

ULMUS PLOTII DRUCE. PLOT'S ELM. Near Banbury, Oxon, 1911.

# BOTANICAL EXCHANGE CLUB AND SOCIETY OF THE BRITISH ISLES.

THE

## VOL. III. PART I.

## Report for 1911

BY THE

## SECRETARY.

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Parcels for 1912 should be sent post paid on or before 1st December, 1912, to John Cryer, 182 Bradford Road, Shipley, Yorks.

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PRINTED BY JAMES PARKER & Co., CROWN YARD, OXFORD,

April, 1912.

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4

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## THE BOTANICAL EXCHANGE CLUB AND SOCIETY OF THE BRITISH ISLES.

## THE REPORT OF THE TREASURER AND SECRETARY, G. CLARIDGE DRUCE, YARDLEY LODGE, OXFORD,

## FOR 1911.

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## PLANT NOTES FOR 1911, ETC.

1(4). CLEMATIS MONTANA, Buch. Ham. Alien, Himalaya. Roadside stone wall, Stonestreet, near Sevenoaks, and on fir trees in a plantation at Burnt Ash, near Bromley, Kent, 1908. (W. H. GRIFFIN.)

21. RANUNCULUS AURICOMUS, L.

Var. b. INCISIFOLIUS, Reichb., Ic. Fl. Germ. et Helv. iii. t. xii. f. 4599 (incisifolia). With the upper leaf segments broader and incised, Mag. Coll. Meadows, Oxon., Wytham, &c., Berks. This is closely allied to, if not synonymous with, var. fallax, Wimm., and in the above characters approaches R. cassubicus, L.

Var. c. RENIFORMIS, Kittel, Tascenbuch der Fl. Deutsch. 773, 1844. With reniform radical leaves, divided (into 3 overlapping or closely contiguous lobes) by two divisions reaching from  $\frac{2}{3}$  to  $\frac{1}{3}$  the depth of the leaf. Stow Wood, Headington, Oxon., and near Alperton, Middlesex.

[Var. PALMATUS, Hn. With leaves having a truncate base should be looked for.]

24 c, d. RANUNCULUS FLAMMULA, L., var. ALISMIFOLIUS, Glaab, Deutsche Bot. Monattschrift, xi. p. 76. Dr. Hugo Glück uses this name (Die Uberflora, 500, 1911) for the plants which I have called by the older name, var. ovatus, Persoon, Syn. ii. 102, 1807, in my List. He has cultivated it and considers it to be a good variety which he has seen growing in Lac de Tonga, Algiers, Cazea, Bordeaux, France, and Tanca de Nizza, Sardinia, and with it he unites var. latifolius Wallroth, Sched. Crit. 289. My specimens, which are from Iver Heath and Hazlemere, Bucks., Albury, Oxon., Sheen Common, Surrey, have broad leaves which are almost truncate at the base.

77. CASTALIA CANDIDA (Presl.), Schinz and Thellung, Nymphaea candida, J. and C. Presl. Delic. Prag. 224, 1822. N. cachemiriana, Camb. = N. pauciradiata, Bunge, N. intermedia, Weik. = N. punctata, Kar. et Kir., N. alba, var. oocarpa, Caspary in

Ind. Sem. Hort. Berol., App. 27, 1855, N. alba, var. candida, Borbas, Buda Korn, Nov. 191, 1879. This new Water Lily to the British flora was pointed out to the botanists on the visit of the Internat. Phyto-geograph. Excursion to Dunkeld on August 16th last by Dr. Ostenfeld. It was growing in a small loch, in which the African Aponogeton distachyum was quite naturalised. Afterward in Ireland, on August 22nd, Dr. Ostenfeld and myself independently found it in two different loughs near Craggamore, and later in the day I saw it in some plenty in a lough near Roundstone, Co. Galway. In appearance it differs but slightly from C. alba, and the botanical characters which separate it from C. alba are chiefly in the fruit, which has a naked space between the under-side of the stigmatic disk and the ovary, whereas in C. alba the fruit is covered up to the disk with the stamen-scars. The pollen in *candida* is larger and smoother than in C. alba, which has numerous projections. The geographical distribution is quite in favour of its being native in Britain, occurring as it does in Siberia, Finland, Sweden, Poland, W. Prussia, Canton St. Gall, Switzerland, Austria, Tyrol, Bohemia, Hungary, and in the lakes of Kashmir.

The following description is abbreviated from that given in Conard's *Water Lilies*, 172-3, t. 20-22, 1905 :--

Flower 6-13 cm. Sepals 4-5 oblong or ovate-oblong (3-8 × 1-3 cm.), narrowed at apex, acute or obtuse, about 7 - veined. green outside, white within. Petals 12-20 white, 7-nerved, outer ones nearly as long as sepals. Stamens 32-70, shorter than in alba, orange yellow, filaments lanceolate (outer) to linear-lanceolate (inner), long acuminate, never narrower than anthers, usually inserted only on the sides, not on the summit of the ovary. Pollen granulate with smooth operculum, larger than in alba. Ovary ovate or roundish, usually contracted and destitute of stamen insertions below the stigma. Carpels 5-14. Fruit ovoid or spherical. Seed larger than in alba, ellipsoid, brownish, o'3 cm. long. Leaf cleft at base to petiole, sub-orbicular to oval, 10-30 cm. long, 25 cm. wide, entire ; lobes nearly equal, inner margins curved, overlapping a little above, and spreading out towards periphery of leaf (or straight and parallel or touching); angles more or less acute; veins on under-side of leaf prominent, the lowest pair (i.e. those running into the lobes) curved, and if produced would cross, inclosing an oval area.

As externally this Lily bears such a close resemblance to *C. alba*, it will be necessary to record afresh the occurrence of the latter in the various British Counties; but it is probable that a great many Scottish localities will yield *candida* alone. Adopting Bentham's standard of species as in *Hayward's Pocket Book*, this plant would stand as *C. alba*, Wood, var. *candida* (Presl.).

126. RADICULA ISLANDICA (*Oeder Fl. Dan.* p. 8, t. 409, as Sisymbrium? islandicum) = Roripa islandica, Schinz and Thell = R. palustris. A probable hybrid of this species with R. sylvestris, Druce, was found on the east side of Tay at Perth; I had previously found the same plant by the Tay in Mid Perth some years ago. G. CLARIDGE DRUCE.

Gen. 39(3). AUBRIETIA, Adans. Fam. ii. 420, 1763. 150(3). A. DELTOIDEA, DC. Alien, Greece. Roadside wall, Hayes, Kent. W. H. GRIFFIN.

155(2). ALVSSUM VINDOBONENSE, G. Beck, *Fl. Nieder. Oest.* ii. 469, 1892. Alien, Europe. Gloucester, ST. BRODY ex H. J. RID-DELSDELL (*Journ. Bot.* 227, 1911). This belongs to the section *Alyssum*, not to that of *Koniga*.

206(2). BRASSICA NAPUS, L., VAR. OLEIFERA (Prain). Alien. Lancashire, etc.

240(2). LEPIDIUM NEGLECTUM, Thellung in Bull. Herb. Boissier, iv. 708. Alien, N. America. That indefatigable collector, Mr. T. Hilton, has sent a sheet of specimens from Aldrington, West Sussex (See Rep. 1909), belonging to this newly-described species, which so closely resembles *L. ruderale* as to make it desirable for members to carefully examine their herbarium specimens. The examination of my own and of that of the Oxford Herbarium enables me to vouch for the occurrence of *L. ruderale* from the following vice-counties :--Cornwall 1, Hants. S. 2, Sussex E. and W. 13, 14, Surrey 17, Essex S. 18, N. 19, Herts. 20, Middlesex 21, Berks. 22, Bucks. 24, Suffolk E. 25, Norfolk E. 27, W. 28, Cambridge 29, Northants. 32, Gloucester W. *Dillenius* 34, Monmouth 35, Glamorgan 41, Chester 58, Lancs. W. 60. to the botanical exchange club of the british isles.

The chief mark of distinction is (as pointed out by Mr. C. E. Salmon, *Journ. Bot.* 164, 1911), that the seed of *L. neglectum* is more orbicular and is surrounded by a winged margin. It has been found at Putney, *Newbould* and *Druce*; Surrey, Oxford, *Druce*, and Earlston, Wigton, *McAndrew*.

246 e. LEPIDIUM HETEROPHVLLUM, Benth., var. LEIOCARPUM, Thellung. Montrose, Forfar, 90. Thornielee, Peebles, 79.

247(2). LEPIDIUM DENSIFLORUM, Schrader. Alien, N. America. East Greenwich, Kent, Rugby, Warwick, Hull, Yorks., C. E. Salmon (*Journ. Bot.* 16, 1911).

277 b. RAPHANUS SATIVUS, L., VAR. CAUDATUS (L.). Alien, Cult. Hort. Watford, Fl. Herts. 24.

Ord. 6(2). CAPPARIDACEAE, Lindley, Nat. Syst. ed. 2, 61, 1836.

Gen. 78(6). CLEOME, L., Sp.

270(6). C. SERRULATA, Pursh, Fl. Am. Sept. 441, 1914 (C. integrifolia, Torrey and Gray). Alien, N. America. Canal side, Gloucester. K. B. BLACKBURN ex H. J. RIDDELSDELL (Journ. Bot. 328, 1911).

288 d. HELIANTHEMUM CHAMAECISTUS, Miller, var. PARVI-FLORUM, Druce, in Ann. Scot. Nat. Hist. p. 98, 1911. Elibank, Selkirk, Wychwood, Oxon. In both instances these plants grew with the type, and the style and stamens were normal. "Foliis ellipticis vel anguste ellipticis, obtusis, supra cum paucis pilis longis, infra albis-tomentosis. Petalis aut sepalis aequalibus aut aliquanto longioribus."

298.  $\times$  V. COLLINA, Besser = V. HIRTA  $\times$  ODORATA, Boxhill, Surrey, Woolacombe and Braunton Burrows, N. Devon. W. T. HIERN. This is another of the hybrids of *hirta* and *odorata*, differing from *sepincola* and *permixta* in being fragrant, in its caespitose habit, in the almost shaggy clothing to the leaf-surface, and in its leafoutline. Besser describes it :---"Stolonibus nullis, subhirsuta, foliis cordatis, calycibus obtusis, floribus odoratis. Planta parva flores pallida lilacina. Aprili florens in collibus affinis *V. campestris*  a qua forma foliorum hirsuti (illius folia pubescentia) et colore florum praeprimis diversa." E. S. GREGORY, *in lit.* 

301. VIOLA EPIPSILA, Lebebour (see Rep. 497, 1910). In order to verify the occurrence of this plant in Britain, which Mrs. Gregory had detected in the Herbarium of Mr. W. F. Miller, labelled V. palustris, Hamilton Tor near Widdicombe, S. Devon, 1885, in June last I went to Moreton Hampstead, and was fortunate to find it within two miles of that town, growing by the side of a stream under the shade of alders in considerable plenty. It also grew on Hamilton Tor in fairly full exposure, and ascended to over 1,400 feet; it also grew by streams among sphagnum in the parish of Upper Nutsworthy, and in other places. Its appearance at once recalled a Marsh Violet which I had noticed, but not collected, growing near Burghfield, Berkshire, and on my return I visited that place and found V. epipsila growing in sphagnum under alders in great plenty. In August last, when with the International Phyto-Geographical Excursion, I was fortunate enough to meet with the same plant at Killarney, Co. Kerry, near the Upper Lake, also growing in shade and shelter. Dr. Vigurs also sent it me from Cornwall in September last. To these localities may be added Carnarvonshire, for I find among a large quantity of Marsh Violet gathered by me at Coed Fynnon, near Bettys-y-Coed, a plant or two which must be referred to epipsila. (Specimens from this locality were distributed through the Club (see *Rep.* 438, 1909.) This latter record supports the opinion expressed by Dr. Neumann and Mrs. Gregory, that plants from Coed Fynnon gathered by Miss C. E. Palmer in 1877 were V. palustris  $\times$  epipsila.

It may be added that this year I saw true V. palustris in Cornwall (Perranwell), Devon (Widdicombe moors), Bucks. (Burn. ham Beeches), Cheshire, Lancashire, Yorks., Cumberland, Perth E. M. and W., and Clifden, Galway, and Co. Clare. The localities in Bucks. and Perth (Dunkeld and the Trosachs) were such as eminently suits *epipsila*, which I vainly sought there. To recapitulate its characters, V. *epipsila* has the petiole, peduncle, and the nerves on the under-surface of the leaves more or less hairy ; the leaves are usually larger than those of the glabrous *palustris*, and the secondary leaves are not so rounded, being more or less ovate-

cordate, and having a short point at their apex; the capsules are also larger; it may be added that our plant fruits very freely.

302(2). VIOLA DECLINATA, Waldst. and Kit. Alien, Hungary. Chailey, Sussex. T. HILTON, 1906.

309(2). POLYGALA BABINGTONII, mihi. *P. grandiflora* (Bab.), mihi, Druce in *Rep. Bot. Exchg. Club. P. vulgaris*, L., var. grandiflora, Bab., Man., Brit. Bot., ed. v., 41. (See also *Journ. Bot.* 174, t. 189, 1877.) Not of De Candolle. *P. buxifolia*, Ball. Herb. non Reichb. Caules firmi suffruticosi, ramis numerosis, ad basim lignosis (10-18 cm. altis). Foliis alternis arctis, ad basim plerumque parvis (4-8 mm. longis). Foliis alt medios ramos late ovalibus vel lanceolatis (20 longis 8 mm. latis), saepe acutis, coriaciis. Flores densiores, sine bracteis, valde caerulei (7-8 mm. longi, 5-6 lati). Calycis alae ovales apiculatae; venae laterales cum vena media fere indivisa prope apicem junguntur, et multas venas reticulatas extrinsecus habent.

The upper leaves are large, lanceolate, calyx wings, ovalapiculate; their lateral veins rejoin the mostly simple central vein near its tip, and have many net-like veins externally. In the second edition of the *Manual* Babington describes it, but without giving it a name, but (ed. iv. p. 40, 1856) suggests that it may be the var. grandiflora, W. & G.

Those who have seen this striking and beautiful plant growing on the limestone cliff of Ben Bulben, Sligo, will acknowledge it has strong claims to specific rank from its stout, almost shrubby, growth and sub-ligneous stems, the broad coriaceous leaves, the handsome clusters of large dark-blue flowers, and the venation of the calyx. De Candolle's var. grandiflora, described (Prodromus, i. 125, 1824), as "caulibus erectis, foliis linearis, floribus magnis roseis," is not this plant, and probably is distinct from *P. vulgaris*. I have not seen Stewart's plant from Ben Evenagh, Derry, referred to this form in *Cybele Hibernica*, p. 46. That this beautiful species should be connected with the name of one who first drew attention to it, and to whom British Botany is so much indebted, is quite appropriate.

324(2). DIANTHUS GUTTATUS, M. Bieb. Alien, Russia. Hull, C. B. WATERFALL (*Wats. B. E. C.* 8, 1902-3). 333(2). SAPONARIA ORIENTALIS, L. Alien, Orient. Galway Bay, August, 1911.—G. CLARIDGE DRUCE.

360 b. LYCHNIS DIOICA, L., var. PRESLII (Sekera). Lychnis Preslii, Sekera, in Lotos, iii. 134, 1853, Melandryum Preslii, Nyman, Syll. Suppl. 41. M. dioicum, var. Preslii (Sekera).

This interesting plant was found by our member, Miss Alice Trower, near Tantallon Castle, Haddington, in 1910, only a single female specimen being seen, and it was exhibited at the Royal Botanical Society, Edinburgh, July 17, 1911. Until recently it was only known in a wild state from a single station in Bohemia, but it is in cultivation, and has been grown in the Botanical Garden, Edinburgh, since 1896. In *Index Kewensis* it is in error given for *Bolivia*.

The plant closely resembles *dioica*, but is entirely glabrous both in leaves and calyx, and its capsule is of a different shape.

Sekera's description is "Petalis semibifidis coronatis, caule foliis, pedunculis calycibusque glaberrimis, foliis superioribus ovatis abrupte acuminatis, radicalibus pedunculatis decurrentibusque, capsula subrotunda ovata dentibus revolutis, floribus dioicis. Flores inodori, diu aperti, saturatius purpurei quam *L. diurnae* nunquam albi. Juni. Julii. In fissuris saxosis ad castellum 'Kost' prope Monacho-Hradecium, circuli olim boleslariensis, frequens."

368. CERASTIUM ALPINUM  $\times$  VULGATUM =  $\times$  C. SYMEI, Druce. Ben Lawers, growing with both parents. Dr. Ostenfeld agrees to the determination.

382. STELLARIA DILLENIANA, Moench. In the original station where Dr. Williams found the above plant, it was flowering in September long after the glaucous variety *palustris* was past; and chiefly from this fact it has been suggested to be specifically distinct. But (*Rep.* 546, 1910) I have stated that "all the continental botanists that I knew of had either merged it into the type or had considered one to be a variety of the other . . . and attention having been given to it we may expect to hear of its turning up in other localities." Therefore it was very pleasing to be able to show it to the members of the International Phyto-Geographical Excursion at Sutton Broad, Norfolk E., on August 4th last, in two different localities, and in each case flowering at the same time and in close

contiguity to *palustris*. At Woodbastwick the latter form alone occurred. Dr. Lindman, who with Dr. Graebner and Dr. Ostenfeld agrees with me in keeping one plant as a variety of the other, tells me in Sweden the green plant is more frequent than the glaucous, and that the flowering period is also identical, and in many parts of Germany it is quite frequent. Mr. Arthur Bennett (*Ann. Scot. Nat. Hist.* 253, 1911) records it from Moulsey Hurst, Surrey, *H. C. Watson*, 1847, Flegg Burn Fen, E. Norfolk, August, 1880, *A. Bennett.* G. CLARIDGE DRUCE.

399 c. SAGINA NODOSA, Fenzl., var. MONILIFORMIS, Lange. Alsine nodosa, var. moniliformis, Meyer, Chlor. Hannov. 206, 1856. "Rurz blatterige blatter-knotige Miene." On the Phyto-Geographical Excursion, Professor Massart pointed out to the members this interesting form in the 'slacks' of the Southport dunes growing with the var. SIMPLEX, Graebn. N. G. Danzig N.F. i. 262, 1895 (which is nearly allied to Spergula nodosa, var. brevifolia, Pers., Syn. i. 522). Dr. Graebner, who was with us, assented to the names in both instances. An interesting paper onthe life history of the species in the Lancashire dunes by our member, Mr. W. G. Travis (Journ. Bot. 270, 1911), shows that moniliformis is a condition in which the plant reproduces itself by leaf-bulbils which develop in the leaf-axils of the lateral stems, especially when the plant grows in wind-swept places. Therefore it may be expected in damp sandy places on the coast. (See New Phyt. 310, 1911.) The var. simplex appears to be more a state than a true variety, but I am unaware if it has been tested in cultivation.

Moniliformis has been observed by me at Braunton Burrows, North Devon, Weymouth, Dorset, North Wanborough, North Hants, Port Meadow, Oxon., Chesham, Bucks., Yarmouth, East Norfolk, Kenfig, Glamorgan, Barmouth, Merioneth, Aberfraw, Anglesey, Southport, Lancashire, Sands of Barrie, Forfar, Golspie, Sutherland, Tain, East Ross, Gweedore, Donegal, North Bull, Co. Dublin, Anacoona at 1,800 feet, Sligo, Portumna, Clare, etc.

403(2). SAGINA SCOTICA, mihi (S. GLABRA, var. SCOTICA, Druce in *New Phyt.* 310, 1911. On the Phyto-Geographical Excursion this plant was noticed by the writer on the lower slopes of Ben Lawers 88, by the large burn which descends from the Gentian rocks, and was, at first, a complete puzzle. It suggested a largeflowered S. saginoides, or a creeping form of S. subulata, or perhaps a pentamerous petaloid S. procumbens, but as fresh plants were found, one after another of these suggestions was dismissed as untenable. The plants were in considerable quantity and in free flower on this hot sunny day, at a much later date (August 17th) than the writer had ever been on the hill. Dr. Ostenfeld became inclined to refer them to a hybrid of procumbens and saginoides, but the plants were fertile and commoner than either of the assumed parents. Professor Graebner agreed with the writer in assigning them to a distinct species. The plants occurred on an altitudinal range of from 1,200 to 3,500 feet. Subsequent comparison led the writer to refer them to the S. glabra which occurs in "prairies sablonneuses" in the Alps of Switzerland, France, Italy and the Tyrol, but seeing more complete material from Switzerland he believes it to be a distinct form. From S. saginoides it may be known by its large flowers, though doubtless in herbaria it will be often found to represent that species. From S. subulata its more creeping habit and more woody root-stock will distinguish it.

The following tabular arrangement shows the distinctive differences :---

SAGINA SAGINOIDES.	S. SUBULATA.	S. SCOTICA.	
ROOTSTOCK. Slender stem.	Very slender.	Stouter and more woody.	
STEM. Decumbent or ascending.	Densely caespitose.	Creeping and rooting, ascending.	
LEAVES. Mucronate or submutique, not aris- tate.	Subulate, strongly aris- tate.	Mucronate, or shortly aristate.	
PEDICELS. Fruiting, twice as long as in- ternodes, straight.	Very long, 3 cm. Erect. Usually pubescent.	Very long, five times as long as leaves. Gla- brous.	
SEPALS. 5 obtuse, oval, applied to the capsule.	5 oval, obtuse. Sub- erect after flowering, somewhat spreading.	Elliptic, obtuse.	
PETALS. 5 much shorter than calyx, oblong.	5 as long or exceeding calyx, roundish-oval.	5 much longer than calyx, roundish-oval.	
CAPSULE. 3-3½ mm. longer than calyx.	Scarcely exceeding calyx 3 mm.		

408. S. PROCUMBENS, L., var. COROLLINA, Ledeb., Fl. Ross. i, 339, 1842. The form with evident petals, "petalis distinctis," was

noticed near Beaumaris, Anglesey, by H. Davies, 1817 (Baxt. Phaen Bot. t. 199). G. CLARIDGE DRUCE.

413. SPERGULARIA SALINA × RUPESTRIS, H. W. Pugsley, in Journ. Bot. 365, 1911. Lyme, Dorset.

441(3). MALOPE TRIFIDA, Cav. Rowledge near Farnham, Surrey. Alien. Dr. C. C. VIGURS, 1907, ex W. H. GRIFFIN.

483(2). GERANIUM BOHEMICUM, L., Alien, Europe. Bank of meadow, Southend Lane, Lower Sydenham, Kent, 1900.—A. O. HUME.

488. GERANIUM ROBERTIANUM, L., var. VILLARSIANUM (Jord.) = G. Villarsianum, Jord., in Cat. Gren. 1849 = G. purpureum, Vill., Fl. Dauph. iii. 374, t. 40, pro parte et loco natali indicato et icone sit, sed non ex descriptione :—

"A G. Robertiano plane differt floribus duplo minoribus, carpellis magis rugosis foliis parvis minus dissectis et fere crassioribus, habitu valde humiliore diffuso. A G. modesto, Jord., in Cat. Gren. 1849, discedit sepalis multo longius pilosis magis dorso convexis, petalis latioribus minus oblongis ungue suo haud longioribus, fructus rostro breviore, carpellis mox deciduis nec diutius suspensis, rugis eorum crassioribus, foliis obscure virentibus minus dissectis, hispiditate longiore, habitu humiliore diffuso." Jordan Pugillus, 38, 1852.

On the limestone rocks above Ballyvaghan, Co. Clare, plants occurred which come under this form, except that they are less hairy, but the habit, outline and general structure lead one to refer it to this plant, and I have also compared it with one of Jordan's type specimens.

497 h. ERODIUM CICUTARIUM, L.'Her., var. PRAETERMISSUM, Boreau. Sandy ground, Kew, Surrey, 1871. J. G. BAKER.

519. RHAMNUS CATHARTICUS, L., var. SCHROETERI, mihi. By the roadside in Silverdale, Lancashire, August 1911, noticed by Professor Schröter, after whom it is named. The small tree looked quite different from type *R. catharticus*, the foliage being of paler and more yellow-green, and appeared as if covered with dust from the mealy pubescence with which the leaves were covered, and they were also thicker in texture than the type. Professor Schröter has sent me a specimen of *R. Villarsii*, Jord., which is said to be a hairy form of *catharticus*, from Fribourg, but this is quite different from the Silverdale plant, which may be briefly diagnosed :—Arbor parva (3-4 m.). Foliis ovalibus orbiculis, flave-viridibus, acuminatis (25-30 mm. longis, 15-20 latis) supra infraque dense pilosis. Petiolis dense pubescentibus. Fructus cum pedunculis hirsutis.

527(2). LUPINUS LUTEUS, L. Alien, Europe. Portobello. J. FRASER, Ann. Scot. Nat. Hist. 100, 1911.

535(2). GENISTA OVATA, Waldst. and Kit. Alien, Europe. N. Lincs. WOODRUFFE-PEACOCK, *List* 29, 1909.

561(2). TRIGONELLA KOTSCHVI, Boissier, *Diagn. Ser.* i. 9, p. 12, forma. Alien, Orient. Market waste, Brighton, Sussex. Determined by W. G. Craib, October, 1910. T. HILTON.

562 var. b. MEDICAGO FALCATA, L., var. TENUIFOLIOLATA, Vuych, Fl. Batava, n. 1813, 1910. Distinguished from the type by the stem and leaves having 'gris' hairs, by the narrower leaflets, which are longly linear, entire, with the two teeth of the central vein prolonged into an apiculus, cuneiform at base. Inflorescence few-flowered, often reduced to 2-3. This is the plant referred to by me (*Rep.* p. 553, 1910) from Mr. Travis "as the narrowleaved form of *M. Falcata*," and is probably an Eastern Alien.

611 d. TRIFOLIUM ARVENSE, L., var. LONGISETUM, Boissier, distinguished from the type chiefly by its longer calyx teeth. Determined by W. G. Craib. Clymping sands, Littlehampton, Sussex. T. HILTON, *in lit*.

615(2). TRIFOLIUM DIFFUSUM, Ehrh. Alien, Eur. mer. Cardiff docks.

647. LOTUS CORNICULATUS, L. At a meeting of the Royal Society on November 23, a paper was read by Messrs. Armstrong and Horton showing that the above plant, collected by the Thames near Reading, contained a cyano-genetic glucoside. This has not been found in *L. uliginosus*, a fact which supports the contention

of the latter being a true species. Chemical News, 104, 276, 1911.

688(2). VICIA PYRENAICA, POURT. Alien, Pyrenees. Lincoln, N. WOODRUFFE-PEACOCK, List 64, 1909.

710 var. b. LATHYRUS SYLVESTRIS, L., var. LATIFOLIUS, Peterm. Fl. Lips. 545 = platyphyllus, Retz, Prod. Fl. Scand. ed. 2, 170 = L. majoris species flore rubente et albido minore dumetorum s. germanicus Ray. Syn. 319, Fl. Danica, v. t. 785. Isle of Wight 10, Wytham, Berks., 22, Pwllheli, Carnarvon 49, Ashridge. The Petioles are strongly winged, the lower leaves large, oval-oblong, rounded and mucronate at the apex, the middle ones elliptic-lanceolate, corolla more rosy and less versicolored than type. G. CLARIDGE DRUCE.

#### Gen. 161(4). GLYCINE, L. Sp.

730(6). G. SOJA, Sieb. and Zucc. Alien, Asia. Leith Docks. J. FRASER, Ann. Sc. Nat. Hist. 100, 1911.

733(2). PHASEOLUS MULTIFLORUS, Willd. Alien. Portobello. J. FRASER, Ann. Sc. Nat. Hist. 100, 1911.

845(3). SPIRAEA DOUGLASH, HOOK. Alien, N. America. Middlesex. Herb. A. LOVDELL.

878(2). RUBUS ODORATUS, L., forma alba. Alien, N. America. Near Lidlington, Beds. MISS ROBINSON.

909 d. Alchemilla vulgaris, L., var. acutidens (Buser). Briquet in Burnat Fl. Alp. Marit. 111, 149, 1899.

A. ACUTIDENS, Buser in *Bull. Herb. Boiss.* ii. 104, 1894, et emend. and ampl. Lindberg *Die Nordischen Alchemilla vulgarisformen*, p. 111, 1899 :---" Caules usque ad ramulam floriferum secundum vel raro tertium et petioli + pilosi, folia subtus nervis per totam longitudinem + pilosis. Inflorescentia lata, multiflora; densa, subcorymbosa, stipulia profunde incisa, folia viridia, orbicularia vel reniformia, 9-vel rarius incomplete 11-loba, supra glabra vel rarius in plicis pauci-pilosa, lobi dentibus conformibus utrimque (7) 8-9 (10), acutis vel acutiusculis, dens apicalis vicinis aequi longus et conformis, raro paullo brevior, flores subvirides, sepala et episepala angustiora et acutiora." Ben Lawers, Mid Perth, 1,200— 3,500 feet; pointed out to the International Phyto-Geographical Excursion last August by Dr. Ostenfeld. It is closely related to *A. alpestris*, which is a more glabrous plant, the leaves "subtus tantum secus apice snervorum adpresse pilosa, lobi dentibus utrimque (6) 7—9 (10), dentes inaequales, dens apicalis parvus, vicinis multo minor, inflorescentia vulgo satis angusta, flores vulgo flavo-virentes." I collected it in Nant Francon Carnarvonshire in 1899, and it is McTaggart Cowan's Hopetown plant of last year's *Report.* 

961 c. PVRUS ARIA, Ehrh., var. INCISA, Reichb., Fl. Excurs. iii. 628, 1830-2 (Sorbus nivea, Hort. Angl.). Near Ewelme, Oxford, Druce, 1880. Cheddar, A. Ley, Nightingale Valley, Clifton, Somerset N. (See Rep. B. E. C. 169, 456.)

Var. TOMENTOSA (Rouy et Cam., Fl. Fr. 21, 1901, as sub-species *Sorbus tomentosa*). Differs from the type by the leaves being tomentose on the upper surface and by the nerves being less numerous (7—8 pairs not 8—12), the corymbs denser, shorter, and with short pedicels.

964(2). P. CVDONIA, L. (*Cydonia vulgaris*, Pers.). Alien, Europe. Roadside hedge of meadow between Chalsfleet and Cullingstone, Kent, 1907. W. H. GRIFFIN, *in lit*. The locality is one given for *P. Mespilus* in *Flora of Kent*, but Mr. Griffin tells me he has only seen the Quince growing there.

966. CRATAEGUS MONOGYNA, Jacquin (= C. OXVACANTHA, L.), var. splendens, Druce. The Parks, Oxford.

Var. CUNEATA (Druce, *Report*, 501, 1910), also at Holmesbury, S. Hants., Clifden, Galway.

Var. QUERCIFOLIA (Druce, *l.c.*). Identical specimens have already been figured under the same name by Loudon (*Arboretum*, ii. 830, t. 608, 1838); he says "the var. 5 *quercifolia*, Booth, appears very distinct in regard to foliage; but there are only small plants of it in two or three places [near] London, all of which have

been lately introduced from Mr. Booth of Hamburg, so that it lacked description. It is not infrequent near Kirkcudbright."

Var. AUREA (Hort., Loudon, *l.c., C. flava*, Hort.) has the leaves like *obtusata*, and the fruit roundish and of a golden-yellow. Miss Ida Hayward sent me specimens of this striking form from Galashiels. It may be remembered that the var. *leucocarpa*, Loudon, was found in a hedge near Bampton, Oxon. (*Plot. Nat. Hist. Oxfordshire*, 1677.)

1004(2). RIBES AUREUM, Pursh. Alien, N. America. Roadside hedge near Icklingham, Norfolk. H. D. HEWITT, 1907, ex W. H. GRIFFIN.

1028.  $\times$  DROSERA LONGIFOLIA  $\times$  ROTUNDIFOLIA, (*D. rotundifolia*  $\times$  *intermedia*, Callier, in *Schrift. Schles. Ges.* ii. 84, 1892). Plants having intermediate characters between the above species have been noticed at Dersingham, Norfolk, growing with both the assumed parents, and Mr. H. Balfour brought me from the New Forest plants which he and I thought had the same parentage. Further specimens and observations are, however, required to prove the occurrence of this hybrid in Britain.

" Pedunculi quam intermediae fere subduplo longiores."

1042. PEPLIS PORTULA, L., var. DENTATA, mihi. Dentibus calycis capsula (1 mm. vel ultra) longioribus. In typical *P. Portula*, the calyx teeth are short, the outer ones shorter than the interior, and subulate, and all falling short of the top of the capsule. In this variety the teeth (1 mm. long) are longer than the capsule. It forms an interesting passage to the form of Western France, *P. longidentata*, Boissier and Reut. *Pl. Hisp. Exsic.* Batt. and Trab. *Fl. d'Alg.* 320 = P. *Portula* var. *longidentata*, J. Gay, *Notes sur Endress*, p. 38, in which they are 1.5-3 mm. long Boscastle, Cornwall, Black Valley, Killarney, 1875, and near. Killarney, 1911.

1070(2). ŒNOTHERA BOTTAE, Torrey and Gray. Alien, Calif. Lincs. N. WOODRUFFE-PEACOCK, List 40.

1099(2). APIUM MOOREI (Syme), mihi. *A. inundatum*, Reichb., var. *Moorei*, Syme ex *Lond. Cat.* ed, viii., 16, 1886, nomen

solum. Helosciadium Moorei = H. inundatum, var. Moorei, Boswell Syme in Bot. Exch. Rep. 20, 1876. See also p. 51, 1881; p. 153, 1886, and E. B. Suppl. 187. Canal at Renishaw, Derbyshire, Lincoln N. Lees in Check List. This has good claims to be considered a species from the character of its leaves both in the aquatic and terrestrial states. Syme (E. B. iv. p. 102) described the Irish plant under Helosciadum inundatum, but did not name it; W. R. Linton (Fl. Derby, 159) alludes to the above plant as having "many aerial leaves and no submerged ones," but I collected it with wholly submerged leaves in October. The much broader segments of the leaflets of the leaves, which are not setaceous, and the larger style and 5-6 bracteated involucel distinguish it from H. inundatum.

1138. ŒNANTHE FISTULOSA, L, var. TABERNAEMONTANI (Gmelin, *Fl. Bad.* i. 676), DC. *Prod.* iv 136: "Foliis radicalibus lobis in lacinias lineares multifidis," and with acute tips to the leafsegments. Port Meadow, Oxford, 1881, DRUCE, *teste* Hugo Glück. This is especially a plant of South Europe. Herbarium specimens rarely show these primary leaves. My Derbyshire examples have the less divided leaves with blunter segments of type *fistulosa*.

1161 b. DAUCUS GUMMIFER, Lam., var. INTERMEDIUS. Corbiere, Fl. Norm. 264, 1894. Old Harry, Dorset. C. E. SALMON, Journ. Bot. 864, 1911.

272(4). MORINA, L.

1228(4). M. LONGIFOLIA, Wallich, Cat. n. 426. Alien, India. Musselburgh. J. FRASER, Ann. Sc. Nat. Hist. 101, 1911.

1278(7). MILLOTIA TENUIFOLIA, Cass. West Australia. Galashiels, Selkirk. Miss IDA HAYWARD, 1911.

1311(2). BIDENS PILOSA, L. South America, etc. Galashiels, Selkirk, Miss Ida Hayward, 1911.

1365(5). COTULA FILIFOLIA, Thunb., Prod. Pl. Capensis, 161. Galashiels, Selkirk. Miss IDA HAYWARD, 1911.

1365(6). C. VILLOSA, DC., *Prod.* vi. 79. Galashiels, Selkirk. Miss Ida Hayward, 1911. The two last natives of S. Africa.

1408. SENECIO HIERACIOIDES, DC. South Africa. Galashiels, Selkirk.—Miss IDA HAYWARD, 1911. The five Alien Composites are for the first time recorded as British, through the persevering industry of Miss Hayward.

1410(2). CALENDULA AEGYPTIACA, Desf. Alien, Greece. Leith Docks, 1908. J. FRASER ex W. H. GRIFFIN.

331(3). ECHINOPS, L.

1412(6). E. SPHAEROCEPHALUS, L. Alien, Eur. Beachley, West Gloucester. H. J. RIDDELSDELL, *Journ. Bot.* 255, 1911.

1434(6). CIRSIUM PALUSTRE, Scopoli, var. FEROX. Crossfell up to 1,400 feet, in Silverdale, on Ben Lawers and near Dunkeld, often with white flowers. This variety of C. palustre attracted the attention of Drs. Graebner, Schröter, Lindman and Ostenfeld on the Internat. Phyto-Geograph. Excursion, and all agreed that it was quite distinct from the plant they were accustomed to see in Sweden. Denmark, Germany and Switzerland. The lighter green of the leaves, and anthodes, and the paler red flowers (or frequently white), and the extremely strong, long and numerous spines of a pale yellowish colour gave the plant a quite different facies from the common woodland form of Britain. At the suggestion of the above botanists I therefore describe it as a variety, should indeed it not deserve a higher grade :- Plant 40-60 cm., pale-green foliage, most thickly covered with strong yellowish spines 10-20 mm. long, leaves narrowly oblong lanceolate, lobed, strongly spiny both on the leaf-margins and on the margins of the decurrent leaves. Anthodes with dull reddish or white flowers densely aggregated into a compact terminal cluster, outer phyllaries ending in a strong spine, pale greyish-green, except for a small central strip which is covered with a shining, viscid strip on which are glandular hairs. the inner and upper phyllaries ending in a flat scarious process. Planta robusta (40-60 cm. alta) pallide viridis, spinosissima, cum pallide flavis spinis fortibus. Capitulis pallide-roseis vel albis floribus, in densis racemis terminabilibus aggregatis. Phyllariis externis cinereis aut pallide-viridibus in forti spina terminatis, parte media viscida, fulgida subnigra paucis pilis glandulosis. Phyllariis superioribus in apice plane scariosa terminatis.

1438(2). CIRSIUM EDULE, Nuttall in Trans. Am. Phil. Soc. N.S., vii. 420, 1841. = Cnicus edulis, Gray (det. J. Hutchinson). North America, Alien. Aldrington, West Sussex. T. HILTON, 1911.

1456 var. e. CENTAUREA SCABIOSA, L., var. SPINULOSA (Rochel, *Pl. Banat. Rar.* 76, t. 36), recorded as *C. spinulosa*, Rochel. Alien, Eur. or. Gloucester, ST. BRODY ex RIDDELSDELL, *Journ. Bot.* 254, 1911.

1539 b. HIERACIUM LEVI, var. VESTITUM, LEY, ex Rev. E. F. LINTON, *Jour. Bot.* 353, 1911. Dollywaggon Pike, etc., Westmorland.

1540(2). H. DENTIFEX, Linton, *l.c.*, p. 354. Clora Valley, Forfar.

1541(2). H. SORDIDUM, W. R. Linton. Linton, *l. c.* Moffat, Dumfries.

1547 d. H. SOMMERFELTII, var. SETOSUM, W. R. Linton, *l.c.* Berriedale, Caithness.

1578 b. H. HOLOPHYLLUM, var. DENTULUM, Linton, *l.c.* 356. Arncliffe, Kettlewell, etc., West Yorks.

1585(3). H. ORITHALES, Linton, *l. c.* 355. Glen Lochay, Mid Perth.

1630 k. H. RIGIDUM, VAR. RUBEFACTUM, W. R. L., ex LINTON, l. c. 356. Chapel en le Frith, Derby, Rhayader, Radnor.

1638 d. HIERACIUM UMBELLATUM, L., var. DUNALE, G. MEYER, Chlor. Hannov. 421, 1836. = var. armeriaefolium, G. Meyer, in Hann. Mag. 170, 1824. H. dunense, Reymer in v. Hall. Fl. Belg. Conf. i. 566: named by Dr. Graebner and assented to by Dr. Ostenfeld. This Rouy and Foucaud (Fl. Fr. ix., 401) say is identical with H. littoreum, Lindb., not of Arvet Touvet, which is the Jersey plant. I think this Southport plant has hitherto been referred to coronopifolium, Fries.

1646. TARAXACUM PALUDOSUM, Schlecht., var. ERECTUM (Schrank). A pretty form which Handel Mazzetti, 1911, in lit. says is "T. paludosum and T. vulgare planta intercedens = T. erectum, Schrank." This grew in some quantity near St. Ouen's Bay, Jersey, and has by some English botanists been named T. udum, Jord., and is I believe identical with plants sent by me from Oxon., which Herr Freyn named T. alpinum, Koch.

1665(2). LOBELIA ERINUS, L. Alien, Africa. Murieston, Edinburgh. J. FRASER, Ann. Sc. Nat. Hist. 101, 1911. Var. SPECIOSA. Gravel pit, Hayes, Kent, 1907. W. H. GRIFFIN, in lit.

1675(2). CAMPANULA PYRAMIDALIS, L. Alien, Eur. mer. Roadside wall near Addington, Surrey, 1909. W. H. GRIFFIN, in lit.

1678(2). CAMPANULA MACRANTHA, Fisch. Alien, Hort. Craigmillar. J. FRASER, Ann. Sc. Nat. Hist. 101, 1911. This is united to C. latifolia in Ind. Kew.

1665 X. ERICA TETRALIX  $\times$  VAGANS =  $\times$  E. WILLIAMSII, Druce, in good bloom, 1911. (*E. cinerea*  $\times$  vagans, Davey, in *Journ. Bot.*). Near Lanarch, Cornwall. Shown to Dr. Graebner, Prof. Schröter and myself *in situ* in August last by its discoverer, Mr. P. D. Williams. The presence of glandular hairs on the plant led me to suspect that *Tetralix* was one of its parents, and seeing it growing with both parents, and carefully examining its structure, the foreign specialists agreed with me in referring it to the above parentage. Planta suffruticosa, ramosissima 50-60 cm. alta. Floribus axillaribus vel interdum subterminalibus, intense roseis, urceolatis. Staminibus *vaganti* similibus sed inclusis, stylis prolongatis. Foliis linearibus marginibus recurvatis, prope *hispido-ciliatis*, ovariis hirsutis. See also *Kew Bulletin*, 1911.

1693 var. c. CALLUNA VULGARIS, Hull, var. ERIKAE, Ascherson, Fl. Norddeuts. Flach. 547, 1898-9. Stem prostrate, creeping, flower spikes horizontally incurved, the flowers usually turned downwards, rarely white (Hort. Edin.) and the foliage normally glabrous, rarely densely hairy (forma *incana*). Lizard, Cornwall, Wessenden Head, Yorks., Dunkeld, E. Perth, Ben Lawers, Mid Perth, Clifden, Co. Galway, Killarney, Kerry.

This interesting plant was shown to the members of the International Phyto-Geographical Excursion last August by Dr. Graebner, after whose wife Ascherson had named it *Erikae*. Its procumbent form makes it very suitable for a rock garden, and a beautiful whiteflowered form was seen in the Edinburgh Botanic Garden.

Dr. Church in his magnificent work (*Floral Mechanism*, 147) describes and figures the inflorescence of this variety which he found at Cape Cornwall, and shows that visiting insects crawl underneath the plant, between the flowers, which are turned downward, and the ground.

Although more frequent in exposed and wind-swept places it is by no means confined to them, as it often grows with the type.

1719(5). LIMONIUM SINUATUM (L.), O. Kuntze. Alien, Eur. Wood near Maidstone, Kent, sent to W. H. Griffin for identification by Assistant Curator of Maidstone Museum, 1910.

Gen. 414(6). NEMOPHILA, Nuttall, in Barton Fl. N. Amer. ii. 71, t. 61, 1852.

1777(6). N. INSIGNIS, Benth. Alien, California. Murrieston, Edinburgh. J. FRASER, Ann. Sc. Nat. Hist. 101, 1911.

1781(2). HELIOTROPIUM PERUVIANUM, L. Alien, S. Amer. Lincs. N. WOODRUFFE-PEACOCK, *List*, 30, 1909.

1789(5). BENTHAMIA INTERMEDIA (F. and M.). Amsinckia intermedia, Fisch. and Mey. Alien, California. Slateford, Edin. J. FRASER in Ann. Sc. Nat. Hist. 101, 1911.

1823(2). LITHOSPERMUM APULUM, Vahl. Alien, Eur. mer. Lincoln N. WOODRUFFE-PEACOCK, List 36, 1909.

1850(2). SOLANUM VILLOSUM, Lam. Alien, Europe. Leith Docks, 1907. J. FRASER ex W. H. GRIFFIN.

1859(2). NICOTIANA SUAVEOLENS, Lehman, *Nicotiana*, p. 43. Alien, Australia. Galashiels, 1911. Miss Ida Hayward, new to Britain.

1873. LINARIA VULGARIS, Mill., VAR. PROSTRATA, Domin. Beitr. Bot. Centrolat. ii. 266, 1910. Humilior, prostrata, i.e. ramis infinis pro more longissimis horizontaliter patentibus, unico vel paucis humilibus plus minusve erectis, foliis patentibus, angustioribus, racemis laxioribus, floribus in racemis minus numerosis fere duplo minoribus. Prague.

In August 1883, I gathered plants at Hucknold, West Norfolk, which I designated in my herbarium as var. *prostrata*. They are identical with those of Dr. Domin, as he agrees. G. CLARIDGE DRUCE.

1873(2). LINARIA GENISTIFOLIA, Mill. Alien, Europe. Brickfield, Wickham Lane, Plumstead, Kent, well established, 1907. W. H. GRIFFIN, *in lit*.

1882(3). LINARIA ORIGANIFOLIA, Aiton. Alien, Europe. Old Walls, "The Friars," Aylesford, Kent, "Established there for centuries," 1904. W. H. GRIFFIN, *in lit*.

1906(2). VERONICA LONGIFOLIA, L. Alien, Europe. Leith. J. FRASER, A.S.N.H. 102, 1911.

1907 d. VERONICA OFFICINALIS, L., var. MULTICAULIS, Wallroth, Sched. Crit. 22, 1822. Wick, R. Bain. Foliis ovatis subsessilibus serratis subcoriaceis, caulibus ramosissimis declinatis undique procumbentibus ex geniculis radicantibus, pedunculis floriferis axillaribus erectis. See Ann. Sc. Nat. Hist. 46, 1911. A. BENNETT.

1912. VERONICA ANAGALLIS - AQUATICA, L. The common British species is the restricted VERONICA AQUATICA, Bernh., which is characterised as being a plant of still water, with white or pale rosy flowers, with dense inflorescence and the pedicels horizontally patent.

The true V. ANAGALLIS, L., is much scarcer, but I have gathered it at Southport, Lancashire (with the Internat. Phyt. Geog. Excursion), at Hampstead Norris, Berkshire, and near Galway. The following tabular arrangement shows the chief points of difference :---

	ANAGALLIS.	AQUATICA.	
Inflorescence long and dense flowered.		Inflorescence lax-flowered.	
Pedicels ascer	nding.	Pedicels horizontally patent.	
Flowers pale	blue.	Flowers white or pale pink.	
Fruit oval-ob with narr	cordate, narrowed below cow notch at apex.	Fruit rather broad, not narrowed be- low, with wide notch at apex (deeply emarginate).	
When the var. GLANDU	rachis is glandular it is LOSA mihi.	When the rachis is glandular it is var. ANAGALLIFORMIS (Boreau).	

2090. NOTE ON PLANTAGO MACRORHIZA, Poiret. On p. 583 of the Report of the Botanical Exchange Club for 1910, I see the name PLANTAGO MACRORHIZA, Poiret, is being used for a plantain collected by Mr. J. A. Wheldon at Blackpool, W. Lancs. He states it ocurs elsewhere in Britain only in Dorset. It is being considered as synonymous with P. Coronopus, L., var. ceratophyllon, Rapin = P. ceratophylla, Hoffmannsegg and Link. P. MACRORHIZA, Poiret, was described in the Voyage en Barbarie, part ii. p. 114, the diagnosis and description being as follows :-- Foliis spathulatis serratis subnudis, spica cylindrica. Plantain a grosses racines. Feuilles en spatule, en dents de scie, presque nues; épis cylindriques. = Plantago coronopus siculus fruticosus platyphyllos Boccone, Sic. p. 30, t. 15, f. 2. Ce Plantain avoit déjà étè trouvé en Sicile par Boccone et gravé dans son ouvrage. Quelque fois il n'a pas deux pouces de haut. Souvent il en acquiert plus de six. Sa racine est longue, très épaisse, presque ligneuse, écailleuse, lanugineuse à soin sommet. Les feuilles sont très-nombreuses, radicales, courtes, élongies vers le haut glabres, dentées. Elles se retrécissent à la base, et offrent quelques poils rares. Les tiges sont arrondies, couvertes d'un léger duvet, et portent des épis cylindriques qui ont quelque fois jusqu'à trois pouces de long.

If the original figure of *P. ceratophylla*, Hoffmannsegg and Link, in the *Fl. Portugal*, tab. 74, or *Journal of Botany*, 1897, tab. 371, be compared with Boccone's figure of *P. macrorhiza* quoted by Poiret, marked differences would be at once noted. It will be seen that the former has rather long leaves with a broad rachis, not at all spathulate, and that in the latter the leaves are short and spathulate, and although Decaisne and certain later authors have

made these species synonymous, other careful workers, like Boccone and Roemer and Schultz, in their *Systema Vegetabilium*, did not do so, and it appears to us that the types are quite distinct.

P. MACRORHIZA, Poir, has a thick woody root, thick, short, spathulate, incised-dentate leaves, attenuate below to the petiole, generally 3'0-5'0 c.m. long, the teeth being subimbricate, a terete pubescent scape, acuminate-aristate bracts longer than the calyx, the capsule 2-3 locular and 2-seeded, the third loculus being generally sterile, and we have seen no British specimens agreeing with these characters. E. G. BAKER.

2090. NOTE ON PLANTAGO SERRARIA, Linn. Thanks to the courtesy of Mr. B. Reynolds, we have recently received at the Natural History Museum, South Kensington, good material of the interesting and curious plant from Steep Holme, which bears considerable resemblance to *P. Serraria*, Linn., and which Dr. Williams in his *Prodromus* identifies as this species. The leading differential characteristics of the South European *P. Serraria*, *L.*, may be stated as follows:—

a. The leaves are lanceolate, rosulate, generally 5-nerved, 5-13 mm. broad, 5-17 cm. long, sharply and remotely inciso-servate.

 $\beta$ . The scapes are elongate, terete, 7-30 cm. long, the spikes are dense, cylindrical, 2-12 cm. long.

 $\gamma$ . The bracts are ovate, pointed, shorter than or equalling the calyx.

δ. Capsules, 2-seeded.

It is the *Plantago apula laciniata bulbosa*. Column. Ecphr. 1, t. 259, f. 1.

a. The leaves are spathulate or ovate-lanceolate, rosulate, generally 3-nerved, 4-7 cm. long, often about I cm. broad at the broadest part.

β. Scapes ascending, longer than the leaves, often 8-10 cm. long. Spikes dense, cylindrical, 1-3 cm. long.

 $\gamma$ . The bracts are lanceolate, acuminate 3-5 mm. long, as long as or slightly longer than the calyx.

 $\delta$ . Capsule 4-locular, generally 5-seeded, four well developed seeds and one smaller.

#### PLANT NOTES FOR 1911, ETC.

It therefore appears to us that this plant cannot be placed under *P. Serraria*, L., as it differs in the leaves and bracts, and especially in the capsule. As the parts of the flower agree on dissection with those of *P. Coronopus*, L., we venture to think that this plant would be better placed as a well-marked variety of that species. We find it does not agree with any hitherto described variety, and we therefore give it the name var. *Sabrinae*. The following diagnosis distinguishes it from any form or variety of *P. Coronopus* known to us.

P. Coronopus, Linn., var. nov. SABRINAE. Radix plus minus lignosa circ. 5-8 cm. longa, foliis spathulatis vel ovato-lanceolatis, sub-carnosis, margine dentatis vel serratis, dentibus vel serraturis imbricatis non remotis, 4-7 cm. longis, circ. 1 cm. latis, saepius 3-nerviis, pedunculis ascendentibus saepius 8-10 cm. longis, spica cylindrica, 1-3 cm. longa, bracteis lanceolatis acuminatis calycem leviter excedentibus vel aequantibus, capsula 4-loculari, seminibus saepius 5.

Habitat. Steep Holme Island in the Bristol Channel. Rev. T. BUTLER, Mr. B. REYNOLDS, Herb. Mus. Brit.

It much resembles Signor Béguinot's figure of var. ceratophylla in Nuov. Giorn. Bot. Ital. xviii., No. 3, tab. xiv., Fig. 2, but is quite different from the true *P. ceratophylla* of Hoffmannsegg and Link. R. M. CARDEW and E. G. BAKER.

2099. PLANTAGO MAJOR, L., var. d. MEGASTACHYA, Wallroth, = P. sinuata Lam. Ill. i. 338, 1791. Hinksey, Oxon and Berks.

Var. e. Var. PUBESCENS, Lange. P. minor, Gilib. = P. minima, DC. 1785. Lytham, Lancashire.

2100(2). PLANTAGO VARIA, R. Br. New South Wales. Galashiels, Selkirk, 1911. Miss IDA HAYWARD. First in Britain.

2101. LITTORELLA UNIFLORA, Ascherson. From Llyn Helyg, Flint. Coll. Dallman and Wheldon. This is, *teste* Dr. Glück, forma ISOETOIDES, Bolle.

2102(3). PARONYCHIA CHILENSIS, DC. Chili. Galashiels, Selkirk, 1911. Miss IDA HAYWARD. First in Britain.

29

2141 b. ATRIPLEX HORTENSIS, L., VAR. ATRO SANGUINEA. Gravel-pit, Hayes, Kent. W. H. GRIFFIN, *in lit*.

2102(4). P. ARGENTEA, Lam. Alien, Eur. North Lincoln. WOODRUFFE-PEACOCK, List 43.

2149 c. ATRIPLEX BABINGTONII, Woods, var. CANESCENS, Hartm., Skand. Fl. 348, 1879. Proudfoot, J. Grant, Dunscandy, Miss Geldart. Slender, much branched and spreading, blue-green, and still at maturiting of the fruit, grey and mealy; leaves smaller than the type, the perianth with yellowish-green bases, and projecting teeth at the lower angles. See Ann. Sc. Nat. Hist. 47, 1911. A. BENNETT.

2158. SALICORNIA SMITHIANA, Moss. (vice S. europaea).

2159. S. EUROPAEA, L. = S. annua, Sm.

2161(2). SALICORNIA GRACILLIMA, Moss. (vice *S. pusilla*, var. gracillima, Towns.

(3). S. DISARTICULATA, MOSS. See Journ. Bot. 177, 185, and Rep. Bot. Exch. Club, p. 583-590, 1910. C. E. MOSS.

2170(2). POLYGONUM ALPINUM, All. Alien, Europe. Between Mellan and Dunoon. J. FRASER in Ann. Sc. Nat. Hist. 102, 1911.

2184 (m). POLYGONUM AVICULARE, L., var. DEPRESSUM. Meisner in *DC. Prod.* xiv. 98, 1856. Caulibus abbreviatis radiatim terrae adpressis ramosis conferte foliolis florigerisque, internodiis brevibus, foliis parvis ovalibus lanceolatis linearibusve acutis obtusisve. Port Talbot, Glam., Galway, Canvey Isle, Essex.

2198 d. RUMEX ELONGATUS, Gussone, × R. OBTUSIFOLIUS, L. Thames side, Putney. C. E. BRITTON (*Journ. Bot.* 99, 1911).

2246(2). ULMUS PLOTII, Druce. Ulmus folio angusto glabro. Plot, Nat. Hist. Oxford. 158, 1677. Ulmus sativa, Miller, var. Lockii, Druce, List of Brit. Plants, 63, 1908. U. glabra, Miller, var. Lockii, Druce, in Journ. Northampton Nat. Hist. Soc. 289, 1910. U. Plotii, Druce, l. c. 88, 1911, and Gard. Chron. Dec. 9, 1911.

Arbor elevata (50-80 ft.) cortice glabro, ramis attenuatis, foliis parvis, inequalibus, angustis, acuminatis, glabris.

A tall tree, 50-80 feet high, of graceful habit with somewhat secund branches; trunk at 4 feet from ground, 8 feet or more in girth, with numerous suckers; bark rather smooth, with slightly curved horizontal fissures; upper branches ascending, middle patent, ending in numerous alternate wiry eventually pendulous branchlets; lower branches somewhat pendulous; branchlets slightly verrucose, buds small; leaves of suckers small, shining above, often showing white lichenous markings; leaves of lower branches unequal at base, oval-lanceolate, acuminate, cut at margin into somewhat blunt serratures, which are themselves slightly serrate; leaves of upper branches similar but of darker green and smoother and more shining than those of the lower branches. The under surface of the leaves paler, with pubescence on the veins, especially on mid-rib and on the nerves near it and at the base.

Ulmus Plotii is of a singularly graceful and beautiful habit, and well deserves a place in parks for its ornamental character. The tree was first distinguished by Dr. Robert Plot, in his classic Natural History of Oxfordshire, published in 1677, where he writes of it as hitherto not described, proceeding to give an account of it as "a narrow-leaved Elm, which also being smooth, justly deserves the name Ulmus folio angusto glabro, wherein it differs not only from the Ulmus minor of Parkinson and Gerarde, but also from their Ulmus folio glabro, whose leaves they say are nothing so large as the Wych hazel, but nearest in bigness, and exactly the figure of the common elm; whereas ours are much less and of quite a different figure, being narrow and having a peculiar kind of pointed ending as exactly expressed in Tab. 10, Fig. 1. Of those there are plenty in the avenue to the house of the Honourable the Lady Cope, the relict of the most ingenious Sir Anthony Cope, of Hanwell, where there is a whole walk of them planted in order, besides others that grow wild in the coppices of the park."

Miller, in his eighth edition of the *Gardener's Dictionary* of 1768, describes six species of Elm, of which only two can be held in any way to represent this tree. The "*U. minor* (the smooth narrow-leaved Elm, by some called the upright Elm)" evidently

refers to the Cornish Elm, a distinct tree of strict upright habit, hence the name given it by Lindley (Synopsis, 227, 1829) of Ulmus stricta, which is common, as its name implies, in Cornwall, and also occurs in Devonshire, Hampshire, etc. It was extensively planted by the late Lord Wantage about Lockinge in Berkshire, and it also grows in hedgerows near Frilford, near Moulsford and Windsor Park in that county. It is to be seen at Silverstone, near Towcester, Overstone, etc., Northamptonshire, and near Little Marlow in Bucks, near Chiselhampton, Banbury, etc., Oxon. Miller's second tree alluded to is U. sativus, an elm with oval, acute-pointed leaves which are doubly sawed at the base = U. minor folio angusto scabro, Gerarde, *Emac.* p. 1480 [1633], the small-leaved or "English Elm" which he says "is not a native of England, and is only found growing near London; or in plantations where the young trees were procured from the neighbourhood of London. . . . As this tree is well known it needs no description." He also says that compared with U. minor, "the latter has leaves narrower, more pointed and smoother," whereas the leaves of Plot's Elm resemble those of the Cornish Elm very closely. Therefore we may well hesitate to accept the names either of U. minor, Miller, or U. sativus, Miller, for the tree mentioned by Plot, which I therefore venture to describe by the above name. Doubtless it is more closely related to U. glabra, Miller (non Hudson), than to the English Elm. G. CLARIDGE DRUCE.

2250. URTICA DIOICA, L., var. SUBINERMIS, Uechtr. in *Fiek. Fl. Schles.* 394. A form approaching this grew at 2,500 feet on Ben Lawers.

2272. SALIX DAPHNOIDES, Vill., var. POMERANICA (Willd.). Koch, Syn. i. 646, 1837. Foliis angustioribus, amentis tenuioribus. Planted doubtless near Southport, 59. Dr. Graebner and Dr. Schröter named it as above.

2315 b. HELLEBORINE PALUSTRIS, Schrank, var. ERICETORUM (Asch. and Graebn., *Fl. Mitt. Eur.* iii. 871, 1907), mihi. Southport Dunes, Lanc. Dr. Graebner has passed my specimen as correct. I have seen it also on the Wexford Coast. If Britten and Rendle are correct it would stand as *H. longifolia*, var. ericetorum (A. and G.).

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2338. HABENARIA GYMNADENIA, X ORCHIS LATIFOLIA =  $\times$  H. WINTONI (See *Rep. Winchester Coll. Nat. Hist. Soc.* 102, 1911). Planta 16 cm alta. Folia (13 cm alta, 1 cm lata) linearia lanceolata, acuta, carinata. Spica 6 cm longa ad basim interrupta, bracteis numerosis flore longioribus. Flore intense purpurato roseo, Habenariae Gymnadeniae haud dissimili, saepe abortivo. Calcar 6 mm. longa. The evidence of *latifolia*, with which the above plant grew on the Downs near Winchester, Hampshire, is suggested by the strongly bracteate inflorescence, and by the colour of the flowers, which in one instance were larger than those of *Gymnadenia*. Another plant with pale flowers, conical inflorescence and very long bracts may belong to the above, if not to the hybrid *H. Gymnadenia*  $\times$  *O. maculata*.

The interesting hybrid *H. Gymnadenia*  $\times$  viridis was found in the same area by the zealous workers at Winchester College, and still a third hybrid probably exists, since the Rev. R. Quirk sent a specimen which strongly suggests *H. Gymnadenia*  $\times$  Orchis pyramidalis, a hybrid already known in Germany as Gymnadenia Anacamptis, Wilms. = Habenaria Anacamptis, Druce, in Rep. of Winch. Coll. 102, 1911. The first is described and illustrated by the Rev. R. Quirk, Winch. Coll. N. H. S. Rep. p. 5, 1911, as Gymplatanthera Jacksonii; the specimens are smaller than Gymnadenia; the flowers are either pink tinged with green or dull livid red; the corolla is pink or purplish overspread with a marked tinge of pale yellowish green; the upper petals and sepals are not helmetshaped, but open and spreading, exposing the column; the spur is shortened, but not to the same extent as in viridis; the bracts as a rule are larger and more leaf-like.

I referred to this on p. 508 of last *Report B.E.C.*, and there is no doubt as to the correctness of Mr. Quirk's diagnosis, but according to the present British arrangement the plant would be designated x *Habenaria Jacksonii* (Quirk in *Rep. Winch. Nat. Hist. Soc.* p. 6, 1911).

2329(2). ORCHIS FALLENS, L. Alien? Europe. East Hill, Liss, Hants. Miss CARDEW (*Journ. Bot.* 324, 1911).

573(2). TRITONIA Ker-Gawl in Bot. Mag. t. 581, 1802.

2363(4). X T. CROCOSMIFLORA, Nicholson, Dict. Gard. vii.

94, 1887. Baker's Iris, 195 = Montbretia crocosmiflora, Fl. Mag., N. S. t. 472, 1881. Alien. A garden hybrid (*T. aurea* x *T. Pottsii*, Benth.) Naturalised near Clifden (Druce), Ballynahinch (Glück), Galway, Killarney, Kerry, Casual near Feock, Cornwall. G. CLARIDGE DRUCE.

2393 c. ALLIUM AMPELOPRASUM, L., var. CORNIGERUM. This curious *Allium*, which I found growing in turf near Port Logan, Wigton, in a young state, for which a 'critic' had suggested the name *oleraceum*, which was obviously wrong, has since flowered in my garden and proved, as I suspected it to be, a form of *Ampeloprasum*, but sufficiently distinct from *holmense* and *Babingtonii*, to the latter of which it is more closely related, to warrant its being given a varietal name. I have had it now for two years growing side by side with *Ampeloprasum*, from which it differs in stature, mode of growth, and especially in its spathe and inflorescence, and time of flowering. *Holmense* grows from 4 to 5 feet high, and the central stem is always erect; the spathe is not prolonged into a point, and the flowers are usually unaccompanied by bulbils, and the leaves are much broader.

In this plant, which grows to 2 or 3 feet high, the flowering stem is bent into a helix from its early stage until the flowers which are mixed with bulbils are about to open. Then, in a day or two at most, it straightens out and assumes an erect position. The spathe, which is prolonged into a horn-like protuberance 12-15 cm. long, is ruptured when the flowers open, and the buds swell, eventually growing to the size of marbles. The leaves are about 15 mm. broad. The whole plant has a very strong alliaceous odour.

Planta 60-90 cm. alta, foliis circa 15 mm. latis superioribus 30-35 cm. alta; rachis rigida in parte superiori amentata, usque ad tempus florendi intorta, postea erecta. Spadix papyracea foliacea, cornoides incrementum ad 12-15 cm. prolongatum. Capitula parvis pallidis floribus longi-pedicellatis, floribus cum bulbis (qui maturi ad 5-20 cm. attingunt) ad basim commixtus.

2416. LILIUM CROCEUM, Chaix. Alien, Eur. mer. Between Bettys and Llanrwst. A. DALLMAN in *Journ. Bot. Suppl.* 46, 1911. 2442. JUNCUS RANARIUS, Nees, in Linnaea xx. 243, 1840 (teste Ind. Kew) is a nomen solum. Emend. Song and Perrier in Billot Annot. Fl. Fr. et Allem. 192, 1859. Der Leitart sehr ähnlich, von ihr hauptsächlich durch Folgendes verschieden: Meist • kleiner als vor., meist nicht über 2 dm. hoch. Stengel starr, oft gebogen, zeimlich stark spreizend verzweigt. Blätter mit an den unteren dunkelrother Scheide und zeimlich starrer, oft gebogener Spreite. Spirrenäste abstehend, Sicheln kurz, meist nur 2 (bis 3) an der Spitze genäherte Blüthen tragend. Innere Perigonblätter etwas Kürzer, äussere solang oder etwas länger als die Kapsel Kapsel am Grunde deutlich verschmälert.

The characters of this plant, as it will be seen, are chiefly those drawn from the perianth and capsule. In this, the inner perianth segments are as long or not much longer than the capsule, which is itself usually smaller and a little narrowed at bottom; whereas in *J. bufonius* they much exceed it. But the plant also differs much in habit, being very short, 5'23 cm. in height, and densely tufted. It prefers damp places in sand dunes, and Dr. Graebner has tested it in cultivation at Berlin, and finds it is quite constant, so that he and Ascherson give it full specific rank in their Flora, and Buchenau came to the same opinion. He says it bears the same relation to J. bufonius that J. Gerardi does to J. compressus, and pointed it out to us on the Southport Dunes, Lancashire. I have it also from the Lizard, Cornwall, New Forest, Hants, Lydd, Kent, Yarmouth, Norfolk, Tenby, Pembroke, Holyhead, Anglesey, Holy Isle, Northumberland, Fife, Kinross, Sands of Barrie, Forfar, Kishorn, W. Ross, Betty Hill, Sutherland, North Bull, Dublin, Newcastle, Co. Down.

For a great part it is the var. *fasciculatus*, Koch, of British Botanists, but there appears to be at least another distinct form of *J. bufonius* in Britain, which is probably the *fasciculatus*, Koch.

2429, var. 6. JUNCUS EFFUSUS, L., var. COMPACTUS, Lej. and Court. *Comp. Fl. Belg.* ii. 23, 1831. Differs from the type in the inflorescence, even at maturity condensed into a globular head, with the internodes much reduced. It is not unfrequently mistaken for *J. conglomeratus*, from which the less striate stems, the shape of the capsule, and sessile style easily distinguish it.

It was seen above Greenfield, Yorks., on Crossfell, Cumberland,

at Foulshaw, Lancashire, and near Dunkeld, E. Perth, but different stages between it and the type occur.

2486. POTAMOGETON POLYGONIFOLIUS, POURT., VAR. D. SPHAG-NOPHILA, Neuman, *Bot. Notiser*, 91, 1896. Moidart, Argyll. S. Macvicar.

Var. e. CORDIFOLIA, Asch. and Graebn., Syn. Mitt. Eur. 306, 1897. Not uncommon.

2489. P. ALPINUS, Balb., var. SPATHULIFOLIUS, Fischer, in *Ber. Bayr. Ges.* xi. 45, 1907. Black Loch, Fife, *G. West.* Loch Fada, Argyll, *M. McNeill.* 

2501. P. PRAELONGUS, Wulf., var. ANGUSTIFOLIUS, Graebner, Die Pflanzenreich, Heft 31, 97, 1907.

2502. P. PERFOLIATUS, L., VAR. C. MACROPHYLLUS, Blytt, Norges Flora, 267, 1861. Isla River, E. Perth, 1882, A. Sturrock.

Var. d. PSEUDO-DENSUS, Asch. and Graebn., Syn. Mitt. Eur. i. 314, 1907. Loch Brotachan, S. Aberdeen, Marshall.

Var. e. CORDATO-LANCEOLATUS, Mert. and Koch, Deutsch. Fl. 852, 1823.

Var. f. RICHARDSONI, Ar. Benn., in *Journ. Bot.* 241, 1881. Mill Dam, Selkirk, *Brotherston*, 1876. Loch Ordie, E. Perth, *W. Barclay*, 1898.

2508. Var. f. P. PUSILLUS, L., change acuminatus to similis, Ar. Benn., there being already Fieber's acuminatus.

For above notes on Pondweeds by Mr. A. Bennett, see A.S.N.H.

2518. ZANNICHELLIA GIBBEROSA, Reichb. Chessington Church, going thence towards Horton and Epsom. H. C. Watson in *Hb. Syme.* 1864. Budworth Mere, Warren in *Hb. Syme.* 

2563. CAREX GRAHAMI  $\times$  SAXATILIS =  $\times$  C. Ewingii, E. S. MARSHALL, Journ. Bot. 197, 1911.

2564. CAREX INFLATA  $\times$  BINERVIS?  $\times$  C. CATTEYENSIS. Winless, Caithness, Arthur Bennett, in *Ann. Sc. Nat. Hist.* 49, 1911. Found by Miss H. Lillie. Male spikes are those of *inflata*, the female more like fine *binervis* with mostly obtuse glumes with the mid-rib very conspicuous. The fruits, which are absolutely sterile, vary from almost *binervis* like to *inflata* like; glumes from obtuse to apiculate. It grew with typical *inflata*.

2643. SPARTINA TOWNSENDII, Groves, forma nova REMOTI-FLORA, Hackel *in lit*. Lymington, S. Hants., July 1911. A form with very long and lax inflorescence. G. CLARIDGE DRUCE.

2686(2). AGROSTIS NEBULOSA, Boiss. and Reuter. Alien, Spain. Slateford, Edinburgh. J. FRASER, Ann. Scot. Nat. Hist. 102, 1911.

2720. Avena sativa L., nov. forma, glumaris, Hackel, in lit. This is a very interesting form, unknown to me, approaching by its long sterile glumes A. longiglumis, Dur., but otherwise quite distinct from it. But should it not be possible that also A. longiglumis, Dur., should have given origin to a cultivated oat? We know now that A. sativa in its common form of Northern Europe derives from A. fatua, but that the cultivated oats of Algeria and some places of Southern Europe derives from A. sterilis (Trabut, Contrib. a l'Etude de l'origine des Avoines cultivées, in Bull. Agric. de l'Algerie 16 année, nr. 15, Aout i. 1910. The differences between A. longiglumis and your sterilis are quite similar to those between A. fatua and A. sativa proper, only the long lateral setae of the flowering glumes seem to me a serious obstacle to the derivation of your plant from A. longiglumis. E. HACKEL, in lit. The specimens, unfortunately casuals on waste ground near Port Meadow, Oxford, had been eradicated when I visited the habitat in September. G. CLARIDGE DRUCE.

2744 b. KOELERIA PHLEIOIDES, Pers., var. BRACHYSTACHYS, Domin. Mag. Bot. Zap. iii. 334, 1904. Alien, Galashiels. Selkirk, 1911. Miss IDA HAYWARD.

679(2). AVELLINIA, Parl., Pl. Nov. 59, 1842.

2744(4). A. MICHELII, Parl. *l.c.* Alien, South Europe. [Leith.] J. FRASER.

2833(2). AGROPVRON PROSTRATUM, Beauv. Alien, Eur. or. Lincoln N. WOODRUFFE-PEACOCK, List 8.

2833(3). A. PATULUM, Trin. (A. SQUARROSUM, Link.). Alien, Egypt. Lincoln N. WOODRUFFE-PEACOCK, *List* 8.

2833(4.) A. ORIENTALE, R. and S. Alien, Orient. Halifax Mill tip, York, 1908. C. CROSSLAND ex tr. H. GRIFFIN.

2786. FESTUCA DUMETORUM, L. Skegness, Lincoln N., July 1911. Specimens distributed this year. G. CLARIDGE DRUCE.

2786. F. DUMETORUM, L., forma PLANIFOLIA, Hackel, *in lit*. A form of the preceding species growing in damper places on the coast at Skegness, Lincoln N., with broader and flatter leaves, has been named as above; it retains, however, the pungent apex to the leaves.

2828. AGROPVRON PUNGENS, var. LITTORALE X A. JUNCEUM = A. OLIVERI mihi. This hybrid grew near both parents at Blakeney, Norfolk, in Aug. 1911. It differs from *pungens* by the more simple inflorescence and from *junceum* by the smaller spikelets and less brittle culm.

2889. Var. e. ATHYRIUM FILIX-FŒMINA, Roth., var. VIC-TORIÆ, Moore. This singular plant was discovered by Mr. J. Cosh on the margin of a wood on the Buchanan Estate, Stirlingshire, in 1861. Mr. Druery states that spores sewn yielded similar though shorter plants, but the peculiar characters came true.

# RECENT PUBLICATIONS.

THE VEGETATION OF CAITHNESS considered in relation to the *Geology*, pp. 132, 1911, by C. B. CRAMPTON, M.B., C.M. This is a masterly treatment of a very difficult subject, in which the plant œcology of a large and interesting area has been minutely and pains-takingly investigated by Dr. Crampton; in it he records the following species, which are additions to the flora of the county:— *Capnoides (Corydalis) claviculata, Filago minima, Vaccinium uligi*  nosum, Oxycoccus quadripetalus, Carex canescens, C. Oederi, Milium effusum, Melica nutans, L., Bromus ramosus, and Asplenium viride, but he had not been able to see certain recorded species :---i.e., Hypericum perforatum, H. humifusum, Spiraea Filipendula, Saxifraga oppositifolia, Drosera longifolia, Apium inundatum, Daucus Carota, Andromeda Polifolia, Verbascum Thapsus, Melampyrum sylvaticum, Origanum vulgare, Salsola Kali, Cryptogramme crispa, Luzula spicata, Osmunda regalis, and Equisetum pratense. The greatest altitude is on Morven, 2,313 feet, Scaraben being 2,054 feet. Saussurea occurs within 20 feet of the sea level, and Ajuga pyramidalis is abundant in at least one place. Primula scotica, Deyeuxia neglecta, and Carex salina are other special plants alluded to, but the author's object is not so much to describe rarities as to show the relationship of one species to another, to their various associations, and their historical developments. In all these ways Dr. Crampton has made important records. The work was "published under the auspices of the Committee for the Survey and Study of British Vegetation."

THE FLORA OF GLAMORGAN, including the Spermaphytes and Vascular Cryptogams, with Index. Prepared under the direction of the Cardiff Naturalists' Society. Edited by Prof. A. H. TROW, D.Sc., F.L.S. Vol. I., 8vo., pp. 209, 1911. Printed by. W. Lewis, Duke Street, Cardiff.

TYPES OF BRITISH VEGETATION, by Members of the Central Committee for the Survey and Study of British Vegetation. Edited by A. G. TANSLEY, M.A., F.L.S. 36 plates, 21 figs. in text, pp. xx, 416. University Press, Cambridge, 1911. An extremely interesting and valuable volume in which are described by specialists the units of vegetation, the physical characters, and climate and soils of the British Islands. The existing vegetation of clays and loams, of coarser sands and sandstones, of older silicious soils, of calcareous soils, of heath formations, of aquatic vegetation, of marsh formation, of peat and peaty soils, of the river valleys of East Norfolk, of lowland moors, of the upland moors of the Pennine Chain, of Arctic-Alpine vegetation, and of the vegetation of the Sea Coast are also discussed.

BRITISH PLANTS, THEIR BIOLOGY AND ECOLOGY. J. F. BEVIS.

B.A., B.Sc., H. J. JEFFERY, A.R.C.Sc., F.L.S. London, Alston Rivers, 1911. pp. 334, 45. 6d.

THE EVOLUTION OF PLANTS. DUKINFIELD H. SCOTT, M.A., LL.D., F.R.S. pp. 256. Williams and Norgate, 15.

PLANT LIFE ON LAND. F. O. BOWER, D.Sc., F.R.S. pp. 172. Cambridge University Press, 1911, 18.

THE HERB GARDEN. F. A. BARDSWELL. A. and C. Beach, 7s. 6d.

BRITISH FERNS AND THEIR VARIETIES. C. T. DRUERV, F.R.S., V.M.H. 40 cold. plates, 96 nature prints, 319 woodcuts, etc. pp. xii, 458. G. Routledge, 7s. 6d. There is no doubt that the list of true Fern varieties in our Floras is sadly incomplete, if the standard of coming true from spores constitutes a variety. This work gives an enormous number often with most uncouth names, and a few hybrids.

THE GENUS ROSA. ELLEN WILMOTT, F.L.S. Drawings by Alfred Parsons, R.A. London, John Murray, folio. Of the roses connected with Britain, Pars I (dated September 15th, 1910), contains Rosa arvensis. iii. (R. stylosa, November 14th, 1910.) vii. (R. cinnamomea, March, 1911.) X. n. 63 (R. virginiana, June 14th. xiii. September 20th (R. spinosissima 82, and under it is var. pimpinellifolia, with smooth peduncles, and the var. rosea, Koch, which is said comes true from seed and was found near Llandudno by the Rev. C. Wolley-Dod, and by Major Wolley-Dod in Kent. The same pretty form also grows in Jersey and Ballyvaghan, Co. Clare. xv. November 14th, 1911. Rosa involuta 96, var. Wilsoni 97, R. hibernica 98, R. pendulina 99. The beautiful drawings are excellently coloured, and the text with copious synonymy is well done. The book when complete, with its illustrated glossary, and its elegant and scholarly dedication to the Queen, will be a sumptuous monograph worthy of the Queen of Flowers, and to put beside Maw's Crocus and Elwes' Lilies.

A LIST OF BRITISH ROSES. MAJOR A. H. WOLLEY-DOD Suppl. to *Journ. Bot.* 191. A very painstaking piece of work by our member, who is leaving England to reside abroad for the greater portion of the next two years, which it is to be hoped will prove in every way pleasant to him.

FLORA DER SCHWEIZ. Dr. HANS SCHINZ and Dr. R. KELLER. pp. xxxii. 648. Part I. EXCURSION FLORA, A. Raustein. Zurich, 1909, price 6s. An extremely compact and an excellently and clearly printed handbook of the Swiss flora, in which 2,454 species are described. It contains a key to the abridgment of authors' names, and a most copious and accurate index. Allowing for such divergences as the adoption of the limitation and sequence of Engler's Genera involves, there is a very general agreement with the names adopted in Hayward's Botanical Pocket Book. Dryopteris is retained instead of Lastrea, but it is widened to include Phegopteris. The Linnean genus Scirpus, on the contrary, is split into Fimbristylis, Trichophorum, Mariscus, Blysmus, Schenoplectus, Isolepis and Eleocharis, while Bartsia is merged into Euphrasia. One is sorry to see retained several of Garsault's binomials, such as Equisetum majus, Paeonia femina, Centaurium minus, Plantago supina, which were purely accidental, and in several instances, even if they were tenable, are antedated by those used in Hill's Herbal of 1756. Selaginella is replaced by Lycopodioides, Boehmer, but Luzula DC. is retained instead of Juncoides, Adanson, and Roripa is (surely wrongly) used instead of Radicula (Dill.), Hill. The names used in the British Plant List or Additions which are adopted in the Swiss Flora include Dianthus gratianopolitanus, Tunica prolifera, Viola canina, Stellaria Dilleniana, Sherardia arvensis, Kentranthus, Cirsium, Cynoglossum montanum, Rhinanthus, Satureia, Helleborine, Crocus albiflorus, Carex muricata, C. elata, C. inflata, C. echinata, Juncus inflexus, J. supinus, etc. Among other interesting names adopted are Ulmus campestris, L., emend. Huds. = U. glabra, Miller. U. scabra, Mill. = U. montana, With. = U. glabra, Huds. Silene vulgaris, Garke = S. inflata, Sm., Ranunculus flaccidus, Pers. = R. trichophyllus, Chaix, Crataegus Oxyacantha, L. = C. oxyacanthoides, Thuill., Chaerophyllum, Haller = Anthriscus, Hoffm. Tilia cordata, Mill. = T. ulmifolia, Scop., Helianthemum nummularifolium, Mill. = H. Chamaecistus, Monotropa, L. = Hypopitys. Orobanche alba, Stephan. = O. rubra. Arctium pubens, Bab., is retained as a distinct species, Crepis taraxacifolia, Thuill., is made

a sub-species of *C. vesicaria*, L. Under *Taraxacum officinale* are included all the 11 sub-species of Dandelion; the numerous forms of *Hieracium* are described under 33, the *Rubi* under 56, and *Rosa* under 25 species.

PARS II. KRITISCHE FLORA DER SCHWEIZ. Dr. HANS SCHINZ and Dr. ROB. KELLER. pp. xi. 400. Zurich, A. Raustein, 1895. 6s. Gives short descriptions of the more critical forms and varieties, and includes many adventitious species.

PRODROME DE LA FLORE CORSE. JOHN BRIQUET, D.Sc. Vol. i. Hymenophyllaceae—Lauraceae with 6 vignettes. pp. lvi. 656. Lyon, 1910.

BIOLOGISCHE UND MORPHOLOGISCHE UNTERSUCHUNGEN ÜBER WASSER-UND SUMPFGWACHSE. Professor HUGO GLÜCK. 105 Textfiguren and 8 litho. pp. xxxiv. 644, 1911. Gustave Fischer, Jena. In this monument of careful investigation and prolonged study, Dr. Glück has described the aquatic and land forms of 118 species, giving minute measurements of their various parts.

For instance, under *Limosella aquatica* he describes the '*Land* formen,' the Zwergformen, which is the Glamorgan plant for which specific rank has been claimed, but which he reduces to forma tenuifolia, the Schwimmblatt form (forma natans, Glück), über gangsformen, and the Wasserformen (forma submersa, Glück).

Among other floristic points of interest may be noted that the so-called var. *fluviatilis* of Hippuris is properly reduced to a forma, as are *fluitans*, *repens*, etc., of *Juncus bulbosus*, but *Kochii* he considers a good variety; the form of *Littorella* which was so abundant at Killarney and which Mr. Dallman sent to the Club from Llyn Helog, Flint, he identifies as forma *isoetoides*, Bolle. Under *Nasturtium amphibium* he retains as varieties *auriculatum* DC. and *variifolium* DC., but the *siifolium* of *N. officinale* is reduced to a form. His visit to England enabled him to see on Portmeadow the forma *terrestris* of *Œnanthe fluviatilis*, a plant which he has found plentifully in Germany. Under *Ranunculus Flammula* the var. *radicans*, Nolte, and *natans*, Persoon, are reduced to forms, but var. *alismifolius*, Glaab, is retained vice *ovata*, Pers. Both *fluitans*, Gren. and Godr., and *longissimum*, Fries, are put as forms of *Sparganium simplex*, while *Veronica Anagallis*, V. *aquatica*, Bernh., and *V. anagalloides*, Guss., have specific rank. To students of aquatic plants the work is invaluable.

STUDIER OFVER SALICES I. LINNES HERBARIUM. S. J. ENANDER, Upsala (Upsala Univ. ürsskrift, 1907). An exhaustive study of the plants in the Linnean Herbarium at Upsala.

SCHEDULAE AD SALICES SCANDINAVIAE EXSICCATAS, Fasc. i., ii. and iii. Upsala, 1911. With descriptions (a set of this expensive collection is at Herb. Kew.).

GENETICAL STUDIES OF ŒNOTHERA. Dr. Bradley Moore DAVIS. New York, 1911. American Naturalist, xlv. 193-234, 1911. An account of some hybrids of Œ. biennis and Œ. grandiflora which resemble Œ. Lamarchiana.

A FURTHER CONTRIBUTION TO A COMPARATIVE STUDY OF THE DOMINANT PHANEROGAMIC AND HIGHER CRVPTOGAMIC FLORA OF AQUATIC HABIT IN SCOTTISH LAKES. *Proc. Roy. Soc.*, Edin. xxx. 2, 65-182, with 124 ill., 1909-1910. G. WEST.

A SHORT FLORA OF CAMBRIDGESHIRE, chiefly from an Ecological standpoint, with a History of its Chief Botanists. By A. H. Evans, M.A., &c. In *Proceedings of the Cambridge Philosophical Society*, xvi. part 3, 1911.

THE BRADLEY BIOGRAPHY. A Guide to the Literature of Woody Plants of the World, published before the beginning of the Twentieth Century. Vol. i. Dendrology, pp. xii. 565, 1911, Cambridge, U.S.A. A very complete list of the works on British Botany, 1550-1900, is published on pp. 394-404.

DICTIONARY OF PLANT NAMES. H. L. GERTH VAN WYK. Published by the Dutch Society of Sciences. Lge. 4to., pp. xxiv., 1444, err. p. v. Haarlem, M. Nijhoff. The Vernacular Names of plants used in Britain, France, Germany and Holland arranged aphabetically under Latin names.

THE CHECK LIST OF LINCOLNSHIRE PLANTS. By our Member, the Rev. E. A. WOODRUFFE-PEACOCK, which has already been alluded to (*Rep.* 526, 1910), includes some new hybrids which

members would much like to have distributed, or to have submitted to experts:---

81. PAPAVER DUBIUM  $\times$  LECOQII, p. 43, 1909.

370. CERASTIUM VULGATUM × VISCOSUM, p. 20.

- 1422. CARDUUS NUTANS × CIRSIUM LANCEOLATUM, Jarvis, p. 17.
- 1427. C. LANCEOLATUM  $\times$  C. PRATENSE (C. BRITANNICUM), p. 17.

2092. PLANTAGO LANCEOLATA × P. MEDIA, p. 44.

2723. Avena pratensis  $\times$  A. pubescens, p. 13.

Besides these there is EQUISETUM LITORALE, Lincoln N., as a new record, and a hybrid Fern "Lastrea spinulosa  $\times$  aristata," p. 34. A few varieties (as nomina nuda) are given: series of these would be gladly received by the Club so as to secure proper publication and examination. The List unfortunately gives no clue as to which plants are native in the area, and it includes many Aliens from the Ports of Grimsby, Boston, &c.

THE JOURNAL OF BOTANY for 1911 contains among others the following papers on British Botany :---

Leicestershire Plants, pp. 31, 48, A. R. Horwood.

The Pimpernels, p. 44, C. E. Moss.

Lincolnshire Plants ex Sibthorp, p. 67, G. C. Druce.

Notes on the Flora of Denbigh, A. A. Dallman, F.C.S. Suppl. 1-50.

(This and the further Notes on the Flora of Flint (p. 8), by the same botanist, add several new county records, and moreover show the general accuracy of the lists supplied to Mr. H. C. Watson by Mr. J. F. Robinson.)

Flora of the Worms Head, p. 89, Rev. H. J. Riddelsdell. Worcestershire Plants, p. 99, R. F. Towndrow.

Chaerophyllum aureum, L., in Perth, p. 117, G. C. Druce. Paisley Aliens. 127.

Epilobium Hybrids, p. 158, R. H. Compton.

Lepidium neglectum and densiflorum, p. 164, C. E. Salmon.

Some species of *Salicornia*, p. 177, C. E. Moss, D.Sc. (S. disarticulata, and S. Smithiana. S. pusilla, var. gracillima is raised to a species.)

Dalmally Plants, p. 191, Rev. E. S. Marshall and W. A. Shoolbred.

Gloucestershire Records, pp. 233, 267. Rev. H. J. Riddelsdell.

Norfolk Notes, p. 267, W. H. Burrell and W. J. Clarke.

Vegetative Reproduction in Sagina nodosa, p. 270, W. G. Travis.

Suffolk Plants, p. 274, G. C. Druce.

Somerset Plants, 1909-10, p. 281, Rev. E. S. Marshall.

Orobanche Ritro, var. hypochaeroides, in Jersey. O. reticulata, var. procera, Druce, in Yorks., pp. 300-1, G. C. Druce.

Cornish Plants, p. 302, G. C. Druce.

Notes on the Flora of Derbyshire, p. 313, E. and H. Drabble.

Viola tricolor, var. sabulosa, DC., p. 341. F. N. Williams. (Disputes the identity of the so-called British sabulosa with that of De Candolle.)

Dorsetshire Plant Records, C. E. Salmon, p. 363. (Includes Daucus gummifer, var. intermedia, Corbiere.)

Lyme Regis Plants, p. 365, H. W. Pugsley, F.L.S.

THE ANNALS OF SCOTTISH NATURAL HISTORY, of which the portion dedicated to Botany for so many years had been edited by Professor Trail came to a regrettable end this autumn, contains among others the following papers of interest:---

The Alpine Cerastia of Britain, p. 39, G. C. Druce.

Contributions to a Flora of Caithness, p. 44, Arth. Bennett.

Scottish Plants, Skye, Peebles, Selkirk and Kirkcudbright, pp. 96 and 164, G. C. Druce. Includes *Arabis alpina*.

Alien Plants, p. 99, J. Fraser.

Vicia Orobus, DC., Pyrola secunda, p. 104, and Goodyera repens, p. 204, Arth. Bennett.

Man's Influence on the Indigenous Flora of Aberdeen, pp. 175, 233, Prof. Trail.

Montia verna, Neck. in Scotland, p. 252, G. C. Druce.

Castalia candida, Schinz and Thell., new to Britain, p. 252, G. C. Druce.

Subscriptions are invited for :---

THE CAMBRIDGE BRITISH FLORA, by C. E. Moss, D.Sc.,

illustrated from drawings by E. W. HUNNYBUN by the Syndicate of the Cambridge University Press. About 10 volumes,  $\pounds 2$  each.

And for THE FLORA OF BRISTOL, by J. WALTER WHITE, F.L.S., Warnham Woodland Road, Clifton, Bristol. 105.

## OBITUARIES.

THE REV. AUGUSTIN LEY. To write an account of the life and work of a personal friend for a scientific journal is no easy task. In the case of Mr. Ley, it has been successfully accomplished by the Rev. W. Moyle Rogers in the *Journal of Botany*, July, 1911. My task, that of writing a notice for a Club, all the members of which are in a relation of personal indebtedness to Mr. Ley, is a far easier one. So well, however, was Mr. Rogers's work done that little is left to be said here beyond personal reminiscences, and a grateful estimate of Ley's work in connection with the *B.E.C.* I shall, however, with Mr. Rogers's kind permission, draw here and there on his article. My reminiscences are derived from a constant acquaintance, maintained by correspondence and by personal contact in his home and in the field, and based upon a friendship dating from 12 to 14 years back.

Ley's bent for natural history, effectively encouraged by his Father, as Mr. Rogers shows, was derived in great part from his Mother's family. His uncle, Augustin Prichard, helped it: but it came to him also in a more direct line. For his Mother was the daughter of Dr. Prichard of Bristol, the "eminent ethnologist," as the English Cyclopædia calls him. A story is told of the elder brother, Clement, who, in reply to a remark about the time spent in scientific pursuits, retorted with a boy's directness, "If Father does not like having scientific sons, he ought not to have married the daughter of a scientific man." It was accurately put, for the Mother herself had no scientific tastes.

Though Ley was never sent to school, yet his career at Oxford testifies to the thoroughness of the education given him by his Father. The latter took advanced pupils for the Schools at Oxford, and educated his sons along with them. Ley thus received a sound classical training : the record of his performances at Oxford (1st in Mods., 2nd in Lit. Hum., and the Gaisford prize for Greek verse) proves it. In connexion with the Gaisford, Mr. Rogers tells a story well worth repeating :---" Dean Liddell, while complimenting him on his composition, objected to one word in it as incorrect, and was met by the rejoinder, 'I got it from your Lexicon, Sir.'"

The chief events of his life are told by Mr. Rogers. To most of his botanical friends his life as a clergyman was little known: but no one who did know it at all could put him down as anything short of an enthusiastic and self-sacrificing Parish Priest. A man so conscientious and at the same time so affectionate as Ley could not fail to leave a permanent mark for good on his parishes. His clerical duty was always far ahead of everything else in his mind; a fact which might escape those who saw only his botanical work.

For Ley put into his botanising, when the time came for it, the same energy and thoroughness that he put into all that he did. His energy in getting about, and in doing his critical work, was wonderful. It was not restlessness, or anything akin to it : no one could be more restful than he, when he had done for the day, and sat down quietly to a theological book (he always refused to play games). He went far afield in his search for plants. Mr. Rogers notes "that in addition to his frequent botanical rambles in most parts of Wales, and his very exhaustive exploration of his own county, Ley made expeditions from time to time to widely separated parts of the British Isles. His travels on the Continent, in Norway, the Tyrol, Switzerland, Normandy and Brittany, and the Riviera, were frequent, though chiefly in earlier years. To Norway his first visit was as early as in 1863, when, with his father and brother, he explored neighbourhoods so unfrequented by tourists and under such primitive conditions, that they were glad to eat the dog-biscuits which they had taken with them for their unfortunate dogs !" Out of the visits to other parts of Britain-the Lakes, West Yorkshire, Lincoln, Hunts., Shropshire, &c .- arose some of the most valuable and permanent work left behind by Ley: e.g. in Hieracium, Rubus, Rosa. In his earlier days he accomplished much in making the flora of more out-of-the-way counties better known, especially in Wales: the reports of the Botanical Record Club bear witness to this. No one could go for an outing with him, without realising his powers of steady persistence through a day's walk, whatever difficulties arose. Nothing daunted him. In August, 1909, we went, accompanied by a Doctor friend, over May Hill, hunting Rubus. The rain poured

to none: his energy and generosity never flagged, though the return parcels sent from the Club could never be an adequate recompense for what he sent in. In all these ways his loss will be severely felt for a long time by the Club: but it is as certain as anything can be that Ley would himself have felt that the highest tribute that could be paid to his memory would be that the Members of the Club who survive him should make haste to fill his place in every way. For, though a man of strong individuality, he never worked for his own hand; what he did he did for the Club, and through it for the advancement of botanical science.

### H. J. RIDDELSDELL.

The members of our Club will be grateful to Mr. Riddelsdell for the warm appreciation of our late member and friend. His loss to the Club is a most serious one; his yearly contributions, usually of critical plants, were always large and valuable, in fact from 1852 to his death he contributed over 15,000 specimens to the Club.

His contributions to Topographical floristic work were very extensive; he supplied County lists to the Botanical Record Club Reports for Brecon, 1874, 1881, Radnor, 1874, Montgomery and Monmouth, 1875, and with the Rev. W. H. Purchas he published A Flora of Herefordshire in 1889. To the Journ. Bot. he contributed papers on Alyssum incanum 53, 1871, Carum Carvi 28, Potentilla rupestris in Radnor 28, Thalictrum alpinum in Kerry 378, Cerastium arcticum in Carnarvon 377, 1887, Moss Flora of the Doward Hills 329, 1891, Rubus imbricatus 208, Obit. of B. M. Watkins 319, 1892, A new British Rubus (R. acutifrons), 13, 1893, R. nemoralis, var. Silurum, Ley, R. curvidens, Ley, R. Borreri, var. virgultorum, Ley, 143, Herefordshire Plant t. 207, 1894, Pyrus minima, Ley, 84, Hierac. diaphanum, var. cacuminum, Ley, 86, Brecon Plants 135, 1895, Herefordshire Rubi (including R. orthoclados 155, R. regillus 217, Carmarthenshire Records 367, Luzula pallescens, Bess., in Radnor 368, 1896, Pyrus minima, t. 372, p. 389, 1897, New forms of Hieracium, H. hypochaeroides, var. cyathis, Ley, H. pollinarium, var. plaipphyllum, Ley, 7, 1898, H. sciaphilum, var. pulchrius, Ley, H. caesium, var. coracinum, Ley, 35, 1899, H. murorum, var. lucidulum, Ley, var. sanguineum, Ley, H. vagense, Ley, H. vulgatum, var. mutabile, Ley, 3, 1900, H. rigidum, var. strigosum, Ley, 168, 1901, Rubus acutifrons, var. amplifrons, Ley,

REPORT FOR 1911.

R. dumetorum, var. triangularis, Ley, 69, 1902, var. raduliformis, Ley, 120, Obit. Rev. W. H. Purchas 80, 1904, Rubus Godronii, var. foliolatus, R. lasioclados, var. longus, R. ericetorum, var. cuneatus, sub. sp. sertiflorus, var. scoticus, and R. horridicaulis, Ley and Rogers 58, Plants of Lake District 171, 216 (with W. R. Linton), 1906, Hieracium britannicum, var. ovale, Ley, H. ciliatum, var. venosum, Ley, H. serratifrons, var. Cinderella, Ley, 108, Roses of Mollis-tomentosa, Group 200, Hereford Plants 317, Rubus mucronatoides, Ley, 46, 1907, Lincoln Rubi, 53, Rosa pomifera 58, Salix herbacea in Carmarthen, Rosa villosae 328, 394, Brecon and W. York Hieracia, H. decolor, Ley, 13, H. repandum, Ley, 13, Lintoni, Ley, 16, H. ampliatum, Ley, 47, H. mutabile, Ley, 48, H. strumosum 49, H. cacuminum 51, H. tavense, Ley, 55, Collection of Roses 247, Fructification of Elms 355, Tilia platyphyllos 350, 432, 1909, British Elms, t. 503 (U. vegeta, Ley), 65. Synonymy in Ulmus 130, Hieracium silvaticum, var. crassum, Ley, H. sparsidens, var. elatius, Ley, H. rectulum, Ley, 327, 1910. The Mosses of Hereford appeared in the Woolhope Naturalists' Field Club Proceedings about 1880, and besides other papers, he published one on the Plants of Craig Cille in the same Journal, 1902-4, and he supplied the article on Botany of Hereford to the Vicioria County History of Hereford in 1908.

His funeral was largely attended, and a special feature was the number of poor people who came with handfuls of flowers to lay on his grave, and whose grief was evidently genuine. The Secretary attended to represent this Club, and to mark the loss of a valued personal friend. His herbarium is left to the University of Birmingham.

WILLIAM AMBROSE CLARKE. Born at Hinkley, Leicester, February 6, 1841. Died at Oxford, February 23, 1911. He practised as a solicitor chiefly at Chippenham for about 20 years, becoming Mayor of that town in 1879. Here he assisted the Rev. T. A. Preston, of Marlborough, in investigating the county flora, and contributed to the *Journ. Bot.*, 55, 1887, a note on some of its plants. In January, 1892, he married Miss Emily S. Ward, daughter of the Vicar of Great Bedwyn, and in the same year took up his residence at Oxford, a city whose libraries proved an unfailing mine of interest to him when preparing his *First Records of Flowering Plants*, of which he published a revised edition in 1900.

He published a valuable note on the dates of publication of the various parts of Curtis' *Flora Londinensis* (*Journ. Bot.* 112, 1895), and assisted in preparing the last edition of the *London Catalogue*. He became a F.L.S. in 1890, and rejoined that Society in 1909 after an interval of some years.

SIR JOSEPH DALTON HOOKER, O.M., C.B., G.C.S.I., K.C.S.I., F.R.S., D.C.L., M.D., &c. Born at Halesworth, Suffolk, June 30, 1817. Died at The Camp, Sunningdale, December 10, 1911. By the death of Sir Joseph Hooker, our Hon. Member, the scientific world loses one of its most able exponents; his lengthy life was full of solid work, and his cheery spirit did much to help and encourage others. He had the "botanist's memory"-on the last occasion I saw him he told me he well remembered seeing the Dillenian Mosses when his father took him to Oxford in 1828. On a previous occasion he reminded me that Daubeny had some Wedgwood medallions; Hooker was a great collector of that ware, which he missed from their place on the walls of the Library; so an investigation being made, they were found and are now put in their original position. It was a memorable sight to see him at the age of 90 dissecting an Impatiens, and as interested in the work as when he was 50 years younger. He knew the world, and those most worth knowing in it, and in answer to my question as to what he considered the most beautiful track of country he had visited, he said he thought the Khasian Hills for their scenic beauty and their rich flora attracted him most. His appearance at the Darwin Celebration in Cambridge in the summer of 1909 was greatly appreciated, and his picturesque figure at the Reception will long live in one's memory. It must be remembered that it was his advice that led Darwin to publish the results of his labours, and it was mainly through Hooker's advocacy that their acceptance by the scientific world was so greatly accelerated.

His funeral on Friday, December 15, was very largely attended by those foremost in Botany in Britain, and included three sons of his old friend Charles Darwin. He was buried by his desire in Kew Churchyard, by the side of his father, Sir William Hooker, and in close contiguity to the Royal Gardens which he had so successfully administered for so many years. The Club was represented at the burial by the Secretary.

### REPORT FOR 1911.

# NEW COUNTY AND OTHER RECORDS.

In addition to those given in the Works already cited, the following among others may be singled out for citation :---

40. RANUNCULUS HETEROPHYLLUS, Weber. Hunts. 31. Crowland, Linc. S.

49. CALTHA RADICANS, Forst. Butterstone, E. Perth 89.

68. ACONITUM NAPELLUS, L. Whithorn, Wigton 74. R. DEW. Alien, of course. W. B. E. C., 1911.

251. THLASPI OCCITANICUM, Jord. On limestone banks of S. Tyne, near Alston, Cumberland 70. W. G. SMITH, D.Sc., *in lit*.

293. VIOLA SYLVESTRIS, Kit. Monk's Wood, Hunts. 31.

294. V. RIVINIANA, Reich., var. DIVERSA, Greg. Killarney.

301. V. EPIPSILA, Ledeb. Cornwall W. 1. VIGURS. Devon S. 3. Berks 22. DRUCE. Carnarvon 49. DRUCE. Killarney. Kerry. DRUCE.

308 d. POLVGALA SERPVLLACEA, Weihe, var. VINCOIDES, Chodat. Ben Lawers, M. Perth 88. H. W. PUGSLEY, in lit.

451. MALVA MOSCHATA, L., VAR. INTEGRIFOLIA, Ley. The Lithe, Selborne, N. Hants. 12. C. E. PALMER.

610. TRIFOLIUM STELLATUM, L. Near Freshwater, on waste ground near the sea on shingly soil, 10 July 1905!

711. LATHYRUS TUBEROSUS, L. Peppard, Oxon. 23. Miss RIDLEY! Colonist, 1911.

L. HIRSUTUS, L. Cornfield, Albury, Herts. 20. Hon. Mrs. MAURICE GLYN, in lit.

966 d. C. MONOGYNA, Jacq. = C. OXYACANTHA, L., var. SPLENDENS, Druce. Henfield Common, Sussex. A. WEBSTER, in dit. The Parks, Oxford. DRUCE.

1033. MYRIOPHYLLUM ALTERNIFLORUM. DC. Near Eye, Northants. 32.

1039. CALLITRICHE POLYMORPHA, LONNY. Melrose 80.

RUBUS MERCICUS, Bagn., var. BRACTEATUS, Bagn. Glendalough, Co. Wicklow. "Apparently this, but bracts rather less conspicuous than usual and stem-leaves imperfect. So far as I know would be new for Ireland." W. MOYLE ROGERS, 1911. This was gathered by me in July, 1901.

1050. EPILOBIUM LAMVI, F. Schultz. Winningfort Wood, Northants, 32. A. LEY. But a hybrid previously found by the writer.

1052. EPILOBIUM ROSEUM, Schreber. Farthinghoe, Northants. 32. DRUCE.

1058. E. NUMMULARIIFOLIUM, R. Cunn. Ardrishaig, Cantyre. P. Ewing. Alien.

1211. ASPERULA CILIATA, Rochel, near Wingfield, Trowbridge, Wilts., June, 1911. R. STAPLEDON.

1429. CIRSIUM ACAULE × ARVENSE = C. GIBSONI (H. C. W.), Druce. Sutton Common, N. Hants. 12. C. E. PALMER, 1897.

1901 *b*. LIMOSELLA AQUATICA, L., VAR. TENUIFOLIA, Lej. Banks of Gala, Selkirk, October, 1911. Miss IDA HAYWARD, *in lit*. A probable alien, but new to Scotland. Is this identical with the Kenfig plant?

1977(2). UTRICULARIA OCHROLEUCA, Hartm. Coniston Lake, N. Lancashire, August, 1911. J. Comber. '

1988. MENTHA ROTUNDIFOLIA, Huds. Near Hampstead Norris, Berks. 22. A. B. JACKSON.

2080. TEUCRIUM SCORDIUM, L. Cowbit, Lincoln S. 53. Last seen 1876. DRUCE.

2127. CHENOPODIUM GLAUCUM, L. Aldershot. Mrs. GIBSON, in lit.

2178. POLYGONUM MITE, Schrank. Near Cowbit, Lincoln S. 53. DRUCE.

2179. P. MINUS, Huds. Near Cowbit, Lincoln, S. 53. DRUCE.

### REPORT FOR 1911.

2233. EUPHORBIA PORTLANDICA, L. Kirkcudbright 73. DRUCE.

2255. BETULA ALBA, L. (VERRUCOSA). Warwick, Beds., Northants., Cumberland, Selkirk, Roxburgh.

2291. POPULUS NIGRA, L., VAI. VIRIDIS, Lindley. Oxford. DRUCE.

2294(2). P. VIRGINIANA, Fouger. Suffolk E., Norfolk E. and W. Moss and Druce. Marsworth, Herts., Bucks., The Parks, Oxford, Lincoln S. Druce.

2326. ORCHIS INCARNATA, L. Wood Walton, Hunts. 31.

2327. O. MACULATA, L., VAR. PRAECOX, Webster = sub.-sp. O. ERICETORUM, Lint. Snelsmore, Berks 22. Menmarsh, Oxon. 23. Grendon, Bucks. 24. Oakley, Northants. 32. Flitwick, Beds. 30.

2477(6). ECHINODORUS RANUNCULOIDES, var. REPENS (Davies). New Forest, S. Hants.

2475. WOLFFIA ARRHIZA, Wimm. Nr. Sawley Abbey, York, 1878. E. F. COOPER, teste A. B. JACKSON, in lit.

2515. APONOGETON DISTACHVUM, Thunb. Loch near Dunkeld. Alien. E. Perth 89. G. CLARIDGE DRUCE.

2615. C. PAIRAEI, Schultz. Malvern 37. C. E. PALMER.

2617. X CAREX BOENNINGHAUSIANA, Weihe. Mawsley Wetbed, Northants. 32. G. CHESTER, *in lit*.

2683. AGROSTIS VERTICILLATA, Vill. Glasgow, G. DON, 1790. Falmouth, F. H. DAVEY, *in lit*. Alien doubtless.

2773. GLYCERIA DECLINATA, Bréb. Perth 88. G. CLARIDGE DRUCE. Now distributed.

2797. BROMUS TECTORUM, L. Newquay, Cornwall I, G, CLARIDGE DRUCE.

55

2923. AZOLLA CAROLINIANA, Willd. Cherwell, Oxford 23. DRUCE. Thames, nr. Henley, Oxon. 23. Miss RIDLEY. Woodbastwick, Norfolk E. 27. Queenstown Junction, Co. Cork.

CORRECTION OF REPORT, 1909, p. 469. Chenopodium urbicum, var. intermedium, W. Cornwall. C. C. VIGURS. "My specimen is C. rubrum, L." C. E. SALMON.

Also REPORT 1910, p. 506, Mr. Nicholson's specimen of *Stachys* recta is said to be an abnormal form of *S. annua*, L.

2185(2). POLVGONUM EFFUSUM, Meisner, in Dc. Prod. xiv. 93, 1856. Multicaule procumbens glabrum, caulibus ramosis elongatis filiformi-tenellis tenuiter striatis laevibus, ochreis parvis hyalinis enerviis dentato-laceris foliisque internodiis elongatis brevioribus, foliis anguste linearibus subenerviis eveniis, axillis 3-5 floris, pedicellis demum florem subaequantibus medio vel supra articulatis, achaenio calycem parvum aequante faciebus ovatis nitidis apice obsolete striatis. India.

# CORRECTIONS AND ADDITIONS.

77(2). On March 25, 1912, Dr. Ostenfeld writes to me to say that he now considers the Water Lily is not *Castalia candida*, but an unnamed variety of *C. alba*.

1696. ERICA MACKAVI X TETRALIX = E. PRAEGERI, Osteni. Craggamore, Galway. Dr. Ostenfeld, Aug. 1911.

2538. SCIRPUS CAESPITOSUS, L., var. AUSTRIACUS (Palla). Meachop Moor, near Grange, Lanc., and var. GERMANICUS (Palla). Craggamore, Galway, both recorded by Dr. OSTENFELD, *in lit*.

2923(2). AZOLLA FILICAULIS, Lam. Wood Bastwick, Norfolk, Dr. OSTENFELD, *in lit*,

### REPORT FOR 1911.

MR. E. W. HUNNYBUN, Mill Common, Huntingdon, who is making a series of drawings of British plants for the *Cambridge British Flora*, would be 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.

MISS BERTHA REID, 26 Ardilaun Road, Highbury, N., Prof. J. PERCIVAL, The Pyghtle, Northcourt Avenue, Reading, and R. Y. STAPLEDON, Esq., Royal Agricultural College, Cireneester, would be much obliged if members will kindly supply seeds and fruits of British plants. Members willing to assist are asked to communicate with the foregoing members direct. Mr. Stapledon especially wishes for Leguminosæ, Umbelliferæ, Compositæ, and Scrophulariaceæ.

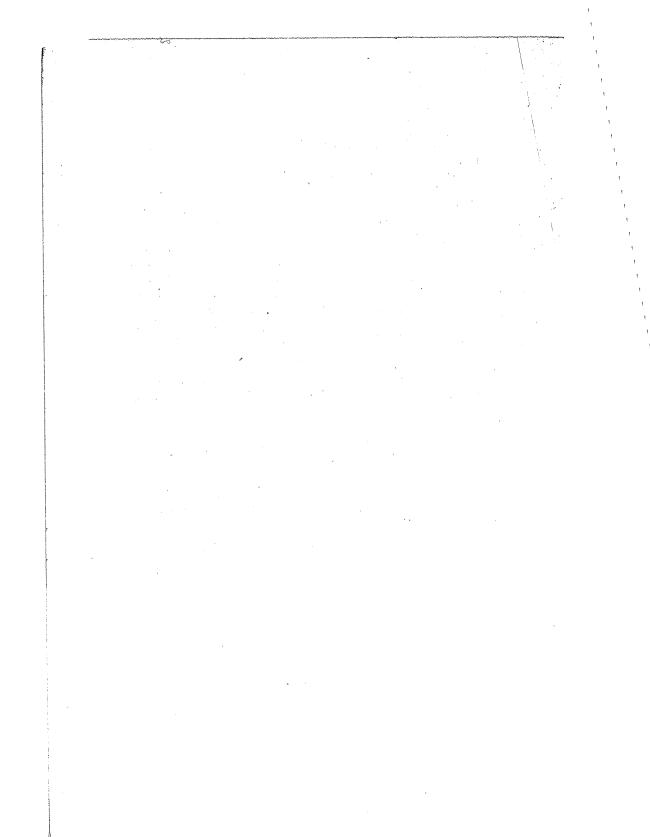
MRS. ADAMS, 14 Vernon Road, Edgbaston, and Miss TROWER, Stansteadbury, Ware, Herts., are painting British Plants. Would members who are willing to assist in supplying specimens kindly let them know.

F. J. HANBURY, Esq., Brockhurst, East Grinstead, is anxious to have seeds or roots of rare British species. He will defray all expenses.

May I add that any opinion expressed in the preceding pages is purely personal and necessarily in no way assumes to carry with it the authority of the Club.

With best wishes, I am yours very sincerely,

G. CLARIDGE DRUCE.



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