THE BOTANICAL SOCIETY EXCHANGE CLUB AND OF THE BRITISH ISLES.

REPORT FOR 1938

BOTANICAL EXCHANGE CLUB (CONVENIENTLY ABBREVIATED B.E.C. 1933 REP.)

the distributor. JOHN F. G. CHAPPLE. Esq.

THE LATE HOMORARY EDITOR, PATRICK M. HALL. Est.

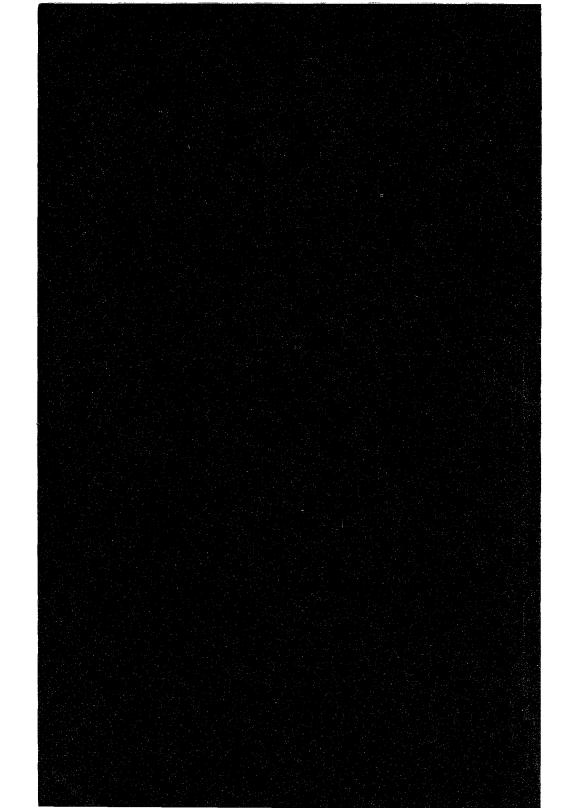
THE MONORARY ACTING EDITORS. E. C. WALLACE, Eng. 2 September Sam Sites.

A. J. WILMOTT. Esq., Mount March Masser Read Landers. S. W.J.

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(VOL. XII. PART II).

Victoria Regina.



Floreat flora.

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OF THE

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BY

THE DISTRIBUTOR,
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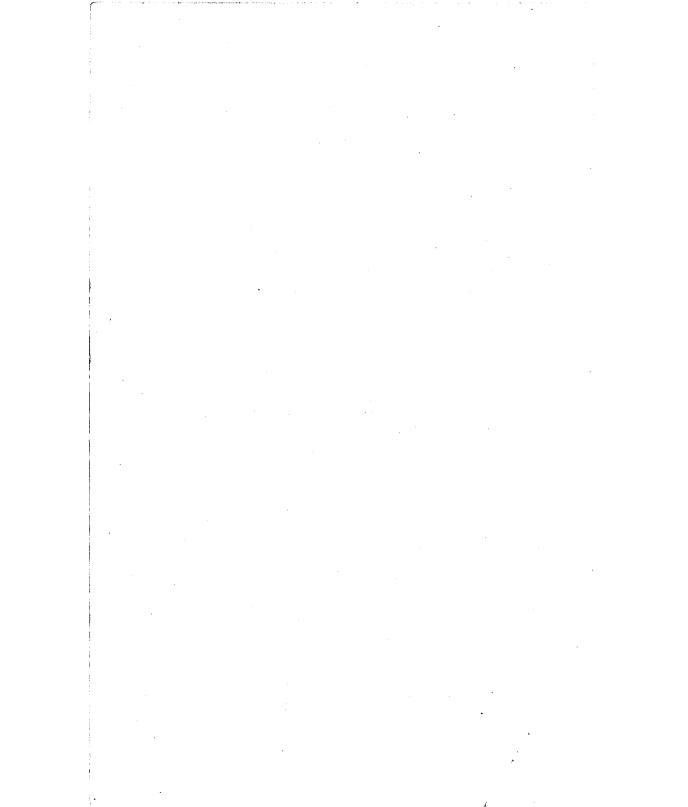
AND

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The causes of the delay in the publication of the Society's Reports have seen set out in the "Report on the State of the Society's Affairs" recently distributed to members. With the exception of the promised Reports on the Excursions (see p. 17) the second part of the Report for 1938 was ready for printing long ago, but after the departure of the Secretary on active service the heavy burden of war duties undertaken by the Editor prevented him from attending to this Report before the onset of his fatal illness. Mr Hall was intending to amplify his introductory remarks, but in the circumstances the acting editors prefer to print the proof as it was left by him, with the addition only of the Reports of the Excursions.

A. J. WILMOTT.

E. C. WALLACE.

REPORT ON THE EXCURSIONS ARRANGED IN 1938.

Six excursions were arranged, five of which took place.

May 28. S. Wilts., v.-c. 8. Potterne Biological Station, Devizes. Leader, Mr E. Marsden Jones.

Unfortunately, this excursion had to be cancelled, as Mr Marsden Jones was taken seriously ill at the last moment. His illness was prolonged, but we are glad to say that he now hopes that in time his recovery will be complete. He asks us to inform members that although the Potterne Station was closed down at the end of September 1940, the British plants were transferred to Drentsey's School, West Lavington, Wiltshire, where they are still under his supervision, and are arranged in biological beds as they were at Potterne. Anyone requiring material for research should apply to the Headmaster.

June 10-13. S. Devon, v.-c. 3. The Coast in the Neighbourhood of Salcombe. Leader, Mr G. T. Fraser.

June 10. The party, numbering 16, assembled during the afternoon and evening at the Salcombe Hotel, Salcombe, the headquarters for the excursion.

June 11. The party left Salcombe at about 9.15 a.m. by char-a-banc for Hope Cove, via Malborough. About an hour was spent at Hope, an interesting fishing village situated on a very wild and rocky portion of the coast. Some interesting plants occur here, including forms of Anthyllis Vulneraria that might repay further study and Orobanche maritima Pugsl. (O. amethystea auct. angl.) growing on Daucus, the latter rather plentifully in some seasons. The party proceeded to Sewer Mill Cove, following the cliffs and passing over Bolt Tail with its fine cliff scenery. Sagina Reuteri (or what passes for it among British botanists), Rosa spinosissima, and Euphrasia occidentalis var. praecox were collected. At Sewer Mill Cove, where a sandwich lunch was eaten, some wet ground above the beach produced a few interesting sedges. A colony of Rumex rupestris occurs here, but the plants were in poor condition. A recent south-easterly gale had much damaged by wind and spray all the coastal vegetation in this area. Very luxuriant plants of Asplenium marinum were seen; also a large patch of Scilla verna. The walk was continued along the coast towards Bolt A damp patch on the cliffs above Steeple Cove contained Radiola Linoides and Centunculus minimus growing together as they so often do. Bolt Head and Sharpitor provided some interesting plants; Geranium sanguineum occurs, and a 1935 record for Erodium neglectum was confirmed. In a bog behind Bolt Head, Orchis praetermissa, O. pardalina Pugsl., and intermediates, were collected. Starehole, the wreck of the Finnish sailing ship—Hertzogin Ceciliewas seen. Tea was obtained at the Bolt Head Hotel during the only serious fall of rain which occurred in the course of the excursion. After tea, some of the party visited Sharpitor House, just taken over by the National Trust. The grounds contain a fine collection of foreign trees, shrubs and herbaceous plants, many of them from New Zealand and Australia. The mild climate suits them admirably, and the place was well worth visiting. Salcombe was reached about 7 p.m., the party having covered about 10 miles of coast during the day. The ballroom at the hotel was placed at our disposal during the evening—and also on the following evening—for discussion and examination of specimens.

June 12. Crossing by the ferry to East Portlemouth, the party proceeded by the eastern shore of Salcombe Harbour to Rickham Common. Marsh Orchids were examined in swampy ground near East Portlemouth; Rosa spinosissima and Jasione montana var. latifolia occurred sparingly at a few places, and some very dwarf plants of Hypochaeris glabra were collected at Rickham Common. Geranium sanguineum is abundant on the coast for about four miles. Below Gara Rock, where a sandwich lunch was eaten, and under Deckler's Cliff, Lotus hispidus occurs in considerable quantity, and between Deckler's Cliff and Gammon Head Ruscus aculeatus is a conspicuous feature of cliff crevices. Some of the party remained at Gammon Head looking for plants and watching the young gulls, while the more energetic members went on to Prawle Point and East Prawle village and were rewarded by finding Geranium purpureum, Trifolium glomeratum, and Bromus lepidus. The party assembled at Gara Rock Hotel for tea, and returned to Salcombe via East Portlemouth and the ferry, having covered about 10 miles.

June 13. The party separated and returned home. Some of them visited the quay at Kingsbridge and collected some interesting grasses. They also visited Slapton and Berry Head on their way home.

Although not a large one, the party, which consisted of 15 members and a visitor, saw and collected many interesting plants, and obtained a number of records new for the district covered. These were all included in the *Flora of Devon*, published subsequently. The hotel was comfortable, its management looked after us well, and the fine weather helped to make things pleasant.

A list of the more interesting plants noted and collected is given below. N.C.R.=New to Devon. N.D.R.=New to Dist. vii of the Flora of Devon. *=New vice-county record. †=Not native: as usual in these Reports.

Viola hirta L. var. calcarea Bab. East Portlemouth, Deckler's Cliff; det. P. M. Hali. N.D.R.
Sagina ciliata Fr. Chivelstone, Gammon Head; det. F. R. Elliston Wright.
S. Reuteri Lange. Malborough, Bolt Tail; and Chivelstone, Gammon Head; "well under what British botanists have called S. Reuteri," F.R.E.W.
Lavatera arborea L. At intervals along the cliffs.
Radiola Linoides Roth, Malborough, Steeple Cove.

Geranium sanguineum L. Malborough; Chivelstone; and East Portlemouth. G. purpureum Vill. Chivelstone, East Prawle. N.D.R. Erodium maritimum (L.) L'Herit. Plentiful on bare headlands throughout. E. neglectum Baker f. & Salmon. Malborough, Sharpitor.

Trigonella ornithopodioides (L.) DC. Malborough; East Portlemouth; and Chivel-Trifolium glomeratum L. Chivelstone; East Prawle. Lotus hispidus Desf. East Portlemouth; Chivelstone; frequent between Rickham

Common and Gammon Head. Rosa spinosissima L. Malborough, Bolt Tail; East Portlemouth, Rickham Common; Chivelstone, above Gammon Head.

Epilobium lanceolatum Seb. & Maur. Salcombe, Sharpitor; det. G. M. Ash. †Oenothera stricta Ledeb. (O. odorata Jacq.). East Portlemouth, Gara Rock, a large colony, well established.

Valerianella dentata Poll. var. mixta (L.) Dufr. Chivelstone, East Prawle. Hypochaeris glabra L. East Portlemouth, Rickham Common; Chivelstone, Gammon Head. Jasione montana L. var. latifolia Pugsl. East Portlemouth, Sandy Cove and

Centunculus minimus L. Malborough, Steeple Cove. †Symphytum peregrinum Ledeb. Salcombe, near Tide End.

Rickham Common; Chivelstone, Gammon Head.

Scrophularia Scorodonia L. Salcombe.

Euphrasia occidentalis Wettst. *var. praecox Bucknall. Malborough, near Hope Cove; det. H. W. Pugsley. N.C.R. *Var. minor Pugsl. East Portlemouth, near Rickham Common; det. H. W.

Pugsley. Orobanche maritima Pugsl. (O. amethystea auct. angl.). South Huish, Hope Cove.

Rumex rupestris Le Gall. Malborough, Sewer Mill Cove; East Portlemouth, near Gara Rock; Chivelstone, Gammon Head. Orchis. All determined by T. Stephenson.

O. pardalina Pugsl. Malborough, near Bolt Head; East Portlemouth, Sandy · Cove; Chivelstone. N.D.R.

O. praetermissa Druce. Salcombe, Tide End; Malborough, near Bolt Head; East Portlemouth, Sandy Cove. Intermediates with the preceding were col-

lected in the two localities where both occurred together. O. maculata L. (O. Fuchsii Druce). Salcombe, Sharpitor. N.D.R.

Ruscus aculeatus L. Chivelstone, Pig's Nose to Gammon Head. † Allium triquetrum L. East Portlemouth, Rickham.

Scilla verna Huds. Malborough, Sewer Mill Cove.

Luzula Forsteri (Sm.) DC. East Portlemouth.

Carex distans L. Malborough, Sewer Mill Cove. C. viridula Michaux (C. Oederi auct. non Retz.), var. oedocarpa (Anderss.) Wil-

mott comb. nov. Malborough, Starehole; det. E. Nelmes (as C. Oederi, var. oedocarpa).

C. extensa Good. Malborough, Sewer Mill Cove. C. Pairaci F. Schultz. Chivelstone, East Prawle.

Dactylis glomerata L. var. conyesta Coss. & Germ. East Portlemouth, Gara

Puccinellia distans (L.) Parl. Kingsbridge Quay.

P. rupestris (With.) Fern. & Weatherby. Kingsbridge Quay. A hybrid with the preceding was determined, with some doubt, by C. E. Hubbard. Catapodium loliaceum (Huds.) Link. East Portlemouth, Rickham Common.

Festuca rubra L. var. glaucescens (Heg. & Heer) Richt. East Portlemouth; Chivelstone; Malborough; at intervals along the coast.

 $\times F$. loliacea Huds. Salcombe, Tide End.

Bromus hordeaceus L. *var. Thominii (Bréb.) Asch. & Graebn. East Portlemouth ("with some doubt," C. E. Hubbard); Kingsbridge ("probably,"

C. E. Hubbard). N.C.R. B. lepidus Holmberg. Chivelstone, East Prawle. N.D.R. B. hordeaceus × lepidus. Chivelstone, East Prawle. C. E. Hubbard considered that a plant growing with the reputed parents may be this hybrid.

Lolium perenne L. *var. longiglume Grantzow. Kingsbridge Quay; det. C. E. Hubbard. N.C.R.

Dryopterts Linneana C. Chr. Salcombe, Sharpitor; perhaps planted, but that is unlikely.

G. T. F.

June 25. Surrey, v.-c. 17. An afternoon in the neighbourhood of Ash. Leader, Lady Davy.

This excursion, which was mainly to explore a large bog and a piece of the Basingstoke Canal, was rather spoilt by the very dry weather. No rain having fallen during the month, the bog plants were suffering from drought, but *Eriophorum gracile* and several nice orchids were found. The Basingstoke Canal was also in bad condition, the *Ranunculus circinatus* there being quite spoilt by mud and stagnant water. The party, which consisted of 12 members and 5 visitors, enjoyed a very good tea and discussed the afternoon's discoveries.

J. C. D.

July 11-16. Westmorland, v.-c. 69. Investigation of the highlands and the Eden Valley between Brough and Penrith. Leaders, Dr R. W. Butcher and Miss C. Rob.

The object of this excursion was to discover how the flora of the southern slopes of the Mickle Fell range, which face the Eden Valley, compared with the more familiar flora of the northern slopes, which face the Tees Valley. The party consisted of 28 members and 7 visitors. While the main work was done on the hills, many members enjoyed seeing the rare plants of the Eden Valley under the guidance of Dr Sprott.

Unfortunately, the searching parties were handicapped by poor weather and mists, but the plants found show without doubt that the absence of records of rare plants is because such plants do not occur in this district. With the single exception of *Scrophularia umbrosa* on the banks of the Eden, no plants were found which had not been recorded by Mr Wilson in his recently published *Flora of Westmorland*.

The areas visited were as follows:-

- (a) Rundale Beck and Swindale Beck. The flora was generally poor and no specially uncommon plant was seen.
- (b) High Cup Nick. The cliffs were thoroughly explored, but the party failed to find the previously recorded rare plants, viz., Sibbaldia procumbers, Saxifraga nivalis, Pyrola secunda, and Carex capillaris.
- (c) Hilton Gill. The conspicuous plants of this region were Hieracia which have not yet been identified; otherwise the flora was similar to that of Rundale Beck.
- (d) Angill and Foxhall Wood. The flora of Angill was very poor and consisted only of widely distributed species of the "Germanic"

element. The feature of the limestone scars between Angill and Hillbeck Wood was the abundance of *Primula farinosa*. Neither Foxhall Wood nor the pools in it yielded anything noteworthy. A pondweed (probably *Potamogeton Berchtoldii* Fieb. = *P. pusillus* auct.) was seen in the lake by Hillbeck House.

In spite of the lack of new and interesting records, the party had a very interesting time, and even their negative observations are of interest.

A list of Vascular Cryptogams observed—sent in by Mr A. H. G. Alston—follows below:—

Equisetum silvaticum L. Above Brough.

E. variegatum L. High Cup Nick, and bog near Orton (found by Miss Rob).
Asplenium viride Huds. Common; Beacon Hill (on limestone) and High Cup Nick (not limestone).

A. Adiantum-nigrum L. Rather rare; Brough (Miss Rob).

Dryopteris Filix-mas (L.) Schott var. paleacea (Don) Druce. Abundant on the west side of the Pennines.

- D. Villarsii (Bell.) Woynar (D. rigida (Sw.) Underwood). Beacon Hill, on Orton Scar.
- D. Oreopteris (Ehrh.) Maxon. Abundant on the west side of the Pennines.
- D. Phegopteris (L.) C. Chr. Above Brough, and seen by Dr Lawn below High Cup
- D. Robertiana (Hoffm.) C. Chr. Beacon Hill and High Cup Nick. Botrychium Lunaria (L.) Sw. Above Brough.

Lycopodium alpinum L. One plant found by Mr Shaw below High Cup Nick.

- L. clavatum L. One plant found by Mrs Sandwith above Brough.
- L. Selago L. Common at High Cup Nick.

Selaginella selaginoides (L.) Link. Beacon Hill and High Cup Nick.

R. W. B.

August 13-15. E. Norfolk, v.-c. 27. Broads and Fens. Leader, Mr E. A. Ellis.

August 13. Members assembled in the morning at Horning Ferry and proceeded to Alderfen Broad, where separate parties investigated the fen and the waters of the broad. After a picnic lunch and further exploration of this area, a visit was made to Bryant's Heath, Felmingham, in the North Walsham district, chiefly to see *Hammarbya paludosa* growing in the bog there.

August 14. The party gathered at Upton church at 11 a.m. and went on to Upton Broad, an extensive sedge-fen little known botanically. Among the more interesting finds here were *Pyrola rotundifolia* and a single plant of *Liparis Loeselii*. All the types of plant community at Upton were inspected and several members made a long trek across to the reclaimed grazing marshes between the fen and the river Bure, by way of contrast. To end the excursion, Dr and Mrs B. B. Riviere very kindly provided tea in the gardens of Woodbastwick Old Hall.

14 members and 8 visitors took part in the excursions.

NOTES ON THE AREAS VISITED.

Alderfen Broad is a Nature Reserve comprising 68 acres of broad, reed-beds, alder carr and rough fen, the property of the Norfolk Natur-

alists' Trust. The water of the broad is about pH 6-7 in summer and commonly supports a "water-bloom" phyto-plankton, large beds of water-lilies and a quantity of Utricularia vulgaris. It has many islands of Typha angustifolia, Phragmites and Scirpus lacustris, with a good deal of Cicuta virosa. Stratiotes aloides is abundant in the bays and dykes at the edge. The reed-swamp is succeeded by fen, which in the early stages is variously composed of Cladium or of Glyceria and Phalaris according to the proximity of springs supplying the broad. The Cladium area has in places been over-run by alder trees to form fen-carr, but farther back it has developed into mowing marsh and eventually wet heath with Calluna and Erica Tetralix. The presence of Scirpus Tabernaemontani and Oenanthe Lachenalii in the fen probably indicates an earlier maritime influence. No previous account of the flora has been published.

Bryant's Heath, Felmingham, is a small common of about 37 acres comprising furze and heathland, bounded on one side by a bog and a small stream margined with reeds and alders. On the dry heath, gorse and heaths are dominant, three species of *Ulex* all growing together, *U. minor* and *U. Gallii* being in bloom at the time of the excursion. The more interesting boggy portion contains patches of *Sphagnum*, in a restricted area of which *Hammarbya paludosa* is quite plentiful (first recorded from this locality in 1935 by A. E. Ellis). It was noticed that *Scirpus setaceus* was very local and *S. pygmaeus* widely spread; *Eleocharis palustris* was much rarer than *E. multicaulis*.

Upton Broad comprises something approaching 200 acres of grown-up broadland, with shallow, restricted pools in the midst of reed-swamp and much Cladium fen, and with small interspersed patches of alder and sallow carr. Portions of the fen are periodically mown or burnt, and the mown areas support a rich flora including several sub-acid types such as Parnassia palustris, Scabiosa Succisa and Pyrola rotunditolia, together with a good number of orchids. Lathyrus palustris was found commonly in several parts of the fen. No Sphagnum was noticed here during the excursion, and the solitary example of Liparis Loeselii, found in fruit, was growing with many other orchids in a fairly open area among Dryopteris Thelyptris, sparse Phragmites and sedges, with a Hypnoid moss flora on the ground.

A comparative list of the plants found in the three areas visited has been compiled from notes supplied by Messrs A. E. and E. A. Ellis and Mr C. T. Prime; Dr Lawn provided records of *Epilobium obscurum* and *E. palustre*, and many other members pooled the results of their observations at the time of the excursion.

LIST OF THE PLANTS FOUND AT ALDERFEN BROAD (A.), BRYANT'S HEATH (B.), AND UPTON BROAD (U.).

(The absence of bracketed letters after the name of a plant indicates that the species was found in all three stations.)

Ranunculus repens L.; R. acer L.; R. bulbosus L. (U.); R. Lingua L. (A., U.); R. Flammula L.; R. sceleratus L. (U.).

Caltha palustris L.

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Nuphar lutea (L.) Sm. (A., U.).
Nymphaea alba L. (A., U.).
Nasturtium officinale R. Br. (B., U.).
Cardamine pratensis L. (A., B.); C. amara L. (U.).
Sisymbrium Thaliana (L.) Gay (B.).
Viola canina L. emend. Reich. (B.); V. palustris L. (A., B.).
Polygala vulgaris L. (B.).
Lychnis Flos-cuculi L.; L. dioica L. (B. U.).
Cerastium erectum (L.) Coss. & Germ. (B.); C. vulgatum L.
Stellaria media (L.) Cyr. (B., U.); S. Dilleniana Moench emend. var. palustris
       (Retz.) Druce (A.); S. graminea L. (B., U.); S. uliginosa Murr.
Arenaria trinervia L. (B.).
Sagina nodosa (L.) Fenzl (B.); S. procumbens L. (B.).
Hypericum quadrangulum L. (H. acutum Moench); H. elodes L. (B.).
Radiola Linoides Roth. (B.).
Geranium molle L. (B.); G. Robertianum L. (B., U.).
Ilex Aquifolium L. (A., B.).
Rhamnus Frangula L. (A., U.).
Acer campestre L. (U.).
Genista anglica L. (B.).
Ulex europaeus L. (B.); U. Gallii Planch. (B.); U. minor Roth (B.).
Cytisus scoparius (L.) Link (B.),
Trifolium pratense L.; T. striatum L. (B.); T. fragiferum L. (B.); T. repens L.;
       T. dubium Sibth. (A., B.).
Lotus uliginosus Schk.; L. corniculatus L. (B.).
Vicia Cracca L. (A., U.); V. hirsuta (L.) S. F. Gray (U.).
Lathyrus palustris L. (U.); L. pratensis L. (U.).
Prunus domestica L. (U.); P. spinosa L. (B.).
Spiraea Ulmaria L.
Rubus Idaeus L. (B., U.); R. fruticosus L. agg.
Potentilla Anserina L.; P. erecta (L.) Hampe; P. sterilis (L.) Garcke (B.); P.
       palustris (L.) Scop. (A., U.).
Alchemilla arvensis (L.) Scop. (B.).
Agrimónia Eupatoria L. (B.).
Rosa canina L. agg.
Crataegus monogyna Jacq.
Parnassia palustris L.
Drosera anglica Huds. (B.); D. longifolia L. (B.); D. rotundifolia L. (B.).
Myriophyllum spicatum L. (A., U.); M. verticillatum L. (U.).
Callitriche stagnalis Scop. (B.).
Lythrum Salicaria L. (A., U.).
Epilobium hirsutum L.; E. parviflorum Schreb. (B., U.); E. obscurum Schreb.
       (A., U.); E. palustre L.
Hydrocotyle vulgaris L.
Apium nodiflorum (L.) Reich. fil. (B., U.).
Cicuta virosa L. (A.).
Sium latifolium L. (U.); S. erectum Huds.
Anthriscus silvestris (L.) Hoffm. (U.).
Oenanthe Lachenalii C. Gmel. (A., U.); O. fistulosa L.
Angelica sylvestris L.
Peucedanum palustre Moench (A., U.).
Herrcleum Sphondylium L. (B., U.).
Caucalis Anthriscus Huds. (U.).
Hedera Helix L. (B., U.).
 Sambucus nigra L. (B., U.).
 Viburnum Opulus L. (A., U.).
Lonicera Periclymenum L.
 Galium saxatile L. (B.); G. uliginosum L. (A., U.); G. palustre L.; G. Aparine L.
 Valeriana officinalis L.; V. dioica L.
Scabiosa Succisa L.
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Eupatorium cannabinum L. (A., U.).
Bellis perennis L. (B.).
Pulicaria dysenterica (L.) Bernh.
Achillea Millefolium L. (A., B.).
Artemisia vulgaris L. (U.).
Tussilago Farfara L. (U.).
Senecio aquaticus Hill (B., U.); S. Jacobaea L. (B.); S. erucifolius L. (B.); S.
       silvaticus L. (B.).
Cirsium lanceolatum (L.) Scop. (B., U.); C. pratense (Huds.) DC. (A., U.); C.
       arvense (L.) Scop. (B., U.); C. palustre (L.) Scop.
Centaurea nigra L. agg. (A., U.); C. nemoralis Jord. (B.).
Lapsana communis L. (B., U.).
Hieracium Pilosella L. (B.).
Hypochaeris radicata L. (A., B.).
Leontodon Leysseri (Wallr.) Beck (L. nudicaulis Banks) (A., B.).
Taraxacum sp.
Sonchus arvensis L. (A.); S. asper (L.) Hill (A., U.).
Campanula rotundifolia L. (B.).
Calluna vulgaris (L.) Hull (A., B.).
Erica cinerea L. (B.); E. Tetralix L. (A., B.).
Pyrola rotundifolia L. (U.).
Hottonia palustris L. (A.).
Primula vulgaris Huds. (B.).
Lysimachia vulgaris L. (A., U.); L. nemorum L. (B.).
Anagallis arvensis L. (U.); A. tenella Murr. (B., U.).
Samolus Valerandi L. (U.).
Fraxinus excelsior L. (U.).
Centaurium umbellatum Gilib. (B.).
Menyanthes trifoliata L.
Myosotis palustris (L.) Hill (A., U.); M. caespitosa Schultz (B., U.); M. arvensis
       (L.) Hill (B.).
Calystegia sepium (L.) R. Br. (U.).
Cuscuta epithymum (L.) Murr. (B.).
Solanum Dulcamara L.
Scrophularia aquatica L. (A., U.).
Veronica officinalis L. (A.); V. Chamaedrys L. (A., B.); V. scutellata L. (B., U.);
       V. Beccabunga L. (B.); V. arvensis L. (B.).
Euphrasia officinalis L. agg.
Bartsia Odontites Huds. (B.).
Pedicularis palustris L.; P. silvatica L. (B.).
Rhinanthus minor Ehrh. (R. Crista-galli auct.) (A., U.).
Utricularia vulgaris L. (A., U.).
Mentha aquatica L.
Lycopus europaeus L. (A., U.).
Nepeta hederacea (L.) Trev. (B., U.).
Scutellaria galericulata L. (A., U.).
Prunella vulgaris L.
Stachys silvatica L. (B., U.); S. palustris L. (U.).
Galeopsis Tetrahit L. (U.).
Lamium album L. (B.); L. purpureum L. (B.).
Teucrium Scorodonia L. (B.).
Plantago Coronopus L. (B.); P. lanceolata L.; P. major L. (B., U.).
Polygonum Convolvulus L. (A.); P. amphibium L. (A., U.); P. Lapathifolium L.
       (A., U.); P. Persicaria L. (U.); P. Hydropiper L. (A., U.).
Rumex Hydrolapathum Huds. (A., U.); R. crispus L. (B., U.); R. nemorosus
       Schrad. (B., U.); R. conglomeratus Murr. (B., U.); R. Acetosa L.; R.
       Acetosella L. (B.).
Daphne Laureola L. (B.).
Ulmus sp. (U.).
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Urtica dioica L.

Myrica Gale L. (A., U.).

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Betula alba L.; B. pubescens Ehrh. (A., U.), var. vestita G. & G. (B.).
Alnus glutinosa Gaertn.
Quercus Robur L.
Salix fragilis L. (U.); S. alba L.; S. viminalis L. (U.); S. aurita L. (B.); S. atro-
       cinerea Brot.; S. repens L.
Populus tremula L. (U.); ? P. nigra L. (U.).
Ceratophyllum submersum L. (U.).
Hydrocharis Morsus-Ranae L. (U.).
Stratiotes Aloides L. (A., U.).
Hammarbya paludosa (L.) (Malaxis paludosa (L.) Sw.) (B.).
Liparis Loeselii (L.) Rich. (U.).
Listera ovata (L.) R. Br. (A., U.).
Epipactis palustris (L.) Crantz (A., U.).
Orchis latifolia L. (O. incarnata auct.) (A., U.); O. praetermissa Druce (A., B.);
       O. maculata L. (O. Fuchsii Druce) (A.); O. ericetorum (Linton) Marshall
       (O. maculata Druce et. al.) (B.).
Gymnadenia conopsea (L.) R. Br. (U.).
Platanthera bifolia (L.) Rchb. (U.).
Iris Pseudacorus L.
Tamus communis L. (B., U.)
Juncus conglomeratus L. em. Koch; J. glaucus Ehrh. (J. inflexus auct.) (U.);
       J. subnodulosus Schrank; J. acutiflorus Ehrh. (B.); J. articulatus L. em.
       Wahl. (B., U.); J. bulbosus L. (B.); J. bufonius L. (A., U.).
Luzula campestris (L.) DC.
Typha angustifolia L. (A., U.).
Sparganium neglectum Beeby (B.); S. ramosum Huds. (A., U.); S. simplex Huds.
Arum maculatum L. (B.).
Lemna minor L.; L. polyrhiza L. (U.); L. trisulca L. (A., U.); L. gibba L. (U.).
Alisma Plantago-aquatica L. (A., U.).
Baldellia ranunculoides (L.) Parl. (Echinodorus Ranunculoides (L.) Engelm.) (B.).
Sagittaria sagittifolia L. (U.).
Triglochin palustre L. (B., U.).
Potamogeton natans L. (A.); P. polygonifolius Pourr. (B.); P. Berchtoldii Fieb.
       (P. pusillus auct.) (U.); P. pectinatus L. (U.).
Zannichellia palustris L. (U.).
Eleocharis palustris (L.) R. Br.; E. multicaulis Sm. (B.).
Scirpus lacustris L. (A., U.); S. Tabernaemontani Gmel. (A., U.); S. setaceus L.
       (B.); S. pygmaeus A. Gray (S. filiformis Savi) (B.).
Eriophorum angustifolium Roth (B.).
Rhynchospora alba (L.) Vahl (B.).
Schoenus nigricans L. (A., U.).
Cladium Mariscus Br. (A., U.).
Carex Pseudo-cyperus L. (A., U.); C. riparia Curt. (U.); C. acutiformis Ehrh. (U.);
       C. vesicaria L. (A.); C. rostrata Stokes in With. (C. inflata auct. non
       Huds.) (A., B.); C. hirta L. (B.); C. flava L. (B., U.); C. viridula Michx.
       (C. Oederi auct. non Retz.) (B.); C. caryophyllea Latour. (B.); C. panicea
       L.; C. Hudsonii Ar. Benn. (C. elata auct.) (A.); C. Goodenowii Gay (A., B.);
       C. stellulata Good. (B.); C. remota L. (A., B.); C. canescens L. (B.); C.
       Otrubae Podpera (C. vulpina auct.) (U.); C. paniculata L. (A., U.); C. dis-
       ticha Huds. (A., U.); C. pulicaris L. (A.); C. dioica L. (B.).
Phalaris arundinacea L. (A.).
Anthoxanthum odoratum L.
Alopecurus geniculatus L. (U.).
Agrostis stolonifera L. (A. alba auct.) (B., U.); A. canina L. (A.).
Calamagrostis canescens (Weber em.) Gmel. emend Druce (C. lanceolata Roth) (U.).
Aira praecox L. (B.).
Holcus lanatus L.
Arrhenatherum elatius (L.) Mert. & Koch (U.)
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Sieglingia decumbens (L.) Bernh. (B.).
Phragmites communis Trin.
Cynosurus cristatus L. (B., U.).
Molinia caerulea (L.) Moench.
Dactulis glomerata L. (A., U.).
Briza media L.
Poa pratensis L.; P. trivialis L. (A., U.); P. annua L. (B.).
Glyceria aquatica (L.) Wahl. (A., U.).
Festuca elatior L. (U.); F. ovina L. (B.).
Lolium perenne L. (U.).
Agropyrum repens (L.) Beauv. (U.); A. caninum (L.) Beauv. (U.).
Nardus stricta L. (A., B.).
Pinus silvestris L. (B.).
Equisetum arvense L. (B., U.); E. fluviatile L. (E. limosum L.) (U.); E. palustre L.
Pteridium aquilinum (L.) Kuhn (Eupteris aquilina (L.) Newm.) (B., U.).
Athyrium Filix-foemina (L.) Roth (B.).
Dryopteris Filix-mas (L.) Schott (A., B.); D. aristata (Vill.) Druce (B.); D. Thelyp-
       teris (L.) A. Gray (A., U.).
Polypodium vulgare L. (A.).
Ophioglossum vulgatum L. (A.).
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E. A. E.

September 24. E. Kent, v.-c. 15. An afternoon at Shellness (adjoining the Isle of Harty). Leader, Mr J. E. Lousley.

The object of this excursion was to examine a small part of the Kent coast where discoveries of some interest might be expected. A small area with a very varied flora, which was not known to produce any really rare plants, and which was sufficiently inaccessible not to have been repeatedly visited by botanists in the past, was therefore selected for the visit. Shellness, the S.E. point of the Isle of Sheppey, is a delightful spit composed almost entirely of the remains of the shells of cockles and other mollusca. From the main spit lateral branches extend westwards into a salt-marsh bounded by the sea-wall beyond which extend the pastures of the Isle of Harty. A recently cut dyke showed that a bed of shells, covered by a variable thickness of mud, extends under much of the salt-marsh.

The twenty-two members who assembled were fortunate in having fine weather during the official excursion. The area—entirely on private land—was examined by kind permission of the owner, whose interest in wild-flowers was demonstrated by the notice in the car-park requesting visitors not to pick them.

A feature of the outer marsh was the colonisation of the mud by Spartina Townsendii, and many members were glad of the opportunity of comparing this with the less aggressive S. stricta of the older more stabilised salt-marsh near the sea-wall. Masses of Aster Tripolium (both rayed and discoid) and Inula crithmoides in full flower lent a pleasant colouring to the marsh.

One of the best discoveries of the day was *Polygonum Raii* in good quantity; this plant is now very scarce on the Kent coast. Lady Davy, with her usual acumen for grasses, found *Puccinellia fasciculata* Bickn. (Glyceria Borreri Bab.) flowering again after the summer.

Two plants of the cockle-shell spit, frequent elsewhere as introductions, may well be native here—Senecio viscosus and a neat form of Lactuca Serriola.

The following list includes some of the other plants in which members were interested:—

Glaucium flavum Crantz.
Cakile maritima Scop.
Arenaria peploides L.
Spergularia marginata (DC.) Kittel.
S. satina J. & C. Presl.
Eryngium maritimum L.
Bupleurim tenuissimum L.
Artemisia maritimu L.—very variable.
Carduus tenuiforus Curt.
Limonium binervosum (G. E. Sm.) C. E. Salmon.
Atriplex littoralis L.
A. laciniata L. (A. maritima Hallier).
Beta maritima L.—exceedingly variable.
Potamogeton interruptus Kit.

The genera Atriplex, Salicornia, and Agropyron were represented by very numerous critical forms, and the first two genera received considerable attention from the experts present.

After tea Dr Lawn made a brief speech proposing a vote of thanks to the leader for organising the excursion.

English Salar and Calabara

The wind of the contract of the Contract of the con-

J. E. L.

REPORT BY THE HON. EDITOR.

The very late appearance of the Distributor's Report for 1938 calls for an explanation but members will no doubt already have realised that it was held up by exceptional circumstances.

The Distribution was carried out in the usual way by Mr Chapple and he seems to have had great difficulty in getting parcels and comments returned by some of the Referees, so that the draft of this Report was not completed when Mr Chapple was mobilized for service with his Territorial A.A. battery in July 1939. Some months later when he had a few days leave at Oxford he finished the draft and sent it to me with such notes and letters from contributors and Referees as he could lay his hands on. On going through these I found that many notes were missing and this resulted in correspondence with several of the Referees, which occupied a considerable time. Even now it has not been possible to recover all the notes and comments, so that the Report is by no means complete.

In editing Mr Chapple's draft I have made some changes which it is thought will result in an improvement in the Report and also effect an economy in paper and print. It has been customary in the past to head each paragraph with a transcription of the contributor's label. In some cases the name of the species was unknown to the contributor so that he wrote on his labels (say) "Ranunculus sp.": in other cases his naming was incorrect. In each case probably the correct name was given later in the paragraph in the Referee's comment. The Publications Sub-Committee are of opinion that this procedure was wrong and that each paragraph should be headed by the correct name of the gathering contributed.

I have given effect to this in the present Report by printing the correct name first and where a change has been necessary this is indicated by printing in inverted commas within square brackets the name under which the gathering was submitted.

Secondly, no reference has been made to several gatherings, either because Referees' notes on them were not available in the case of a few critical gatherings or because they were gatherings of uncritical plants from localities which did not extend the known distribution.

The thanks of the Club are due to all those who have contributed notes and to all those Referees who assisted by examining parcels. Thanks are also due to Mr Chapple for having carried out the Distribution and for his share in this Report and especially for the very interesting set of Elms which he contributed. I saw him in the summer of 1940 when his battery formed part of the A.A. defences of this area. He was then a sergeant but I understand that he has since been posted to an O.C.T.U. and has no doubt by now gained his Commission.

PATRICK M. HALL.

Fareham, Hants, February 22nd, 1941.

LIST OF PARCELS RECEIVED.

• .		-		 · .		Sheets.	Gatherings.	,
G. M. Ash	,			•••		31	2	
E. B. Bishop						24	3	
G. C. Brown		•••		•		74	6	
Druce Herbarit	ım, U	niv. of	Oxfo	ord, per	J.			
F. G. Chap	ple .	•••		••••		448	26	
E. S. Edees	•••	•••				47	4	
J. D. Grose	• • • •			•••		160	14	
P. M. Hall	•••		• • • •	•••		77	7	
J. W. Long		•••	•••		.,.	130	. 9	
R. Melville	•••	• •••		•••		54 .	4	
National Museum of Wales					•••	64	6	
Nottingham Natural History			$\mathbf{M}\mathbf{u}$	seum	•••	192	19	
F. Rilstone	•••	•••	•••	•••		118	9	
Miss C. M. Rob			• • •	•••	•••	121	11	
E. C. Wallace		•••	•••			200	15	
1								
				Total	•••	1740	135	

Fumaria officinalis L. ["Fumaria ——."] 61, S.E. Yorks.: cliff tops—arable land, Atwick, July 13th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "This is typical F. officinalis L."—H. W. Pugsley.

Rorippa austriaca (Crantz) Bess. ["Nasturtium austriacum Crantz."] 41, Glamorgan; in abundance on cultivated ground near Grangetown, Cardiff, June, 1938.—Coll. R. L. SMITH and A. E. WADE; comm. DEPARTMENT OF BOTANY, NATIONAL MUSEUM OF WALES.

Barbarea verna (L.) Aschers. (Ref. No. 3828.) 23, Oxon.; garden weed, Headington, May 8th, 1938.—J. F. G. Chapple. "Correct."—A. B. Jackson.

Barbarea intermedia Boreau. (Ref. No. 3814.) 24, Bucks.; road-side, Piddington, April 14th, 1938.—J. F. G. Chapple. "Yes, quite characteristic."—A. B. JACKSON.

Erophila Boerhaavii (Van Hall) Dumortier. ? 7. Wilts.; Minety station, April 6th, 1938.—J. D. GROSE. "These plants were collected on the platform of Minety station, and are, I think, a uniform gathering of the only form in the immediate neighbourhood. Marshall (Journ. Bot., 1904) recorded "Erophila praecox. Stony platform, Minety station, in plenty." Specimens are in Herb. Druce, and agree well with those now distributed. According to Rouy, Fl. de France, 2, 227, E. praecox has "feuilles . . . à poils la plupart bifides, quelques-uns simples." Schultz in his recent monograph, however, describes E. praecox as having the hairs mostly simple, with only a few bifurcate. From his key these plants seem to come under E. Boerhaavii (Van Hall) Dum., as most of the hairs are forked; but Schultz himself has examined Marshall's plants and named them E. praecox (Stev.) DC. var. virescens (Jord.) O. E. Schultz."-J. D. G.

Viola canina L. var. ericetorum Reichb. Xiviniana Reichb. ["Viola Riviniana Reichb. var. flavicornis (Forster)."] (Ref. No. 2529.) .19, N. Essex; short turf in Deer Park, Markshall, May 8th and Sept. 11th, 1938; flower pale blue, spur yellow, all plants small and remaining so in the fruiting stage of September 11th.—G. C. Brown. "There is a mixture here. The flowering plants of May 8th are nearly all V. canina L. var. ericetorum (Hayne) Reichb. (=V. flavicornis Sm. non Forster)× Riviniana Reichb. There may be amongst them a few scraps of the canina parent, the influence of which is seen in the hybrids in their habit and stipules. No doubt at the time of Mr Brown's first visit on May 8th the Riviniana plants were past flowering and the canina barely yet in flower, so that the hybrids would be conspicuous and consequently gathered. The fruiting plants all belong to a small form of V. Riviniana Reichb. On Sept. 11th these would be the most conspicuous, as the hybrid plants would be sterile and the canina would very likely be less frequent."— P. M. HALL.

Viola segetalis Jord. forma obtusifolia (Jord.) Drabble. ["Viola agrestis Jord."] (Ref. No. 2527.) 19, N. Essex; field by Oliver's Thicks, Stanway, July 10th, 1938; upper petals pale blue outside and in.—G. C. Brown. "This gathering would probably come under V. agrestis Jord. according to the late Dr Drabble's classification but it is becoming increasingly evident to me that the numerous 'species' in that classification overlap to a great extent. This gathering appears to me to consist of young plants of V. segetalis Jord. f. obtusifolia (Jord.) Drabble. Under a tall covering crop the branches would tend to become erect and so show the habit characteristic of segetalis. It is useful to know the cropping of the field in which such gatherings are made."—P. M. Hall.

Viola segetalis Jord. forma obtusifolia (Jord.) Drabble. ["Viola —."] 56, Notts.; waste ground, Arnold Road, Nottingham, September, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "See my remarks on Mr Brown's gathering. I find that plants which agree with V. agrestis Jord. in Drabble's classification are almost invariably autumnal or 'stubble' growths."—P. M. Hall.

Viola ruralis Bor. (det. P. M. Hall). 62, N.E. Yorks.; clover field, Catton, May 9th, 1938.—Miss C. M. Rob. "A very uniform gathering, of which Miss Rob kindly sent me fresh specimens. I have no doubt that this is the same plant as that distributed by Miss Rob in 1936, see B.E.C. 1936 Rep., 395 (1937). That gathering, which was very immature, appeared to resemble V. Deseglisei Jord. and was so named by me, illustrating the undesirability of naming any but mature gatherings in this group."—P. M. HALL.

Silene gallica L. (Ref. No. Ran. 1252.) 1A, Scilly; St Mary's, June 5th. 1938.—Coll. J. E. S. Dallas; comm. E. B. Bishop. "These plants were shown growing to the collector by Mr J. E. Lousley, who pointed out the great difference in flowers between this and S. anglica (restr.), which grew plentifully in the district. Although Davey, in Fl. Cornwall, did not record S. gallica (restr.) for the county, it is evident that he included all references under an aggregate S. anglica. Mr Lousley informs me that S. gallica (restr.) has been well known to occur in the Isles of Scilly for many years. However it does not appear to have been distributed previously from there through the B.E.C."-E. B. BISHOP. "This appears to be S. gallica L. sensu J. Cosmo Melvill in Journ. Bot., 18, 146 (1880). No notes, however, are given about the colour of the This should always be done by collectors for this section of Silene. The best taxonomic value to be assigned to the plants showing various character combinations in this group (Silene anglica sens. lat.) is at present uncertain."-W. B. TURRILL.

Spergularia rubra (L.) J. & C. Presl. 56, Notts.; paths, Wollaton Hall, Nottingham, June 23rd, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "Correctly determined."—W. B. Turrill.

Erodium neglectum Baker and Salmon. ["Erodium cicutarium L'Hérit.? var. glutinosum (Dum.)."] 61, S.E. Yorks.; Hornsea sands, July 14th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "This agrees with E. neglectum Baker and Salmon but I am not yet [5/2/40.—Ed.] sure whether this species is valid nor whether it may not contain more than one element."—E. F. Warburg. [Not sent out till 1939 Distribution.—Ed.]

Trifolium agrarium L. 41, Glamorgan; field, Whitchurch, July, 1938.

—Comm. Department of Botany, National Museum of Wales.

Rubus ramosus Briggs. 1, W. Cornwall; Ventongimps, Perranzabuloe, August 26th, 1938.—F. Rilstone. "Yes."—W. Watson.

Rubus Winteri P. J. Muell. apud Wirtg. (det. Wm. Watson). ["Rubus Winteri Focke."] 56, Notts.; Gold Holes Lane, near Everton, August 26th, 1932.—Coll. H. Fisher; comm. Nottingham Natural History Museum.

Rubus propinguus P. J. Muell. ["Rubus sp. near R. macrostemon Focke." 1. W. Cornwall; Ventongimps, Perrangabuloe, Aug. 26th, 1938.—F. RILSTONE. "This plant, which has been under observation since 1924 as a form near R. macrostemon, is now sent because it almost exactly matches a gathering from Kaiserlautern in the Bayarian Palatinate distributed as 'R. procerus P. J. M. var. robustus P. J. M. =var. dunatos Focke.' Focke (Species Ruborum, 1914) arranges procerus, macrostemon, and dynatos (=robustus) as subspecies under R. hedycarpus Focke. Kaiserlautern is little more than thirty miles from Weissenburg, where P. J. Mueller lived, but Rev. H. J. Riddelsdell, who has seen authentic specimens of Mueller's robustus, told me some time ago that it is very near another plentiful plant of this neighbourhood—a plant of stouter growth with broader panicle and different leaves—so this now sent must be rather a form allied to robustus than actually it. Whatever the most suitable name there is no doubt of the very substantial agreement of the British and German plants. The only differences I can find are the rather greater amount of spreading hair on the petioles and the narrower bases of the panicle leaves on the German plant. I append a description of the plant now sent: -Stem dull purplish above with shallow furrows and prominent rounded ridges along the angles, a good deal of stellate pubescence (sometimes disappearing from the older stems) and a few longer hairs. Prickles confined to the angles, straight, declining. Petioles with hooked prickles and loosely adpressed hair. Leaflets white felted beneath with veins sunk on the upper surface and prominent beneath. Terminal leaflet elliptic, roundish-ovate, or roundishobovate, two to three times as long as its stalk. Panicle usually cylindrical with more or less patent branches above and strongly ascending ones below and with 3-nate and simple leaves. Rachis rather wavy. clothed with dirty-whitish-grey hair and felt (the hair spreading and loosely adpressed) and with declining prickles, slender in the upper portion and stouter below. Panicle branches dividing above the middle into three or more branchlets. Sepals short and broad, very concave, short pointed, with plenty of hair and felt; patent on fall of petals, reflexed later. Petals pinkish, concave, crumpled, rather narrowly oval, well apart. Stamens long, white, later forming a shaggy mass about the young fruit."—F. RILSTONE. "This is Rubus propinguus P. J. Muell. I have seen it in several counties from Kerry to Kent, and it is reported from many places in the N.W., W., and the centre of France. There is no description of it in the 'Handbook.' The Discolores are divided into (1) the Gypscaulones, of which R. Winteri and R. ulmifolius are representative, and (2) the Hedycarpi, of which the cultivated R. procerus is an example. R. propinguus, by reason of its pruinose stem, belongs to the former group: its affinity with the Hedycarpi is more remote."—WM. WATSON.

Rubus effeminatus (Focke). [" Rubus criniger Linton."] Essex: Layer-de-la-Haye Common, July 10th, 1938.—G. C. Brown. "Petals white, stamens exceeding styles, sepals reflexed in flower and later. Apparently identical with numerous gatherings seen from the Colchester district by Moyle Rogers and Riddelsdell including Ref. No. 1986 from Grime's Dyke, Stanway, cf. B.E.C. 1923 Rep., 384 (1924). The cuneate-based leaflets are very constant in this gathering as well as the grevish appearance of the living bush."—G. C. Brown. "Not R. criniger, which has 4-nate and 5-nate pedate as well as 3-nate leaves on the stem, and an ovate-acuminate ± lobate (not an obovate) terminal leaflet, besides a differently constructed panicle. In my opinion it is R. effeminatus (Focke). In 1931 I identified Mr Brown's Ref. No. 1986 from Stanway as this in Hb. Druce. Focke merely gives, under Rubus egregius, in Rubi Europaei, p. 183 (1914), 'Forma: effeminatus Focke nov. nom.: molliter pilosus; inflorescentiae extraaxillares longae, multiflorae; sepala longe acuminata, in flore patentia, in fructu reflexa; stamina stylis multo breviora.—Fruticem vidi unicum haud procul ab Oxford Britanniae.' Druce gives R. egregius forma effeminatus Focke for Boar's Hill on Focke's authority in 'Additions to the Berkshire Flora,' p. 454 (? 1918). There is no specimen of it from Boar's Hill in Hb. Druce, but he says in Fl. Berks, that he took Focke to the top of Boar's Hill in 1894, and that Focke found R. sulcatus there. I know where R. sulcatus grows at Boar's Hill, and not very far to the south of it I found a bush of R. effeminatus in a hedge of birches in 1933. I do not suggest that my bush is the one that Focke found, but I do not know of it elsewhere at Boar's Hill. On the northern slope of the hill there is a bush of typical R. egregius Focke, in the open, which Druce records as R. mercicus var. bracteatus Bagn. (a later synonym of R. egregius). This could never be described as 'molliter pilosus,' and had this bush been intended Druce, who says he had known it since 1889. must surely have made some reference to it in recording the effeminatus. In my specimen of effeminatus and in the Essex specimens the stem is acute-angled and glaucous, the leaves are very rarely 4-nate and never apparently 5-nate, only slightly greyish beneath, the terminal leaflet is narrow obovate-cuneate with undulate margin and irregular acuminate teeth, the petals are pink (see the unclosing petals under a lens!) and the carpels are pilose. The whole plant is softly pilose. This will distinguish R. effeminatus from R. egregius."—WM. WATSON.

Rubus Schleicheri Weihe (det. Wm. Watson). ["Rubus Murrayi Sudre."] 56, Notts.; Whip Ridding, Kirklington, July 21st, 1938.—Coll. H. Fisher; comm. Nottingham Natural History Museum.

Potentilla intermedia L. 41, Glamorgan; in some quantity on cultivated ground near Grangetown, Cardiff, June, 1938.—Coll. A. E. Wade and R. L. Smith; comm. Dept. of Botany, National Museum of Wales. "Correct."—D. H. Valentine.

Sorbus intermedia (Ehrh.) Pers. 62, N.E. Yorks; lane near Sunbeck Junction, Raskelf, June 17th, 1938.—Miss C. M. Rob. "Correct."—E. F. Warburg. [Not sent out until 1939 Distribution.—Ed.]

Ribes alpinum L. (Ref. No. 3122.) 7, N. Wilts.; Wick Hill, May 4th, 1938; abundant in this station, where it cannot be native but was perhaps introduced accidentally when conifers were planted nearby; all the bushes noticed are male.—J. D. Grose.

Epilobium hirsutum L. × Lamyi F. Schultz. 17, Surrey; gravel pits, Farnham, July 31st, 1938.—G. M. Ash.

Epilobium adenocaulon Hausskn. × montanum L. 17, Surrey; brickworks near Chiddingfold, Aug. 6th, 1938.—G. M. Ash.

Blumenbachia insignis Schrad. (Ref. No. 38339.) 23, Oxon.; tip, Jack Daw Lane, Nov. 9th, 1938.—J. F. G. CHAPPLE and J. P. M. BRENAN.

Carum Petroselinum (L.) Benth. & Hook. 54, S. Lincs.; sand-hills, Sutton-on-Sea, June 26th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Galium saxatile L. ["G. hercynicum Weig. forma."] (Ref. No. 3889.) 59, S. Lancs.; near Hutton Cross, near Preston, June 23rd and July 9th, 1938.—Coll. H. E. BUNKER; comm. J. F. G. CHAPPLE (see B.E.C. 1936 Rep., 450 (1937)).

Galium tricorne Stokes. 61, S.E. Yorks.; cliff cornfield, Atwick, July 17th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "Yes."—C. E. Britton.

Galium Vaillantii DC. 39, Staffs.; allotments, Burton-on-Trent, Aug. 31st, 1938.—J. F. G. Chapple. "Yes."—C. E. Britton.

Valerianella dentata (L.) Poll. 56, Notts.; Cinderhill, June, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Valerianella carinata Loisel. (Ref. No. 3843.) 3, S. Devon; gardenweed, Priory Avenue, Kingskerswell, June 13th, 1938.—J. F. G. CHAPPLE.

Chrysanthemum Balsamita L. 56, Notts.; old kitchen garden, Wollaton Hall, Nottingham, Sept., 1938.—Coll. R. Bulley; comm. Notting-HAM NATURAL HISTORY MUSEUM.

Senecio vulgaris L. var. radiatus Koch. 17, Surrey; gravel pits, Ham, April 1st, 1938.—Coll. F. M. Struthers; comm. E. C. Wallace.

Arctium vulgare (Hill) Evans. 1, W. Cornwall; Lambourne Hill, Perranzabulce, Aug. 25th, 1938, and seeds, Oct. 29th, 1938. This appears to belong to the form (A), vulgare proper (Evans, Journal of Botany, 1937, p. 77), which Dr Evans says is the prevailing form along the western seaboard. The petioles in this locality almost always show in section the seven main strands as figured by Butcher and Strudwick. As usual in this neighbourhood the plants were heavily infected with the parasitic fungus Erysiphe cichoriacearum which made it difficult to preserve colour in drying.—F. Rilstone. "The specimens were probably all A. vulgare (Hill) Evans; one certainly was."—A. H. Evans.

Carduus tenuiflorus Curt. [" Carduus pycnocephalus L. var. tenuiflorus (Curt.)."] 41, Glamorgan; on sand and shingle, Sully Island, June, 1938.—Coll. A. E. Wade; comm. Dept. of Botany, National Museum of Wales.

Crepis biennis L. 62, N.E. Yorks.; between Topcliffe village and station, June 22nd, 1938.—Miss C. M. Rob. "Beautiful material."—J E. Lousley.

Taraxacum lacistophyllum Dahlst. ["Taraxacum ——."] 65, N.W. Yorks.; roadside Burrill, near Bedale, May 15th, 1938.—Miss C. M. Rob. "The specimen (sic.—Ed.) of Taraxacum, which you (=J.F.G.C.?—Ed.) kindly sent me, is T. lacistophyllum Dahlst. (the group of Erythrosperma)."—G. HAGLUND.

Symphytum officinale L. ["S. officinale L. x > peregrinum Ledeb.?"] 34, W. Gloster.; Oakford Valley, June 18th, 1938; apart from the slightly less decurrent lower leaves, and the longer filaments, there is little in these dried specimens to distinguish them from S. officinale; when growing, however, the plants appeared, particularly in the colouring of the flowers and leaves, to be truly intermediate between the suggested parents.—J. D. Grose. "I fail to find evidence of hybridity; the clothing of hairs, the shape of the leaves, which also overtop the inflorescence, and the very definitely decurrent leaves, are all characteristic of S. officinale."—A. E. Wade.

4

Myosotis scorpioides L. em. Hill var. memor Kittel mixed with M. caespitosa Schultz. ["M. palustris Hill var. strigulosa (Reichb.)."] 61, S.E. Yorks.; Hornsea Mere, July 19th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "This gathering is a mixture of M. caespitosa Schultz and the upper portion of M. scorpioides L. em. Hill which appears to come under the typical form, i.e., var. memor Kittel. Reichenbach's strigulosa is not based upon the single character of adpressed hairs; see B.E.C. 1929 Rep., 162 (1930). The majority of the records published for M. scorpioides var. strigulosa (Reichb.) Schinz & Keller are errors for either other forms or varieties of M. scorpioides or for M. caespitosa, and should be rejected unless recently confirmed."—A. E. Wade.

Cuscuta europaea L. 31, Hunts.; found growing on Hops, Nettles, and Acer campestre in a roadside hedgerow near the village of Upton, Aug. 9th, 1938.—R. Melville. [This gathering of Cuscuta and those that follow were submitted to the referee, Dr W. A. Clark of Newcastle upon Tyne, who states that his notes upon them were returned to Mr Chapple before Easter 1939: unfortunately they were not among the papers forwarded to me from Yardley Lodge and have not come to light since.—Ed.]

Cuscuta Trifolii Bab. (probably). (Ref. No. Eri. 504). 32, Northants; Old Stone Pits, Ufford (parasitic on Genista tinctoria), Aug. 26th, 1937. —Coll. Mrs C. L. Whide; comm. E. B. Bishop. "At this particular station seemingly almost confined to one host-plant, which grows rather freely in a largish long-abandoned pit, where no plough could possibly be used. The plants, both host and parasite, have been under our notice since 1933, and we have never seen the parasite in the large field surrounding the pit, though no wall or fence intervenes. Rotation crops of Medicago sativa, Onobrychis and clovers are grown at intervals and (as usual) persist in plenty on the edges, often up to the spots where the Genista grows, but the Cuscuta seems to ignore them."—E. B. Bishop.

Linaria repens (L.) Mill. 10, Wight; hedgebank, Cowes, August, 1938.—J. W. Long.

Veronica agrestis L. var. Garckiana P. Fourn. ["V. agrestis L."] (Ref. No. 38181.) 39, Staffs.; allotment ground, Burton-on-Trent, Aug. 31st, 1938.—J. F. G. Chapple. "Yes, good specimens of the var. Garckiana P. Fournier."—J. E. Lousley.

Euphrasia borealis Towns. (Ref. No. 1164.) 39, Staffs.; Stanton, July 15th, 1938.—E. S. Eddes. "Good specimens of typical E. borealis." —H. W. Pugsley.

Euphrasia Pseudo-kerneri Pugsl. forma elongata Pugsl. [" E. nemorosa (Pers.) Löhr."] 28, W. Norfolk; Narborough, Aug. 8th, 1938,

E. S. Eddes. "This is E. Pseudo-kerneri f. elongata Pugsl., which is known for several stations in Norfolk. It usually produces white flowers. In most of the specimens the corolla has shrivelled in drying through insufficient pressure."—H. W. Pugsley.

Euphrasia nemorosa Löhr var. collina Pugsl. (det. H. W. Pugsley). (Ref. No. 3117.) 62, N.E. Yorks.; exposed grassy ground on cliffs about 3 miles north of Whitby, July 6th, 1938.—P. M. Hall.

Euphrasia confusa Pugsl. forma albida Pugsl. ["Euphrasia ——."] (Ref. No. 1163.) 57, Derby; near Baslow, July 30th, 1938.—E. S. Edees. "Is E. confusa f. albida Pugsl. Many of the specimens are unbranched like the form frequently seen in Scotland."—H. W. Pugsley.

Orobanche Rapum-genistae Thuill. 10, Wight; on Ulex, Lynn Common, July, 1937.—J. W. Long. "Rightly named. This is now a rare species and it is doubtful whether twenty-six specimens should have been collected. Orobanches (except O. minor) are too easily exterminated."—H. W. Pugsley.

Mentha longifolia (L.) Huds. 17, Surrey; roadside near Bullswater Common, Aug. 27th, 1938.—Lady Davy and Miss C. M. Rob. "The short, tapering leaves bring this very near to var. pulverulenta Strail. The plant is less robust than the Farningham form, and the leaves not quite as broad in relation to length. Possibly habitat is responsible."—A. L. STILL.

Mentha longifolia (L.) Huds. 13, W. Sussex; roadside, North Stoke, Aug. 7th, 1938.—E. C. WALLACE. "The suddenly-rounded apices of the lower leaves and the venation raise some suspicion of hybridity. The presence of epigeal stolons is evidence of rotundifolia, and should be looked for in doubtful cases. The early date of flowering rather indicates longifolia; most of the hybrids I have seen have not flowered till after mid-August."—A. L. STILL.

Mentha verticillata L. 66, Durham; Winch Bridge, Sept. 3rd, 1938.

—Miss C. M. Rob. "Correct."—A. L. Still.

×Mentha Muelleriana F. Schultz var. serratifolia Pugsl. 17, Surrey; cult. Wallington from a Salcombe cutting, Aug. 15th, 1938.—Coll. A. I. STILL; comm. E. C. WALLACE.

Ajuga Chamaepitys (L.) Schreb. (Ref. No. 3324.) 12, N. Hants.; bare arable field, Harewood, near Andover, Sept. 13th, 1938; this species was very plentiful in this locality this year and the plants were so large that it was impossible in most cases to dry whole plants; members may be glad to see such luxuriant fruiting specimens.—P. M. Hall.

Chenopodium hybridum L. (Ref. No. 38293.) 23, Oxon.; waste ground, Lamarsh Road, Oxford, Oct. 13th, 1938.—J. F. G. Chapple. "Correct."—A. J. WILMOTT.

Chenopodium opulifolium Schrad. (Ref. No. 38294.) 23, Oxon; waste ground, Binsey Lane, Oxford, Oct. 13th, 1938.—J. F. G. CHAPPLE. "Correct."—A. J. WILMOTT.

Chenopodium polyspermum L. (det. E. C. Wallace). 56, Notts.; waste ground, Derby Road, Nottingham, August, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Atriplex tatarica L. 10, Wight; riverside, Newport, August and September, 1937; the plant, which was named by Dr Aellen, was destroyed before it reached maturity and I had difficulty in finding any fruit.—J. W. Long. "Correct."—A. J. WILMOTT.

Rumex maritimus L. 28, W. Norfolk; in various stages of growth on the sandy margin of Ringmere, near Thetford, Aug. 14th, 1938.— J. E. LOUSLEY and E. C. WALLACE.

Euphorbia exigua L. ["E. exigua L. var. retusa DC."] 56, Notts.; near Rushcliffe Halt, Sept. 24th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "The specimen before me is not the variety, as it has the leaves acute, not retuse."—A. J. Wilmott.

Ulmus glabra Huds. var. montana Lindquist. (Ref. No. 3768.) 23, Oxon.; West Bar Street, Banbury, May 19th and Sept. 14th, 1938.— J. F. G. Chappie. "This is very close to Lindquist's variety as illustrated in plate 15, B.E.C. 1931 Rep. The shape of the leaf, serrations, short petioles and rather slender branchlets are all similar. Forms similar to this occur sporadically in England and it is doubtful whether they are actually varieties or of hybrid origin. The tree from which this gathering was taken is growing very near to U. Plotii, No. 3763, and the following characters suggest the possibility of hybridisation with the latter species: the distal leaves of the short shoots often have very broad, blunt serrations and not infrequently the leaf base is subcordate. Unless additional new characters are discovered, this question can be settled only by breeding experiments."—R. Melyille.

Ulmus glabra Huds. × nitens Moench var. Hunnybunii Moss. ["U. sativa Moss?"] (Ref. No. 2528.) 19, N. Essex; hedge, Gamon's Farm, Wormingford, May 22nd and Sept. 4th. 1938; mostly young trees extending the whole length of a field and uniform in type but none in fruit; seems best under U. Plotii Druce = sativa Moss, but the leaves are extremely long and narrow, almost as in U. stricta.—G. C. Brown. "Probably Ulmus nitens var. Hunnybunii Moss × U. glabra Huds. The leaf shape is very close to that of var. Hunnybunii, but the long sides of the subdistal leaves of the short shoots have about 15 lateral veins in-

stead of 10, the finer veinlets are sunk in the surface giving it a coarse grained appearance and the petioles are shorter. All these characters indicate *U. glabra* as one parent."—R. Melville.

Ulmus glabra Huds. × Plotii Druce. (Ref. No. 3639.) 23, Oxon.; roadside near Sturdy's Castle; flowers February, 1937; fruit May 13th, 1938; foliage June 6th, 1937, and Sept. 14th, 1938.—J. F. G. Chapple. "This hybrid fits very well into the large range of hybrid forms of this parentage, many of which have been found further north where U. Plotii is more common. Characters derived from U. glabra are the rather coarse leaves with somewhat acute serrations and rather numerous lateral veins, averaging 13 for the subdistal leaves of the short shoots as compared with 8 in U. Plotii. The rufous hairs on the bud scales also come from U. glabra. The characters of U. Plotii are not well marked, but the smaller size of the leaves and the rather uniformly cordate bases of the basal leaves of the short shoots and rather slender pendulous branchlets can be attributed to this source."—R. Melville.

Ulmus glabra Huds. × U. sp. ["×U. hollandica Miller = U. major Sm."] (Ref. No. 2533.) 19, N. Essex; Little Horkesley, Sept. 9th, 1938; very tall trees with very slender pendulous branches, leaves shining above and markedly unequilateral.—G. C. Brown. "Not ×Ulmus hollandica Mill. This is a hybrid of U. glabra Huds. probably with one of the East Anglian small-leaved elms related to U. Plotii Druce but not yet named. Distal leaves on some of the short shoots are cordate-based and the leaf shape sometimes approaches that of U. Plotii. The long shoots tend to continue growth, successive leaves changing in shape, shortening and becoming blunter toothed and more equal at the base, another feature of U. Plotii and its allies. Several of the sheets have only long shoots; the more characteristic short shoots should always be included."—R. Melville.

Ulmus carpinifolia Gleditsch. (Ref. No. 36. 21.) 20, Herts.; Cottered Green, 40 ft. tree, flowers Feb. 28th, fruit May 3rd, leaves Aug. 18th, 1938.—R. Melville. "The tree from which this gathering was taken was illustrated in the Quarterly Journal of Forestry, and is probably pure U. carpinifolia. Note the shape of the distal and subdistal leaves of the short shoots, especially the base, also the acute serrations, numerous glands and absence of scattered hairs; the fruits are obovate with a cuneate base."—R. Melville.

Ulmus carpinifolia Gleditsch \times glabra Huds. ["U. carpinifolia Borkh.=U. glabra Miller."] (Ref. No. 2532.) 19, N. Essex; large old tree, Bottingoms Farm, Wormingford, Sept. 4th, 1938; leaves shining above, twigs not pendulous; this seems to be a very characteristic U. glabra and the small quantity of fruit seen earlier in the season confirms this.—G. C. Brown. "This is not pure U. carpinifolia Gleditsch (the oldest authority for the name) but shows evidence of a strain of

U. glabra in the larger size of the leaves and the intermediate leaf shape."—R. Melville.

Ulmus carpinifolia Gleditsch \times Plotii Druce. (Ref. No. 3775.) 23, Oxon.; roadside, Charlton-on-Otmoor, May 5th and Sept. 17th, 1938.— J. F. G. Chapple. "The leaf shape in this hybrid is very close to that of U. Plotii and the serrations broad and blunt as in that species. The leaf base in many cases is subcordate and nearly equal as in U. Plotii but some of the leaves have the base strongly asymmetrical and of similar shape to U. carpinifolia. The influence of U. carpinifolia is also shown in the larger size of the leaves."—R. Melville.

Ulmus carpinifolia Gleditsch \times Plotii Druce. (Ref. No. 3776.) 23, Oxon.; roadside, Charlton-on-Otmoor, May 5th and Sept. 17th, 1938.— J. F. G. Chapple. "This is probably a segregate of the parentage suggested. Notice that the distal and subdistal leaves of short shoots generally have the base similar in shape to that of U. carpinifolia while the shape of the upper half is intermediate or in some cases approaches to that of U. Plotii. The leaf-serrations are broader and blunter than in U. carpinifolia, approaching U. Plotii in this respect. The fruits are relatively longer and more elliptical than in U. Plotii and show some tendency to the cuneate base of U. carpinifolia.—R. Melville.

Ulmus Plotii Druce. (Ref. No. 3763.) 23, Oxon.; West Bar Street, Banbury, March 4th and Sept. 14th, 1938.—J. F. G. Chapple. "Typical Plot's elm. The tree in the foreground of the plate in B.E.C. 1911 Rep. may be regarded as the type tree, although Druce did not say in so many words that it was his type or mention any special tree as his type. This gathering is from the second large tree to be seen in the picture, behind and appearing slightly to the left of the first."—R. MELVILLE.

Ulmus Plotii Druce. (Ref. No. 3834.) 38, Warwick; Bridge End, Warwick, March 4th, May 17th, and Sept. 14th, 1938.—J. F. G. CHAPPLE. "Good typical material of Plot's Elm."—R. MELVILLE.

Ulmus stricta Lindl. var. Goodyeri Melville. (Ref. No. 38. 6.) 11, S. Hants.; tree, 25 ft., near Bashley, Mar. 6th, May 25th, and Aug. 12th, 1938.—R. Melville. "Gales caused severe damage to the foliage before it was fully expanded and this resulted in the production of numerous proleptic shoots to replace that destroyed. The leaves of such shoots are much narrower than those of normal foliage and are also roughly hairy. When this variety was described (Journ. Bot., July, 1938) it was pointed out that Goodyer must have drawn up his description from young plants that would have had narrow rough leaves. If the trees had suffered in the same way in 1624, he would have been impressed by the narrowness and roughness of the leaves of mature trees as well as of young plants. It was very difficult this year to find any undamaged normal foliage on the trees."—R. MELVILLE.

Salix Caprea L. (Ref. No. 3084.) 7, N. Wilts.; Okus Quarry, Swindon, April 4th and Aug. 8th, 1938.—J. D. Grose. "Correct."—A. J. Wilmott. "S. atrocinerea × Caprea: reddish hairs can be seen on the upper surfaces of some of the younger leaves and the leaf-shape is longer and more acute than in typical S. Caprea; note also the rather long style; probably older branches would show some striations on the wood."—R. Melville. "After seeing Melville's determination, I have re-examined my specimen and still see no signs of S. atrocinerea in it."—A. J. Wilmott.

Salix Caprea L. (Ref. No. 3097.) 8, S. Wilts.; Little Bedwyn, April 10th and July 24th, 1938; conspicuous when fresh by the bright orange (not yellow) anthers; the shoots are slightly leafy.—J. D. GROSE. "Yes."—A. J. WILMOTT and R. MELVILLE.

Salix Caprea L. × viminalis L. ["S. viminalis L. × ?"] (Ref. No. 3088.) 7, N. Wilts.; Inglesham, April 5th and June 9th, 1938.—
J. D. Grose. (For the use of the referee I am including a single sheet showing material collected from the same tree in 1937—Ref. No. 2193. These much larger, silkier leaves were from a lower branch, and are not typical of the upper ones. The swamp was quite dry in 1938, thus perhaps accounting for the smallness of the leaves. All were very badly eaten, and it was difficult to find any worth collecting.—J.D.G.) "S. Caprea × viminalis, I think."—A. J. WILMOTT. "S. viminalis × Caprea, I think. An older branch should have been stripped of bark to make sure that there are no striations on the wood."—R. MELVILLE.

Salix atrocinerea Brot. Q (Ref. No. 381.) 1, W. Cornwall; bank by stream, Lambiggan, Perranzabuloe, April 13th and July 21st, 1938.—
F. Rilstone. "Correct."—A. J. Wilmott. "S. atrocinerea × aurita segregate approaching S. atrocinerea. Evidence of S. aurita is given by the distinctly toothed, sometimes undulate and ± inrolled leaf-margins and some of the ovaries with sessile, short, blunt-lobed stigmas. The striations on the wood are more numerous than is usual for S. atrocinerea."—R. Melville.

Salix atrocinerea Brot. Q. 1, W. Cornwall; by stream, Lambourne, Perranzabuloe, May 9th and Sept. 8th, 1938.—F. RILSTONE. "Correct."—A. J. WILMOTT and R. MELVILLE.

Salix atrocinerea Brot. (Ref. No. 3088.) 7, N. Wilts.; Inglesham, April 5th and June 9th, 1938.—J. D. Grose. "Correct."—A. J. Wilmott and R. Melville.

Salix atrocinerea Brot. × aurita L.? hermaphroditic. (Ref. No. 3128). 7, N. Wilts.; near Lydiard Plain, May 7th and Aug. 8th, 1938.— J. D. Grose. "But for the smallness of the of catkins I should have passed this as S. atrocinerea, but because of them I think it is probably a hybrid."—A. J. WILMOTT. "S. aurita L. forma."—R. MELVILLE.

Salix atrocinerea Brot. × viminalis L. (Ref. No. 37. 22.) 21, Middlesex; Thames bank, Twickenham, April 1st 1938; the most obvious characters of S. atrocinerea are the striated wood of two year or older stems and the reddish-brown hairs on the leaves; the latter are more apparent when the leaves are full-grown.—R. Melville. "Yes, but the mature leaves should also be distributed with the flowers."—A. J. Wilmott.

Populus tremula L. var. sericea Döll. (Ref. No. 3111.) 8, Wilts.; Green Lane Wood, April 20th and June 29th, 1938.—J. D. Grose. "Foliage collected too late in the season to show the silky pubescence characteristic of this variety, which appears to be as common as or perhaps commoner than the typical form in the wild state."—A. B. Jackson.

Populus nigra L. var. genuina Wesmael (det. A. B. Jackson). (Ref. No. 3082.) 7, N. Wilts.; damp field near Wanborough, March 31st, June 6th and August 13th, 1938.—J. D. Grose. "This is the typical form of the European Black Poplar, distinguished by its glabrous young branchlets. It has a more easterly distribution than the var. betulifolia, which is the only form found wild in Britain. The material is very well selected and its value is increased by the addition of a photograph, which shows the habit of the tree."—A. B. Jackson.

Ceratophyllum submersum L. 36, Hereford; pond near Tyberton, Aug. 21st, 1938; a very interesting find by Mr P. M. Hall and myself of a species that is, I believe, usually found near the sea in ditches influenced by the tides; fruits were scarce, but well-developed.—E. C. WALLACE.

Stratiotes aloides L. 50, Denbigh; abundant in a pool, Gresford, August, 1938.—Coll. W. E. Jones; comm. Dept. of Botany, National Museum of Wales.

Iris Pseudacorus L. var. Bastardi (Bor.). 17, Surrey; pond on Epsom Common, June 10th, 1938.—E. C. WALLACE.

Allium roseum L. var. hulbiferum Kunth. 41, Glamorgan; Barry, June, 1938.—Coll. R. L. Smith; comm. Dept. of Botany, National Museum of Wales.

Luzula Forsteri (Sm.) DC. × pilosa (L.) Willd. = × L. Borreri Bromf. (Ref. No. 2299.) 11, S. Hants.; with both parents, Mislingford, near Wickham, May 7th, 1938.—P. M. Hall.

Lemna minor L. 15, E. Kent; dyke near the sea, Seasalter, Sept. 23rd, 1938; this is a form which I have always seen near the sea, differing from the plant of inland pools and streams by its larger size and greater thickness.—E. C. WALLACE.

Wolffia arrhiza (L.) Wimm. 17, Surrey; pond on Burgh Heath, Sept. 10th, 1938.—E. C. WALLACE.

Potamogeton gramineus L. (det. J. E. Dandy). (Ref. No. 3086.) 28, W. Norfolk; Ringmere Pool, near Thetford, June 26th, 1938.—P. M. Hall. "A broad-leaved state of very shallow water."—J. E. Dandy.

Potamogeton Friesii Rupr. (Ref. No. 3871.) 23, Oxon.; canal at Wolvercote, July 1st, 1938.—J. F. G. CHAPPLE.

Potamogeton pusillus L. (det. J. E. Dandy) (P. panormitanus Biv.-Bern.) 13, W. Sussex; ditch by R. Arun, South Stoke, Aug. 7th, 1938.—E. C. Wallace. [Not sent out until 1939 Distribution.—Ep.]

Potamogeton pusillus L. (det. J. E. Dandy). (Ref. No. 38131.) 23, Oxon.; gravel-pit near Cassington, July 26th, 1938.—J. F. G. CHAPPLE.

Carex L. The gatherings were submitted to Mr E. Nelmes of Kew, who agreed with all the determinations. Mr Nelmes tells me that his comments were returned to Mr Chapple in July 1939. These unfortunately have not come to light and Mr Nelmes did not keep a copy. In three cases Mr Nelmes suggested changes of name.—ED.

Carex Hostiana DC. × lepidocarpa Tausch (=×C. Leutzii Aschers. & Graebn.) (Ref. No. 38125.) 22, Berks.; alkaline bog, Cumnor, July 25th, 1938.—J. F. G. CHAPPLE.

Carex Hostiana DC. × lepidocarpa Tausch (=×C. Leutzii Aschers. & Graebn.) 64, M.W. Yorks.; Ripon Parks, June 23rd, 1938.—Miss C. M. Rob. "Certainly a hybrid involving the first-named parent and a species of the flava group. I see nothing in the characters of the specimens against the second parent being C. lepidocarpa Tausch, as Miss Rob suggests."—J. E. Lousley.

Carex lepidocarpa Tausch. 64, M.W. Yorks.; Ripon Parks, June 23rd, 1938.—Miss C. M. Rob.

Carex irrigua Sm. ["C. magellanica Lam."] 88, Mid Perth; bogs above Invermeran, Glen Lyon, at c. 1100 ft., July 13th, 1938.—Coll. P. M. Hall, R. Mackechnie, W. A. Sledge, and E. C. Wallace; comm. F. C. Wallace. "It was with great satisfaction that we refound this plant this year in some abundance in Brebner's locality recorded in Buchanan White's Flora of Perthshire."—E. C. W. "Beautiful specimens of this rare species."—J. E. Lousley. "Mr Nelmes says it may not be a convenient occasion to change the name to C. paupercula Michx. but at least it should be changed to C. irrigua Sm, since C. magellanica Lam. is specifically distinct."—Ed.

Carex limosa Thuill. 75, Ayr; bog in Knockewart Hills at c. 700 ft., July 19th, 1938.—Coll. R. MACKECHNIE; comm. E. C. WALLACE.

Carex Hudsonii Ar. Benn. ["C. elata All."] (Ref. No. 3015.) 13, W. Sussex; bank of R. Adur, near Partridge Green, June 12th, 1938.—P. M. Hall.

Carex Hudsonii Ar. Benn. 62, N.E. Yorks.; Pilmoor, May 17th, 1938.—Miss C. M. Rob. "Undoubted specimens of this species."—J. E. LOUSLEY.

Carex leporina L. var. longibracteata Peterm. 17, Surrey; Peasemarsh, July 23rd, 1938.—E. C. Wallace, "Mr Wallace's specimens are representative of a very interesting variant of C. leporina L. which appears to be constant and restricted to a few localities. Similar specimens were distributed from Milford, Surrey (B.E.C. 1927 Rep., 590, (1928)) when Mr I. A. Williams made some interesting observations. The variant differs from the usual form of the species in (1) the very congested panicle and habit, and (2) the constant presence of a long leafy The Surrey plant now contributed is identical with the wellknown plant of a number of commons near Malvern. I was shown this on Castlemorton Common by the late Mr R. F. Towndrow in 1933, when he pointed out that it was originally described as C. Malvernensis S. Gibson, Phytologist, 1, 715-716, 1843. The same plant was collected near Malvern by T. Westcombe and described in Phytologist, 2, 751 and 759, 1847, as C. argyroglochin Hornemann—which it is not. have been unable to find a continental variety which exactly fits the British plant. Sonder (Fl. Hamb., 489, 1851) describes a C. leporina var. capitata which is said to resemble C. festiva Dew. (C. Macloviana D'Urb.), which scarcely suggests the present variation, and also his failure to mention the presence of long bracts, and their absence in the plate cited by him (Fl. Dan. t. 2366) shows that he had a different plant in mind. Judging from quotations, Petermann's C. longibracteata was founded solely on the presence of a long leafy bract, but I have been unable to refer to his original description (Anal. Pflzschl., 493, 1846). Leafy bracts of considerable length frequently occur on plants of normal habit, thus, for example, specimens which I gathered at Brookwood, Surrey, in 1931 have bracts 11 cm. long although the plants are tall and slender and quite unlike Mr Wallace's specimens. morton plant was described by Syme as C. ovalis Good. var. bracteata in English Botany, ed. 3, 10, 104, 1873, but this name cannot be transferred to C. leporina since there is an earlier var. bracteata of that species (Liebm., Vidensk. Selsk. Skr. Kjøbenh., 5, ser. II, 264, 1861) which Kukenthal refers to C. albolutescens Schwein. It appears therefore that we have only Gibson's name for this very characteristic plant, and it may be called C. leporina L. var. malvernensis (Gibson) comb. nov."--J. E. LOUSLEY.

×Carex axillaris Good. 65, N.W. Yorks.; Carthorpe Moor, Aug. 31st, 1938.—Miss C. M. Rob. "Excellent specimens of the hybrid well-known as ×C. axillaris (Good.). Goodenough's name unfortunately ap-

pears to be invalid owing to the earlier publication of C. axillaris L., $Sp.\ Pl.$, ed. 2, 1382 (1763). The earliest valid name appears to be $\times C$. Crepini Torges in $Mitt.\ Thur.\ BV.$ (N.F.), \mathcal{S} , IV, 59 (1893)."—J. E. LOUSLEY.

Carex Otrubae Podp. [" C. vulpina L."] (Ref. No. 2719.) 7, N. Wilts.; near Wootton Bassett, July 22nd, 1937.—J. D. Grose.

Carex Pairaei F. Schultz. 88, Mid Perth; hedgebank, Ballechin, near Ballinluig, July 17th, 1938; first discovered in 1937.—Coll. P. M. Hall, R. Mackechnie and E. C. Wallace; comm. E. C. Wallace.

Gramineae Lindl. All the gatherings were submitted to Mr C. E. Hubbard of Kew, by whom corrections in naming were made as necessary. His notes, like those of Mr Nelmes on Carex, are unfortunately missing:—ED.

Digitaria sanguinalis (L.) Scop. ["Panicum sanguinale L."] 11, S. Hants.; reclaimed land, Southampton, Sept., 1937.—J. W. Long.

Anthoxanthum Puelii Lec. & Lam. (Ref. No. 38080.) 3, S. Devon; barley field, Milber Down, Newton Abbot, August, 1938.—Coll. T. Stephenson; comm. J. F. G. Chapple.

Agrostis tenuis Sibth. (Ref. No. 3118.) 62, N.E. Yorks.; bare open ground on cliffs about 3 miles north of Whitby, July 6th, 1938. This is the var. pumila (L.) Druce, 780/3e of the British Plant List, ed. 2. It formed quite a sward on bare ground in an exposed situation. For an account of this and other diseased states see Philipson in Journ. Bot., 73, 65 (1935).—P. M. Hall. "Agrostis tenuis Sibth., state infected with Tilletia."—W. R. Philipson.

Apera interrupta (L.) Beauv. (Ref. No. 3098.) 61, S.E. Yorks.; sand-pit, Flixton, July 5th, 1938. A chance remark to Dr W. A. Sledge reminded him that there were Yorkshire specimens of this species in Herb. Horrell in his possession and a visit to Flixton ensued. There is no reference to Yorkshire records in Com. Fl. in spite of the following entry in B.E.C. 1916 Rep., 508 (1917):-" +2700. Apera interrupta Beauv. In a sand-pit of about half acre, Flixton, near Scarborough, A. J. Burnley, vide sp.; †Wakefield, York, Cryer, in Nat., 251." Though the species is doubtless an alien at Wakefield (S.W. Yorkshire, v.-c. 63), Dr Sledge and I are very definitely of opinion that it is native at Flixton, where it is associated with such species as Cerastium arvense L., Trifolium striatum L., Filago germanica (L.) Huds., F. minima (L.) Pers. and a perennial "tricolor" pansy. This appears to be a considerable extension of the recorded range of this species as a native. The description, "near Scarborough," may be misleading; Flixton is south of the R. Derwent and therefore just in v.-c. 61.-P. M. Hall.

Gaudinia fragilis (L.) Beauv. 10, Wight; abundant in old pasture, Haven Street, June, 1938; an addition to the sheets I distributed in 1936.—J. W. Long.

Festuca elatior L. × Lolium multiflorum Lam. (Ref. No. 3854.) 23, Oxon.; waste ground, Jack Daw Lane, Oxford, June 24th, 1938.— J. F. G. Chapple.

Festuca elatior L. × Lolium perenne L. (Ref. No. 3855.) 23, Oxon.; waste ground, Jack Daw Lane, Oxford, June 24th, 1938.—J. F. G. Chapple.

Bromus commutatus Schrad. (Ref. No. 3857.) 23, Oxon.; waste ground, Jack Daw Lane, Oxford, June 24th, 1938.—J. F. G. Chapple.

Bromus lepidus Holmberg f. lasiolepis Holmberg. (Ref. No. 3856.). 23, Oxon.; waste ground, Jack Daw Lane, Oxford, June 24th, 1938.—J. F. G. Chapple.

Brachypodium distachyon (L.) Beauv. (Ref. No. 38183.) 39, Staffs.; on barley siftings, Burton-on-Trent, Aug. 31st, 1938.—J. F. G. Chapple.

Lolium perenne L. var. cristatum Pers. 7, N. Wilts.; Walcot, Swindon, June 13th and July 1st, 1938; spikes broad, flattened, coiled and drooping when young, afterwards \pm erect but remaining broad, probably similar to the form distributed in 1924, see B.E.C. 1924 Rep., 746 (1925).—J. D. Grose.

?Lolium multiflorum Lam. × perenne L. (Ref. No. 3858.) 23, Oxon.; waste ground, Jack Daw Lane, Oxford, June 28th, 1938.—J. F. G. Chapple.

Pholiurus filiformis (Roth) Schinz & Thell. ["Lepturus filiformis Trin."] 61, S.E. Yorks.; Hornsea sands, July 14th, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum.

Equisetum Telmateja L. ["E. maximum Lam."] 61, S.E. Yorks.; clay cliffs near Bridlington, July 22nd, 1938.—Coll. R. Bulley; comm. Nottingham Natural History Museum. "E. Telmateja is the correct name. E. maximum was a nomen abortivum."—A. H. G. Alston.

Athyrium Filix-foemina (L.) Roth. ["var. convexum Newm."] (Ref. No. 3535.) 8, S. Wilts.; Alderbury, Aug. 21st, 1938; fronds pale green when fresh; appears to be a form induced by exposure to the light.—J. D. Grose. "It hardly seems worth trying to assign varietal names to forms induced by environment conditions."—A. H. G. Alston.

Chara contraria Kuetz. var. hispidula Br. (det. G. O. Allen). (Ref. No. 3872.) 23, Oxon.; abundant in the canal at Wolvercote, July 1st, 1938.—J. F. G. CHAPPLE.



