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of the British Bryological Society
for 1934.**

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LIST OF MEMBERS, 1934.

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- Rev. H. G. Jameson, M.A. (Oxon.), Gartymore, Park Rise, Leatherhead, Surrey.
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Ordinary Members :—

- Mr. J. H. Albrecht, 24, Dornton Road, London, S.W.12.
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 Miss Margaret S. Brown, 36, Kent Street, Halifax, Nova Scotia.

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- Mr. D. G. Catcheside, M.Sc., F.L.S., 2, Longton Avenue, Sydenham, S.E. 26, and Dept. of Botany, King's College, Strand, London, W.C.2.
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- Miss H. A. Chick, 45, Cricklade Avenue, Streatham Hill, London, S.W. 2.
- Miss C. A. Cooper, California Lane, Bushey Heath, Herts.
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- Mr. H. N. Dixon, M.A. (Lond. and Cantab.), F.L.S., 17, St. Matthew's Parade, Northampton.
- Mrs. Dixon, 17, St. Matthew's Parade, Northampton.
- Mr. G. M. Duncan, 72, Rubislaw Den North, Aberdeen.
- Mr. J. B. Duncan, 6, Summerhill Terrace, Berwick-on-Tweed.
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- Miss G. Freeth, B.Sc., F.R.G.S., 81, West Hill, London, S.W.15.
- Mr. A. Gepp, M.A. (Cantab.), British Museum (Nat. Hist.), Cromwell Road, London, S.W. 7.
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- Rev. R. Jackett, Ty Cerrig, Abergwili, Carmarthenshire. (Deceased, 3rd June, 1935).
- Mr. D. A. Jones, M.Sc., A.L.S., 11, Tyndall Avenue, Tyndall's Park, Bristol, 2.
- Mr. E. W. Jones, M.A., School of Forestry, University of Oxford, Oxford.

- Mrs. C. Moore Kennedy, Hotel Victoria, Palma de Mallorca, Spain.
- Mr. H. H. Knight, M.A. (Cantab.), The Lodge, All Saints Villas Road, Cheltenham.
- Miss Margaret Knox, 63, Talbot Road, Highgate, London, N.6.
- Dr. Mauno J. Kotilainen, D.Ph., Korkeavuoren, Katu 8, Helsinki (Helsingfors), Finland.
- Dr. Wm. Leach, M.A., Ph.D., Dept. of Botany, The University, Birmingham.
- Mr. J. R. Lee, 96, Finlay Drive, Dennistoun, Glasgow, E.1.
- Mr. Johannes Lid, Botanical Museum, Oslo, Norway.
- Rev. D. Lillie, M.A., B.D., North Manse, Watten, Caithness.
- Miss F. M. Loader, 5, Westbourne Mansions, Westbourne Crescent, Southampton.
- Miss E. M. Lobley, Nether Knowe, Windmill Hill, Hexham, Northumberland.
- Mr. Percy Long, Glenlea, Carisbrooke Road, Newport, Isle-of-Wight.
- Dr. N. Malta, Prof. of Botany, Alberta 10, Riga, Latvia.
- Mr. C. V. B. Marquand, M.A. (Cantab.), F.L.S., Langdale, 46, Hook Rise, Tolworth, Surrey.
- Rev. W. G. M. Martin, B.A., Glenmanus, Portrush, Ireland.
- Rev. W. R. Megaw, B.A., M.R.I.A., The Manse, Rosetta, Belfast.
- Mr. F. E. Milsom, B.Sc., Glen Lyn, Station Road, Shepley, Huddersfield.
- Dr. Hjalmar Möller, Naturhistoriska Riksmuseum, Stockholm, 50, Sweden.
- Mr. W. E. Nicholson, F.L.S., 50, St. Anne's Crescent, Lewes.
- Miss E. F. Noel, F.L.S., 37, Burnham Court, London, W.2.
- Miss D. Powell, M.Sc., F.L.S., Aldersyde, Reigate, Surrey.
- Prof. J. H. Priestley, D.S.O., B.Sc., F.L.S., The University, Leeds.
- Rev. Dr. P. G. M. Rhodes, D.D., M.A. (Cantab.), F.L.S., St. Mary's, Evesham, Worcs. (Deceased, December, 1934).
- Mr. P. W. M. Richards, Trinity College, Cambridge.
- Mr. F. Rilstone, Lambourne Hill, Callestick, S.O., Cornwall.
- Miss Ida M. Roper, F.L.S., 176, Chessell Street, Ashton Gate, Bristol (3). (Deceased, 8th June, 1934).
- Dr. S. P. Rowlands, M.B., B.S. (Lond.), 42a Beckett Road, Doncaster.
- Mrs. Saunders, St. Ann's, Wray Park Road, Reigate, Surrey.

- Miss A. Muriel Saunders, St. Ann's, Wray Park Road, Reigate, Surrey.
- Mr. G. B. Savery, Silvertown, Exeter.
- Miss L. I. Scott, M.Sc., Lyddon Hall, Leeds.
- Herr Albert Schumacher, Waldbröl, Rheinland, Germany.
- Mr. W. R. Sherrin, A.L.S., South London Botanical Institute, 323, Norwood Road, London, S.E. 24.
- Miss K. E. Smith, The Quarry, Lutterworth Road, Nuneaton.
- Mr. F. A. Sowter, Ashstead, North Avenue, Leicester.
- Capt. Carl Stenholm, Södra Vägen, 24, Göteborg, Sweden.
- Mr. E. H. Stevens, B.A., Haw House, Rothbury, Morpeth, Northumberland.
- Miss E. H. Stevenson, B.Sc., Training College, The Close, Salisbury.
- Mr. A. Thompson, 15, Bannercross Drive, Sheffield.
- Mr. Francis W. Thorrington, Sunnymead, Little Baddow, Chelmsford.
- Mr. W. G. Travis, 9, Barton Road, Liverpool.
- Dr. L. B. C. Trotter, M.D. (Cantab.), Rossway, Ledbury, Herefordshire.
- Mrs. Trotter, Rossway, Ledbury, Herefordshire.
- Mr. Arthur Turner, 140, Pine Street, Nelson, Lancashire.
- Colonel A. R. Uggla, F.L.S., 18, Sturegatan, Stockholm, Sweden.
- Dr. Fr. Verdoorn, P.O. Box 8, Leiden, Holland.
- Mr. E. C. Wallace, Springfield, 2, Strathearn Road, Sutton, Surrey.
- Dr. Walter Watson, D.Sc. (Lond.), A.L.S., Cedene, Cheddon Road, Taunton.
- Mr. W. C. R. Watson, Rosedale, 245, Southlands Road, Bickley, Kent.
- Miss M. Weightman, M.Sc., 13, Alexandra Road, Waterloo, Liverpool.
- Mrs. A. White, 140, Station Road, Hendon, N.W.4.
- Miss G. Wigglesworth, M.Sc., The Manchester Museum, Victoria University, Manchester.
- Mr. A. Wilson, F.L.S., F.R.Met.S., Tir-y-coed, Roe Wen, Conway, North Wales.
- Mr. William Young, J.P., F.B.S.Ed., Fairview, Kirkcaldy, Fifeshire.

NEW MEMBERS, 1935.

Mr. H. Britten, The Nursery, Crescent Avenue, Whitby, Yorks.

Mr. Temple Clayton, 209, Dryden Road, Ithaca, New York,
U.S.A.

Miss A. M. Irwin, Bayhead, Portballingtree, Bushmills, N.
Ireland.

Mr. J. Mackenzie Lamb, B.Sc., British Museum (Nat. History),
Cromwell Road, London, S.W.7.

Mr. Alan H. Norkett, 26, Beechcroft, New Malden, Surrey.

Mr. Wm. C. Steere, Dept. of Botany, University of Michigan,
Ann Arbor, U.S.A.

Mr. Per Störmer, Bot. Museum, Oslo, Norway.

**MOSESSES AND HEPATICS SENT FOR
DISTRIBUTION, 1934—1935.**

	<i>Sphagna</i>	<i>True Mosses</i>	<i>Hep-atics</i>	<i>Total</i>
Mr. G. H. Allison	69	79	4	152
Miss E. Armitage	24	20	23	67
Mr. E. B. Bartram (U.S.A.)	—	62	—	62
Mr. C. M. Bedford	1	25	—	26
Mr. W. Bellerby	—	56	—	56
Rev. C. H. Binstead	—	30	—	30
Dr. A. Boros (Hungary)	—	140	—	140
Mr. D. B. Bradshaw	—	12	—	12
Miss K. Breien (Norway)	—	90	—	90
Miss M. S. Brown (Nova Scotia)	—	30	16	46
Mr. W. H. Burrell	—	85	—	85
Mons. J. Charrier (France)	42	140	82	264
Miss C. A. Cooper	—	30	—	30
Mr. H. N. Dixon	—	139	—	139
Mr. J. B. Duncan	—	275	55	330
Dr. A. J. Grout (U.S.A.)	12	81	—	93
Mr. D. A. Jones	—	95	52	147
Mr. E. W. Jones	—	92	20	112
Mr. H. H. Knight	—	16	9	25
Mr. J. R. Lee	—	20	14	34
Mr. J. Lid (Norway)	—	86	23	109
Miss E. M. Lobley	70	103	42	215
Herr L. Loeske (Germany)	—	84	—	84
Rev. W. R. Megaw	—	23	—	23
Dr. Hj. Möller (Sweden)	—	325	—	325
Mr. W. E. Nicholson	—	50	80	130
Mr. F. Rilstone	—	18	—	18
Herr A. Schumacher (Germany)	—	215	84	299
Captain C. Stenholm (Sweden)	—	90	33	123
Mr. E. H. Stevens	—	39	—	39
Mr. P. Störmer (Norway)	—	39	—	39
Mr. W. G. Travis	—	29	11	40
Dr. L. B. C. Trotter	—	64	—	64
Mr. A. Turner	—	34	17	51
Colonel A. R. Uggla (Sweden)	—	64	—	64
Dr. Fr. Verdoorn (Holland)	—	—	545	545

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				<i>True</i>	<i>Hep-</i>	<i>Total</i>
				<i>Sphagna</i>	<i>Mosses</i>	<i>atics</i>
Mr. E. C. Wallace	—	160	115	275
Dr. W. Watson	—	79	—	79
Mrs. A. White	....	....	—	32	—	32
Mr. A. Wilson	....	....	—	26	22	48
Mr. W. Young	....	....	—	255	93	348
				218	3,332	1,340
						4,890

REFEREES.

Mosses :—

Sphagnaceae :—

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

True Mosses :—

Andreaeaceae to Grimmiaceae	....	Mr. SAVERY.
Tortulaceae to Timmiaceae,	....	Dr. WATSON.
Schistostegaceae to Leskeaceae	....	Mr. JONES.
Hypnaceae, except Harpidia	....	Mr. J. B. DUNCAN.
Harpidia and North American Mosses	....	Mr. SHERRIN.
European Mosses	....	Mr. NICHOLSON.
Non-European (except North American Mosses) and Referee-in-Chief	....	Mr. DIXON.

Hepatics :—

British and European	....	Mr. MILSOM.
		(<i>pro. tem.</i>)
Non-European and Referee-in-Chief	....	Mr. NICHOLSON.

REPORT OF SECRETARY.

In presenting the Thirteenth Annual Report it is gratifying to mention that the Society is flourishing and much interest is taken in all its transactions.

It is with much regret that the deaths of four of our valued members have to be announced—The Rev. Dr. P. G. M. Rhodes, Herr L. Loeske, Rev. R. Jackett, and Miss I. M. Roper. The Society has been deprived of the services of able members who have contributed much to its success in the past.

The Annual Meeting at Ingleborough, last August, was well attended and proved a success. The excursions were carried out in a delightful country with a very attractive bryological flora. It is hoped that members will arrange to be present at Killarney and Dingle, where the prospects will be singularly inviting.

The distribution of Mosses and Hepatics has proved successful in numbers, quality and interest. Owing to the indisposition of Mr. Knight, Mr. Milsom undertook to referee the hepatics this year, and Mr. Bedford to distribute them.

Members give their grateful thanks to the Distributors, Referees, Bibliographer and the local Secretaries for their valuable services.

Mr. Albrecht has resigned the office of Distributor of Mosses owing to pressure of other duties, but he very kindly undertook to write the report on Mosses sent in for distribution. Mr. Cheetham, a former member, assisted the local Secretaries at Ingleton, and his knowledge of the Bryophytes of the district proved invaluable. Their assistance was much appreciated.

Any gifts of books on Mosses or Hepatics, or of specimens will be gladly received on behalf of the Society by Mr. W. R. Sherrin; copies of new papers for the Bibliography by Dr. L. B. C. Trotter, and specimens of new Vice-County records by Mr. J. B. Duncan (Mosses), by Mr. A. Wilson (Hepatics), and by Mr. W. R. Sherrin (Sphagna and Harpidia).

The *Revue Bryologique* is available for members to borrow, if they write to let Mr. J. H. Albrecht know they are interested.

D. A. JONES.

11, Tyndall Avenue,
Tyndall's Park,
Bristol.

May, 1935.

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STATEMENT OF*RECEIPTS.*

Balance from last Account	£105	0	3
Subscriptions—1934	£43	5	0
,, Arrears	....	....		5	0
,, 1935 (paid before due)	....	....	8	5	0
Special Donation	....	....		15	0
				52	10
					0
Publications sold	....	....		7	0
Bank Interest	....	....		3	0
				£158	0
					3

MOSS CENSUS

Sales, 1934—per Mr. W. R. Sherrin	....	....		16	6
Balance due 31st December, 1934	....	....		5	0
				£5	17
					1

HEPATIC CENSUS

Sales, 1934—per Mr. W. R. Sherrin	....	....		11	6
Balance due 31st December, 1934	....	....		11	13
				£12	4
					9

BALANCE SHEET*LIABILITIES.*

Subscriptions, 1935—paid before due	....	....	£8	5	0
Distribution costs, 1934-35 (estimated)	....	....		5	10
Printing Report, 1934 (estimated)	....	....		27	10
Deficit on Moss Census Catalogue Account	....	....		5	0
Deficit on Hepatic Census Catalogue Account	....	....		11	13
Balance (excess of Assets over Liabilities)	....	....		57	14
				£115	13
					7

Examined and found correct—J. Y. ELDER,

Barclays Bank, Berwick-on-Tweed.

22nd January, 1935.

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ACCOUNT for 1934.

<i>EXPENSES.</i>				
Printing Report, 1933	£28 4 1
„ Circulars, etc.	19 3
Stationery	16 6
Distribution Costs, 1933-34	....	....	....	5 13 3
Secretary's Expenses	....	....	....	1 18 6
Treasurer's Expenses	....	....	....	1 8 4
Librarian's Expenses	....	....	....	2 6 2
Annual Excursion—Expenses	....	....	....	1 5 7
Balance in hand, 31st December, 1934	....	....	....	115 8 7
				£158 0 3

CATALOGUE ACCOUNT.

Balance, 31st December, 1933	....	....	....	£5 16 2½
Expenses—Postage	....	....	....	10½
				£5 17 1

CATALOGUE ACCOUNT.

Balance, 31st December, 1933	....	....	....	£12 4 1½
Expenses—Postage	....	....	....	7½
				£12 4 9

31st DECEMBER, 1934.

<i>ASSETS.</i>				
Cash in hand (General Account)	....	....	....	£115 8 7
Subscriptions in arrear (£6), estimated to produce	....	....	....	5 0
734 Copies unsold, Moss Census Catalogue, Ed. II.	.....		
313 Copies unsold, Hepatic Census Catalogue, Ed. III.	.....		
				£115 13 7

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 DISTRIBUTORS (Mosses).

The number of mosses this year is rather less than the previous year but included many species greatly needed by the Society.

There were 16 new V.C. records among the *Sphagna* and 22 among the True Mosses.

The European Non-British mosses covered more species than usual. These are always very acceptable to the Society and our thanks are due not only to our Continental members, but also to some of our home members.

The foreign material came from many scattered regions, including Java, Philippine Islands, Jamaica, China, East Indies, Burma, U.S.A., Brazil, Canada, Norway and Sweden.

The referees reported favourably on most of the plants sent in, but a few suggestions were made—(1) Members sending in species collected by others should write their own names as contributors. Some packets were sent out this year without these names, as the distributors did not notice the fact until after the lists had been sent away and so were unable to add them.

(2) *Harpidia* should be floated out in water before drying; this method makes better specimens and it is easier for the referee to identify them.

(3) Greater care might be taken in the field to collect mature specimens of *Sphagna*. It is hardly necessary to add that approved methods of preparing the specimens are described in Mr. Sherrin's Handbook, but, unfortunately, these are not always followed.

One referee writes:—"A large number of mosses was sent, many of much interest, well prepared and with very few mistakes in naming."

The Distributors wish to thank the contributors, many of whom sent in rare material which had not been formerly distributed. Mr. Watson also wishes to mention and give his appreciation of Messrs. Albrecht, Sherrin and Wallace's willing assistance given with the work of the distribution.

A. M. SAUNDERS.

WM. C. R. WATSON.

May, 1935.

REPORT OF DISTRIBUTOR (Hepatics).

The number of packets sent in for distribution this year is 1,240, contributed by 20 members, a decrease on the numbers of 1933-4.

The referee reports that in general the packets have been well prepared, correctly named and contain a good quantity of material.

Among the contributors from abroad is a large and valuable number of packets from Dr. Fr. Verdoorn, containing species from the Dutch East Indies, part of his "Exsiccata Hepaticae Selectae et Criticae." A number of packets from India was sent by Mons. Charrier. From Mr. W. E. Nicholson specimens of *Frullania Tamarisci* Nees var. *Schiffneri* Nichols., from Cornwall, together with an equal number of reprints describing his new variety, have been contributed. The above contributions, Foreign and British, are much appreciated

It would help the distributor if members would say definitely when sending in desiderata lists, whether they would like to receive *foreign* species if available.

C. M. BEDFORD.

Taunton,

May, 1935.

REPORT OF THE ANNUAL MEETING, 1934.

(Extracted from *The Journal of Botany*, May, 1935, pp. 138-9).

The Society held its Annual Meeting and Excursion at Ingleton, Yorkshire, from August 11th to 18th, 1934, President, Mr. H. H. Knight, M.A. Over thirty members and friends were present.

The first ramble explored the Limestones from Austwick, by Oxenber and Moughton, also Helwith Moss for Sphagna and Hepatics. Next day Penyghent was climbed from Horton-in-Ribblesdale, by Hull Pot and Hunt Pot, for the Carboniferous Limestone and Gritstone. Then a day up the Ingleton Glens for their fine waterfalls. The golden-brown peat water rushes down the deep narrow Limestone gorges. The way led up the River Doe, and, crossing the top of the Glen, the return was made down the River Twiss. On Wednesday the drive took us out of Yorkshire into Lancashire, through High Bentham to Hindburndale, on the Millstone Grit, among the moors, bogs, woods, and streams of Moorcock, Botton Mill and Hindburn—an interesting country. Next day Clapdale was visited from Clapham, some members returning over Ingleborough. The last outing was to the Bolton Woods on the River Wharfe. Entering the dale at the Strid Cottage, the path winds through the wooded gorge. The river flows rapidly through the deep, narrow clefts in the broad horizontal sheets of the Millstone Grit at the Strid; farther on the valley widens out till Bolton Abbey is reached. Members were greatly indebted to their Yorkshire friends, Messrs. Milsom, Burrell, and Cheetham, for guidance on the rambles.

The General Meeting was held on August 15th, when Mr. D. A. Jones, M.Sc., A.L.S., was elected to the Presidency of the Society. The West of Ireland was suggested for the meeting of 1935, probably in August.

As the Society had met at Ingleton in 1926, there were not many new records to make, but a number of interesting Bryophytes were met with, some of which are enumerated

below, those new to V.C. 60 (West Lancs.) and V.C. 64 (Mid-West Yorks.) are starred :—

Sphagna *S. Warnstorffii* (64*), *S. fallax* var. *robustum* (64*), and *S. medium* (64*) at Helwith Moss. *S. squarrosum* var. *subsquarrosum*, c.fr., *S. pulchrum* and *S. cuspidatum* var. *falcatum* (64*) at Austwick Moss. *S. obesum* var. *plumosum* (64*) Penyghent. *S. compactum*, *S. recurvum* var. *robustum* and *S. obesum* var. *canovirens* (60*) on Hindburn Moor.

True Mosses.—In Mid-west Yorkshire (64), Moughton and Oxenber :—*Pleurochaete squarrosa* (only Yorkshire station), *Thuidium delicatulum*. Penyghent :—*Encalypta rhabdocarpa*, *Myurella julacea*, *Pseudoleskea catenulata*. Ingleton Glens :—*Campylopus subulatus**, *Webera calcarea**, *Barbula ferruginascens*, *Hypnum incurvatum*. Clapdale and Ingleborough :—*Seligeria tristicha*, *Campylopus atrovirens* var. *muticus*, *Zyodon gracilis*. Bolton Abbey :—*Fissidens rufulus* c.fr., *Philonotis caespitosa**, *Orthodontium gracile*, *Plagiothecium elegans* var. *collinum*. Hindburndale, W. Lancs. (60) :—*Tetraphis Browniana*, *Catharinea crispa*, *Discelium nudum*, *Hypnum stramineum* c.fr.

Hepatics, V.C. 64. Ingleton Glens :—*Lophozia Muelleri*, *L. attenuata* forma *eflagellis*, *Plagiochila tridenticulata*, *P. asplenoides* var. *minor* forma *laxa*, *Cololejeunea calcarea* and *C. Rossettiana*, *Marchesinia Mackaii*. Bolton Abbey :—*Cephalozia media*, *Sphenolobus exsectiformis*, *Calypogeia Neesiana*. Hindburndale, W. Lancs, V.C. 60 :—*Blasia pusilla*, *Harpanthus scutatus**, *Lepidozia reptans* var. *julacea**, *Blepharostoma trichophyllum*, *Microlejeunea ulicina*.

ELEANORA ARMITAGE.

REPORT ON PLANTS SENT IN BY MEMBERS.

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

SPHAGNA.

Sphagnum fimbriatum Wils., Hodder's Comb (56), W.W., com. C.M.B.; var. *validius* Card., Kirkby-on-Bain (54), Sept., 1934, G.H.A.; New Ferry (58), July, 1924, J.A.W., com. W.G.T.

S. Russowii Warnst., var. *Girgensohnioides* Russ., Eshells Moor (67*), Oct., 1933, E.M.L.

S. Warnstorffii Russ., var. *virescens* Russ., Helwith Moss (64), Aug., 1934, E.A., det. W.R.S. "I made this *S. rubellum* Wils., but Mr. Sherrin now suggests that it is an aberrant form of *S. quinquefarium* Warnst.," G.F.H.

S. rubellum Wils., New Forest (11), Dec., 1934, F. Marshall, com. G.H.A.; var. *purpurascens* Russ., Glencoe (98*), July, 1934, E.M.L.

S. plumulosum Roll., Loch Coruisk, Skye (104), June, 1934, small tufted form, E.A.

S. compactum D.C., Hindburndale (60), Aug., 1934, E.A. "These are young plants of *S. acutifolium* Ehrh.," G.F.H.; var. *imbricatum* Warnst., Blanchland Moor (67*), May, 1934, E.M.L.

S. squarrosum Pers., var. *spectabile* Russ., Glencoe (98*), July, 1934, E.M.L.

S. teres (Schpr.) Ångstr., var. *imbricatum* Warnst., Brant Fell near Sedbergh (65), Aug., 1934, E.M.L.; Henhole, Cheviot (68*), May, 1933, E.M.L.; var. *subteres* Lindb., Eshells Moor (67*), Oct., 1934, E.M.L.

S. pulchrum (Lindb.) Warnst., Otter Ferry, Loch Fyne (98*), Aug., 1934, E.M.L.

S. recurvum P. de Beauv., var. *robustum* Breidler, Stanhope Common (66*), Aug., 1933, E.M.L.; var. *majus* Ångstr., Haxey (54), May, 1934, G.H.A.

S. cuspidatum Ehrh., var. *falcatum* Russ., Glencoe (98*), July, 1934, E.M.L.; var. *plumosum* Bryol. germ., Haxey (54), May, 1934, G.H.A.; Ben Nevis (97*), July, 1934, E.M.L.

S. obesum (Wils.) Warnst., var. *canovirens* Warnst., Haxey (54), May, 1934, G.H.A. "This is a rather poor form of var. *plumosum* Warnst.," A.Th.

S. inundatum (Russ.) Warnst., Haxey (54), May, 1934, G.H.A. "A small form of var. *lancifolium* Warnst.," A.Th.; Forêt d'Aizenay, Vendée, France, Aug., 1930, J.Ch.; Forêt de L'Absie, Deux-Sèvres, France, March, 1933, J.Ch. "Near var. *eurycladum* (Warnst.) comb. nov. Sherrin; a second gathering from the same locality is *S. auriculatum* Schimp., var. *laxifolium* Warnst.: I think mention might be made of the capital specimens Mr. Charrier has sent in," A.Th.

S. auriculatum Schimp., Haxey (54), May, 1934, G.H.A.; Loch Coruisk, Skye (104), June, 1934, E.A. "Near var. *tenellum* Warnst., but the leaves are too large," A.Th.; Forêt de Vouvant, Vendée, France, July, 1930, J.Ch. "Near var. *laxifolium* Warnst.," A.Th.

S. aquatile Warnst., Haxey (54), May, 1934, G.H.A. "A weak form," A.Th.; Forêt de Vouvant, Vendée, France, Nov., 1933, J.Ch.; Forêt de la Chaize-le-Vicomte, Vendée, France, July, 1933, J.Ch. "Near var. *remotum* Warnst.," A.Th.; Forêt de L'Absie, Deux-Sèvres, France, March, 1933, J.Ch. "One packet is *S. auriculatum* Schimp., det. W.R.S., the other is a curious form of *S. obesum* Warnst.," A.Th.; var. *intortum* Warnst., Glencoe (98*), July, 1934, E.M.L.; var. *remotum* Warnst., Ben Nevis (97*), July, 1934, E.M.L.; var. *pauperatum* Warnst., Haxey (54), May, 1934, G.H.A. "This is *S. auriculatum* Schimp.," A.Th.

S. contortum Schultz, Eshells Moor (67*), Oct., 1934, E.M.L.; Creag-an-Lochain-Lairige, Killin (88), July, 1934, E.M.L.

S. crassicladum Warnst., var. *magnifolium* Warnst., Haxey (54), May, 1934, G.H.A.; var. *intermedium* Warnst., Haxey (54), May, 1934, G.H.A. "Two gatherings: one correct, the other is *S. inundatum* (Russ.) Warnst., var. *lancifolium* Warnst.," A.Th.

S. Camusii (Card.) Warnst., Haxey (54), May, 1934, G.H.A., det. G.F.H. "I sent this to Mr. Sherrin, and he named it *S. obesum* (Wils.) Warnst., with which I agree," A.Th.

S. turgidulum Warnst., Haxey (54*), May, 1934, G.H.A.; Ben Nevis (97*), July, 1934, E.M.L., det. W.R.S.

S. cymbifolium Ehrh., Forêt de L'Absie, Deux-Sèvres, France, March, 1933, J.Ch.

S. papillosum Lindb., Dinnet Moor, S. Aberdeen (92*), Sept., 1934, E.A. "This is var. *normale* Warnst., and a new V.C. record," G.F.H.

S. strictum Sulliv., Florida, U.S.A., Mar., 1931, A.J.G., det. Dr. A. Le Roy Andrews. "I have examined one stem from each of the packets, and find they are true *S. strictum* Sulliv. On the two occasions on which I have found *S. strictum*, I have noticed that the plant, when growing, has a different appearance from that of *S. compactum* D.C., var. *squarrosum* Russ., which it most nearly resembles: the more sharply pointed leaves give it a somewhat bristly look. The stem-leaves resemble those of *S. compactum*, but are, usually, not so broad at the apex. The section of the chlorophyllose cells of the branch-leaves is very like the figures in Mr. Sherrin's book for *S. squarrosum*, p. 24, and *S. aquatile*, fig. 35, plate V., but the lumen occupies more of the space, so that the walls are rather thinner in proportion. Then, the outsides of the walls are faintly papillose, though, in these American specimens it is difficult to see it. I find that a very little stain, put into the water on the slide, helps to make this visible," A.Th.

TRUE MOSSES.

EUROPEAN (British and Continental).

Andreaea petrophila Ehrh., var. *acuminata* B. & S., Borrowdale (70), Aug., 1895, H.N.D.; Snowdon (49), July, 1888, H.N.D.; var. *gracilis* B. et S., Lodore (70), July, 1891, H.N.D.; var. *alpestris* Thed., Borrowdale (70), Aug., 1895, H.N.D.; forma *homomalla*, Helvellyn (69), July, 1891, H.N.D.

A. alpina Smith, Canisp (108), July, 1899, H.N.D.; Errigal (I.35), July, 1890, H.N.D.; Ben Lawers (88), July, 1893, H.N.D.; Ben Douran (88), July, 1898, H.N.D.; var. *compacta* Hook., Helvellyn (69), July, 1891, H.N.D.; Ben More (88), July, 1897, H.N.D.; Langdale Pike (69), July, 1891, H.N.D.; Ben Odhar (88), July, 1897, H.N.D.; Twll Du (49), July, 1888, H.N.D.

A. Rothii W. et M., c.fr., Loch Coruisk (104), June, 1934, E.A.; Moel Hebog (49), July, 1888, H.N.D.; var. *hamata* Lindb., Helvellyn (69), July, 1891, H.N.D.; var. *falcata* Lindb., Langdale (69), July, 1891, H.N.D.

A. crassinervia Bruch., Scawfell Pike (70), 1891, H.N.D.; var. *Huntii* Braithw., Scawfell Pike (70), Aug., 1895, H.N.D.

A. Blyttii B.E., Hestbrepiggen (Norway), July, 1934, K.B.

A. nivalis Hook., Cairn Toul (92), July, 1934, E.C.W.; Cairngorm (96), June, 1930, H.H.K., J.B.D., D.A.J.; Ben Nevis (97), July, 1934, E.M.L.; var. *fuscescens* Hook., Cairn Toul (92), July, 1934, E.C.W.

Tetraphis pellucida Hedw., Kirkby (54), Sept., 1934, G.H.A.

Catharinea (Atrichum) undulata W. et M., c.fr., Skaugum (Norway), Oct., 1934, P.St.; var. *minor* W. et M., Weardale (66*), April, 1934, E.M.L.

C. angustata Brid., c.fr., Kőszeg (Hungary), Nov., 1930, A. Visnya, com. A.B.

C. crispa James, Bentham (60), Aug., 1934, W.Y.; Ingleton (64), Aug., 1934, C.A.C.

Psilopilum laevigatum Lindb., c.fr., Dalvik (Iceland), July, 1934, E.W.J.

Oligotrichum hercynicum Lam., Finse (Norway), Aug., 1932, J.B.D.; Salzburg (Austria), Jan., 1908, G. Schellenberg, com. Hj.M.; var. *laxum* Braithw., Cwm Clogwyn (49), Aug., 1912, W. Ingham, J. C. Wilson, D.A.J.

Polytrichum aloides Hedw., var. *Dicksoni* Wallm., Pigdon Woods (67*), June, 1934, E.M.L.

P. sexangulare Floerke, Turtagrö ; Krosbu ; Lyngseidet (Norway), Aug., 1932, J.B.D. ; Ben Lawers (88), July, 1891, R. H. Meldrum, com. W.Y. ; Ben Nevis (97), July, 1934, E.M.L. ; Roksbøtn (Norway), Aug., 1934, J.L.

P. strictum Banks, Vastadtjern (Norway), July, 1933, P.St. ; Finse (Norway), Aug., 1932, J.B.D.

P. formosum Hedw. (*P. attenuatum* Menz.), Köszeg (Hungary), Sept., 1930, A. B. ; Somogy (Hungary), July, 1932, A.B.

Archidium alternifolium Schp. (*A. phascoides* Brid.), Forêt de l'Absie (France), March, 1933, J.Ch.

Pleuridium subulatum Rabh., La Réorthe (Vendée), April, 1933, J.Ch.

P. alternifolium Rabh., Kågeröd (Sweden), June, 1934, C.St.

Ditrichum tenuifolium Lindb., Tärnaby (Lapland), July, 1934, A.R.U.

D. zonatum Limpr., var. *scabrifolium* Dixon, Ben Nevis (97), July, 1934, E.M.L.

D. vaginans Hampe., Sligo (I.28), 1928, C.A.C.

Swartzia montana Lindb., Ingleton (64), Aug., 1934, C.A.C.

S. inclinata Ehrh., Holy Island (68), Sept., 1931, H. Tully, com. E.M.L.

Seligeria paucifolia Carruth., E. Dean (13), April, 1932, W.W.

S. recurvata B. et S., Thrum Rocks (67), June, 1933, E.H.S. ; Sutton Bank (62), Jan., 1923, W.H.B.

Brachyodus trichodes Fürnr., Dufton Gill (69), May, 1934, A.W.

Saelania caesia Lindb., Lyngseidet (Norway), Aug., 1932, J.B.D.

Rhabdoweisia crenulata Jameson, Gryfe Water (76), April, 1934, J.R.L.

Oreas Martiana Brid., Gossenau (Tirol), June, 1894, C. Trautmann, com. Hj.M.

Cynodontium polycarpum Schp., Lyngseidet (Norway), July, 1932, J.B.D. ; Södermanland (Sweden), Sept., 1934, A.R.V. ; " One packet contains only *Rhacomitrium aciculare*," G.B.S.

C. Bruntoni B. et S., Aberfoyle (87), May, 1911, J. McAndrew, com. W.Y. ; Nistertal (Rhld.), June, 1934, A.Sch.

C. gracilescens Schp., Tärnaby (Lapland), July, 1934, A.R.V.

C. Jenneri Stirt., Lyngseidet (Norway), July, 1932, J.B.D. ; Kongsvoll (Norway), Aug., 1932, J.B.D.

C. virens Schp., Lyngseidet (Norway), Aug., 1932, J.B.D. ; Ben Lawers (88), July, 1885, J. McAndrew, com. W.Y. ; Gossenau (Tirol), June, 1894, C. Trautmann, com. Hj.M. ; Oxtinderne (Norway), ——— 1934, A.R.V.

C. Wahlenbergii Ren. et Card., San Mayen (Greenland), June, 1899, P. Dahjers, com. Hj.M.

Trematodon longicollis Mchx., Ischia (Italy), May, 1868, F.C. Kiaer, com. K.B.

Dicranella cerviculata Schp., Ingleton (64), Aug., 1934, H.H.K. ; Ohligs (Rhld.), Oct., 1928, A.Sch.

D. rufescens Schp., Bentham (60), Aug., 1934, W.Y. ; Withyham (14), Oct., 1934, E.C.W.

D. Schreberi Schp., Rothbury (67), June, 1933, E.H.S.

D. squarrosa Schp., Ebbegebirge (Westphalia), Aug., 1929, A.Sch.

Dicranoweisia crispula Lindb., Finse (Norway), Aug., 1932, J.B.D. ; Lyngseidet (Norway), Aug., 1932, J.B.D. ; Duved (Sweden), July, 1933, C.St. ; Kongsvoll (Norway), Aug., 1934, A.R.U.

Campylopus flexuosus Brid., Ebbegebirge (Westphalia), Aug., 1931, A.Sch.

C. Mildei Limpr., Bellinzona (Ticino), Aug., 1930, Dr. Jäggli et L.L.

C. Shawii Wils., Adrigole (I.3), July, 1925, W.E.N.

C. setifolius Wils., Killarney (I.2), June, 1925, W.E.N.

C. atrovirens de Not., form, Loch Coruisk (104), June, 1934, E.A. ; Bellinzona (Ticino), Oct., 1934, L.L. "Very small for *C. atrovirens*," G.B.S. ; "*C. atrovirens* var. *gracilis* Dixon," H.N.D. ; var. *falcatus* Braithw., Skye (104), June, 1934, J.B.D., L.B.C.T.

C. introflexus Brid., Ischia (Italy), May, 1868, leg. F. C. Kiaer, com. K.B.

Dicranodontium longirostre Schp., Ebbegebirge (Westphalia), Aug., 1931, A.Sch. ; var. *alpinum* Milde, Ingleborough (64), Aug., 1934, J.B.D. ; also W.Y.

Dicranum fulvellum Smith, Ben Nevis (97), July, 1934, E.M.L.

D. falcatum Hedw., Ben Nevis (97), July, 1934, E.M.L.

D. schisti Lindb., (*D. Blyttii* B.E.), Brocken (Harz), July, 1911, L.L.

D. Starkei W. et M., Finse (Norway), Aug., 1932, J.B.D.

D. molle Wils., Nystugudal (Norway), July, 1889, Chr. Kaurin et E. Ryan, com. K.B.

D. spurium Hedw., Gierzhagen (Rhld.), May, 1932, A.Sch.

D. elatum Lindb., c.fr., Haaöya (Norway), July, 1933, P.St.

D. Bonjeani de Not., Lyngseidet (Norway), Aug., 1932, J.B.D. ; Newham Bog (68), July, 1934, J.B.D. ; var. *rugifolium* Bosw., Weardale (66*), April, 1934, com. E.M.L.

D. scoparium Hedw., var. *paludosum* Schp., Newham Bog (68), July, 1934, J.B.D. ; var. *spadiceum* Boul., Hambledon Heath (62), July, 1934, W.B. ; Burnley (59), A.T.

D. fuscescens Turn., Ben Lui (88), 1929, C.A.C. ; Lyngseidet (Norway), July, 1932, J.B.D. ; var. *congestum* Husnot, Lyngseidet (Norway), Aug., 1932, J.B.D. "Nearer type than variety, as the *subula* is long and narrow, and the upper cells not elongate," H.N.D.

D. elongatum Schleich., Lyngseidet (Norway), Aug., 1932, J.B.D.

D. strictum Schleich., Rothbury (67), July, 1934, E.H.S. ; Aviemore (96), July, 1930, D.A.J.

D. montanum Hedw., Lyngseidet (Norway), Aug., 1932, J.B.D.

Fissidens incurvus Starke, c.fr., Hendon (21), Jan., 1933, A.Wh.

F. rufulus B. et S., Bolton Woods (64), Aug., 1934, J.B.D. ; W.Y.

F. polyphyllus Wils., Glengariffe (I.3), July, 1925, W.E.N. ; Pont Aberglaslyn (48), Aug., 1931, W.W., com. C.M.B.

F. adiantoides Hedw., c.fr., Skaugum (Norway), Oct., 1934, P.St. "Rather small for *F. adiantoides*. The cells too are small and inclined to be obscure except in the band at the edge of the leaves. I am not quite sure that it is not *F. decipiens*," G.B.S. "Must be referred to *F. adiantoides* on account of the size of the cells, but it is certainly a remarkable form," H.N.D.

Octodiceras Julianum Brid., near Cintra and Colores (Portugal), no date, com. D.A.J.

Grimmia (Hydrogrimmia) mollis B. et. S., Nystuguhö (Norway), July, 1889, Chr. Kaurin et E. Ryan, com. K.B.

Grimmia (Schistidium) apocarpa Hedw., form, Lyngseidet et Kongsvoll, Aug., 1932, J.B.D.; var. *alpicola* H. et T., Kongsvoll (Norway), Aug., 1932, J.B.D.; var. *rivularis* (*Grimmia rivularis* Brid.), Mallièvre (Vendée), Sept., 1929, J.Ch.

Schistidium papillosum Culmann, Stubaital (Tirol), Sept., 1934, L.B.C.T.

“*S. papillosum* was based on a Swiss plant, closely allied to *S. gracile* Schleich. (*Grimmia apocarpa* var. *gracilis* Web. and Mohr.). It differs according to the author primarily in the non-calcareous habitat, the colour more variegated and of a more reddish hue, the hair-points well developed, the back of the nerve spinulose with high erect papillae, rather than being subserrate, the peristome teeth broader below and frequently somewhat perforate above, and the back of the lid shorter, less acute, and often oblique.

“So far as these characters go they seem fairly well represented on Dr. Trotter's plant, though the colour and the hair-points do not differ from what is frequently found in *S. gracile*; and it may be taken to be correctly referred to Culmann's species. As to the value of the species, it must be considered a matter of opinion. Even if all the characters were constant it would not seem to be of very high specific value, and it remains to be seen whether they are constant and definitely correlated,” H. N. Dixon.

G. maritima Smith., Kent Estuary (69), Oct., 1933, A.W.

G. funalis Schp., Widdy Bank Fell (66), July, 1934, J.E.L., com. E.C.W.; Kongsvoll (Norway), Aug., 1934, A.R.U.; Gemmi (Switz.), June, 1905, C. Trautmann, com. Hj. M.

G. torquata Hornsch., Creag Chailleach (88), Sept., 1885, J. McAndrew, com. W.Y.; Thingvellir (Iceland), June, 1934, E.W.J.

G. andreaeoides Limpr., Stubai (Tirol), Sept., 1934, L.B.C.T. “I am not very familiar with this species,” G.B.S. “Recte,” H.N.D.

G. orbicularis Bruch., Great Orme (49), Sept., 1933, E.H.S.; Bristol (34), March, 1934, D.A.J.; Modling (Austria), April, 1867, S. Berggren, com. Hj.M.

G. trichophylla Grev., Canary Is., June, 1896, A. Tullgren, com. Hj.M.

G. sardoa de Not., Etna (Sicily), May, 1914, C. Trautmann, com. Hj.M.

G. decipiens Lindb., Traprain Law (82), Oct., 1908, J. McAndrew, com. W.Y.; Harlech (48), July, 1927, D.A.J.

G. Hartmani Schp., Loch Ken (73), Oct., 1910, J. McAndrew, com. W.Y.; River Tees (66*), June, 1934, J.B.D. et E.M.L.

G. patens B. et S., Traprain Law (82), July, 1908, J. McAndrew, com. W.Y.

G. Doniana Sm., Currie (83), April, 1910, J. McAndrew, com. W.Y.

G. ovata Schwaeg., Kongsvoll (Norway), Aug., 1932, J.B.D.

G. commutata Hueb., Loch Strowan (73), Aug., 1896, J. McAndrew, com. W.Y.

G. montana B. et S., Traprain Law (82), Oct., 1908, J. McAndrew, com. W.Y.

G. alpestris Schleich., Kleine Scheidegg (Switz.), May, 1934, D.B.B.; Stubai (Tirol), Sept., 1934, L.B.C.T.

G. leucophaea Grev., Arthur's Seat (83), March, 1906, J. McAndrew, com. W.Y.; Berwyn (50), July, 1905, P.G.M.R. et D.A.J.; Wernerseck (Rhld.), March, 1934, A.Sch.

G. tergestina Tomm., Schynige Platte (Switz.), June, 1905, W. et C. Trautmann, com. Hj.M.; Volegno (Etruria), June, 1882, A. Böttini, com. Hj.M.

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

G. atrata Mielich., Glen Callater (92), July, 1934, F.C.W.; Värstien (Sweden), July, 1934, A.R.U.

Rhacomitrium fasciculare Brid., Bieberstein (Rhld.), Jan., 1933, A.Sch. "I should call this plant *Rh. canescens*. The leaves are strongly papillose and there are minute decurrent auricles of pellucid cells. Also, a white hair point is occasionally present," G.B.S.

Rh. sudeticum B. et S., Doone Valley (4), April, 1932, A.Wh.

Rh. ramulosum Lindb., Malfoner Tal (Tirol), July, 1902, L.L.; Jämtland (Sweden), July, 1933, C.St.

Rh. lanuginosum Brid., Busbach (Rhld.), Oct., 1932, A.Sch.

Rh. canescens Brid., var. *strictum* Schlieph., Tärna (Lapland), July, 1934, A.R.U. "I should call this plant *Rh. sudeticum*."

The stems are mostly unbranched and the cells are not strongly papillose as in *Rh. canescens*," G.B.S. "*Grimmia trichophylla*," J.H.A. "Not a *Rhacomitrium*. I should agree that it is *Gr. trichophylla*," H.N.D.

Hedwigia ciliata Ehrh., var. *striata* Wils., above Harlech (48), March, 1921, E. Cleminshaw, J. C. Wilson, D.A.J.

H. imberbis Spruce, Glengariffe (I.34), July, 1925, W.E.N.; Barmouth (48), April, 1879, I. B. Wood, com. K.B.

Pottia bryoides Mitt., Farnos (Hungary), May, 1932, A.B.

P. lanceolata C.M., Craigmillar Castle (83), March, 1912, J. McAndrew, com. W.Y.

Tortula cuneifolia Roth., Napoli (Italy), April, 1868, F. C. Kiaer, com. K.B.

T. mutica Lindb. (*Barbula latifolia* B.E.), Königswinter (Rhld.), Jan., 1929, leg. Brasch, com. L.L.

T. laevipila Schwaegr., Teesdale (66*), June, 1934, J.B.D. et E.M.L.; New Galloway (73), July, 1907, J. McAndrew, com. W.Y.

T. muralis Ehrh., Liberton (83), March, 1910, J. McAndrew, com. W.Y.; Caenlochan Glen (90), July, 1934, E.C.W.

T. ruraliformis Dix., Mochras (48), April, 1911, D.A.J.

T. norvegica Wahl., Lyngseidet (Norway), July, 1932, J.B.D.

B. lurida Lindb., Gilmerton (83), March, 1907, J. McAndrew, com. W.Y.

B. rubella Lindb., var. *ruberrima* Ferg., Ingleton (64), Aug., 1934, W.Y. "No gemmae noticed, otherwise seems right," W.W.; Killin (88), June, 1913, L. J. Cocks, com. F.R. "No gemmae noticed, otherwise seems right," W.W.

B. tophacea Mitt., Lamberton (81), Dec., 1933, J.B.D.

B. recurvifolia Schp., Belton (53*), Sept., 1934, G.H.A.; var. *robusta* Braithw., Ben Bulbin (I.28), Sept., 1928, J.B.D.

B. spadicea Mitt., Bolton Woods (64), Aug., 1934, W.Y. "Probably; no fruit; leaves less revolute than usual," W.W.; Bolton Abbey (64), Dec., 1934, W.H.B.; Berchtesgaden (Bavaria), Sept., 1895, Th. Suse, com. H.J.M.

B. verbana (Dix. et Nich.), Bellinzona (Ticino), Oct., 1934, L.L.

B. sinuosa Braithw., Belvoix Park (I.38), Dec., 1934, W.E.M.

B. Hornschuchiana Schultz, Gullane Bay (82), July, 1909, J. McAndrew, com. W.Y.

Leptodontium flexifolium Hampe, Muggleswick (66*), Sept., 1934, E.M.L. ; New Galloway (73), Oct., 1897, J. McAndrew, com. W.Y.

L. recurvifolium Lindb., Tallyllyn Lake (48), Aug., 1931, H.H.K. et D.A.J.

Weisia crispa Mitt., c.fr., Woodhurst (31*), March, 1934, E.W.J.

W. microstoma C.M., Edinburgh (83), Jan., 1911, J. McAndrew, com. W.Y. “*W. viridula*. Peristome present, ripe spores about 16 μ ,” W.W.

W. tortilis C.M., Szádelö (Hungary), Oct., 1929, H.B. “Probably correct, but no capsules,” W.W.

W. crispata C.M., Aberdour (85), Sept., 1907, J. McAndrew, com. W.Y. “Probably correct, but no ripe capsules,” W.W.

W. viridula Hedw., Charmouth (9), March, 1931, A.Wh.

W. tenuis C.M., Rothbury (67), Sept., 1934, E.H.S.

W. reflexa Brid., Nuneaton (38), 1934, C.A.C.

W. curvirostris C.M., Glen Tatmik (89), July, 1908, W. Smith, com. W.Y. ; Kongsvoll (Norway), Aug., 1934, A.R.U. ; Lai (Graubünden), July, 1888, N. C. Kindberg, com. Hj.M.

Trichostomum crispulum Bruch., Teesdale (66*), June, 1934, E.M.L.

T. tenuirostre Lindb., Penmaenmawr (49), Sept., 1933, E.H.S. “I am not satisfied with this naming as the leaves show little papillosity and the general appearance suggests *Zygodon Mougeotii*. The leaves appear too long for the *Zygodon*, their margins are scarcely revolute enough and the basal areolation is nearer to that of *T. tenuirostre*,” W.W. “I quite agree with the above remarks but what is it? I have never seen *T. tenuirostre* with such narrow leaves, neither have I seen *Zygodon Mougeotii* with such long ones; one of the margins of the leaf is recurved in part. It may be a form of *tenuirostre*,” D.A.J. “The Penmaenmawr moss is puzzling, but I have no doubt that it belongs to *Zygodon Mougeotii*. I have seen the leaves quite as long; the margin is little revolute but it is not quite plane at base. I thought it might be a form of *Weisia curvirostris*, but the nerve is too stout and the cells too small,” H.N.D.

T. hibernicum Dix., Killarney (I.2), July, 1925, W.E.N.

T. flavovirens Bruch., Vendée (France), Oct., 1933, J.Ch.

T. nitidum Schp., Penrice, Gower (41), May, 1934, E.C.W.

T. fragile Dix., Kongsvoll (Norway), Aug., 1932, J.B.D. ; Myvatn (Iceland), Aug., 1934, E.W.J. ; Ben Lawers (88), July, 1885, J. McAndrew, com. W.Y. "The relationship between some forms of *T. fragile* and *T. tortuosum* var. *fragilifolium* is a close one. I should refer this plant to the latter. The leaves are rather strongly curled and their margins are sometimes undulate," W.W.

Hyophila riparia Fleisch., Ichenheim (Baden), in 1890, leg. W. Baur, com. L.L.

Pleurochaete squarrosa Lindb., Amberley (13), March, 1932, E.C.W.

Cinclidotus danubicus Schiff. et Baumg., Tchenheim (Baden), 1908, W. Baur, com. L.L.

C. riparius Arn., Shelsley Beauchamp, (37), Oct., 1931, D.A.J.

C. fontinaloides P.B., Badgeworthy Valley (4), April, 1932, leg. W.W., com. C.M.B.

Encalypta vulgaris Hedw., Boxhill (17), April, 1934, E.C.W. ; Fairmilehead (83), April, 1914, J. McAndrew, com. W.Y.

E. ciliata Hoffm., Upper Teesdale (66), June, 1934, J.B.D. et E.M.L.

E. rhabdocarpa Schwaeg., Upper Teesdale (66*), June, 1934, J.B.D. et E.M.L.

Anæctangium compactum Schwaegr., Cwm Glas Mawr (49), Aug., 1931, E.C.W.

Zygodon lapponicus B. et S., Glencoe (98*), June, 1934, C.V.B.M. et E.M.L. ; Killin (88), Aug., 1872, G. E. Hunt, com. W.Y.

Z. Mougeotii B. et S., Aggertal (Rhld.), April, 1927, A.Sch. "Areolation often incrassate at base, but this character is a somewhat variable one," W.W.

Z. viridissimus R.Br., Aber (49), Nov., 1865, G. E. Hunt, com. W.Y.

Z. gracilis Wils., Clapdale (64), Aug., 1934, W.Y.

Ulota Ludwigii Brid., Killin (88), June, 1890, H.G.J., com. H.N.D. ; Glencoe (98), July, 1898, C.H.B. et H.N.D.

U. Drummondii Brid., Loch Tay (88), July, 1899, W.E.N., E.G.S., H.N.D. ; Tyndrum (88), July, 1898, C.H.B. et H.N.D.

U. Bruchii Hornsch., New Forest (11), July, 1889, H.N.D.

U. crispa Brid., Glencoe (98), July, 1898, C.H.B. et H.N.D. ; var. *intermedia* Braithw., Beddgelert (49), July, 1888, H.N.D.

U. phyllantha Brid., Dunvegan (104), June, 1934, E.A. ; Land's End (1), July, 1886, H.N.D. ; Eastbourne (14), Jan., 1888, Glencoe (98), July, 1934, C.V.B.M. et E.M.L.

U. Hutchinsiae Hamm., Lochgilphead (98), June, 1911, J. McAndrew, com. W.Y.

O. rupestre Schleich., var. *Sturmi* Juratz., Patterdale (69), July, 1891 ; Skye (104), July, 1893, H.N.D.

O. cupulatum Hoffm., Great Oakley (32), Aug., 1887, H.N.D. ; Pitlochry (89), June, 1914, J. McAndrew, com. W.Y.

O. speciosum Nees, Braemar (92), July, 1884, com. H.N.D.

O. affine Schrad., Braemar (92), July, 1871, G. E. Hunt, com. W.Y. ; var. *rivale* Wils., R. Wye (42), July, 1903, C.H.B. et H.N.D.

O. rivulare Turn., New Galloway (73), May, 1897, J. McAndrew, com. W.Y. ; Hulne Park (68), May, 1934, J.B.D.

O. tenellum Bruch., Newnham (32), May, 1888, H.N.D.

O. pulchellum Smith, Teesdale (66), Aug., 1896, H.N.D.

O. diaphanum Schrad., Hunsbury Hill (32), Jan., 1898, H.N.D.

O. obtusifolium Schrad., Kettering (32), April, 1885, H.N.D.

Splachnum vasculosum L., Lyngseidet (Norway), Aug., 1932, J.B.D. ; Killin (88), Aug., 1905, W. Evans, com. W.Y. ; Bredared (Sweden), June, 1933, C.St. ; Dalvik (Iceland), July, 1934, E.W.J.

Tetraplodon mnioides B. et S., (*T. bryoides* Lindb.), Bispberget (Norway), July, 1934, K.B. ; Achnasheen (105), July, 1883, H.N.D.

T. angustatus B. et S., Kongsvoll (Norway), Aug., 1932, J.B.D.

T. Wormskjoldii Lindb., Widdybank Fell (66), Aug., 1901, leg. Horrell et D.A.J., com. H.N.D.

Discelium nudum Brid., Stowe Wood (32), Sept., 1903, H.N.D. ; Bentham (60), Aug., 1934, W.Y.

Nanomitrium tenerum Lindb., Leipzig, Nov., 1934, K. Bergner, com. L.L. ; Crowborough (14), Sept., 1896, W.E.N. com. H.N.D.

Ephemerum serratum Hampe, c.fr., Laceby (54), March, 1934, G.H.A., "A few capsules were seen," D.A.J. ; Ampfield (11*), Oct., 1934, A.Wh. ; Wickham Bishops (19), Jan., 1885, H.N.D.

E. recurvifolium Lindb., Comberton (28*), March, 1934, P.W.M.R. et E.W.J.; Long Stanton (28), March, 1934, E.W.J.; Laceby (56), March, 1934, G.H.A.

Physcomitrella patens B. et S., Edenbridge (15), Oct., 1911, G. F. Talbot, com. H.N.D.

Physcomitrium eurystoma Sendt., Gallikon (Switz.), Sept., 1893, K. Horster, com. Hj.M.

Funaria (Entosthodon) ericetorum Schp., La Réorthe (Vendée), April, 1933, J.Ch.

F. hungarica Boros., Szeged (Hungary) June, 1926, A.B.; Hajdunánás (Hungary), 1933, J. Tgmándy, com. A.B.

F. calcarea Wahl., Clapdale (64), Aug., 1934, W.Y.; Avon Gorge (6), April, 1913, H.H.K., com. H.N.D.; (*F. dentata* Croome), Vérteskozma (Hungary), May, 1932, A.B.

F. hygrometrica Sibth., Marllang (Norway), July, 1934, K.B.; var. *calvescens* B.E., Farthinghoe (32), Sept., 1899, H.N.D.

Amblyodon dealbatus P.B., Gullane (82), Sept., 1908, J. McAndrew, com. W.Y.

Meesia trichoides Spruce, Kongsvoll (Norway), Aug., 1932, J.B.D.; Finse (Norway), Aug., 1932, J.B.D.; Gullane (82), Aug., 1907, J. McAndrew, com. W.Y.

M. triquetra (L.), Hredavatn (Iceland), Aug., 1934, E.W.J.

Paludella squarrosa Brid., c.fr., Lyngseidet (Norway), Aug., 1932, J.B.D.; Nesøy (Norway), June, 1930, P.St.; Dalvik (Iceland), July, 1934, E.W.J.

Aulacomnium turgidum Schwaeg., Kongsvoll (Norway), Aug., 1932, J.B.D.; Ben Heasgarnich (88), June, 1901, com. W.Y.

Timmia austriaca Hedw., Kongsvoll (Norway), Aug., 1932, J.B.D.; Dalvik (Iceland), July, 1934, E.W.J.

T. bavarica Hessel., Szilice (Hungary), Sept., 1929, A.B.; Brunflo (Sweden), July, 1934, C.St.; Kongsvoll (Norway), Aug., 1932, J.B.D.

T. norvegica Zett., Andermatt (Switz.), Aug., 1929, L.L.

Catocopium nigratum Brid., Widdybank Fell (66), June, 1934, J.B.D. et E.M.L.

Conostomum boreale Swartz., Ben Lomond (86), June, 1895, J. C. Wilson, com. D.A.J.; Ben Nevis (97), July, 1934, C.V.B.M. et E.M.L.; Ben Lawers (88), July, 1885, J. McAndrew, com. W.Y.; c.fr., Dalvik (Iceland), July, 1934, E.W.J.

- Bartramia Oederi* Swartz., Trow Gill (65), ———, A.T.
- B. Halleriana* Hedw. (*B. norvegica* Lindb.), Parád (Hungary), May, 1931, A.B.
- Philonotis rigida* Brid., Aber (49), Jan., 1899, H.N.D.
- Ph. fontana* Brid., form, Lyngseidet (Norway), Aug., 1932, J.B.D.; var. *ampliretis* Dixon, Cynicht (48), June, 1902, J. Backhouse et D.A.J., com. H.N.D.; “formâ prostrata gracillima fragillima,” Hobcarton Crags (70), June, 1926, H.N.D.; var. *tomentella* Mol., Finse (Norway), Aug., 1932, J.B.D.; Kongsvoll (Norway), Aug., 1932, J.B.D.; Dalvik (Iceland), July, 1934, E.W.J.
- Ph. caespitosa* Wils., Widdup Cross (63), Oct., 1934, A.T.; Great Bedwyn (22), May, 1912, C. P. Hurst, com. H.N.D.; Harlech (48), June, 1917, J. C. Wilson, et D.A.J.
- Ph. seriata* Mitt., Loch Earn (88), July, 1897, H.N.D.; Lom (Norway), Aug., 1889, J. Hagen, com. K.B.; Ben Macdhui (94), July, 1913, W.Y.
- Ph. calcarea* Schp., Lyngseidet (Norway), July, 1932, J.B.D.; Penyghent (64), Aug., 1934, W.Y.; Ingleborough (64), Aug., 1934, W.Y.; Ben Lawers (88), July, 1893, H.N.D.; Littondale (65), Aug., 1896, H.N.D.; Berchtesgaden (Bavaria), Sept., 1885, Th. Suse, com. Hj.M.
- Ph. capillaris* Lindb., R. Wye (43), May, 1902, C.H.B., com. H.N.D.; Skye (104), July, 1893, H.N.D.
- Ph. rivularis* Warnst., c.fr., Kr. Bantzen (Saxony), March, 1901, C. Trautmann, com. Hj.M. “Mons. G. Dismier, Essai Monographique sur les *Philonotis* de France, page 391, has shown that this plant should be referred to *P. marchica* Brid. var. *laxa* Loeske et Warnst., and further that the alleged specific differences in the absence of tori in the peristome are of no specific value,” W.E.N.
- Breutelia arcuata* Schp., c.fr., Cader Idris (48), Aug., 1931, D.A.J.; Ballyvaughan (I.9), ———, A.Wh.
- Mielichoferia nitida* N. et H. (*Oreas Mielichoferi* Brid.), Mittersill (Austria), Aug., 1927, L.L.; var. *elongata* B. et S., Loch Kander (92), July, 1930, D.A.J.
- Orthodontium gracile* Schwaegr., Harrogate (64), April, 1931, E.H.S. “This is the var. *heterocarpum* Wats.,” D.A.J.; var. *heterocarpum* Wats., Laceby (54*), April and May, 1934, G.H.A.; Skipwith (61), Aug., 1934, F.E.M. et D.A.J.
- Leptobryum pyriforme* Wils., var. *minus* Husn., Coatham Marshes, Yorks (62), July, 1900, W. Ingham, com. H.N.D.

Webera polymorpha Schp., Dalwhinnie (108), Aug., 1883, H.N.D.

W. acuminata Schp., Glen Shiel, Ross (105), July, 1883, J. E. Bagnall, com. H.N.D.

W. elongata Schwaegr., Ingleborough (64), 1934, W.Y.; Borrowdale (70), Aug., 1895, H.N.D.

W. (Pohlia) longicolla Hedw., Kongsvoll (Norway), July, 1893, Chr. Kaurin, com. J. Lid.

W. cruda Schwaegr., New Galloway (73), May, 1895, J. McAndrew, com. W.Y.

W. nutans Hedw., var. *longiseta* B. et S., Baddesley Common (38), J. E. Bagnall, com. H.N.D.

W. annotina Hedw., Berlin, June, 1905, L.L.; var. *erecta* Correns, Cheviot (68), July, 1905, E.M.L.; var. *tenuifolia* Schp., Craig Chailleach (88), July, 1899, W.E.N., E.G.S., H.N.D. "I think the *W. annotina* var. *tenuifolia* Schp., is probably mostly var. *decipiens*, but not always. The varietal name *tenuifolia* avoids the dilemma which of the two it is. H.N.D. in litt," D.A.J.

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

W. proligera Bryhn., c.fr., Kirkintilloch (86*), July, 1926, leg. R. Grierson, com. J.R.L.; Hayle River (1), _____, A.Wh.

W. Ludwigi Schp., Cairn Toul (92), July, 1934, E.C.W.; Krosbu (Norway), Aug., 1932, J.B.D.; Oxtinderne (Norway), July, 1934, A.R.U.

W. commutata Schp., var. *gracilis* Schp. (*W. gracilis* de Not.), Barrie, Dundee (90), Aug., 1895, leg. G. Forbes, ex-herb., J. E. Bagnall, com. H.N.D.; Finse (Norway), Aug., 1932, J.B.D.

W. gracilis de Not., Stubai (Tirol), Sept., 1934, L.B.C.T.

W. carnea Schp., Barnwell (32), June, 1888, H.N.D.

W. albicans Schp., var. *glacialis* Schp., Ben Nevis (97*), July, 1934, C.V.B.M. et E.M.L.; c.fr., Dalvik (Iceland), July, 1934, E.W.J.

B. pendulum Schp., f. *inflatum* Podp., Nyisegyháza (Hungary), June, 1927, A.B.

B. arcticum R.Br., Tarmachan (88), July, 1898, H.N.D.

B. calophyllum R.Br., Gullane (82), Sept., 1910, J. McAndrew, com. W.Y.

- B. inclinatum* B.E., Lindlar (Rhld.), May, 1930, A.Sch.
- B. pallens* Sw., Sallbachhügel (Rhld.), Oct., 1931, A.Sch. ; Clitham (59), ———, A.T. ; form, Finse (Norway), Aug., 1932, J.B.D.
- B. Duvalii* Vort., Stubai (Tirol), Sept., 1934, L.B.C.T. ; Kongsvoll (Norway), Aug., 1932, J.B.D. ; c.fr., Lyngseidet (Norway), Aug., 1932, J.B.D.
- B. turbinatum* Schwaegr. var. *latifolium* B. et S., (*B. Schleicheri* var. *latifolium* Schp.), Wengern Alp (Switz.), May, 1934, D.B.B.
- B. neodamense* Itzig, Ainsdale (59), June, 1927, W.G.T.
- B. pseudo-triquetrum* Schwaegr., (*B. ventricosum* Dicks.), Veresgyház (Hungary), Aug., 1926, A.B. ; var. *compactum* B.E., Borostgánkő (Hungary), Sept., 1930, A.B.
- B. bimum* Schreb., Drumshoreland (84), June, 1917, W. Evans, com. W.Y. "Habit of *B. bimum*, but inflorescence not found," D.A.J.
- B. affine* Lindb., var. *cirratum* Braithw. (*B. cirratum* Hoppe et Hornsch.), Monor (Hungary), April, 1932, A.B. "I failed to find a synoicous inflorescence in the flowers which I examined, so I sent some material to Mr. Dixon, who has found an occasional synoicous inflorescence ; so he thinks that the plant may pass as *B. cirratum* though irregular as to inflorescence. The fruit is very immature and does not give much assistance," W.E.N.
- B. pallescens* Schleich., Parád (Hungary), July, 1931, A.B. ; Süttő (Hungary), May, 1932, A.B. ; Káesfürdő (Hungary), June, 1933, A.B.
- B. intermedium* Brid., Whitby (62), Sept., 1934, E.H.S.
- B. capillare* L., var. *flaccidum* L., Alsodabas (Hungary), Oct., 1928, A.B.
- B. Donianum* Grev., Ancaster (53), Spring, 1934, G.H.A. "In poor condition," D.A.J.
- B. murale* Wils., Caythorpe (53*), Spring, 1934, G.H.A.
- B. alpinum* Huds., f. *virescens* Podp., Parád (Hungary), July, 1931, A.B. ; Mátrafüred (Hungary), Aug., 1931, A.B.
- B. argenteum* L., c.fr., Riis (Norway), Oct., 1934, P.St. ; var. *lanatum* B.E., Weardale (66*), April, 1934, E.M.L.
- B. roseum* Schreb., Gorebridge (83), Oct., 1905, J. McAndrew, com. W.Y. ; Oxwich Burrows (41*), May, 1934, E.C.W.

Mnium affine Bland., Colne (59), Sept., 1934, A.T. "The variety *elatum* B.E., taller, with erect sterile branches, larger leaves and shorter, blunt teeth," D.A.J.; var. *rugicum* B.E. (*Mn. rugicum* Laur.), Berlin, May, 1915, L.L.

Mn. cuspidatum Hedw., c.fr., Nant-y-mor (49), June, 1901, J. C. Wilson, com. D.A.J.

Mn. serratum Schrad., Ingleborough (64), Aug., 1934, W.Y.

Mn. Blyttii B.E., Blija (Norway), Aug., 1900, W.E.N.

Mn. orthorrhynchum B.E., Kongsvoll (Norway), Aug., 1932, J.B.D.; Inchnadamph (108), July, 1921, W.E.N.

Mn. lycopodioides Schwaegr., Ben Lawers (88), July, 1934, J.B.D.

Mnium hymenophyllum Br. Eur., Kongsvoll (Norway), Aug., 1932, J.B.D., and *Mnium hymenophylloides* Hüb., Lyngseidet (Norway), Aug., 1932, J.B.D. "Mr. H. N. Dixon, in the Revue Bryologique for 1909, pp. 33-36 and 59-60, a contribution to the Bryology of Tornean Lapland with a discussion on the relationship of *Mnium hymenophyllum* and *M. hymenophylloides*, has adduced very good reasons for considering these two plants to belong to one species, the proper name of which is *Mnium hymenophylloides* Hüb. The present specimens tend to confirm Mr. Dixon's views," W.E.N.

Cinclidium stygium Swartz., c.fr., Lyngseidet (Norway), Aug., 1932, J.B.D.; Inchnadamph (108), July, 1932, W.E.N.; Duved (Sweden), July, 1933, C.St.; Cader Idris (48), Aug., 1931, F.E.M. et D.A.J.

Fontinalis antipyretica var. *cymbifolia* Nich., associated with *Hypnum pseudofluitans*, in pool of quarry, W. Monkton (5), W.W.; var. *thermalis* Boros, Tapolca (Hungary), Aug., 1926, A.B.; var. *gracilis* Schp., Linz (Austria), Aug., 1931, L. Müller, com. A.B.

Neckera crispa Hedw., c.fr., Oxember (64), Aug., 1934, A.Wh.

N. turgida Jur., Fichtelgebirge (Germany), July, 1903, P. Lydow, com. Hj.M.

N. pumila Hedw., Glen Lochay (88), June, 1932, E.C.W.; Lolling (Westphalia), Feb., 1863, leg. Beckhaus, com. Hj.M.

N. complanata Huebn., c.fr., Duchall Castle (76), May, 1934, J.R.L.; Carsdale (62), July, 1934, W.B.

N. Besseri Jur., Varpalota (Hungary), May, 1931, A.B.

Homalia trichomanoides B.E., Balcombe (14), April, 1934, E.C.W.

Hookeria laetevirens H. et T., Mousehole Cave (1), June, 1931, W.E.N., H.H.K., D.A.J.

Leucodon sciuroides Schwaegr., St. Pierre du Chemin (Vendée), March, 1926 ; St. Hilaire (Vendée), March, 1932 ; Forêt de L'Absie, Deux Sevres (France), March, 1933, J.Ch.

Antitrichia curtispindula Brid., Capel Garmon (50*), Sept., 1934, A.W. ; Weardale (66), April, 1934, E.M.L.

Myurella julacea B.E., Kongsvoll (Norway), Aug., 1932, J.B.D. ; Ingleborough (64), Aug., 1934, W.Y. ; Myvatn (Iceland), Aug., 1934, E.W.J.

M. apiculata B.E., Myvatn (Iceland), Aug., 1934, E.W.J.

Leskea polycarpa Ehr., var. *paludosa* Schp., Gönyü (Hungary), Aug., 1933, A.B.

L. nervosa Myrin., Répáshuta (Hungary), June, 1932, A.B. "Mixed with *Pseudoleskea catenulata* B.E., in some packets," D.A.J. ; Jämtland (Sweden), July, 1934, C.St.

Anomodon rostratus Schp., Lillafüred (Hungary), June, 1932, A.B.

A. longifolius Bruch., Hámor (Hungary), May, 1928, A.B. ; Felsögalla (Hungary), April, 1929, 1931, A.B.

A. attenuatus Huebn., Diablerêts (Switz.), Aug., 1910, E. Clemenshaw et D.A.J. ; Kågeröd (Sweden), May, 1934, C.St.

A. viticulosus H. et T., Charmouth (9), July, 1929, A.Wh.

Leptodon Smithii Mohr., Lodore (70), June, 1934, W.E.M. ; Roma, April, 1868, F. C. Kiaer, com. K.B.

Pterigynandrum filiforme Hedw. var. *decipiens* Limpr., Kongsvoll (Norway), July, 1934, A.R.U. = var. *heteropterum* B. & S.

Heterocladium heteropterum B.E., Horner Wood (5), April, 1932, A.Wh. ; Remscheid (Rhld.), 1862, Dr. Döring, com. Hj.M.

H. dimorphum B.E., Trafoi (Tirol), Aug., 1897, Th. Suse, com. Hj.M.

Pseudoleskea atrovirens B.E., Mürren (Switz.), May, 1934, D.B.B.

Ps. catenulata B.E., Ingleborough (64), ———, A.T.

Ps. striata Dixon, Stuben (Tirol), July, 1928, J.B.D. ; var. *saxicola* B.E., Stubai (Tirol), Sept., 1934, L.B.C.T.

Thuidium abietinum B.E., Lakenheath (26), Oct., 1934, H.H.K.

Th. hystricosum Mitt., Fawley Mount (11), June, 1934, A.Wh. ; Kemsing (16), May, 1932, A.Wh.

Th. Blandovii B.E., c.fr., Dalvik (Iceland), July, 1934, E.W.J.

Th. delicatulum Mitt., Loch Long (98), May, 1934, J.R.L. ; New Galloway (73), J. McAndrew, com. W.Y.

Th. Philiberti Limpr., Twiss Beck (64), Aug., 1934, E.A. ; Chilton Foliat (7), C. P. Hurst, com. W.W.

Climacium dendroides W. et M., Waldbröl (Rhld.), Nov., 1926, A.Sch. ; Daelivann (Norway), May, 1934, K.B.

Myurium hebridarum Schp., Hebrides (110), Aug., 1902, W. West, com. W.H.B. ; Loch Coruisk (104), June, 1933, J.B.D. ; L.B.C.T.

Orthothecium rufescens B. E., Chailleach Range (88), Aug., 1919, J. C. Wilson et D.A.J. ; Glencoe (98), July, 1934, C.M.B. et E.M.L. ; Ingleborough (64), Aug., 1934, W.Y. ; Creag an Lochain (88), July, 1934, E.C.W. ; Kongsvoll (Norway), July, 1934, A.R.U. "One of these packets contains *O. chryseum* B.E.," J.B.D.

O. chryseum B.E., Dalvik (Iceland), July, 1934, E.W.J.

Camptothecium (Homalothecium) Philippeanum Lindb., c.fr., Omassa (Hungary), June, 1932, A.B. ; Brünn, March, 1913, J. Suze, com. Hj.M.

C. lutescens B.E., Corrieburn (86*), April, 1934, J.R.L. ; Bröltal (Rhld.), Oct., 1928, A.Sch.

C. nitens Schp., Lyngseidet (Norway), Aug., 1932, J.B.D. ; Lochan a Larige (88), July, 1929, D.A.J. ; June, 1934, E.C.W. ; Kågeröd (Sweden), June, 1934, C.St.

Brachythecium plicatum B.E., Brunflo (Sweden), July, 1934, C.St.

B. glareosum B.E., Rothbury (68), Aug., 1934, E.H.S.

B. salebrosum B.E., Bredhurst (15), April, 1903, J. Marten, com. W.Y. "Barren and difficult to determine. I have only found male flowers. I doubt if it is *B. salebrosum*," J.B.D. "I think probably a form of *B. rutabulum*," H.N.D.

B. rutabulum B.E., Siégtal (Rhld.), April, 1933, A.Sch. ; var. *robustum* B.E., Napoli (Italy), F. C. Kiaer, com. K.B.

B. glaciale B.E., Tärna (Lapland), July, 1934, A.R.U.

B. reflexum B.E., Ben Lawers (88), Aug., 1902, D.A.J.

B. velutinum B.E., Bridge End (83), April, 1909, J. McAndrew, com. W.Y.

B. populeum B.E., Bredhurst (15), April, 1903, J. Marten, com. W.Y.

B. (Scleropodium) caespitosum Dixon, Vouvant (Vendée), April, 1933, J.Ch.

B. illecebrum de Not., Réamur (Vendée), March, 1930, J.Ch. ; Cothelstone (5), May, 1908, W.W.

Hyocomium flagellare B.E., Frafjord (Norway), July, 1893, E. Nyman, com. J.L. ; Hind Burn (60), Aug., 1934, W.Y.

Eurhynchium (Cirriphyllum) crassinervium B.E., Vouvant (Vendée), April, 1933, J.Ch.

E. speciosum Milde, Eger (Hungary), Aug., 1929, A. Bartha, com. A.B.

E. praelongum (L.) Bryhn, Valle St. Rocco, Napoli (Italy), April, 1868, leg. F.C. Kiaer, com. K.B.

“ Since the specific name *E. praelongum* is applied differently in England and on the Continent (see the Handbook, p. 460), it would be better, perhaps, to drop this name altogether ; but the question can be settled, I believe, only by agreement between British and Continental bryologists.

The plant, known on the Continent as *E. praelongum*, is a less robust form of *E. Swartzii*, which grows usually prostrate among grass, in tangled mats : the colour is yellow, the branching irregular, and the leaves are distant.

E. Swartzii is, as stated, a more robust plant, often dark green in colour, with larger, more crowded leaves, which frequents alder-clumps, or is found under bushes ; in fact, it is found usually in somewhat moister situations. In other ways, however, it does not differ essentially from the ordinary continental *E. praelongum*.

Specimens of *E. hians*, which I received from America appeared to be the calcicolous form of our *E. Swartzii*, which frequents chalky slopes : it is rather glossy, with a yellowish tinge, the cells are distinctly narrower, and the nerve is often shorter than in the common form.

According to Warnstorff (Laubmoose, p. 784), *E. praelongum*, *E. hians* and *E. Swartzii* are a connected series of forms, passing one into another, in which *E. hians* occupies a nearly central position : in my view, however, it seems more likely

that, whilst every gradation can be found between *E. praelongum* and *E. Swartzii*, *E. hians* may be a calcicolous "race" which does not vary.

The British plant, *E. praelongum* Hobkirk, is the same as our continental *E. Stokesii*: the British var. *Stokesii* Brid., is described as being a more robust form, with more regularly pinnate, or bi-pinnate branches. I have received specimens of this variety, but have been unable to find any other character in which it differs from the type; in Germany it is found in damp woods, but appears to be rare. Our common form of *E. Stokesii* is only once-pinnate.

We have also a form of our *E. Stokesii*, which resembles our *E. praelongum*, growing entangled with grass, and having irregular branching with the leaves distant. Much more rarely I have found a form with stiff, upright stems, almost entirely without branchlets.

While there exists a complete chain of forms in the *E. Stokesii* group, whose affinity is indicated by the shape of the stem leaves, one cannot regard the other chain of forms *E. praelongum*—*E. Swartzii*—*E. hians* as being satisfactorily explained. The possibility exists that what have been regarded as differences of habit merely, are really of higher value. But without cultural experiments this question cannot be answered." L.L. (Edited by J.H.A.).

E. Teesdalei Schp., Teesdale (66*), June, 1934, E.M.L.; Bolton Woods (64), Aug., 1903, W.Y.

E. tenellum Milde (*Rhynchostegiella algeriana* Broth.), Csákvar (Hungary), May, 1929, A.B.

E. myosuroides Schp., var. *brachythecioides* Dixon, Slieve-more (I.27), July, 1925, W.E.N.

E. myurum Dixon (*Isothecium viviparum* Lindb.), Alsódabag (Hungary), Oct., 1928, A.B.

E. striatulum B.E. (*Isoth. fileszens* Moenk.), Bakonyána (Hungary), May, 1932, A.B.; Cheddar (6), May, 1928, D.A.J.

Plagiothecium depressum Dixon, New Galloway (73), April, 1890, J. McAndrew, com. W.Y.; *f. cavernarum* Lämm., Kesztöli (Hungary), May, 1928, A.B.

P. elegans Sull., c.fr., Nantcol Ravine (48), June, 1907, J. C. Wilson, et D.A.J.; var. *collinum* Wils., Wharfedale (64), Aug., 1934, D.A.J.

P. silvaticum B.E., Treize Vents (Vendée), May, 1932, J.Ch.

P. Roeseanum B.E., Mór (Hungary), May, 1933, A.B.

Amblystegium serpens B.E., form, Lamberton (81), Dec., 1933, J.B.D.

A. Juratzkanum Schp., Ponton (53), Spring, 1934, G.H.A.

A. irriguum B.E., Rothbury (67), July, 1934, E.H.S.

A. filicinum de Not., Robin Hood's Bay (62), Sept., 1934, W.B.; Wiehltal (Rhld.), May, 1927, A.Sch.; var. *Whiteheadii* Wheldon, Gullane (82), Oct., 1911, J. McAndrew, com. W.Y. "These plants are not good enough for var. *Whiteheadii*, which is a very well-marked form," J.B.D.

Hypnum riparium L., on plank over water, Norton Fitzwarren (5), June, 1932, W.W. "This is merely a habitat form and various intermediates between it and type were noticed. On the top of the unsubmerged portions of plank the plant was procumbent and yellowish with leaves secund. On the side the plant was less procumbent, brighter in colour and with less secundity. The submerged portion of the plank bore typical *Campylium riparium* of a duller-green colour, at right angles to the substratum and with leaves at right angles to the stem; on the top a similar plant but recumbent was found. A piece of one of the typical plants and one of the intermediates is enclosed in each packet," W.W.

H. elodes Spruce, Ainsdale (59), June, 1933, W.G.T.; Aberlady (82), Aug., 1908, J. McAndrew, com. W.Y.

H. polygamum Schp., Balerno (83), July, 1912, J. McAndrew, com. W.Y.; Klågeröd (Sweden), June, 1934, C.St. "Has not the colour or habit of *H. polygamum*—nerve strong and well defined, auricles lax and pellucid. I should say *H. riparium*," J.B.D.; Bozen (Tirol), Aug., 1903, Th. Suse, com. A.B. "There is a good deal of admixture in some of these packets, but the prevailing plant is *H. stellatum* var. *protensum*," J.B.D.

H. stellatum Schreb., Sallbachhügel (Rhld.), Oct., 1931, A.Sch.

H. chrysophyllum Brid., Newborough Warren (52), Aug., 1931, E.C.W.; Ferriby (54), Spring, 1934, G.H.A.

H. hispidulum Brid., var. *Sommerfeltii* (Myr.), Ferriby (54), Spring, 1934, G.H.A.

H. Halleri Linn., Kongsvoll (Norway), ———, M. N. Blytt, com. K.B.

H. aduncum Hedw., var. *intermedium* Schp., Haxby (54), May, 1934, G.H.A.; Vendée, May, 1928, J.Ch. "*H. riparium*

W.R.S. "I do not think this can be any form of *H. aduncum* and agree that it is a form of *H. riparium*. It is evidently from an abnormal habitat, floating in a pool. With us *H. riparium* attaches itself to wood and stone, but may evidently flourish in marshes and pools or ditches. I have once gathered it in marshy ground, when I took it for *A. Kochii*. This plant seems rather exceptional in that some of the leaves on the older parts of the stem are comparatively wide and quite shortly acuminate, and also that the leaves of the young shoots are very short and sometimes obtuse, with the nerve very variable, and sometimes almost wanting, while the cells are also very short. These features are often variable, except I think, the obtuse young leaves, which I have not seen before. The plant is certainly an unusual form. Usually *H. riparium* when growing in ponds tends to become the var. *longifolium* Schp. I have never seen anything approaching this plant of Charrier's," J.B.D. "This is the form figured in my work, "Laubmoose Europas" as *Amblystegium eu-riparium*, fig. 164, f/v.," W. Moenkemeyer; var. *paternum* Sanio, West Monkton Quarry (6), ———, W.W., com. C.M.B. "It may be the var. *paternum*. It needs properly floating out to enable the characters to be seen," W.R.S.; var. *Wheldoni* Ren. (teste Wheldon), Berrow (6), Dec., 1916, W.W.; var. *pseudo fluitans* f. *flagelliforme* Wisack (Livonia), Aug., 1907, W. v. Bock; var. *pseudo—Sendtneri* Ren., Kersel (Livonia) Aug., 1913, W. v. Bock, com. Hj.M. "A very weak form of the variety, judging from specimens named by Renauld for Wheldon," W.R.S.

H. Sendtneri Schp., Haxby (54), May, 1934, G.H.A. "Two packets contain *H. fluitans* and three *H. exannulatum*," W.R.S.; Guddelaw (Hessen), March, 1883, G. Roth, com. Hj.M.

H. Wilsoni, Schp., Ainsdale (59), June, 1933, W.G.T.; Gullane (82), July, 1913, J. McAndrew, com. W.Y.; var. *livonicum*, Kersel (Livonia), Oct., 1909, W. v. Bock, com. Hj.M.

H. lycopodioides Schwaeg., f. *obesum* Warnst., Freshfield (59), Oct., 1908, J. A. Wheldon, com. W.G.T.

H. fluitans L., c.fr., Lenzie Moss (86a), May, 1934, J.R.L.; var. *Jeanbernati* Ren., Kersel (Livonia), Aug., 1913, W. v. Bock, com. Hj.M.; var. *gracile* Boul., Haxby (54), May, 1934, G.H.A. "A small form of *H. fluitans*, but not the var. *gracile* Boul.," W.R.S.; var. *Robertsiae* Ren., Haxby (54), May, 1934, G.H.A.; var. *capillifolium* (Warnst.), Schwarzhof (Livonia), Aug., 1911, W. v. Bock, com. Hj.M.; var. *serratum*,

Altensee (Styria), Aug., 1910, Th. Suse, com. Hj.M. ; var. *squarrosus*, Sinealik (Livonia), Aug., 1913, W. v. Bock, com. Hj.M. ; var. *ovale* Ren. MS., Wessenden Valley, Yorks, Aug., 1910, J. C. Wilson, com. D.A.J. (fide Ingham et Wheldon).

H. exannulatum Gumb., Gisburn (64), ———, A.T. ; Haxey (54), 1934, G.H.A. "var. *falcifolium* Ren.," W.R.S. ; Roksbotn (Norway), Aug., 1934, J.L. "var. *purpurascens* Schp.," W.R.S. ; var. *decurrrens*, Kersel (Livonia), July, 1913, W. v. Bock, com. Hj.M.

H. vernicosum Lindb., Nordhausen (Brandenburg), ———, Ruthe, com. Hj.M. ; La Planée (France), July, 1930, V. Madiot, com. J.Ch. " *H. intermedium* Lindb.," W.R.S.

H. badium Hartm., Gåveli (Norway), Aug., 1878, F. Kiaer, com. J.L.

H. decipiens Limpr., Ben Lawers (88), July, 1905, A.W. ; Karerseehotel (Tirol), Sept., 1896, Th. Suse, com. Hj.M.

H. falcatum Brid., Lyngholmen (Norway), July, 1890, E. Ryan, com. J.L. ; var. *virescens*, Schp., Stubaital (Tirol), Sept., 1934, L.B.C.T.

H. incurvatum Schrad., Laubach (Hessen), Aug., 1888, G. Roth, Hj.M.

H. reptile Mx., Johannesbad (Bohemia), 1859, J. Milde, com. Hj.M.

H. fastigiatum Brid., Karerseehotel (Tirol), Sept., 1896, Th. Suse, com. Hj.M.

H. cupressiforme L., var. *resupinatum* Schp., c.fr., Ingleton (64), Aug., 1934, E.A. "Yes, *H. cupressiforme*, but certainly not the var. *resupinatum*," J.B.D. ; var. *tectorum* Brid., Dinnet Moor (92*), Sept., 1934, E.A. ; near Ingleton (64), Aug., 1934, W.Y. ; var. *elatum* B.E., Perranporth (1), April, 1934, F.R. "Not at all typical of the var. *elatum*. I would be inclined to call it a robust sand-dune form," J.B.D.

H. Patientiae Lindb., (*Stereodon Lindbergii*), Bentham (60), Aug., 1934, W.Y. ; var. *demissum* Schp., Laubach (Hessen), Sept., 1910, Roth, com. Hj.M.

H. callichroum Brid., Lodore (70), 1934, C.A.C. "One packet is correct, the others contain *H. cupressiforme*," J.B.D. ; Tynygroes (48), March, 1910, J. C. Wilson et D.A.J. ; Högfors (Norway), July, 1873, F. Kiaer, com. J.L. "This is smaller in all its parts than *H. callichroum*—it should be *H. hamulosum*," J.B.D.

H. Bambergeri Schp., Knutshö (Norway), July, 1878, F. Kiaer, com. J.L.

Bryhnia Novae-Angliae Grout, Sandefjord (Norway), Jan., 1890, E. Jörgensen, com. J.L.

H. molluscum Hedw., Carsdale (62), July, 1934, W.B. ; var. *condensatum* Schp., Nantcol Ravine (48), March, 1910, J. C. Wilson et D.A.J. ; Llyn Crafnant (49), ————, A.T. ; var. *fastigiatum* Bosw., Inchnadamph (108), June, 1933, J.B.D. ; Fanone (I.9), July, 1934, W.R.M.

H. crista-castrensis L., Glencoe (98), July, 1934, C.V.B.M. et E.M.L. ; Trehörningen (Norway), Nov., 1934, P.St.

H. tundrae Lindb. et Arn., Wixacksumpf (Livonia), Aug., 1908, W. v. Bock, com. Hj.M.

H. palustre Huds., Kågeröd (Sweden), May, 1934, C.St.

H. alpestre Sw., Godhavn (Greenland), 1870, S. Berggren, com. Hj.M.

H. molle Dicks., Ben Nevis (97), Aug., 1909, H.H.K. and D.A.J.

H. polare Lindb., Spitzbergen, 1868, S. Berggren, com. Hj.M.

H. ochraceum Turn., Riesengebirge (Silesia), Aug., 1860, J. Milde, com. Hj.M. ; var. *flaccidum* Milde, on rocks in small waterfall, Greenfield (63), Jan., 1915, W.W. " Differs from the usual form of v. *flaccidum*, which is common by stream sides in the same locality, in that the leaves are not longly acuminate but obtuse or subobtuse. The nerve is very variable and the leaf-apex is slightly denticulate. It would, no doubt, go under Milde's *complanata* which Mr. Dixon unites with the var. *flaccidum*. In this particular instance no intermediates to the ordinary form were present but some intermediates between typical *flaccidum* and *complanatum* were noticed in other cases," W.W.

H. cochlearifolium (Vent.), Knutshö (Norway), July, 1889, Chr. Kassrin, com. J.L.

H. trifarium W. et M., Ben Nevis (97), July, 1934, C.V.B.M. et E.M.L. ; Augsburg (Bavaria), Oct., 1879, A. Holler, com. Hj.M. ; Ben Lawers (88), July, 1885, J. McAndrew, com. W.Y.

H. cordifolium Hedw., Sawby (64), ————, A. T. ; Rothley Lake (67), Aug., 1933, E.H.S. ; Loopetal (Rhld.), A.Sch.

H. sarmentosum Wahl., Aberfoyle (87), May, 1911, J. McAndrew, com. W.Y. ; Riesengebirge (Silesia), July, 1880, J. Milde, com. Hj.M. ; Tärna (Sweden), July, 1934, A.R.U.

Hylocomium splendens B.E. (*H. proliferum* Lindb.), c.fr., Parád (Hungary), Jan., 1931, A.B. ; Tatra (Hungary), July, 1933, A.B.

H. pyrenaicum Lindb., Bånnkjenn (Norway), May, 1867. F. Kiaer, com. J.L. ; Karerseehotel (Tirol), Sept., 1903, Th. Suse, com. Hj.M.

H. brevirostre B.E., Worston (59), Sept., 1934, A.T. "This is *H. stellatum*," J.B.D.

H. squarrosum B.E., Robin Hood's Bay (62), Sept., 1933, W.B.

NON-EUROPEAN (Including specimens of European species from Countries outside Europe).

Fissidens Zippelianus Bry. Jav., Perumal, Feb., 1932, leg. P. Foreau, com. J.Ch. "The correct name for this is *F. sylvaticus* Griff.," H.N.D.

Trematodon ceylonensis C.M., Perumal, Feb., 1932, P. Foreau, com. J.Ch.

Pilopogon exasperatus Brid., Pangerango, April, 1897, Hj.M.

P. Blumii (D.M.), c.fr., Tjipanas, May, 1897, Hj.M. "The nomenclature of this species is very involved. It is not properly a *Pilopogon*, but *Thysanomitrium*, which as Thériot has shown, cannot be separated from *Campylopus*. Also it is identical with earlier named plants, possibly with *C. Richardii* (Schwaegr.), certainly with *Thys. umbellatum* W. Arn. The more correct name is therefore *C. umbellatus* (W. Arn). Par.," H.N.D.

Holomitrium crispulum Mart., Santa Rosa (Guatemala), Dec., 1906, H. v. Türkheim, com. Hj.M.

Dicranoloma leucophyllum (Hpe.) Par., Luzon (P.I.), March, 1931, F. C. Hadden, com. E.B.B.

Leucobryum sanctum Hpe., Luzon (P.I.), May, 1931, F. C. Hadden, com. E.B.B.

Calymperes serratum Al. Br., P.I., Aug., 1931, Dr. G. A. C. Herklots, com. W.H.B.

Hyophila Micholitzii Broth., Rangoon, Sept., 1897, Hj.M.

Barbula constricta Mitt., Luzon (P.I.), March, 1931, F. C. Hadden, com. E.B.B.

Acaulon rufescens Jaeg., Austin (Texas), March, 1934, leg. McAllister, com. A. J. Gr.

Mnium medium B.E., Dodge Park (Oregon), May, 1928, M. Washburn, com. A.J.G.

Hypnodendron Reinwardtii (Lindb.), Tjibeurrum, Feb., 1897, Hj.M.

Erpodium Domingense (Brid.), C.M., Milk River, Jamaica, Jan., 1930, M.S.B.

Climacium americanum Brid., Cobb Brook, Vermont, Sept., 1917, A.J.Gr.

Bestia Breweriana (Lesg.) Grout., Brownsville (Oregon), April, 1930, L. L. Haskin, com. A.J.G.

Prionodon densus (Sw.) C.M., Cinchona (Jamaica), April, 1930, M.S.B.

Oedocladium rufescens Mitt., Pangerango, April, 1897, Hj.M. Now usually placed in *Myurium* as *M. rufescens* (H. & R.) Fleisch.

Pirelela cymbifolia (Sull.) Cardot., Sandford (Florida), April, 1926, A.J.G. "Only secondary stems are present," W.R.S.

Pilotrichella subtenuis (C.M.), Paranà (Brazil), July, 1910, P. Dusén, com. Hj. M.

P. perpinnata Broth., Londiani (Br. E. A.), July, 1920, G. Lindblom, com. Hj.M. "The name is invalid, as Brotherus had already described a *P. perpinnata* from Queensland. This however is identical with *P. imbricatula* C.M., and should be so named. Cardot refers *P. imbricatula* C.M. to *P. Isleana* Besch., but there appears to me to be some doubt as to what is the true *P. Isleana*, as Bescherelle has two different plants under that name in his herbarium. It is best therefore to retain C. Müller's name for the present plant," H.N.D.

P. flexilis (Sw.) Jaeg., Cinchona (Jamaica), April, 1930, M.S.B.

Papillaria appressa (Flsch.), Jaeg., Mandeville (Jamaica), Feb., 1930, M.S.B.; Guarapuará (Brazil), Jan., 1911, P. Dusén, com. Hj.M.; San Paola (Brazil), ————, leg. Niemeyer, com. Hj.M.

P. fuscescens Hook., Pangerango (Java), April, 1897, Hj.M.

P. squamatula C.M., Serra da Esperença (Brazil), Jan., 1911, P. Dusén, com. Hj.M.

Meteorium Miquelianum (C.M.) Fleisch., Luzon (P.I.), March, 1931, F. C. Hadden, com. E.B.B.

Barbella pendula (Sull.) Fleisch., Luzon (P.I.), March, 1931, F. C. Hadden, com. E.B.B.

Meteroriopsis rematifolia (Hornsch.), Roca Nova (Brazil), May, 1909, P. Dusén, com. Hj.M.

Phyllogonium immersum Mitt., Paranà (Brazil), Aug., 1910, P. Dusén, com. Hj. M.

Ph. fulgens (Sw.) Brid., Cinchona (Jamaica), April, 1930, M.S.B.

Neckera pennata Hedw., Annapolis Co., Nova Scotia, Aug., 1934, M.S.B.

N. Douglasii Hook., Hoh River (Washington), April, 1934, O. J. Murie, com. E.B.B.

N. pseudo-imbricata C.M., Comoro-Ins., Jun.-Aug., 1875, leg. Hildebrandt, com. Bensch, com. Hj.M.

Neckeropsis undulata (Palis), Monte Serrato (Brazil), July, 1902, P. Dusén, com. Hj.M.

Elmeriobryum philippense Broth., Luzon (P.I.), March, 1931, F. C. Hadden, com. E.B.B.

Distichophyllum succulentum, Silver Cascade (Palni Hills), Jan., 1932, P. Foreau, com. J.Ch. "This is *D. limpidum* Thn. & Mitt. The two species are very close to one another, but *D. limpidum* has a stronger, less abrupt cuspidate point, the border is slightly stronger, etc.," H.N.D.

Callicostella gabonensis Broth. et P. de la V., Gabon, July, 1934, leg. Chaillot, com. J.Ch. "This appears to have the leaf outline and apex of *C. submarginatula* Broth. et P. de la V., while the cells are laxer, i.e., agreeing with *C. gabonensis*. It is possible that it indicates a transition between the two, and the consequent doubtful status of *C. gabonensis*," H.N.D.

Hypopterygium plumarium (Mitt.), Roca Nova (Brazil), May, 1909, P. Dusén, com. Hj.M.

Hygrohypnum montanum (Wils.) Broth., Stratten (Vermont), June, 1931, A.J.G.

Platyhypnidium rusciforme (Neck.), Long Island (New York), July, 1929, A.J.G.

Brachythecium lamprochryseum Kindb., New Denver (Brit. Columbia), April, 1927, A.J.G.

Entodon plicatus C.M., Shembaganur, March, 1932, P. Foreau, com. J.Ch.

Rhizogonium spiniforme (L.) Br., Philippine Is., Dec., 1930, Dr. G. A. C. Herklots, com. W.H.B.

Acroporium hermaphroditum (C.M.), Fleisch., Luzon (P.I.), May, 1931, F. C. Hadden, com. E.B.B.

A. hamulatum Flsch., Philippine Is., Aug., 1931, Dr. G. A. C. Herklots, com. W.H.B.

A. diminutum (Brid.), Flsch., Philippine Is., Dec., 1930, Dr. G. A. C. Herklots, com. W.H.B.

Taxithelium planum (Brid.), Mitt., Manatee, March, 1931, A.J.G.

Hypnum patientiae Lindb., forma, Riverstoke (British Columbia), Aug., 1926, leg. F. A. McFadden, com. A.J.G.

Hypnum plumaeforme Wils., Amoy Is. (China), July, 1931, Dr. G. A. C. Herklots, com. W.H.B.

Ectropothecium Andrei Cardot et P. de la V., Skembaganur, March, 1932, leg. P. Foreau, com. J.Ch. "If this is correct, it is a somewhat unusual form. In all my specimens of *E. Andrei* the branch leaves are decurved-falcate on each side of the branch, *i.e.*, falcate vertically to the plane of the branching; and the leaf-points are shortly and rather widely acuminate. Here the branch leaves are mostly falcate in the plane of the branching (not two-ranked), and the acumen is finer," H.N.D.

Rhacopilopsis trinitensis (C.M.), Britt. et Dix., Gabon, July, 1934, leg. Chaillot, com. J.Ch.

Pogonatum Wallisii (C.M.) Jaeg., Luzon (P.I.), March, 1931, F. C. Hadden, com. E.B.B.

HEPATICS.

EUROPEAN (British and Continental).

Riccia bifurca Hoffm., c.fr., Myvatn, N. Iceland. Growing on hot earth around steaming fissures, this species along with *Fossombronia Dumortieri* formed a carpet and were the only two plants present in the warmest places. Both are confined in Iceland to warm ground. In the cooler parts the above two species are mixed with *Preissia quadrata* which becomes prominent, July, 1934, E.W.J.

R. crystallina L., Lough Pool, Sellack (36), Sept., 1934, E.A.

R. Huebeneriana Lindenb., Horsted Keynes pond, E. Sussex (14), Oct., 1919, W.E.N.

Marchantia polymorpha L., Dalvik, N. Iceland, July, 1934, E.W.J., c.fr., Elletjern in Frog, Norway, July, 1934, J.L.

Metzgeria hamata Lindb., Fort William, Westernness (97), July, 1932, W.E.N.

Moerckia Blyttii (Moerck.) Brockm., Ben Nevis (97), July, 1934, C.V.B.M. and E.M.L., com. E.M.L.

Pellia Fabbroniana Raddi (*J. calycina* Tayl.), bank of River Wharfe, nr. Bolton Abbey (64), Sept., 1934, A.Tr.

Fossombronia Dumortieri (Hub. et Genth.) Lindb., sterile, Myvatn, N. Iceland. Growing on hot earth around steaming fissures, with *Riccia bifurca*—both plants in Iceland confined to hot ground. The only two plants present in the warmest parts, July, 1934, E.W.J.; Kirkby (54), Sept., 1934, G.H.A.

Gymnomitrium concinnatum (Lightf.) Corda, Cwm Dyli, (49), Aug., 1931, D.A.J.; also, Harrison Stickle, Langdale (69), July, 1934, W.G.T.

Marsupella sphacelata (Gies.) Lindb., stream near Turtagro, Jotunheimen, Norway, Aug., 1932, J.B.D.

Alicularia compressa (Hook.) Nees, Rhyd-ddu (49), June, 1909, J.C.W. and D.A.J.; also, Saarscherback, Germany, A.S.

Aplozia sphaerocarpa (Hook.) Dum., on wet shale bank, Thurston, near Burnley (59), A.Tr. "This is *Alicularia scalaris* (Schrad.) Corda. The patent underleaves are conspicuous especially on some stems, and the oil bodies are persistent," F.E.M.; also, Luddenden, S.W. Yorkshire, on gritstone rocks in stream, 700 ft., Sept., 1934, W.H.B.

A. pumila (With.) Dum., Crowborough, E. Sussex (14), March, 1913, W.E.N.

Jamesoniella Carringtoni (Balf.), Schiffn., Ben Chuirn (88), Sept., 1929, D.A.J.

Anastrophyllum Donianum (Hook.) Steph., rock ledge in corrie of Lochnagar, S. Aberdeen (92), Aug., 1934, E.C.W.

Gymnocolea inflata (Huds.) Dum., Bergisches Land, Hildener Heide, Jaberg, Germany, Oct., 1928, A.S.

G. acutiloba (Kaal.) K. Mull., Rhinog Fawr, Harlech (48), Sept., 1922, D.A.J.

Lophozia Muelleri (Nees) Dum., rocks by R. Tees, Winch Bridge (66*), June, 1934, E.M.L.; also, Bergisches Land Brotal, Schonenberg, Germany, May, 1932, A.S.

L. bantriensis (Hook.) Steph., Eshells Moor (67), 1934, E.M.L.

L. lycopodioides (Wallr.) Cogn., c.fr., Tromso Amt., Norway, Aug., 1932, J.B.D.; also, Per Stormer, Norway, Nov., 1934, J.L.

L. Hatcheri (Evans) Steph., Tromso Amt., Norway, July, 1932, J.B.D.; also, Lakenheath, W. Sussex (26*), Oct., 1934, W.W. and H.H.K.

L. Floerkii (W. et M.) Schiffn., Hebden Bridge (63), May, 1914, J.C.W. and P.G.M.R., com. D.A.J.; Caenlochan Glen, Angus (90), July, 1934, and Cairn Toul, c. 4100 ft., S. Aberdeen (92), July, 1934, E.C.W.

L. attenuata (Mart.) Dum., Eridge and West Hoathly, E. Sussex (14), April, 1934, E.C.W.; forma *eflagellis* Schiffn., Twiss Beck, Ingleton (64), Aug., 1934, E.A.

L. barbata (Schmid.) Dum., walls near railway, Criccieth (49), Sept., 1913, D.A.J.; Bergisches Land, Sieggebiet, Nutscheid, Germany, Nov., 1928, A.S.

Sphenolobus ovatus (Dicks.) Schiffn., (*J. Dicksoni*, Hook.), Halta, Sweden, 1933, C.S.

Plagiochila asplenioides var. *minor* (Lindenb.) (P. Dillenii, Tayl.), Swilla Glen, Ingleton (64), Aug., 1934, E.A.; var. *major* Nees, forma *subintegerrima* Schiffn., Fetteresso Castle Woods (91*), Sept., 1934, E.A.; var. *major* Nees, Puck's Glen, Argyll (98), Aug., 1934, J.R.L.

P. spinulosa (Dicks.) Dum., Falls of Falloch (87), May, 1934, J.R.L.

Pedinophyllum interruptum (Nees) Pears., var. *pyrenaicum* (Spruce), Kaal., How Stean Beck, Pateley Bridge (64), J.B.D. and H.H.K.

Leptoscyphus anomalus (Hook.) Mitt. (*Mylia anomala*, Gray), boggy heath by Hawley Pond, N. Hants (12*), June, 1934, E.C.W. "Much mixed with *Lepidozia setacea*, *Sphagnum*, etc.," F.E.M.

Chiloscyphus polyanthus (L.) Corda, var. *rivularis*, pool, Ardingly Rocks, E. Sussex (14), Feb., 1912, leg. W.E.N.; also, Bergisches Lands Wiehltal, Wiehl, Germany, Nov., 1933, A.S.; West Hoathly, E. Sussex (14), April, 1934, E.C.W., and in a bog pool at 1650 feet. Hilton Fell (69), June, 1933, A.W. "The specimens of *Chiloscyphus polyanthus* var. *rivularis* contributed this year are interesting and draw attention to the various forms included under the variety. In general they all have a much-branched habit, and reduced under-leaves, but vary considerably in the size and opacity of the cells. Mr. Nicholson draws attention to the fact that the genus *Chiloscyphus* is a very difficult one, pointing out that there are upwards of 30 species in New Zealand, but in Europe only one, which, however, gives a long series of forms," F.E.M.

Harpanthus Flotowianus Nees, Dalvik, N. Iceland, July, 1934, E.W.J.

H. scutatus (Web. et Mohr.) Spruce, on rocks by River Hindburn, near Botton Mill, W. Lancs. (60*), Aug., 1934, H.H.K.

Cephalozia bicuspidata (L.) Dum., forma *conferta* Hüben, Loch Davan, S. Aberdeen (92), Sept., 1934, E.A.

C. hibernica Spruce M.S. Pears., O'Sullivan's Cascade, Killarney (I.1), July, 1925, J.B.D.

C. media (Lindb.) (*C. lunulaefolia* Dum.), Wharfedale, Bolton Abbey (64), Aug., 1934, E.A.

C. catenulata (Huben.) Spruce, Eridge Rocks, E. Sussex (14), Aug., 1919; also, Graffham Common, W. Sussex (13), Sept., 1911, W.E.N.

C. fluitans (Nees) Spruce, Ashdown Forest, E. Sussex (14), Dec., 1908; also, Eridge Rocks, E. Sussex (14), W.E.N.

Cephalozia stellulifera (Tayl.) Schiffn., var. *Limprichtii*, Warnst., moist clay, Hamsey, E. Sussex (14), March, 1918, W.E.N.

C. Turneri (Hook.) K. Müll, Forêt de Vouvant, La Vendée, France, Nov., 1933, J.C.

C. dentata (Raddi) K. Müll, The Lizard, Cornwall (1), May, 1930, W.E.N.

Hygrobrella laxifolia (Hook.) Spruce, Tromso Amt., Norway, Aug., 1932, J.B.D.; Ben Nevis (97), July, 1934, C.V.B.M. and E.M.L., com. E.M.L.

Pleuroclada albescens (Hook.) Spruce, Ben Nevis (97), 4000 ft., July, 1934, C.V.B.M. and E.M.L., com. E.M.L.; boulders, near summit of Ben Douran (98), Aug., 1929, D.A.J.

Odontoschisma Sphagni (Dicks.) Dum., Wahner Heide, Huhnerbruch, Germany, Aug., 1930, A.S.

O. denudatum (Nees) Dum., West Hoathly, E. Sussex (14), April, 1934, E.C.W.

Adelanthus dugortiensis, Douin et Lett, Achill Island (I.27), July, 1925, J.B.D.

Calypogeia Trichomanis (L.) Corda var. *aquatica* Ingham, floating in bog, Widdybank Fell (66), June, 1934, J.B.D. and E.M.L., com. E.M.L. "This is now regarded as a form only, though, in the case of the present plant, a well-marked one," F.E.M.

Bazzania trilobata (L.) Gray, Cwm Bychan, above Harlech (48), Aug., 1914, J.C.W. and D.A.J.; also, sandstone rocks, West Hoathly, E. Sussex (14), April, 1934, E.C.W.

B. tricrenata (Wahl.) Pears., Glencoe (98), July, 1934, C.V.B.M. and E.M.L., com. E.M.L.; Kongsvoll, Norway, Aug., 1932, J.B.D.

Lepidozia reptans (L.) Dum., Kågeröd, Skane, Sweden, 1934, C.S.

L. Pearsoni Spruce, Puck's Glen, Argyll (98), Aug., 1934, J.R.L.

L. setacea (Web.) Mitt., boggy heath by Hawley Pond, N. Hants (12*), June, 1934, E.C.W.

Blepharostoma trichophyllum (L.) Dum., Kongsvoll, Norway, Aug., 1932, J.B.D.

Chandonanthus setiformis (Ehrh.) Lindb., Tromso Amt., Norway, Aug., 1932, J.B.D.; var. *alpinus* (Hook.), Kaal, near summit of Cairn Toul, c. 4200 ft., S. Aberdeen (92), July, 1934, E.C.W.

Anthelia julacea (L.) Dum., wet rocks, Langdale Pikes (69), July, 1934, W.G.T.

Herberta adunca (Dicks.) Gray, Glencoe (98), July, 1934, C.V.B.M. et E.M.L., com. E.M.L.

H. Hutchinsiae (Gottsche) Evans, Glencoe (98), July, 1934, C.V.B.M. et E.M.L., com. E.M.L.; also, at only 500 ft. altitude near Nantlle (49), A.W.

Mastigophora Woodsii (Hook.) Nees, Ben Chuirm (88), Aug., 1929, D.A.J.

Ptilidium ciliare (L.) Hampe, Trehorningen in Aker, Norway, Nov., 1934, J.L.; Ebbegebirge, Westphalia, Germany, Aug., 1931, A.S.

P. pulcherrimum (Web.) Hampe, Trehorninge in Aker, Norway, Nov., 1934, J.L.

Trichocolea tomentella (Ehrh.) Dum., Rostanga, Skane, Sweden, 1933, C.S.; also, wet places in wood among *Sphagna*, near Llyn Crafnant, Trefriw (49), A.T.

Scapania gracilis (Lindb.), Kaal., tree trunk, Lodore, Cumberland (70), Sept., 1934, W.G.T.; West Hoathly, E. Sussex (14), April, 1934, E.C.W.

S. ornithopodioides (With.) Pears., Ben Chuirm (88), Sept., 1924, D.A.J.

S. undulata (L.) Dum., a form, in springs, Ben Lawers, 3000 ft., Perthshire (88), July, 1904, J.B.D.; in shade, growing in small stream issuing from spring in grit escarpment, Wycollers, near Colne, S. Lancs. (59), A.Tr.

S. uliginosa (Swartz.) Dum., Finse, Norway, Aug., 1932, J.B.D.

S. obliqua (Arnell) Schiffn., Cwm Clogwyn (49), Aug., 1931, D.A.J.

S. paludosa var. *aquatica*, Schiffn., submerged in old slate quarry, Moelwyn Bach, Croesor (48) (original station), Sept., 1922, D.A.J.

Radula Lindbergiana var. *germana* (Jack), Ben Lawers (88), July, 1934, J.B.D. and E.M.L., com. E.M.L.

R. voluta Tayl., Seatoller, Borrowdale (70), Aug., 1933, D.A.J.

Pleurozia purpurea (Lightf.) Lindb., Glencoe (98), July, 1934, C.V.B.M. and E.M.L., com. E.M.L.

Madotheca laevigata (Schrad.) Dum., woods near Portmadoc (49), June, 1901, J.C.W., S. J. Owen, and D.A.J.

M. platyphylla (L.) Dum., Boxwell (34), March, 1928, H.H.K. and D.A.J.

M. porella (Dicks.) Nees, Artro Valley (49), Aug., 1909, J.C.W. and D.A.J. ; Mallievre, La Vendée, France, 1929, J.C.

Lejeunea cavifolia (Ehrh.) Lindb., Balcombe, E. Sussex (14), April, 1934, E.C.W. "A few stems show some approach to *L. patens*, but in the main this is typical *L. cavifolia*," F.E.M.

Microlejeunea ulicina (Tayl.) Evans, beech trees, Mickleham, Surrey (17), April, 1934 ; woodland, near Balcombe, E. Sussex (14), April, 1934, E.C.W. and Forêt de l'Absie, Deux Sevres, France, March, 1933, J.C.

Drepanolejeunea hamatifolia (Hook.) Schiffn., mixed with *Harpalejeunea ovata* (Hook.) Schiffn., growing amongst *Frullania*, etc., on rocks, Upper Lake, Killarney (I.I.), April, 1934, E.W.J.

Frullania Tamarisci (L.) Dum., Slievemore, Achill (I.27), Aug., 1911, J.C.W., com. D.A.J. ; also, Rhossili, Gower, Glamorgan (41*), May, 1934, E.C.W. ; Vouvant, Les Episses, La Vendée, France, May, 1933, J.C. ; var. *Schiffneri* Nichols, rocks near the sea, Coverack, W. Cornwall (1), Dec., 1934, W.E.N.

F. fragilifolia Tayl., rocks by trees, Winch Bridge (66*), June, 1934, E.M.L.

F. dilatata (L.) Dum., walls, especially limestone, Craven and Clitheroe areas, S. Lancs. (59), A.T.

REPORT ON NON-EUROPEAN HEPATICS.

The plants sent in for distribution and particularly those sent by Dr. F. Verdoorn are a very fine lot and Dr. Verdoorn's afford a very good example of his work among the *Lejeuneaceae* *Holostipae*. They tend to show the chaotic nature of the nomenclature of exotic Hepatics at the present time. The cause of this is largely the fact of the preponderance of the influence of the late Franz Stephani in this field. Stephani in his *Species Hepaticarum*, which is an indispensable book to the student, worked on a geographical basis and scorned to give differential characters to his species. His descriptions are often very good in themselves, but as he fails to distinguish them from their nearest allies they present a difficult problem to the student, and the result has been the creation of a large number of species which are no doubt invalid.

Thus *Thysananthus spathulistipus* (Rein. Bl. and Nees) Lindenb., embraces according to Dr. Verdoorn no less than five other species according to previous authors, mostly Stephani. On these plants Dr. Verdoorn has made the remark "an species propria?" The same remark is made on the specimens of this species recently distributed by him in his *Hepaticae Selectae et Criticae*. *Archilejeunea mariana* Gotts., has, according to Dr. Verdoorn, eleven synonyms and the plant was distributed by himself under the name of *A. caramuensis* St., within the last two years.

Ptydrocoleus pulopenangensis (Gotts.) Trevis, embraces eight synonyms, mostly Stephani.

Mastigolejeunea humilis (Gotts.) Spr., embraces 15 synonyms mostly from Stephani and of comparatively recent origin.

I should be sorry to discourage workers from a field where work is much needed, but it is only fair to point out the present position of affairs.

Herbier Charrier—*Metzgeria consanguinea* Schiffn.? Indes Anglaises, Shembaganur March, 1923, leg. R. Père Fouan, det. W. E. Nicholson. The query mark attached to my original identification for Mons. Charrier must remain, as I have not been able to compare the plant with authentic material.

(Signed) WM. EDW. NICHOLSON.

January, 31st, 1935.

NON-EUROPEAN.

Metzgeria consanguinea Schiffn., Shanbaganur, British India, March, 1923, leg. Pe Foreau, com. J.C., det. W.E.N. "The query mark attached to my original identification for M. Charrier must remain, as I have not been able to compare the plant with authentic material," W.E.N.

Spruciella succida (Mitt.) Steph., Gabon, Libreville, Sibang; lit d'un ruisseau, July, 1934, leg. Chailott, det. W.E.N., com. H.C.

Plagiochila Belangeriana Lindb., British India, Thembaganur, May, 1923, leg. Pe Foreau, det. W.E.N., com. J.C.

P. opposita (R.B. et N.) Dum., British India, Thembaganur, May, 1923, leg. Pe Foreau, det. W.E.N., com. J.C.

Bazzania Ceylonica Mitt., Perumal, British India, May, 1923, leg. Pe Foreau, det. W.E.N., com. J.C.

Chandonanthus hirtellus (Web.) Schiffn., British India, Kodaikanal, May, 1923, leg. Pe Foreau, det. W.E.N., com. J.C.

Madotheca campylophylla L. et L., Perumal, British India, May, 1929, leg. Pe Foreau, det. W.E.N., com. J.C.

M. Perrottetiana Mont., Perumal, British India, May, 1923, leg. Pe Foreau, det. W.E.N., com. J.C.

Mastigolejeunea repleta (Nees), British India, Perumal, June, 1923, leg. Pe Foreau, det. F. Verd, com. J.C.

Porella platyphylloidea (Schwein.) Lindb., on tree, Lake Kedji, Nova Scotia, July, 1926, M.S.B.

Frullania Asagrayana Mont., on tree, St. Croix, Nova Scotia, July, 1923, M.S.B.

F. eboracensis Gottsche, on trees, Dartmouth, Nova Scotia, July, 1925, M.S.B.

Trachypus bicolor (Riv. et Hsch.) Java, in woods, about 2000-2400 metres, F.V., July, 1930, det. H.N.D.

Eucalyx Hasskarlianus (Nees) var. *virens* (Schiffn.), Java, on northern slope, in very narrow valley, July, 1930, F.V.

Zoopsis argentea Hk. et Tayl., Java, on eastern slope, near waterfall, about 1600 metres, F.V.

Plagiochila fusca S. de Lac., Java, in wood, 1420-1650 metres, 1930, F.V., det. Th. Herzog.

Isotachis armata (Nees) Mitt., Java, in woods round a volcanic lake, 1700-1800 metres, July, 1930, F.V.

Ptychocoleus pycnocladus (Tayl.), Java, in botanical gardens, about 250 metres, 1930, F.V.

Archilejeunea mariana (G.) = *A. falcata*, etc., Java, in botanical gardens, about 250 metres, F.V.

Schistochila sciurea (de Not.), Amboina, leg. Karstens, 1889, det. Schiffner, com. F.V.

Jubula Hutchinsiae (Hook.) ssp., *Javanica* (St.) Java, leg. Massart, 1895, det. et com. F.V.

Thysananthus spathulistipus (Bl. N.), an species propria? W. Sumatra, on trees, 2100-2800 metres, leg. V. Schiffner, 1894, det. et com. F.V.

Plagiochila arbuscula L. et L., New Zealand, N.I., near Rotorua, 1600 ft., fide Th. Herzog., leg. et det. W. Allison, 1931, com. F.V.

Conocephalus supradecompositus (Lindb.), Steph., Japan, Kinshin, Higo, leg. et det. Y. Horikawa, 1930, com. F.V.

Syzygiella variegata (Lindb.), Java, about 1650 metres, det. V. Schiffner, leg. Max Fleischer, 1890, com. F.V.

Anthoceros Carolinianus Mich., U.S.A., Florida, Sandford, leg. et det. S. Rapp, 1931, com. F.V.

Frullania campanulata S. de Lac, Java, 250 metres, leg. Schiffner, 1893, det. et com. F.V.

Ptychocoleus pulapenangensis (G.), Java, on trees, 260 metres, leg. Schiffner, 1893-4, det. et com. F.V.

Mastigolejeunea humilis (G.), Java, Buitenzorg Gardens, on trees, common, 260 metres, leg. Schiffner, 1893-4, com. F.V.

RECENT BRYOLOGICAL PUBLICATIONS.

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

MOSSES.

- ADDISON, M.—*Aulacomnium papillosum*. *Bryologist*, XXXVII. No. 4, 1934, p. 76. (= *A. palustre*).
- *ALBRECHT, J. H.—Synopsis of the European species of *Pogonatum* and *Polytrichum*, II. *Jour. Bot.*, LXXII., April, 1934, pp. 104-110.
- **De Rhacomitrio heterosticho* var. *graciles-cente* B. & S. *Rev. Bryol. et Lichénol.*, T. VII., fasc. 1-2 1934, pp. 53-55. (In Latin).
- AMANN, J.—*Flore des mousses de la Suisse*. Vol. III., Revision et additions. *Beitr. z. Kryptogamenflora d. Sweiz* VII., 2, 1933, pp. 186, figs. 22.
- ARENS, P.—Über die Natur der Keulenhaare der Laubmoose. *Ber. Deut. Bot. Gesells.*, LI., 8, 1933, pp. 348-350, fig. 1.
- BARROS, E.—Algunos instrucciones útiles para principiantes en collecciones de musgos. *Rev. Univ. Santiagó* XVIII., 1933, pp. 473-475.
- BARTRAM, E. B.—Mosses of the River Napo, Ecuador. *Rev. Bryol. et Lichénol.*, Tome VI.; Fasc. 1-4, 1933, pp. 9-18, figs. 3. (1 gen. nov., and 4 spp. nov.).
- Mosses of the Templeton Crocker Expedition collected by John Thomas Howell and lists of the mosses known from the Galapagos Islands and from Cocos Islands. *Proc. Acad. Sci. California*, XXI., 1933, pp. 75-86, figs. 3.
- Review. vide ANNONYMOUS (infra.).
- Polynesian mosses. Bernice P. Bishop Museum, *Occas. Pap.* X., No. 10, 1933, pp. 28, figs. 12.
- Review. vide REIMERS, H. (infra.).
- Review of JONES, G. N. (*Grimmiaceae*) (infra.). *Bryologist*, XXXVII., No. 1, 1934, p. 11-12.
- Venturiella sinensis* (Vent.) C. M. in Texas. *Bryologist*, XXXVII., No. 2, 1934, p. 46.

- Mosses of southern British Honduras and Guatemala. *Rhodora*, XXXVI., 1934, pp. 55-58, fig. 1.
Review. vide ALLORGE, P. (infra.).
- BECQUEREL, P.—Croissance des mousses dans une atmosphère qu'elles ont constituée. *Compt. Rend. Acad. Sci. Paris*, CXCVII., 1933, p. 783-4.
- BLUMRICH, J.—Bemerkenswerte Moose im Feldmoos. *Heimat, Vorarlberger Monatshefte XIV.*, 1933, p. 130-131.
- BOWEN, Esther J.—The mechanism of water conduction in the Musci considered in relation to habitat. *Ann. of Bot.* XLVII., 1933, pp. 401-422.
Ditto, II. Mosses growing in damp situations. *Ibid*, pp. 635-661, figs. 41.
Ditto, III. Mosses growing in dry environments. *Ibid*, pp. 889-912, figs. 23.
- BRANDT, A.—Ueber die Vegetation des Naturparks von Hilsjärvi. *Silva Fennica*, XXXII., Helsingfors 1933; Musci pp. 28-32.
- *BREIEN, K.—Bryoziphium norvegicum in Greenland. *Bryologist*, XXXVII., 1934, p. 85.
- CAVANAGH, L. M.—Notes on Iowa mosses. *Proc. Iowa Acad Sci.*, XXXVIII., 1933, pp. 129-132.
- CONARD, H. S.—Modeling clay for mosses. *Bryologist*, XXXVII., No. 2, 1934, p. 43. (Mounting capsules).
- DEGENER, O.—Hawaiian mosses. *Torreyia XXXIII.*, 6, 1933, p. 151.
- *DIXON, H. N.—Mosses of Celebes. *Ann. Bryol.* VII., 1934, pp. 19-36. (12 spp. nov., 1 var. nov.).
Bryophyta nova. *Annales Bryologici*, VII., 1934, pp. 157-8 (2 spp. nov.).
- *More mosses from South Georgia. *Kong. Norske Vidensk. Selsk. Forhr.*, VII., Nr. 1, 1934, pp. 1-3. (2 spp. nov.).
- *Manchurian mosses. *Rev. Bryol. et Lichénol.*, Tome VII., Fasc. 1-2, 1934, pp. 105-116. (15 spp. nov.).
Review of GROUT, A. J. (Moss Flora, infra.) *Jour. Bot.*, LXXIII., Jan. 1935, p. 29-30.
- GAUME, R.—Une espèce nouvelle de mousse en forêt de Fontainebleau: *Orthodontium Gaumei* Allorge et Thériot. *Bull. de l'Assoc. des Nat. Vallée du Loing*, 15e année, 1932, pp. 109-111.

- GROUT, A. J.—Moss Flora of North America north of Mexico. Vol. III., Part 4, pp. 179-277, Pls. XLV.-LXXX. Pubd. by the Author : Newfane, Vermont, 1934. Price 5 dollars. Review. vide DIXON, H. N. (supra.).
- GUPTA, K. M.—On the structure of a new species of Indian mosses, *Physcomitrellopsis indica* Dixon, sp. nov. from Benares. Jour. Indian Bot. Soc. XII., 1933, pp. 122-128, figs. 5. Review. vide REIMERS, H. (infra.).
- *GYÖRFFY, I.—Doppelte Mooskapseln aus Frankreich. Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-2, 1934, pp. 117-121, figs. 2. (*Orthotrichum brigantiacum* Culmann & *Homalothecium sericeum* (L) B. E. fo. *robusta*, *densa* Thériot).
- *Musci monstruosi transsilvanici. I. Monatuose Catharinaea Haussknechtii aus Siebenbürgen. Zeitschrift Erdelyi Muzeum, XXXIX., Nr. 7-12, 1934, pp. 341-348, figs. 5. Fundo Rockefelleriano adjuvamnte editum IX. (In Magyar and German).
- *Ein neuer Fundort von *Splachnum ampullaceum* in Siebenbürgen. Magyar Botanikai Lapok, XXXIII., 1/12, 1934, p. 1.
- *Novitas bryologica - VI. *Tetraplodon bryoides* (Zoeg.) Lindb. monstruosus in peninsula Labrador inventus. Bryologist, XXXVII., Mch. - Ap. 1934, pp. 44-46, figs. 2.
- *Abnormalitäten von *Physcomitrium piriforme* aus Siebenbürgen und von *Meesea trichodes* aus der Hohen-Tatra. Magyar Botanikai Lapok, XXXIII., 1/12, 1934, pp. 52-56, figs. 9. (Fundo Rockefelleriano adjuvente editum).
- **Funaria mediterranea* Monstruositäten aus Italien. Nuov. Giorn. bot. ital., nuov. ser., XLI., 1934, pp. 134-141, Pl. I., Firenze.
- Monographie der Thermalvegetation von Hajduszoboszlo in Ungarn. Arch. f. Protistenk., LXXVI., pp. 274-337, Pls. IV., figs. 11. (Mosses).
Review. vide ALLORGE, P. (infra.).
- HILLIER, L.—L'*Hypnum aduncum* dans le Nord-Est de la France. 65e Cong. Soc. Savantes, 1932, Sect. Sciences, pp. 280-292. Paris, 1933.
Review. vide ANONYMOUS (infra.).
- JÄGGLI, M.—Brevi note botaniche. Boll. Soc. Ticinese Sc. Nat. 1932, 1933, pp. 7, fig. 1, Locarno 1933.
Review. vide ALLORGE, P. (infra.).

- JENNINGS, O. E.—The nomenclature of some of the species muscorum. *Bryologist*, XXXVII., No. 3, 1934, p. 63-4.
- JONES, G. N.—Grimmiaceae in Grout's Moss Flora of North America north of Mexico, Vol. II., Part 1, Vermont 1933, pp. 65, Pls. 25.
Reviews. vide GEPP, A. (infra.), BARTRAM, E. B. (Supra.).
- LAZARENKO, A. S.—Zur Bryogeographie Ostasiens. *Jour. du Cycle Bot. de l'Academie d. Sci. d'Ukraine*, VII.-VIII., 1933, pp. 177-184, figs. 2. (In Russian with German summary).
Review. vide REIMERS, H. (infra.).
- LEMÉE, G.—Cas tératologique présenté par *Polytrichum juniperinum* Hedw. *Bull. mens. Soc. Amis Sc. Nat. Rouen*, 1932, No. 8, p. 6-7, Rouen, 1932.
- *LOESKE, L.—Ueber einige rheinische *Didymodon*-Formen. *Sonderab. Sitzungsber. f. 1932/3, Naturhistor. Ver. preuss. Rheinl. u. Westfal., Bonn*, 1934, pp. 4.
Review. vide REIMERS, H. (infra.).
Zu K. G. Limpricht's 100 Geburtstag. *Ann. Bryol.* VII., 1934, pp. 95-97.
- *Über *Tortula Freibergii*, *T. obtusifolia* und verwandte Formen. *Ann. Bryol.* VII., 1934, pp. 98-107.
- *Über *Tayloria splachnoides* und *Dicranum Blyttii* im norddeutschen Tieflande und über *Cynodontium Limprichtianum*. *Hedwigia*, Bd. LXXIV., 1934, pp. 214-223.
- *MEGAW, W. R.—Irish Moss Records. *Irish Naturalists' Journal*, Jan., 1935, p. 173.
- MEYLAN, C.—La var. *subjulaceum* Molendo de l'*Hypnum cupressiforme* L. *Rev. Bryol. et Lichénol.*, Tome VII., Fasc. 1-2, 1934, pp. 63-65.
- MILLER, R. B.—Mounting mosses in glycerine jelly. *Bryologist* XXXVII., No. 5, 1934, p. 86-87.
- MOHLING, R.—Starch deposition in the sporogenous cells of certain mosses. *Bull. Torr. Bot. Club*, LVII., 1930, pp. 525-532, Pl. I.
- PAPP, C.—Contribution à la monographie du *Polytrichum juniperinum* Willd. *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 154-170, Pls. II. (giving numerous forms and varieties).

- *POTIER de la VARDE, R.—Mousses nouvelles de l'Afrique tropicale française. Diagnoses préliminaires (huitième note). *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 132-153, figs. 15. (15 spp. nov. et pl. fo. nov.).
- REITER, A.—Der Micellarkohäsionsmechanismus des Laubmoosperistoms dargestellt an *Amblystegium serpens*. *Bot. Archiv.*, XXXIII., 1931, pp. 358-405, figs. 12.
- ROL, R.—Notes sur des cultures in vitro de *Bryum roseum* Schreb. *Compt. Rend. Soc. Biol. Nancy*, CXII., 1933, p. 1371-2.
- SAKURAI, K.—Beobachtungen über japanische Moosflora V, (*Fissidens* spp.). *Botan. Mag. Tokio* XLVII., Nr. 563, 1933, pp. 733-747.
Review. vide REIMERS, H. (infra.).
- SASAOKA, H.—Original descriptions of mosses collected in Japan, I. *Jour. Japanese Bot.*, IX., 7, 1933, pp. 445-449.
On some moss species named by Dr. Sakurai. *Ibid*, IX., 3, 1933, p. 206-7.
Bryological notes, VII., *Ibid*, VIII., 1933, pp. 481-4.
- SAVICZ, L.—*Dicranum robustum* Blytt auf Sachalin. Savicz, V.P. *Plantae cryptogamae*, Fasc. I. in *Acta Inst. Bot. Acad. Sci. U.S.S.R.*, 2 Ser., I., Leningrad, 1933, pp. 243-246. (In Russian with German summary).
- SAYRE, G.—The *Grimmias* of Iowa. *Bryologist*, XXXVII., No. 2, 1934, pp. 29-34.
Decurrent leaf cells in *Climacium*. *Ibid*, No. 5, pp. 83-85, figs. 6.
- *STEERE, W. C.—Mosses of British Honduras and the Department of Petén, Guatemala. *Rev. Bryol. et Lichénol.*, Tome VII., Fasc. 1-2, 1934, pp. 28-41.
*The occurrence of *Erpodium domingense* in the United States, with notes on its distribution. *Bryologist*, XXXVII., July-Aug., 1934, p. 74-5. (Texas).
- STEYERMARK, J. A.—*Bryoziphium norvegicum* in Missouri. *Bryologist*, XXXVII., No. 2, 1934, p. 47.
- STÖRMER, P.—Un cas de capsules jumelles chez *Anoetangium compactum* Schwaegr. *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, p. 200, fig. 1.
- *THÉRIOT, J.—Obituary. Francois-Hippolyte Dupret (1853-1932). *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 5-8.

Bryophyta nova (Microdus, Leucomium, Acroporium, Schradobryum, Taxithelium, Ectropothecium. Ann. Bryol. VII., 1934, pp. 157-160.

*Sur une petite collection de mousses du Guatemala. Rev. Bryol. et Lichénol., Tome VII., fasc. 1-2, 1934, pp. 56-58. (1 sp. nov.).

*TROTTER, L. B. C.—Plagiothecium denticulatum B. & S. forma propagulifera Ruthe, c. fr. in Britain. Bryologist, XXXVII., No. 1, 1934, p. 9-10, fig. 1.

WALTHER, K.—Untersuchungen über die Variabilität innerhalb des Formenkreises von Polytrichum juniperinum Willd Ann. Bryol. VII., 1934, pp. 121-156, figs. 12.

WEIER, T. E.—Neutral red staining in the protonema of Polytrichum commune. Am. Jour. Bot., XX., 6, 1933, pp. 431-439, Pl. XXVIII.

Note on cellular degeneration in the protonema of Polytrichum commune. Protoplasma XIX., 1933, p. 587-8, figs. 2.

WOESLER, A.—Entwicklungsgeschichtliche und zytologische Untersuchungen an den Vorkeimen einiger Laubmoose, sowie einige Beobachtungen über die Entwicklung ihrer Stämmchen. Beitr. Biologie Pflanzen XXI., 1, 1933, pp. 59-116., Pls. VI.-XII., figs. 8.

HEPATICIS.

*BRINKMAN, A. H.—List of Hepatics of Pacific Coast and adjoining territory. Report of Provincial Museum, Victoria, B.C., for 1933 ; 1934, pp. 24-33. (Contains full bibliography).

BUCH, H.—Verzeichnis der von H. Roivanen in Südchile während der auer'schen Feuerlandexpedition im Jahre 1929 gesammelten Plagiochila-Arten. Annales Bryologici VII., 1934, pp. 1-5, fig. 1.

Bryophyta nova. Annales Bryologici, VII., 1934, p. 161-2. (Calypogeia Meylanii sp. nov.).

CHALAUD, G.—Observations sur les spores de Fegatella conica et leurs mode de germination. Ann. Bryol. VII., 1934, pp. 9-18, figs. 14.

CLARK, L. and FRYE, T. C.—Liverworts new to the Northwestern States. Bryologist, XXXVII., No. 1, 1934, p. 1-2.

- EBERLE, G.—Das gewöhnliche Lebermoos. *Natur u. Museum*, LXIII., 9, 1933, pp. 320-324, figs. 4.
- *EVANS, A. W.—A revision of the genus *Acromastigum*. Supplement to *Annales Bryol.*, III., 1934, pp. 178, figs. 40.
Review. vide ANONYMOUS (infra.).
- FLORIN, R.—Nagra Marchantiaceefynd i nordväst Harjedalen och Torne Lappmark. *Svensk. Bot. Tidskr.*, XXXV., 1931, p. 438-9.
- FULFORD, M.—List of hepaticae of Kentucky. *Bryologist*, XXXVII., No. 2, 1934, pp. 21-28, map 1.
- GAUME, R.—Contribution à l'étude des hépatiques de la forêt de Fontainebleau. *Bull. Assoc. Nat. Vallée Loing*, 16e année, 1933, pp. 148-156.
Review. vide ALLORGE, V. (infra.).
- GUILLAUMOT, Abbé.—Hépatiques rares de la flore française. *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, p. 201. (*Eremonotus myriocarpus* & *Aplozia Schiffneri*).
- GYÖRFFY, Katinka.—Über die vergleichende Entwicklungsgeschichte und phylogenetische Bedeutung der *Oxymitra paleacea* Bisch. (*Tessalina pyramidata* Dumort.) *Folia Cryptog. (Szeged)* I., Nr. 10, 1933, pp. 1117-1251, figs. 49, tabs. XXI.-XXX. (In Magyar with German summary).
Review. vide REIMERS, H. (infra.).
- HAUPT, G.—Author's report upon "Zytologie der Gattung *Marchantia* L." (vide B.B.S. Report for 1933, p. 161). *Annales Bryol.*, VII., 1934, pp. 168-172, figs. 4.
- HERZOG, Th.—Studien über *Drepanolejeunea* II. *Ann. Bryol.* VII., 1934, pp. 57-94, figs. 37. (Part I., *ibid.*, III., 1930). (Malay Archipelago & Philippines).
- HILLIER, L. et BIZOT, M.—*Blyttia Lyellii* (Hook.) Lindb. dans le département du Jura (France). *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, p. 205-6.
- HORIKAWA, Y.—Studies on the Hepaticae of Japan, VIII. *Jour. Sci. Hiroshima Univ. Ser. B., Div. 2, I.* (1933), pp. 197-205, Pl. I., figs. 4.
- JOVET, P.—Premières localités françaises du *Frullania microphylla* (Gottsche) Pearson. *Rev. Bryol. et Lichénol.*, Tome VII., Fasc., 1-2, 1934, pp. 42-47, figs. 6.
- JOVET, P. et GUINET, C.—Notes sur la flore bryologique de la forêt de Rambouillet. I. *Riccia Huebeneriana* Lindenb. et aperçus sur les peuplements limicoles de quelques étangs. *Rev. Bryol. et Lichénol.*, VII., Fasc. 1-2, 1934, pp. 66-73.

- KHANNA, L.-P.—A new species of *Notothylas* from Rangoon. *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 116-118, figs. 4. (*N. Verdoorni* sp. nov.).
- KNAPP, E.—Hepatikologische Studien II. Was ist *Macvicaria fossombronioides* Nichols. *Annales Bryol.*, VI., 1933, pp. 62-73, figs. 21.
Review. vide REIMERS, H. (infra.).
- KNOBLOCH, I. W.—A few liverworts unreported from Western New York. *Bryologist*, XXXVII., No. 1, 1934, p. 10-11.
- KOPPE, F. und KOPPE, K.—Vorarbeiten zu einer Lebermoosflora von Thüringen. *Mitt. Thüring. Bot. Vereins N.F.* XLI., 1933, pp. 1-25.
Review. vide REIMERS, H. (infra)..
- KURZ, H. and LITTLE, T. M.—Liverworts of north and central Florida. *Bull. Florida St. Coll. for Women* XXVI., 1933, pp. 139, figs. 1-68.
- von MALMBORG, S.—Weiteres über die Gattung *Cryptothallus*. *Ann. Bryol.* VII., 1934, pp. 108-110, figs. 2.
- NEVINS, B. J.—Cytological studies on the antheridia of *Sphaerocarpus Donnellii*. *La Cellule*, XLI., 1933, p. 292.
- NIRULA, R. L. and RICHHARIA, R. H.—Some interesting observations on *Notothylas*. *Proc. Bot. Ses. Ind. Sci. Congress, Patna, 1933*.
- PANDÉ, S. K.—The origin of the archesporium in *Notothylas* Levieri Schiff. Ms. *Current Science*, I., 9, 1933, p. 272.
Review. vide REIMERS, H. (infra.).
On the morphology of *Riccia robusta* Kashyap. *Jour. Indian Bot. Soc.*, XII., 1933, pp. 110-121, figs. 2, tab. 3.
Review. vide REIMERS, H. (infra.).
- PATTERSON, P. M.—A developmental study of *Dumortiera hirsuta* (Sw.) Nees. *Jour. Elisha Mitchell Sci. Soc.*, XLIX., I., 1933, pp. 122-150, Pls. IV.-VIII.
- ROUSSEAU, C.—Sur la structure de l'épithélium hépatique des Éolidiens. *Compt. Rend. Acad. Sci. Paris.* CXCVIII., 7, 1934, pp. 677-679.
- SCHIFFNER, V.—*Macvicaria* und *Madotheca ulophylla*. *Ann. Bryol.* VII., 1934, pp. 111-120, figs. 3.
Über *Cryptothallus mirabilis* Malmb. *Ann. Bryol.*, VII., 1934, p. 165-6.

- SCHINDLER, H.—Die Lebermoose der Umgebung von Rudolstadt. Ein Beitrag zur Lebermoosflora Thüringens. Mitt. Thüring. Bot. Ver. N.F. XLI., 1933, pp. 25-32.
- SZEPESFALVI, J.—*Clevea hyalina* und *Mörckia Flotowiana*, neue Lebermoose aus der Umgebung von Budapest. Ungar. Bot. Blätter, XXXIII., Budapest, 1934, pp. 59-61. (In German).
Review. vide BOROS, A. (infra.).
- TATUNO, S.—Geschlechtschromosomen bei einigen Lebermoosen. II. Bot. Mag. Tokyo, XLVII., 1933, No. 558, pp. 438-445, figs. 33. (In Japanese).
Ditto, III. Ibid, XLVII., 1933, pp. 715-720, figs. 25. (In Japanese with German summary).
- VERDOORN, Fr.—Studien über Asiatische Jubuleae (De Frullaniaceis XV.-XVII.), mit einer Einleitung Bryologie und Hepaticologie ihre Methodik und Zukunft. Annales Bryological Supplementary vol. IV., 1934, pp. 231, figs. 32. (Price, Gulden 7.95).
- WENZL, H.—Untersüchungen über den Wasserhaushalt von *Marchantia polymorpha*. Jahrb. f. wiss. Bot., LXXIX, 2, 1934. pp. 311-352, figs. 4.
- WHEELER, L. C.—The genus *Grimaldia*. Bryologist, XXXVII., No. 5, 1934, p. 87-88.

SPHAGNA.

- GUILLAUMOT, Abbé.—Le *Sphagnum bavaricum* dans le Morvan (France). Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, 1933, p. 203.
- LEONTJEV, A. M.—Die Torfmoose des Ssyssolsk-Kreises der autonomen Provinz Komi. Savicz, V. P. Plantae cryptogamae, Fasc. I. in Acta Inst. Bot. Acad. Sci. U.S.S.R. 2 Ser. I. Leningrad, 1933, pp. 247-258. (In Russian with German summary).
- RIGG, G. G.—Notes on a sphagnum bog at Fort Bragg, California. Science, 2 Ser., LXXVII., 1933, p. 535-6.
- *SCHUMACHER, A.—*Sphagnum strictum* Sull., ein neues Torfmoos für Deutschland. Sonderab. Sitzungsber. f. 1932/3, Naturhistor. Ver. preuss. Rheinl. u. Westfal., Bonn, 1934, pp. 1-9, figs. 3.
Review. vide REIMERS, H. (infra.).

SCHWALBE, C. G. und NEUMANN, K. C.—Künstliche Torfbildung: Inkohlung von Sphagnummoos. *Angew. Chemie* XLVI., 1933, pp. 177-179.

THOMPSON, A.—New Vice-County records for Sphagna, mainly from the Northern counties. *Jour. Bot.*, LXXIII., Feb., 1935, pp. 51-53.

BRYOPHYTES.

ALLORGE, P.—Leçon inaugurale du cours de Cryptogamie. *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 179-199.

Contribution à la flore bryologique du Maroc espagnol. *Ibid*, pp. 206-208. (Hepatics and mosses).

Reviews of :—ANDREWS, A. Le R. (1933 list), PICCIOLI, E. (1933 list), REIMERS, H. (Korea, Moosflora, 1931 list), REIMERS, H. u. SAKURAI, K. (1932 list), SCHENK, E. and FRYE, T. C. (1933 list), VERDOORN, Fr. (Levermosgeslachten, 1932 list, Taxonomic hepaticology, 1932 list), BOROS, A. (infra.), HORVAT, I. (infra.), EVANS, A. W. (Plagiochasma, supra.), ZEROW, D. (Ukraine bryophytes, 1933 list). *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 209-216.

Obituary. André de Crozals (1861-1932). *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, p. 225-6 (Includes bibliography).

Obituary. Karl von Goebel (1854-1932). *Ibid*, p. 227-8.

Reviews of :—BARTRAM, E. B. (Honduras and Guatemala mosses, supra.), EVANS, A. W. (Scapania, 1930 list), JONES, G. N. (Grimmiaceae, supra), KASHYAP, S. R. and CHOPRA, R. S. (1933 list), GYÖRFFY, I. (Thermalvegetation, supra), HARMSEN, L. (infra), JÄGGLI, M. (supra), KOTILAINEN, M. (Seltenheiten, 1933 list), SAVICZ, L. (Kamschatka sphagna, supra.), PAUL, H. (Einfluss des Wassers, 1932 list), BLAIKLEY, N. M. (water absorption, 1932 list), GYÖRFFY, I. (Novitas bryol. VI., supra.). *Rev. Bryol. et Lichénol.*, Tome VII., Fasc. 1-2, 1934, pp. 122-133.

ALLORGE, V.—Reviews of :—GROUT, A. J. (Hygroamblystegium, 1933 list), DIXON, H. N. (Amblystegium, 1933 list), SHARP, A. J. (1933 list), GAUME, R. (Fontainebleau bryophytes, infra.). *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 209-215.

Reviews of:—BRINKMAN, A. H. (Canadian hepatics, 1933 list), DIXON, H. N. (Hong Kong mosses, 1933 list), BAILEY, J. W. (Snowbank mosses, 1933 list), BARTRAM, E. B. (Venturiella, supra.), GAUME, R. (Osmunda, infra., Fontainebleau hepatics, supra.), PODPERA, J. et SUZA, J. (1933 list), STEYERMARK, J. A. (Bryoziphium, supra.), STUDHALTER, R. A. (Riella, 1933 list), WILLIAMS, R. S. (Lindbergia, 1933 list), PANDE, S. K. (Notothylas, 1933 list; Riccia, supra.), FLOWERS, S. (fossil mosses, 1933 list). Rev. Bryol. et Lichénol., Tome VII., Fasc. 1-2, 1934, pp. 122-133.

AMMONS, N.—Twenty minutes collecting bryophytes on Mount Washington summit. Bryologist, XXXVII., No. 1, 1934, p. 3-4. (New Hampshire).

Preliminary list of West Virginia mosses. Bryologist XXXVII., No. 4, 1934, pp. 65-74. (Includes sphagna).

ANONYMOUS.—Review of EVANS, A. W. (Genus Acromastigum, supra). Jour. Bot. LXXII., Nov., 1934, p. 327.

ANONYMOUS.—Review of Annales Bryol., VII. Jour. Bot., LXXIII., Feb., 1935, p. 62-3.

ANONYMOUS. Reviews of:—BARTRAM, E. B. (Mexican mosses, 1932 list; Templeton Crocker Expedn. mosses, supra.), HERZOG, Th. (Java bryophytes, 1932 list), POTIER de la VARDE, R. (Fissidens Høegii, 1933 list), STEERE, W. C. (S. Michigan mosses II., 1933 list), THÉRIOT, J. (Sierra Nevada mosses, 1933 list), VERDOORN, Fr. (De Frullaniaceis X. & XI., 1933 list), CORNET, A. (Belgian bryophytes, infra.), HILLIER, L. (Hypnum aduncum, supra.), KHANNA, L. P. (Anthoceros, 1932 list), NICHOLSON, W. E. (Cinclidotus, 1932 list), STEERE, W. C. (Meesea, 1932 list). Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, 1933, pp. 209-216.

ANONYMOUS.—Reviews of:—DIXON, H. N. and SAINSBURY, G. O. K. (1933 list), CARBONNEL, J. (infra.), DISMIER, G. (Vercors bryophytes, infra.), FULFORD, M. (Kentucky hepatics, supra.), GROUT, A. J. (Miscell. notes, 1933 list), IKENBERRY, G. J. (1933 list), MOXLEY, E. A. (N. Grey co. mosses, 1933 list), STEERE, W. C. (Bartramia, 1933 list), GYÖRFFY, I. (Novitas, supra.), COOPER, W. S. and FOOT, H. (1933 list). Rev. Bryol. et Lichénol., Tome VII., Fasc. 1-2, 1934, pp. 123-133.

*ARMITAGE, E.—The British Bryological Society. (History and activities). Ann. Bryol., VII., 1934, p. 164-5.

- BAUR, K. and FULFORD, M.—The first bryological foray, 1933. *Bryologist*, XXXVII., No. 3, 1934, p. 55-56. (Southern Appalachian Mts., E. United States).
- BORNMÜLLER, J.—Ein kleiner Beitrag zur Moosflora des östlichen Tirols und angrenzenden Vorarlbergs. *Mitt. Thüring. Bot. Ver. N. F.* XLI., 1933, pp. 33-38.
- BOROS, A.—A nyírség flórája és növényföldrajza. (La flore et la végétation du Nyírség's). *Publ. Commiss. pour la Grogr. du Pays natal*, vol. VII., 207 pp., Budapest, 1932. (Bryophytes on pp. 31-39).
Review. vide ALLORGE, P. (supra.).
- Reviews of :—LATZEL, A. (infra), SZEPESEFALVI, J. (Clevea, supra). *Rev. Bryol. et Lichénol.*, Tome VII., Fasc. 1-2, 1934, pp. 127-129.
- BUCH, H.—Methoden zur Herstellung mikroskopischer Dauerpräparate von Moosen unter Anwendung wässriger Einschlussmittel. *Ann. Bryol.*, VII., 1934, pp. 6-8.
- CARBONEL, J.—Liste complète des muscinées observées dans la commune de Thérnodels (Aveyron). *Bull. Soc. Bot. France*, LXXX., 1933, pp. 509-514.
- *CHRISTOPHERSEN, Erling.—Plants of Gough Island (Diego; Alvarez). *Det Norske Videnskaps-Akademi i Oslo*, 1934; (Musci by H. N. DIXON, Sphagna by J. LID, and Hepaticae by H. BUCH, pp. 9-10).
- CORNET, A.—Glanures bryologiques. *Bull. Soc. R. Bot. Belgique*, LXV., 1933, pp. 87-89.
Review. vide ANONYMOUS (supra.).
- CULMANN, P.—Un îlot de mousses atlantiques dans les Alpes françaises. *Rev. Bryol. et Lichénol.*, Tome VI., Fasc. 1-4, 1933, pp. 78-89. (Mosses and hepatics in the Arve basin above Chedde).
Nouvelle contribution à la flore bryologique du bassin supérieur de l'Arve. *Bull. Soc. Bot. France*, LXXX., 3/4, 1933, pp. 217-230.
- DAVIS, T. A. W. and RICHARDS, P. W.—The vegetation of Moraballi Creek, British Guiana: an ecological study of a limited area of tropical forest. Part I. *Jour. Ecol.*, XXI., 1933, pp. 350-384.
Ditto, Part II. *Ibid*, XXII., 1934, pp. 106-155.
- DISMIER, G.—Aperçu sur la flore bryologique du Vercors (Drôme). *Bull. Soc. Natural. et des Archéol. de l'Ain*, XLVII., 1933, pp. 176-178.

- *DIXON, H. N.—The nomenclature of the Species Muscorum. Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, pp. 93-115, 1933.
- *FAEGRI, Knut.—Über die Längenvariationen einiger Gletscher des Jostedalsbre und die dadurch bedingten Pflanzensukzessionen. Bergens Museums Arbok 1933 Naturvidenskapelig rekke Nr. 7, pp. 255, figs. 47, tabs. 32.
- GAMS, H.—Beiträge zur Kenntnis der Steppenmoose. Ann. Bryol. VII., 1934, pp. 37-56, figs. 7. (Ecological paper).
- GARDET, G.—Observation critique sur l'irrigation au jardin botanique du Lautaret. Bull. Soc. Bot. France, LXXVII., 1930, pp. 186-188.
- GAUME, R.—Une excursion bryologique au Long Rocher (forêt de Fontainebleau). Bull. Naturalistes Vallée du Loing, XVI., 1933, pp. 77-81.
Review. vide ALLORGE, V. (supra.).
- L'Osmonde Royale (*Osmunda regalis* L.) Fougères en forêt de Montargis. Bull. Ass. Nat. Vallée Loing, 16e année, 1933, p. 76-7. (Includes bryophytes).
Review. vide ALLORGE, V. (supra.).
- GEPP, A.—Review of JONES, G. N. (Grimmiaceae, supra.). Jour. Bot., LXXII., Ap., 1934, p. 118.
- HARMSSEN, L.—Mosses. Meddel. om Grønland, udg. af Kommissionen for Vidensk. Undersog. i Grønland, Bd. 104, Nr. 7, Copenhagen, 1933, pp. 40, map 1, figs. 11.
Review. vide ALLORGE, P. (supra.). (Includes mosses and hepatics.).
- HERTER, G.—Estudios botánicos en la Región Uruguaya, III. Plantae avasculares. Montevideo, 1933, pp. 84, Pl. XI.-XIX.
- HERZOG, Th.—Die Bryophyten der Andenreisen von C. Troll (Bolivia, Columbia, Panama). Hedwigia, Bd. LXXIV., Hft. 2, Juni, 1934, pp. 79-114, figs. 13. (Mosses, hepatics and sphagna; pl. spp. nov.).
- HILLIER, L.—Aperçu bryologique sur la forêt de la Serre (Jura). Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, 1933, pp. 119-131.
- HOFFMANN, A.—Liste des muscinées et hépatiques recueillies dans le département de Seine-et-Oise. Bull. Soc. Sci. Nat. de S.-et-O., Sér. 3, I., 1933, pp. 8-17.

- HORVAT, I.—Grada za briogeografiju Hrvatske (Matériaux pour la bryogeographie de la Croatie). Acta Bot. Inst. Bot. Univ. Zagrebensis, VII., pp. 73-128, Zagreb, 1932. (In Croatian, with German summary).
Review. vide ALLORGE, P. (supra.).
- JAEGGLI, M.—Musci arboricoli del Cantone Ticino (Regione del Castagno, 200-1000 m.). Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, 1933, pp. 23-67, map 1, figs. 2, Pls. II. (Moss and hepatic associations on trees).
- JOVET, P.—Muscinées de quelques cimetières parisiens urbains. Notes de Bryologie urbaine. II. Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, 1933, pp. 175-178.
- KOPPE, F.—Die Moosflora von Westfalen. I. Abhandl. Westfäl. Provinzial-Mus. f. Naturk. V., 1934, Heft 4, pp. 31. (Includes long bibliography).
Review. vide REIMERS, H. (infra.).
Kleine Beiträge zur Flora des nördlichen Westpreussens. Ber. d. Westpreuss. Bot.-Zool. Ver., LV., 1933, pp. 1-16.
- KRAHMER, B.—Die Moose der Umgebung Arnstadts und der benachbarten Teile des Thüringer Waldes. Mitt. Thuring. Bot. Ver., XL., 1931, pp. 20-42.
- LATZEL, A.—Moose aus dem Bakony-und Vértesgebirge. Mag. Bot. Lapok, XXXII., 1933, pp. 153-182. (Mts. in Hungary)
- LOESKE, L.—Obituary. Carl Correns (1866-1933). Rev. Bryol. et Lichénol., Tome VI., Fasc. 1-4, 1933, p. 226.
- *MARQUAND, C. V. B.—The Vegetation of the Island of Rum. Proc. Linn. Soc. London, Session 146, 1933-34, Pt. I. (Off W. coast of Scotland).
- MÖLLER, Hj.—Obituary. H. W. Arnell. Ann. Bryol., VII., 1934, p. 163-4, with portrait.
- OCHSNER, F.—Études sur quelques associations épiphytes du Languedoc. Rev. Bryol. et Lichénol., Tome VII., Fasc. 1-2, 1934, pp. 74-104, figs. 11.
- PATSCHOW, F.—Geotropismus und Statolithenstärke bei Bryophyten. Beih. Bot. Centralbl., LI., I., Abt. 2, 1933, pp. 287-310, figs. 14.
- PITMAN, E. M.—Additional mosses from Maine, U.S.A. Bryologist, XXXVII., No. 3, 1934, p. 62-3.
- PODPERA, J.—Ad bryophyta Romaniae cognoscenda communicatio. Bull. Jard. Mus. Bot. Univ. Cluj, XI., 1931, pp. 53-64, figs. 3.

- POLUNIN, N.—The flora of Akpatok Island, Hudson Strait. Jour. Bot. LXXII., July, 1934, pp. 197-204. (Includes hepaticae and musci).
- REIMERS, H.—Reviews of:—ALBRECHT, J. H. (Polytrichum, 1933 list), ANDREWS, A. Le R. (Stablerias, 1933 list), BARTRAM, E. B. (Templeton Croker Expedn., supra.; Polynesian mosses, supra.), DIXON, H. N. and SAINSBURY, G. O. K. (N.Z. mosses, 1933 list), GUPTA, K. M. (Physcomitrellopsis, supra), GYÖRFFY, K. (Tessalina, supra.), KNAPP, E. (Macvicaria, supra.), KOPPE, F. (Westfalian mosses, supra.), KOPPE, F. und KOPPE, K. (Thüringen hepatics, supra.), LAZARENKO, A. S. (E. Asiatic bryophytes, supra.), LOESKE, L. (Didymodon forms, supra.), MÖLLER, Hj. (Grimmia, 1933 list), PANDÉ S. K. (Notothylas indica, supra; N. Levieri, supra.; Riccia, supra.), PICCIOLI, E. (Orthotrichum, 1933 list), SAKURAI, K. (Japanische Moosflora V., supra.). SCHUMACHER, A. (Sphagnum strictum, supra.). Hedwigia, Bd. LXXIV., Hft. 3/4, Aug., 1934, pp. 22-30.
- Zweiter Nachtrag zur Moosflora der Provinz Brandenburg. Verh. Bot. Ver. Prov. Brandenb., LXXIV., 1932/3, pp. 131-179.
- Bericht über die auf dem Herbstausflug in den Blumental am 24 September, 1933, beobachteten Moose. Ibid, pp. 368-371.
- RENDLE, A. B.—International Rules of Botanical Nomenclature adopted by the Fifth International Botanical Congress, Cambridge, 1930. Supplement to Jour. Bot., June, 1934, pp. 29.
- RENDLE, A. B.—Obituary. David McArdle (1849-1934). Jour. Bot., LXXII., Oct., 1934, p. 292.
- *RICHARDS, P. W.—Musci collected by the Oxford Expedition to British Guiana in 1929. Bull. Miscellaneous Information, Royal Botanic Gardens, Kew, No. 8, 1934, pp. 317-337, figs. 6; H.M. Stationary Office, London, price 8 pence. (Includes sphagna. 3 spp. nov., true mosses).
- SARRASSAT, C.—Les études de botanique dans la Creuse de 1832 à 1932. Mém. Soc. Sc. Nat. et Archéol. Creuse, fasc. du Centenaire, pp. 21, Guéret, 1932.
- SEYERMARK, J. and MOORE, J. A.—Report of a botanical expedition into the mountains of Western Texas. Ann. Missouri Bot. Gard., XX., 1933, pp. 791-800. (Bryophyta p. 795-6).

*STEERE, W. C.—The Bryophytes of the Chase S. Osborn Preserve of the University of Michigan, Sugar Island, Chippewa County, Michigan. *American Midland Naturalist*, XV., No. 6, 1934, pp. 761-769. Univ. Press, Notre Dame, Ind., U.S.A. (Mosses, hepatics and sphagna).

*Unreported or otherwise interesting bryophytes from Michigan. *Bryologist*, XXXVII., May - June, 1934, pp. 57-62. (Mosses and hepatics).

Ditto, II. *Ibid*, XXXVII., Sept.-Oct., 1934, pp. 79-82.

STEHLI, G.—Das Goldene Frauenhaar. *Kosmos*, XXX., 4, 1933, pp. 120-122, figs. 3.

EXSICCATI.

v. KEISSLER, C.—Schedae ad Kryptogamas exsiccatas editae a Museo Historiae naturalis Vindobodensis Cent. XXXII., No. 3171-3200, Musci et Addenda. *Ann. Naturhist. Mus. Wien* XLVI., 1932-33, pp. 219-223.

*YOUNG, W.—Notes on recent additions of British mosses to the Collection in the Herbarium at the Royal Botanic Garden, Edinburgh. *Trans. and Proc. Bot. Soc. Edin.*, XXXI., Part III., 1934, pp. 339-342.

I take this opportunity of thanking all those who have assisted me in compiling this list, either by notifying me of works or by sending reprints. I hope that members will not be deterred by the fear of giving trouble from availing themselves of the Card Index. It does not take long to look up and type out any references that are wanted.

LESLIE B. C. TROTTER.

June 1st, 1935.

OBITUARY.

LEOPOLD LOESKE (1865-1935).

Herr Loeske was born on October 24th, 1865, and died in March, 1935. A journalist by profession, he early acquired an interest in Natural History, and became one of the foremost of European bryologists. He belonged to a generation which saw many celebrated bryologists, many of whom have now left us. He owed much of his early bryological training to C. Warnstorf and M. Fleischer. A keen observer, he stressed the importance of studying the living plant in its natural surroundings, the gametophyte receiving particular attention. His greatest interest was centred in the evolution and relationship of bryophytes. Twenty years of investigation on these lines led to the publication in book-form of a collection of notes in 1910.

His better known works include a Moss Flora of the Harz, and monographs of the European *Funariaceae* and *Grimmiaceae*. He never considered his treatment of the *Grimmiaceae* to be complete. There were two editions (1913 and 1930). He felt there was still useful work to be done; he had in fact re-written the second edition two or three times before it came to publication, after looking at the group from several angles. He wrote over sixty miscellaneous papers in various botanical journals, including the Reports of our Society.

His fellow bryologists will greatly miss him, especially the younger generation, many of whom owe much to his assistance.

He was elected an Honorary Member of the British Bryological Society in the year 1925.

J. H. A.

PHILIP GRAFTON MOLE RHODES (1885-1934).

The Rev. Dr. Rhodes passed away at Evesham, Worcestershire, on December 16th, 1934, at the early age of 49. He belonged to a Birmingham family and was educated at King Edward's School of that city. He went to Pembroke College, Cambridge later, where he won many prizes and took his degree with First-Class Honours in Theology and Classics. At the end of his course he was ordained a Curate of the Church of England at Kidderminster, where he remained for

four years. Afterwards he became a Catholic and was sent to Fribourg University, Switzerland, for the studies of the Catholic priesthood. In due course he took his Doctorate of Divinity. Later he was appointed Professor of Dogmatic Theology at Oscott College, Birmingham, where he proved very successful and was much liked. Leaving Birmingham, after several years, he was appointed Parish Priest of the Catholic St. Mary's Church, Evesham, which appointment he held at his death.

He was a great lover of Nature and Natural History from his youth and was an enthusiast to the end. In 1925 he was elected a Fellow of the Linnean Society.

For many years he was a member of the British Bryological Society and contributed much to its success. He had a wide knowledge of Mosses, Hepatics and Lichens, together with Phanerogams.

During the latter part of his life he paid much attention to Fungi of all kinds, chiefly Pyrenomycetes which he exchanged with foreigners on a large scale. His collections of Fungi went to Kew where they are much appreciated. He wrote notes on the Fungi of Worcestershire, which appeared at different times in the Transactions of the Worcestershire Natural History Society. In 1909 he compiled a List of Mosses, Hepatics and Lichens of the Channel Islands, which appeared in the Transactions of the Guernsey Society of Natural Science and, also, contributed Notes on the same groups to "A Short Flora of Cambridge," edited by A. H. Evans, M.A.

His large and valuable Herbarium of Mosses, mostly British and European, comprising over 10,000 specimens and including 35 fascicles of Bauer's Exsiccata of European Mosses was given, a few years ago, to the British Bryological Society, who presented it, with the donor's consent to the British Museum (Natural History), South Kensington, on the condition that a Standard Herbarium be formed to which members of that Society should have special access. His Hepatic and Lichen Herbarium went to the Birmingham Natural History Museum. He left his estate to the Fribourg University for the endowment of a Scholarship.

The Rev. Dr. Rhodes was a gentleman in the true sense of the word and as one of his students remarked, "a saintly man for whom those who came in contact with him had a real affection." Many of us will miss him greatly and feel that we have lost a man of striking personality and of unfailing courtesy.

D. A. J.

This title page is placed here so as to maintain continuation of synchronised page numbers throughout Volume 3. It would ordinarily have been Page 175

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