alopecuroides Hull. Orig. E. Harling, W. Norfolk, v.c. 28. Cult. Edmondsham Rectory, Dorset, Sept. 20, 1913.—E. F. Linton.

M. aquatica, var. citrata (Ehrh.). Origin: edge of pond, Northaw, Herts., v.c. 20 (see note by H. Peirson—who sent roots—in "Jl. Bot." 1911, p. 346). Cult. Underdown, Ledbury, Sept. 13, 1913.—S. H. Bickham. Mr. Peirson kindly sent me roots of this, and it retains its characters well in cultivation. It is just my idea of

M. citrata (i.e., a glabrous aquatica), but I confess I have never seen Ehrhart's specimens! Not the same as Mr. J. W. White's Mendip plant distributed through the Exchange Club of Brit. Isles in 1908.—C.E.S. Mr. Bickham may be justified in labelling his plant M. citrata Ehrh. in the absence of any certainty as to its parentage. In the "Lond. Cat." it is placed as a variety under M. aquatica L. The plant is almost identical with what Mr. J. G. Baker sent out in 1868 as M. citrata, cult. hort. Kew. I do not know what the latest views about this form are, but there appear to me signs of a connection with M. piperita L., and I hazard the opinion that it arose from a cross between that species and M. aquatica L.—E.F.L.

Prunella laciniata L. Near Hardwick, Cambs., v.c. 29, July, 1913.—A. J. Crosfield. Much finer examples than those I collected near Tilehurst, Berks., in July, 1907, where it occurs in old pasture, suggestive of enclosed common land, and was discovered by my friend, Mr. H. Weaver, in 1903. In this locality P. vulgaris grows close by and I saw one plant which had cream coloured corollas spotted with purple, indicating hybridity.—A.B.J.

P. $laciniata \times vulgaris$. Near Hardwick, Cambs., v.c. 29, July 3, 1913.—A. J. Crosfield & G. Goode. entertain no doubt that the specimens are the suggested hybrid, which is guite common near Hardwick.—C.E.M. These are very interesting; cf. Prunella hybrida Knaf. in "Lotos," XIV. Jahrg. (1864), p. 84. "Spica supremo foliorum caulinorum pari suffulta, calycis labii inferioris dentibus plus minus pectinato-ciliatis, filamentorum longiorum spinis plus minus antrorsum curvatis nec rectis, foliis plerumque pinnatifidis, sed et grosse dentatis aut subintegerrimis, floribus caeruleis vel dilute caeruleis. Ciliae dentium labii calveis inferioris plerumque breviores quam in P. alba, sed longiores et copiosiores quam in P. vulgari..... Equidem nullibi nisi in consortio Prunellae vulgaris cum P. alba ejusmodi formam reperi, unde mihi suspicio movebatur hybriditatis....." This is said to be Brunella intermedia Link = B. laciniata \times vulgaris.— E.B.

Galeopsis Ladanum L. (agg.). ? sub-sp. (1) Ref. No. 80. Edge of G.N. Railway, near Hitchin, Herts.,

v.c. 20, Aug. 28, 1913. I believe this plant and Ref. No. 81 are the same, in spite of the rather narrower leaves of the former, which may be merely the result of the later stage at which it was gathered. I distinguish it from var. angustifolia by its short-tubed corolla of a blue-purple colour, smaller in all its parts than var. angustifolia, which latter has flowers of a rose-pink colour. In these two localities the plant is practically pure. There are others in the neighbourhood, where this form appears to blend with var. angustifolia.—J. E. Little. G. angustifolia Ehrh.; approaching var. canescens (Schultz), but between that and the type.—E.S.M. (2) Ref. No. 81. From the same station, Aug. 16, 1913. This plant was sent to the B.E.C. in 1912. I then named it G. intermedia Vill., on the authority of Dr. C. E. Moss and Mr. E. W. Hunnybun. But Dr. Thellung (B.E.C. Rept., 1912), writes, "G. Ladanum L. sub-sp. angustifolia (Ehrh.) Gaud., forma foliis latioribus leviter accedens ad sub-sp. intermedium (Vill.) Briq." If it does not possess the "folia ovata" of Villar's description, yet certainly it does show the character "corolla calice vix major"; in which latter character it is distinct from the other British plants that I have seen.—J. E. Little. I think this is G. angustifolia Ehrh.—E.S.M.

Plantago lanceolata L., var. sphærostachya Röhl. Upminster Common, S. Essex, v.c. 18, July, 1912.—W. R. Sherrin. This is correctly named P. lanceolata L., var. sphærostachya Mertens & Koch.—E.B.

P. Coronopus L., var. pygmæa Lange. Sutton, near Southend, S. Essex, v.c. 18, June, 1913.—W. R. Sherrin. This is allied to the variety pygmæa, but the type of the variety is fewer-flowered.—E.B.

Herniaria ciliata Bab. Banks on cliffs, Kennack Cove, W. Cornwall, v.c. 1, June, 1912.—H. Boyden.

Chenopodium album L., var. paganum (Reichb.). Garden ground near Westbury-on-Trym, Bristol, W. Glos., v.c. 34, Oct. 16, 1913.—J. W. White.

C. opulifolium Schrad. Waste heap N. of Welwyn Tunnel, Herts., v.c. 20, Oct. 6, 1913.—J. E. Little.

C. rubrum L., var. blitoides Wallr. Brickfield at E. Grinstead, E. Sussex, v.c. 14, Aug., 1912.—Coll. Phyllis Stockdale. Comm. R. S. Standen. This plant, with its long strict spikelets and acutely-toothed leaves may well be var. blitoides. One of its described characters, "leaves acuminate" is, however, not very evident on my specimen, and the fruit should be blood-red or purple at maturity.—C.E.S. Yes, a rather small form of the variety.—C.E.M.

Salicornia [stricta Dum.]. Thorney Island, W. Sussex, v.c. 13, Oct. 15, 1913.—R. S. Standen. The two specimens I have examined are very good examples of the more branched form of S. ramosissima in the fruiting state.—C.E.M.

- S. pusilla Woods, var. gracillima Towns. Thorney Island, W. Sussex, v.c. 13, Oct. 15, 1913.—R. S. Standen. This seems to be Townsend's plant. S. pusilla Woods is a critical and little understood plant, but seems to me nearer S. herbacea than S. gracillima. The latter is, in its anatomical features, allied to S. disarticulata; and it is a tenable view that S. gracillima is a hybrid of S. disarticulata and S. ramosissima.—C.E.M.
- S. [appressa Dum.]. Thorney Island, W. Sussex, v.c. 13, Oct. 15, 1913.—R. S. Standen. My two specimens are not very characteristic, as they do not show the usual triangular-fanshaped outline; but I have seen the species there in good quantity.—E.S.M. Of the three specimens before me, two are S. prostrata, var. smithiana Moss and Salisbury (= S. smithiana Moss = S. procumbens auct. angl. olim non Smith), and the third is perhaps a hybrid whose parentage could better be determined at the time of collecting than from a dried specimen.—C.E.M.
- S. lignosa Woods. Portchester, S. Hants., v.c. 11, Oct. 15, 1913.—R. S. Standen. S. perennis, var. lignosa Moss (= S. lignosa Woods). The specimen before me is a splendid example of this.—C.E.M.

Suæda maritima Dum., var. procumbens Syme. Saltmarsh, Wells, W. Norfolk, v.c. 28, Aug., 1912.—F. Long. Yes; a small form of this slight variety.—E.S.M.

Polygonum heterophyllum Lindmann (P. aviculare L., pro parte). Ref. No. 3918. Sandy wheat-stubble, West Monkton, S. Somerset, v.c. 5, Sept. 23, 1913. Prostrate, slender.—Edward S. Marshall.

Urtica dioica L., var. Herefordshire Beacon, v.c. 36, Aug. 23, 1913.—A. J. Crosfield. Top pieces only of this species are not enough to form an opinion on. It seems the ordinary form.—E.F.L.

Betala alba L. \times pubescens Ehrh., var. microphylla. Ref. No. 3892. Allt Coire Pheiginn, west of Garth Castle, near Fortingal, Mid Perthsh., v.c. 88, Sept. 2, 1913. Dr. C. E. Moss and I agreed in so naming this. It was a tree with pendulous branches, 20 to 25 feet high, and did not produce female catkins at all freely. Nearer to the pubescens parent in foliage; but there is good evidence of B. alba.—Edward S. Marshall.

B. alba Ait. × pubescens (fide C. E. Moss). Planted in the garden of "The Grange," Hitchin, Herts., v.c. 20, April 30, 1913. A very fine tree.—J. E. Little.

Quereus Robur L., var. intermedia (D. Don). Malvern Wells, Worcs., v.c. 37, Aug. 26, 1913.—A. J. Crosfield. This is a narrow-leaved form of Q. sessiliftora Salisb. Don's var. intermedia cannot be separated from sessiliftora, as is very clearly shown by Dr. Moss (Jl. Bot. 1910, p. 5).—A.B.J. Perhaps Q. Robur × sessiliftora; but, if so, nearer Q. sessiliftora. Every stage between the putative parents occurs; and there must often be some doubt therefore in determining dried specimens.—C.E.M.

Q. Robur L., var. sessiliftora (Salisb.). Malvern Wells, Worcs., v.c. 37, Aug. 26, 1913.—A. J. Crosfield. Q. sessiliftora Salisb.—E.S.M. Correct, but is best cited as Q. sessiliftora Salisb., as most botanists and foresters now regard it as distinct from Q. Robur L. (Q. pedunculata Willd.).—A.B.J. Q. sessiliftora var. genuina. See "Camb. Brit. Fl." II., 74 (1914).—C.E.M.

Salix triandra L., var. Hoffmaniana (Sm.). Banks of Ouse, Lindfield, E. Sussex, v.c. 14, Sept. 9, 1913.—R. S. Standen. Leaf-material only; looks right.—E.S.M. Nearest to var. Hoffmaniana, but one of the frequent

forms of it which diverge towards the type, in the well-developed leaves being elongate and parallel-sided. Smith describes the leaves as nowhere parallel-sided.— E.F.L.

- S. triandra L., var. amygdalina L. Withy bed, Walton-in-Gordano, N. Somerset, v.c. 6, Aug. 4, 1913.— Ida M. Roper. The Rev. E. F. Linton considers the S. amygdalina, figured and described by Smith, not worth distinguishing as a variety. It should have a more rounded leaf-base than usual; this specimen has not, and appears to be the type.—E.S.M. The foliage piece is type S. triandra L. The piece with a late catkin has leaves with rounded base, the main distinction of S. amygdalina. The two names are now regarded as synonyms. In gathering willows, flowers and leaves should be from the same bush; if not, the fact should be stated.—E.F.L.
- S. [caprea L. × cinerea L.]. Hedge, Clevedon, N. Somerset, v.c. 6, March 25 and Sept. 24, 1913.—Ida M. Roper. A difficult hybrid to be sure about; but I can only see S. cinerea in this specimen.— E.S.M. This seems to me merely a form of S. cinerea, differing from the average type of the species by having the larger leaves, on the middle of the shoots, broadest above the middle. The catkins are not stout enough for the hybrid.—J. Fraser. S. cinerea L. on the whole; but buds, stipules, catkin bracts and ovaries show evidence of S. aurita having entered into the composition of one of its parents; neither fruit nor foliage show any evidence of S. caprea L.—E.F.L.
- S. cinerea L. × viminalis L. Withy bed, Walton-in-Gordano, N. Somerset, v.c. 6, April 9, and Aug. 4, 1913.—Ida M. Roper. The specimens are from different bushes; the ? flowers are S. caprea (or S. cinerea?) × viminalis, not pure S. viminalis; note the pedicelled ovaries and the acute bracts. The foliage is type S. cinerea L.—E.F.L.
- S. Smithiana Willd. var., rugosa Leefe. 3, \(\mathcal{2}\). Hedgerow, Walton-in-Gordano, N. Somerset, v.c. 6, April 9, and Aug. 7, 1918.—Ida M. Roper. One of my \(\mathcal{2}\) fruiting pieces is S. caprea \(\times\) viminalis; the other is S. cinerea.—E.S.M.

It is undesirable to put male and female specimens on the same sheet, or, if done, it should be stated which the foliage belongs to. Here the 3 specimens are probably from the same stock as the leaves, which are correctly labelled as S. Smithiana Willd., var. rugosa. But the ? fruiting specimens are unmitigated S. cinerea L.—E.F.L.

S. Andersoniana × phylicifolia, \mathfrak{P} (= S. nigricans × phylicifolia Linton in "Journ. Bot." 1892, p. 362). A handsome bush of an intermediate form of the hybrid, believed to have been brought long ago from the Clova Valley, Forfarshire. Shrubbery at Edmondsham, Dorset, May 16, and July 24, 1913.—Edward F. Linton.

Populus canescens Sm. 3. (? planted). The Grange, Stevenage, Herts., v.c. 20. Catkins, Feb. 18; leaves, July, 1913. So far as I know, P. canescens Sm. in this district occurs only as a 3 tree. One is led to infer that it is not here a native. Will some member next year send the 2 tree?—J. E. Little. Yes, P. canescens Sm.—C.E.M.

P. deltoidea × nigra \(\text{?} \). Planted: "Avenue Lodge," Hitchin, Herts., v.c. 20, June 10, 1913.—J. E. Little. Exactly the same as the tree now called P. marilandica at Kew which is believed to be of the above parentage. It appears to be the P. canadensis of Hartig and other German dendrologists.—A.B.J. This is the "P. deltoïdea × nigra, (A) × P. canadensis" of the "Camb. Brit. Fl." II., 12 (1914). It agrees with the description of P. canadensis of both Mönch and Hartig, but not with the description of P. marilandica Poir.—C.E.M.

Juniperus sibirica Burgs. Errisbeg, near Roundstone, W. Galway (alt. 600 ft.), Aug. 13, 1913.—W. C. Barton.

Pinus Pinaster Ait. Moor near Baldhu, W. Cornwall, v.c. 1, June, 1913.—Coll. J. S. Stephens. Comm. A. J. Crosfield. Yes, but collected too late to show the shoot-buds which in winter afford a useful distinguishing character in this genus. This species has been extensively planted in some parts of England, particularly about Bournemouth, where it reproduces itself freely from seed.—A.B.J. This is a seedling plant without roots of P. Pinaster Aiton. This pine in the seedling stage has much shorter and more slender leaves than in the adult stage.

This identification is undoubtedly correct, as the specimen agrees absolutely with authentic seedlings of the same size of *P. Pinaster*. It has the same buds (remains of old bud are visible at base of current year's shoot on the main stem) and same position of the resin-canals in the leaves. The number and position of the resin-canals in the pines is characteristic of each species as a rule.—A. Henry.

Helleborine [latifolia Druce, var. media Marshall]. Luton, Beds., v.c. 30, Aug. 9 and 15, 1913. D. M. Higgins. My specimen is badly dried. It looks much more like violacea than media, but with such material it is guess work.—C.E.S. I think that this is H. violacea Druce.—E.S.M.

Ophrys apifera Huds., var. Trollii Reichb. fil. Durdham Downs, Bristol, W. Glos., v.c. 34, June 20, 1913.—I. M. Roper. This plant appears to be nearer the continental O. Trollii Hegets. than any other plant in this country.—E.B.

Tulipa sylvestris L. Origin: Stansfield, Suffolk. Cult. Crofton, Hitchin, 1910–12. In the wild station from which my bulbs were taken there were thousands of plants thickly massed together, but not 1 per cent. produced a flower. Some years ago the occupier of the land sent bulbs up to the Royal Horticultural Society. The flower has a sweet scent. Of the bulbs transplanted to my garden only a few have ever flowered, so that it has taken some years to obtain even these few specimens.—J. E. Little.

Juncus tenuis Willd. By the Bridgewater Canal, Lymm, Cheshire, v.c. 58. Growing between and upon blocks of sandstone lining the canal; an unusual station for the species. Aug. 1913.—Coll. G. A. Holt. Comm. Charles Bailey. J. tenuis Willd. is evidently extending its distribution in Britain. It has been found this summer by Mr. C. B. Green in Dorset, near Poole Harbour.—E.F.L.

J. maritimus Lam., var. atlanticus J. W. White. Salt-marsh, St. Mary's, Isles of Scilly, Sept. and Oct.,

1913.--J. W. White and E. A. Stideford. (See also B.E.C. Rept. 1913, p. 449).

J. bulbosus L., var. fluitans (Lam.). Errisbeg, near Roundstone, W. Galway (alt. 600 feet), Aug. 13, 1913.— W. C. Barton. This is a more or less viviparous state, and not a good variety.—E.S.M. I should have said not the variety, but a viviparous state. Fries is given as the authority, in Rouy's "Fl. Fr." for this variety, and his description is as follows ("Novit. Fl. Suec." 1828, p. 92)—"variabilis, caule elongato ramosissimo fluitante (folia saepius ut in β [uliginosus], verum in amnibus rapacioribus in fundo crescit forma numquam florens, densissime caespitosa, foliis longissimis capillaceis, saepe rubentibus)."—C.E.S.

J. biglumis L. Creag Mhor, near Fortingal (at about 2700 feet alt.), Mid Perthshire, v.c. 88, July 18, 1913. Remarkably abundant over a small area.—C. E. Salmon.

Sparganium ramosum Huds. A deep-water form growing at one spot in the Gloucester and Berkeley Canal, where it is crossed by the branch line of the Midland Railway Co., W. Glos., v.c. 34. In this station the water of the canal is tepid and probably derives its heat from a neighbouring chemical works. The locality was discovered by Mr. Charles Upton, of Gloucester, and the plants now sent were collected by the Rev. Walter Butt and myself on the 7th July, 1913. The ordinary erect form of the plant is frequent on the margin of the same canal —Charles Bailey.

S. affine Schnizl. Higher Scarth Tarn, Lancs., Sept. 1913.—Coll. W. H. Pearsall. Comm. A. Bennett.

Potamogeton pusillus L. The Lake, Southill Park, Beds., v.c. 30, June 27 and July 12, 1913.—J. E. Little. My example is only in flower. I should much like to see it in fruit. The leaf apex reminds one of P. rutilus.—C.E.S. This seems to answer to the P. pusillus L., var. tenuissimus Mert. & Koch, f. angustifolius Fischer.—A.B.

P. pectinatus L. The Lake, Southill, Beds., v.c. 30, June 27, and July 12, 1913.—J. E. Little. Yes, the typical plant of Linnaeus.—A.B.

Zannichellia palustris L. Ickleford, Herts., v.c. 20, Aug. 28, 1913.—J. E. Little. Yes, correct.—A.B. The ripe fruits are strongly spinous on the back, and somewhat so on the lower edge; when immature, they are smooth, or but slightly crenate. My sheet is certainly not ordinary Z. palustris. I believe it is Z. gibberosa Reichb.—E.S.M. Yes, the usual form. The ripe fruits on my specimen do not agree with the figure of Z. gibberosa in Reichb. "Icon. Crit.", nor with the fruits on a specimen of this species in Hb. Brit. Mus.—C.E.S.

Z. palustris L., var. brachystemon (Gay). Pond, near the sea, Keyhaven, S. Hants., v.c. 11, June, 1913.—J. Comber. I think so.—E.S.M. This is interesting, but on my sheet there are very few ripe fruits in a condition for examination. Some of the characters point to Z. pedunculata, but it is not that, I believe.—C.E.S.

Schænus ferrugineus L. (Ref. No. 3806). Loch Tummel, Mid Perthsh., v.c. 88, July 19, 1913. Growing in damp, stony ground; associated with Myrica Gale L. Quite plentiful in one spot by the Loch-side.—E. S. Marshall & C. E. Salmon.

Carex gracilis Curt. [var. prolixa (Fr.)]. By the Boyd stream between Pucklechurch and Hinton, W. Glos., v.c. 34, June 12, 1913.—J. W. White. Fries described the fruits of C. prolixa as having raised nerves, and the leaves and bracts as broad. In the present plant the fruits are not distinctly nerved, and the foliage is hardly broader than usual, though the glumes are very long. The habit is that of var. gracilescens.—E.S.M. C. Husnot, in his "Cyperacea" (p. 32 and Plate VIII.), describes var. personata Fr. as having the spikelets more peduncled than var. prolixa, and lax-flowered below; and the scales are figured (Pl. VIII., No. 9, 10) as longer and more acuminate. The specimens have just these features, and appear to be var. personata Fries rather than var. prolixa. E.F.L. (Kükenthal named this "C. gracilis Curtis, var. strictifolia (Opiz) Aschers.," see B.E.C. Rept. 1913, p. 505).

C. aquatilis Wahl. (Ref. No. 3809). Marshes near the head of Loch Tummel, Mid Perthsh., v.c. 88, July 12, 1913. A tall, slender form, or variety; too young, perhaps, to be named accurately. A new station for the species, I believe.—Edward S. Marshall. A fair example of the medium-sized plants of this species. It varies greatly.—A.B.

- C. Oederi Retz., var. ædocarpa And. Burley Moor, New Forest, S. Hants., v.c. 11, June 1, 1913.—R. S. Standen. Correct.—E.S,M.
- C. hirta L., f. hirtaeformis Pers. (1) Wet ground, Barton Common, near Milton, S. Hants., v.c. 11, June, 1913.—J. Comber. Yes, I think good hirtaeformis, although it has the glumes of var. spinosa Mortensen, and some might so name it. Is there room for both these "varieties"?—C.E.S. Townsend, in his "Fl. Hants." p. 476, refers to this variety in an observation, and seems to imply that he knew it in Hants., but he gives no localities. I have it from Dorset, but not from Hants.—E.F.L. Persoon described this as a species in "Syn. pl." II. 547 (1807). Gaudin, in his "Flora Helvetica," VI., p. 128 (1833), described it as C. hirta L., var. glabra, and it must bear his name as a variety. A later name for it is var. glabriuscula Brébisson Fl. Normandie, 349 (1869). -A.B. [Kükenthal remarked of this, "Yes, approaching forma spinosa Mort." (See B.E.C. Rept., 1913, p. 504)]. (2) Bank of Thames, Windsor, Berks., v.c. 22, June, 1913.—W. R. Sherrin. This is the unstable glabrescent condition, so called.—E.S.M.
- C. inflata Huds. (C. rostrata Stokes) × vesicaria L. (Ref. No. 3815). Marsh at the head (S.W. end) of Loch Tummel, Mid Perthsh., v.c. 88, July 12, 1913; growing with the parents, and fairly intermediate. Mr. Bennett agrees.—Edward S. Marshall.

Spartina alterniflora Lois. Mud banks, Cracknore Hard, Southampton Water, S. Hants., v.c. 11, Aug. 1913.

—J. Comber.

Anthoxanthum odoratum L., var. villosum Lois. Harmer Green Wood, Herts., v.c. 20, May 24, 1913.—
J. E. Little. May perhaps pass; but Ascherson and Graebner say that the leaf-sheaths are hairy—in these plants they are glabrous.—E.S.M. This long-awned hairy form seems correctly named var. villosum Lois. The

majority of the leaf-sheaths are hairy, in the upper part, in my specimens.—C.E.S.

Agrostis nigra With. (Ref. No. 3819). Grassy banks of the River Lyon, Fortingal, Mid Perthsh., v.c. 88, July 15, 1913. This agrees very well with Babington's description, and Mr. Bennett thinks it correct.—Edward S. Marshall.

Deschampsia setacea Richter. Margin of Hatchet Pond, near Beaulieu, S. Hants., v.c. 11, Aug. 1913.—J. Comber. Rightly named.—E.F.L.

Molinia cærulea Moench., var. major Roth. Damp shady places by roadside, near Milton, S. Hants., v.c. 11, Aug. 1913.—J. Comber. "Correct.—E. Hackel" (B.E.C. Rept., 1913, p. 509).

Poa annua L., var. Prittlewell, near Southend, S. Essex, v.c. 18, June, 1913.—W. R. Sherrin. This may be var. reptans Hansch, but I have not seen specimens authentically named.—A.B.

P. nemoralis L., var. cæsia Gaud.? (Ref. No. 3821). Cliffs above Fortingal, Mid Perthsh., v.c. 88 (at 1000 to 1200 feet), July 9, 1913. Intensely glaucous. Mr. Arthur Bennett writes: "I do not know Gaudin's plant; but, judging by description, I should think your specimens must be very near it."—Edward S. Marshall. I do not know what cæsia Gaud. is, or where he described it. Neither Richter, Ascherson and Graebner, or Nyman mentions any P. cæsia of Gaudin. There is a P. glaucantha Gaud., an alpine plant, and a var. caesia of Mert. & Koch Deut. Fl. I. 619 (1823) = P. Gaudini Roemer & Schultes "Syst. veg." II., 548 (1817). Perhaps it is a mistake for var. glauca Gaud. Agrost. Helv. I. 189 (1811), which is the same as Mertens and Koch's caesia.—A.B. (See also B.E.C. Rept., 1913, p. 511).

Agropyron pungens R. & S., [var. littorale (Reichb.)]. Bank of Avon, Sea Mills, Bristol, W. Glos., v.c. 34, Aug. 8, 1913.—Ida M. Roper. I should have named this A. repens L., var. Leersianum Reichb. (= Triticum Leersianum Wulf., Schreb. & Kutz.—A.B.

A. pungens R. & S., [var. pycnanthum G. & G.]. Bank of Avon, Sea Mills, Bristol, W. Glos., v.c. 34, Aug. 8, 1913.—Ida M. Roper. I should name this simply A. pungens R. & S. The glumes can hardly be called "abruptly rounded and obtuse."—A.B.

Equisetum arvense × limosum (E. litorale Kühlew.). Ref. No. 3825. Very local, on the south shore of Loch Tummel, Mid Perthsh., v.c. 88, July 12, 1913.—Edward S. Marshall. (See also B.E.C. Rept., 1913, p. 515).

APPENDIX I.

Draba verna L. Key to subspecies, from Rouy & Foucaud's "Flore de France," Vol. II., p. 220, (1895).

Rouy & Foucaud's Key to Erophila is subjoined, not as solving the difficulties of classification, but only as a help to some better understanding.

Mr. E. G. Baker writes that the definite separation of I. Bifide from II. Simplices does not work out very well in the case of E. hirtella Jord., of which Jordan says "pilis patulis sæpius bifurcatis." Also that Jordan's E. majuscula has leaves "oblong-obovate," and De Candolle's E. præcox leaves "lanceolate," and that there are similar differences in the number of seeds, E. stenocarpa Jord. having "about 40," and E. hirtella Jord. "30-35."

Hairs all or nearly all simple, very rarely with bifid hairs intermixed; silicules elliptic or oblong; seeds 14-24.*

Hairs all or nearly all bifid, some trifid, rarely with simple hairs intermixed.

2

3

5

Leaves broadish, ovate or oblong-lanceolate, spreading horizontally on the ground; silicules elliptic or oblong, little or not at all attenuate at base. D. alabrescens Nob.

Leaves lanceolate, erect or ascending; silicules oblong, much attenuate at base. D. hirtella Nob.

Silicules ovate-suborbicular, or obovate-rotundate, 3 very obtuse; seeds 8-24. 4 Silicules of a different form.

^{*} The number of seeds refers to each loculus of the silicule.

^{† &}quot;Ovale" has two meanings :-

^{1.} In a general sense, its equivalent is "oval."

^{2.} In a botanical sense, its equivalent is "ovate."

To translate "obovale" as "oboval" would be meaningless; and therefore it appears better to adhere to "ovate" and "obovate" respectively, although ovate" as applied to the silicule of an Erophila gives rise to other difficulties of fact.

4 Flowers small (3mm. diam.); lobes of petals contiguous or nearly so; silicules ovate-suborbicular, 3mm. long × 2.5mm. broad, rounded at top.

D. præcox Stev.

Flowers larger (8.5.—4mm. diam.); lobes of petals divaricate or divergent; silicules elliptic-obovate, 4—7mm. long × 2.5—3mm.. broad.

D. spathulata Hoppe.

- 5 Plant ± robust, with short bi- or trifid hairs; Flowers large with ovate-rotundate sepals; silicules elongate oblong or oblong-lanceolate, large; seeds 30—40. D. majuscula Nob. Plant ± slender, with mostly bifid some simple hairs; sepals ovate or oblong; silicules elliptic or oblong; seeds 16—24.
- 6 Leaves lanceolate or linear-lanceolate; silicules oblong. D. leptophylla Nob. Leaves ovate-lanceolate or lanceolate; silicules narrow-lanceolate or linear-oblong.

 D. lanceolata Neilr.

Leaves broader, ovate or elliptic; plant with fairly long hairs; silicules oblong or sublanceolate.

D. vulgaris Nob.

6

- **Series I. BIFIDÆ** Nob. Hairs all or nearly all bifid or trifid, very rarely with simple hairs intermixed.
- Subsp. I. D. majuscula Rouy & Fouc. E. majuscula Jord. Scapes 6—20cm., fairly robust. Hairs short 2—3-fid. Leaves mostly ovate, broad. Petals much exceeding calyx. Silicules large oblong, rounded at top; seeds 30—40.
- Subsp. II. D. lanceolata Neilr. E. stenocarpa Jord. Scapes capillary or slender, and usually numerous. Leaves lanceolate or ovate-lanceolate. Hairs 2—3-fid, short. Petals little longer than calyx. Silicules ± large, lanceolate-linear, or linear-oblong; seeds 30—36.

- Subsp. III. D. leptophylla Fouc. & Rouy. E. leptophylla Jord. Scapes slender. Leaves lanceolate or linear-lanceolate, with short pubescence. Hairs mostly bifid, some simple. Petals distinctly exceeding calyx. Silicules of medium size (5—7mm. long), oblong; seeds 16—24.
- Subsp. IV. D. vulgaris Rouy & Fouc. E. vulgaris DC. Scapes slender. Leaves ovate or ovate-lanceolate, with 2- or 3-fid hairs, short. Silicules elliptic-oblong or oblong-sublanceolate, of medium size (5—6mm. long); seeds 16—24.
- Subsp. Y. D. spathulata Hoppe. E. obovata Jord. Scapes slender, few (1—3). Leaves broadly lanceolate or nearly ovate. Hairs mostly bifid, some simple or trifid. Petals small, scarcely exceeding calyx. Silicules broadly obovate or elliptic-lanceolate, narrowed at base, rounded or subattenuate above, of medium size, but mostly small (4—7mm. long); seeds 16—24.
- **Subsp. VI. D. præcox** Stev. *E. præcox* DC. Scapes slender. Leaves ovate or broadly lanceolate. Hairs mostly bifid, some simple. Silicules suborbicular or broadly ovate, much rounded at base and above, generally small; seeds 16—24.
- **Series II. SIMPLICES** Nob. Hairs all or nearly all simple, rarely with bifid hairs intermixed.
- Subsp. VII. D. glabrescens Rouy & Fouc. E. glabrescens Jord. Scapes slender, short (6—10cm.). Leaves more or less narrow, lanceolate, oblong or ovate-lanceolate, with spreading lamina often recurved at tip. Silicules elliptic or ovate-oblong, of medium size; seeds 20—24.
- Subsp. VIII. D. hirtella Fouc. & Rouy. E. hirtella Jord. Scapes slender. Leaves lanceolate or ovate-lanceolate, nearly erect. Flowers large. Silicules elliptic-oblong or obovate, attenuate at the base, of medium size; seeds 20—24.

APPENDIX II.

Draba verna L. (*Erophila vulgaris* DC.). Key from Clavaud's "Flore de la Gironde," Paris, G. Masson, 1882. [See also A. Boreau, "Flore du centre de la France, et du bassin de la Loire," Paris, 1857, for similar key].

 2

3

", ", slightly divergent.

2 Silicules rotundate, very obtuse at top.

E. brachycarpa

", oblong, the lower third much narrowed.

E. hirtella

Lobes of petals nearly contiguous.

4

3 Leaves narrow-lanceolate.
,, obovate-oblong, often dentate. E. majuscula

Leaves glabrescent, or sparsely covered with simple

hairs; sepals ovate; silicules oblong-elliptic.

E. glabrescens

Leaves covered with branched hairs; sepals oblong; silicules linear-oblong, nearly 4 times as long as broad.

E. stenocarpa

Copies of many of the earlier Reports can be obtained from the Hon. Secretary.

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Vol. II., No. 11.

THE

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OF THE

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1914-1915.

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27 JAN. 1916

THE WATSON

Botanical Exchange Club.

REPORT FOR 1914-15.

The number of plants sent for distribution this year was in excess of any sent since 1907, the total being raised considerably by the generous contributions of Mr. J. E. Little and Mr. J. W. White. The full list is as follows:—

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		244		Rev. W. Moyle Rogers 54
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Mr. A. J. Crosfield .		119		Mr. W. R. Sherrin 22
Mr. G. Goode .		77		Mr. R. S. Standen 264
Rev. A. G. Gregor .		90		Rev. C. H. Waddell 50
Miss I. M. Hayward.		23		Mr. J. W. White 369
Miss D. M. Higgins .		27		
Mr. A. R. Horwood .		33		
Rev. E. F. Linton .		62		Total 3330
Mr. J. E. Little .		691		

As a whole the plants formed an interesting collection, and most of the critical genera were represented. The condition in most instances was good, and many representative specimens were noticeable on account of their careful preparation. Some members, however, sent only very limited sets of plants, which is a practice that adds considerably to the difficulties of the distributor and only affords a limited benefit to the Club.

The rule to send a spare label for the Report was too often disregarded, and the recent request to include

specimens for two Public Museums, we regret to say, did not meet with the attention it deserves. The advantage of being able to find in two most important public collections specimens of the more interesting critical plants commented on in our Reports is so obvious that we hope members will always bear this in mind.

Valuable notes were received from the following experts, to whom the Club is much indebted:—Mr. E. G. Baker, Mr. W. Barclay, Mr. Arthur Bennett, Mr. C. Bucknall, Dr. Eric Drabble, Mrs. E. S. Gregory, Mr. J. Groves, Mr. A. B. Jackson, Rev. E. F. Linton, Rev. E. S. Marshall, Dr. C. E. Moss, Mr. H. W. Pugsley, Rev. W. Moyle Rogers, Mr. C. E. Salmon, Mr. H. S. Thompson, Mr. J. W. White, Mr. A. J. Wilmott, and Major A. H. Wolley-Dod.

The thoughtful assistance rendered by the Secretary has materially lightened the work of distribution, and grateful thanks are offered to him.

IDA M. ROPER,

Distributor for the year 1914-15.

To Dr. Vigurs the Club is very greatly indebted for the following notice of the late Mr. F. H. Davey, who, during the years he was a member of the Club (1901—1914) was a frequent contributor of interesting Cornish plants. Of the portrait here reproduced by the kindness of the family Miss Davey writes that, "though taken so long ago as 1902 it is a most speaking likeness, and he had not altered much, with the exception of a sprinkling of white in his black hair. He had a youthful appearance, and his age was always judged much lower than it really was."

G. GOODE,

Hon. Sec. and Editor.

November 7, 1915.

FRED. HAMILTON DAVEY, F.L.S.

IF I were asked what I admired most highly in my dear friend, Fred. Hamilton Davey, I should say it was the extraordinary energy and thoroughness with which he accomplished a wonderful amount of botanical work notwithstanding the handicaps of only an ordinary village education (he left school at the early age of 11) and very indifferent health; to which may well be added his remoteness from any centre of learning, and the constant tie of his occupation. He was always cheerful, an excellent correspondent and companion, and he had the rare accomplishment of infusing some of his unbounded energy into his fellow workers. It was indeed a pleasure to work with and for him.

As he indicates in the dedication of his "Flora of Cornwall," his father was the first one who inspired him with a love for plants. Later he came under the influence of Canon Saltern Rogers. In a short time he learnt all the botany the dear old Canon could teach him, and got well ahead of his teacher. He then became acquainted with Mr. A. O. Hume, and his idea of a Cornish flora became a possibility, as Mr. Hume was able to help with the necessarily considerable expense involved, and in the search for Cornish records through a large quantity of scarce literature. Soon he got together a band of workers, and after about three year's work brought out his "Tentative List" in 1902. This was an innovation at that time, though obviously the best way of getting the material for the Flora proper.

In the years between the publication of the "Tentative List" and the completed Flora he accomplished his best work, adding many plants to the Cornish list, thoroughly searching considerable areas himself, and assisting and encouraging others to do likewise. In this period he studied the more critical genera, such as *Rubi* and *Euphrasiæ*, with excellent results. Records came in so well, and he worked so hard, that he was able in 1909 to publish his "Flora of Cornwall," a fine volume of over 600 pages, and well worthy of taking its proper

place with the other county Floras written by the masters of British Botany.

He continued to work thoroughly till the autumn of 1911, when an unusually severe heart attack kept him in bed many weeks. He recovered sufficiently in the following spring to do what proved to be his last field work, namely, a study of the *Potentillæ* growing near his house. This interval was, however, only a temporary respite, for in July of 1912 he was laid low with an attack of apoplexy. This cleared up sufficiently to enable him to converse fairly well, but left him unable to write, and only to read occasionally. But, though practically confined to bed, he still retained his accustomed cheerfulness, and was as keen as ever to hear the botanical news. The end came suddenly on the 28rd of September, 1915, when he was only 47 years of age.

Besides the "Flora of Cornwall" a large amount of his work has been published. From 1891 onwards he contributed many papers to the Royal Cornwall Polytechnic Society on botanical subjects, other nature subjects, and on Cornish worthies. To the Royal Cornwall Institution he supplied many annual botanical reports, for which, in 1905, he was awarded its Henwood triennial gold medal. He contributed many notes and papers to the "Journal of Botany," including his chief paper on the new Euphrasia he discovered in 1906. He also wrote the article on Botany for the "Victoria History of Cornwall," many notes in the Reports of the Watson Exchange Club, numerous popular articles in the local press, and other papers. His name is perpetuated in Ulmus major Sm., var. Daveyi Henry.

C. C. VIGURS.

Thalictrum [dunense Dum.]. Tenby, Pembrokesh., v.c. 45, June 26, 1914.—A. G. Gregor. A small specimen for critical purposes, but there is little doubt that it is *T. collinum* Wallr.—E.F.L.

Ranunculus heterophyllus Weber, var. triphyllus (Wallr.). Portbury marshes, N. Somerset, v.c. 6, May 29, 1914.—J. W. White. R. heterophyllus type. The carpels

are bristly, whereas those of *R. triphyllos* Wallr. are described as "glaberrimis nitidis."—J.G. I should no doubt have written "var. triphyllus Hiern." *R. triphyllos* Wallr. must be a different plant. Specimens gathered in the Portbury marshes in 1888 were named "*R. heterophyllus*, var. triphyllus" by Messrs. H. & J. Groves, and they agree well with a Chepstow plant labelled "triphyllus" by Mr. Hiern.—J.W.W. (in lit.).

R. peltatus Schrank? Kenfig Pool, Glamorgansh., v.c. 41, 1905.—Coll. J. W. Carr. Comm. A. Bennett. A rather small-flowered R. peltatus Schrank.—J.W.W. The var. (or form) truncatus of R. peltatus Schrank.—E.S.M. I think a form of R. peltatus, or a hybrid with that species.—J.G.

R. [peltatus Schrank, forma]. Pond, Barrow Hill, N. Somerset, v.c. 6, May 30, 1914. A small form with short peduncles and very hairy fruit. See "Fl. Brist." (1912), p. 115.—Ida M. Roper. Yes; from a well-known local station. The specimens are rather young. Two or three weeks later, submerged leaves and peduncles would have shewn to better advantage.—J. W. W. A pretty plant; I know of no special name for it.—E.S.M. cutting of the floating leaves, the short pedicels, and the very hairy fruits take this plant away from R. aquatilis L. excl. varieties emend. Godron = R. heterophyllus Wiggers non Babington = R. diversifolius Gilibert fide Rouy & Foucaud = R. peltatus Schrank (cf. Moss in "Journ. Bot." pp. 118-119, 1914), and take it towards R. trichophyllus Chaix in Villars emend. Moss loc. cit. If the plant is not a hybrid of R. aquatilis and R. trichophyllus (as above defined), I should put the specimen under the latter species. However, the flowers are larger than common form of R. trichophyllus of the fens of eastern England, where, too, this species rarely develops floating leaves. I think the plant would be referred to R. radians Revel by some botanists, though personally I should question this identification. It also agrees with some plants which Babington referred to his own R. heterophyllus: but Babington's specimens of his R. heterophyllus are so varied that I seriously doubt the wisdom of those British botanists who retain Babington's name R. heterophyllus. Syme (Eng. Bot. ed. III.) referred R. aquatilis

- and R. trichophyllus to the same aggregate species; and doubtless he had such intermediate plants as the present in mind when he did so. Such intermediate plants are not very rare; and if they are not hybrids Syme's view is a very reasonable one.—C.E.M.
- R. ——? Foulness, S. Essex, v.c. 18, June, 1914.— W. R. Sherrin. R. Baudotii Godr.—J.W.W. & J.G.
- R. tripartitus DC. (fide Dr. Moss). Near Brockenhurst, New Forest, S. Hants., v.c. 11, flowers April 16, fruit May 19, 1914.—R. S. Standen. I agree. It is a pity, however, that submerged leaves are not obtainable, as they form an important character.—J.W.W. Submerged leaves in this species are frequently caducous.—C.E.M.
- R. Lenormandi F. Schultz. S.W. side of Snaefell (about 1100 ft.), Isle of Man, March 25, 1914. Some of the flowers were subsequently developed in water at home.—Coll. R. H. Goode. Comm. G. Goode. Yes, it is R. lenormandi Schultz (1837); and this is the same as R. caenosus Gussone (1834) and R. homiophyllus Tenore (1830). How the two latter names came to be misapplied to any form of R. hederaceus L. is indeed curious. The plant often flowers through the winter—I have seen it in flower on the Pennines at nearly 1000 feet on Christmas Day.—C.E.M.
- R. sardous Crantz, [var. parrulus L.]. Mill vard, Portishead, N. Somerset, v.c. 6, June 1, 1914. -Ida M. Roper. Clearly a near ally of R. sardous; but not R. parrulus L., which is dwarf, and only bears one or two flowers. Doubtless an alien; I suspect that it is R. Xatartii Lapeyr., which is described by Rouy as having oboval-oblong petals, only twice as long as the calvx. My specimens are rather mouldy; and the character of the carpels (which are also immature) cannot be made out.—E.S.M. Not var. parrulus in the accepted sense of the name. R. parrulus L. (1767) is described by Linnaeus as having the stem solitary, subuniflorous, filiform, a digit or half-a-foot long; the leaves few, petiolate, simple, trifid, dentate and hairy; the flower almost larger than the leaves, yellow; and the calyx membranaceous and hairy. The habit of the plant -slender and erect-is seen in the figure cited by Linnaeus, viz., Columna, ecphr., p. 316. The plant is not

a "dwarf" in the sense of being squat, but merely a small slinder plant of [presumably] R. sardous Crantz (1763). Mr. Marshall is clearly following Rouy's "Fl. de France," where he makes R. Xatardi Lapeyr. (not Xatartii as Rouy has it) = R. Philonotis, var. intermedius (Ball. nomen nudum) Cosson, whose description he takes. The Billot exsicc. No. 306 quoted by Rouy disagree with Lapeyrouse's description, and since there is (see Clos. 1857) no specimen of R. Xatardi in Lapevrouse's herbarium, it is difficult to see why Rouy uses the name in this sense. Philippe, in his flora of the Pyrenees, and Grenier & Godron, "Flore de France" places R. Xatardi as a synonym of R. trilobus We have in the Natural History Museum a specimen passed by Xatard himself as R. Xatardi, which agrees with Lapevrouse's description and is clearly a form close to normal R. trilobus with the leaves more cut up than usual, the deep cutting of the terminal lobe giving the leaves the "pinnate" look which Lapevrouse describes. R. trilobus (Desf. "Fl. atl." I. p. 437, t. 113) has small pale yellow flowers, with the petals bearing a large nectary scale and not much exceeding the calvx. The fruits are small, tubercular all over both faces—not with a marginal ring of slight tubercles as in R. sardous. The stems and leaves are nearly glabrous. Miss Roper's plant possesses all these characters [the specimen does bear one ripe fruit!] and must therefore be so named. It is doubtless an alien.—A.J.W.

Helleborus [viridis L.], var. occidentalis (Reuter). Swansley Wood, near Caxton, Cambs., v.c. 29, April 3, 1914.—Coll. R. H. Goode. Comm. G. Goode.

Papaver Rhæas L., var. Seaford, E. Sussex, v.c. 14, June 30, 1914.—R. S. Standen. The stigma disc, etc. point to Rhæas, but the hairs on stems, etc. are not nearly so patent as usual. It must go under var. strigosum Boenn., I believe.—C.E.S. The peduncle-hairs on the specimen before me are comparatively few. They do not spread at a right angle as in the type, nor are they decidedly adpressed as in strigosum Boenn. The plant seems to be an intermediate.—J.W.W. Rather scrappy; no lower leaves are present. I think it is P. dubium × Rhæas.—E.S.M. P. dubium × rhæas, one of the strigosum forms; in other words, a hybrid form

nearer $P.\ dubium$ than $P.\ rh\alpha as$ as regards the hairs of the pedicel.—C.E.M.

- P. Rhæas L., var. Pryorii Druce. Riddy Lane, Hitchin, Herts., v.c. 20, June 4, 1914. Is this more than a forma? In 1914 I examined considerable areas of P. Rhæas, and in most of them some plants were to be found of this character with coloured hairs, sometimes brown rather than red, but different plants showed gradations between the uncoloured hairs and the most extreme forms of crimson.—J. E. Little. Corn poppies with crimson hairs to their peduncles must undoubtedly be assigned to var. Pryorii Druce. Those with coloured hairs of other tints have not, I believe, received distinctive names. Unfortunately, these colour distinctions are not stable in the herbarium, so it is to be feared that after a time all dried specimens of such varieties must come down to plain P. Rhæas.—J.W.W.
- P. [Rh\alpha as L., var.]. Seaford, E. Sussex, v.c. 14, June 30, 1914.—R. S. Standen. No var. of Rh\alpha as, but P. hybridum L.—J.W.W. Very characteristic P. hybridum L.—E.S.M.
- P. Lecoqii Lamotte. (1) Margins of cultivated ground, Charlton, Hitchin, Herts., v.c. 20, July 20, 1914.—J. E. Little. No doubt right.—E.F.L. (2) Border of field, Filton, W. Glos., v.c. 34, June 20, 1914.—Ida M. Roper. An excellent characteristic specimen.—J.W.W. This differs considerably from my specimens of P. Lecoqii in habit, foliage, and capsule. Is it not P. collinum Bogenh.?—E.S.M. The capsule, which broadens suddenly above the base, and the stigma rays, which reach to the edge of the disc, show this to be P. Lecoqii. The habit and foliage are quite normal in my specimen. P. collinum is very pubescent, with short stigmatic rays and nearly simply pinnate leaves.—A.J.W.

Fumaria occidentalis Pugsley. Garden weed, Newquay, W. Cornwall, v.c. 1, June 18, 1912.—J. W. White. Yes.—H.W.P.

F. Vaillantii Lois.? Waste heap, near Offley Grange, Hitchin, Herts., v.c. 20, Aug. 1, 1914. (A) The smaller

plant. (B) The larger plant.—J. E. Little. (A) Remarkably luxuriant F. Vaillantii Lois.—E.S.M. This is F. Vaillantii Lois. (type), gathered late.—H.W.P. (B) From the glaucous foliage and its cutting; small flowers; short fruiting racemes, and especially from the rather small, rough, often hardly retuse fruit, I suspect this to be F. officinalis × Vaillantii, between which two species it seems very nearly intermediate. Apparently fertile.— E.S.M. F. officinalis L., gathered late and off flower. Possibly var. minor Haussk.—H. W. P. [Later.] specimen for which Mr. Marshall suggests the name F. officinalis × Vaillantii would seem to be in better condition than that on the sheet referred to me, but I expect it is really the same form, either var. minor or var. Wirtgeni of Haussknecht, which are both intermediate in some degree between typical F. officinalis and F. Vaillantii, and formerly often passed with British botanists as the latter. I should doubt whether a fertile plant of this kind would be a direct hybrid between the two species.—H.W.P.

Radicula Nasturtium-aquaticum Rendle & Britten, var. microphylla Rendle & Britten. Boggy ground, Corfe Castle, Dorset, v.c. 9, June 5, 1914.—Ida M. Roper. I believe so, but it is not (as we have it in Britain) a variety I have much faith in!—C.E.S. For me (and Mr. Britten agrees), this is only a starved state.—E.S.M. A poor little variety, which J. D. Hooker calls "a starved terrestrial form." The specimens are right enough, for what we knew formerly as var. microphyllum Rchb.—E.F.L.

Erophila ———. (Ref. No. 26). Near Gt. Wymondley, Herts., v.c. 20, April 12, 1914. Many simple hairs, but also too many bifid to come under the group *E. glabrescens*, though by selection out of many hundreds I have obtained a few plants which seem to approach it.—J. E. Little. (Sheet 1) My gathering looks mixed; perhaps stunted *E. verna* and *E. stenocarpa*.—E.S.M. (Sheet 2) I cannot definitely name this. It comes very near *E. præcox*; but the capsules are narrower and less evenly rounded (tending to be jujube-shaped), while the leaves are much less pilose, and bear more simple hairs than forked ones.—E.S.M.

 $E.\ stenocarpa$ Jord. Sandy, Beds., v.c. 30, April 14, 1914.—J. E. Little. Yes; rather small and weak $E.\ stenocarpa$ Jord.—E.S.M.

E. præcox DC. Between Flitwick Moor and Greenfield Mill, Beds., v.c. 30, April 25, 1914.—J. E. Little. Excellent E. præcox DC. (E. brachycarpa Jord.!).—E.S.M.

Sisymbrium orientale L. (= S. Columnae Jacq.) (fide A. Thellung). With other aliens, on rubbish heap, Purwell Field, Hitchin, Herts., v.c. 20, Aug. 3, 1914. Flowers pale yellow. A new record.—J. E. Little.

Thlaspi alpestre L. [var. occitanum (Jord.)]. Roadside bank, Llanrwst, Carnarvonsh., v.c. 49, April, 1878.—J. Comber. On comparing a Thlaspi with Jordan's descriptions and figures one finds it necessary to have the developed fruiting raceme, which is absent from Mr. Comber's gathering. Of occitanicum (not "occitanum") Jordan writes: "foliis glaucis, radicalibus oboyatis sæpius grosse crenato-dentatis." He says further of this segregate: "ses feuilles assez glauques et bien plus dentées," and "Le style...ordinairement il n'atteint pas les lobes de l'échancrure." The ripe silicule may or may not agree; but in other respects it is evident that this Llanrwst plant differs widely. Rather than venture a guess among the "species 16 sequentes ex T. alpestris L., typo," I would prefer to leave it with T. sylvestre Jord. as defined in the "Manual."—J.W.W. Not Jordan's T. occitanicum. I know this Welsh plant well, but am not sure whether or no it deserves varietal rank.—E.S.M.

Helianthemum Chamæcistus × polifolium. (Ref. No. 3350). Root from Purn Hill, Bleadon, N. Somerset, v.c. 6. Cult., garden, West Monkton, May 27 and July 5, 1914. —Edward S. Marshall.

Viola epipsila Ledeb., var. glabrescens (fide Mrs. E. S. Gregory). Fen Moor, Goathland, N.E. Yorks., v.c. 62, Aug. 12, 1913. In shelter of Willows, Myrica, banks of rills, etc. Bracts above, but not greatly above, the middle of the peduncle. Capsule (1cm.) large. Leaves often slightly pointed. Mrs. Gregory (in lit. June 3, 1914) writes: "I have carefully examined a series of these plants, and should place them all under V. epipsila Led.,

var. glabrescens Asch. & Graebn. Further search in the same locality will probably reveal V. epipsila, type." Of one plant she adds: "This plant compares well with specimens in my herbarium of V. epipsila, var. glabrescens Asch. & Graebn. There are hairs on parts of the stolons and on petiole of one leaf."—J. E. Little.

V. Riviniana Reichb. Harmer Green Wood, Welwyn, Herts., v.c. 20, April 12, 1912.—J. E. Little. V. Riviniana. A tendency, in habit, towards f. nemorosa Neum. The colour of spur goes in drying.—E.S.G.

V. Riviniana Reichb., var. diversa E. S. Gregory. Clophill, Beds., v.c. 30, April 25, 1914. Spur pale, not (or slightly) yellow, channelled below, and at extremity. Stipules coarsely glandular-fringed. Fl. slaty-blue. Lower petal with dark lines on a pale ground.—J. E. Little. Correct.—E.S.G.

V. canina L., var. ericetorum Reichb. Colney Heath, Herts., v.c. 20, May 19, 1913.—J. E. Little. From the sparsely toothed upper stipules and blunt apices to most of the leaves, I take these specimens to belong to var. ericetorum of V. canina. A capsule or two would be helpful. One sees in these Colney Heath violets how nearly, in some of its stages, V. Riviniana, var. diversa approaches V. canina, var. ericetorum. I should say that both of the varieties occur in the habitat; therefore great care is necessary in separating them. Needless to say, I did not see all the plants distributed, and mistakes may have been possible. Should any members of the club care for my further opinion on any of the sheets, they are most welcome to it.—E.S.G.

V. lactea × Riviniana. (Ref. No. 3535). Root from a heath by Crowcombe Station, S. Somerset, v.c. 5. It grew with the parents, and is a very good intermediate, just like Mr. W. A. Shoolbred's hybrid from Tidenham Chase, W. Glos. No capsules are produced, though it flowers freely. Grown in garden, West Monkton, May 18, 1914.—Edward S. Marshall. I agree.—E.S.G.

V. arvensis Murr. [forma segetalis (Jord.)]. Cornfield, Pill, N. Somerset, v.c. 6, July 14, 1914.—Ida M. Roper. The plants with widely divergent petioles are V. arvatica.

The others seem to be juvenile-flowering plants of something else.—E.D.

V. arvensis L., var.? Horby Hills, Leics., v.c. 55, June 27, 1914.—A. R. Horwood. The plants are so badly dried that they are not worth keeping or troubling about. They appear to be V. Déséglisei Jord.—E.D.

Dianthus prolifer L. Shingle, Pagham, W. Sussex, v.c. 13, June 13, 1914.—J. E. Little.

Saponaria officinalis L., var. puberula Wierzb. Roadside, Abinger Hammer, Surrey, v.c. 17, Aug. 13, 1914.—A. J. Crosfield. Correct, I should say.—E.S.M. Yes. I notice that Rouy & Foucaud ("Fl. Fr.") give the authority for the variety, as "Syme in herb." with the description, "plante ± pubescente à calices pubescents."—C.E.S.

S. ocymoides L. (fide H. S. Thompson). On gravel "pipes" in chalk cutting, N. of Knebworth Station, east side, Herts., v.c. 20, May 11, 1914. Central and S. Europe—sub-alpine. About 7 plants. Growing with a Dianthus, and Cerastium. An escape. Apparently quite established, and some distance from houses.—J. E. Little. Yes; apparently this is the type (genuina Gren. & Godr.).— E.S.M.

Cerastium Edmondstonii Ostenfeld = C. arcticum Lange, pro parte = C. latifolium Smith (non L.). (Ref. No. 3927). On granite, at 3400 feet, Castle Corrie, Stob Coire an Easain, Glen Spean, W. Inverness, v.c. 97, July 24, 1914.—Edward S. Marshall.

C. cerastoides Britton (trigynum Vill.). Castle Corrie, Stob Coire an Easain, Glen Spean, at 3400 feet, W. Inverness, v.c. 97, July 24, 1914.—Edward S. Marshall.

Arenaria tenuifolia L. Willbury Hill Gravel Pit, Hitchin, Herts., v.c. 20, June 8, 1912. Except in the fact that the specimens marked A are nearly eglandular, and those marked B are slightly glandular-setose at the base of the calyx, there is no evident difference between the plants. Mr. C. E. Salmon (B.E.C. Rept., 1909, p. 442) remarks that Corbière says (Fl. Norm., p. 105) the number of stamens and length of capsule are not reliable characters for distinguishing these varieties. In these

plants the number of stamens varies from 3—10, and the capsule, though mostly exceeding, occasionally only equals the calyx. In habit these plants are not nearly so robust or so much branched as the other sets from cultivated land now distributed. The proportion of slightly glandular plants is in this case much larger, about 40—50%.—J. E. Little.

A. tenuifolia L., [var. laxa (Jord.)]. (1) Derelict sandy land, near Cockley Cley, W. Norfolk, v.c. 28, June 23, 1914. Glandular plants. About 10% of these plants have glandular hairs on the base of the sepals, and often on the leaves. Otherwise they do not differ from the eglandular plants.—J. E. Little. Here glabrous and more or less glandular sepals occur in the same inflorescence. According to Rouy & Foucaud, var. laxa Willkomm (A. laxa Jord.) should have very spreading pedicels and panicle-branches; this plant does not agree. - E.S.M. (2) Cultivated ground, near Devil's Dyke, 2 miles N.N.W. of Beechamwell, W. Norfolk, v.c. 28, June 23, 1914. Eglandular plants.-J. E. Little. I should not separate these from type. The occasional presence of glands is hardly enough for varietal distinction.—E.S.M. Cultivated ground, Hexton Road, near High Down, Hitchin, Herts., v.c. 20, Aug. 3, 1914. Eglandular plants. -J. E. Little. Sepals glabrous or slightly glandular. Not separable from type, I believe.—E.S.M.

Sagina apetala Ard. (1) "Crofton," Hitchin, Herts., v.c. 20, Aug. 3, 1912. Pubescence of stem eglandular, calyx and peduncle glabrous.—J. E. Little. A form of S. apetala with few glands.—E.S.M. (2) "Crofton," Hitchin, Herts., v.c. 20, June 8, 1913. Eglandular pubescence on stem, glandular on calyx and peduncle. Habit closely prostrate, branches arched back. Capsule exceeding the calyx.—J. E. Little. Apparently decumbent; S. apetala Ard., var. prostrata Gibs., I believe.—E.S.M. (3) On cult. ground at "Crofton," Hitchin, Herts., v.c. 20, Aug. 3, 1912. Glandular hairs on calyx, peduncle and stem. Plant ascending rather than closely prostrate.—J. E. Little. S. apetala, var. prostrata, I believe. The quantity of glands normally varies much in this species.—E.S.M.

Spergularia salina Presl. (Ref. No. 60). Edge of pool, Lihou I., Guernsey, Aug. 13, 1912.—W. C. Barton. Right.—E.S.M.

S. salina Presl., var. neglecta (Syme). (1) Saltmarsh, Keyhaven, S. Hants., v.c. 11, Aug. 1914.—J. Comber. Yes.—E.S.M. (2) Longmere Point, Thorney I., W. Sussex, v.c. 13, Sept. 8, 1914.—R. S. Standen. Plant glabrous; seeds smooth. I should call this type salina (as generally understood).—E.S.M.

S. rupestris Lebel, var. glabrescens Lebel (fide Director of Kew). Calcareous shore, Seaford, E. Sussex, v.c. 14, July 21, 1914.—R. S. Standen. I suppose correct, but a reduced state. - A.B. Judging by the pyriform seeds this seems to be a form of S. rupestris Lebel, differing by being glabrous. I have no description of var. alabrescens Lebel.—E.F.L. The addition of Lebel's name to var. glabrescens is apparently erroneous. No doubt Mr. Standen obtained the incorrect abbreviated citation from the "London Catalogue," or some other publication which does not pretend to be authoritative in nomenclatorial matters. In any case, I have failed to find that Lebel ever used such a name, although in the text of one of his papers he refers to this glabrescent form. The form seems to be based on a single character. and is what I term a sub-variety.—C.E.M.

Portulaca oleracea L. In the damp sandy ground of Mr. Pritchard's Nursery Garden, Christchurch, S. Hants., v.c. 11, July 30, 1914, where it has occurred for a few years past. Dr. C. E. Moss tells me it is quite a feature in fields in parts of Jersey, and very widely distributed in warm temperate countries.—E. F. Linton.

Claytonia perfoliata Donn. S.W. corner of Herrings-well Heath, W. Suffolk, v.c. 26, May 11, 1912. This plant was also found in Herts. (Fells' Nurseries, Hitchin, May 14, 1913), but only one plant—a casual. Dr. B. J. Jackson, in "Flora of Herts.," merely remarks that it was "said to have been found in Herts." In Bedfordshire it was abundant along the road from Maulden to Ampthill, April 25, 1914. Abbot ("Fl. Bedf." 1798) has naturally no mention of it, as, I believe, its introduction dates considerably later.—J. E. Little.

Malva parviftora L. (Ref. No. 4021). One fine plant (alien), on sandhills, Ansdell, W. Lancs., v.c. 60, Aug. 10, 1914. Procumbent; flowers small, bluish white. I think that it is rightly named.—Edward S. Marshall.

Tilia platyphyllos Scop. Malvern Chase, Worcs., v.c. 37, Sept. 21, 1914.—A. J. Crosfield. Yes.—C.E.M.

Erodium cicutarium L'Hérit., var. chærophyllum (Cav.). Hitchin, Herts., v.c. 20, May 30, 1914.—J. E. Little. I believe so; a rather small form of it.—E.S.M.

Oxalis stricta L. A weed in the garden, Edmondsham, Dorset, v.c. 9, Sept. 22, 1914, which came in three or four years ago, and has been increasing rapidly the last year.—E. F. Linton.

Rhamnus Alaternus L. Clifton Down, Bristol, W. Glos., v.c. 34, March 16, 1914. Well established.—Ida M. Roper.

Medicago denticulata Willd., var. apiculata (Willd.). St. Leonards-on-Sea, E. Sussex, v.c. 14, May 27, 1914.—A. G. Gregor. Yes; a very rare variety in Britain, which I have never met with.—E.S.M. This is M. apiculata, var. confinis Koch "Syn. Flor. Germ." I. 164 (1836), which he describes as "spinulis in tubercula, latitudine ipsorum non longiora, abbreviatis." His M. apiculata "type" has the spines less than half the transverse diameter of the legume, while M. denticulata has them equalling the same diameter.—A.J.W.

Lotus corniculatus I. Offley Hill, Hitchin, Herts., v.c. 20, Aug. 10, 1914. I have so far failed to find quite glabrous plants in this district. Plants with some villosity are most usual.—J. E. Little. This is about as glabrous as ever I remember seeing L. corniculatus, but there seems no special name for it.—C.E.S. Type corniculatus is often nearly glabrous. This is a luxuriant state of the species.—J.W.W.

Vicia villosa Roth. Station yard, Portishead, N. Somerset, v.c. 6, June 1 and July 14, 1914.—Ida M. Roper. Correct.—H.S.T.

Lathyrus Aphaca L. (Ref. No. 4023). Locally plentiful and certainly native on clayey-sandy cliffs,

Seaton, S. Devon, v.c. 3, July 1, 1914.—Edward S. Marshall.

Prunus Cerasus L. West Wood, Hitchin, Herts., v.c. 20, May 14, 1914. Before finding this group of about 20 bushes in company with Mr. H. S. Thompson, I had searched the district unsuccessfully for many years. Mr. Marlborough R. Pryor, of Weston Park, showed me one tree near Tile Kiln Farm, Weston, in 1912. Otherwise I knew of none. But about a fortnight after finding the West Wood bushes, I found another colony of 16 in a spinney near Offley.—J. E. Little.

Rubus nitidus Wh. & N., subsp. opacus Focke. Turf moor, near Glastonbury, N. Somerset, v.c. 6, Aug. 6, 1914.

—J. W. White. Yes.—W.M.R.

R. affinis Wh. & N. Peat moor, near Catcott-Burtle, near Bridgwater, N. Somerset, v.c. 6, Aug. 6, 1914.—J. W. White. Yes.—W.M.R.

R. villicaulis Koehl., var. Selmeri Lindeb. (1) Old Biddulph Hall, N. Staffs., v.c. 39, July 25, 1890. (2) Heaths near Bournemouth, Dorset, v.c. 9, Aug. 10, 1890. —J. W. White. Not R. villicaulis Koehl. but R. Selmeri Lindeb., which is advanced to specific rank in "Lond. Cat." ed. X.—W.M.R.

R. rusticanus Merc. (1) Stoke Druid, Bristol, W. Glos., v.c. 34, July 28 and Aug. 29, 1914.—Ida M. Roper. Yes, but weak.—W.M.R. (2) Cupernham, Romsey, S. Hants., v.c. 11, Aug. and Sept., 1914.—R. S Standen. Under R. rusticanus Merc., as form or hybrid. The rusticanus character is quite unmistakeable; but I think it possible that the plant may also have Lindleianus in it, by crossing.—W.M.R.

 $R.\ leucostachys \times rusticanus.$ Bullen Bank, near Ledbury, Herefordsh., v.c. 36, July 27, 1914.—S. H. Bickham. Yes, I believe, quite certainly one of the many leucostachys \times rusticanus hybrids. At first sight more readily recalling leucostachys than rusticanus, but really more nearly intermediate than most. But the series (in chalky districts especially) shows a remarkable range of variation.—W.M.R.

- R. fuscus Wh. & N. Hedge, Failand, N. Somerset, v.c. 6, July 10, 1914.—Ida M. Roper. Yes.—W.M.R.
- R. glareosus Rogers & Marshall. Dense thicket on sandy soil, Hesworth Common, Fittleworth, W. Sussex, v.c. 13, July 22, 1914.—Coll. F. A. Rogers & W. Moyle Rogers. Mostly very strong, but certainly not distinct from the much weaker Tilford and Hindhead (Surrey) examples of the species which I distributed through the Watson B.E.C. in 1912–1913.—W.M.R.
- R. foliosus Wh. & N. Holmbush, St. Leonard's Forest, W. Sussex, v.c. 13, Aug. 18, 1902.—J. W. White. This may be R. foliosus, but the specimen is too imperfect to enable me to say so with certainty.—W.M.R.
- R. Marshalli Focke & Rogers. Roadside, Bedham to Fittleworth, W. Sussex, v.c. 13, July 25, 1914.—Coll. F. A. Rogers. Comm. W. Moyle Rogers.
- R. Durotrigum R. P. Murr. Roadside thickets at intervals, Bedham to Fittleworth, W. Sussex, v.c. 13, July 18-25, 1914.—Coll. W. Moyle Rogers & F. A. Rogers. In the Sussex Durotrigum the large leaves are frequently and perhaps usually less deeply incised than in most of the Dorset examples, but the toothing is very irregular and often considerably compound. There seems no room for question as to identity.—W.M.R.
- R. [dumetorum Wh. & N.]. Lane, Failand, N. Somerset, v.c. 6, Aug. 19, 1914.—Ida M. Roper. I think most probably a caesian hybrid:—either R. caesius × rusticanus, or R. corylifolius × rusticanus.—W.M.R.
- R. dumetorum Wh. & N., var. pilosus Wh. & N.? Field hedge near Pensford, N. Somerset, v.c. 6, Aug. 20, 1914. I send these sheets without feeling confident that the plant is correctly named, or indeed that it belongs to the aggregate at all. It seems almost too caesian for a dumetorum form.—J. W. White. I agree with Mr. White's remarks, but can give no definite name. Among dumetorum forms it seems nearest to var. raduliformis, but is still more caesian-looking than that.—W.M.R.
- R. Balfourianus Blox. Tower's Walk, Lindfield, Sussex, v.c. 14, June 26, 1914.—R. S. Standen. Yes; very characteristic R. Balfourianus Blox.—W.M.R.

Potentilla erecta Hampe, [var. sciaphila]. Heath, Rangeworthy, W. Glos., v.c. 34, July 29, 1914.—Ida M. Roper. My Cornish sheet, so named, has much blunter, broader leaves. Only small type, I believe.—E.S.M.

P. intermedia L. (fide Kew). Mildenhall, W. Suffolk, v.c. 26, June 6, 1913 (see Rept. Watson B.E.C., 1913-14, p. 440).—W. C. Barton. I believe so.—E.S.M. Rouy and Camus (Fl. Fr. VI., p. 193) state that P. intermedia L. is ambiguous, and use the name P. heptaphylla Mill. I do not know enough about this species and its allies to deny that the plant sent belongs to this species; but it is the fact that the figure of P. intermedia L. in Reichenbach's "Icon. Crit." t. 590, has flowers, and especially petals, which are very much bigger than those of Mr. Barton's specimen. The leaflets, too, of this plant, are more deeply cut than those of P. intermedia represented in Reichenbach's work. It seems to me that this specimen is a better match of P. obscura Willdenow, as exemplified in Reichenbach's "Icon. Crit." t. 340. Mr. Barton's label does not indicate whether or not the plant is indigenous— I suppose it is not. I found a single plant—apparently a seed-introduced alien—like Mr. Barton's on the Greensand in Cambridgeshire in July, 1915.—C.E.M.

Acaena Sanguisorbae Vahl. Banks of Tweed, near Melrose, Roxburghsh., v.c. 80, Sept. 1914. A native of Australia and New Zealand, a wool introduction well established by the Tweed.—I. M. Hayward.

Rosa involuta Sm., var. Wilsoni (Borrer). Growing on a very restricted area on a bank at the edge of the Menai Straits, near Bangor, N. Carnarvonsh., v.c. 49, Sept. 7, 1888.—Charles Bailey. Correct.—W.B.

R. omissa Déségl., var. (Ref. No. 1 [1914]). Callar-fountain Hill, Perth, Mid Perthsh., v.c. 88, Sept. 10, 1914. It is with some hesitation that I place this rose in the Omissa group. While it is evident that many of the sepals persist till the full ripening of the fruit, others had fallen before that stage was reached, and taken as a whole they were on this bush certainly not so persistent as on some of our Scottish forms. Of course it will be understood that I selected specimens which still retained their sepals at least in part. This rose borders closely

on that group intermediate between the Omissa and Scabriuscula groups. In whatever group you place it, it cannot be properly identified with any of the microspecies described by Mr. Ley, even as modified by Major Wolley-Dod. Nor can I fit it to any of the varieties described by Keller. The latter includes in his R. tomentosa varieties, such as intromissa, which seem to me in ne respect materially different from some of his varieties of R. omissa. The present rose is quite glaucous (blue-green); it is glabrous or perhaps glabrescent on the upper surface of the leaflets, and is almost quite destitute of subfoliar glands. The leaves, too, are ample and vary greatly in shape. It is the exception rather than the rule, at least in this district, to find a rose which will fit the description of any of the so-called varieties or microspecies.—W. Barclay. I should say certainly one of the Omissa group. Bar the spreading and sub-deciduous sepals it has much more the facies, in my specimen at least, of R. mollis than of R. tomentosa. It is nearest var. submollis Lev.—A.H.W.-D.

R. [scabriuscula Sm.]. (No. 11). Tall bush with dark bark, in hedge at the Rectory, Grey Abbey, Co. Down, Sept. 9, 1914. I am sorry these specimens are rather too mature. It seems nearest to scabriuscula.—C. H. Waddell. This is not R. scabriuscula Sm., from which it differs by its more hairy styles, densely hairy and thickly glandular underside of leaflets, and its spreading, erect, more persistent sepals. It belongs, I think, to a group intermediate between the Omissa and Scabriuscula groups, but like the majority of tomentosa forms does not coincide with any of the so-called varieties or micro-species.—W.B. Near R. scabriuscula perhaps, but far from characteristic. I should prefer to leave it under an aggregate R. tomentosa Sm.—A.H.W.-D.

R. tomentosa Sm. (agg.). Tingley Wood, Herts., v.c. 20, June 14 and Aug. 9, 1913.—J. E. Little. The group to which I think these belong is very rare in Scotland; at least, I have very seldom met with it, and indeed the vast majority of our tomentosa forms belong to the Omissa group. They seem to belong to the group or sub-group which Major Wolley-Dod calls "Fætidæ" and which I have called the Scabriuscula group. The

prickles are quite straight. But for the hispid styles they might be put under var. fætida Bast., or, if you make it a species, R. fatida Bast. As a matter of fact, like most specimens, they do not exactly tally with the description of any named variety. The specimens do not show fruit at the right time; that is, when one can judge of the position and duration of the sepals. It is therefore with some reserve that I have classed them, though I have little doubt as to what I have said. To give a varietal name in any sense other than the name of a group is not possible, at least for me, in the case of most specimens not only of the Tomentosæ but of most other Rose species.—W. Barclay (in lit. 23 Feb., 1914). I should place this to R. scabriuscula Sm. R. fatida has very decidedly glandular leaflets, as well as quite glabrous styles.—A.H.W.-D.

R. Eglanteria Huds., var. comosa (Rip.). (No. 7). By the sea, Mountstewart, Co. Down, Sept. 3, 1914.—C. H. Waddell. Sepals not erect enough and persistent enough for comosa Rip. It belongs to group Apricorum Rip.—W.B. I think correct, but towards R. micrantha Sm.—A.H.W.-D.

R. Eglanteria Huds., var. apricorum (Rip.).? Embley Park, Romsey, S. Hants., v.c. 11, July 15, 1914.—R. S. Standen. Possibly correct but the material is not good enough to decide.—W.B.

R. micrantha Sm. Bank of Avon below Bristol, W. Glos., v.c. 34, June and Sept., 1906.—J. W. White. Correctly named.—W.B.

R. canina L., var. lutetiana (Léman)? (No. 5). Wood by the sea, Mountstewart, Co. Down, Sept. 3, 1914.—C. H. Waddell. Yes. Being a glaucous form it may be called var. glaucescens Desv.—W.B. If the leaves were glaucous I should quite agree with Mr. Barclay, but they do not appear so to me (by artificial light), so I should leave it as R. lutetiana Lém.—A.H.W.-D.

R. canina L., var. andegavensis (Bast.). Hedge by the Avon, near Pill, N. Somerset, v.c. 6, June and Oct., 1911.—J. W. White. Its biserrate leaflets and glandular pedicels make it enter into the group Verticillacantha Mérat, glaucous forms of which, like this, have been called, according to Baker, glaucophylla Winch.—W.B. Not R. andegavensis, which is uniserrate, but a form near R. inconspicua Déségl., or R. Lemaitrei Rip. My specimen is a poor one.—A.H.W.-D.

R. [glauca Vill., var. Reuteri (Godet)]. (No. 8). Wood by the sea, Mountstewart, Co. Down, Sept. 3, 1914. I think this is R. Reuteri, but it does not seem typical.—C. H. Waddell. Not R. glauca Vill. To be classed along with No. 5, from which it is not materially different.—W.B. Not R. glauca, but fairly good R. lutetiana Lém.—A.H.W.-D.

R. [glauca Vill., var. subcanina Christ]. (No. 4). Wood by the sea, Mountstewart, Co. Down, Sept. 3, 1914.—C. H. Waddell. Not a subcanina form. It may be considered as a very thinly hairy, almost glabrescent form of R. dumetorum Thuill., var. urbica Lém.—W.B. Not a glauca form. Is it not R. lutetiana Lém.?—A.H.W.-D.

R. stylosa Desv., var. Bank of Avon, Bristol, W. Glos., v.c. 34, June 19 and Sept. 7, 1914.—Ida M. Roper. Not R. stylosa, but very near R. curticola Pug., to which I should place it.—A.H.W.-D. After careful and repeated examination I have formed the opinion that this is correctly named. In shape the leaflets approach nearer those of R. canina than is usually the case, but in other respects it is a true stylosa. Its leaves are biserrate and quite glabrous and its pedicels perfectly smooth, a combination of characters which prevents it from entering into any of the named varieties or groups known to me. I have not seen any form with the same characters. It has nothing to do with R. curticola Pug., I believe.—W.B.

Pyrus latifolia Syme, var. decipiens (Bechst.). (Ref. No. 4027). Greenaleigh Wood, Minehead, S. Somerset, v.c. 5, June 10, 1914.—E. S. Marshall.

P. minima Ley. Craig Cille, Breconsh., v.c. 42, July 1914. Coll. Miss E. Armitage. Comm. S. H. Bickham.

P. communis L., var. Pyraster L. Roadside, Rockhampton, W. Glos., v.c. 34, April 23 and Aug. 13, 1914.—Ida M. Roper. Yes.—E.S.M.

Cratægus monogyna Jacq., var. kyrtostyla (Fingerh.). Reigate Hill, Surrey, v.c. 17, Aug. 14, 1914.—A. J. Crosfield. Right, I think. The varietal name is β . kyrtostyla Beck, "Ann. K. K. Hofmns. Wien," II. 96 (1887), according to Ascherson & Graebner.—E.S.M. Correct.—A.B.

Sedum Forsterianum Sm., type (a. virescens Wats.). (Ref. No. 4034). Root from Culbone Woods, S. Somerset, v.c. 5; flowered at West Monkton, June 24, 1914. Though slightly increased in size, this maintains its habit and green root-leaves.—E. S. Marshall.

S. Forsterianum Sm., var. glaucescens Wats. (Ref. No. 4035). Root from coast slopes above Greenaleigh, near Minchead, S. Somerset, v.c. 5. Cult. garden, West Monkton, June 27, 1914. This was referred by Rev. R. P. Murray to S. rupestre L.; but Rev. A. Ley and I considered it to be better placed under the present species, and it keeps distinct from the Cheddar S. rupestre, under cultivation, though closely allied to it. Much enlarged by garden growth; thus resembling the more luxuriant wild specimens on the cliffs below. The root-leaves are decidedly glaucous; and it is much more robust than the type (No. 4034), under similar conditions.—E. S. Marshall.

Carum segetum Benth. & Hook. fil. Early leaves. Willbury Hill, Hitchin, Herts., v.c. 20, June 5, 1913, Nov. 7, 1913, and Mar. 28, 1914. The section of the petiole above the lowest pinne is like that of a quarter moon, as compared with that of Pastinaca sativa, which is reniform. There is some general resemblance in the leaves of the two plants, though the pinnæ of the former are more acute and more numerous than in the latter. By following up the leaves in clover and sainfoin fields in the autumn and spring, I find that, far from being a rare plant in this district as is stated in Pryor's "Flora of Herts.", it is now at any rate very generally distributed, occurring sometimes in great quantity on cultivated ground, and sometimes on roadside waste and on hedgebanks. In one locality recorded by Coleman it has persisted at least 60 years.—J. E. Little.

Pimpinella Saxifraga L., var. dissecta With. (Ref. No. 91). Avebury Down, N. Wilts., v.c. 7, Aug. 5, 1913.

—W. C. Barton. Yes; but more extreme states of this variety occur.—C.E.S.

Seseli Libanotis Koch. Near Hitchin, in Beds., v.c. 30, Aug. 19, 1913. A new County record?—J. E. Little.

Meum Athamanticum Jacq. Near Hexham, Northumberland, v.c. 67, June 1914.—Coll. E. K. Higgins. Comm. D. M. Higgins.

Linnæa borealis L. Glenlivet, Banffsh., v.c. 94, July 27, 1914.—Sent by Mr. Macgregor Skene, an old member of the Club. Unfortunately the flowers had fallen before the specimens reached me.—S. H. Bickham.

Galium Mollugo L., var. Bakeri Syme. (1) Ref. No. 4038. In profusion on the railway embankments of the Great Western main line, near Kingweston, N. Somerset, v.c. 6, June 11, 1914. This variety comes into flower about the same time as G. erectum Huds., two to three weeks earlier than the type.—E. S. Marshall. This variety was described by Syme, from plants coming from Cleves, which is near Gormire, which is near Thirsk in Yorkshire. There is authentic material at S. Kensington. Mr. Marshall's specimens agree in the shape of the leaves, but the flowers are smaller than in the Cleves plant, but Syme did not mention in his original description that the flowers are decidedly large.—E.G.B. (2) Cliff tops, Milford-on-Sea, S. Hants., v.c. 11, Aug. 1914.—J. Comber. Not Syme's var. Bakeri. I think this is a reduced form of G. erectum, and not Mollugo at all.—A.B. Variety Bakeri is described as having linear leaves. The extreme form, with all the leaves linear, I have not seen: does it exist?—E.F.L. The type of var. Bakeri Syme from Cleves has much larger flowers and a laxer inflorescence. This plant from Milford must be very closely allied to G. Mollugo L., forma angustifolium, Leers' Flora Herbornensis, p. 115 (1775).—E.G.B.

Filago apiculata G. E. Smith. Cult. ground, near "Gravel Pit Plantation," Kentford, W. Suffolk, v.c. 26, Sept. 25, 1912.—J. E. Little. Yes.—J.W.W.

Anthemis arvensis L. Cult. ground, near Offley Grange, Hitchin, Herts., v.c. 20, Oct. 12, 1913. Uncertain in its appearance. In 1913 I found it in about eight

distinct areas, both in Herts. and Beds. But for a good many years previously I had seen none. This year, 1914, I have seen none in places where last year it was abundant.—J. E. Little.

Matricaria inodora L., var. [maritima?]. West of Chidham, W. Sussex, v.c. 13, Oct. 2, 1914. This is var. salina Bab.; common on the south coast.—E.S.M. & E.F.L.

M. ———? Mill-yard, Portishead, N. Somerset, v.c. 6, July 14, 1914.—Ida M. Roper. This is apparently M. disciformis DC. (next to M. suaveolens).—A.J.W.

M. Chamomilla L. St. Ippolyts, Hitchin, Herts., v.c. 20, Sept. 17, 1914. Though common in the lower valley of the Lea, M. Chamomilla is very scarce in N. Herts. Pryor's "Flora of Herts." has no records for the Ivel basin, in which St. Ippolyts lies. Abbot ("Flora Bedfordiensis," 1798) speaks of it as common. So far as the parts of Beds. adjoining Herts. are concerned I have not yet found it, though it may occur on the light lands of the greensand. M. inodora is, in S. Beds., as with us, a universal weed, though not recorded by Abbot. Is it possible that he did not distinguish them? Or has some change in their distribution taken place?—J. E. Little.

Ambrosia artemisiæfolia L. St. Leonards-on-Sea, E. Sussex, v.c. 14, Aug. 1, 1914.—A. G. Gregor. Correct. —A.J.W.

A. trifida L. St. Leonards-on-Sea, E. Sussex, v.c. 14, Aug. 21, 1914.—A. G. Gregor. Correct.—A.J.W.

Arctium [nemorosum Lej.]. Bank of canal, Midford, N. Somerset, v.c. 6, July 27, 1914.—Ida M. Roper. I should call this A. minus Bernh.—E.F.L.

Cnicus acaulis Willd., hybrid? Rough field, Failand, N. Somerset, v.c. 6, Aug. 19, 1914.—Ida M. Roper. This, allowing for the difference of date, comes very close to a plant found near St. Arvan's, Monmouth, v.c. 35, on July 24, 1903, by Mr. W. A. Shoolbred and myself. I have little doubt that both are C. acaulis × arvensis. Note the intermediate foliage, etc., and the short spines at the tip of many of the phyllaries.—E.S.M. The caulescent

form, I believe. The seeds appear to be well-formed, only immature. Hybrid thistles are usually sterile.—E.F.L.

C. arvensis Hoffm., var. vestitus Koch. Station yard, Portishead, N. Somerset, v.c. 6, July 14, 1914.—Ida M. Roper. Probably the plant Koch had in view when he reduced Cirsium argenteum Vest. to a variety as C. arvense δ vestitum, describing it "fol. subtus niveotomentosis." ("Syn. Fl. Germ. et Helv.", ed. 2, 457).— E.F.L. This has the general facies of the variety or subspecies C. setosus Besser, together with the ashy-white pubescence which is found in C. arvensis, var. vestitus.— E.S.M.

C. arvensis Hoffm., var. Waste, near M. Ry. Goods Yard, Hitchin, Herts., v.c. 20, Sept. 24, 1914. The same plant, I believe, has occurred in two other localities near Hitchin, in which however I was unable to get it in flower and fruit. It may correspond to the plant sent by Mr. J. Cryer to the B.E.C. 1911 (Report, p. 99). In this plant (intermixed with typical C. arvensis) the upper leaves are entire: the lower irregularly sinuate-lobed: both with setose margins.—J. E. Little. This is var. setosus (Bess.).—E.F.L.

Centaurea melitensis L. St. Leonards-on-Sea, E. Sussex, v.c. 14, July 18, 1914.—A. G. Gregor. Correct. —A.J.W.

Crepis fatida L. Waste ground, Newhaven, E. Sussex, v.c. 14, June 23, 1914.—R. S. Standen. Yes.—C.E.S.

Hieracium Auricula L. (Ref. No. 2832). Root from a pasture, remote from houses, Keevil, S. Wilts., v.c. 8. Cult. garden, West Monkton, May 27, 1914. Styles yellow.— E. S. Marshall.

H. holosericeum Backh. (1) Ben Chaluim, Mid Perth, v.c. 88 (at 2000 to 2200 feet), July 20, 1914; (2) Ben an Socaich, Glen Spean, W. Inverness, v.c. 97, on granite (at 2200 to 2500 feet), July 24, 1914. Styles yellow. Ligule-tips very pilose. Foliage deep green.— E. S. Marshall. I agree.—E.F.L.

H. lima F. J. Hanb. (Ref. No. 3969). Cheddar Gorge, N. Somerset, v.c. 6, May 30, 1914. Styles yellow; ligules glabrous-tipped. At this early date the leaves are not so harsh and "raspy" in texture as usual.—E. S. Marshall.

H. Sommerfeltii Lindeb. (Ref. No. 3973). Ben Chaluim, Mid Perth, v.c. 88 (at 2000 to 2200 feet), scarce and local, July 20, 1914. Styles yellow. Ligules glabroustipped. Leaves firm, rather glaucous, more or less blotched.—E. S. Marshall. Rightly named.—E.F.L.

H. variicolor Dahlst., (stylose form). (Ref. No. 3309). Originally (1908) from limestone rocks by the Allt nan Uamh, near Inchnadamph, W. Sunderland, v.c. 108; Cult. garden, West Monkton, June 22, 1914. The wild plant was so named by Rev. E. F. Linton; it comes true from seed. Styles dull, pale yellow. Heads very glandular, epilose. Leaves not blotched.—E. S. Marshall.

H. serratifrons Almq., var. caliginosum Dahlst. (Ref. No. 3986). Cult. garden, West Monkton, June 8, 1914; raised from seed gathered in 1908 by Mr. W. A. Shoolbred near Inchnadamph, W. Sutherland, v.c. 108. Styles yellow. Ligule-tips glabrous. Heads very glandular, epilose. It agrees very well with specimens of mine, so named, from near Tongue and Kylesku, in the same vice-county.—E. S. Marshall.

H. [Pictorum Linton]. (Ref. No. 3987). Rocks (at 1800 feet), Coire a' Chuilinn, Glen Falloch, Mid Perth, v.c. 88, July 22, 1914. Styles yellow. Ligule-tips glabrous. Heads glandular, with black-based hairs. Leaves dull green (often purplish at the tips), dull green and glabrous above, with impressed veins.—E. S. Marshall. Not H. Pictorum, which has firmer, subcoriaceous leaves glossy above when fresh, styles not pure yellow, pappus white. This plant has been mistaken before for H. Pictorum, and is, I think, the Perthshire and Central Highland form of H. rivale F. J. Hanb., referred to in "British Hieracia," p. 51. It has thinner leaves, ligule-tips glabrous, and grey pappus tinged with brown.— E.F.L.

H. rivale F. J. Hanb., var. dasythrix Linton. (1) (Ref. No. 3988). Beinn a' Chroin (at 2500 feet), Glen Falloch, Mid Perth, v.c. 88, July 16, 1914. (2) (Ref.

No. 4014). Corrie Ardran, Crianlarich (at 2000 to 2300 feet), Mid Perth, July 14, 1914. Styles yellow. Ligules full yellow.—E. S. Marshall. Yes. I have only seen specimens of No. 4014, but have no doubt Mr. Marshall has identified the two gatherings correctly.—E.F.L.

H. sagittatum Lindeb., var. subhirtum F. J. Hanb. (Ref. Nos. 3991, 3992). Streamsides and rocks (from 1200 to 2200 feet), Glen Falloch, Mid Perth, v.c. 88, July 16, 1914. Styles yellow. Ligules light yellow. Heads small and narrow, very pilose with white hairs, eglandular.—E. S. Marshall. Good examples of this variety.—E.F.L.

H. umbellatum L., var. linariifolium Wallr. (Ref. No. 3997). Coast sandhills, Ansdell, W. Lancs., v.c. 60; locally plentiful, Aug. 10, 1914. Styles livid, which is very unusual, in this species. Leaves linear or linear-lanceolate, with revolute margins.—E. S. Marshall.

Hypochæris maculata L. Near Hitchin, in Beds., v.c. 30, June 26, 1913. A new record.—J. E. Little.

Taraxacum erythrospermum And. (Ref. No. 122). Limestone rock, Brean Down, N. Somerset, v.c. 6, April 26, 1914.—W. C. Barton. Correct.—C.E.S.

Vaccinium uliginosum L. Corrie Ardran, Crianlarich, Mid Perth, v.c. 88, July 14, 1914.—E. S. Marshall.

Oxycoccus quadripetala Gilib. Dersingham, W. Norfolk, v.c. 28, June 22, 1914.—J. E. Little. I once looked up Gilibert's reference, and decided that his name could not stand. Anyhow, the plant is our cranberry, which I prefer to call V. oxycoccus; and this specimen is the usual lowland British variety and not var. microphyllum. (See my remarks in "The New Phytologist," Dec., 1912).—C.E.M.

Erica cinerea L., forma flore albo. Errisbeg, near Roundstone, W. Galway, Aug. 13, 1913.—W. C. Barton.

Limonium vulgare Mill., var. pyramidale Druce.

(1) Salt-marsh, Keyhaven, S. Hants., v.c. 11, Aug. 1914.

—J. Comber. Yes, but not very good for this "state."—

C.E.S. (2) Wells, W. Norfolk, v.c. 28, July 28, 1914.

—A. J. Crosfield. A nice example of this tall state of L. vulgare.—C.E.S.

L. binervosum C. E. Salmon. Sandy, gravelly or silty pans at top of tideway in Brancaster salt-marsh, near the sand dunes, W. Norfolk, v.c. 28, Oct. 5, 1911.—J. E. Little. Certainly.—C.E.S.

Centaurium umbellatum Gilib., var. capitatum. Cliff tops, Milford-on-Sea, S. Hants., v.c. 11, Aug. 1914.—J. Comber. The state usually so named.—E.S.M.

Gentiana germanica Willd. (1) Harlington, Beds., v.c. 80, Aug. 1911.—D. M. Higgins. Of the two specimens submitted to me one is G. germanica and the other G. Amarella.—J. W. W. (2) Ashmansworth, N. Hants., v.c. 12, Sept. 9, 1914.—W. C. Barton.

Nymphoides peltatum R. & B. Old West River, near Willingham, Cambs., v.c. 29, Aug. 17, 1914.—Coll. G. Goode & R. H. Goode.

Amsinckia intermedia F. & M. (fide Kew). Mildenhall, W. Suffolk, v.c. 26, June 6, 1913.—W. C. Barton. A. lycopsioides Lehm., according to the diagnosis in DC. Prodr. X. 117-8 and the specimen in Herb. Mus. Brit. It has the corolla throat bearded and the stamens inserted near the base of the tube—while A. intermedia has the corolla throat glabrous and the stamens inserted at the throat.—A.J.W.

Symphytum officinale L., var. patens (Sibth.). Charleston, Seaford, E. Sussex, v.c. 14, June 18, 1914.—R. S. Standen. A strongly hispid, very floriferous form of S. peregrinum.—C.B.

S. peregrinum Ledeb. (1) Bank of stream, Corfe Castle, Dorset, v.c. 9, June 5, 1914. Flowers pale pink.—Ida M. Roper. This is scarcely distinguishable from S. officinale, var. purpureum except that the shape and clothing of the leaves approach those of S. peregrinum. The stamens are those of S. officinale. If S. peregrinum grew in the same locality, it is × S. discolor.—C.B. (2) (Ref. No. 111). Mildenhall, W. Suffolk, v.c. 26, June 11, 1914.—W. C. Barton. Correct. The flowers are very fine and of a beautiful colour.—C.B.

Myosotis versicolor Sm. Dersingham, W. Norfolk, v.c. 28, June 22, 1914. Flowers first white, then blue.—

J. E. Little. Corbière [Fl. Norm., 408 (1893)] mentions a var. dubia Arrond. of M. versicolor, with diagnosis "flowers white, then blue." This, Rouy (Fl. Fr.) degrades to a "sub-var." Probably this is Mr. Little's plant.—C.E.S.

Cuscuta europæa L. Bank of Avon, Saltford, N. Somerset, v.c. 6, Aug. 21, 1914. Parasitic on Urtica dioica.—Ida M. Roper.

Euphrasia Rostkoviana Hayne, form or hybrid? On peat, Tadham Moor, N. Somerset, v.c. 6, Aug. 1913. —J. W. White. The flowers are rather small, but this is, I believe, E. Rostkoviana type.—C.B.

E. brevipila Burnat & Gremli, form or hybrid? Peat moor, near Ashcott, N. Somerset, v.c. 6, Aug. 1913. —J. W. White. Typical E. brevipila, I believe. But one sheet, in which the main stems have been bitten off, is either E. brevipila, var. subeglandulosa or abnormal E. nemorosa.—C.B.

E. nemorosa H. Mart. Chalk hill, Offley, Herts., v.c. 20, Aug. 22, 1912. Named by Mr. Bucknall, who saw all the sheets.—J. E. Little.

E. nemorosa H. Mart., forma. Blackdown, on Mendip, N. Somerset, v.c. 6, Sept. 19, 1911.—J. W. White. One sheet has the habit of E. nemorosa and the short glandular hairs of E. brevipila. Possibly the hybrid E. brevipila × nemorosa. The others appear to be forms of E. nemorosa.—C.B.

E. gracilis Fr. (Ref. No. 118). Growing in marshy ground, Grande Mare, Guernsey, July 31, 1914. On specimens of this gathering submitted for comment Mr. Marshall remarked "I think that this may be E. gracilis Fr., but am not sure. As a rule, that is a plant of rather dry ground." Mr. Bucknall replied "E. gracilis Fr., I think." Most of the plants were growing in permanently water-logged soil, some in permanent water.—W. C. Barton.

E. curta Wettst. (Ref. No. 4045). Submaritime sands, Ansdell, W. Lanes., v.c. 60, Aug. 10, 1914. This grew plentifully, together with the var. glabrescens

Wettst., from which it differed by its more copious pubescence, giving the plant a greyish appearance. Flowers small, white, or nearly so, excepting the yellow throat-patch. It comes under the type, I believe.—E. S. Marshall. Very characteristic examples of *E. curtu.*—C.B.

E. [curta Wettst., var. glabrescens Wettst.]. Pease Pottage, W. Sussex, v.c. 13, July 30, 1907. A form approaching E. nemorosa.—J. W. White. This is a mixed gathering. The small compact plants with obtusely-toothed lower leaves, I should refer to E. borealis. The others have the long, spreading branches and the general appearance of E. nemorosa, but the few hairs on the leaves and calyx-teeth, although they are very short, may indicate an approach to E. curta.—C.B.

Rhinanthus stenophyllus Druce (Alectorolophus stenophyllus Sterneck). (Ref. No. 3934). Plentiful in grassy places near the Fillan River, about a mile above Crianlarich, Mid Perth, v.c. 88, July 18, 1914. Note the intercalary leaves.—E. S. Marshall.

Melampyrum cristatum L. Roadside near Cambridge, Cambs., v.c. 29, June 30, 1912.—Coll. R. M. Brown. Comm. D. M. Higgins. Yes; but specimens subjected to insufficient pressure, and have thus badly shrivelled.—C.E.S.

Orobanche minor Sm. On clover, near Great Wymondley, Herts., v.c. 20, June 22, 1913. In 1913 the plant was in great abundance in a number of clover fields near Hitchin. In one locality on the G.N.Ry. it appears year after year on T. pratense, Crepis virens and other plants. One was growing on Picris hieracioides, which is plentiful at this spot. In Norfolk, near Cockley Cley, in light sandy soil, I was able last year to get up uninjured two plants with their hosts—Erodium cicutarium, and Echium vulgare.—J. E. Little.

Mentha aquatica L., [var. subglabra Baker]. Surlingham Ferry, E. Norfolk, v.c. 27, Sept. 1914.—F. Long. Not glabrous enough to match some examples I have of this variety named by Baker.—C.E.S. Not the variety, I think.—A.B.

M. arvensis L., var. Cornfield, Rangeworthy, W. Glos., v.c. 34, July 29, 1914.—Ida M. Roper. A pretty form; but I see no points distinguishing it varietally.—E.S.M. Not far from the type.—E.F.L. I do not think there is any name for this. In habit, etc. it is nearest var. præcox, but far too hairy for that. Of continental forms it is perhaps nearest to M. lanceolata Beck, but it does not really agree with any of the Abbé Strail's descriptions.—A.B.

Thymus [Chamedrys Fr.]. Barnbarroch, Wigtownsh., v.c. 74, July 1909.—Coll. E. K. Higgins. Comm. D. M. Higgins. This is T. Serpyllum L. Note the long stolons and short lateral flowering branches arising therefrom.—A.B.J.

Galeopsis angustifolia Ehrh., var. canescens (Schultes). (1) Melbourn, Cambs., v.c. 29, July 15, 1914.

—A. G. Gregor. According to Koch, this comes under canescens Schultes.—C.E.S. (2) (Ref. No. 114). Avebury Down, N. Wilts., v.c. 7, Aug. 5, 1913.—W. C. Barton. I have no example of Schultes' variety that could be called authentic, but Mr. Barton's plant matches specimens so named by Dr. Thellung. I understand that var. canescens should have "caulis superne et calyces pilis brevibus patentibus dense tecti" (Koch, Syn. ed. 3, 489)—not very obvious in these specimens.—C.E.S. Under the var. canescens (Schultes), I agree; but by no means extreme.—E.S.M.

Plantago Coronopus L., [var. ceratophyllon Rapin]. Sandy ground, Boscombe, S. Hants., v.c. 11, June 4, 1914. —Ida M. Roper. Much taller and more erect than what I know as ceratophyllon; apparently biennial, whereas that appears to be truly perennial.—E.S.M. One of the numerous intermediate forms approaching var. ceratophyllon Rapin.—E.G.B.

P. Coronopus L., var. pygmæa Lange. (fide E. G. Baker). Sandy cart ruts, Shouldham, W. Norfolk, v.c. 28, June 24, 1914.—J. E. Little. A forma, I believe. Dr. E. J. Salisbury tells me he has grown this under careful cultural conditions, and that the offspring from seeds are quite large plants.—C.E.M.

Chenopodium [urbicum L., var. intermedium Mog.]. North Hayling Island, S. Hants., v.c. 11, Sept. 12, 1914. -R. S. Standen. Writing of C. urbicum, var. intermedium in the "Camb. Brit. Fl." Dr. Moss remarks, "This variety is liable to be confused with C. rubrum, var. blitoïdes." Here is a case in point. That Mr. Standen's plant is really C. rubrum is shewn by the leaf-outline, which is in no sense triangular, the leafy spikes, and a large majority of minute, shining, vertical seeds. In C. urbicum the seeds are all horizontal and at least twice as large, the spikes are naked, and the leaf-outline distinctly triangular. Those members who possess a specimen of intermedium distributed by Mr. Bickham in 1906, or one gathered by Mr. Marshall at Kilve in 1907, will do well to make a comparison. On going through the Chenopodia in my herbarium, I found a further illustration of the difficulty Dr. Moss has mentioned. Specimens collected at St. Newlyn East, W. Cornwall in 1909 by Dr. Vigurs and Major Wolley-Dod were labelled intermedium and distributed through the B.E.C. B. Isles, the Rev. A. Lev assenting to the name. These again are undoubtedly C. rubrum, and should be looked up by the recipients.— J.W.W. C. rubrum, var. blitoïdes.—C.E.M.

Beta trigyna Waldst. & Kit. Waste ground, St. Philip's Marsh, Bristol, W. Glos., v.c. 34, June 17, 1914.—Ida M. Roper. Apparently correct, though I can only see 2 stigmas in general, and they are always described as being 3.—A.J.W.

Atriplex patula L., var. linearis Moss & Wilmott. On gravel, near Croydon, Surrey, v.c. 17, Oct. 1884.—Coll. A. Bennett. Comm. C. E. Salmon.

Salicornia ramosissima Woods (flde C. E. Moss). (1) Pagham, W. Sussex, v.c. 13, Oct. 1, 1914.—J. E. Little. (2) Thorney I., W. Sussex, v.c. 13, Sept. 8, 1914.—R. S. Standen. Yes.—C.E.M.

S. herbacea × pusilla (fide C. E. Moss). Brakish marsh inside sea wall, S.E. of Chidham, W. Sussex, v.c. 13, Oct. 2, 1914. New to Sussex.—J. E. Little.

Š. pusilla Woods, var. *gracillima* Towns. S. Hayling I., Hants., v.c. 11, Sept. 9, 1914.—R. S. Standen. My

sheet is mixed; three specimens are S. gracillima Moss, the other is S. lignosa Woods.—E.S.M. Of the four specimens sent to me, one is a branch of S. perennis Miller, doubtless included in error. The other three are probably correctly named.—C.E.M.

- S. [procumbens Sm.]. N. Hayling I., Hants., v.c. 11, Sept. 12, 1914.—R. S. Standen. Not S. procumbens Sm., and not quite S. procumbens auct. angl. olim; but rather S. prostrata, var. appressa Moss & Salisbury (= S. appressa Dum.).—C.E.M.
- S. lignosa Woods. N. Hayling I., Hants., v.c. 11, Sept. 12, 1914.—R. S. Standen. Yes. I reduced this to a variety of S. perennis Mill., as the characters which distinguish it from its nearest ally are rather slight. (See "Cambr. Brit. Fl." Vol. II.).—C.E.M.
- S. disarticulata Moss. (1) N. Hayling I., Hants., v.c. 11, Sept. 12, 1914. Growing in great abundance on the northern side of the Island, over a small area. Uniformly 1-flowered, I believe. A few much larger specimens, about nine inches high, grew close by, with 1—3 flowers; these may have been hybrids with ramosissima.—C. E. Salmon. Yes; small neat plants.—C.E.M. (2) From the same station, Sept. 12, 1914.—R. S. Standen. Yes; fine plants.—C.E.M.
- S. dolichostachya Moss. Coast, S.W. of Emsworth, Hants., v.c. 11, Sept. 10, 1914.—R. S. Standen. Yes; small plants. The form which originally attracted my attention was very much larger than this. Whether this smaller form, which I know also on the Norfolk coast, is a mere state or a definite variety, I am unable at present to say.—C.E.M.

Polygonum Convolvulus L., var. subalatum V. Hall. Weed in Rectory garden, Grey Abbey, Co. Down, Sept. 1914. It seems to be the common form here; leaves longer and narrower than in the type.—C. H. Waddell. Yes, this is var. subalatum Lejeune & Courtois Comp. Fl. Belg. II. 59 (1831), which is an earlier name for var. pseudo-dumetorum H. C. Wats. It is the P. Convolvulus L. β. of Bromfield's "Fl. Vect.", p. 435 (1856), and is mentioned in the "Phytologist," III., p. 765 (1848).— E.G.B.

P. aviculare L., var. æquale Lindman. Shore, S.W. of Emsworth, Hants., v.c. 11, Sept. 10, 1914.—R. S. Standen. Yes. I think this is what we call var. arenastrum (Bor.).—E.S.M.

Urtica dioica L., [var. microphylla Hausm.]. Quorn, Leics., v.c. 55, July 31 and Aug. 3, 1905.—Coll. F. L. Foord-Kelcey. Comm. A. R. Horwood. The late Mrs. Foord-Kelcey did not consider—and I agreed with her—that these specimens should go under var. angustifolia. Both that and the var. microphylla are shade-lovers, and doubtless the two may be regarded as merely ombriphilous states.—A.R.H. I do not think this is the var. microphylla of the "Fl. Tirol, II., 771 (1852)." A specimen from Baron Hausmann, which I gave to the late Mr. C. B. Clarke of Kew, had a distinct look and habit; this looks like a reduced dioica. It may be var. angustifolia Wimm. & Grab. Fl. Sil. 1827-9.—A.B. This is Urtica dioica L., the common stinging nettle—a rather small-leaved state.—C.E.M.

Parietaria ramiflora Moench., var. Little Ormes Head, Carnarvonsh., v.c. 49, Sept. 29, 1914.—A. J. Crosfield. This appears to be a starved dry-rock form or state.—E.F.L.

P. ramiflora Moench., var. fallax. Old wall, Seaford, E. Sussex, v.c. 14, June 26, 1914.—R. S. Standen. The flowers are immature and not advanced enough to show the characters of var. fallax.—E.F.L.

Salix alba × pentandra 3 (No. 132 of set of British Willows), from wet ground, Sholden, near Walmer, E. Kent, v.c. 15, from a younger tree than No. 131, which is decumbent with age; collected for me and sent fresh by Miss L. Day, April 20 and July 30, 1914. There is no noticeable difference between the two trees of this rare hybrid, and it is probable that both are of one stock.— E. F. Linton.

S. purpurea L., f. Forbyana (Sm.). Lowlands near Berrow, N. Somerset, v.c. 6, April 23 and July 26, 1904. As noted in "Fl. Brist." this plant was so named by Dr. Buchanan White and approved by the Rev. E. F. Linton.—J. W. White.

S. viminalis L., forma. Abbotsleigh, near Bristol, N. Somerset, v.c. 6, April and Aug. 1890.—J. W. White. Flowering branches seem rather slender and glabrous for pure S. viminalis; but, if the flowers and foliage come from the same stock, I can call them nothing else.—E.F.L.

S. cinerea L., form or hybrid? Roadside hedge, near Yate, W. Glos., v.c. 34, April 4 & Aug. 14, 1913.— J. W. White. (1) & fl., S. caprea L.; (2) \(\rho \) fruit, apparently S. aurita \(\times \) cinerea; (3) broad-leaved S. cinerea, which may be put to f. aquatica Sm. A fine example of mixture!—E.F.L.

S. cinerea L., [f. aquatica (Sm.)]. By Roman road, Hallen, W. Glos., v.c. 34, April 13 & Aug. 10, 1914.—Ida M. Roper. Approaching f. aquatica (Sm.), but wanting the full breadth of leaf-blade and of bracts of that form.—E.F.L.

S. [nigricans Sm.]. Myddleton, near Warrington, S. Lancs., v.c. 59, June 1885.—J. Comber. S. cinerea L.—E.F.L.

Populus alba × tremula 3 (= P. canescens Sm.). Clack Mill, Westbury-on-Trym, W. Glos., v.c. 34, Feb. 27 & July 24, 1914.—Ida M. Roper. This is certainly P. canescens Sm., but there is no evidence of its being a hybrid between P. alba and P. tremula, and it occurs frequently in localities where the other species are not found. The leaves on the long shoots are tomentose beneath like these, the lower leaves being glabrous beneath.—A.B.J.

P. deltoïdea × nigra ? (× P. canadensis Mönch). Planted: "Avenue Lodge," Hitchin, Herts., v.c. 20, June 10, 1918. This was distributed to the W.E.C., 1913-14, but Dr. Moss has now (18 Jan. 1914) added the identification with × P. canadensis Mönch.—J. E. Little.

Ceratophyllum submersum L. Pond, Castlemorton, Worcs., v.c. 37, Sept. 22, 1914.—A. J. Crosfield. Yes; fruit very typical. Near tidal waters, where alone I have seen it, the habit is stouter and denser than in these specimens.—E.S.M. Yes.—A.B. [Later]; By the name Dr. Moss gives this, I suppose he places it under C. demersum; continental authors, on the other hand, place

it under C. submersum. C. submersum L., var. apiculatum Garcke = C. apiculatum Cham. in "Linnæa" IV., ex Schumann Fl. Brasil. III. 3, 749 (1894). But this plant must be placed under submersum (if the two species submersum and demersum are kept separate). It has not the fruit of C. demersum. I agree with Mr. Marshall.—A.B. C. demersum L., var. apiculatum (Chamisso). There are (so far as my observations go) three distinct British forms of Ceratophyllum, namely, (1) C. demersum L. (sensu str.), (2) C. submersum L. (sensu str.), and (3) an intermediate form, C. apiculatum Chamisso. Though intermediate, the distribution of this last is against its being considered a hybrid. Authorities differ as to how these three plants should be arranged. Some reduce all three forms to a single species, C. demersum L. emend. Others retain two species, C. demersum and C. submersum. Of these, some place the intermediate plant under C. demersum, whilst others place it under C. submersum. Still others retain each as a species. I follow the majority of authors of recent continental floras in placing the intermediate plant as a variety of C. demersum.—C.E.M.

Juncus [conglomeratus L., var. laxus Asch. & Graebn.]. (Ref. No. 119). Calne, N. Wilts., v.c. 7, Aug. 23, 1914.—W. C. Barton. Why not J. effusus L.? It has the pale inflorescence of that; and the capsules are similar.—E.S.M. I do not see how this differs from J. effusus L.—E.F.L.

J. maritimus Lam., var. atlanticus mihi. Salt-marsh, St. Marys, Scilly Is., v.c. 1, Sept. 5, 1914. By the kindness of Mrs. Stideford, of "Lunnon," I am enabled to distribute another parcel of this interesting rush. My correspondent secured some good stems before the marsh was mown, but has cut them shorter than is, perhaps, desirable. In my note on this plant (Jl. Bot. Jan. 1914, p. 19) I proposed for it the varietal name atlanticus, having concluded that the allied form J. rigidus Desv. (Rouy, "Fl. de France") described as "forte, rigide" could not be identical. That description indeed seems to fit the type maritimus of this country rather than the variation under notice, which has a somewhat weak and slender stem from four to five feet high. Still, as Dr. Moss has suggested, it will be well to compare this plant

with specimens of *J. rigidus* in the Rouy Herbarium at Paris when an opportunity offers; and until that can be done the name atlanticus should be regarded as provisional. Examples in some degree approaching the Scillonian form have been lately forwarded to me from Poole Harbour, Dorset, by Mrs. E. P. Sandwith. The following brief description may suffice to define this variety:—Culmo subtenue, elato, ad 10–15 dcm. producto. Anthela magna (2½–4 dcm. longa) diffusa, abunde decomposita, bracteam floralem inferiam multo superante. Cætera ut typi.—Jas. W. White.

Sparganium [neglectum Beeby]. By the Dane stream, Milford-on-Sea, S. Hants., v.c. 11, Aug. 1914.—J. Comber. Fruit too young for certainty; very small and crowded. From its shape, I rather suspect that it may be S. erectum, var. microcarpum.—E.S.M. Not S. neglectum Beeby. I judge from the crowded fruits, and from the fact that the unripe fruits show signs of contracting abruptly into the beak, that this plant is S. ramosum Curt. (S. erectum L.), var. microcarpum Neum. The fruits of S. neglectum Beeby are less numerous and not so densely packed. See an interesting note by W. H. Beeby in Rept. B.E.C. 1888, p. 234.—E.F.L.

Alisma lanceolatum With. Burwell Lode, Cambs., v.c. 29, Sept. 8, 1914.—A. J. Crosfield.

Scheuchzeria palustris L. (Ref. No. 3941). Locally plentiful in two bogs, close to Rannoch Station, Mid Perth, v.c. 88, July 17 & 28, 1914. In one of the localities only barren plants were seen. This is some miles from where Mr. A. H. Evans found it. The plant is likely to be frequent in this district; only a very small area was explored.—E. S. Marshall.

Potamogeton [pusillus L.]. Drain between River Nar and Shouldham Warren, W. Norfolk, v.c. 28, June 25, 1914.—J. E. Little. The fruit is hardly well-formed enough to be quite certain, but I think this is P. trichoides Cham., var. Trimmeri Casp.—A.B.

P. pectinatus L. (1) Foulness, E. Essex, v.c. 18, June, 1914.—W. R. Sherrin. This is P. pectinatus L., var. pseudo-marinus Ar. Benn. = var. salina Voch and

P. marinus L. of many continental authors. I have seen a specimen named by the original describer.—A.B. (2) Lagoon, Pagham Harbour, W. Sussex, v.c. 13, with fruit June 15, with leaves Oct. 1, 1914.—J. E. Little. Yes.—A.B.

Zannichellia pedunculata Reichb. (1) Pond, Ashton Gate, Bristol, N. Somerset, v.c. 6, in flower May 20, in fruit July 1, 1914.—Ida M. Roper. Correct, I have no doubt; none of the fruit is quite ripe.—E.S.M. No doubt correct so far, but Babington makes Z. pedicellata (Fr.) the same. I do not agree. Z. pedicellata (Fr.) has fruit with common peduncle and pedicelled. Z. pedunculata Reichb. has fruit without a common peduncle, but pedicelled. Thus I should place Miss Roper's specimens under Fries' plant.—A.B. (2) Brackish ditch, between Pagham and Sidlesham, W. Sussex, v.c. 13, June 15, 1914.

—J. E. Little. Yes.—E.S.M. & A.B.

Naias flexilis Rostk. & Schmidt. Lastwaite Water, Lancs., v.c. 69, Aug. 4, 1914.—Coll. W. H. Pearsall. Comm. C. E. Salmon.

Scirpus ———. (Ref. No. 3942). Boggy ground in Glen More, near Crianlarich, Mid Perth, v.c. 88, near the col below Am Binnein (at 1700 feet), July 29, 1914. I suppose this comes under S. cæspitosus L., a species of which we have two forms in Britain; but it does not exactly match anything that I have in my herbarium. The growth was by no means densely tufted; the spikelets remarkably small; and the bristles were remarkably conspicuous, at first sight, almost suggesting an Eriophorum. It has not yet been submitted to any expert. —E. S. Marshall. S. cæspitosus L.—A.B.

S. filiformis Savi, var. monostachys. Punfield, Swanage, Dorset, v.c. 9, June 10, 1914.—Coll. C. B. Green. Comm. Ida M. Roper. Yes, but much larger than usual, for the variety.— E.S.M.

S. maritimus L., var. conglobatus Gray. Salt-marshes, Keyhaven, S. Hants., v.c. 11, Aug. 1914.—J. Comber. Right; but not worth distinguishing. It depends on the surroundings.—E.S.M.

S. maritimus L., var. monostachys Sonder. Saltmarshes, Keyhaven, S. Hants., v.c. 11, Aug. 1914.—J. Comber. Yes; but merely a depauperate state.—E.S.M.

Eriophorum angustifolium Roth, var. alpinum Gaud. (= var. minus Koch = E. gracile Smith, non Roth). (Ref. No. 3943). Abundant in bogs, N.E. corrie of Ben Chaluim (between 2300 and 2500 feet), Mid Perth, v.c. 88, July 20, 1914. I had never before observed it in such plenty.—E. S. Marshall.

Carex muricata L. Meadow, Malvern Wells, Worcs., v.c. 37, June 26, 1914.—Coll. R. F. Towndrow. Comm. S. H. Bickham. Yes; the true C. muricata of Herb. Linn.! and "Spec. Plant." (C. Pairæi F. Schultz).—E.S.M.

- C. divulsa × vulpina. Roadside ditch, Leigh Sinton, Worcs., v.c. 37, June 15, 1914.—Coll. R. F. Towndrow. Comm. S. H. Bickham. Yes. I received this, fresh, and had no doubt about it.—E.S.M.
- C. paradoxa Willd. Mow Fen, Shouldham, W. Norfolk, v.c. 28, June 25, 1914.—J. E. Little. Yes.—E.S.M.
- C. remota L. × vulpina. (1) Near Nyetimber, W. Sussex, v.c. 13, June 21, 1914. Growing in ditches, with both its parents, this hybrid is not infrequent in this part of Sussex.—C. E. Salmon. (2) Readside ditch, near Reed, W. Suffolk, v.c. 26, June 10, 1911. Two plants, with parents.—J. E. Little.
- C. magellanica Lam. Bog on the west side of Glen More (facing Ben More), near Crianlarich, Mid Perth, v.c. 88, July 29, 1914. A new station for this rare sedge, which also occurs in Corrie Ardran, not far off. It was extremely local, and grew at about 1600 feet; in ripe fruit.—E. S. Marshall.
- C. panicea L., var. tumidula Laestad. (Ref. No. 3944). Bog near Rannoch Station, Mid Perth, v.c. 88, July 17, 1914.—E. S. Marshall.
- C. distans L., forma. Bulverhythe Salts, St. Leonardson-Sea, E. Sussex, v.c. 14, June 6, 1914.—A. G. Gregor. Young state of the maritime plant (C. B. Clarke's C.

vikingensis), I believe.— E.S.M. Yes, I do not see what else it can be, but the beaks are remarkable in length.—A.B.

Spartina stricta Roth. (1) Thorney I., W. Sussex, v.c. 13, Sept. 8, 1914. In plenty, over a small area, towards the south of the Island. Growing with, and apparently being overwhelmed by, S. Townsendi. The flat leaves of the fresh plant rapidly become strongly involute on being dried.—C. E. Salmon. (2) Same locality and date.—R. S. Standen. (3) Opposite to Itchenor, W. Sussex, v.c. 13, Sept. 24, 1913.—J. E. Little.

Anthoxanthum aristatum Boiss. Near West Wood, Offley Holes, Hitchin, Herts., v.c. 20, June 27, 1914.—Coll. H. C. Littlebury. Comm. J. E. Little. This is not mentioned in the "Flora of Herts.", but I do not know if it has been previously recorded elsewhere for the county. For Beds., I recorded it in 1911 (B.E.C. Rept., p. 137).—J. E. Little.

Phleum phleoides Simonkai. Willbury Hill, Hitchin, Herts., v.c. 20, and Beds., v.c. 30, July 4, 1914.—J. E. Little. Correct.—A.B.

Apera interrupta Beauv. Sandy land, Cockley Cley, near Swaffham, W. Norfolk, v.c. 28, June 23, 1914.— J. E. Little.

Phragmites communis Trin., var. subuniflora Druce (= var. nigricans Gren. & Godr.). (Ref. No. 3949). Swamp by the Caledonian Railway, Crianlarich, Mid Perth, v.c. 88, July 30, 1914. According to Ascherson & Graebner, "Synopsis," I. 330, Arundo Phragmites L., var. subuniflora DC., "Fl. de France," V. 263 (1815) is the same as P. communis Trin., var. nigricans Gren. & Godr., "Fl. de France," III. 474 (1856). I have long known the plant in this station.—E. S. Marshall.

Poa glauca Vahl. (Ref. No. 3950). Beinn a Chroin, Glen Falloch, Mid Perth, v.c. 88 (at 2300 to 2500 feet), July 16, 1914. Specimens from this station were confirmed by Prof. Hackel in 1889.—E. S. Marshall.

Glyceria distans Wahlb., var. By the Severn Sea, near Avonmouth, W. Glos., v.c. 34, June 19, 1911.—J. W.

White. This reminds me of a very glaucous, prostrate plant which I found on July 1, 1914, on the shingly beach at Seaton, S. Devon. It struck me as being rather untypical.—E.S.M. G. distans.—A.B.

Festuca rigida Kunth. (Ref. No. 120). Quarry Wood, Bisham, Berks., v.c. 22, June 22, 1913. A pretty form growing on a bank under beech trees. Is it a usual shade form, or more than that?—W. C. Barton. I have not seen this before; shade may account for it.—E.S.M. A usual shade form.—E.F.L. I should consider it simply a weak form. I do not think it is the Sclerochloa rigida, var. umbrosa Bal. exsicc.—A.B.

F. ciliata Danth. Waste ground, Newhaven, Sussex, v.c. 14, June 18, 1914.—Coll. W. E. Nicholson. Comm. R. S. Standen. Right. It differs from F. ambigua Le Gall by its hairy glumes.—E.S.M.

F. ambigua Le Gall. Blown sand, Pagham, W. Sussex, v.c. 13, June 15, 1914.—J. E. Little. Correct.—C.E.S. & E.S.M.

F. ovina L., f. vivipara. Gap of Dunloe, Co. Kerry, Aug. 8, 1913.—W. C. Barton. A poor specimen. Probably a viviparous state of var. capillata Hackel (F. tenuifolia Sibth.).—E.S.M. Probably Mr. Marshall is correct.—A.B.

Bromus secalinus L., var. velutinus (Schrad.). Cult. land, E. of Felpham, W. Sussex, v.c. 13, June 21, 1914.—C. E. Salmon. I agree.—A.B. Perhaps right; but not extreme.—E.S.M.

B. [hordeaceus L., var. glabratus Druce]. Near the Rifle Butts, Haileybury College, Herts., v.c. 13, May 28, 1914, with typical B. hordeaceus.—J. E. Little. Specimen young; but I am pretty sure that it is B. racemosus L.—E.S.M. Certainly no form of B. hordeaceus. I agree with Mr. Marshall.—A.B.

B. ——? Melbourn, Cambs., v.c. 29, July 15, 1914. —A. G. Gregor. B. arvensis L., I should say.—E.S.M. Yes.—A.B.

Lolium perenne L., var. aristatum Schum. Filton Meads, W. Glos., v.c. 34, July 13, 1914.—Ida M. Roper. I agree.—E.F.L. Schumacher makes his L aristatum the type of the species in his "Enum. pl. Sæll." I., 38 (1801). It is t. 748 of the "Fl. Danica," and Lange calls it L repens L., f aristata in his "Nom. Fl. Danicæ," 25 (1887).—A.B. This is identical with my No. 1132 (Paddlesworth, E. Kent, 1893), so named by Hackel; but I noted that "part of the sheet was L italicum," and in both cases I am forced to conclude that one has merely to do with a rather small form of L multiflorum Lam. (= L italicum Braun.).—E.S.M.

Agropyron repens Beauv., var.? Edge of salt-marsh, Keyhaven, S. Hants., v.c. 11, Aug. 1914.—J. Comber. A. repens, var. Leersianum, I believe.—E.S.M. Var. barbatum Duval-Jeune [= var. Leersianum Gray].—A.B.

A. [junceum × repens Beauv.]. Keyhaven, S. Hants., v.c. 11, Aug. 1914.—J. Comber. Not at all like my specimens of the hybrid, named by Hackel. Is it not A. pungens?—E.S.M. I should have called this A. pungens R. & S., var. pycnanthum (Gren. & Godr.); and I see that my specimens of this var. from Hengistbury Head on the same coast, confirmed by Dr. Hackel are almost identical with Mr. Comber's plant.—E.F.L. A. pungens R. & S., but not var. pycnanthum; that has glumes and pales obtuse—which this has not.—A.B.

Azolla filiculoïdes Lam. Ditch between Jesus Grove and Midsummer Common, Cambridge, Cambs., v.c. 29, Oct. 1913.—G. Goode. Fine specimens; beautifully dried.—E.S.M.

Equisetum arvense L., var. [decumbens Meyer]. Waste ground, Bristol, W. Glos., v.c. 34, April 23 & June 16, 1914.—Ida M. Roper. I do not know var. decumbens. It is not given in Rouy's "Fl. de France." The present plant is common enough in cultivated ground; I had not thought of it as being more than a "state." Koch ("Synopsis," ed. II., 964) rightly refuses it varietal rank.—E.S.M. I think this is not Meyer's plant; that is quite decumbent, the stem lying on the ground, and the branches rising up one before the other, and very dense (quite a dense little bush), with many (hundreds) of stems. I should call this a form of the ordinary alpestre variety.—A.B.

E. [limosum L., var. fluviatile (L.)]. Swanage, Dorset, v.c. 9, June 10, 1914.—Ida M. Roper. No fruits on my specimen; but the strongly grooved aërial stem indicates E. palustre L., and not any form of E. limosum L. (including E. fluviatile L.).—C.E.M.

Chara ——? Wicken Fen, Cambs., v.c. 29, July 23, 1914.—Coll. R. H. Goode. Comm. G. Goode. C. fragilis Desv., subsp. delicatula Braun.—J.G.

C. vulgaris L., var. longibracteata Kuetz. Mill pond, Bitton, W. Glos., v.c. 34, June 18, 1914.—Ida M. Roper. Correct.—E.S.M. & J.G.

Copies of many of the earlier Reports can be obtained from the Hon. Secretary.

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Horwood, A. R.	• • •	•••	•••	• • •	•••	0	6	0
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Hon. Treasurer.

31st December, 1914.

TREASURER'S BALANCE SHEET, 1914.

Receipts.	Expenditure.
£ 8, d.	
Balance in hand from 1913 2 11 10	Printing—
:	Thirtieth Annual Report (220 copies)
Balance due to Treasurer, December 31st, 1914 3 0 1	51 pages and wrapper 12 10 0
	List of Desiderata (320 copies) and
	wrapper for 1914 4 11 0
	Circular 0 4 0
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	Distributor 2 6 6
e	Rev. E. F. Linton for supplementary fascicle of
	Willows III 0 6 5
£19 17 11	£19 17 11
31st December, 1914.	SPENCER H. BICKHAM,







P 35

Vol. II., No. 12.

THE

Тероки Виниац Рероки

OF THE

WATSON

Botanical Exchange Club,

1915-1916.

Referees:

Rev. E. F. LINTON, M.A., F.L.S., Edmondsham Rectory, Salisbury.

Rev. E. S. MARSHALL, M.A., F.L.S., West Monkton Rectory, Taunton.

Rev. W. MOYLE ROGERS, F.L.S., Chetnole, Grosvenor Road, Bournemouth West; and

Rev. H. J. RIDDELSDELL, M.A., Wigginton Rectory, Banbury.
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CAMBRIDGE:

PRINTED BY J. WEBB & CO., ALEXANDRA STREET, 1916.



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THE WATSON

Botanical Exchange Club.

REPORT FOR 1915-16.

There has been a falling off in the number of plants sent for distribution, especially in comparison with last year, but considering the many calls which have come to everyone on account of the war it is a matter for congratulation that members have made so great an effort to maintain the work of the Club in a vigorous state. We are specially grateful to several members for their liberal contributions. The full list is as follows:—

Sheets.	Sheets.
Mr. C. Bailey 47	Rev. E. S. Marshall 358
Mr. W. Barclay 20	Rev. W. Moyle Rogers 131
Mr. W. C. Barton 655	Miss I. M. Roper 316
Mr. S. H. Bickham 251	Mr. C. E. Salmon 41
Mr. J. Comber 147	Mr. W. R. Sherrin 18
Mr. A. J. Crosfield 70	Mr. R. S. Standen 20
Mr. J. E. Griffith 12	Mr. H. S. Thompson 152
Miss D. M. Higgins 28	Rev. C. H. Waddell 42
Mr. A. R. Horwood 359	Mr. J. W. White 132
Rev. E. F. Linton 27	
Mr. J. E. Little 67	
Mr. H. C. Littlebury 64	Total 2963
Dr. F. Long 6	

The majority of the specimens were well prepared, and the number of sheets sent of each plant was sufficiently liberal to permit of a few being given to several noncontributing members. Valuable notes were received from the following experts, to whom the Club is much indebted:—Mr. E. G. Baker, Mr. W. Barclay, Mr. Arthur Bennett, Mr. C. Bucknall, Dr. Eric Drabble, Mrs. E. S. Gregory, Mr. J. Groves, Mr. A. B. Jackson, Rev. E. F. Linton, Mr. J. E. Little, Rev. E. S. Marshall, Dr. C. E. Moss, Rev. H. J. Riddelsdell, Rev. W. Moyle Rogers, Dr. E. J. Salisbury, Mr. C. E. Salmon, Mr. J. W. White, Mr. A. J. Wilmott, and Major A. H. Wolley-Dod.

IDA M. ROPER,

Distributor for the year 1915—16.

Additional note to former Report.

31st Report (1914—15), p. 480.

Ranunculus tripartitus DC. (fide Dr. Moss). Near Brockenhurst, New Forest, S. Hants., v.c. 11. flowers April 16, fruit May 19, 1914.—R. S. Standen. Though the aerial leaves sometimes resemble those of R. tripartitus, I should refer this, and all the other New Forest plants I have seen, to R. lutarius. R. tripartitus, which occurs in Cornwall and Co. Cork, may be readily distinguished by the production of a number of very finely divided submerged leaves, the segments of which are capillary. R. lutarius, on the other hand, rarely produces any divided submerged leaves, and when these are present they are few in number, less frequently forked and have the segments distinctly flattened. Usually there are also some transitional leaves present, and these I have not seen in R. tripartitus.—J.G.

Thalictrum minus L., var. collinum (Wallr.). Hedgerow, near Newmarket Heath, Cambs., v.c. 29, Aug. 9, 1915.—A. J. Crosfield. Rightly named.—E.F.L.

Ranunculus heterophyllus Weber, var. Yatton Marshes, N. Somerset, v.c. 6, June 13, 1900.—J. W. White. Yes, I should refer this to R. heterophyllus, one of the many forms. Its characteristics were well enumerated by Mr. White in B.E.C. Report 1900, p. 619.—J.G.

R. acris L., var. [Friesianus Rouy & Fouc.]. Roadside, Kingston Seymour, N. Somerset, v.c. 6, May 22, 1915.—Ida M. Roper. The specimen before me has the characters of R. tomophyllus Jord., i.e., a short oblique root, leaf-segments scarcely overlapping, and the stem and petioles rather densely hairy. I should so name it.—J.W.W.

R. flabellatus Desf., var. europæus Nyman. Origin, St. Aubins, Jersey, cult. Ledbury, May 20, 1915.—S. H. Bickham.

Barbarea vulgaris Br., var. divaricata Dyer. Purwell, Hitchin, Herts, v.c. 20, June 18, 1915. This slightly varying form grows intermixed with the type both in the above locality, and at Stansteadbury, Ware, and Hertford Heath.—J. E. Little. My single specimen is, I believe, the var. divaricata Lond. Cat. ex Trimen & Dyer, Fl. Middlesex, 29, (1869), which seems the same as var. decipiens Druce, Fl. Berks., 44, (1897). Mr. Beeby suggested the name "pseudo-arcuata" for this plant, but did not, I think, ever publish it. Not B. arcuata Reichb., I believe.—C.E.S. I have seen two sheets of this gathering, one being the var. arcuata Fries (=divaricata Dyer), and the other I should place under the var. campestris Fr., characterised by its obliquely erect or slightly spreading pods, which is the most common form in Britain.—A.B.J.

Erophila ——. Burnham-on-Crouch, Essex, v.c. 18, May, 1915.—W. R. Sherrin. Possibly E. hirtella Jord.; but I have not seen any authentic specimens of that.—E.S.M.

E.—... (Ref. No. 68). Wall, Ickleford Manor, Hitchin, Herts., v.c. 20, April 9, 1915. A further gathering of the plant sent under the same reference number to the B.E.C. in 1913, (see Report 1913, p. 449), but showing better, I hope, the characters of the leaves. A patch which was brought into the house and flowered in a flower-pot grew rather more elongated leaves, stems and silicules.

The leaf hairs, at first in February almost entirely simple, seemed afterwards in the later stages to be more often bifid. Mr. Salmon places it under E. hirtella Jord.—J. E. Little. I cannot name this definitely.—E.S.M.

E. ——. (Ref. No. 84). Meadow below Walsworth, Hitchin, Herts., v.c. 20, April 19, 1915. A single small patch of plants with predominantly simple hairs, at least in the early stage, surrounded by numerous other patches in which forked hairs predominate. In the form of the silicules this patch does not differ from the others which seem to belong to E. brachycarpa Jord.—J. E. Little. I think E. præcox DC. (= E. brachycarpa Jord.), and not virescens Jord.—E.S.M. Coming under glabrescens, I believe—perhaps virescens Jord.; the predominance of simple hairs seems to rule out brachycarpa.—C.E.S.

E. ——. (Ref. No. 55 A.). Gravel Pit, St. Ippolyts, Herts., v.c. 20, April 13, 1915. A further gathering of the plant sent under same reference number to the Wats. B.E.C. in 1913—14 (Rept. p. 432). It persists in, and is limited to, a small patch of about a square yard. I suppose one may place it as Draba verna L., subsp. glabrescens Rouy & Fouc.—J. E. Little. I do not know this.—E.S.M. I presume under glabrescens Rouy & Fouc.—C.E.S.

E. præcox DC. Sea Wall, Burnham on Crouch, Essex, v.c. 18, May 1915. W. R. Sherrin. Plant hairy, with a considerable proportion of trifid hairs. Silicules obovate, narrowed below—or elliptic, a few more truly ovate, 3mm. long × 2mm. broad. One of those intermediates which it is difficult to place, lying apparently between Draba vulgaris Rouy & Fouc. and D. præcox Stev., nearest the latter, though not characteristic.—J.E.L. Three of my specimens are E. præcox DC.; the other two may come under that, but have longer capsules.—E.S.M.

Cochlearia ——. Burnham-on-Crouch, Essex, v.c. 18, May 1915.—W. R. Sherrin. Very dwarf C. anglica L. No fruit is present; but I suspect that it would prove to be var. stenocarpa Meyer (= Hortii Syme).—E.S.M.

Brassica Erucastrum Vill. Newmarket Heath, Cambs., v.c. 29, Aug. 9, 1915.—A. J. Crosfield. Yes, = Erucastrum

obtusangulum Reichb., = Diplotaxis Erucastrum G. & G.— J.W.W.

Capsella Bursa-pastoris Medic., var. rubellæformis (Mott). (Ref. Nos. B. 25, 29, 32). Kibworth, Leics., v.c. 55, Dec. 10, 1915. Coll. Miss M. E. Whitton. This is a common form recognised by the concave margins of the silicules. It varies in some cases towards brachycarpa, but the plants sent are fairly typical.—Comm. A. R. Horwood. (Ref. No. B. 32). This seems to agree with Mott's description and figure of this in "Fl. Leics.", p. 17—18, (1886).—C.E.S.

C. Bursa-pastoris Medic., var. stenocarpa-coronopifolia (Mott). (1) (Ref. No. B. 10). Humberstone, Leics., v.c. 55. Dec. 5, 1915. Coll. Miss M. E. Whitton. This variety, which is one of the largest forms, may be distinguished by the long obovate silicules, and the shallow notch, and pinnatifid radical leaves. It differs from stenocarpa-lyrata (Mott) (see B. 27 and B. 34) in having the upper margin of the lobes of the leaves notched, whereas in the latter they are entire. But there are intermediate forms (see B. 33).—A. R. Horwood. (2) (Ref. No. B. 24). Syston, Leics., v.c. 55, Nov. 25, 1915.—Coll. Miss M. E. Whitton. Comm. A. R. Horwood. Correct, I believe.—C.E.S. (3) (Ref. No. B. 28). Kibworth, Leics., v.c. 55, Dec. 10, 1915.—Coll. Miss M. E. Whitton. Comm. A. R. Horwood. Yes, this seems to fit description and drawing in "Fl. Leics.", p. 17-18, (1886).—C.E.S. (4) (Ref. No. B. 23). Intermediate between this and lyrata. Kibworth, Leics., v.c. 55, Dec., 1915.—Coll. Miss M. E. Whitton. Comm. A. R. Horwood.

C. Bursa-pastoris Medic., var. stenocarpa-lyrata. (Ref. Nos. B. 27, 34). Kibworth, Leics., v.c. 55, Dec. 10, 1915.—Coll. Miss M. E. Whitton. Comm. A. R. Horwood.

Viola hirta L., f. lactiflora Reichb. Cadbury Ridge, Tickenham, N. Somerset, v.c. 6, April 22 and Aug. 26, 1915. Flowers pure white.—Ida M. Roper. This plant is not the counterpart of the one found on Cadbury Camp, in the same district. Its surface is much more hairy; its flowers are smaller, with much thinner, narrower petals; its fruit is furnished with long, shaggy hairs. The same form grows sparingly in Banwell Wood, Somerset, and at

Stokeinteignhead, Devon. In 1914, Miss Livett very kindly sent me an assortment of variegata and lactiflora forms from Cadbury, so that I might study the capsules. I found all variegata capsules to have long, shaggy hairs on the angles; some lactiflora capsules were glabrous, (as described in "British Violets," p. 24); some were slightly hairy, but not shaggy. The name I applied to this form from Banwell Wood and from Stokeinteignhead is:— "V. hirta, var. hirsuta, f. lactiflora." Miss Roper's specimens—taken in flower, and again, in fruit—make violet-study a pleasure.—E.S.G.

V. hirta L., var. Foudrasi (Jord.). Limestone slopes below Leigh Woods, Bristol, N. Somerset, v.c. 6, April 27, 1915. No flowers left by May 12, petals broad, rich violet. (See Fl. Brist. (1912), p. 174).—H. S. Thompson. Correct. —E.S.G.

V. calcarea Gregory. Growing with small V. hirta L. on limestone slopes below Leigh Woods, Bristol, N. Somerset, v.c. 6, April 28 and 27, 1915. Flowers violet, spur short.—H. S. Thompson. Yes.—E.S.G.

V. canina L., var. Selworthy Beacon, S. Somerset, v.c. 5 (at 800 feet), April 15, 1915.—W. C. Barton. From the long-fringed lower stipules and the long, narrow anther-spurs, I judge these plants to be nearer to V. Riviniana than to V. canina. A later, more mature gathering is necessary to complete the diagnosis. I have what appears to be the same violet from "Sand hills between Newquay and Perranporth," sent me by the late Mr. Davey. His plants, also, were only in the early-flowering stage.—E.S.G.

V. Lloydii Jord., var. insignis Drabble. (Ref. No. 4072). Abundant in oatfields, Melvich, W. Sutherland, v.c. 108, July 15, 1915. Named by Dr. Drabble. This beautiful pansy is common on the North coast, in cultivated land; but it is also probably native, as I saw it in wild ground, near Strathy and Altnaharra.—Edward S. Marshall.

V. arvensis Murr., var. [subtilis (Jord.)]. Stubble field, Narborough, Leics., v.c. 55, Oct. 23, 1915.—A. R. Horwood.

Most of these plants are *V. agrestis* Jord., but there may be some admixture. They are by no means typical.—E.D.

V.——. Cornfield, near Loch Skaill, Orkneys, v.c. 111, July 16, 1900.—Coll. W. A. Shoolbred. Comm. S. H. Bickham. V. derelicta Jord. Some of the plants are rather unusually large-flowered, but I find this to be commonly the case in the Scotch pansies. The specimens agree exactly with others so named by me for Mr. Marshall from Melvich, Sutherland. A very well-prepared set.— E.D.

Dianthus plumarius L. On the town walls, Conway, Carnarvonsh., v.c. 49, July, 1912. Were it not that the walls upon which this pink grows are protected by the cottage gardens beneath them, the plant would long ago have ceased to exist, and it is little more than a garden denizen though it has lived on the walls for at least eighty years.—S. H. Bickham.

Silene [annulata Thore?]. (Ref. No. 4163). Plentiful in some fields of Trifolium incarnatum, near Milverton, S. Somerset, v.c. 5, May 25, 1915. Annual, rather viscid; flowers bright rose. Known thereabouts for some years, though in less quantity; doubtless originally introduced with foreign seed. I am not at all sure about the name. S. annulata is considered by Rouy & Foucaud to be a variety of S. cretica L. (a native of Greece, &c.), only differing by its almost globular capsules and shorter carpophores.—Edward S. Marshall. Silene cretica L. emend., Rohrbach Monograph, p. 167 (1868). The carpophore is scarcely reduced sufficiently to fit Thore's description of S annulata, now considered as a mere form of S. cretica.—A.J.W.

S. dichotoma Ehrh. Field, St. Martha's, Guildford, Surrey, v.c. 17, Aug., 1915.—Coll. R. M. Kennedy. Comm. J. Comber. Yes.—E.S.M.

Stellaria neglecta Weihe. Hedge bank, Keynsham, N. Somerset, v.c. 6, May 17, 1915.—Ida M. Roper. Yes, this is the S. neglecta of Weihe, not of Babington. Marshall's var. decipiens is distinguished, according to the author, by its bluntly tubercled seeds.—J.W.W.

S. neglecta Weihe, var. umbrosa (Opiz). Park Wood, Bramfield, Herts., v.c. 20, May 31, 1915. Not recorded in Pryor's "Fl. of Herts." In small quantity on the E. side of Park Wood, three furlongs from Bramfield Church. First noticed April 27, 1912.—J. E. Little.

Hypericum hircinum L. Origin, Haughley Woods, Norfolk. Cult. Ledbury, July 30, 1915. I give the locality as it was stated to me, and it so appears in "E.B." ed. III., but I am of opinion that in both cases a mistake has been made and that the County should be "Suffolk."—S. H. Bickham.

Althæa hirsuta L. (Ref. No. 4166). Borders of open, stony ground in a large wood, near Kingweston, N. Somerset, v.c. 6, Aug. 19, 1915. The plants were usually procumbent.—Edward S. Marshall.

Tilia [platyphyllos Scop.]. South Croxton, Leics., v.c. 55, June, 1908. The cymes in this tree are pendulous, the fruit when ripe downy. The young branches are downy, the leaves not so hairy as in some examples of this species, but bear simple hairs both sides, in addition to tufts in the axils of the veins below.—A. R. Horwood. I should name this T. europæa L. The leaves are not downy beneath, and the peduncles are many-flowered.—J.W.W.

T. cordata Mill. Wood near Dolgelley, Merionethsh., v.c. 48, July 30, 1915.—W. C. Barton.

Erodium cicutarium L'Hérit., var.? Origin, Dersingham, W. Norfolk, v.c. 28, Cult. Crofton, Hitchin, June 25, 1915. Cult. together with E. pimpinellifolium Sibth. (origin, Potton, Beds, see Rept. Wats. B.E.C. 1913—14, p. 436). No. 3 has more pilose general effect. Stem hairs often glandular, marginal leaf hairs conspicuous. Flowers paler, mauve, not rose pink. Original soil light sand, about four miles from the sea (The Wash).—J. E. Little. The petals in this plant do not seem to be spotted, and in this respect, and some others, it approaches E. triviale Jord., but is much more glandular, and the awn has far fewer twists. We cannot find any authentic description of named forms to agree with this.—C.E.S. & E.G.B.

E. maritimum L'Hérit. Close to beach at Minehead, S. Somerset, v.c. 5, Sept. 16, 1915. The smaller

specimens from Limestone rocks at Goblin Combe and Warren above, (? 300—700 ft.), N. Somerset, v.c. 6, May 24, 1915.—H. S. Thompson.

Ononis repens L., var. horrida Lange. (Ref. No. 4169). Coast, near Steart, S. Somerset, v.c. 5, Sept. 25, 1915. Mostly prostrate.—E. S. Marshall.

Medicago lupulina L., var. eriocarpa Rouy. (Ref. No. 188). Barmouth, Merionethsh., v.c. 48, Aug. 14, 1915. Rouy states that the type has a glabrous legume and describes his var. eriocarpa "Légume pubescent ou velu: plante ordinairement fortement pubescent-soyeuse." common English plant of the chalk downs has somewhat hairy pods, though the hairs tend to disappear as the fruit ripens; but it is scarcely "pubescent-soyeuse." Syme gives "pod glabrous or slightly pubescent." Mr. Druce. in the "Handbook" gives "c. scabra Gray, pod rough with simple hairs"; but Gray described var. scabra, "Legumen ... rough with many tubercles," and I find no tubercles on these pods. A more hairy plant was growing on the stonework of Carnaryon Castle. I found var. Willdenowii Boem. (non Mérat) = Rouy's sub-var. glandulosa Neilr., at Barmouth, with glandular hairs on stem, leaves and petioles. (See B.E.C. Report, 1910, p. 552).—W. C. Barton. I agree that this comes under the sub-var. eriocarpa of Rouy.—C.E.S. A very slight "variety." Koch says, of his a. vulgaris, "leguminibus glabris vel adpresse pubescentibus"; which would include the present plant.--E.S.M.

Trifolium arvense L., var. strictius Koch. Quarry rubble, Hanham, W. Glos., v.c. 34, Sept. 10, 1915.—Ida M. Roper. This agrees very well with Koch's description ("Synopsis," ed. 2, I. 188):—"caulis gracilior, minus flexuosus, rami angulis acutioribus egredientes, stipulae inferiores angustiores, parte libera angustiore, calycesque triente longiores." He gives a reference to "Deutschlands Flora," V., 270; so the authority should be Mertens & Koch. T. Brittingeri Weitenweber (T. gracile, "Fl. Germ. Exsicc.", non Thuill.) is added as a synonym.—E.S.M. This has the habit, the longer free portion of stipule, etc., that Koch ascribes to his variety. It also seems to agree with Rouy's description of T. Brittingeri Weitenw.—C.E.S.

T. dubium Sibth., var. pygmaeum (Soy-Will.). Bank of Avon, Bristol, N. Somerset, v.c. 6, May 28, 1915.—Ida M. Roper. I believe correctly named. It is apparently the sub-var. pauciflorum Coss. & Germ. "Fl. Paris," ed. 2, 164 (1861).—C.E.S.

Oxytropis uralensis DC. Coast, Melvich, W. Sutherland, v.c. 108, July 14, 1915.—Edward S. Marshall.

O. campestris DC. Glen Fiagh, Clova, Forfarsh., v.c. 90, July 11, 1915. More plentiful, I think, than in 1888; a good many seedlings occur on screes below the main station, down to about 1700 feet, but seldom flower.—Edward S. Marshall.

Ornithopus ———? Grassy bank at Friday Street, Abinger, Surrey, v.c. 17, Sept. 20, 1914.—E. B. Bishop. I should have said this was O. roseus but Coste says the pod is glabrous in that! It is anything but glabrous here!— C.E.S. The plants are O. roseus Duf. (O. sativus Gren. & Godr. vix Brot.), and not O. sativus Brot. sec. Boiss & Reut., (O. isthmocarpus Coss.). Both species have both hairs and glabrous pods, though, as is unfortunately common, authors have without adequate study emended the original descriptions to fit only the forms they know. O. sativus Brot. seems to be undoubtedly O. isthmocarnus Coss., and differs in having arcuate and not straight legumes with a very long incurved beak and isthmi between the lomenta. One specimen has an isthmus on one pod, but the rest are quite normal and the other characters show it to be O. roseus. None of the specimens in Herb. Mus. Brit. showed such an abnormality!--A.J.W.

Lathyrus Aphaca L., var. affinis Guss. Waste ground, Brislington, N. Somerset, v.c. 6, June 11, 1915.—Ida M. Roper. Rouy's description fits this plant admirably. Nyman treats L. affinis Guss. as a subspecies. It differs from ordinary British L. Aphaca by its very pale yellow flowers, etc.—E.S.M. I am unable to find satisfactory characters to separate L. affinis Guss. and other segregates from L. Aphaca L. This does not agree with Gussone's description and cannot be so named.—A.J.W.

[Rubus caeresiensis Sudre & Gravet], subsp. or var. integribasis Rogers. This is the plant represented in

"Lond. Cat.," ed. X., by No. 444, "integribasis P. J. Muell.?"; West Cliff, Bournemouth, S. Hants., v.c. 11, June 19, 1915; West Moors, Wimborne, Dorset, v.c. 9, July 27, 1915.—W. Moyle Rogers. Talbot, Dorset, v.c. 9, Aug. 9, 1915.—Mary A. Rogers & L. Cumming. alteration of name suggested above is due to Dr. Focke's change of view. It was at his suggestion that we adopted the name R. integribasis P. J. Muell. (see "Journ. Bot." 1890, p. 100); but now [see his "Sp. Ruborum (Rubi Europei) 1914," pp. 330, 331 (106, 107)] he associates our plant more closely with Sudre & Gravet's R. caeresiensis. His words (p. 330) are "R. integribasis (cit. P. J. Muell.) Rogers' 'Handb. Brit. Rubi,' p. 24, forma R. caeresiensi arcte affinis videtur"; and he adds (on p. 331) "in plantâ Britannicâ (R. integribasi Rogers) foliola potius obovata, aculei paullo longiores et robustiores sunt. Stamina stylos Petala roseola. R. caeresiensi sine dubio magis affinis quam R. integribasi. In sudlichen England." I have not seen R. caeresiensis, which is reported only "in den belgischen Ardennen."—W.M.R.

R. imbricatus Hort. Hedges and rubble heaps, Glen Frome, near Stapleton, Bristol, v.c. 34, Aug. 16, 1915.— J. W. White. Yes, R. imbricatus Hort. Many of the specimens are mildewed.—H.J.R. Correct.—W.M.R.

R. nemoralis P. J. Muell. Branksome Park, Bournemouth, Dorset, v.c. 9, June 26, 1915.—Coll. M. A. Rogers. Comm. W. Moyle Rogers.

R. lentiginosus Lees. Midhurst Common, W. Sussex, v.c. 13, Aug. 4, 1914 (see "Jl. Bot.," 1915, p. 54).—W. Moyle Rogers.

R. mucronatus Blox., var. nudicaulis Rogers. Branksome Park, Dorset, v.c. 9, July 27, 1915.—Coll. Mary A. Rogers. Comm. W. Moyle Rogers.

R. radula Weihe, subsp. anglicanus Rogers. (1) Branksome Park, Dorset, v.c. 9, Aug. 10, 1915.—Coll. Mary A. Rogers. Comm. W. Moyle Rogers. (2) Tilton Hill, Leics., v.c. 55, Aug. 1, 1904, (fide W. Moyle Rogers).—A. R. Horwood.

R. rudis Wh. & N. Fittleworth, W. Sussex, v.c. 13 July 24, 1914.—W. Moyle Rogers.

- R. oigoclados Muell. & Lefv., var. Bloxamianus (Colem.), (fide W. Moyle Rogers). Billesdon Coplow and Tilton Hill, Leics., v.c. 55, July and Aug., 1904.—A. R. Horwood.
- R. melanodermis Focke in "Jl. Bot.," 1890, p. 133. Branksome Park, Dorset, v.c. 9, July 15 and 20, 1915.— Coll. Mary A. Rogers. The "? endemic" in the account of this bramble in my "Handbk. Brit. Rubi," p. 69, may still stand, in spite of M. Sudre's "determination" ("Batotheca Europæa," Fasc. II., 1904), which places it as a subordinate form under "R. granulatus Müll. et Lef.", seeing that Mueller & Lefèvre's plant itself is only recognised by Focke, (on Boulay's authority) in "Sp. Ruborum (Rubi Europæi)," 1914, as a hybrid "R. macrophyllus × Sprengelii," which our R. melanodermis certainly cannot be. In 1889 I showed the living plant to Dr. Focke both in Dorset and Hants., and in his 1890 article in "Jl. Bot." he rightly characterizes it as "a small, low and very glandular bramble." The blackish-purple tint of stem, petioles, etc., is very remarkable. The panicle, though very lax, is usually quite short; but when strongly developed (as in most of these specimens), its lower branches, while continuing racemose, become considerably lengthened, so as to make the panicle-outline distinctly pyramidal at last. Locally abundant through most of Dorset and South Hants., it also occurs in S. Devon. W. Glos. and Glamorganshire.—W. Moyle Rogers.
- R. Bloxamii Lees. West Cliff, Bournemouth, S. Hants., v.c. 11, July 2, 1915.—Coll. Mary A. Rogers. Comm. W. Moyle Rogers.
- R. glareosus Rogers & Marshall, f. robusta. "Jl. Bot.," 1912, pp. 309—311; 1915, p. 85. Near Midhurst and Hesworth Common, Fittleworth, W. Sussex, v.c. 13, July 22 and 30, 1915.—F. A. Rogers & W. Moyle Rogers. These strong W. Sussex plants have a somewhat closer superficial resemblance to R. pallidus Wh. & N. than can be seen in any of the slender and comparatively weak Surrey specimens contributed to the Wats. B.E.C. by me in 1912. The sandy surface soil is the same in both neighbourhoods, but the Surrey ground (Farnham to Hindhead) is barer and drier, and its plants in consequence

are partially starved. At the same time the strongest Sussex plants that I saw over many miles were certainly all *R. glareosus*, having no *pallidus*-like leaves nor strictly characteristic *pallidus* armature, nor in any case white petals.—W. M. R.

R. dasyphyllus Rogers. (1) Ivory Hill, near Frampton Cotterel, W. Glos., v.c. 34, July 25, 1915.—J. W. White. Correct.—H.J.R. Yes, but panicles of course exceptionally weak.—W.M.R. (2) Hillside, (at about 700 feet), near Fontmell Magna, Dorset, v.c. 9, Sept. 15, 1915.—Coll. Mary A. Rogers. Comm. W. Moyle Rogers.

R. Bucknalli J. W. White. Hedges and open woodland, at an elevation of over 600 ft., on oolitic hills between North Nibley and Wotton-under-Edge, W. Glos., v.c. 34, Aug. 2, 1915. (See "Jl. Bot.," 1899, p. 389).—J. W. White.

Potentilla [procumbens Sibth.]. Roadside, Heslington, Yorks., v.c. 61, July, 1915. Flowers double.—Coll. E. K. Higgins. Comm. D. M. Higgins. No; P. reptans L.—E.S.M.

P. argentea L., var.? Near Shefford, Beds., v.c. 30, Aug. 2, 1915.—H. C. Littlebury. Under the type, I think (a. vulgaris Lehm. of Rouy & Camus).—E.S.M.

Alchemilla vulgaris L., var. alpestris Pohl. Arthog (at 200 to 600 ft.), Merionethsh., v.c. 48, June 16, 1915.—W. C. Barton. A. alpestris Schmidt.—C.E.S.

A. acutidens Buser, var. alpestriformis C.E.S. Origin, near Lochan nan Chat, Ben Lawers, Mid-Perthsh., v.c. 88, 1913. Hort. Reigate, Aug. 1915. (See "Jl. Bot.," 1914, p. 287).—C. E. Salmon.

Agrimonia odorata Mill. (1) Near Charterhouse-on-Mendip (in three places), N. Somerset, v.c. 6, July 21, 1915. First seen on July 13, when with Rev. E. Ellman. New county record. (See "Jl. Bot.," Sept. 1915). (2) Hollow Marsh, near Farrington Gurney, N. Somerset, v.c. 6, July 24, 1915.—H. S. Thompson.

Rosa ———? (Ref. No. 15). Old slate quarries, Grey Abbey, Co. Down, Aug. 3, 1915.—C. H. Waddell. This seems to me to answer Mr. Ley's description of his R. subcrecta better than any of the specimens distributed under that name by himself and others which I have yet seen. The fruit is globose and the other characters answer fairly well.—W.B. R. subcrecta Ley.—A.H.W.-D.

R. suberecta Lev. (Ref. No. 14). Mountstewart, Co. Down, Aug. 27, 1915.-C. H. Waddell. Mr. Lev's description of his R. suberecta is pretty wide, but I don't see how this can come under it. The shape of the fruit answers not to his subcrecta "globose," but to his R. Andrzeiovii, b. pseudo-mollis, viz., "roundish, the primordial always pyroid." This seems to me fatal, for the shape of the fruit is an important character with him. In other respects his description might cover this plant. You have the red colouring, more or less, and the aciculate petiole frequent enough, whatever the worth of these characters may be. "Thorns straight, sometimes robust, more or less falcate, leaflets more or less hairy on both sides, subfoliar glands few or many"; these phrases are wide enough to cover a great many variations, and, if he had added fruit globose, ovoid or pyriform, I should have been better pleased, and I think it might then have done away with several of his other species. Of course although the fruit of this plant suits b. pseudo-mollis, its fairly numerous subfoliar glands prevent us from joining it to that variety, which should have none except on the midrib. There can be no doubt, however, that it comes under R. tomentosa Sm., group Omissa Déségl.—W.B. Certainly not R. suberecta, and, to judge from my specimen, I cannot agree with Mr. Barclay that there is no doubt as to its belonging to the *Omissa* group. On three of the six fruits the sepals are more or less reflexed, and only spreading on the others. The long peduncles, also, point to a Tomentosa rather than an Omissa form. I should label it R. pseudo-cuspidata Crép.—A.H.W.-D.

R. tomentosa Sm., var. (Ref. No. 16). Springs Road, Grey Abbey, Co. Down, Sept. 2, 1915. This is a widely spread form in Co. Down, which I have on several occasions sent to the Club from different localities. The Rev. A. Ley thought it an undescribed form, and asked me for specimens to study, shortly before his lamented death. It is a very strong-growing tall form, much taller than its allies. The bark is remarkably dark, the flowers

pure white.—C. H. Waddell. I think the present specimens are laxer, wider-spaced and more flexuous than those I saw formerly, but that may be from situation and age. The bark is not at all darker than in many, if not most, Scottish specimens. All I can say of it is that it appears to be R. tomentosa Sm., of group Omissa Déségl.—W.B. An Omissa form nearest var. submollis Ley.—A.H.W.-D.

R. Borreri Woods. Little Malvern, Worcs., v.c. 37, Aug. 18, 1915.—A. J. Crosfield. Yes, = R. tomentella Lém.—W.B. Hardly strong enough, and no peduncles glandular, nor are the leaves glandular beneath. I should label it R. Carionii Déségl. & Ozan.—A.H.W.-D.

R. canina L., var. [lutetiana (Léman)]. (Ref. No. 12). Hedge by roadside, Grey Abbey, Co. Down, Aug. 31, 1915. Petals white; a strong bush.—C. H. Waddell. This is a form of R. dumetorum Thuill.—a thinly-hairy form which may be called var. urbica Lém.—W.B. Too thinly-hairy even for R. urbica. It should be placed under R. semiglabra Rip.—A.H.W.-D.

R. canina L., var. dumalis (Bechst.), form with spherical fruit. (Ref. No. 13). Mountstewart, Co. Down, Oct., 1915. A tall vigorous bush.—C. H. Waddell. This also is a thinly-hairy form of R. dumetorum Thuill., but with globular fruit. It is in no material respect different from No. 17, which is called R. dumetorum, var. sphærocarpa Pug. This variety is described as having unarmed petioles and thinly hispid styles. No. 17 has some petioles unarmed, some slightly, and some strongly armed, and its styles are densely hispid or rather villous. I believe R. opaca Gren., R. globata Déségl., and some other globosefruited forms would fit it just as well, so that there is a choice of names. R. dumetorum, var. urbica, with globose fruit, satisfies me.—W.B. Nothing to do with R. dumalis. but one of the Dumetorum sub-group. The globose fruit is not against R. dumetorum Thuill., though British botanists usually assign ovoid fruit thereto, but its leaflets are too broad and too thinly hairy, and its styles too hispid. I should label it R. platyphylla Rau.—A.H.W.-D.

R. dumetorum Thuill., var. sphærocarpa (Pug.). (Ref. No. 17). Hedge, Grey Abbey, Co. Down, Sept. 2, 1915.—

C. H. Waddell. See note on No. 13, which includes this No. 17. – W.B. Better under R. platyphylla Rau with No. 13.—A. H. W.-D.

R. stylosa Desv., var. systyla (Bast.). Shillingstone, Dorset, v.c. 9, Sept. 13, 1915.—W. Moyle Rogers. Yes.—W.B. Very typical but for the smooth peduncles, which would make it var. corymbosa Desv.—A.H.W.-D.

Saxifraga Geum L. Hort. "Caradon," Southampton, Hants., May 30, 1915. Originally brought two years ago from Glencar, Co. Kerry, by Mr. Arnold Eliott, and transplanted to a fresh rockery in Sept., 1914.—H. S. Thompson. One of the two specimens received may be small S. Geum, var. serrata Syme; but I suspect that there is some admixture of S. hirsuta. The other is, I feel sure, a very small form of S. Geum × hirsuta; the leaves are decidedly broader than long, and their bases vary from shallowly cordate to truncate.—E.S.M.

S. Sternbergii Willd. Hort. "Caradon," Southampton, Hants., May 30, 1915. Originally brought two years ago by Mr. Arnold Eliott from Brandon Head, Co. Kerry, and transplanted in Sept., 1914, to a fresh rockery.—H. S. This closely approaches the County Clare plants so named (Black Head and Ballyryan); but typical S. Sternbergii, as figured by Sternberg from his original cultivated plant, differs greatly, and I rather doubt whether they can be specifically identical. I have in cultivation a Saxifrage, from near the summit of Brandon Mountain (Ref. No. 3649), which exactly agrees with Sternberg's figure of his cultivated plant; it is likewise bright green, but the petals are broader and rounder, never pinkish (as in the present case); the sepals broad and obtuse; the leaf-segments broad and blunt: so that it comes much nearer to S. rosacea Moench (decipiens Ehrh.; palmata Sm.) in characters, though clearly distinct from that. In a wild state it is densely caespitose; under cultivation it becomes somewhat laxer, but less so than in the Clare and Brandon Head examples.—E.S.M.

Ribes Grossularia L. Wood, near Sea Mills, Bristol, W. Glos., v.c. 34, Apr. 29, 1915.—H. S. Thompson.

R. rubrum L., var. petræum (Sm.). By the Land Yeo, Wraxall, N. Somerset, v.c. 6, Apr. 30, 1915.—Ida M. Roper. I suppose so; the flowering racemes are pubescent, and usually upright.—E.S.M.

Sedum album L. A denizen on limestone walls at Blagdon, Mendip, N. Somerset, v.c. 6, July 21, 1915.— H. S. Thompson. Yes, it is mentioned as occurring in this locality in Marshall's Supp. Fl. Som. 77, 1914, reported by Miss Livett, and where I also have seen it growing. It is evidently the teretifolium Haw.—C.E.S.

Callitriche truncata Guss. (Ref. No. 4232). Pool, at Cannington, S. Somerset, v.c. 5, Oct. 19, 1915. The Station—an old mill-lead—has since been destroyed; but no doubt the plant occurs in other neighbouring spots.—Edward S. Marshall. Yes, correct.—A.B.

Epilobium obscurum Schreb. × parviflorum. Little Malvern, Worcs., v.c. 37, Aug. 18, 1915.—A. J. Crosfield. Rightly named.—E.S.M.

Enothera odorata Jacq. Sandy bank near Berrow, N. Somerset, v.c. 6, July 5, 1915. Seen near here in 1859 by Thos. Clark. A Patagonian species.—H. S. Thompson.

Trinia glauca Reichb. fil. Rocky limestone banks near Bristol, W. Glos., v.c. 34, May 17 and 27, 1915.—H. S. Thompson.

Ammi majus L. Waste ground near Goods Station, Ledbury, Herefordsh., v.c. 36, Sept. 13, 1915. This alien is noted in the Thirsk Botanical Exchange Club Report for 1865 as having been found on the Severn Bank near Gloucester by Dr. St. Brody. I imagine that probably this was in proximity to the Docks where I have also met with it. At the old Canal Wharf, and at the Goods Station, Ledbury, it not infrequently occurs.—S. H. Bickham.

Pimpinella Saxifraga L., intermediate between type and var. dissecta With. Aylestone, Leics., v.c. 55, Aug. 5, 1905.—A. R. Horwood. Nearer type than dissecta I should say.—C.E.S.

Heracleum Sphondylium L., var. angustifolium Huds. Near Dolgelley, Merionethsh., v.c. 48, Aug. 9, 1915.—W. C. Barton. Yes, the form with narrow leaf-segments.— J.W.W.

Sambucus nigra L., var. laciniata Mill. Earith Bridge, Hunts., v.c. 31, May 12, 1915.—A. J. Crosfield. Always planted, I believe, in England, where it has long been known. In Johnson's edn. of Gerard, p. 1423 (1633) there is a good figure of it, labelled "The Jagged Elder Tree," and the observation, "That [kind] with the jagged leaves growes in my garden."—C.E.S.

Viburnum Opulus L., var. flava mihi (yellow-fruited form). Narborough Bog, Leics., v.c. 55, Oct. 1915. The original bushes at Narborough have been cut down, but this rare form has recently been found in several fresh stations there, and is not likely to be exterminated as seemed at one time. The fruit differs from the type in being a rich golden-yellow. It is somewhat smaller, as are the seeds. The leaves of this form differ in the outline of the lobes. It would seem desirable to designate it by a varietal name, var. flava.—A. R. Horwood.

V. Opulus L. Intermediate form (light red and yellow fruit). Narborough Bog, Leics., v.c. 55, Oct. 1915. These specimens show the fruit to be not entirely red or scarlet, but half red half yellow, or a lighter red, or reddish-yellow. They are distinctly intermediate, but whether a hybrid between the type and the variety, or merely an intermediate, it is difficult to say.—A. R. Horwood.

Galium verum L., var. maritimum DC. Sandy shore, Fairbourne, near Barmouth, Merionethsh., v.c. 48, Aug. 4, 1915.—W. C. Barton. I agree. Evidently synonymous with var. littorale Bréb.—C.E.S. This is, I think, what has been so named in Britain; but it does not quite agree with the description in De Candolle's "Prodromus," IV., p. 603:— "caule demisso ramosissimo basi glabro apice villoso, ovariis glabris," the stem not being villous, upwards. It may be the var. littorale Brébisson; but it is probably a state, due to poor sand and exposure, rather than a real variety.—E.S.M.

G. Vaillantii DC. (Ref. No. 4189). Among crops, near Ashcott Station, N. Somerset, v.c. 6, Aug. 19, 1915. I send a few sheets, gathered five weeks earlier than those contributed before. Doubt was then expressed as to the name, the fruit being bristly; but De Candolle, ("Prodromus," IV., p. 608), says:—"fructibus... setis apice uncinatis paucis subhispidis," G. spurium L. being there described as "fructu glabro sublaevi."—Edward S. Marshall. These specimens of Somerset G. Vaillantii are much less branched in fruit than the original specimens of Mr. Gibson from Saffron Walden, Essex. Certainly not G. spurium.—A.B. In Rouy & Foucaud's "Fl. de France," VIII., 49, this is placed as a var. under G. spurium L.; the species is described as having fruit glabrous, and var. Vaillantii as having "fruits hispides, à poils non oncinés." I agree with Mr. Marshall's naming.—E.F.L.

Asperula arvensis L. Waste ground, Brislington, N. Somerset, v.c. 6, May 22, 1915.—Ida M. Roper.

Filago apiculata G. E. Smith. Near Shefford, Beds., v.c. 30, Aug. 2, 1915.—H. C. Littlebury.

F. gallica L. In some quantity in a sandy field three or four miles from Colchester, Essex, v.c. 18, July 26, 1886, —Coll. E. F. Linton and W. R. Linton. Comm. E. F. Linton.

Senecio vulgaris L., var. præcox forma. (Ref. Nos. S. 13 and 14). Kibworth, Leies., v.c. 55, Dec. 10, 1915.—Coll. Miss M. E. Whitton. Mr. A. H. Trow remarks:—"Good examples of a form of præcox."—A. R. Horwood.

S. vulgaris L., f. rubricaulis Trow. (Ref. No. S. 17). Kibworth, Leics., v.c. 55, Dec. 10, 1915.—Coll. Miss M. E. Whitton. Mr. A. H. Trow remarks:—"Yes, rubricaulis is clearly present in this lot, and often fairly typical." I have eliminated the less typical plants.—A. R. Horwood.

Carduus crispus L., var. acanthoides (L.). Quarry ground, Twerton-on-Avon, N. Somerset, v.c. 6, June 22, 1915.—Ida M. Roper. A weak specimen and young for certain determination, but I think rightly named.— E.F.L.

Crepis paludosa Moench. Arthog, Merionethsh., v.c. 48, June 29, 1915. Young plants to show lower leaves and growth.—W. C. Barton.

Hieracium Pilosella L., var.? (Ref. No. 166). Arthog (alt. 600 feet), Merionethsh., v.c. 48, June 12, 1915. The Rev. E. F. Linton writes:—"It is much more like some forms of var. concinnatum F. J. Hanb., but that has the heads glandular and epilose. The heads here are hairy as well as glandular."—W. C. Barton.—Under the type.—E.S.M.

H. argenteum Fr., var. septentrionale F. J. Hanb. (Ref. No. 4093). Sandhills, Armadale Bay, W. Sutherland, v.c. 108, July 16, 1915. Intensely glaucous; styles yellow. Somewhat modified by the unusual situation.—Edward S. Marshall. No doubt correct, though the specimen submitted to me is very poor, with hardly any foliage.— E.F.L.

H. rivale F. J. Hanb., var. [dasythrix Linton]. (Ref. No. 3994). Head of Glen Falloch, W. Perthsh., v.c. 87 (from 2000 to 2500 feet), July 16, 1914. Styles livid, or livescent; ligules glabrous-tipped.—Edward S. Marshall. This is rather the type, H. rivale F. J. Hanb., than the variety. Var. dasythrix has the phyllaries shorter and broader and more obtuse, clothed with more dense and more shaggy pubescence, and with, I think, on the whole rather less glandular clothing on both heads and peduncles; but in this last point both vary, so that the quantity of glands does not form a stable character.—E.F.L.

H. sagittatum Lindeb., var. subhirtum F. J. Hanb. Stream, Glen Lyon, Mid Perthsh., v.c. 88, July 16, 1913.—Edward S. Marshall.

H. vulgatum Fr., var. subfasciculare W. R. Linton. (Ref. No. 165). Old walls, Arthog, Merionethsh., v.c. 48, Aug. 5, 1915. Named by Rev. E. F. Linton.—W. C. Barton.

H. acroleucum Stenstr., var. daedalolepium (Dahlst.). Ref. No. 164). Crevices of rocks (at 400 feet), Arthog, Merionethsh., v.c. 48, June 14, 1915. Named by Rev. E. F. Linton.—W. C. Barton. These seem identical with three specimens for which I suggested daedalolepium, or nearly so. Styles darkened.—E.S.M.

H. sciaphilum Uechtr., var. transiens Ley. (Ref. No. 160). Arthog (at 200 feet), Merionethsh., v.c. 48, July 29, 1915.—W. C. Barton. Yes, var. transiens Ley (see "Jl. Bot.", 1909, p. 49).—E.F.L.

H. protractum Lindeb. Origin, Unst (J. Groves), Shetland, v.c. 112, cult. Ledbury, July 15, 1915.—S. H. Bickham.

H. gothicum Fr., var. latifolium Backh. (Ref. No. 4099). Very local on grassy cliffs, Melvich, W. Sutherland, v.c. 108, Aug. 7, 1915. Styles yellow, or occasionally livescent. Ligules glabrous-tipped. I think this a fairly good variety. The type does not occur there.—Edward S. Marshall. Rightly labelled var. latifolium Backh., and not as in the Lond. Cat., f. latifolia. The aggregation of the leaves at the base of the stem is a frequent feature in the variety.—E. F. L.

H. boreale Fr., var. rigens (Jord.). (Ref. No. 181). Lake Gwernan, near Dolgelley. (Ref. No. 180). Gwynant Valley, near Penmaenpool, Merionethsh., v.c. 48, Aug. 24 and 31, 1915.—W. C. Barton. Though not agreeing perfectly with H. rigens, Jord., it seems to come nearest that, and is, I think, the British form so named from N. Wales and other parts of Britain. No. 180 being practically identical with No. 181 may have the same note attached to it.—E.F.L.

H. umbellatum L., var.? (Ref. No. 170, 171). On refuse from slate quarries, Bethesda, Carnarvonsh., v.c. 49, Aug. 17, 1915. The Rev. E. F. Linton writes: "H. umbellatum L., a neat-looking form with leaves reduced in size and length and often aggregated near the base; a variation probably induced by the situation and lack of richer soil, which, if cultivated, would become normal. Hardly any of the specimens shew squarrose phyllaries. These remarks include Nos. 170 and 171." Besides the characteristics noted above I was struck by the rigidity of stem and leaves and the brittleness of the stem. The plant was easily distinguished by its habit, and by the reddish colour of the stems.—W. C. Barton. Yes. Forms of H. umbellatum with heads (when dry) as black as in H. boreale.—E.S.M.

H. umbellatum L. (Ref. No. 182). Tan-y-Bwlch, Merionethsh., v.c. 48, Aug. 25, 1915.—W. C. Barton. H. umbellatum L., f. latifolia. I doubt whether this is meant to be placed under monticola.—E.F.L. Yes. Like most of your gatherings it is remarkably black-headed.—E.S.M.

H. umbellatum L., var.? (Ref. No. 169). On ballast at Minffordd Junction, Merionethsh., Aug. 25, 1915. The Rev. E. F. Linton writes: "This seems to be a curious var. of H. umbellatum L., with a look of H. rigidum var., answering to description in Arvet-Touvet of var. brevifolium Fröl., non Tausch., of which I have no stem. I have one stem like this from France, but not named.—W. C. Barton. A broad-leaved H. umbellatum superficially resembling H. boreale. Heads remarkably dark and leaves (of the well grown specimens, especially) very broad.— E.S.M.

Anagallis arvensis L., var. carnea Schrank. (Ref. No 187). Barmouth, Merionethsh., Aug. 18, 1915. Petals with glandular ciliate margins. The scarlet-flowered plant was plentiful, but I saw none with blue flowers in the district. The pale-flowered form occurred chiefly on road-sides, trodden ground or poor stony soil, and a few were intermediate in colour.—W. C. Barton.

A. fæmina Mill. (cærulea Schreb.). (Ref. No. 4192) Open, stony ground in a large wood, near Kingweston, N. Somerset, v.c. 6, Aug. 19, 1915.—Edward S. Marshall.

Gentiana Amarella L. Ashmansworth, N. Hants., v.c. 12, Sept. 15, 1915.—W. C. Barton. G. germanica \times Amarella. This is probably a secondary hybrid approaching closely to G. Amarella.—E.J.S.

 $G.\ Amarella \times germanica (= \times G.\ Pamplinii\ Druce).$ (Ref. No. 194). Ashmansworth, N. Hants., v.c. 12, Sept. 15, 1915.—W. C. Barton. Yes, this is the primary hybrid.— E.J.S.

G. germanica Willd. Ashmansworth, N. Hants., v.c. 12, Sept. 15, 1915.—W. C. Barton. Yes.—E.J.S.

× Symphytum densiflorum Buckn. (= S. officinale, β purpureum × peregrinum). By the river Chew, near Chew Magna, N. Somerset, v.c. 6, June 7, 1915.—J. W. White. Correct.—C.B.

× S. discolor Buckn. (= Symphytum officinale, var. ochroleucum × S. peregrinum). By the river Chew, near Chew Magna, N. Somerset, v.c. 6, May 31, 1915.—J. W. White. Correct.—C.B.

Anchusa officinalis L. (1) Waste ground, Brislington, N. Somerset, v.c. 6, May 27, 1915.—Ida M. Roper. (2) Waste ground, Ledbury, Herefordsh., v.c. 36, Aug. 5, 1915.—S. H. Bickham. (3) Barmouth, Merionethsh., v.c. 48, Aug. 16, 1915.—W. C. Barton. A. officinalis "Linn" was mostly, if not entirely, A. italica Retz, and the correct name and authority is therefore A. officinalis L. emend. Retz. named they are all correct, though this aggregate includes several forms, and must probably be further split up. Many "species" have been described, but a revision of of them is badly needed, as the characters given do not seem sufficient for identification. (1) appears to be A. amplexicaulis Sibth. sec. Roemer & Schultes Syst. Veg. IV., 99, as it agrees with Schott's plant in Herb. Roemer! But whether it is really Sibthorp's A. amplexicaulis is uncertain. (2) may be A. procera Bess. ex Link, but the specimen received does not show whether the fruiting calyx is "open" or "closed," and again, authentic examples have not been seen. It may be just an extra tall form of the common plant. (3) seems to be the plant most common in the National Herbarium under the name of A. officinalis "Linn."—A.J.W.

Myosotis arvensis Hill, var. umbrosa Bab. Scraptoft, Leics., v.c. 55, May 19, 1906. Though considered by some only a shade form, this form or variety appears to be fairly constant in three characters, which mark it off from the type. (1) flowers approaching sylvatica in size when fresh; (2) a much greater degree of hairiness; (3) great luxuriance—the plants being much branched from the base, twice as tall, the cymes rarely dichotomous.—A. R. Horwood. The flowers look too small and the corolla tube too short for umbrosa, though it is difficult to judge from dried material. Mr. Horwood sent some Leicestershire

umbrosa to the Club in 1906, which the Revs. A. Ley and E. F. Linton passed. My example of this 1906 plant certainly looks more robust than the present specimens, and has a stouter (? biennial) root. Dr. F. N. Williams considers Babington's plant to be synonymous with var. sylvestris Schlech.—C.E.S.

Lithospermum purpureo-cœruleum L. Flowers, Sandford Hill; fruit, Cheddar Wood, Mendip, N. Somerset, v.c. 6, June 7 and 22, 1915. (See "Jl. Bot.," 1884, p. 74).—H. S. Thompson.

Verbascum pulverulentum Vill. Eaton, Norwich, Norfolk, v.c. 27, Sept. 1915.—F. Long.

Linaria purpurea Mill. Old walls, Ledbury, Herefordsh., v.c. 36, Aug. 1915.—S. H. Bickham.

Scrophularia alata Gilib. Little Malvern, Worcs., v.c. 37, Aug. 18, 1915.—A. J. Crosfield. Mine is a poor specimen. It does not agree well with Babington's description of S. Ehrharti C. A. Stev., usually accepted as synonymous. But Babington says his plant is not S. alata Gilib.—J.W.W.

Veronica spicata L. Origin, Culford Heath, W. Suffolk, v.c. 26 (E. F. Linton). Cult. Underdown, Ledbury, July 15, 1915.—S. H. Bickham. Writing from memory I led Mr. Bickham to suppose that this plant of V. spicata came from Culford Heath, Suffolk, whence the Rev. J. D. Gray sent me specimens long ago. I find, however, that the plant I have in cultivation and sent Mr. Bickham a root of, was given me by Mr. F. J. Hanbury, F.L.S., who gathered it in August, 1890, and on his label wrote "Cambridgeshire," withholding any more precise locality.—E.F.L.

Euphrasia borealis Towns. (Ref. No. 153). On wall top, Harlech Golf Links, Merionethsh., v.c. 48, Aug. 11, 1915.—W. C. Barton. This may be dwarfed E. borealis. Were no better-developed plants found on the ground near the wall? It is extremely difficult and unsafe to name starved plants.—E.D. Yes, E. borealis Towns., but rather small.—C.B.

E. stricta Host. (1) Downs, Guildford, Surrey, v.c. 17, Sept. 1915.—J. Comber. This is E. Kerneri Wetts., not E. stricta. The flowers are rather small, but otherwise characteristic of E. Kerneri.—C.B. Gathered too late, and the specimens are not typical. I agree with Mr. Bucknall; one of my specimens has the fine large flowers of Kerneri.—C.E.S. The material received is scanty and indifferent. One plant has the leaves and bracts decidedly pilose, and comes under E. curta, var. glabrescens; the other two may be correct. [Later]. Evidently the gathering was mixed; none of the plants received by me can go to E. Kerneri.—E.S.M. (2) Oakthorpe, Leics., v.c. 55, Sept. 3, 1915. Some of the plants from this locality were undoubtedly of the borealis type, as pointed out by Mr. Bucknall, who calls these plants for the most part stricta, but I have excluded, I believe, all but the latter.—A. R. Horwood. E. stricta Host.—E.D.

E. nemorosa H. Mart. (Ref. No. 152). Pant Einion, Arthog, Merionethsh., v.c. 48, Aug. 15, 1915.—W. C. Barton. E. nemorosa I think, but not typical. leaves are sometimes sparingly setulose, especially the lower ones, and this may indicate an approach to E. curta. but taking the other characters into consideration, I consider it to be nearest to E. nemorosa.—C.B. E. nemorosa, var. ciliata, I think, but not typical. (See "J). Bot.," March, 1916).—E.D. Yes; coming under our usual form, var. ciliata Drabble. One of my examples has a pronounced nemorosa habit, the other is more condensed and simulates curta, but the plant is only just in flower. _C.E.S. The three specimens sent to me I should call good E. curta Wettst., var. glabrescens Wettst., they have, decidedly, the habit of that plant. But Wettstein included under E. curta, var. glabrescens, much that is identical with E. nemorosa, var. ciliata Drabble.—E.S.M.

E. gracilis Fr. (Ref. No. 4106). Dry heaths, Strathy, W. Sutherland, v.c. 108, Aug. 6, 1915. Flowers violet-blue or reddish. This plant is often setose or setulose in Scotland.—Edward S. Marshall. Correct.—C.B.

E. curta Wettst., maritime form of the type. (Ref. No. 4110). Coast rocks, east of Reay, Caithness, v.c. 109, July 24, 1915. Flowers small, reddish-lilac or whitish.—

Edward S. Marshall. Is not this too near to *E. latifolia* Pursh.? I find a difficulty in distinguishing it from small specimens of that species, except by the rather shorter hairs. The teeth of the leaves are, in my opinion, too obtuse for *E. curta*, and the calyx and capsule of a different shape.—C.B. Yes, this seems to be *E. curta*, but the teeth of the leaves and bracts are unusually obtuse; I have similar plants from Helvellyn.—E.D. [Later]. This is *rery* near my recollection of Fries' original *E. curta* (under *E. parviftora* Fr.). It is most closely allied to *E. latifolia* (arctica Lange), but differs in texture, clothing, and corolla.—E.S.M.

E. latifolia Pursh. (Ref. Nos. 4115, 4117, 4118). Coast, near Melvich and Strathy, W. Sutherland, v.c. 108, July and Aug., 1915. It varies much in size, according to the situation (sheltered or exposed).—Edward S. Marshall. Correct.—E.D. & C.B.

E. foulaensis Towns. (Ref. No. 4120). Coast, near Melvich, W. Sutherland, v.c. 108, Aug. 5, 1915. I regret that the supply is so meagre; it was backward this year.—Edward S. Marshall. Yes.—C.B.

Rhinanthus major Ehrh., var. platypterus Fr. (Ref. No. 4201). Locally plentiful on the peat-moor, near Edington Junction, N. Somerset, v.c. 6, Aug. 23, 1915. Seed-wing broad; plant glabrous. Owing to its being nearly past flower the corollas are small. The violet appendages were those of major, not of minor. The latter flowers in late May and early June, here!—E. S. Marshall.

Melampyrum pratense L., var. hians Druce. (Ref. No. 144). Arthog Woods, Merionethsh., v.c. 48, June 15, 1915. Corolla deep yellow, mouth of tube open. Apparently the only form in the neighbourhood; a few miles away the type was plentiful.—W. C. Barton. Right.—E.S.M.

Mentha verticillata L., f. between ovalifolia Briquet and ballotifolia, tending towards the latter. Abundant in running water in a swamp below the railway station, Shandon, Dumbartonsh., v.c. 99, Sept. 29 and Oct. 1, 1897. Named for me by M. John Briquet in 1898.—

Charles Bailey. Yes, a sativa form. One of my examples might, I think, pass for the paludosa (Sole) state of it.—C.E.S.

M. verticillata L., f. between ballotifolia and ovalifolia Briquet. Same locality and dates as above; named for me by M. Briquet in 1898. I am unable to separate the two varieties.—Charles Bailey. Yes, under sativa, no doubt. Rather intermediate between rivalis Wats. and paludosa (Sole); on the whole, nearer the latter.—C.E.S. I agree with Mr. Bailey, and can see no appreciable difference between the two.—A.B. Two forms of the variable M. sativa L.—E.F.L.

M. aquatica × arvensis, (= M. sativa L.). Grassy drove, King's Wood, Yatton, N. Somerset, v.c. 6, Aug. 18, 1915.—Ida M. Roper. Rightly named.—E.S.M. & E.F.L. Yes, correct, a small form.—A.B. I agree; it would seem to come under rivalis Wats.—C.E.S.

M. gentilis L. (= M. arvensis \times spicata A. Thellung). Garden, Haymesgarth, Cleeve Hill, E. Glos., v.c. 33, Sept. 10 and 21, 1915.—Charles Bailey. Not what we usually know as M. gentilis. Apparently this is a cultivated plant of one of Mr. Bromwich's forms of M. gracilis Sm. from Haseley Common.—E.F.L.

Origanum vulgare L., var. albiftorum Lej. Field, near Netherlands Copse, Guildford, Surrey, v.c. 17, Aug. 1915.—J. Comber. I believe this is the sub-var. pallescens Coss. & Germ., (which they formerly considered a full var.). It may be synonymous with albiftorum Lej. (See B.E.C. Rept., 1913, p. 490).—C.E.S.

Thymus Serpyllum L. (1) (Ref. Nos. 135, 136, 137, 139, 141). Harlech Golf Links, Merionethsh., v.c. 48, Aug. 11 and 18, 1915. The plants from which these specimens were taken were all growing under exactly the same conditions in one spot, a level piece of turf among the sandhills. There were several clumps of each, which were easily recognisable at some distance.—W. C. Barton. No. 141—T. Serpyllum L., var. angustifolius Gren. & Godr. (= T. angustifolius Pers.). Nos. 135, 136 and 137—forms between var. linneanus G. & G. and var. angustifolius

G. & G.—A.B.J. (2) (Ref. No. 132). Sandy coast, Fairbourne, Merionethsh., v.c. 48, Aug. 4, 1915. Growing in a situation even more exposed than the preceding. I saw no *T. ovatus* within a mile. –W. C. Barton. A very diffuse plant, with the interrupted inflorescence suggesting *T. ovatus*, but with the trailing habit of *T. Serpyllum.*—A.B.J. (3) (Ref. No. 2040). By Lias quarry above Street, N. Somerset, v.c. 6, July 7, 1915.—H. S. Thompson. This appears to be *T. ovatus* Mill., but the material sent me is not very good, and does not show well the characteristic habit.—A.B.J. (4) Sandy ground, Weston-super-Mare, N. Somerset, v.c. 6, Aug. 5, 1915.—Ida M. Roper. Correct.—A.B.J.

T. Serpyllum L., sub-sp. lanuginosus (Miller) Briquet. (See Schinz, "Fl. de la Suisse," 1911, p. 494). (Ref. No. 2041). By Lias quarry above Street, N. Somerset, v.c. 6, July 7, 1915.—H. S. Thompson. A form of T. Serpyllum coming under the var. linneanus G. & G. T. lanuginosus Miller is quite a different plant, which does not grow in Britain, so far as I am aware.—A.B.J.

T. Serpyllum L.,? sub-sp. lanuginosus (Miller) Briquet (= T. spathulatus Opiz, see "Fl. Brist.," 1912, p. 478.) (Ref. No. 2042). Durdham Down, Clifton, W. Glos., v.c. 34, July 17, 1915.—H. S. Thompson. T. Serpyllum L.—A.B.J.

T. Chamædrys Fr. Rocky slope, Wraxall, N. Somerset, v.c. 6, Aug. 13, 1915.—I. M. Roper. Yes, but T. ovatus Miller is the earliest name for it.—A.B.J.

Hyssopus officinalis L. Origin, Beaulieu Abbey, S. Hants., v.c. 11; cult. Ledbury, July 30, 1915.—S. H. Bickham.

Salvia verticillata L. Woolmer Green, Herts., v.c. 20, July 10, 1915.—H. C. Littlebury.

Scutellaria galericulata L. (Ref. No. 195). Canalside, Calne, N. Wilts., v.c. 7, Sept. 4, 1915. Growing in water, so that the pubescence is not due to dry or exposed situation. Rouy has "a vulgaris Mutel. Tiges, feuilles et calices glabres; corolles \pm pubescents. β pubescens Mutel. Tiges, page inférieure des feuilles, calices et corolles pubescents, ordinairement plus petits (rare)." This plant

certainly comes under β pubescens, and is unlike the plants for which Mr. Druce suggests the name literalis (Rept. B.E.C., 1912, p. 275). Syme, "Eng. Bot.," describes S. galericulata with "calyx pubescent, tube of corolla very finely pubescent, plant subglabrous with angles of the stem, leaves, and flowering calyx finely pubescent, sometimes rather thickly so." Is vulgaris Mutel found in the British Isles?—W. C. Barton. My herbarium-specimens vary much in amount of pubescence; but none of them have the leaves quite glabrous.—E.S.M. I agree with Mr. Barton's note, and, in answer to his query, I have not, so far, seen any specimens from Britain coming under Mutel's glabrous vulgaris.—C.E.S. Mr. Barton asks, "Is S. vulgaris Mutel found in the British Isles." My answer is "Yes." I have a specimen gathered by myself "Between Alford and Cranleigh, Surrey, Aug. 1884." Another from "Gatehouse, Kirkcudbright, July 1887, Prof. D. Oliver," comes very near to it, but is really slightly hairy. A specimen from "Andover, N. Hants., July 18, 1878, C. B. Clarke," is intensely hairy, so much so that the corollas, calices, and under surface of leaves are quite whitish with the density of the hairs. Mr. Barton's observation that "the pubescence (of his specimens) is not due to dry or exposed situation" is apt, because in the case of Teucrium Scordium L. it is so, as the Devon specimens are usually very hairy, while others from near Ely, growing in water, are nearly glabrous. But there is another agent to consider; i.e., age. In Vicia Orobus the plants are densely hairy up to the buds of the flowers showing, they then gradually become semiglabrous as the flowering and seeding proceeds. Neither Grenier and Godron (Fl. France), nor Cosson and Germain (Fl. Env. Paris), mention the variety pubescens, but Boreau "Fl. centre de la France" II., p. 422 (1849) has a β pubescens as of his own authority, and for his var. a has "calice ordinairement glabre."—A.B.

Galeopsis Tetrahit L., var. nigricans Bréb. (Ref. No. 145). Ashmansworth, N. Hants., v.c. 12, Sept. 14, 1915.—W. C. Barton. I believe so. The Rev. E. Ellman tells me that in Sussex this appears to be the native form.—E.S.M. I agree.—C.E.S.

Lamium molucellifolium Fr. (= intermedium Fr.) \times purpureum L., n. hybr.? (Ref. No. 4128). Hotel kitchen-

garden, Melvich, W. Sutherland, v.c. 108, with the supposed parents, and fairly intermediate between them, Aug. 2, 1915. Mr. F. J. Hanbury and I both thought them to be correctly determined. Leaves more rugose than in *L. purpureum*, differently shaped; flowers larger, of a deeper colour, and calyx different.—Edward S. Marshall. If the supposed hybrid, this plant is somewhat exceptional in producing seed freely, hard well-formed and well-filled nuts.—E.F.L.

L. purpureum L. f. alba. Field, Moorend, W. Glos., v.c. 34, Apr. 9, 1915.—Ida M. Roper.

Plantago maritima L. Bank of Avon, Bristol, W. Glos., v.c. 34, June 21, 1915.—Ida M. Roper. Tending towards var. latifolia Syme, but leaves hardly broad enough.—E.G.B.

Amaranthus retroflexus L. Bristol Harbour, W. Glos., v.c. 34, July 20, 1915.—Ida M. Roper. Correct.—A.J.W.

Salicornia ———. (Ref. No. 4215). Locally plentiful on a sandy mud-flat, near high-water mark, Dawlish Warren, S. Devon, v.c. 3. Erect, much branched, about three to five inches high; red or reddish in autumn. Branches erect or ascending. Spikes short, stout, blunt. Flowers in threes; central round or roundish, much larger than the lateral ones.—Edward S. Marshall. S. ramosissima Woods.—C.E.M. Yes, S. ramosissima. The great regularity of the branching suggests the possibility of hybridisation with S. gracillima, should that species be present in the locality.—E.J.S. [Later]. I am inclined to agree to the name given, though it is very unlike the other forms of S. ramosissima which I observed there. S. gracillima was not seen; but possibly it may occur.—E.S.M.

S. dolichostachya Moss. (Ref. No. 4207). Sandy mud-flats, Dawlish Warren, S. Devon, v.c. 3, Oct. 7, 1915.—Edward S. Marshall. Yes.—C.E.M. Quite typical.—E.J.S.

Polygonum minus Huds., var. subcontiguum Wallich. Whitmoor Common, Surrey, v.c. 17, Sept. 1915.—J. Comber.

Agrees well enough with description and Plate 129 of the "Camb. Brit. Fl." I have the same thing from Surrey and Dorset.—E.S.M. Yes.—C.E.S.

- P. Persicaria L., var. elatum Gren. & Godr. Moist ditch, Whitmoor Common, Surrey, v.c. 17, Sept. 1915.—J. Comber. Yes.—C.B. & J.W.W.
- P. maculatum Trim. & Dyer. By Briton's Pond, near Guildford, Surrey, v.c. 17, Sept. 1915.—J. Comber. Correct, we believe.—C.B. & J.W.W. I think this is one of the numerous forms of P. persicaria × lapathifolium.—C.E.M.
- P.——? Sandy field, Worplesdon, Surrey, v.c. 17, Sept. 1915.—J. Comber. Perhaps this may be P. aviculare L., var. angustissimum Meisner ("Camb. Brit. Fl." pl. 133).—E.S.M. I think this would come under aequale Lindman, but it is gathered too late to show the leaves, etc., satisfactorily.—C.E.S. P. aequale Lindman.—C.E.M.

Euphorbia platyphyllos L. Cultivated land, Wolvers, near Reigate, Surrey, v.c. 17, Oct. 8, 1915. It is interesting to note that John Stuart Mill found this Spurge in this locality more than fifty years ago.—C. E. Salmon.

- E. Esula L. Downs at Lewes, S. Hants., v.c. 11, June 17, 1915.—R. S. Standen.
- E. Cyparissias L. Near Horsley, S. Hants., v.c. 11, June 10, 1915.—R. S. Standen.
- E. exigua L., [var. retusa L.]. North Road, near Baldock, Herts., v.c. 20, July 3, 1915.—H. C. Littlebury. The leaves of my plants are not retuse; only the type, I believe.—E.S.M. One example only on my sheet seems the variety; the remaining (eleven) specimens are type.—C.E.S.

Quercus Cerris L. Nassau Woods, Dolgelley, Merionethsh., v.c. 48, Aug. 9, 1915.—W. C. Barton. Yes, typical Q. Cerris, which is not a native of Britain, but occasionally establishes itself from self-sown acorns.—A.B.J. Yes.—C.E.M.

Salix triandra [\times viminalis 3 (= S. hippophaefolia Thuill.)]. Withy bed, Corston, N. Somerset, v.c. 6, Apr. 24

and Aug. 16, 1915.—Ida M. Roper. S. triandra type.— E.F.L.

S. alba L., var. cærulea (Sm.) 3. Bank of Rhyne, Kenn Moor, N. Somerset. v.c. 6, May 22 and Aug. 17, 1915. --Ida M. Roper. Rightly named.—E.F.L.

S. cinerca [× viminalis] 3. Hedge, Clevedon Moor, N. Somerset, v.c. 6, Apr. 14 and June 24, 1915.—Ida M. Roper. The foliage is that of S. cinerca L., more softly pubescent than usual; the flowers no doubt are the same. There is no sign of S. viminalis in either.—E.F.L.

Populus canescens [\times tremula] \circ . Field hedge, Siston, W. Glos., v.c. 34, Mar. 20 and July 27, 1915. Stigmas purple.—Ida M. Roper. I see nothing in this but P. canescens Sm.—A.B.J.

P. tremula L., var. villosa (Lange) \(\mathbb{Q} \). Under Leigh Woods, Bristol, N. Somerset, v.c. 6, April 12 and June 23, 1915.—Ida M. Roper. Yes.—C.E.M.

P. deltoidea Marsh. (fide A. B. Jackson). Ingarsby, Leics., v.c. 55, May 1906.—A. R. Horwood.

P. balsamifera L. (fide A. B. Jackson). Spinney Hill, Leicester, v.c. 55, catkins May 1905, leaves Aug. 1905.—A. R. Horwood.

P.——? Wanlip, Leics., v.c. 55, Apr. 1913. This was a tall tree, with bright golden-yellow foliage, hardly like any of the usual types of poplars in habit. It was suggested by Kew that it belongs to the balsamifera group. Mr. Druce names it P. tacamahacca Mill.—A. R. Horwood.

Orchis ericetorum Linton. (1) (Ref. No. 189). Marshy ground (at 600 feet alt.), Arthog, Merionethsh., v.c. 48, June 14, 1915.—W. C. Barton. Right; Dr. Moss and Mr. Druce now consider this to be the true Linnean O. maculata.—E.S.M. Yes, my O. ericetorum.—E.F.L. (2) Stoborough Heath, Wareham, Dorset, v.c. 9, June 15, 1915.—Ida M. Roper. Right.—E.F.L. Yes, a small state with very narrow leaves.—C.E.S.

Leucojum vernum L. (Ref. No. 4056). Near Stogumber, S. Somerset, v.c. 5, Mar. 8, 1915.—E. S. Marshall.

Allium vineale L., var. compactum (Thuill.). Junction of Norton and Wilbury Roads, Letchworth, Herts., v.c. 20, June 26, 1915.—H. C. Littlebury. Right.—J.W.W.

Juneus tenuis Willd. Crianlarich, Perthsh., v.c. 88, Sept. 13, 1915. Abundant in a marshy piece of ground near the roadside.—C. E. Salmon.

Luzula campestris DC., var. congesta Syme. Hillside, Winterhead, Sidcot, N. Somerset, v.c. 6, Apr. 13, 1915.— Ida M. Roper. These look like starved plants. Rouy gives Diard as the authority for the varietal name.—E.S.M. I should call it a starved condition—possibly due to exposed position—which, if cultivated, would revert at once to type.—E.F.L. This answers to Syme's description.—A.B.

Wolffia arrhiza Wimm. Pond, E. of Burnham, N. Somerset, v.c. 6, Sept. 23, 1915. (See "Jl. Bot.," Nov. 1915).—Ida M. Roper.

Damasonium Alisma Mill. Briton's Pond, near Guildford, Surrey, v.c. 17, Sept. 1915.—J. Comber.

Potamogeton polygonifolius Pourr. (Ref. No. 193). Peat swamp (at 600 feet alt.), Arthog, Merionethsh., v.c. 48, June 14, 1915. Is this a "form" due entirely to situation, and has it been shown to revert to type when grown in water? Syme's var γ ericetorum has apparently been abandoned. The leaves in these plants vary from lanceolate to sub-orbicular.—W. C. Barton. This is a small form, not exactly answering to any of the 28-40 named varieties of it, which are mostly forms, induced by local conditions. Syme's ericetorum had been named forma cordifofia Cham. et Schlecht. in 1827! No doubt Mr. Barton's form is due to the situation. One extreme form has leaves 4 inches long and 21 wide!—A.B. This is the common state of wet heaths, called var.ericetorum. his "British Potamogetons," p. 20, Mr. Fryer has pointed out that "under cultivation, by gradually increasing the depth of water, 'var. ericetorum' speedily becomes 'var. genuinus,' and the same change has been noticed in plants growing naturally."—E.S.M.

P. decipiens Nolte. Above Forteviot Bridge, Perthsh., v.c. 88, Sept. 20, 1915.—W. Barclay. Mr. Barclay certainly gathered P. decipiens at this place and date, as I have specimens from him, but this specimen is too poor and indefinite to be sure of.—A.B.

P. crispus × alpinus. River Earn above Dalreoch Bridge, Mid Perthsh., v.c. 88, Sept. 22, 1915. This hybrid was discovered by Mr. J. R. Matthews and myself whilst botanising on the bank of the river Earn above Dalreoch Bridge, nearly opposite the village of Dunning, on 26th Aug. last. Not being able to identify it, I sent specimens to Mr. Arthur Bennett, who determined it to be the above hybrid, saying at the same time that it has hitherto been found only in Denmark, and possibly in Bavaria. There were two or three distinct beds of it, and on a subsequent visit another was found about a mile below, on the opposite (left) bank, a short distance below the bridge.—W. Barclay.

Eriophorum gracile Roth. (Ref. No. 4225). Wet bog on Britty Common, above Staple Fitzpaine, S. Somerset, v.c. 5 (at nearly 900 feet), July 1, 1915. New for the County.—Edward S. Marshall.

Rynchospora alba Vahl. (Ref. No. 4226). Wet bog, Shapwick Heath, N. Somerset, v.c. 6, Aug. 26, 1915. This is sent, as being unusually tall.—Edward S. Marshall.

Carex chordorhiza Linn. fil. (Ref. No. 4140). Wet bogs, Altnaharra, W. Sutherland, v.e. 108, July 24, 1915; associated with C. limosa and C. lasiocarpa. Owing to the drought, apparently, it did not fruit so freely as usual.—Edward S. Marshall.

- C. contigua Hoppe. Roadside, Headley Lane, near Headley, Surrey, v.c. 17, June 16, 1914. The name has been confirmed by the Rev. E. S. Marshall.—C. E. Salmon.
- C. humilis Leysser. Durdham Down, Bristol, W. Glos., v.c. 34, Apr. 10; foliage, July 17, 1915. No fruit visible.—H. S. Thompson.
- C. depauperata Curt. Bank, near Axbridge, N. Somerset, v.c. 6, June 23, 1915. Mr. Pugsley's station, which I found independently. In fine condition this year, with many fruiting spikes.—H. S. Thompson.

- C. flava L., var. lepidocarpa (Tausch). Oughton Head Common, Hitchin, Herts., v.c. 20, June 23, 1915.—H. C. Littlebury. Yes, C. lepidocarpa Tausch; but the heads are smothered in mould.—E.S.M. I believe this is what British botanists name lepidocarpa, but I have not seen a type specimen of Tausch's plant, and his description does not quite agree.—A.B.
- C. Œderi Retz., var. cyperoides Marss. (= C. chrysites Link). Shapwick Peat Moor, N. Somerset, v.c. 6, July 3, 1915.—H. S. Thompson. C. chrysites Link is merely a "nomen nudum." I think this is what Marsson describes in his "Fl. Vorpommen und Rügens."—A.B.
- C. lasiocarpa Ehrh. (= C. filiformis L.). Ashcott Peat Moor, N. Somerset, v.c. 6, July 8, 1915. (See "Jl. Bot.," Oct. 1915).—H. S. Thompson.
- C. hirta L., var. spinosa Mort. Boggy field, Wraxall, N. Wilts., v.c. 7, June 7, 1915.—Ida M. Roper. Correct.—E.S.M. Rightly named, I believe.—C.E.S.
- C. acutiformis Ehrh., var. Kochiana (DC.) (= C. spadicea Roth). Marsh between Cheddar and Draycott, N. Somerset, v.c. 6, May 19, 1897. Glumes of fertile spikes with a long, rough beak. This character is best observed in the less mature specimens, as, when ripe, the glume is brittle. The glumes of barren spikes differ also from those in type paludosa, being very generally cuspidate with beaks.—J. W. White.
- C. riparia Curt., forma. Bank of Frome, Iron Acton, W. Glos., v.c. 34, May 26, 1915. Many of the spikes are bifid or forked.—Ida M. Roper. Abnormal, but not a variety.—E.S.M. A luxuriant specimen with the lowest spike slightly branched.—E.F.L.

Phalaris arundinacea L., var. picta L. (Ref. No. 4149). Marsh at Lower Dounreay, east of Reay, Caithness, v.c. 109; with the type, in plenty, July 24, 1915. Besides the variegated foliage, it seemed to differ constantly in the amethystine hue of the flowers, in this locality.—Edward S. Marshall.

Anthoxanthum—aristatum Boiss. West Wood, near Hitchin, Herts., v.c. 20, June 5, 1915.—H. C. Littlebury. Correctly named.—C.E.S.

Mibora verna Beauv. Maelog Sands, Anglesey, v.c. 52, March 1915.—J. E. Griffith.

Agrostis alba L., var. maritima Meyer. (Ref. No. 145). On shore track, Harlech, Merionethsh., v.c. 48, Aug. 11, 1915. – W. C. Barton. All the panicles on my sheet are far too dry and "gone to hay" to examine with any degree of satisfaction.—C.E.S.

Ammophila baltica Link. Sand dunes north of Yarmouth, E. Norfolk, v.c. 27, June 26, 1915. The last edition of the "Lond. Cat." treats Ammophila baltica as an undoubted hybrid of A. arenaria; and as such a hybrid is included in the Club's List of Desiderata these specimens are contributed. The status of A. baltica was presumably determined in Northern Europe, where possibly it occurs in company with both its reputed parents. In this country, however, on the coast of Norfolk at least, Mr. C. E. Salmon and I have, during the past summer, carefully noted the range and associations of A. baltica, without perceiving anything suggestive of a hybrid origin, and we did not meet with a single plant of Calamagrostis epige?os whilst botanising in the county. J. W. White.

Koeleria vallesiana Asch. & Graebn. Limestone rocks near Bleadon, N. Somerset, v.c. 6, July 5, 1915. (See "Jl. Bot.," 1905, p. 313).—H. S. Thompson.

Catabrosa aquatica Beauv., var. (Ref. No. 4152). Wet sands, Dunnet Bay, Caithness, v.c. 109, Aug. 3, 1915. It seems to come under var. subtilis Hooker "Engl. Fl.," ed. 4, p. 36 (1838) [var. littoralis Parnell (1842); var. minor Bab. (1843)]. Mr. F. J. Hanbury and I gathered it hereabouts in 1886, but much stronger; Prof. Hackel then named it "forma grandiftora," but it is more than a form. Prof. Babington identified it as his var. minor. Perhaps owing to the long drought, this year, it was remarkably small, and appeared to be annual; as a rule, several plants grew matted together; prostrate.—Edward S. Marshall. I believe this to be var. uniflora Gray (Nat. arr. II., 133,

1821)—"Locustae 1-flowered; flowret sessile." It is also, probably, var. subtilis Hook., but I cannot find the correct reference to the description. That given by Ascherson & Graebner will not work. One finds there ("Brit. Fl." ed. 4, 36, 1838)—"Mr. Wilson finds in the wet sand of the north shore at Liverpool, a var. not two inches high, each calyx containing in general but one perfect flower." This note is found, word for word, in ed. I., 35, 1830. Mr. Marshall's plant appears to be, also, the var. littoralis Parn. and the var. minor Bab. Syme ("E.B." ed. 3) remarks—"Sometimes, when growing on wet sand by the sea, the stems are only two or three inches high and the spikelets are commonly 1-flowered, but it seems impossible to draw a line of demarcation between this and the ordinary form."—C.E.S. This little plant has had a good many names attached to it:

*C. aquatica, var. uniflora Gray, Nat. arr. Brit. Pl., 133, (1821).

* *Poa airoides, var. uniflora Gaudin, Fl. Helv. 1, 236, (1828).

C. aq., var. subtilis Hooker, Brit. Fl., ed. 4, 36, (1838).

C. aq., var. littoralis Parnell, Brit. Gras. t. 102, (1842).
 C. aq., var. minor Babington, Man. ed. 1, 266, (1843).

C. aq., β littoralis Kittel, Tasch. Fl., Deutschlands, ed. III., 102, (1844).

* I am not quite sure if these are really the same though Hackel named some of my specimens uniflora.—A.B.

Poa palustris L. By pond in disused brickfield, near Sandhurst, E. Glos., v.c. 33, July 21, 1909.—Coll. Rev. H. P. Reader. Comm. A. R. Horwood.

Glyceria distans Wahlb., var. prostrata Beeby. Inland form. Coleman Road, Leicester, v.c. 55, July 1915. Prof. Hackel named this the type, but I prefer to place it under Beeby's variety, which refers to the habit of the plant. The Coleman Road plant was prostrate to decumbent, and not erect like the maritime type, nor other inland (Leics.) plants I have seen.—A. R. Horwood.

Bromus madritensis L. Roadside near Hotwells, Bristol, W. Glos., v.c. 34, June 16, 1915.—H. S. Thompson.

B. tectorum L. Waste ground, Brislington, N. Somerset, v.c. 6, May 21, 1915.—Ida M. Roper. Yes.—E.S.M.

B. hordeaceus L., var. glabratus. Field border, Tickenham Hill, N. Somerset, v.c. 6, June 5, 1915.—Ida M. Roper. Var. leptostachys Beck (B. mollis L., var. leptostachys Pers.; var. glabratus Doell; var. glabrescens Coss. & Germ.).—E.S.M. I agree, var. glabratus.—E.F.L.

Brachypodium pinnatum Beauv., var. pubescens Gray. Little Malvern, Worcs., v.c. 37, Aug. 18, 1915.—A. J. Crosfield.

Chara aspera Willd., var. subinermis Kuetz. (fide J. Groves). Frensham Little Pond, Surrey, v.c. 17, Sept. 1915.—J. Comber. The var. subinermis is a weak unstable form. In the present specimens some of the stems have the spine-cells shorter than the diameter of the stem, while others produce them of normal length.—J.G.

- C. polyacantha Braun. Walton Moor, N. Somerset, v.c. 6, Sept. 10, 1903.—J. W. White. A small weak form similar to that distributed from the same locality in 1904. (See B.E.C. Rept., 1904, p. 40).—J.G.
- C. hispida I. (Ref. No. 4154). Small pool on the coast, east of Reay, Caithness, v.c. 109, July 24, 1915. Named by Mr. James Groves. I had not seen this before in N. Scotland.—Edward S. Marshall.
- C. hispida L., var.? Ken Moor, N. Somerset, v.c. 6, Sept. 14, 1904.—J. W. White. C. hispida, a small form, not sufficiently well-marked to separate as a variety.—J.G.
- C. vulgaris L. (1) Still water form, Crown Hill, Leics., v.c. 55, Sept. 1905. (2) Running water form, Scraptoft, Leics., v.c. 55, June 3, 1905. Mr. J. Groves calls the Crown Hill plant a long-bracted form. I thought that an example to show the great difference in form and habit of the plant when growing in still and running water would be of interest.—A. R. Horwood. (3) (Ref. No. 4153). Growing in a fountain at Thurso Castle, Caithness, v.c. 109, in several feet of clear water, August 3, 1915. Bright green, elongated, doubtless owing to the depth. Mr. J. Groves writes:—"C. vulgaris—an extremely pretty form. I do not know any precise varietal name to fit to it; but the species is endlessly variable."—Edward S. Marshall.

SUBSCRIPTIONS, 1915.

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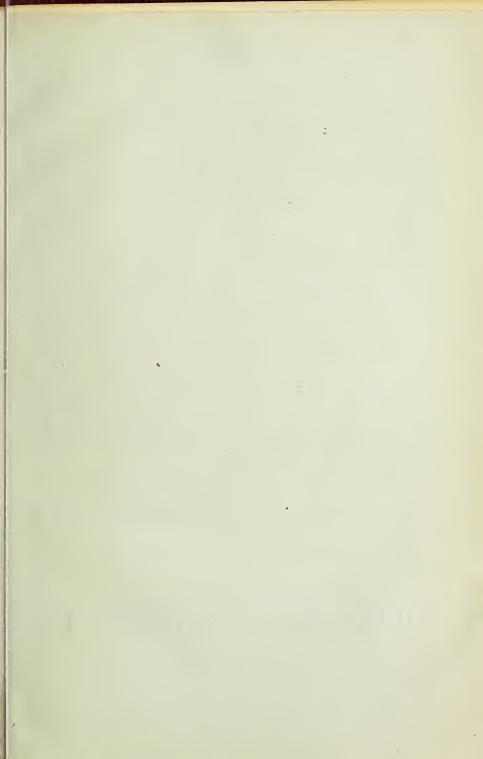
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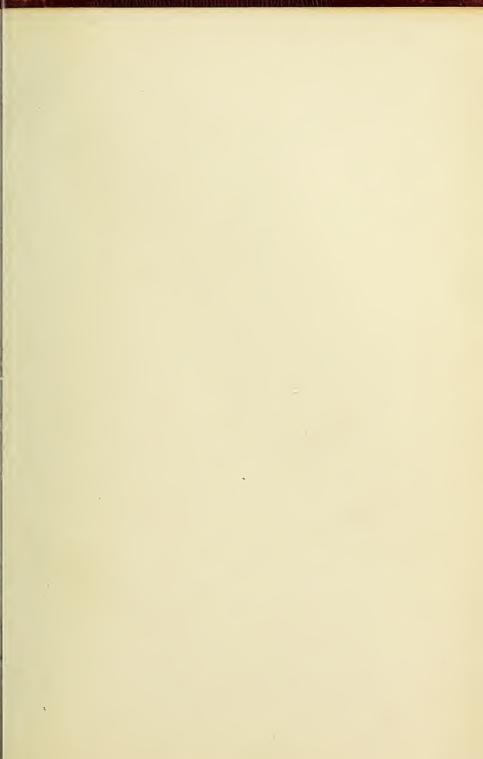
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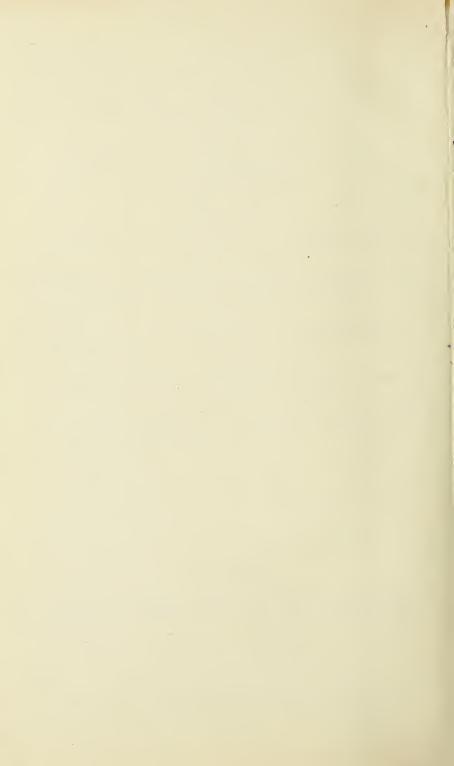


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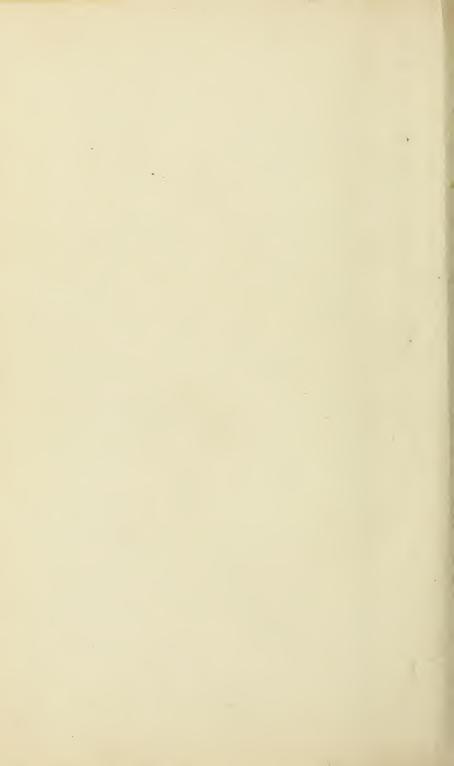
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