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**Original members of the Moss Exchange Club.*

STATEMENT OF*RECEIPTS.*

Balance from last Account	£115	6	3
Subscriptions—1937	....	....	£38	0	0	
„ Arrears	....	....		15	0	
„ 1938 (paid before due)	....	....	6	10	0	
Special Donation	....	....		15	0	
				<hr/>		
				46	0	0

£161 6 3

BALANCE SHEET*LIABILITIES.*

Subscriptions, 1937—paid before due	....	....	£7	10	0
Distribution costs, 1937-38 (estimated)	....	....	4	10	0
Printing Report, 1937 (estimated)	22	10	0
Balance (excess of Assets over Liabilities)	83	16	0
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			£118	6	0

Examined and found correct—J. Y. ELDER,

Barclays Bank, Berwick-on-Tweed.

31st *January*, 1938.

ACCOUNT for 1937.*EXPENSES.*

Printing Report, 1936	....	....	....	....	£25	14	0
,, Circulars	....	....	....	....	1	16	0
,, Census Catalogue, Sphagna	....	....	....	....	4	2	6
Distribution Costs, 1936-37	....	....	....	....	4	14	6
Secretary's Expenses	....	....	....	....	3	1	6
Treasurer's Expenses	....	....	....	....	1	15	9
Librarian's Expenses (Index Boxes)	....	....	....	....	1	15	0
Subscriptions— <i>Revue Bryologique</i>	....	....	....	....		16	0
Balance in hand, 31st December, 1937	....	....	....	....	117	11	0

£161 6 3

31st DECEMBER, 1937.*ASSETS.*

Cash in hand (General Account)	....	....	....	....	£117	11	0
Subscriptions in arrear (£4 5s.), estimated to produce	....	....	....	....		15	0

£118 6 0

J. B. DUNCAN, *Treasurer.*

N.B.—Subscriptions, 10/- per annum, Foreign and Colonial Members, 5/-, should be paid not later than 31st March, each year.

REPORT OF SECRETARY.

The Sixteenth Annual Report of the British Bryological Society shows a decrease in membership. This decrease is not large, but is to be regretted. Can present members do anything to make up for the loss by recruiting new ones?

The meeting last year at Bundoran, and later at Achill Island, was a great success in spite of unfavourable weather, and although the number present was rather small, much pleasure and many specimens resulted from the excursion.

This year the district chosen is that round Llangollen. This is of a less unusual type than those of last year, but it is to be hoped there will be a large number of members present, as it is easily reached from most parts of Britain.

The Distributors, Referees and Bibliographer receive the sincere thanks of members for all the heavy work they have put in in the service of the Society. Mr. Richards has again stopped a gap that could not be easily filled, but, unfortunately, he wishes definitely to stop the work of refereeing. Mr. Crosland has kindly undertaken to do the section for which Mr. Savery had previously been referee. Since this was written the Secretary has heard with regret of the death of Mr. Savery, which took place as long ago as November last year. He did excellent work for the Society as Referee for some years, though owing to illness he never appeared at any of the meetings and so was not known personally by the other members.

The number of packets of sphagna sent in for distribution this year is not much less than last, 421 instead of 487. There is a great decrease in the True Mosses, 1644 this year and 2,903 last. The corresponding numbers for Hepatics are 619 and 1,168. The Referees for Hepatics report favourably on the specimens sent in, except in one or two particulars which are mentioned in the Report of the Distributor and should be noted. The Distributors of the True Mosses also report that the contributions were very satisfactory, though here again a few points about the packets sent in are worthy of consideration.

There are notices in this Report about the Moss Herbarium belonging to the Society; and about the *Revue Bryologique* and *Bryologist* which members would do well to read. Books belonging to the Society may also be borrowed by application to Mr. Sherrin; a list of those on Mosses and Hepatics is printed on the end cover of the Report.

The Library is a poor one for such a society to possess, and gifts of books to it would be most welcome.

Bryological specimens will also be gladly received on behalf of the Society by Mr. Sherrin.

Copies of new papers for the Bibliography should be sent to Dr. L. B. C. Trotter, and specimens of new Vice-County Records of Mosses to Mr. J. B. Duncan, of Hepatics to Mr. A. Wilson, and of Sphagna to Mr. A. Thompson.

A. THOMPSON.

May, 1938.

REPORT OF THE ANNUAL MEETING, 1937.

By ELEANORA ARMITAGE.

The Society held its Annual Meeting and Excursion at Bundoran, Co. Donegal, Ireland, from June 19th to 26th, 1937, under the Presidentship of Mr. J. B. Duncan, Berwick-on-Tweed. About twenty members and friends were present. Thirteen of the party went on to Achill Island, Co. Mayo (I.27) for another week. In East Donegal (I.34) the Bundoran sand-dunes were explored and two excursions were made up the River Erne—one from Ballyshannon and the other from Belleek; the latter included a small area of Co. Fermanagh (I.33). But the chief interest centred in the range of the Dartry Mountains in Counties Leitrim (I.29) and Sligo (I.28). The excursions here included the attractive valleys of Gleniff with Annacoona Rocks, Sligo, and Glenade, Leitrim; also in Sligo was the huge bluff of Ben Bulbin, facing towards the Atlantic with very steep, wet grassy slopes, and, near the summit, the great curved wall of precipitous rock, the jutting cliffs of which are deeply grooved. This walk taxed the climbing powers of the bryologists, though the cliff top was but 1,500 ft., and the grassy summit beyond was 1,700 ft.

A good deal of rain impeded the walks on Achill Island (I.27). The bogland near Dugort was interesting, and the cliffs, rocks and corrie of Slievemore held many bryophytes. One day the barren summit (2,204 ft.) of Slievemore was reached. Croaghaun has precipices of over 1,000 feet. At Keel and Dooagh were sandy stretches of beach.

The Annual Meeting took place on June 22nd. The following elections were made:—President and Treasurer, Mr. J. B. Duncan; Vice-President, Miss E. Armitage; Secretary, Mr. A. Thompson. Mr. H. N. Dixon and Rev. C. H. Binstead are now Honorary Members, elected at Cheltenham, 1936. The next Meeting is to be at Llangollen for the Berwyns, in August, 1938.

The Sphagnum list has been collated by Mr. A. Thompson; all are new V.C. Records. Most of the Mosses and Hepatics are also new or interesting.

SPHAGNA.

- S. Warnstorffii* Russ., Ben Bulben, (I.28); Bundoran (I.34).
S. rubellum Wils., Tullaghan (I.29).
S. subtile W., Slievemore (I.27).
S. quinquefarium W., Ben Bulben and Gleniff (I.28).
S. plumulosum Röhl, Glenade and Tullaghan (I.29).
S. compactum De C., var. *imbricatum* W., Glenade (I.29); Castle Caldwell (I.33).
S. squarrosum Russ. var. *spectabile* Russ., Tullaghan, (I.29); near Keel Lough (I.27); var. *subsquarrosum* Russ., Tullaghan (I.29); Bundoran (I.34).
S. amblyphyllum Russ., var. *macrophyllum* W., near Keel Lough (I.27); Ben Bulben (I.28); var. *mesophyllum* W., near Keel Lough (I.27); Tullaghan (I.29).
S. pulchrum W., Glenade (I.29).
S. recurvum P. de B., var. *robustum* Breid., Ben Bulben (I.28); var. *majus* Ångstr., Slievemore and near Keel Lough (I.27); Gleniff and Ben Bulben (I.28); Glenade and Tullaghan (I.29).
S. fallax von K., var. *robustum* W., Glenade (I.29).
S. cuspidatum Ehrh., var. *falcatum* Russ., Ben Bulben and Cliffony, (I.28); Bundoran (I.34); var. *submersum* Schp., near Keel Lough (I.27); Ben Bulben (I.28); var. *plumulosum* Schp., Slievemore (I.27); var. *serratum* (Aust.), Bundoran (I.34).
S. molluscum Bruch, Glenade (I.29).
S. Holtii W., Slievemore (I.27).
S. obesum Wils., Tullaghan (I.29).; var. *plumosum* Warnst., Slievemore (I.27); var. *teretiramosum* W., Achill Island (I.27); Ben Bulben (I.28); var. *canovirens* W., Glenade (I.29); near

Keel Lough (I.27); var. *hemi-isophyllum* W., Slievemore (I.27).

S. subsecundum Nees, Tullaghan (I.29).

S. inundatum W., var. *robustum* (W.) Sherrin, Cliffony (I.28); Castle Caldwell (I.33); var. *eurycladum* (W.) Sherrin, Castle Caldwell (I.33); Bundoran (I.34); var. *lancifolium* W., Tullaghan (I.29); Castle Caldwell (I.33); var. *densum* (W.) Sherrin, Bundoran (I.34); var. *diversifolium* W., Glenade (I.29).

S. auriculatum Schp., var. *ovatum* W., near Keel Lough and Slievemore (I.27); Castle Caldwell (I.33); var. *laxifolium* W., Castle Caldwell (I.33); var. *submersum* W., Meenaun Cliffs and bog near Keel and Slievemore (I.27); var. *racemosum* W., Ben Bulben (I.28).

S. crassicladum W., var. *diversifolium* W., near Keel Lough (I.27); Castle Caldwell (I.33).

S. Camusii W., Slievemore and near Keel Lough (I.27); Tullaghan (I.29); Cliffony (I.28).

S. platyphyllum W., Castle Caldwell (I.33).

S. imbricatum Hornsch., var. *cristatum* W., near Keel Lough (I.27).

S. papillosum Lindb., var. *normale* W., Ben Bulben (I.28); Glenade and Tullaghan (I.29); Castle Caldwell (I.33); var. *sublaeve* Limpr., near Keel (I.27).

S. magellanicum Brid., near Keel Lough (I.27); Cliffony (I.28); Tullaghan (I.29).

MOSSES

(New County Records starred).

Swartzia montana c. fr., Gleniff (I.28); *S. inclinata*, Gleniff (I.28). *Seligeria pusilla*, Annacoona (I.28*); *S. tristicha*, Annacoona (I.28*); Glenade (I.29*), new to Ireland; *S. recurvata*, Glenade (I.29). *Brachyodes trichodes*, Ben Bulben (I.28*); *Dichodontium pellucidum* var. *compactum*, Gleniff (I.28*). *Dicranella heteromalla*, Gleniff (I.28*); *D. cerviculata*, Cliffony (I.28*). *Campylopus pyriformis*, Ben Bulben (I.28*). *Dicranum Bonjeani* var. *rugifolium*, Bundoran (I.34*). *Fissidens viridulus* var. *Lylei*, Ballyshannon (I.34*); *F. pusillus*, Gleniff (I.28); *F. crassipes*, River Erne, Belleek (I.33*); *F. rufalus*, River Erne, Belleek (I.33*). *Campylostelium saxicola*, Ben Bulbin (I.28*). *Tortula ruraliformis*

(I.34); *T. intermedia*, Ballyshannon (I.34*). *Barbula lurida*, Bundoran (I.34*); *B. ferruginascens*, Ben Bulben (I.28*); *B. recurvifolia*, Bundoran, (I.34*); Glenade (I.29); *B. recurvifolia* var. *robusta*, Glenade (I.29*), only known before from Ben Bulben (I.28). *Leptodontium flexifolium*, Glenade (I.29*); *Weisia tenuis*, Ben Bulben (I.28); *W. calcarea* c. fr., Ben Bulben (I.28*); *W. curvirostris*, Glenade (I.29*); *W. curvirostris* var. *insignis*, Glenade (I.29*), only known before from Ben Bulben (I.28); *W. curvirostris* var. *commutata*, Bundoran (I.34*), new to Ireland; *W. verticillata*, Bundoran (I.34). *Trichostomum crispulum* var. *elatum*, Ben Bulben (I.28*); var. *brevifolium*, Bundoran sand-dunes (I.34*), new to Ireland; *T. mutabile* var. *cophocarpum*, Ben Bulben (I.28); Glenade (I.29). *T. tortuosum* var. *fragilifolium*, Truskmore (I.29*); Bundoran (I.34*). *Encalypta commutata*, summit of Ben Bulben, Annacoona, c. fr., (I.28). *Anoetangium compactum*, Gleniff (I.28). *Ulota vittata*, Gleniff (I.28). *Orthotrichum saxatile*, Gleniff (I.28); *O. cupulatum* var. *nudum*, Bundoran (I.34*); *O. tenellum*, on hawthorn by River Erne, Ballyshannon (I.34*), also *O. pulchellum*. *Amblyodon dealbatus*, Annacoona (I.28). *Timmia norvegica*, Gleniff (I.28). *Catoscopium nigratum*, slack in sand-dunes, Bundoran (I.34*). *Breutelia arcuata*, Gleniff (I.28); Glenade (I.29) c. fr. *Plagiobryum Zierii*, summit of Ben Bulben (I.28). *Bryum filiforme*, Ben Bulben (I.28); Ballyshannon (I.34). *B. pendulum*, Bundoran (I.34). *B. inclinatum*, Annacoona (I.28*); Kinlough (I.29*).; *B. obconicum*, Bundoran (I.34*); *B. murale*, Belleek (I.33). *Mnium affine* var. *elatum*, Ben Bulben (I.28*); *M. serratum*, Glenade (I.29*), Belleek (I.33*); *M. orthorrhynchum*, Truskmore (I.29*); *M. stellare*, Gleniff (I.28). *Neckera crispa* var. *falcata*, Ben Bulben (I.28). *Pterygophyllum lucens* (I.29). *Heterocladium heteropterum* var. *fallax*, River Duff (I.28*); *Thuidium abietinum* (I.34); *T. delicatulum*, Ben Bulben (I.28*); *T. Philiberti*, Bundoran (I.34*). *Cylindrothecium concinnum*, Bundoran (I.34). *Orthothecium rufescens* (I.34), (I.29). *O. intricatum*, Gleniff (I.28), in fruit, which is very rare. *Camptothecium lutescens* (I.34). *Brachythecium salebrosum* var. *palustre*, Bundoran (I.34*). *Eurhynchium Swartzii* var. *rigidum*, River Erne (I.34*); *E. pumilum*, Erne Valley (I.34*) *E. Teesdalei* (I.28), (I.33), near River Erne, Belleek (I.34*) *E. tenellum*, Erne Valley and Bundoran (I.34*). *Plagiothecium depressum*, Annacoona (I.28*), River Erne (I.34*). *Hyocomium flagellare*, Glenade (I.29*). *Amblystegium Sprucei*, Annacoona (I.28), Glenade (I.29*); *A. confervoides*, Gleniff (I.28); *A. serpens* var. *salinum*, Bundoran (I.34); *A. Kochii*

Bundoran (I.34*). *Hypnum polygamum* (I.34); *H. chryso-phyllum*, River Erne (I.33); *H. falcatum* var. *gracilescens*, Annacoona (I.28*), new to Ireland; *H. cupressiforme* var. *tectorum*, Bundoran (I.34*); var. *elatum*, Bundoran (I.34); *H. palustre*, Ballyshannon (I.34*); *H. stramineum*, Ben Bulben (I.28*); *H. cordifolium*, and *H. giganteum*, Bundoran (I.34). *Hylocomium brevirostre*, Glenade (I.29).

ACHILL ISLAND.

Campylopus Schwarzii, Croaghaun (I.27). *Dicranum uncinatum*, Croaghaun (I.27). *Barbula recurvifolia*, Dugort (I.27*). *Ulota crispa*, Croaghaun (I.27); *U. Hutchinsiae*, Slievemore (I.27). *Splachnum ampullaceum*, Dugort (I.27). *Funaria Templetoni* (I.27). *Webera elongata*, Croaghaun (I.27*). *Bryum pendulum* (I.27*); *B. turbinatum*, The Valley (I.27*).

HEPATICES.

Aneura pinguis, Bundoran sand-dunes (I.34*); *A. palmata*, Croaghaun and Slievemore (I.27). *Metzgeria conjugata*, Glenade (I.29*). *Pellia Fabbroniana*, Bundoran (I.34*). *Fossombronia angulosa*, Dugort (I.27). *Lophozia bantriensis*, Glenade (I.29*); *L. excisa*, Ben Bulben (I.28). *Plagiochila asplenioides* var. *minor*, Erne Valley (I.34*), and forma *laxa*, Erne Valley (I.34*) (new to Ireland); var. *humilis* forma *laxa*, Erne Valley (I.34*), new to Ireland; *P. spinulosa*, Ben Bulben (I.28). *Leptoscyphus Taylori*, Ben Bulben (I.28*); *L. cuneifolius*, Croaghaun (I.27). *Cephalozia connivens*, Dugort (I.27). *Nowellia curvifolia*, Dugort (I.27)*. *Adelanthus dugortiensis*, Dugort (I.27), refound, but not plentifully, in its only locality. *Bazzania tricrenata* (I.27), Glenade (I.29*). *Blepharostoma trichophyllum* (I.28), Glenade (I.29*). *Herberta Hutchinsiae* (I.27). *Mastigophora Woodsii*, Dugort (I.27). *Trichocolea tomentella*, Glenade (I.29). *Scapania aspera*, Bundoran sand-dunes (I.34*); *S. dentata* var. *ambigua*, Dugort (I.27*); *S. umbrosa*, Ben Bulben (I.28*). *Radula aquilegia*, Croaghaun, (I.27). *Pleurozia purpurea* (I.27). *Madotheca laevigata*, lime rocks, Erne Valley (I.34*). *Lejeunea patens*, Ben Bulben (I.28), (I.29). *Harpalejeunea ovata*, Croaghaun (I.27), Glenade (I.29). *Marchesinia Mackaii*, lime rocks, Erne Valley (I.34*). *Frullania germana*, Slievemore (I.27), Ben Bulben (I.28*). *Anthoceros punctatus*, Dugort (I.27).

ADDENDA TO REPORT OF IRISH MEETING.

Mr. Dixon was kind enough to send some valuable notes on his Irish gatherings, which are here transcribed.

Fissidens viridulus var. *Lylei*, Ballyshannon. Very variable as to border, sometimes wanting, but mostly on the vaginant lamina only. Potier de la Varde thinks this is the same thing as the continental *F. Bambergeri* Schp. *F. rufulus*, Belleek, young and sterile, here and there a more mature stem showed the characteristic colour and structure.

Weisia curvirostris, Ballyshannon. A curious form with very minute leaves, erect and appressed when dry, not twisted.

Zygodon Stirtoni, almost in the town of Belleek, a fairly well-marked tuft; others were nearer *Z. viridisimus* on the whole.

Ulota crispa, hawthorns, Glenade; a remarkable form; calyptras sometimes naked, resembling *U. vittatae*; or with few hairs, others the normal densely hairy form. None of the latter plant was seen or a hybrid sporophyte might have been suspected.

Bryum filiforme, Ballyshannon; a form with narrow, usually acute and apiculate leaves with wider cells than type. A plant sometimes taken for *B. concinatum*. The Ballyshannon plant was further from type than the Carbis Bay var. *juliforme* which has always seemed to me a poorly characterized form.

Mnium punctatum; a slender form of this resembled *M. subglobosum*.

Nechera crispa var. *falcata* was the common form on Ben Bulbin. A curious form with spreading branches and complanate leaves was also seen.

Amblystegium Sprucei, Annacoona; certainly dioicous, with leaves of *Sprucei* rather than *A. confervoides*. I doubt very much whether the distinction of the cell-form is reliable between the two species.

Hypnum polygamum, Bundoran; variable nerve, usually single, thin, about half-way up the leaf.

H. palustre; very common, in large fruiting mats. At Ballyshannon a pretty colour form, leaves variegated with red in a broad stripe in the middle, simulating a broad nerve.

List of Additional Hepatics sent by Mr. C. V. Marquand.

Riccia sorocarpa (I.34). *Blasia pusilla* (I.34). *Gymnomitrium crenulatum* (I.28), (I.29). *Gymnocolea inflata* (I.34). *Sphenobolus ovatus* (I.34). *Harpalejeunea ovata* (I.34).

REFEREES.**Mosses :—****Sphagnaceae :—**

Acutifolia and Cymbifolia	....	Mr. HORSLEY.
Rigida, Squarrosa and Cuspidata		Miss LOBLEY.
Subsecunda	....	Mr. THOMPSON.
Referee-in-Chief	....	Mr. SHERRIN.

True Mosses :—

Andreaeaceæ to Grimmiaceæ	....	Mr. CROSLAND.
Tortulaceæ to Orthotrichaceæ	....	Dr. WATSON.
Schistostegaceæ to Leskeaceæ (except Bryum)	....	Mr. RICHARDS.
Hypnaceæ	....	Mr. J. B. DUNCAN.
North American Mosses	....	Mr. SHERRIN.
European Mosses and British species of Bryum	....	Mr. NICHOLSON.
Non-European (except North American Mosses) and Referee- in-Chief	....	Mr. DIXON.

Hepatics :—

British and European	....	Mr. MILSOM.
Non-European and Referee-in- Chief	....	Mr. NICHOLSON.

REPORT OF DISTRIBUTORS (Mosses).

This winter the Distribution has been a smaller one than of late, as will be seen by referring to the summary on another page. Nevertheless, a high proportion of the plants contributed have been both useful in satisfying the wants of many members and in giving rise to critical discussion.

We have had fewer plants from outside Europe this time, but quite a number from our members across the North Sea and the English Channel. They are always glad of bryophytes from England, but we feel there is scope in supplying more material collected in Scotland and Eire, and not necessarily of the rarer "Western" or "Atlantic" plants. Plants from our latitudes across the Atlantic are very welcome to us for study and comparison with our own. Many of our species occur in Canada, both lowland and highland.

Once again the Distributors ask members who want mosses and hepatics from the Distribution to let us know their requirements. There are many who expect to receive a yearly parcel, but leave it to the Distributors to decide what shall be sent. This is scarcely satisfactory from the point of view of efficiency, as they have to take their chance of what is left after the members who send desiderata lists have been supplied with what is available. Contributors receive prior consideration.

Dr. J. Froehlich has kindly sent from Vienna some mosses collected by W. Wilson, which he came across and thought would be of interest to the British members. As they are in large wrappers they will be suitably packeted and distributed next winter. Will anyone specially interested communicate with the Distributors? Mention here should also be made of some mosses sent by Mrs. D. A. Jones to the Society last year, which have now been distributed.

The Referees for mosses again have the grateful thanks of all members for their annual task. All reported favourably on the material sent in, most of it being admirably prepared. One Referee pointed out that there is a general failure to enter the all-important ecological details (altitude, nature of substratum, habitat) on the packets.

Part of the distribution work was done at the South London Botanical Institute, through the courtesy of Mr. W. R. Sherrin. Mr. G. F. Horsley has again compiled the Report on the Sphagna and Mr. J. H. Albrecht the lengthier task of the True Mosses.

A. MURIEL SAUNDERS.
EDWARD C. WALLACE.

April 7th, 1938.

REPORT OF DISTRIBUTOR (Hepatics).

The number of packets sent in for distribution this year is 619, contributed by 18 members. This is just over half the number of packets sent in last year. The Referees report that the specimens are well packeted, with plenty of material and in almost every case correctly named. A few packets were made up with somewhat flimsy paper and it would be an advantage to have the Census Catalogue number at the top right-hand corner.

C. M. BEDFORD.

Taunton, 1938.

**MOSSES AND HEPATICS SENT FOR
DISTRIBUTION, 1937.**

	<i>Sphagna</i>	<i>True Mosses</i>	<i>Hepatics</i>	<i>Total</i>
Miss E. Armitage	—	73	73	146
Mr. C. M. Bedford	—	3	—	3
Rev. C. H. Binstead	—	73	—	73
Dr. A. Boros (Hungary)	—	90	26	116
Mr. D. B. Bradshaw	—	9	20	29
Miss M. S. Brown (Nova Scotia)	—	22	—	22
Mons. J. Charrier (France)	39	87	28	154
Miss H. A. Chick	—	31	—	31
Miss C. A. Cooper	—	12	—	12
Mr. H. N. Dixon	—	31	—	31
Mr. J. B. Duncan	—	84	11	95
Dr. J. Froehlich (Austria)	—	79	4	83
Mr. J. D. Houston	—	36	—	36
Mr. E. W. Jones	43	80	31	154
Mr. H. H. Knight	—	10	16	26
Herr J. Lid (Norway)	34	79	—	113
Miss E. M. Lobley	120	71	18	209
Rev. W. R. Megaw	—	20	—	20
Mr. F. E. Milsom	—	25	20	45
Mr. E. A. Moxley (Ontario)	—	109	—	109
Mr. W. E. Nicholson	—	50	50	100
Mr. P. W. M. Richards	4	17	24	45
Miss A. M. Saunders	—	10	—	10
Miss K. E. Smith	—	3	—	3
Captain C. Stenholm (Sweden)	20	151	38	209
Herr Per Störmer (Norway)	8	136	32	176
Mr. A. Thompson	153	—	—	153
Mr. W. G. Travis	—	36	—	36
Mr. A. Turner	—	29	14	43
Dr. Fr. Verdoorn (Holland)	—	50	101	151
Mr. E. C. Wallace	—	105	93	198
Dr. W. Watson	—	33	20	53
	421	1,644	619	2,684

REPORT ON PLANTS SENT IN BY MEMBERS.

(An Asterisk (*) denotes a new Vice-Comital Record.)

SPHAGNA.

Sphagnum fimbriatum Wils., var. *intermedium* Russ., bottom of stem in water of a pool, Austwick Moss (64*), July, 1936, A.Th. ; var. *laxifolium* W., wet overhanging bank, William Clough (57), Sept., 1931, A.Th.

S. Girgensohnii Russ., var. *robustum* W., Scald Hill, Cheviot (68*), Oct., 1936, E.M.L. ; Sandane, Nordfjord (Norway), Aug., 1936, A.Th. ; between vars. *robustum* W. and *microcephallum* W., Utvik Mountain, Nordfjord (Norway), Sept., 1936, A.Th. ; var. *microcephallum* W., Sandane, Nordfjord (Norway), Sept., 1936, A.Th. ; between vars. *microcephallum* W., and *stachyodes* Russ., Sandane, Nordfjord (Norway), Sept., 1936, A.Th. ; var. *gracilescens* Grav., Sandane, Nordfjord (Norway), Aug., 1936, A.Th. ; near Myklebust Glacier, Nordfjord (Norway), Aug., 1936, A.Th. ; var. *stachyodes* Russ., Sandane, Nordfjord (Norway), Sept., 1936, A.Th. ; Sandane, Nordfjord (Norway), Sept., 1936, A.Th.

S. Russowii W., Feldon Burn, Edmundbyers (66*), Aug., 1937, E.M.L. ; var. *girgensohniodes* Russ., damp ground in wood, Longshaw (57), March, 1933, A.Th.

S. fuscum Schp., var. *robustum* Roell., near top of Svinestrandra (4,000 ft.), Nordfjord (Norway), Sept., 1936, A.Th. ; var. *medium* Russ., Utvik Mountain, Nordfjord (Norway), Sept., 1936, A.Th. ; var. *tenellum* W., Sandane, Nordfjord (Norway), Aug., 1936, A.Th.

S. rubellum Wils., bog, Tullaghan (I.29*), June, 1937, E.M.L.

S. acutifolium Ehrh., marsh, Sucé, Loire Infre. (France), Aug., 1937, J. Ch. ; Sandane, Nordfjord (Norway), Aug., 1936, A.Th.

S. quinquefarium Lindb., Hannay Combe, Dunkery Beacon (5), April, 1932, A.Th.

S. plumulosum Roell., old peat cuttings, Gothill near Oxford (22), Aug., 1936, E.W.J. "In Phragmites swamp. Practically the only locality for *Sphagnum* in the Oxford district. The marsh is on valley peat of a calcareous nature ; the water

is neutral in reaction, and the shallow pools amongst the Phragmites have white calcareous mud in them. *Hypnum commutatum* and *H. stellatum* are accompanying species," E.W.J. ; Tregaron Raised Bog (46), July, 1937, E.W.J. " In wet ground among *Scirpus caespitosus* and *Eriophorum vaginatum*. In enclosed packet, the more densely cushioned, deeply coloured form of drier places among Calluna. These forms are typical of deep peat," E.W.J.

S. compactum D.C., Kvia, in Naerbo (Norway), Dec., 1936, J.Lid. " Yes, the var. *subsquarrosum* W.," E.M.L. ; var. *squarrosum* Russ., Glen Trool (73*), April, 1937, E.M.L. ; Videseter (Norway) Sept., 1936, A.Th.

S. strictum Sulliv., Glen Trool (73*), April, 1937, E.M.L. ; Sandane (Norway), Sept., 1936, A.Th. ; Haoyne, in Frogn (Norway), July, 1937, Per St. " This plant has some resemblance to *S. strictum* Sulliv., but is a very good specimen of *S. compactum* D.C., var. *subsquarrosum* W., with two packets between the vars. *squarrosum* Russ. and *subsquarrosum* W. Mr. Thompson has also agreed to this," E.M.L.

S. squarrosum Pers., Sucé, Loire Infre. (France), Aug., 1935, J.Ch. " Three packets belong to the var. *spectabile* Russ., two other packets contain also *S. subsecundum* Nees, var. *intermedium* W.," E.M.L. ; var. *subsquarrosum* Russ., Austwick Moss (64), Aug., 1934, A.Th. ; Achill Is. (I.27), June, 1937, A.Th. ; Tullaghan (I.29*), June, 1937, E.M.L.

S. teres Ångstr., Lode, in Naerbø (Norway), Dec., 1936, J.Lid. ; var. *subteres* Lindb., Shatton Clough (57), July, 1936, A.Th. ; Videseter (Norway), Aug., 1936, A.Th.

S. Lindbergii Schp., Harjidalen, Linsall, Lofsdalen (Sweden), July, 1937, C.St. ; var. *macrophyllum* W., Sandane (Norway), Sept., 1936, A.Th. ; f. *plumosum* W., Sandane (Norway), Sept., 1936, A.Th. ; between vars. *macrophyllum* W. and *mesophyllum* W., Utvik Mountain (Norway), Sept., 1936, A.Th. ; var. *mesophyllum* W., Sandane (Norway), Sept., A.Th.

S. riparium Ångstr., Sandane (Norway), Aug., 1936, A.Th.

S. amblyphyllum Russ., Tregaron Raised Bog (46), July, 1937, E.W.J. ; var. *macrophyllum* W., Shatton Clough (57), July, 1936, A.Th. ; var. *mesophyllum* W., Cheviot (68*), Oct., 1936, E.M.L. ; Tullaghan (I.29*), June, 1937, E.M.L.

S. balticum Russ., Myklebust (Norway), Aug., 1936, A.Th.

S. pulchrum W., Cheviot (68*), Oct., 1936, E.M.L. ; Sandane (Norway), Aug., 1936, A.Th.

S. recurvum P. de Beauv., Lode, in Naerbø (Norway), Dec., 1936, J.Lid. "The var. *majus* Ångstr.," E.M.L.; var. *robustum* Breidl., Austwick Moss (64), July, 1936, A.Th.; var. *majus* Ångstr., Ben Bulbin (I.28*), June, 1937, A.Th. et E.M.L., comm. E.M.L.

S. fallax Klinggr., var. *plumosum* W., Totley Moss (57), Sept., 1931, A.Th.; var. *robustum* W., Swaledale (65*), May, 1936, A.Th.; Cheviot (68*), Oct., 1936, E.M.L.

S. cuspidatum Ehrh., var. *falcatum* Russ., Ben Nevis (97*), July, 1936, E.M.L.; var. *submersum* Schp., Dunkery Beacon (5), April, 1932, A.Th.; Corpach Moss, Fort William (97*), July, 1936, E.M.L.; Sandane, (Norway), Aug., 1936, A.Th.; approaching var. *plumosum* Schp., Austwick Moss (64), July, 1936, A.Th.

S. molluscum Bruch., Tregaron Raised Bog (46), July, 1937, E.W.J.; Mark of Luce Moss, Wigtown (74*), April, 1937, E.M.L.

S. obesum Wils., var. *plumosum* W., Longshaw (57), July, 1936, A.Th.; near var. *sanguineum* W., Ben Nevis (97*), July, 1936, E.M.L.; var. *hemisophyllum* W., Totley Moss (57*), June, 1937, A.Th.

S. subsecundum Nees, Tullaghan (I.29*), June, 1937, E.M.L.; Vendée, (France), Sept., 1936, J.Ch. "var. *intermedium* W.," A.Th.; var. *intermedium* W., Sandane (Norway), Aug., 1936, A.Th.

S. inundatum Russ., var. *eurycladum* (W.) Sherrin, Ben Nevis (97*), July, 1936, E.M.L.; near var. *eurycladum* (W.) Sherrin, Sandane (Norway), Sept., 1936, A.Th.; var. *densum* (W.) Sherrin, near Fort William (97*), July, 1936, E.M.L.; var. *lanceifolium* W., New Forest (11), April, 1935, A.Th.; Glen Nevis (97*), July, 1936, E.M.L.; Tullaghan (I.29*), June, 1937, E.M.L.

S. auriculatum Schp., Bundoran (I.34*), June, 1937, E.M.L.; var. *ovatum* W., Selworthy (5), March, 1932, A.Th.; Loughrigg (69), April, 1927, A.Th.; Westernness (97*), July, 1936, E.M.L.; Skye (104*), July, 1936, E.M.L.; var. *submersum* W., Swaledale (65*), May, 1937, A.Th.; "*S. aquatile* W.," Vendée, (France), May, 1936, J.Ch. "I should name this *S. auriculatum* Schp., var. *ovatum* W., as *S. aquatile* W. has been taken out of our Census Cat.," A.Th.

S. crassycladum W., Ben Nevis (97) and Skye (104*), July, 1936, E.M.L.; var. *diversifolium* W., Dunkery Beacon (5),

April, 1932, A.Th. ; New Forest (11), April, 1936, A.Th. ; County Kerry (I.1), Aug., 1935, A.Th.

S. turgidulum W., Skye (104*), July, 1936, E.M.L.

S. contortum Schultz, Ambleside (69), Sept., 1933, A.Th. ; Bundoran (I.34), June, 1937, E.M.L. ; Loire Infre. (France), Aug., 1935, J.Ch.

S. platyphyllum (Sull. & Lindb.) W., Langavatn in Hardangervidda (Norway), July, 1936, J.L.

S. imbricatum Hornsch., Booth Bog, near Aberystwith (46), July, 1937, H. Godwin ; var. *crisatum* W., marsh, Eide Moen, Sandane, Nordfjord (Norway), Aug., 1936, A.Th.

S. papillosum Lindb., var. *normale* W., Glen Trool (73*), April, 1937, E.M.L. ; Bog Tullaghan (I.29*), June, 1937, E.M.L.

S. cymbifolium Ehrh., Pico (4,000 ft.), (Azores), June, 1929, leg. T. G. Tutin et E. F. Warburg, det. W.R.S., comm. P.W.R.

S. magellanicum Brid., "*S. medium* Limpr.," Tregaron Raised Bog (46), July, 1937, E.W.J. "Common, in deep cushions, over a limited area of the bog ; absent from the wettest parts and from the sloping margins," E.W.J. ; Lough Cloenty, near Cliffeny (I.28*), June, 1937, E.M.L.

TRUE MOSSES.

EUROPEAN (British and Continental).

Andreaea nivalis Hook., Ben Macdhui (92), July, 1935, E.C.W.

Catharinea undulata W. & M., var. *Haussknechtii* Dixon, Voloc (Hungary), Aug., 1937, A.B.

C. angustata Brid., Kisanna (Hungary), Aug., 1937, A.B. "I should call these plants *C. undulata* var. *Haussknechtii*, with immature fruit. The inflorescence is, I think, *synoicous*, while there is little in the vegetative characters to suggest *C. angustata*," F.C.

C. crispa James, Moorland Stream (59), May, 1937, A.Tu.

Psilopilum arcticum Brid. (*P. laevigatum* Lindb.), Jalve, (Norway), July, 1895, Chr. Kaurin, com. J.L. ; var. *hypnocarpum* Hagen, Lyngen (Norway), July, 1916, B. Kaalaas, com. J.L.

- Polytrichum urnigerum* L., Lode (Norway), Dec., 1936, J.L.
P. commune, L., Lode (Norway), Dec., 1936, J.L.
- Ditrichum tenuifolium* Lindb., Gosau (Austria), Aug., 1908, H.N.D. et W.E.N. ; Funnasdalen (Sweden), July, 1935, C.S.
- D. pallidum* Hpe., Solfatara (Italy), April, 1914, H.N.D. et W.E.N.
- Swartzia montana* Lindb., Downhill (I.40), Sept., 1937, J.D.H. ; Haoyne (Norway), July, 1937, P.S.
- S. inclinata* Ehrh., Magilligan (I.40), Aug., 1937, J.D.H. ; W.R.M.
- Seligeria tristicha* B. et S., Gleniff (I.28*), June, 1937, H.N.D., C.V.B.M., E.M.L. (New to Ireland) ; item com. H.N.D.
- S. recurvata* B. et S., Zanyka (Hungary), Aug., 1937, A.B.
- Saelania caesia* Lindb., Szarka-hegy (Hungary), Aug., 1937, A.B. "Very fine gathering," F.C.
- Rhabdoweisia denticulata* B. et S., Carn Dearg (97), July, 1936, E.C.W.
- Cynodontium Bruntoni* B. et S., Grey Tor (3), May, 1937, E.A.
- C. polycarpum* Schp., Argentieres (H. Savoie), July, 1922, W.E.N. "Three packets contain in addition small sterile patches of *Dicranum strictum*," F.C.
- C. torquescens* Limpr., Haoya (Norway), July, 1937, P.S.
- C. Jenneri* Stirton, Glen Lochay (88), July, 1923, W.E.N.
- C. virens* Schp., Glen Lyon (88), July, 1937, E.C.W. ; Duved (Sweden), July, 1933, C.S. "I should consider this a well-marked var. *serratum* B. et S.," F.C.
- Dichodontium pellucidum* Schp., var. *compactum* Schp., Bundoran (I.34), June, 1937, J.B.D.
- Trematodon longicollis* Mchx., Solfatara (Italy), April, 1910, W.E.N.
- Dicranella crispa* Schp., Wartling Hill (14), Mar., 1899, W.E.N. ; Glenshane Pass (I.40), Oct., 1937, J.D.H.
- D. secunda* Lindb., Glen Nevis (97*), July, 1936, E.C.W. et E.M.L. ; Grimsey (N. Iceland), June, 1936, E.W.J.
- D. rufescens* Schp., Glenshane Pass (I.40), Oct., 1937, J.D.H.
- D. varia* Schp., Bakonybel (Hungary), Oct., 1937, A.B.
- D. Schreberi* Schp., var. *elata* Schp., Kilrea (I.40), April, 1936, J.D.H.

Blindia acuta B. et S., Hohe Tauern (Austria), June, 1936, J.F.

Dicranoweisia crispula Lindb., Lyngen (Norway), July, 1936, E.A.

Campylopus Schwarzii Schp., Achill Island (I.27), June, 1937, J.B.D.

C. flexuosus Brid., Achill Island (I.27), June, 1937, J.B.D.

C. atrovirens De Not., Styhead Pass (70), Sept., 1937, A.Tu.

C. introflexus Brid., Salcombe (3), Oct., 1937, C.H.B.

Dicranodontium longirostre B. et S., Mallwyd (48), Aug., 1936, E.W.J.

Dicranum Starkei W. et M., f. *subdenticulata* Limpr., Hallbrendsnipa (Norway), July, 1902, E. Jorgensen, com. J.L. "Certainly *D. Starkei*. I have no description of this form." F.C.

D. molle Wils., Coire Leis (97), July, 1937, E.C.W.

D. undulatum Ehrh., Oroszlany (Hungary), June, 1937, A.B.

D. robustum B. et S., Funnasdalen (Sweden), July, 1935, C.S.*

D. groenlandicum Brid., Nordreisa (Norway), July, 1892, leg. E. Jørgensen, com. J.L. ; *identidem* ex Tinn (Norway).

D. Bonjeani De Not., f. *secundum*, Clitheroe (59), May, 1937, A.Tu. "Correctly described. But who is the authority for f. *secundum*? Ecologically, I am all in favour of the naming of distinctive forms when the habitat (as in the present case) is also described," F.C. ; var. *rugifolium* Bosw., River Drouses (I.34*), June, 1937, J.B.D. et E.M.L. ; Kirkcowan (74*), April, 1937, E.C.W. et E.M.L.

D. spurium Hedw., Ockham Common (17), April, 1935, E.C.W. ; Lofsdalen (Sweden), July, 1937, C.S.

D. majus Turn., Haoya (Norway), July, 1937, P.S.

D. strictum Schleich., Ruislip (21*), Aug., 1937, F.E.M.

D. uncinatum C.M., Achill Island (I.27), June, 1937, J.B.D.

D. montanum Hedw., Felsogalla (Hungary), May, 1937, A.B.

D. Sauteri Schp., Gesaeuse (Austria), Sept., 1937, J.F.

Fissidens incurvus Starke, Lolworth (29*), March, 1934, E.W.J.

F. rivularis Spruce, Brockweir (34*), April, 1937, E.W.J.

F. rufulus B. et S., Ballyshannon (I.34), June, 1937, H.N.D.

Grimmia apocarpa Hedw., var. *rivularis* W. et M., Staward (67), Aug., 1935, E.M.L. et H.A.C.; var. *gracilis* W. et M., Rosenlauri (Switzerland), Sept., 1937, D.B.B. "Yes, *Sch. longidens* Phil," J.H.A.; var. *brunnescens* Limpr., Csakvar (Hungary), Mar., 1937, A.B.

G. patens B. et S., Glen Callater (92), July, 1935, E.C.W.

G. commutata Hueb., St. Laurent sur Sevre (France), Oct., 1936, J.C.; Aardal (Norway), July, 1936, E.A. "Near *G. commutata*, but capsule striate," E.A. "Differs notably from *G. commutata* in the deeply 8-striate capsule, very long ($\frac{1}{3}$ - $\frac{1}{2}$) hair-point of comal leaves, recurved margins, and less obscure areolation. This must be some continental species," F.C. "This is *Gr. elatior*, a much misunderstood plant, but really quite distinct," J.H.A.; "Yes, *Gr. elatior* B. et S.," H.N.D.

G. elongata Kaulf., Snowdon (49), Aug., 1931, J.B.D.

G. unicolor Hook., Aardal (Norway), July, 1936, E.A.

Rhacomitrium aciculare Brid., West Dipton (67), Aug., 1935, E.M.L. et H.A.C.

Rh. protensum A.Br., Haoya (Norway), July, 1937, P.S.

Rh. sudeticum B. et S., Lake Langevared (Norway), July, 1936, E.A.

Rh. lanuginosum Brid., Glen Callater (92), July, 1937, E.C.W.

Pottia Heimii Fuernr., Grimsey (N. Iceland), July, 1934, E.W.J.; Kornye (Hungary), April, 1935, A.B. "The sporogonium has a different appearance to our usual form. This may be due to some influence of the habitat, or more probably, to the material being gathered when the capsule was immature," W.W.

P. viridifolia Mitt., Kingston, near Taunton (5), April, 1937, W.W. "This is somewhat intermediate between *P. crinita* and *P. viridifolia*. In general appearance it is markedly different from typical *P. crinita*. The bright green colour and abundance of chloroplasts in the cells are characteristic of *P. viridifolia*. Though the point is fairly long at times, it is not so long as in *P. crinita*, and its basal cells are often chlorophyllose. So long as *P. viridifolia* is maintained as a species or sub-species, I should put it under that, rather than with *P. crinita*. Mr. Dixon writes, 'I think you are right in placing your *Pottia* between *P. crinita* and *P. viridifolia*, probably nearer the latter, though that may be a matter of opinion,' " W.W.

- P. minutula* Fuernr., Ballintog (I.39), Aug., 1937, J.D.H.
- P. lanceolata* C.M., Elsfeld (23), Mar., 1936, E.W.J.; Csakvar (Hungary), April, 1937, A.B.
- P. latifolia* C.M., Nied, Tauern (Austria), June, 1936, J.F.
- Tortula aloides* De Not., La Creche (France), Mar., 1936, J.C.
- T. obtusifolia* Schleich., Domos (Hungary), Oct., 1937, A.B.
- Barbula tophacea* Mitt., Les Sables d'Olonne (France), June, 1936, J.C. "These are robust plants, and the leaf is somewhat decurrent, being similar to that figured from the Braunton sand dunes in the Journal of Ecology of June, 1918 (Watson Cryptogamic Vegetation of Sand-dunes)," W.W.
- B. fallax* Hedw., La Creche (France), Mar., 1936, J.C.
- B. recurvifolia* Schp. var. *robusta* Braithwaite, Glenade (29*), June, 1937, H.N.D., J.B.D., E.M.L.; J.B.D.; Anacoona (I.28), June, 1937, H.N.D.
- Leptodontium flexifolium* Hampe, Nutley (14), June, 1904, W.E.N.
- Weisia crispa* Mitt., Aytre (France), Feb., 1936, J.C. "In some packets there is a considerable admixture of other material," W.W.
- W. Levieri* Limpr., Breloux (France), Mar., 1936, J.C.
- W. mucronata* B. et S., var. *subgymnostoma* Limpr., Ryde, I. of W. (10*), April, 1937, A.M.S., three gatherings.
- W. reflexa* Brid., Nuneaton (38), June, 1937, C.A.C.
- W. curvirostris* C.M. var. *commutata* Dix., Nant-y-Ffrith (50), Aug., 1912, W.W. "This has been previously distributed as the variety, but it is not an extreme form in regard to the length of the cells, and some papillae are sometimes present. In the report for Section II., 1921 the following comment was made: 'Cells elongated, but not all smooth, D.A.J.,'" W.W.; Bundoran (I.34*), June, 1937, E.M.L. (New to Ireland); var. *insignis* Dixon, Ben Bulben (I.28), June, 1937, E.M.L.; Gleniff (I.28), June, 1937, J.B.D.; forma, Ballyshannon (I.34), June, 1937, H.N.D.
- W. verticillata* Brid., Clitheroe (59), July, 1937, A.Tu.
- Trichostomum mutabile* Bruch, var. *cophocarpum* Schp., Ben Bulben (I.28*), June, 1937, E.M.L. "Some *T. crispulum* var. *elatum* (New to I.28) has been partially separated, but there is some still present," W.W.
- T. hibernicum* Dixon, Torc Mt. (I.2), Aug., 1935, F.E.M.

T. flavovirens Bruch, Les Sables d'Olonne (France), June, 1936, J.C.

T. inclinatum Dixon, Bugac (Hungary), June, 1936, A.B.

T. tortuosum Dixon, Haoya (Norway), July, 1937, P.S.

T. Ehrenbergeri Lor., Kairatos (Crete), April, 1906, W.E.N.

Pleurochaete squarrosa Lindb., Offham (14), Jan., 1924, W.E.N.

Cinclidotus fontinaloides P.B., Minehead (5), April, 1932, C.A.C. ; St. Laurent sur Sevre (France), Oct., 1936, J.C.

C. riparius Arnott, Ludlow (40), Sept., 1937, H.H.K.

Encalypta commutata N. et H., Gleniff (I.28), June, 1937, E.M.L.

E. ciliata Hoffm., Funnasdalen (Sweden), July, 1935, C.S.

Anoetangium compactum Schwaegr., Uldale (65), Nov., 1936, C.A.C. et F.E.M.

Zygodon Mougeotii B. et S., West Dipton (67), Aug., 1935, E.M.L., H.A.C.

Ulota crispa Brid., Borrowdale (70), Sept., 1937, A.Tu.

Orthotrichum anomalum Hedw., La Creche (France), Mar., 1936, J.C.

O. Lyellii H. et T., Oppegaard (Norway), May, 1936, P.S.

O. affine Schrad. var. *rivale* Wils., Kirkcowan (74*), April, 1937, E.C.W. et E.M.L.

O. diaphanum Schrad., Minety Station (7), April, 1937, E.C.W.

Schistostega osmundacea Mohr, Voles Hill, Taunton (5), Nov., 1936, C.M.B. ; Tilford (17), Mar., 1937, E.C.W.

Tetraplodon mnioides B. et S., Rannoeh Station (88), July, 1937, E.C.W.

Funaria Templetoni Sm., Loch Maree (105), Sept., 1937, E.M.L.

F. hygrometrica Sibth. var. *arctica* (?) Berggr., Dalvik (Iceland), July, 1934, E.W.J. "D. A. Jones named this *F. hygrometrica* var. *arctica*. I have not been able to compare it with authentic specimens of the variety, but it does not seem to have the peristome characters of var. *arctica*," E.W.J. "This does not seem to agree with any named variety. I should call it simply a dwarf form," P.W.M.R. "The *Funaria* is very near var. *arctica* Berggr., but not quite so

extreme, and the peristome is about normal for *F. hygrometrica*. I should call it a form approaching var. *arctica* Berggr. I have an almost identical form from 14,500 ft. in the Himalayas," H.N.D.

Aulacomnium palustre Schwaegr., Bakke (Norway), June, 1935, P.S. ; Bog, Danby Moor (62), Aug., 1935, H.A.C.

A. androgynum Schwaegr., Engvika (Norway), June, 1935, P.S.

Timmia norvegica Zett., Gleniff (I.28), June, 1937, E.M.L. ; and June, 1937, C.H.B.

Mielichhoferia elongata Horn., L. Kander (92), July, 1930, D.A.J. et H.H.K.

Webera schimperii Schp., (*Bryum rutilans* B. et S.), Maristuen (Norway), Aug., 1900, W.E.N. et H.N.D.

W. erecta Lindb., Finse (Norway), Aug., 1932, J.B.D.

W. Ludwigi Schp., Lake Langevand (Norway), July, 1936, E.A.

W. albicans Schp., var. *glacialis* Schp., Ben Nevis (97), July, 1936, E.M.L.

Bryum pendulum Schp., Bundoran (I.34*), June, 1937, E.A.

B. lacustre Brid., Banhida (Hungary), Aug., 1937, A.B.

B. inclinatum Bland Halton (60), June, 1937, A.Tu.

B. turbinatum Schwaegr. var. *latifolium* B. et S., Kleine Scheidegg (Switzerland), Sept., 1937, D.B.B.

B. bimum Schreb., Les Sables d'Olonne (France), June, 1936, J.C. "This plant may well be *B. bimum*, as suggested ; but the evidence that it is so is not present. Neither Mr. Dixon, nor I, has been able to find any inflorescence on the plants ; and in the absence of this, there is no distinguishing mark from *B. pseudo-triquetrum*," W.E.N.

B. caespiticium L., Grimsey (N. Iceland), July, 1934, E.W.J.

B. obconicum Hornsch., Frome (36), June, 1937, C.H.B.

B. Donianum Grev., Taunton (5), May, 1936, W.W.

B. alpinum Huds., var. *viride* Husn., Grey Tor (3*), May, 1937, E.A.

B. Gerwigii Limpr., Neuhausen (Switzerland), Aug., 1908, H.N.D.

Mnium medium B. et S., Haoya (Norway), July, 1937, P.S. ; Bogerup (Sweden), June, 1937, C.S.

M. affine Bland, var. *elatum* B. et S., Grasmere (69), June, 1937, C.H.B.

M. hornum L., Bakke (Norway), June, 1935, P.S.

M. Blyttii B. et S., Vaarsti (Norway), July, 1867, leg. F. Kiaer, com. J.L.

M. orthorrhynchum B. et S., Ben Bulben (I.28), June, 1937, C.H.B.

M. cinclidioides Hueb., Tregaron Bog (46), July, 1937, E.W.J. ; Undersaker (Sweden), July, 1936, C.S.

Fontinalis antipyretica L., Birkhead Beck (62), Aug., 1935, H.A.C.

F. squamosa L., River Bann (I.40), Aug., 1937, W.R.M.

Neckera Besseri Jur., Dunaszentmiklos (Hungary), Sept., 1937, A.B.

Pterygophyllum lucens Brid., Wiener Wald (Austria), Nov., 1936, J.F.

Leucodon sciuroides Schwaegr., Breuil-Chaussee, (France), Feb., 1936, J.C. "A robust form approaching var. *morensis* B. et S. in vegetative characters," P.W.M.R. ; var. *morensis* Schp., Skiftenes (Norway), July, 1891, leg. F. E. Conradi, com. J.L. "A rather large form, but not in my opinion var. *morensis*. The branches are not sufficiently tumid, and the capsule is not the right shape," P.W.M.R.

Pterogonium gracile Sw., Varenne (Italy), Aug., 1937, J.F.

Anacamptodon splachnoides Brid., Czakovar (Hungary), June, 1937, A.B.

Antitrichia curtipendula Brid., Zinkenbachklamm (Austria), July, 1937, J.F.

Porotrichum alopecurum Mitt., Haoya (Norway), July, 1937, P.S.

Myurella apiculata B. et S., Hredavatn (Iceland), Aug., 1934, E.W.J.

Anomodon attenuatus Hueb., Haoya (Norway), July, 1937, P.S.

A. viticulosus H. et T., Staward (67), Aug., 1935, E.M.L., H.A.C.

A. rostratus Schp., Bakonybel (Hungary), Oct., 1937, A.B.

Leptodon Smithii Mohr, St. Helens, I. of W. (11), Sept., 1936, A.M.S.

Pterigynandrum filiforme Hedw., var. *heteropterum* B. et S., Glen Lyon (88), July, 1937, E.C.W.

Heterocladium heteropterum B. et S. var. *fallax* Milde, Wigtown (74*), April, 1937, E.C.W. et E.M.L.

H. dimorphum B. et S., Haoya (Norway), July, 1937, P.S.

Pseudoleskea Breidleri Kindb. (*Ptychodium oligocladium* Limpr.), Hammerfest (Norway), July, 1936, E.A.

P. atrovirens B. et S., Grimsey (Iceland), July, 1934, E.W.J.

P. patens Limpr., Merak (Norway) Aug., 1904, E. Ryan, com. J.L. "Habit identical with my Ben Nevis plant of 1936," E.C.W.

Thuidium delicatulum Mitt., Zinkenbachklamm (Austria), July, 1937, J.F.

Climacium dendroides W. et M., Frosterley (66), Aug., 1935, E.M.L., H.A.C.

Brachythecium plicatum B. et S., Tamischbachturm (Austria) Sept., 1937, J.F.

B. glareosum B. et S., Dormington (36), Jan., 1938, C.H.B.

B. illecebrum De Not., Braunschott (12), Mar., 1937, E.C.W.

Eurhynchium cirrosum Jur., Ben Lawers (88), July, 1937, E.C.W.

E. piliferum Schreb., Hvalstad (Norway), Oct., 1934, P.S.

E. praelongum Hobk., Freshfield (59), Dec., 1908, leg. Wheldon, com. W.G.T. ; Haoya (Norway), July, 1937, P.S.

E. Swartzii Hobk., La Creches (France), Mar., 1936, J.C. "A very robust form which we should, I think, place under var. *robustum* Limpr. (var. *rigidum* Boul.)," J.B.D. ; var. *rigidum* Boul., Shiplake (23), April, 1937, C.H.B.

E. pumilum Schp., Erme Valley (I.34*), June, 1937, E.A.

E. Teesdalei Schp., River Duff (I.28), June, 1937, E.M.L.

E. tenellum Milde, La Creche (France), Mar., 1936, J.C.

E. myosuroides Schp., Haoya (Norway), July, 1937, P.S. ; var. *brachythecioides* Dixon, Achill Island (I.27), July, 1937, J.B.D.

E. circinatum B. et S., La Creche (France), Mar., 1936, J.Ch.

E. striatulum B. et S., La Creche (France), Mar., 1936, J.C.

E. rusciforme Milde, Loch Torridon (105), Sept., 1937, E.M.L.

E. murale Milde var. *julaceum* B. et S., Wienerwald (Austria), April, 1937, J.F. "Fine plants, but not at all well marked for this variety," J.B.D.

Plagiothecium depressum Dixon, Adam's Rocks (36), May, 1937, C.H.B.

P. pulchellum B. et S., Whernside (65), Nov., 1936, C.A.C., F.E.M.

P. silesiacum B. et S., Gesaeuse (Austria), Sept. 1937, J.F.

P. denticulatum B. et S., Singloya (Norway), June, 1935, P.S.

P. latebricola B. et S., Weaver's Down (12*), Mar., 1937, E.C.W.

Amblystegium Sprucei B. et S., Gleniff (I.38), June, 1937, J.B.D. ; Dalvik (Iceland), 1934, E.W.J.

A. Kochii B. et S., Bundoran (I.35), June, 1937, C.H.B.

A. varium Lindb., Menaggio (Italy), Aug., 1937, J.F.

A. irriguum (?) B. et S., Lyngen (Norway), July, 1936, E.A. "A slender form of *A. filicinum*,—var. *trichodes*," J.B.D.

A. filicinum De Not., var. *vallisclausae* Dixon, Widdybank Fell (66*), July 1937, E.M.L.

Hypnum elodes Spruce, Greywell (12*), June, 1936, E.C.W.

H. polygamum Schp., Birkdale (59), Oct., 1937, W.G.T.

H. stellatum Schreb., Haoya (Norway), July, 1937, P.S. ; Hammerfest (Norway), July, 1936, E.A. "This is *Hylacomium squarrosum*," J.B.D. ; var. *protensum* Roehl, Zinkenbachklamm (Austria), July, 1937, J.F.

H. chrysophyllum Brid., Meopham (16), May, 1937, E.C.W.

H. Halleri Linn. fil., South of France, Aug., 1937, C.A.C.

H. Sendtneri Schp., Tromsø (Norway), July, 1936, E.A. "A small form with weak nerve," H.N.D. ; var. *gracilescens* Wheld., Birkdale (59), Oct., 1937, W.G.T.

H. Wilsoni Schp., Birkdale (59), Oct., 1937, W.G.T.

H. lycopodioides Schwaeg., Magilligan sandhills (I.40), July, 1936, J.D.H.

H. exannulatum Guemb., Lofsdalen (Sweden), July, 1937, C.S. "Very fine fruiting specimens," J.B.D.

H. uncinatum Hedw. var. *plumulosum* (?) Schp., Ballyshannon (I.34), June, 1937, E.A. "This is a form of *H. molluscum*," J.B.D.

H. intermedium Lindb., Loch Torridon (105*), Sept., 1937, E.M.L. ; var. *Cossoni* San., Menaggio (Italy), Aug., 1937, J.F.

H. falcatum Brid. var. *gracilescens* Schp., Ben Bulben (I.28), June, 1937, C.H.B. "Has not the habit of var. *gracilescens*. I should say *H. commutatum* (forma). There is some admixture of *H. revolvens* and *Ambl. filicinum*." J.B.D. "Seems to me to be nearer to *H. falcatum* var. *gracilescens*—one of those intermediate forms, on which one cannot be dogmatic," H.N.D.

H. fastigiatum Hartm., Gesaeuse (Austria), Sept., 1937, J.F.

H. reptile Mchx., Gesaeuse (Austria), Sept., 1937, J.F.

H. cupressiforme L. var. *tectorum* Brid., Snead (47*), April, 1937, E.A. ; Bundoran (I.34*), June, 1937, E.M.L. ; var. *elatum* B. et S., Bundoran (I.34), June, 1937, E.A.

H. imponens Hedw., Weavers Down (12*), April, 1937, E.C.W. ; Ambersham Common (13), Oct., 1928, W.E.N.

H. Patientiae Lindb., Dry Hill (17), Feb., 1937, E.C.W. ; Warton Cragg (60), July, 1937, A.Tu.

H. procerrimum Mol., Tamischbachturm (Austria), Sept., 1937, J.F.

H. molluscum Hedw., Worth Forest (14), April, 1937, E.C.W. "A robust form with plicate leaves—nearest to var. *condensatum* Schp., though it has not the characteristic colour," J.B.D. ; Szogliget (Hungary), Nov., 1937, A.B.

H. molle Dicks., Ben Nevis (97), July, 1937, E.C.W.

H. arcticum Sommerf., Kojan (Sweden), Sept., 1936, C.S.

H. montanum Wils., Kikud (Norway), Aug., 1890, leg. F.E. Conradi, com. J.L.

H. ochraceum Turn., Ben Nevis (97), July, 1936, E.C.W.

H. stramineum Dicks., Widdup (62), Oct., 1936, A.Tu.

H. cordifolium Hedw., Bundoran (34), June, 1937, E.M.L. ; Haoya (Norway), July, 1937, P.S. ; La Pommeraie sur Sevre (France), Sept., 1936, J.C.

Hylocomium rugosum De Not., Giggleswick Scar (64), Oct., 1936, C.A.C. et F.E.M. ; Oslo (Norway), Sept., 1937, P.S.

EXTRA-EUROPEAN (Including specimens of European species from countries outside Europe).

Fissidens ceylonensis D. et M., Kuala Selangor, Dec., 1932, P.W.M.R.

- Octodiceras Julianum* Brid., Ontario, July, 1937, E.A.M.
Eucamptodon inflatus Mitt., Auckland, N.Z., 1934, leg. L.B. Moore, com. Verdoorn.
Leucobryum aduncum D. et M., Selangor, Dec., 1932, P.W.M.R.
Syrrhopodon Wallisii C.M., Selangor, Dec., 1932, P.W.M.R.
Callicostella papillata Mitt., Selangor, Dec., 1932, P.W.M.R.
Hygroamblystegium fluviatile Loeske, f. *typicum* Boulay, Ontario, July, 1937, E.A.M.
H. noterophilum Warnst., Ontario, July, 1937, E.A.M.
Drepanocladus capillifolius Warnst., Ontario, Aug., 1937, E.A.M.
Calliergon trifarium (W. et M.), Ontario, Aug., 1937, E.A.M.
Scorpidium turgescens (Schp.), Ontario, Aug., 1937, E.A.M.
Plagiothecium latebricola B. et S., Ontario, Aug., 1936, E.A.M.
Buxbaumia aphylla L., Halifax, N.S., May, 1937, M.S.B.
Diphyscium foliosum Mohr, Halifax, Oct., 1937, M.S.B.
Pogonatum brevicaule Brid. (*P. pennsylvanicum* (Hedw.) Paris), Halifax, Oct., 1937, M.S.B.

HEPATICS European, (British and Continental).

Riccia Bischoffii Hüben, Vertessomolo (Hungary), April, 1935, A.B.

R. crystallina L., forma, in great abundance on wet mud flats around edges of drying pool, Woodlands Park, Dorset (9). A form intermediate between type and var. *angustior* Nees, det. F.E.M., E.W.J., June, 1936.

“When Mr. Jones first sent this to me I named it a form of *R. crystallina*. In spite of the spores, however, it seems to have some of the characteristics of *R. Huebeneriana*, Lindb,” F.E.M. “I am strongly inclined to support the view that Mr. Jones’s specimens belong to *R. crystallina* var. *angustior*. Where other characters vary, the spores are generally very constant, and these certainly appear to me to belong to *R. crystallina* rather than *R. Huebeneriana*,” W.E.N.

R. crystallina var. *angustior* Nees. Cart-rut on heath, Tuddenham, W. Suffolk (26), July, 1937, P.W.R.

R. fluitans L. In a pool, Deux-Sevres (France), Feb., 1936, J.C.

Targionia hypophylla L., Wall, Headley, N' Hants. (12), Mar., 1937, E.C.W.

Reboulia hemisphaerica (L.) Raddi, Tardos (Hungary), May, 1933, A.B.

Conocephalum conicum (L.) Dum., wet rocks, Deux-Sevres (France), Mar., 1935, J.C.

Dumortiera hirsuta Reinw. Bl. et Nees, on dripping rocks, Torc Cascade, Killarney, Ireland (I.2), Aug., 1935, W.W.

Aneura pinguis (L.) Dum., Bundoran sandhills, Co. Donegal (I.34*), June, 1937, E.A.

Metzgeria furcata (L.) Dum., small gemmiferous form, Conford, Headley, N. Hants. (12), Mar., 1937, E.C.W.

M. conjugata Lindb., vertical rock faces on crags, Cwm du, Afon Senni, nr. Brecon, alt. 1,700 ft. (42), April, 1937, E.W.J.

Pellia endiviaefolia (Dicks.) Lindb. (= *P. Fabbroniana* Raddi), Crosglany (Hungary), June, 1937, A.B.

P. Fabbroniana, Raddi (*J. calycina*, Tayl.) var. *lorea* Nees, under dripping rocks, Hurrot Wood, Lanc. (59), Aug., 1937, A.Tu.

Gymnomitrium varians (Lindb.) Schiffn., Ben Nevis, summit plateau, Westernness (97), July, 1936, E.C.W.

Alicularia Breidleri, Limpr., Ben Nevis, summit, Westernness (97), July, 1936, E.C.W.

Aplozia riparia forma *potamophila* Bern., in stream, Greenfield, Yorks. (63), Dec., 1912, W.W.

Jungermannia lanceolata L. (= *Aplozia lanceolata* (Schrad.) Dum.), Haoya in Frogn (Norway), July, 1937, P.S.

Jamesoniella autumnalis (Spruce) Schiffn., rocks, Charrault, St. Philbert du Pont, Vendée (France), April, 1937, J.C.

Lophozia turbinata (Raddi) Steph., Boxhill, Surrey (17), Mar., 1936, E.C.W.

L. quinquedentata (Huds.) Cogn., on shady sandstone rocks, cliff above Capel y Fin, Nant Honddu, Black Mountains (?), April, 1937, E.W.J. ; North Cape (Norway), July, 1936, E.A.

L. lycopodioides (Wallr.) Cogn., Tromsö (Norway), July, 1936, E.A.

L. Hatcheri (Evans) Steph., (*L. Floerkii* var. *Baueriana*, Schiffn.), Funnasdalen (Sweden), July, 1935, C.S.

L. Floerkii (Webr. et Mohr.) Schiffn., Jamtland (Sweden), July, 1936, C.S. ; Hammerfest (Norway), July, 1936, E.A.

L. attenuata Dum., rocks, St. Laurent sur Sevre, Vendée (France), Oct., 1936, J.C. ; forma *eflagellis*, Hammerfest (Norway), July, 1936, E.A.

L. barbata (Schmid.) Dum., Coakvar (Hungary), April, 1937, A.B.

L. quadriloba (Lindb.) Evans, Craig an Lochain-na-Lairige, Perthshire (88), July, 1923, leg. W.E.N.

Sphenobolus minutus (Crantz) Steph., Moss of Cree, Wigtown Bay, Wigtown (74*), April, 1937, E.C.W.

S. exsectiformis (Breidl.) Steph., lane near Churt, Surrey (17), April, 1937, E.C.W.

Plagiochila asplenioides (L.) Dum., wall near Newton, Stewart, Wigtown (74), April, 1937, E.C.W. ; entire leaves, Dovedale, Brothers Water, Cumberland (70), May, 1936, E.C.W. ; var. *minor* Lindb. (= *P. Dillenii* Tayl.), Erne Valley, Co. Donegal (I.34*), June, 1937, E.A. ; var. *minor*, f. *laxa*, Matouschek, Chase Wood, Ross, Hereford (36), June, 1937, E.A. ; Erne Valley, Co. Donegal (I. 34*), June, 1937, E.A. ; var. *humilis*, Lindenb., near Newton Stewart, Wigtown (74*), April, 1934, E.C.W. ; var. *humilis* forma *laxa* Schiffn., Sand dunes, Bundoran, Co. Donegal (I.34*), June, 1937, E.A. ; var. *major* Nees, Haoya in Frog, (Norway), July, 1937, P.S.

P. spinulosa (Dicks.) Dum., Slievemore, Achill Island (I.27), July, 1937, J.B.D.

P. tridenticulata Tayl., wet sandstone rocks in shade, Tore Glen, Killarney (I.2), Sept., 1936, P.W.R.

Leptoscyphus Taylori (Hook) Mitt., (*Mylia Taylori* Gray), summit of Ben Bulbin, Sligo, Ireland (I.28*), June, 1937, E.M.L.

L. anomalus (Hook) Mitt. (*Mylia anomala* Gray), bog side of Pendle Fell, Clitheroe, S, Lar.cs. (59), June, 1937, A. Tu.

L. cuneifolius (Hook), Mitt. (*Clasmatocolea cuneifolia* Spruce), boulders, Croaghaun, Achill Island (I.27), July, 1937, J.B.D. ; on bark of trees and moist rocks among *Frullania* and *Plagiochila*, Galways Bridge, Killarney (I.2), Sept., 1936, P.W.R.

Lophocolea minor Nees, Csakvar (Hungary), April, 1937, A.B.

Harpanthus Flotowianus Nees, Undersaker Jamtland, (Sweden), July, 1936, C.S.

Cephalozia pleniceps (Aust.) Lindb. var. *macrantha* (Kaal. et Nichols.), Ashdown Forest, E. Sussex (14), May, 1912, W.E.N.

C. fluitans (Nees) Spruce, Tregaron raised bog (16) ; common in the wettest parts of bog among *Sphagnum cuspidatum*, July, 1937, E.W.J.

Nowellia curvifolia (Dicks.) Mitt. (= *Cephalozia curvifolia* Dum.), Eggerness, Garliestown, Wigtown (74), April, 1937, E.C.W., E.M.L. ; on decaying log in birch wood, Coed Mawr, Afon Augell, Mallwyd (48), Aug., 1936, E.W.J.

Cephaloziella stellulifera (Tayl. M.S.), Schiffn., Carbis Bay, Cornwall (1), Nov., 1919, W.E.N.

C. Massalongi (Spruce), K. Mull., Carbis Bay, Cornwall (1), June, 1937, W.E.N.

C. Nicholsoni Douin et Schiffn., Carbis Bay, Cornwall (1), June, 1937, W.E.N.

C. dentata (Raddi) K. Mull, The Lizard, Cornwall (1), April, 1926, W.E.N.

Pleuroclada albescens (Hook) Spruce, Lake Langeraud, alt. 4,000 ft. (Norway), July, 1936, E.A.

Bazzania trilobata (L.) Gray, Trevisen, Haoya in Frogn (Norway) July, 1937, P.S.

B. tricrenata (Wahl.) Pears., rocks, Glenade, Leitrim (I.29*), June, 1937, J.B.D. and E.M.L., com. E.M.L. " This seems to tend more to *B. triangularis*," F.E.M. " I do not think that *B. triangularis* has any definite limits but I consider that the plant sent in as *B. tricrenata* is one of the innumerable transitional forms between the two species if indeed they be species," W.E.N. ; Murren (Switzerland), Oct., 1937, D.B.B.

Lepidozia pinnata (Hook) Dum., Slievemore, Achill Is. (I. 27), July, 1937, J.B.D.

L. reptans (L.) Dum. var. *julacea* Nees, among granite rocks, Grey Tor, Dartmoor (3*), May, 1937, E.A.

Herberta adunca (Dicks.) Gray, Upper Falls, Glen Nevis (97), July, 1923, W.E.N.

H. Hutchinsiae (Gottsche) Evans, Slievemore, Achill Is., Co. Mayo (I.27), June, 1937, D.B.B.

Mastigophora Woodsii (Hook) Nees, Croaghaun Mt., Achill Is., Co. Mayo (I.27), June, 1937, D.B.B.

Ptilidium ciliare (L.) Hampe, forma *inundatum* Schiffn., in marsh, Fountains Fell (64), Oct., 1937, F.E.M.

P. pulcherrimum (Web.) Hampe, Dipton, Corbridge on-Tyne, Northumberland (67), July, 1937, E.M.L.

Trichocolea tomentella (Ehrh.) Dum., on black swampy soil on edges of streamlets in woods, Winford Eagle, Dorset (9), June, 1936, E.W.J.

Diplophyllum albicans (L.) Dum., with *perianth*, Barrowford, S. Lancs. (59), Sept., 1937, A. Tu.

Scapania gracilis (Lindb.) Kaal., St. Laurent-sur-Sevre, Vendée (France), Oct., 1936, J.C. ; Grey Tor, Dartmoor (3), May, 1937, E.A. ; var. *laxifolia* Carr, Drummond Hill, Fortingal, mid-Perth (88), July, 1937, E.C.W.

S. aspera Bernet., chalk downs near Plumpton, E. Sussex (14), Feb., 1908, W.E.N. ; Bundoran, Co. Donegal (I.34*), June, 1937, E.A.

S. ornithopodioides (With.) Pears., Glen Nevis (97), July, 1923, W.E.N.

S. uliginosa (Swartz) Dum., Anafjallet, Harjedalen (Sweden), 1934, C.S. ; Lodsallen, Harjedalen (Sweden), 1937, C.S.

S. irrigua (Nees) Dum., Videseter, 4,000 ft. (Norway), July, July, 1936, E.A.

Radula Carringtoni Jack., Torc Mt., Killarney (I.2), Aug., 1935, F.E.M.

Pleurozia purpurea (Lightf.) Lindb., Slievemore, Achill Is. (I. 27), June, 1937, D.B.B.

Madotheca laevigata (Schrad.) Dum., Erne Valley, Donegal (I.34*), June, 1937, E.A. ; Anuglen in Tysnes (Norway), June, 1937, P.S. ; Oberösterreich (Austria), July, 1937, leg. et det. J.F.

M. Thuja (Dicks.) Dum., rocks near the sea, Lizard, Cornwall (1), Dec., 1934, W.E.N.

M. platyphylla (L.) Dum., lane near Headley, Hants. (12*), Mar., 1937, E.C.W.

Cololejeunea calcarea (Lib.) Schiffn., on limestone boulder in subalpine wood, Stockhorn (Switzerland), July, 1935, E.W.J.

Lejeunea Holtii Spruce, wet sandstone rocks in deep shade, Killarney (I.2), Sept., 1936, P.W.R. ; Torc Mt., Killarney (I.2), Aug., 1935, J.B.D. and F.E.M.

L. cavifolia (Ehrh.) Lindb., by stream, Worth Forest, E. Sussex (14), April, 1937, E.C.W. ; Brandstone Wood, Cumberland (70), Sept., 1937, A. Tu. "This is *L. patens* Lindb.," F.E.M.

L. planiuscula Lindb. emend. Buch., Hoyle's Mouth near Tenby, Pembrokeshire (45), Oct., 1937, H.H.K.

Marchesinia Mackaii (Hook) Gray, Hoyle's Mouth, near Tenby, Pembrokeshire (45), Oct., 1937, H.H.K. ; rocks, Erne Valley, Co. Donegal (I. 34*), June, 1937, E.A.

Frullania fragilifolia Tayl., tree, Eggerness, Garliestown, Wigtown (74), April, 1937, E.C.W.

Anthoceros punctatus (L.) Fields, Breuil-Chaussee, Deux-Sevres (France), Feb., 1936, J.C.

NON-EUROPEAN.

Lepidozia spinosissima Hitt., rain forest, Auckland, North Island, New Zealand, 1934, leg. L. B. Moore, com. F.V.

Trichocolea lanata, rain forest, Auckland, North Island, New Zealand, 1934, leg. L. B. Moore, com. F.V.

CENSUS CATALOGUES.

List of additional V.C. Records since the issue of the Report for 1936.

MOSSES.

Oligotrichum hercynicum Lam., Muckanaght, Twelve Bens (I. 16), 1933, P.W.M.R. ; var. *laxum* Braithw., Beinn a Bhuid (92), July, 1934, E.C.W.

Polytrichum aloides Hedw., Kylemore (I.16), 1933, P.W.M.R.

Pleuridium subulatum Rab., Mynydd Mays (41), Jan., 1935, A. E. Wade.

Ditrichum flexicaule Hampe, near Fleam Dyke (29), 1932 ; var. *densum* B. and S., Devil's Dyke (29), 1929, P.W.M.R.

Seligeria Doniana C.M., Cross Fell (70), Sept., 1937, T.H.B.B.

S. acutifolia var. *longiseta* Lindb., Cross Fell (70), Sept., 1937 ; Apes Tor, Manifold Valley (39), Oct., 1937 ; Clints Crag, Weardale (66), Oct., 1937, T.H.B.B.

S. calcarea B. and S., Benbradach (I.40), Sept., 1937, J.D.H.

Brachyodus trichodes Fuernr., Inishgore (I.40), June, 1937, W.R.M.

Rhabdoweisia denticulata B. and S., Inishgore (I.40), June, 1937, W.R.M.

Dichodontium pellucidum var. *fagimontanum* Brid., Crossfell (70), April, 1936, E.C.W.

D. flavescens Lindb., Kylemore (I.16), 1933, P.W.M.R.

Blindia acuta var. *trichodes* Braithw., Inishgore (I.40), May, 1937, J.D.H.

Campylopus flexuosus Brid., Heath Wood, Gamlingay (29), 1930, P.W.M.R.

C. pyriformis Brid., Heath Wood, Gamlingay (29), 1930, P.W.M.R.

Dicranum Bonjeani De Not., Kilrea (I.40), July, 1937, J.D.H.

D. scoparium var. *orthophyllum* Brid., Gamlingay (29), 1929, P.W.M.R.

Fissidens incurvus Starke, Over Wood (29), 1932, P.W.M.R.

F. Curnowii Mitt., Muckanaght, Twelve Bens (I.16), 1933, P.W.M.R. ; St. Kilda (110), 1931, leg. C. O. Petch.

F. crassipes Wils., St. John's College, Cambridge (29), 1928. Now extinct in this locality but I have seen it elsewhere in the county, P.W.M.R.

Grimmia apocarpa var. *rivularis* W. & M., Stradreagh (I.40), April, 1937, J.D.H.

Campylostelium saxicola B. et S., Inishgore (I.40), June, 1937, W.R.M.

Acaulon muticum C.M., Jordans (24), 1930, P.W.M.R.

Pottia viridifolia Mitt., Portstewart (I.40), Jan., 1937, W.R.M.

Tortula ambigua Ångstr., Ballasalla, I. of Man (71), Mar., 1937, T.H.B.B.

T. aloides De Not., Benbradach (I.40), Sept., 1937, J.D.H.

T. mutica Lindb., Castledawson (I.40), June, 1937, W.R.M.

T. laevipila Schwaeg., Straffan (I.19), Oct., 1937, J.S.T.

Barbula tophacea Mitt., King's College, Cambridge (29), 1928, P.W.M.R.

B. rigidula Mitt., Roy Bridge (97), July, 1936, E.M.L.

B. cylindrica Schp., Newton Stewart (74), April, 1937, E.C.W. and E.M.L.

B. sinuosa Braithw., Bourne Brook, Grantchester (29), 1929, P.W.M.R.

Weisia rupestris C.M., Ness Glen (I.40), Aug., 1937, J.D.H.

W. curvirostris var. *scabra* Lindb., Yew Cozar Scar, Arneliffe (64), Aug., 1937, T.H.B.B.

W. verticillata Brid., Witley (17), Jan., 1913, Ll. J. Cocks ; Raasay Is. (104), Aug., 1937, K. Blackburn.

Cinclidotus Brebissoni Husn., Cookham (22), 1931, P.W.M.R.

Encalypta streptocarpa Hedw., Kirkcowan (74), April, 1937, E.C.W. and E.M.L.

Orthotrichum cupulatum Hoffm., Bossington (5), April, 1936, W.W. per E.C.W.

O. affine var. *rivale* Wils., Roy Bridge (97), July, 1936, E.M.L.

O. rivulare Turn., Castledawson (I.40), June, 1937, W.R.M.

O. stramineum Hornsch., Glen Nevis (97), July, 1936, E.C.W.

Funaria ericetorum Dixon, Kilrea (I.40), May, 1937, J.D.H. ; Felbridge (17), Nov., 1910, Ll. J. Cocks.

Amblyodon dealbatus P. Beauv., Magilligan Sandhills (I.40), Aug., 1937, W.R.M.

Philonotis capillaris Lindb., Esher (17), Oct., 1909, Ll. J. Cocks.

Webera acuminata Schp., Muckanaght, Twelve Bens (I.16), 1933, P.W.M.R.

W. nutans var. *longiseta* B. and S., Kirkcowan (74), April, 1937, E.C.W. and E.M.L.

W. albicans Schp., Kirkcowan (74), April, 1937, E.C.W. and E.M.L.

Bryum neodamense Itzigs., Magilligan (I.40), Aug., 1937, W.R.M.

B. murale Wils., Goytre (35), April, 1936, A.E. Wade.

B. alpinum var. *viride* Husn., Grey Tor, Dartmoor (3), May, 1937, E.A.

Neckera pumila Hedw., Glen Nevis (97), July, 1936, E.C.W.

Homalia trichomanoides B. and S., Straffan (I.19), Oct., 1937, J.S.T.

Pterogonium gracile Swartz, Bultth Wells (42), June, 1936, A. E. Wade.

Heterocladium heteropterum var. *fallax* Milde, Derrycunihy Woods, Killarney (I.1), 1936, P.W.M.R.

H. Macounii Best, Rosthwaite (70), Aug., 1937, F.E.M.

Pseudoleskea patens Limpr., Coire Lis (97), July, 1936, E.C.W.

Cylindrothecium concinnum Schp., Gog Magog Hills (29), 1932, P.W.M.R. Correction: In last Report—Hall Dale, North Hope (39), should read: Stanhope, Hall Dale (39,) Nov., 1936, T.H.B.B.

Orthothecium intricatum B. and S., Muckanaght, Twelve Bens (I.16), 1933, P.W.M.R.

Brachythecium glareosum B. and S., Over Wood (29), 1932, P.W.M.R.

B. salebrosum B. and S., Dernford Fen (29), 1929, P.W.M.R.

B. rivulare var. *latifolium* Husn., Ben Nevis (97), July, 1936, E.C.W.

B. glaciale B. and S., Aonach Beag (97), July, 1937, c.fr., E.C.W.

Eurhynchium piliferum B. and S., Monks Wood (31), 1930, P.W.M.R.

E. speciosum Schp., Wicken Fen (29), 1929, P.W.M.R.

E. Swartzii Hobk. var. *rigidum* Boul., Buckden, Wharfedale (64), May, 1937, A.Tu.

E. curvisetum Husn., Cosford (17), Mar., 1937, E.C.W.

E. myosuroides var. *brachythecioides* Dixon, Ben Nevis (97), July, 1936, E.C.W.

E. myurum Dixon, Over Wood (29), 1932, P.W.M.R.

E. murale var. *julaceum* B. and S., Boro Green (16), May, 1936, E.C.W.

E. megapolitanum Milde, Frithsden Beeches, near Berkhamstead Common (20), Nov., 1937, C.A.C.

Plagiothecium elegans Sull., Kirkcowan (74), April, 1937, E.C.W. and E.M.L.

P. elegans var. *collinum* Wils., Ben Nevis (97), July, 1936, E.C.W.

P. sylvaticum B. and S., Monk's Wood (31), 1930, P.W.M.R.

Hypnum riparium var. *longifolium* Schp., near Caxton Gibbet (29), leg. T. G. Tutin and E. F. Warbury, 1930.

H. elodes Spruce, Greywell Marsh (12), June, 1936, E.C.W.

H. uncinatum Hedw., Esher (17), Nov., 1908, Ll. J. Cocks.

H. falcatum var. *gracilescens* Schp., Cwm Llwech, Brecon (42), July, 1926, A. E. Wade.

H. falcatum Brid. var. *virescens* Schp., Slaggyford (67), May, 1936, E.M.L. and E.C.W.

H. cupressiforme var. *minus* Wils., Ness Glen (I.40), Aug., 1937, J.H.D. ; var. *tectorum* Brid., near Fleam Dyke (29), 1932, P.W.M.R. ; var. *elatum* B. and S., Shipton Bellinger (12), Aug., 1936, E.C.W. ; Pendine Sandhills (44), April, 1937, L.B.C.T. ; Widdybank Fell (66), July, 1937, E.M.L.

H. hamulosum B. et S., Stob Ban (97), July, 1936, E.C.W.

Hylocomium rugosum De Not., near Fordham (29), 1930, P.W.M.R.

Sphagnum molluscum Bruch., St. Kilda (110), 1931, leg. C.A. Petch, det. W.R.S.

S. Camusii Card. var. *pyrenaicum* Warnst., between Chesterfield and Baslow (57), 1923, leg. P.W.R., det. W.R.S.

S. medium Limpr., wood by Upper Lake, Killarney (I.2), 1936, P.W.M.R.

HEPATICS.

List of additional V.C. records since the issue of the Report for 1936.

Riccia Warnstorffii Limpr. in Warnst., Reigate Heath (17), Sept., 1931, A.M.S. et E.C.W.

R. fluitans L., Goring (23), 1937, H. J. Riddelsdell, per H.H.K.

Targionia hypophylla L., Churt (17), April, 1937, E.C.W.

Conocephalum conicum (L.) Dum., Headley, Liphook (12), 1937, E.C.W. ; near Bourne End (24), 1931, P.W.M.R.

Marchantia polymorpha L., forma *aquatica* Nees, Abinger (17), Feb., 1936, E.C.W.

Aneura pinguis (L.) Dum., forma *angustior* Hook., Forge Valley (62), 1937, W.W.

Aneura multifida (L.) Dum. Delete (33), fide H.H.K.

Metzgeria furcata (L.) Dum., Selborne (12), 1937, E.C.W.; also var. *fruticulosa* (Dicks.) Lindb., Selborne (12), 1937, E.C.W.

M. conjugata Lindb., Lough Fee (I.16), 1933, P.W.M.R.

Pellia epiphylla (L.) Corda, Weaver's Down (12), 1937, E.C.W.

P. Fabbrioniana Raddi, Liphook (12), 1937, E.C.W.; var. *lorea* Nees, Water-break-its-neck (43), 1937 W.W.

Fossombronia Wondraczeki (Corda) Dum., Roudsea Wood (69b), 1937, P.W.M.R.

F. Dumortieri (Hüb. et Genth.) Lindb., near Letterfrack (I.16), 1933, P.W.M.R.; wet moors, Kirkby (54), G.H.A.

Alicularia Geoscyphus De Not. forma *suberecta* Lindb., Pont Aberglaslyn (49), Aug., 1931, E.C.W.

Gymnocolea inflata (Huds.) Dum. var. *heterostypa* (Carr. et Spruce) K. Müll. Delete (35), fide H.H.K.

Lophozia turbinata (Raddi) Steph., Checkenden (23), 1937, W.W.

L. badensis (Gottsche) Schiffn., Downhill (I. 40), J.D.H. per W.R.M.

L. bantriensis (Hook.) Steph., Glenade (I. 29), 1937, W.W.

L. bicrenata (Schmid.) Dum., Princetown (3), 1937, W.W.

L. lycopodioides (Wallr.) Cogn., Lochnagar (92), July 1935, E.C.W.

Plagiochila asplenioides (L.) Dum. var. *minor* Lindenb., Effingham (17), L. J. Cocks, sp. in Herb. F.R., per E.C.W.; Brecon (42), 1937, W.W.

Leptoscyphus Taylori (Hook.) Mitt., Brecon (42), 1937, W.W.

Lophocolea bidentata (L.) Dum., Headley (12), Mar., 1937, E.C.W.

L. heterophylla (Schrad.) Dum., Bramshott (12), Mar., 1937, E.C.W.

Harpanthus scutatus (Web. et Mohr) Spruce, Haresland Linn (67), 1937, E.M.L. per J.B.D.

Cephalozia bicuspidata (L.) Dum., forma *conferta* Hüben, Clandon (17), Mar., 1935, E.C.W.

C. ambigua Massal, Ben a Bhuid (92), 1934, also Corrie Etchachan (92), 1935, E.C.W.

C. macrostachya Kaal., Thursley (17), Mar., 1936, E.C.W.

C. leucantha Spruce, Kettlebury Hill (17), Apr., 1937, E.C.W.

C. Francisci (Hook.) Dum., East Burnham Common (24), 1931, P.W.M.R.

Cephaloziella Starkii (Funck) Schiffn., (20), 1937, Prof. Salisbury per W.W.

C. Hampeana (Nees) Schiffn., Haddon Down (5), 1937, W.W.; Lakenheath (26), Dr. Watt, det. W.W.; Skipwith (61), W.W.

C. integerrima (Lindb.) Warnst., Lakenheath (26), Dr. Watt, per W.W.

C. myriantha (Lindb.) Schiffn., Esher (17), Mar., 1935, E.C.W.

C. striatula (Jens.) Douin, East Burnham Common (24), 1931, P.W.M.R.

Eremonotus myriocarpus (Carr.) Pears., (42), 1937, E.W.J., per H.H.K.

Odontoschisma denudatum (Nees) Dum., Gors Goch, Glan-Teifi (46), Sept., 1937, H.H.K.

Calypogeia fissa (L.) Raddi, (20), 1937, Prof. Salisbury, per W.W.

C. arguta Nees et Mont., Hook (12), June, 1936, E.C.W.

Lepidozia reptans (L.) Dum., Headley (12), Mar., 1937, E.C.W.; (20), 1937, Prof. Salisbury, per W.W.; wood 5-6 miles N. of Reading (23), 1937, W.W.

Blepharostoma trichophyllum (L.) Dum., Glenade (L.29), 1937, W.W.

Ptilidium ciliare (L.) Hampe, Weaver's Down (12), Mar., 1937, E.C.W.

P. pulcherrimum (Web.) Hampe, Deerleap Wood (17), Apr., 1937, E.C.W.

Diplophyllum albicans (L.) Dum., Fritton Lake (25), May, 1937, Arthur Mayfield, per A.W.

D. obtusifolium (Hook.) Dum., Whimble (43), 1937, W.W.

Scapania gracilis (Lindb.) Kaal. var *laxifolia* Carr., Cwm-y-Glo (49), W.W.

S. nemorosa (L.) Dum., Stodham near Lyss (12), Aug., 1937, E.C.W.

S. ornithopodioides (With.) Pears., Mackanaght (I.16), 1933, P.W.M.R.

Scapania dentata Dum., (20), 1937, Prof. Salisbury, per W.W.; var. *ambigua* De Not., Dugort (I.27), W.W.; Cairn Taggart (92), July, 1935, E.C.W.

S. irrigua (Nees) Dum., (20), 1937, Prof. Salisbury, per W.W.

S. curta (Mart.) Dum., Newlands Corner (17), Mar., 1911, L. J. Cocks, sp. in Herb. F.R., per E.C.W.; (20), 1937, Prof. Salisbury, per W.W.

S. umbrosa (Schrad.) Dum., Barrowford (59), 1937, A.T.

S. apiculata Spruce, var. *Jonesii* (Schiffn. MS.) Nicholson, Cromagloun, Killarney (I.2), Aug., 1935, D.A. Jones and F.E.M. (see Journ. Bot. Jan. 1938).

Radula complanata (L.) Dum., Oakhangar (12), June, 1937, E.C.W.

Madotheca laevigata (Schrad.) Dum., var. *Killarneysis* Pears., Lydford (3), 1937, H.H.K. et W.W.

M. Thuja (Dicks.) Dum., Fort William (97), 1937, E.C.W.

M. platyphylla (L.) Dum., Headley (12), Mar., 1937, E.C.W.

Cololejeunea Rossettiana (Massal.) Schiffn., Crosby Gill (69), June, 1937, A.W.

Lejeunea cavifolia (Ehrh.) Lindb., Buch emend., (5), 1937, W.W.

L. planiuscula (Lindb.), Buch emend., (5), W.W.; Derry-cunihy Woods (I.1), 1936, P.W.M.R.; Glengariff (I.3), 1936, P.W.M.R.; Eggerness (74), Apr., 1937, E.C.W.

L. patens Lindb., Glen Callater (92), July, 1934, E.C.W.

Marchesinia Mackaii (Hook.) Gray, near Inverarnan (99), W.W.; Loch Sween (101), 1934, P.W.M.R.

Jubula Hutchinsiae (Hook.) Dum., by the river Wye (34), 1937, E.W.J., per H.H.K.

Frullania dilatata (L.) Dum., Liphook (12), E.C.W.

RECENT BRYOLOGICAL PUBLICATIONS.

An asterisk (*) denotes that a copy of the work has been presented
to the Library.

- ALLORGE, P.—Analyse bryologique de matelas. *Rev. Bryol. et Lichénol.* Tome X., Fasc. 1-3 (1937) 1938, p. 93. (Moss stuffing of a mattress).
- AMANN, J.—Notice sur trois muscinées de la flore valaisanne. *Bull. Murithienne* LII., 1934/35, pp. 40-44.
- AMANN, J.—Paul Culmann (1860-1936). *Rev. Bryol. et Lichénol.*, Tome X., fasc. 1-3 (1937) 1938, pp. 5-7, with photograph.
- APINIS, A. & LACIS, L.—Data on the ecology of bryophytes. II. Acidity of the substrata of musci. *Acta Horti Botan. Univ. Latviensis* IX./X., (1934/35) 1936, pp. 1-100, figs. 5. (In English ; summary in Lettish).
- BARTRAM, E. B.—Bornean mosses, principally from Mount Kinabalu. *Philippine Jour. Sci.*, LXI., 1936, pp. 235-250, Pl. I.
Review. vide POTIER de la VARDE, R. (infra.).
- CAIN, S. A.—*Syrrhopodon texanus* Sull. in Long Island. *Bryologist* XXXIX., No. 5, 1936, p. 118.
- DIXON, H. N.—*Notulae Bryologicae* I. *Jour. Bot.* LXXV., May, 1937, pp. 121-132.
Review of :—GROUT, A. J. (*Moss Flora*, infra.). *Jour. Bot.* LXXV., 1937, p. 333.
On a new *Index Bryologicus*. *Annales Bryologici*, IX., 1936 (July, 1937), p. 1-2.
Index Bryologicus. *Rev. Bryol. et Lichénol.*, Tome X., fasc. 1-3 (1937) 1938, pp. 8-10.
On a collection of Mosses from Laos. *Annales Bryologici* IX., 1936 (July, 1937), pp. 61-72. (11 spp. nov.) (French Indo-China).
Review. vide POTIER de la VARDE, R. (infra.).
Bryophyta Nova (26-29). *Annales Bryologici* IX., 1936 (July, 1937), pp. 139-141.
Review. vide POTIER de la VARDE, R. (infra.).

- *DIXON, H. N. and BARTRAM, E.B.—S. Berggren's New Zealand Mosses. Bot. Notiser N:r 28, Lund 1937, pp. 63-84, figs. 7.
Review. vide POTIER de la VARDE (infra.).
- DIXON, H. N. and SHERRIN, W. R.—On a small collection of mosses from New Guinea, with a revision of the genus *Spiridens*. Annales Bryologici, X., 1937 (1938), pp. 16-19.
- DOUIN, R.—Sur la position systématique du genre *Hedwigia*. Rev. Gén. Bot., XLV., 1933, pp. 89-91.
- FISCHER, J.—Zur Verbreitungsökologie von *Splachnum sphaericum* (L. fil.) Swartz. Beih. Botan. Centralbl., Abt. A., LV., 1936, pp. 122-144, figs. 3.
- FLEISCHER, M. (decd.).—Bryophyta Nova. Annales Bryologici, IX., 1936 (July, 1937), p. 140.
Review. vide POTIER de la VARDE, R. (infra.).
- FLOWERS, S.—Review of :—GROUT, A. J. (*Musci Perfecti* and *Musci Pleurocarpi*, infra.). Bryologist XL., 1937, pp. 64-66.
A card index of the files of the Bryologist. Bryologist XL., 1937, p. 113. (Mosses.)
- FRYE, T. C.—Polytrichaceae in GROUT, A. J., Moss Flora (infra.).
- GAUME, R.—Une mousse nouvelle pour le département de Seine-et-Oise : *Sematophyllum demissum* (Wils.) Mitt. Conférence Sav., Litt. et Artist. Départ. Seine-et-Oise, 12e Session 1934, C.R. des Travaux, 1935, p. 57-58.
Review. vide ALLORGE, P. (infra.).
- GRETER, P. E.—Die Laubmoose des oberen Engelberger Tales. Diss. Stifsdruckerei Engelberg, Freiburg i Schweiz, 1936, pp. iv. and 312, figs. 7, map 1.
Review. vide ALLORGE, P. (infra.).
- GROUT, A. J.—Notes on the North American species of the genus *Fissidens* Hedw. Rev. Bryol. et Lichénol., Tome IX., Fasc. 3-4, 1936, pp. 173-175.
Moss Flora of North America North of Mexico, Vol. I., part 2, pp. 63-135, Pls. XXXIX-LXVIII, published Aug., 1937, by author.
Review. vide DIXON, H. N. (supra).
Some notable extensions of range of North American mosses. Bryologist XL., 1937, p. 12.
Marshall Avery Howe, 1867-1936. Bryologist XL., 1937, pp. 33-36, with photograph.

- *GYÖRFFY, Barnabas.—Fejlődéstani vizsgálatok a *Catharinaea Haussknechtii*-N. (Contributions to the development of *Catharinaea Haussknechtii*). *Folia Cryptogamica* Vol. II., 1935 (1936), pp. 62-103, Pls. II.-V. (In Magyar; summary in English.)
- *GYÖRFFY, I.—Ueber die Entdeckung der *Paludella squarrosa* in der Zips. *Folia Cryptogamica*, Vol. II., 1935 (1936), pp. 105-120, Pl. I., fig. 1, map 1. (Zips = Szepes, Czechoslovakia).
- *Ein neuer Bürger der Mooswelt von Pieniny und der Hohen-Tatra: *Catharinaea Haussknechtii* (Jur. and Milde) Broth. *Folia Cryptogamica* Vol. II., 1935 (1936), p. 122.
- HESSELBO, A.—Mosses collected on the fifth Thule Expedition. Report of the fifth Thule Expedition, 1921-1924. The Danish Expedition to Arctic North America in charge of Knud Rasmussen. Ph.D.II., 1935, Nr. 2, pp. 1-17.
- HILLIER, L.—Les Fissidens dans la chaîne du Jura et zones limitrophes. *Rev. Bryol. et Lichénol.*, Tome IX., Fasc. 3-4, (1936) 1937, pp. 210-222.
- À propos de *Platygyrium repens* (Brid.) Br. eur. *Rev. Bryol. et Lichénol.*, Tome X., Fasc. 1-3, (1937) 1938, p. 92-93.
- Notules bryologiques. Sur deux mousses peu répandues dans l'Est de la France. *Bull. Soc. Etude Sc. Nat. Haute-Marne*, XIV., 1934, pp. 780-785. (*Platygyrium repens* and *Pleuridium nitidum*.)
- IKENBERRY, G. J.—The relation of hydrogen-ion concentration to the growth and distribution of mosses. *Amer. Jour. Bot.*, XXIII., 1936, pp. 271-279, fig. 1.
- KABIERSCH, W.—Studien über die ostasiatischen Arten einiger Laubmoosfamilien II. (*Rhizogoniaceae*, *Bartramiaceae*, *Aulacomniaceae*, *Meeseaceae*). *Hedwigia*, LXXVII., Hft. 2/3, Oct., 1937, pp. 71-136, figs. 40.
- KOCH, W.—Ueber einige Wassermoos-Gesellschaften der Linth. *Ber. Schweiz. Bot. Ges.*, XLVI., (Festband Rübel) 1936, pp. 355-364.
- Review. vide ALLORGE, P. (infra.).
- LADYZHENSKAIA, K. I. (? = LADYZENSKY, C.).—Note on the family Mniaceae from Khibini. *Acta Inst. Bot. Acad. Sci. U.S.S.R.*, Ser. 2, 1936, pp. 579-587, figs. 3. (In Russian, summary in English.)

- LANGRAND, E.—Contribution à la flore du Nord de la France. *Le Monde des Plantes*, 36e année, 1935, p. 12.
Review. vide ANONYMOUS (infra).
- *LEE, J. R.—The moss-flora of tree trunks. *North Western Naturalist*, (Buncle & Co., Arbroath), Mch. 1937, pp. 11-26, figs. 8.
- LIPMAN, C. B.—The tolerance of liquid air temperatures by dry moss protonema. *Bull. Torr. Bot. Club* LXIII, 1936, pp. 515-518, fig. 1.
- LUBLINER, K.—Die Laubmoose. Warsaw. *Mianowskiego* 1935, pp. 95, figs. 12, Pls. IV. (In Polish.)
- LUISIER, A.—Recherches bryologiques récentes à Madère, 2e Serie. *Broteria Cienc. Nat. VI.*, 33, 1937, pp. 88-95, fig. 1.
Review. vide POTIER de la VARDE, R. (infra.).
- McKAY, E.—Photosynthesis in *Grimmia montana*. *Plant Physiology X.*, 1935, pp. 805-809, fig. 1.
- *MEGAW, W. R.—Irish moss records. *The Irish Naturalists' Journal*, VI., Mch., 1937, p. 196.
- MEUSEL, H.—(vide B.B.S. Report for 1936, p. 374). Summary. *Annales Bryologici*, IX., 1936 (July, 1937), pp. 157-160, figs. 5.
- MEYLAN, C.—Le grand Gemslager de Valleta dans le Parc National. *Jahresber. d. Naturf. Ges. Graubündens*, LXXII., 1933-34, pp. 4.
Review. vide ANONYMOUS, (infra.). (Desmatodon *Wilczekii* Meyl. inter alia).
Encore le *Leskea catenulata* Brid. *Rev. Bryol. et Lichénol.* Tome X., Fasc. 1-3, (1937) 1938, pp. 30-36.
- MILLER, C.—Male plant of *Polytrichadelphus Lyallii*. *Bryologist XL.*, 1937, pp. 87-89, Pl. I.
- MOXLEY, E. A.—Bryological notes from Owen Sound and Bruce Peninsula. *Bryologist XL.*, 1937, p. 89-90. (Ontario, Canada.)
- MOXLEY, G. L.—*Orthotrichum* sp., Yes, but which? *Bryologist XL.*, 1937, p. 113-114. (*O. rupestre*, *O. affine*, or *O. Bolanderi*.)
- MOYLE, J. B.—Notes on Minnesota aquatic bryophytes. *Bryologist XL.*, 1937, pp. 114-116.
- NICHOLS, G. E.—*Polytrichum* and *Pogonatum* species of the Eastern United States. *Bryologist XL.*, 1937, pp. 1-10.

- POTIER de la VARDE, R.—Herborisations dans la region de Bocaranga (Oubangui). *Rev. Bryol. et Lichénol.*, Tome IX., Fasc. 3-4, pp. 194-209, figs. 7, (1936) 1937.
- Mousses du Gabon. *Mem. Soc. Nat. des Sc. Nat. et Math. Cherbourg*, XLII, pp. 1-270, figs. 69. (French Equatorial Africa.)
- ROBERTS, Edith A. and HARING, Inez M.—The water relations of the cell walls of certain mosses as a determining factor in their distribution. *Annales Bryologici* X., (1937) 1938, pp. 97-114, figs. 4, tables 4.
- ROIVAINEN, H.—Bryological investigations in Tierra del Fuego, with diagnoses of many new species by E. B. Bartram. *Ann. Bot. Soc. Zool.-Bot. Fennicae, Vanamo* IX., pp. 58, figs. 16, Helsinki 1937.
- Review. vide POTIER de la VARDE, (infra.).
- SAKURAI, K.—Beobachtungen über Japanische Moosflora. XII. *Bot. Mag. Tokyo L.*, 1936, pp. 618-624, figs. 6.
- SAVICZ, L. I.—Les mousses de l'archipel François-Joseph, Severnaia Zemlia île Wiese, récoltées par V. P. Savicz durant l'expédition polaire de 1930 sur le brise-glace "G. Sedov." *Acta Inst. Bot. Acad. U.S.S.R.* 2, ser. III., 1936, pp. 505-578, map 1. (In Russian ; summary in French.)
- SCHWARZENBACH, M. E.—On heterospory in *Macromitrium* (? title). *Verh. Schweiz. naturf. Gesellsch.*, Solthurn, 1936, p. 310-311.
- Review. vide ANONYMOUS (infra.).
- SHIMOTOMAI, N. u. KIMURA, K.—Geschlechtschromosomen bei zwei Laubmoosen. *Zeit. indukt. Abstamm.-u. Vererblehre* LXXII., 1936, pp. 307-312, figs. 7.
- Geschlechtschromosomen bei Laubmoosen. *Bot. Mag. Tokyo* XLVIII., 1935, pp. 629-635, figs. 7.
- SÖDERBERG, I. och SANDBERG, C.—Bidrag till kännedomen om Södra Väster-Götlands mossflora. *Svensk Botan. Tidskr.*, XXX., 1936, pp. 193-213.
- *STEERE, W. C.—Mosses of the G. Allan Hancock Expedition of 1934, collected by Wm. R. Taylor. *The Hancock Pacific Expeditions*, Vol. III., No. 1, 1936, pp. 1-12, Pl. I. Univ. South. Calif. Press, Los Angeles, California.
- Review. vide POTIER de la VARDE, R. (infra.).
- Calymperaceae in GROUT, A. J. *Moss Flora* (supra).

- Mosses of British Honduras and the Department of Peten, Guatemala. II. *Annales Bryologici* X., (1937) 1938, pp. 115-123, figs. 7.
- STEFUREAC, T. I.—Cateva consideratiuni fitogeografice asupra muschiului *Buxbaumia aphylla* L. din regiunea alpina a Carpatilor Bucovinei. (Quelques remarques phytogéographiques sur *Buxbaumia aphylla* L. trouvé dans l'étage alpin des Carpathes de Bucovine.) *Bull. Fac. St. Cernauti* X., 1936, pp. 291-300.
Review. vide ALLORGE, P. (infra.).
- TARNAVASCHI, J. T.—Beitrag zur Ökologie und Phytosoziologie der *Buxbaumia indusiata* Bridel, sowie zur Verbreitung von *Buxbaumia aphylla* L. und *Buxbaumia indusiata* Bridel in Rumänien. *Bull. Fac. Stiinte Cernauti* X., 1936, pp. 282-290, figs. 2. (In German ; summary in Roumanian.).
- THÉRIOT, J.—Quelques formes nouvelles de mousses de l'Argentine. vide BAUER, E. (Serie 46, supra.).
Additions à la flore bryologique de la Colombie. *Rev. Bryol. et Lichénol.*, Tome X., Fasc. 1-3, (1937) 1938, pp. 11-18 figs. 7.
Mousses de l'Ile-de-Pâques. *Rev. Bryol. et Lichénol.*, Tome X., Fasc. 1-3, (1937) 1938, pp. 74-77, figs. 2.
Quelques nouveautés pour la flore bryologique du Sud-Amérique. *Ann. Crypt. Exot.*, VIII., 1936, pp. 135-139, fig. 1.
Review. vide POTIER de la VARDE (infra.).
- WICKES, M. L.—Another *Syrrhopodon* on Long Island, New York. *Bryologist* XL., 1937, p. 71. (*S. floridanus*.)
- YANG, C. Y.—An enumeration of moss-flora in Chihli Province. *Sci. Rep. Nation. Tsing Hua Univ.*, Ser. B., II., 1936, pp. 111-135.

HEPATICIS.

- ALLEN, C. E.—The chromosomes of *Sphaerocarpus cristatus*. *Bot. Gazette* XCVII., 1936, pp. 846-953, figs. 21.
- BUCH, H.—Musciniées récoltées dans le Nord-Ouest de la Péninsule Ibérique 15 juin - 1er octobre 1930. Hépatiques (fin.) *Rev. Bryol. et Lichénol.*, Tome X., Fasc. 1-3, (1937) 1938, pp. 47-54.

- BUCH, H., EVANS, A. W. and VERDOORN, Fr.—A preliminary check list of the Hepaticae of Europe and America (North of Mexico). *Annales Bryologici* X., (1937) 1938, pp. 3-8.
- CASTLE, H.—A revision of the Genus *Radula*. Introduction and Part I. Subgenus *Cladoradula*. *Annales Bryologici* IX., 1936 (July, 1937), pp. 13-56, figs. 15.
- CHALAUD, G.—Hépatiques de la Haute-Ariège (suite). *Rev. Bryol. et Lichénol.*, Tome IX., Fasc. 3-4, (1936) 1937, pp. 223-228, Pl. I.
- Effet des doses toxiques de deux sels métalliques sur la germination des propagules de *Lunularia cruciata*. *Annales Bryologici*, IX., 1936 (1937), pp. 57-60, figs. 9.
- CHALAUD, G. et BOUSQUET, E.—Sur la biologie de quelques hépatiques des Pyrénées calcaires. *Rev. Bryol. et Lichénol.*, Tome X., Fasc. 1-3, (1937) 1938, pp. 55-63.
- CHAVAN, A. R.—A new species of *Cyathodium* from India. *Bryologist* XL., 1937, pp. 57-60, Pl. I. (*C. Barodae* Chavan sp. nov.)
- CLARK, L. and FRYE, T. C.—Extension of ranges among North-Western hepaticae. *Bryologist* XL., 1937, pp. 13-16.
- CORDA, A. J. C.—Genera Hepaticarum. (Facsimile copy of original.) *Annales Bryologici* X., (1937) 1938, pp. 7.
- DEGENKOLBE, W.—Brutorgane bei beblätterten Lebermoosen. *Annales Bryologici* X., (1937) 1938, pp. 43-96, figs. 112.
- EIFRIG, H.—Monographische Studien über die indomalayischen Arten von *Taxilejeunea*. *Annales Bryologici* IX., 1936 (July, 1937), pp. 73-114, figs. 15.
- EVANS, A. W.—A history of the genus *Pallavicinia*. *Bryologist* XL., 1937, pp. 25-33.
- The structure of the capsule wall in certain species of *Riccardia*. *Annales Bryologici* X., (1937) 1938, pp. 20-35, figs. 6.
- A history of the genus *Nardia* and *Plectocolea*. *Annales Bryologici* X., (1937) 1938, pp. 36-42.
- FULFORD, M.—Some hepaticae from Washington, Oregon and Idaho, collected by Dr. Arthur Svihla. *Bryologist* XXXIX., No. 5, 1936, pp. 105-111.
- *GYÖRFFY, I.—Durch hormonale Einflüsse hervorgerufene Abänderungen bei *Preissia commutata* Nees. *Biologia Generalis* Bd. XIII., 1937 (Wien u. Leipzig), pp. 482-503, Pls. VII.-X.

- HERZOG, Th.—Studien über Drepanolejeunea III. *Annales Bryologici* IX., 1936 (July, 1937), pp. 113-130, figs. 12.
 Neue Hepaticae aus Südamerika. *Broteria, Ciencias Nat.* VI., 33, 1937, pp. 17-23, figs. 4.
 Review. vide ALLORGE, P. (infra.).
- HORIKAWA, Y.—Monographia hepaticarum Australi-Japonicarum. *Jour. Sci. Hiroshima Univ., Ser. B, II.*, 1936, pp. 101-325, figs. 62. Pls. XII.
- KOEHLER, M.—Zweiter Beitrag zur Lebermoosflora des Kassler Gebietes. *Rep. Spec. Nov. Regn. Veget. Beih. XCII.*, 1936, pp. 136-150.
- *LEE, J. R.—A rare Scottish liverwort, *Jubula Hutchinsiae* Dum. *Trans. Glasgow & Andersonian Nat. Hist. & Mic. Soc.*, Oct., 1934, pp. 50-60.
- LUISIER, A.—Recherches bryologiques récentes à Madère, 2e. série. *Broteria Cienc. nat.* VI., 33, 1937, pp. 88-95, fig. 1.
 Review. vide POTIER de la VARDE, R. (infra.).
- NICHOLSON, W. E.—A new *Scapania* from Ireland. *Jour. Bot.* LXXVI., Jan., 1938, pp. 15-17, figs. 5. (*S. apiculata* Spruce var. nov. *Jonesii* (Schiffner MS.)).
- PARKER, D.—Some liverworts from Indiana. *Bryologist* XL., 1937, p. 79-80.
- SCHADE, A.—Nachträge zum Standortsverzeichnis der Lebermoose Sachsens nebst einigen kritischen Bemerkungen. *Sitzungs- u. Abh. Naturwiss. Ges. Isis, Dresden* (1935) 1936, pp. 18-86, fig. 1.
- TATUNO, S.—Geschlechtschromosomen bei einigen Lebermoosen. *Jour. Sci. Hiroshima Univ. Ser. B. 3*, 1936, pp. 1-9, figs. 22.
 Ditto, V. Geschlechtschromosomen bei einigen *Frullania*-Arten. *Bot. Mag. Tokyo L*, 1936, pp. 526-531, figs. 15.
 Heterochromosomen bei Lebermoosen II., Über die Chromosomen einiger Arten von Lebermoosen, mit besonderer Berücksichtigung ihrer Heterochromosomen. *Ibid.* pp. 341-347, figs. 24. (In Japanese; summary in German).
- *VERDOORN, Fr.—On some new collections of Asiatic and Oceanic *Jubuleae* (De *Frullaniaceis* XVIII.). *Blumea, Suppl. I.*, (J. J. Smith Jubilee Vol.), 29/6/37, pp. 210-213.
- WEBER, F.—Doppelbrechung der Chloroplasten von *Anthoceros*. *Protoplasma* XXVI., 1936, pp. 312-314, figs. 3.
- *WIGGLESWORTH, G.—South African species of *Riella*, including an account of the developmental stages of three of the

species. Extr. Linn. Soc. Jour.-Botany, Vol. LI., No. 339, 10, Dec. 1937, pp. 309-332, figs. 58. (3 spp. nov.).

WOLCOTT, G. B.—Cytological studies on the Hepaticae. I. Somatic mitosis in *Pallavicinia Lyellii*. Amer. Jour. Bot. XXIV., 1937, figs. 12.

SPHAGNA.

ABERG, G.—Untersuchungen über die Sphagnum-Arten der Gruppe Subsecunda in Europa. Mit besonderer Berücksichtigung ihres Auftretens in Schweden. Arkiv. f. Botanik XXIX., A, 1937, pp. 11-77, figs. 14, Pls. II., Maps 7.

Review. vide ALLORGE, P. (infra.).

ANDREWS, A. le Roy.—Notes on the Warnstorf Sphagnum Herbarium I. Annales Bryologici IX., 1936 (July, 1937), pp. 3-12.

A new Sphagnum from New Guinea. Bryologist XL., 1937, pp. 36-38, Pl. I. (*S. e fibrillosum* Andrews sp. nov.).

BLOMQUIST, H. L.—Mosses of North Carolina, I. Sphagnales. Bryologist XL., 1937, pp. 67-71.

DURHAM, Jane R.—Observations on the branch leaves of Sphagnum. Bryologist XL., 1937, pp. 17-20, figs. 8.

HÉE, A.—Sphaignes récoltées dans les Vosges. Bull. Ass. Philomathique Alsace et Lorraine, VIII., 1936, pp. 193-199.

SAVICZ, L.—Sphagnovye (torphianye) mkhi evropeiskoi tchasti. (Sphagnales partis Europae U.S.S.R.), édité par l'Acad. des. Sci. de l'U.S.S.R., Vol. I., in 8vo ; pp. 103, figs. 18, 1936, Moscow & Leningrad. (In Russian).
Review. vide ALLORGE, P. (infra.).

Sphagnovye mkhi basseinov Anadyria i Penjinskoi guby. (Sphaignes du bassin de l'Anadyr et du golfe de Penja.). Bull. Sect. Extrême Orient Acad. Sc. U.S.S.R., 1936, pp. 101-107. (In Russian ; summary in German).

*SHERRIN, W. R.—Census Catalogue of British Sphagna. British Bryological Society, 1937, pp. 13. (Price 6d.).

WILLIAMS, K. T. and THOMPSON, T. G.—Experiments on the effects of Sphagnum on the pH of salt solution. Intern. Rev. f. ges. Hydrobiol., XXXIII., 1936, pp. 271-275.

ZEROW, D. K.—Die Torfmoose des Kaukasus. Jour. Inst. Bot. Acad. Ukraine IV., 1935, pp. 25-43. (In Ukrainian; summary in English).

Review. vide ALLORGE, P. (infra.).

Zur Frage nach der Zeit und den Verhältnissen der Sphagnum-Versumpfung der nordwestlichen Ukraine. Jour. Inst. Bot. Acad. Sci. Ukraine, IV., 1936, pp. 137-149, figs. 7.

BRYOPHYTES.

ALLORGE, P.—Reviews of :—DIXON, H. N. (Borneo moss flora, 1935 list); MALTA, N. (Monographic work, infra.); POTIER de la VARDE, R. (Luisierella, 1936 list); GAUME, R. (Sematophyllum, supra.); KOCH, W. (Wassermoos-Gesn., supra.); MAHEU, J. et GUERIN, H. P. (infra.). Rev. Bryol. et Lichénol., Tome IX., Fasc. 3-4, 1936 (1937), pp. 229-233.

Reviews of :—ABERG, G. (supra.); HORIKAWA, Y. (Monographia, 1935 list); SAVICZ, L. (Sphagnales, supra.); ZODDA, J. (1935 list); STEFUREAC, T. I. (supra.); ZEROW, D. (Caucasus sphagna, supra.); GRETER, P. F. (supra.); RICHARDS, P. W. (Azores bryophytes, infra.). Rev. Bryol. et Lichénol., Tome X., Fasc. 1-3, 1937 (1938), pp. 97-109.

Riella, Fissidens polyphyllus und serrulatus, Hyocomium flagellare. Die Pflanzenareale, 3e Reihe, H. 5, pp. 45-51, Jena 1932.

ANONYMOUS.—Reviews of :—BARTRAM, E. B. (Polynesian mosses, 1934 list); DIXON, H. N. (Siam moss flora, 1935 list) (Bryophyt. Nippon, 1936 list), (Congo mosses, 1936 list); MEYLAN, C. (Tortula Mairei, 1936 list); MÖLLER, Hj. (Grimmiaceae II., 1933 list); THÉRIOT, J. (Central Asian Expedn.); TUOMIKOSKI, R. (Mnium spp., 1936 list); BIZOT, M. (Dijon bryophytes, infra.); LANGRAND, E. (N. France mosses, supra.); LID, J. (Crop contents, 1933 list); MEYLAN, C. (Valleta mosses, supra.). Rev. Bryol. et Lichénol., Tome IX., Fasc. 3-4, 1936 (1937), pp. 229-233.

Review of :—Annales Bryologici IX., 1936 (July, 1937). Jour. Bot. LXXV., Oct., 1937, p. 302.

Review of :—SCHWARZENBACH, M. E. (supra.). Annales Bryologici IX., 1936 (July, 1937), p. 156-157.

- ARMITAGE, E.—Some Spitsbergen mosses. *Bryologist* XL., 1937, pp. 74-78. (Includes hepatics).
- The British Bryological Society. *Bryologist* XL., 1937, pp. 85-87. (Ingleton Meeting, Aug., 1934).
- BIZOT, M.—Muscinées récoltées pendant la Session extraordinaire de la Société Botanique de France à Dijon (1932). *Bull. Soc. Bot. Fr.*, LXXIX., 1932, pp. 821-829.
Review. vide ANONYMOUS (supra.).
- BROTHERUS, V. P., OKAMURA, K. und ZAHLBRUCKNER, A.—Materialien zu einer Flora der Kryptogamenpflanzen des fernen Ostens. *Acta Instit. Botan. Acad. Sci., U.S.S.R. Ser. III.*, 3, 1936, pp. 589-596. (In Russian; summary in German).
- BROWN, M. S.—Mosses from Syria. *Bryologist* XL., 1937, p. 84-85. (Includes hepatics).
- *CHRISTOPHERSEN, E.—Plants of Tristan da Cunha; with the co-operation of Carl Christensen, H. N. Dixon and Bernt Lyngé. *Scientific Results of the Norwegian Antarctic Expeditions, 1927-1928, et seq.*, No. 16, Oslo, 1937, pp. 19. (Hepaticae on p. 14, Musci on p. 15).
- CONARD, H. S.—British bryologists at Killarney. *Bryologist* XL., 1937, pp. 45-47.
- COURCELLE, R.—Relevés d'herborisations dans la Mayenne en 1934-1936. *Bull. Mayenne Sciences*, 1936, pp. 85-93. (19 bryophytes mentioned).
- DÖPP, W. u. A.—Reviews of recent Research: Bericht über einige neuere karyologische Arbeiten an Moosen. *Annales Bryologici* IX., 1936 (July, 1937), pp. 142-152. (Contains long bibliography).
- FLOWERS, S.—The bryophytes of Utah. *Bryologist*, XXXIX., No. 5, 1936, pp. 97-104.
- von GAISBERG, E. und MAYER, A.—Waldmoose, 2 Aufl., Stuttgart. *Württemb. Forstl. Versuchsanst.*, 1936, pp. ix. & 36, Pls. XXXVI.
- GARDET, G. et BIZOT, M.—Simple aperçu sur les associations bryologiques des environs des Eaux-Bonnes (Basses-Pyrénées). *Bull. Soc. Etude Sc. Nat. Haute-Marne*, 1934, XIV., pp. 765-780.
- GRAHAM, E. H.—Notes on some mosses from the Uinta basin, Utah. *Bryologist* XL., 1937, pp. 40-45. (Includes sphagna).

- GRIMME, A.—Die Torf-und Laubmoose des Hessischen Berglandes. Rep. Spec. Nov. Regn. Veget. Beih. XCII., 1936, pp. 1-135.
- GUILLAUMOT, l'Abbé.—Mousses du Val de Peisey nouvelles ou rares pour la France. Rev. Bryol. et Lichénol., Tome X., Fasc. 1-3, (1937) 1938, p. 94. (Mosses & Hepatics).
- HAYREN, E.—Moosfunde 1936 von der Insel Oesel und einigen Nachbarinseln. Mem. Soc. pro Fau. et Fl. Fennica XII., 1935-1936-1937, pp. 89-193. (Islands opposite Estonia).
- HOLLERMEYER, A.—Una excursion botanica à la Cordillera de Lonquimay. Rev. Chil Hist. Nat. XL., 1936, pp. 132-138.
- HORIKAWA, Y.—Symbolae florae bryophytae Orientali-Asiae et Micronesiae VIII. Botan. Mag. Tokyo L., 1936, pp. 201-206, figs. 7.
- Ditto IX. Ibid., pp. 380-385, figs. 3.
- Ditto X. Ibid, pp. 556-561, figs. 3.
- Contributions to the bryological flora of Eastern Asia. Jour. Japan. Bot. XII., 1936, pp. 666-671, figs. 12.
- *JONES, E. W.—The vegetation of Grimsey, Iceland. Jour. Ecology, XXV., No. 1, Feb., 1937, pp. 222-253, 1 map and 5 photographs. (Includes bryophytes).
- JOVET, P.—Review of:—JUDAY, C. (infra.). Rev. Bryol. et Lichénol., Tome IX., Fasc. 3-4, 1936 (1937), p. 232-233.
- JUDAY, C.—The depth distribution of aquatic plants. Ecology, XV., 1934, p. 325.
- Review. vide JOVET, P. (supra.).
- KNOBLOCH, I. W. and BLEEKMAN, W. H.—Bryophytes of Western New York and vicinity—I. Bryologist XL., 1937, pp. 61-63.
- KUJALA, V.—Über die Vegetationsgrenze von Mittel- und Nordfinnland. Communicationes Inst. Forestalis Fennicae XXII., 4, 1936, pp. 95. (In Finnish ; summary in German).
- LÄMMERMAYR, L.—Notizen zur Flora über Gips, Dolomit, Phyllit und Magnesit in Steiermark. Mitt. Naturw. Ver. Steiermark LXXII., (1935) 1936, pp. 27-38.
- LITTLE, E. L. (Jr.).—Bryophytes of the Jornada Experimental Range, New Mexico. Bryologist XL., 1937, pp. 81-83. (Musci and hepaticae).
- McFARLIN, J. B.—Mosses of Polk county, Florida. Bryologist XL., 1937, pp. 49-57. (Includes sphagna).
- MÄGDEFRAU, K.—Der Wasserhaushalt der Moose. Annales Bryologici X., (1937) 1938, pp. 141-150.

- MAHEU, J. et GUÉRIN, H. P.—Influence de la lumière électrique sur la flore cavenicole. *Bull. Soc. Bot. France*, LXXXII., 1935, pp. 477-494, figs. 51.
Review. vide ALLORGE, P. (supra.).
- MALTA, N.—Monographic work in Bryology. *Proc. 6th Intern. Congress Bot.*, Vol. I., 1936, pp. 318-320.
Review. vide ALLORGE, P. (supra.).
- NICHOLS, G. E. and STEERE, W. C.—Notes on Michigan bryophytes.-III. *Bryologist* XXXIX., No. 5, 1936, pp. 111-118.
- PAPP, C.—Despre vegetatia briofita din padurile sud-vestice Dobrogenie. Sur la végétation muscinale des forêts du sud-ouest de la Dobrogenie. *Bull. Grad. Bot. Univ. Cluj.*, XV., 1935, pp. 131-144.
- POTIER de la VARDE, R.—Reviews of:—BARTRAM, E. B. (Fiji mosses, 1936 list); Bornean mosses, supra); DIXON, H. N. (Laos mosses; Bryophyta nova, supra.); DIXON, H. N. and BARTRAM, E. B. (supra.); FLEISCHER, M. (supra.); LUISIER, A. (Madère, mousses, supra.) ROIVAINEN, H. (supra.), STEERE, W. C. (Hancock Expedn., supra.; Kewenaw bryophytes, infra.); THÉRIOT, J. (Chili Fl. bry., infra.; Reliquiae, 1936 list). *Rev. Bryol. et Lichénol.*, Tome X., Fasc. 1-3, (1937) 1938, pp. 98-104.
- REGEL, K.—Fontes Florae Lituanae IV. *Mem. Fac. Sci. Univ. Vyt. le Grand* XI., 1936, pp. 47-81.
- REIMERS, H.—Eine interessante Flechten- und Moosgesellschaft auf Zechsteingyps am Südrand des Kyffhäuser. *Verh. Bot. Ver. Prov. Brandenb.* LXXVII., 1937, pp. 121-130.
- *RICHARDS, P. W.—A collection of bryophytes from the Azores. *Annales Bryologici*, IX., 1937, pp. 131-138. (Musci, Hepaticae and Sphagna).
Review. vide ALLORGE, P. (supra.).
- SAVICZ, L.—Bryologitcheskaia poezdka na Novuiu Zemliu letom 1935 goda. (Excursion bryologique en Nouvelle Zemble pendant l'été 1935). *Sovetskaia Botanika* 1936, pp. 135-141.
- *SCHUMACHER, A.—Floristisch-soziologische Beobachtungen in Hochmooren des südlichen Schwarzwaldes. *Beiträge zur nat. Forschung in Südwestdeutschland*, Bd. II., Hft. 2, 1937, pp. 221-283, 1 map and 6 photographs. (Mosses, hepatics and sphagna).

STÅLFELT, M. G.—Über die Beziehung zwischen den Assimila—
tions- und Atmungsgrössen. Svensk Bot. Tidskr. Bd.
XXX., 1936.

Der Gasaustausch der Moose. Planta Bd. XXVII., 1937.

Die Bedeutung der Vegetation im Wasserhaushalt des Bodens.
Svenska Skogsvårdsföreningens Tidskr. Bd. XXXV., 1937.

(Author's summary of above three works in Ann. Bryol., X.,
(1937) 1938, p. 158-159.

*STEERE, W. C.—Critical bryophytes from the Keweenaw Penin—
sula, Michigan. Rhodora XXXIX., Jan.-Feb., 1937, pp.
1-46, figs. 6.

Review. vide POTIER de la VARDE, R. (supra).

STEFUREAC, T. I.—Consideratiuni asupra vegetatiei si florei
muschilor (Bryophytelor) din Valea Vijnicioarei (Bucov—
ina). (Considérations sur la flore et la végétation muscin—
ale de la vallée de Vijnicioara (Bucovine)). Bull. Fac.
St. Cernati X., 1936, pp. 301-344, figs. 3, map 1, photo—
graphs 3.

THÉRIOT, J.—Contribution à la flore bryologique du Chili (XIIe.
article). Revista Chilena Hist. Nat. XXXIX., 1935, pp.
16-21, Pl. I.

Review. vide POTIER de la VARDE (supra).

VERDOORN, Fr.—On some recent contributions to Japanese
bryology (Editorial). Annales Bryologici X., (1937) 1938,
p. 1-2.

WACHTER, W. H.—C. M. van der Sande Lacoste (1815-1887).
Annales Bryologici X., (1937) 1938, pp. 131-140, with
portrait.

WALLACE, E. C.—Bryophytes of West Inverness. Jour. Bot.
LXXV., Dec., 1937, pp. 352-355. (Mosses, hepatics and
sphagna in Ben Nevis massif.)

*WATSON, W.—The bryophytes and lichens of British Woods.
Jour. Ecol. XXIV., 1, Feb., 1936, pp. 139-161.

*Ditto II., Ibid, XXIV., 1936, pp. 446-478.

ZIEGENSPECK, H.—Inwieweit sind die Sphagnen und andere
Moose befähigt im Leben ihre Umgebung auf ein bestimm—
tes pH-Optimum einzustellen. Bot. Archiv XXXVIII.,
1936, pp. 1-15.

EXSICCATI.

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- ALLORGE, V. et P.—Bryotheca iberica, 4e série, Portugal, Nos. 151-200, déc. 1935, Rev. Bryol. et Lichénol., Tome X., Fasc. 1-3, (1937) 1938, p. 116.
- *BAUER, E.—Musci europaei et americani exsiccati. Schedae und Bemerkungen zur 44 Serie, Nos. 2151-2200, Nov., 1932.
- *Ditto, 45 Serie, Nos. 2201-2250, July, 1934.
- *Ditto, 46 Serie, Nos. 2251-2300, Nov., 1936.
- GROUT, A. J.—North American Musci Perfecti, Nos. 301-325, and North American Musci Pleurocarpi Supplement Nos. 47-59.
- Review. vide FLOWERS, S. (supra).
- VERDOORN, Fr.—Hepaticae selectae et criticae Series IX. (1936 et Series X. (1937) and Musci selecti et critici Series III. (1936) et Series IV. (1937). Annales Bryologici X., (1937) 1938, pp. 124-130, figs. 2.
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I should like to thank all those who have helped me in compiling this list of works ; also all those who have so generously presented copies of recent works to the Library.

Once more I would mention how unsatisfactory it is to obtain the first intimation of a British work from a list in one of the Continental reviews. When one has not got access to a large scientific library it is quite impossible to see all those periodicals which occasionally publish bryological matter. Perhaps, therefore, authors will so far overcome their natural modesty as to send me early information of new works. I shall be most grateful.

(Signed) LESLIE B. C. TROTTER.

30th March, 1938.

TELARANEA NEMATODES IN IRELAND.

By P. W. RICHARDS.

Telaranea nematodes (Gottsche) Howe, is the only species of a genus allied to *Lepidozia* (perhaps merely a subgenus of it), which was discovered for the first time in Europe by Dr. Hans Buch of Helsingfors, growing in scattered stems among mosses collected at Waterville in Kerry (V.C. I.1) by Dr. F. Verdoorn in 1935. On receiving the news last October the writer of this note re-examined what he had previously thought to be an abnormal form of *Blepharostoma trichophyllum* (L. Dum., collected in 1936 at Derrycunihy Wood near Killarney (also I.1); this also proved to be *Telaranea*.

Dr. Buch will shortly give an account of his striking discovery in "Annales Bryologici," but the following short description may be of use to members of the B.B.S. :—

In small, diffuse, light green patches, *somewhat glistening*. Stems to c. 15 mm long, more or less pinnately branched, with a central strand of narrow cells surrounded by a *cortex of very large cells*. Leaves rather distant on the main stem, closer on the branches, divided to the base into 2-3 *segments* of not more than 7 cells; base of segments usually of 2 cells, the rest a single row of cells, bases of segments connate for only part of their length. Segments spreading, lightly incurved: cells *very large*, but variable in size, the sub-basal about 25-35 μ by 75 μ or more. Underleaves like the lateral leaves, but smaller, 2-, rarely 3-fid. Monoicous. Female inflorescence on short postical branches; the bracts larger than the leaves, deeply divided into several segments. Perianth cylindrical-fusiform, terete below, trigonous above, scarcely contracted at mouth, ciliate, cilia about *half as long as the rest of the perianth*. Androecia on lateral branches, occupying the whole or part of a branch, male bracts more or less similar to the leaves.

Telaranea can be distinguished from *Blepharostoma* in the field by its peculiar glistening appearance (probably due to the larger size of the cells) and under the microscope it is known by the leaves divided into 2-3 (not 3-4) segments, the much larger leaf cells, the segments consisting of fewer cells, the differently shaped and more longly ciliate perianth. The

Killarney plant, which has perianths and antheridia, differs slightly from specimens collected by the writer in British Guiana and determined by Prof. A. W. Evans, but does not seem to be specifically distinct.

Telaranea has previously been known only from tropical America northwards to Bermuda and from tropical Africa. At Derrycunihy Wood it grew on peat in shade associated with *Sphagnum* and *Calypogeia Trichomanis*. As it is easily overlooked it may well prove to have a fairly wide distribution in Ireland.

Since writing the above I have heard that *Telaranea* has been found by Prof. Allorge at San Sebastian in N. Spain.

OBITUARY.

GEORGE BROOKE SAVERY (1874-1937).

The passing of Mr. G. B. Savery must cause keen regret among our members.

His association with our Society goes back to 1910 or perhaps earlier and though most of his collecting had to be done by proxy, he contributed much useful and interesting material and his specimens were always good and worthy of preservation.

For many years he has done exacting and most useful work as one of our Referees in a most thorough and painstaking manner.

Born and educated in Yorkshire and trained for the profession of a civil engineer, an illness and serious operation at the age of 20 prevented him from pursuing this vocation and very seriously handicapped him for life.

In addition to his bryological studies he was also keenly interested in and helped with many local causes in the parish of Silverton, Devonshire, the beautiful countryside where he lived for so many years.

Devoted also to his garden he found pleasure and recreation in raising hybrid daffodils and tulips.

A distinguished visitor to the garden was the late Sir Austen Chamberlain, who came to see the tulips with Sir Francis Ackland, an old friend of Savery's.

His last illness was of some months' duration and he died peacefully 23rd November, 1937.

Always kindly and helpful to his correspondents and a keen student at the microscope we have lost in him a most loyal and devoted member.

**List of Books on Mosses and Hepatics in the
Library of the British Bryological Society.**

Mosses—

- Braithwaite.—British Moss Flora, (3 vols.), 1887.
Cardot et Desmier.—Monographs,—Fontinalis, 1892,
Philonotis, 1908.
Dixon.—Handbook of British Mosses, second edition.
Douin.—Des Mousses et des Hepatiques.
Horrell.—European Sphagnaceae, 1901.
Renauld.—Harpidium, 1894.
Schimper.—Synopsis Muscorum Eur., 1876.

Hepatics—

- Boulay.—Hepatics, 1904.
Cooke.—British Hepatics, 1894.
Du Mortier.—Hepatics, 1874.
Ekart.—Synopsis Jungermannia, 1832.
Lett.—Hepatics of the British Isles, 1902.
Macvicar.—Handbook of British Hepatics, 1912.
Maller.—Die Lebermoose (2 vols.,) 1906-11.