

THE BOTANICAL SOCIETY
AND EXCHANGE CLUB
OF THE BRITISH ISLES.

REPORT FOR 1928

OF THE

BOTANICAL EXCHANGE CLUB

CONVENIENTLY ABBREVIATED REP. B.E.C.)

BY THE

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W. B. TURRILL, Esq., D.Sc. (Lond.), F.L.S.

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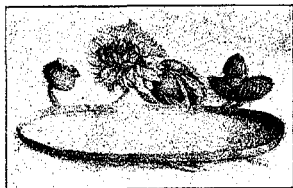
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Victoria Regina.



Floreat flora.

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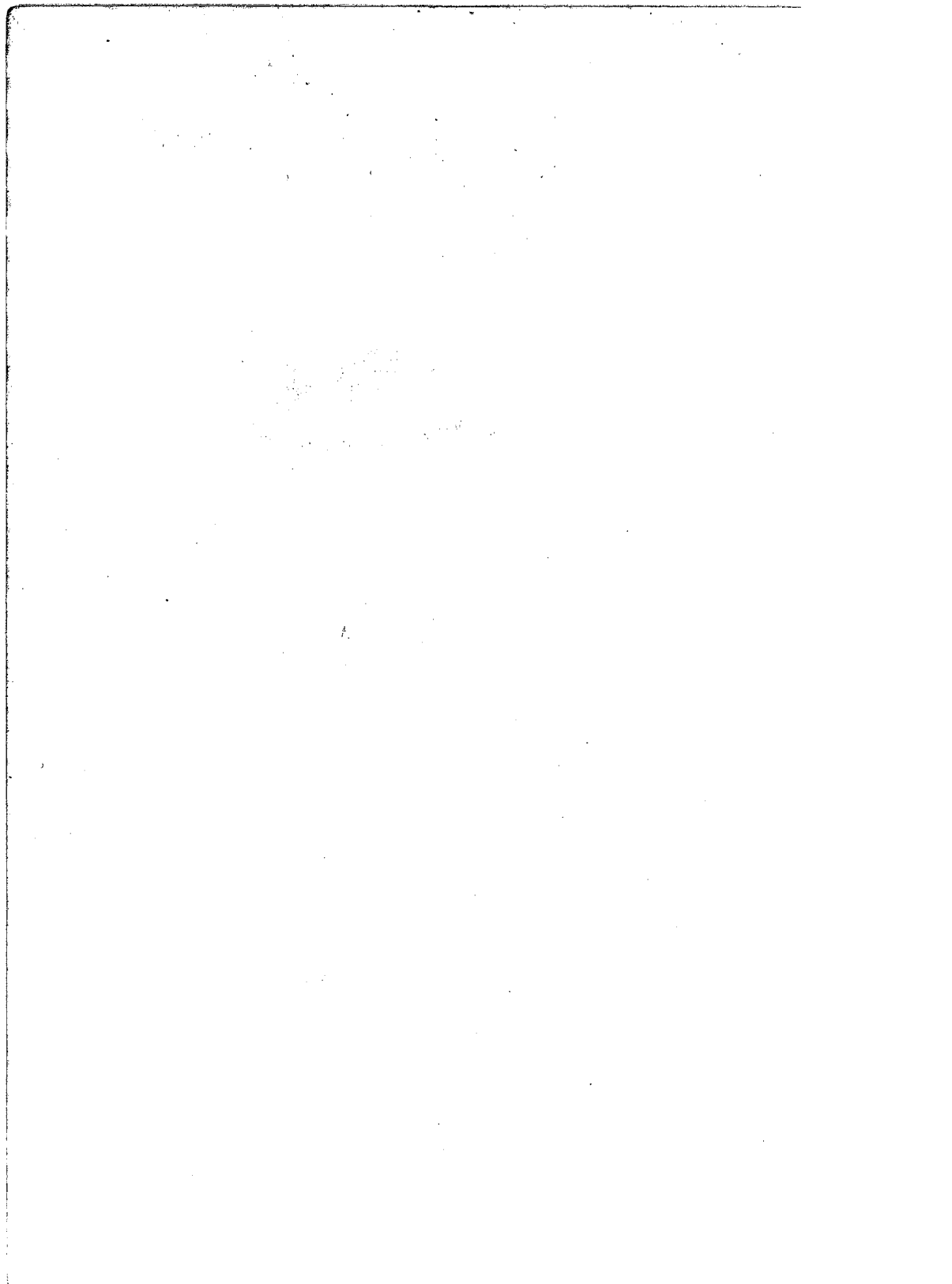
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AUGUST 1929.



REPORT OF THE DISTRIBUTOR FOR 1928.

THE specimens received slightly exceed in number those listed in last year's Report: 31 contributors sending in 4804 sheets. With only two or three exceptions the specimens were well prepared and the task of distribution was lightened by the courtesy of the members in following the rules. The only complaint one can make is that the writing of several members is at times difficult or impossible to decipher. It is possible that some errors have escaped correction in this Report for that reason. Especially interesting series of foreign plants were received from Dr K. Rechinger and Prof. Beattie.

For reasons connected with his professional status, this year's distributor is not one of the active members of the exchange side of the Society's work. Perhaps, therefore, his colleagues in the Society and Club will not take it amiss if he makes a few suggestions beyond the scope normally allotted to a distributor.

The British flora is not a large one on the basis of species numbers. No competent systematist familiar with its problems supposes, however, that its taxonomic interest is yet exhausted. A great deal has been done towards increasing our knowledge of its species, their variations, and their distributions, within the past few decades, especially by the members of our Society. Yet a kindly critic cannot help feeling that the methods now in vogue need, not replacing, but correlating with others, in part, of more recent origin.

Many of the problems of plant-life, while primarily taxonomic, cannot be solved by herbarium and library studies alone, or by these correlated only with observational field-studies. Herbarium studies and field-collecting are indispensable, but they are insufficient by themselves. The cultural, ecological, genetical, anatomical, and cytological aspects have all an important bearing on taxonomic problems. How many species and varieties of uncertain status are there that have never been subjected to experimental research? How many hybrids are there recorded in our floras and lists that have never been subjected to genetical analysis? The answers to these questions are numbers of three or four places of figures. It is true that many members are limited by lack of sufficient time, space, and funds from conducting experiments on a large scale. On the other hand, if every member would attempt to solve one problem by attacking it from as many standpoints as possible—and especially by means of experiments—it does seem probable that future accounts of the British flora would be more stable, more complete, and more accurate than they have been till now. Surely the definite solution of one biological problem is worth many "county records," and every reader of this Report must have at least one such to attract him in his own vice-county.

One matter worthy of attention by the active exchange contributors is that the results of experiments and observations can often be recorded

in a most excellent manner by means of annotated herbarium specimens. This applies to both ecological and genetical experiments and observations, using these terms in a broad sense. This matter is dealt with more fully in a paper to be published in the *Journal of Ecology*, and it is intended to have separates available for members particularly interested.

At Kew special biological and genetical herbaria for British plants have been established and the Director will gladly receive specimens for incorporation in them. Such specimens will always be available for reference and will form a permanent national record of the senders' researches.

The best thanks of the Club and of the Distributor are due to the Director of the Royal Botanic Gardens, Kew, and to the Keeper of the Herbarium and Library for giving facilities and providing technical assistance for this year's distribution.

W. B. TURRILL.

Kew, March 1929.

LIST OF PARCELS RECEIVED.

	No. of Specimens.
F. S. Beattie,	329
W. Biddiscombe,	56
C. E. Britton,	232
G. C. Brown,	86
R. Bulley,	112
R. J. Burdon,	127
G. C. Druce,	648
J. Fraser,	98
L. B. Hall,	32
P. M. Hall,	179
I. Helsby,	51
H. H. Johnston,	55
J. E. Little,	230
J. W. Long,	81
Louis Arsène,	469
J. E. Lousley,	225
C. V. B. Marquand,	36
R. Melville,	48
K. Rechingcr,	351
H. J. Riddelsdell,	236
F. Rilstone,	100
Miss I. M. Roper,	169
C. E. Salmon,	22
W. A. Sledge,	82
R. L. Smith,	87
C. Waterfall,	314
Welsh National Museum, Department of Botany, ...	56
J. W. White,	169
J. A. Williams,	13
A. Wilson,	53
A. H. Wolley-Dod,	56
	4804

Thalictrum dunense Dum. [Ref. No. Z.26.] Sand dunes, Knockesurmer, Belgium, July 13, 1928.—J. E. LOUSLEY. "Did Mr Lousley notice whether the rootstock was caespitose or creeping? It has been urged that Syme's var. *maritimum* is a different plant from that of Dumortier."—DRUCE.

Ranunculus acris L. Example of fasciation. Meadows, Homebridge, Chester. Found by County School girl, about May 1916. Comm. C. WATERFALL.

Ranunculus auricomus L. Newton Longville, Bucks, May 1928.—G. C. DRUCE. "The radical leaves of these specimens are very peculiar. They are reniform, rather deeply trifid and irregularly dentate. Only three leaves of my five plants show an approach to this, the rest of the radical leaves being tripartite, with each segment cuneate, bi-trifid and dentate. It would be interesting to know if the Bucks specimens are constant and worth a varietal name."—FRASER. "Is not this var. *reniformis* Kitt., the usual representative of the species at least in southern England?"—BRITTON.

Ranunculus Flammula L. [Ref. No. 3429.] Epsom Common, Surrey, September 1, 1928. This is the hairy form, with the hairs on the stems and on the leaves mostly appressed, though on some of the younger branches the hairs are more or less spreading. Most authors describe the species as glabrous or pubescent, but only Beck, as far as I know, gives a definite varietal name to a hairy form (var. *pilifer* Fl. N.O. i., 416 (1890)). As that is described as being decidedly hispid, it can hardly be the same as our British plant.—C. E. BRITTON. "I should call this var. *serratus* DC., i.e., the serrate-leaved form of the ordinary plant, which is var. *suberectus* Syme."—DRABBLE. "Is this a habitat-form? Similar plants with wiry, much-branched stems and narrow leaves occur on the clay beds of small dried-up pools, but the most extreme forms are found on boggy ground, where shortage of water can hardly be the cause, unless indeed the poisonous nature of the peat forces the plant into a xerophytic habit."—RILSTONE. "Not at all my idea of var. *serratus* Pers."—DRUCE.

Ranunculus pseudo-fluitans Baker & Foggitt. Wollaton Canal, Nottingham, July 1928.—R. BULLEY. "Not large enough for the type form of this species, but may possibly be the var. *minor*. My sheet shows only the upper part of one stem and is without fruits. Under such conditions stable determination is impossible."—PEARSALL.

Ranunculus Lenormandi Schultz. In peaty soil, Bovey Heath, South Devon, July 2, 1928.—C. WATERFALL. "Yes."—PEARSALL.

Capnoides claviculata (L.) Dr. Near Treddol, Cardigan, on slate, August 22, 1928.—R. MELVILLE.

Fumaria Bastardi Bor. = *F. confusa* Jord. Edge of wheat field, near Bovey Tracey, South Devon, July 6, 1928.—C. WATERFALL.

Fumaria —. Barningham, Norfolk, June 28, 1928.—R. J. BURDON.

Barbarea intermedia Bor. Railway Banks, Cinderhill, Nottingham, May 3, 1928.—R. BULLEY.

Cardamine amara L. Woods on border of the Lake, Lymm, Cheshire, May 9, 1928.—C. WATERFALL.

Cardamine bulbifera Cr. Near Croxley Green, Herts, April 26, 1928.—I. HELSBY.

Erucastrum Pollichii Schimp. & Sp. [Ref. No. 3447.] Merton, Surrey, September 8, 1928. In the *British Plant List*, ed. 2, this species appears under the unfamiliar name of *Brassica gallica* (Willd.) Dr. If *Erucastrum* is not kept up, this species would seem more naturally associated with *Diplotaxis* rather than being placed under *Brassica*.—C. E. BRITTON. "If retained in this genus the valid trivial is *gallicum* (Willd.), who established *Sisymbrium gallicum*. If merged into *Brassica*, as is done in the *Gen. Plant.*, it should stand as *B. gallica* (Willd.) Dr."—DRUCE.

Coronopus didymus Sm. Edge of woodland path opposite Bovey Potteries, South Devon, July 2, 1928.—C. WATERFALL.

Lepidium graminifolium L. Cardiff Docks, Glamorgan, September 1928. This plant appears year after year at our local Docks in ever increasing numbers. There is only one patch of it, but it is not likely to be eradicated, as the ground will probably never be built over.—R. L. SMITH.

Raphanus maritimus Sm., var. *albus* Dr. Maritime sands, growing with the type, but less common, St Helier's, Jersey, July 1, 1928.—L. ARSENE.

Raphanus maritimus Sm. Maritime sands, St Helier's, Jersey, July 1, 1928.—L. ARSENE.

Viola Riviniana Reichb. [Ref. No. 31.] Peak Copse, Upham, S. Hants, May 10, 1925. A gathering to illustrate the woodland form of this species, which appears to be "type" or as close to it as it is possible to get. Possibly rather larger than usual, due to growing in deep leaf mould in open wood. The specimens of this gathering were of a pale bluish grey colour and the flowers the typical slatey blue of *Riviniana*.—P. M. HALL. "The method of perennation is peculiar. One of my specimens seems to have lost its crown, and an adventitious head has arisen from the root, giving rise to a new plant. The other

has a long root, and a long stem has arisen from a point that seems adventitious, producing a long underground stem, with bracts, apparently to carry up the crown from a substratum of moss or decayed leaves. My own specimens have a caudex above the long roots."—FRASER.

Viola Riviniana Reichb. [Ref. No. 36.] Peak Copse, Upham, S. Hants, May 10, 1925. Var. *incisa* (Martr.-Don.) = forma *nemorosa* Neum. [Ref. No. 36A.] Peak Copse, Upham, S. Hants, May 10, 1925. This is a series to show the root system of *V. Riviniana* Reichb., and consists partly of the type *Riviniana* and partly of its var. *incisa*, gathering No. 36 being really part of the gathering No. 31, and No. 36A part of No. 33. The root system consists of a network of stout main roots lying in a horizontal plane parallel to the surface of the ground. The smaller fibrous rootlets branch off from these main roots, which at intervals form nodes from which soboles shoot up to the surface. Sometimes several soboles proceed from the same node. This method of perennation is not confined to woodland forms of *Riviniana* growing in leaf mould, which lends itself to penetration by horizontal roots, as I have found the same thing in var. *diversa* Greg. and also in the hybrid between *diversa* and *V. canina* L., growing in peaty turf. My attention was called to this character of *V. Riviniana* by Mr A. J. Wilmott.—P. M. HALL.

Viola Riviniana Reichb., var. *diversa* Greg. [Ref. No. 46.] Heathy bank near Holmsley Station, S. Hants, May 17, 1925. The common form of the heaths of the New Forest, noticeable for its floriferous habit, lilac tint in flowers, and whitish spurs.—P. M. HALL

Viola Riviniana Reichb., var. *vicina* (Martr.-Don.), forma *nemorosa* Neum. * [Ref. No. 33.] Peak Copse, Upham, S. Hants, May 10, 1925. Growing in the same wood as Ref. No. 31, but not actually with it. This plant is very distinct from the type [Ref. No. 31] on account of: 1—Its smaller habit. 2—The deeper colour of its flowers, which have a purple tint in them nearly as deep as that of *V. odorata*. The spurs also are more deeply tinted than in the type. The deeper colour of the flowers may be seen in many of the dried specimens, but the colour of the spurs is not preserved. 3—The leaves have longer and more tapering apices, resembling those of *V. sylvestris* Lam. in outline. *V. sylvestris* and/or its variety *punctata* grow with this gathering, and fresh plants of this gathering submitted to Mrs Gregory were named by her "*Riviniana* × *sylvestris*." I had not pointed out to her, however, that this plant grew in large numbers and remained quite uniform. Plants which are clearly hybrids also occur in this station, but only in small numbers as isolated examples. With regard to nomenclature, I have followed the second edition of the *British Plant List* in equating var. *vicina* with forma *nemorosa* Neum., but this may have to be revised. In my opinion, however, whatever name is correct, this plant

is worth varietal rank, certainly more so than forma *minor*, which now appears in the List as var. *flavicornis* (Forst.), and possibly more so than var. *diversa* Greg. This plant growing with the type and keeping distinct from it cannot be a mere "ecad," which may prove to be the proper status of both *diversa* and *minor*, which in certain situations approximate very closely to one another.—P. M. HALL.

Viola odorata L. [Ref. No. 68.] Wood at East End, North Leigh, Oxon, April 6, 1928. Sent for comparison with Ref. No. 73. No *imberbis* seen.—P. M. HALL.

Viola odorata L., var. *praecox* Greg. [Ref. No. 73.] Plantation near Woodstock, Oxon, April 6, 1928. Living plants from this station were submitted to Mrs Gregory in 1914, and passed by her as var. *praecox*, with the remark that the leaves were hardly so acute as in some examples. Certainly it is very different from Somerset *praecox* sent by Miss Roper in February 1919, in which the leaves are very much more acute. The Oxford plant does not appear to be particularly early flowering, as it was just coming into flower on March 11 of this year. Later leaves from cultivated plants do not become notably more acute than those of the type. In a fresh state this plant is more distinct from the local type [Ref. No. 68] than might appear from dried specimens. The flowers are smaller and much darker, while the leaves are of rather a bright green, smaller but only very slightly more acute. This plant is remarkable for its very long, slender, rooting stolons, and covers a lot of ground to the exclusion of any other *odorata* form. No examples of forma *imberbis* were seen. This plant has many resemblances to *V. multicaulis* Jord., and is very similar to the plant distributed under that name by the Secretary from Bladon, Oxon, in 1914. At South Kensington the sheet of *V. multicaulis* Jord. in the Standard Herbarium shows a great likeness to the Woodstock plant, but in the General European Herbarium it is more variable. This name, however, cannot be admissible for this plant if it is a variety of *odorata*, as all authorities since Jordan concur in treating his *multicaulis* as a hybrid. Owing to the plant occurring here in great numbers but absolutely uniform, and in the absence of any other form of *odorata*, hybrid origin may, in this case, I think, be ruled out. *V. hirta* occurs here very sparsely, and there is one patch of \times *permixta* [Ref. No. 74].—P. M. HALL.

Viola odorata L. \times *hirta* L. = \times *permixta* (Jord.). [Ref. No. 74.] Plantation near Woodstock, Oxon, April 6, 1928. So named in 1914 by Mrs Gregory. Growing in several large clumps with Ref. No. 73, the other parent *V. hirta* L. occurring near by, but in very small quantity. The only flower seen this year was very large, of a handsome reddish purple and scented. It comes nearest to *permixta* of the named hybrid forms on account of its short stolons and shape of leaves.—P. M. HALL.

Viola odorata L. \times *hirta* L. = \times *permixta* (Jord.). [Ref. No. 83.] Wood between Eartham and Slindon, W. Sussex, April 8, 1928. Growing in a large patch with one of the parents, *V. odorata* L., var. *dumetorum* (Jord.), forma *imberbis* (Leight.). The other parent, *V. hirta* L., grew on the verge of the wood nearby. The flowers had the slatey-bluish tint of *hirta* and sharply reflexed spurs, but were faintly scented. It is impossible to equate these hybrids exactly with the named form. All one can say is that this gathering, though very different from No. 74, still comes nearer to *permixta* than any other of the named hybrids.—P. M. HALL.

Viola hirta L., var. *propera* (Jord.) Gillot. [Ref. No. 14.] Chalky turf, Farley Mount, S. Hants, April 18, 1925. Distinguished by its dwarf habit, small foliage, and relatively large flowers, and therefore presumably to be referred to var. *propera* (Jord.) Gillot, although not exhibiting the broad sepals said to be characteristic of that variety (see *British Violets*, p. 22). This variety seems to occupy a place intermediate between the type and var. *Foudrasii* Jord., which is much smaller and glabrescent.—P. M. HALL.

Viola hirta L., var. *variegata* Greg. [Ref. No. 15.] Chalky turf, Farley Mount, S. Hants, April 18, 1925. Growing with Ref. No. 14, and only differing from it in colour, which is white, more or less splashed with blue-violet, and in the upper petals, which are slightly narrower and have a tendency to reflex, giving the flower a less rounded appearance. A plant grown on in cultivation produced hirsute capsules, which places it under var. *variegata* Greg. ("angles of capsules clothed with long hairs," *British Violets*, p. 24) rather than var. *lactiflora* Reichb., which has glabrous capsules. It seems to me preferable to rank this plant as a colour sub-variety = *V. hirta* L., var. *propera* (Jord.) Gillot, sub-var. *variegata* (Greg.).—P. M. HALL.

Viola agrestis Jord. [Ref. No. 2423.] Allotment ground, Lexden, N. Essex, September 9, 1928. I have found *V. agrestis* in a number of Essex localities, but nothing has hitherto been authenticated, I believe, for v.-c. 19.—G. C. BROWN. "Yes, *agrestis* Jord. Mr Brown is mistaken, however, in thinking that there is no previous authenticated record. I have named *agrestis* for R. W. Butcher from Saffron Walden (see *Rep. B.E.C.*, 195, 1926). I have also seen a plant from Dr Druce labelled 'Ansell,' but I do not know in which of Watson's very unnecessary and unnatural subdivisions of the county this place lies."—DRABBLE.

Viola agrestis Jord., appr. *Deseglisei*. Railway bank, Hanslope, Bucks, July 1928.—G. C. DRUCE. "Yes, *V. agrestis*. As Dr Druce says, it approaches *Deseglisei* in its somewhat upright habit, but the general texture, colour, and hairiness are those of typical *agrestis*."—DRABBLE.

Viola agrestis Jord. [Ref. No. 128.] Oat field, Racton, W. Sussex, June 27, 1928. [Ref. No. 196.] Oat stubble, Racton, W. Sussex, April

23, 1928. The former gathering from growing corn is an uncharacteristic, erect, simple-stemmed plant. The later gathering from the stubble of the same field shows the long widely spreading branches of *agrestis*.—P. M. HALL. "The oat field gathering is not *agrestis*, of course. My sheet is *V. segetalis*, f. *obtusifolia* (Jord.). The oat stubble plant is probably the same. It may have grown from seed of the June plants. Taken alone, it rather suggests *V. arvatica* Jord., but the evidence seems to be against this. I have often pointed out that *segetalis* and f. *obtusifolia* when flowering, in an immature condition, may simulate *arvatica*."—DRABBLE.

Viola segetalis Jord. [Ref. No. Z.36.] Clay Hill, Burghfield, Berks, October 1, 1928. Growing on the damp border of a cornfield, in a strip of weeds which the farmer did not trouble to cut. Growth very erect and fine.—J. E. LOUSLEY. "My specimen is f. *obtusifolia*, which I regard as a mere form of *segetalis*."—DRABBLE.

Viola ruralis Jord. [Ref. No. FF.49.] Minster Lovell, Oxon, June 1928.—G. C. DRUCE. "Yes, *ruralis* Jord."—DRABBLE.

Viola anglica Drabble. Roundhurst, Blackdown, W. Sussex, August 17, 1928.—R. J. BURDON. "Yes, *V. anglica*."—DRABBLE.

Viola lutea Huds. Pasture by Mollfryn Reservoirs, Radnorshire, August 20, 1928.—R. MELVILLE. "Yes, *V. lutea* Huds., unusually hairy for the inland plant."—DRABBLE.

Viola lutea Huds., var. *amoena* Hensl. Ardverikie Forest, W. Inverness, July 27, 1926.—W. A. SHOOLBRED; comm. NATIONAL MUSEUM OF WALES. "Yes."—DRABBLE.

Viola Curtisii Forst. Borve, S. Harris, July 1928. These are the var. or forma *Forsteri*.—G. C. DRUCE. "Yes. I have already named this plant for Dr Druce. Very useful material with the subterranean stems well shown. What is needed for determination of the pansies is not artistically pretty sheets with beautifully dried flowers but complete and mature plants. Very generally the use of the flower for diagnostic purposes is at an end when its relative size has been seen, while without the underground parts and lower branches satisfactory determination is impossible."—DRABBLE.

Viola Pesneau Lloyd & Foucaud. [Ref. No. Z.27.] Sand dunes, Ambleteuse, Pas de Calais, France, May 30, 1928.—J. E. LOUSLEY. "Quite possible; my sheet carries one immature plant without any development of subterranean twiggy branches and three fragments."—DRABBLE.

Dianthus gallicus Pers. [Ref. No. 167.] St Ouen's Bay, Jersey, September 2, 1928.—P. M. HALL.

Silene conica L. Maritime sands, St Ouen's Bay, Jersey, May 14, 1928.—L. ARSENE. "A very local plant of sandy heaths and pastures from Forfar and East Lothian to Kent. Occasionally it turns up in a casual way in gardens, like *S. noctiflora*. The principal features of it are the 30-ribbed calyx and subulate acuminate teeth that close over the seed vessel, forming a cone."—FRASER.

Silene nutans L., var. *Smithianus* Moss. Nottingham Castle Rocks, July 1926.—R. BULLEY.

Silene dichotoma Ehrh. Splott, Cardiff, May 1928. This plant is thriving quite well in this locality, and has been for the last three years, but sooner or later it will disappear as the spot where it grows is right on the edge of common land.—R. L. SMITH.

Lychnis macrocarpa B. & R. Splott, Cardiff, May 1928. This plant is growing in company with *Silene dichotoma* Ehrh., and the same remarks apply. Nearly all the capsules produced by this plant are eaten by insects before the seeds can ripen, thus preventing the increase of the plant in numbers.—R. L. SMITH.

Arenaria serpyllifolia L., var. *viscidula* Roth. E. Coast N. of Nagden Marshes, Kent, September 15, 1924. Not an extreme form of this variety which is sometimes plentifully bedecked with adhering sand grains but glandular enough, I believe, to be so named. These plants grew on shingly ground and mobile sands did not occur there. The ripe capsule is slightly more inflated than in type and the sepals more strongly veined.—C. E. SALMON. "Yes; var. *viscidula* Roth, *i.e.*, the glandular form of ordinary *A. serpyllifolia*, not the glandular form of var. *macrocarpa* Lloyd (*A. Lloydii* Jord.), which is *sphaerocarpa* Tenore. Hooker (*Students' Flora*, ed. iii.) wrongly made *A. sphaerocarpa* Tenore synonymous with his *A. serpyllifolia* proper and this error has been perpetuated, *e.g.*, in Townsend's *Flora of Hampshire*."—DRABBLE.

Sagina apetala Ard. Canal Wall, Lenton, Nottingham, July 1, 1928.—R. BULLEY.

Spergularia salina Presl, var. *neglecta* (Kindb.). Wet ground, Par Sands, E. Cornwall, June 1928.—F. RILSTONE.

Hypericum quadrangulum L. (*H. dubium*). Earlston, Berwick, 1926.—I. M. HAYWARD.

Tilia cordata Mill. (Barren). Mawsley Wood, Northants, September 1928. Fruiting specimens were not in evidence.—G. C. DRUCE.

Tilia cordata Mill. Offa's Dyke, W. Gloster, July 30, 1920.—W. A. SHOOLBRED; comm. NATIONAL MUSEUM OF WALES.

Geranium sanguineum L. Wooded hill-side between Dyserth and Cwm, Flintshire, North Wales, June 2, 1928.—C. WATERFALL.

Geranium Endressii J. Gay, var. *Endressii*, forma *luxurians* Turrill. Goonbell, St Agnes, W. Cornwall, August 30, 1928.—F. RILSTONE.

Geranium Endressii J. Gay, var. *Thurstoniana* Turrill. Goonbell, St Agnes, W. Cornwall, August 30, 1928. I was unfortunately too late for satisfactory specimens of these plants as they were nearly past flowering on August 30.—F. RILSTONE.

Geranium columbinum L. Stony hedge bank, above Bishops Leighton, South Devon, June 14, 1928.—C. WATERFALL.

Geranium Robertianum L., floribus albidis. Hort. Hitchin. From Worcestershire, Mrs EDWARDS, June 14, 1928.—J. E. LITTLE. "Presumably var. *leucanthum* Asch. & Graebn. Syn. Mitt.-Eur. Fl. = *G. Robertianum* L., fl. albo., Gaud. Fl. Helv."—A. E. WADE. "There is more than one white variety of this polymorphic species, including one with pale yellow anthers. These specimens have purple anthers and white pollen. White-flowered forms reproduce themselves from seeds. I have observed a long colony that has had white flowers since the beginning of this century. In France the species varies with purple, rose, and white flowers."—FRASER.

Erodium moschatum L'Hérit. Wool alien. [Ref. No. 762.] Great Wymondley, Herts, September and October 1928. Although the plants were strongly glandular, no musky smell was discernible. In material at Herb. Mus. Brit. several collectors have remarked upon the absence of any smell of musk in specimens gathered by them.—J. E. LITTLE.

Oxalis tetraphylla Cav. Alien, Mexico. Introduced in fields and growing in quantity at La Haule, Jersey, September 10, 1928.—L. ARSENE.

Trigonella M. procumbens (caerulea) Reichb. Burton-on-Trent, Staffs, July 1928.—G. C. DRUCE.

Medicago hispida Gaertn., aggr. Great Wymondley, Herts, August and September 1928. In this case a wool alien, due to the employment of shoddy waste as manure.—J. E. LITTLE.

Medicago arabica Huds. (*M. maculata* Sibth.). Hedge bank in lane, Bishop's Teignton, South Devon, June 12, 1928.—C. WATERFALL.

Medicago minima Desr. Wool alien. Great Wymondley, Herts, September and October 1928. The average size of these plants was very much larger than of our native plants as I have seen them on the breckland of Suffolk. One plant in particular was 2 ft, 6 in. long, with

stout stems and large leaflets. Doubtless this was due to the stimulus of the shoddy-waste used as manure.—J. E. LITTLE.

Trifolium ochroleucum Huds. Roadside near Cambridge, July 1928.—J. W. LONG.

Anthyllis Vulneraria L. On chalk cutting, Upton, Berks, June 1928. This has been sent to M. P. Riencourt de Longpré for his critical determination.—G. C. DRUCE.

Anthyllis Vulneraria L., var. *coccinea* L. Short sandy turf, Sennen Green, near Land's End, W. Cornwall, August 25, 1913.—R. B. ULLMAN. "Communicated by Ullman as *Anthyllis rubra* Gouan but is it not *Vulneraria* L., var. *bicolor* (R. & F.) ?"—P. M. HALL.

Vicia sylvatica L., f. *alba*. Wooded limestone slope near the Avon, below Tomintoul, Banff, July 18, 1905.—W. A. SHOOLBRED; comm. NATIONAL MUSEUM OF WALES.

Vicia Cracca L. (Fruits). Folly Alder Swamp, Hitchin, Herts, September 6, 1928.—J. E. LITTLE.

Vicia ——. [Ref. No. PP.612.] Ware, Herts, September 1929.—G. C. DRUCE. "Is not this *V. villosa* Roth?"—BRITTON.

Vicia lutea L. Sandy or rocky places among grass; bushes near the sea, valley between St Brelade's Church and La Moye School, Jersey, June 20 and July 21, 1928.—L. ARSENE. "Quite correct. A maritime plant, which must be looked for on the sandy and gravelly sea shore. Very marked features are the upper teeth of the calyx shorter than the tube of the corolla, and the lower three longer than it; as well as very short ovate stipules, half hastate towards the base of the stem. All the characters are present in my specimens, except a root to show that the plant is annual."—FRASER.

Vicia angustifolia L., var. *Bobartii* Forster. Railway banks at Goods Station, Dyserth, Flintshire, June 2, 1928.—C. WATERFALL. "*V. angustifolia*. Not var. *Bobartii*, which is a more slender plant and has upper leaves linear."—I. M. ROPER.

Vicia angustifolia L., var. *Bobartii* Koch. Cliff slopes, Polperro, E. Cornwall, June 1928. A Scandinavian specimen of var. *Bobartii*, which has recently come into my possession, is an excellent match of this Polperro plant.—F. RILSTONE.

Vicia angustifolia (L.) Reichard. [Ref. No. FF.50.] Albury, Herts, May 1928. This has also been sent to our French expert.—G. C. DRUCE.

Vicia hirsuta Gray. (Fruits). Purwell Field, Hitchin, Herts, July 20, 1928.—J. E. LITTLE.

Vicia tetrasperma Moench. (Fruits). Purwell Field, Hitchin, Herts, July 20, 1928.—J. E. LITTLE.

Rubus idaeus L., var. *obtusifolius* Willd. Misk Hills near Hucknall, Notts, July 21, 1928.—R. BULLEY. "Clearly not *obtusifolius* but depauperate *idaeus* L."—RIDDELSDELL.

Rubus Lindleianus Lees. By stream, Polperro, E. Cornwall, panicles July 9, 1928; leaves July 23, 1928.—F. RILSTONE. "Yes; nearly typical."—RIDDELSDELL.

Rubus argenteus Wh. & Nees, f. *glandulosa*. [R.N. 1900, 1903, 1909.] Sandling Park, E. Kent, July 18, 1927, seen in one copse only. Petals long, narrow elliptic, opening pink, afterwards nearly white. Sepals strongly reflexed. A shade form. Also from the South Downs around Fridon and up to the top of Cissbury Ring and slopes near Devil's Dyke, Brighton, W. Sussex [R.N. 1505 to 1510], July 1926. Sepals less strongly reflexed. This is the first record from E. Kent of this plant, or indeed of any form of *R. argenteus* Wh. & Nees. It is a plant I have collected and studied for many years and have had sent to me from Wilts and other counties. It is also the plant from Reigate Hill referred to by Rogers under *Gelertii* as passed by Gelert himself (Rogers *Handbook*, p. 56). True *Gelertii* does, I believe, occur in England, and a glandular form of true *argenteus* does occur in Surrey. But this plant is neither; nor (if we are to trust Sudre's description and plate) is it *R. alterniflorus* M. & L. as suggested in *B.E.C. Report*, 1927, p. 505. It is very different from *R. argenteus* Wh. & Nees as seen in Sussex, Cornwall, Monmouth, Glamorgan, and many other counties, in colouring, stem, etc. The most remarkable critical feature is provided by the panicle rachis which is covered closely with felt or very short hair (no long hair), with many or few glands, acicles, and long gland-tipped bristles, and is most variable in outline and leafiness. The plant of our list to which it is nearest critically is Rogers' *podophyllus*, I think, but it seems to be a form which is new and needs description and a name. There is an allied form which Barton and I found in quantity in N. Wales. This is even closer to *podophyllus*, but has peculiar features of its own which keep it well apart.—H. J. RIDDELSDELL "A shade form of *R. alterniflorus* M. & L."—WATSON.

Rubus Schlechtendalii Wh. & Nees. Shotover Hill, August 13, 1926 [R.N. 1565, 6]; near Wigginton Heath, August 20, 1926 [R.N. 1569]; Freeland, October 6, 1926 [R.N. 1570]; furzy field below Oatley Hill, July 31, 1926 [R.N. 1567], all v.-c. 23, Oxon. None quite typical and more under Sudre's *anglicus*. The nearest to Weihe's type is R.N. 1570 which, however, lacks the very large flowers and elongated fruits of the Mennighüffen plant. This type is described and figured by Weihe and, as is plain from my specimens from that locality, has a stem with decided but blunt angles, strong stout-based prickles moderately long and not infrequently falcate and stem sometimes a little sulcate. The Mor-

timer Common plant (Set No. 84 on which Sudre founded his var. *anglicus*) has stems rather more sulcate and rather less hairy than the Men-nighüffen plant, though still quite hairy; inflorescence shorter (not longer) but much less leafy; with rachis fork still weak though rather stronger than in type and much more numerous; peduncles shorter; branches patent-erect instead of strongly ascending, fruit smaller and rounder; leaf serrature entirely different. In fact my two sheets of Set No. 84 (Mortimer Common) do not agree with Sudre's description of his var. *anglicus*, which probably was made hurriedly or by some assistant with the result that the first half of it is apparently either incorrect or deceptive. *Schlechtendalii* is a variable species, further complicated by numerous forms (such as R.N. 1567 now distributed) intermediate between it and *macrophyllus*. Sudre does not seem to have got the hang of them.—H. J. RIDDELSDELL.

Rubus Godroni Lec. & Lam. Near Compton Wynyates, Warwick [R.N. 1881]; Sibford Heath, Oxon [R.N. 1882, 3], August 17, 1927; hedge near Paddlesworth [R.N. 1884], and near Sandling Junction [R.N. 1888], E. Kent, July 1927. *R. propinquus* P. F. Muell., to which Sudre and others refer the British *Godroni*, is in Focke's mature judgment simply *R. rhamnifolius* Wh. & Nees, a view which receives some support from Sudre's figure and description. According to Focke, *R. Godroni* proper has its headquarters in Great Britain, while *R. robustus* P. J. Muell. (renamed *dynatos* by Focke, whose batology is better than his knowledge of the classical languages) occurs here and there in England. Focke does not use the name *Winteri*. Until I see well vouched specimens of *propinquus* it seems to me best to retain the name *Godroni* Lec. & Lam. The E. Kent plant goes off from *Godroni* towards *robustus* but is not the latter.—H. J. RIDDELSDELL. "*R. Pseudo-bifrons* Sudre, not *Godroni*, which has a blunt angled stem with slender, hardly compressed prickles; a roundish terminal leaflet glabrous above, and bright pink flowers with stamens much exceeding the styles."—WATSON.

Rubus leucanthemus P. J. Muell. ? Fittleworth and Cowdray Park, W. Sussex, July 1926 [R.N. 1595, 1610, 1612, 1609]. This is one of the English forms which needs describing and naming. It is best for the moment to use the above name as a label which will not mislead. It is not *leucanthemus* P. J. Muell., for that is just white-flowered *leucostachys*; and it is not, I am sure, identical with Focke's *fuscus* f. *hirsutissima parce glandulosa* (=Sudre's *hirsutissimus*), being very different in panicle and leaf. I have *leucanthemus*? from many localities. It ranges from Dorset to Westmorland and Kent; and the *fuscus* f. from several localities. The two are unmistakably different.—H. J. RIDDELSDELL. "*R. vestitus*, forma *umbrosa*, nothing more."—WATSON.

Rubus lasioclades Focke. Paddlesworth Court Wood, E. Kent, July 1927 [R.N. 1870]. Some members may like a specimen from Marshall's locality, whence it was first identified in this country by Focke. A very late flowerer. The leaves only acquire their ragged look as they mature.

The probability is that it is a fixed hybrid of *leucostachys* and *rusticanus*, the species with which it usually occurs.—H. J. RIDDELSDELL.

Rubus adenanthus Boul. & Gill. From various spots in Cheshire, August 1926 [R.N. 1601, 2, 3, 6, 7, 8]. Well representing the Cheshire form of this species, and quite constant in all characters, except size. But it is not exactly the same as the Jersey plant which is a little less glandular and has rather stronger prickles and a more open panicle. Unfortunately the above name is impossible, as there is an earlier use of it for an extra-European species. The whole of our series from Jersey, Glamorgan, Cheshire, etc., will have to be newly described and given a name. Sudre reduces *adenanthus* Boul. & Gill. to a variety of *macrostachys* P. J. Muell., but it does not appear that he applies his name to the Jersey plant.—H. J. RIDDELSDELL. "I think not *adenanthus* but *R. granulatus* M. & L., to which Babington's *R. pygmaeus* (later changed to *R. praeruptorum*) belongs. Sudre says that *R. Bloxamianus* is the same thing as *R. granulatus*. This is, I feel sure, a mistake, and the way is therefore left open for my identification above."—WATSON.

Rubus mucronatoides Ley. Highmoor Wood, Almeley, Herefordshire, September 21, 1926 [R.N. 1613, 5, 6.]. Poor and late gathered, to fill gaps in herbarium until better specimens are available.—H. J. RIDDELSDELL. "Yes."—WATSON.

Rubus setulosus Rogers, forma. Freeland, Oxon, July 1927, [R.N. 1858, 1860, 2, 3, 6, 8, 1922]. Placed by Rogers under *anglosaxonicus* Gelert, which appears to be identical with *apiculatus* Wh. & Nees. Focke, at least, thinks so; though he omits all mention of *setulosus*, well marked form though it be. If it is kept under *apiculatus*, Rogers' name stands, but, if it is treated as a species, the name must be altered. Sudre arranges it as a var. *angusticuspis* of *obtruncatus* P. J. Muell. These Freeland plants may be well compared with Rogers' Cinnor Hill, 1891, sheet of *setulosus*, which differs somewhat from the common west country type, but is included in his description (1892). The chief difference lies in the broadish base of the terminal leaflet, which is frequently ovate or oval (not obovate) even to roundish; points shorter, etc. But some Freeland plants are nearer description than others.—H. J. RIDDELSDELL. "*R. cognatus* N. E. Br., as amended by Rogers."—WATSON. "But there is already a *cognatus* Boul. I put it as *Browneanus* in the List."—DRUCE.

Rubus echinatoides Rogers, forma. Sprouston, E. Norfolk, July 1925 [R.N. 1414, 1415, 1417]. Rogers so named this plant many years ago as a form with weak prickles.—H. J. RIDDELSDELL. "This is *Lintoni*."—WATSON.

Rubus rudis Weihe. In open woodland on Wotton Hill, West Gloucester, August 7, 1928.—J. W. WHITE. "Right."—RIDDELSDELL.

Rubus minutiflorus P. J. Muell. Near Sapey Common, Herefordshire, September 22, 1927 [R.N. 1804]. Though this has long passed by the name of *minutiflorus*, it is not, I believe, Mueller's plant. It has much of the look of *pallidus* Wh. & Nees in some ways, but is probably a local (Herefordshire and Worcestershire) form which needs describing and placing among Rogers' *sub-Bellardiani*. Continental botanists differ widely as to *minutiflorus*.—H. J. RIDDELSDELL. "*R. angustifrons* Sudre. *Minutiflorus* has broad ovate leaves."—WATSON.

Rubus corylifolius Sm., nearest var. *sublustris* Lees, but stem rather angular, and prickles not much scattered. Cross-roads near Rolbright Stones, Oxon, August 3, 1926 [R.N. 1769]. I believe that the *corylifolius* of the Scandinavians is our *sublustris*.—H. J. RIDDELSDELL. "Yes."—WATSON.

Rubus conjugens Bab. Near Chalcombe, Northants, August 10, 1926 [R.N. 1775, 6]; Oatley Hill, Warwick, July 31, 1925 [R.N. 1773].—H. J. RIDDELSDELL. "Yes."—WATSON.

Potentilla argentea L. [Ref. No. 2422.] With alien spp. at Hythe Quay, Colchester, N. Essex, August 18, 1928. Certainly introduced with alien species. A much more robust and taller form than that found in native localities in the district.—G. C. BROWN.

Potentilla procumbens Sibthorp. [Ref. No. 3376.] Towyn, Merioneth, July 21, 1928. These specimen from Towyn are interesting from the circumstance that (apart from *P. Anserina*) *P. procumbens* appears as the only representative of the genus in that vicinity. *P. reptans* and *P. erecta* (*Tormentilla*) seem quite absent. I am not acquainted with a similar instance where *P. procumbens* occurs in a district unaccompanied by either *P. reptans* or *P. erecta*.—C. E. BRITTON.

Potentilla erecta × *reptans*. [Ref. No. 3341.] Banstead Down, Surrey, July 1, 1928. Some specimens closely approach *P. procumbens* from Towyn but differ essentially in being barren plants, whilst the Towyn *procumbens* fruited plentifully. The influence of the parent species upon the characters of the plants is well shown though, on the whole, *P. erecta* is perhaps dominant.—C. E. BRITTON.

Alchemilla pratensis Schmidt. Middleton-in-Teesdale, Durham, June 1928.—G. C. DRUCE. "Typical plants from the same locality as var. *aprica* G. C. D. My specimens are rightly named *A. pratensis*. The stems and petioles are densely covered with spreading hairs while the pedicels and urceoles are glabrous. A feature of the specimens is their small size and they must have come from a high elevation. In the valleys of Kincardineshire and N. Aberdeen the whole plant is very much larger, with broad leaves."—FRASER.

Alchemilla alpestris Schmidt, f. *aprica*. Middleton-in-Teesdale, Durham, June 1928. These small compact plants were gathered on a dry bank overlooking the Tees at Middleton, Durham.—G. C. DRUCE.

Alchemilla alpestris Schmidt. High Force, Durham, June 1928.—G. C. DRUCE.

Rosa stylosa Desv., var. *pseudo-rusticana* Crép. Field, Featherbed Lane, Clutton, N. Somerset, July 10, September 18, 1928.—I. M. ROPER. "A *stylosa* form, but not var. *pseudo-rusticana*. Its globose fruit makes it var. *lanceolata*. The flowers appear to have been pink. Those of *pseudo-rusticana* should be white, and it has other important differences."—WOLLEY-DOD.

Rosa stylosa Desv., var. *systyla* Bak. [Ref. No. 3417.] Headley, Surrey, August 25, 1928. Identified by Lt.-Col. A. H. Wolley-Dod, who has seen the whole gathering. The Colonel's comment is "All the characters point to *R. stylosa*, var. *systyla*, except the important one of the disc, which is only slightly conical. Keller insists on a conical disc for all varieties of *R. stylosa* but, I think, this may pass. It is interesting as showing the passage to the Deseglisei group of *R. dumetorum*, which led to the error in naming so many specimens from S.W. England *R. stylosa*, var. *leucochroa* Desv., instead of *R. dumetorum*, var. *incerta* W.-Dod."—C. E. BRITTON.

Rosa canina L., var. *curticola* (Pug.). Filton Meads, Bristol, W. Gloucester, July 8, September 11, 1928. Flowers white, the styles glabrous.—I. M. ROPER. Not *curticola*, which is one of the Transitoriae. This belongs to the Dumales and is quite a good form of var. *cladoleia* (Rip.), the name I now use instead of var. *leiostyla* (Rip.)."—WOLLEY-DOD.

Rosa dumetorum Thuill., var. *ramealis* (Pug.). Michelgrove Woods, W. Sussex, October 3, 1928.—I. M. ROPER. "This cannot be var. *ramealis* on account of its hispid peduncles. It has some marked features of the Stylosae, especially the glabrous styles on a conical disc, with longish, weakly hispid peduncles. The leaflets also conform to those of *R. stylosa* vars., but I never saw any member of that species with such narrow fruits. It is more likely to be some new variety of *R. stylosa* than one of the Deseglisei group, which is the only alternative."—WOLLEY-DOD.

Rosa dumetorum Thuill., var. *incerta* Déség. Thicket, Featherbed Lane, Clutton, N. Somerset, July 10, September 18, 1928.—I. M. ROPER. "I think neither var. *incerta* nor a *dumetorum* form at all, but surely the same as Miss Roper's rose from the same station, labelled *R. stylosa*, var. *pseudo-rusticana*, which I have called var. *lanceolata*. The connection between forms of var. *incerta* and *R. stylosa* is often very close."—WOLLEY-DOD.

Rosa glauca Vill., var. *Afzeliana* (Fries). Blore, Staffordshire, September 1928. Professor G. Boulanger suggested this name for the very handsome *Rosa glauca* which, from its round red fruits and persistent sepals, at a distance looked like a *mollis* Rose. One may add that, as long ago I had discovered, *R. dumalis* Becket cannot be applied to our

biserrate *canina* forms, since it is really synonymous with an older name than *glauca* Villars. Strictly speaking, it should replace it, but I am too weak-kneed to make such a confusing change so I leave *Afzeliana* Fries as subordinate to *R. glauca*.—G. C. DRUCE. "Correctly named. It might be written as Dr Druce has written it, which is certainly better than making *R. Afzeliana* Fr. the sub-species, as is done on the Continent, since *R. glauca* Vill. antedates it considerably, but I prefer the notation *R. glauca* Vill., var. *Reuteri* Cott."—WOLLEY-DOD.

Rosa micrantha Sm., var. *trichocarpa* Rouy. [Ref. No. 3433.] Bantstead Downs, Surrey, September 2, 1928. Identified by Lt. Col. A. H. Wolley-Dod, who has seen the whole gathering, and comments as follows: "I can match this exactly by other Surrey specimens, and feel sure that Dr Keller would pass it, though he shares my doubt as to Rouy's variety being the same as Boullu's." I feel some degree of uncertainty that this plant is correctly placed under *R. micrantha* Sm. The habit and characters point rather to *R. rubiginosa* L. from which it is separated chiefly by the glabrous styles.—C. E. BRITTON.

Rosa rubiginosa L., f. *Corstorphinae* Wolley-Dod. Aberfeldy, Mid-Perth, August 20, 1928.—J. G. GLASSFORD.

Rosa omissa Déség., f. *Sherardi* (Davies). Mawsley Wood, Northants, September 1928.—G. C. DRUCE. An *omissa* form, no doubt, though the short, erect, connivent sepals give it a strong look of *R. mollis*. But I should certainly label it *R. omissa* Déség., var. *typica* R. Kell., not *Sherardi*, which should have no subfoliar glands and presents other differences."—WOLLEY-DOD.

Rosa pimpinellifolia L., var. *rosea* Koch. Sand dunes, Le Quennevais, Jersey, July 10, 1928.—L. ARSENE.

Rosa —. [Ref. No. Z.38.] Epsom Common, Surrey, September 9, 1928.—J. E. LOUSLEY. "This is one of the Dumales, coming nearest to var. *Carioti* (Chab.) of the names in our list, but with narrower fruit. All the fruits have broken off in my specimen, but they look as if they had had very short peduncles."—WOLLEY-DOD.

Cratageus monogyna Jacq., var. *splendens* Dr. Mawsley Wood, Northants, September 1928. The fruits are not quite so extreme in size as those of the Akeley plant in Buckinghamshire.—G. C. DRUCE.

Ribes rubrum L., var. Beaconsfield, Bucks, July 1928. Mr Fraser names this *sativum*.—Mrs WEDGWOOD.

Cotyledon Umbilicus-Veneris L. Old walls about Bishop's Teignton, South Devon, June 1928.—C. WATERFALL.

Drosera obovata M. & K. Loch Langavat, N. Harris, July 1928.—G. C. DRUCE.

Epilobium parviflorum Schreb. Damp places, Le Quennevais, Jersey, July 21, 1928. Collected on the marshy borders of the Quennevais Pond, near the Race Course. It is very likely the locality cited in Babington's *Primitiae Flor. Sarn.*, p. 35, as the habitat of a special variety. In my opinion, the Quennevais specimens do not differ from those I collected or examined elsewhere in the Island. They are not more woolly and their leaves are not wider. In some of them, all the leaves seem to be opposite, but usually the superior leaves are alternate. The Jersey plant is the same that grows on the coast of Brittany and Normandy and should perhaps be placed under variety *maritimum* Rouy. It is densely woolly, the leaves very variable, often ovate-lanceolate, rather than narrowly lanceolate, and the stem is not uncommonly prostrate or decumbent at the base.—L. ARSENE. "I am glad Bro. Louis Arsène has brought this plant forward. It is a very distinct variety and I tried unsuccessfully some years ago to find a published description that would fit it. It is not confined to the sea coast. I have gathered it in the Via Gellia near Matlock and at Somersall near Chesterfield, Derbyshire, and Dr W. J. Fordham has sent me similar plants from Bubwith, near Selby, Yorkshire. Rouy's description of var. *maritimum* in Fl. Fr. vii., p. 192, runs thus:—'S. *maritimum* Nob. [i.e. Rouy]. *E. molle* form. *maritimum* Lévl.—Plante couchée à la base, puis dressée, velue-blanchâtre, feuilles dressées et rapprochées, plus larges, non étalées.' In having the leaves 'non étalées' the Via Gellia plants agree with this description more closely than do Bro. Louis Arsène's specimens, while plants on the Great Orme have broadly lanceolate or even ovate leaves and are probably truly var. *maritimum* Rouy. However, it seems probable that Bro. Louis Arsène's plant, the Derbyshire and Yorkshire plants, and that of the Great Orme are merely forms of one densely villose variety which varies somewhat in the breadth and setting of the leaves and which may include vars. *mollissimum* Lévl. and *menthoides* Boiss., as well as *maritimum* Rouy."—DRABBLE.

Epilobium tetragonum L., forma. Bradmore Pond, Northants, July 1928.—G. C. DRUCE. "Ordinary *tetragonum*, I think."—DRABBLE.

Epilobium lanceolatum Seb. & Maur. Dry places, roadsides, banks, walls, St Saviour's, Jersey, July 1, 1928.—L. ARSENE. "Has all the characters of *E. lanceolatum*, but judging by the length of the stem of one of my specimens and the withered leaves at the base it must have been growing in rank vegetation, perhaps on a grassy bank."—FRASER. "Yes."—DRABBLE. "My sheet of this represents an average form of the plant as we know it in Cornwall, but the species varies considerably. The stout congested form I this year distributed from Fowey is rather unusual and, as it grew out of a dry stone hedge, can hardly owe its robustness to good feeding. Other variations noticed are in the greater or less obtuseness of the leaf-tip and the frequent tendency to produce narrow, semi-folded stem leaves. A rather more distinct form occasionally met with is more diffuse in habit, with fewer flowers, a wavy rachis and leaves narrowly oval obtuse or somewhat lanceolate obtuse. A sheet

of this form collected at St Blazey (v.-c. 2) by Dr C. C. Vigurs in 1912 bears the note 'a state, apparently shade-grown = forma *umbrosa* Haussk. Monogr. fide E. S. Marshall,' to which Dr Vigurs has added 'not shade grown.' The latter agrees with my experience."—F. RILSTONE.

Epilobium lanceolatum Seb. & Maur. Garden weed, Brookfield, Bovey Tracey, South Devon, June 1928.—C. WATERFALL. "Yes."—DRABBLE.

Epilobium lanceolatum S. & M. Banks in lane, Fowey, E. Cornwall, July 1928. Of unusually robust growth.—F. RILSTONE. "Yes."—DRABBLE.

Danaa cornubiensis Burnat. Near Burnham Beeches, Bucks, August 5, 1928. This interesting species appears to be increasing in this isolated locality, and is now in such large quantity that these specimens can be distributed without fear. In weighing the evidence for its status in this country it may be worthy of note that the neighbourhood is in some respects an outpost of the western flora. For instance the most easterly locality for the minute hepatic, *Microlejeunea ulicina*, is on a few tree trunks there.—C. V. B. MARQUAND.

Smyrnum Olusatrum L. By the Battleaxes, Wraxall, North Somerset, May 25, 1928.—J. W. White. "Rightly named. Good specimens. The leaves are often faulty, because they die away long before the large, black fruits drop."—FRASER.

Bupleurum lancifolium Hornem. Burton-on-Trent, Staffs, July 1928.—G. C. DRUCE.

Chaerophyllum sylvestre (L.) S. & T. [Ref. No. FF.53.] Abingdon, Berks, June 1928. This is one of the forms of my var. *latisepta*.—G. C. DRUCE.

Oenanthe Lachenalii C. Gmel., var. *minima* Rouy & Camus. Lady's Island Lake, Co. Wexford, August 1928. Described as "Plante de 5-10 cm., ombelles petites, à 1-2 au plus à 5-8 moyons courts inégaux; involucres nuls ou oligophylles, involucelles à folioles moins promptement caduques que celles de type, feuilles à segments peu nombreux, elliptiques ou oblongs." Cultivation should be tried to see if this is a real variety or a reduced edaphic state. It was very consistent for some distance round the brackish water of the lake, nor did I see the type near.—G. C. DRUCE. This seems to come under Rouy and Camus's description in *Fl. Fr.* vii., p. 261, but is it anything more than a dwarf state?"—DRABBLE.

Caucalis daucoides L. Burton-on-Trent, Staffs, July 1928.—G. C. DRUCE.

Caucalis nodosa Scop. Hedge bank on roadside above Bishop's Teignton, South Devon, June 14, 1928.—C. WATERFALL.

Sambucus racemosa L. Berkhamstead Common, Hertfordshire, May 12, 1928. I found about seven bushes growing wild on the common near the entrance to Ashridge Park, whence presumably this plant was originally bird-sown. One bush appeared much older than the others and may be the parent of the other six.—J. A. WILLIAMS.

Sambucus Ebulus L. Near East Harting, Sussex, August 4, 1928. A long hedgerow and a very beautiful sight.—W. BIDDISCOMBE.

Sambucus Ebulus L. Near Stevenage, Herts, July 1928.—I. HELSBY.

Rubia peregrina L. Dry, bushy and rocky places, Beupora, Jersey, July 21, 1928.—L. ARSENE. "This interesting, broad-leaved, almost orbicular form looks different from the normal British plant and agrees well with Rouy's description of his var. *Bocconi* in Fl. Fr. viii., 2, 1903."—C. E. SALMON. "Is not this var. *Bocconi* Rouy (*R. Bocconi* Petagna)? I gathered a similar form at St Ives, Cornwall, some years ago."—DRABBLE.

Sherardia arvensis L. Among long grass on Railway Bank, the Goods Station, Dyserth, Flintshire, June 2, 1928.—C. WATERFALL.

Valerianella carinata Lois. Garden weed, Huntley, Bishop's Teignton, South Devon, June 11, 1928.—C. WATERFALL. "Yes; this is *V. carinata* Loiseleur not L. The boat-shaped cavity between, but outside, the two barren cells is very peculiar. The carina or keel is also there, on the back of the fertile cell, but it is not strong."—FRASER.

Erigeron acre L. Railway Banks, Cinderhill, Nottingham, September 6, 1928.—R. BULLEY.

Inula crithmoides L. Maritime rocks, Gros-Nez, Jersey, August 1, 1928.—L. ARSENE. "I agree with the name. Well dried specimens of this fleshy-leaved Composite. It seems confined to maritime rocks in the west of Britain, from Wigton to south-west Wales and Cornwall. I have gathered it on maritime rocks in Glamorgan."—FRASER.

Pulicaria vulgaris Gaertn. [Ref. No. Z.54.] In plenty, West End, Esher, Surrey, August 19, 1928.—J. E. LOUSLEY.

Diotis maritima L. Abundant on the seashore in the "Landes," near the mouth of the River Adour, 4 miles west of Bayonne, S.W. France, July 29, 1927.—C. V. B. MARQUAND. "Cassini is the authority for the species in the genus *Diotis*."—DRUCE.

Anthemis Cotula L. [Ref. No. 4125.] Manure heap near a wooden poultry house, west side of the Lorns, Stromness, Mainland, Orkney,

alt. 200 ft., October 24, 1928. Not native. One plant in full flower only seen by me. Fresh leaves and flowers with a disagreeable odour, especially when crushed. Corolla of ray florets with a white limb and pale yellow tubes, with style rudimentary; of disk florets yellow and 5-lobed at the apex, style and its two recurved branches yellow; receptacle conical, clothed with linear-subulate acute scales. Also [Ref. No. 4126] from artificial grassy pasture near a stone poultry house, Ness, Stromness, Mainland, Orkney, October 24, 1928. Only three plants seen.—H. H. JOHNSTON.

Chrysanthemum Leucanthemum L., form or var. Off grass covered stump in garden, Brookfield, Bovey Tracey, South Devon, July 9, 1928.—C. WATERFALL.

Artemisia. On made ground, Bishop Road, Redland, Bristol, October 14, 1928. Closely allied to *A. vulgaris*, but six feet high, candelabrum form. A striking plant.—J. W. WHITE.

Senecio erraticus Bert., var. *intermedia* Dr. Shefford, Berks, August 1927. I hesitate whether to put this intermediate as a variety of *erraticus* or *aquaticus*.—G. C. DRUCE. "Has the few small bracts of the outer series of the capitulum, but the branches are fewer than in the type, and the leaves, so far as they are shown, have a smaller terminal lobe than the type, and these seem to me the features of the variety."—FRASER.

Senecio squalidus L., var. *subinteger* Dr. Oxford, June 1928. This originally came up as a mutant in my garden to which a solitary example of type *squalidus* had been brought the year before. The plant rapidly spread and among the progeny this form reproduces itself.—G. C. DRUCE. "An addition to the forms of this polymorphic species, which is for ever varying in the amount of division of the leaves. I have some seedlings showing similar leaves to this but no adult specimens, though they are very varied in width and fission."—FRASER.

Senecio viscosus L. (Achenes). Waste, near Gas Works, Hitchin, Herts, September 3, 1928.—J. E. LITTLE.

Senecio viscosus L. Railway sidings, Netherfield, Notts, August 31, 1928.—R. BULLEY.

Senecio Cineraria DC. Stony hillside facing sea, near Daddy Hole Plain, Torquay, South Devon, June 29, 1928.—C. WATERFALL.

Senecio integrifolius Clairv. = *campestris* DC. Pepper Box Hill, near Salisbury, May 1928.—W. BIDDISCOMBE.

Centaurea Drucei C.E.B. [Ref. No. 3414.] Headley, Surrey, August 25, 1928. Characteristic specimens and frequent at Headley, Surrey.—C. E. BRITTON.

Centaurea nemoralis Jordan (fide Charles Edward Britton, who saw this specimen on November 20, 1928). [Ref. No. 4130.] Artificial grass field, eight years in grass, 370 ft. alt., Geo, Firth, Mainland, Orkney. Not native. A weed of cultivated land. Rare. Sixteen plants, in withered flower (no fruit developed) and sparingly in flower, only seen by me. Corolla purple. Style and its two divergent branches pale purple. This alien species was found by John Sinclair, residing at Moan, Firth, Mainland, November 2, 1928.—H. H. JOHNSTON.

Crepis paludosus Moench. [Ref. No. Z.3.] Meadow above High Force, Durham, July 15, 1927.—J. E. LOUSLEY.

Hieracium Pilosella L. [Ref. No. FF.54.] Upton, Berks, June 1928. Dr Zahn has identified this. It is 419/1 f. of my List as *subvirescens* (N.P.) and a N.C.R.—G. C. DRUCE.

Hieracium pratense: Old Garden, Nottingham, July 4, 1928.—R. BULLEY. "See 419/5. *H. colliniforme* N. & P. of my List."—DRUCE.

Hieracium rubicundiforme Zahn. Ex Clova, H.O., August 1927.—G. C. DRUCE.

Hieracium pellucidum Laest., teste Zahn. [Ref. No. FF.58.] Upton railway, Berks, June 1928. I thought it would be well to have authenticated examples named by Dr Zahn. The seeds came to this place by wind after the Chalk cutting had been made about 4 years. They have now much increased.—G. C. DRUCE.

Hieracium stenolepis Lindeb. Limestone cliffs, Craig-y-cilau, Breconshire, June 10, 1926.—A. E. WADE and H. A. HYDE; comm. NATIONAL MUSEUM OF WALES.

Hieracium surrejanum Hanb. Witley, Surrey, July 1928. Probably some of these come under the var. *megalodon* Linton, but the line of demarcation is not clear.—G. C. DRUCE.

Hieracium pulmonarioides Vill. Nottingham Castle, August 28, 1928.—R. BULLEY.

Hieracium umbellatum (L.) Zahn. Border of Park Wood, near Devauden, Monmouth, August 9, 1917.—W. A. SHOOLBRED; comm. NATIONAL MUSEUM OF WALES.

Taraxacum aequatum Dahlst., nova sp. Harwell, Berks; Shipton, Oxon, May 1928.—G. C. DRUCE.

Taraxacum caphocentrum Dahlst., nova sp. Didcot, Berks, May 1928.—G. C. DRUCE.

Sonchus oleraceus L., var. *triangularis* Wallr. Leaves runcinate-pinnatifid with a large, triangular, terminal lobe, the lateral sublanceolate. Markham Farm, near Portbury, N. Somerset, November 14, 1928.—J. W. WHITE. "I have no description of this, though it is evidently correct. The terminal lobe of the cauline leaves is triangular-hastate and often truncate at the base, though this is not constantly so. One leaf is lanceolate, repand-dentate, without a terminal lobe. It is a polymorphic species, and is reputed to hybridise with *S. asper*."—FRASER. "By no means an extreme form, and hardly typical."—DRUCE.

Gaultheria Shallon Pursh. Naturalised on moor near Bumper Castle, Derbyshire, September 1928. This is spreading fast here, but it owes its origin to a former nursery where many Ericaceae are grown.—G. C. DRUCE.

Calluna vulgaris Hull, f. *pubescens* Huds. Moorland, The Bickerton Hills, Cheshire, September 5, 1928.—C. WATERFALL.

Rhododendron ponticum L. Seedlings on heathy moor above Matlock, Derbyshire, September 1928.—G. C. DRUCE.

Gentiana lingulata Ag., var. *praecox* Towns. [Ref. No. 29.] Bonchurch Down, near Ventnor, Isle of Wight, May 9, 1925.—P. M. HALL.

Polemonium caeruleum L. Mulham Cove, West Yorks, July 26, 1928.—W. A. SLEDGE.

Symphytum peregrinum Ledeb. Humberstone, Leicester, July 1916.—A. R. HORWOOD; comm. NATIONAL MUSEUM OF WALES.

Anchusa officinalis L. Waste ground, Cowes, September 1928.—J. W. LONG.

Pulmonaria angustifolia. Near Brading, Isle of Wight, April 8, 1928.—I. HELSBY.

Myosotis palustris Hill. [Ref. No. 3409.] Waltham Abbey, N. Essex, July 18, 1928. A small-flowered form with corolla about 5 mm. in diameter, and with stems and leaves with appressed hairs. Would perhaps be named var. *strigulosa* (Reichb.).—C. E. BRITTON.

Myosotis collina Hoffm., forma. Cothill, Berks, May 1928.—G. C. DRUCE.

Echium arenarium Guss. Barry Docks, Glamorgan, August 1928. Plant completely prostrate, sending out in all directions stems covered with a profusion of flowers from early May until late October. This species was first noticed by the writer in July 1927 when it was growing in company with one or two plants each of *Polycarpon tetraphyllum* L., *Trifolium arvense* L., *Ornithopus compressus* L., *O. pinnatus* (Mill.)

Dr., *Caucalis latifolia* L., *Gnaphalium luteo-album* L., *Anthemis mixta* L., *Galactites Galactites* (L.) Dr., *Tolpis barbata* Gaertn., *Antirrhinum Orontium* L., *Corrigiola littoralis* L. and *Rumex bucephalophorus* L. The *Echium* was the only plant of the thirteen that appeared a second year.—R. L. SMITH.

Sibthorpia europea L. Wet and shady places, hedges and damp banks among moss and springs, St Brelade's, Jersey, July 21, 1928.—L. ARSENE. "A rare plant in Britain, correctly named. It likes a shady, moist place in which to grow. It is confined to the west of England, from S. Wales to Cornwall, from which latter county I have it. The rainfall is much greater in the western than in the eastern counties; but it has established itself spontaneously on a lawn at Kew where the subsoil is sand. The garden is slightly sunk, and it also has the shade of trees to some extent."—FRASER.

Veronica Beccabunga L., forma. Menmarsh, Oxon, June 1928. A pretty form very near to, but with somewhat broader leaves than, the var. *elegans*.—G. C. DRUCE. "This seems to me to be quite ordinary *Beccabunga*."—DRABBLE.

Veronica Tournefortii Gmel., forma. [Ref. No. CC.13.] Harwell, Berks, July 1928. These have the aspect and corolla of var. *Corrensiana* (teste C. E. Britton) but lack the secondary serration of the leaves. Similar plants were found near Penley Wood, Bucks.—G. C. DRUCE. "This plant is intermediate between the two extremes commonly found in this country, viz., the luxuriant dark green plant with crowded leaves and deeply-coloured flowers, and the slender paler plant with pale flowers and with small leaves separated by long internodes. Both these forms are possibly produced in response to soil conditions. In our plants slender habit and small leaves seem very rarely to be correlated with crowded growth (*i.e.*, short internodes) as shown in some continental specimens."—F. RILSTONE.

Veronica persica Poir., var. *Corrensiana* (Lehm.). [Ref. No. 3462.] Ashtead, Surrey, October 14, 1928. An account of this var. appeared in *Journ. Bot.*, 42, 1928. The examples distributed are quite characteristic and show the deeply incised leaves, with secondary dentition, and the broad sepals which are not more than subacute. The corolla of the living plants was of a uniform deep blue colour and all segments were equally strongly veined.—C. E. BRITTON.

Veronica persica Poir. [Ref. No. 3283.] Walton-on-the-Hill, Surrey, October 2, 1927. This is a form with deeply incised leaves with serratures mostly simple, acute sepals, and corolla blue with the lower segment much paler or even whitish. It is not an uncommon form and cannot be referred to either var. *Aschersoniana* (E. Lehm.) or var. *Corrensiana* (E. Lehm.).—C. E. BRITTON. "Dr Thellung gave good reasons for using the older name *Tournefortii*."—DRUCE.

Veronica agrestis L., var. *Garckiana* Fournier. [Ref. No. 3458.] New Malden, Surrey, October 6, 1928. The name of this var. is correctly that given here, and not *Garkiana* as mis-printed in *Journ. Bot.*, 43, 1928. This is the common form of the species with the capsules, as described by Garcke (*Ill. Fl. v. Deutschl.*), glandular-ciliate at the margin and with scattered glandular hairs on the sides (or glabrescent below). Var. *Boreana* is the plant described by Boreau, and has the capsule clothed with crisp eglandular hairs mixed with straight glandular hairs and is much rarer.—C. E. BRITTON.

Veronica polita Fr., var. *Thellungiana* Lehm. [Ref. No. 3281.] Walton-on-the-Hill, Surrey, October 2, 1927. The usual autumnal growth.—C. E. BRITTON.

Veronica polita Fr., var. *Thellungiana* (Lehm.). [Ref. No. 3152.] Ashtead, Surrey, June 19, 1927. Small specimens characteristic of the spring state of this species.—C. E. BRITTON.

Euphrasia brevipila Burn. et Gremli. [Ref. No. 3380.] Towyn, Merioneth, July 23, 1928.—C. E. BRITTON. "Small-flowered *E. brevipila* with several interesting characters. The foliage is much lighter green than is usual and possesses a very abundant supply of unusually stout glandular hairs."—PEARSALL. "Yes; *brevipila*."—DRABBLE.

Euphrasia occidentalis Wettst. [Ref. No. Z.25.] Knocke-sur-mer, Belgium, July 13, 1928.—J. E. LOUSLEY. "These specimens are practically eglandular but extremely setose on the leaf-margins. Wettstein considered *E. occidentalis* to be very near *E. curta* in habit, size and form of flowers, and in general hairiness. These plants suggest the latter species but are, I think, correctly named."—PEARSALL. "Yes; *occidentalis*, but the specimens I have seen are entirely without stalked glands. The sessile glands usually present in all the hemiparasitic Scrophulariaceae, are well developed."—DRABBLE.

Euphrasia gracilis Fr., fide W. H. Pearsall. Colm Top, near Belfast, Co. Antrim, August 29, 1928.—I. M. ROPER. "Typical examples of *E. gracilis*."—PEARSALL. "Yes; *gracilis*."—DRABBLE.

Euphrasia gracilis Fr. [Ref. No. 3383.] Abergynolwyn, Merioneth, July 24, 1928.—C. E. BRITTON. "*E. gracilis*, but very young. The few fruits are immature and the spike not fully developed."—PEARSALL. "Probably young and very small *gracilis*. The habit and the tooting of the stem-leaves resemble *scotica* but the floral characters seem to indicate *gracilis*."—DRABBLE.

Euphrasia Rostkoviana Hayne. Field near Rolven, Carnarvonshire, September 1928.—A. WILSON. "Typical *E. Rostkoviana*, with some of the longest and most flexuous glandular hairs I've yet seen. The flowers are smaller and paler in colour than usual."—PEARSALL. "Yes; *Rostkoviana*."—DRABBLE.

Verbena officinalis L. Waste ground, opposite Bovey Potterne, South Devon, July 2, 1928.—C. WATERFALL.

Mentha longifolia Huds., var. *pulverulenta* Strail. [Ref. No. Z.104.] Agreed to by Mr Fraser. On common land near Tadworth Station, Surrey, September 2, 1928.—J. E. LOUSLEY. "The only alteration I would make is to write it *longifolia* Huds., var. *pulverulenta* (Strail). The latter described it as a species. The feature of it is the mealy pubescence. Some sheets of it have passed through my hands previously but they were all collected in Kent by the late E. S. Marshall. This is a new record."—FRASER.

Mentha piperita L. Cookridge, Yorks, September 26, 1928.—W. A. SLEDGE.

Mentha piperita L., var. *subcordata* Fraser. One lot from Friday Street, Surrey, August 28, 1927; another lot, cultivated at Kew, from Friday Street, Surrey, September 3, 1928. Unfortunately those gathered at Friday Street were not in bloom and I was unable to get there later in the season. The specimens do not show the subcordate base of the leaf so well as the cultivated ones, but there were plenty of plants at Friday Street that did so though they were less advanced than those I gathered.—J. FRASER.

Mentha aquatica × *arvensis*. Lane near Upper Diddlesfold, Lurgers-hall, W. Sussex, September 1, 1928.—R. J. BURDON. "A very untypical state of ×*M. verticillata* L., var. *paludosa* Sole. Typically it is one of the most hairy varieties of the hybrid. Sole, *Menth. Brit.*, t. 22, shows a subspicate form which I regard as the best form of the plant. It is very inconstant in this respect whether wild or cultivated, and even in the same spot in different years, according to the rainfall. The verticels may number 1-3 in very dry seasons in the open, or they may number 7-10 without being subspicate, or the main axis may terminate in a pair of leafy bracts, but when the stems are interlaced with a hedge there may be 1-5 pairs of leafy bracts. The leaves are always elliptic, rarely lanceolate-elliptic and roundly obtuse to subacute. In water, in hedges, or when cultivated, the plant loses a considerable amount of its hairiness. The calyx teeth, from a broad triangular base, suddenly narrow to a slender point."—FRASER.

Mentha rubra Huds. [Ref. No. 1778.] Roadside, Alphamstone, N. Essex, August 26, 1928. In great quantity and established for many years. Named in 1921 by Dr Thellung, but Dr Druce says *in litt.*, June 31, 1921, "I hesitate here." Odour perhaps rather more pleasant than ordinary *rubra*.—G. C. BROWN. "It is ×*M. rubra* Sm., var. *varipila* Briq. The stems, leaves and bracts are more or less hairy or thinly pilose, as the varietal name indicates. Hudson's description of his *M. rubra* says the stems are diffuse (caulibus diffusis), so that I feel on safer grounds with Smith's description."—FRASER.

Mentha arvensis L., var. Chalky field, Henley, Oxon, September 1928.—G. C. DRUCE. "Yes; the form I call *M. arvensis* L., f. *hirtipes* Fraser. The type of Linnaeus has glabrous pedicels to the flowers."—FRASER.

Mentha arvensis L., var. *densifoliata* Briq., teste J. Fraser. [Ref. No. Z.100.] Barrons Pond, Epsom, Surrey, September 15, 1928.—J. E. LOUSLEY. "I agree. The variety varies greatly according to environment. In the open, or amongst thin corn, it branches freely, with shorter internodes. The broadly ovate leaves, broadest near the base, with 7-11 serratures or crenatures on each margin, are the main features."—FRASER.

Mentha arvensis L., f. *angustifolia* Fraser, teste J. Fraser. [Ref. No. Z.103.] By Cutt Millpond, Puttenham, Surrey, August 26, 1928.—J. E. LOUSLEY. "I agree. I have gathered a narrower-leaved wild plant, and after 4-5 years of cultivation the leaves got considerably broader but retained the tapering outline at both ends."—FRASER.

Mentha arvensis L., var. *agrestis* (Sole) = *M. arvensis* L., var. *Scribidae* Briq. Oatfield, Cambridge Batch, Bristol, N. Somerset, August 2, 1928.—I. M. ROPER. "A little less hairy than usual, but otherwise quite typical. The very broad, almost orbicular leaves and short petioles are characteristic of the variety. The plaiting or rugosity of the fresh leaves is lost in drying."—FRASER.

Thymus britannicus Ronniger. Rock face by road, Kellow, Polperro, E. Cornwall, July 28, 1928.—F. RILSTONE.

Thymus britannicus Ronniger. Cliff slopes, Polperro, E. Cornwall, July 29, 1928. By Dr Ronniger's Key both these gatherings of plants with goniotrichous flowering shoots and hirsute leaves run down to *T. britannicus*, but the Kellow plant is much the more hairy.—F. RILSTONE.

Calamintha sylvatica Bromf. Hedgerow, Apes Down, Isle of Wight, August 1928.—J. W. LONG. "Correctly named. I am pleased Mr Long did not name it *C. grandiflora* Moench, a beautiful old garden plant. I see that Coste, *Fl. de France* iii., 96, names it *C. officinalis* Moench (*C. sylvatica* Bromf.). Surely it is time these names should be stabilised."—FRASER.

Satureia ? *villosa* (Boiss.) Dr. (*Calamintha baetica* Pugsl.). Corfe Castle, Dorset, September 1928.—G. C. DRUCE. "The specimens agree with others from Corfe Castle named *Calamintha baetica* Pugsl. The calyx measures 6.5-8 mm. to the tip of the longest teeth. Specimens I have seen named *C. baetica* Boiss. & Reut. from Spain and Portugal in Herb., Kew have a shorter calyx, measuring 5.5-6.5 mm. These continental specimens are often much more hairy than Dorset ones, more so than those I have named *C. ascendens* Jord., var. *Briggsii* Syme. The

hairs on the calyx teeth of the last named are much longer than in *C. baetica*, however."—FRASER.

Nepeta hederacea Trev., var. *parviflora* Benth. Slopes above cliffs, Polperro, E. Cornwall, June 11, 1928.—F. RILSTONE. "Benth. needs to be bracketted."—DRUCE.

Nepeta hederacea (L.) Trev., var. *parviflora* (Benth.). Wood Wraxall, N. Somerset, May 2, 1928. Corolla tube hardly longer than calyx, stigma developed, but stamens very short and abortive.—I. M. ROPER.

Galeopsis bifida Boenn. [Ref. No. 3410.] Burgh Heath, Surrey, August 19, 1928. To give specific rank to this form is but to follow the practice of many modern European botanists (Lindman, Hermann, Vollmann, Gremlí, etc.). In addition to the characters afforded by the more elongated mid-lobe of lower lip, deeply emarginate, and with recurved margins, there is a decided difference in the colour of the corolla of this form as compared with *G. Tetrahit*, the lower lip being much deeper coloured in comparison to the rest of the corolla. Other differences are to be found in the nutlets, which are smaller and narrower than in *G. Tetrahit*. The fact that barren plants have been noted intermediate in characters between *G. Tetrahit* and *G. bifida* seems to favour the view that the latter is a good species.—C. E. BRITTON.

Galeopsis Ladanum L., aggr., sub-sp. *angustifolia* (Ehrh.) Gaud. See *Rep. B.E.C.*, 276, 1912, and *Wats. Rep.*, 454, 1913. L.N.E. Railway near Wilbury Hill, Hitchin, Herts, September 19, 1928.—J. E. LITTLE.

Lamium hybridum Vill. (Entomophilous state). Great Wymondley, Herts, June 2, 1928.—J. E. LITTLE.

Lamium hybridum Vill. Hitchin, Herts, February and March, 1928. This cleistogamic state lasts from November to March, but in the latter month a few short-tubed flowers may be found with the hood opened.—J. E. LITTLE.

Lamium hybridum Vill. (at the end of the cleistogamic state; an odd flower with galera lifted). Allotment, Hitchin Hill, Hitchin, Herts, February 27, 1928. Tube of corolla <3 mm., contracted above the base.—J. E. LITTLE.

Lamium hybridum Vill. Cotton's Market Garden, Wymondley Road, Hitchin, Herts, March 1, 1928. End of the cleistogamic state. Flowers still short-tubed; but a few with lifted hoods.—J. E. LITTLE.

Lamium Galeobdolon Crantz. Woods, Mont-y-Frith, Flintshire, May 1928.—C. WATERFALL.

Plantago Coronopus L., forma *glabrescens* Druce. [Ref. No. 2425.] Waste ground by maltings, Hythe Quay, Colchester, N. Essex, Septem-

ber 27, 1928. Has persisted since 1925, cf. Ryde, *Rep. B.E.C.*, 779, 1925. Dr Druce says "conspicuous from its bright green, succulent, glabrescent foliage."—G. C. BROWN.

Herniaria ciliata Bab., var. *angustifolia* Pugsley. St Brelade's Bay, Jersey, July 10, 1928. The plants agree better with the description of *H. ciliata* Bab., var. *subciliata* (Bab.) Moss of the Cambridge Flora (which is there regarded as synonymous with var. *angustifolia* Pugs.) than with Mr Pugsley's original description in *Journ. Bot.*, 331, 1914; the more crowded inflorescence, approaching *H. glabra* L., being a distinctive character. The plant is recorded from this locality as *H. glabra* L., in Lester-Garland's *Flora of Jersey*.—W. A. SLEDGE.

Chenopodium opulifolium Schrader. Waste heap, Bethel Lane, Hitchin, Herts, November and December 1927. A character noted in Bab. *Manual*, ed. ix., 1904, by Messrs Groves, viz., "leaves with usually slightly mucronate teeth," is observable in these plants. Ten seeds, arranged in a contiguous row, measure 11.87 mm., giving an average of 1.18 mm. Coste (*Fl. Fr.*) gives 1.25 mm. He describes them as "ternes;" to me they appear somewhat shining and finely punctulate, as in *C. album*. Like the latter they have a rather prominent radicle so that the horizontal outline is irregular. Ascherson and Graebner describe the edge as "stumpf-randig," but the difference between this and "ziemlich scharf" for *C. album* is only slight. Dr E. Drabble (*in litt.*, November 15, 1928) writes: "Much of our English *Chenopodium opulifolium* seems to be var. *mucronulatum* G. Beck." Within the limits of my observation *C. opulifolium* is very late in flower and fruit.—J. E. LITTLE. "Yes; beautiful material. My sheet is var. *mucronulatum* G. Beck."—DRABBLE.

Chenopodium album L., var. *lanceolatiforme* (Murr). Didcot, Berks, September 1928.—G. C. DRUCE.

Chenopodium album L., sub-sp. *lanceolatiforme* Murr. On waste ground by the Docks, Avonmouth, West Gloucester, October 1928. Derived perhaps from East Asia.—J. W. WHITE.

Chenopodium album L., var. *leptophyllum* Moquin. Waste ground near Gas Works, Hitchin, Herts, October 13 and November 13, 1928. Dr Moss did not allow this as a species, yet in habit it is distinct from *C. album*. The edge of the seed is similarly narrowed, neither very obtuse nor definitely sharp. An average of 10 seeds gives 1.12 mm. diameter. The surface is somewhat shining and obscurely punctulate. The radicle is prominent and *C. album*, *C. opulifolium* and *C. leptophyllum* may thereby be distinguished from *C. ficifolium*, in which the horizontal outline is suborbicular and the edge obtuse.—J. E. LITTLE. "The experts, Dr Aellen and Dr J. Murr, give it (as is its due) specific rank."—DRUCE.

Chenopodium album L., sub-sp. *viridescens* St Amans. In a cultivation at Frenchay, West Gloucester, October 19, 1928.—J. W. WHITE.

Chenopodium album L., var. [Ref. No. Z.34.] Waste ground, Mitcham, Surrey, August 25, 1928.—J. E. LOUSLEY. "For critical determination such specimens as *Chenopodium album* (leafless) are useless; so, too, are the rootless examples of *Poa nemoralis*, *Parnellii* and *Festuca* of Mr Lousley's gatherings."—DRUCE.

Chenopodium leptophyllum Moq. On made ground, Avonmouth Docks, West Gloucester, October 21, 1928.—J. W. WHITE. "Yes, but should it not be quoted as *C. leptophyllum* Nutt. (Britton & Brown)? Moquin-Tandon (1849) treated this plant as a variety of *album*."—DRABBLE.

Chenopodium ficifolium L. Farmyard, Clapton Court, September 26, 1928.—J. W. WHITE. "Correctly named. The three-lobed leaves of my specimens are few, but the spreading lateral lobes have the usual tooth on the lower side. The perianth segments are keeled and mealy. The achene is horizontal, dull blackish and punctate, with a thick obtuse edge."—FRASER. "Smith, not L., is the authority for the species."—DRUCE.

Chenopodium hircinum Schrad. On made ground, Avonmouth Docks, West Gloucester, October 21, 1928.—J. W. WHITE.

Atriplex Halimius L. Planted for hedges, but naturalised on the coast, Westmount, Jersey, September 10, 1928.—L. ARSENE.

Atriplex portulacoides L. Westmount, Jersey, September 10, 1928. Muddy or rocky sea-shores. In the *Flora of Jersey* it is said to be extinct, but it is found, as far as I know, in seven or eight different localities, especially at the base of cliffs. It is very abundant at Rouge Nez.—L. ARSENE.

Salicornia dolichostachya Moss. [Ref. No. 2424.] Sandy mud, Beacon Hill, St Osyth, N. Essex, August 6, 1928. This seems to be identical with my No. 2158 from the same spot, teste W. C. Barton. Rather young, perhaps, but floral characters appear to be right.—G. C. BROWN. "My specimen is quite unlike *dolichostachya*. The habit is wrong and the terminal spikes are too short and slender and the central flower does not separate the lateral ones. It seems to be a form of *S. europaea* L."—DRABBLE.

Salicornia sp. [Ref. No. Z.37.] Pagham Harbour, West Sussex, August 5, 1928.—J. E. LOUSLEY. "*S. radicans* Sm, or *lignosa* Woods—the former, I think, though my scraps show no rooting at the nodes. The material is quite inadequate."—DRABBLE.

Salsola — ? Considerable quantity on a rubbish heap by the Thames, near Grays, Essex, October 13, 1928. The plants were very

bushy, often reddish in colour when fresh, and about 9 to 18 inches high.
—J. A. WILLIAMS.

Polygonum Convolvulus L., var. *subalatum* Lej. & Court. Waste ground, Redland, Bristol, W. Gloster, July 25, 1928.—I. M. ROPER. "Yes; this is var. *subalatum* Lej. & Court. In my experience this is by far the commoner form of *P. Convolvulus*."—DRABBLE. "Correctly named. The three outer sepals are rough on the back, and broadly winged. The nutlets are dull black (not polished) and finely granular."—FRASER.

Polygonum Persicaria L., var. *elatum* G. & G. [Ref. No. 3408.] Near Fishers Green, N. Essex, August 18, 1928.—C. E. BRITTON. "Is not this var. *agreste* Meisner?"—LITTLE.

Polygonum petecticale (Stokes) Dr. [Ref. No. 615/8.] Ware, Herts, September 1928. As much confusion appears to be present regarding this plant, a series of it in good condition is sent, including both forms, *densum* and *gracile*. The synonyms include *P. nodosum* Pers. and *P. maculatum* T. & D.—G. C. DRUCE.

Polygonum heterophyllum Lindman. Railway siding, Whissendine, Rutland, August 4, 1916, A. R. HORWOOD; comm. NATIONAL MUSEUM OF WALES.

Polygonum rurivagum Jord. [Ref. No. Z.22.] Wheat stubble, Farley, Surrey, September 25, 1928. I never find this variety except among growing crops, where it would naturally tend to attain the elongated form it exhibits.—J. E. LOUSLEY.

Polygonum heterophyllum Lindman. [Ref. No. Z.28.] Eastfields, Mitcham, Surrey, October 15, 1928.—J. E. LOUSLEY.

Polygonum heterophyllum Lindman. [Ref. No. Z.29.] Westcott, Dorking, Surrey, October 16, 1927. Very typical. A fine large plant characteristic of the neglected borders of arable land.—J. E. LOUSLEY.

Polygonum patulum M. Bieb. Burton-on-Trent, Staffs, July 1928. This represents the plants formerly called *Bellaridi*, which these are not. I have not been able to compare these with Bieberstein's plant, but I hope they are correctly named. Dr Danser confirms the name.—G. C. DRUCE.

Polygonum cognatum Meisn., var. *alpestre* (C. A. Mey). [Ref. No. 2268.] Waste ground by maltings, Hythe Quay, Colchester, N. Essex, July 22, 1928. A further supply of better material to supplement that sent in 1926. Named by Dr Thellung in *Rep. B.E.C.*, 275, 1926. Also see *Rep. B.E.C.*, 1062, 1925.—G. C. BROWN. "The above plant was recorded in *Journ. Bot.*, 338, 1872, as a casual on the Westerley Ware, Kew. It existed there till 1923 as the last form of vegetation after

everything else had been destroyed by the game of football. The making of hard tennis courts exterminated it. The leaves of this plant were much shorter and narrower than those collected by Mr Brown; otherwise they were the same."—FRASER.

Rumex Hydrolapatheum Huds. [Ref. No. Z.35.] Cutt Millpond, Puttenham, Surrey, August 26, 1928. With the petioles channelled above, with raised edges and other characters of *R. heterophyllus* Sch. in the last edition of Babington. On what records do the 15 vice-counties of *R. maximus* Schreb. in the 11th edition of the *London Catalogue* rest, and should the species be entered there at all? I should be most interested to see plants genuinely referable to this species.—J. E. LOUSLEY. "The characteristic lower leaves are absent. It is hardly worth while to offer an opinion based on imperfect *Rumex* material, but it may be mentioned that I am quite familiar with *R. maximus* Schreber and have not found the differences in petiole-character between that plant and *Hydrolapatheum* that one might expect from the description in *Bab. Man.*, eds. 9 and 10."—DRABBLE. "In answer to the query may I say that there is no satisfactory evidence of the occurrence of *Rumex maximus* in Britain. The plant has received several names, including *latifolius* Borrer, but all the British plants I have seen can be referred to the hybrid, *R. Hydrolapatheum* × *obtusifolius* = *R. Weberi* F.-B."—DRUCE.

Rumex maritimus L. Wollaton Park Lake, Nottingham, September 13, 1928.—R. BULLEY.

Rumex Patientia L. Adventive on city refuse, Cranbrook Road, Bristol, June 1928. Nyman states that this fine Dock, although found in many European countries, is not native in any one of them, but in all probability was derived from Central Asia for cultivation as a culinary herb.—J. W. WHITE. "Correctly named. There should be a tubercle on one of the fruiting perianth segments, but the inflorescence is too young to show it. The species was at one time cultivated in this country under the name of Herb Patience. It is really native in Eastern Europe."—FRASER.

Euphorbia portlandica L. Sand dunes, Dawlish Warren, South Devon, June 25, 1928.—C. WATERFALL.

Euphorbia exigua L. Garden weed, Brookfield, Bovey Tracey, South Devon, July 3, 1928.—C. WATERFALL.

Euphorbia Peplis L. Crabbie Bay, Jersey, July 17, 1928. Still plentiful in this locality, whence the last specimens of this species to be distributed through the Club were sent by Mr Charles Bailey in 1903.—W. A. SLEDGE.

Ulmus nitens Moench. [Ref. No. 742.] Wallington Park, W. Norfolk, September 23, 1927.—J. E. LITTLE. "This appears to be a form

of *U. nitens* with more coarsely toothed leaves than usual. Without seeing the tree from which the specimens were taken it is not possible to say if this is what Dr Moss means by the var. *Sowerbyi*, and the figure, No. 2248, quoted in *English Botany* as that variety, I should regard as typical *Ulmus nitens*."—A. B. JACKSON. "This name is antedated by *Ulmus carpiniifolius* Borck."—DRUCE.

Betula alba L. Tree in field adjoining Rushford Wood, Rushford Barton, South Devon, June 18, 1928.—C. WATERFALL.

Carpinus Betulus L. Mawsley Wood, Northants, September 1928.—G. C. DRUCE.

Salix alba L., var. *vitellina* (L.) ♂ [Ref. No. S.742.] Planted, left bank of River Hiz, Hitchin, Herts, April 20 and July 19, 1928. Branches diverging at a much wider angle than in typical *S. alba*. On the young enrolled leaf are scattered appressed hairs. In this stage the marginal glands, as yet yellow, are active, and glandular dots (the result of exudation from these glands?), are found scattered over the leaf. The light green leaves are almost immediately glabrescent and covered with varnish from the glands. Stipules minute and glandular. Petioles half-round, channelled, hairy on the edge of the channel. Young leaves, especially at the tips, ciliate. The flowers in this plant are, I believe, uniformly diandrous, but in a tree, otherwise similar, distributed to the B.E.C. (*Report*, 404, 1923) a proportion of the flowers had 3 or 4 stamens.—J. E. LITTLE. "I agree. It is an exceptionally glabrous form. Most of the bushes that are stooled or trees that have recently been cut down are subglabrous. Old trees may be subglabrous, thinly hairy, or quite silky. The ♂ is very rare in Surrey, Middlesex, and apparently elsewhere."—FRASER.

Salix triandra L. Horsell Common, near Woking, Surrey, May and September 1928.—W. BIDDISCOMBE. "Correct. Elliptic-lanceolate, closely serrate leaves, tapering to both ends, and more or less glaucous beneath, are the main features of the type."—FRASER.

Salix purpurea L., f. *Helix* (Sm.). Fieldcommon Farm, West Molesey, Surrey, catkins March 18; leaves September 16, 1928. It is impossible to say what was *Salix Helix* L. His description is "*Salix foliis serratis glabris lanceolato-linearibus, superioribus oppositis obliquis.*" In Britain, the leaves are the least serrate of all the forms of *S. purpurea*; indeed, many of the leaves may be entire, and the others obscurely dentate at the widest part. I therefore adopt Smith's descriptions, and his plate in *English Botany*, ed. 1, t. 1343; and ed. 2, t. 1331. Only the male twig and the leafy twig belong to the form *Helix*. The female catkins and the enlarged ovary on the same plates belong to *S. rubra* Huds., f. *Forbyana* (Sm.).—J. FRASER.

Salix cinerea L., f. *oleifolia* (Sm.). Ref. No. 92, as it precedes the name on the labels. The first bush of this form which I found; hence

the low reference number. Runny Mede, Surrey, catkins March 21; leaves September 16, 1928. The venation is always dense in this form, and conspicuous in open situations.—J. FRASER.

Salix repens L., f. *argentea* (Sm.). Rosehearty, North Aberdeen, catkins May 16; leaves August 15, 1928. The above is a maritime form of the species collected by A. P. Fraser, a relative of mine, from an isolated and uniform colony which I marked on September 20, 1927, when collecting there. The forms *incubacea* (L.) and *fusca* (L.) also grow there. The former is mostly maritime, the latter mostly inland.—J. FRASER.

Populus tremula L. [Ref. No. 734.] (See *Rep. B.E.C.*, 286, 1912.) Little Wymondley, Herts, February 21, and September 18, 1928, coll. S. SIMMONS. Specimens from this tree were sent to Miss B. Corfe, Winchester, for a postcard drawing in the South Kensington Natural History Series.—J. E. LITTLE. "A wonderfully glabrous form of the species which might well be regarded as typical. Presumably the catkins were a little older before they were sketched as the anthers were hidden beneath the silky hairs in my specimens."—FRASER.

Populus tremula L. ♂ [Ref. No. 734.] (See *Rep. B.E.C.* 286, 1912.) Little Wymondley, Herts, February 21 and September 18, 1928, coll. S. SIMMONS. Specimens from this tree sent to Miss B. Corfe, Winchester, for a postcard drawing in the South Kensington Natural History series.—J. E. LITTLE.

× *Populus canadensis* Moss. Fornham St Martins, W. Suffolk, April 16 and October 8, 1928.—R. W. BUTCHER and I. M. ROPER.

Orchis maculata L. Menmarsh, Oxon, May 1928.—G. C. DRUCE.

Orchis Fuchsii Dr. Ampwell, S. Hants, June 1928. From a wet marsh, through which doubtless basic water flows, at Ampwell. See a paper by P. M. Hall in this *Report*. Some very luxuriant plants were present. The suggested hybrid, × *O. transiens*, was also seen. The strong spots on the leaves mostly disappear in drying.—G. C. DRUCE.

Iris foetidissima L. Hedgebanks, etc., about Bishops Teignton, South Devon, June 1928.—C. WATERFALL.

Crocus vernus (All.). Near Harleston, Norfolk, March 2, 1928.—I. HELSBY. "I agree. Allioni's name should not be in brackets. Some authorities write the name *C. vernus* (L.) All., and others say *C. officinalis* Huds. (*vernus* All.). The three stigmas are dilated at the apex and shallowly fringed. The anthers are longer than their filaments and reach nearly to the top of the stigmas."—FRASER.

Sisyrinchium californicum Ait. Rosslare, Co. Wexford, August 1928. It seems to be spreading in the neighbourhood of Rosslare. Its introduction has yet to be explained.—G. C. DRUCE.

Asphodelus tenuifolius Cav. Splott, Cardiff, Glamorgan, September 1928. Solitary specimens of this species appear almost every year here, but last September I was fortunate enough to find a little colony of nearly forty plants, hence this gathering. A grain alien, most probably from Persia.—R. L. SMITH.

Ornithogalum pyrenaicum L. Grashford, Somerset, June 14, 1928.—I. HELSBY.

Juncus maritimus Lam. Aldeburgh, E. Suffolk, September 27, 1928.—Coll. K. D. LITTLE; comm. J. E. LITTLE. "I agree with the name, but the authority for it is Lamarck. The specimen I have received has well developed fruit. According to the description, all six perianth segments should be lanceolate acute, but in a flower here and there the inner three are obtuse with scarious margins. This may be accidental variation, but it is the first specimen in which I have noted it."—FRASER. "The earlier name is *Juncus spinosus* Forskal."—DRUCE.

Juncus articulatus L., forma. [Ref. No. 3398.] Aberdovey, Merioneth, July 25, 1928. A small form growing in hollows of the sand dunes. Var. *litoralis* Buchenau is a small plant found in damp places among dunes on the coast of Europe, and perhaps may be the same as the plant distributed.—C. E. BRITTON. "*J. articulatus* L., var. *littoralis* Patze—a frequent state on sand dunes."—I. M. ROPER.

Sparganium angustifolium Michx. Rodil, S. Harris, July 1928. This is synonymous with *S. affine* Schniz. = *S. natans* L., p.p.—G. C. DRUCE.

Sparganium minimum Fr. Keenaghan, Co. Donegal, August 1928. These very slender plants are, I am afraid, too young for critical determination, but I have sent one to Denmark to see if it can be separated.—G. C. DRUCE.

Potamogeton Drucei Fryer. Child Okeford, Dorset, June and September 1928. It was a great delight to discover this handsome Pondweed in a new county last June. It grows in great masses in the Stour near Ould Okeford, Dorset. There seems to be no *alpinus* in the stream. In September it was fruiting freely and extends for some distance. It may well be that it is the plant which Pulteney (See *Fl. Dorset*) called *heterophyllus*. I was unable to see *gramineus* in any of its forms in the river.—G. C. DRUCE.

Potamogeton Griffithii A. Benn. Llyn Anafon, Carnarvonshire, altitude 1630 ft., August 4, 1928. Hearing that Llyn Anafon will shortly be converted into a reservoir for the supply of water to Llanfairfechan (by which the existing vegetation in the lake will be destroyed) I collected a few specimens of this interesting plant. It grows in rather deep water, say 8 ft., at a considerable distance from the west shore of the lake, and does not occur at all at the margin. To secure specimens,

a garden rake, attached to a thick cord, was thrown as far as possible, just reaching some of the flowering stems which appeared at the surface of the water. No other *Potamogeton* was detected in the lake except *P. polygonifolius*, which is abundant close to the shore on the opposite side. I regret that it is impossible to produce nice looking herbarium specimens as the leaves, besides being undulate, are somewhat spirally twisted and cannot be spread out flat.—A. WILSON. "I, too, could see no other species than *oblongus* (*polygonifolius*), but a boat is needed to work the deeper part."—DRUCE.

Potamogeton upsaliensis Tis. Binden, Dorset, June and September 1928. Unfortunately I could get no fruiting specimens. It is said to be a hybrid of *lucens* × *perfoliatus* = a var. of the hybrid *P. decipiens*.—G. C. DRUCE. "Yes; for nomenclature see *Journ. Bot.*, 348, 1917."—I. M. ROPER.

Ruppia maritima L. (*R. spiralis* Dum.) Lady's Island Lake, Co. Wexford, August 1928.—G. C. DRUCE. "My sheet is a mixture of *Zanichellia palustris* and immature *Ruppia spiralis* Dum."—I. M. ROPER.

Cyperus longus L. Marshy ground near Carisbrooke, Hants, September 1928.—J. W. LONG. "Fine specimen of a rare plant still to be found in the Isle of Wight. I have it from Guernsey."—FRASER.

Scirpus americanus Pers. (*pungens* Roth). Near Formby, Lancs, November 1928. It was discovered by Mr R. E. D. Baker and is new to Britain.—G. C. DRUCE. "Correctly named. The sessile spikes, glumes pointed, shallowly lacerated at the ends, and the plano-convex, brown, shining, turgid and mucronate fruits are the main features of the species. Stems concavo-triquetrous. Surely this must be a new record."—FRASER.

Scirpus rufus Wahl. Nisishee, S. Harris, July 1928. Some of them have the long bract of the so-called variety, *bifolius*, of Wallroth.—G. C. DRUCE.

Eriophorum vaginatum L. By Basingstoke Canal, Woking, Surrey, May 1928.—W. BIDDISCOMBE.

Kobresia bipartita Dalla Torre. [Ref. No. Z.23.] In abundance, Widdy Bank Fell, Durham, Upper Teesdale, July 1, 1927.—J. E. LOUSLEY.

Carex pendula Huds. (Fruits.) Wood near Parkhurst House, W. Sussex, August 17, 1928.—R. J. BURDON and J. E. LITTLE.

Carex strigosa Huds. Forest of Dean, Monmouth, June 13, 1916.—L. B. HALL.

Carex humilis Leysser. [Ref. No. 5.] Hizaze Hill, Breamore, South Hants, April 11, 1925. Very abundant in the short down turf of this,

the only Hampshire station. It is interesting to compare these plants with the large cultivated examples distributed in 1918.—P. M. HALL.

Carex praecox Jacq. Bramcote Hall, Notts, May 5, 1928.—R. BULLEY.

Carex tomentosa L. Westwell, Oxon, June 1928.—G. C. DRUCE.

Carex panicea L., forma. Marsh near Knaresborough, Yorks, June 18, 1927.—W. A. SLEDGE.

Carex limosa L. Near Wareham, Dorset, July 18, 1928.—L. B. HALL.

Carex limosa L. [Ref. No. 243.] Swamp, 50 feet, Burn of Funzie, Fetlar, Shetland, August 16, 1928. Native. Common in the swamp. Plants in unripe fruit. A new record for this species for H. C. Watson's county, No. 112, Shetland, discovered by me on August 16, 1928.—H. H. JOHNSTON. "Small specimens, correctly named, and a new county record, as Mr Johnston says, so far as Watson's *Top. Bot.* is concerned. The specimens show the creeping habit of the plant and the woolly hairs on the root fibres. The fruits are also a valuable asset in distinguishing this species from *C. magellanica* Lam. (*irrigua* Sm.)."—FRASER. "A very interesting addition to these Islands (v.-c. 112); it occurs in the Orkneys."—C. E. SALMON.

Carex contigua × *divulsa* ? [Ref. No. 679.] Fruiting culms, Wimbotsham, W. Norfolk, August 3, 1928. The characters which lead me to suggest the above name are:—(1) *C. contigua* points. An erect, moderately stout culm with a spike about 6 cm. long. Spikelets having, when young, brown glumes with green midribs. Utricles about 5.5 mm. long, at maturity turning chestnut-brown, but somewhat paler than in *C. contigua*, and gradually narrowed into a relatively long beak of about 1.75 mm. (2) *C. divulsa* points. The lower spikelets are often separated by twice their own length at maturity. The utricles spread only slightly, and are gradually narrowed at the base. The nut is about 3 mm. long and 1.5 mm. broad, *i.e.*, very definitely longer than broad.—J. E. LITTLE.

Carex Pairaei F. Schultz. (Fruits.) Santon Warren, Norfolk, July 25, 1928.—J. E. LITTLE.

Carex paniculata L. [Ref. No. 304.] Swamp, 50 feet, Burn of Funzie, Fetlar, Shetland, August 29, 1928. Native, very rare. Nine tufts of plants only seen. Plants in unripe fruit or in withered flower with no fruit developed. A new record for this species for H. C. Watson's county, No. 112, Shetland, discovered by me on August 29, 1928.—H. H. JOHNSTON.

Carex paradoxa Willd. Malham Tarn bog, West Yorks, altitude 1250 feet, July 27, 1928.—W. A. SLEDGE. "I cannot refer these strongly caespitose plants to any other species than *C. paradoxa* Willd., though

their occurrence at an altitude of 1250 feet is remarkable and quite out of the known range of the species in England and Ireland. This Sedge is abundant here and presumably represents the *C. teretiuscula* Good., var. *pseudoparadoxa* (Gibbs.), which Gibson stated was plentiful at Malham Tarn, and which poses in the *Flora of West Yorks* as *C. teretiuscula* Good., var. *Ehrhartiana* Hoppe. The plants clearly do not come under *Ehrhartiana*, however, the fruits showing no relation with *C. teretiuscula*. *C. pseudoparadoxa* has been discussed by Mr Salmon in *Journ. Bot.*, 14, 1916, where he shows its affinity is with *C. paniculata* rather than *C. teretiuscula*, but the characters of the fruit and the frayed sheaths at the base of the stem separate the plants from this variety, with which they would seem to agree in habit. There is a specimen from the same locality (collected in 1910) in the late John Cryer's herbarium at Leeds University labelled *Carex paradoxa*. I would accept these specimens as *C. paradoxa* Willd. without question, especially since Dr Sledge says the plants are strongly caespitose, for that is a character that will separate it from the creeping *C. teretiuscula* and from *C. paniculata*, which forms tussocks 1-4 feet high. The perigynia of the specimens are ribbed nearly to the base of the beak and I counted 21-24 of these ribs. *C. Ehrhartiana* Hoppe (*C. pseudoparadoxa* Gibbs.) was first found near Manchester, and was, I understand, regarded as a state of *C. teretiuscula*."—FRASER.

Alopecurus bulbosus Gouan. Ridge, Dorset, June 1928.—G. C. DRUCE.

Agrostis alba L., var. Whissendine, Rutland, August 4, 1916.—A. R. HORWOOD; comm. NATIONAL MUSEUM OF WALES.

Aira caryophyllea L. Sandy fields near Bulwell, Nottingham, June 13, 1928.—R. BULLEY.

Corynephorus canescens Beauv. Denes, Great Yarmouth, July 21, 1928.—R. J. BURDON. "There can be no doubt of the correctness of these specimens, judging by the closely involute, acute, pungent, scabrous and glaucous leaves. The white, clubbed awn just about equalling the barren glumes, suggests the name, from *Kofuna*, a club."—FRASER.

Trisetum flavescens Beauv., var. *variegatum* Murr. & Koen. Boncry's Farm, Horsell, Surrey, on Bagshott Sand, June 1928.—W. BIDDISCOMBE.

Poa Parnellii Bab. [Ref. No. Z.57.] Locus classicus, High Force, Upper Teesdale, Durham, July 1927.—J. E. LOUSLEY.

Poa nemoralis L. [Ref. No. Z.30.] Riverbank near Barnard Castle, Durham, July 1927. Agreeing with *Parnellii* Bab. in the florets not being webbed, and in the upper sheath usually much exceeding its leaf. Web hairs 1-3 mm. long, glume hairs 3 mm. in length.—J. E. LOUSLEY.

Festuca arundinacea Schreb. Banks of Avon, Ashton Gate, Bristol, N. Somerset, July 13, 1928.—I. M. ROPER.

Festuca elatior L. Burgh St Martin, Norfolk, July 15, 1928.—R. J. BURDON.

Festuca Danthonii A. & G. (*ciliata* Danth.) Burton-on-Trent, Staffs, July 1928. This beautiful species still holds its ground at Burton-on-Trent although less abundant than last year.—G. C. DRUCE.

Festuca ——. [Ref. No. Z.17.] Shingle, Pagham, West Sussex, June 1928.—J. E. LOUSLEY.

Bromus rigidus Roth. Dry, rocky or sandy places, Portelet, Jersey, May 15, 1928.—L. ARSENE. "Correctly named. It is often named *B. madritensis* L., var. *rigidus* Bab. *B. madritensis* has a smooth stem and scabrid glumes. *B. rigidus* seems to be confined to the Channel Islands and has the rachis, pedicels, glumes and upper part of the stem finely pubescent. The specimens collected on May 15 are much greener than those collected on June 1, and show that the plant matures early in Jersey."—FRASER.

Bromus racemosus L. Pasture by the Severn at Lawrence Weston, West Gloucester, June 9, 1928. These examples may help the recipients towards a more decided recognition of *B. racemosus* as a specific unit. The hesitation with which it is still regarded here and there is largely due to its confused treatment by descriptive writers in the past, who, if Babington be excepted, were in doubt as to its status, some classing it as a variety of *B. commutatus* and others, on the contrary, placing the latter as a sub-species under an aggregate *racemosus*. Some botanists, again, ascribe their difficulty to the intermediates they have met with—not in this district, however, where intermediates are unknown. The figure in *English Botany* is unfortunately useless; the sub-sessile spikelets shown are never produced by *B. racemosus*. This drawing was probably made from a glabrescent form of *B. mollis*. In our Severn-side hayfields the strictly erect habit and spreading pedicels of the smaller plant now distributed compared with the tall, drooping, heavy-headed *commutatus* makes distinction easy.—J. W. WHITE.

Bromus unioloides H. B. K. Waste ground, Cowes, Isle of Wight, September 1928.—J. W. LONG.

Bromus japonicus Thunb. Waste ground, Dagenham Docks, Essex, June 13, 1928.—R. MELVILLE. "I agree. (Syn. *B. patulus*). It comes very close to *B. commutatus*, differing chiefly by having a long ligule, half-verticillate branches, bifid flowering glumes, and spreading awns."—FRASER.

Agropyron pungens Roem. & Schult., var. *littorale* (Reichb.). Bank of Avon, Sea Mills, Bristol, W. Gloster, July 26, 1928.—I. M. ROPER.

Elymus europaeus L. Dale, Derbyshire, September 1, 1928.—R. BULLEY.

Asplenium lanceolatum Huds. Hedgebanks and rock crevices on the coast, Portinfer near Gros Nez, Jersey, August 1, 1928.—L. ARSENE.

Asplenium Adiantum-nigrum L. Hedgebank, Brookfield, Bovey Tracey, South Devon, July 9, 1928.—C. WATERFALL.

Isoetes lacustris L. Llyn Ffynnon Llyffaint, Carnedd Llewelyn, Carnarvonshire, alt. 2710 ft., July 14, 1928. Probably a record for altitude in the British Isles. It occurs at 2300 ft. in Atholl (White, *Fl. of Perthshire*), and at 2338 ft. on Magillicuddy's Reeks (Hart, *Fl. of Kerry*).—A. WILSON.

Isoetes echinospora Durieu. Dorsetshire, in water and on mud, July 28, 1928, coll. L. B. HALL and C. E. SALMON. See *Journ. Bot.*, 272, 1928. "Yes; rightly named. Specimens from Littlesea were sent to me early in July by Sir W. Abbot-Anderson. They were shown him by a Cambridge undergraduate who was told at that University that they were *lacustris*. They were certainly *echinospora*."—DRUCE.

Plants received from Dr K. Rechinger, Botan. Abteilung des Naturhistorischen Museum in Wien, Austria:—*Asarum europaeum* L., *Potamogeton lucens* × *natans*, *Chaeturus marrubiastrum* L., *Eurotia ceratoides* C. A. Mey, *Marrubium peregrinum* × *vulgare*, *Primula vulgaris* Huds., *Rumex patientia* × *silvester*, *Alyssum Arduini* Fritsch, *Laserpitium Siler* L., *Euonymus latifolia* L., *Viscum album* L., *Carex contigua* Hoppe, *Rumex nivalis* Hegetschw., *Euphorbia austriaca* Kerner, *Doronicum grandiflorum* Lam., *Circaea intermedia* Ehrh., *Gentiana Sturmiiana* Kerner, *Rumex crispus* × *puluster*, *Dianthus alpinus* L., *Potamogeton alpinus* Balb., *Allium sibiricum* L., *Gentiana aspera* Hegetschw., *Nephrodium oreopteris* Desv., *Gentiana asclepiadea* L.

Plants received from Prof. S. F. Beattie, Lowell Textile Institute, Lowell, Mass., U.S.A.:—*Artemisia Stelleriana* Bess., *Taxus canadensis* Marsh., *Cornus florida* L., *Polystichum acrostichoides* (Mx.) Schott, *Saxifraga virginiana* L., *Vaccinium vacillans* Kalm., *Dulichium arundinaceum* (L.) Britt., *Thalictrum venulosum* Trel., *Trillium cernuum* L., *Sambucus racemosa* L., *Steironema lanceolatum* (Watt) Gray, *Solidago caesia* L. var. *azillaris* (Pursh) Gray, *Senecio aureus* L., *Moehringia lateriflora* (L.) Fenzl, *Desmodium marylandicum* (L.) DC., *Lobelia spicata* Lam., *Eupatorium verbenasifolium* Mx., *Solidago puberula* Nutt., *Rubus strigosa* Michx., *Viburnum dentatum* L., *V. alnifolium* Marsh., *Hypericum ellipticum* Hook., *Physostegia virginiana* (L.) Benth., *Viola lanceolata* L., *Galinsoga ciliata* (Raf.) Blake, *Gnaphalium obtusifolium* L.

ERRATA AND CORRECTIONS

Covering the plants sent by Prof. Beattie for the present and the last two distributions.

Rep. B.E.C., 285, 1926.

- Line 5. For *canadense* read *canadensis*.
- Line 11. For *Seriocarpus* read *Sericocarpus*.
- Line 12. For *squamosa* read *scariosa*.
- Line 13. For *rubricaulescens* read *subcaulescens*.
- Line 17. For *Apocynum* read *Apocynum*.
- Line 19. For *Scorophularia* read *Scrophularia*.
- Line 21. For *dichotoma* read *dichotomum*.

Rep. B.E.C., 593, 1927.

- Line 16. For *caroliniana* read *graminifolia* (L.) Nutt.
- Line 18. For *caroliniensis* read *baccata* (Wang.) Koch.
- Line 19. For "Raff" read "Raf."
- Line 22. For *caroliniensis* read *carolinianus*.

The specimens of *Decodon verticillatus* sent are the var. *pubescens* T. & G. *Eupatorium purpureum* is probably one of the segregates of that species, re-established by Wiegand in *Rhodora*, 1920, 58 ff., and is most probably *E. verticillatum* Lam. *Potentilla canadensis* is the var. *simplex* (Michx.) T. & G. *Thalictrum venulosum* of this year's lot proves to be *T. polygamum* Muhl. As to some of the others, *Euthamia caroliniana* is a vexing error on my part. Knowing our two species of this genus, in labelling I gave the name of the other to the one.

F. S. BEATTIE.

Department of Chemistry,
Lowell Textile Institute,
Lowell, Mass.

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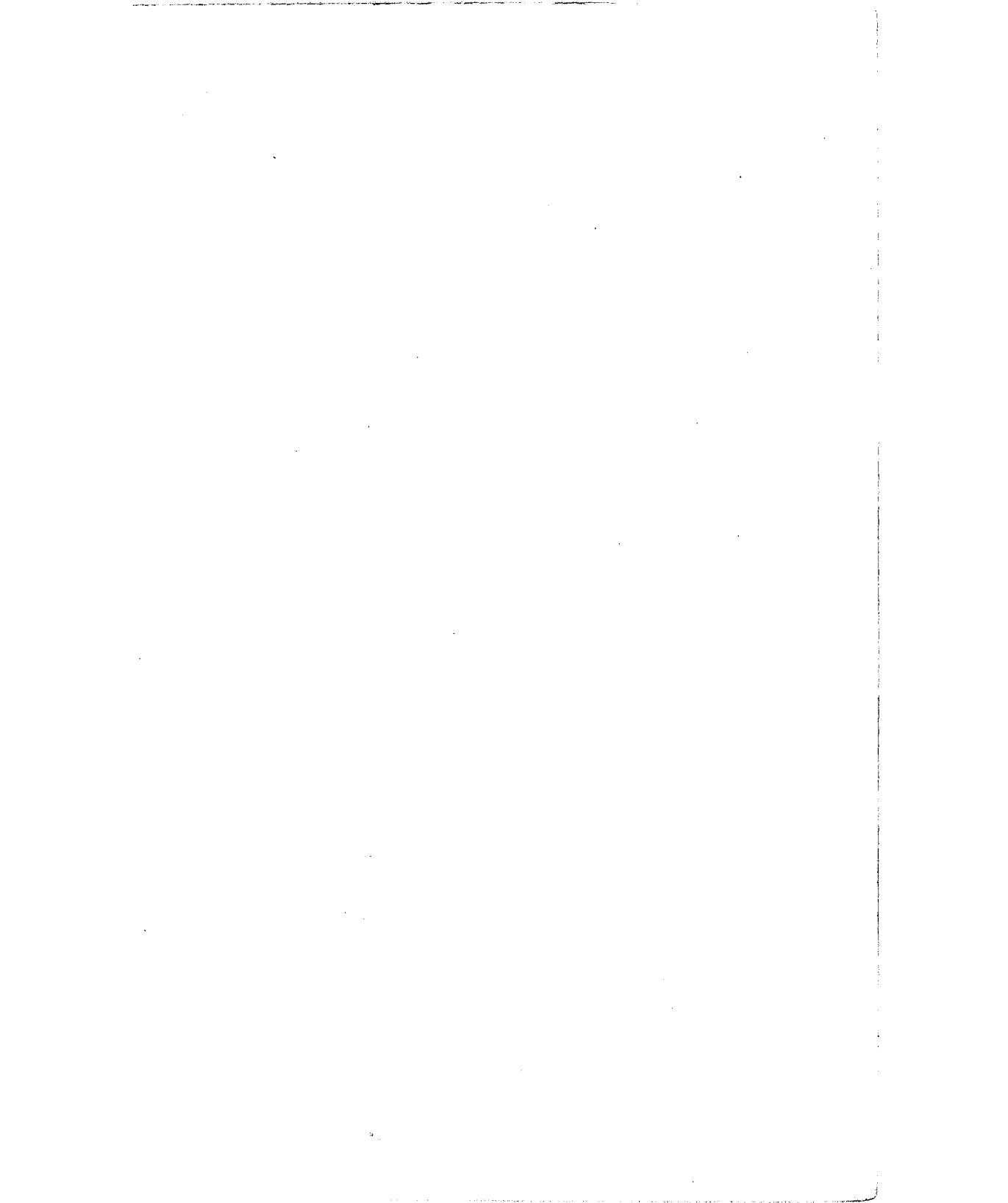
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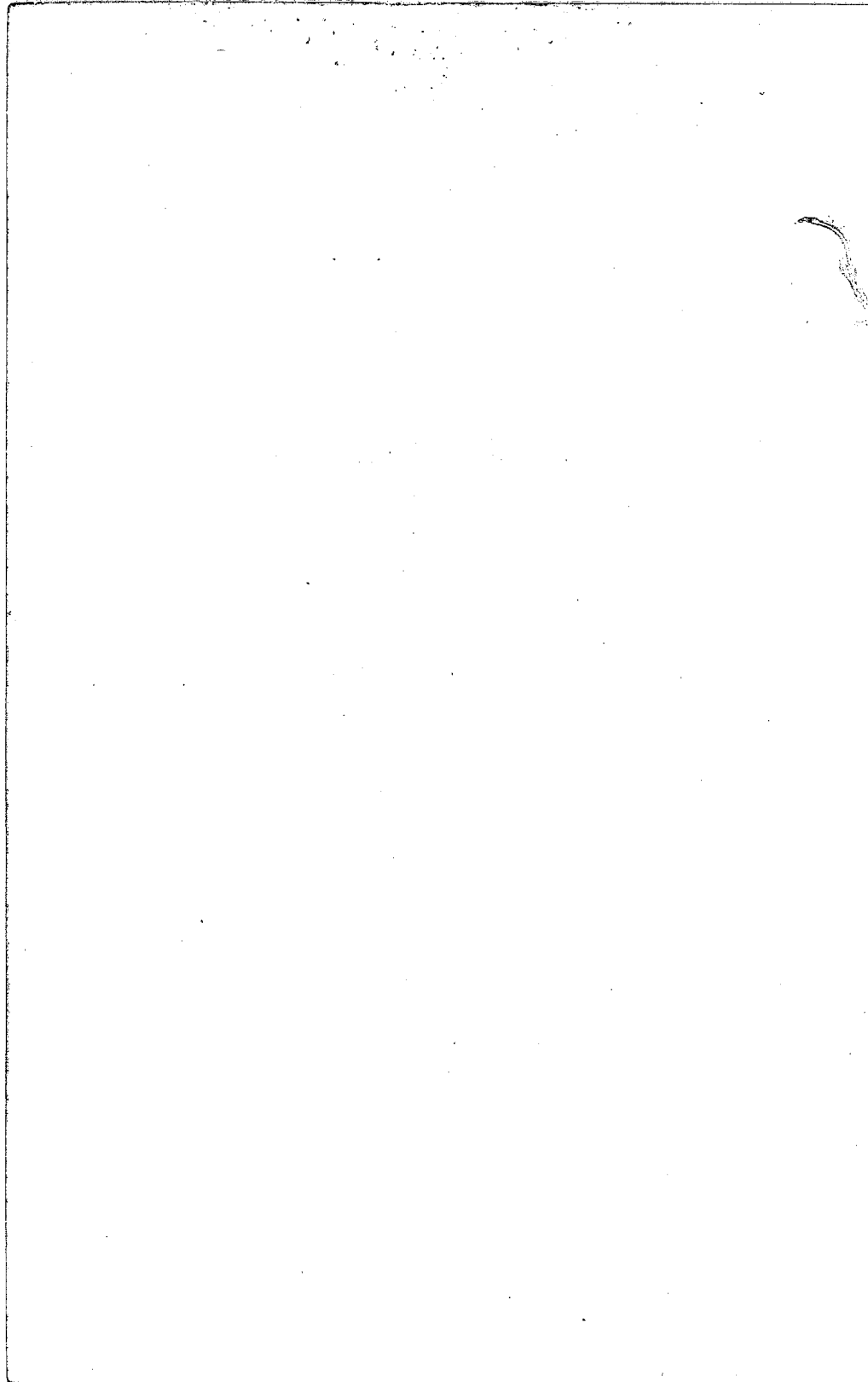
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