THE BOTANICAL SOCIETY AND EXCHANGE CLUB OF THE BRITISH ISLES.

REPORT FOR 1930

OF THE

BOTANICAL EXCHANGE CLUB

(CONVENIENTLY ABBREVIATED REP. B.E.C.)

BY THE

EDITOR AND DISTRIBUTOR, C. E. BRITTON.

VOL. IX. PART IV.

PUBLISHED BY
T. BUNCLE & CO., MARKET PLACE, ARBROATH.

August 1931.

PRICE 4s.

British and Foreign Trees and Shrubs in Cornwall

By EDGAR THURSTON

WITH 42 WHOLE PAGE ILLUSTRATIONS

Demy 8vo. 12s. 6d. net.

"A book that will be received with delight by all interested in horticulture in the Duchy. It is a work that has entailed not only a profound knowledge of the subject dealt with, but extensive research that must have covered a period of many years and demanded an enormous expenditure of time and labour. Mr Thurston and the Royal Institution of Cornwall are to be commended for thus putting the fruits of the former's toil before the public."—The Western Morning Press.

Principles of Plant Biochemistry

PART I

By MURIEL WHELDALE ONSLOW

Royal 8vo. Illustrated. 16s. net.

A short, up-to-date presentation of the subject, with full bibliographical references. Mrs Onslow is the author of *Practical Plant Biochemistry*. This volume and its successor will deal with the theoretical side of the subject.

CAMBRIDGE UNIVERSITY PRESS

Fetter Lane, London, E.C.4.

THE BOTANICAL SOCIETY AND EXCHANGE CLUB OF THE BRITISH ISLES.

(VOL. IX. PART IV).

Victoria Regina.



Floreat flora.

REPORT FOR 1930

OF THE

BOTANICAL EXCHANGE CLUB

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

BY THE

EDITOR AND DISTRIBUTOR.

C. E. BRITTON.

The Subscription, 12s 6d per annum, and Non-Contributing Member's Subscription of 10s per annum, became due on January 1, 1931, and should be sent to

G. CLARIDGE DRUCE,

YARDLEY LODGE, 9 CRICK ROAD, OXFORD.

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

Exchange Club Parcels for 1931 should be sent, post paid, on or before lst December 1931, to

P. M. HALL, Esq.,

12 High Street, FAREHAM, Hants,

who will act as Distributor and Editor of the B.E.C. Report.

Printed by T. BUNCLE & CO., Arbroath.
August 1931.

LIST OF PARCELS RECEIVED.

					No. of G	athering	No. of Sheets.		
S. F. Beattie						20	227		
G. J. V. Bemrose		•••	•••			3	33		
C. E. Britton	•••	•••				17	221		
G. C. Brown		•••	•••			7	98		
R. J. Burdon	•••		•••			10	145		
R. Bulley		•••	•••	•••	•••	12	96		
Cardiff, Nat. Mu	s. Wa	les		•••	•••	8	97		
G. C. Druce	•••	•••	•••			48	627		
H. Foster	•••	•••				9	94		
J. Fraser	•••		•••	•••		5	101		
L. B. Hall	•••	•••	•••		•••	1	24		
P. M. Hall		•••	•••		•••	2	18		
I. M. Hayward					•••	1	12		
I. Helsby	•••	•••	•••			4	37		
J. E. Little	•••	,		•••		21	188		
J. W. Long		•••	•••	•••		7	80		
Bro. Louis-Arsèn	е	•••	•••	•••	•••	18	421		
J. E. Lousley			•••		•••	24	230		
H. J. Riddelsdell			• • • •	•••	•••	9	78		
F. Rilstone			•••	•••	•••	5	51		
I. M. Roper	•••		•••		•••	5	73		
W. A. Sledge				•••	•••	5	77		
R. L. Smith		•••			•••	7	129		
H. B. Willoughb	y Smi	$^{ m th}$			•••	1	26		
F. A. Sowter	•••	•••	• • •			5	58		
C. Waterfall	•••	•••	•••		•••	6	77		
J. W. White			•	•••	•••	11	143		
A. Wilson	•••	•••				3	70		

3621

Ranunculus acris L. Horley and other places, N. Oxon, June 1930. With very small flowers (only 50 to 65 per cent. of usual diameter), petals often notched or scalloped, stamens much reduced, sometimes hardly showing beyond the head of styles; plant slender. Scattered among normal plants and fairly frequent in occurrence.—H. J. RIDDELSDELL. "Probably var. minutiflorus Dr. See Rep. B.E.C., 469, 1916, and 24, 1923."—BRITTON.

Ranunculus ophioglossifolius Vill. Near Cheltenham, Gloster, August 1930.—G. C. Druce.

Ranunculus parviflorus L. (1) Berry Head, S. Devon, June 2, 1930; coll. E. D. Morgan, comm. H. Foster. (2) Gotham, Notts, June 5, 1930.—R. Bulley.

Ranunculus triphyllus Hiern. Pond on the Moat Farm, Ubley, North Somerset, June 3, 1930. Agrees well with gatherings approved by Hiern. The carpels are not bristly.—Jas. W. White. "Hiern's triphyllus, judging by his herbarium examples—all of which I examined—was merely a form of R. heterophyllus, and to avoid confusion with Wallroth's similar name it has been thought advisable to drop both and use var. trifidus Pears. These plants quite justify their label and are well displayed."—Pearsall.

Ranunculus floribundus Bab. Pond near Yate Court, West Gloucester, June 19, 1930. Gathered rather late, in shallow water after weeks of drought, when few submersed leaves survived. As a Babingtonian species this is unsatisfactory. Messrs Groves and Pearsall both regard it as linking peltatus with heterophyllus and, as a rule, much nearer the former.—Jas. W. White. "Fine examples of this and splendidly mounted, as we expect from Mr White. (It is a fact worth recording, that all the sheets of Batrachium and Potamogeton sent in this year to both clubs are far more carefully prepared than is commonly the case.)"—Pearsall.

Ranunculus tripartitus DC. Knighton Heath, S. Devon, May 7, 1930.—E. D. Morgan. "Yes, from a well-known station. These slender and delicate examples are most carefully mounted and display the plants to the greatest advantage."—Pearsall.

Papaver Rhoeas L. [B.39.] Wheat-field near Greenstreet Green, Orpington, W. Kent, July 12, 1930.—J. E. Lousley. "See Rep. B.E.C., 274-7, 1918, for list of varieties of P. Rhoeas. According to the clavis there given, this plant would come under var. caudatifolium Fedde, sub-var. subpinnatifido-caudatum Fedde."—Briton.

Papaver Lecoqii Lam. Dry Sandford, Berks, July 1930.—G. C. Druce.

Papaver hybridum L. Splott, Cardiff, Glamorgan, June 18, 1930. This species (growing in company with Roemeria) was rather abundant this year. Curiously enough, I never once saw this poppy with a fully expanded flower. The petals must be exceedingly fugacious even for Papaver.—R. L. SMITH.

Fumaria capreolata L., var. Babingtonii Pugsley. [2461.] Hedgebank, Fingringhoe, N. Essex, June 5, 1930. Flowers pale pink, tips deep claret colour. Plant rampant.—G. C. Brown.

Fumaria micrantha Lag. Chalk near Goring, Oxon, June 29, 1930.— H. J. RIDDELSDELL.

Cardamine bulbifera Crantz. Wood near Croxley Green, Herts, May 22, 1929.—I. Helsey.

Erophila verna E. Meyer (aggr.). [841b.] Wymondley Road, Hitchin, Herts, April 18, 1930.—J. E. Little. "I make this come under Boerhaavii rather than verna E. Meyer. Ovules 24-40, and therefore it would be var. decipiens. I think, perhaps sub-var. linearifolia. Of course the fruit is narrow for the β section, but not beyond that of decipiens."—Drabble.

Sisymbrium pannonicum Jacq. [B.22.] Waste ground near Thames, Ham, Surrey, July 5, 1930. An alien plant becoming quite plentiful round London.—J. E. Lousley. "The specific name, altissimum L., is nowadays used in place of pannonicum."—Ep.

Sisymbrium Thalianum (L.) Gay. Near Earl Shilton, Leicester, May 1930.—F. A. Sowter.

Erysimum cheiranthoides L. Netherfield, Notts, August 9, 1930.— R. Bulley.

Bursa pastoris Weber, form or var. Shavington Avenue, Chester, June 1930.—C. WATERFALL. "I should name this Capsella B.-p. (L.) laevigata E. At."—BRITTON.

Teesdalia nudicaulis Br. (1) Near Earl Shilton, Leicester, May 1930.—F. A. Sowter. (2) Sandy waste ground near Gainsborough, N. Lincs, June 1930.—H. B. WILLOUGHRY SMITH.

Helianthemum polifolium Mill. Berry Head, Devon, June 2, 1930; coll. E. D. Morgan, comm. H. Foster.

Viola lactea Sm. Preston-on-Teign, Devon, June 4, 1930; coll. E. D. Morgan, comm. H. Foster. "Right, I believe, but rather scanty material."—Gregory.

Viola lactea × Riviniana = × Curnowii Dr. [528.] Chailey Common, E. Sussex, May 17, 1930. Growing very abundantly with both parents. V. canina L. also occurs, but I have been careful to select in the fresh state only plants which contained no trace of canina. This cross frequently gives rise to plants which when dried are very like canina superficially. The cordate or sub-cordate leaf bases, however, as well as the more inflated spurs and the fringing of the stipules, are good guides to the true parentage of the plants. The flowers when fresh are very pale blue, only slightly more coloured than those of V. lactea.—P. M. Hall. "Correctly named, I have no doubt."—Gregory.

Viola odorata L., var. subcarnea (Jord.). [431.] Tidbury Ring near Bullington, N. Hants, April 5, 1930. This var. is widely distributed on the chalk in Hampshire, but generally occurs sparingly among the type and var. dumetorum (Jord.). Here, however, it was the dominant form, and the forma, imberbis (Leight.), was entirely absent, which is also unusual. The forma imberbis may occur in any of the colour varieties. The colour varieties, as well as the imberbis character, will, I believe, prove to be genetically constant.—P. M. Hall. "The direction of leaf hairs in this violet is not uniform, and I have for a long time considered it a hybrid, hirta × odorata, very near odorata; not a variety."—Gregory. "In a Surrey locality known to me, a form that I identify as V. subcarnea Jord., is to be met with year after year, and plants transplanted to my garden flower maintain their characters each season."—Britton.

Viola contempta Jord., var. patula Drabble. [918.] Beggarly Shot, Purwell Field, Hitchin, Herts, October 4 and 11, 1930.—J. E. LITTLE. "All these are contempta Jord., and most of them are var. patula. Typically, however, var. patula has several widely divaricate or even more or less prostrate branches from the base. I have given my determinations on each label."—Drabble.

Viola agrestis Jord. [929.] Near Highover Farm, Hitchin, Herts, October 10, 1930.—J. E. Little. "Yes, the late autumnal state of agrestis, which is usually smaller-leaved than the spring and summer states."—Drabble.

Viola agrestis Jord. [900.] Ash Brook, St Ippolyts, Hitchin, July 4, 1930.—J. E. Little. "Yes, the summer state of agrestis."—DRABBLE.

Viola agrestis Jord. [895.] Cornfield, near Nine Springs, St Ippolyts, Herts, September 2, 1930.—J. E. Little. "Yes, agrestis."—Drabble.

Viola —. [919.] Beggarly Shot, Purwell Field, Hitchin, Herts, October 4, 1930.—J. E. Little. "V. agrestis Jord., the autumnal state."—Drabble.

Viola —. [921.] Beggarly Shot, Purwell Field, Hitchin, October 6, 1930.—J. E. LITTLE. "These are V. latifolia Drabble, but not very 'typical." The leaves are usually broader and the flowers paler, but I think there can be no doubt about the identification."—Drabble.

Viola Deseglisei Jord. East Molesey, Surrey, June 1, 1930.—J. Fraser. "A mixed gathering. Some are Deseglisei, and I have confirmed these on the labels. Of the rest, some are probably small and 'untypical' V. contempta Jord., and others are indeterminate and probably hybrids."—Drabble.

Viola Deseglisei Jord. [860.] L.N.E. Railway, Wymondley Road, Hitchin, Herts, June 1, 1930.—J. E. LITTLE. "Early-flowering plants, but not Deseglisei, I think. The habit suggests segetalis, and so I should call these if segetalis occurs in the neighbourhood."—DRABBLE.

Viola Deseglisei Jord. [866.] 100 acre field, Great Wymondley, Herts, June 7, 1930.—J. E. LITTLE. "Yes."—Drabble.

Viola Deseglisei Jord. [856.] Rowney Warren, Beds, May 26, 1930.—J. E. Little. "All these are rather young and without basal branching, but I think they are Deseglisei. In this state it is impossible to be sure that there are no young plants of segetalis and its forma obtusifolia present."—Drabble.

Viola arvatica Jord. [901.] Great Wymondley, Herts, September 6, 1930.—J. E. Little. "Yes, some of the plants are unusually large."—Drabble.

Viola derelicta Jord. [858.] Wilbury Hill, Herts, May, June, August, September 1930.—J. E. LITTLE. "Yes, some have the larger flowers found in plants from N. Scotland."—Drabble.

Viola segetalis Jord. Det. Drabble. Weed in Botanic Garden, Oxford, June 1930.—G. C. Druge.

Cerastium viscosum L., var. macropetalum (Dr.). [852.] Burnham Green, Herts, May 10, 1930.—J. E. Little. "Yes."—Drabble.

Stellaria aquatica Scop. By Trent, Kings Mills, Derbyshire, August 22, 1930.—R. Bulley.

Arenaria tenuifolia L. Wilbury Hill, Herts, June 3, 1930.—J. E. Little.

Hypericum hircinum L. Churchyard, Clifton Hill, Bristol, August, September 1930.—J. W. White.

Hypericum elatum Ait. Cultivated in the garden of Bristol University, August 20, 1930. Alien. An ornamental shrubbery plant which

has a place in our descriptive books and catalogues. These fruiting specimens show the persistent sepals that mark the species. In *H. hircinum* they are deciduous.—J. W. White.

Malva pusilla Sm. Roadside, Ryde, Isle of Wight, August 1929.— J. W. Long. "Excellent examples showing the characteristic features of this species."—Britton.

Malva —. Riverside, Newport, Isle of Wight, September 1930.— J. W. Long. "Closely related to Malva parviflora L., and apparently the var. microcarpa (Pers.) Fiori et Paoletti, which Thellung terms a rather weak var. with calyx less accrescent at maturity and with smaller fruit."—Britton.

Malva parviflora L. Waste ground, Newport, Isle of Wight, September 1929.—J. W. Long. "Well-marked by the accrescent calyx and wrinkled carpels. In continental specimens the fruiting calyx often becomes purplish."—Britton.

Linum catharticum L. [3342.] Banstead Downs, Surrey. A very much-branched form with a multitude of flowering branches, suggesting at first sight a condition of more than annual duration. It is possibly a biennial form or an "over-wintering" annual. Rouy (Fl. Fr., iv., 56) has a var. segetale Adam, found in stubble fields on calcareous soil in the Vosges, which, by the description, must resemble the plant distributed.—C. E. Britton. "A well-grown state of ordinary catharticum. Plants transferred to my garden from Freshwater Downs produced a similar growth."—Drabble.

Geranium rotundifolium L. By railway bank, near Goring, Oxon, June 24, 1930.—H. J. RIDDELSDELL.

Geranium purpureum Vill., var. Forsteri Wilmott. [B.25.] Shingle, Clymping, West Sussex, June 6, 1930. An interesting plant which does not quite agree with the description of Forsteri in that it is erect. However, the other characters and the extremely small petals seem to indicate this variety. The size of the plants varied slightly according to exposure on the shingle, but they were all small.—Leg. J. E. Lousley. "The glandular sepals, and the smooth carpels, deeply wrinkled throughout, seem to show that this is G. purpureum Vill., var. Forsteri Wilmott (=G. purpureum Forster)."—Drabble. "The only difference between G. purpureum Vill. and var. Forsteri Wilmott, is that the latter is prostrate. Mr Lousley's specimen therefore fails in its only distinguishing feature."—Wolley-Dod.

Impatiens parviflora DC. (1) Clifton Grove, Nottingham, August 30, 1930.—R. Bulley. (2) Littleworth Common, Surrey, September 1, 1929 [3752].—C. E. Britton.

Ulex Gallii Planch. Ventongimps, W. Cornwall. Pods, April 1929; flowers, August 1929.—F. RILSTONE.

Medicago Falcata L. Knighton, Leicester, October 14, 1930.—G. J. V. Bemrose. "This is var. tenuifoliolata Vuyck."—Britton.

Medicago minima (L.) Bartalini. [B.28.] Seaside banks in several places near Seasalter, Whitstable, E. Kent, August 3, 1930.—J. E. LOUSLEY.

Trifolium arvense L., var. Cothill, Berks, July 1930.—G. C. DRUCE. "An extraordinarily fine growth of arvense, var. strictius Koch = T. Brittingeri Weitenw."—DRABBLE.

Trifolium subterraneum L. Orley Common, S. Devon, May 12, 1930; coll. E. D. Morgan, comm. H. Foster.

Dorycnium rectum (L.) Ser. Barry Dock, Glamorgan, August 1930.

—G. C. Druce.

Lathyrus tuberosus L. Barry Dock, Glamorgan, September 14, 1930. This species has long been established at the above locality. There is a patch about four yards square which is slowly increasing in size each year. Its mode of introduction is uncertain, but probably with ballast.—R. L. Smith and R. Melville.

Lathyrus tuberosus L. [B.6.] Near Fyfield, North Essex, July 27, 1930. I was shown the locality for this plant by some village boys, who are well acquainted with it under the name of "The Fyfield Pea." The characteristic tubers are extremely difficult to dig up for examination, and the plant grows both in the standing corn and the surrounding hedges. Dr Walker-Arnott's statement that the flowers fall off without forming pods is probably due to the fact that the Pea is cut with the corn. It has been known here by farmers since about 1800.—Leg. J. E. Lousley. "Is not the fact, if it be a fact, that the flowers drop off before the fruit is formed, due to the plant having learnt to increase itself by its tuberous runners, and so does not trouble to make seeds, as in other analogous cases? How can cutting the corn make its flowers fall off if they were ever advanced enough to make fruit before that operation? Naturally if cut before it had a chance the flowers would fall or fade."—Wolley-Dod.

Lathyrus Nissolia L. Torquay, Devon, June 13, 1930; coll. E. D. D. Morgan, comm. H. Foster.

Tetragonolobus purpureus Mch. [3740.] Fallow field, Hook, Surrey, October 5, 1930. Notable for its crimson-blackish flowers. It is the Lotus Tetragonolobus L. of Druce's British Plant List.—C. E. BRITTON.

Lotus hispidus Desf. Dartmouth, S. Devon, June 12, 1930; coll. E. D. Morgan, comm. H. Forster.

Lotus angustissimus L. Old garden ground above cliffs, Polperro, Cornwall. On account of the robust growth and unusually stout pods I have sometimes suspected this plant of being angustissimus × hispidus, but the characters are essentially those of the former species. It grew in a derelict garden plot and probably had benefitted by the comparative richness of the soil.—F. Reistone.

Lotus angustissimus L. St Lawrence's Valley, Jersey, July 1, 1930.—Bro. Louis Arsene.

Vicia angustifolia (L.) Reichard, var. typica Rouy. Pont Marquet, Jersey, June 1, 1928.—Bro. Louis Arsene.

Vicia tetrasperma Moench, var. tenuissima Druce. Near Pamber, N. Hants, September 1930.—G. C. DRUCE.

Vicia bifoliolulata Rodrig. Clifton, July 1930. Cultivated from seeds brought from the Cala Mesquieda, Minorca, 1905 (loc. class.). Endemic.—J. W. White.

Spiraea Filipendula L. Near Bingham, Notts, July 1930.—F. A. Sowter. "Luxuriant specimens."—Britton.

Rubus —... Castle Eden, Co. Durham, July 25, 1930.—R. J. Burdon. "Clearly a poor shade-grown dasyphyllus. On the whole, material a good deal knocked about, especially stem-pieces. Several of the panicles, which seem rather more robust, are probably from a different root; they are rather less characteristic in armature, and may have a second influence in their parentage. Two characteristic stem pieces and one panicle are the minimum of material for a sheet. This rule is not followed in the present gathering."—H. J. RIDDELSDELL.

Potentilla erecta \times procumbens. Banstead Heath, Surrey, June 29, 1930.—C. E. Briton.

Alchemilla vulgaris L. Langree, Jedburgh, July 3, 1930.—R. J. Bur-Don.

Alchemilla pastoralis Buser. Middleton-in-Teesdale, Durham, August 1930.—G. C. Druce.

Acaena anserinifolia (Forst.) Dr. Trendlebeare Down, S. Devon, June 18, 1930; coll. E. D. Morgan, comm. H. Foster. "Under the name of A. Sanguisorbae Vahl, Dunn says A native of New Zealand, which was found by Mr W. R. Martin on Heytor Down, Dartmoor, Devonshire. How it came to this bleak moor is exceedingly difficult to determine, but it is almost certain that it was carried thither by reason

of its clinging seeds, which would be carried on the fur of animals or the clothes of human beings."—H. FOSTER.

Rosa stylosa Desv., var. systyla Baker. Under Wavering Down, Winscombe, N. Somerset, July 10, 1930, October 1, 1930. Flowers pink.—Ida M. Roper. "Good typical systyla Baker."—Wolley-Dod.

Rosa micrantha Sm. Lambourne, W. Cornwall, October 10, 1930.— F. Rilstone. "A very ordinary form of R. micrantha Sm., var. typica."—Wolley-Dod.

Rosa omissa Déségl. Dwarf bushes in hedgebanks, Polperro, Cornwall, October 6, 1930.—F. Rilstone. "I think this is R. Sherardi, f. pseudo-mollis (E. G. Baker) W.-Dod, but some tomentosa form is not obviously excluded, if indeed pseudo-mollis does not really belong to that species and not to Sherardi. I have recently learnt that long persistence of the sepals is not at all a conclusive feature of R. Sherardi and its varieties. Though it is an unusual fault to find, these specimens are gathered too late. Glands, hairs, and often the best leaflets are deciduous after about the middle of September."—Wolley-Dod.

Rosa pimpinellifolia \times tomentosa. Selkirkshire, August and October 1930.—I. M. Hayward. "This is one of the innumerable forms of R. spinosissima crossed with one of the Villosae. It is always difficult, if not impossible, to diagnose which species of the latter is involved, whether mollis, Sherardi, or tomentosa. From geographical considerations tomentosa is quite a possibility, while there is not much indication of mollis. I classify most of these indefinite hybrids under $\times R$. Sabini, though normally I believe that to be spinosissima \times mollis. A peculiarity in this gathering is the markedly emarginate terminal leaflets, not well seen in all specimens. The oblique bases of the lateral leaflets are derived from the spinosissima parent, but it is more exaggerated here than I have seen before."—Wolley-Dod.

Rosa multiflora Thunb. Hedge, Puttenham, Surrey, July 1930.—G. C. Druce and F. Clarke. "A garden escape, of course, and I cannot verify the name, though it looks right. It would have been interesting to know how far from human habitations it was found, and whether it appeared well established."—Wolley-Dod. "R. multiflora Thunb. belongs to the section Synstyleae. Related to it is the common Crimson Rambler of the gardens."—Britton. "The nearest house had no multiflora in the garden. It was a large bush in a hedge."—Druce.

Pyrus communis L., var. Deseglisei Rouy & Camus. Yate Lower Common, West Gloucester, April 24 and August 11, 1930. Only two trees are now known to exist in the locality and they are so old and full of dead wood that one fears they cannot long survive.—J. W. White. "It appears doubtful to me whether this interesting pear has been correctly identified. The var. Deseglisei belongs to the glabrous P. Piraster Bor.,

whereas this plant evidently comes under the more hairy *P. Boroeana* Rouy & Camus."—Britton. "For notes on this plant see *Rep. B.E.C.*, 222, 1917, and 820, 1919, and *Wats. B.E.C.*, 62, 1917-18."—JACKSON.

Sorbus Aria Crantz, var. lanifera Kern. Border of a limestone wood on the Cadbury ridge above Clapton Wick, North Somerset, May 27, June 18, and August 20, 1930. A solitary tree of 40 feet with foliage hoary-tomentose on both surfaces, but becoming bald above towards autumn. Specimens have been twice distributed through the B.E. Club in hope of their being identified with some named variety, but it was only a few months ago that our lamented friend, C. E. Salmon, discovered that Kerner had given the name lanifera to a corresponding form similarly isolated in Central Europe. See Journ. Bot., 175, 1930. Damaged leaves and flower-buds are the work of swarms of beetles and caterpillars that infested the tree in May and fell in showers on the gatherer of these sprays. I have not met with the plant found in Leigh Woods, 1892, by the Rev. Aug. Ley, and accepted as lanifera by Prof. Hedlund (loc. cit.).—J. W. White.

Crataegus monogyna Jacq., var. fissa (Poiret). The Parks, Oxford, October 1930.—G. C. Druce.

Crataegus heterophylla Flugge. Tiverton, N. Devon, October 1930.—G. C. Druce and Col. Watts. "Alien, of course, but I do not think it was planted."—Druce.

Sedum sexangulare L. Torre, S. Devon, June 26, 1930; coll. E. D. Morgan, comm. H. Foster.

Epilobium hirsutum L., var. villosissimum Koch. Oakham, Rutland, September 15, 1930.—G. J. V. Benrose.

Epilobium roseum Schreber. [B.16.] Moist roadside near Hever, W. Kent, August 4, 1930. Fairly plentiful around Hever and Edenbridge.

—J. E. Lousley.

Epilobium roseum Schreber. Garden weed, Chester, June 1930.—C. WATERFALL.

Bupleurum fruticosum L. British Camp, Hereford, July 26, 1930.—G. J. V. Bemeose. "Yes, but it is not a British plant. It is the only shrubby umbellifer hardy in Europe."—Jackson.

Bupleurum opacum Lange, var. nanum Koch. Sands of St Ouen's Bay, Jersey, July 12, 1930.—Bro. Louis Arsene.

Bupleurum tenuissimum L. Shingle near Seasalter, E. Kent, September 8, 1930; coll. J. E. Cooper, comm. G. C. Brown.

Apium nodiflorum (L.) H. G. Reichb., var. pseudorepens (H. C. Wats.) Dr. Shalford, Surrey, August 7, 1930.—R. J. Burdon. "This

2/1

plant is quite interesting. At the Shalford locality, it was sending horizontal runners along the mud of the pond, and rooting at every joint. Also the leaflets were ± rotundate. But the peduncles are too short for A. repens (L.) H. G. Reichb. On the pond A. nodiflorum flowered and fruited, but the plants on the mud were shy of flowering. It is interesting that so distinct a mud-form should grow alongside the terrestrial form and that both should differ from the plant of ditches and streams."—Lettle.

Chaerefolium sylvestre (L.) Schinz & Thell., var. angustisectum Dr., vergens. Autumnal leaves, Tiverton, N. Devon, October 1930.—G. C. Druce.

Peucedanum officinale L. [B.3.] Extremely abundant on the slopes facing the sea at Tankerton, near Whitstable, E. Kent, August 3, 1930.

J. E. LOUSLEY.

Galium erectum Huds. [864.] Near Wilbury Hill, Beds, June 3, 1930.—J. E. LITTLE. "Excellent examples of G. erectum."—BRITTON.

Galium sylvestre Poll. Chalk Downs near Goring, Oxon, June 1930.— H. J. RIDDELSDELL.

Galium uliginosum L. Banks of Tweed, near Ashestiel, Selkirk, July 8, 1930.—R. J. Burdon.

Valerianella dentata (L.) Poll. Near Cinderhill, Nottingham, June 27, 1930.—R. Bulley.

Filago germanica (L.) Huds. Heathy ground, near Papplewick, Notts, August 25, 1930.—R. Bulley. "One specimen of F. spathulata was in this set."—Britton.

Filago minima Pers. Sandy field, Papplewick, Notts, August 25, 1930.—R. Bulley.

Filago minima Pers. Cothill, Berks, July 1930.—G. C. DRUCE.

Ambrosia artemisifolia L. St Anne's-on-the-Sea, September 6, 1902. Contr. Nat. Mus. Wales, Cardiff.

Bidens cernua L. Darenth Marshes, W. Kent, August 15, 1929.—I. Helsby.

Bidens tripartita L. Canal side, Nottingham, September 17, 1930.—R. Bulley.

Achillea nobilis L. Barry Dock, Glamorgan, August 1930.—G. C. Druce.

Achillea —. Hortal, Ely, Cardiff, July 7, 1930. I first found this interesting plant at Splott, Cardiff, two years ago, and removed it to my garden, where it flourishes.—R. L. SMITH.

Matricaria? decipiens C. Koch. Burton-on-Trent, Staffs, August 1930.—G. C. Druce.

? Hieracium cumbriense Hanbury. Barras, Westmorland, August 1930.—G. C. Druce.

Hieracium pellucidum Laest. Lambridge Wood, Oxon, July 1930.—G. C. Druce.

Hieracium diaphanoides Lindeb. Det. J. CRYER. Wingfield Manor, Derbyshire, July 3, 1926.—R. Bulley.

Hieracium —. [P.87.] Newhaven, Sussex, July 1929.—G. C. Druce. "This, teste Zahn, is sub-lepistoides Zahn."—Druce.

Hieracium —. [2463.] L.N.E. Railway embankment, Colchester, N. Essex, October 30, 1930.—G. C. Brown.

Leontodon nudicaule (L.) Banks, var. lasiolaena (Bisch.) Dr. Sandhills, St Osyth, N. Essex, July 20, 1930. A few plants of var. leiolaena grew intermixed with these.—G. C. Brown.

Taraxacum glauciniforme Dahlst. Heath, Beds, May 1929.—G. C. DRUCE.

Taraxacum lacistophyllum Dahlst. Hinksey, Berks, May 1929.—G. C. Druce.

Taraxacum britannicum Dahlst. Oxford, May 1929, in Rep. B.E.C., 30, 1926.—G. C. Druce.

Taraxacum hamatum Raunk. Shefford Woodlands, Riever, Berks; Ledbury, Hereford; Ham, N. Hants; Byfleet, Surrey; Little Bedwyn, Wilts, May 1929.—G. C. DRUCE.

Lactuca saligna L. Shingle by sea, Swalecliff and Seasalter, E. Kent, August 26 and September 28, 1930; coll. J. E. Cooper, comm. G. C. Brown.

Ledum oelandicum Oeder. (L. latifolium Jacq.). Naturalised in some quantity in two separate localities at Normandy, Surrey, July 1930.—G. C. Druce and C. E. Marks. "L. groenlandicum Oeder."—Jackson.

Limonium binervosum C. E. Salmon. [2459.] Sandhills, St Osyth, N. Essex, July 17, 1930. Abundant in one spot where but few plants had been seen in previous years.—G. C. Brown.

Ligustrum vulgare L., var. aureum. With golden-yellow flowers. In a hedge, with the ordinary white-flowered form, at Goring, Oxon, June and July 1930. Near a house and probably introduced. I put it under vulgare as I do not know of any yellow-flowered distinct species, nor indeed, of any such variety of vulgare. I could detect no distinction except that of the flower colour.—H. J. RIDDELSDELL. "Ligustrum vulgare, var. fl. aureis. I do not know a yellow-flowered form of the common privet, and it is difficult to judge of it on this specimen, the flowers of which have dried brown."—Jackson.

Gentiana germanica Willd. Assenton, Oxon, September 1930.—G. C. Druce.

Gentiana campestris L. Brimfield, Berks, September 1930.—G. C. Druce.

Asperugo procumbens L. Cherry Hinton, Cambs, June 1930.—G. C. Druce and Gilbert-Carter.

Pulmonaria longifolia Bor. Wootton, Isle of Wight, May and June 1930.—J. W. Long.

Myosotis? sylvatica Hoffm. By a stream in a wood, Great Tew, Oxon, May 22, 1930. In small quantity. If it is sylvatica, it would, I believe, be a new county record.—H. J. RIDDELSDELL. "Correct."—Wade. "Sent from this place by G. C. Druce to the Club (see p. 270, 1912). It was originally planted there with Potentilla fruticosa and other plants by Mr Boulton, a former owner of the park. Other localities are given in my 'Flora of Oxfordshire,' p. 296, but in this county it is not a native."—Druce.

Myosotis arvensis (L.) Hill, forma. Shingly ground, Sully Island, Glamorgan, July 1930.—A. E. Wade. "Merely stunted arvensis, is it not?"—Drabble.

Myosotis arvensis Hill. Roadside, Crantock, W. Cornwall, July 28, 1930.—I. M. ROPER. "This plant comes very near to forms I have called var. stricta Bosch. Prodr. Fl. Batavae, p. 160 (1850). Persoon has a var. simplex which is probably the same. I have similar forms under cultivation and await the results before any opinion upon the true status of any of the varieties of M. arvensis."—Wade.

Myosotis versicolor Sm., sub-var. dubia Rouy. Cloverfield, Cefn Rhwawg, Abercarn, Monmouth, June 6, 1930.—A. E. Wade.

Cuscuta epilinum L. Easton Maudit, Northants, July 1930.—G. C. Druce.

Solanum nigrum L., var. chlorocarpum Spenn. [3738.] Cultivated field, Hook, Surrey, October 5, 1930. Ripe fruit bright green, finally

becoming yellowish-green. This plant does not appear in the *British Plant List*, where, however, there is var. *luteo-virescens* (Gmel.), which is not identical, as the berries in that are less green.—C. E. BRITTON.

Atropa Belladonna L. Very rare in Jersey. Found in a hedge at St Saviour's, July 1, 1930.—Bro. Louis Arsene.

Veronica officinalis L. Glen Luce, Wigtown, August 1930.—G. C. Druce. "Yes, the capsules are more deeply emarginate than in most English specimens."—Drabble.

Veronica aquatica Benq. Binsey, Oxon, July 1929.—G. C. DRUCE. "Yes."—BRITTON.

Veronica persica Poir., var. Corrensiana (Lehm.). [3736.] Cultivated field, Lower Morden, Surrey, September 28, 1930.—C. E. BRITTON.

Veronica agrestis L., f. alba. Garden weed, Hallatrow, N. Somerset, June 25, 1930.—Ida M. Roper. "Var. Garckiana P. Fourn."—Britton.

Veronica agrestis L. (some show lusus calycida). [848.] Allotment, Storehouse Lane, Hitchin, Herts, April 30, 1930.—J. E. LITTLE. "Very young. In this state the leaves approximate in shape and dentition to those of V. polita. The characters of the sepals and capsules are, however, those of V. agrestis L., and it is the common var. Garckiana P. Fourn."—Britton.

Veronica agrestis L. (some show lusus calycida). [849.] Allotment, Highbury, Hitchin, Herts, May 3, 1930.—J. E. LITTLE. "Preceding remarks also apply to this."—Britton.

Veronica hederifolia L. The Westra, Dinas Powis, Glamorgan, May 5, 1930.—A. E. WADE.

Veronica hederifolia L., var. triloba (Opiz) Beck. The Westra, Dinas Powis, Glamorgan, May 5, 1930.—A. E. Wade. "The plant is slender, the leaves small and mostly three-lobed, so I suppose this may pass as the 'variety'."—Drabble. "Probably no more than juvenile representatives of the species, which, at a later stage, would exhibit the 5 or 7-lobed or toothed leaves. It is not difficult to detect leaves 5-lobed on these specimens."—Briton.

Euphrasia — Philpots, E. Grinstead, E. Sussex, August 30, 1930. — R. J. Burdon. "E. anglica Pugsley."—Pearsall and Drabble.

Arenaria Lloydii, Saxifraga tridactylites, etc., August 11, 1930.—Bro. Louis Arsene.

Polygonum dumetorum L. Tubney, Berks, September 1930.—G. C. Deuge.

Polygonum lapathifolium L. [3707.] Wisley, Surrey, August 31, 1930. The var. genuinum of Gren. et Godron.—C. E. Britton.

Polygonum lapathifolium L., var. tomentosum Beck. [3663.] White-moor Common, Surrey, August 17, 1930. Beck (Fl. N.Ö. i., 323) describes the variety as having stems erect and little-branched, or, prostrate and more branched, the leaves oblong lanceolate, narrowed at each end, and all, with the exception of the uppermost, woolly arachnoid. The plants distributed are in agreement with this description.—C. E. Britton.

Polygonum ---. [3706.] Wisley, Surrey, August 31, 1931. This plant attracted notice in a cultivated field where P. Persicaria and P. lapathifolium were both abundant. The spikes of flowers were paler than the first, and more slender than either. A study of its characters suggested that it was a hybrid between these two species, a conclusion that was supported by the discovery that large well-formed fruits were devoid of contents. For the following note, I am greatly indebted to Mr W. H. Pearsall, who has made a very careful study of the specimen received .- C. E. Britton. "This plant is interesting. Mr Britton informs me that it was growing near abundant P. Persicaria (1), and P. lapathifolium (2), but it is clearly neither of these species alone but shows the influence of each in the following characters. The stem is strongly marked with red on the sun-touched side only. The flowers, on the whole, are paler than those of normal (1), but all the perianths have their lower parts ± glandular, although less so than is usual in (2). The sheaths have their actual surfaces glabrous as in (2) but beset with scattered hairs (especially on the veins) less numerous than in (1), and their marginal cilia are also less strong than in that species. The spikes are slender and ± interrupted and the pedicels sparsely glandular. leaves are broadly lanceolate, subequally attenuate above and below, not acuminate but subacute with the margins at the actual apex convex. They are ± hairy on both sides and an occasional glandular hair may be found on the lower surface. There are few mature fruits but these are very suggestive of hybridity. Most of them resemble those of (1) are black, smooth, shining, nearly round (2.5 × 2.0 mm.) and shortly acuminate. An occasional fruit is longer (3.0 × 2.0 mm.) but not broad enough for (2) and invariably empty. The styles are always united for nearly or quite half their length, becoming divergent and not merely patent but vertically reflexed. In my judgment these characters point to P. Persicaria × P. lapathifolium."—Pearsall.

Polygonum Persicaria L. Llangollen, Denbighshire, N. Wales, August 27, 1930.—C. Waterfall.

Polygonum nodosum Pers. [B.14.] Mitcham Common, Surrey, July 26, 1930. A large colony by a streamlet. Seems to me very typical of the species.—J. E. Lousley. "No form of P. nodosum, but just ordinary P. Persicaria. W. H. Pearsall concurs."—Britton. "There is nothing even remotely suggesting nodosum (petecticale) in my specimen. The leaves, pedicels, and perianths are all eglandular, the fruit surface is quite smooth, and many of the fruits are trigonous. It is P. Persicaria, var. elatum."—Drabble.

Polygonum petecticale Dr. Britons Pond, Guildford, Surrey, August 7, 1930.—R. J. Burdon. "Correct. A similar form to my plant [3598] from Esher."—Britton.

Polygonum petecticale Dr. [3598.] Esher Westend, Surrey, September 15, 1929.—C. E. Britton.

Polygonum petecticale Dr. [3655.] Near Mortlake, Surrey, August 16, 1930. The var. ovatum of authors.—C. E. Britton.

Polygonum petecticale Dr., var. erectum (Rouy). [3650.] Near Mortlake, Surrey, August 16, 1930. Seen for two seasons in preceding locality. It appears to agree well with the plant described by Rouy as P. lapathifolium, race P. nodosum, var. erectum. The principal features are the erect stem with nodes not much swollen, the lanceolate longly acuminate leaves and erect spikes.—C. E. Britton. "Very interesting; form and surface of fruit, and the glandular leaves point to petecticale, and, if so, no doubt it is var. erectum (Rouy). It is rather disturbing, however, to find entirely glandless peduncles and perianths in petecticale. Was it growing with normal petecticale and Persicaria?"—Drabble.

Polygonum Hydropiper × Persicaria. [3750, etc.] Near Brookwood, Surrey, October 18, 1930. Growing with species P. Hydropiper and P. Persicaria, and appearing to be of mixed parentage. The fruits are plentifully produced and vary in shape from the rounded form of P. Persicaria to the more elongated form of P. Hydropiper.—C. E. BRITTON. "A good intermediate."—Pearsall.

Polygonum minus×Persicaria=P. Braunianum F. Schultz. [0.39.] Binsey, Oxon, August 1929.—G. C. Druce. "Quite possibly, if it grew with the supposed parents."—Drabble. "Immature, with but few expanded flowers. The elongate-lanceolate leaves, broader than is usual with P. minus, and longer in proportion to breadth than in P. Persicaria, the comparatively stout stems, and linear inflorescences, appear to indicate that this plant is correctly identified as the hybrid named."—Britton.

Rumex sanguineus L. Hort. Origin, The Grounds, Lymm, Cheshire, May 1930.—C. WATERFALL.

Rumex pulcher L. Polperro, E. Cornwall. Flowers, June 14, 1930; leaves, October 2, 1930.—F. RILSTONE.

Muchlenbeckia complexa Meissn. New Zealand, shrub, well-established on a hillside at St Saviour's, Jersey, September 11, 1930.—Bro. Louis Arsene. "Yes."—Jackson.

Thesium humifusum DC. Barry Dock, Glamorgan, July 10, 1930. An established species. I gathered 34 sheets from one large healthy plant that continued to produce flowers for four months.—R. L. SMITH.

Euphorbia Cyparissias L. Churn, Berks, July 1930.—G. C. DRUCE.

Ulmus minor Mill., var. sarniensis (Loudon). Easton Neston. Northants, November 1930.—G. C. Druce. "This is the tree commonly known as the Wheatley Elm, U. nitens, var. Wheatleyi, the leaves of which are broader than the Cornish elm. The tree may generally be recognised at a glance by its pyramidal habit. Henry (Elwes & Henry, vii., p. 1891 (1913)) considered that this elm, which is sometimes sold in Germany and Holland under the erroneous name of U. campestris, var. monumentalis, is in all probability the same as that propagated by Loddiges as U. sarniensis, as it is also frequently called the Jersey or Guernsey elm, but Loudon's U. campestris, var. sarniensis, judging from the description seems to refer to a different tree. There is also no reason to suppose that Miller's description of U. minor referred to the Cornish elm, which is not 'common in some parts of Hertfordshire & Cambridgeshire 'as stated by Miller in his description of U. minor (Gard. Dict., ed. 8, No. 6 (1768)."—Jackson. "My friend, Mr Bruce Jackson, as it will be seen, denies that U. minor Mill. is the Cornish Elm, probably owing to his notes having been confused. If our members will refer to Miller's Gardener's Dictionary of 1768, where U. minor is first established, they will find there is no reference to its occurrence in the counties of Herts and Cambridge as mentioned by Mr Jackson. any inference drawn from non-existing data must be fallacious. localities cited by Miller are loosely given as 'Hedgerows in several parts of England,' which applies equally well to Cornwall and Devon as to Cambridge and Herts. Moreover, he says 'by some it has been called the Irish Elm,' which indicates it is a western not an eastern tree, and Prof. Henry gives Ireland in its distribution. If the description of U. minor is carefully read 'foliis oblongo-ovatis glabris acuminatis duplicato serratis. The smooth narrow-leaved Elm, by some called the upright Elm . . . The branches smooth . . . erect,' it will be seen that it can only apply to the Cornish Elm and its variety, the Wheatley Elm. Miller also goes on to say of U. minor 'leaves are narrower and more pointed than the English Elm and are somewhat later in coming out in the Spring than those, but continue longer in the Autumn,' which is true of the Cornish Elm. I have seen green leaves attached to the branches of the Wheatley Elm as late as November. Miller's description of *U. minor* is practically repeated by Martyn in his edition of the Gardeners' Dictionary of 1807. Therefore, I contend that *U. minor* Mill. = *U. stricta* Lindley. The latter was established in the Synopsis, 227, 1829, but he makes no reference to Miller, although his description is practically that of Miller's *U. minor*, with which it is synonymous. Loudon (Arboretum, iii., 1376) gives var. cornubiense = stricta Lindl. and var. sarniensis Loud., based on *U. sarniensis* Loddiges Cat., 1836, with an inadequate description, 'differing very little from the species.' It is suggested that this does not apply to the Jersey Elm, but that is the vernacular name given to it by Loudon, and there seems no need to suspect that sarniensis Loddiges—the original trivial—is not the same."—Druce.

Urtica dioica L., var. umbrosa (Weddell as sub-var.) Rouy Flore de France, xii. (1910), 273, "tiges et feuilles pubescentes à poils acérés rares." Banks and islands of River Thames, near Goring, Oxon, and Berks, June 25, 1930. Leaves remarkably soft, almost velvety. Stinging hairs hardly to be found on leaves, and rare on petioles and stems. These actual specimens were gathered on an island on the Oxford side of the river.—H. J. RIDDELSDELL.

Alnus incana Medik. Roundsea Wood, near Cork, N. Lancs, June 22, 1930.—W. A. Sledge. "Yes. W. H. Pearsall sent me some from this station some years ago. T. J. Foggitt recently wrote that he had seen it (planted with pines) in Glen Clova, which is a new station to me."—LITTLE. "Correct. Presumably introduced."—Jackson.

Salix aurita × caprea (S. capreola J. Kern.). [579.] Whyteleafe, Caterham Valley, Surrey; catkins, April 14th; leaves, July 7, 1929.—J. Fraser.

Salix cinerea × viminalis, f. ferruginea (G. Anderss.). [741.] Tilburstow Hill, Surrey; catkins, April 13; leaves, July 27, 1930.—J. Fraser.

Populus canescens Sm. 3 (or P. canescens × tremula?). Planted, Old Park Road, Hitchin, Herts, February 18, March 15, October 22, 1930. Two trees, not more than 20 ft. high, with slender branches which suggest P. tremula. The leaves are those of P. canescens, and the budbracts are hairy though rather acute. The floral bracts are of the lighter colour of P. canescens, rather than the darker colour of P. tremula.—J. E. Little. "P. canescens, I should say undoubtedly. I can see no evidence of hybridity here."—Jackson.

Populus alba L. Q (sucker leaves). Planted, Wymondley Road, Hitchin, Herts, March 27, October 23, 1930.—J. E. LITTLE. "Yes, showing the characteristic 3-lobed leaves. The male flower of this species is rarely if ever found."—Jackson,

Orchis O'Kellyi Druce. Ballyvaghan, Co. Clare; coll. P. B. O'Kelly, June 1930, ex G. C. Druce.

Lilium pyrenaicum Gouan. Plentiful among bracken and male-fern on banks near South Molton, Devon. Stems quite 3 feet in height, often producing five or six flowers, June 30, 1930.—J. W. WHITE. "A fine series of a very handsome plant."—BRITTON.

Paris quadrifolia L. Wood near Berkhamsted, Herts, May 21, 1929.

—I. Helsby.

Juncus acutus L., var. decompositus Guss. The common form in Jersey. St Ouen's Bay, July 12, 1930.—Bro. Louis Arsene.

Juncus nodulosus Wahl. Near Langdon Beck, Durham (found there in 1909), August 1930.—G. C. DRUCE.

Juneus compressus Jacq. [B.37.] By pool, Swalecliffe, east of Whitstable, E. Kent, August 3, 1930.—J. E. Lousley.

Luzula sylvatica (Huds.) Gaud., var. latifolia Gerard. (Bulletin Société française: Duffour No. 1, 1911.) Very strong plant with leaves very wide—12 to 17 mm. Giffard Bay, Jersey, May 21, 1929.—Bro. Louis Arsene.

Potamogeton crispus L., var. serratus (Huds.). Canal, Market Harborough, Leicester, August 1930.—G. C. Druce. "Yes, but I agree with Fryer that this flat-leaved form is merely a state."—Pearsall.

Potamogeton pennsylvanicus C. & S. (autumnal state) (P. Nuttallii C. & S.). Near Elland, Yorks, August 1930.—G. C. Druce. "Very beautiful specimens of this."—Pearsall.

 $\times Potamogeton\ Lintoni\ Fryer\ (P.\ crispus\ imes\ mucronatus).$ Burtonon-Trent, Staffs, August 1930.—G. C. Druce. "Very good examples of this rare and little-known hybrid. They are more than usually valuable as they may be compared with P. Bennettii, from which they are quite distinct, and with P. crispus, f. serratus, which they closely resemble. Singularly enough, there is no description of this hybrid in Fryer's Pots. Brit. Isles, nor in any other British Flora. Dr Hagström does not describe it, as he had seen no specimens at the date of publication of his Critical Researches (1916). In March 1920, however, I sent him sheets of the Rev. W. R. Linton's original gathering—Canal, Renishaw, Derby, August 1, 1900—and these were determined by Dr Hagström as P. crispus × Friesii, confirming Fryer's view (Journ. Bot., 366, 1900). Later in the same year Dr Druce added a second locality-Canal, Lichfield, Stafford—for this hybrid and these plants also were confirmed by Dr Hagström (Rep. B.E.C., 250, 1920). As I saw the whole of Dr Druce's gatherings and have authenticated sheets of the Derbyshire

plant, a brief description of the chief characters of the hybrid may be of use. Both the parent species show stem-sections which are oblong with rounded ends—the L/B ratio of P. crispus being nearly 2:1, and that of P. Friesii being 3:1. We should therefore expect, and we find, that the hybrid possesses a similarly compressed stem whose section is more than twice as long as broad. The habit of the Derbyshire form is similar to that of P. Friesii, but the Staffordshire form more closely resembles P. crispus, f. serratus, and is, indeed, easily mistaken for it. The leaves of the former are of a darker green, narrower, and possess a very obtuse rounded apex: those of the latter are olive green, wider and + acute; they also frequently carry suggestions of the reddish tinge of the young leaves of P. crispus. The fruits of each, if formed, are sterile, but often crispus-like in outline. The distinctive character of the hybrid is the indistinct and scanty serrulation of the leaf margins. This can only be seen on leaves which are quite clean, and as the few, distant and minute denticles are easily abraded from older leaves the examination of young leaves under the microscope becomes essential, a lens being Often there are the merest traces of quite useless for this purpose. denticles near the apex only, but other leaves of the same plant will show an occasional tooth and numerous minute prominences (which normally form the bases of teeth) along a ± sinuated margin. Other useful characters in separating the hybrid from similar forms are the presence or absence of glands at the leaf-bases and the nature of the stipules and nervation. It is, perhaps, necessary to add that no gathering should be distributed until every plant has been authenticated."-PEARSALL.

Potamogeton compressus L., ad. var. latifolius Gray vergens. Market Harborough, Leicester, August 1930.—G. C. Druce. "Very carefully prepared specimens of this species. The width of the leaves on the sheet sent me is 4.0-4.5 mm., but many others of the same gathering—which I have seen previously—were 5 mm. wide. I do not think these width-forms deserve varietal rank but they come under f. latifolius Fischer (Bayer. Pot., 97, 1907), which is synonymous. I have seen no British forms wider than these, although Hooker (Stu. Fl., 435) says often ¼ inch broad (=6 mm.). Scottish forms are usually longer, narrower and more longly acuminate than these."—Pearsall.

×Potamogeton Bennettii Fryer (P. crispus × pusillus). Grangemouth, Stirling, August 1930.—G. C. Druce. "Very acceptable examples. Both British and Continental botanists long regarded this hybrid as crispus × obtusifolius. The former of these supposed parents possesses a stem-section nearly twice as long as broad; in the latter the length is slightly over twice the breadth. Any hybrid of these two species should therefore show a stem-section with a L/B ratio of approximately two. The hybrid, however, has a nearly round stem—only very slightly longer (in section) than broad—as in pusillus. The width of the leaves, too, would tend to be broader than in the specimens before us, if obtusifolius were one of the parents. Under the microscope

the influence of *crispus* is well seen in the minute denticles on the leaf margins. The late Mr A. Bennett ultimately agreed with this determination, see *L.C.* (1925) 1959."—Pearsall.

Potamogeton obtusifolius M. & K. [B.8.] In the Canal near Byfleet, Surrey, September 9, 1930.—J. E. LOUSLEY.

Zannichellia pedunculata Reichb. [B.18.] Brackish dyke near Seasalter, E. Kent, August 3, 1930.—J. E. Lousley. "Quite good examples of this. Reichenbach described it as Z. pedunculata, var. maritima, in Fl. Germ. Excurs., i., 7, 1830, but there is an earlier name for it as a species—Z. maritima Nolte, Novit. Fl. Holsat., 75, 1826, and this should have preference. Earlier still it had been cited as a form of Z. palustris, under the name pedicellata, by Wahlenberg et Rosen in Nov. Act. Upsal., viii., 227, 254, 1821. The characteristic fruits are well shown on these sheets. As usual, they vary considerably so far as the dorsal margin is concerned on the same plant. Some are dorsally nearly smooth and only slightly ridged; others are crenulate, and some strongly muricate. All the fruits are pedicellate and have a common peduncle. The styles are subequal in length to the carpels."—Pearsall.

Ruppia rostellata Koch. [B.4.] Brackish ditch on the levels near Seasalter, Whitstable, E. Kent, August 3, 1930.—J. E. Lousley. "Very nice examples of this. One member, however, reports an admixture of R. maritima on the sheet received by him, so examination of all specimens is desirable."—Briton.

Eleocharis uniglumis Schultes. Loch Dunvegan, Skye, July 1930.—W. A. Sledge.

Scirpus carinatus Smith. [B.10.] Large panicled form. Near Mortlake, August 16, 1930. The form I call sublacustris with large cymes—a tall stout plant approaching lacustris. The stem is trigonous for only a short distance below the panicle. The reproductive organs are better formed than in subtriqueter, and it is on this form that nuts are occasionally found.—J. E. LOUSLEY.

Scirpus carinatus Smith. [B.32.] Small panicled form. Near Mortlake, August 16, 1930. These plants are unfortunately a little young, but the anthers are fully formed. It is plain that they would never grow into plants with large cymes like B.10. They represent the hybrid-form I term subtriqueter with small cymes, stem trigonous for a considerable distance below the panicle, and upper leaves often extended into short leaves. In this form the reproductive organs are usually ill-developed.—J. E. LOUSLEY.

"Scirpus carinatus Smith." [B.26.] Aylesford, West Kent, August 24, 1930. This is $\times S$. Scheuchzeri Brügger (Neue Pflanzenbastarde der Schweizer-Flora in Bericht der Naturforsch-Gesellschaft Graubundens.

Jahrgang, xxv., May 15, 1882), which is the plant described by Dr Druce from West Sussex as ×arunensis. The presence of S. Tabernaemontani is clearly seen in these plants in the glumes, which are asperous. The present gathering (all from one rootstock, like all my gatherings of Scirpus) is not so asperous in the glumes as some of the Medway plants. The stigmas are 2 (sometimes in carinatus they may be 3). The influence of the triqueter parent is seen in the trigonous upper stem.—J. E. LOUSLEY.

Scirpus Tabernaemontani Gmel. Rycote, Oxon, October 1930.—G. C. Druce.

×Scirpus arunensis Druce. [B.36.] Near Houghton Bridge, August 9, 1930. I consider S. Scheuchzeri Brügger to be the correct name of this plant with S. Kukenthalianus P. Junge and ×S. arunensis Druce as synonyms. The Arun plant shows considerable variation in the extent to which the glumes are asperous and the length of the trigonous portion of the upper stem and size of paniele. This, of course, is only to be expected in a hybrid.—J. E. Lousley.

Scirpus triqueter L. [B.11.] Estuarine mud of Thames between Mortlake and Kew, Surrey, August 16, 1930. Entirely submerged at high tide.—J. E. Lousley.

Scirpus Holoschoenus L. Barry Dock, Glamorgan, August 1930.—G. C. Druce.

Rhyncospora fusca Ait. [B.7.] Bog behind "The Moat," Thursley Common, Surrey, July 23, 1930. This plant is here very plentiful, but restricted to patches of peat, very moist, and free of almost all other vegetation. It was discovered here by the late Rev. E. S. Marshall.—J. E. Lousley.

Carex lasiocarpa Ehrh. Askham Bog near York, July 9, 1930.—W. A. Sledge.

Carex flava L. Roundsea Wood, Haverthwaite, N. Lanes, June 22, 1930.—W. A. SLEDGE. "These are most interesting examples of this species. I have known this station for over thirty years and distributed examples from it in 1913. In correspondence, some botanists were inclined to think it a new species, but I have identical material from Vermont, U.S.A., some sheets of which show plants 32 inches high. In my judgment it is shade-grown C. flava but possessing characters not usually given in books. The beaks are noticeably arcuate, long, strongly ciliate, deeply bifid, but smooth in the notch. The glumes are lanceolate-acute, very gradually tapering to the ciliate apex. Many authorities—Bab., Gray, Bentham and Hooker—give 'blunt' for the apex, which is sometimes the case. The specimens are, unfortunately, too young to show mature fruits but are excellently displayed,"—Pearsall.

Carex flava L. [A.201.] Penhale Quarries, Mullion, W. Cornwall, May 23, 1929.—J. E. Lousley. "The C. flava, var. minor, of Townsend, but better placed under C. Oederi as var. oedocarpa."—Britton. "Seems to be var. minor Towns., but without well-advanced utricle, it is difficult to be sure. I suppose, as both Druce and Salmon in L.C. give oedocarpa And. priority, that this is the name to be used. But the plant itself is in many characters more closely related to lepidocarpa than to flava proper, or to Oederi."—LITTLE.

Carex rariflora Sm. From various localities where collected by the late W. A. Shoolbred. Contributed by Nat. Mus. of Wales, Cardief.

Carex aquatilis Wahl. Windermere, June 27, 1930.-W. A. Sledge.

Carex helvola Blytt. Lochnagar, S. Aberdeen, 1906, W. A. Shoolbred. Contributed by Nat. Mus. of Wales, Cardiff.

Carex canescens L. Holt House Wood, Kings Lynn, W. Norfolk, June 7, 1930.—Ida M. Roper.

Carex divulsa Stokes. [679.] Hort. Hitchin. Ex Wimbotsham, W. Norfolk, July 1929, September 1930. I have now grown this Carex in my garden, 1926-1930, and wish to withdraw the name C. contigua × divulsa (Rep. B.E.C., 930, 1928) in favour of C. divulsa Stokes. Will members kindly make the correction?.—J. E. LITTLE. "These well-developed plants, with the ripe fruits, leave no doubt as to their identity with C. divulsa."—Britton.

Setaria viridis Beauv. [B.23.] Disused gravel pits, Tamworth Lane, near Mitcham Common, Surrey, September 9, 1930.—J. E. LOUSLEY.

Setaria verticillata Beauv. Splott, Cardiff, Glamorgan, September 10, 1930. This rather rare adventive species appeared in fair quantity this year, and was seen with pleasure by several of our members.—R. L. Smith. "This is var. brevisetum Godr."—Howarth.

Phalaris paradoxa L., var. praemorsa Coss. & Dur. Waste land, Newport, Isle of Wight. Occurred in plenty in 1917, and lasted several years, July 1917.—J. W. Long. "Correct."—Howarth.

Phleum pratense L., var. nodosum (L.). Great Orme's Head, altitude 300 ft. on scar limestone, July 30, 1930.—A. Wilson. "Correct." —Howarth.

Ammophila baltica Link. Sand dunes north of Yarmouth, E. Norfolk, June 26, 1926.—J. W. White.

Polypogon monspeliensis (L.) Desf. Bristol, July 1886.—J. W. White, "Correct,"—Howarth.

Mibora verna Beauv. St Aubins Bay, Jersey, April 8, 1910.—J. W. White.

Agrostis alba L., var. Sea Banks, Castle Eden, Co. Durham, August 29, 1930.—R. J. Burdon. "Probably only a form."—Howarth.

Apera Spica-Venti Beauv. Waste ground, Newport, Isle of Wight, July 1930.—J. W. Long. "Correct."—Howarth.

Holcus —. One large patch on Wimbledon Common, Surrey, July 10, 1930. I suppose just a broad-leaved form of H. mollis L.—H. J. RIDDELSDELL. "Scarcely, I think, more than a f. luxurians (in all parts) due to soil. . . . No varieties can I trace in this direction."—Barton. "A normal form of H. mollis grew close by."—Barton and RIDDELSDELL. "My specimen is without the underground parts, but is clearly H. mollis L."—Drabble. "Holcus mollis."—Howarth.

Cynosurus echinatus L. Sandy waste, St Helens, Isle of Wight, July 1930.—J. W. Long.

Catabrosa aquatica Beauv. By ditch near Watermeads, Mitcham, Surrey, June 14, 1930.—J. E. LOUSLEY.

Eragrostis Eragrostis (L.) Dr. Splott, Cardiff, Glamorgan, September 10, 1930. Quantities of this species (a grain alien) appeared this year, forming patches a couple of feet across, with the plants quite prostrate on the ground.—R. L. SMITH. "Correct."—Howarth.

Sphenopus divaricatus (Gouan) Reichb. Guernsey; coll. Lady Davy, July 1930, ex G. C. Druce. "Yes, but I should name it Festuca expansa Kunth, reserving the name Sphenopus for a section of the genus Festuca in the same way as Vulpia, Scleropoa, etc."—Howarth.

Festuca rubra L., var. barbata Hackel. Stone Point, Walton-on-Naze, N. Essex, June 29, 1930.—G. C. Brown. "Is the var. genuina, sub-var. barbata Hack; and the var. dumetorum Howarth."—Howarth.

Bromus britannicus I. A. Williams. Origin near Lymington, Hants, August 1930. Sown, August 18, 1929; taken, June 24, 1930. A: In dry sand, full sun; B: in sandy peat, full sun; C: in sandy peat, shade.—L. B. Hall. "It might be possible to test this genetically and cytologically, and compare it with authentic Bromus hordeaceus L., and with B. molliformis Lloyd."—Howarth.

Brachypodium pinnatum Beauv. Clipsham, Rutland, July 1930.—F. A. Sowter. "My specimen is var. pubescens S. F. Gray."—Drabble. "Yes, a vulgare Koch."—Howarth. "These two varietal names appear to be synonymous, but pubescens is the earlier name."—Editor.

Lolium multiflorum Lam. [B.29.] Wheat-field near Chelsfield Station, W. Kent, July 12, 1930.—J. E. Lousley.

Agropyron junceum Beauv. [18-89.] Westmount, Jersey, August 4, 1929. This is the var. genuinum G. & G. (var. microstachyum Lange). I never saw in Jersey the var. macrostachyum G. & G.—Bro. Louis Arsene.

× Agropyron junceum × repens (A. Hackelii Druce = A. acutum auct.) [18-90a.] Maritime sands, all around the Island. Grève d'Azette, Jersey, August 4, 1929.—Bro. Louis Arsene. "Yes."—Druce.

×Agropyron junceum × repens. (A. acutum.) [18-90c.] Another form; perhaps junceum × pungens. Sands of the Quennvais, in dry places, with A. Vaillantianum. Jersey, July 6, 1928.—Bro. Louis Arsene. "Hackel rejected acutum for Britain."—Druce.

Agropyron repens L., var. dumetorum (Hoffm.) S. F. Gray. [18-93a.] Sandy borders of the Quennvais Pond, where it grows with vars. Leerplaces, with A. Vaillantianum, Jersey, July 6, 1928.—Bro. Louis Arsene. "Yes."—Drabble. "Correct."—Howarth.

Agropyron repens L., var. Leersianum S. F. Gray. [18-94.] Wet borders of the Quennvais Pond, growing with vars. dumetorum and lasiorachis. Jersey, July 6, 1928.—Bro. Louis Arsene. "My sheet has two distinct varieties, (a) two spikes of dumetorum as above, and (b) one spike of Vaillantianum."—Howarth.

Agropyron repens L., var. Vaillantianum (Schreb.) Schrank. [18-95a.] Sands of the Quennvais, growing in dry places with A. acutum [18-90c.] Jersey, July 6, 1928.—Bro. Louis Arsene. "Correct."—Howarth.

Agropyron repens L., var. Vaillantianum (Schreb.) Schrank. [18-95b.] A form growing on the sands of Grève d'Azette with A. junceum and A. acutum. Jersey, August 4, 1929.—Bro. Louis Arsene. "Correct."—Howarte.

Agropyron repens L., var. Vaillantianum (Schreb.) Schrank. [18-95f.] A form with leaves distinctly bluish, especially in their upper part. Grows with A. junceum on the maritime sands at Westmount, Jersey, August 4, 1929.—Bro. Louis Arsene. "Correct."—Howarth.

Agropyron repens L., var. lasiorachis Hack. [18-96.] Sandy borders of the Quennvais Pond. Plant glaucous, growing with vars. dumetorum and Leersianum. Jersey, July 6, 1928.—Bro. Louis-Arsene. "Yes."—Drabble. "Correct."—Howarth.

"All these varieties of A. repens require genetical and cytological investigation, and no satisfactory determinations can be made without this. We are, however, much indebted to Bro. Louis-

Arsene for bringing these grasses before us, and hope that it may result in stimulating their investigation."—W. O. Howarth.

Triticum triunciale (L.) Rasp. [482.] Burton-on-Trent, Staffs, August 1930.—G. C. Druce. "Not this species, but is T. ventricosum Ces., otherwise Aegilops ventricosa Tausch."—Britton. "This plant is T. ventricosum Ces."—Howarth and J. Percival.

Polystichum angulare Presl. Hort. The Wirral, Cheshire, May 1930.—C. WATERFALL.

Chara vulgaris L., var. papillata Wallr. Brackish dyke near Seasalter, Whitstable, E. Kent [no date on label].—J. E. Lousley.

Chara aculeolata Kütz. Cors Bodeilio, Anglesey, June 25, 1930.—
A. Wilson.

Plants received from Prof. S. F. Beattie, Lowell, Mass., U.S.A.:—Myriophyllum tenellum Big., Fagus grandifolia Ehrh., Iris prismatica Pursh, Tsuga canadensis (L.) Carr., Rhexia virginica L., Ostrya virginiana (Mx.) Koch, Lycopus communis Bickn., Anemone quinquefolia L., Apocynum androsaemifolium L., Alisma subcordatum Raf., Apocynum cannabinum L., Aster Radula Aiton, A. multiflorus Ait., A. vimineus Lam., var. saxatilis Fernald, Agrimonia gryposepala Wallr., Chelone glabra L., Bidens trichosperma (Mx.) Britt., Circaea latifolia Mill., Cornus paniculata L'Hérit.

Prof. Beattie writes:—"Of the species sent, Alisma subcordatum, Anemone quinquefolia, Circaea latifolia, and Agrimonia gryposepala may be of a little special interest, since opinion is divided as to whether they are or are not A. Plantago-aquatica, Anemone nemorosa, C. lutetiana, and A. Eupatoria. The best authorities regard them now as quite distinct, but it may be of interest to some to compare my specimens with the European parallels. Lycopus communis is one of the few species we have which are in the class of "segregates." Very little careful work has been done in this country, so far, upon critical species, though we have enough which ought to be studied. Of the others, Rhexia virginica is unusual, and rather far north of its usual range. Aster vimineus, var. saxatilis, is of interest because it is a form of the higher levels, occurring here as a wash-down from the mountains."

ADDITIONS AND CORRECTIONS.

Rep. Bot. Soc. and E.C., 1929, p. 31, p. 128. Mr J. E. Little points out that some confusion exists in these records. One species only is concerned, *Verbascum longifolium* DC. The identity of this has been reaffirmed by Dr W. B. Turrill.

Rep. B.E.C., 1929, p. 221, line 20. The name should read Funaria Vaillantii Lois. Labels bearing this correction were sent to the Distributor.

Rep. B.E.C., 1929, pp. 223 and 229. In place of Lurgershall read Lurgashall.

Rep. B.E.C., 1929, p. 234. For Longmoor read Longmorn.

Distribution of 1929 but not appearing in the Report. "Viola ruralis Jord. [A.2.] Chalky field above Goring, Oxon, June 8, 1929. Leg. J. E. Lousley." Dr Drabble has noted Mr J. E. Little's sheet of this gathering as "imperfect and scrappy V. Deseglisei."

Distribution of 1928, but not appearing in the Report. "Veronica persica Poir., var. Corrensiana (Lehm.). [3463.] Hook, Surrey, October 21, 1928.—C. E. Britton."

REPORT, 1930.

- P. 280.—676/2. Read "A variety with yellow seeds and veins of the corolla darker orange," etc.
 - P. 285.—Line 22. Read "south-east" in place of "north-east."
- P. 372.—718. Read "Juncus macer S. F. Gray (bicornis Michx.)." Also in last line of paragraph read "macer" in place of "bicornis."

PLANT LIFE THROUGH THE AGES

A Geological and Botanical Retrospect

By A. C. SEWARD

With 141 Illustrations, including nine reconstructions of Ancient Landscapes drawn for the author by EDWARD VULLIAMY.

Royal 8vo. 30s net

The earlier chapters of this book deal with the Earth's crust and the nature of the evidence on which geologists base their reconstructions of past scenes. A short account of the preservation of plants as fossils and a concise description of the various groups and families of plants follow, and the author then traces the history of the plant-world from the time of the oldest rocks which contain recognisable remains of plants to the present day. An attempt has been made to correlate successive stages in the evolution of floras with the corresponding climatic and physical environment in which the plants lived, and special attention has been paid to the illustrations and maps.

CAMBRIDGE UNIVERSITY PRESS

TECHNICAL PRINTING

T. BUNCLE & CO.

MARKET PLACE, ARBROATH, SCOTLAND

PRINTERS OF

Botanical, Zoological, Photographic, and other Text Books, Periodicals, Reports, Catalogues, &c.

Staff of Experts on Technical Subjects

ESTIMATES and SAMPLES SENT ON REQUEST

THE COMITAL FLORA OF THE BRITISH ISLES

By G. CLARIDGE DRUCE, M.A., D.Sc., LL.D., F.R.S.

PUBLISHED BY T. BUNCLE & CO., ARBROATH.

THIS work includes the records of British plants in the Vice-Counties of England, Wales, and Scotland, based on Watson's "Topographical Botany"; Bennett's "Supplement," published in 1905, and the second "Supplement," published in 1929-30; in Ireland on Praeger's "Irish Topographical Botany" and its Supplements; and in Lester-Garland's "Flora of Jersey," Marquand's "Flora of Guernsey" and the adjacent islands. All the authentic records made up to the end of 1930 are included. It gives the Latin and English names of the plant, Watson's definitions—agrestal, paludal, &c., place of growth, frequency, elevation, distribution throughout the British Isles, giving each vice-county in which it occurs. Lastly, its first record as a British plant.

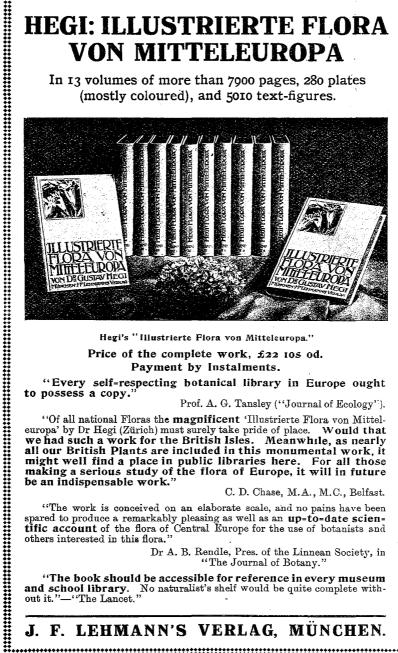
PRICE, 20/- (Cloth Binding).

To Members of the Botanical Society and Exchange Club of the British Isles, Copies—7/6, in cloth; 6/-, in paper covers; interleaved, 3/6 extra—will be sent (all Post Free), if ordered before December 31st, 1931. This is done in order to save the expense of sending it to members who would have no use for the Flora.

READY SHORTLY.

HEGI: ILLUSTRIERTE FLORA VON MITTELEUROPA

In 13 volumes of more than 7000 pages, 280 plates (mostly coloured), and 5010 text-figures.



Hegi's "Illustrierte Flora von Mitteleuropa."

Price of the complete work, £22 10s od. Payment by Instalments.

"Every self-respecting botanical library in Europe ought to possess a copy.

Prof. A. G. Tansley ("Journal of Ecology").

"Of all national Floras the magnificent 'Illustrierte Flora von Mitteleuropa' by Dr Hegi (Zürich) must surely take pride of place. Would that we had such a work for the British Isles. Meanwhile, as nearly all our British Plants are included in this monumental work, it might well find a place in public libraries here. For all those making a serious study of the flora of Europe, it will in future be an indispensable work."

C. D. Chase, M.A., M.C., Belfast.

"The work is conceived on an elaborate scale, and no pains have been spared to produce a remarkably pleasing as well as an up-to-date scientific account of the flora of Central Europe for the use of botanists and others interested in this flora."

Dr A. B. Rendle, Pres. of the Linnean Society, in "The Journal of Botany."

"The book should be accessible for reference in every museum and school library. No naturalist's shelf would be quite complete without it."--"The Lancet."

J. F. LEHMANN'S VERLAG, MÜNCHEN.

REPRINTS,

ETC.,

ALL THE CHIEF PAPERS PRINTED IN REPORTS TO BE OBTAINED FROM THE SECRETARY, G. CLARIDGE DRUCE, 9 CRICK ROAD, OXFORD.

taran da antara da a			,	
Botanical Society and Exchange Club Reports, 1879-				
1928 (complete).	£12	12	0	
Mosses and Hepatics of Oxfordshire,	0		6	
Dubious Plants of Britain.	ñ	. –	6	
Centaurium Scilloides and Ajuga genevensis,	0		-	
Alchemilla argentea,	_	1	6	
The Genus Bursa. Almquist & Druce,	n	-	6	
Plantago maritima, &c.,	•	1	6	
European Sphagnaceae. Braithwaite,	0	8	6	
Sketches of Botany, 1790. Pulteney. 2 vols.,	•	18	-	
Corrected Names of Roses. Wolley-Dod,	-	1	6	
Menthae Briquetianae. J. Fraser,	0	1	6	1
The Genus Thymus. K. Ronniger,	. 0	2	0	
Orchis maculata L., etc. Druce,	U.	_	6	
Centaurea Scabiosa. C. E. Britton,	•	1	0 0	
Centaurea Jacea. C. E. Britton,	Ξ.	1	. 0	
Notes on Nomenclature. Druce, 1914,	0	-	6	
Oxford Botanic Gardens. Druce,	0		0	
Herbal, 1633. Gerard. No title page,	- 5		0	
Flora of West Ross (paper),	•	4	6	
,, ,, (bound in cloth),		6	0	
British Batrachia. Pearsall,	_	2	_U	
Melampyrum. G. Beauverd,	_	1	-	
Flora of Palestine and Syria. Post,	4	-	- 0	
Flora of Berkshire. Druce,	-	16	0.	
(Supplement),	-	2	6	
Flora of Northamptonshire. Druce,	1		0	
Flora of Buckinghamshire. Druce,	٠	10	Û	
Flora of Oxfordshire. Druce,	-	10	0	
Flora of Cyprus. Holmboe,	•	10	-	
Woods' Tourist Flora,	1		0	
Flora of Zetland. Druce. 2 parts,	-	-	6	
Journal of Botany, 1912-1914, 1916, 1922 (paper), each		_	6	
1996 1997 (oloth)		-	_	
,, ,, 1886, 1887 (cloth), each British Brambles. Miss Trower (cloth),		18	0	. *
Z		6	•	
Hierosia Boskhaves	-	3		
Hieracia. Backhouse,	-	10	•	
Memorial of John Ray. Lankester,	-	-5	0	
Warner's Plantae Woodfordiensis,	0	18	0	
Syme's English Botany. Sowerby. Ed. 3, first proof;				
spotless; green cloth; 12 vols.,		0.	0	
,, ,, Calf, richly gilded; 24 vols., -	24	0	0	

NEW WORKS

BEAUTIFULLY ILLUSTRATED WORK ON

MESEMBRYANTHEMA,

By N. E. BROWN, Dr. phil. A. TISCHER, and Miss M. C. KARSTEN. Edited by E. J. LABARRE.

With 179 Illustrations from the living plants, and Two Full-page Colour Plates figuring 14 different Species. Chapters on Cultivation and General Ecology (particularly dealing with Mimicry and Windowed Plants) and full description of the 146 Species illustrated.

Issued in one Volume in English, German and Dutch. -Price 36,- net.

A STUDENTS' ILLUSTRATED

IRISH FLORA.

BEING A GUIDE TO THE INDIGENOUS SEED-PLANTS OF IRELAND

By J. ADAMS, M.A. (Cantab), Economic Botanist, Ottawa, Canada.

Crown Svo. 343 + viii. pages. 578 ILLUSTRATIONS and Outline Map of Ireland.

Illustration and particulars of distribution of each plant. Additional Chapters on Classification, Relation to Environment, Topographical Distribution. Lists of Poisonous Plants and Lists of English and Irish Names.

Price 12/= net.

The Dispersal of Plants Throughout the World.

By Henry M. Ridley, M.A., C.M.G., F.R.S., F.L.S. Showing the means and methods by which plants are distributed throughout the world, by Wind, Water, Animals, Birds, Simple Adhesion, Special Modification, &c., &c. Illustrated. Royal 8vo., 744 pp. £3 3/= net.

Further Illustrations of British Plants.

By R. W. BUTCHER and F. E. STRUDWICE. Forming a more complete British Flora, together with Bentham's Handbook and Illustrations (see below). 485 new figures with descriptions. Crown 8vo.

Handbook of the British Flora.

By George Bentham and Sir J. D. Hooker. Revised and brought up to date with Additions by A. B. Rendle, M. A., B. Sc., F. R. S., Keeper of Botany, British Museum. A description of the Flowering Plants and Ferns indigenous to or naturalised in the British Isles. Crown 8vo., pp. lxi. +606.

Illustrations of the British Flora.

Forming an Illustrated Companion to Bentham's "Handbook" and other British Floras. Fifth Revised Edition, 1924. 1,322 Wood Engravings by W. H. Fitch, W. G. Smith, and others. Crown 8vo.

Orchids for the Outdoor Garden.

By A. W. DARNELL. A descriptive list of the World's Orchids that may be grown outdoors in the British Isles, with full cultural directions how to grow them. About 1,000 species described. 22 Full-page Illustrations. Crown 8vo.

LLOYD'S BANK BUILDINGS, Bank St., ASHFORD, KENT.