



THE  
BOTANICAL EXCHANGE CLUB  
OF THE BRITISH ISLES.

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REPORT FOR 1907.

BY THE EDITOR AND DISTRIBUTOR,  
THE REV. H. J. RIDDELSDELL, M.A.,  
ST. MICHAEL'S COLLEGE,

LLANDAFF.

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The Subscription, 7/6 per annum, and Non-contributing Members' Subscription of 5/- per annum, should be paid to the Treasurer,  
G. CLARIDGE DRUCE, M.A., F.L.S.,  
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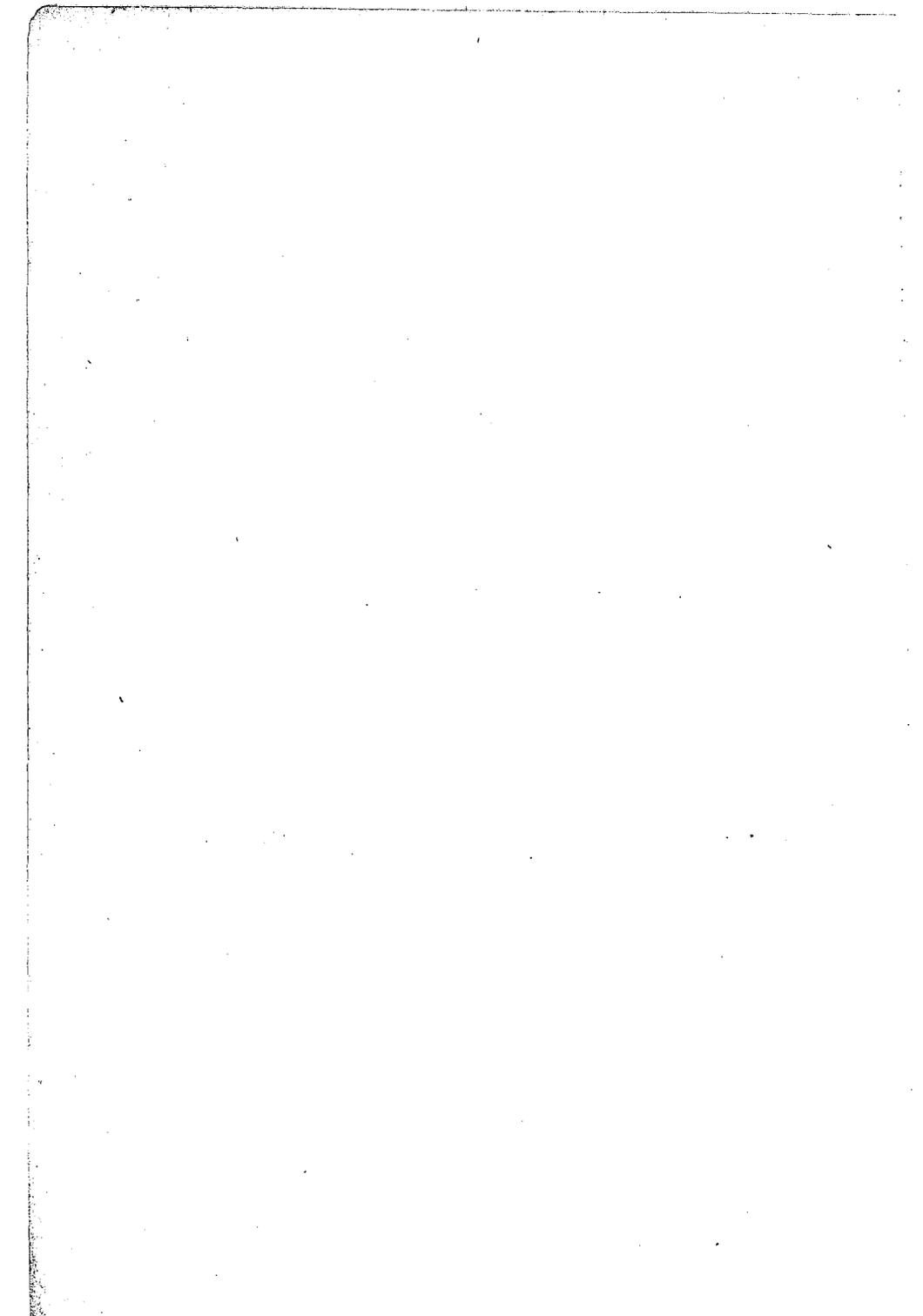
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Parcels for 1908 should be sent post paid in December to  
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# THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

## THE REPORT OF THE TREASURER AND SECRETARY FOR 1907.

I BEG to say that the financial report is satisfactory.

### *BALANCE SHEET FOR 1906.*

	<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
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					<u>£26</u>	<u>3</u>	<u>8</u>

Balance in hand of Treasurer, G. Claridge Druce, Yardley Lodge, Oxford, £4 19s. 8d. To him all subscriptions should be paid on the first of January in each year; of 7s. 6d. for each member who contributes and receives specimens; of 5s. for each non-contributing or corresponding member, who receives a copy of the Reports only.

Members may have a complete set of the *Reports* for the years 1879—1900 for 12s. 6d. post free, odd copies 1s. each, three for 2s. 6d., and from 1901-6 at 1s. 6d. post free.

Among the chief items of interest in British Botany of the year 1907 are the following :—

BERBERIS VULGARIS × AQUIFOLIUM. Described by the Rev. E. S. Marshall from a plant noticed in Somersetshire 'Journ. Bot.' 1907, p. 393.

CERASTIUM VULGATUM, L., var. OBTUSUM, Druce. A tall rigid plant with clustered cymes, short capsules and shorter, broader and less acuminate sepals. St. Aubin's, Jersey.—G. CLARIDGE DRUCE.

SPERGULA ARVENSIS, L., var. NANA, E. F. Linton. From Guernsey ('Journ. Bot.' p. 380, 1907). Distributed this year.

HYPERICUM HUMIFUSUM, L., var. LIOTTARDI, Vill. At Darenth in Kent, and West Kirby in Cheshire. E. Drabble in 'Journ. Bot.' p. 212, 1907.

TRIFOLIUM PRATENSE, L., var. AMERICANUM, Harz. Pointed out by Dr. Domin; it is a robust plant with a copious patent pubescence on the stems, and appears to be widely distributed. It is what I recorded as var. *expansum* from Forfar, in 'Ann. Scot. Nat. Hist.'—G. CLARIDGE DRUCE.

VICIA SATIVA, L., var. CANESCENS, Druce. Leaves and stems covered with a dense hoary pubescence. Among turf, Bouley Bay, Jersey. G. Claridge Druce ('Journ. Bot.' p. 420, 1907).

V. ANGUSTIFOLIA, L., var. GARLANDII, Druce. See 'Flora of Jersey,' p. 101, and 'Journ. Bot.' l.c.—G. CLARIDGE DRUCE.

RUBUS LACUSTRIS, Rogers ('Journ. Bot.' p. 9, 1907). Found in some quantity in the English Lake district, as about Patterdale, W. Langdale, between Coniston and Ambleside, Threlkeld, and by Thirlmere and Derwentwater.

POTENTILLA VERNA × CRANTZII. Fairly intermediate, with larger blossoms than *verna*. On the limestone at Grassington, Yorkshire, whence both species are recorded. June 1906.—G. CLARIDGE DRUCE.

BRITISH ROSES OF THE MOLLIS-TOMENTOSA GROUP are treated in a Paper by the Rev. A. Ley in 'Journ. Bot.' p. 200, 1907, in which *R. submollis*, Ley, *R. omissa*, Déségl., and *R. pseudo-rubiginosa*, Ley, among others are described.

SAXIFRAGA HYPNOIDES × TRIDACTYLITES = × S. FARRERI, Druce. Discovered by Mr. Reginald Farrer on Ingleborough, and showing evidence of both parents. I saw *S. tridactylites* growing near the locality where Mr. Farrer gathered it. He has it in

cultivation at his rock-garden at Clapham, Yorks.—G. CLARIDGE DRUCE.

PICRIS HIERACIOIDES, L., var. INCANA, Druce. Densely aggregated capitula, the centre one much overtopped by the lateral. The outer phyllaries covered with a short greyish-white tomentum. Alderney. See 'Journ. Bot.' p. 423, and 'Linn. Soc. Rep.'

HIERACIUM BRITANNICUM, F. J. H., var. OVALE, Ley. Brecon, West York. ('Journ. Bot.' p. 109, 1907.)

H. CILIATUM, Almq., var. VENOSUM, Ley. Brecon. ('Journ. Bot.' p. 109.)

H. SERRATIFRONS, Almq., var. CINDERELLA, Ley, Gloucester, Hereford, Worcester, Salop, Glamorgan, Montgomery. ('Journ. Bot.' p. 109, 1907.)

H. PINNATIFIDUM, Lönnr. (*H. vulgatum*, var. *nemorosum*, Lindeb.) Carnarvon, Denbigh, Derby, Leicester, Easterness, Perth.

Var. VIVARIUM, Lönnr. Hereford, Carnarvon. ('Journ. Bot.' p. 110, 1907.)

H. CONSPERSUM, Dahlst. Lake Lancashire. W. R. Linton. ('Journ. Bot.' p. 111, 1907.)

H. SCANICUM, Dahlst. Very near *H. irriguum* according to the Rev. W. R. Linton. Area general. Only a slight variety. ('Journ. Bot.' p. 111, 1907.)

H. ANFRACTUM, Fr., sub. sp. CACUMINATUM, Dahlst. Our *H. sciaphilum* to a great extent is represented by this form.

Var. BARBAREAEFOLIUM, Dahlst. Gloucester, Hereford, Brecon, Glamorgan, Derby. ('Journ. Bot.' p. 111, 1907.)

H. ORNATUM, Dahlst. Carnarvon. W. R. Linton. But Dahlstedt says *in litt.* "a form approaching *ornatum*." ('Journ. Bot.' p. 112, 1907.)

LEONTODON NUDICAULIS, Mérat [*L. HIRTUM*, L.], var. ARENARIA (DC). See 'Journ. Bot.' p. 423, 1907. Jersey, Guernsey, Alderney.

Var. PRISTIS, Druce. A densely hairy, sub-simple plant, with strong taproot, the leaves deeply repand-runcinate, covered with long shaggy hairs at base and sub-glabrous phyllaries. Guernsey, Alderney. ('Journ. Bot.' l.c. and 'Rep. Linn. Soc.')

—G. CLARIDGE DRUCE.

TARAXACUM SPECTABILE, Dahlst. Shetlands. W. H. Beeby in 'Ann. Scot. Nat. Hist.' p. 169, 1907. Allied to *T. palustre* DC.

STATICE PLANTAGINEA, All., var. BRACTEATA, Druce. Common on the Quenvais. See 'Journ. Bot.' p. 424, 1907.

RHINANTHUS GROENLANDICUS, Chabert. Unst. W. H. Beeby in 'Ann. Scot. Nat. Hist.' p. 234, 1907.

EUPHRASIA VIGURSII, F. H. Davy. Porth Towan. Between New Quay and Perranporth, Cornwall, and Roborough Downs, near Yelverton, Devon. Found by our Member, Dr. Vigurs. Allied to *E. Rostkoviana*. ('Journ. Bot.' p. 217, 1907, with plate, t. 486.)

OROBANCHE RITRO, Gren. & Godr., var. HYPOCHAEROIDES (Beck) as forma. A most beautiful and distinct plant, of a bright citron-yellow colour, very glandular. Its nearest ally is *O. elatior*, Sutt. St. Ouen's, Jersey. See 'Journ. Bot.' p. 425, 1907, and 'Rep. Linn. Soc.' The type is only recorded from Marseilles.

—G. CLARIDGE DRUCE.

O. MINOR, Sm., var. CONCILIATA. (Beck as forma). "Corolla excepta basi alba amethystino-violacea, squamae calycis cum cauli purpurascens." Miss M. C. Murray. 'Ann. Scot. Nat. Hist.' p. 253, 1907.

ULMUS SATIVA, Mill., var. LOCKII. A graceful tree with small rather narrow leaves, and very distinct habit. Is frequent about Fine-shade and other parts of Northamptonshire, and is known there as Lock's Elm.—G. CLARIDGE DRUCE.

Forms of Potamogeton new to Britain, by Arth. Bennett ('Journ. Bot.' 172, 1907), include :—

2512 bis. POTAMOGETON VAGINATUS. Turcz. 'Cat. Baic. Dah.'

n. 1092. Allied to *P. pectinatus*, L. Tingwall Loch, Shetland. W. H. Beeby. See also 'Ann. Scot. Nat. Hist.' p. 235, 1907.

2489. *P. GRACILIS*, Wölg. Westmeath and Longford. (? *P. alpinus* × *gramineus*.)

2493. *P. TISELII*, Richter (*P. gramineus* × *natans*). Westmeath and Longford. It is the *P. fluitans*, 'Irish Top. Bot.' p. 318, 1901.

2495. *P. NITENS*, Weber, var. *MAXIMUS*, Ar. Benn. East Perth, Mid Ebudes. New in name only, it is the var. *latifolius*.

2508. *P. PUSILLUS*, L., var. *ACUMINATUS*, Ar. Benn. Stirlingshire.

2512. *P. PECTINATUS*, L., var. *SALINUS*, Voch. (var. *pseudomarinus*, Ar. Benn.) Norfolk.

2493. *P. INTERMEDIUS*, Tiselius (*P. heterophyllus*, var. *intermedius*, Ar. Benn.) Orkney.

2501. *P. UNDULATUS*, Wölg. See 'Ann. Scot. Nat. Hist.' p. 104, 1907 (*praelongus* × *crispus*).

*P. ALPINUS* × *PRAELONGUS*? Odiham, Hants. C. E. Palmer. = × *P. Palmeri*, 'Brit. List.'

*P. ALPINUS*, Balb., var. *LACUSTRIS*, Marss. Lunan Burn, Perth.

2499. *P. UPSALIENSIS*, Tiselius. From the Earn above Fort Eviot, W. Perth. A. Sturrock. Near × *P. decipiens*, Nolte.

× *P. MACVICARII*, Ar. Benn. = *P. praelongus* × *polygonifolius*, Moidart. Argyll. S. M. Macvicar. 'Ann. Scot. Nat. Hist.' p. 106, 1907.

*AGROSTIS CANINA*, L., var. *LAEVIS*, Hackel *in litt.* Found on Brandon Mountain, Kerry, in Sept. 1906. See 'Irish Naturalist,' p. 152, 1907. Differt a typo foliis omnibus planis latiusculis (circ. 2 mm. latis) prorsus laevibus, paniculae ramis spicularumque pedicellis laevibus, spiculis majusculis.—G. CLARIDGE DRUCE.

GLYCERIA MARITIMA, Wahl., var. FOUCAUDII, [Hackel], as *Atropis Foucaudii* in Husnot 'Gramina,' p. 49, 1896, recorded from the coast near Grain, West Kent, Mudeford, Hants, and Auginish Island, Co. Limerick. See note by E. S. Marshall in 'Journ. Bot.' p. 210, 1907.

TRITICUM PEREGRINUM, Hackel. A newly described Alien Species found by our member Mr. Fraser, near Edinburgh. 'Ann. Scot. Nat. Hist.' p. 101, 1907.

DRYOPTERIS REMOTA (Braun.) has been reported from Lomond in Scotland by W. B. Boyd. See 'Trans. and Proc. Edinburgh Botanic. Society,' xxiii. p. 281.

CYSTOPTERIS FRAGILIS, Bernh., var. SEMPERVIRENS. From Corrie Ceann-mor, S. Aberdeen. W. Young. 'Proc. Soc. Bot. Edin.' xxiii. (1906), pp. 192—194.

DEVEUXIA STRIGOSA, Kunth. This (as I suggested in the 'British Plant List') must be now removed from our British species. The Caithness plant which I have collected in all its known localities must be referred teste Prof. Hackel to *D. neglecta*, Kunth. The true *strigosa* is now usually considered to be *D. neglecta* × *Calamagrostis epigeios*. The latter species does not now occur in North Scotland.—G. CLARIDGE DRUCE.

Among the recent publications (up to 1907) interesting to our members may be mentioned the following:—

'List of British Seed-Plants and Ferns.' Exhibited in the Department of Botany, British Museum (Natural History), by A. B. Rendle and James Britten. pp. 44. London. Printed by order of the Trustees of the British Museum, 1907, price 4d.

'The Dillenian Herbaria': An account of the Dillenian Collections in the Herbarium of the University of Oxford, together with a Biographical Sketch of Dillenius, Selections from his Correspondence, Notes, &c., by G. Claridge Druce. Edited with an Introduction by S. H. Vines, M.A., Sherardian Professor in the University, Oxford: at the Clarendon Press. 1907, 8vo. pp. cxii, 258, with portrait, price 12s. 6d.

'The Flora of Glamorganshire,' by our member the Rev. H. J. Riddelsdell, M.A., has appeared as a 'Supplement' to the 'Journal of Botany' during the year, and is issued as a separate work at 2s. 6d. pp. 88. It forms a concise and excellent account of enormous personal work. His interesting discovery of a new variety of the rare *Liparis Loeselii* has already been mentioned in these pages.

Another work on the Flora of the same County is being prepared by our member, Prof. A. H. Trow, D.Sc., F.L.S.

'The Flora of Sussex,' by the late Rev. F. H. Arnold, LL.D. pp. 154, 4s. 6d., Mitchell and Co., Arundel, adds but little to the matter given in the preceding edition, and a complete Flora of the County on more modern lines is still a desideratum.

'The Flora of West Lancashire.' J. A. Wheldon, F.L.S., and Albert Wilson, F.L.S. pp. 511. 1907, 12s. 6d. Our members must be heartily congratulated upon producing this handsome volume, which shows the distribution of 797 native species of Phanerogams and Higher Cryptogams, 44 Colonists, and 31 Denizens, through that interesting vice-county. In addition there are about 100 Aliens mentioned. Five additional native species are given at the end. The Mosses, 332, and Hepaticae, 100, and 309 Lichens are also included, and the work is illustrated by 15 beautiful reproductions of photographs, taken by Mr. Wilson, of plants in situ, &c. An excellent introduction treating of the species enumerated from an oecological standpoint is given.

'The Trees of Great Britain and Ireland,' H. J. Elwes, F.R.S., and A. Henry, M.A. Vol. ii., 1907. Privately printed, £3 3s. In this volume *Quercus Robur* and *Q. sessilis* (under the name *Q. sessiliflora*, Salisb.) are described, and it is satisfactory to find these two distinct species kept apart. The Horse-chestnut is said to have been first grown at Vienna in 1576 from seeds sent from Constantinople. *Larix decidua*, Mill. (under the name *L. europaea* DC.) and *Pinus Laricio*, Poir, which now is self-sown at Holkham, Norfolk, are also among the species described, and beautifully illustrated.

'Wild Flowers of the British Isles,' H. Isabel Adams. Revised by our member J. Bagnall, A.L.S. Ranunculaceae to Compositae,

4to., pp. xvi., 168. 30s. nett. Heinemann and Co. 75 coloured plates.

The year 1907 has deprived us of two members by death, and the Botanical world is poorer by their loss, and by that of the other botanists mentioned below :—

HENRY BROMWICH, eldest son of Wm. Bromwich, gardener, was born at Warwick on Mar. 10, 1828, and died in the adjoining parish of Milverton on May 28, 1907. He was early interested in Botany, and while young took a number of prizes for his collections of wild flowers at the local horticultural shows. He was for some years gardener at Wroxall Abbey, the seat of Miss Wren (a descendant of Sir Christopher Wren), where he gained much of his botanical knowledge, the neighbourhood, especially Yarningdale Common, being rich in uncommon species. For many years he was a member of the *Botanical Exchange Club*, and he rendered material aid, which is warmly acknowledged, to Mr. Bagnall, when preparing the 'Flora of Warwickshire.' Mr. Bromwich also for some years was honorary curator to the Botanical Department of the Warwick Museum, to which institution he expressed a wish his own Herbarium should be given. In the 'Report' of that Museum in 1904 the botanical collection is referred to as one of the best in the provinces, 'the Warwickshire plants are represented by a special collection, the work chiefly of Mr. Bromwich, a well-known and experienced local botanist, who still contributes to its further development.'

ALEXANDER SOMERVILLE, born in Glasgow, 1842, the son of an eminent Missionary, Dr. A. N. Somerville, died there at Hillhead on June 5, 1907. His early years (after three years at the University) were spent in business in that city, and also at Calcutta, where he lived fifteen years. On his return he graduated B.Sc. He was an enthusiastic worker at the marine fauna of Western Scotland, a member of the Conchological Society, and also one of its referees for Marine Mollusca, and was three years its President, and was also at one time President of the Glasgow Natural History Society, and many of his papers appeared in its *Transactions*. He was elected a Fellow of the Linnean Society in 1881. He greatly interested himself in the Topographical Botany of Scotland, at which he did much excellent work. For many years he was a valued

member of this Club, his specimens being always very carefully prepared. He also contributed papers to the Botanical Society of Edinburgh. He had a charming personality, and was an excellent correspondent. See 'Ann. Scot. Nat. Hist.,' p. 195, 1907, where there is a portrait.

EDWARD ARTHUR LIONEL BATTERS, born at Enfield, Dec. 26, 1860, died at Gerrard's Cross, Bucks, Aug. 11, 1907, educated at King's Coll. School, London, and Trinity Hall, Cambridge. Published in 1890 in the 'Annals of Botany' with E. M. Holmes a 'Revised List of the British Marine Algae,' and in 1902 the 'Catalogue of the British Marine Algae' as a 'Supplement to the Journ. Bot.' His herbarium consists of upwards of 10,000 British specimens. *Battersia* was established by Reinke in 1890 in his honour.

OTTO KUNTZE, died Jan. 28, 1907, in his 64th year at San Remo. He was a good systematist as well as a profound student of Botanical Nomenclature. He was a chemist by profession, and he published as long ago as 1867 his 'Flora of Leipzig' and a critical revision of the German 'Rubi.' He monographed the genus *Clematis* in 'Verhandlungen der Prov. Brandenburg.' His important work 'Revisio Generum Plantarum' was issued in 1891-8, and included not only his views on nomenclature, which aroused a strenuous opposition, but also a description of the numerous species noticed on his foreign travels. In 1904 he, in conjunction with Dr. Post, issued a valuable botanical 'Lexicon,' and numerous contributions, chiefly of a polemic character, have been made from time to time. His views did not receive the respect they should have met with at the Vienna Congress, about which he spoke with no bated breath. He had an important library at his pleasant villa at San Remo, where, although very deaf, he was a kind and interesting host. His copies of the rare first edition of Linnaeus' 'Species Plantarum,' and the still more scarce 'Systema' of 1735, have been acquired by the library of the Oxford Botanic Gardens.

MAXWELL T. MASTERS, F.R.S., born at Canterbury, April 15, 1833, died at Ealing, May 30, 1907, educated at King's College, London, M.D., Sub-Curator of the Fielding Herbarium at Oxford,

Lecturer on Botany at St. George's Hospital, 1855-68, Co-Editor 1865, and Editor, 1887, et sequente of the 'Gardener's Chronicle.' He contributed largely to the 'Linnean Transactions' and 'Journal,' to the 'Journal of Botany,' &c., and by British botanists he will also be remembered for his paper 'On the Flowering Plants and Ferns of Oxfordshire and the contiguous Counties,' which he contributed to the Ashmolean Society in 1857, and especially by his work on 'Vegetable Teratology,' which was published in 1869 by the Ray Society. His name is perpetuated in *Mastersia*, Benth., a Leguminous genus. His geniality and kindness impressed any one with whom he came in contact. He was a corresponding member of the Institute of France. See 'Gard. Chronicle,' June 8, 1907, with portrait, and 'Journ. Bot.,' p. 258.

RACHAEL F. THOMPSON, born at York 1856, died at Southport Dec. 9, 1906, was a grand-daughter of John Tatham of Settle, whose records of plants she contributed to Lees' 'Flora of West Yorkshire.' She assisted in the preparation of the ninth edition of the 'London Catalogue,' and drew up the excellent account of the *Hieracia* for Groves's edition of 'Babington's Manual.' See 'Journ. Bot.,' p. 78, 1907.

#### G. CLARIDGE DRUCE.

Mr. W. Bell, of Knighton Road, Leicester, has kindly consented to act as Distributor and Editor of the 'Report' for 1908. All plants should be sent to him in December 1908.

Mr. E. W. Hunnybun, Mill Common, Huntingdon, who is making a most beautiful series of drawings of British plants, would be very much obliged if members would assist him in obtaining some of his *desiderata*, a list of which, with other information, will be gladly supplied by him. He will defray the cost of transmission and supply tins for the plants.

By the kindness of C. Bailey, Esq., we are enabled to have the benefit of the accompanying reproductions of his photographs of *Oenothera*.

## ADDITIONAL DESIDERATA FOR THE YEAR 1908.

COMPILED BY THE SECRETARY.

- Berberis vulgaris* × *Aquifolium*.  
*Silene latifolia* × *maritima*.  
*Cerastium vulgatum*, L., var. *obtusum*, Druce.  
*Viola tricolor*, L., var. *polychroma*, Borbas.  
 — *arvensis*, Murr., var. *derelicta* (Jord.).  
 ————— var. *contempta* (Jord.).  
 — *lutea*, Huds., var. *multicaulis*, Koch.  
*Spergularia arvensis*, L., var. *nana*, Linton.  
*Hypericum humifusum*, L., var. *Liotardi*, Vill.  
*Trifolium pratense*, L., var. *americanum*, Harz.  
 ————— *leucochraceum*, Aschers. and Prantl.  
*Vicia sativa*, L., var. *canescens*, Druce.  
*V. angustifolia*, Reichard, var. *Garlandii*, Druce.  
*Potentilla argentea*, L., var. *dissecta*, Wallr.  
 ————— *verna* × *Crantzii*.  
*Rosa mollissima*, Willd., var. *pseudorubiginosa* (Lej.).  
 — *omissa*, Déségl.  
 — *villosa*, L., var. *submollis* (Ley).  
 ————— var. *recondita* (Puget).  
*Saxifraga hypnoides* × *tridactylites* = × *S. Farreri*.  
*Senecio nebrodensis*, L.  
*Picris Hieracioides*, L., var. *incana*, Druce.  
*Hieracium*, *Schmidtii* Tausch, var. *fealense*, Beeby.  
 ————— *britannicum*, F. J. H., var. *ovale*, Ley.  
 ————— *ciliatum*, Almq., var. *venosum*, Ley.  
 ————— *serratifrons*, var. *cinderella*, Ley.  
 ————— *pinnatifidum*, Lönn., var. *vivarium*, Ley.  
 ————— *scanicum*, Dahlst.  
 ————— *anfractum*, Fr., var. *cacuminatum* (Dahlst.).  
 ————— *barbareae-folium*, Dahlst.  
 ————— *ornatum*, Dahlst.  
 ————— *breve*, Beeby.  
 ————— *demissum*, var. *australe*, Beeby.  
 ————— *subtruncatum*, Beeby.  
 ————— *strictum*, Fr., var. *humile*, Beeby.  
*Hieracium crocatum*, Fr., var. *congestum*, Beeby.  
*Leontodon nudicaulis*, Mérat., var. *arenaria* (DC.).  
 ————— *pristis*, Druce.  
*Taraxacum spectabile*, Dahlst.  
*Statice plantaginea*, All., var. *bracteata*, Druce.  
*Rhinanthus groenlandicus*, Chabert.  
*Euphrasia Vigursii*, F. H. Davy.  
*Orobanche Ritro*, Gren. and Godr., var. *hypochaeroides* (Beck).  
 ————— *minor*, Sm., var. *conciiliata* (Beck).  
*Thymus glaber*, Mill.  
 ————— *ovatus*, Mill., var. *montanus* (W. and K.).  
 ————— *subcitratus* (Schreber).  
 ————— *praecox*, Opiz.  
 ————— var. *spatulatus* (Opiz).  
*Plantago lanceolata*, L., var. *depressa*, Rostr.  
*Polygonum aviculare*, L., var. *condensatum*, Beck.  
 ————— *erectum* (Lej and Court).  
*Ulmus sativa*, Mill., var. *Lockii*.  
*Potamogeton alpinus*, Balb., var. *lanceustris*, Marss.  
 ————— × ? *gramineus* = *P. gracilis*, Wolfg.  
 ————— × ? *praelongus* = *P. Palmeri*.  
 ————— *gramineus*, var. *intermedius* (Tisel.).  
 ————— × *natans* = *P. Tiselii*, Richt.  
 ————— *upsaliensis* Tiselius.  
 ————— *nitens*, Weber, var. *maximus*, Ar. Benn.  
 ————— *praelongus* × *polygonifolius* = *P. Macvicari*, Ar. Benn.  
 ————— × *crispus* = *P. undulatus*, Wolfg.  
 ————— *pusillus*, L., var. *acuminatus*, Ar. Benn.  
 ————— *pectinatus*, L., var. *salinus*, Voch.  
 ————— *vaginatus*, Turcz.  
*Glyceria maritima*, L., var. *Foucaudii* (Hackel).  
*Triticum peregrinum*, Hackel.  
*Polystichum angulare*, Presl., var. *Braunii* (Spenn.).  
*Cystopteris fragilis*, Bernh., var. *sempervirens*.

## REPORT OF THE DISTRIBUTOR FOR 1907.

APOLOGIES are due to members for a late appearance of the Report.

A large number of plants was sent for distribution: their quality and interest was on the whole high. Members seemed to appreciate the return parcels greatly.

The Distributor's work is, at the best, exacting of much time and labour. It is made much heavier, however, when members send their plants arranged otherwise than in the order of the London Catalogue, or do not supply enough labels. One parcel arrived without a separate sheet for each specimen; and the plants had to be *disentangled* from each other, and provided each with its own sheet. Notes on the plants were not always written on detached slips of paper, but sometimes on the enclosing cover. Specimens might often be better prepared: complaints have come from several quarters on this point. And generally, it would be a help to Distributors and Members if the rules of the Club were carefully observed.

The Club's thanks are due to many well-known botanists who have supplied notes: Messrs. E. G. Baker, H. W. Pugsley, E. F. Linton, E. Hackel, D. Fry, and many of our own members.

In Mr. Druce's absence from England, it remains for me to recall to members the great and irreparable loss which the Club has suffered by the death of the Rev. W. R. Linton, which took place on 4th Jan. of this year. We have had, however, the privilege of receiving the valuable series of plants which he collected in 1907, and annotated and prepared for distribution. We also have to record, with regret, another gap in our membership, caused by the death of Mr. Adair; a small parcel of his plants is distributed, through the kindness of Mr. Bailey.

H. J. RIDDELSDELL.

12 May, 1908.

## LIST OF THE PARCELS RECEIVED.

	No. of Specimens.
Bailey, C., <i>M.Sc.</i> , <i>F.L.S.</i> , Atherstone House, North Drive, St. Anne's- on-the-Sea ... ..	300
Bell, W., Knighton Road, Leicester ... ..	51
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Cumming, L., <i>M.A.</i> , Eastfield House, Rugby ... ..	38
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Ewing, P., <i>F.L.S.</i> , The Frond, Uddingston, Glasgow ... ..	48
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Gregory, Mrs., 34 Montague Road, Cambridge ... ..	28
Horwood, A. R., Corporation Museum, Leicester ... ..	63
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Ley, Rev. A., <i>M.A.</i> , Netherton, Brampton Abbots, Ross-on-Wye ...	971
Linton, Rev. W. R., <i>M.A.</i> ... ..	462
Marshall, Rev. E. S., <i>M.A.</i> , <i>F.L.S.</i> , West Monkton Rectory, Taunton ...	208
Melville, J. Cosmo, <i>M.A.</i> , <i>F.L.S.</i> , Meole Brace Hall, Shrewsbury ...	105
Painter, Rev. W. H., Stirchley Rectory, Shifnal, Salop ... ..	50
Peck, Miss, Avonhurst, Bathampton, Bath ... ..	29
Riddelsdell, Rev. H. J., <i>M.A.</i> , St. Michael's College, Llandaff ...	578
Rogers, Rev. W. M., <i>F.L.S.</i> , Chetnole, Grosvenor Road, Bournemouth West ... ..	110
Shoolbred, W. A., <i>M.R.C.S.</i> , <i>F.L.S.</i> , St. Ann's, Chepstow ... ..	27
Vigurs, C. C., <i>M.D.</i> , Newquay, Cornwall ... ..	362
Waddell, Rev. C. H., <i>M.A.</i> , Vicarage, Saintfield, Co. Down ... ..	17
Wheldon, J. A., <i>F.L.S.</i> , 60 Hornby Road, Walton, Liverpool ... ..	136
White, J. W., <i>F.L.S.</i> , Warnham, Woodland Road, Clifton, Bristol ...	171
Wilson, A., <i>F.L.S.</i> , <i>F.R.M.S.</i> , 4 Eaton Road, Ilkley, Yorks. ... ..	54
Wolley-Dod, Major A. H., Pyrmont, Common Road, Walton-on-Thames	84
Total	4,994

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*Thalictrum*, sp. River side, Erwood, Brecon, and Llanstephan, Radnor, 25th June and 15th July 1907. Same plant (origin Erwood, Brecon) cultivated, 13th September 1907. This *Thalictrum* has scattered glands on foliage, petioles, and inflorescence.—AUGUSTIN LEY.  
*Thalictrum*. Wye banks. I think this may be called *T. pubescens*, Schleich., which I have placed as a variety under the aggregate *T. minus*, L., though the specimen is very thinly glandular for that form. It appears to be shade-grown, a condition in which the surface of the leaflets is larger and the glands apparently less developed. In maturity *T. pubescens* has the fruits glandular as well as the other parts.—E. F. LINTON. *Thalictrum*, orig. Erwood. Very near *T. collinum*, Wallr., but as there appear to be a few glands even at this late state of growth, it may be *T. pubescens*, Schleich.—E. F. LINTON.

*T. flavum*, L., var. *sphaerocarpum*, Lej. Marshy lake side, Llangasty, Brecon, 30th Sept. 1907. Fruit well developed and nearly free from insect distortion: it is thought that this may be welcome to some members.—AUGUSTIN LEY. Yes, var. *sphaerocarpum* (Lej. and Court).—E. F. L.

*T. flavum*, L., var. *nigricans*, Jacq. Marshy meadow, Llangasty, Brecon, 26th June and 30th Sept. 1907. A few more specimens from the same spot as those sent last year, to assist in determining if possible this plant. Rev. E. F. Linton (in Rep. of Watson Club) is right in saying that this plant is densely caespitose. I am cultivating it in the garden, and hope to obtain by this means "honest fruit."—AUGUSTIN LEY. See 'Rep. B.E.C.' 1906, p. 208. What British Botanists have been calling var. *nigricans* is now in the 'Lon. Cat.' as var. *rufinerve* (Lej. and Court).—H. J. R.

*Ranunculus Drouetii*, F. Schultz, forma. Small road-side pool south of Trevemper, Crantock, West Cornwall, v.-c. 1, 7th and 25th June 1907. Messrs. H. and J. Groves write about this plant that it is a "difficult form approaching *R. trichophyllus* in some respects, but much nearer *R. Drouetii*, to which it is perhaps better referred."—C. C. VIGURS. Clearly right, I should say; a not uncommon, small-flowered form.—E. S. M.

*R. Baudotii*, Godr., forma. On brackish sandy mud at St. Columb Minor, Porth, West Cornwall, v.-c. 1, 18th and 21st June 1907. Messrs. Groves write of this plant that it is a "mud form of *R. Baudotii*, not *R. marinus*, Fries, which is a more distinct plant." It was named *R. marinus*, Fries, for me some years ago by a good botanist, and seems to agree with the description in Babington's Manual, Ed. IX., of that plant, for which of course the Editors are not responsible.—C. C. VIGURS. Only the *state* which this plant assumes when growing on mud; not a true variety.—E. S. M.

*R. tripartitus*, DC. Castle Killibury (alias Kelly Castle), near Wadebridge, East Cornwall, v.-c. 2, 19th June 1907. It was found here by Mr. Clement Reid in 1906. It was growing (when I saw it) in a small portion only of one of the two circular moats of this ancient earthwork situated on top of a knoll. The only possible origin of the plant in this situation would seem to be transportation of the seeds by birds. It existed in a very dense mass; the stems were inextricably entangled, and though fine, were comparatively strong. The segments of the submerged leaves were very slender, weak, and completely collapsing; all the floating leaves were yellowish-brownish-green, not at all the colour of *R. lutarius*, Bouv., and it seemed to me to be as distinct from *R. lutarius* as that plant

is from *R. hederaceus*, L.; I should not think anyone who knew *R. lutarius* would pass it by for that species. Messrs. H. and J. Groves have seen and passed some of Clement Reid's and of this gathering. *Vide*, 'Journ. Bot.', 1907, p. 452.—C. C. VIGURS. Also sent by S. H. BICKHAM.

*R. hederaceus*, L., var. *omiophyllus* (Ten.). Roadside pool a mile south-east of Newquay, West Cornwall, v.-c. 1, 16th and 21st June 1907. Messrs. Groves say—"In the direction of *omiophyllus*, but not the extreme form." The plants were rooted near the edge of the pool, and the stems floating for at least two feet; the flowers were few and small.—C. C. VIGURS. I believe so; but is this anything more than a luxuriant, submerged *state*? I doubt it.—E. S. M.

*R. acris*, L., var. *tomophyllus*, Rouy et Fouc. = *R. tomophyllus*. Jord. (*pro specie*). Pastures about Failand and Portbury, N. Somerset, July 1907. My friend Cedric Bucknall has joined me in a diligent endeavour to identify the forms of *R. acris* that grow about Bristol, with the idea of arranging them under the segregates described by Jordan and other continental botanists. Many gatherings have been made in every kind of situation, with care to secure representative roots, leaves and fruit. The specimens have been repeatedly examined and compared with descriptions, and also with such collections—by no means complete—as are contained in our National Herbaria. The result of this work—chiefly undertaken by my friend—stated shortly, is that we cannot consider any of the variations worthy to rank as distinct species. Of 'subspecies' I say nothing, for I have never been able to form a mental picture of that entity. As happens with other groups of critical plants, our British forms of *R. acris* cannot often be precisely collated with those known to grow on the continent. A few certainly agree fairly well with one or other of them, and a larger proportion can be named more or less uncertainly; but in the majority of cases puzzling cross-affinities are found to obtain, so that the plants cannot be allotted to any named variety, and sometimes not even to a particular section. The best that can be said of many of these *tomophyllus* specimens is that they are nearer to this than to anything else. Although sometimes classed as a secondary form under *Boræanus*, in its extreme state this plant is as far removed from the latter as from either of the other segregates.—JAMES W. WHITE. Yes, well marked; but would it not be better to subordinate it to *R. Boræanus* as var. *tomophyllus* (Jord.) Towns., as was done by Mr. Townsend in 'Journ. Bot.'? *R. Boræanus* and *tomophyllus* are connected by many intermediate forms, and are not even *subspecifically* distinct.—J. A. WHELDON. 'Lon. Cat.,' Ed. X., gives it as *R. acris*, L., var. *Boræanus* (Jord.),

*f. tomophyllus* (Jord.)—H. J. R. Evidently near Jordan's plant, but is it hairy enough? In any case, hardly more than a sub-variety of the same author's *R. Boræanus*, I believe.—E. S. M.

*R. acris*, var. *tomophyllus*, Jord.? Wyaston, S. Derby, 13th June 1907.—W. R. LINTON.

*R. acris*, L., subsp. *Boræanus*, f. *rectus*, Rouy et Fouc. = *R. rectus*, Boreau (*pro specie*). Pastures near Axbridge, North Somerset, 28th June, 1907. This form is rather common about Bristol, ranking in frequency next to *tomophyllus*, as far as can be judged at present. In England it seems difficult to lay hold of a character much relied upon by authors for the diagnosis of these plants, viz. the direction of the rootstock, whether oblique, horizontal or vertical. On continental specimens, however, I have seen roots such as I have never met with at home. Unless the plant grows in sand, peat, or similar loose soil, its root must obviously be liable to deflection by obstructions in its path, and the root-character will therefore be often obscured when a thin layer of earth overlies rock; or on stony roadsides. Nor does the rootstock take a direction in line with the aerial stem when plants spring from ditch-banks or other sloping ground. Thus one finds it difficult to make out clearly those forms which differ little from each other, save in the direction of their rootstocks, e.g. *Steveni* and *rectus*, which are instanced by Townsend; and the same hindrance lies in the way of a decision on many doubtful gatherings.—JAMES W. WHITE. This appears in 'Lon. Cat.,' Ed. X., as *R. acris*, L., var. *rectus* (Jord.)—H. J. R.

*R. acris*, var. *rectus*, Bor. Yeldersley Lane, S. Derbs., 13th June 1907. This was a robust plant growing in wet ground on the side of the lane.—W. R. LINTON. Not the *rectus* of Boreau.—J. W. WHITE.

*Glaucium phæniceum*, Crantz. It occurs in quantity over ground laid out in allotments at Canton, Cardiff, Glamorgan. Gathered Sept. 1907. It appears to seed freely.—H. J. RIDDELSDELL. Placed by Boissier as a var. of *G. corniculatum*, Curt. (i.e., var. *phæniceum*, DC.). It depends on the colour of the flowers.—E. G. BAKER.

Mr. Pugsley wishes it to be borne in mind that in most of Dr. Vigurs's specimens he has only seen samples of the Fumitories; he does not vouch for his remarks applying beyond the sheets which he actually saw.

*Fumaria purpurea*, Pugsley. Roadside at the top of the hill North of Trebellen, Cubert, v.-c. 1, West Cornwall, 30th Aug. and

14th Sept. 1907, and one specimen 11th May 1905. Confirmed by Mr. Pugsley.—C. C. VIGURS. Allotment gardens, Malvern, Co. Worcester, 23rd Sept. and 7th Oct. 1907. Mr. Pugsley has seen specimens gathered 23rd Sept., and those gathered 7th Oct. are from the same exact spot.—S. H. BICKHAM. Field between Lancaster and Caton, W. Lancs., Aug. 1907. "A weak shade grown form" of *F. purpurea*, teste Mr. H. W. Pugsley.—ALBERT WILSON.

*F. Boræi*, Jord. Cobo, Guernsey, July 1906. Named by Mr. Pugsley. One of the commonest species in the Channel Islands and occurring in Jersey, Guernsey, Alderney and Sark.—G. CLARIDGE DRUCE.

*F. Boræi*, Jord. Type?. Tillage near Erwood, Radnorshire, 25th June 1907.—AUGUSTIN LEY. Yes, type.—H. W. PUGSLEY.

*F. Boræi*, Jord., var. *serotina*, Clavaud. Victoria Gardens, Truro, v.-c. 1, West Cornwall, 25th July 1907. Fide Mr. Pugsley.—C. C. VIGURS.

*F. Boræi*, Jord., var. *serotina*, Clavaud. 1. Roadside N.W. of Tregair, St. Newlyn East, 27th June 1907 and 16th July 1907; 2, roadside East of Lescliston (alias Rosecliston) "watering," St. Newlyn East, 16th July 1907; 3, vegetable garden, Trevella, Crantock, 31st Aug. 1907, all v.-c. 1, West Cornwall; 4, vegetable garden, Yelverton, S. Devon, v.-c. 3 (the last confirmed by H. W. P.). Of No. 1 Mr. Pugsley says "probably correct, but the material is hardly sufficient to separate it from var. *muraliformis*." Of No. 2, "a slender form of *F. Boræi* type, I think." Of No. 3, "probably so but not certain in absence of fruits."—C. C. VIGURS.

*F. Boræi*, Jord., var. *serotina*, Clavaud (teste Pugsley). Fields near Halton, W. Lancs. (60), Sept. 1907.—A. WILSON and J. A. WHELDON.

*F. confusa*, Jord. Cobo, Guernsey, July 1906. Named by Mr. Pugsley. Widely distributed and frequent also in Sark and Alderney, and St. Ouen's and St. Helier's, Jersey, for which island it is a new record.—G. CLARIDGE DRUCE. The petals are dark-tipped; I think that it is the var. *hibernica*, Pugsley.—E. S. M. 'Lon. Cat.' Ed. X., names this *F. Bastardi*, Bor.—H. J. R.

*F. officinalis*, L. f. Tillage near Erwood, Radnor, with *F. Boræi*, Jord., 25th June 1907. Hardly differing from type, except in its large, deeply coloured flowers.—AUGUSTIN LEY. Yes.—H. W. PUGSLEY.

*Barbarea vulgaris*, R. Br. f. ?. Origin, Glais, Glamorgan (on colliery debris), cultivated 27th May and 9th July 1907. This curious form has the seed longer than broad, short spreading pods with not more than 2-3 seeds in each.—AUGUSTIN LEY. A form of *B. vulgaris* with imperfect fructification. The 1-3 seeded silicles are evidently not normal.—E. F. L. A distinct looking plant, striking features of which are the large yellow flowers and short nearly patent pods. Mr. J. R. Drummond and I compared this with Kew material and found that it came nearest to *B. taurica*, DC. Syst. 2, 207, a plant of Afghanistan and Cashmere, but Boissier, 'Fl. Orient.' I. 183, makes *B. taurica* a synonym of *B. arcuata*, Reichb., a plant which I do not pretend to understand. The description in the *Systema* is as follows:—*Barbarea foliis radicalibus et inferioribus pinnatipartitolyratis lobis terminalibus foliisque summis ovatis dentatis, pedicellis patulis, siliquis adscendentibus*. The label conveys no information as to whether this was an alien or not, but the abortive condition of many of the pods in my specimen is an indication of foreign origin. An examination of the *Barbarea* specimens preserved at Kew makes it clear that a revision of this difficult genus is desirable, but this would not be possible without a careful study of the living plants.—A. B. JACKSON. '*Barbarea vulgaris*, Br.' now appears in 'Lon. Cat.' as *B. vulgaris*, Ait.—H. J. R.

*B. vulgaris*, Br., var. Near Aberdare, June 1904 and 1905, and cult. from seed, Llandaff, Glam., 1907. Flowers small; silicles slenderer than in type, and in cultivation spreading, though in the wild state nearly adpressed. Does a name already exist for the variety? It is not var. *decipiens*, Druce ('Fl. Berks,' p. 44), which does not cover this small fld. form.—H. J. RIDDELSDEL. Is *B. vulgaris*, Br.—E. F. L. i.e., *B. vulgaris*, Ait.—H. J. R. I should cross out the var. Allowing for a certain amount of variation, I do not see how it differs from the plant usually recognised as *B. vulgaris* type.—A. B. JACKSON. Mr. Jackson adds in a subsequent letter, "I believe that the material preserved under" *B. vulgaris* "at Kew includes two if not three different plants. . . . The direction taken by the pods both when young and mature seems very variable. I find a small flowered plant very much like yours in habit but having the young pods spreading, collected by the late Mr. C. B. Clarke near Andover. This also is named *vulgaris*."

*B. stricta*, Andr. Banks of the Thames near Richmond (*locus classicus*), June and July 1907. This is associated with *B. vulgaris* in the locality named but is remarkably distinct from it, and no intermediate plants were noticed. The stiff erect hairs which are present on the young sepals of *B. stricta* afford a useful distinguishing character not mentioned in British floras. In *B. vulgaris*

the sepals are quite glabrous. See 'Journ. Bot.,' April 1908, where Messrs. T. A. Sprague and J. Hutchinson publish a valuable paper on the differences between these two species.—A. B. JACKSON.

*Sisymbrium hispanicum*, Jacquin. On made ground in St. Philip's Marsh, Bristol, 10th July 1907. A plant of the Pyrenées and Central Spain that has been with us several years in succession although it does not appear to form good fruit.—JAS. W. WHITE.

*S. Columnæ*, Jacq., = *S. orientale*, Linn., var. *stenocarpum*, Rouy and Fouc. On the sites of old poultry runs on the sandhills off the North Drive, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 6th and 20th July, and 3rd and 31st August 1907. My contributions to the Club this season are aliens which have been introduced in grain siftings and sweepings upon which poultry are fed. As building operations extend the fowls are removed, and on the site of their old feeding grounds seeds of foreign plants germinate, and by the time that they flower and fruit builders' or other traffic destroys them. I have collected many other aliens, some of which shall be sent next year, as all their names are not yet worked out. The *S. Columnæ* was widely spread over the area bounded by St. Leonard's Road, St. Andrew's Road South, Beach Road, and the North Drive. Its narrow fruits bring it under Rouy and Foucaud's var. *a. stenocarpum*. ('Flore de France,' ii. p. 21.) —CHARLES BAILEY.

*Erysimum perfoliatum*, Crantz, = *Conringia orientalis*, Andrz. This is another of the St. Anne's-on-the-Sea aliens occurring, in isolated examples, in the same stations as *Sisymbrium Columnæ*, noted above. Flowering and fruiting examples on the 6th and 23rd July 1907, growing in the shade of luxuriant examples of *Sinapis nigra*, Linn.—CHARLES BAILEY. *E. orientale*, Mill.—H. J. R.

*Sinapis juncea*, Linn. This plant was under observation throughout the season. It grew on the margin of a cindered passage-way between the North Drive and St. George's Gardens, St. Anne's-on-the-Sea (v.-c. 60), along the side of Atherstone House. At first I took it to be a starved state of *Sinapis nigra*, Linn., but as growth progressed it was clearly seen not to be that plant. Examples of this starved condition, collected 26th July and 31st August 1907, are included in the parcel. Besides this station there were several others on the contiguous sandhills of a more luxuriant growth, some of them in stations which had been free from fowls for at least three or four years; the best examples were collected 7th September 1907. Some plants in my herbarium from Swinemünde, Pomerania, suggested to me that the plant might be the

*S. juncea*, Linn., given in the 'Prodrômus' (Vol. I., pp. 218, 219) as a native of China, and cultivated in fields of *Trifolium alexandrinum* in Egypt, but the examples growing on the cindered pathway lacked the character of the "ramis fasciculatis" of the 'Prodrômus.' Later on in the summer some plants of the same species were sent to me for naming by Mr. Jas. E. McDonald of Heaton Norris, as occurring on a refuse tip in his neighbourhood, and these possessed the fascicled branches which were lacking in the cinder-grown examples. These fascicles are shown by the sandhills plants of 7th Sept. There are some variations in the direction of the pods, and in the length and shape of the style, and I am not sure that *Sinapis brassicata*, Linn., may not be represented in some of these gatherings.—CHARLES BAILEY. Mr. Bailey informs me that he sent examples of all his gatherings to Kew, and they were all returned to him as *S. juncea*, L.—H. J. R. This is *Brassica nigra*, Koch, = *Sinapis nigra*, Linn., Sp. Pl. 933, and not *Brassica juncea*, Hf. and T. (see 'Fl. Br. Ind.' i. 157), which has a different pod and leaves, and is a true *Brassica*. *B. juncea* is a sub-tropical plant, seldom maintaining itself even in its own region (Anatolia and N. Africa to the Gangetic Plain) as an escape, and occurring in these islands solely as a depauperated casual near wool and oil factories, &c., and that comparatively rarely.—J. R. DRUMMOND.

*Eruca sativa*, Lam. A frequent plant on the poultry areas of the sandhills of St. Anne's-on-the-Sea, north-west Lancashire, v.c. 60, during 1907. The flowers were all yellowish straw-coloured. The examples sent were collected 20th July 1907.—CHARLES BAILEY.

*Thlaspi alpestre*, L., var. *occitanum* (Jord.). Yarnbury, Aug. 1907. Typical of the waste heaps of the lead mines of the West Riding of Yorkshire.—JOHN CRYER. I think this had better be left under the aggregate *T. alpestre*, L. Quite recently Mr. Bucknall and I have compared specimens very carefully with the descriptions and figures given by Jordan in his *Diagnoses* and in the *Observations*. We noted that Jordan's name is *occitanum*, not 'occitanum.' With that segregate the present plant agrees fairly well in characters of the capsule, including the number of seeds. But the *occitanum* has very glaucous leaves—more or less dentate; and a biennial root 'vraiment pivotante.' As far as I can tell from the small specimen at hand Mr. Cryer's plant is not glaucous; its leaves have but little tothing; and the root appears to be perennial.—JAS. W. WHITE. 'Lon. Cat.,' Ed. X., drops var. *occitanum* (Jord.).—H. J. R.

*Reseda stricta*, Pers. ?, on waste ground at Canton, Cardiff, Glam., Sept. 1907. *R. lutea*, L., grew close by. The plant now

distributed much resembles a *Reseda* from Wytham sent in 1906 by Mr. Druce and named by him *R. stricta*, Pers.—H. J. R. Yes, *Reseda stricta*, Pers. This species belongs to that section of *Resedastrum* in which the calyx is caducous and seeds smooth or nearly so.—E. G. BAKER.

*Viola Riviniana* f. *minor*, Murbeck, = *V. flavicornis*, Forst. Clogher, Co. Tyrone. Coll. Miss Peck, April and May 1907.—E. S. GREGORY.

*V. canina*, L. Railway Bank, Malvern Link, Co. Worcester, 30th July 1906, and 11th June 1907.—S. H. BICKHAM. I do not think that this is pure *canina*, "Linn" (*V. ericetorum*, Schrad.), but probably a hybrid with *V. Riviniana*.—E. S. M. I suppose this to be *V. silvestris*, Reich., of rather diffuse growth.—D. FRY. I have no hesitation in giving my opinion in favour of the hybrid *Viola Riviniana* × *ericetorum*. It is a plant I know pretty well, as I cultivated it for years in my garden at Weston-super-Mare. Mr. Beeby very kindly named it for me in 1898, and I have taken a good series of specimens for my herbarium; one of which, gathered late in the season, is almost the counterpart of Mr. Bickham's example.—E. S. GREGORY. Mr. Bickham subsequently wrote to Mrs. Gregory:—"I think that . . . we may have on this railway bank *V. Riviniana*, *V. ericetorum*, and the hybrid *V. Riviniana* × *ericetorum*, all growing together. Towndrow writes that he used to think he found—

1. True *canina* (*ericetorum*).
2. *V. Riviniana*.
3. A doubtful plant which he then supposed to be *V. Riviniana* × *ericetorum*, but could get no one to agree with him."

*V. canina* × *Riviniana*. East Pentire, Newquay, West Cornwall, v.-c. 1, 16th May 1907 (with Mr. F. H. Davey), and 14th July 1907. This was first identified in 1905 by Mrs. E. S. Gregory, who kindly wrote, "I take (it) to be a hybrid between *canina* and *Riviniana*," but reserved a definite opinion till seeing full material, which illness prevented me sending the next year. This year I sent it to Mr. E. Baker, who kindly forwarded it to Dr. Becker, who replied that he believes the plant to be *canina* × *Riviniana*. Mr. Baker says that in most of the sheets of this hybrid in the British Museum the leaves are rather more cordate at the base than in my plants; he does not give a positive opinion; and says that Mr. Pugsley does not think there is any *Riviniana* in it, and would call it a form of *ericetorum*. The plant forms a small group of large, very compact tufts, the largest, nearly 3 ft. in diameter, having been lately destroyed by quarrying operations. No root-leaves can be seen. On 28th June, I collected

a few specimens bearing partially developed fruits, generally with one, sometimes with two, but never with all three carpels developed; but by the 14th of July cleistogamous flowers only were to be seen, and these are completely barren. *V. ericetorum* and *V. Riviniana* (also *V. hirta*) grow close by. The Rev. E. F. Linton (in 'Journ. Bot.', 1907) says this hybrid is always sterile. I have not examined the pollen.—C. C. VIGURS.

*V. canina* × *stagnina*. Woodwalton Fen, Hunts. Coll. E. W. Hunnybun, June 1907.—S. H. BICKHAM.

*V. canina*, var. *crassifolia*, Grönv. Woodwalton Fen, Hunts, 29th May 1907. Coll. E. W. Hunnybun. Named on the authority of Dr. Neuman.—E. S. GREGORY. Also sent by S. H. BICKHAM.

*V. stagnina*, Kit. Woodwalton Fen, Hunts. Coll. E. W. Hunnybun, 13th June 1907.—S. H. BICKHAM.

*V. nemoralis*, Kützing, which Dr. Neuman says is a synonym for *V. montana*, L. Woodwalton Fen, Hunts, 29th May 1907. Coll. E. W. Hunnybun.—E. S. GREGORY. Also (13th June 1907) from S. H. BICKHAM.

The Fen violets gathered by Mr. Hunnybun and sent by me to the Club, have acquired a new interest through notes recently received from Mr. Becker, of Hedersleben, Germany. In October 1907, I put up a set of four plants (all from Woodwalton) which I considered tolerably distinct and sent them first to Dr. Neuman labelled thus :—

I. *V. stagnina*, Kit. Fls. small, whitish, slightly tinged pale blue, spur greenish.

II. *V. canina*, L. Fls. larger, bright blue, spur yellow.

III. *V. stagnina* × *canina*. Leaves thick, roughish, fls. pale blue. (This plant had been named for me in 1905, by Prof. Murbeck.)

IV. *V. nemoralis*, Kützing. Leaves thinner, fls. pale blue.

Dr. Neuman replied as follows :—

I. *V. stagnina*, recte.

II. *V. canina* β *crassifolia*, Grönvall.

III. *V. canina* × *pumila*, vel. *pumila* × *Riviniana*, probably the latter. Stipules too long to be of *canina* × *stagnina*.

IV. *V. montana*, L. (syn. *V. nemoralis*, Kützing).

By Mr. Arthur Bennett's advice, I sent the same plants to

Dr. Becker and received them late in January, with the following notes :—

I. If at this place *V. canina* or *V. montana* occurs, you will hardly look in vain for *V. canina* × *stagnina*, or *V. montana* × *stagnina*. These hybrids form large bushes. *V. stagnina* and *canina* × *stagnina* were the reason that impelled me to study more particularly the genus *Viola*.

II. These *canina* forms obviously approach by their long stipules and long leaves to *V. montana*, L.

III. *V. canina* and *montana*. *V. canina* and *montana* are sub-species of one collective species.

IV. *V. montana*, L. = *V. nemoralis*, Kütz. Agrees with German and Scandinavian examples. Determ. W. Becker.—E. S. GREGORY.

*V. Lloydii*, Jord. Yoke Cliff, Wirksworth, Derbs, 10th July and 4th Sept. 1907. Named for me by Dr. E. Drabble. Growing in a wooded limestone cliff and looking like a distinct species.—W. R. LINTON.

*V. saxatilis*, Schmidt., var. *monticola*, Jord.? Origin, Brilley, Herefordshire; cult. June and July 1907. This is the same plant which I sent to the Club last year under the suggested name of *V. Sagoti*, Jord. Under cultivation in poor soil in a shaded situation it has proved to bear more resemblance to *V. monticola*, Jord.—AUGUSTIN LEY.

*V. saxatilis*, Schmidt, ff. Tillage, Llangammarch, Brecon, 24th July 1907.—AUGUSTIN LEY. *V. Lloydii*, Jord.—E. G. BAKER.

*V. carpatica*, Borb. Near Oldcastle Mill, Cheshire, 1st Aug. 1907. No. 1640. Plants bearing this name have several times been distributed, and I would not have added to their number, had I not the impression that they are not all the same species. *V. carpatica*, Borb., is said to be perennial or sub-perennial, whatever that may mean, but these are annual or possibly biennial. I do not know the § *Melanium*, and therefore cannot suggest an alternative name unless it be *V. polychroma*, Kern., also a perennial or sub-perennial species. These gatherings were made in a sandy rabbit burrow, and the plant did not extend beyond the excavated sand, probably because it will only grow in recently turned soil, like most of its section.—A. H. WOLLEY-DOD.

*V. obtusifolia*, Jord. Some seeds from a plant so named by Dr. Drabble, gathered near Winslow, Bucks, were sown in my

garden; the specimens are sent to show the characters are fairly fixed, as they have also independently been named *obtusifolia*. Aug. 1907.—G. CLARIDGE DRUCE. *V. arvensis*, var. *obtusifolia* (Jord.) of 'Lon. Cat.,' Ed. X.—H. J. R.

*V. nana*, DC = *V. Kitaibeliana*, Reichb., var. *nana* (DC). From the Quenvais, Jersey, June 1906 and April 1907. This appears to be quite a distinct species; the tiny flowers often suffused with purplish-violet are very curious. It also occurs on the L'Ancrese Common, Guernsey.—G. CLARIDGE DRUCE. *Viola arvensis*, var. *nana* DC of 'Lon. Cat.,' Ed. X.—H. J. R.

*Polygala Amarella*, Crantz. A few rose-tinted and white-flowered specimens to supplement those sent last year. I enclose also a few blue-flowered from a new station. These were found growing on very wet stony ground on the lower northern slope of Hawkswick Clowder, eight to nine hundred feet above sea-level.

Hawkswick Clowder is a hill 1,500 ft. high between Kilnsey and Arncliffe in Wharfedale, Yorkshire.—JOHN CRYER.

*Saponaria Vaccaria*, Linn. = *Vaccaria parviflora*, Moench. A few plants occurred with the other aliens of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 20th July, 24th and 31st August 1907.—CHARLES BAILEY.

*Silene Cucubalus*, Wibel, var. *puberula*, Syme. Rough turf in a plantation on an old limestone quarry, Waltham, Leics., v.-c. 55, 25th July 1907. In the report of the Watson Botanical Exchange Club, 1907, Mr. Bell remarks of *Silene Cucubalus*, var. *puberula*, "It is strange that there are no specimens of it in the County Herb., Leicester, nor have I seen living plants in the County."—F. L. FOORD-KELCEY. Correct.—D. FRY. *S. latifolia*, Rendle and Britten, var. *puberula* (Jord.) in 'Lon. Cat.,' Ed. X.—H. J. R.

*S. Armeria*, L. Self-sown in the Parks, Oxford, Sept. 1907.—G. CLARIDGE DRUCE.

*S. noctiflora*, Linn. On broken ground, the site of an old poultry farm, in the sandhills to the south of Birkdale railway station, Southport, south-west Lancashire, v.-c. 59, 24th August 1907. This site has afforded a large series of aliens to Southport botanists, one of whom, Mr. Henry Ball, pointed it out to me. Together we collected *Sideritis montana*, *Salvia verticillata*, *Anagallis cœrulea*, *Cerinth minor*, *Silene dichotoma*, &c.—CHARLES BAILEY. *S. noctiflora* never has this elongate habit. The calyx is quite different, whitish and membranous between the nerves, with long narrowly subulate teeth, not to mention other floral characters. Mr. Bailey's plant is *Lychnis alba*, Mill.—E. F. L.

*Lychnis dioica* × *alba* = *L. intermedia*, Schur. Near Stow Wood, Oxford, in the vicinity of both parents, July 1907.—G. CLARIDGE DRUCE.

*L. Flos-cuculi*, L., fl. pl. Cult. Egremont, Cumberland, by the late Joseph Adair. Comm. Harold Adair, per Charles Bailey. Mr. Harold Adair writes to Mr. Bailey under date 25th December 1907:—"The plant was found in a line near where hundreds of this plant grow, but only one with double flowers. I brought the root to my garden, and the 15 or 18 specimens were gathered from it."

*Cerastium triviale*, var. *alpestre* (Lindbl.), Hartm. Ben Lawers, Mid Perth, July 1907.—P. EWING. I have not seen a Scandinavian specimen; but I believe that the name has been denied to our British alpine plants. From a neighbouring hill, Cam Chreag, I have a more luxuriant, but otherwise practically identical sheet; in both of them the pubescence is longer and more copious than in our usual alpine *triviale* forms. Both var. *alpinum*, Mert. and Koch, and *C. longirostre*, Wichura, are identified by Rouy and F. N. Williams with var. *fontanum* (Baumg.); and the present plant comes near that, if it is not the same thing.—EDWARD S. MARSHALL.

*C. triviale*, Link, ? f. *filiforme*, Hartm. Cam Chreag, Glen Lochay, v.-c. 88, 24th July 1907.—P. EWING. I do not know this form.—E. S. M.

*C. alpinum* × *alpestre*?. Ben Lawers, Mid Perth, 12th July 1907.—P. EWING. I can see no trace of hybridity. The sheet before me matches several gatherings of *C. alpinum* (type), which happens to be very well represented in my collection.—E. S. M.

*Stellaria umbrosa*, Opiz. Shrewsbury, Salop, April—May 1907.—J. COSMO MELVILL. Yes, *S. neglecta*, Weihe, var. *umbrosa* (Opiz). E. S. M.

*S. neglecta*, Weihe, var. *decipiens*, Marshall. Main road above Shirley, Derbs., 8th July 1907. Mr. Marshall, to whom I sent specimens, considers this to be *S. media* only. It is a large luxuriant form, but as Mr. M. points out, wants the long reflexed fruiting pedicels, and the seeds are too small.—W. R. LINTON.

*S. graminea*, L. var. Hartsfield Common, E. Grinstead, Sussex. (Mrs. Carlos Patteson coll.) Comm. J. Cosmo Melvill, July 1907. A very curious compact and stunted form, growing in a dwarfed way amongst low herbage, gorse, &c., in damp places. The stamens light purple, rendering the effect of pale lilac flowers. I have never

noted this form in European collections, and I do not think it bears a varietal name.—J. C. MELVILL. A small form, which (as far as I can make out) is apetalous. I know of no definite name for it.—E. S. M.

*Arenaria norvegica*, Gunner. At about 230 feet above sea level near Inchnadampf, W. Sutherland, July 1907. Very rare.—G. CLARIDGE DRUCE.

*Spergula arvensis*, L., var. *nana*, Linton. This plant I had described as var. *praecox*, and as such have it included in my 'British Plants,' which was printed off in July of 1907, but not yet published, and the name therefore must give way to Mr. Linton's name *nana*, which has been published in 'Journ. Bot.' The chief points of interest are its small size, its very early flowering, Jan. to March, and its habitat, which is not cornfields, but aboriginal turf-ledges on sea-cliffs, and also grassy commons. Mr. Marquand, in the 'Flora of Guernsey,' long ago drew attention to it. As I have said, its point of interest is in its growing in natural turf, this proving it to be native of the Channel Isles, and not to have been brought in with cornfield weeds. The seeds are papillose, and the plant has the habit of *Sagina procumbens*. March 1907.—G. CLARIDGE DRUCE. *S. arvensis*, L., var. *nana*, Linton ('Journ. Bot.', 1907, p. 380).—E. F. L. This is the small plant recently described in 'Journal of Botany' as var. *nana*, Linton.—E. S. M.

*Tilia cordata*, Mill. Swithland Wood, 7th Aug. 1907. Hitherto this has been recorded under *parvifolia*, but at nearly all the stations it is known to have been planted, so that the indigeneity of *Tilia cordata* in Leicestershire has been locally questioned. Professor A. G. Tansley and Dr. Moss, who were here with the British Association, state that, "judging from the ground flora *Tilia cordata* is undoubtedly indigenous at Swithland."—W. BELL. This differs from all the other Limes in having an erect, not drooping inflorescence, a character not mentioned in the books.—A. B. JACKSON.

*Geranium Robertianum*, L., var. *modestum* (Jord.), on shingle, Kingsdown, near Walmer, E. Kent, v.-c. 15; 9th July 1907.—F. L. FOORD-KELCEY. This plant occurs frequently on the southern coasts of England, and I have seen it in Co. Kerry. It is usually called var. *purpureum* (Vill.); but it is, perhaps, too near to var. *modestum* (Jord.) to deserve separate rank. Rev. R. P. Murray once told me that he regarded the two as identical.—E. S. M.

*Erodium cicutarium*, L'Hérit, var. *glandulosum*, Bosch. Deal Sandhills, E. Kent, v.-c. 15, 2 July 1907.—F. L. FOORD-KELCEY. Yes; originally recorded from this station, the specimens having

been so named by Mr. Arthur Bennett. I have since found it on various sandy coasts, including Glamorgan and E. Sutherland.—E. S. M.

*Ononis repens*, var. *horrida*, Lange. Sandy Coast, Stert, S. Somerset, 22 Aug. 1907.—E. S. MARSHALL.

*Trigonella caerulea*, Ser. With many other introduced plants on waste ground at Canton, Cardiff, Glam., Sept. 1907. Is it this species?—H. J. RIDDELSDELL. This would seem to deserve distinguishing by a varietal name, such as var. *oblonga*, for the fruiting raceme is cylindrical oblong instead of round or roundly ovate. The whole plant is more slender, and the leaves and stipules narrower, as also are the racemes, than in my specimen which coincides in these respects with the description.—E. F. L.

*Medicago lupulina*, L., var. *Willdenowiana* (Koch)? Fruit hairy; simple hairs whitish; glandular hairs many, very minute. On railway banks, Sellack, Herefordshire, 8th July 1907.—AUGUSTIN LEY. The fruit is more or less hairy, but apparently not glandular-hairy; so that it is hardly the variety. I believe that var. *scabra*, Gray, is an earlier name.—E. S. M. Not the variety which has glandular hairs on the pods. In my specimens the pods are pilose but the hairs are eglandular. I have found the variety in three separate localities during the last two years, but always in garden ground.—A. B. JACKSON.

*M. lupulina*, L., var. *Willdenowii*, Boenn. Waste ground, Canton, Cardiff, Glam., Sept. 1907. Probably introduced. The fruit is covered with glandular hairs, which, however, tend to disappear as the fruit ripens and blackens.—H. J. RIDDELSDELL. Should be called var. *scabra*, Gray.—H. J. R.

*Melilotus indica*, All., = *M. parviflora*, Desf. Very abundant on the sandhills, in the poultry area, on the north side of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 20th July 1907. Generally growing in the shade of large bushes of *Sinapis nigra*, and species of *Chenopodium*.—CHARLES BAILEY.

*Trifolium*, Sp. Waste ground at Canton, Cardiff, Glam., Sept. 1907.—H. J. RIDDELSDELL. *T. diffusum*, Ehrh. A Mediterranean species not previously noted for Britain so far as I can make out. Mr. Drummond and I determined it.—A. B. JACKSON.

*T. striatum*, Linn., ? var. *erectum*, Leight. East Pentire, Newquay, West Cornwall, v.-c. 1, 14th July 1907. I take this to be var. *erectum*, though it does not seem to agree with the

description in "Babington." It was quite erect, growing with *Mesembryanthemum virescens*, which is rapidly establishing itself here.—C. C. VIGURS. I heard from Mr. Arthur Bennett, some years ago, that Leighton's plant was much larger. The question of mere size, however, seems immaterial; and I believe that it may stand as correct.—E. S. M.

*T. dubium*, Sibth. (forma autumnalis umbelliformis). I have noted this autumnal form of the Lesser Yellow Clover, of which I can find no mention in any text-books, in two or three localities, seemingly putting forth the whole of its strength to complete flowering and fruiting in the late autumn, the topmost flower heads assuming a strong umbellate appearance. It occurred plentifully in two places—between Meole Brace and Bagster Hill, and at Redhill, Salop—in September and October 1907.—J. C. MELVILL. I cannot separate this from type.—E. S. M.

*Vicia sepium*, L., forma. This pretty dwarf procumbent form of the Hedge Vetch occurred in some quantity on the sandy bay between Betty Hill and Farr Point, West Sutherland, July 1907.—G. CLARIDGE DRUCE. Not worth distinguishing, in my opinion; the northern climate and (probably) an exposed situation account for its habit.—E. S. M.

*Prunus domestica*, L. Small spreading tree in hedge by G.C.R. line near Quorn Station, Leics., v.-c. 55, 18th April and 28th July 1907.—F. L. FOORD-KELCEY. I should call it *P. insititia*, L.—E. F. L. So should I.—H. J. R. I think this belongs to *insititia* rather than to *domestica*, as the flowers, foliage, and fruit are too small for the latter, with which also the downy peduncles are not consistent.—D. FRY. I agree.—JAS. W. WHITE.

Mr. Rogers has seen sample specimens of all the Rubi distributed; and in some cases has seen all the plants sent out. With exceptions particularly noted, he agrees to the names on the labels.

*Rubus sulcatus*, Vest. August 1907. (1) Near "Salterns," east side of Poole Harbour; (2) Near Hamworthy Junction, Dorset; (3) Moor, near Redhill, S. Hants.—W. MOYLE ROGERS. To my regret I find myself obliged to ask the members to alter the specific name given above. Misled by the extraordinary luxuriance of the living bushes, with their long high-arching, sharply-angled stems bearing crowded wide-spread 5 nate leaves, I believed this handsome plant to be a form of *R. sulcatus* with exceptionally narrow leaflets and only moderate-sized flowers. Further study has shown me that I was wrong, and that it cannot be separated

from Focke's typical *R. opacus*, as represented by specimens collected by him near Bremen and now in my herbarium. It is also, I am convinced, the same form as the Somersetshire specimens issued as No. 78 in the "Set of British Rubi" (1892—1895), and as a Dorset plant which grows in some quantity at West Moors, near Wimborne. With reference to the latter, submitted by me to Dr. Focke in 1893, he wrote, "Quite my plant." I may add however that, in its autumnal condition, especially as seen in the specimens now distributed to the members, it is considerably unlike a smaller and more pubescent plant, which Focke distinguishes as his "*forma minor*." The latter is represented in the "Set" by No. 106, consisting of specimens collected by me in S. Devon, where I had constant opportunities of becoming familiar with the living bushes. This small form, as stated in my Handbook, p. 23, is also found near Bremen "on very poor and dry soil," and is readily distinguished from the type by its greyer, more hairy, and more finely-toothed leaves and short-pointed leaflets:—characters which make any confusion of it with *R. sulcatus* practically impossible.—W. M. R.

*R. affinis*, Weihe and Nees. Small form. Peterston, Glamorgan, 28th August 1905. Some of the panicles, gathered at this late date, show great development of the lower branches. Mr. Rogers has seen the bushes at this locality.—H. J. RIDDELSDELL. Yes.—W. M. R.

*R. holerythros*, Focke. Colgate, St. Leonard's Forest, W. Sussex, 30th July 1906.—JAS. W. WHITE. Yes.—W. M. R.

*R.* ——. Woods near Apley, N. Lincoln, 16th August 1907. This bramble, which has been the subject of a good deal of correspondence between myself and Rev. W. M. Rogers, has at length been definitely assigned by him to *R. mercicus*, Bag., and I concur in the identification. New County record.—AUGUSTIN LEY. *R. mercicus*, Bagnall. Off type, towards subsp. *bracteatu*s, Bagnall, especially in outline of panicle.—W. MOYLE ROGERS.

*R. mercicus*, Bagnall. Gathered in Market Rasen Wood, Lincolnshire (in company with Mr. A. Ley). I have since shown scanty material to Mr. W. M. Rogers, who says it "certainly resembles closely *R. mercicus*."—L. CUMMING.

*R. thyrsoideus*, Wimm. Wrawby Moor, N. Lincoln, 23rd August 1907. This is a form recalling, so far as the narrowness of the foliage goes, the continental *R. candicans*, W.; the panicle, however, takes it quite away from that plant. New Vice-County record.—AUGUSTIN LEY. Yes.—W. M. R.

*R. Godroni*, Lec. and Lam., var. *foliolatus*, Rogers and Ley. Larkton Hills, Cheshire, 15th August 1907, No. 1635. I send this plant as I had labelled it, believing it to be the same variety as was so named for me last year by Mr. Rogers, though not from the same bush. Just before making up my parcel, however, I received from M. Sudre, to whom I had sent three or four Rubi to name, the following note on a specimen of the present plant:—" *R. Muenteri*, Marsson (*P. Maassii*, Focke, subsp. *R. Muenteri*, Sud. Rub. Eur.) = Set of Brit. Rub. No. 11 ex parte (sub. nom. *R. leucandrus*). " I leave further remarks for those better acquainted than I am with the species in question.—A. H. WOLLEY-DOD. Yes.—W. M. R. Labels give Ref. No. 1636.—H. J. R.

*R. sylvaticus*, W. and N. Woods near Apley, N. Lincoln, August 1907. Frequent in Cockglade, Springwood, and other woods near Apley; often shewing slight glandular and acicular development on the stem. New County record.—AUGUSTIN LEY. Yes.—W. M. R.

*R. sylvaticus*, W. and N. Hedge, near Bow Lough, Saintfield, Co. Down, 31st August 1907.—C. H. WADDELL. Yes.—W. M. R.

*R. Salteri*, Bab. Radyr, Peterston, Llantrissant, Caerphilly, Glamorgan, August 1907. Apparently a frequent form over this area of the County.—H. J. RIDDELSDELL. Mr. Rogers agrees to all these specimens.

*R. hypoleucus*, Lef. and Muell. In great quantity and variety round Radyr, Llandaff, &c., Glamorgan, August 1907. Seen by Mr. Rogers, who says, "hardly glandular at all except on bracts." In spite of all precautions this form seems persistently to dry a bad colour.—H. J. RIDDELSDELL. Mr. Rogers saw all these.

*R. hypoleucus*, Lef. and Muell. f. Duckington Dingle, Cheshire, 12 August 1907, No. 1637. Mr. Rogers saw specimens of this last year, and thought it undoubtedly came under aggregate *R. hypoleucus*, Lef. and Muell, as a form.—A. H. WOLLEY-DOD.

*R. hypoleucus* × ? *leucostachys*. One bush at Radyr with both species, 20 August 1907. The *hypoleucus* parentage is clear. Mr. Rogers suggests *leucostachys* on the other side.—H. J. RIDDELSDELL.

*R. Lettii*, Rogers. Cwm Einon, 18th July 1907, Cardiganshire, v.-c. 46. This is the *Rubus* which I sent last year to the Club as *R. curvidens*, A. Ley, and which Mr. Ley believed to be *R. criniger*, Linton. This year I visited Cwm Einon again, and obtained a good supply of the plant, which has been submitted to the Rev.

W. Moyle Rogers and A. Ley, and which they are both agreed is *R. Lettii*. New Record for Cardiganshire. See 'Journal of Botany,' 1901, p. 381; 1907, p. 319.—W. H. PAINTER. Bolston Wood, Herefordshire, 31st July 1907. See 'Journ. Bot.,' 1907, pp. 319, 320. Since writing the above, the Rev. W. M. Rogers has expressed himself satisfied with the practical identity of this Herefordshire plant with the Irish *R. Lettii*.—AUGUSTIN LEY. The Bolston Wood plant differs from the Cos. Down and Armagh type *Lettii* by its stem-prk. rather more unequal, and with stouter base; stipules conspicuously narrower (nearly filiform instead of rather broadly lanceolate), and panicle browner, more irregular in outline, and with less remarkably needle-like pale prk. which seem *always* eglandular, while only *mostly* so in the Irish plant. Slight and unimportant as these differences may seem in detail, the aggregate result is such that I felt some difficulty at first as to specific identity. But the large series of specimens which I have received from Mr. Ley, at intervals since 1901, have now convinced me that his Herefordshire plant cannot be kept distinct from the Irish type. I also agree with his suggestion that Mr. Painter's Cardiganshire plant should go with the Herefordshire one. Here, however, a fresh difficulty arises in the fact—possibly due to mixture—that most of Mr. Painter's stem-pieces are (quite unlike my *R. Lettii*) either glabrous or glabrescent. I should add that generally the Welsh plant is less conspicuously grey and hairy than the Irish.—W. MOYLE ROGERS.

*R. adenanthus*, Boul. and Gill, forma. Several bushes in hedges at Aberdare, Glam., 14th August 1905 and 3rd August 1907. Flowers faint blush, nearly white, cup shape, petals rather broad. Mr. Rogers saw the 1905 gathering, and specimens of 1906 also, when he wrote, "I think it impossible to separate any of these from my Gorey Bay *R. adenanthus*, which they resemble more closely than W.-Dod's Cheshire plant does. The latter is much more glandular and aciculate than the Jersey plant."—H. J. RIDDELSDELL.

*R. radula*, Weihe, subsp. *anglicanus*, Rogers. Bournemouth neighbourhood, S. Hants and Dorset; very common; July and August 1907. Off type *radula* towards *R. ericetorum*, Lefv.; but I am convinced after many years of study under favourable circumstances, nearer to the former than to the latter, in spite of M. Sudre's opinion to the contrary. It is truly radulan in armature, though often less conspicuously so than type *radula*; while *R. ericetorum* is characteristically sub-Koehlerian.

Among other marked differences the following are usually quite conspicuous, in addition to the distinct stem armature:—

*R. anglicanus*, ls. 5 nate-digitate (thick). *Term. lt.* round

based or emarginate, with rather short or moderate point, and petiolule about  $\frac{1}{2}$  its length. *Pan.* fairly compact in the considerable ultra-axillary top, with one or no simple l. few and inconspicuous acic. and std. gl. almost wholly sunk in long hair; rach. and sep. shaggy. *Fl.* very showy, starlike.

*R. ericetorum*, L., 3—5 nate-pedate (thin). *Term. lt.* with narrow sub-cuneate base and very long gradually acum. point; petiolule moderate, often less than  $\frac{1}{3}$  its length. *Pan.* remarkably elongate, very lax throughout, and more narrowed above, normally with three to five simple leaves reaching almost to the top; rach. and ped. with close felt crowded acic. and other unequal arms, but only scattered short hair. *Prk.* more deflexed.

Both forms are found with us almost exclusively in S. and W. England:—*anglicanus* in 25 v.-c., and most abundant in the S.W.; while *ericetorum* is known in 18 v.-c., and seems most frequent in S.E. England and along the Welsh border.—W. MOYLE ROGERS. Mr. Rogers has asked me to add that he has himself seen no continental specimens of Lefevre's *R. ericetorum*, but assumes that Dr. Focke was right in assigning that name to our plant after seeing living bushes of it in 1894.—H. J. RIDDELSDELL.

*R. radula*, sp. coll., var. *echinatoides*, Rog. Old Wood, Skellingthorpe, S. Lincoln; August 1907. The station is misprinted on the labels "Skellington." Abundant throughout this large wood.—AUGUSTIN LEY.

*R. regillus*, Ley. Gorsley, Herefordshire (in Linton Wood); 4th September 1907.—AUGUSTIN LEY.

*R. regillus*, Ley. Gathered in Queen's Wood, Ross, in company with Mr. A. Ley.—L. CUMMING. The specimens needed more careful pressing.—H. J. R.

*R. podophyllus*, P. J. Muell. Plantations and woods near Grasby (also near Barnetby), N. Lincoln; abundant and characteristic; August 1907.—AUGUSTIN LEY.

*R. Lejeunei*, W. and N. Wood border at Llangammarch, Breconshire; 25th July 1907. New station for this rare bramble.—AUGUSTIN LEY.

*R. fuscus*, subsp. *obscurus* (Kalt). From the classic locality, Belmont Wood, Hereford, 3rd Aug. 1907. Seen and approved by Mr. Rogers.—H. J. RIDDELSDELL.

*R. pallidus*, W. and N., var., *leptopetalus*, Rog. Plantations on Mitcheldean Meend, West Gloucester; 31st Aug. 1907.—AUGUSTIN LEY.

*R. thyrsiger*, Bab. In quantity at Llantrissant, Glam., Aug. 1907. Discovered there by Mr. Rogers in 1905.—H. J. RIDDELSDELL.

*R. rosaceus*, subsp. *infecundus*, Rogers. Port Talbot, v.-c. 41, 29th July 1907. Named by Mr. Rogers.—H. J. RIDDELSDELL.

*R. rosaceus*, sp. coll., subsp., *Purchasianus*. Sellack, Herefordshire; 7th September 1907.—AUGUSTIN LEY.

*R. Marshalli*, var. *semiglaber*, Rogers. Port Talbot, v.-c. 41, 29th July 1907. Named by Mr. Rogers.—H. J. RIDDELSDELL.

*R. velatus*, Lefv. Wood at Glynhir (near Llandebie), Carmarthenshire; July 1907. New County record.—AUGUSTIN LEY.

*R. dumetorum*, W. and N., var. *raduliformis*, Ley. Near Eltham (also at Barnetby and other stations), N. Lincoln; August 1907. New County record.—AUGUSTIN LEY.

*R. dumetorum* W. & N., var. *triangularis*, Ley. Whitbourne, Herefordshire; August 1907. The specimens are not very characteristic; but are this variety.—AUGUSTIN LEY.

*R. Balfourianus*, Blox. Woods near Grasby, abundant and characteristic (also at Barnetby), N. Lincoln. Petals usually white, sometimes pink.—AUGUSTIN LEY. Rightly named, I believe, though untypical in the glabrous or glabrescent stem, very broad roundish terminal leaflet and narrow stipules.—W. MOYLE ROGERS.

*R. Balfourianus*, Blox. Hedges, Bridstow, Herefordshire; July and September 1907. Petals uniformly white.—AUGUSTIN LEY.

*Geum rivale*, L., albino. Stanton, Staffs., cult., 11th June 1907.—W. R. LINTON.

*Potentilla erecta*, Hampe, var. *sciaphila* (Zimm). *P. Tormentilla*, Neck., var. *sciaphila*, Asch. & Gr., *Syn.* VI. 838 (1904). Sandy, ericetal places, Richmond Park, Surrey, 28th Aug. 1907, leg. A. B. Jackson & K. Domin. This well marked variety has only hitherto been recorded from East and West Cornwall by Mr. Davey (see 'Watson Exchange Club Report,' 1905-6, p. 50), and from heathy hills of the rolled pebbles of the Thanet sands ('B. E. C. Report,' 1905, p. 167); but an examination of the material preserved under the name *Potentilla Tormentilla*, Neck. (= *P. silvestris*), at the British Museum and Kew shows that the variety is of fairly general distribution in Britain. It may be distinguished from the type by its smaller, prostrate habit, the stems

short, not more than four inches in length, slender flaccid, leaves shortly petiolate, stipules small, entire or toothed only at the apex, leaflets obovate lanceolate, with only one or two teeth at the leaf apex, not deeply toothed as in the type, flowers small on long slender pedicels, leaflets of the epicalyx only half the length of the calyx. Dr. Domin considers that the occurrence of this variety in England is interesting from a phyto-geographic point of view. On the Continent it is very rarely found except in the Alps, though a plant coming near the variety occurs in S. Bohemia (Domin) and Dresden (Wolf). The Richmond specimens agree very well with Cornish examples collected by Mr. Davey and named by Dr. Wolf, the monographer of the genus.—A. B. JACKSON. I fail to see why this should be called a *variety*; to me it appears to be only a starved *state*, which is common enough in such situations.—E. S. M. In the total absence (in the specimens I received) of the characteristic root-leaves, and in the absence of the compactness which Mr. F. H. Davey and I take from Mr. A. Bennett to be the chief features of this variety, it is impossible to accept this as Zimmeter's var. *sciaphila*. Vide 'B. E. C. & Watson E. Club Reports' for 1905, and 'Jour. Roy. Inst. Cornwall,' No. LII. (1905).—C. C. VIGURS.

*P.* — sp.? Clogher Valley, Co. Tyrone, June 1907.—C. L. PECK. *Two Sheets*:—1. Leaves sessile; stipules much cut; flowers small. *P. erecta*, Hampe (*sylvestris*, Neck.). 2. *a.* Leaves stalked; stipules undivided; flowers fairly large. *P. procumbens*, Sibth. *b.* Leaves more shortly stalked, the leaflets narrower and more deeply cut; stipules more or less cut; flowers intermediate. A poor specimen; but I am pretty sure that it is *P. erecta* × *procumbens*.—E. S. M.

*P. rupestris*, L. Radnorshire, June 1907. Still unknown from any other station in Radnor.—AUGUSTIN LEY. A very freely seeding plant. It is remarkable that it does not spread.—H. J. R.

*Rosa mollis*, Sm., var., *cærulea*, Woods. Thicket on Cefn hill, Herefordshire (at about 1,250 ft.), 9th Sept. 1907. New County record for the variety.—AUGUSTIN LEY. Var. *cærulea* should have the peduncles and fruit nearly or quite smooth. In my specimen these are decidedly glandular-hispid; so I think that the varietal name cannot stand.—E. S. M.

*R. omissa*, Deség., var. *submollis* (Ley). Road hedge, near Melton Ross. Plantation near Grasby; both North Lincoln. New Vice-County record.—AUGUSTIN LEY.

*R. omissa*, Deség., var. *submollis* (Ley). Hedge at Capel-y-ffin, Brecon, 17th September 1907.—AUGUSTIN LEY.

*R. omissa*, Deség., var. *submollis* (Ley). Gorsley, Herefordshire (in two spots), 4th September 1907.—AUGUSTIN LEY.

*R. Andrzejewii*, Steven, var. *pseudomollis* (Ley). Exley Valley, Herefordshire, 9th September 1907.—AUGUSTIN LEY.

*R. cuspidatoides*, Crépin. Aymestrey, Herefordshire, 10th September 1907.—AUGUSTIN LEY.

*R. tomentosa*, Sm. var. Hedgerow, Ingarsby, Leics. Ref. No. 84.—A. R. HORWOOD. I doubt this belonging to *R. tomentosa*, and think it is one of the *R. coriifolia* group coming nearest *R. cinerea*, Rap. This species has not been recorded from Britain though Mr. Baker makes it synonymous with his *R. Watsoni*, from which it differs chiefly in its much more glandular petioles and peduncles, but both species have usually more fully biserrate leaflets, while *R. Watsoni* never, and *R. cinerea* rarely has hispid fruit. Its differences from all other species of the group are greater than those from *R. Watsoni*.—A. H. WOLLEY-DOD.

*R. micrantha*, var. *Briggsii*, Baker. Hedge by roadside near Hadzor, Droitwich, Worcs., 9th Aug., 1907.—C. H. WADDELL.

*R. Borreri*, Woods. Between Edge and Tilston, Cheshire, 15th Aug. 1907. Ref. No. 1515.—A. H. WOLLEY-DOD.

*R. canina*, Linn., var. — Hedgerow, South Croxton, Leics. Ref. No. 106. Sept. 1907.—A. R. HORWOOD. British authors would probably label this *R. lutetiana*, Lém., to which group it belongs, coming near *R. fallens*, Deségl., in its hairy petioles, while the broad leaflets and obovoid fruit show an approach to *R. Touranginiana*, Deségl. and Rip. There are almost as many forms of some of these species as there are bushes. Another gathering by Mr. Horwood from the same place, but without reference number, is the same form.—A. H. WOLLEY-DOD. *R. canina*, L., var. *lutetiana* (Leman).—D. FRY. An intermediate, towards *dumalis*. Quite a common form.—J. W. WHITE.

*Pyrus Domestica*, Ehrh. (*P. Sorbus*, Gaertn.). From a large tree in the Botanic Gardens at Oxford, which is said to have been grown from a fruit of the Wyre Forest Tree. June flowers. Sept. fruit, 1907.—G. CLARIDGE DRUCE.

*Saxifraga umbrosa*, L., var. Orig., limestone rocks, Lovers' Leap, Ashwood Dale, Buxton, v.-c. 57, May 1906. Cult. Quorn

Vicarage Garden. When this Saxifrage was distributed through the Watson Botanical Exchange Club in 1906, the Rev. E. S. Marshall remarked on it: "This is the crenate-serrate (Pyrenean) plant."—F. L. FOORD-KELCEY. The Pyrenean type, with oblong-oval, crenate-serrate leaves. This does not, apparently, occur as a native in Ireland; and it is probably not so in England.—E. S. M.

*Epilobium lanceolatum* × *roseum*? Waste ground, by the Rea Brook, Meole Brace, Shropshire, Aug. 1907. Concerning this, the Rev. E. S. Marshall, to whom I submitted specimens, and for whose verdict I am very grateful, writes as follows:—"A very puzzling hybrid—one parent is certainly *E. roseum*, which predominates in the inflorescence. The long-stalked, irregularly-toothed stem-leaves favour *E. lanceolatum* as the second factor, and I believe that it is most probably a narrow-leaved *lanceolatum* × *roseum*. At first I thought that it might be a cross with *E. tetragonum*, Curt. (*adnatum*, Grisebach), but that hybrid would not produce such long petioles in such irregularly shaped foliage. I am, however, not yet quite certain about the proposed determination; it is a most difficult plant."—E. S. M. I carefully examined the *Epilobia* of the immediate neighbourhood. *E. roseum*, Schreb., was present, in cultivated ground, but quite rare. *E. montanum*, L. everywhere abundant, while by the banks of the Rea Brook were *E. hirsutum*, L. in profusion, also coming up as a weed away from the water-edge, and *E. parviflorum*, Schreb., not abundant. No sign of *E. lanceolatum*, S. and M., one of the supposed parents of the hybrid, has yet been observed, nor *adnatum*, Griseb., but I contemplate searching the ground more minutely this forthcoming year.—J. COSMO MELVILL. This name was suggested by me for the only specimen which I had previously seen. I do not think that it is a foreign species. If it is (as I believe) a hybrid, *E. roseum* is certainly one parent (note the glandular, short and shrunken capsules, small, *roseum*-like flowers, long-stalked lower leaves, &c.). Mr. Melvill tells me that *E. roseum* occurs sparingly close by, but that he has seen neither *E. tetragonum*, Curt. (*adnatum*, Griseb.) nor *E. lanceolatum* anywhere near. The shape and irregular toothing of the leaves (which also shew no tendency to be adnate-decurrent) are strongly in favour of a *lanceolatum* origin, besides some other points. I have seen specimens of *lanceolatum* from Yorkshire, which is further north.—E. S. MARSHALL.

*E. Lamyi*, F. Schultz. Orig. Dulverton, v.-c. 5, S. Somerset, Cult. 2 Aug. 1907.—E. S. MARSHALL.

*Oenothera biennis*, L. Sandhills near Hightown, South Lancs,

(59), 30th August 1907. In these examples the flowers are much smaller than in *Æ. Lamarckiana*, but the stigmas occasionally exceed the stamens, especially when they are united before being reflexed. The styles are usually about the same length as the stamens—J. A. WHELDON. I examined the Linnean type-specimen last spring. Although miserably scrappy, it resembled this plant in the small size of its flowers; so the name is probably correct.—E. S. M.

*Æ. Lamarckiana*, Ser. in DC. The three plates, I. to III., which accompany this Report, illustrate the growth of this plant at St. Anne's; they were sent last year, but too late to be included in last year's Report. They are taken from an address to the members of the Manchester Field Club on "De Lamarck's Evening Primrose." A copy of this address was sent last summer to every member of the Botanical Exchange Club.—CHARLES BAILEY.

*Carum verticillatum*, Koch. Rhostie, Cardiganshire, v.-c. 46. Leg. J. H. Salter, D.Sc., 13th Sept. 1907. Communicated, Rev. W. H. PAINTER. I send these specimens *in fruit* thinking that they may be acceptable to members of the Club.

*Falcaria vulgaris*, Bernh. Field border (allotments) in the outskirts of the city of Lincoln, August 1907. Abundant for a few yards.—AUGUSTIN LEY.

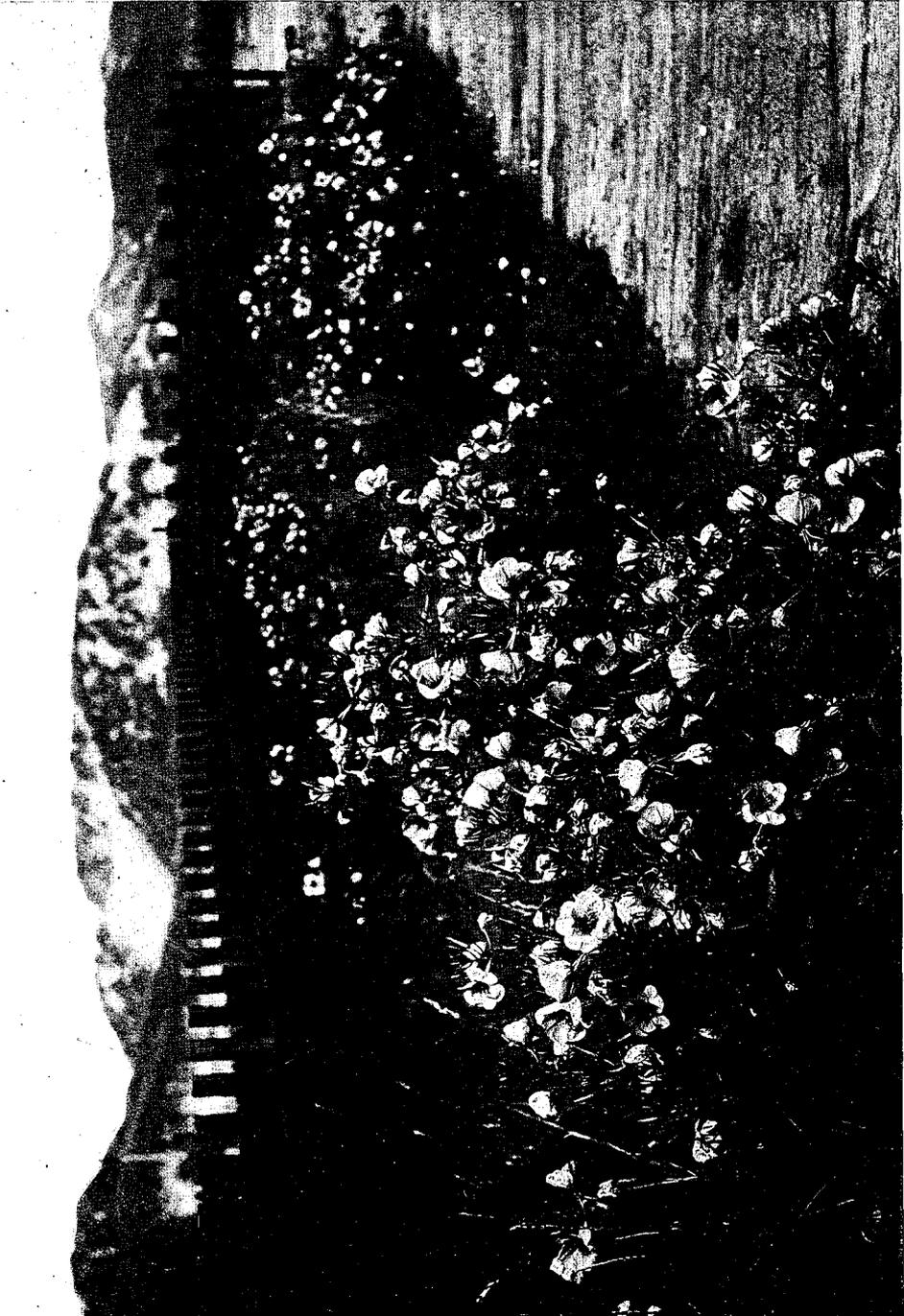
*Galium erectum*, Huds. Origin, Shirley, Derbs. (communicated to me by Rev. W. R. Linton). Cultivated 29th August 1907.—AUGUSTIN LEY. Correct.—E. S. M.

*G. erectum*, Huds. From Yeldersley fields, S. Derbs., cult. 1st July 1907. This is a very rare species in Co. 57; the present plant seems very nearly typical.—W. R. LINTON. Yes. W. R. L. had doubts about its proper status.—E. S. M.

*G. ochroleucum*, Syme non Kit. = *G. vero-mollugo*, Wallroth; *G. decolorans*, Grenier et Godron. Grassy roadside waste, Failand, North Somerset; 10th Aug. 1907. Growing with *G. verum* and *G. Mollugo*, these plants certainly appear to be the result of crossing between those species. The several patches produce stems varying in character and tint of flowers; some favouring one parent and some the other. At the end of September gatherings shewed only abortive ovaries. I could not find a single good fruit. The specimens agree well with examples gathered abroad; but I have sometimes doubted if the continental plant be really a hybrid, for it is of general distribution in Southern Europe, and often grows

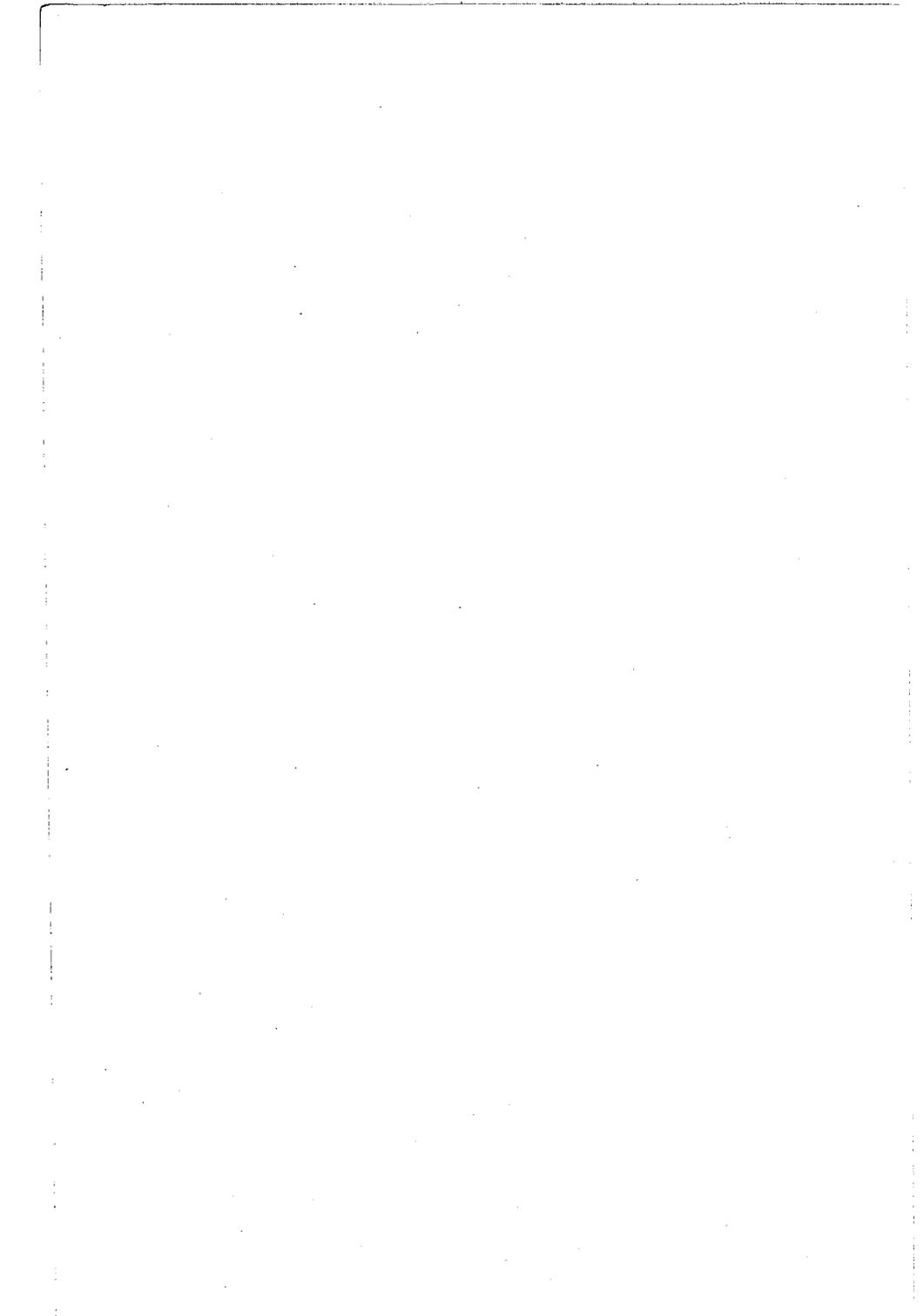


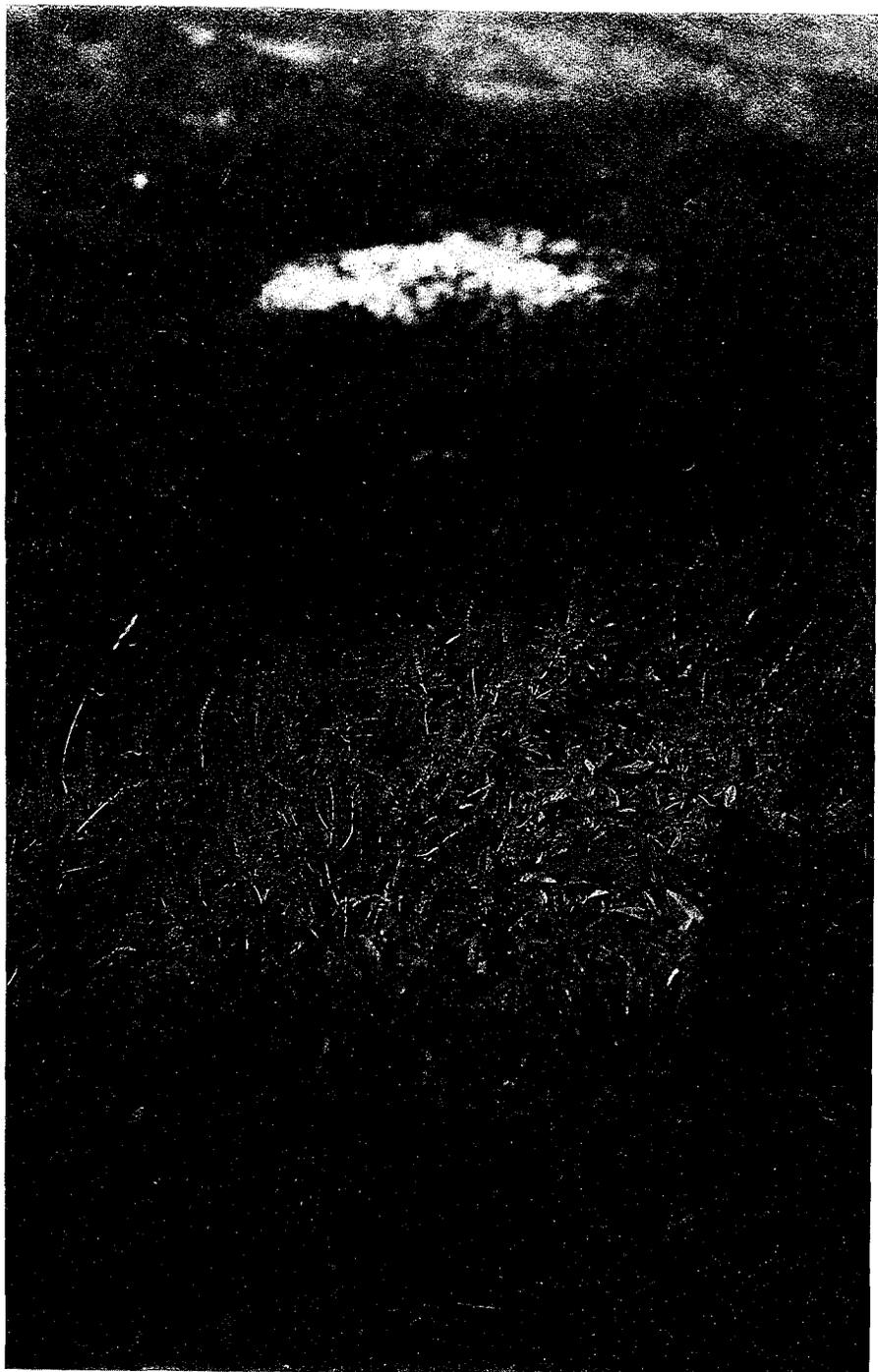


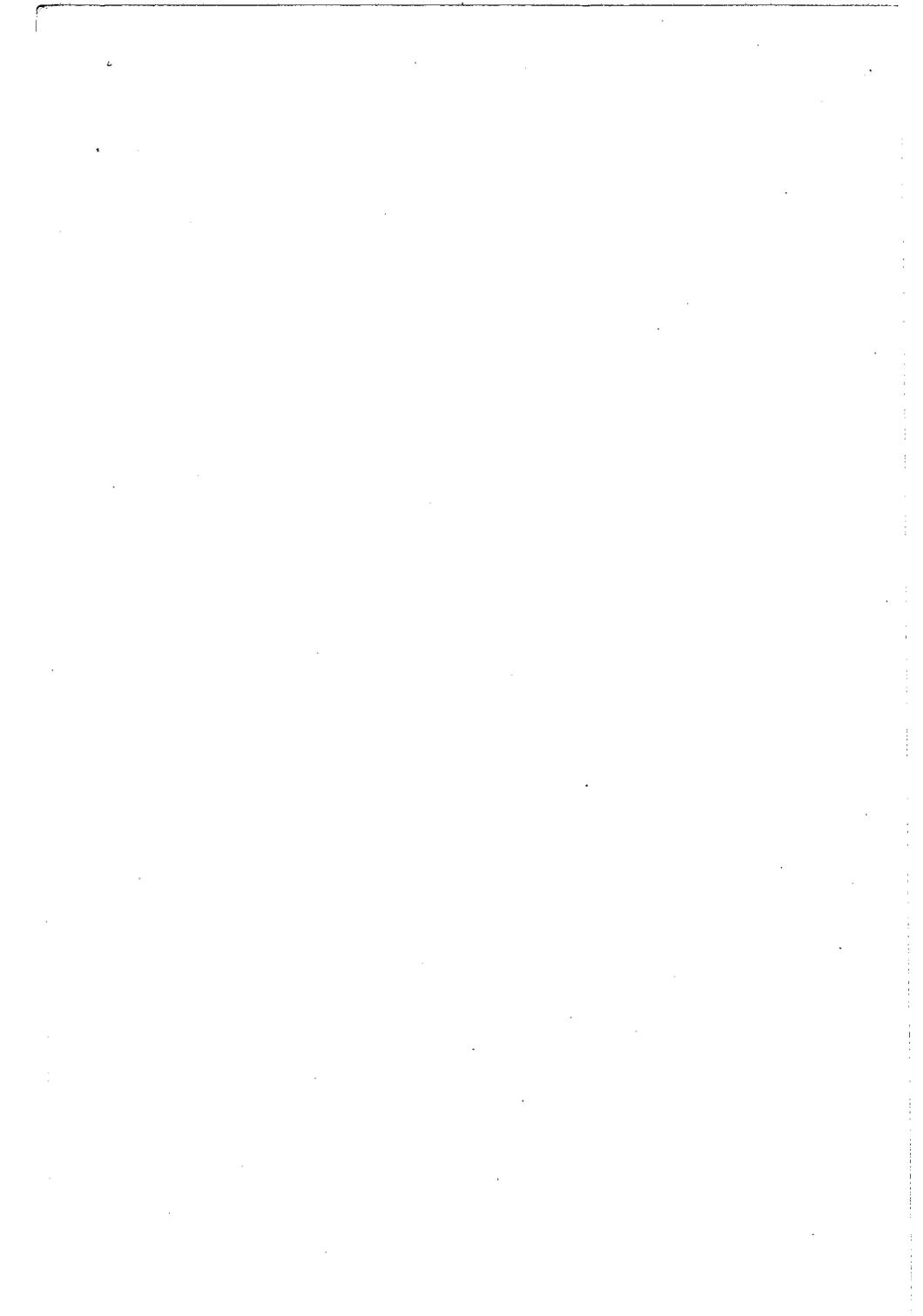












where neither of the supposed parents can be seen. I have not, however, had an opportunity of searching for fruits in late summer.—JAMES W. WHITE. Yes; *G. Mollugo* × *verum*, decidedly on the *verum* side. I have gathered a similar form in W. Sussex.—E. S. M.

*Valeriana Mikanii*, Syme. On the lias limestone between East and West Leake, Notts., 27th July 1907.—LEG. A. B. JACKSON and T. E. ROUTH. I should say undoubtedly *V. Mikanii*, Syme, though not thoroughly characteristic, as the lower stem-leaves have much fewer leaflets than is usual in well developed plants, in which they often run to 8 or 10 pairs.—D. FRY. This is now identified with *V. officinalis*, L. Correct.—E. S. M.

*Valerianella eriocarpa*, Desv. Portland and other places near Weymouth, v.-c. 9, June 1907. The locality by the backwater looks a native one.—H. J. RIDDELSDELL. From the description of the station in Mansel-Pleydell's *Flora*, this might well be a native in Portland. It appears to be common in W. France.—E. S. M.

*Solidago virgaurea*, L., var. *cambrica* (Huds.). Rocks by the Wye, Brecon, and Radnor, 25th June 1907. Leaves varying in breadth, usually broad; somewhat hairy; margin shortly ciliate; heads large.—AUGUSTIN LEY.

*S. virgaurea*, L. Variety. In river gravel at Abergwesyn, Brecon, 23rd July 1907. Leaves narrow lanceolate, somewhat coarsely serrate; somewhat hairy, and with ciliate margin; heads large. These varieties of Golden Rod agree with *S. cambrica*, Huds., in having fewer larger heads than the typical plant; in flowering earlier, and in growing mainly on rocks, either by streams or on mountain cliffs; but differ from it, and vary extremely among themselves in breadth of leaf. Would it not be more satisfactory to disregard the breadth and shape of the leaf and unite them all as a "var. *præcox*" of the type?—AUGUSTIN LEY.

*Aster* —. By the railway between Yarnton and Wolvercote, Oxfordshire, in great quantity, Oct. 1907. Perhaps best referred to *A. novi-belgii*, L.—G. CLARIDGE DRUCE. In spite of the very few serrations on the leaves, I believe this is the same as the Wicken Fen plant, on which there is a note in 'B.E.C. Report,' 1897, p. 551. Those who can understand the note will be able to supply the name. My Dorset specimens of the same plant vary greatly in the number of serrations.—E. F. L.

*Ambrosia artemisifolia*, Linn. Plate IV., issued with this Report, illustrates the growth of this alien, which has been

established for over twenty years at St. Anne's-on-the-Sea, v.-c. 60. The area represented on the plate has been invaded by drifting sand, and building operations have begun in its immediate neighbourhood. The Club is indebted to the Manchester Literary and Philosophical Society for the use of the plate. It was issued with a paper entitled "Further Notes on the Adventitious Vegetation of the Sandhills of St. Anne's-on-the-Sea," read 9th April 1907, a copy of which was posted to each member of our Club.—CHARLES BAILEY.

*Achillea*, sp. Pettycur, Fife, 18th July 1907.—W. R. LINTON. We found a good patch of this alien by the railway embankment. I don't know the species.—E. S. M. The *Achillea* (unnamed) seems very near to *A. lanata*, Spreng, if not quite it. But this section of the genus is variable and rather perplexing.—J. W. WHITE.

*Matricaria suaveolens*, Buchen. (= *M. discoidea*, DC.). By the railway at Basingstoke, Hants. New county record. Sept. 1907.—G. CLARIDGE DRUCE.

*Senecio viscosus*, L. Railbanks near Walton, Liverpool (v.-c. 59), Aug. 1907. New to S. Lancs.? This plant, which is not recorded for the north side of the Mersey in Green's 'Liverpool Flora,' did not occur in this locality until this year. The ground was disturbed (but no ballast brought) to lay a temporary railway siding, and unless seed was brought with the rolling stock or plant, it would appear to have been dormant in the soil.—J. A. WHELDON.

*S. viscosus*, L. Highley, Salop, Aug. 19th, 1907, v.-c. 40.—W. H. PAINTER. Growing upon railway sidings in great profusion. Doubtless introduced with ballast.

*Cnicus tuberosus*, Roth. Orig., Nash Point, Glam.; cult., Llandaff, 5th and 12th Aug. 1907. Also (A) heads cut from wild plants, 7th Aug. 1907; and (B) ripe heads from the native locality, Sept. 1907. Many members already have sheets of the wild plant: the cult. specimens are added in illustration of certain points. Fruit ripens freely in the wild state (B), but much more sparsely in cultivation. The cultivated plant is very luxuriant, often developing a large number of branches, heads, and stem leaves. Though the wild plant makes good specimens and preserves its colour well, yet elaborate precautions have failed to keep a good colour in specimens from the garden: at any rate, in 1907. This may be due to the heavy clay soil, or to the unusually cold season.

The plant has fleshy 'tuberous' roots, and not the creeping rhizome found in *C. pratensis*, Willd., and *C. Woodwardii*, Wats.

(cf. 'Report B.E.C.' 1904, p. 25, 1906, p. 229, for other reasons for keeping it distinct from *C. pratensis*). It agrees very well with the description of *C. tuberosus* in 'Sowerby' V. 13 [the anthodes are, however, often not solitary], and produces good fruit. Reports of experts given below seem to place beyond a doubt its identity with *C. tuberosus*, Roth.

I have in my herbarium a poor specimen of *C. tuberosus* from Avebury, coll. G. C. Druce; a cultivated specimen of the same, comm. A. B. Jackson; and a plant [wrongly assigned in my 'Flora of Glamorganshire' to *C. Woodwardii*] from a small patch found in the dredged mud of the Cardiff new docks, a locality many miles away from Nash Pt. There is also a specimen in St. Brody's herbarium at Gloucester labelled 'see *Carduus Forsteri*, Syme. Mr. Dyer thinks it *Woodwardii*.' 'A fine patch of this rare thistle grows near the Stonehouse Station, Glouc., 1868.' There is no root present. It is not possible, I believe, to distinguish these last two specimens from *C. tuberosus*, Roth. But it is doubtful if either of them was native.

The Avebury plant in cultivation shews certain changes. The phyllaries become more decided and contrasted in colouring, and much more clearly veined. The leaves become more clearly veined, stronger and more rigid; as well as broader, through the lengthening of the lobes.

The wild Glamorganshire plant is more rigid than that from Avebury, with thicker and more solid leaves. It is stouter and taller; and more luxuriant, branching lower down the stem. The leaves have a broader rachis and are larger. The veins of the phyllaries are much less prominent; their mucro longer. Under cultivation the leaf lobing is more coarse and sometimes almost disappears. The phyllaries do not develop their veining. The Cardiff and Stonehouse plants are somewhat intermediate between the Wilts and Nash Point plants in these respects.

Professor Paul Ascherson writes: "Your plant agrees tolerably well with the German one. I write but 'tolerably,' because there is a slight difference in the form of the leaves; the *acaule*-liking form, exhibited in all leaves of your plant, occurs in nearly all of my German specimens only in the primordial ones: in the majority of leaves the segments are cleft into lanceolate laciniae. But there are specimens from a locality in Bohemia (where the *Cirsium bulbosum* is only an alien, introduced with grass seed) agreeing very well with yours. I think it very probable that at your locality the plant is a native. In Western France the species occurs also in very scattered localities, as in Brittany and Normandy. The hypothesis that the English plant is a hybrid between *Cirsium acaule* and *anglicum* or even *Carduus crispus* seems to me to be highly improbable."—H. J. RIDDELSDELL. I compared this with Lambert's original Boynton specimen preserved at Kew, and it

matches very well with that plant except that the Welsh specimens have rather less divided leaves.—A. B. JACKSON. On seeing fuller specimens of this interesting plant, I withdraw the suggestion that it is the same as a Roundstone, Connemara, plant, and accept the present naming.—E. F. L. I suppose that this is correct. But the Avebury plant, which I saw in good flower in Rev. T. A. Preston's garden at Marlborough in 1885, branched far more freely in cultivation.—E. S. M.

*C. acaulis*, Willd., var. *caulescens*, Pers. Plentiful in pastures on the Lias, about Compton Dundon, v.-c. 6, N. Somerset, 14th August, 1907. Ref. No. 3195.—E. S. MARSHALL.

*C. arvensis*, Hoffm. var. *setosus* (Bess). Waste ground, Canton, Cardiff, Sept. 1907. I have doubts that this variety is rightly named. The plants vary considerably in leaf outline, from entire to lobed—the lobes always small. Perhaps it is var. *vestitus* (Vest). Forms of var. *mitis* were also present.—H. J. RIDDELSDELL. According to G. Beck's arrangement of the forms of *Cirsium arvense* in Koch, ed. iii, p. 1553, this is *C. arvense*, Scop., var. *obtusilobum*, forma *subincanum*, G. Beck. The leaves are not quite so rounded and obtuse, or so distinctly lobed, as in the Bath plant, which has also been called *setosus*, but in error, for *C. setosum*, Mey., as described in Koch's 'Flora,' comes under var. *commune*—the section with sharply pointed leaf-lobes.—C. BUCKNALL and JAS. W. WHITE. Agrees very well with foreign specimens so named at Kew. For an account of this variety see F. N. Williams' 'Prod. Fl. Brit.,' part 2, 51.—A. B. JACKSON. This is rather the var. *mitis*, Koch, than var. *setosus* (Bess.), which has entire or subentire leaves.—E. F. L.

*Onopordon Acanthium*, Linn. A few plants on the sandhills off the North Drive, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 24th August and 12th October 1907.—CHARLES BAILEY. Approaching var. *viride*, Michet; a form which I have seen at Deal, March, and Chatteris.—H. J. RIDDELSDELL.

*Serratula tinctoria*, L., var. *monticola* (Boreau). Watermeadows in the Parish of Kempford, Fairford, E. Gloucester, v.-c. 33, 20th July 1907. Some of the larger specimens have longer peduncles, and the heads in that case are larger. Is this the same as var. *alpina*, Gren. and Godr.?—H. J. RIDDELSDELL. Similar to specimens so named at Kew, but appears to be a mere state, and not a good variety. I found a form which appeared to be intermediate between type and variety on the Downs near Winchester in the autumn of 1906, and possibly this was the plant recorded from there as var. *monticola* by the late Mr. F. I. Warner.—A. B. J.

*Hieracium Pilosella*, L., var. Scape and phyllaries very white and tomentose; nearly glandless. Origin, Wenlock Edge, Salop; cult. 19th June 1907.—AUGUSTIN LEY. This is the form referred to in 'British Hieracia,' p. 9, as eglandular. Fries does not describe the heads of *H. Pilosella* as being glandular; this may therefore be the type, though the species with us is usually more or less glandular.—E. F. L.

*H. Auricula*, L. Root from Keevil, v.-c. 8, N. Wilts.; cult. 10th June 1907.—E. S. MARSHALL. Nice examples of *H. Auricula*, L., without any of the faults that often make cultivated specimens unwelcome.—E. F. L.

*H. pratense*, Tausch. In crevices of wall, and upon bank, very locally, just South of Shrewsbury, Salop, August 1907. It is impossible to say how long this plant has been located in this spot, but it looks as if it had been there for a considerable period, at all events. I am indebted to the Rev. E. F. Linton for confirmation of the identification. Not before recorded for Salop, or indeed, I believe, for England; the other records being for Scotland and Ireland.—J. COSMO MELVILL. I do not think that this is correctly named; but the material is so very poor that it is not worth troubling about.—E. S. M. So I named it when Mr. Melvill sent it me tentatively last autumn. It agrees with what Aman. Dahlstedt has formerly confirmed for me as *H. pratense*, Tausch. This was the plant cultivated at the Cambridge Botanic Gardens, identical with, and I believe originating from the Scotch plant. The cyme is often more compact, but in some situations it opens out, e.g. in specimens from the garden at Sellack.—E. F. L.

*H.* —. Found at Culbone, v.-c. 5, S. Somerset, at the end of May 1907, and grown on in my garden. I thought that it might be *H. cyathis*; but Rev. W. R. Linton pointed out that it differs in several respects. Very possibly it may be *H. Schmidtii*, var. *devoniense*, modified by being cultivated in good soil.—EDWARD S. MARSHALL. The specimen submitted is too imperfect for identification, but I recognise it as one which has not been identified, and is under consideration.—E. F. L.

*H. centripetale*, F. J. Hanb. Correifron, Moffat, N.B. 20th July 1907.—W. R. LINTON.

*H. lasiophyllum*, Koch. Rocks, Aberedw, Radnor, 25th June 1907.—AUGUSTIN LEY. Yes.—E. S. M.

*H. rubicundum*, F. J. H. Origin, Black Mountain, Hereford and Brecon. Garden seedlings, 6th June 1907.—AUGUSTIN LEY.

*H. vagense*, Ley. Side of the Wye at Boughrood, v.-c. 43, and Erwood, v.-c. 42, 27th July 1907.—H. J. RIDDELSDELL. Correct.—E. F. L.

*H. serratifrons*, var. *lepistoides*, Johanss. Radyr, v.-c. 41, 23rd August 1907; Goring, v.-c. 23, 4th June 1907; downs and wood near Stroud, v.-c. 34, 9th July 1907. Named by Mr. Ley, who refers to this form plants which "used to be called *pellucidum* by English Botanists," the true *pellucidum* appearing to be identical with what was named var. *lucidulum*, Ley.—H. J. RIDDELSDELL. I agree (Stroud plant).—E. F. L. Not what I understand by var. *lepistoides*—a plant with the involucre very pale, like a peeled twig, whence the name is derived. In these specimens the heads are densely black-glandular.—E. S. M.

*H. serratifrons* var. *lepistoides*, Johanss.? Symonds Yat, Glouc., 21st June 1907. I have queried this, as it does not exactly agree with my Scandinavian specimens; I have sent specimens to Scandinavian experts, and hope to get their opinion on them before long.—W. R. LINTON.

*H. Cinderella*, Ley. Symonds Yat, West Gloucester; June and July 1907. I am informed by Rev. W. R. Linton that the position of this plant will have to be changed from that under which it was published (cf., 'Bot. Jour.', 1907, p. 109). I therefore refrain from quoting it as under *H. serratifrons*, Almq. The present specimens may be taken as good characteristic specimens of the true plant.—AUGUSTIN LEY. The name should not have a capital letter.—E. S. M.

*H. subulatidens*, Alm., var. *cuneifrons*, Ley. Origin Craig Cille, Brecon; cult. 3rd July 1907.—AUGUSTIN LEY.

*H. platyphyllum*, Ley. Among quarry debris at foot of the cliffs, Portland Island, near the neck, v.-c. 9, 20th June 1907. "Phyllariés and branching of panicle just characteristic," A. L. A curious extension of area for the species, which is known otherwise from W. Yorks, Brecon, Monmouth, Caermarthen, Glamorgan, and Hereford Counties.—H. J. RIDDELSDELL. The Portland plant seems rightly referred to *H. platyphyllum*, from which it differs very slightly and in characters that may be due to climate and situation. It might be worth while cultivating this form by the side of the typical plant, to test the identification.—E. F. L.

*H. duriceps*, F. J. Hanb., var. *crawoniense*, F. J. H. Various localities in the Moffat neighbourhood, July 1907. This differs from description in 'Brit. Hier,' p. 63, in having peduncles with few

to rather many glands and heads with scattered glands on the phyllaries. Thus it is a slight variety of the variety.—W. R. LINTON.

*H. acroleucum*, Stenstr., var. *mutabile*, Ley; named on Mr. Ley's authority. From Boughrood, Radnorshire; and Erwood and near Llangammarch, Breconshire; 26th and 27th July 1907.—H. J. RIDDELSDELL.

*H. subramosum*, Lönnr. Coast and railbank near Pettycur, Fife, 18th July 1907. This is the plant gathered in the same locality by Dr. Boswell Syme in 1876. As growing it looks very like stout *H. vulgatum*, but on nearer inspection differs both in panicle and head clothing. I have sent specimens to Scandinavian experts and hope soon to receive their opinion.—W. R. LINTON. This agrees well with the description of *H. subramosum* in 'Brit. Hier.,' but there are some divergencies from the plant gathered and distributed by Syme in 1876. That had the leaves glabrous on the upper surface, all but the lowest strongly dentate with long teeth, the heads rather few, the phyllaries shaggily clothed with long hairs and some small glands, styles inconspicuous perhaps late exerted. The Pettycur plant differs in all these respects, with leaves nearer *H. vulgatum*, Fr., in texture, clothing, shape, teeth and colour; phyllaries with shorter hairs, styles much exerted and early produced. It is not ordinary *H. vulgatum*, but it is extremely like subalpine forms of *H. vulgatum* from Glen Doll, &c., which Aman. Dahlstedt formerly accepted as a *f. montana* of that species. It would be desirable to take his opinion on this Pettycur plant.—E. F. L.

*H. sciaphilum*, Uecht. Glynhir and neighbourhood, also at Talley Abbey, Carmarthen, July 1907. It is thought that specimens of this common Hawkweed may be valued, to compare with *H. cacuminatum* Dahl. It is easily separated, in a general way, from that, by the numerous, more coarsely toothed stem leaves, rougher, cuneate-based heads, bracteolate peduncles, and unmistakably ciliate florets.—AUGUSTIN LEY.

*H. sciaphilum*, Uecht., var. *strumosum*, Ley. Origin, Black Mountain; cult. July 1907.—AUGUSTIN LEY.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Aber-gwesyn and near Llanwrtyd, Breconshire, 23rd July 1907. Fide A. Ley.—H. J. RIDDELSDELL.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Aber-gwesyn, Brecon, 23rd July 1907. "I still retain this under the name *amphibolum*," W. R. Linton. Note: The name should of course be as above. It has been printed "*H. amphibolum*, Lindeb." on the labels, as though a species.—AUGUSTIN LEY.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Nant Hebog, Llanwrtyd, 23rd July 1907. This is the Hawkweed from Llanwrtyd ascribed in 'British Hieracia' (p. 69) to *H. Adlerzii*, Almq. I believe that Rev. W. R. Linton is now inclined to view it as probably *H. amphibolum*.—AUGUSTIN LEY.

*H. septentrionale*, Arv. Touv., var. *amphibolum*, Lindeb. Aberedw and Boughrood, Radnor, 25th June 1907. This plant has been sent by Rev. W. R. Linton to Enander.—AUGUSTIN LEY.

*H. cacuminatum*, Dahl. Ammanford, 20th July 1907. "Probably *cacuminatum*."—W. R. LINTON. This is near the Scandinavian type specimens of *H. cacuminatum*; differing from the British plants we have been ascribing to this species in the phyllaries being far less clothed with glands and having their tips esenescent.—AUGUSTIN LEY.

*H. cacuminatum*, Dahl., f. Abergwesyn, Breconshire, 23rd July 1907. This is the *sciaphilum*-like plant common in many parts of Britain, which has been placed under *H. cacuminatum*, Dahl., but is not the typical plant of Dahlstedt.—AUGUSTIN LEY.

*H.* — ? Origin Mellte glen, S. Brecon. Cult. 3rd July 1907. This plant has been distributed before under various names; but its right place in our lists remains still doubtful. Rev. W. R. Linton does not favour the suggestion that it can be placed under *H. sparsifolium*, Lindeb.—AUGUSTIN LEY.

*H. sparsifolium*, Lindeb., var. *lingua*, Ley. Origin West Brecon; cult. 1st July 1907. This plant readily grows by seed and increases in the garden.—AUGUSTIN LEY.

*H. rigidum*, var. *trichocaulon*, Dahlst. Hedge bank, Howells-field, W. Glos., 19th Aug. 1907.—W. A. SHOOLBRED. This matches nicely the var. *calcaricolum*, F. J. Hanb. The specimens are better developed and not so desiccated as the few original specimens, whose corymbs were probably reduced to 1-2 heads through the drought and the exposure of their habitat.—E. F. LINTON.

*H. boreale*, Fr., var. *eminens* (Jord.). Origin Aberedw, Radnor; cult., 28th August 1907.—AUGUSTIN LEY.

*H. umbellatum*, L., near var., *filifolium*, Back. Roadsides near Eltham, N. Lincoln; 19th August 1907.—AUGUSTIN LEY. No.—W. R. LINTON. I should prefer to call this var. *linariifolium*, Wallr., a widely spread form, from Perth and Wigton to Lancashire and Norfolk, rather than var. *filifolium*, which has yet narrower and more entire leaves.—E. F. L.

*H. umbellatum*, L., var. near *coronopifolium* (Bernh.). Roadside near Doddington, S. Lincoln, 14th August 1907. Much more hirsute than *H. coronopifolium* usually is.—AUGUSTIN LEY. Yes.—W. R. LINTON. Very good.—E. S. M. This differs from my English series of var. *coronopifolium*, which all have the more glabrescent leaf character; but it is included in M. Arvet-Touvet's description, "feuilles glabrescentes ou pubescentes-blanchâtres en dessous." Fries ('Symb. Hist. Hier.' p. 177), wrote "*folia subtus glabrescentia vel puberula*," and altered this in his 'Epicrisis' (p. 136) to "*foliis pubescenti-incanis*." A hairy form would thus be included in the older descriptions.—E. F. L.

*H. umbellatum*, L. Tenby, 5th Sept. 1907. At Mr. Ley's suggestion I sent this to Mr. W. R. Linton labelled var. *pauciflorum*, Hartm., who replied, "I doubt this: I was over those sandhills some few years ago and considered the *H. umbellatum* only the type: you may find all stages from plants short one headed to full form. I think the reduced form is due to situation perhaps aided by sheep or rabbits."—S. H. BICKHAM. Var. *curtum*, Linton, just like some of the original Abersoch specimens.—E. F. L.

*H. umbellatum*, L., var. *paniculatum*, Cariot? Origin, Nant Francon, Carnarvon; cult., August 28th 1907. Much disfigured by garden mildew. Styles dark greenish. Phyllaries all blunt.—AUGUSTIN LEY. Not var. *paniculatum*, Cariot, with which I identified Mr. Griffiths' Bangor plant ('B.E.C. Report,' 1890, p. 306), and which has green phyllaries (pale green when fresh). I do not know the hirsute Great Orme's Head plant, referred to under var. *paniculatum*, with the account of which Mr. Ley's plant agrees pretty well.—E. F. L.

*Trachelium caeruleum*, L. Naturalised on a wall in St. Peter's, Guernsey, but doubtless only an escape from the neighbouring garden. July 1906.—G. CLARIDGE DRUCE.

*Anagallis caerulea*, Schreb. Waste ground, Canton, Cardiff, Sept. 1907. The petals are finely gland-fringed.—H. J. RIDDELSDELL. Now known as *A. femina*, Mill.—ED.

*Erythraea Centaurium*, Pers., forma. Penhallow Moor, St. Newlyn East, West Cornwall, v.-c. 1. 13th Aug. (with Mr. H. Groves) and 4th Sept. 1907. A much-branched densely-flowered form growing in a patch of 50—100 plants, with ordinary *E. Centaurium* and *E. pulchella* close by. The small plants resemble var.

*capitata* (Koch.), but the larger are quite different. Rev. E. S. Marshall tells me he has seen similar plants at Lytham. Hybridity between *E. Centaurium* and *E. pulchella* might be suggested, but I imagine the variability of the former is sufficient to account for this form.—C. C. VIGURS. *Centaurium umbellatum*, Gilib.—H. J. R.

*E. littoralis*, Fr. Dornoch, 10th Aug. 1907. Passed by Ar. Bennett.—S. H. BICKHAM. A remarkable variety which I cannot match in an extensive series. It differs principally from typical *E. littoralis* in its sepals relatively shorter than the corolla tube, and their broader, more obtuse, and less attenuate apices. They are also much less scabroso-puberulous, although more so than in *E. Centaurium*.—J. A. WHELDON. Yes; the usual form of the N.E. coasts.—E. S. M. *Centaurium vulgare*, Rafn.—H. J. R.

*Gentiana baltica*, Murb. Quintrell Downs, St. Columb Minor, 21st Aug. 1907 (with Mr. H. Groves), and Penhallow Moor, St. Nelwyn East, 4th Sept. 1907, both West Cornwall, v.-c. 1. As will be seen from these specimens the plant varies much in size in the same locality. The tiny specimens with one or two flowers only grow together in fairly large numbers in a group, and remind one of *G. verna*. They seem to me to be as worthy of varietal rank as are many of the forms which have been so raised.—C. C. VIGURS. Very typical! I greatly doubt the occurrence of true *G. campestris* in the South of England.—E. S. M.

*Anchusa officinalis*, L. In the greatest luxuriance and abundance in the station already cited for *Silene noctiflora*, L., viz., Birkdale, south-west Lancashire, v.-c. 59, 24th August 1907. From the well established growth of the plant it must have been there for many years.—CHARLES BAILEY. I agree.—E. F. L.

*Pulmonaria officinalis*, L. In a coppice now an outlying part of Wychwood Forest, Oxford, where it was pointed out to me by Lady Margaret Watney. Here the habitat looks a very natural one as it is far from houses or gardens, or other sources of introduction. April 1907.—G. CLARIDGE DRUCE.

*Echinosperrum Lappula*, Lehm. = *Lappula echinata*, Gilib. Occurring in the undergrowth of larger aliens in the poultry area of the sandhills north of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 6th and 20th July 1907. Other species of *Echinosperrum* also occurred.—CHARLES BAILEY.

*Echium italicum*, L. In a field on a fowl-farm at Cothill, Berks. Doubtless introduced with other aliens with foreign corn.

It was also in very beautiful growth on the edge of one of the gravel pits near Ware, Herts, there introduced probably by the cleanings from the foreign barley used in malting. August 1907.—G. CLARIDGE DRUCE.

*Verbascum sinuatum*, L. ? On waste ground, St. Philip's, Bristol, 20th Sept. 1907. I am not at all sure that the naming is correct, for the specimens do not entirely correspond with my continental ones. Several Mulleins have been growing for some years on this waste ground. They are all difficult, and possibly not European. Mr. Britten does not recognize them, and I have not had the chance of working them out in any big herbarium.—JAMES W. WHITE.

*Linaria arenaria*, DC. On the Burrows near Westward Ho, N. Devon, Oct. 1907. The situation appeared to be quite a natural one, but the plant is of extremely limited distribution in Europe, being confined to the dunes of the neighbourhood of Cherbourg in Western France. Subsequently ('Journ. Bot.' 451, 1907) it has been shewn that seeds were sown here about 14 years ago which had been brought from France.—G. CLARIDGE DRUCE.

*Veronica didyma*, Ten., var. *grandiflora*, Bab. Garden, Shirley, Derby, 25th Aug. 1907.—W. R. LINTON. I believe that this is Babington's var. *grandiflora*, published under *V. polita*, Fr. So far as I remember, the identification of this species with *V. didyma*, Ten., was rejected by Fries himself when describing it.—E. S. M.

*V. serpyllifolia*, var. *humifusa* (Dickson). Self-sown in my garden from a plant introduced from Ben Lawers about twelve years ago. It seems to have retained completely its character both in the prostrate stem and in the glandular pubescence of the fruit. The purity of the breed may be largely due to the situation of my garden, in the middle of the town, preventing admixture with type.—L. CUMMING. Should be var. *tenella*, All.—H. J. R.

*V. peregrina*, L. Clogher Valley, Co. Tyrone, June 1907.—C. L. PECK.

*Euphrasia Vigursii*, Davey. Quintrell Downs, St. Columb Minor, 8th Sept. 1907, and Newlyn Downs, St. Newlyn East, 16th Sept. 1907, both West Cornwall, and collected C. C. V., Roborough Downs, 13th Aug. 1907, and High Moor, Lydford, 3rd and 15th Sept. 1907, both South Devon, v.-c. 3. The plants I send are from a locality already published and from three new localities. For those from Roborough Downs I am indebted to Mr. Clive Sara, who collected them at my request, and those from near Lydford (elevation about 900ft.) to Miss D. Glazebrook, who found them there.

The Quintrell Downs plants, growing amongst ling, short furze, &c., are generally more branched and "drawn up" than the others. These Cornish specimens have usually a paler and larger corolla than the Devonshire ones. Records for East Cornwall and North Devon are (I believe) still wanting. All the known localities for this plant (except Davey's original one) are heathy and furzy downs or crofts; in at least three of them *Gentiana baltica* also grows, and in the original one *Gentiana praecox*.—C. C. VIGURS. *E. Vigursii*? Quintrell Downs. This has larger, paler flowers than Mr. Davey's plant from Perranzabuloe, and the bracts and flowers are not so crowded. The glandular hairs are shorter than those of *E. Rostkoviana*, and less abundant on the stem. Can it be *E. campestris*, Jord.?—C. BUCKNALL. *E. Vigursii*, Davey.—E. S. M.

*E. brevipila*, Burn. and Gr.? Roundstone and Woodford, Co. Galway, Ireland, 21st and 24th Aug. 1907. Doubtful gatherings as regards some of the specimens. It seems evident that although in England, *E. brevipila* is fairly constant in characters, in the West of Ireland there are several forms that differ rather widely. Some of these specimens are almost, and others quite, eglandular, while the habit of the latter verges towards that of *E. stricta*. Still, I know not where else to place them.—JAMES W. WHITE. *E. brevipila* (Woodford). Yes; a peculiar form, sometimes simulating the habit of *E. nemorosa*.—E. S. M. Ditto (Roundstone). Very characteristic.—E. S. M.

*E. borealis*, Towns. Limestone pasture on Mendip, N. Som., 3rd Sept. 1907.—J. W. WHITE. Correct.—E. S. M.

✓ *E.* ——. Redhill, Salop, on and near waste ground connected with the disused railway track, Aug. 1907. Probably *E. nemorosa*, H. Mart., but a very large growing form.—J. COSMO MELVILL. This is *E. nemorosa*, H. Mart.—C. BUCKNALL and J. A. WHELDON. A form of *E. nemorosa*, I believe; material not very good.—E. S. M.

*E. gracilis*, Fries. Clifden, Co. Galway, Ireland, 16th August 1907.—JAS. W. WHITE. And from Rossmore, by the Shannon, Co. Galway, 24 Aug. 1907.—JAS. W. WHITE. *E. gracilis* (Clifden). On my sheet there is, I think, a mixture; part being *E. gracilis*, and part *E. scottica*, Wettst.—E. S. M. *E. gracilis* (Rossmore). Yes.—E. S. M.

*E. scottica*, Wettst. Moffat, Dumfries, 18th July 1907.—W. R. L.

*E. scottica*, Wettst. Tatham Moor, Hindburndale, W. Lancs.,

Aug, 1907. This occurs in two forms, one with flowers violet streaked with red-purple, the other with flowers pale violet and white. It is found also on the same moor on the Yorkshire side, in v.-c. 64, York, mid-west.—ALBERT WILSON. Right, but Wettstein's name was spelt *scottica*.—E. S. M. No, it is *E. gracilis*, Fr.—C. BUCKNALL. The notes suggest a mixed gathering.—H. J. R.

*E. curta* v. *glabrescens*, Wettst. Longstone Edge, Derbs., 28th Aug. 1907. Mr. Marshall, to whom I sent specs., considers this to be rather *E. Kernerii*, Wettst., on account of the larger flowers.—W. R. LINTON.

*E. latifolia*, Pursh. Farr Point, W. Sutherland. It is to be desired that these Scottish forms should be carefully examined and compared with American examples. I have some doubts about their identity. July 1907.—G. CLARIDGE DRUCE. Correct.—E. S. M. Not enough labels sent.—H. J. R.

*Bartsia viscosa*, L. Grassy parts of the sands near the sea, Baglan, Glam., 30th June 1906.—H. J. R.

*B. alpina*, L. Ben Laoigh, July 1907.—P. EWING.

*Rhinanthus Crista-galli*, L., var. *angustifolius*, G. and G.? Abundant in marshy meadows, Llangasty, Brecon, 25th June 1907. This agrees with the description of var. *angustifolius*, G. and G. in the narrowness of the leaf, but instead of being a "bushy much-branched" form has a slender, nearly simple stem.—AUGUSTIN LEY. This does not appear to me distinguishable from typical *R. Crista-galli* (*minor*, Ehrh.).—E. S. M.

*R. C-galli*, var. *stenophyllus*, Schur. Near Llangorse Lake, Brecon, 24th June 1907.—W. R. LINTON. Probably *R. stenophyllus*, Schur.—E. S. M.

*R. stenophyllus*, Schur.? Coast sand dunes, Formby, S. Lancs, (59), Aug. 1907. The same plant as that already distributed from the coast of Cheshire and W. Lancs., referred by Mr. Marshall to *R. stenophyllus* and by Mr. Druce to *R. minor*. I should like to know which it really is. It is associated with *Pyrola rotundifolia*, *Orchis incarnata*, *Epipactis longifolia* and *Ophrys apifera* in the above named station.—J. A. W. Correct, I think.—E. S. M. This is no doubt *Alectorolophus stenophyllus*, Sterneck, in *Ost. bot. Zeitschr.*, 1895; = *Rhinanthus stenophyllus*, Schur.; but is only the autumnal form of *R. Crista-Galli*, L.—C. BUCKNALL.

*Melampyrum arvense*, L. This interesting addition to the Oxfordshire flora was discovered by Mr. W. Evetts of Tackley in

a cornfield, and also in a field of clover between Tackley and Steeple Aston. It is in small quantity, Sept. 1907.—G. CLARIDGE DRUCE.

*M. pratense*, L. Clogher Valley, Co. Tyrone, June 1907.—C. L. PECK. Why sent to the Club?—ED.

*M. pratense*, var. *hians*, Druce, Midlaw Burn, Moffat, N.B., 23rd July 1907, and Raehills, Dumfries, 24th July 1907.—W. R. LINTON.

*Mentha alopecuroides*, Hull. Bossington, S. Som., native, N.C.R., 14th and 23rd Sept. 1907.—E. S. M. This belongs, I suppose, to *M. alopecuroides*, Hull, but the spikes are very unusually and remarkably short.—D. FRY.

*M. alopecuroides* X *rotundifolia*? Ref. No. 3,202. Near Bossington, v.-c. 5, S. Somerset, with the supposed parents, 23rd Sept. 1907. Though perhaps nearer, upon the whole, to *M. rotundifolia*, I think that there is good evidence of *M. alopecuroides* both in the foliage and the inflorescence. No such hybrid appears to be known. I am growing this, to test it by cultivation.—EDWARD S. MARSHALL. The leaves of this plant approach those of *alopecuroides* in being rounder and more deeply incised than in typical *rotundifolia*, and Mr. Marshall's suggestion of a hybrid origin may very likely be correct.—D. FRY.

*M. longifolia*, Huds., var. *Nicholsoniana* (Strail). Stream side at Three Cocks Inn, Breconshire, 30th September 1907. New County record, it is believed, for the variety.—AUGUSTIN LEY.

✓ *M. Pulegium*, L., var. *giganteum*, Lej. and Court. (var. *erecta*, Syme). On the margin of a pond at Salford, Beds., Sept. 1904. The plant was uniformly erect. It is a new county record for the species.—G. CLARIDGE DRUCE. Var. *erecta*, Syme. I do not know the var. *giganteum*, which may be an earlier synonym; but it is quite unsuitable to the small specimens now before me.—E. S. M.

*Thymus Serpyllum*, L., fl. albo. Sea Cliffs, Hordley, Hants, near Mead End, July 1906.—J. COSMO MELVILL.

*Salvia pratensis*, L. In some quantity in the well-known native locality round Cornbury and Finstock, Oxon, June 1907.—H. J. R. Right, no doubt, but very luxuriant.—J. W. W. Hardly *S. pratensis*, L., with these floral bracts, which rather recall *S. Sclarea*, L. In a more advanced condition the difference is more obvious between these two; I have no young *S. Sclarea* to compare.—E. F. L.

*Nepeta Glechoma*, Benth., var. *parviflora*, Benth. Symonds Yat, West Gloucester, 21st June 1907. The sub-glabrous stem and leaves are a characteristic of this variety, in addition to the small corolla.—AUGUSTIN LEY. Yes, I think this is the var. *parviflora* of *N. Glechoma*.—D. FRY. No doubt, correct enough; but a pretty poor 'variety.' Considering how Bentham 'lumped' together totally distinct species, he might well have spared us this.—E. S. M. Var. of *N. hederacea*, Trev.—H. J. R.

*Lamium maculatum*, L. In the corner of a meadow half-way between the villages of Threshfield and Skirethorns, Yorkshire, I have noticed a luxuriant bed of *Lamium maculatum*, L., for a period of eight years. It is well-established, occupies about two square yards, apparently does not spread, but maintains its own ground very tenaciously. The above villages are a mile apart, and the bed is half-way between on the margin of a branch of the Craven fault. How it came to be established I cannot find out.—JOHN CRYER.

*Ballota nigra*, L., var. *borealis*, Schweigg. Sellack, Herefordshire, 4th July 1907.—A. LEY. I don't know where to look for the description of *borealis*, and can say nothing on the naming of these specimens. But that they differ from the type is manifest. I got the same beautifully soft, velvety plant from Winterbourne, West Glouc., some time ago, and am glad to have a name suggested for it.—JAS. W. WHITE. I have somewhere seen it stated that *borealis* is really type-*nigra*. Whether that is correct or no, this villous plant, which seems to be confined to the West of England, is a well-marked variety.—E. S. M.

*Chenopodium ficifolium*, Sm. = *C. serotinum*, Linn. A few plants on the sandhills south of St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 12th October 1907. In 1906 this species was frequent on the north side of St. Anne's, in Orchard Road, but by the winter of that year that station was completely covered with houses.—CHARLES BAILEY.

*Chenopodium hybridum*, Linn. Amongst dewberry plants on the upper parts of sandhills by the side of Devonshire Road, North Drive, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 3rd, 24th, and 31st August 1907. Evidently of alien origin, as this species did not occur previously in this station in any of the five previous years.—CHARLES BAILEY.

*Chenopodium urticum*, L., var. *intermedium*, Moq. Farnyard at Kilve, v.-c. 5, S. Somerset, 30th Sept. 1907. Ref. No. 3209.—E. S. MARSHALL.

*Salicornia procumbens*, Sm. A small form; abundant on mud near the mouths of the rivers Brue and Parret, below Highbridge, v.-c. 6, N. Somerset. Procumbent, or ascending from a procumbent base, very red. 14th Oct. 1907.—EDWARD S. MARSHALL.

*Polygonum aviculare*, L., form between *arenastrum* and *denu-datum*. This occurred in quantity in a fallow field below Sharpstone's Quarry, Salop, on the farm-road towards Bomere, and seems to embody characters of two varieties, one of which is essentially maritime.—J. COSMO MELVILL. Poor material; seems near *arenastrum*, but not good.—E. S. M.

*Rumex rupestris*, Le Gall. Fistrel Beach, Newquay, West Cornwall, v.-c. 1, 27th July 1907 and 3rd August 1907, with fruit 22nd Sept. 1907. Found by Mr. Clement Reid three or four years ago. Do these specimens agree well with those from near Plymouth? We expected the leaf base to be more gradually narrowed. The tubercles seem so large as to occupy almost the whole of the sepals. Many of the panicles seem infected by a parasite near the base; I particularly noticed *R. crispus* and *R. conglomeratus* growing near were not similarly affected.—C. C. VIGURS.

*R. limosus*, Thuill. Chard Reservoir, S. Som., 16th Sept. 1907, N.C.R.—E. S. M.

*R. limosus*, Thuill.? or a form of *R. maritimus*? Growing on mud at the side of the Great Pool, Westwood Park, Droitwich, Worc., 7th August 1907. Some of the plants were very large and much branched below. I do not know *R. maritimus* well, but this does not seem to match the specimens I have. Can it be *limosus*? or the hybrid of *R. maritimus* described as *Warrenii*? I should like to have it named.—C. H. WADDELL. A form of *R. maritimus*, with the inflorescence less crowded than usual. The tubercles of the fruit are much too small for *R. limosus*.—E. S. M.

*Euphorbia stricta*, L. Origin, St. Briavels, West Gloucester; cult. July and August 1907.—AUGUSTIN LEY.

*E. coralloides*, L. At the sides of the road among shrubs, &c., in Horney Park, Sussex, probably introduced from Borrer's plants; June 1906.—G. CLARIDGE DRUCE.

*E. sp.* By the railway, Littlemore, Oxon, where I have noticed it for some years; June 1907.—G. CLARIDGE DRUCE. Is not this *E. Esula*, L.?—E. S. M. The same as a plant near *E. Esula*, L., which I found by the Wye, and have called *E.*

*mosana*, Lej.—E. F. L. I believe this is *E. Esula*, L., but in the absence of fruit I cannot be certain.—C. BUCKNALL. This is *E. Esula*, L., a variable species. I have seen it in a similar habitat near Milverton, Leamington.—A. B. JACKSON.

*E. sp.* By the road near Marcham, Berks, doubtless alien, June 1907.—G. CLARIDGE DRUCE. Appears to be the same as the last, and equally insufficient for determination.—C. BUCKNALL.

*Fagus sylvatica*, L., var. I send out this as a somewhat remarkable leaf variety. Leaves uniformly much smaller, thicker, with veins on the under side much impressed; thicker and less sticky to the touch than in type. Small, very fructiferous trees on the north ridge of Moely-golfa, Montgomery, 18th July 1907.—AUGUSTIN LEY.

*Salix aurita* × *phylicifolia*. Kinnelhead, Moffat, N.B., 19th July 1907.—W. R. L.

*S. rugosa*, Lief. Pond, Quenby, Leics., 14th August 1906 and April 1907.—A. R. HORWOOD. *S. cinerea* × *viminalis*, I believe.—E. S. M. Rather a narrow-leaved form, both of *S. rugosa*, Leeft, and of the hybrid *S. caprea* × *viminalis*. The older name is *S. sericans*, Tausch.—E. F. L. Not, I believe, the willow formerly known as *S. rugosa*, Leeft (a name now dropped), but another of the numerous hybrids between *viminalis* and the *Caprea* (*Smithiana*, Willd.). The so-called *S. rugosa* has broader and more oblong leaves than those in Mr. Horwood's specimen.—D. FRY.

*S. herbacea* × *repens*. By stream, about 1,400 ft., Glen Shee, E. Perth, v.-c. 89, 14th July 1906.—W. A. SHOOLBRED.

*S. myrsinites* × *nigricans*, Glen Fiagh.—W. R. L. Yes; nearer to *nigricans*, but there is good evidence of *myrsinites*.—E. S. M.

*Populus alba*, L. Shirley, Derby, 20th April and 5th Aug. 1907: planted.—W. R. LINTON. Correct.—E. S. M.

*P. canescens*, Sm. Wyaston, S. Derbs., 19th April and 30th July 1907.—W. R. LINTON. Yes; *P. alba* × *tremula*.—E. S. M.

*P. nigra*, L. These autumnal leaves from the true plant which grows in Christ Church Meadow, Oxford, shall be supplemented by catkins next year. Sept. 1907.—G. CLARIDGE DRUCE. I suspect that this is more probably *P. canadensis*.—E. S. M. Yes, the true *nigra*, which may be distinguished at once from the planted American tree by its burred trunk, denser foliage and leaves with a cuneate base and longer more acuminate points.—A. B. JACKSON.

*P. deltoidea*, Marsh., var. *serotina*, Hartig, [*P. nigra*, auct. ang. p.m.p. *P. monilifera*, Ait.]. This tree, which is so extensively confounded with the true *P. nigra* by English writers, is much the more frequent of the two. It is an extremely rapid grower and therefore has been very frequently planted through England. It is the *P. monilifera*, Aiton, and may be the *P. canadensis* of some authors. In a somewhat aggregate sense *P. deltoidea* of Marshall's 'Arbustum,' 106 (1785), is this plant. These are the autumnal leaves from a tree in Christ Church Meadow, Oxford, Sept. 1907.—G. CLARIDGE DRUCE. Dode, the latest monographer of the genus, identifies this poplar as *P. serotina*, Hartig. These specimens are identical with material so named by Dode. Another better known name for this tree is *P. monilifera*, Aiton. It is one of the commonest planted poplars in England, and is probably of American origin. It is the Black Poplar of many English botanists, but it differs from the true *P. nigra* in its leaves, which are truncate and not cuneate at the base, with much shorter points, smooth bark, and sparser habit.—A. B. JACKSON.

*Orchis incarnata*, L. Borth Bog, Cardiganshire, v.-c. 46, 1st July 1907. I gathered this plant in 1905 as *O. latifolia*, but having since discovered my error I send these specimens as vouchers of Mr. Pugsley's find. See 'J. of B.' 1906, p. 395.—W. H. PAINTER. Right. Preserved so well that the marking of the lip is discernible.—E. F. L. No; *O. latifolia*, L. *O. incarnata* has the stem-leaves hooded at the tips, and a conical spur; in this plant the leaf-tips are quite flat, and the spur more elongate-oblong.—E. S. M.

*O. ericetorum*, Linton. Fairly abundant in rough strong moorland grass at Alwoodley near Leeds, July 1907.—JOHN CRYER. Correct, I believe; but my specimen is imperfect, as it does not shew the foliage properly.—E. S. M.

*Sisyrinchium californicum*, Ait. In the marshy fields near Rosslare, Wexford, where Mr. Marshall first found it. A few miles south of this place is Carnsore Point, on which more wrecks have occurred than almost anywhere else in Ireland. It might easily have happened that some Californian produce from wreckage drifted here containing its seed, which is very freely produced. Now in this locality it is so abundant that in walking through the marshy fields the seeds are scattered in one's progress. Moreover the pads of earth scattered by horses had, I found, seeds attached, so that animals grazing there help to spread it. The fields too are subject to floods which also assist in its dispersal. The locality is contiguous to the sea; indeed the separating bank is not of ancient formation. It is an interesting example of the complete naturalisation of a Western American species. Some

specimens were still flowering in late Sept. 1907.—G. CLARIDGE DRUCE. I do not think Mr. Druce's ingenious conjecture that this may have originated through the wreck of a ship at Carnsore Point at all probable. The Point is several miles away; and the plant grows at some distance from tidal influence; nor does it seem at all likely that seeds of this marsh-loving species would have been conveyed in a cargo of corn from the Western United States. Its companions are such plants as *Eriophorum angustifolium*, *Juncus acutus*, *Orchis incarnata*, etc.; and, unless it was intentionally sown there (as is possible, but not very probable), I believe that it is native, and will some day be found elsewhere in Ireland.—EDWARD S. MARSHALL.

*Asphodelus fistulosus*, Linn. Frequent in the sandhills about Devonshire Road, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60, 20th July 1907. The species did not mature its fruits, as it did in 1906 on the Orchard Road site.—CHARLES BAILEY.

*Muscari racemosum*, Mill., Lam., and DC. Near Kiddington, Oxfordshire, where it was discovered by Capt. Gaskell. I think there is little doubt that it is a genuine native. Its habitat is a large pasture ground in an upland situation, and the plant is so abundant as to give a distinct colour to the place. There are no ornamental grounds nearer than Ditchley Park, and it is not at all likely to have been brought from that place. May 1907.—G. CLARIDGE DRUCE.

*Juncus tenuis*, Willd. Near Lochgilphead, Argyllshire, Oct. 1907. So far as I am aware this is a new record for Argyllshire, v.-c. 98: consequently have enclosed a few plants thinking that some of the members would like to have one.—P. EWING.

*J. effusus* × *glaucus* = *J. diffusus*, Hoppe. Margin of pond in Richmond Park, Surrey, 28th Aug. 1907. Leg. A. B. JACKSON and K. DOMIN. My two specimens are imperfect, the basal sheaths not being present. Pith continuous. It is quite sterile; but I am not sure that it is the hybrid.—E. S. M.

*J. lamprocarpus*, Ehrh., var. *littoralis*, Patze = *J. nigritellus*, Bab. Sandy shore near Ainsdale, South Lancs. (v.-c. 59), October 1907. Leg. J. A. Wheldon. It differs from *J. lamprocarpus* in its ascending stems which sometimes root at the nodes, and the very dense fasciculate clumps in which it grows. The inner perianth segments are acute.—J. A. W. I believe that this is what Babington called var. *nigritellus* (Don's *J. nigritellus* was probably *J. alpinus*, Vill.). But it seems to me merely a *state* of maritime sands, undeserving of varietal rank. It is much more marked at Berrow, N. Somerset.—E. S. M.

*Luzula multiflora*, Lej., forma. Ref. No. 3161. Rocky ravine, Correifron, Moffatdale, v.-c. 72, Dumfries, 20th July 1907.—EDWARD S. MARSHALL. Mr. Arthur Bennett thinks that this is near the var. *nivalis*, Koch. It looked much more distinct when growing than in its dried state.—E. S. M.

*L. multiflora*, Lej. Correifron, Moffat, N.B., 20th July 1907. Often tall, panicle markedly umbellate, large broad stem-leaves; looked different from the ordinary lowland form.—W. R. LINTON.

*L. pallescens*, Besser. Woodwalton Fen, 13th June 1907, coll. 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.* to E. W. Hunnybun.—S. H. BICKHAM. I have not seen a type specimen of Besser's plant, but this distinct looking *Luzula* is evidently what is understood as the true thing on the Continent, judging from material collected in Northern and Middle Europe, preserved at Kew. Besser described his *L. pallescens* in 'Enum. pl. Volh. Podol' 15 (1820), other synonyms being *L. campestris*, var. *pallescens*, Wahlenb., 'Fl. Suec.' I. 218 (1824), *L. multiflora*, Lej., var.  $\beta$  *pallescens*, Bluff et Fingerhuth, 'Comp. florae germ.', I, 444 (1825), *L. sudetica* (Willd.), Presl., var. *pallescens*, Aschers., 'Fl. Prov. Brandenburg,' 74 (1864). Buchenau, *Mon. Juncaceae* ('Engl. Jahrb.' XII. 163, 1890), points out that the extreme form of this plant has a very distinct appearance and might well deserve specific rank, were it not that intermediate states are found. According to Ascherson and Graebner, 'Syn. Mitt. Fl.,' II. 520 (1904), however, shade forms of the common *Luzula campestris* have been mistaken for true *pallescens*, and these have been regarded as transitional states between *L. sudetica* and *L. campestris*. *Luzula pallescens*, Besser, may be easily recognised by its pale colour and slender habit, the foliage being of a brighter green than in *L. multiflora* and less hairy, with smaller shorter spikelets mounted on slender very unequal peduncles. The individual flowers are smaller than in *L. multiflora*, with bristle-tipped outer perianth segments, which are, however, shorter than in *L. multiflora*, with shorter greener fruits. Among the specimens in 'Herb. Mus. Brit.' I find one labelled "*L. multiflora*, var., Woods of Aghadoe, Killarney, Aug. 30, 1883. Coll. H. N. Ridley," and another, a rather scrappy specimen, "*Luzula multiflora*, var. Pinus Wood, Balmuto, Fife. J. Boswell Syme, Aug. 1871." Both of these match Mr. Hunnybun's plant. Several Continental specimens of *Luzula multiflora* in the Kew Herbarium shew a tendency to vary in the direction of *L. pallescens*.—A. BRUCE JACKSON. At the end of May and the beginning of June of last year I went to a rough piece

of fen (i.e. of fen land which has never been under cultivation) forming part of Woodwalton Fen, Hunts.

My object was to collect fen violets for distribution by the two Exchange Clubs. I found a strip of land which had been spade-dug for the purpose of planting willow cuttings to form an Osier Holt. The ground had been dug over about two years previously, and it was being rapidly covered with vegetation. On this piece of ground there was an abundance of *V. crassifolia*, *stagnina*, and *nemoralis*, together with hybrids, and growing near was a *Luzula*, which I at once perceived was a new form to our Flora. I have no doubt its appearance on that spot was due to the turning over of the soil and that it will quickly disappear. I found about six roots. The rough fen which is surrounded with water and is only accessible by boat, is covered with very coarse grasses, sedges, and rushes, so that there is a regular struggle for existence. The largest root of the *Luzula* was a big tussock. The other roots were much younger, evidently originating from the larger root.

I came to the conclusion from the description in 'Boreau' that it was *pallescens*, Besser. I sent specimens to Mr. A. Bennett. He was too busy to do more than look up his notes, from which he gathered that he had received "*pallescens*, Besser," from Messrs. Ley, Marshall, and Somerville. As he had not compared my plant with the specimens sent by those gentlemen, I thought it probable that what they had sent was merely a variety of *multiflora*, and not the true plant of Besser. On enquiry Messrs. Ley and Marshall said my surmise was correct. Mr. Somerville had unfortunately just died, so I do not know anything about his plant. Mr. Marshall felt sure that my plant was that of Besser. I then sent specimens to Mr. Evans and afterwards to the Messrs. Groves. . . . The soil of the fen is pure turf. There was plenty of luxuriant *multiflora* growing in different parts of the same rough fen, but the two plants bore no resemblance to each other.—E. W. HUNNYBUN. Mr. Hunnybun in a note observes: "*L. pallescens*, Besser, may possibly be fairly abundant in the fen, but there is such a matted growth of sedge and grass that except, as in the present instance, where a small piece had been dug over with a spade to plant willow cuttings, it would find it almost impossible to grow. It will soon be choked and disappear again."

*Sparganium* —. With a larger plant in a pond near Walton, Liverpool (v.-c. 59), October 1907. The larger plant was *S. neglectum*, Beeby, but I was unable to identify these much smaller plants. Are they *S. ramosum*, var. *microcarpum*, Neum?—J. A. WHELDON. Yes.—W. H. BEEBY. This may be *microcarpum*, but it is immature, and without fruit one cannot say positively.—JAS. W. WHITE. Not *S. neglectum*, Beeby, but *S. erectum*, L. (*ramosum*, Curt.), var. *microcarpum*.—E. S. M.

*Arum italicum*, Miller. Trevowah, Crantock, 8th June 1907, and Treago, Crantock, 1st July 1907, v.-c. 1, West Cornwall. The latter gathering was from a shaded place with a North aspect.—C. C. VIGURS.

*Potamogeton falcatus*, Fryer. Ditch in Hocking Fen, Ramsey, Hunts, 7th Aug. 1907, coll. E. W. Hunnybun and A. Fryer, see 'Journ. of Bot.,' 1889, p. 65.—S. H. BICKHAM. This cannot spread without difficulty as the fen drain or ditch is a small one and almost a cul de sac owing to one end being more or less grown up. We found the tenant of the land working on it, and he told us that he clears out the drain or ditch every year, but still the plant is abundant. We might have sent you a barrow load.—E. W. HUNNYBUN. This has occurred in Nottinghamshire, where it was found by Prof. Carr.—AR. BENNETT in a letter to S. H. B.

*P. Zizii*, Roth., narrow-leaved form. Ditch in Mepal Fen, Cambs., coll. E. W. Hunnybun and A. Fryer, 26th July 1907.—S. H. BICKHAM. *P. angustifolius*, Bercht. and Presl.—H. J. R.

*P. Cooperi*, Fryer. From the classic locality, Loughborough Canal, Leicestershire, 23rd July 1897. Kindly communicated by Mr. Cooper.—G. CLARIDGE DRUCE.  $\times$  *P. Cooperi*, Fryer. River Soar at Quorn, v.-c. 55, 19th Aug. 1907.—F. L. FOORD KELCEY. *P. crispus  $\times$  *perfoliatus* ( $\times$  *P. Cooperi*, Fryer), according to 'Lon. Cat.,' Ed. X.—H. J. R.*

*Eleocharis multicaulis*, Smith. Penhallow Moor, St. Newlyn East, West Cornwall, 24th July 1907. Although the season was dry, and not far advanced, some of the spikes are already viviparous.—C. C. VIGURS. Looks right; but it is only in flower.—E. S. M.

*Scirpus cernuus*, Vahl. (*S. filiformis*, Savi.), var. *pygmaeus* (Kunth). Fistrel Beach, Newquay, West Cornwall, 3rd August 1907. The variety is much more common in this district than the type is. Vide 'B. E. C. Report,' 1905, p. 186 (46), as to nomenclature; but I prefer sticking to the 'Lon. Cat.,' Ed. IX. according to our Regulations, until names shew a tendency to "crystallize out" of their present "liquid" state.—C. C. VIGURS. As Mr. C. B. Clarke pointed out, Kunth's name is that of a synonym, not a variety. This is *S. filiformis*, Savi., var. *monostachys*.—E.\*S. M.

*S. triqueter*, L. Mud banks by the Thames, between Richmond and Hammersmith, Sept. and Oct. 1907.—A. B. JACKSON.

*S. lacustris  $\times$  *triqueter* (*S. carinatus*, Sm.). Mud banks by the Thames between Kew and Hammersmith, Aug. and Sept. 1907.—A. B. JACKSON and K. DOMIN. This bulrush forms a conspicuous feature of the riverside vegetation on the Surrey side*

of the river, but is somewhat difficult of access even at low tide owing to the mud banks which surround it. After examining a large number of specimens *in situ* and comparing it with its associate, *S. triquetra*, which, however, occurs in much less quantity, we are convinced that it is a hybrid (*S. lacustris* × *triqueter*), as suggested by Rev. E. F. Linton ('Journ. Bot.', 1907, 301). The stems are always taller than *S. triquetra* but more slender than *S. lacustris*, the lower part round, the upper part obtusely triangular. In extreme forms which approach *S. lacustris* we observed that the stems in the upper half were only very slightly angled with very obtuse sides, or nearly round, but never quite circular as in the common bulrush, *S. lacustris*. Other plants evidently nearer *S. triquetra* have stems triangular from the base, with occasionally one angle sub-acute, leaves with or without lamina, inflorescence compact or with the spikelets on elongated branches and evidently pedicelled; hypogynous bristles mostly equalling the ovaries, anthers glabrous or shortly ciliate, styles 2 or 3. Pollen often ill developed. The essential characters of the hybrid and assumed parent may be contrasted as follows:—

<i>S. triquetra</i> .	<i>S. carinatus</i> .	<i>S. lacustris</i> .
Flowering stems acutely triangular about 3 ft. high.	Flowering stems terete below, obtusely triangular above, 3—6 ft. high.	Flowering stems stout, terete 6—10 ft.
Leaves reduced to a sheath, lamina not developed.	Leaves with or without lamina.	Leaves with lamina more or less developed.
Spikelets two to many, sessile, and compact at the apex of elongated branches.	Spikelets varying in number, sessile, or on elongated branches.	Spikelets never sessile, often long pedicelled.
Hypogynous bristles equalling or a little shorter than the nut.	Hypogynous bristles mostly equalling the ovaries.	Hypogynous bristles equalling or slightly exceeding nuts.
Anthers glabrous.	Anthers glabrous or shortly ciliate.	Anthers fringed at apex.
Styles 2.	Styles 2—3.	Styles 3.

The character of the nuts we do not mention as nearly all the spikelets of *S. triquetra* and *S. carinatus* were found to be barren. In the case of *S. triquetra* this sterility may have been due to an abnormal season. Jackson found well-developed nuts in one or two spikelets of *S. carinatus*, and these were convex on the back, as described in Babington ('Manual,' Ed. IX., 450), and quite different in shape from those of *S. lacustris*, correctly described as bluntly trigonous. Some forms of this hybrid bulrush much resemble *S. lacustris*, but they are always more slender than

in that species, with the other characters exactly intermediate, as described above. The apparent absence of *S. lacustris* from the area covered by *S. carinatus* may be considered by some as a point against its hybrid origin, but it will be well to point out that *S. lacustris* has been recorded from Strawberry Hill, which is some miles west of the above-mentioned locality. Having regard to the fact that both the assumed parents do not grow in close proximity, it is, of course, possible to regard *S. carinatus* as a secondary hybrid. These secondary hybrids in the course of generations often simulate good species and may even become so, as for instance, *Potentilla aurulenta*, which has arisen from the primary hybrid combination *P. verna* × *opaca*. *Scirpus carinatus* has not advanced so far, but its great variation is a sufficiently clear indication of its hybrid origin. It is interesting to note that *S. carinatus* and *S. triquetus* are associated on the banks of the Arun, near Amberley, Sussex, and by the Tamar, near Calstock, Cornwall. I am unable to ascertain whether *S. lacustris* grows near Amberley, but it is not recorded from the banks of the Tamar in Davey's list of Cornwall plants.—A. B. JACKSON and K. DOMIN. *S. carinatus* is widely spread on the Continent, where it is apparently often associated with *S. triquetus*.—A. B. JACKSON.

*S. maritimus*, L., var. *compactus*, Koch. St. Columb Minor Porth near Newquay, West Cornwall; 26th June 1907 and 10th Sept. 1907.—C. C. VIGURS. Yes; var. *conglobatus*, Grey, is an earlier name. But I regard this and var. *monostachys*, Sonder, as merely depauperate states.—E. S. M.

*Eriophorum angustifolium*, Roth., var. *triquetrum*, Fries. Trebiskin Moor, Cubert, West Cornwall, v.-c., 1, 18th July 1907 and 9th August 1907. Vide 'B. E. C. Report,' 1905, page 186 (46), and 'Journ. Bot.,' 1906, p. 279.—C. C. VIGURS.

*E. polystachyon*, L. (*E. latifolium*, Hoppe). Between E. Anstey and Brushford, S. Som., 27th Aug. 1907, N. C. R.—E. S. M.

*Carex chordorrhiza*, L. f. Marsh near Tubeg of Mudale, a locality about a couple of miles from Mr. Marshall's original locality at Alltnahara. It is fairly plentiful in both places, but the ground is very wet. July 1907.—G. CLARIDGE DRUCE. Insufficient number of labels supplied.—H. J. R.

*C. canescens*, L., var. *fallax*, E. S. M. Lochnagar, S. Aberdeen, cult. 14th July 1907.—W. R. LINTON. Yes; I gave this name to W. R. L., as applied by Pfarrer Kükenthal to my wild specimens from the same spot (Loch-nan-Eoin). But *C. canescens*, L., by Linnaeus's type-specimen, and the description and habitat given

in *Spec. Plant.*, was really *C. divulsa*, Good. The name *C. canescens* had better be dropped. I call it *C. curta*, Good., var. *fallax*. W. R. L. had this in cultivation for many years; and, although increased in size, it has kept its slender habit very well indeed.—E. S. M.

*C. Goodenowii*, Gay, var. *Ref. No. 3,221*. Ditch, near the coast, below Porlock, v.-c. 5. S. Somerset, 27th May 1907. A remarkably tall form or variety. Mr. Arthur Bennett believes it to be *C. vulgaris*, Fr., var. *elatior*, Sonder, 'Fl. Hamb.' p. 493 (1551).—EDWARD S. MARSHALL. I call this simply *C. Goodenowii*.—E. F. L.

*C. vulgaris*, Fr., var. *recta* (Fleischer), Kük., Sgiath Crom, Mid Perth, 4th July 1905.—P. EWING.

*C. tomentosa*, L. From Fairford, 12th July 1907, in a gutter by the roadside; and from a new locality, near Whelford, in Kempsford Parish, 19th July 1907; both E. Gloster. The Fairford plant has narrower leaves and a more wiry habit, though it was in as wet a place, and in as long grass, as the Whelford plant.—H. J. RIDDELSDELL. The length and breadth of the leaves of *Carices* vary so much according to situation, in shade or exposure, short turf or long herbage, that there is no need to distinguish such variations even as forms.—E. F. L.

*C. depauperata*, Curt. In the recorded station from near Godalming, Surrey, in good fruit, but at a later date than usual, Aug. 1907.—G. CLARIDGE DRUCE.

*C. sylvatica*, Huds. forma, growing very abundantly and luxuriantly in Grass-wood, Grassington, Yorkshire. This past season I noticed for the first time that many of the spikes were branched at or close to the base. On examining a large number of living specimens in various parts of the wood I found at least fifty per cent. had branched spikes.—J. CRYER. The compound spikelets, which I have seen even more developed, are due, I think, to luxuriance.—E. F. L. Lower spikes branched at the base. It does not, I think, deserve a special name.—E. S. M. Rightly named. The small spikes at the base of the leading one are very peculiar.—D. FRY.

*C. acutiformis*, Ehrh., forma. Tregair Moor, St. Newlyn East, West Cornwall, v.-c. 1, 13th July 1907. About half a mile away at Trevemper Bridge on slightly brackish land grows what Mr. A. Bennett characterises as "*good typical acutiformis*"; this he says is abnormal.—C. C. VIGURS. For so variable a species this plant is fairly typical.—E. F. L. I cannot separate this from the type.—E. S. M. Correct.—D. FRY.

*C. vesicaria*, L., forma? This was found in abundance in the Mere near Raincliffe Wood, Scarboro'. It was growing with typical *C. vesicaria*, L., and *C. hirta*, L., the former of which was abundant. I looked for but did not see any specimens of *C. rostrata*, Stokes, near. Many of the flowers were barren, but not all. I should like the opinion of the Club on this.—JOHN CRYER. A slender, narrow-leaved plant, which looks as if it had grown among rank herbage and been drawn up. Not a variety, I believe.—E. S. M. A form with shorter smaller perigynia than usual.—E. F. L.

*C. vesicaria*, L., var. *alpigena*, mihi non Fries. Ben Laoigh, Mid Perth, v.-c. 88, 27th July 1907.

I have named this *Carex vesicaria*, Linn., var. *alpigena*, non Fries. If this plant is compared (even in its half developed state) with Fries' des. in 'Nov. Fl. Suec. con.' 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; the leaves are not sub-convolute as in *C. pulla* or *C. Grahamii*. I know that this plant has been confused with *C. Grahamii*, but when they are seen growing together in the same marsh, as was the case with the plants herewith, there is no difficulty in distinguishing them, even in the young state.—P. EWING. This differs from all the plants I have which have been put to var. *alpigena*, Fr., some of which appear to be nothing more than luxuriant *C. pulla*, Good. This is much nearer *C. vesicaria*, of which it might be an alpine state but for the dark brown male spikelets. I suspect, however, that it is a hybrid of *C. vesicaria*, and should like to see maturer fruit.—E. F. L.

*C. pulla*, Good, var. *Grahamii* (Boott). Ben Laoigh, Mid Perth, 27th July 1907. I have so named this plant as that is the name given to this form 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 its ability to exist at the same altitude.—P. EWING. I believe that this cannot be separated from *C. Grahamii*, Boott; but it clearly comes under *C. vesicaria*, L., and is not a form of *C. saxatilis*, L. (*pulla*, Good.).—E.S.M.

*Panicum miliaceum*, Linn. A well-established patch of several years' growth occurs on the sandhills adjacent to St. Leonard's Road, and St. Andrew's Road South, St. Anne's-on-the-Sea, north-west Lancashire, v.-c. 60. The plants contributed, with both light and dark-coloured spikes, were collected 12th October 1907; on a visit a month later to the same station, for mature fruits, it was found that frost had prevented further growth.—CHARLES BAILEY.

*Alopecurus fulvus*, Sm. f. bearing anthers, first whitish, then dull orange. Pool side, Sellack, Herefordshire, 20th June 1907.—AUGUSTIN LEY. *A. fulvus*, Sm.—E. HACKEL. i.e. *A. æqualis*, Sobol.—H. J. R.

*Phleum pratense*, L., var. *stoloniferum*, Bab. Kewsholt, N. Lincoln, 10th August 1907.—AUGUSTIN LEY.

*P. nodosum*, L. Sand dunes at Meols, Cheshire, 7th August 1907, Ref. No. 1641. This is, I think, our usual *Phleum* of dry barren places, and is perhaps not worth distributing.—A. H. WOLLEY-DOD. Correct; but it is a variety of *P. pratense*, L., not a species.—E. S. M.

*Agrostis vulgaris*, With., var. *pumila* (Linn.). On the disused roadway and refuse heaps at the Swithland Quarries, Leicestershire, 7th August 1907. This is a new County record for this pretty form of *Agrostis*. When conducting the Botanical Excursion of the British Association on Charnwood Forest, I noticed a few plants at Bardon Hill; and subsequently a good patch or two were found in Swithland Wood.—W. BELL. Correct; but it is not a genuine variety, only a diseased (fungoid) condition. Rev. W. R. Linton tested it in his garden at Shirley, and it at once reverted to type. It is accordingly omitted from the new edition of 'Lond. Cat.'—E. S. M. *A. tenuis*, Sibth.—H. J. R.

*A. tenuis*, Sibth., var. *pumila* (Linn.). Yeldersley fields, S. Derbs., wild 1906, the same cult. August 1907. It is, I imagine, well known, since Mr. E. S. Salmon's investigations, that *A. pumila* is merely a state of the type caused by the attack of a fungus. I brought some of the variety into the garden, and the result is well seen in the specimens sent. It appears to have quite got rid of the fungoid invader. *A. pumila*, therefore, as a variety falls.—W. R. LINTON.

*Deyeuxia*, sp. This is the plant which appears in our lists as *Deyeuxia strigosa*, Kunth. = *Calamagrostis strigosa*, Hartm. This, or allied forms, occur in several localities in Caithness. Robert Dick first found it by Loch Duran, which has since been drained. At first I believe it was named *C. lapponica*, but afterwards it was referred to *C. stricta* (*Deyeuxia neglecta*), until Mr. Arth. Bennett named it in after years as *C. strigosa*. Subsequently Professor Hackel named some plants collected by me from Loch Duran-side, the locality being a small marsh (a relic of the Loch), which will soon be destroyed. This year I have sent Prof. Hackel specimens from Grant's original locality near Loch Duran, some from my own locality about half a mile away, as well as specimens identical with these which were gathered near Loch Watten (where it is abundant),

and also specimens from a new locality in a marsh near Loch Scarcllett; all these localities being lowland, and so far as one can see with but little range of variation in the plants. The rhizomes are extensively creeping, and so much intermingled with those of other plants as to be with difficulty separated; so that the description 'caespitose' given for *strigosa* by Groves in the 'Manual' is not applicable to these plants. July 1907. I have not yet had time to make a microscopical examination of the glumes.—G. CLARIDGE DRUCE. *Calamagrostis neglecta*, Beauv.—E. HACKEL. Identical, I believe, with the Loch Duran plant, which has been referred to *D. strigosa*, Kunth. The panicle-branches are hispid; but I understand that the name has been called in question.—E. S. M. Dr. O. Stapf considers this to be type *D. neglecta*. I have a similar plant labelled "*Deyeuxia strigosa*, Loch Duran, Caithness, July 1886.—E. S. Marshall." The true *D. strigosa*, judging from Scandinavian material preserved at Kew, seems to be a grass with larger spikelets, but otherwise much the same.—A. B. JACKSON. *Deyeuxia neglecta*, Kunth., of 'Lon. Cat.,' Ed. X.—H. J. R.

*Gastridium australe*, Beauv. In an undoubtedly native situation, in aboriginal turf among furze, in company with *Geranium columbinum*, *Euphorbia exigua*, &c., on a steep bank by the sea, near Nash Point, Glam., August 1907, N.C.R.—H. J. RIDDELSDELL. *Gastridium lendigerum*, Gaud., of 'Lon. Cat.,' Ed. X.—H. J. R.

*Sieglingia decumbens*, Bernh., f. On a wet clayey rushy hill-side near Llangammarch, v.c. 42, 24th and 25th July 1907, at about 800 ft. above sea level. This form, as it grew, was a very remarkable looking plant, with wide open panicle, upright growth, densely tufted habit, and the stem considerably taller than usual. But in drying the open panicle usually becomes nearly closed, and other small points, which at first seemed to separate the form—e.g. the panicle is often very near the topmost leaf-sheath, the flowers often exceed the glumes, the pales sometimes have more numerous veins, &c.—disappeared, or were found under careful examination not to be constant. And in spite of the habit and the open panicle, the plant can apparently only be put down as a very robust form. Prof. Hackel agrees to this. He says:—"Only the open panicle would, if constant, give a varietal character, but I could not find it always in your specimen. I should have awaited that your form had chasmogamous flowers, as was the case in some French specimens with open panicle I described in the 'Oester. Bot. Zeitschr.,' but your specimen is cleistogamous. The spikelets and flowers are somewhat greater, and so is also the habit of the plant, but this is not a distinct character."—H. J. RIDDELSDELL. An unusually luxuriant plant; but I cannot see that it differs from

the type in any particular save habit.--JAS. W. WHITE. Very luxuriant. I have found a plant with an inflorescence about as branched among the Kew specimens. According to Hackel this grass has cleistogamous flowers (*Botanische Zeitschrift*, 1902, p. 474). Dr. Stapf points out to me that this species should be merged into *Danthonia*, the structure of the glumes being essentially the same as in that genus. This is evident on comparing it with the European *D. provincialis*, which differs in having awned pales, but this does not constitute a generic distinction. The American and Australian species of *Triodia* are totally different. I therefore suggest that the name *Danthonia decumbens*, DC., 'Fl. France,' III. 34 (1805), be revived.—A. B. JACKSON.

*Sesleria cœrulea*, Ard., var. *luteo-alba*, Opiz. I do not know that this beautiful grass has been noticed near Grassington before. It was fairly abundant in tufts on a steep slope with a northern aspect, 750 ft. above sea-level, this last June. *Sesleria cœrulea*, Ard., is always very abundant over a large area, and at different altitudes.—JOHN CRYER.

*Koeleria cristata*, Pers., var. —. Groby Pool, 7th August 1907. This form is far more robust than our general Leicestershire forms; is it one of the forms which have recently been differentiated?—W. BELL. This is, I consider, the *K. cristata*, of British authors, now called *K. gracilis*, Pers., subsp. *britannica*, Domin.—E. S. M. *K. gracilis*, Pers.—E. HACKEL.

*Koeleria*, sp. Smallmouth Sands, Weymouth, v.-c. 9, 16th June 1907.—H. J. RIDDELSDELL. I cannot venture an opinion. It may be *K. glauca*, DC., var. *albescens* (DC.). I don't think it *britannica*.—E. S. M. *K. gracilis*, Pers.—E. HACKEL.

*K. albescens*, DC. Plentiful on the Quenvais, Jersey, where I first discovered it in 1877. June 1907.—G. CLARIDGE DRUCE. *K. glauca*, DC., var. *albescens* (DC.), of the 'Lon. Cat.' Ed. X.—H. J. R.

*K. ? albescens*, DC. Smallmouth Sands, Weymouth, v.-c. 9. 18th and 20th June 1907.—H. J. RIDDELSDELL. *K. albescens*, DC.—E. HACKEL. *K. glauca*, DC., var. *albescens* (DC.), of the 'Lon. Cat.' Ed. X.—H. J. R.

*Poa bulbosa*, L., f. *vivipara*. Shore near Barry, v.-c. 41, 18th May 1907. Earlier and better specimens of the plant distributed last year.—H. J. RIDDELSDELL.

*P. nemoralis*, L., variety. Plant green, erect, wiry; fruit-panicle spreading. Exposed mountain rocks, Black Mountain; Brecon and Hereford; September 1907. This form is abundant on

these hills.—AUGUSTIN LEY. *P. nemoralis*, L., *vulgaris*, Gaud., approaching somewhat var. *montana*, Gaud., but nearer to *vulgaris*.—E. HACKEL. Gathered too late. It seems to me to be sub-alpine, depauperate form of the type, tending rather towards var. *coarctata*, Gaud.—E. S. M.

*P. Chaixii*, Vill. In the pleasure ground of Chiselhampton House with *Festuca heterophylla*, where it may have been introduced. Now very abundant. June 1907.—G. CLARIDGE DRUCE.

*P. palustris*, L. (*P. serotina*, Ehrh.). Still abundant in the original locality, i.e. a marsh on the west side of the River Tay, about four miles below Perth, where it is abundant over a limited space; but I think purely alien. July 1907.—G. CLARIDGE DRUCE.

*Festuca ovina*, L., forma. On the limestone cliffs at Inchdamph, W. Sutherland. Only a form of the type, not true *supina*. July 1907.—G. CLARIDGE DRUCE. Material poor. I cannot see how it differs from var. *capillata*, Hackel.—E. S. M.

*F. rubra*, sub-var. *barbata*, Hack. Correifron, 9th Aug. and Midlaw Burn, 23rd July, Moffat, N.B., 1907.—J. T. JOHNSTONE and W. R. LINTON. Mr. Marshall considers this to be probably the above variety. It grows on cliffs to upwards of 2,000 ft., and mixed up with the type. The Correifron plant is more pronounced than the other.—W. R. LINTON. *F. rubra*, var. *barbata*, Hackel, of 'Lon. Cat.' Ed. X.—H. J. R.

*F. rubra*, L., recently sown pasture near Ledbury, v.-c. 36, 8th July 1907.—S. H. BICKHAM. Var. *fallax*, Hackel, I believe.—E. S. M. Mr. Bickham subsequently suggested *F. dumetorum*, L.—ED.

*F. rubra*, v. *fallax*, Thuill. Near Moffat, Dumfries, 16th July 1907. Pointed out to me by Mr. Marshall. Chiefly growing on wall tops and in partial shade. Characterised by the long involute root-leaves.—W. R. LINTON. *F. rubra*, var. *fallax*, Hackel, of 'Lon. Cat.', Ed. X.—H. J. R.

*F. heterophylla*, Lam. In the pleasure grounds near Chiselhampton House, Oxford, in immense quantity. This is the locality whence I first recorded it in 1889. Here it is associated with *Lilium martagon*, *Poa Chaixii*, *Tulipa sylvestris*, *Ornithogalum umbellatum*, etc., and is probably an introduced species, although now completely naturalised. June 1907.—G. CLARIDGE DRUCE.

*F. heterophylla*, Lam. In woods on the Bere Estate between

Pangbourn and Bradfield. In this situation it has all the appearance of a native species. No introduced plants are near, nor is the place a plantation or near houses. I am making investigations into the history of the woodland and in other directions, but its occurrence here gives it a different status from what the plant previously possessed. The Rev. H. J. Riddelsdell was with me when these were gathered in June 1907. A new county record.—G. CLARIDGE DRUCE. From both localities also by H. J. R.

*Bromus giganteus*, L., var. *triflorus*, Syme, Saundersfoot, v.-c. 45, 22nd Aug. 1907. On a specimen sent to Mr. A. Bennett he remarked "Yes."—S. H. BICKHAM.

*B. racemosus*, L. Canal bank near Aintree, Liverpool, 30th July 1907.—J. A. WHELDON. I believe, correct.—E. S. M. Not *Bromus racemosus*, L., but *B. mollis*, var. *glabrescens*, Coss. Apart from other characters. *B. racemosus* is, perhaps, most readily distinguished from "*mollis*" forms by its differently shaped lower pale, as described by many authors.—D. FRY. To the same effect.—JAS. W. WHITE.

*B. brachystachys*, Hornüing. Canal bank near Aintree, Liverpool (59), 30th July 1907. New to South Lancs. This has been noticed for several years and taken for a starved form of *B. racemosus*, with which it grows in plenty. It may, however, be readily distinguished by its paler colour, smaller and more shining spikelets, and very contracted panicle, besides the difference in the shape of the glumes, &c.—J. A. WHELDON. *B. mollis*, var. *leptostachys*, Pers.—E. HACKEL.

*B. interruptus*, Druce. In a field at Rainham Camp, Northants, 6th June 1907.—H. J. RIDDELSDELL.

*Lolium multiflorum*, Lam., var. *muticum*, DC., 'Fl. Fr.', Ed. 3, V. 286 (1816). Rough grassy places, Kew Gardens, Aug. 1907. Coll. A. B. JACKSON and K. DOMIN. The Italian rye grass was abundant in rough grassy places on the west side of Kew Gardens last summer, and assumed a great variety of forms, among them being the above, which is distinguished by its awnless glumes. I recorded the same variety from Leicestershire ('Journ. Bot.', 1904, p. 349). This grass might be passed by for the common *L. perenne*, but it is easily separated from that by its scabrid rachis. A form which has some of the flowering glumes shortly awned seems to connect var. *muticum* with the type. When very luxuriant the spikelets of both type and var. become branched. We have seen similar forms near Richmond, Oxford, and St. Alban's.—A. B. JACKSON and K. DOMIN.

*L. perenne* × *multiflorum*. We observed this combination in Kew Gardens and also near Oxford, and probably it occurs in other localities where the parents are associated. This hybrid appears to be sterile, and the different forms it assumes may conveniently be divided into two groups as follows:—

*L. perenne* × *multiflorum*. In vegetative characters more like *L. perenne*, but much stouter, with leaves nearly or quite glabrous, bright green, spikelets smaller; some of the flowering glumes shortly awned, others without awns, rachis scabrid. Barren. The specimens now distributed apparently belong here.

*L. multiflorum* × *perenne*. More like the first-named plant [i.e. *multiflorum*], but the spikelets have less numerous flowers, and glumes longer than is usual in *L. multiflorum*.—A. B. JACKSON and K. DOMIN. The labels give *L. italicum* × *perenne*.—H. J. R.

*L. perenne* × *multiflorum* (*L. hybridum*, Hackel). Near Godstow, Berks. Dr. Domin pointed this out to me in Sept. 1907, and it is similar to specimens given me by Mr. A. B. Jackson which Dr. Domin showed him near Kew.—G. CLARIDGE DRUCE. *L. multiflorum*, Lam.—E. HACKEL.

*Agropyron*, sp. *Ref. No.*, 3226. Banks of the Parret, towards its mouth, between Stert and Combwich, v.-c. 5, S. Somerset. 22nd Aug. 1907. I suppose that this is only a glaucous, maritime form of *A. repens*, though it looked very peculiar when growing.—EDWARD S. MARSHALL. *A. repens*, var. *maritimum*, Hack. nov. comb. = *Triticum repens*, var. *maritimum*, Koch. & Ziz., 'Fl. Pal.' (1815). *Agropyron repens*, var. *littorale*, Lange, 'Handb.', 47 (1850).—E. HACKEL.

*Lastræa Filix-mas*, Presl., var. *abbreviata*, Bab. Clifden, Connemara, Ireland: 16th Aug. 1907. A curious variety that attracts notice in many spots near Clifden, growing out of rubble stone walls in exposed places. The crowded overlapping pinnæ and pinnules, due to a general shortening of the internodes; and the dense clothing of the stipe, are such as might be expected on plants fully exposed to weather on the verge of the Atlantic. Here and there one sees an approach to var. *paleacea*, Moore.—JAMES W. WHITE. These specimens, although I think correctly named, differ from the description in 'Fl. Franc.' and in Newm. 'Brit. Ferns,' as also from authentic Ingleboro' specimens, in having more numerous sori at the base of each pinnule. In the typical plant there are 1 or 2, very rarely three on the lower pinnules, and they are arranged nearer the midrib of the pinna. In my example of Mr. White's gathering the sori are quite often 5 or 6 and sometimes 7 on each pinnule, the lowest pair being further from the rachis,

so as not to appear as though clustered along it as in the Ingleboro' plant. The specimens are more robust and pinnules more numerous than in Ingleboro' examples.—J. A. WHELDON.

*L. spinulosa*, Presl., var. *glandulosa*. (Moore, ex. p.). Sandy woods near Caistor; and again sandy woods Wrawby Moor, N. Lincoln; August 1907. These plants vary much in the shape of the scales of the stipe and the presence or absence of a dark stain in their centre; but all differed in a well marked manner from typical *spinulosa* and typical *dilatata*, in company with which they grew. Some of the fronds bear a close resemblance to fronds originally named *glandulosa* from Lydbrook, West Gloucester. I was unable to trace any difference in the root stock between the plants I send as *L. glandulosa*, and *L. dilatata* growing near.—AUGUSTIN LEY. Agrees very well with specimens named by Moore from Epping Forest.—A. B. JACKSON.

*Equisetum* — Ref. No., 3227. On mud, Chard Reservoir, v.-c. 5, S. Somerset, 16th Sept. 1907. Sub-erect from a creeping-rooting base. Stems scabrid at the angles; central tube very small, exceeded by 6 or 7 lateral ones. I thought this most likely to be either a curious form of *E. palustre* or (possibly) a hybrid, *E. arvense* x *palustre*. Two good judges refer it to *palustre*; a third could see nothing to keep it from *arvense*. The station is against *arvense*; this season the water was remarkably low, and I believe that it is usually more or less submerged. Only barren plants occurred in the restricted locality where it grew.—EDWARD S. MARSHALL. Agrees with *E. palustre*, forma *longiramosa*, Klinge, but representing a weak state of it.—J. A. WHELDON.

*Chara hispida*, var. *horrida*, Braun. Quy Fen, Cambridge, coll. R. P. Gregory, 18th June 1907.—E. S. GREGORY. No; that (as its name implies) is extremely spinous. My specimen is almost spineless.—E. S. M. The labels were written '*Carex*.'—H. J. R.

*Tolypella intricata*, Leonh. Pitney, N. Som., 27th April 1907. N. C. R.—E. S. M.

*Nitella ornithopoda*, Braun. Shallow water on the Cazan road, Arcachon, Gironde, France, March and April 1906; *f. laxa*.—G. R. BULLOCK WEBSTER. Canon Bullock Webster has kindly sent a supply of this rare and local charad from W. France; it was thought that specimens would interest the members. Notes from the report of the Linnæan Society's meeting, 7th March 1907, are appended:—

Messrs. H. & J. GROVES, F.L.S., exhibited a series of specimens

of *Nitella ornithopoda*, A. Braun, collected by the Rev. Canon Bullock Webster. This rare species has only been found in a small district in the West of France, from Angoulême in the north to the south of Arcachon, and doubtfully in one locality in Portugal. The especial interest of the specimens exhibited, which were collected to the south of Arcachon in March and April 1906, was that they represented gatherings of the plant from very different habitats and showed great variations. The plants collected in shallow ditches were already in full fruit, while those from running water and from Lake Cazan were quite immature, and so far sterile. Only a few specimens of this species have previously reached England, and the collection exhibited was probably by far the most extensive series of forms yet obtained.

Braun recognized two forms—the more typical one almost resembling in habit some forms of our *N. tenuissima* (this form was called f. *moniliformis* by Prof. Migula), and the other var. *laxa*, which resembles *N. gracilis*. Among the specimens were some from roadside ditches near Arcachon, representing a third and very distinct form; this may be called var. *robusta*. It is 4-5 in. high, very dark green, much more robust than the ordinary form, and with comparatively short ultimate rays to the branchlets, giving it the appearance of *N. mucronata* in miniature.

*N. ornithopoda* is interesting as representing in Europe Braun's section POLYARTHRODACTYLÆ. The headquarters of the species in this section is Australasia, where there are eleven species; two reach north to Japan, and one occurs in India. Two or three are found in South America, and one in North America. Three species occur in Africa, one of which is also recorded by Dr. Nordstedt from Portugal. It is not quite certain that *N. ornithopoda* is distinct from this last.



