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

## REPORT FOR 1937

OF 77 3

BOTANICAL EXCHANGE CLUB

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DISTRIBUTOR.

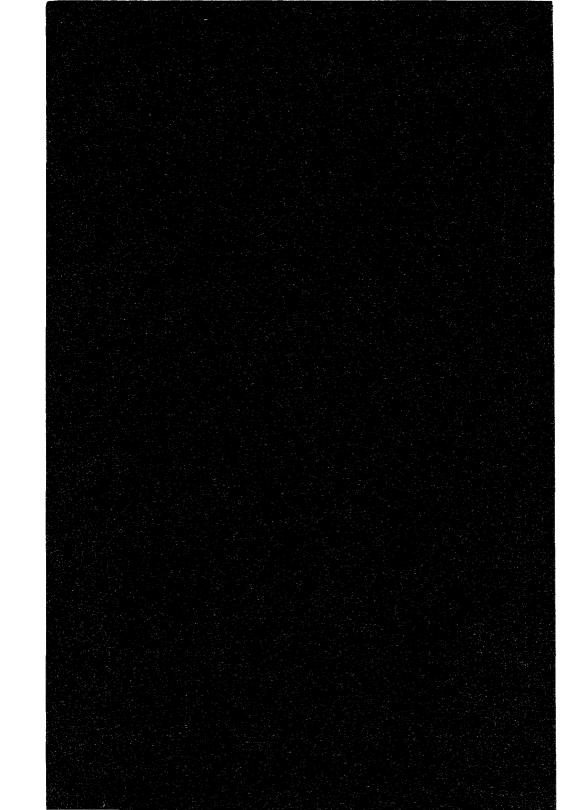
John F. G. Chapple, Esq.

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

(VOL. XI, PART VI).

Victoria Regina.



Floreat flora.

### REPORT FOR 1937

OF THE

#### BOTANICAL EXCHANGE CLUB

(Conveniently Abbreviated for Citation B.E.C. REP.)

BY THE

DISTRIBUTOR,

JOHN F. G. CHAPPLE, Eso.

The Subscription, £1 per annum for Exchange Members, and 10s per annum for Ordinary Members, became due on January 1, 1938, and should be sent

THE HONORARY SECRETARY,
YARDLEY LODGE, CRICK ROAD, OXFORD.

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

Exchange Club Parcels for 1938 should be sent, post paid, on or before 1st December 1938, to the Honorary Secretary, as above.

PRINTED BY T. BUNCLE & Co. Ltd., ARBROATH.
SEPTEMBER 1938.



#### REPORT OF THE DISTRIBUTOR FOR 1937.

The last two Distributors have both had to report a serious diminution in the number of specimens contributed, and it is my unfortunate duty to have to record yet another decline both in the number of gatherings and in the number of sheets contributed. Seventeen members sent in 1752 sheets representing 144 gatherings. This also represents a falling off in the number of active members of the Exchange Club—a feature regrettable in itself—and one that every member should do his utmost to remedy by the encouragement and enlistment of new collectors.

All the material, with very few exceptions, was well prepared, and was submitted in accordance with the Rules, thus doing much to lighten the Distributor's task. If there is anything that members should be reminded about, it is that specimens should not exceed 18 inches in length, and, as a good many Herbarium sheets are only 15 inches long, that would be a more convenient standard to aim at; also, that each gathering should consist of not less than 10 sheets, otherwise there remains little or nothing for distribution to individual members after the needs of the public Herbaria and Referees have been supplied.

Most of the critical genera are represented—even if only by single gatherings—but, as has been remarked, uncritical and unvarying species of a Bentham and Hooker standard (unless of topographical interest) ought soon to find no place in the distribution of a Club which exists for the exchange "of plants of known critical or special interest." It is a cause for regret that Hieracium, Salix and the Palmate Orchids are not represented in this distribution. Among the more notable plants sent in were Geranium Endressi, var. Thurstonianum, Euphrasia montana, × Mentha Mulleriana, var. serratifolia, Prunella laciniata × vulgaris, Vallisneria spiralis and Zostera Hornemanniana.

The thanks of the Club are due to all those who contributed notes, and to the following Referees for their criticisms:—H. K. Airy-Shaw, G. M. Ash, E. G. Baker, E. B. Bishop, C. E. Britton, Dr R. W. Butcher, J. E. Dandy, P. M. Hall, Dr W. O. Howarth, C. E. Hubbard, A. B. Jackson, J. E. Lousley, Dr R. Melville, E. Nelmes, H. W. Pugsley, Rev. H. J. Riddelsdell, A. L. Still, T. G. Tutin, Wm. Watson, A. J. Wilmott, and Lt.-Col. A. H. Wolley-Dod.

JOHN F. G. CHAPPLE.

Yardley Lodge, Oxford, May 10th, 1938.

#### LIST OF PARCELS RECEIVED.

*							
						Sheets.	Gatherings.
G. M. Ash	•••	•••	•••	•••	•••	25	2
E. B. Bishop		•••	•••		•••	79	6
G. C. Brown			•••		•••	36	4
J. F. G. Chapple		•••		•••	***	320	24
E. S. Edees				• • •	•••	53	4
J. D. Grose		•••		•••		113	10
P. M. Hall		•••	•••	•••		63	5
H. H. Johnst	on		•••			14	1
J. W. Long		•••		•••	•••	100	6
Nottingham Public Nat. History			Museum		89	9	
F. Rilstone		•••	•••	•••	•••	135	9
C. M. Rob	•••			•••	•••	101	9
N. D. Simpso	$\mathbf{n}$		•••	•••		47	4
W. A. Sledge		•••	•••			82	6
National Museum of Wales				•••		188	20
E. C. Wallace	•••		•••	•••	•••	217	16
C. Waterfall	•••	•••		•••	•••	90	9
						1752	144

Thalictrum? montanum Wallr. (Ref. No. P.36.) 45, Pembroke; maritime cliffs near Penally, July 31st, 1937.—J. F. G. Chapple. "Although the plants of the coastal sand-dunes of Scotland are usually fairly constant in form on the eastern side, there is greater polymorphism on the west, which reaches its greatest confusion, apparently, in Pembrokeshire. The example before me has characters both of T. arenarium and T. montanum, but further study of the plant is required before its status can be properly described."—R. W. Butcher.

Thalictrum majus Crantz. (Ref. No. 3060.) 85, Fife; rocky shore of the Forth, N. Queensferry, July 17th, 1937.—E. C. Wallace. "Yes."—R. W. Butcher.

Ranunculus trichophyllus Chaix. (Ref. No. 0.320.) 23, Oxon; pond, Lower Heyford, May 15th, 1937.—J. F. G. Chapple. "Yes."—R. W. Butcher.

Ranunculus radians Revel. (Ref. No. O.310.) 23, Oxon; pond near Menmarsh, April 28th, 1937. Flowers large. Carpels "bottle-necked" with a few bristles on the ventral shoulders. Peduncles rather short, curved at the base. Floating leaves rather scarce, deeply divided (to the base in the majority), underside and petioles very hairy. Submerged leaves quite rigid—none of these specimens were "floated out."—J. F. G. Chapple. "So I should say at the moment, though I am often at a loss to discover what constant taxonomic characters (except rigid leaves) separate this from R. heterophyllus Weber."—R. W. Butcher.

Ranunculus heterophyllus Weber. 62, N.E. Yorks; pond, Gallow Green, Topcliffe, May 15th, 1937.—C. M. Rob. "Yes; in this form it is unmistakable and typical, and corresponds almost exactly to one of the plants in Herb. Linnaeus labelled R. aquatilis."—R. W. BUTCHER.

Ranunculus heterophyllus Weber, var. submersus Bab. (Ref. No. O.316.) 23, Oxon; pond on Otmoor, May 4th, 1937.—J. F. G. Chapple. "Yes; distinguished by size of flower and collapsing leaves."—R. W. BUTCHER.

Ranunculus —. 64, Mid-west Yorks; pond between Fountains and Markington, June 11th, 1937.—C. M. Rob. "Very good examples of R. heterophyllus, var. submersus Bab."—R. W. BUTCHER.

Ranunculus Drouetii F. Schultz. Det. R. W. Butcher. (Ref. No. 0.340.) 23, Oxon; pond, Marston Meadows, May 18th, 1937. Flowers exceptionally small, 6-10 mm. across when fully expanded. Receptacle hairy. Carpels slightly hairy. Peduncles short, curved—chiefly at the base. Submerged leaves collapsing. This is, I think, the plant understood as Drouetii in this country, but it is doubtful if it is Schultz's plant

of the Continent which appears to have totally glabrous carpels, and is a plant with a more slender habit."—J. F. G. Chapple.

Ranunculus pseudo-fluitans Baker & Foggitt. (Ref. No. 3061.) 12, North Hants; stream near Hazeley Heath, May 30th, 1937.—E. C. Wallace. "This is quite distinct in habit, size of flower and shape of floating leaf from what I interpret to be the type of R. pseudo-fluitans Baker & Foggitt. This is undoubtedly R. peltatus, var. penicillatus Dumortier, which is not synonymous with R. pseudo-fluitans B. & F."—R. W. Butcher.

Fumaria occidentalis Pugsley. 1, W. Cornwall; Lambourne Hill, Perranzabuloe, May 31st, 1937.—F. Rilstone. "Good specimens of a rampant form of this rare species."—H. W. Pugsley.

Fumaria muralis Sonder. 50, Denbigh; under Brassica in old quarry near Rhos-on-sea, July 25th, 1937.—C. WATERFALL. "This is only F. officinalis L."—H. W. Pugsley.

Fumaria micrantha Lag. 14, E. Sussex; cultivated land, Glynde, October 17th, 1937.—E. C. WALLAGE. "Correct."—H. W. Pugsley.

Barbarea vulgaris R. Br., var. transiens Druce? 1, W. Cornwall; weed of garden and waste ground, Lambourne Hill, April 26th, 1937 (leaves winter). This plant matches a specimen (Tyndall's Park, Bristol, June 16th, 1923) received through the B.E.C. in 1924. J. W. White, the collector, stated that the plant then distributed was similar to one from Wellsway, Bath, accepted by Dr Druce as his variety, and also put to var. transiens by Mr A. B. Jackson (Journ. White says he was attracted to the plant by the Bot., 208, 1916). darker yellow of the petals and the peculiar upper leaves which, instead of being merely toothed, were pinnatifid, with longish linear basal lobes, while the pods were those of vulgaris type. White adds his own comment:-" As stated by Druce, the plant has a stout much-branched habit and conspicuous flowers, but its marked feature lies in the linear pinnae of the upper leaves that exceed the terminal lobe in width." The plants now sent have these characters and also agree with the Bristol plant in the somewhat triangular outline of the terminal lobe of the basal leaf, though that has not, as these have, the uppermost pair of pinnae broader than the terminal leaflet. In fact, these Cornish plants appear to have the foliage of intermedia but the subulate-pointed pods of vulgaris.—F. RILSTONE. "The short account of var. transiens in the Fl. of Berks. deserves consultation. There Druce wrote 'leaves with a rather oblong terminal lobe, the lateral linear lobes much exceeding in length the breadth of the terminal lobe.' It will be seen that there is no reference to the position on the plant that the described leaves occupied, but A. Bruce Jackson, in his account of this variety, ascribed Druce's characters to the lower stem-leaves, and somewhat modified that account by saying that the terminal lobe was 'oblong cuneiform.' As Mr Rilstone's specimens have a somewhat rounded terminal lobe I am afraid that they cannot quite accurately be placed to Druce's var. transiens.'—C. E. Britton. "I suppose this is what Druce would have called his var. transiens, although I have seen more extreme forms. The degree of lobing in the upper leaves of B. vulgaris varies greatly, even on a single plant, and I have come to the conclusion after examining much material that the variety is hardly worth distinguishing. I have not noticed any difference in the colour of the flowers. The foliage of B. intermedia is quite distinct from B. vulgaris, being of a much darker shining green."—A. B. Jackson.

Draba muralis L. 1, W. Cornwall; weed in nursery gardens, Truro, May 1937.—Coll. Miss K. M. Skinner; comm. F. Rilstone.

Brassica oleracea L. 50, Denbigh; old quarry near Rhos-on-Sea, August 21st, 1937.—C. WATERFALL.

Bursa — 1, W. Cornwall; Lambourne Hill, Perranzabuloe, June 1st, 1937. A pretty form with rosette closely pressed to the stony ground.—F. RILSTONE.

Viola canina L. × stagnina Kit. 23, Oxon; Otmoor, May 26th, 1937 (Ref. No. 1982); June 5th, 1937 (Ref. No. 2017). I am indebted to Mr Hall for the determination of this plant, and to Mr Brenan for introducing me to the locality which had been given him by Mr Polunin as a locality for V. stagnina. The specimen gathered a few years ago and labelled V. stagnina, in Herb. Kew, is (teste Brenan) canina x stagnina. This hybrid is abundant over a restricted area, and, on the drier ground, is associated with V. canina. search over a period of several weeks failed to reveal the presence of V. stagnina.—J. F. G. CHAPPLE. "I visited the locality with Mr Chapple in June 1937, and although no V. stagnina could be found, its presence in these hybrids was clear from the following characters seen in various combinations: - Strongly caespitose, floriferous habit; sterility; flowers paler than V. canina with more rounded petals; spurs shorter than in V. canina, sometimes depressed and green as in V. stagnina; narrower subcordate-truncate leaves; foliose stipules."—P. M. HALL.

Viola — . 62, N.E. Yorks; cornfield, Topcliffe Station, August 15th, 1937.—C. M. Rob. "This gathering is difficult to place under the arrangement proposed by the late Dr E. Drabble, but I consider it comes best under V. Lloydii Jord. The plants are up-drawn through growing in a corn crop, and this obscures some of the characters said to be typical of V. Lloydii. However, very few of the leaves can be described as acute, and this coupled with the sub-foliaceous, often crenate, mid-lobes of the upper stipules, and with the broad sepals and large appendages indicates V. Lloydii in preference to V. Lejeunei Jord. It is to be noted that the later gathered plants are more typic-

ally leafy above, and they also show that the size of flower decreases as the season advances."—P. M. Hall.

Gypsophila elegans M. Bieb. 41, Glamorgan; waste ground, Pengam, Cardiff, June 1937.—Coll. A. E. Wade and R. L. Smith; comm. DEPARTMENT OF BOTANY, NATIONAL MUSEUM OF WALES.

Stellaria media Vill., var. apetala (Ucria) [ = Boraeana (Jord.) = pallida Dum.]. (Ref. Nos. 808, 809, 813, 814, 815.) 32, Northants; various gatherings in 1934 and 1935 from Bainton.—Coll. Mrs C. L. WILDE; comm. E. B. BISHOP. Following British Plant List I use above name, but my own inclination is to follow London Catalogue, 11th ed., and give it specific rank. (1) Wall of farmyard, May 21st, 1934. Sepals glabrous, as are most peduncles. (2) Same station and date as (1), with similar sepals and peduncles, but with longer internodes. Same station as (1) and (2), April 19th, 1935. Characters as in (2), except that stems are stouter. (4) From four separate ant-hills in field at Ashton, seemingly all of same form, April 19th, 1935. Sepals and peduncles pubescent, usually rather densely so; colour of leaves darker green, not of that pale yellowish green of the previous three, which seems typical of the var. (or species), and probably suggested to Du Mortier his name of pallida. (5) By railway, near Ballast Pits, April 28th, 1935. Sepals and peduncles densely pubescent: internodes "In Béguinot's classification long; colour as in (4).—E. B. BISHOP. (N. Giorn. Bot. Ital., n.s., 17, 348-390: 1910) the following would probably be the approximate determinations:—Ran. 808, 809, and 813: S. media (L.) Cyr., ssp. apetala (Ucria) Bég., var. glabella (Jord. & Fourr.) Rouy & Fouc. Ran. 814: S. media (L.) Cyr., ssp. pallida (Dum.) Bég., var. Boraeana (Jord.) Bég. (but the earliest varietal epithet is provided by the synonym S. apetala, var. minor Rouv & Fouc.). Ran. 815: S. media (L.) Cyr., ssp. pallida (Dum.) Bég., var. intermedia (Rouy & Fouc.) Gürke. Our glabrous form of pallida agrees better with the original description of Alsine glabella Jord. & Fourr. than do the specimens distributed by Béguinot as S. apetala, var. glabella (Fl. Ital. Exsicc., No. 532b). There seems little justification for maintaining apetala and pallida as independent subspecies, at least as far as the North European material goes, merely on the basis of the glabrous or hairy sepals, respectively. Béguinot's memoir is an important and valuable piece of work, but the last word on the taxonomy and status of the numerous forms included in the Stellaria media group has yet to be written."—H. K. AIRY-SHAW. "The collecting and sending in of numerous forms in this manner for purposes of exchange is unsatisfactory. After the National Herbaria have been supplied with specimens of each reference number there is little or nothing left for distribution to individuals. At least 10 specimens of each gathering should be sent in, and when, as in this instance, different plants are included in one gathering, each reference number should be represented by 10 specimens."—J. F. G. CHAPPLE.

Sagina apetala Ard. 23, Oxon; waste ground, Wheatley, July 22nd, 1987.—J. F. G. CHAPPLE.

Tilia platyphyllos Scop. 42, Brecon; limestone rocks, Craig Cilau, July 29th, 1937.—Coll. H. A. Hyde; comm. Department of Botany, National Museum of Wales. "Yes; the Rev. A. Ley considered it native in the limestone woods of the Wye Valley, extending westwards into Breconshire and Radnorshire. The fruits are variable in shape and in the prominence of the ribs, which are sometimes absent. In cultivated trees the leaves vary a good deal in size and degree of pubescence."—A. B. Jackson.

Geranium Endressi Gay, var. Thurstonianum Turrill. 1, W. Cornwall; Lambourne Hill. (Cultivated from root from Goonbell, W. Cornwall, 1.) July 17th, 1937. This plant remains constant in its original station at Goonbell. A form of G. Endressi somewhat resembling it was distributed through the B.E.C. (as G. nodosum L., abnormal) by Mr J. W. Long in 1935, but that had laciniate petals and does not. Dr Turrill says, come under var. Thurstonianum.—F. Rilstone.

Geranium Robertianum L., var. intermedium Wilmott. 41, Glamorgan; shingle beach, Sully, August 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales.

Rhamnus Alaternus L. 10, Isle of Wight; hedge, Pan Down, Newport, May 1937. I had not previously found this plant. In Stratton's list of Isle of Wight plants, published in 1908, there is a record—"one bush of many years' growth in a hedge on Pan Down."—J. W. Long. "A well-known Mediterranean species introduced into English gardens during the seventeenth century, or possibly earlier. A note by the late Mr Frederick Stratton in his interleaved copy of the Flora Vectensis states that it has long been established in a hedge on Pan Down. These specimens are, no doubt, from the same locality."—A. B. Jackson.

Medicago italica (Mill.) Steud. 41, Glamorgan; waste ground, Pengam, Cardiff, August 1937. Coll. R. L. Smith and A. E. Wade, and from rubbish heap, near Pengam, Cardiff, Glamorgan, 41, July 1937.—Coll. R. L. Smith; both comm. Department of Botany, National Museum of Wales. "Yes; better known to many botanists as M. orbicularis All."—J. E. Lousley. "These are M. orbicularis All."—A. J. Wilmott.

Melilotus indica (L.) All. 41, Glamorgan; waste ground, Splott, Cardiff, July 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales.

Tritolium pratense L., var.? (Cornish Marl Clover.) 1, W. Cornwall; cultivated, Lambourne Hill, August 3rd, 1937. The strain of Tri-

folium pratense known as "Cornish Marl." This I grew as the result of a suggestion from Mr Charles Nicholson that it might prove to be a distinct variety. The seed was kindly given me by Mr T. Rowse Hosking, Secretary of the Cornish Marl Growers' Association, to whom I am indebted for the following information. The plant is highly valued by agriculturists because of its persistence and the fact that, unlike most clovers, it does not need much lime in the soil. In Sutton's experiments Cornish Marl headed the list for palatibility and nutritive qualities. The roots run to 3 ft. 6 in. deep and a two-years' growth of rootstock may be as thick as a man's thumb. In habit the plant is rosetteshaped in the early stages and the stems are normally prostrate. It is more hairy than ordinary pratense, especially if the season is wet. It grew wild originally in the tract of the north Cornish coast between the Camel and Gannel Rivers and the strain has been preserved by the farmers in that region. There is also a Montgomeryshire strain originally imported from Cornwall. I understand that Mr F. R. Horne, of Seale Hayne, has had the plant under observation and will describe and name it if it proves botanically distinct. The prostrate habit seems to be the leading observable characteristic. That and the neat rosettes of the young plants were most pronounced in the growth of the specimens now distributed but I do not know how far the latter may be a characteristic of T. pratense in general.—F. Rilstone.

Anthyllis Vulneraria L., var. bicolor (Rouy & Fouc.). 41, Glamorgan; Locks Common, Portheawl, May 27th, 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales, "This is not Rouy's subvar. bicolor of var. affinis (Britt.) Rouy, which is a montane plant, but his var. Dillenii Schultes, i.e. the var. coccinea L."—A. J. Wilmott.

Lathyrus sylvestris L. 41, Glamorgan; cliffs, near Cold Knap, July 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales.

Prunus spinosa L., var. fruticans Weihe. (Ref. No. 2243.) 7, N. Wilts; Liddington, May 5th and August 4th, 1937. Young branches downy. No fruit formed.—J. D. GROSE. "Yes, but as this is almost certainly the hybrid, P. insititia × spinosa, the name ×P. fruticans Weihe should be used."—R. MELVILLE.

Prunus spinosa. L., ? var. fruticans Weihe. (Ref. No. 2162). 7, N. Wilts; Rushey Platt, Swindon, March 26th and August 18th, 1937. Young branches glabrous; flowers usually solitary. No fruit formed.—J. D. Grose. "This is P. cerasifera Ehrh., the Myrobalan or Cherry Plum, often used as a plum stock and sometimes planted as a hedge around orchards."—R. MELVILLE.

Prunus —. (Ref. No. 2201.) 7, N. Wilts; Wansdyke, Marlborough, April 21st and August 11th, 1937. This appears to have the

downy pedicels and young branches of P. instituta, but the oblong fruit of P. domestica.—J. D. Grose. "This appears to be intermediate between P. instituta and P. domestica, and is probably a hybrid of this parentage."—R. Melvelle.

Rubus pistoris Bart. & Ridd. 62, N.E. Yorks; Yearsley Moor, July 29th, 1937.—C. M. Rob. "This has clear resemblances to R. pistoris but in the absence of my Rubus herbarium I cannot say that it is that species. The strigose leaves with broad terminal leaflet and the coarser more Selmeri-like panicle, as well as other features, appear to take it away from pistoris. The latter may well occur in other parts of v.-c. 62 besides Gormire."—H. J. RIDDELSDELL. "Yes, but R. pistoris is only the dwarf form of R. Selmeri Lindeb., and grows in close company with it at Yearsley Moor, as elsewhere. It has long been known as R. Selmeri Lindeb., var. microphyllus Lindeb. in Hb. Rub. Scand., No. 34; but there is a much earlier name for R. Selmeri, and the correct combination will be R. nemoralis P. J. Muell. in Flora, 139 (1858), var. microphyllus (Lindeb.) Wm. Watson."—Wm. Watson.

Rubus furnarius Bart. & Ridd. 62, N.E. Yorks; Yearsley Moor, July 29th, 1937.—C. M. Rob. "Not furnarius. I think it was this form that caught my attention some years ago on Pilmoor. It is clearly related to Lindebergii and furnarius, but lacks the grey felted foliage, the very long petiole of terminal leaflet, the large flowers, and patent panicle branches of furnarius; nor is it so robust as most of the latter species. It is probably a new form of local occurrence and worth naming."—H. J. RIDDELSDELL. "Yes, but as R. furnarius is only a form of R. Lindebergii P. J. Muell.—and grows with it at Yearsley Moor—it is better to retain the older name for it, R. Lindebergii P. J. Muell., var. sericeus Aresch. in Some Obs. on the Genus Rubus, 145 (1885-1886)."—WM. WATSON.

Rubus Marshalli Focke & Rogers. 21, Middlesex; Park Wood, Uxbridge, August 16th, 1937.—Coll. H. Fisher; comm. Nottingham Natural History Museum. "Yes, but with very few stalked glands on stem. It is to be hoped that members will take care always to get the whole of a gathering for distribution from one bush only. Bushes which look exactly alike in the field are not necessarily all one form. Stem pieces should come from the middle of a stem, not from too high up or too low down; descriptions are taken from the middle cuttings."—H. J. RIDDELSDELL. "R. Marshalli Focke & Rogers."—Wm. Watson.

Rubus dumetorum Weihe, aggr. (Ref. No. 2523.) 19, N. Essex; Tiptree Heath, July 18th, 1937. Petals white, stamens about equalling styles; sepals reflexed in flower then loosely rising.—G. C. Brown. "Yes, R. dumetorum Weihe, aggr. It has features which associate it closely with several of the forms named by Rogers, but it fits none. This

is the case with most of our dumetorum. What is badly wanted is someone who will take up the British Caesians as a special study; it is the section of Rubus of which our knowledge is the most backward."—H. J. RIDDELSDELL. "R. myriacanthus Focke. See Journ. Bot., 201, 1937."—WM. WATSON.

Rosa dumetorum Thuill., group Deseglisei W.-Dod, var. Deseglisei (Ref. Nos. R.1990 and R.1991.) 17, Surrey; Loseley, near Guildford, July 30th, 1937.—Coll. Mrs C. L. Wilde; comm. E. B. BISHOP. "All are probably from the same bush but, as there is some slight doubt, the two gatherings are given separate reference numbers. Other bushes, apparently similar, occur in the hedge of the same field, and in that of an adjacent one. Named as above by Col. Wolley-Dod, from gatherings in 1928 and 1929, though the very scanty pubescence on upper surface of leaflets inclined me at the time to bring them under var. incerta (Déségl.) W.-Dod, especially as pubescence even beneath was far from dense."-E. B. BISHOP. "Mr Bishop is quite correct. These leaflets are much too glabrous for var. Deseglisei, and the specimens must be labelled var. incerta (Déségl.) W.-Dod. The fruits are larger than would be normal in var. Deseglisei, which usually has them broadly ovoid or subglobose, but the shape as well as the size varies in both varieties, and thus are sometimes quite roundish in var. incerta."— A. H. WOLLEY-DOD.

Rosa dumetorum Thuill., group Deseglisei W.-Dod, var. Deseglisei (Bor.) Chr., f. Rohreri R. Kell. (Ref. Nos. R.1992 solely from one bush, and R.1993 solely from quite another bush.) 17, Surrey; Witley Common, July 19th, 1937. Several bushes are scattered over an area of about an acre. An excellent match, as Roses go, for f. Rohreri (see Keller's Synopsis, p. 547), differing but in slight unimportant details. It should be noted that Keller describes leaflets as being "large," not "very large" as stated by Wolley-Dod in B.E.C. 1935 Rep., 73 (1936). Also I must admit that Keller does not state size of fruit, therefore I was wrong in describing fruit as "large" in B.E.C. 1935 Rep., 902 (1936). This Rose is very distinct, especially in the field, from my "var. Deseglisei" of the previous paragraph. Seeing that Rohreri sepals are densely glandular beneath, whilst those of var. Deseglisei and its other formae are apparently eglandular, I am inclined to think that Keller unintentionally put Rohreri under var. Deseglisei, instead of under var. pseudo-collina Chr., which immediately follows.—E. B. BISHOP. "Correctly named."—A. H. WOLLEY-DOD.

Rosa dumetorum Thuill., group Mercicae W.-Dod, var. mercica W.-Dod. (Ref. No. R.1994.) 55, Rutland; roadside verge between Exton and Uppingham, June 19th, 1937.—Coll. Mrs C. L. Wilde; comm. E. B. Bishop. "All from the same large and vigorous bush. First found by Mrs C. L. Wilde in September 1936: previously recorded from only two vice-counties. Confirmed by Col. Wolley-Dod, but with very weak

glandular peduncles, more than half being quite eglandular. Certainly this must be looked upon as a rather weak form of var. mercica, weak (that is) in glandular development on peduncles, fruit and sepals. But subfoliar glands (the possession of which is the distinguishing feature of group Mercicae) are more numerous than in the description on p. 52 of Wolley-Dod's Revision. By Keller this would seem to come nearest to R. dumetorum Thuill., var. Simonkaiana R. Kell. (Synopsis, p. 766), but again a weakly glandular form."—E. B. Bishop. "Since there are subfoliar glands as well as hispid peduncles this must go to var. mercica, but it is a very weak form, and is one of the borderland examples between one variety and another which shows the difficulty of segregating them in so fluid a genus."—A. H. Wolley-Dod.

Rosa dumetorum Thuill., group Mercicae W.-Dod, var. seticaulis W.-Dod. (Ref. Nos. R.1854, R.1997, and R.1998.) 32, Northants; edge of Severals Wood, Ufford, September 12th, 1936; June 28th, 1937; and September 4th, 1937. All from the same fairly large healthy bush, which is apparently of some considerable age. Confirmed by Col. Wolley-Dod, without any reservation. Previously known only from one station in Surrey, where it was discovered by Col. Wolley-Dod in 1910. rather weak form, weak in scantiness of acicles and glands on flowering branches below the inflorescence (the characteristic feature of var. seticaulis). However, subfoliar glands are quite numerous, more so than in Wolley-Dod's description, on p. 53 of his Revision. sent out has at least a few glands and/or acicles on some flowering branch, but such can usually only be found after careful search. must always be borne in mind that these acicles and glands become brittle with age, and are then very liable to be detached by rough weather, and perhaps even more so by handling and in transit. Consequently they are less in evidence in the later-gathered specimens. Even when acicles and glands have become mangled or detached, their bases of attachment are often easily recognisable."-E. B. Bishop. "All correctly named, but, as the collector says, they are very weak forms. I have verified that every sheet shows at least one or two acicles (in one specimen quite a collection of glands) close to the stipules, but on the branches. Such specimens show an affinity with plants which have been labelled R. obtusifolia, var. sclerophylla, which variety does not belong to R. obtusifolia, but to the Mercicae group of R. dume-This will be corrected in due course."—A. H. Wolley-Dod.

Rosa tomentosa Sm., var. pseudo-cuspidata (Crép.) Rouy. Det. W.-Dod. Various localities in and near Goring, Oxon, 23, and Streatley, Berks, 22, September 1937.—Coll. H. J. RIDDELSDELL; comm. J. F. G. Chapple. "I so named this from a sheet seen in 1937, but on examination of the whole collection I am more than doubtful. The leaflets are much too glabrous and the subfoliar glands excessive but a more important feature is the presence of acicles under the inflorescence, which, I think, will be seen on every sheet, while one or two also have

them on the stems. The specimens should be labelled R. rubiginosa L., var. typica W.-Dod, though actually not very typical and suggestive of a hybrid with some tomentosa variety, but this is improbable from the perfectly well-formed fruit."—A. H. Wolley-Dod. "The sheet received by me is R. typica W.-Dod."—E. B. BISHOP.

Rosa micrantha Sm., aggr. (Ref. No. 2522.) 19, N. Essex; Tiptree Heath, July 18th, 1937. Sepals horizontally spreading, fruit shining, leaves scented.—G. C. Brown. "Though the stem armature closely resembles that of R. micrantha, the sheet received by me is R. rubiginosa L., var. typica W.-Dod."—E. B. Bishop. "I agree with Mr Bishop's determination that this is R. rubiginosa L., var. typica W.-Dod."—A. H. WOLLEY-Dod.

Rosa micrantha Sm. Det. W.-Dod. Various localities in and near Goring, Oxon, 23, and Streatley, Berks, 22, September 1937.—Coll. H. J. RIDDELSDELL; comm. J. F. G. CHAPPLE. "Correctly named."—A. H. WOLLEY-DOD.

Pyrus latifolia L. 58, Cheshire; small tree in wood, Newton, August 28th, 1936.—C. WATERFALL. "The same as distributed last year—the form of Sorbus latifolia Lam. commonly distributed by nurserymen; see B.E.C. 1936 Rep., 401 (1937)."—J. F. G. CHAPPLE and A. J. WILMOTT.

Callitriche intermedia G. F. Hoffm. 23, Oxon; pond on Otmoor, May 4th, 1937.—J. F. G. CHAPPLE. "Yes, showing the divaricate persistent styles of this species. In Butcher and Strudwick's Further Illustrations the styles are figured closely reflexed, and described as 'soon falling'—surely erroneously."—C. E. Britton.

Epilobium hirsutum × parviflorum. (Ref. No. 2241.) 23, Oxon; gravel-pit near Eynsham, August 23rd, 1937.—J. F. G. Chapple. "Yes, excellent specimens."—G. M. Ash.

Epilobium obscurum Schreb. 12, N. Hants; Odiham, August 29th, 1937.—G. М. Аян.

Epilobium adenocaulon Hausskn. 17, Surrey; Haslemere, October 13th, 1937.—G. M. Ash.

Astrantia major L. Cult. Shavington Avenue, Chester, C. WATERFALL, 'ex Lane Newbold, near Richmond, N.W. Yorks, 65.—Coll. K. S. DICKINSON.

Daucus Carota L. 50, Denbigh; near Old Colwyn, July 3rd, 1936.—C. WATERFALL.

Galium Mollugo L. 41, Glamorgan; shingle beach, Sully, August 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales. "Intermediate between var. genuinum H. Br. and var. pubescens Schrader."—A. E. Wade. "I agree that this estimate of the whole gathering is correct."—C. E. Britton.

Galium Mollugo L., var. genuinum H. Br. 41, Glamorgan; bushy place on the cliffs near Cold Knap, Barry, July 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales. 'A very fine gathering of this variety, each sheet displaying ample material."—C. E. Britton.

Erigeron canadensis L. (Ref. No. 2702.) 7, N. Wilts; sandy field, Okus, Swindon, July 20th, 1937. Not previously recorded for this vice-county. The plants were uniformly small.—J. D. Grose. "Not an N.C.R.; for a previous record for v.-c. 7 see B.E.C. 1932 Rep., 103 (1933)."—J. F. G. CHAPPLE.

Erigeron canadensis L. 56, Notts; canal-side, Lenton, August 1st, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Ambrosia artemisifolia L. (Ref. No. 2916.) 7, N. Wilts; Broughton Common, September 1st, 1937. Found by Miss Gullick in 1933 and increasing yearly despite cutting.—J. D. Grose.

Galinsoga parviflora Cav. 56, Notts; canal-side, Lenton, August 31st, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Senecio vulgaris L.; var. erectus Trow (radiatus Koch). 11, S. Hants; broken ground, 'Bus Terminus, Bournemouth, September 20th, 1937. The Director, Royal Botanic Gardens, Kew, kindly had this plant named for me. He remarked that it was "not quite the extreme glabrous plant" and gave the reference "see Trow in Journ. Genetics, 2, 239 (1912)."—J. W. Long.

Cnicus tuberosus Roth. 10, Isle of Wight; garden, Newport, August 1936.—J. W. Long. "Mr Long tells me that the origin of this Thistle was from near Devizes, Wilts. I think it is important that the origin of cultivated specimens should be stated on the label."—J. F. G. Chapple.

Cirsium arvense (L.) Scop., var. mite Koch. (Ref. No. 3471.) 9, Dorset; farm-yard near Wool, July 12th, 1937.—J. F. G. Chapple. "I regard this as a typical form of the alien species Cirsium setosum (Besser) M. Bieb. The lobing of the stem-leaves agrees with the description in Flora Taurico-Caucasica (1819). What C. arvense, var. mite really is, appears problematical."—C. E. Briton. "Wimmer and Grabowski are

the authorities for this varietal name, not Koch. The latter described it (Syn. Fl. Germ. et Helv., ed. i, 400, 1837) in words practically identical with those of Wimmer and Grabowski (Fl. Silesiae, 2, 92, 1829) whose description runs 'Foliis caulinis sinuato-pinnatifidis subundulatis, rameis subintegris vel dentatis, mitius spinosis.' With this description the present gathering is in agreement.'—W. A. SLEDGE.

Centaurea nigra L. = C. obscura Jord. 1, W. Cornwall; field-border, Lambourne Hill, Perranzabuloe, August 10th, 1937. This form, a dwarf, spreading, semi-prostrate plant, is common in West Cornwall, and flowers a fortnight earlier than the tall; erect forms (C. nemoralis). The flowering heads are large and dark-coloured, in contrast to the smaller, lighter-coloured heads of the latter forms. It is, I think, f. elonyata C. E. Britton. On August 10th, when these specimens were gathered, the plants were going out of flower; the first fully-opened flower-head was noted on July 10th. Not till the end of the month were the tall plants in flower.—F. Rilstone. "A splendid set of specimens admirably representative of C. obscura Jord. and belonging to my forma elongata, as Mr Rilstone suggests. Such plants clearly bring out the distinctions between this species and the more common C. nemoralis Jord."—C. E. Britton.

Centaurea paniculata L., var. 41, Glamorgan; waste ground, Splott, Cardiff, August 16th, 1937.—Coll. A. E. Wade and R. L. Smith; comm. Department of Botany, National Museum of Wales. "As Rouy recognises under C. paniculata L. eight subspecies, two "formes," seventeen varieties, one subvariety and six hybrids, it will be seen that the difficulty in establishing the exact identity of the 'var.' distributed is great."—C. E. Britton.

Crepis taraxacifolia Thuill. 50, Denbigh; near Rhos-on-Sea, June and July 1937.—C. WATERFALL.

Taraxacum lissocarpum Dahlst. Det. G. Haglund. (Ref. No. 1940.) 23, Oxon; Otmoor, May 4th, 1937.—J. F. G. Chapple.

Lactuca Serriola L., ? var. dubia Jordan. (Ref. No. 2233.) 23, Oxon; waste ground, Oxford, August 20th, 1937. Not from the same locality as the plant collected by Lady Douie and named var. dubia Jord. by J. E. Lousley (see B.E.C. 1936 Rep., 265 (1937)), but from another station about a mile distant. The label should read var. dubia (Jordan) Rouy—Jordan having described it as a species.—J. F. G. Chapple. "Undoubtedly the plant described by Jordan in Pugillus Plantarum Novarum, 119, 1852, as Lactuca dubia. It matches a specimen in Herb. Mus. Brit. gathered by Jordan labelled 'Lyon à Villenbaume, 20 août, 1853,' as L. scariola integrifolia auct. gall.—a synonym quoted by Jordan in his Pugillus.'—J. E. Lousley.

Lactuca alpina Hook. f. 58, Cheshire; garden ground, Shavington Avenue, near Chester, July and August 1933-1936.—C. WATERFALL. "This is the Caucasian species Lactuca macrophylla A. Gray."—J. F. G. CHAPPLE.

Limonium binervosum (G. E. Smith) C. E. Salmon forma. (Ref. No. P.369.) 45, Pembroke; Bullslaughter Bay, August 4th, 1937.—J. F. G. Chapple. "A small, slender form of this species, mostly with very narrow foliage recalling L. transwallianum Pugsley, from which it differs by its more spathulate and more strongly mucronate leaves, larger spikes of flowers and much larger and broader corollas."—H. W. Pugsley.

Limonium binervosum (G. E. Smith) C. E. Salmon forma. (Ref. No. P.370.) 45, Pembroke; Bullslaughter Bay, August 5th, 1937.—J. F. G. Chapple. "Another dwarf form of L. binervosum, distinct from P.369, with broad foliage, and contracted spikes of large spikelets."—H. W. Pugsley.

Limonium binervosum (G. E. Smith) C. E. Salmon forma. (Ref. No. P.378.) 45, Pembroke; limestone crevices, Saddle Point, August 7th, 1937.—J. F. G. Chapple. "An extremely dwarf form of this species, probably due to a very dry habitat. It would be interesting to test this plant by cultivation."—H. W. Pugsley.

Solanum nigrum L., var. ochroleucum (Bast.). 58, Cheshire; roadside, Kilmorey Park Avenue, Chester, September 25th, 1937.—C. WATERFALL.

Euphrasia montana Jordan. (Ref. No. 25.) 64, Mid-west Yorks; Tarn Moss, Malham, June 30th, 1937.—W. A. Sledge. "Excellent specimens of E. montana Jord."—H. W. Pugsley.

Rhinanthus stenophyllus Schur. (Ref. No. 3062.) 8, S. Wilts; chalk down, Ham Hill, July 25th, 1937.—E. C. WALLACE.

Melampyrum pratense L., var. lanceolatum Schur. Det. C. E. Britton. (Ref. No. 1987.) 12, N. Hants; near Eversley, May 30th, 1937.—P. M. Hall.

Orobanche purpurea Jacq. (Ref. No. 2333.) Braye Bay, Alderney. Channel Isles. On Yarrow. June 10th, 1937. The fifth sepal is strongly developed in several plants; in others it is scarcely discernible.—J. D. Grose.

×Mentha Mulleriana F. Schultz, var. serratifolia Pugsley. Cultivated in garden at Wallington, Surrey, by A. L. Still from a cutting given by Mr Pugsley. September 1937.—Comm. E. C. WALLAGE. "This plant unfortunately grew very gross in the garden and most of the speci-

mens are side shoots. In a dry spot these would be short and crowded with whorls, with small bracts. But the specimens show the characteristic leaf-shape and flowering parts."—A. L. STILL

Mentha longifolia Huds. × rotundifolia Huds., var. sapida (Tausch) Briq. 90, Angus; by a stream, Glamis, August 19th, 1937.—Coll. R. H. Corstorphine and A. L. Still; comm. E. C. Wallace. "Among Malinvaud's Exsiccata there is a sheet labelled as above, but not at all like the Glamis plant. Another sheet which closely resembles the latter is labelled M. caerulescens Opiz. Topitz' description of var. sapida fits Malinvaud's sheet, but he gives a f. leptodentuta Top. which appears to agree with the Glamis plant."—A. L. Still.

Mentha? longifolia (L.) Huds. (Ref. No. 2232.) 23, Oxon; established on the edge of a "tip," Oxford, August 20th, 1937.—J. F. G. CHAPPLE. "This must come under nemorosa; the signs of a rotundifolia cross are not apparent; the leaves are papery and very slightly reticulate; and the spikes are slender and interrupted. See B.E.C. 1935 Rep., 795 (1936), for Trautmann's opinion."—A. L. STILL.

×Mentha crispa (L.) Fraser. Cultivated at Wallington, Surrey, by A. L. Still, August 1937, from a root from Carlisle.—Comm. E. C. Wallace. "Sole says, on a sheet of this, 'Danish Curled Mint, an Exotic.' It is old in cultivation and no doubt an escape in the few localities recorded in Britain. There are two sheets labelled M. crispa in the Linnean Herbarium. The second is marked 'sibirica.' The ancients called any Mint with rugose leaves crispa. The second Mint looks like a rotundifolia-arvensis cross (M. carinthiaca (Host) Briq.)."—A. L. Still.

Mentha piperita L. (Ref. No. 37.1227.) 3, S. Devon; ditch by road-side, Ivybridge-Cornwood Road, September 24th, 1937.—N. D. Simpson. "I should call this var. subcordata Fraser. I have several specimens like this, mostly from the West. The leaves are slightly cuneate at the base in many cases, but otherwise I cannot match it with any of my officinalis. The nearest I have is a plant from Holmwood Common, distributed by Mr E. C. Wallace, which Mr Fraser passed as subcordata. In this variety the serratures are usually more numerous, smaller and less finely pointed than in officinalis. The 'Mitcham' Mint differs slightly from this Ivybridge form."—A. L. Still.

×Mentha piperita L., var. officinalis (Sole), lusus pilosus. Cultivated at Wallington, Surrey, August 1937, by A. L. Still. Origin, Weston-in-Gordano, N. Somerset, 6.—Comm. E. C. Wallace. "=M. hircina Hull, var. hirsuta Fraser."—A. L. Still.

Mentha aquatica L. × spicata L. Runners of the "Roydon Mint," cultivated at Sutton, Surrey, September 1937.—E. C. WALLACE. "I have had these stolons 5 feet long in the garden."—A. L. STILL.

×Mentha verticillata L., var. trichoides Briq. 41, Glamorgan; Parkmill, Gower, September 1st, 1937.—Coll. A. L. Still; comm. E. C. Wallace. "See B.E.C. 1934 Rep., 796 (1935). There is some doubt about the position of this Mint. Although Briquet marked Druce's Hereford plant as stated above, I cannot find any reference to this name in his writings. But in Fragmenta Mon. Lab. (Herb, Boissier, 1894) he describes M. dalmatica Tausch, var. trichoides Briq. from Croatia. Our plant has the general facies of M. dalmatica Tausch, which is the hybrid longifolia × arvensis, and Mr Fraser agreed with me that it showed signs of a spicate parent; but there is no record of M. longifolia in Gower. In the Bishopston Valley it is closely associated with M. gentilis L., var. vesana Lej. & Court and is difficult to distinguish from this at sight. I have not seen the latter at Parkmill, but there is a form of gentilis somewhere there which has so far eluded me. I am inclined to suspect 'sporting.' "—A. L. Still.

×Mentha gentilis L., var. vesana Lej. & Court. 41, Glamorgan; Bishopston Valley, Gower, September 3rd, 1937.—Coll. A. L. Still; comm. E. C. Wallace. "See B.E.C. 1935 Rep., 108 (1936)."—A. L. Still.

×Mentha gentilis L. Cultivated at Wallington, Surrey. Origin, river bank, Symond's Yat, W. Gloucester, 34.—Coll. August 1937 by A. L. Still; comm. E. C. Wallace. "Not the same plant as that distributed last year from the same locality."—E. Ç. Wallace. "This plant has been cut down and the stolons were taken at random. In the garden it was a spreading decumbent plant, profusely branched. It is abnormal in having triangular calyx teeth and hairs in the throat of the corolla, both arvensis characters. But the habit of the plant is that of gentilis, and Dr Metcalf was not prepared to say that this name was incorrect. A similar plant was sent me from the Wye above Hereford by Mr M. L. Williams."—A. L. Still.

Lycopus europaeus L. 58, Cheshire; Upton Gorse near Chester, August 11th, 1937.—C. WATERFALL.

Lycopus europaeus L., var. dissectus With. 100, Arran; at sea-level, Lamlash, August 11th, 1937.—Coll. R. Mackeenne; comm. E. C. Wallace. "This plant is much more hairy than the usual plant of southern England and could be called var. pubescens Benth. The leaves of subglabrous plants are often much dissected near their bases."—E. C. Wallace. "The variations of this species may be classified as follows:—(1) Glabrescent or pubescent; (2) leaves dissected or sinuatedentate; (3) leaf segments acuminate or obtuse. Possible combinations of the three pairs of characters give a possibility of twelve varietal names, and although there is some co-relation between the second and third groups, a considerable number of the theoretical variations occur in nature. For an example of the complications which result see B.E.C. 1918 Rep., 298-299 (1919). Until we are prepared to use formulae to

describe such unlinked variations, it seems preferable to refer to them in short descriptive phrases rather than to attempt to apply varietal names. I should label Mr Mackechnie's plant 'a pubescent form with dissected leaves,' which indicates that it would probably fall under both var. pubescens Bentham and var. dissectus Withering and obviates the necessity of searching for type specimens of these authors."—J. E. LOUSLEY.

Prunella laciniata L. (Ref. No. 2019.) 12, North Hampshire; old camp site near Shipton Bellinger, June 20th, 1937. See note on p. 498.—P. M. Hall.

Prunella laciniata L. × vulgaris L. (Ref. No. 2020.) 12, North Hampshire; old camp site near Shipton Bellinger, June 20th, 1937. With both parents; flower-heads larger than in P. vulgaris and variable in colour; extent of toothing of leaves also variable.—P. M. Hall.

Lamium moluccellifolium Fr.? (Ref. Nos. Lab. 501, 502, 503.) 32, Northamptonshire; (1) Top of wall at Lolham, Maxey, June 12th, 1937. (2) Cornfield by Ermine Street, Walcot, -Coll. Mrs C. L. Wilde. June 21st, 1937.—Coll. E. B. Bishor. (3) Top of wall at Ufford, June 21st, 1937.—Coll. E. B. Bishop. All comm. E. B. Bishop. "I think correct, but had not previously met with this northern species. correct, seemingly N.C.R. for v.-c. 32, though it is recorded for v.-c. 31, which is yet further south."—Е. В. Візнор. "All undoubted L. amplexicaule. The rarer species may easily be distinguished by the much longer, spreading, less hirsute calyx teeth, and the rapid decrease in the size of the bracts towards the apex of the stem. Once the two species have been seen in the field they are unlikely to be confused again."-J. E. Lousley. "Certainly not L. moluccellifolium Fr. It appears to be the cleistogamous form of L. amplexicaule L."—A. J. WILMOTT.

Plantago lanceolata L., var. anthoviridis W. Watson (the extreme form). 1, W. Cornwall; Lambourne Hill, Perranzabuloe, May 3rd, 1937. The variety seems to have a slightly earlier flowering season than the typical plant. Here the first flowers seen in 1937 (on April 12th) were anthoviridis. Ordinary lanceolata appeared a day or two later. Then for a few days both forms were about equally numerous but before long the spikes of the variety were far outnumbered by those of the typical form. The main flowering season of anthoviridis is, I think, shorter than that of typical lanceolata. Davey in Flora of Cornwall gives the flowering season of P. lanceolata as April to September: Hooker (Stud. Fl.) says May to October, and Babington (Manual) May to July. In Cornwall, at any rate, all lanceolata forms appear to have two flowering seasons, the main burst of blossom in spring and early summer being followed by a "thin" period and then a second flowering period in early autumn.-F. RILSTONE. "Agrees with the type of this variety."-E. G. BAKER.

Chenopodium leptophyllum (Nutt.) Brit. & Br. 10, Isle of Wight; waste land, Cowes, August 1937.—J. W. Long. "Yes, this appears to match specimens which Aellen has named for me as C. pratericola Rydberg, var. Thellungianum Aellen (=C. leptophyllum auct.—non Moq., non Nutt.)."—J. E. LOUSLEY.

Chenopodium polyspermum L. (Ref. No. 2933.) 7, N. Wilts; Okus Quarry, Swindon, September 2nd, 1937. Specimens taken from two erect plants, one with rather narrower leaves than the other.—J. D. GROSE.

Chenopodium polyspermum L., ? var. cymosum Moq. (Ref. No. 2929.) 7, N. Wilts; Okus Quarry, Swindon, September 2nd, 1937. All specimens taken from one procumbent plant, about six feet in diameter, with over a hundred fruiting spikes. Elsewhere in Wiltshire, I have seen plants with similar leaves and inflorescence measuring, in the fruiting stage, only three or four inches.—J. D. Grose.

Chenopodium polyspermum L., var. acutifolium (Sm.) Gaudin. 41, Glamorgan; waste ground, Newport Road, Cardiff, September 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales.

Note.--The genus Salicornia is under revision and the sending in of dried specimens is useless at the moment.

Salicornia ramosissima Woods, small form. (Ref. No. 2524.) 19, N. Essex; dry ground away from tide, Langenhoe, September 12th, 1937. Central stem erect, branches spreading, all deep red, a perfectly detached colony where water cannot penetrate.—G. C. Brown. "Two forms, both of which probably come under S. ramosissima of the Cambridge British Flora."—A. J. Wilmott.

Salicornia disarticulata Moss? (Ref. No. 2525.) 19, N. Essex; [Ray Channel] Saltings, Mersea Island, September 12th, 1937. Plant green, stems mostly erect, spikelets disarticulating easily. With S. stricta, but very distinct in size and habit.—G. C. Brown. "Salicornia disarticulata Moss."—A. J. Wilmott.

Polygonum Convolvulus L., var. subalatum DC. 56, Notts; canal side, Lenton, August 1st, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Musrum. "Correct. Not a critical plant. The distribution of this as compared with the usual form of the species is not very well known."—C. E. Britton.

Polygonum —. 56, Notts; canal side, Lenton, August 1st, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "Not very good material. The species, however, is P. Persicaria L. and is an unusual form with the ripe fruits exceeding the perianth. I cannot discern an admixture with a second species."—C. E. Britton.

Polygonum Raii Bab. (Ref. No. P.375.) 45, Pembroke; Manorbier, August 4th, 1987.—J. F. G. CHAPPLE.

Polygonum Bellardi All. 10, Isle of Wight; river side, Newport, October 1936.—J. W. Long. "The application of Allioni's name is extremely doubtful, but the present gathering does not represent the plant to which it has been referred in most recent Continental floras. The spreading habit, dingy ochreae, and small fruits (circa 1.75 mm. long) show that Mr Long's plant is P. pulchellum Lois."—J. E. LOUSLEY.

Euphorbia virgata W. & K., var. esulifolia Thell. 11, S. Hants; between Owslebury and Baybridge, May 27th, 1937 (Ref. No. 1998.), and June 12th, 1937 (Ref. No. 1998 A).—P. M. Hall. "Not the f. esulifolia Thell."—A. J. Wilmott.

Euphorbia virgata W. & K., ? f. esulifolia Thell. (Ref. No. 2657.) 8, S. Wilts; Larkhill, July 14th, 1937. Like the plant distributed last year by Mr Foster, this grew in abundance in a military camp.—J. D. GROSE. "One of the forms so named. This and Mr Hall's Owslebury plant are different extremes of what is included under E. virgata W. & K., but there seem to be several forms and ripe seeds are required before they can be satisfactorily studied."—A. J. Wilmott.

Ulmus nitens Moench. (Ref. No. 3777.) (Foliage only; mature and epicormic.) 32, Northants; roadside, Silverstone, June 7th, 1937.—J. F. G. CHAPPLE and R. MELVILLE. "This Elm is very similar in leaf shape to my conception of 'pure', U. nitens Moench. Compare subdistal leaves of the short shoots of normal branches with the figure given in Ann. Bot., n.s., 1 (4), 1937, p. 674. The leaves differ in having comparatively few glandular hairs and numerous short simple hairs on the lower surface, whereas the reverse should be the case. differences in shape of the leaves of epicormic shoots as compared with those of normal shoots, the scarcity of glandular hairs and the increased numbers and length of the simple hairs."—R. Melville. Ulmus nitens Moench as I understand it but the leaves are not fully developed and should have been collected later in the season. The collectors have, however, wisely included epicormic shoots which, as usual, show the upper surfaces scabrid."—A. B. Jackson.

Vallisneria spiralis I. 59, S. Lancs; Reddish Canal, July 1937.—Coll. Miss E. S. Todd; comm. J. F. G. Chapple. "Exceedingly interesting and beautiful specimens. This species is characteristic of warm climates in the New and Old Worlds, but has extended into colder waters in France, Japan, Canada and elsewhere. On the continent it has been observed in thermal waters and warm effluents, and it would be interesting to know if the locality in the Reddish Canal is close to a warm discharge from a factory."—J. E. Lousley. "Vallisneria spiralis appears to have been first discovered in Britain in this locality by C. Bailey in 1908. (See B.E.C. 1908 Rep., 338 (1909), and B.E.C. 1924

Rep., 533 (1925).) The water of the canal at Reddish is raised to an abnormal temperature—sometimes up to 90° F. (Bailey, Journ. Bot., 328, 1884)—by the discharge of hot water from adjacent mills. The other plants associated with V. spiralis in the Reddish Canal are Chara Braunii and Naias graminea, and C. Bailey in his account of the latter species in Journ. Bot., 305-333, 1884, puts forward the theory that Naias graminea may have been introduced to the local mills with cotton from Egypt. Groves and Bullock-Webster (British Charophyta, 2, 13) think it probable, too, that Chara Braunii may have been introduced from Egypt by the same means. But the introduction of Vallisneria spiralis cannot be ascribed to the same source as I am unable to find that it occurs in Egypt—it is not mentioned in Muschler's Manual Flora of Egypt."—J. F. G. Chapple.

Sisyrinchium angustifolium Mill. 10, Isle of Wight; garden, Newport, September 1936.—J. W. Long. [Origin unknown.]

Juncus compressus Jacq. (Ref. No. 28.) 64, West Yorks; Newton in Fairburn, July 21st, 1937.—W. A. Sledge.

Lemna polyrrhiza L. 56, Notts; canal, Lenton, July and August, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Wolffia arrhiza Wimm. 17, Surrey; pond on Burgh Heath, September 10th, 1937. The surface of the water of the small pond was completely covered with the Wolffia at this date. By mid-October very little was to be seen on the surface but quite a number of fronds could be seen on the bottom of the pond, about one foot below the surface. A month later conditions were much the same even with ice on the pond. Many of the fronds in September were budding laterally, but by October all the off-shoots appeared to have been shed."—E. C. WALLACE.

Potamogeton alpinus Balb. 62, North East Yorks; Preserve Pond, Castle Howard, July 27th, 1937.—C. M. Rob. "Correctly named."—J. E. Dandy.

Potamogeton rutilus Wolfgang. (Ref. No. 5045.) 111, Orkney; in about 2½ feet of water, Loch of Ayre, St Mary's Village, Holm, Mainland, August 28th, 1937.—H. H. Johnston. "This is the true P. pusillus L. (P. panormitanus Biv.), see Journ. Bot., 76, 89-92, 1938."—J. E. Dandy.

Zostera marina L. (Ref. No. 37.1207.) 11, S. Hants; in deep mud in a water hole near a bunny, Pennington Marshes, September 7th, 1937.—N. D. SIMPSON. "Correctly named, but the leaves are rather narrower than are quite typical, even on flowering shoots. The leaves on vegetative shoots are always broader than those on fertile ones."—T. G. Tutin.

Zostera Hornemanniana Tutin. (Ref. No. 37.1209.) 9, Dorset; in sandy mud, Bramble Bay, near S. Haven, Poole Harbour, September 8th, 1937.—N. D. SIMPSON. "Correctly named."—T. G. TUTIN.

Zosteru nana Roth. (Ref. No. 37.1208.) 9, Dorset; in sandy mud, Bramble Bay, near S. Haven, Poole Harbour, September 8th, 1937.—N. D. SIMPSON. "Correctly named."—T. G. TUTIN.

[Eriophorum alpinum L. (Ref. No. 30.) Switzerland, Stazersee, near St Moritz, August 17th, 1937.—W. A. Sledge.]

Carex Pseudo-cyperus L. (Ref. No. 2620.) 7, N. Wilts; near Clyffe Pypard Pond, July 8th, 1937.—J. D. Grose.

Carex vesicaria L. (Ref. No. 919.) 39, Staffs; Trentham Park, June 16th, 1937.—E. S. Edees. "Yes, typical specimens."—E. Nelmes.

Carex inflata Huds. (Ref. No. 920.) 39, Staffs; Trentham Park, June 16th, 1937.—E. S. Eddes. "Yes."—E. Nelmes. "A most interesting form with leaves up to 9 mm. broad, not inrolled, and female spikes 65 × 10 mm. Very similar to the plant gathered by Dr Praeger, labelled 'Drain, Mullaghmore Lough, Co. Armagh, Ireland, 8th June 1893,' which was first referred in error to C. rhynchophysa C. A. Meyer. Both gatherings are best under Ascherson's C. rostrata, var. latifolia, Fl. Brandenb., 1, 792 (1864)."—J. E. Lousley.

Carex strigosa Huds. 12, N. Hants; wood on clay, Empshott, June 6th, 1937.—E. C. WALLACE. "Yes."—E. NELMES.

Carex helodes Link. (Ref. No. 918.) 39, Staffs; Consall, July 3rd, 1937.—E. S. Edees. "Yes."—E. Nelmes and J. E. Lousley.

Carex extensa Good. 3, S. Devon; side of river Tamar, Bere Ferrers, June 26th, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "Yes."—E. Nelmes.

Carex panicea L., ? var. tumidula Laest. (Ref. No. 1987.) 23, Oxon; Otmoor, May 25th and June 6th, 1937.—J. F. G. Chapple. "Two forms appear to be represented here—f. tumidula Laest. and f. robustu Warnstorf (elongated yellow fruits)."—E. Nelmes. "Plants similar to this gathering are frequent in fens and bogs in many parts of England, and in my opinion are merely forms due to their habitat. They have sometimes been referred to var. tumidula Laest., but specimens so named in Herb. Bennett (in Herb. Mus. Brit.) from Colonsay, v.-c. 102, exhibit the characters attributed to the variety in an extremely marked degree and differ more from the present gathering than this differs from the normal British plant. Unless a type specimen of Laestadius' plant can be produced I suggest that the name tumidula should be restricted to extreme examples such as those from Colonsay."—J. E. Lousley.

Carex Goodenowii Gay. (Ref. No. 921.) 39, Staffs; Rudyard Lake, June 26th, 1937.—E. S. Edees. "Yes."—E. Nelmes. "Yes, a not unusual lakeside form with the upper female spikes terminating in a few male flowers."—J. É. Lousley.

Carex Goodenowii Gay. 62, N.E. Yorks; Pilmoor, July 25th, 1937.— C. M. Rob. "There is an almost identical plant in Marshall's Herbarium which Kükenthal identified as 'forma monstrosa' (No. 2384, W. Sutherland, 1900). Ar. Bennett's comment was 'Very odd. But for the distinctly ribbed fruits one might have thought caespitosa'."-E. NELMES. "I was with Miss Rob when this was gathered and have no hesitation in describing the sedge as the most distinct and uniform variant of the polymorphic C. Goodenowii that I have ever seen in the field. Most of the variations of this species run into one another so much when a large enough series is examined that in the present state of our knowledge it is impossible to do more than select occasional extreme variants on which to confer names. The present gathering may be named C. Goodenowii Gay, var. elatior Lang, sub-var. angustifolia (Kük.) (Allg. bot. Zeit., 3, 1888), forma subovalis (Kneucker) and matches Kneucker, Exsicc. 9, 1901, No. 263. Notes on whether the variation persists in this locality will be very welcome."—J. E. Lousley. "There is a specimen of C. Goodenowii in Herb. Druce from the New Forest, Brockenhurst (coll. B. King, 1919), which exhibits the same features as Miss Rob's plant, except that it is very stunted (16 cm. high) and has a 'starved' look. In an accompanying note, the collector says 'the forest is very dried up.' Another specimen with 'fertile spikes reduced 'from Littlesea, Dorset, collected in the same dry summer (1919)—after six weeks' drought—by the Rev. H. J. Riddelsdell and distributed through the B.E.C. (see B.E.C. 1919 Rep., 843 (1920)). makes some approach to Miss Rob's plant, but the fertile spikes are not nearly so contracted. Observation should be kept on the plant at Pilmoor to see whether this character is due to climatic conditions."-J. F. G. CHAPPLE.

Carex remota L. 3, S. Devon; side of river Tamar, Bere Ferrers, June 26th, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "Yes."—E. Nelmes.

Carex —... 62, N.E. Yorks; roadside, Terrington Carr, July 29th, 1937.—C. M. Rob. "C. paniculata × remota— a form of the hybrid not coming under ×C. Boenninghauseniana (Weihe)."—J. E. LOUSLEY. "Miss Rob's plant appears to me to be an extreme shade form of C. disticha Huds."—E. Nelmes.

Carex disticha Hudson. (Ref. No. 29.) 64, W. Yorks; Newton near Fairburn, July 21st, 1937. Sent partly for comparison with Ref. No. 26, and partly on account of the unusually well-formed fruit.—W. A. SLEDGE. "Yes."—E. NELMES.

Carex disticha Huds., var. longibracteata (Schleich. ex Druce). (Ref. No. 26.) 64, M.W. Yorks; Tarn Moss, Malham, June 30th, 1937. A form rather than a variety which here produced every intermediate state down to the typical short-bracted type. But some of the specimens now distributed are extreme examples of the form with bracts often reaching a length of 7 inches. For a note on the varietal name, which appears to be a nomen nudum, see Journ. Bot., 35, 145, 1897. —W. A. Sledge. "Yes, extreme examples of a form which occurs rather frequently."—E. Nelmes. "An extremely interesting luxuriant form of C. intermedia Good. For reasons for rejecting Hudson's name see C. B. Clarke in Journ. Linn. Soc., 36, 291, 1903. Long-bracted forms of this species are not infrequent, and it seems scarcely worth while adopting Schleicher's name which Britten has shown to be invalid (Journ. Bot., 1897, 145)."—J. E. Lousley.

Carex incurva Lightf., var. erecta Lang. (Ref. No. 27.) 90, Forfar (Angus); Fishtown-of-Usan, July 14th, 1937.—W. A. Sledge. Sledge's excellent material matches a sheet in Herb. Mus. Brit. collected by O. F. Lang as his variety, and also agrees with the author's original description 'Culmo stricte erecto 4-8 pollices alto' (Linnaea, 24, 507, 1851)."-J. E. Lousley. "This plant is one of the components of a very variable species, with forms and varieties in Europe, Asia, and N. and S. America. The chief European forms appear to be as follows: -(1) A comparatively tall, robust plant, with erect or nearly erect stems; occurring in Norway and probably in Scotland (C. maritima Gunn., 1772; C. incurva Lightf., var. erecta O. F. Lang, 1851; var. pratensis Hartm., 1854); (2) a smaller plant with usually curved stems, found in Scotland, N. England, Norway, etc. (C. incurva Lightf., 1777); and (3) a short, straight-stemmed plant from Switzerland, Austria, etc. (C. juncifolia All., 1785). Dr Sledge's specimens appear to be too slender for typical C. maritima Gunn. They differ considerably from Marshall's 2364, which Kükenthal cites under Lang's var. The name C. maritima Gunn. was omitted from the Index Kewensis."—E. Nelmes.

Panicum Crus-galli L., var. brevisetum Döll. 41, Glamorgan; waste ground, Pengam, Cardiff, June 1937.—Coll. A. E. Wade and R. L. Smith; comm. Department of Botany, National Museum of Wales. "Echinochloa crus-galli (L.) Beauv., var. mitis (Pursh) Peterm."—C. E. Hubbard.

Setaria viridis (L.) Beauv., var. major (Gaud.) Pospichal. 41, Glamorgan; waste ground, Newport Road, Cardiff, October 1937.—Coll. A. E. Wade and R. L. Smith; comm. Department of Botany, National Museum of Wales... "Setaria viridis (L.) Beauv., var. major (Gaud.) Koch."—C. E. Hubbard.

Setaria viridis (L.) Beauv., var. major (Gaud.) Koch. 41, Glamorgan; waste ground, Newport Road, Cardiff, September 1937.—Coll. R. L. Smith; comm. Department of Botany, National Museum of Wales. "Setaria viridis (L.) Beauv., var. major (Gaud.) Koch."—C. E. Hubbard.

Setaria viridis (L.) Beauv., var. major (Gaud.) Koch. Awns varying from green to purple. 41, Glamorgan; waste ground, Penarth Road, Cardiff, September 1937.—Coll. R. L. SMITH; comm. DEPARTMENT OF BOTANY, NATIONAL MUSEUM OF WALES. "Setaria viridis (L.) Beauv., var. major (Gaud.) Koch."—C. E. Hubbard.

Setaria verticillata (L.) Beauv. 6, N. Somerset; garden weed near Clevedon, August 1937.—Coll. R. L. Smith and Mrs C. I. Sandwith; comm. Department of Botany, National Museum of Wales. "Setaria verticillata (L.) Beauv."—C. E. Hubbard.

Phleum nodosum L. (Ref. No. 2273.) 20, Herts; Wilbury Hill, August 31st, 1937.—P. M. Hall. "Phleum nodosum L."—C. E. Hubbard.

Phleum pratense L., var. intermedium? 56, Notts; Colwick, July 6th, 1937.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "Phleum nodosum L."—C. E. Hubbard.

Agrostis stolonifera L. 1, W. Cornwall; Lambourne Hill (growing with bush fruit), August 17th and September 14th, 1937. "Ad var. giganteam vergens" was Dr Stapf's comment some years ago on a similar gathering from the same enclosure.—F. Rilstone. "Agrostis gigantea Roth."—C. E. Hubbard.

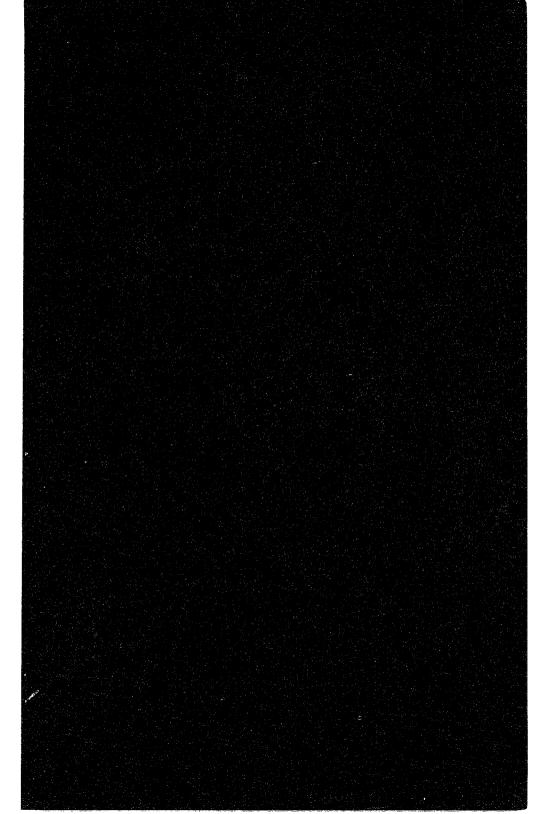
Cynosurus cristatus L. Large-spiked form. 41, Glamorgan; waste ground, Pengam, Cardiff, June 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales. "Cynosurus cristatus L."—C. E. Hubbard.

Cynosurus cristatus L. Small-spiked form. 41, Glamorgan; waste ground, Pengam, Cardiff, June 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales. "Cynosurus cristatus."—C. E. Hubbard.

Festuca rigida (L.) Kunth, var. Guernsey; near Fort Doyle. Cultivated in Lady Davy's garden, West Byfleet, Surrey, June 2nd, 1937. Lady Davy collected this plant in, I believe, 1926 near Fort Doyle, and it has grown abundantly at Byfleet ever since. In 1936 I found the same variety near St Peter's Port, about five miles from the first station.—C. M. Rob. "Scleropoa rigida Griseb., var. patens Coss & Dur."—C. E. Hubbard.

Bromus maximus Desf. 41, Glamorgan; roadside near Newport Road, Cardiff, June 1937.—Coll. A. E. Wade; comm. Department of Botany, National Museum of Wales. "Bromus Gussonei Parl."—C. E. Hubbard.

Bromus carinatus Hook. & Arn. (Ref. No. 4937.) 23, Oxon; established on waste-ground by the Cherwell, Oxford, September 6th, 1937.—J. F. G. Chapple. "Bromus laciniatus Beal. (B. pendulinus Sessé). Occasionally cultivated as an ornamental grass. Naturalized on Thames' bank at Kew."—C. E. Hubbard.



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