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**TYPE SPECIMENS OF BRYOPHYTES
IN THE NATIONAL MUSEUM OF
NATURAL SCIENCES,
NATIONAL MUSEUMS OF CANADA**

Robert R. Ireland and Linda M. Ley

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TYPE SPECIMENS OF BRYOPHYTES IN THE
NATIONAL MUSEUM OF NATURAL SCIENCES,
NATIONAL MUSEUMS OF CANADA

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and
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K1A 0M8

Syllogeus No. 47

National Museums of Canada
National Museum of Natural Sciences

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ABSTRACT

The type specimens of bryophytes in the Bryophyte Herbarium of the Museum of Natural Sciences are listed. Types of 848 moss and 86 liverwort taxa are catalogued, listing the authority, literature citation, kind of type, locality information, collector number or date, CANM accession number and current accepted name for each taxon. The type specimens from the valuable Macoun herbarium are recorded separately from the specimens received from other sources.

RÉSUMÉ

Les spécimens types de bryophytes consignés à l'herbier du Musée national des sciences naturelles sont énumérés dans ce travail. Les types de 848 mousses et 86 hépatites sont catalogués et contiennent les renseignements suivants: citation des noms d'auteurs et de la bibliographie, genre de type, localité, numéro de récolte ou date, numéro d'homologation dans CANM et nom d'usage courant de chacun des taxons. Les spécimens types de l'inestimable herbier Macoun sont enregistrés séparément des autres spécimens.

ACKNOWLEDGEMENTS

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INTRODUCTION

This catalogue lists all the type specimens of bryophytes (mosses - MUSCI and Liverworts - HEPATICAEE) in the National Museum of Natural Sciences (CANM) in Ottawa. It is intended as an aid to researchers who need to locate type specimens required for their studies. Searching for types is often a laborious and time-consuming job which can be expedited by a catalogue listing the holdings of an institution. We hope that this catalogue will be of assistance to scientists throughout the world.

The type specimens in the catalogue are divided into the following two groups:

- 1) TYPE SPECIMENS FROM MACOUN'S HERBARIUM. These specimens are part of the John Macoun herbarium which he collected or were collected and sent to him by James M. Macoun (his son), R. Bell, A. Brinkman, G.M. Dawson, J. Dearness, J. Fletcher, J. Fowler, A.P. Low, J. Moser, C.F. Newcombe, W. Palmer, A.C. Waghorne and J. White. Most of the taxa were described by the Swedish bryologist N.C. Kindberg, and the holotypes are presently at the Swedish Museum of Natural History (S) in Stockholm.

The various problems with the Macoun types have been discussed by Steere and Crum (1977). Though some of his specimens in CANM are clearly marked as being new (e.g. "n. sp.", "n. subsp." or "n. var."), a great number have no indication of the "type" designation at all. However, they seem to fit the protologue perfectly, so we are reasonably certain that they are types. Regardless of whether they are marked or not, other problems exist as well. Often the information on the label does not correspond with the protologue in every detail; sometimes part of the locality description does not match, while in other cases the date does not agree. The numbers on the labels and packets, often several different ones, are meaningless and are rarely cited in the protologue. Whenever some part of the label data does not match the protologue, a "?" is placed after the kind of type in the catalogue. The types without a question mark appear more clearly to be bona fide types, but in the final analysis it is up to the specialist studying the specimens to decide.

- 2) TYPE SPECIMENS FROM OTHER SOURCES. These specimens form the remainder and bulk of the types in CANM. They were obtained primarily from other institutions and were collected by numerous people. Most of these specimens appear to be types since the label data matches the protologue, but the type is questioned whenever there is a problem regarding the exact data.

The catalogue lists the name (basionym) of the taxon, followed by the authority and the literature citation for the protologue. Below the taxon is the kind of type(s), followed by the information on the label, including locality data, collector, collector's number, if listed, or the date if not listed, an exsiccat name and number when applicable, and the CANM accession number on the packet. The current accepted name is given below following basically the nomenclature of Wijk, Margadant, and Florschütz (1959-69), with recent additions in Crum, Steere and Anderson (1973) and Ireland et al. (1980) for the mosses and Stotler and Crandall-Stotler (1977) for the liverworts.

Besides assisting scientists locate type specimens for their studies, this catalogue should help curators in other herbaria locate types among their collections which may have escaped notice. This is especially true of the Macoun collections which were widely distributed throughout the world. At the same time, our herbarium may contain additional types that we presently do not know exist, and we would be grateful for any information about those that we have overlooked.

TYPE SPECIMENS FROM MACOUN'S HERBARIUM
(All specimens collected by J. Macoun
unless stated otherwise)

MUSCI

Amblystegium dissitifolium Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 220. 1892.
SYNTYPES. Canada: Ontario, Niagara Falls, 24 September 1891 (CANM 197756); Ontario, Owen Sound, 16 September 1891 (CANM 197757).
= *Conardia compacta* (C. Müll.) Robins.

Amblystegium distantifolium Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 222. 1892.
SYNTYPE. Canada: Newfoundland, New Harbour, A.C. Waghorne, 16 August 1890 (CANM 197758).
= *Hygroamblystegium tenax* (Hedw.) Jenn.

Amblystegium serpens ssp. **columbiae**
Kindb. *in* Mac., Bull. Torrey Bot. Cl. 17: 279. 1890.
ISOTYPE. Canada: British Columbia, 1 mi. from Sicamous, 19 July 1889 (CANM 197960).

Anacolia aristifolia Flow. *in* Grout, Moss Fl. N. Amer.
2: 156. 1935.
ISOTYPE. Canada: British Columbia, Vancouver I., Cedar Hill, 21 May 1887 (CANM 197360).
= *A. menziesii* (Turn.) Par.

Andreaea macounii Kindb. *in* Mac., Bull. Torrey Bot. Cl. 17: 83. 1890.
ISOTYPES? Canada: British Columbia, highest slopes of the mountains N of Griffin Lake, Gold Range, alt. 6500 ft., 1889, CANADIAN MUSCI 401 (CANM 197761); British Columbia, mountains N of Griffin Lake, 11 August 1889 (CANM 197762).
= *A. nivalis* Hook.

Andreaea sparsifolia var. **sublaevis**
Kindb., Ottawa Nat. 7: 17. 1893.
ISOTYPE. Canada: British Columbia, Vancouver I., Carmannah, J.M. Macoun, 9 May 1892 (CANM 197763).
= *A. rupestris* var. *acuminata* (B.S.G.) Sharp

Anoectangium canadense Kindb., Ottawa
Nat. 14: 86. 1900.
ISOTYPE. Canada: British Columbia, Vancouver I., 7 May 1875 (CANM 197764).
= *Amphidium californicum* (C. Müll.) Broth.

Anomodon heteroideus Kindb. *in* Mac. & Kindb., Cat. Canad. Pl.
6: 172. 1892.
SYNTYPES. Canada: Ontario, Owen Sound, 10 September 1890 (CANM 197767); Ontario, Owen Sound, 16 September 1890 (CANM 197766); Ontario, Ottawa, McKay's woods, October 1885 (CANM 197768).
= *Leskeella nervosa* (Brid.) Loeske

Anomodon platyphyllus Kindb., Ottawa
Nat. 7: 19. 1893.
SYNTYPES. Canada: Ontario, CANADIAN MUSCI 256 (as *A. obtusifolius* Bruch & Schimp.) (CANM 197770). Ontario, Belleville, October 1868 (CANM 197772); Ontario, Ottawa, October 1884 (CANM 197773); Québec, Rivière Rouge, 1870 (CANM 197771).
= *A. minor* (Hedw.) Fürnr.

Atrichum leiophyllum Kindb. *in* Mac., Bull. Torrey Bot. Cl. 17: 275. 1890.
ISOTYPE. Canada: British Columbia, Vancouver I., Mount Arrowsmith, 18 July 1887 (CANM 197775; 197776).
= *Oligotrichum parallelum* (Mitt.) Kindb.

Atrichum rosulatum C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl. 6: 148. 1892.
ISOTYPE? Canada: British Columbia, Revelstoke, 9 May 1890 (CANM 197777).
= *A. selwynii* Aust.

Aulacomnium palustre var. **laxifolium**
Kindb. *in* Mac. & Kindb., Cat. Canad. Pl. 6: 145. 1892.
ISOTYPE. Canada: British Columbia, Roger's Pass, 6 August 1890 (CANM 197778).

- Barbula andreaeoides** Kindb., Rev. Bryol.
32: 36. 1905.
ISOTYPES. Canada: British Columbia,
McArthur Pass, 10 August 1904 (CANM
197780); British Columbia, Lake O'Hara,
10 August 1904 (CANM 127780).
= *Didymodon subandreaeoides*
(Kindb.) Zander
- Barbula brachyngia** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 59. 1892.
ISOTYPE. Canada: Québec, Anticosti
I., 3 September 1883 (CANM 197781).
= *Tortula norvegica* (Web.)
Lindb.
- Barbula brachyphylla** var. **angustifolia**
Kindb. *in* Mac. & Kindb., Cat.
Canad. Pl. 6: 55. 1892.
ISOTYPE. Canada: British Columbia,
Deer Park, Lower Arrow Lake, 8 June
1890 (CANM 197782).
= *B. vinealis* Brid.
- Barbula chrysopoda** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 57. 1892.
ISOTYPES. Canada: British Columbia,
Revelstoke, 17 May 1890, CANADIAN MUSCI
216 (CANM 197784); British Columbia,
Revelstoke, 17 May 1890 (CANM 197783;
197785).
= *B. convoluta* Hedw.
- Barbula circinnatula** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 57. 1892.
ISOTYPE. Canada: British Columbia,
Agassiz, 8 May 1889 (CANM 197786).
= *B. cylindrica* (Tayl. ex
McKay) Schimp. ex Boul.
- Barbula convoluta** var. **obtusata**
Kindb. *in* Mac. & Kindb., Cat.
Canad. Pl. 6: 220. 1892.
ISOTYPE. Canada: Ontario, Owen Sound,
16 September 1890 (CANM 197787).
- Barbula decursivula** Kindb. *in* Mac.
& Kindb., Cat. Canad. Pl.
6: 264. 1892.
ISOTYPE. Canada: British Columbia,
Stephen, 15 August 1890 (CANM 197788).
= *B. fallax* Hedw.
- Barbula horridifolia** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 57. 1892.
ISOTYPE. Canada: British Columbia,
Revelstoke, 9 May 1890, CANADIAN MUSCI
542 (CANM 197789).
= *B. cylindrica* (Tayl. ex
McKay) Schimp. ex Boul.
- Barbula inclinatula** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 50. 1892.
ISOTYPES. Canada: British Columbia,
in the old bed of the Illicillewaet,
near Revelstoke, 27 May 1890, CANADIAN
MUSCI 512 (as *B. (Tortella)*
inclinatula C. Müll. & Kindb.) (CANM
126423); British Columbia, near
Revelstoke, 27 May 1890 (CANM
197790); British Columbia, Revelstoke,
27 May 1890 (CANM 126422).
= *Tortella inclinata* (Hedw. f.)
Limpr.
- Barbula laeviuscula** Kindb. *in* Mac.
& Kindb., Cat. Canad. Pl.
6: 265. 1892.
ISOTYPE. Canada: Alberta, Banff, 6
July 1890 (CANM 197791).
= *Tortula ruralis* (Hedw.)
Gaertn., Meyer & Scherb.
- Barbula lato-excisa** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 60. 1892.
ISOTYPE. Canada: British Columbia,
Cedar Hill, near Victoria, 20 May 1887
(CANM 197793).
= *Tortula princeps* De Not.
- Barbula leptotricha** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 60. 1892.
ISOTYPE. Canada: Manitoba, Lake
Winnipegosis, 16 July 1881 (CANM
197794).
= *Tortula intermedia* (Brid.) De
Not.
- Barbula macrorhyncha** Kindb. *in*
Mac. & Kindb., Cat. Canad. Pl.
6: 50. 1892.
ISOTYPE. Canada: Ontario, North
Hastings, 16 August 1874 (CANM
197795).
= *Aloina rigida* (Hedw.) Limpr.
- Barbula megalocarpa** Kindb. *in*
Mac., Bull. Torrey Bot. Cl.
16: 92. 1889.
ISOTYPE? Canada: British Columbia,
Vancouver I., near Victoria, 21 April
1887, CANADIAN MUSCI 79 (CANM 132902).
- Barbula melanocarpa** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 54. 1892.
ISOTYPE? Canada: British Columbia,
Yale, 18 May 1889 (CANM 197797).
= *Didymodon occidentalis* Zander

- Barbula oenea** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 55. 1892.
ISOTYPE? Canada: British Columbia,
Revelstoke, 19 May 1890 (CANM 197798).
= *Bryoerythrophyllum*
recurvirostrum (Hedw.) Chen
- Barbula papillinervis** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 60. 1892.
SYNTYPES. Canada: British Columbia,
Câche Creek, 25 May 1875 (CANM 197799);
British Columbia, Revelstoke, 23 May
1890 (CANM 197800); British Columbia,
Arrow Lake, 18 June 1890 (CANM
197801).
= *Tortula pulvinata* ssp.
papillinervis (C. Müll. &
Kindb.) Par.
- Barbula platyneura** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 52. 1892.
ISOTYPE. Canada: British Columbia,
Deer Park, Lower Arrow Lake, 11 June
1890 (CANM 197792).
= *Pseudocrossidium revolutum*
(Brid. in Schrad.) Zander
- Barbula pseudo-rigidula** Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 264. 1892.
ISOTYPE. Canada: British Columbia,
Lytton, 17 April 1889 (CANM 197802).
= *B. cylindrica* (Tayl. ex
McKay) Schimp. ex Boul.
- Barbula robustifolia** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 56. 1892.
SYNTYPE? Canada: British Columbia,
Vancouver I., 5 May 1875 (CANM
197803).
= *B. cylindrica* (Tayl. ex
McKay) Schimp. ex Boul.
- Barbula ruralis** ssp. *alaskana*
Kindb., Sp. Eur. & N. Amer. Bryin.
2: 249. 1897.
SYNTYPE? United States: Alaska,
Unalaska I., J.M. Macoun, 14
September 1892 (CANM 197804).
= *Tortula ruralis* (Hedw.)
Gaertn., Meyer & Scherb.
- Barbula sparsidens** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 54. 1892.
ISOTYPE. Canada: British Columbia,
Revelstoke, 3 May 1890 (CANM 197805).
= *B. fallax* Hedw.
- Barbula subandreaeoides** Kindb., Rev.
Bryol. 32: 36. 1905.
ISOTYPE. Canada: British Columbia,
Yoho Valley, 6 September 1904 (CANM
197806).
= *Didymodon subandreaeoides*
(Kindb.) Zander
- Barbula subcarnifolia** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 52. 1892.
ISOTYPE. Canada: Ontario, Pelee I.,
13 June 1882 (CANM 197807; 197808).
= *Desmatodon porteri* James
ex Aust.
- Barbula subcuneifolia** Kindb., Ottawa
Nat. 5: 196. 1892.
ISOTYPE. United States: Alaska, St.
Matthews I., Behring Sea, J.M.
Macoun, 10 August 1891 (CANM
197809).
= *Tortula mucronifolia* Schwaegr.
- Barbula subgracilis** C. Müll & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 53. 1892.
ISOTYPE. Canada: British Columbia,
Yale, 17 May 1889 (CANM 197810).
- Barbula subgracilis** var. *viridior*
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 263. 1892.
ISOTYPE. Canada: Ontario, Owen Sound,
Sydenham River, 17 September 1890 (CANM
197811).
- Barbula subicmadophila** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 53. 1892.
ISOTYPE. Canada: British Columbia,
Yale, 17 May 1875 (CANM 197812).
= *Didymodon occidentalis* Zander
- Barbula subulata** var. *longifolia*
Kindb. in Mac., Bull. Torrey Bot.
Cl. 17: 89. 1890.
SYNTYPES. Canada: British Columbia,
Yale, 17 May 1875 (CANM 197814);
British Columbia, vicinity of Victoria,
7 May 1875 (CANM 197813).
= *Tortula subulata* Hedw.
- Barbula tortellifolia** C. Müll & Kindb.
in Mac. & Kindb., Cat. Canad.
Pl. 6: 56. 1892.
SYNTYPE. Canada: British Columbia,
Burrard Inlet, North Arm, 30 April 1889
(CANM 197815).
= *B. cylindrica* (Tayl. ex
McKay) Schimp. ex Boul.

Bartramia circinnulata C. Müll & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 105. 1892.
ISOTYPE. Canada: British Columbia,
Hastings, 6 April 1889 (CANM 197817).
= *B. pomiformis* var.
elongata Turn.

Bartramia glaucoviridis C. Müll & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 105. 1892.
ISOTYPE. Canada: British Columbia,
Revelstoke, 5 May 1890 (CANM 197818).
= *B. pomiformis* Hedw.

Bartramia oederiana var. **minor**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 105. 1892.
SYNTYPE. Canada: British Columbia,
Gold Range, Mount Queest, alt. 6000
ft., J.M. Macoun, 27 July 1889
(CANM 197819).
= *Plagiopus oederiana* (Sw.)
Limpr.

Bartramopsis lescurii ssp. **sitkana**
Kindb., Rev. Bryol. 21: 35. 1894.
ISOTYPE? United States: Alaska,
Sitka, J.M. Macoun, September
1891 (CANM 197820).
= *B. lescurii* (James) Kindb.

Brachythecium cavernosum Kindb., Rev.
Bryol. 22: 86. 1895.
SYNTYPES. Canada: Ontario, Credit
Forks, J. White, 3 September 1892
(CANM 197827); Ontario, Spanish Mills,
J. White, 5 September 1893 (CANM
197828).
= *B. rutabulum* (Hedw.) B.S.G.

Brachythecium columbico-rutabulum Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 198. 1892.
ISOTYPE. Canada: British Columbia,
Revelstoke, 13 May 1890 (CANM 197826).
= *B. frigidum* (C. Müll.) Besch.

Brachythecium digastrum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 190. 1892.
SYNTYPE. Canada: Ontario, McKay's
Bush, Ottawa, 12 October 1889 (CANM
197829).

Brachythecium gemmascens C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 195. 1892.
ISOTYPE. Canada: British Columbia,
Columbia River above Revelstoke, 12 May
1890 (CANM 197830).
= *B. frigidum* (C. Müll.) Besch.

Brachythecium harpidiooides C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 194. 1892.
SYNTYPE. Canada: British Columbia,
Revelstoke, 6 May 1890 (CANM 197831).

Brachythecium laevisetum Kindb. in
Mac., Bull. Torrey Bot. Cl.
17: 279. 1890.
ISOTYPE. Canada: British Columbia,
Craigallachie, 18 July 1889 (CANM
197832)
= *B. salebrosum* (Web. & Mohr)
B.S.G.

Brachythecium lamprochryseum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 199. 1892.
SYNTYPES. Canada: British Columbia,
Comox, 29 April 1887 (CANM 197833);
British Columbia, Vancouver I., Mt.
Finlayson, 19 May 1887 (CANM 197835);
British Columbia, Vancouver I., Mt.
Benson, 8 June 1887 (CANM 197834).
= *B. frigidum* (C. Müll.) Besch.

Brachythecium laxirete Kindb., Rev.
Bryol. 36: 97. 1909.
ISOTYPE. Canada: British Columbia,
Asulcan Valley, A. Brinkman, 10
July 1908 (CANM 197836).
= *B. rutabulum* (Hedw.) B.S.G.

Brachythecium leucoglaucum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 198. 1892.
SYNTYPE. Canada: New Brunswick,
Queen's Co., J. Moser, 10
September 1888, CANADIAN MUSCI 591
(CANM 197837; 197838).
= *B. rutabulum* (Hedw.) B.S.G.

Brachythecium nanopes C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 201. 1892.
ISOTYPES. Canada: British Columbia,
above Revelstoke, 19 May 1890, CANADIAN
MUSCI 548 (CANM 197840); British
Columbia, along the Columbia above
Revelstoke, 19 May 1890 (CANM 197839).
= *B. populeum* (Hedw.) B.S.G.

Brachythecium platycladum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 195. 1892.
ISOTYPE. Canada: Ontario, Ottawa, 21
May 1885 (CANM 197841).
= *B. rutabulum* (Hedw.) B.S.G.

Brachythecium pseudo-albicans Kindb.
in Mac., Bull. Torrey Bot. Cl.
17: 278. 1890.
ISOTYPES. Canada: British Columbia,
Comox, CANADIAN MUSCI 285 (as *Hypnum*
(*Brachythecium*) *albicans* Neck.)
(CANM 197843; 197844); British
Columbia, Comox, 5 May 1887 (CANM
197842).
= *B. albicans* (Hedw.) B.S.G.

Brachythecium pseudo-chloropterum
Kindb., Rev. Bryol. 32: 34. 1905.
ISOTYPE. Canada: Alberta, Pipestone
Creek, 8 July 1904 (CANM 197845;
197846).
= *B. reflexum* (Starke ex
Web. & Mohr) B.S.G.

Brachythecium pseudo-collinum Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 196. 1892.
ISOTYPE. Canada: New Brunswick,
Queen's Co., Canaan Forks, J.
Moser, 1890 (CANM 197847).
= *B. salebrosum* (Web. & Mohr)
B.S.G.

Brachythecium rivulare ssp.
colpophylloides Kindb., Rev. Bryol.
34: 88. 1907.
SYNTYPES? Canada: British Columbia,
Yoho Valley, Twin Falls, 6 August 1904
(CANM 197849); British Columbia, Yoho
Valley, 6 September 1904 (CANM 197850);
Québec, W of Old Chelsea, 17 May 1907
(CANM 197848).
= pp. *B. rutabulum* (Hedw.) B.S.G.
(Québec) & pp. *B. nelsonii*
Grout? (British Columbia)

Brachythecium rivulare ssp. *novae-*
brunsviciae Kindb., Ottawa Nat.
4: 63. 1890.
ISOTYPE? Canada: New Brunswick,
Canaan Forks, J. Moser, 1888
(CANM 197853).
= *B. rivulare* var.
obtusulum Kindb. in Mac.
& Kindb.

Brachythecium rivulare var *obtusulum*
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 201. 1892.
SYNTYPES. Canada: British Columbia,
Revelstoke, CANADIAN MUSCI 492 (as
Hypnum (*Brachythecium*) *rivulare*
var. *new-brunswickae* Kindb.)
(CANM 197852); New Brunswick,
Fredericton, J. Fowler, 30
September 1879 (CANM 197854).

Brachythecium rutabuliforme Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 198. 1892.
ISOTYPE. Canada: British Columbia,
Spence's Bridge, 30 May 1889 (CANM
197855).
= *B. plumosum* (Hedw.) B.S.G.

Brachythecium salebrosum ssp.
mammilligerum Kindb. in Mac.
& Kindb., Cat. Canad. Pl.
6: 192. 1892.
ISOTYPE. Canada: British Columbia,
Sicamous, 19 July 1889 (CANM 197856).
= *B. acutum* (Mitt.) Sull.

Brachythecium spurio-acuminatum C. Müll.
& Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 191. 1892.
SYNTYPES. Canada: Ontario,
Northumberland Co., Brighton, 6 October
1888, CANADIAN MUSCI 566 (as
Brachythecium spurio-acuminata
C. Müll. & Kindb.) (CANM 197857);
Ontario, Brighton, 6 October 1888 (CANM
197858).
= *B. oxycladon* (Brid.) Jaeg. &
Sauerb.

Brachythecium spurio-rutabulum C. Müll &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 197. 1892.
SYNTYPE. Canada: British Columbia,
Burrard Inlet and Vancouver I.,
CANADIAN MUSCI 651 (CANM 197859;
197860).
= *B. frigidum* (C. Müll.) Besch.

Brachythecium subintricatum Kindb., Rev.
Bryol. 22: 86. 1895.
ISOTYPE. Canada: British Columbia,
Victoria, Sea's Farm, 5 May 1893 (CANM
197862).
= *B. frigidum* (C. Müll.) Besch.

Brachythecium velutinum ssp.
curvirameum Kindb., Rev., Bryol.
34: 88. 1907.
ISOTYPES? Canada: Québec, E of
Montmorency R., 30 July 1905 (CANM
197864); Québec, W side of Montmorency
R., 24 June 1905 (CANM 197865;
197866).
= pp. *B. reflexum* (Starke
ex Web. & Mohr) B.S.G. & pp.
B. starkei (Brid.) B.S.G.

Bryum aciculinum Kindb., Sp. Eur. & N.
Amer. Bryin. 2: 355. 1897.
ISOTYPE. Canada: British Columbia, on
Sproat Mt., 24 June 1890 (CANM
197867).
= *B. pseudotriquetrum* var.
crassirameum (Ren. & Card.)
Lawt.

Bryum alpiniforme Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 271. 1892.
ISOTYPE. Canada: Ontario, Lake Nipigon, 14 July 1884 (CANM 197868).

Bryum anoectangiaceum C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl. 6: 130. 1892.
ISOTYPE. Canada: British Columbia, Hector, 12 August 1890 (CANM 197871).
= *B. pallens* (Brid.) Sw. ex Röhle

Bryum aurimontanum Kindb., Rev. Bryol. 32: 34. 1905.
ISOTYPE? Canada: Yukon, Hunker Creek, 29 July 1902 (CANM 197872).
= *B. arcticum* (R. Br.) B.S.G.

Bryum bimum var. **angustifolium**
Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 123. 1892.
ISOTYPE. Canada: Ontario, Kingston, J. Fowler, 1 June 1881, CANADIAN MUSCI 641 (CANM 197873).
= *B. lisae* var. *cuspidatum* (B.S.G.) Marg.

Bryum brachyneuron Kindb. in Mac., Ottawa Nat. 5: 179. 1892.
ISOTYPE. United States: Alaska, St. Paul I., Behring Sea, J.M. Macoun, 30 July 1891 (CANM 197876).

Bryum capillare ssp. **erythroloma**
Kindb., Eur. N. Amer. Bryin. 2: 358. 1897.
LECTOTYPE. Canada: British Columbia, Vancouver I., Cedar Hill, 18 April 1887 (CANM 197874).
= *B. erythroloma* (Kindb.) Syed

Bryum capillare ssp. **heteroneuron**
C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 130. 1892.
SYNTYPES? Canada: British Columbia, Hastings, 11 April 1889 (CANM 197901; 197904); British Columbia, Nanaimo, 9 July 1889 (CANM 197902); Ontario, Ottawa, 24 May 1888 (CANM 197903).
= *B. capillare* Hedw.

Bryum capillare ssp. **ruraliforme**
Kindb., Sp. Eur. & N. Amer. Bryin. 2: 358. 1897.
ISOTYPE. Canada: British Columbia, Pier's Farm, Victoria, 11 May 1893 (CANM 197878).

Bryum capillare var. **brevicuspidatum**
Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 131. 1892.
SYNTYPE. Canada: British Columbia, near Victoria, CANADIAN MUSCI 180 (CANM 197875).

Bryum capitellatum C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl. 6: 127. 1892.
ISOTYPE. Canada: British Columbia, Comox, 30 April 1887 (CANM 197879).
= *B. gemmiparum* De Not.

Bryum cirrhatum var. **megalosporum**
Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 122. 1892.
ISOTYPE? Canada: British Columbia, Hastings, 29 April 1889 (CANM 197880).

Bryum columbico-caespiticium Kindb., Hedwigia 42 (Beibl.): 16. 1903.
ISOTYPE. Canada: British Columbia, Revelstoke, 8 May 1890 (CANM 197881).
= *B. lonchocaulon* C. Müll.

Bryum cincinnatiforme Kindb., Sp. Eur. & N. Amer. Bryin. 2: 387. 1897.
ISOTYPE? United States: Alaska, St. Paul I., Behring Sea, J.M. Macoun, 1 August 1892 (CANM 197882).
= *Pohlia obtusifolia* (Brid.) L. Koch

Bryum cyclophyloides Kindb., Rev. Bryol. 32: 37. 1905.
ISOTYPE. Canada: Alberta, Pipestone Creek, 6 July 1904 (CANM 197883).
= *B. turbinatum* (Hedw.) Turn.

Bryum duvalii var. **lato-decurvans** C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 132. 1892.
SYNTYPES? Canada: British Columbia, Revelstoke, 12 May 1890, CANADIAN MUSCI 487 (as *Bryum lato-decurvans* C. Müll. & Kindb.) (CANM 197886); British Columbia, Roger's Pass, 30 July 1890 (CANM 197885); British Columbia, Revelstoke, 12 May 1890 (CANM 197910).
= *B. weigeliae* Spreng.

Bryum edwardsianum C. Müll. & Kindb., in Mac. & Kindb., Cat. Canad. Pl. 6: 120. 1892.
ISOTYPE. Canada: Prince Edward Island, Brackley Point, 7 July 1888 (CANM 197887).
= *B. stenotrichum* C. Müll.

Bryum erubescens Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 118. 1892.
ISOTYPE. Canada: Alberta, Rocky Mts., Laggan, 18 August 1891, CANADIAN MUSCI 638 (CANM 267883).
= *B. stenotrichum* var. *biddlecomiae* (Aust.) Lawt.

- Bryum erythrophylloides** Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 272. 1892.
ISOTYPE. Canada: Alberta, Cypress Hills, 6 August 1880 (CANM 197888).
= *B. turbinatum* (Hedw.) Turn.
- Bryum erythrophylloides** ssp. *gaspeanum* Kindb., Sp. Eur. & N. Amer. Bryin. 2: 352. 1897.
ISOTYPE? Canada: Québec, Ste. Anne des Monts, Gaspé, 16 August 1882 (CANM 197884).
- Bryum erythrophyllum** Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 131. 1892.
SYNTYPE. Canada: Nova Scotia, Truro, 12 June 1883 (CANM 197890).
= *B. turbinatum* (Hedw.) Turn.
- Bryum flagellosum** Kindb., Sp. Eur. & N. Amer. Bryin. 2: 356. 1897.
ISOTYPE. Canada: British Columbia, Rocky Mts., Hector, 12 August 1890 (CANM 197891).
= *B. lisae* var. *cuspidatum* (B.S.G.) Marg.
- Bryum froudei** Kindb., Ottawa Nat. 5: 180. 1892.
ISOTYPE. United States: Alaska, St. Paul I., Behring Sea, J.M. Macoun, 30 July 1891 (CANM 197892).
= *B. stenotrichum* C. Müll.
- Bryum gemmascens** Kindb., Sp. Eur. & N. Amer. Bryin. 2: 360. 1897.
ISOTYPE. Canada: British Columbia, Comox, 22 June 1893 (CANM 197893; 197894).
= *B. capillare* Hedw.
- Bryum gemmuligerum** Kindb., Sp. Eur. & N. Amer. Bryin. 2: 368. 1897.
ISOTYPE. Canada: Saskatchewan, 12-mile Lake, near Wood Mountain, 6 June 1895 (CANM 267884).
- Bryum grandirete** Kindb., Sp. Eur. & N. Amer. Bryin. 2: 353. 1897.
ISOTYPE? Canada: British Columbia, Selkirk Mts., Roger's Pass, 7 August 1895 (CANM 197895).
= *B. turbinatum* (Hedw.) Turn.
- Bryum haematocarpum** C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 125. 1892.
ISOTYPES. Canada: British Columbia, Valley Pass Creek, at Sproat, Columbia R., 19 June 1890, CANADIAN MUSCI 555 (CANM 197897); British Columbia, Pass Creek, Sproat, 19 June 1890 (CANM 197896).
= *B. pseudotriquetrum* (Hedw.) Gaertn., Meyer & Scherb.
- Bryum hamicuspis** Kindb., Hedwigia 42 (Beibl.): 16. 1903.
SYNTYPE. Canada: Ontario, Cape Vincent, near Kingston, J. Fowler, 1 June 1881 (CANM 197899; 197900).
= *B. lisae* var. *cuspidatum* (B.S.G.) Marg.
- Bryum hydrophilum** Kindb. in Mac., Bull. Torrey Bot. Cl. 16: 95. 1889.
ISOTYPES. Canada: British Columbia, near Nanaimo, CANADIAN MUSCI 187 (as *Bryum hydrophyllum* Kindb.) (CANM 197908); British Columbia, Nanaimo, 4 June 1887 (CANM 197907).
= *B. pallens* Sw.
- Bryum intermedium** ssp. *ovatifolium* Kindb., Rev. Bryol. 34: 92. 1907.
ISOTYPE. Canada: Alberta, Pipestone Creek, 6 July 1904 (CANM 267885).
- Bryum julaceum** Kindb., Ottawa Nat. 23: 187. 1910.
ISOTYPE. Canada: Alberta, Pipestone Pass, 4 July 1904 (CANM 197909).
= *B. caespiticium* Hedw.
- Bryum leucolomatum** C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 123. 1892.
ISOTYPES. Canada: British Columbia, Revelstoke, 17 May 1890, CANADIAN MUSCI 543 (CANM 197911); British Columbia, Revelstoke, 17 May 1890 (CANM 143229).
= *B. lonchocaulon* C. Müll.
- Bryum manitobae** Kindb., Rev. Bryol. 37: 15. 1910.
ISOTYPE. Canada: Manitoba, MacGregor, 9 June 1906 (CANM 197912).
= *B. lisae* var. *cuspidatum* (B.S.G.) Marg.
- Bryum microcephalum** C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 134. 1892.
ISOTYPE. Canada: British Columbia, Deer Park, Lower Arrow Lake, Columbia River, 11 June 1890 (CANM 197913).
= *B. caespiticium* Hedw.

- Bryum microerythrocarpum** C. Müll. & Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 124. 1892.
ISOTYPE. Canada: British Columbia, Vancouver I., Shawnigan Lake, 1 July 1887 (CANM 197914).
- Bryum microglobum** C. Müll. & Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 129. 1892.
ISOTYPE. Canada: Ontario, near London, J. Dearness, 15 May 1889 (CANM 197915).
= *B. bicolor* Dicks.
- Bryum oligochloron** C. Müll. & Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 129. 1892.
ISOTYPES. Canada: British Columbia, Deer Park, Lower Arrow Lake, Columbia River, 12 June 1890, CANADIAN MUSCI 554 (as *Bryum oligocladon* C. Müll. & Kindb.) (CANM 197917); British Columbia, Deer Park, Lower Arrow Lake, 12 June 1890 (CANM 197918).
= *B. caespiticium* Hedw.
- Bryum ontariense** Kindb., Ottawa Nat. 2: 155. 1889 and Bull. Torrey Bot. Cl. 16: 96. 1889.
ISOLECTOTYPE. Canada: Ontario, CANADIAN MUSCI 184 (as *Bryum roseum* Schreb.) (CANM 145198).
= *Rhodobryum ontariense* (Kindb.) Kindb.
- Bryum pallescens** var. **grande** Kindb., Rev. Bryol. 36: 43. 1909.
ISOTYPE? Canada: British Columbia, Departure Bay, 7 July 1908 (CANM 197923).
- Bryum pallescens** var. **laxifolium** Kindb. *in Mac., Bull. Torrey Bot. Cl.* 17: 274. 1890.
ISOTYPE. Canada: Alberta, Kananaskis Pass, 23 June 1885 (CANM 197924; 197925).
= *B. boreale* (Web. & Mohr) Funck
- Bryum pallescens** var. **longifolium** Kindb. *in Mac., Bull. Torrey Bot. Cl.* 17: 274. 1890.
ISOTYPE. Canada: Alberta, Morley, foothills of Rocky Mts., 13 June 1885 (CANM 197926).
- Bryum percurrentinerve** Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 126. 1892.
ISOTYPES. Canada: British Columbia, W of Kamloops, 18 June 1890, CANADIAN MUSCI 505 (as *Bryum percurrentinerve* Kindb.) (CANM 197928); British Columbia, Kamloops, 18 June 1889 (CANM 197930).
= *B. gemmiparum* De Not.
- Bryum producticolle** Kindb., Sp. Eur. & N. Amer. Bryin. 2: 364. 1897.
ISOTYPE. Canada: British Columbia, near Victoria, 25 May 1893 (CANM 197932).
= *B. lonchocaulon* C. Müll.
- Bryum pseudo-carneum** Kindb., Ottawa Nat. 14: 88. 1900.
ISOTYPE. Canada: Nova Scotia, Sable I., 16 August 1899 (CANM 197933).
= *Pohlia bulbifera* (Warnst.) Warnst.
- Bryum pseudotriquetrum** var. **hyalodontium** C. Müll & Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 133. 1892.
ISOTYPE. Canada: British Columbia, Rocky Mts., Hector, 13 August 1890 (CANM 197934).
- Bryum pygmæo-alpinum** C. Müll. & Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 126. 1892.
ISOTYPE. Canada: British Columbia, Mount Arrowsmith, 17 July 1887 (CANM 197935).
= *B. muehlenbeckii* B.S.G.
- Bryum revelstokense** Kindb., Rev. Bryol. 23: 22. 1896.
ISOTYPE? Canada: British Columbia, Revelstoke, 9 May 1890 (CANM 143231; 197936; 197937).
= *B. lonchocaulon* C. Müll.
- Bryum rubicundulum** C. Müll. & Kindb. *in Mac. & Kindb., Cat. Canad. Pl.* 6: 129. 1892.
ISOTYPES. Canada: British Columbia, Selkirk Mts., Asulcan Glacier, 7 August 1890, CANADIAN MUSCI 519 (as *Bryum rubicundum* C. Müll. & Kindb.) (CANM 197938); British Columbia, Hermit Mt., Roger's Pass, 5 August 1890 (CANM 197939).
= *B. muehlenbeckii* B.S.G.
- Bryum streptophyllum** Kindb., Sp. Eur. & N. Amer. Bryin. 2: 359. 1897.
ISOTYPE. Canada: British Columbia, Hastings, 6 April 1889 (CANM 197940).
= *B. capillare* Hedw.

- Bryum subpercurrentinerve** Kindb., Rev.
Bryol. 32: 37. 1905.
ISOTYPE? Canada: Alberta, along
Pipestone Creek, 8 July 1904 (CANM
197942).
= *B. pseudotriquetrum* var.
bimum (Brid.) Lilj.
- Bryum subpolymorphum** Kindb., Sp. Eur. &
N. Amer. Bryin. 2: 390. 1897.
ISOTYPE. Canada: British Columbia,
Gold Range, N of Griffin Lake,
alt. 6500 ft., 1889, CANADIAN MUSCI 468
(as *Webera cucullata* Schimp.)
(CANM 197943).
= *Pohlia drummondii* (C. Müll.)
Andr.
- Bryum subpurpurascens** Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 119. 1892.
ISOTYPE. Canada: British Columbia,
Port Moody, Burrard Inlet, 23 April
1889, CANADIAN MUSCI 593 (CANM
197944).
= *B. pallens* Sw.
- Bryum synoico-caespiticium** C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 128. 1892.
ISOTYPES. Canada: British Columbia,
Revelstoke, channels of the
Illicillewaet, 27 May 1890, CANADIAN
MUSCI 513 (CANM 197945); British
Columbia, Revelstoke, 27 May 1890 (CANM
197946).
= *B. caespiticium* Hedw.
- Bryum tomentosum** Kindb., Sp. Eur. & N.
Amer. Bryin. 2: 361. 1897.
ISOTYPE. Canada: British Columbia,
Rocky Mts., Hector, 14 August 1890
(CANM 197947).
= *B. capillare* Hedw.
- Bryum trichophorum** Kindb., Sp. Eur. & N.
Amer. Bryin. 2: 359. 1897.
ISOTYPES. Canada: British Columbia,
Vancouver I., Cadboro Bay, 31 May 1893,
CANADIAN MUSCI 623 (as
Mielichhoferia trichophora
Kindb.) (CANM 197949); British
Columbia, Vancouver I., Cadboro Bay, 31
May 1893 (CANM 197948).
= *B. capillare* Hedw.
- Bryum vancouverense** Kindb. in
Mac., Bull. Torrey Bot. Cl.
16: 95. 1889.
ISOTYPE? Canada: British Columbia,
Goldstream, near Victoria, 18 May 1887
(CANM 197951).
= *B. caespiticium* Hedw.
- Calliergon subgiganteum** Kindb., Ottawa
Nat. 14. 80. 1900.
ISOTYPE. Canada: Saskatchewan, Prince
Albert, 30 June 1896 (CANM 267886).
= *C. richardsonii* (Mitt.) Kindb.
in Warnst.
- Calliergon subsarmentosum** Kindb., Rev.
Bryol. 36: 42. 1909 and Ottawa Nat.
23: 137. 1909.
ISOTYPE. Canada: British Columbia,
Shawnigan Lake, 18 June 1908 (CANM
197952).
= *C. sarmentosum* (Wahlenb.)
Kindb.
- Calliergon subturgescens** Kindb., Rev.
Bryol. 32: 34. 1905.
ISOTYPE. Canada: Alberta, Laggan, 25
July 1904 (CANM 197953).
= *Scorpidium turgescens* (T.
Jens.) Loeske
- Camptothecium hamatidens** var. *tenue*
Kindb. in Mac., Bull. Torrey Bot.
Cl. 17: 277. 1890.
ISOTYPES? Canada: British Columbia,
Vancouver I., CANADIAN MUSCI 392 (as
Hypnum (Camptothecium) hamatidens
Kindb.) (CANM 197956); British
Columbia, Vancouver I., Mt. Erskine, 10
May 1887 (CANM 197954).
= *Homalothecium nuttallii* (Wils.)
Jaeg.
- Camptothecium nitens** var. *leucobasis*
Kindb., Ottawa Nat. 23: 138. 1909.
ISOTYPE? Canada: Yukon, Hunker Creek,
30 July 1902 (CANM 197957).
= *Tomentypnum nitens* (Hedw.)
Loeske
- Camptothecium nitens** var. *microtheca*
Kindb., Ottawa Nat. 23: 138. 1909.
ISOTYPES? Canada: Yukon, Hunker
Creek, 17 mi. from Dawson, 26 July 1902
(CANM 197958); Yukon, Hunker Creek, 25
July 1902 (CANM 197959).
= *Tomentypnum nitens* (Hedw.)
Loeske
- Campylopus canadensis** Kindb., Rev.
Bryol. 32: 35. 1905.
ISOTYPE? Canada: Alberta, head of
Lake Louise, 13 September 1904 (CANM
197961; 197962).
= *Paraleucobryum longifolium*
(Hedw.) Loeske
- Ceratodon columbiae** Kindb., Rev. Bryol.
23: 20. 1896.
SYNTYPE? Canada: British Columbia,
Revelstoke, 3 May 1890 (CANM 197963).
= *C. purpureus* (Hedw.) Brid.

Ceratodon heterophyllus Kindb., Ottawa
Nat. 5: 179. 1892.
ISOLECTOTYPE. United States: Alaska,
St. Paul I., Behring Sea, J.M.
Macoun, 16 August 1891 (CANM
197965).
= *C. purpureus* var.
rotundifolius Berrgr.

Cinclidium macounii Kindb., Rev. Bryol.
23: 21. 1896.
SYNTYPE. Canada: British Columbia,
Rocky Mts., Kicking Horse Lake, 23 July
1885 (CANM 197966).
= *C. stygium* Sw.

Cynodontium strumulosum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 16. 1892.
ISOTYPES. Canada: British Columbia,
Rocky Mts., Hector Station, 13 August
1890, CANADIAN MUSCI 518 (CANM 197967);
British Columbia, Hector, 13 August
1890 (CANM 197968).
= *Oncophorus strumulosus*
(C. Müll. & Kindb.) Britt. in
Williams

Desmatodon camptothecius Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 48. 1892.
ISOTYPE? Canada: Québec, Gaspé Coast,
August 1882 (CANM 197969).
= *D. cernuus* (Hüb.) B.S.G.

Desmatodon cernuus var. *xanthopus*
Kindb., Ottawa Nat. 4: 61. 1891.
ISOTYPES. Canada: Manitoba, Boggy
Creek, 12 August 1872, CANADIAN MUSCI
604 (CANM 267887); Manitoba, Boggy
Creek, 12 August 1872 (CANM 131557).
= *D. cernuus* (Hüb.) B.S.G.

Desmatodon subtorquescens C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 48. 1892.
ISOTYPE. Canada: Québec, Gaspé, 10
August 1882 (CANM 197970).
= *D. obtusifolius* (Schwaegr.)
Schimp.

Dichelyma longinerve Kindb. in
Mac., Bull. Torrey Bot.
Cl. 16: 97. 1889.
ISOTYPE. Canada: British Columbia,
Vancouver I., Cedar Hill, 1887,
CANADIAN MUSCI 391 (CANM 197971).
= *Drepanocladus exannulatus*
(B.S.G.) Warnst.

Dichelyma obtusulum Kindb. in Mac.
& Kindb., Cat. Canad. Pl.
6: 159. 1892.
ISOTYPE. Canada: New Brunswick, Bass
R., J. Fowler, 13 July 1878,
CANADIAN MUSCI 534 (CANM 197972).
= *D. pallescens* B.S.G.

Dicranella cerviculatula Kindb., Ottawa
Nat. 5: 195. 1892.
ISOTYPE. Canada: Northwest
Territories, Nottingham I., Hudson
Strait, R. Bell, 24 August 1884
(CANM 197973).
= *Arctoa hyperborea* (With.)
B.S.G.

Dicranella parvula Kindb. in Mac.,
Bull. Torrey Bot. Cl. 16: 91. 1889.
SYNTYPE. Canada: British Columbia,
Rocky Mts., Kicking Horse Lake, 28 July
1885 (CANM 197974).
= *Didymodon parvulus* (Kindb.)
Britt. in Williams

Dicranella polaris Kindb., Ottawa Nat.
5: 195. 1892.
ISOTYPE. United States: Alaska, St.
Lawrence I., Behring Sea, J.M.
Macoun, 15 August 1891 (CANM
197975).
= *D. cerviculata* (Hedw.) Schimp.

Dicranoweisia obliqua Kindb., Ottawa
Nat. 5: 195. 1892.
ISOTYPES. Canada: British Columbia,
Selkirk Mts., Asulcan Creek, 8 August
1890, CANADIAN MUSCI 668 (CANM 197976);
British Columbia, Selkirk Mts., Asulcan
Creek near the glacier, 7 August 1890
(CANM 197977).
= *Kiaeria blyttii* (B.S.G.)
Broth.

Dicranoweisia roellii var. *aterrima*
Kindb., Ottawa Nat. 23: 142. 1909.
ISOTYPE. Canada: British Columbia,
Lake O'Hara, 9 August 1904 (CANM
197978).
= *D. crispula* var. *contermina*
(Ren. & Card.) Grout

Dicranum albicans var. *denticulatum*
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 261. 1892.
SYNTYPES. Canada: British Columbia,
Rocky Mts., near Hector, 7 August 1890,
CANADIAN MUSCI 589 (CANM 197979);
British Columbia, Rocky Mts., 3 mi.
below Hector, 13 August 1890 (CANM
197980).
= *Paraleucobryum longifolium*
(Hedw.) Loeske

- Dicranum crispulum** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 27. 1892.
SYNTYPES. Canada: British Columbia,
Selkirk Mts., Albert Canyon, 29 May
1890, CANADIAN MUSCI 569 (CANM 197994);
British Columbia, Albert Canyon, 29 May
1890 (CANM 197995); British Columbia,
Vancouver I., Comox, 2 May 1887 (CANM
198026).
= *D. fuscescens* Turn.
- Dicranum sauteri** var. **pachytrichum**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 260. 1892.
ISOTYPE. Canada: British Columbia,
Selkirk Mts., Roger's Pass, 29 July
1890 (CANM 198004).
= *Paraleucobryum longifolium*
(Hedw.) Loeske
- Dicranum sulcatum** Kindb. in Mac.,
Bull. Torrey Bot. Cl. 17: 87. 1890.
SYNTYPE. Canada: British Columbia,
Vancouver I., July 1887 (CANM 198025).
= *D. fuscescens* Turn.
- Didymodon baden-powellii** Kindb., Ottawa
Nat. 5: 179. 1892.
ISOTYPE. United States: Alaska, St.
Paul I., Behring Sea, J.M. Macoun,
4 August 1891 (CANM 198029).
= *Bryoerythrophyllum*
recurvirostrum (Hedw.) Chen
- Didymodon canadensis** Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 44. 1892.
ISOTYPE. Canada: Alberta, Rocky Mts.,
head of Lake Louise, 8 August 1891
(CANM 198030).
= *Bryoerythrophyllum*
recurvirostrum (Hedw.) Chen
- Didymodon trachyneuron** Kindb., Sp. Eur.
& N. Amer. Bryin. 2: 275. 1897.
ISOTYPE. Canada: Québec, Wakefield,
13 September 1893 (CANM 198031).
= *Oxystegus tenuirostris* (Hook. &
Tayl.) A.J.E. Smith
- Distichium macounii** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 40. 1892.
SYNTYPES. Canada: British Columbia,
along the Columbia R. above Revelstoke,
18 May 1890, CANADIAN MUSCI 490 (CANM
198032); British Columbia, along the
Columbia above Revelstoke, 18 May 1890
(CANM 198033).
= *Ditrichum flexicaule* var.
densem (B.S.G.) Braithw.
- Drummondia clavellata** var. **canadensis**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 81. 1892.
ISOTYPE. Canada: Ontario, Pelee I.,
15 June 1882 (CANM 199515).
= *D. prorepens* (Hedw.) Britt.
- Encalypta alaskana** Kindb. in Mac.
& Kindb., Cat. Canad. Pl.
6: 269. 1892.
ISOTYPE. United States: Alaska,
Ounalaska I., Behring Sea, J.M.
Macoun, 21 August 1891 (CANM
198034).
= *E. ciliata* Hedw.
- Encalypta cucullata** C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 96. 1892.
ISOTYPE. Canada: British Columbia,
along the Columbia R. at Revelstoke, 9
May 1890, CANADIAN MUSCI 491 (CANM
198036).
= *E. procera* Bruch
- Encalypta labradorica** Kindb., Sp. Eur. &
N. Amer. Bryin. 2: 295. 1897.
ISOTYPE. Canada: Québec, Fort Chimo,
A.P. Low, 30 August 1896 (CANM
198035).
= *E. brevicolla* (B.S.G.) Bruch
ex Aongstr.
- Encalypta leiocarpa** Kindb. in
Mac., Bull. Torrey Bot. Cl.
17: 273. 1890.
ISOTYPE? Canada: British Columbia,
Mt. Queest, J.M. Macoun, 27 July
1889 (CANM 124021).
= *E. affinis* Hedw. f.
- Encalypta macounii** Aust., Bot. Gaz.
2: 97. 1877.
ISOTYPE. Canada: British Columbia,
Stewart's Lake Mts., 21 June 1875 (CANM
198038).
= *E. affinis* Hedw. f.
- Encalypta rhaftocarpa** var. **leiomitra**
Kindb., Ottawa Nat. 4: 61. 1890.
ISOTYPE. Canada: Alberta, Clearwater
River, Athabasca, lat. 57°, J.M.
Macoun, 11 July 1888 (CANM 198037).
= *E. rhaftocarpa* Schwaegr.
- Encalypta sub-brevicolla** Kindb., Sp.
Eur. & N. Amer. Bryin. 2: 295. 1897.
ISOTYPE. Canada: Labrador, Seal Lake,
A.P. Low, 3 August 1896 (CANM
198039).
= *E. brevicolla* (B.S.G.) Bruch
ex Aongstr.

Encalypta subspathulata C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 93. 1892.
SYNTYPES. Canada: British Columbia,
Lytton, April 1889, CANADIAN MUSCI 421
(as *E. spathulata* C. Müll.) (CANM
198042); British Columbia, near
MacLeod's Lake, 25 June 1875 (CANM
198040).
= *E. rhaftocarpa* var.
subspathulata (C. Müll. &
Kindb. in Mac. & Kindb.) Flotw.

Entodon acicularis C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 176. 1892.
SYNTYPE. Canada: Ontario, McKay's
Woods, 2 May 1885 (CANM 198044).
= *E. cladorrhizans* (Hedw.)
C. Müll.

Entodon expallens C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 177. 1892.
ISOTYPE. Canada: British Columbia,
Stephen, summit of Rocky Mts., 23 July
1885 (CANM 198043).
= *Hypnum pratense* Koch ex
Brid.

Entodon macounii C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 177. 1892.
ISOTYPES. Canada: Ontario,
Northumberland Co., Murray, CANADIAN
MUSCI 436 (as *Cylindrothecium*
drummondii Bruch & Schimp.) (CANM
198046); Ontario, Murray, 7 October
1888 (CANM 198045).
= *Hypnum pratense* Koch ex
Brid.

Eurhynchium labradoricum Kindb., Sp.
Eur. & N. Amer. Bryin. 1: 101. 1896.
ISOTYPES. Canada: Québec, Fort Chimo,
A.P. Low, 9 September 1896 (CANM
197861); Québec, Ungava Bay,
A.P. Low, 9 September 1896 (CANM
198048).
= *Brachythecium calcareum* Kindb.

Eurhynchium pseudo-serratum Kindb.,
Ottawa Nat. 7: 22. 1893.
SYNTYPES. Canada: Newfoundland,
Harbor Deep, A.C. Waghorne, 1
October 1891 (CANM 198053);
Newfoundland, Seal Cove,
A.C. Waghorne, 1891 (CANM
198052); Newfoundland, Western Cove,
A.C. Waghorne, 12 October 1891
(CANM 198051); Ontario, Ottawa, 12
October 1889 (CANM 198054).
= pp. *Brachythecium curtum*
(Lindb.) Limpr. & pp.
Brachythecium rutabulum
(Hedw) B.S.G.

Eurhynchium pseudo-velutinoides Kindb.,
Rev. Bryol. 22: 84. 1895.
ISOTYPE. Canada: British Columbia,
Victoria, Sea's Farm, 18 May 1893 (CANM
198055).
= *Brachythecium pseudovelutinoides*
(Kindb.) Broth.

Eurhynchium revelstokense Kindb., Ottawa
Nat. 7: 22. 1893.
ISOTYPE? Canada: British Columbia,
Revelstoke, 5 May 1890 (CANM 198056).
= *Brachythecium acutum* (Mitt.)
Sull.

Eurhynchium rusciforme var. **obtusum**
Kindb., Rev. Bryol. 36: 43. 1909.
ISOTYPE. Canada: British Columbia,
Departure Bay, Biological Station, 3
July 1908 (CANM 198057).

Eurhynchium semiasperum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 207. 1892.
ISOTYPES. Canada: British Columbia,
Deer Park, Lower Arrow Lake, Columbia
R., 6 June 1890, CANADIAN MUSCI 507 (as
Hypnum (Eurhynchium) semiasperum
C. Müll. & Kindb.) (CANM 198058);
British Columbia, Deer Park, Lower
Arrow Lake, 6 June 1890 (CANM 198059).
= *Brachythecium plumosum* (Hedw.)
B.S.G.

Eurhynchium serratum ssp. **ericense**
Kindb., Ottawa Nat. 7: 22. 1893.
ISOTYPE. Canada: Ontario, Leamington,
21 September 1890 (CANM 198060).
= *Rhynchosstegium serratum*
(Hedw.) Jaeg. & Sauerb.

Eurhynchium subcaespitosum Kindb., Rev.
Bryol. 22: 84. 1895.
ISOTYPE. Canada: British Columbia,
Vancouver I., Goldstream, 2 June 1893
(CANM 198062).
= *Scleropodium subcaespitosum*
(Kindb.) Par.

Eurhynchium subintegritifolium Kindb.,
Ottawa Nat. 7: 21. 1893.
ISOTYPE. Canada: British Columbia,
Revelstoke, 5 May 1890 (CANM 198064).
= *Brachythecium curtum* (Lindb.)
Limpr.

Eurhynchium substrigosum Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 205. 1892.
ISOTYPES. Canada: British Columbia,
Sicamous, 3 July 1889 (CANM 198066);
British Columbia, Sicamous, Lake Mara,
3 July 1889 (CANM 198067; 198068).
= *E. pulchellum* (Hedw.) Jenn.

Fissidens adiantoides var.

brachyphyllus Kindb. in Mac.
& Kindb., Cat. Canad. Pl.
6: 37. 1892.
ISOTYPE. Canada: Ontario, Belleville,
13 October 1888 (CANM 198069).
= *F. cristatus* Wils. ex
Mitt.

Fissidens osmundooides var. **obliquus**

Kindb., Rev. Bryol. 36: 42. 1909 and
Ottawa Nat. 23: 140. 1909.
SYNTYPES. Canada: British Columbia,
Sicamous, 3 July 1889 (CANM 198074);
Ontario, above Britannia, 11 October
1907 (CANM 198072); Ontario, Algonquin
Park, Island Lake, 17 July 1900 (CANM
198073).
= pp. *F. osmundooides* Hedw. & pp.
F. limbatus Sull.

Fontinalis dalecarlica var.

macounii Card. ex Ren. &
Card., Rev. Bryol. 20: 9. 1893.
LECTOTYPE. Canada: Alberta, Athabasca
Plains, 24 September 1872 (CANM
197175).

Forsstroemia nitida Lindb., Oefv.

Finsk.-Vet. Soc. Foerh.
12(2): 73. 1869.
ISOTYPE. Canada: Ontario, Hastings
Co., 20 July 1864 (CANM 159489).
= *Neomacounia nitida* (Lindb.)
Irel.

Georgia cuspidata Kindb., Rev. Bryol.

20: 93. 1893.
SYNTYPE. Canada: Ontario, Leamington,
20 September 1890 (CANM 198075).
= *Tetraphis pellucida* Hedw.

Grimmia arctophila ssp. **labradorica**

Kindb., Sp. Eur. & N. Amer. Bryin.
2: 221. 1897.
ISOTYPE? Canada: Québec, Clearwater
Lake, A.P. Low, 21 July 1896
(CANM 198076).
= *G. affinis* Hoppe & Hornsch.
ex Hornsch.

Grimmia arcuatifolia Kindb. in

Mac., Bull. Torrey Bot. Cl.
16: 93. 1889.
ISOTYPE. Canada: British Columbia,
near Victoria, Mount Tolmie, 21 April
1887 (CANM 198077).
= *Rhacomitrium heterostichum*
(Hedw.) Brid.

Grimmia atricha C. Müll. & Kindb.

in Mac. & Kindb., Cat. Canad. Pl.
6: 65. 1892.
ISOTYPE. Canada: British Columbia,
Sproat Mt., Columbia R., 24 June 1890,
CANADIAN MUSCI 609 (CANM 198078).

Grimmia canadensis Kindb., Sp. Eur. & N.

Amer. Bryin. 2: 226. 1897.
ISOTYPES? Canada: British Columbia,
Vancouver I., Victoria, Parson's Mt.,
13 May 1893, CANADIAN MUSCI 652 (CANM
198079); British Columbia, Victoria,
Esquimalt Harbour, 13 May 1893 (CANM
198080).
= *G. trichophylla* Grev.

Grimmia chloroblasta Kindb. in

Mac. & Kindb., Cat. Canad. Pl.
6: 64. 1892.
ISOTYPE. Canada: British Columbia,
mountain at Spence's Bridge, 28 May
1890, CANADIAN MUSCI 607 (CANM
198081).
= *G. heterophylla* Kindb. in
Mac. & Kindb.

Grimmia depilata Kindb. in Mac. &

Kindb., Cat. Canad. Pl. 6: 69. 1892.
ISOTYPE. Canada: British Columbia,
Vancouver I., Mount Benson, 8 June 1887
(CANM 198083).
= *G. trichophylla* Grev.

Grimmia elata Kindb., Rev. Bryol.

32: 33. 1905.
ISOTYPE? Canada: Yukon, Hunker Creek,
25 July 1902 (CANM 198084).
= *G. elatior* Bruch ex Bals.
& De Not.

Grimmia grandis Kindb., Rev. Bryol.

32: 36. 1905.
ISOTYPE. Canada: Alberta, Lake
Louise, 13 September 1904 (CANM
267888).

Grimmia heterophylla Kindb. in

Mac. & Kindb., Cat. Canad. Pl.
6: 64. 1892.
ISOTYPE. Canada: British Columbia,
Spence's Bridge, 28 May 1889 (CANM
198086).

Grimmia microtricha C. Müll. & Kindb.

in Mac. & Kindb., Cat. Canad. Pl.
6: 70. 1892.
ISOTYPE. Canada: British Columbia,
Revelstoke, 7 May 1890 (CANM 198087).
= *G. donniana* Sm.

Grimmia nivalis Kindb. in Mac.,

Bull. Torrey Bot. Cl. 17: 271. 1890.
ISOTYPES. Canada: British Columbia,
summit of Gold Range, August 1889,
CANADIAN MUSCI 415 (CANM 198089);
British Columbia, Gold Range, 10 August
1889 (CANM 198088; 198090).
= *G. donniana* Sm.

Grimmia ovataeformis Kindb., Rev. Bryol.
32: 35. 1905.
ISOTYPES? Canada: Alberta, Lake Louise, 13 September 1904 (CANM 198091); Alberta, head of Lake Louise, 13 September 1904 (CANM 198092).

Grimmia papillinervis Kindb., Rev.
Bryol. 34: 89. 1907.
ISOTYPE? Canada: British Columbia, summit of Skagit Trail, 18 July 1905 (CANM 198093).

Grimmia procura Kindb., Rev. Bryol.
23: 18. 1896.
ISOTYPE? Canada: British Columbia, Vancouver I., Parson's Mt., 19 May 1893 (CANM 198094; 198095).
= *G. leibergii* Par.

Grimmia pseudorivularis ssp.
lancifolia Kindb., Sp. Eur. & N.
Amer. Bryin. 2: 234. 1897.
SYNTYPES. Canada: British Columbia, Hector, 11 August 1890 (CANM 198096); Québec, Chelsea, Meech Lake, 30 September 1893 (CANM 198097).

Grimmia sarcocalyx Kindb. in Mac.
& Kindb., Cat. Canad. Pl. 6: 66. 1892.
ISOTYPE. Canada: British Columbia, Spence's Bridge, 28 May 1889 (CANM 198098).
= *G. laevigata* (Brid.) Brid.

Grimmia subflaccida Kindb., Ottawa Nat.
14: 85. 1900.
ISOTYPE? Canada: New Brunswick, Edmundston, 8 September 1899 (CANM 198099).
= *G. apocarpa* Hedw.

Grimmia subpapillinervis Kindb., Rev.
Bryol. 36: 98. 1910.
ISOTYPE. Canada: British Columbia, Asulcan Valley, A. Brinkman, 10 July 1908 (CANM 198100).

Grimmia velutina Kindb., Rev. Bryol.
23: 18. 1896.
ISOTYPE. Canada: British Columbia, Lytton, on right bank of Thompson R., 17 April 1889 (CANM 198101).
= *G. donniana* var. *manniae* (C. Müll.) Wijk & Marg.

Gymnostomum platyphyllum Kindb. in
Mac., Bull. Torrey Bot. Cl.
17: 84. 1890.
ISOTYPE. Canada: British Columbia, W of Kamloops, 18 June 1889, CANADIAN MUSCI 506 (CANM 198102).
= *Didymodon tophaceus* (Brid.) Lisa

Heterocladium macounii Best, Bull.
Torrey Bot. Cl. 28: 127. 1901.
ISOTYPES. Canada: British Columbia, Vancouver I., Goldstream, 2 June 1893, CANADIAN MUSCI 648 (as *H. vancouverense* Kindb.) (CANM 198106); British Columbia, Goldstream, 2 June 1893 (CANM 198107).

Heterophyllum pseudo-nemerosum Kindb.,
Sp. Eur. & N. Amer. Bryin.
1: 123. 1896.
ISOTYPE? Canada: New Brunswick, Queen's Co., J. Moser, 1889 (CANM 198108).
= *Callicladium haldanianum* (Grev.) Crum

Homalia macounii C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 163. 1892.
SYNTYPES? Canada: British Columbia, Revelstoke, 19 May 1890 (CANM 198110); British Columbia, along the Columbia above Revelstoke, 19 May 1890 (CANM 198113); British Columbia, Vancouver I., Comox, 30 April 1887 (CANM 198112); Newfoundland, A.C. Waghorne, 24 July 1890 (CANM 198109); Ontario, McKay's Lake, May 1885 (CANM 198111).
= *Homalia trichomanoides* (Hedw.) B.S.G.

Homalothecium sericeoides C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 175. 1892.
ISOTYPES. Canada: British Columbia, Revelstoke, 7 May 1890, CANADIAN MUSCI 496 (CANM 198116); British Columbia, Revelstoke, 7 May 1890 (CANM 198117).
= *Homalothecium nevadense* (Lesq.) Ren. & Card.

Hypnum alaskae Kindb., Ottawa Nat.
7: 23. 1893.
SYNTYPE? United States: Alaska, Port Etches, Lat. 60° 30' N, J.M. Macoun, 18 June 1892 (CANM 198118).
= *H. callichroum* Brid.

Hypnum arcuatiforme Kindb. in Mac.
& Kindb., Cat. Canad. Pl.
6: 238. 1892.
ISOTYPE. Canada: Ontario, Ottawa, in Beechwood, near gate of cemetery, 29 September 1889 (CANM 198119).
= *H. lindbergii* Mitt.

Hypnum chloropterum C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 231. 1892.
SYNTYPES? Canada: New Brunswick,
Canaan Forks, *J. Moser*, 1890
(CANM 198121); New Brunswick, Queen's
Co., *J. Moser*, June 1889 (CANM
198122); New Brunswick, King's Co.,
J. Moser, 19 July 1891 (CANM
198123); Newfoundland, New Harbour,
A.C. Waghorne, 12 August 1890
(CANM 198120).
= *Bryhnia novae-angliae* (Sull. &
Lesq. ex Sull.) Grout

Hypnum columbico-palustre C. Müll. &
Kindb. *in Mac. & Kindb., Cat.*
Canad. Pl. 6: 241. 1892.
ISOTYPES. Canada: British Columbia,
Revelstoke, at mouth of the canyon, 18
May 1890, CANADIAN MUSCI 493 (CANM
198124); British Columbia, by
Illicillewaet Canyon, 18 May 1890 (CANM
198125).
= *Hygrohypnum luridum* (Hedw.)
Jenn.

Hypnum conflatum C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 230. 1892.
SYNTYPES? Canada: British Columbia,
Spence's Bridge, alt. 3000 ft., 28 May
1889 (CANM 198126); Ontario, Britannia,
14 September 1890 (CANM 198127).
= *Drepanocladus aduncus* (Hedw.)
Warnst.

Hypnum decursivulum C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 224. 1892.
SYNTYPES. Canada: British Columbia,
Selkirk Mts., E of Albert Canyon
Station, 29 May 1890, CANADIAN MUSCI
514 (as *Hypnum (Campylium)*
decurssivalum C. Müll. & Kindb.)
(CANM 199027); British Columbia, Albert
Canyon, 29 May 1890 (CANM 199262).
= *Campylium radicale* (P. Beauv.)
Grout

Hypnum falcatum var. **microphyllum**
Kindb. *in Mac. & Kindb., Cat.*
Canad. Pl. 6: 232. 1892.
SYNTYPE. Canada: Newfoundland, Bay
Bull's Arm, *A.C. Waghorne*, 20
August 1890 (CANM 198128).
= *Drepanocladus sendtneri*
(Schimp.) Warnst.

Hypnum filicinum var. **aciculinum** C.
Müll. & Kindb. *in Mac. & Kindb.*,
Cat. Canad. Pl. 6: 231. 1892.
ISOTYPES. Canada: British Columbia,
Revelstoke, 23 May 1890, CANADIAN MUSCI
587 (CANM 198129); British Columbia, W
of Revelstoke, 23 May 1890 (CANM
198130).
= *Cratoneuron filicinum* var.
aciculinum (C. Müll. & Kindb.
ex Mac. & Kindb.) Grout

Hypnum flaccum C. Müll & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 240. 1892.
SYNTYPES? Canada: New Brunswick,
Canaan Forks, *J. Moser*, 1891
(CANM 198132); New Brunswick, Canaan
Forks, *J. Moser*, 11 September
1888 (CANM 198133); New Brunswick,
Queen's Co., Canaan Forks, *J.*
Moser, 1888 (CANM 198131); Ontario,
Owen Sound, base of Jones Falls, 17
September 1890 (CANM 198134).
= *Callicladium haldanianum*
(Grev.) Crum

Hypnum hamatidens Kindb. *in Mac.*,
Bull. Torrey Bot. Cl. 16: 97. 1889.
ISOTYPE? Canada: British Columbia,
Vancouver I., CANADIAN MUSCI 279 (as
H. (Campothecium) haematidens
Kindb.) (CANM 197955).
= *Homalothecium nuttallii* (Wils.)
Jaeg.

Hypnum jamesii-macounii Kindb., Rev.
Bryol. 43: 88. 1907.
ISOTYPE. United States: Alaska, St.
Paul I., Behring Sea, *J.M.*
Macoun, 6 July 1892 (CANM 198136).
= *Drepanocladus jamesii-macounii*
(Kindb.) Grout

Hypnum molluscoides Kindb., Rev. Bryol.
22: 85. 1895.
ISOTYPE? Canada: Newfoundland, Bay
Bull's Arm, *A.C. Waghorne*, 11
November 1890 (CANM 198139).
= *H. molluscum* var.
molluscoides (Par.) Grout

Hypnum moseri Kindb., Ottawa Nat.
4: 65. 1890.
ISOTYPES? Canada: New Brunswick,
Canaan Forks, *J. Moser*, 30
December 1889 (CANM 198140); New
Brunswick, Queen's Co., *J. Moser*,
1889 (CANM 198141).
= *Drepanocladus uncinatus* (Hedw.)
Warnst.

Hypnum pseudo-arcticum Kindb., Bull. Torrey Bot. Cl. 17: 280. 1890.
SYNTYPE? Canada: British Columbia, Sicamous, 3 July 1889 (CANM 198144).
= *Hygrohypnum luridum* (Hedw.) Jenn.

Hypnum pseudo-circinnale Kindb., Ottawa Nat. 14: 83. 1900.
SYNTYPE? Canada: New Brunswick, Woodstock, 3 July 1899 (CANM 198145).
= *H. fertile* Sendtn.

Hypnum pseudo-drepanium C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 240. 1892.
ISOTYPE. Canada: Ontario, Ottawa, Dow's Swamp, 16 September 1889 (CANM 198146).
= *H. lindbergii* Mitt.

Hypnum pseudo-fastigiatum C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 235. 1892.
SYNTYPES? Canada: British Columbia, Revelstoke, 6 May 1890 (CANM 198147); Ontario, Owen Sound, 16 September 1890 (CANM 198148).
= *H. pallescens* (Hedw.) P. Beauv.

Hypnum pseudo-montanum C. Mull. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 234. 1892.
ISOTYPE. Canada: Ontario, bed of Sydenham R., below Jone's Falls and below Potowattimie Falls, Owen Sound, 16 September 1890, CANADIAN MUSCI 539 (CANM 198149; 198150).
= *Hygrohypnum luridum* (Hedw.) Jenn.

Hypnum pseudo-nemerosum Kindb., Sp. Eur. & N. Amer. Bryin. 1: 123. 1896.
ISOTYPE? Canada: New Brunswick, Queen's Co., J. Moser, 1889 (CANM 198151).
= *H. cypresiforme* var. *resupinatum* (Wils.) Schimp.

Hypnum reauldii Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 238. 1892.
SYNTYPES? Canada: Prince Edward Island, Hunter R., CANADIAN MUSCI 375 (as *H. (Harpidium) reauldi* Kindb.) (CANM 198156); British Columbia, Revelstoke, 3 May 1890 (CANM 198160); British Columbia, Sicamous, 3 July 1889 (CANM 198161); Ontario, Sydenham R. at Owen Sound, 17 July 1890 (CANM 198154); Ontario, Owen Sound, 16 September 1890 (CANM 198157); Prince Edward Island, Hunter R., 3 July 1888 (CANM 198158); Québec, near the lake N of Aylmer Road, near Hull, 14 May 1891 (CANM 198152).
= *H. lindbergii* Mitt.

Hypnum subcomplexum Kindb., Rev. Bryol. 22: 88. 1895.
ISOLECTOTYPE. Canada: Québec, along the Gaspé Coast, 2 August 1882 (CANM 189456).
= *H. vaucheri* Lesq.

Hypnum subimponens var. *cristulum* Kindb. in Mac., Bull. Torrey Bot. Cl. 17: 280. 1890.
ISOTYPE? Canada: British Columbia, southern part of Vancouver I., CANADIAN MUSCI 350 (as *H. subimponens* var. *cristula* Kindb.) (CANM 198167).

Hypnum substrigosum Kindb. in Mac., Ottawa Nat. 3: 151. 1890.
ISOTYPE? Canada: Ontario, Ottawa, 1889, CANADIAN MUSCI 449 (as *H. (Eurhynchium) substrigosum* Kindb.) (CANM 198065).
= *Eurhynchium pulchellum* (Hedw.) Jenn.

Hypnum torrentis C. Müll & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 243. 1892.
ISOTYPE. Canada: British Columbia, Hector, 12 August 1890 (CANM 198168).
= *Hygrohypnum smithii* (Sw.) Broth.

Hypnum uncinatum var. *micropterum* Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 229. 1892.
ISOTYPE. Canada: Labrador, Battle Harbour, A.C. Waghorne, 30 August 1891 (CANM 198171).
= *Drepanocladus uncinatus* (Hedw.) Warnst.

Hypnum uncinatum var. **substriatum**

Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 229. 1892.
SYNTYPES? Canada: Prince Edward Island, near Brackley Point, 1888, CANADIAN MUSCI 376 (as *H. (Harpidium) uncinatum* var. *substriatum* Kindb.) (CANM 198169); British Columbia, Revelstoke, 19 May 1890 (CANM 198104); Prince Edward Island, Brackley Point, 26 June 1888 (CANM 198172); Prince Edward Island, Hunter R., 2 July 1888 (CANM 198170).
= *Drepanocladus uncinatus* (Hedw.) Warnst.

Hypnum waghornei Kindb. in Mac. &

Kindb., Cat. Canad. Pl. 6: 234. 1892.
SYNTYPE. Canada: Newfoundland, Chance Cove, A.C. Waghorne, 26 September 1890 (CANM 198173).
= *Drepanocladus uncinatus* (Hedw.) Warnst.

Hypotterygium canadense Kindb., Rev.

Bryol. 26: 46. 1899.
ISOTYPE. Canada: British Columbia, Queen Charlotte Is., C.F. Newcombe, 1898 (CANM 198174).
= *H. fauriei* Besch.

Isothecium brachycladon Kindb., Rev.

Bryol. 22: 82. 1895.
ISOTYPE. Canada: British Columbia, Vancouver I., Sea's Farm, near Victoria, 6 May 1893 (CANM 198175).

Isothecium cardotii Kindb. in Mac.

& Kindb., Cat. Canad. Pl. 6: 275. 1892.
ISOTYPE? Canada: British Columbia, Hastings, 10 April 1889 (CANM 198178).
= *I. stoloniferum* var. *cardotii* (Kindb.) Wijk & Marg.

Isothecium myosuroides ssp.

brevinerve Kindb., Ottawa Nat. 7: 20. 1893.
SYNTYPE. Canada: Newfoundland, Speedwell Bay, A.C. Waghorne, 11 December 1890 (CANM 198179).
= *I. eumyosuroides* ssp. *brevinerve* Kindb.

Isothecium myurellum Kindb. in

Mac., Bull. Torrey Bot. Cl. 17: 278. 1890.
ISOTYPE. Canada: British Columbia, Vancouver I., Nanaimo R., 26 April 1887 (CANM 198180).
= *I. stoloniferum* var. *myurellum* (Kindb.) Wijk & Marg.

Isothecium obtusatulum Kindb., Rev.

Bryol. 22: 83. 1895.
SYNTYPE? Canada: British Columbia, Vancouver I., Parson's Mt., near Victoria, 17 May 1893 (CANM 198181).
= *I. stoloniferum* Brid.

Isothecium thamnioides Kindb., Sp. Eur.

& N. Amer. Bryol. 1: 36. 1896.
ISOTYPE. Canada: British Columbia, Vancouver I., Goldstream, 2 June 1893 (CANM 198185).
= *I. stoloniferum* var. *thamnioides* (Kindb.) Wijk & Marg.

Leptodontium canadense Kindb. in

Mac. & Kindb., Cat. Canad. Pl. 6: 45. 1892.
ISOTYPE. Canada: Ontario, Owen Sound, Sydenham R., 17 September 1890 (CANM 198186).
= *Hyophila involuta* (Hook.) Jaeg. & Sauerb.

Leptotrichum flexicaule ssp.

brevifolium Kindb. in Mac & Kindb., Cat. Canad. Pl. 6: 46. 1892.
ISOTYPES. Canada: Alberta, Devil's Lake, 10 August 1891, CANADIAN MUSCI 550 (as *L. flexicaule* var. *brevifolium* Kindb.) (CANM 198187); Alberta, Devil's Lake, Dry Canyon, 10 August 1891 (CANM 198188).
= *Ditrichum flexicaule* f. *brevifolium* (Kindb.) Grout

Leptotrichum tomentosum Kindb., Ottawa

Nat. 7: 18. 1893.
ISOTYPE. United States: Alaska, St. Paul I., Behring Sea, J.M. Macoun, 3 July 1892 (CANM 198189).
= *Campylopus subulatus* var. *schimperi* (Milde) Husn.

Lescuraea imperfecta C. Müll. & Kindb.

in Mac. & Kindb., Cat. Canad. Pl. 6: 170. 1892.
ISOTYPE. Canada: British Columbia, Revelstoke, W side of Columbia R., 9 May 1890, CANADIAN MUSCI 489 (CANM 198190).
= *L. stenophylla* (Ren. & Card.) Kindb.

Leskea nigrescens Kindb., Ottawa Nat.

2: 155. 1889 and Bull. Torrey Bot. Cl. 16: 97. 1889.
ISOTYPE? Canada: Ontario, Beechwood, near Ottawa, CANADIAN MUSCI 395 (CANM 198194).
= *Leskeella nervosa* var. *flagellifera* (Kindb.) Wijk & Marg.

Leskea subobtusifolia C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 169. 1892.
SYNTYPES? Canada: British Columbia,
Nelson, Kootanie R., 3 July 1890 (CANM
198195); British Columbia, Pass Creek
Falls, 18 June 1890 (CANM 198196).
= *L. polycarpa* var.
paludosa (Hedw.) Schimp.

Meesia macounii Kindb., Rev. Bryol.
32: 36. 1905.
ISOTYPE. Canada: Alberta, near
Laggan, 25 July 1904 (CANM 198197;
198201).
= *M. longiseta* Hedw.

Merceya latifolia Kindb. in Mac.,
Bull. Torrey Bot. Cl. 16: 94. 1889.
ISOTYPES. Canada: British Columbia,
Vancouver I., Mount Finlayson at
Goldstream, 1887, CANADIAN MUSCI 459
(CANM 198198); British Columbia, Mount
Finlayson, near Victoria, 18 May 1887
(CANM 198199); British Columbia,
Vancouver I., Mount Finlayson, 18 May
1887 (CANM 198200).
= *Crumia latifolia* (Kindb.).
ex Mac.) Schof.

Mielichhoferia recurvifolia Kindb., Rev.
Bryol. 32: 36. 1905.
ISOTYPE. Canada: Alberta, Lake Agnes,
14 September 1904 (CANM 198202;
267889).
= *Ceratodon purpureus* (Hedw.)
Brid.

Mnium blytti var. **microphyllum**
Kindb., Ottawa Nat. 23: 184. 1910.
ISOLECTOTYPE. Canada: Yukon, Hunker
Creek, 26 July 1902 (CANM 198203).
PARATYPES? Canada: Yukon, along
Hunker Creek, 23 July 1902 (CANM
198204); Yukon, Hunker Creek, 26 July
1902 (CANM 198385).
= *M. blyttii* B.S.G.

Mnium cuspidatum var. **tenellum**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 136. 1892.
ISOTYPES. Canada: Prince Edward
Island, Rustico Bay, CANADIAN MUSCI 203
(CANM 198206); Prince Edward Island,
Rustico Bay, 3 July 1888 (CANM
198205).
= *Plagiommium cuspidatum* (Hedw.)
Kop.

Mnium decurrens C. Müll & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 140. 1892.
SYNTYPE? Canada: British Columbia,
Pass Creek, Sproat, 27 June 1890 (CANM
198210).
= *M. thomsonii* Schimp.

Mnium glabrescens Kindb., Ottawa Nat.
7: 18. 1893.
ISOLECTOTYPE. Canada: British
Columbia, Vancouver I., Comox, 28 April
1887 (CANM 198212).
PARATYPES? Canada: British Columbia,
Queen Charlotte Is., G.M. Dawson,
July 1878 (CANM 198213); British
Columbia, Vancouver I., Comox, 29 May
1887 (CANM 198211); British Columbia,
Vancouver I., 8 May 1875 (CANM 273978).
United States: Alaska, Port Etches,
J.M. Macoun, 18 June 1892 (CANM
273979); Alaska, Sitka, J.M. Macoun,
September 1891 (CANM 146084).
= *Rhizomnium glabrescens* (Kindb.)
Kop.

Mnium glabrescens ssp.
chlorophyllum Kindb., Sp. Eur. &
N. Amer. Bryin. 2: 340. 1897.
LECTOTYPE. Canada: Québec, Meech
Lake, near Chelsea, 23 September 1893
(CANM 157671).
ISOLECTOTYPE. Canada: Québec,
Chelsea, 23 September 1893 (CANM
198382).
= *Rhizomnium punctatum* ssp.
chlorophyllum (Kindb.) Kop.

Mnium insigne var. **intermedium**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 139. 1892.
ISOLECTOTYPE. Canada: British
Columbia, Vancouver I., Cedar Hill, 17
April 1887 (CANM 198221).
= *Plagiommium insigne* (Mitt.)
Kop.

Mnium macounii Kindb., Rev. Bryol.
32: 33. 1905.
LECTOTYPE. Canada: Yukon, Hunker
Creek, 23 July 1902 (CANM 198215).
ISOLECTOTYPE. Canada: Yukon, Hunker
Creek, 23 July 1902 (CANM 198214).
PARATYPE. Canada: Yukon, Hunker
Creek, 23 July 1902 (CANM 198384).
= *M. ambiguum* C. Müll.

Mnium macrociliare C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 137. 1892.
LECTOTYPE. Canada: British Columbia,
Revelstoke, 14 May 1890 (CANM 198218).
PARATYPE. Canada: British Columbia,
Revelstoke, 14 May 1890 (CANM 198219).
= *Plagiommium ciliare* (C. Müll.)
Kop.

Mnium medium ssp. **robustum** Kindb.
in Mac., Bull. Torrey Bot. Cl.
17: 274. 1890.
ISOTYPE. Canada: British Columbia,
Cedar Hill, near Victoria, 17 June 1887
(CANM 198220).
= *Plagiommium insigne* (Mitt.)
Kop.

Mnium niagareae Kindb. in Mac. &
Kindb., Cat. Canad. Pl. 6: 141. 1892.
ISOTYPES. Canada: Ontario, Niagara
Falls, Whirlpool, 6 June 1891, CANADIAN
MUSCI 581 (CANM 198223); Ontario,
Niagara, Whirlpool, 6 June 1891 (CANM
198222).
= *M. marginatum* (With.) P.
Beauv.

Mnium serratum var. **macounii** Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 139. 1892.
ISOTYPE. Canada: Prince Edward
Island, Rustico Bay, 16 July 1888 (CANM
198228).
= *M. spinulosum* B.S.G.

Mnium simplex Kindb., Rev. Bryol.
23: 22. 1896.
SYNTYPES? Canada: British Columbia,
Vancouver I., Nanaimo, Mount Benson, 10
July 1893 (CANM 198229; 198230);
British Columbia, mountains at Griffin
Lake, 11 August 1889 (CANM 198231).
= *Roellia roellii* (Broth.
ex Röll) Andr. ex Crum

Neckera douglasii var. **macounii**
Kindb. in Mac., Bull. Torrey Bot.
Cl. 17: 275. 1890.
SYNTYPES. Canada: British Columbia,
Vancouver I. and Hastings, CANADIAN
MUSCI 389 (CANM 198232); British
Columbia, Hastings, 8 April 1889 (CANM
198233); British Columbia, Vancouver
I., Comox, 29 April 1887 (CANM
198234).
= *N. douglasii* Hook.

Neckera menziesii var. **amblyclada**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 162. 1892.
ISOTYPE. Canada: British Columbia,
Hector, 15 July 1885, CANADIAN MUSCI
567 (CANM 198235).
= *Metaneckera menziesii* (Hook.
ex Drumm.) Steere

Neckera oligocarpa ssp. **pterantha**
C. Müll. & Kindb. in Mac. &
Kindb., Cat. Canad. Pl. 6: 162. 1892.
ISOTYPE. Canada: British Columbia, 3
mi. below Hector, 13 August 1890 (CANM
198236).
= *N. pennata* var. *tenuera*
C. Müll.

Oligotrichum hercynicum var.
latifolium C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 149. 1892.
ISOTYPES. Canada: British Columbia,
Selkirk Mts., Roger's Pass, CANADIAN
MUSCI 661 (as *O. latifolium*
Kindb.) (CANM 198238); British
Columbia, Selkirk Mts., Roger's Pass,
31 July 1890 (CANM 198237).
= *O. hercynicum* (Hedw.) DC.

Orthotrichum affine var. **sublaeve**
Kindb., Ottawa Nat. 14: 86. 1900.
ISOTYPE. Canada: Nova Scotia, Cape
Breton I., Big Intervale, 16 July
1898 (CANM 153811).

Orthotrichum affine ssp. **subrivale**
Kindb., Rev. Bryol. 34: 91. 1907.
ISOTYPE. Canada: Québec, Fraser's
Falls, Murray River, 11 August 1905
(CANM 153798).
= *O. sordidum* Sull. & Lesq.
ex Aust.

Orthotrichum anomalum var. **americanum**
Vent. in Mac. & Kindb., Cat.
Canad. Pl. 6: 86. 1892.
SYNTYPES? Canada: Manitoba, Lake
Winnipegosis, 6 July 1882 (CANM
198239); Manitoba, Lake Winnipegosis,
July 1881 (CANM 198240).
= *O. anomalum* Hedw.

Orthotrichum connectens Kindb. in
Mac., Ottawa Nat. 3: 150. 1890.
ISOTYPE? Canada: Ontario, Ottawa,
Dow's Swamp, 16 September 1889 (CANM
154905).
= *Ulota crispa* (Hedw.) Brid.

Orthotrichum consimile ssp.
anomaloides Kindb., Sp. Eur. & N.
Amer. Bryol. 2: 310. 1897.
LECTOTYPE. Canada: Alberta, Rocky
Mts., E end of Devil's Lake, 29 July
1891 (CANM 197621).
PARATYPES? Canada: Alberta, Rocky
Mts., Banff, 6 September 1891 (CANM
199517); Alberta, Rocky Mts.,
Kananaskis, 24 June 1885 (CANM
199518).
= *O. anomalum* Hedw.

Orthotrichum lonchothecium C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 90. 1892.
SYNTYPES. Canada: British Columbia,
Kootanie Lake, 13 July 1890 (CANM
198242); Alberta, Rocky Mts., Banff, 4
July 1891 (CANM 198241).
= *O. laevigatum* f. *macounii*
Lawt. & Vitt in Lawt.

Orthotrichum lyelliioides Kindb., Rev.

Bryol. 23: 21. 1896.

ISOTYPE. Canada: British Columbia,
Vancouver I., Comox, 3 May 1887
(CANM 153152).

= *O. lyellii* Hook. & Tayl.

Philonotis fontana var. **microblasta**

C. Müll. & Kindb. in Mac. &

Kindb., Cat. Canad. Pl. 6: 107. 1892.

ISOTYPE. Canada: British Columbia,
Roger's Pass, 30 July 1890 (CANM
198248).

= *P. fontana* (Hedw.) Brid.

Philonotis fontana var. **microthamnia**

Kindb., Ottawa Nat. 23: 183. 1910.

ISOTYPE. Canada: Yukon, Hunker Creek,
26 July 1902 (CANM 198249).

Philonotis glabriuscula Kindb. in

Mac. & Kindb., Cat. Canad. Pl.
6: 107. 1892.

ISOTYPES. Canada: New Brunswick,
Queen's Co., J. Moser, 2 January
1890, CANADIAN MUSCI 578 (CANM
198254); New Brunswick, Canaan Forks,
J. Moser, 2 January 1890 (CANM
198255).

= pp. *P. marchica* (Hedw.) Brid. &
pp. *P. fontana* (Hedw.) Brid.

Philonotis macounii Lesq. & James,

Mosses of N. Amer. 208. 1884.

ISOTYPE? Canada: British Columbia,
near Victoria, 9 May 1875 (CANM
150788).

= *P. capillaris* Lindb.

Philonotis microcarpa Kindb., Rev.

Bryol. 32: 37. 1905.

ISOTYPE. Canada: Alberta, Pipestone
Creek, 8 July 1904 (CANM 267890).

= *P. fontana* var. *pumila*
(Turn.) Brid.

Philonotis vancouveriensis Kindb., Sp.

Eur. & N. Amer. Bryin. 2: 326. 1897.

SYNTYPES? Canada: British Columbia,
Vancouver I., Nanaimo R., 26 April 1887
(CANM 198256). United States: Alaska,
Nagni I., J.M. Macoun,
18 September 1892 (CANM 198257).
= *P. capillaris* Lindb.

Physcomitrium megalocarpum Kindb.

in Mac., Bull. Torrey Bot. Cl.

16: 94. 1889.

SYNTYPE. Canada: British Columbia,
Vancouver I., Cedar Hill, CANADIAN
MUSCI 147 (CANM 198259).

Physcomitrium platyphyllum Kindb.

in Mac. & Kindb., Cat. Canad. Pl.
6: 269. 1892.

ISOTYPE. Canada: Ontario, near
Ottawa, J. Fletcher (CANM
198260).

= *P. pyriforme* (Hedw.) Hampe

Plagiothecium brevipungens Kindb.

in Mac. & Kindb., Cat. Canad. Pl.
6: 215. 1892.

ISOTYPE. Canada: Ontario, Ottawa,
McKay's Woods, 21 May 1885 (CANM
198261).

= *Callicladium haldanianum*
(Grev.) Crum

Plagiothecium membranosum Kindb.

in Mac. & Kindb., Cat. Canad. Pl.
6: 215. 1892.

SYNTYPE? Canada: Ontario, Belleville,
June 1874 (CANM 198262).

= pp. *Herzogiella turfacea*
(Lindb.) Iwats. & pp. *Brotherella*
recurvans (Michx.) Fleisch.

Plagiothecium pseudo-latebricola Kindb.

in Mac. & Kindb., Cat. Canad. Pl.
6: 211. 1892.

SYNTYPES. Canada: British Columbia,
Columbia R., 12 May 1890 (CANM 198263);
British Columbia, Revelstoke, 3 May
1890 (CANM 198264).

= *Isopterygium pulchellum* (Hedw.)
Jaeg. & Sauerb.

Plagiothecium undulatum ssp.

subneckeroides Kindb., Rev. Bryol.
36: 42. 1909 and Ottawa Nat.

23: 138. 1909.

ISOTYPE? Canada: British Columbia,
Newcastle I., Departure Bay, 10 July
1908 (CANM 198265).

= *P. undulatum* (Hedw.) B.S.G.

Platygyrium rupestre Kindb. in

Mac., Bull. Torrey Bot. Cl.

17: 276. 1890.

ISOTYPES. Canada: British Columbia,
Yale, 1889, CANADIAN MUSCI 469
(CANM 198269); British Columbia, above
Yale, 17 May 1889 (CANM 198268).

= *Tripterocladium leucocladulum*
(C. Mill.) Jaeg. & Sauerb.

Pogonatum erythrodontium Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 150. 1892.
SYNTYPES? Canada: British Columbia,
Comox, 1889, CANADIAN MUSCI 430 (as
P. contortum Lesq.) (CANM
198270); British Columbia, Comox, 3 May
1887 (CANM 198272). United States:
Alaska, Prince of Wales I.,
J.M. Macoun, 28 September 1891
(CANM 198271).
= *P. contortum* (Brid.) Lesq.

Polytrichum alpinum var. **microdontium**
Kindb. in Mac., Ottawa Nat.
5: 180. 1892.
ISOTYPE? United States: Alaska, St.
Paul I., Behring Sea, J.M.
Macoun, 30 July 1891 (CANM 198273).
= *Pogonatum alpinum* var.
septentrionale (Brid.) Brid.

Polytrichum apiculatum Kindb., Rev.
Bryol. 32: 35. 1905.
ISOTYPE. Canada: Alberta, Mount Molar
Creek, 8 July 1904 (CANM 198274).
= *P. juniperinum* Hedw.

Polytrichum commune var. **canadense**
in Mac. & Kindb., Cat. Canad. Pl.
6: 156. 1892.
SYNTYPES? Canada: British Columbia,
Albert Canyon, 29 May 1890, CANADIAN
MUSCI 563 (CANM 198275); British
Columbia, Albert Canyon, 29 May 1890
(CANM 198276).
= *P. commune* Hedw.

Polytrichum juniperinum var.
waghornei Kindb. in Mac. &
Kindb., Cat. Canad. Pl. 6: 155. 1892.
ISOTYPE? Canada: Labrador, Deep Water
Creek, Venison Tickle and Cape Charles,
A.C. Waghorne, 17 September 1891
(CANM 198277).

Polytrichum macounii Kindb. in
Mac., Bull. Torrey Bot. Cl.
16: 96. 1889.
ISOTYPE? Canada: British Columbia,
Vancouver I., Mount Arrowsmith,
CANADIAN MUSCI 217 (as *P.*
(*Pogonatum*) *macounii* Kindb.) (CANM
198278).
= *Pogonatum alpinum* var.
sylvaticum (Hoppe) Lawt.

Pottia heimoides Kindb. in Mac. &
Kindb., Cat. Canad. Pl. 6: 43. 1892.
ISOTYPES. Canada: Alberta, Rocky
Mts., Banff, 4 July 1891, CANADIAN
MUSCI 559 (CANM 198279); Alberta, Rocky
Mts., Banff, 4 July 1891 (CANM
198280).
= *Desmatodon heimii* (Hedw.)
Mitt.

Pseudoleskea falcicuspis C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 182. 1892.
SYNTYPE. Canada: British Columbia,
Illicillewaet Canyon, near Revelstoke,
18 May 1890, CANADIAN MUSCI 510 (as
P. falcicuspis C. Müll. & Kindb.)
(CANM 198281).
= *Lescuraea incurvata* (Hedw.)
Lawt.

Pseudoleskea malacoclada C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 185. 1892.
ISOTYPE. Canada: British Columbia,
Spence's Bridge, May 1889, CANADIAN
MUSCI 460 (as *P. catenulata* Bruch
& Schimp.) (CANM 198282).
= *Pseudoleskeella tectorum* (Funck
ex Brid.) Kindb. ex
Broth.

Pseudoleskea sciurooides var. **denudata**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 181. 1892.
ISOTYPE. Canada: British Columbia,
Asulcan Creek, 7 August 1890,
CANADIAN MUSCI 564 (CANM 198283).
= *Lescuraea radicans* var.
denudata (Kindb.) Lawt.

Pseudoleskea substriata Best, Bull.
Torrey Bot. Cl. 27: 233. 1900.
HOLOTYPE. Canada: British Columbia,
below Hector, 13 August 1890 (CANM
198284).
= *Lescuraea saxicola* (B.S.G.)
Mol. ex Lor.

Pterigynandrum papillosum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 165. 1892.
ISOTYPES. Canada: British Columbia,
Deer Park, 4 June 1890, CANADIAN MUSCI
553 (CANM 198286); British Columbia,
Deer Park, Arrow Lake, 4 June 1890
(CANM 198285).
= *P. filiforme* Hedw.

Pylaisia cyrtophylla Kindb., Sp. Eur. &
N. Amer. Bryin. 1: 60. 1896.
ISOTYPE? Canada: Alberta, Athabasca
Plains, 17 September 1872 (CANM
267891).

Pylaisia filari-acuminata C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 174. 1892.
ISOTYPES? Canada: British Columbia,
Revelstoke, 3 May 1890, CANADIAN MUSCI
626 (CANM 198287); British Columbia,
Revelstoke, W side of Columbia R.,
(CANM 198288).
= *Pylaisiella polyantha* (Hedw.)
Grout

Pylaisia ontariensis Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 174. 1892.
SYNTYPE? Canada: Québec, Gaspé, Mt.
Albert, 24 August 1882 (CANM 198289).
= *Pylaisiella polyantha* (Hedw.)
Grout

Pylaisia pseudo-platygyrium Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 173. 1892.
ISOTYPE. Canada: Ontario, Nipigon
Lake, 17 July 1884 (CANM 198290).
= *Pylaisiella polyantha* (Hedw.)
Grout

Pylaisia selwyni Kindb., Ottawa Nat.
2: 156. 1889.
ISOTYPE? Canada: Ontario, Richmond
Road, 15 May 1885 (CANM 198291).
= *Pylaisiella selwynii* (Kindb.)
Crum, Steere & Anders.

Rhacomitrium alternuatum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 73. 1892.
ISOTYPE? Canada: British Columbia,
Selkirk Mts., summit of Roger's Pass,
6 August 1890, CANADIAN MUSCI 524 (CANM
203487).
= *R. heterostichum* var.
macounii (Kindb. ex Mac.)
G. Jones

Rhacomitrium brevipes Kindb. in
Mac., Bull. Torrey Bot. Cl.
17: 272. 1890.
ISOTYPES? Canada: British Columbia,
Selkirk and Gold Range Mts., August
1889, CANADIAN MUSCI 614 (as
R. micropus Kindb.) (CANM
203480); British Columbia, mountains N
of Griffin Lake, 9 August 1889 (CANM
203474).
= *R. sudeticum* f. *brevipes*
(Kindb.) Lawt.

Rhacomitrium canescens var. *muticum*
Kindb. in Mac., Bull. Torrey Bot.
Cl. 17: 272. 1890.
ISOTYPES? Canada: British Columbia,
Gold Range, on the mountains N of
Griffin Lake, 1889, CANADIAN MUSCI 467
(CANM 198293); British Columbia,
mountains N of Griffin Lake, 8 August
1889 (CANM 198292).

Rhacomitrium macounii Kindb. in
Mac., Bull. Torrey Bot. Cl.
16: 93. 1889.
SYNTYPE? Canada: British Columbia,
Selkirk Range, 24 August 1885 (CANM
203479).
= *R. heterostichum* var.
macounii (Kindb. ex Mac.)
G. Jones.

Rhacomitrium microcarpum var. *palmeri*
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 267. 1892.
ISOTYPE? United States: Alaska, St.
Paul I., W. Palmer, 10 June 1890
(CANM 203485).
= *R. fasciculare* (Hedw.) Brid.

Rhacomitrium palmeri Kindb., Rev. Bryol.
23: 19. 1896.
SYNTYPES? United States: Alaska,
Behring Sea, St. Paul I., J.M.
Macoun, 1892, RENAUD & CARDOT,
MUSCI AMER. SEPT. EXS. 367 (CANM
203475); Alaska, Behring Sea, St. Paul
I., J.M. Macoun, 30 July 1892
(CANM 203488).
= *R. fasciculare* (Hedw.) Brid.

Rhacomitrium robustifolium Kindb.
in Mac., Bull. Torrey Bot. Cl.
17: 272. 1890.
ISOTYPE. Canada: British Columbia,
Vancouver I., Mt. Arrowsmith, 17 July
1887 (CANM 203477; 203483; 203484).
= *R. heterostichum* var.
macounii (Kindb. ex Mac.)
G. Jones

Rhacomitrium tenuinerve Kindb., Rev.
Bryol. 23: 19. 1896.
SYNTYPES? Canada: British Columbia,
Vancouver I., Ucluelet, 7 June 1909
(CANM 198294; 198295); British
Columbia, along the Columbia at
Revelstoke, 19 May 1890 (CANM 198296).
United States: Alaska, St. Paul I.,
J.M. Macoun, 3 July 1892 (CANM
198297).
= *R. fasciculare* (Hedw.) Brid.

Rhaphidostegium subadnatum C. Müll. &
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 209. 1892.
SYNTYPES. Canada: Ontario, London,
J. Dearness, May 1889 (CANM
198299); Québec, Gaspé, 2 August 1882
(CANM 198300).
= *Hypnum pallens* (Hedw.) P.
Beauv.

Rhaphidostegium whitei Kindb., Sp. Eur.
& N. Amer. Bryol. 1: 63. 1896.
ISOTYPE? Canada(?): Ontario(?), J.
White, 25 April 1892 (CANM 198298).
= *Brotherella recurvans* (Michx.)
Fleisch.

Scleropodium obtusifolium var.
homomallum Grout, Bull. Torrey Bot.
Cl. 26: 534. 1899.
HOLOTYPE. Canada: British Columbia,
Vancouver I., Goldstream, 18 May 1887
(CANM 181665).

Scouleria aquatica var. *nigrescens*
Kindb. in Mac., Bull. Torrey Bot. Cl. 16: 94. 1889.
LECTOTYPE. Canada: British Columbia, Vancouver I., Nanaimo, 27 April 1887 (CANM 133517).
= *S. aquatica* Hook.

Scouleria aquatica var. *virescens*
Kindb. in Mac., Bull. Torrey Bot. Cl. 16: 93. 1889.
ISOTYPE. Canada: British Columbia, Selkirk Mts., close to the Glacier Hotel, 1885, CANADIAN MUSCI 105 (CANM 198303).
= *S. aquatica* Hook.

Scouleria muelleri Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 62. 1892.
LECTOTYPE. Canada: British Columbia, Revelstoke, 12 May 1892, CANADIAN MUSCI 558 (CANM 198302).
= *S. aquatica* Hook.

Seligeria campylopoda Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 41. 1892.
ISOTYPES. Canada: Ontario, Owen Sound, CANADIAN MUSCI 60 (CANM 154812); Ontario, Owen Sound, 16 September 1890 (CANM 198305; 198307).

Seligeria subcampylopoda Kindb., Rev. Bryol. 32: 35. 1905.
ISOTYPES? Canada: Alberta, near the head of Lake Louise, 13 September 1904 (CANM 198309); Alberta, head of Lake Louise, 13 September 1904 (CANM 198308).
= *S. campylopoda* Kindb. in Mac. & Kindb.

Sphagnum labradorense Warnst. in Kindb. & Mac., Cat. Canad. Pl. 6: 253. 1892.
ISOTYPE. Canada: Newfoundland, Black River, Placentia Bay, A.C. Waghorne, 7 May 1891 (CANM 105499).
= *S. molle* Sull.

Tetraplodon mnioides ssp. *breweri* var. *brevicollis* Kindb., Ottawa Nat. 23: 142. 1909.
ISOTYPE. Canada: Yukon, Bonanza Creek, 18 July 1902 (CANM 198310).

Thelia compacta Kindb., Ottawa Nat. 4: 62. 1890.
ISOTYPE? Canada: Ontario, Northumberland Co., Seymour, CANADIAN MUSCI 433 (CANM 198311).
= *T. hirtella* (Hedw.) Sull.

Thuidium leskeoides Kindb. in Mac., Bull. Torrey Bot. Cl. 17: 277. 1890.
ISOTYPE? Canada: British Columbia, Vancouver I., Cedar Hill, 20 April 1887 (CANM 198312).
= *Claopodium whippleanum* (Sull.) Ren. & Card.

Thuidium pseudo-abietinum Kindb., Ottawa Nat. 7: 20. 1893.
ISOTYPE. Canada: Ontario, Brittania, 11 September 1890 (CANM 198313).
= *Helodium blandowii* (Web & Mohr) Warnst.

Thuidium pseudo-gracile Kindb., Sp. Eur. & N. Amer. Bryin. 1: 56. 1896.
ISOTYPE. Canada: Ontario, Leamington, 19 September 1890 (CANM 198314).
= *Haplocladium virginianum* (Brid.) Broth.

Thuidium vancouverense Kindb. in Mac., Bull. Torrey Bot. Cl. 17: 277. 1890.
ISOTYPE. Canada: British Columbia, Vancouver I., Mt. Finlayson, 31 May 1887 (CANM 198105).
= *Bestia vancouverensis* (Kindb.) Wijk & Marg.

Trematodon acicularis Kindb., Rev. Bryol. 23: 18. 1890.
ISOTYPE? Canada: British Columbia, Cragellaichie, 18 July 1889 (CANM 198315).
= *T. ambiguus* (Hedw.) Hornsch.

Ulota camptopoda Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 85. 1892.
SYNTYPES? Canada: Québec, Hull, Aylmer Road, 24 April 1891, CANADIAN MUSCI 582 (CANM 198316); Québec, W of Hull, 26 April 1891 (CANM 154914).
= *U. crispa* (Hedw.) Brid.

Ulota connectens Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 85. 1892.
SYNTYPE? Canada: Ontario, Ottawa, Dow's Swamp, October 1889, CANADIAN MUSCI 557 (CANM 198317).
= *U. crispa* (Hedw.) Brid.

Ulota maritima C. Müll. & Kindb. in Mac. & Kindb., Cat. Canad. Pl. 6: 84. 1892.
SYNTYPES? United States: Alaska, Kodiak I., J.M. Macoun, 22 September 1891 (CANM 198319); Alaska, Behring Sea, Uunalaska I., J.M. Macoun, 21 August 1891 (CANM 198320).
= *U. phyllantha* Brid.

Ulota obtusiuscula C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 82. 1892.

SYNTYPES. Canada: British Columbia,
Westminster Junction, 26 April 1888,
CANADIAN MUSCI 523 (CANM 198321);
British Columbia, Vancouver I., G.M.
Dawson, July 1885 (CANM 198322).

Ulota scabrida Kindb. in Mac. &
Kindb., Cat. Canad. Pl. 6: 83. 1892.
SYNTYPES? Canada: British Columbia, 3
mi. below Hector, 13 August 1890 (CANM
198323); British Columbia, below
Hector, 13 August 1890 (CANM 198325);
British Columbia, Hector, 13 August
1890 (CANM 198324); British Columbia,
Rocky Mts., Kicking Horse Lake, 29 July
1885 (CANM 198326).
= *U. curvifolia* (Wahl.) Lilj.

Ulota subulifolia C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 82. 1892.
ISOTYPE. Canada: British Columbia,
New Westminster Junction, 26 April
1889 (CANM 199516).
= *U. megalospora* Vent. in
Röll

Webera canaliculata C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 113. 1892.
ISOTYPE. Canada: British Columbia,
Vancouver I., Salt Spring I., 10 May
1887 (CANM 198327).
= *Pohlia rutilans* (Schimp.)
Lindb.

Webera columbica Kindb. in Mac. &
Kindb., Cat. Canad. Pl. 6: 115. 1892.
SYNTYPES? Canada: British Columbia,
Revelstoke, 6 May 1890 (CANM 198329);
British Columbia, Revelstoke, 16 May
1890 (CANM 141495); British Columbia,
Telegraph Trail, 7 June 1875 (CANM
198330); British Columbia, Quesnel, 5
July 1875 (CANM 141491).
= *Pohlia columbica* (Kindb.
in Mac. & Kindb.) Andr.

Webera ludwigii var. **microphylla**
Kindb. in Mac. & Kindb., Cat.
Canad. Pl. 6: 117. 1892.
ISOTYPE. Canada: British Columbia,
mountains at Griffin Lake, 7 August
1889 (CANM 198333).
= *Pohlia ludwigii* (Spreng.
ex Schwaegr.) Broth.

Webera micro-apiculata C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 115. 1892.

SYNTYPES. Canada: British Columbia,
Rocky Mts., Hector, 13 August 1890,
CANADIAN MUSCI 637 (CANM 198335);
British Columbia, Eagle Pass, 23 May
1890 (CANM 198334).

= *Pohlia cruda* (Hedw.) Lindb.

Webera nutans var. **macrospora** Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 113. 1892.

ISOTYPE. Canada: British Columbia,
mountains N of Griffin Lake, 9 August
1889 (CANM 198337).
= *Pohlia nutans* (Hedw.) Lindb.

Webera polymorphoides Kindb. in
Mac. & Kindb., Cat. Canad. Pl.
6: 111. 1892.

ISOTYPE? Canada: British Columbia,
Selkirk Mts., Hermit Mt., 1890,
CANADIAN MUSCI 636 (CANM 198338).
= *Pohlia drummondii* (C. Müll.)
Andr.

Webera pycno-decurrens C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 114. 1892.

ISOTYPE. Canada: British Columbia,
mountains N of Griffin Lake, 10 August
1889 (CANM 197916).
= *Pohlia drummondii* (C. Müll.)
Andr.

Webera subcucullata C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 113. 1892.

SYNTYPES? Canada: Québec, summit of
Mount Albert, Gaspé and also British
Columbia, summit of Gold Range, N of
Griffin Lake, August 1889, CANADIAN
MUSCI 424 (CANM 198341); British
Columbia, Mt. Queest, July 1889 (CANM
198339); British Columbia, mountains N
of Griffin Lake, 8 August 1889 (CANM
198340).

= *Pohlia drummondii* (C. Müll.)
Andr.

Weisia convoluta C. Müll. & Kindb.
in Mac. & Kindb., Cat. Canad. Pl.
6: 14. 1892.

ISOTYPE? Canada: British Columbia,
Silver City, 10 August 1885 (CANM
198343).
= *Dicranoweisia crispula* (Hedw.)
Milde

Weissia pusilla Kindb., Rev. Bryol.
23: 20. 1896.
ISOTYPES? Canada: Ontario, Owen Sound, 31 July 1871 (CANM 198344); Ontario, Owen Sound, 27 July 1874 (CANM 198345).
= *Gymnoetomum calcareum* Nees & Hornsch.

Zygodon crispatus Kindb., Rev. Bryol.
23: 21. 1896.
SYNTYPES? Canada: British Columbia, Eagle Pass, Revelstoke, 9 May 1890 (CANM 117357); British Columbia, Yale, 17 May 1889 (CANM 198346).
= *Amphidium lapponicum* (Hedw.) Schimp.

Zygodon lapponicus ssp. **decipiens**
Kindb., Sp. Eur. & N. Amer. Bryin.
2: 317. 1897.
SYNTYPE? Canada: British Columbia, Agassiz, 15 May 1889 (CANM 198347).
= *Amphidium mougeotii* (B.S.G.) Schimp.

HEPATICAE

Anthoceros macounii M.A. Howe, Bull.
Torrey Bot. Cl. 25: 19. 1898.
ISOTYPE. Canada: Québec, Leamy's Lake
near Hull, 6 October 1889, CANADIAN
HEPATICAE 81 (CANM 14120).

Frullania selwyniana Pears., Geol. &
Nat. Hist. Surv. Can. (List of Canad.
Hep.) 1: 1. 1890.
ISOTYPE. Canada: Québec, Ste. Anne
R., 19 August 1882 (CANM 3147).

Jungermannia floerkii var. **alpina**
Pears., Geol. & Nat. Hist. Surv. Can.
(List of Canad. Hep.) 1: 22. 1890.
ISOTYPE. Canada: British Columbia,
Rocky Mts., Kicking Horse Lake,
20 July 1885 (CANM 562; 566).
= *Barbilophozia floerkei* (Web. &
Mohr) Loeske

Jungermannia macounii Aust., Proc. Acad.
Nat. Sci. Phil. 21(1869): 222. 1870.
ISOTYPE? Canada: Ontario, Hastings
Co., 15 July 1868 (CANM 1722).
= *Cephalozia macounii* (Aust.)
Aust.

Jungermannia wattiana Aust., Bull.
Torrey Bot. Cl. 3: 11. 1872.
ISOTYPE? Canada: Ontario, Lake
Superior, 30 July 1869 (CANM 4341).
= *Lophozia heterocolpos* (Thed.)
M.A. Howe

Lejeunea macounii Spruce ex
Underw., Bull. Torrey Bot. Cl.
17: 259. 1890.
ISOTYPE. Canada: British Columbia,
Hastings, 8 April 1889 (CANM 2254).
= *Cololejeunea macounii* (Spruce
ex Underw.) Evans

Lejeunea serpyllifolia var.
americana Lindb., Acta Soc. Sci.
Fennicae 10: 486. 1875.
SYNTYPE? Canada: Ontario, along the
Moira R. at Belleville, 1865
(CANM 4458).
= *L. cavifolia* (Ehrh.) Lindb.

Lophocolea macounii Aust., Proc. Acad.
Nat. Sci. Phil. 21(1869): 223. 1870.
SYNTYPES? Canada: Ontario near
Belleville, 1866 (CANM 4973); Ontario,
Hastings Co., 17 October 1867 (CANM
4979).
= *L. heterophylla* (Schrad.) Dum.

Metzgeria furcata var. **pacifica**
Brinkm., Bryologist 34: 15. 1931.
HOLOTYPE. Canada: British Columbia,
Hastings, 12 April 1889 (CANM 6059).

Scapania peckii Aust., Proc. Acad. Nat.
Sci. Phil. 21(1869): 218. 1870.
SYNTYPE? Canada: Ontario, Belleville,
July 1867 (CANM 9117).
= *S. glaucocephala* (Tayl.)
Aust.

Sphagnoecetis macounii Aust., Bull.
Torrey Bot. Cl. 3: 13. 1872.
ISOTYPE. Canada: Ontario, 25 mi. N of
Michipicoten, 28 July 1869 (CANM 6625).
= *Odontoschisma macounii* (Aust.)
Underw.

TYPE SPECIMENS FROM OTHER SOURCES

MUSCI

Acanthocladium benguetense var.
latifolium Bartr., Farlowia
 1: 187. 1943.

ISOTYPE. Burma: Kareni, Nataung,
F.G. Dickason 9444 (CANM
 197305).
 = *Wijkia benguetense* var.
latifolia (Bartr.) Crum

Acpororium jamaicense Crum & Bartr.,
Bull. Inst. Jamaica Sci. ser.
 8: 66. 1958.
 HOLOTYPE. Jamaica: Portland Parish,
 John Crow Mts., ca. 1.3 mi. SW of
 Ecclesdown, *G.L. Webster* 5583
 (CANM 197307).
 PARATYPE. Jamaica: Portland Parish,
 John Crow Mts., 1.5 mi. SW of
 Ecclesdown, *G.L. Webster* 5203
 (CANM 197306).

Acpororium novae-guineae Bartr.,
Brittonia 13: 377. 1961.
 ISOTYPE. New Guinea: Sepik River
 Dist., Wewak-Angoram area, Angoram
 Hills near Passam Village,
R.G. Robbins 2139 (CANM 197308).

Acpororium percaudatum Bartr., *Brittonia*
 13: 377. 1961.
 ISOTYPE. New Guinea: Madang Dist.,
 Lower Ramu-Atitau area, Asai Valley,
 Schrader Range near Aiome patrol post,
R.G. Robbins 1377 (CANM 197309).
 PARATYPE. New Guinea: Madang Dist.,
 Lower Ramu-Atitau area, Mombasop
 Village, slopes of Schrader Ranges near
 Asai Valley, *R.G. Robbins* 1365
 (CANM 197310).

Aerobryopsis mexicana Card., *Rev. Bryol.*
 37: 8. 1910.
 SYNTYPE. Mexico: Puebla, Honey
 Station, PRINGLE, PLANTAE MEXICANAE
 15044 (CANM 197313).

Aerobryopsis philippinensis Bartr.,
Philipp. J. Sci. 68: 222. 1939.
 ISOTYPE. Philippines: Luzon, Pampanga
 Prov., Camp Stotsenburg, Mt. Pinatubo,
A.D.E. Elmer 22083 (CANM
 111300).

Aeroryopsis scariosa Bartr., *Philipp. J. Sci.* 68: 223. 1939.
 ISOTYPE. Philippines: Luzon, Mountain
 Prov., Mt. Santo Tomas, *H.H. Bartlett* 13310 (CANM 256378;
 197314).

Aloinella apiculata Bartr., *J. Washington Acad. Sci.* 26: 9. 1936.
 ISOTYPE. Jamaica: Arutully, *C.R. Orcutt* 6802 (CANM 132019).

Alsia longipes Sull. & Lesq., *Musci Bor.*
Amer. ed. 2: 66. 1865.
 ISOTYPE. United States: California,
H. Bolander, SULLIVANT &
 LESQUEREAUX, *MUSCI BOR. AMER.* 399 (CANM
 197315).
 = *Bestia longipes* (Sull. & Lesq.)
Broth.

Amblyodon dealbatus var. *americanus*
 Ren. & Card., *Hedwigia* 77: 131. 1937.
 ISOTYPE. United States: Minnesota,
 Osceola, *J.M. Holzinger*, RENAULD
 & CARDOT, *MUSCI AMER.* SEPT. 180 (CANM
 149228).
 = *A. dealbatus* (Hedw.) B.S.G.

Amblystegium americanum Grout,
Bryologist 13: 32. 1910.
 ISOTYPE. United States: Wisconsin,
 Trempealeau Ridge along Mississippi R.,
J.M. Holzinger, Grout, N. AMER.
MUSCI PLEUR. 335 (CANM 197316).
 = *Conardia compacta* (C. Müll.)
Robins.

Amblystegium vacillans Sull., *Icon.*
Musc. Suppl. 96: 72. 1874.
 ISOTYPE. United States: New
 Hampshire, White Mts., *W. Oakes* &
W.S. Sullivant (CANM 197318).
 = *A. riparium* (Hedw.) B.S.G.

Amblystegium varium var. *parvulum*
 Aust. ex Grout, *Moss Fl. N. Amer.*
 3: 70. 1931.
 ISOTYPE. United States: New Jersey,
 AUSTIN, *MUSCI APPAL.* 378 (CANM
 172559).
 = *A. varium* (Hedw.) Lindb.

Amphidium papillosum Bartr., *Philipp. J. Sci.* 68: 48. 1939.
 ISOTYPE. Philippines: Luzon, Mountain
 Prov., Mt. Santo Tomas, *H.H. Bartlett* 13275 (CANM 197319).

Andreaea blyttii B.S.G., *Bryol. Eur.*
 6: 155. 1855 (fasc. 62-64 Mon. 25.13).
 ISOTYPE. Finland (Finmarkiae):
M.N. Blytt (CANM 106976).

Andreaea nivalis var. **baileyi** Holz.,
Musci Acro. Bor. Amer. n. 501. 1924.
ISOTYPE. United States: Washington,
Snohomish Co., Mt. Pilchuck,
J.W. Bailey, HOLZINGER, MUSCI
ACRO. BOR. AMER. 501 (CANM 197322).
= *A. nivalis* Hook.

Andreaea pulvinata Beck., Trans. New
Zealand Inst. 25: 293. 1893.
ISOTYPE. New Zealand: Canterbury,
Rockwood, T.W.N. Beckett 359
(CANM 250908).

Anisothecium brachydontium Crum &
Steere, Bryologist 59: 247. 1956.
ISOTYPE. Puerto Rico: S of San
Lorenzo, km 11.2, unfinished road to
Patillas, W.C. Steere 6808 (CANM
197323).

Anisothecium crispum var. **atlanticum**
C. Jens., Bot. Faerøes Dan. Invest.
1: 161. 1901.
ISOTYPE. Denmark: Faeroes,
Strømø, Vestmannahavn Bø, C.
Jensen, 7 June 1896 (CANM 197324).

Anoectangium gradatum Card., Rev. Bryol.
36: 107. 1909.
ISOTYPE. Mexico: Federal Dist.,
Mexico Valley, Canada above Contreras,
PRINGLE, PLANTAE MEXICANAE 10582 (CANM
197325).

Anoectangium leibmanni var. **viride**
Card., Rev. Bryol. 36: 107. 1909.
SYNTYPE. Mexico: Nuevo Leon, Sierra
Madre near Monterrey, PRINGLE, PLANTAE
MEXICANAE 10455 (CANM 197326).

Anoectangium walkeri Broth., Rec. Bot.
Surv. India 1: 311. 1899.
ISOTYPE. India: Coorg, Mercara,
T.L. Walker 277 (CANM 197327).

Anomobryum filiforme var. **americanum**
Ren. & Card., Bot. Gaz. 22: 51. 1896.
ISOTYPE. United States: Wisconsin,
Trempealeau Mt., J.M. Holzinger,
RENAULD & CARDOT, MUSCI AMER. SEPT. 306
(CANM 197328).
= *Pohlia filiformis* (Dicks.)
Andr.

Anomobryum mucronatulum Card., Rev.
Bryol. 36: 112. 1909.
ISOTYPE. Mexico: Jalisco, near
Guadalajara, PRINGLE, PLANTAE
MEXICANAE 10571 (CANM 197329).

Anomobryum plicatum Card., Rev. Bryol.
36: 112. 1909.
ISOTYPE. Mexico: Hidalgo, near Honey
Station, PRINGLE, PLANTAE MEXICANAE
15058 (CANM 197330).

Archidium cubense Williams, Bryologist
22: 2. 1919.
ISOTYPE. Cuba: Santa Clara, Manacas,
Bro. Leon 6002 (CANM 112180).

Archidium donnellii Aust., Bull. Torrey
Bot. Cl. 6: 190. 1877.
ISOTYPE. United States: Virginia,
Prince Edward Co., environs of Hampden
Sidney College, J.D. Smith,
AUSTIN, MUSCI APPAL. 455 (CANM
112184).

Astrophyllum medium var. **arcticum** C.
Jens., Medd. Groenland 15: 371. 1898.
SYNTYPE. Greenland: eastern
Greenland, N. Hartz, 1 & 2 July
1891-1892 (CANM 155832).
= *Plagiomyium medium* ssp.
curvatulum (Lindb.) Kop.

Atrichum conterminum Card., Rev. Bryol.
37: 5. 1910.
SYNTYPE. Mexico: Federal Dist.,
Canada, Valley of Mexico, PRINGLE,
PLANTAE MEXICANAE 10551 (CANM 197331).
= *A. angustatum* var.
conterminum (Card.) Wijk &
Marg.

Atrichum novae-guineae Bartr., Rev.
Bryol. Lich. 30: 206. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, Upper
Ambun river valley ascending the track
to Marimuni, R.G. Robbins 3035
(CANM 208113).

Atrichum portoricense Crum & Steere,
Bryologist 59: 254. 1956.
ISOTYPE. Puerto Rico: Mt. Guilarte, W
of Adjuntas, W.C. Steere 7212
(CANM 208115).

Aulacomnium palustre var. **rupestre**
Aust., Musci Appal. n. 219. 1870.
ISOTYPE. United States: New Jersey,
Palisades, near Closter, C.F.
Austin, AUSTIN, MUSCI APPAL. 219
(CANM 148787).
= *A. palustre* (Hedw.) Schwaegr.

Barbella elongata Williams, Bull. New
York Bot. Gard. 8: 356. 1914.
PARATYPE. Philippines: Luzon, Benguet
Prov., Bagui, R.S. Williams 1693
(CANM 197332).
= *B. pendula* (Sull.) Fleisch.

Barbula abbonii Thér., Smiths. Misc.
Coll. 85(4): 20. 1931.
ISOTYPE. Mexico: Nuevo Leon,
Monterrey, Fre. Abbon 10970 (CANM
197333).

- Barbula altiseta** Card., Rev. Bryol.
36: 85. 1909.
ISOTYPE. Mexico: Michoacan,
Patzcuaro, PRINGLE, PLANTAE MEXICANAE
751 (CANM 197334).
- Barbula artocarpa** Lesq., Trans. Amer.
Phil. Soc. n. ser. 13: 4. 1865.
ISOTYPE. United States: California,
San Francisco, Mount Diablo,
H. Bolander, SULLIVANT &
LESQUEREAUX, MUSCI BOR. AMER. 133 (CANM
197335).
= *B. vinealis* Brid.
- Barbula bakeri** Card. & Thér., Bot. Gaz.
37: 367. 1904.
SYNTYPE. United States: California,
Santa Clara Co., near Alma,
C.F. Baker, HOLZINGER, MUSCI
ACRO. BOR. AMER. 157 (CANM 197336).
= *B. vinealis* Brid.
- Barbula ehrenbergii** var. *mexicana*
Thér., Smiths. Misc. Coll.
85(4): 19. 1931.
ISOTYPE. Mexico: Nuevo Leon,
Monterrey, Fre. Abbon 10969 (CANM
197338).
= *B. ehrenbergii* (Lor.) Fleisch.
- Barbula farriae** Crum & Bartr., Bull.
Inst. Jamaica Sci. ser. 8: 25. 1958.
HOLOTYPE. Jamaica: on road, ca. $\frac{1}{2}$ mi.
WSW of Ecclesdown, M.L. Farr 12
(CANM 197339).
- Barbula haringae** Crum, Southw. Natural.
1: 36. 1956.
HOLOTYPE. United States: Arizona,
Cochise Co., W of Huachuca Military
Reserve, L.N. Goodding Cry. 85
(CANM 197340).
PARATYPES. United States: Arizona,
Huachuca Game Preserve, South Huachuca
Canyon, L.N. Goodding Cry. 285,
293 (CANM 128331; 128332).
= *B. amplexifolia* (Mitt.) Jaeg. &
Sauerb.
- Barbula hypselostegia** Card., Rev. Bryol.
36: 84. 1909.
ISOTYPE. Mexico: Hidalgo, Honey
Station, PRINGLE, PLANTAE MEXICANAE
10653 (CANM 197341; 197342).
= *B. indica* (Hook.) Spreng.
in Steud.
- Barbula johansenii** Williams, Rep. Canad.
Arct. Exp. 1913-18, 4(E): 4. 1921.
ISOTYPE. Canada: Northwest
Territories, Franklin Dist., Victoria
I., Wollaston Land, Murray Point, F.
Johansen, 25 March 1916 (CANM
197344).
= *Didymodon johansenii* (Williams)
Crum
- Barbula leptodontoides** Crum & Steere,
Amer. Midland Natural. 60(1): 17. 1958.
ISOTYPE. Haiti: Arrondissement de
Jérémie, southern peninsula, Beaumont
to Morne Geffrard, H.H. Bartlett
17651 (CANM 197345).
PARATYPE. Haiti: Arrondissement de
Jérémie, southern peninsula, Beaumont
to Morne Geffrard, H.H. Bartlett
17655 (CANM 197346).
- Barbula lozanoi** Card., Rev. Bryol.
36: 85. 1909.
SYNTYPE. Mexico: Nuevo Leon, Sierra
Madre, near Monterrey, PRINGLE, PLANTAE
MEXICANAE 10459 (CANM 197347).
- Barbula manniae** C. Müll., Flora
70: 222. 1887.
ISOTYPE. United States: Colorado,
Manitou, M.R. Mann, May 1886
(CANM 197348).
= *Desmatodon obtusifolius*
(Schwaegr.) Jur.
- Barbula nipponica** Nog., J. Jap. Bot.
27: 286. 1952.
PARATYPE. Japan: Kumamoto, Kuma,
Ohno, K. Mayebara, NOGUCHI &
HATTORI, MUSCI JAP. 252 (CANM 197350).
- Barbula nipponica** var. *gracilis*
Nog., J. Jap. Bot. 27: 286. 1952.
ISOTYPE. Japan: Kumamoto, Kuma,
Isshiochi, K. Mayebara, NOGUCHI &
HATTORI, MUSCI JAP. 253 (CANM 197351).
- Barbula pringlei** Card., Rev. Bryol.
36: 85. 1909.
ISOLECTOTYPE. Mexico: Morelos, near
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10637 (CANM 197352).
= *B. indica* (Hook.) Spreng.
in Steud.
- Barbula Robbinsii** Bartr., Brittonia
13: 370. 1961.
ISOTYPE. New Guinea: Sepik River
Dist., Wewak-Angoram area, near Passam
village, North Angoram Hills, R.G.
Robbins 2137 (CANM 197353).

- Barbula rubricaulis** Thér., Smiths.
 Misc. Coll. 85(4): 19. 1931.
 ISOTYPE. Mexico: Nuevo Leon,
 Monterrey, Fre. Abbon 10968 (CANM
 197354).
 = *B. arcuata* Griff.
- Barbula spiralis** var. **emarginata**
 Card., Rev. Bryol. 36: 84. 1909.
 ISOTYPE. Mexico: Mexico, Amecameca,
 PRINGLE, PLANTAE MEXICANAE 10611
 (CANM 197355).
 = *Pseudocrossidium replicatum*
 (Tayl.) Zander
- Barbula subteretiuscula** Card., Rev.
 Bryol. 36: 85. 1909.
 ISOTYPE. Mexico: Hidalgo, Cuyamaloya,
 Sierra de Pachuca, PRINGLE, PLANTAE
 MEXICANAE 10621 (CANM 197356).
- Barbula subulifolia** Sull., Proc. Amer.
 Acad. Arts Sci. 5: 277. 1861.
 ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES
 32 (CANM 197357).
 = *B. arcuata* Griff.
- Barbula whitehouseae** Crum, Southw.
 Natural. 1: 35. 1956.
 HOLOTYPE. United States: Texas,
 Fannin Co., Lake Crockett, about 12 mi.
 N of Honey Grove, E. Whitehouse
 21001 (CANM 197358).
 PARATYPE. United States: Texas,
 Tarrant Co., Post Oak Belt, near
 Christman place, Eagle Mountain Lake,
 E. Whitehouse 17984 (CANM
 197359).
 = *B. eustegia* Card. & Thér.
- Bartramia hispida** Mitt., J. Linn. Soc.
 Bot. 12: 264. 1869.
 ISOTYPE. Jamaica?: Miles (CANM
 197385).
 = *Breutelia hispida* (Mitt.)
 Jaeg.
- Blindia martinii** Sainsb., Rev. Bryol.
 Lich. 18: 111. 1949.
 SYNTYPE. New Zealand: Canterbury,
 Arthur's Pass, W. Martin, January
 1944 (CANM 197361).
- Brachymenium condensatum** Williams,
 Bryologist 26: 2. 1923.
 ISOTYPE. Mexico: Michoacan,
 Patzcuaro, PRINGLE, PLANTAE MEXICANAE
 762 (CANM 197362).
- Brachymenium imbricatum** var.
validinervium Card., Rev. Bryol.
 36: 111. 1909.
 ISOTYPE. Mexico: Morelos, Cuernavaca,
 PRINGLE, PLANTAE MEXICANAE 15028
 (CANM 197363).
 = *B. menchii* Broth. ex
 Card.
- Brachymenium walkeri** Broth., Rec. Bot.
 Surv. India 1: 320. 1899.
 SYNTYPE. India: Oborg, Verajpet,
 T.L. Walker 124 (CANM 197364).
- Brachythecium alboviride** Besch. ex
 Card., Rev. Bryol. 37: 69. 1910.
 ISOTYPE. Mexico: Hahn (CANM
 197366).
- Brachythecium flexinerve** Card., Rev.
 Bryol. 37: 67. 1910.
 ISOTYPE. Mexico: Hidalgo, Cuyamaloya,
 PRINGLE, PLANTAE MEXICANAE 10620 (CANM
 197368).
- Brachythecium glareosum** f. **americanum**
 Grout, N. Amer. Musci Pleur. Suppl.
 n. 16. 1929.
 ISOTYPE. Canada: British Columbia,
 Arrow Lakes, Halcyon Hot Springs,
 F.A. MacFadden, GROUT, N. AMER.
 MUSCI PLEUR. SUPPL. 16 (CANM 197369).
- Brachythecium hastifolium** Card., Rev.
 Bryol. 37: 69. 1910.
 SYNTYPE. Mexico: Hidalgo, Honey
 Station, PRINGLE, PLANTAE MEXICANAE
 10474 (CANM 197370).
 = *Heterophyllum hastifolium*
 (Card.) Fleisch.
- Brachythecium hylocomoides** Card., Rev.
 Bryol. 37: 69. 1910.
 ISOTYPE. Mexico: Hidalgo, Honey
 Station, PRINGLE, PLANTAE MEXICANAE
 10484 (CANM 197371).
- Brachythecium lamprochryseum** var.
solfatarense Grout, N. Amer. Musci
 Pleur. n. 327. 1912.
 ISOTYPE. United States: Wyoming,
 Yellowstone National Park, Solfatara
 Creek, M.B. Streeter, GROUT, N.
 AMER. MUSCI PLEUR. 327 (CANM 197372).
 = *B. frigidum* (C. Müll.) Besch.
- Brachythecium lanceolifolium** var.
gracile Card., Rev. Bryol.
 37: 66. 1910.
 SYNTYPE. Mexico: Nuevo Leon, Sierra
 Madre above Monterrey, PRINGLE, PLANTAE
 MEXICANAE 10453, 10454 (CANM 197373).

- Brachythecium longidecurrens** Bartr.,
Farlowia 2(3): 318. 1946.
ISOTYPE? Chile: Prov. Magellanes,
Fuegia media, Rio Bueno, H.
Rovainen, 9 December 1928 (CANM
111688).
- Brachythecium novae-guineae** Bartr., Rev.
Bryol. Lich. 30: 202. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, Mt. Hagen
above Yaramanda, R.G. Robbins
2725 (CANM 197374).
- Brachythecium oxycladon** f. **falcatum**
Grout, Moss Flora N. Amer.
3: 36. 1928.
ISOTYPE. United States: Michigan,
Cheboygan Co., dry banks bordering
Douglas Lake, G.E. Nichols 141
(CANM 197375).
= *B. salebrosum* (Web. & Mohr)
B.S.G.
- Brachythecium pacificum** Jenn.,
Bryologist 16: 95. 1913.
ISOTYPE. Canada: British Columbia,
Queen Charlotte Is., Skidegate,
W. Spreadborough, 1 July 1910
(CANM 197376).
= *B. frigidum* (C. Müll.) Besch.
- Brachythecium petrophilum** f.
lanceolatum Grout, Moss Flora N.
Amer. 3: 47. 1928.
ISOTYPE. United States: Arizona,
Santa Cruz Co., Patagonia Mts., E.B.
Bartram, GROUT, N. AMER. MUSCI
PLEUR. SUPPL. 6 (CANM 197377).
= *B. velutinum* var. *venustum*
(De Not.) Arc.
- Brachythecium plumosum** var.
sublaevipes Card., Rev. Bryol.
37: 70. 1910.
SYNTYPE. Mexico: Federal Dist.,
canyon above Contreras, PRINGLE,
PLANTAE MEXICANAE 10552 (CANM 197378).
- Brachythecium populeum** var. **ovatum**
Grout, Mem. Torrey Bot. Cl.
6: 190. 1897.
SYNTYPE. United States: Vermont,
Johnson, A.J. Grout, GROUT, N.
AMER. MUSCI PLEUR. 4 (CANM 197379;
197380).
= *B. populeum* (Hedw.) B.S.G.
- Brachythecium rivulare** var. **laxum**
Grout, Bryologist 4: 48. 1901.
ISOTYPE. United States: Montana,
Flathead Co., Lake McDonald, along
Avalanche Trail, J.M. Holzinger &
J.B. Blake, GROUT, N. AMER. MUSCI
PLEUR. 78 (CANM 197381).
= *B. frigidum* (C. Müll.) Besch.
- Brachythecium rutabulum** var. **undulatum**
Warnst., Allg. Bot.
Zeitschr. 5(Beih. 1): 37. 1899.
ISOTYPE? Italy: Prov. Papiensis,
Torre d'Isala, F. Aug. Artaria,
16 January 1898 (CANM 180278).
- Brachythecium tenuinerve** Card., Rev.
Bryol. 37: 65. 1910.
SYNTYPES. Mexico: Amecameca, PRINGLE,
PLANTAE MEXICANAE 10585 (CANM 197383);
Hidalgo, Cuyamaloya, PRINGLE, PLANTAE
MEXICANAE 10624 (CANM 197382).
- Brachythecium washingtonianum** Eaton
ex Grout, Bryologist
3: 12. 1900.
ISOTYPE. United States: Washington,
Mason Co., C.V. Piper 25 (CANM
197574).
= *B. frigidum* (C. Müll.) Besch.
- Braunia novae-seelandiae** C. Müll. &
Beck., Trans. New Zealand Inst.
26: 275. 1894.
ISOTYPE? New Zealand: Canterbury,
Selwyn Gorge, T.W.N. Beckett 417
(CANM 159249).
= *Hedwigidium integrifolium*
(P. Beauv.) Dix.
- Braunia plicata** var. **canescens**
Card., Rev. Bryol. 38: 38. 1911.
SYNTYPE. Mexico: Hidalgo, Cuyamaloya,
PRINGLE, PLANTAE MEXICANAE 10627 (CANM
197384).
- Bryhnia hultenii** Bartr. *ex* Grout,
Moss Flora N. Amer. 3: 264. 1934.
ISOTYPE. United States: Alaska,
Kodiak I., Kodiak, E. Hulten 5135
(CANM 197386).
- Bryum alvarensense** Arn. & Medelius, Bot.
Not. 1921: 27. 1921.
ISOTYPE. Sweden: Öland, Stenasa,
Ebelunda, S. Medelius, 11 June
1920 (CANM 144874).
= *B. turbinatum* (Hedw.) Turn.
- Bryum argenteum** var. **brachycarpum**
Card., Rev. Bryol. 36: 112. 1909.
SYNTYPE. Mexico: Jalisco, Sierra de
San Esteban, near Guadalajara, PRINGLE,
PLANTAE MEXICANAE 10566 (CANM 197388).
- Bryum brachycarpum** Bartr., Farlowia
2: 314. 1946.
ISOTYPE? Chile: Fuegia media,
Estancia La Marina, H. Rovainen,
11 January 1929 (CANM 111689).

- Bryum capillare** var. **pulvinatum**
Warnst. in Bauer, Musci Eur. Exs.
23: n. 1119. 1915.
ISOTYPE. Germany: Brandenburg,
Neuruppin, C. Warnstorff, BAUER,
MUSCI EUR. EXS. 1119 (CANM 143150).
- Bryum insolitum** Card., Rev. Bryol.
36: 112. 1909.
ISOTYPE. Mexico: Jalisco, near
Guadalajara, Rio Blanco, PRINGLE,
PLANTAE MEXICANAE 10562 (CANM 197393).
- Bryum knowltonii** Barnes, Bot. Gaz.
14: 44. 1889.
ISOTYPE. Canada: Newfoundland, Funk
I., W. Palmer, 23 July 1887 (CANM
197394).
- Bryum laxulum** Card., Rev. Bryol.
36: 113. 1909.
SYNTYPE. Mexico: Hidalgo, near Honey
Station, PRINGLE, PLANTAE MEXICANAE
10655 (CANM 197395).
- Bryum lucidum** Britt., Bull. Torrey Bot.
C1. 18: 53. 1891.
ISOTYPE. United States: Idaho,
Kootnai Co., near Rathdrum, J.B.
Leiberg, May 1889 (CANM 197396).
PARATYPE. United States: Idaho,
Kootnai Co., Traille River Pass,
J.B. Leiberg, 18 October 1889
(CANM 197397).
= *Roellia roellii* (Broth.) Andr.
in Grout
- Bryum mayebarae** Nog., J. Jap. Bot.
26: 273. 1951.
ISOTYPE. Japan: Kyushu, Kumamoto,
Kuma, Shimonotsukuma, K. Mayebara
NOGUCHI & HATTORI, MUSCI JAP. 166 (CANM
197398).
= *B. algovicum* Sendtn. ex
C. Müll.
- Bryum microbalanum** Card., Rev. Bryol.
36: 112. 1909.
SYNTYPE. Mexico: Morelos, near
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10662 (CANM 197399).
- Bryum oblongum** Lindb., Bot. Not.
1882: 26. 1882.
ISOTYPE. Finland: Helsingfors,
Fredriksberg, S.O. Lindberg,
October 1881 (CANM 143927).
- Bryum pendulum** var. **nevadense** Card.
& Thér., Bot. Gaz. 37: 370. 1904.
ISOTYPE. United States: Nevada,
Ormsby Co., King's Canyon, near Carson,
C.F. Baker, HOLZINGER, MUSCI
ACRO. BOR. AMER. 171 (CANM 197400).
- Bryum percrispifolium** Bartr., Rev.
Bryol. Lich. 30: 191. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, Sau
Valley, Labalam Village, N of Kompian,
R.G. Robbins 2994 (CANM 197401).
- Bryum polycladum** Card. & Thér., Bot.
Gaz. 37: 370. 1904.
ISOTYPE. United States: Nevada,
Douglas Co., Spooner, C.F.
Baker, HOLZINGER, MUSCI ACRO. BOR.
AMER. 172 (CANM 197402).
= *B. lisae* var. *cuspidatum*
(B.S.G.) Marg.
- Bryum punjabense** Bartr., Rev. Bryol.
Lich. 29: 169. 1960.
ISOTYPE. India: Bashahr State,
Punjab, Majoli, W. Koelz 7454
(CANM 256256).
- Bryum reedii** Robins., Bryologist
69: 107. 1966.
PARATYPE. United States: Maryland,
Baltimore Co., Soldiers Delight, Red
Run, Dolfield Road, H. Robinson &
C.F. Reed, 24 July 1965 (CANM
212112).
- Bryum serotinum** Lindb., Musci Scand.
17. 1879.
ISOTYPE. Finland: Helsingfors,
Fredriksberg, S.O. Lindberg, 9
October 1881 (CANM 197403).
- Bryum torquatum** Mohamad, J. Bryol.
10: 454. 1979.
ISOTYPE. Jamaica: Bellvue House, Port
Royal Range near Kingston, R.G.
Robbins 7 (CANM 144799).
- Bryum tricolor** Card., Rev. Bryol.
38: 34. 1911.
ISOTYPE. Mexico: Ixtaccihuatl,
P.A. Purpus 3718 (CANM 197404).
- Bryum vellei** Card. & P. de la Varde,
Rev. Bryol. 50: 22. 1923.
SYNTYPE. India: Madras State, Madura
Dist., Palni Hills, Kodaikanal and
surrounding region, G. Foreau & G.
Roiné, 1912, FOREAU, MUSCI
MADURENSES INDIAE MERIDIONALIS
EXSICCATI (CANM 257338).
- Bryum ventricosum** var. **brevifolium**
Mach. in Bauer, Musci Eur. Amer.
Exs. 39: n. 1926. 1927.
ISOTYPE. Portugal: Parades de Coura,
A. Machado, BAUER, MUSCI EUR.
AMER. EXS. 1926 (CANM 144507).
= *B. pseudotriquetrum* var.
brevifolium (Mach.) Podp.

- Bryum wabagense** Bartr., Rev. Bryol.
Lich. 30: 191. 1962.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, Ambum R.
valley northwest of Wabag,
R.G. Robbins 3021 (CANM 197405).
- Callicostella aiomensis** Bartr.,
Brittonia 13: 373. 1961.
ISOTYPE. New Guinea: Schrader Range,
Mt. Aiome, R.G. Robbins 1425
(CANM 197406).
- Callicostella leoni** Thér., Mem. Soc.
Cubana Hist. Nat. 14: 367. 1940.
SYNTYPE. Cuba: Oriente Prov., Bayate,
between Miranda and Sab. Resuena,
E.L. Elkmann 2615 (CANM 197636).
- Calliergon sarmentosum** var.
flagellaris Karcz., Polskie
Towarzystwo Botaniczne Monographiae
Botanicae 34: 141. 1972.
ISOTYPE. United States: Alaska,
Thoroughfare R. to Glacier Creek, base
of Mt. Eielson, W.A. Weber & L.A.
Viereck 10165 (CANM 176603).
- Calliergonella conardii** Lawt., Moss
Flora Pacific Northwest 272. 1971.
ISOTYPE. United States: Wyoming,
Yellowstone Park, Lost Lake,
E. Lawton 1821 (CANM 129836).
= *Fontinalis hypnoides* C.J.
Hartm.
- Calymperes bartramii** Reese, Bryologist
64: 136. 1961.
HOLOTYPE. Columbia: Cachivera Palito,
R.E. Schultes & I. Cabrera 13199
(CANM 197407).
- Calymperes nashii** Williams, Bull. Torrey
Bot. Cl. 47: 391. 1920.
ISOTYPE. Haiti: Bayeux, near Port
Margot, G.V. Nash 51 (CANM
197408).
- Campylopus angusti-alatus** Thér., Smiths.
Misc. Coll. 85(4): 2. 1931.
ISOTYPE. Mexico: Valle de México, Rio
Frio, Fre. Amable 1724 (CANM
197410).
- Campylopus arduennae** Lib., Pl. Crypt.
Arduenn. n. 106. 1832.
ISOTYPE. France: M.A. LIBERT, PL.
CRYPT. ARDUENN. 106 (CANM 225321).
= *C. flexuosus* (Hedw.) Brid.
- Campylopus bartletti** Bartr., J.
Washington Acad. Sci. 22: 477. 1932.
ISOTYPE. British Honduras: El Cayo
Dist., Duck Run, H.H. Bartlett
12973 (CANM 197411).
- Campylopus bermudianus** Williams in
Britt., J. New York Bot. Gard.
13: 193. 1913.
ISOTYPE. Bermuda: Paget Marsh,
S. Brown 651 (CANM 197412).
- Campylopus brittonae** Williams, N. Amer.
Fl. 15: 141. 1913.
ISOTYPE. Jamaica: slopes of Sir John
and Summit, E.G. Britton 1167
(CANM 197415).
- Campylopus caroliniae** Grout, Moss Fl. N.
Amer. 1: 249. 1939.
ISOTYPE. United States: North
Carolina, Brunswick Co., Southport,
L.E. Anderson & A.W. Evans 6180
(CANM 197413).
- Campylopus hondurensis** Bartr., Field
Mus. Nat. Hist. Bot. 4: 351. 1929.
ISOTYPE. Honduras: Dept. Comayagua,
El Achote, P.C. Standley 56157a
(CANM 197416).
= *C. flexuosus* (Hedw.) Brid.
- Campylopus mexicanus** Thér., Smiths.
Misc. Coll. 78(2): 7. 1926.
ISOTYPE. Mexico: Michoacan,
Campanario, vicinity of Morelia,
Bro. Arsène 7576 (CANM 197417).
- Campylopus robbinsii** Bartr., Rev. Bryol.
Lich. 30: 187. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, near
Tabanaka, Middle Waga River Valley,
R.G. Robbins 3304 (CANM 197419).
- Campylopus roellii** Ren. & Card., Bull.
Soc. R. Bot. Belg. 38: 9. 1899.
ISOTYPE. Costa Rica: Juan Vinas,
Sang (CANM 197420).
- Campylopus saint-pierrei** Thér., Smiths
Misc. Coll. 85(4): 3. 1931.
ISOTYPE. Mexico: Hidalgo, El Chico,
M. Saint-Pierre (Bro. Amable)
1589 (CANM 197421).
- Campylopus saxatilis** Williams, N. Amer.
Fl. 15: 137. 1913.
ISOTYPE. Jamaica: near Cinchona,
W. Harris 11143 (CANM 197422).
- Campylopus standleyi** Bartr., Contr. U.S.
Nat. Herb. 26: 59. 1928.
ISOTYPE. Costa Rica: Prov. San José,
Cerro de las Vueltas, P.C. Standley
& J. Valerio 43939 (CANM 197423).
= *C. jamesonii* (Hook.) Jaeg.

- Campylopus underwoodii** Williams, N.
Amer. Fl. 15: 142. 1913.
ISOTYPE. Jamaica: summit of Blue Mt.
Peak, L.M. Underwood, 20-21 April
1903 (CANM 197424);
L.M. Underwood 2539 (CANM
197425).
- Campylopus wabagensis** Bartr., Rev.
Bryol. Lich. 30: 187. 1961.
PARATYPES. New Guinea: Western
Highlands Dist., Wabag area, ranges S
of Wabag, Lai Valley, R.G. Robbins
2852 (CANM 197426); Western
Highlands Dist., Wabag area, track to
Sugarloaf Mts., from Tale R., Tsak
Valley, R.G. Robbins 2779 (CANM
197427); Western Highlands Dist., Wabag
area, Sugarloaf Mt. area, S of
Wapenamanda, R.G. Robbins 2821
(CANM 197428).
- Ceratodon dimorphus** Philib., Rev. Bryol.
15: 28. 1888.
ISOTYPE? France(?): sur le Col du
Simplon (Valais), H. Philibert,
July 1887 (CANM 113600).
= *C. purpureus* (Hedw.) Brid.
- Chaetomitrium integrifolium** Bartr.,
Brittonia 13: 375. 1961.
ISOTYPE. New Guinea: Sepik River
Dist., Wewak-Angoram, Screw R. gorge
near Maprik, R.G. Robbins 1984
(CANM 197429).
- Chaetomitrium madangense** Bartr.,
Brittonia 13: 375. 1961.
ISOTYPE. New Guinea: Madang Dist.,
Lower Ramu-Atitau, foothills of
Adelbert Range near Josephstaal,
R.G. Robbins 1658 (CANM 197430).
- Chaetomitrium pseudopapillifolium**
Bartr., Brittonia 13: 375. 1961.
ISOTYPE. New Guinea: Sepik River
Dist., Wewak-Angoram area, Angoram
Hills near Tring Village, R.G.
Robbins 2172 (CANM 197431).
- Chaetomitrium robbinsii** Bart., Brittonia
13: 376. 1961.
ISOTYPE. New Guinea: Sepik River
Dist., Wewak-Angoram area, Prince
Alexander Range near Nagipam Village
(Maprik), R.G. Robbins 2006 (CANM
197432).
- Chaetomitrium smithii** Bartr., J.
Washington Acad. Sci. 46: 395. 1956.
ISOTYPE. Fiji: Viti Levu, Tailevu,
hills E of Wainimbuka R., in vicinity
of Ndakuivuna, A.C. Smith 7172
(CANM 197433).
- Cheilotrichia novae-seelandiae** Broth.,
Oefv. Finsk.-Vet. Soc. Foerh.
40: 164. 1898.
SYNTYPE. New Zealand: Blue Mountains,
Otago(?), D. Petrie 664 (CANM
197434).
= *C. chilensis* (Mont.) Broth.
- Chrysophyllum arcticum** Williams, Rep.
Canad. Arct. Exp. 1913-18,
4(E): 10. 1921.
ISOTYPE. Canada: Northwest
Territories, Pihumalerksiaq I.,
Cockburn Point, F. Johansen, 15
July 1916 (CANM 199409).
= *Campylium stellatum* var.
arcticum (Williams) Sav.-Ljub.
- Conomitrion hallianum** Sull. & Lesq.
in Aust., Musci Appal. n.
108b. 1870.
ISOTYPE. United States: Illinois,
E. Hall; New Jersey, Little Falls
and Ogdensburg, C.F. Austin,
AUSTIN, MUSCI APPAL. 108b (CANM
197435).
= *Fissidens fontanus* (B.-Pyg.)
Steud.
- Coscinodon renauldi** Card., Bot. Gaz.
15: 41. 1890.
ISOLECTOTYPE. United States: Kansas,
Salina, J. Henry, RENAULD &
CARDOT, MUSCI AMER. SEPT. 34 (CANM
133683).
= *C. rauvi* (Aust.) Lesq. & James
- Cratoneuron papillosum** Grout, Moss Fl.
N. Amer. 3: 78. 1931.
ISOTYPE. United States: Montana,
Columbia Falls, R.S. Williams,
GROUT, N. AMER. MUSCI PLEUR. SUPPL. 26
(CANM 197436).
= *C. williamsii* Grout
- Crossidium aberrans** Holz. & Bartr.,
Bryologist 27: 4. 1924.
ISOTYPE. United States: Arizona, Pima
Co., Santa Catalina Mts., Soldier
Canyon, E.B. Bartram, BARTRAM,
MOSES S. ARIZ. 66 (CANM 197437;
197438; 197439).
- Crossidium desertorum** Holz. & Bartr.,
Bryologist 26: 72. 1923.
ISOTYPE. United States: Arizona, Pima
Co., Tucson Mts., E.B. Bartram,
HOLZINGER, MUSCI ARO. BOR. AMER. 483
(CANM 129397; 197440).
PARATYPE. United States: Arizona,
Pima Co., Tucson Mts., E.B.
Bartram, BARTRAM, MOSES S. ARIZ. 67
(CANM 129398).

Crossidium seriatum Crum & Steere,
Southw. Natural. 3: 117. 1959.
ISOTYPE. Mexico, Baja California,
Cedros I., E side at north end, perhaps
4 mi. S of point, W.C. Steere
17533c (CANM 197441).

Crossidium succulentum Holz. & Bartr.,
Bryologist 26: 69. 1923.
ISOTYPE. United States: Arizona, Pima
Co., Tucson Mts., E.B. Bartram,
HOLZINGER, MUSCI ACRO. BOR. AMER. 484
(CANM 129412).
PARATYPE. United States: Arizona,
Pima Co., N of Rillito Creek, E.B.
Bartram, BARTRAM, MOSSES S. ARIZ. 65
(CANM 197442).
= *C. squamigerum* var.
pottioideum (De Not.) Mönk.

Crossomitrium acuminatum Bartr., Rev.
Bryol. Lich. 22: 157. 1953.
ISOTYPE. Panama: Canal Zone, westerly
arm of Quebrada Salamanca,
J.A. Steyermark & P.H. Allen, 16
December 1934 (CANM 197443).

Crumia deciduidentata Sharp & Iwats., J.
Hattori Bot. Lab. 32: 95. 1969.
ISOTYPE. United States: Alaska,
across bay from Port Moller, A.J. &
E. Sharp & Z. Iwatsuki A459 (CANM
111729).

Cryphaea floridensis Crum, Bryologist
73: 381. 1970.
HOLOTYPE. United States: Florida,
Collier Co., Collier-Seminole State
Park, Royal Palm Hammock, L.E.
Anderson & H. Crum 13450 (CANM
197444).
= *C. filiformis* (Hedw.) Brid.

Cryphaea funalis C. Müll., Hedwigia
37: 241. 1898.
ISOTYPE. Puerto Rico: Cayey, in
Quebra Morillos, P. Sintenis,
October 1885 (CANM 197445).

Cryphaea pilifera Mitt., J. Linn. Soc.
Bot. 12: 412. 1869.
SYNTYPE. Columbia: Novae-Granatenses,
Andes Bogotenses, in sylvis prope
Bogota, J. Weir 183, Reliquiae of
V.F. Brotherus No. R 11719 (CANM
256649).

Cyclodictyon humectatum Card., Rev.
Bryol. 37: 50. 1910.
ISOTYPE. Mexico: Morelos, near
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10528 (CANM 197446).

Cylindrothecium amplirete Sull., Proc.
Amer. Acad. Arts. Sci. 5: 284. 1861.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES
72 (CANM 197448).
= *Lepidopilum amplirete* (Sull.)
Mitt.

Dactylhymenium pringlei Card., Rev.
Bryol. 36: 72. 1909.
ISOTYPE. Mexico: Chihuahua,
Chihuahua, PRINGLE, PLANTAE MEXICANAE 4
(CANM 197449).
= *Didymodon tophaceus* (Brid.)
Lise

Dawsonia Robbinsii Bartr., Rev. Bryol.
Lich. 30: 207. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, Sau Valley
along road to Kompian, N of Wabag,
R.G. Robbins 2850 (CANM 208116).

Decodon brasiliensis C. Müll. in
Broth., Act. Soc. Sci. Fenn.
19(5): 20. 1891.
ISOTYPE. Brazil: prov. Minas Geraes,
Sítio, E. Wainio, 1885 (CANM
197677).
= *Rhachitheciumpurpusillum*
(Thwait. & Mitt.) Broth.

Desmatodon ellesmerensis Brass.,
Bryologist 74: 208. 1971.
HOLOTYPE. Canada: Northwest
Territories, Ellesmere I., vicinity of
Alert weather station, G.R. Brassard
4467 (CANM 205544).
= *Pseudocrossidium revolutum*
(Brid. in Schrad.) Zander

Desmatodon porteri James ex Aust.,
Musci Appal. n. 123. 1870.
ISOTYPE. United States: Pennsylvania,
Easton, "College Hill", T.C.
Porter; New York, Niagara Falls,
G.W. Clinton, AUSTIN, MUSCI
APPAL. 123 (CANM 197452).

Dicranella hutchinsonii Krajina,
Bryologist 53: 153. 1950.
ISOTYPE. Canada: British Columbia,
Vancouver, University of B.C. campus,
V. Krajina, 26 September 1949
(CANM 197453).
= *D. rufescens* (With.) Schimp.

Dicranella pseudolongirostris Card.,
Rev. Bryol. 36: 68. 1909.
ISOTYPE. Mexico: Morelos, Cuernavaca,
PRINGLE, PLANTAE MEXICANAE 10661 (CANM
197454: 197455).
= *Microdus longirostris*
(Schwaegr.) Schimp. in Besch.

Dicranella sharpii Bartr., Bryologist
50: 202. 1947.
ISOTYPE. Guatemala: El Quiché, below
Nebaj, A.J. Sharp 2448 (CANM
197456).

Dicranella sphaerocarpa Card., Rev.
Bryol. 36: 69. 1909.
ISOTYPE. Mexico: Jalisco, Etzatlan,
PRINGLE, PLANTAE MEXICANAE 10614 (CANM
197457).
= *Microdus sphaerocarpus* (Card.)
Broth.

Dicranella squarrosa f. **fluitans**
Grout, Moss Fl. N. Amer. 1: 56. 1936.
ISOTYPE. Canada: Nova Scotia, Cape
Breton I., Warren Lake, near Ingonish,
G.E. Nichols, GROUT, N. AMER.
MUSCI PLEUR. 458 (CANM 114788).
= *D. palustris* (Dicks.) Crundw.
ex Warb.

Dicranoloma phillipsiae Bartr., Philipp.
J. Sci. 68: 53. 1939.
ISOTYPE. Philippines: Bukidnon,
forest near Impalutao, L.H. Phillips
26 (CANM 197459).

Dicranum fuscescens var. **eatonii** Ren.
& Card., Bull. Herb. Boiss.
4: 15. 1896.
ISOTYPE. United States: New
Hampshire, Mt. Washington, D.C.
Eaton, RENAUD & CARDOT, MUSCI AMER.
SEPT. 206 (CANM 197463).
= *D. fuscescens* Turn.

Dicranum fuscescens f. **pallidiseta**
Bail. ex Holz., Musci Acro. Bor.
Amer. Eur. n. 653. 1929.
ISOTYPE. United States: Washington,
Kittitas Co., bank of Wolf Creek, on
Mt. Margaret, J.W. Bailey,
HOLZINGER, MUSCI ACRO. BOR. AMER. EUR.
653 (CANM 197462).
= *D. pallidisetum* (Bail. ex
Holz.) Irel.

Dicranum julaceum Hook. & Wils. in
Drumm., Musci Bor. Amer. n. 100. 1828.
ISOTYPE. Canada: British Columbia,
banks of Portage R., near the Columbia
R., DRUMMOND, MUSCI BOR. AMER. 100
(CANM 197464).
= *Aongstroemia longipes* (Somm.)
B.S.G.

Dicranum mariae Holz. ex Ren. &
Card., Bull. Herb. Boiss. 4: 15. 1896.
ISOTYPE. United States: Colorado,
Boulder Co., Springdale, M.
HOLZINGER, RENAUD & CARDOT, MUSCI
AMER. SEPT. 205 (CANM 197465).
= *D. rhabdocarpum* Sull.

Dicranum microcarpon Hook. in
Drumm., Musci Bor. Amer. n. 105. 1828.
ISOTYPE. Canada: Alberta(?), near the
Rocky Mts., DRUMMOND, MUSCI BOR. AMER.
105 (CANM 197461).
= *Oncophorus wahlenbergii* Brid.

Dicranum ontariense Peterson, Can. J.
Bot. 55: 988. 1977.
ISOLECTOTYPE. Canada: DRUMMOND, MUSCI
BOR. AMER. 86 (CANM 119569).

Dicranum richardsoni Hook. in
Drumm., Musci Bor. Amer. n. 104. 1828.
ISOTYPE. Canada: across Canada to
Rocky Mts., DRUMMOND, MUSCI BOR. AMER.
104 (CANM 197466).
= *Oncophorus wahlenbergii* Brid.

Dicranum scoparium f. **diversifolia**
Bauer, Musci Eur. Amer. 41: n.
2005a. 1928.
ISOTYPE. Czechoslovakia: Gau Kaschau,
Snina, E. Bauer, BAUER, MUSCI
EUR. AMER. 2005a (CANM 197467).

Dicranum sumichrasti var. **viride**
Card., Rev. Bryol. 36: 69. 1909.
ISOTYPE. Mexico: Puebla, Honey
Station, PRINGLE, PLANTAE MEXICANAE
15119 (CANM 121767).

Didymodon alticaulis Bartr., Bryologist
50: 204. 1947.
ISOTYPE. Guatemala: El Quiché,
between Chajul and Cotzal, A.J.
Sharp 5286 (CANM 197468).

Didymodon austriacus Schiffn. & Baumg.,
Oesterr. Bot. Zeitschr. 56: 156. 1906.
ISOTYPE? Austria: Nieder-Oesterreich,
Lössbosungen in Weinbergen oberhalb
Stein/Donau, V.F. Schiffner, 4
May 1902 (CANM 122607).
= *D. cordatus* ssp.
austriacus (Schiffn. & Baumg.)
Wijk & Marg.

Didymodon columbianus Herm. & Lawt.,
Bull. Torrey Bot. Cl. 95: 388. 1968.
ISOTYPE. United States: Oregon, Wasco
Co., 6 mi. NE of The Dalles, south bank
of Columbia R. along US 30, F.J.
Hermann 18751 (CANM 197451).
= *Bryoerythrophyllum columbianum*
(Herm. & Lawt.) Zander

Didymodon diversifolius Aust., Musci
Appal. n. 115. 1870.
ISOTYPE. United States: New York,
Herkimer Co., near Newville; also
Niagara Falls, S.T. Olney,
AUSTIN, MUSCI APPAL. 115 (CANM
197469).
= *D. tophaceus* (Brid.) Lisa.

Didymodon fragilis Hook. & Wils.
in Drumm., Musci Bot. Amer. n.
127. 1828.
ISOTYPE. Canada: Alberta(?), margins
of alpine lakes, DRUMMOND, MUSCI BOR.
AMER. 127 (CANM 197470).
= *Tortella fragilis* (Hook. &
Wils.) Limpr.

Didymodon integrifolius var.
paucidentalus Thér., Rev. Bryol. n.
ser. 3: 43. 1930.
ISOTYPE. Uganda: Behungi Escarpment,
D.H. Linder 2598 (CANM 256140).

Didymodon luzonensis Bartr., Philipp. J.
Sci. 68: 116. 1939.
ISOTYPE. Philippines: Luzon, Mountain
Prov., Mt. Santo Tomas, H.H.
Bartlett 13304 (CANM 197471).

Didymodon mexicanus var. *subulatus*
Thér. & Bartr., Bryologist 29: 1. 1926.
ISOTYPE. United States: Arizona, Pima
Co., Santa Catalina Mts., Window Trail,
E.B. Bartram, BARTRAM, MOSSES S.
ARIZ. 174 (CANM 197472).

Didymodon oblongifolius Hook. in
Drumm., Musci Bot. Amer. n. 114. 1828.
ISOTYPE. Canada: Alberta(?), Rocky
Mts., DRUMMOND, MUSCI BOR. AMER. 114
(CANM 197473).
= *Desmatodon obtusifolius*
(Schwaegr.) Schimp.

Didymodon planifolius Froehl., Ann.
Naturh. Mus. Wien 57: 38. 1950.
ISOTYPE. Iran: Luristan, Bisheh, 50
km from Khorramabad, K.H. & F.
Rechinger 7407 (CANM 222631).
= *D. planotophaceus* Froehl.

Diploneuron connivens Bartr., J.
Washington Acad. Sci. 26: 11. 1936.
ISOTYPE. Jamaica: St. Ann's, Lumsden,
C.R. Orcutt 6087 (CANM 197474).

Ditrichum henryi Crum & Anders., J.
Mitchell Sci. Soc. 72: 289. 1956.
ISOTYPE. United States: North
Carolina, Jackson Co., Upper Falls,
Whitewater R., L.E. Anderson & H.
Wright 10014 (CANM 197477).
= *D. rhynchosstegium* Kindb.

Ditrichum roivanenii Bartr. & Roiv.,
Ann. Bot. Soc. Fenn. Vanamo
9: 19. 1937.
ISOTYPE. Argentina: Feugiana, Brazo
Aino, Fjordo Finlandia, H.
Roivainen, 1 March 1929 (CANM
111690).

Ditrichum tortuloides Grout, Bryologist
30: 4. 1927.
ISOTYPE. United States: Vermont,
Newfane, Baker's Brook, A.J.
Grout, HOLZINGER, MUSCI ACRO. BOR.
AMER. EUR. 638 (CANM 197478).
= *D. ambiguum* Best ?

Drepanocladus crassicostatus Janssens,
Bryologist 86: 45. 1983.
ISOTYPE. Canada: British Columbia,
Crown Lake, near Pavilion Lake, Marble
Canyon, W.B. Schofield 38890
(CANM 265039).

Drepanocladus exannulatus var.
polaris Bryhn, Forh. Vid. Selsk.
Christiania 1908(5): 23. 1908.
ISOTYPE? Canada: Northwest
Territories, Fort Conger, R.E.
Peary, 1902 (CANM 197479).

Drepanocladus exannulatus f.
psuedotrichophyllum Herm.,
Bryologist 80: 340. 1977.
ISOTYPE. United States: Colorado,
Lake Co., Sawatch Mts., Independence
Pass, F.J. Hermann 24148 (CANM
212140).

Drepanocladus intermedius var.
fallax Loeske in Bauer, Musci
Eur. Amer. Exs. Sched. Bemerk ser.
41: n. 2046. 1929.
ISOTYPE. Hungary: Komitat Pest, Rand
der Ung. Tiefebene (Alföld), bei
Veresegyház, A. Boros, BAUER,
MUSCI EUR. AMER. EXS. 2046 (CANM
174353).

Drepanophyllum duidense Williams, Bull.
Torrey Bot. Cl. 58: 501. 1931.
ISOTYPE. Venezuela: Foothills Camp,
slopes of Mount Duida, G.H.H.
Tate 222 (CANM 147895).

Drummondia clavellata Hook. in
Drumm., Musci Bor. Amer. n. 62. 1828.
ISOTYPE. Canada: Ontario (Upper
Canada), DRUMMOND, MUSCI BOR. AMER. 62
(CANM 197480).
= *D. prorepens* (Hedw.) Britt.

Ectropothecium campanulatum Mitt., J.
Linn. Soc. Bot. 12: 512. 1869.
ISOTYPE. Colombia: Novae-Granatenses,
Andes Bogotenses, prope Guaduas secus
viam ad Honda ducentem, J. Weir
191, Reliquiae of V.F. Brotherus
No. R 11687 (CANM 256650).

Ectropothecium perlatifolium Bartr.,
Rev. Bryol. Lich. 30: 205. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, forest
track into Porgera Valley, 20 mi. W of
Laiagam patrol post, R.G. Robbins
3363 (CANM 197481).

Ectropothecium robbinsii Bartr.,
Brittonia 13: 379. 1961.
ISOTYPE. New Guinea: Sepik River
Dist., Wewak-Angoram area, Prince
Alexander Ranges, N of Maprik, R.G.
Robbins 2021 (CANM 197482).

Encalypta vittiana Horton, Bryologist
82: 369. 1979.
PARATYPE. Canada: Yukon Territory,
Bonnet Plume Range, slopes above NW
shore of Pinguicula Lake, D.G.
Horton 5794 (CANM 262452).

Endotrichella robbinsii Bartr., Rev.
Bryol. Lich. 30: 197. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, track
from Upper Ambum valley to Sirunki,
R.G. Robbins 3145 (CANM 197491).

Entodon calycinus Card., Bull. Soc. Bot.
Genève ser. 2, 3: 285. 1911.
ISOTYPE. Japan: Kyushyu, Sakurajima,
U. Faurie 1309 (CANM 197483).

Entodon dependens Sakurai, Bot. Mag.
Tokyo 48: 394. 1934
ISOTYPE. Japan: Kyushyu, Osumi Prov.,
Mt. Kurinodake, Y. Doi 1124 (CANM
197484).
= *E. calycinus* Card.

Entodon erythropus var. **mexicanus**
Card., Rev. Bryol. 37: 11. 1910.
SYNTYPES. Mexico: Morelos, Parque,
PRINGLE, PLANTAE MEXICANAE 10502
(CANM 197485); Hidalgo, Honey Station,
PRINGLE, PLANTAE MEXICANAE
10652 (CANM 197486).

Entodon seductrix var. **temuis** Grout,
N. Amer. Musci Pleur. n. 186. 1904.
ISOTYPE. United States: Minnesota,
Winona Co., Queen's Bluff, J.M.
Holzinger, GROUT, N. AMER. MUSCI
PLEUR. 186 (CANM 197488).
= *E. seductrix* (Hedw.) C. Müll.

Entosthodon bartramii Grout, Moss Fl. N.
Amer. 2: 79. 1935.
ISOTYPE. United States: Arizona, Pima
Co., SW of San Xavier Mission, E.B.
Bartram, HOLZINGER, MUSCI ACRO. BOR.
AMER. EUR. 639 (as *Funaria*
bolanderi (Lesq.) Holz.) (CANM
138247).
= *E. sonorae* (Card.) Steere

Entosthodon drummondii var.
obtusifolius Holz., Musci Acro.
Bor. Amer. n. 219. 1906.
ISOTYPE. United States: Georgia,
Thomasville, back of Wyman Jones
Estate, E.B. Taylor, HOLZINGER,
MUSCI ACRO. BOR. AMER. 219 (CANM
197490).
= *E. drummondii* Sull. in
Sull. & Lesq.

Entosthodon neoscoticus M.S. Brown,
Bryologist 35: 17. 1932.
ISOTYPE. Canada: Nova Scotia, Halifax
Co., Peggy's Cove, M.S. Brown 485
(CANM 209228).
= *Desmatodon randii* (Kenn.) Laz.

Ephemerum papillosum Aust., Musci Appal.
n. 50. 1870.
ISOTYPE. United States: New Jersey,
Palisades, AUSTIN, MUSCI APPAL. 50
(CANM 137911).
= *E. crassinervium* (Schwaegr.)
Hampe

Ephemerum spinulosum var. **texanum**
Grout, Moss Fl. N. Amer. 2: 70. 1935.
ISOTYPE. United States: Texas, near
Bastrop, F. McAllister, GROUT, N.
AMER. MUSCI PERF. 275 (CANM 137909).
= *E. crassinervium* var.
texanum (Grout) Bryan &
Anders.

Ephemerum synoicum James, Trans. Amer. Phil. Soc. 9: 106. 1865.
ISOTYPE. United States: New Jersey, near Camden; Pennsylvania, Philadelphia, AUSTIN, MUSCI APPAL. 46 (CANM 138005).
= *Micromitrium synoicum* (James) Aust. ex Sull.

Erpodium opuntiae Card., Rev. Bryol. 37: 6. 1910.
ISOTYPE. Mexico: Oaxaca, valley near Oaxaca, PRINGLE, PLANTAE MEXICANAE 31a (CANM 197493).

Erpodium pringlei Britt., Bull. Torrey Bot. Cl. 32: 268. 1905.
ISOTYPE. Mexico: Jalisco, Guadalajara, PRINGLE, PLANTAE MEXICANAE 710 (CANM 197494).

Erythrodontium densum var. *brevifolium* Card., Rev. Bryol. 37: 12. 1910.
ISOTYPE. Mexico: Michoacan, Corn Station, PRINGLE, PLANTAE MEXICANAE 10438 (CANM 197495).
= *Bryosedgwickia densa* var. *brevifolia* (Card.) Biz. & P. de la Varde.

Eucamptodon robinsii Bartr., Brittonia 11: 88. 1959.
ISOTYPE. New Guinea: Kainantu sub-dist., Eastern Highlands near Barola on road to Kainantu, R.G. Robbins 935 (CANM 197496).

Eurhynchium praelongum var. *californicum* Grout, Bull. Torrey Bot. Cl. 25: 248. 1898.
ISOTYPE. United States: California, H.N. Bolander 46 (CANM 131553).
= *Stokesiella praelonga* var. *californica* (Grout) Crum

Fabronia bartramii Grout, Bryologist 29: 4. 1926.
ISOTYPE. United States: Arizona, Santa Cruz Co., Harshaw Creek, near Patagonia, E.B. Bartram, GROUT, N. AMER. MUSCI PLEUR. 493 (CANM 130221).
= *F. ciliaris* (Brid.) Brid.

Fabronia jamaicensis Lor., Moosstud. 163. 1864.
ISOTYPE. Jamaica: Bethabara, Wullechlaegel, 1849 (CANM 197497).

Fabronia octoblepharis var. *americana* Card., Rev. Bryol. 37: 50. 1910.
SYNTYPE. Mexico: Jalisco, Etzatlan, PRINGLE, PLANTAE MEXICANAE 10618 (CANM 197498).

Fabronia patentifolia Card., Rev. Bryol. 37: 49. 1910.
SYNTYPES. Mexico: Jalisco, Alemeda of Guadalajara, PRINGLE, PLANTAE MEXICANAE 10575 (CANM 197499); Hidalgo, Tula, PRINGLE, PLANTAE MEXICANAE 10593 (CANM 197500).
= *F. wrightii* Sull. in Sull. & Lesq.

Fabronia wullechlaegelii Lor., Moosstud. 163. 1864.
ISOTYPE. Jamaica: Bethabara, Wullechlaegel, 1849 (CANM 197501).

Fissidens amplifolius Dix. & P. de la Varde, Ann. Crypt. Exot. 3: 170. 1930.
ISOTYPE. India: Tinnevelly Dist., Mundanthurai, G. Foreau 978 (CANM 197502).

Fissidens andersonii Grout, Moss Fl. N. Amer. 1: 252. 1939.
ISOTYPE. United States: North Carolina, Currituck Co., near Currituck, L.E. Anderson 6505 (CANM 197504).
= *F. bryoides* Hedw.

Fissidens aphelotaxifolius Purs., Bull. Torrey Bot. Cl. 103: 35. 1976.
ISOTYPE. Canada: British Columbia, Queen Charlotte Is., SW Moresby I., Upper Victoria Lake, W.B. Schofield 30787 (CANM 100561).

Fissidens appalachensis Zander, Bryologist 72: 406. 1969.
ISOTYPE. United States: North Carolina, Caldwell Co., Dixon Creek at juncture with US 221, R. Zander & S. Pravda 3345 (CANM 110515).

Fissidens arseniei Broth. & Par. ex Thér., Smiths. Misc. Coll. 78(2): 8. 1926.
SYNTYPE. Mexico: Puebla, Cerro Guadalupe, Bro. Arsène 685 (CANM 197503).
= *F. repandus* Wils.

Fissidens carnosus Broth., Rec. Bot. Surv. India 1: 314. 1899.
ISOTYPE. India: Coorg, near Natur, T.L. Walker 178 (CANM 197506).

Fissidens coorgensis Broth., Rec. Bot.
Surv. India 1: 316. 1899.
ISOTYPE. India: Coorg, near Sidapur,
T.L. Walker 267 (CANM 197505).

Fissidens densiretis Sull., Proc. Amer.
Acad. Arts Sci. 5: 274. 1861.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES
15 (CANM 197507; 197508).

Fissidens exiguum Sull., Musci Allegh.
n. 44. 1846.
ISOTYPE. United States: Ohio, near
Columbus. SULLIVANT, MUSCI ALLEGH. 44
(CANM 268104).

Fissidens guadalupensis Schimp. ex
Besch., Ann. Sci. Nat. Bot. ser.
6,3: 193. 1876.
ISOTYPE. Guadeloupe: La Rivière
Rouge, HUSNOT, PL. DES ANTILLES 134
(CANM 108933).
= *F. similiretis* var.
guadalupensis (Besch.) Grout

Fissidens imshaugii Crum, Bryologist
63: 93. 1960.
ISOTYPE. Cuba: Pinar de Rio, Alturas
de Pizarras, just SW of Hotel San
Vicente, H.A. Imshaug 25253 (CANM
197509).

Fissidens kochii Crum & Anders.,
Bryologist 64: 345. 1962.
HOLOTYPE. United States: Louisiana,
St. Charles Parish, Sarpe Wildlife
Refuge, 2 mi. E of Hwy 61, about 15 mi.
NW of New Orleans, L.F. Koch 7657
(CANM 197510).

Fissidens legallooi Crum, Bryologist
63: 97. 1960.
HOLOTYPE. Guadeloupe: St. Barthélemy,
morne de Petite Saline, Gris-Gris,
C. Le Gallo 674 (CANM 197516).
PARATYPES. Guadeloupe: St.
Barthélemy, Chemin de Morne Saline,
C. Le Gallo 377 (CANM 109775);
Ile St. Barthélemy, morne de Petite
Saline, Gris-Gris, *C. Le Gallo*
1034 (CANM 109776); St. Barthélemy,
morne de Vittet, *C. Le Gallo* 657
(CANM 109777); St. Barthélemy, morne de
Vitte, *C. Le Gallo* 365 (CANM
109778).

Fissidens longidecurrens Thér., Smiths.
Misc. Coll. 78(2): 10. 1926.
SYNTYPE. Mexico: Michoacan, vicinity
of Morelia, Bro. Arsène 4906
(CANM 197511).

Fissidens lutescens Broth., Rec. Bot.
Surv. India 1: 315. 1899.
ISOTYPE. India: Coorg, near Verajpet,
T.L. Walker 159 (CANM 197512).

Fissidens manateensis Grout in
Holz., Musci Acro. Bor. Amer. Eur.
24: n. 590. 1926.
ISOTYPE. United States: Florida,
Manatee Co., near road from Oneco to
Acadia, A.J. Grout, HOLZINGER,
MUSCI ACRO. BOR. AMER. EUR. 590 (CANM
197513).
= *F. fontanus* (B.-Pyl.) Steud.

Fissidens michoacamus Thér., Smiths.
Misc. Coll. 78(2): 12. 1926.
ISOTYPE. Mexico: Michoacan, vicinity
of Morelia, Bro. Arsène 7892
(CANM 197514).
= *F. leptopus* Card.

Fissidens milobakeri L. Koch, Bryologist
54: 206. 1951.
ISOTYPE. United States: California,
San Mateo Co., along the eastern shore
of Lake San Andreas, L.F. Koch
3394 (CANM 197515).

Fissidens neglectus Crum, Bryologist
63: 95. 1960.
ISOTYPE. Cuba: Loma Pelada,
C. Wright, WRIGHT, THIRD CUBAN
COLLECTION 23 (CANM 197517).
PARATYPE. Cuba: Lagunillas,
Jurisdicion Pinar del Rio, *C. Wright*
51 (CANM 109908).

Fissidens nothotaxifolius Purs. & Hoe,
Bryologist 78: 479. 1975.
PARATYPE. United States: Hawaii,
Oahu, S. Koolau Mts., Manoa Valley,
Manoa Falls Trail 73 along Waihi
Stream, W.J. Hoe, HOE, BRYOPHYTA
HAWAIIICA EXSICCATA 54 (CANM 252822).

Fissidens petrophilus Sull., Proc. Amer.
Acad. Arts Sci. 5: 276. 1861.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES
21 (CANM 197518).

Fissidens plurisetus Bartr. in
Willis, Bryologist 42: 153. 1939.
ISOTYPE. Panama: Canal Zone, Barro
Colorado I., B. Willis 19 (CANM
197519).

Fissidens pringlei Card., Rev. Bryol.
36: 69. 1909.
SYNTYPE. Mexico: Federal Dist.,
Canada above Contreras Valley of
Mexico, PRINGLE, PLANTAE MEXICANAE
10559 (CANM 197520).
= *F. repandus* Wils.

Fissidens reclinatus var.
brevifolius Card., Rev. Bryol.
36: 69. 1909.
SYNTYPE. Mexico: Jalisco, Barranca,
near Guadalajara, PRINGLE, PLANTAE
MEXICANAE 10699 (CANM 197521).
= *F. repandus* Wils.

Fissidens reesei Crum & Anders.,
Bryologist 63: 35. 1960.
HOLOTYPE. United States: Florida,
Glades Co., Palmdale, Tome Lyles Park,
Fisheating Creek, L.E. Anderson & H.
Crum 13332 (CANM 197523).
PARATYPES. United States: Florida,
Glades Co., S bank of Fisheating Creek
by US 27, W.D. Reese 1329 (CANM
197522); Florida, Polk Co., 9 mi. N of
Wauchula, L.E. Anderson & H. Crum
13488 (CANM 110208).

Floribundaria nipponica Nog., J.
Hattori Bot. Lab. 3: 96. 1948.
ISOTYPE. Japan: Oita, Shimoke,
Fukayabakei, A. Noguchi, NOGUCHI
& HATTORI, MUSCI JAP. 77 (CANM
197525).

Fontinalis antipyretica var. *thermalis*
Boros in Bauer, Musci Eur.
Amer. Exs. 39: n. 1930. 1927.
ISOTYPE. Hungary: Transdanubien,
Komitat Zala, Tapolca, A. Boros,
BAUER, MUSCI EUR. AMER. EXS. 1930 (CANM
157002).

Fontinalis microphylla f. *subfalcata*
Dietzow & Freiberg in Bauer,
Musci Eur. Exs. 24: n. 1164. 1915.
ISOTYPE. Germany (Ostpreussen):
Allenstein, im Bszeneksee, bei Ganglau,
W. Freiberg, BAUER, MUSCI EUR.
EXS. 1164 (CANM 156904).

Foreauella indica Dix. & P. de la Varde,
Arch. Bot. 1(8-9): 175. 1927.
SYNTYPE. India: Madras, Madura Dist.,
Palni Hills, Lower Palni Hills, along
Parappar R., G. Foreau 395, MUSCI
MADURENSES INDIAE MERIDIONALIS
EXSICCATI (CANM 257332).
= *F. orthothecia* (Schwaegr.) Dix.
& P. de la Varde

Funaria californica Sull. & Lesq., Musci
Bor. Amer. ed. 2: 41, n. 238. 1865.
ISOTYPE. United States: California,
montosae, H. Bolander, SULLIVANT
& LESQUEREAUX, MUSCI BOR. AMER.
ed. 2: 238 (CANM 197526).
= *Entosthodon californicus* (Sull.
& Lesq.) Crum & Anders.

Funaria epipedostegia Card., Rev. Bryol.
36: 109. 1909.
SYNTYPES. Mexico: Jalisco, near
Guadalajara, PRINGLE, PLANTAE MEXICANAE
10570 (CANM 197527); Morelos, near
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10660 (CANM 197528).
= *Entosthodon longisetus* Schimp.
in Besch.

Funaria koelzii Bartr., Rev. Bryol.
Lich. 29: 167. 1960.
ISOTYPE. India: Kangra, Punjab, Kulu,
W. Koelz 4924 (CANM 256257).

Garovaglia luzonensis Williams, Bull.
New York Bot. Gard. 8: 353. 1914.
SYNTYPE. Philippines: Luzon, Baguio,
R.S. Williams 1878 (CANM
197529).

Garovaglia ulei C. Müll. ex
Broth., Hedwigia 34: 128. 1895.
SYNTYPE. Brazil: Goyaz, Rio das
Almas, E. Ule 1572 (CANM
197530).
= *Jaegerina scariosa* (Lor.) Arz.

Glyphomitrium daviesii var.
teotonianum Allorge & P. de la
Varde, Rev. Bryol. Lich. 15: 45. 1946.
ISOTYPE. Azores: Flores, Fazenda,
V. & P. Allorge, V. & P.
ALLORGE, BRYOPHYTA AZORICA 85 (CANM
152352).

Grimmia alpicola var. *rivularis* f.
acutifolia Grout, N. Amer. Musci
Per. n. 387. 1940.
ISOTYPE. United States: Colorado,
Longs Peak, W. Kiener, GROUT, N.
AMER. MUSCI PER. 387 (CANM 197531).
= *G. occidentalis* Lawt.

Grimmia arctolimnia Steere, Bryologist
77: 230. 1974.
ISOTYPE. Canada: Northwest
Territories, Port Radium, Labine Point,
near Eldorado Mine, W.C. Steere
10429 (CANM 232930).

Grimmia brittoniae Williams, Bull.
Torrey Bot. Cl. 27: 316. 1900.
ISOTYPE. United States: Montana,
Flathead R., Bad Rock Canyon, R.S.
Williams 223 (CANM 197538).

Grimmia calyptata Hook. in
Drumm., Musci Bor. Amer. n. 60. 1828.
ISOTYPE. Canada or United States?:
Rocky Mts., DRUMMOND, MUSCI BOR. AMER.
60 (CANM 197534).
= *Coccinodon calypratus* (Hook.)
C. Jens.

- Grimmia catalinensis** Bartr., Bryologist
27: 62. 1924.
ISOTYPE. United States: Arizona, Pima Co., Santa Catalina Mts., ravine near top of Mt. Lemon, E.B. Bartram, BARTRAM, MOSSES S. ARIZ. 62 (CANM 197536).
= *G. ovalis* (Hedw.) Lindb.
- Grimmia hermannii** Crum, Mich. Bot.
13: 171. 1974.
ISOTYPE. United States: Michigan, Keweenaw Co., Copper Harbour, F.J. Hermann 25446 (CANM 226826).
- Grimmia hookeri** Drumm., Musci Bor.
Amer. n. 61. 1828.
ISOTYPE. Canada: Ontario, near Niagara Falls, DRUMMOND, MUSCI BOR. AMER. 61 (CANM 152283).
= *Ptychomitrium incurvum* (Schwaegr.) Spruce
- Grimmia montana** var. *abnoba* Schmidt
in Bauer, Musci Eur. Amer.
39: n. 1918. 1927.
ISOTYPE. Germany: Südlicher Schwarzwald, nahe dem Gipfel des Schauinsland, H. Schmidt, BAUER, MUSCI EUR. AMER. 1918 (CANM 197539).
- Grimmia montana** var. *idahensis* Ren. & Card., Bot. Gaz. 30: 18. 1900.
ISOTYPE. United States: Idaho, Lake Pend d'Oreille, J.B. Leiberg, RENAULD & CARDOT, MUSCI AMER. SEPT. 289 (CANM 197540).
= *G. montana* B.S.G.
- Grimmia moxleyi** Williams in Holz., Musci Bor. Amer. Eur.
24: n. 600. 1926.
ISOTYPE. United States: California, Los Angeles Co., between Big Rock Creek and Devil's Punch Bowl, G.L. Moxley 1141, HOLZINGER, MUSCI BOR. AMER. EUR. 600 (CANM 197541).
- Grimmia praetermissa** Card., Rev. Bryol.
36: 105. 1909.
SYNTYPE. Mexico: Mexico, in the crater of the volcano of Toluca, PRINGLE, PLANTAE MEXICANAE 26a (CANM 197542).
= *G. ovalis* (Hedw.) Lindb.
- Grimmia pulla** Card., Rev. Bryol.
36: 106. 1909.
ISOTYPE. Mexico: Hidalgo, near Honey Station, PRINGLE, PLANTAE MEXICANAE 10423 (CANM 197543).
- Grimmia santaritae** Bartr., Bryologist
27: 60. 1924.
ISOTYPE. United States: Arizona, Santa Cruz Co., Santa Rita Mts., White House Canyon, E.B. Bartram, BARTRAM, MOSSES S. ARIZ. 75 (CANM 197544).
= *G. arizonae* Ren. & Card.
- Grimmia trichophylla** var. *indianensis* Sayre, Bryologist
57: 21. 1954.
ISOTYPE. United States: Indiana, Warren Co., E side of road 2 mi. SW of Rainsville, W.H. Welch 9694 (CANM 197537).
= *G. pulvinata* (Hedw.) Sm. ex Sm. & Sowerby
- Gymnostomum latifolium** Hook. in Drumm., Musci Bor. Amer. n. 16. 1828.
ISOTYPE. Canada: Saskatchewan, low points of the Saskatchewan R., near Carlton House, DRUMMOND, MUSCI BOR. AMER. 16 (CANM 267893).
= *Physcomitrium hookeri* Hampe
- Gymnostomum phascooides** Hook. in Drumm., Musci Bor. Amer. n. 12. 1828.
ISOTYPE. Canada: Saskatchewan, DRUMMOND, MUSCI BOR. AMER. 12 (CANM 267892).
= *Hymenostomum rostellatum* var. *phascooides* (Hook.) Card.
- Gymnostomum pusillum** Drumm., Musci Bor.
Amer. n. 22. 1828.
ISOTYPE. Canada: Alberta, Rocky Mts., Baptiste R., DRUMMOND, MUSCI BOR. AMER. 22 (CANM 267894).
= *Seligeria donniana* (Sm.) C. Müll.
- Gymnostomum uvidum** Card., Rev. Bryol.
36: 70. 1909.
SYNTYPE. Mexico: Morelos, near Cuernavaca, PRINGLE, PLANTAE MEXICANAE 10433 (CANM 197548; 197549).
= *G. recurvirostrum* Hedw.
- Gyroweisia papillosa** Thér., Smiths. Misc. Coll. 85(4): 6. 1931.
SYNTYPE. Mexico: Michoacan, Morelia, Bro. Arsène 4927 (CANM 197550).
- Haplohymenium mithouardi** var. *viride* Thér., Anne Crypt. Exot.
5: 179. 1932.
ISOTYPE. China: Fukien Prov., Buong Kang, Yenping, H.H. Chung B101 (CANM 197552).
= *Heterocladium gracillimum* Nog.

- Holomitrium xolocotzianum** Crum,
Bryologist 55: 55. 1952.
PARATYPE. Mexico: Guerrero, ca. 25 km
W of Chilpancingo, A.J. Sharp
1037a (CANM 197554).
- Homalia pygmaea** var. **elongata** Dix. &
P. de la Varde, Arch. Bot. Bull. 1(8-
9): 182. 1927.
ISOTYPE. India: Madras, Palni Hills,
Perumalundai, G. Foreau, 5
February 1927 (CANM 197555).
- Homalothecium gracillimum** Dix. & P. de
la Varde, Ann. Crypt. Exot.
3: 180. 1930.
ISOTYPE. India: Kannan Deva Hills,
Travancore, G. Foreau 1887a (CANM
197556).
- Homomallium mexicanum** Card., Rev. Bryol.
37: 53. 1910.
SYNTYPE. Mexico: Hidalgo, Cuyamaloya
Station, PRINGLE, PLANTAE MEXICANAE
10631 (CANM 197557).
- Hookeria cubensis** Sull., Proc. Amer.
Acad. Arts Sci. 5: 285. 1861.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES
85 (CANM 165170).
= *Lepidopilum cubense* (Sull.)
Mitt.
- Hookeria obliquicuspis** C. Müll., Bull.
Herb. Boiss. 5: 564. 1897.
ISOTYPE. Jamaica: Newhaven Pass,
W. Harris, 1896 (CANM 197447).
- Hookeria pilotrichelloides** Broth.,
Trans. Linn. Soc. Bot. ser.
2: 92. 1901.
ISOTYPE. British Guiana: Mt. Roraima,
J.J. Quelch & F. McConnell 337
(CANM 197567).
= *Neohypnella diversifolia*
(Mitt.) Welch & Crum
- Hookeria varians** Sull., Proc. Amer.
Acad. Arts Sci. 5: 285. 1861.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES
88 (CANM 197558).
= *Cyclodictyon varians* (Sull.)
O. Kuntze
- Hookeriopsis heteroica** Card., Rev.
Bryol. 37: 51. 1910.
ISOTYPE. Mexico: Veracruz, Jalapa,
PRINGLE, PLANTAE MEXICANAE 15145 (CANM
197560).
- Hookeriopsis websteri** Crum & Bartr.,
Bull. Inst. Jamaica Sci. ser.
8: 521. 1958.
HOLOTYPE. Jamaica: Portland Parish,
John Crow Mts., 1.5 mi. SW of
Ecclesdown, G.L. Webster 5199
(CANM 197561).
PARATYPES. Jamaica: Portland Parish,
1½-2 mi. SW of Ecclesdown, G.R.
Proctor 9994 (CANM 165161); Portland
Parish, E slope of John Crow Mts., 1½-
2½ mi. SW of Ecclesdown, G.R.
Proctor 10487 (CANM 165162).
- Husnotiella revoluta** Card., Rev. Bryol.
36: 71. 1909.
SYNTYPES. Mexico: Morelos, near
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10636 (CANM 197562); Mexico, Lecheria,
PRINGLE, PLANTAE MEXICANAE 10523 (CANM
197563).
- Hygroamblystegium filum** var.
compactum Bartr., Farlowia
2: 317. 1946.
ISOTYPE. Chile: Fuegia media, Lago
Linch, Cerro Chico, H. Roivainen,
20 December 1928 (CANM 111691).
- Hygroamblystegium irriguum** f.
marianopolitana (Dupret) Grout,
Moss Fl. N. Amer. 3: 73. 1931.
ISOTYPE. Canada: Québec, near
Montréal, H. Dupret, GROUT, N. AMER.
MUSCI PLEUR. 247 (CANM 197317).
- Hygrohypnum steerei** Sharp, Bryologist
81: 319. 1978.
ISOTYPE. Mexico: Tamaulipas, Rio
Sabinas, W of El Encino, A.J. Sharp
& D. Budnik 8752 (CANM 260412).
- Hymenostomum castaneum** Crum & Steere,
Amer. Midland Natural.
60(1): 12. 1958.
ISOTYPE. Haiti: Morne la Hotte, Pic
Macayo, L.R. Holdridge 595 (CANM
197564).
- Hymenostomum inoperculatum** Crum, Madrono
14: 74. 1957.
HOLOTYPE. United States: California,
Santa Clara Co., Stanford University,
in front of Sequoia Hall, W.B.
Schofield, February 1955 (CANM
197565).
= *Weissia inoperculata* (Crum)
Crum, Steere & Anders.
- Hymenostomum semidiaphana** Thér., Smiths.
Misc. Coll. 85(1): 5. 1931.
ISOTYPE. Mexico: Michoacan, Morelia,
Cerro San Miguel, Bro. Arsène
5040 (CANM 197566).

- Hyophila stomatodonta** Card., Rev. Bryol. 36: 76. 1909.
SYNTYPE. Mexico: Jalisco, Barranca de Guadalajara, C.G. Pringle 15227 (CANM 129311).
= *Desmatodon stomatodontus* (Card.) Williams
- Hyophila walkeri** Broth., Rec. Bot. Surv. India 1: 317. 1899.
SYNTYPE. India: Coorg, near Hatur, T.L. Walker 173 (CANM 197578).
- Hypnum aureonitens** Bartr., Bryologist 49: 124. 1946.
ISOTYPE. Guatemala: Totonicapan, region of Salvachan, P.C. Standley 84511 (CANM 197568).
- Hypnum bergenense** Aust., Musci Appal. n. 391. 1870.
SYNTYPE. United States: New Jersey, Closter; Maine, York Co., AUSTIN, MUSCI APPAL. 391 (CANM 199275).
= *Campylium radicale* (P. Beauv.) Grout
- Hypnum chrysophyllum** var. *brevifolium* Ren. & Card., Bull. Herb. Boiss. 4: 19. 1896.
ISOTYPE. United States: Washington D.C., Rock Creek, J.M. Holzinger, RENAULD & CARDOT, MUSCI AMER. SEPT. 248 (CANM 198966).
= *Campylium chrysophyllum* (Brid.) J. Lange.
- Hypnum closteri** Aust., Musci Appal. n. 439. 1870.
ISOTYPE. United States: New Jersey, Closter; New York, Shawangunk Mt., AUSTIN, MUSCI APPAL. 439 (CANM 197569).
= *Hygrohypnum closteri* (Aust.) Grout
- Hypnum deplanatum** Card., Rev. Bryol. 37: 56. 1910.
ISOTYPE. Mexico: Hidalgo, Honey Station, PRINGLE, PLANTAE MEXICANAE 15292 (CANM 197570).
= *Brotherella deplanatula* (Card.) Broth.
- Hypnum erectum** Drumm., Musci Bor. Amer. n. 224. 1828.
ISOTYPE. Canada: Ontario (Upper Canada), DRUMMOND, MUSCI BOR. AMER. 224 (CANM 197571).
= *Brachythecium acuminatum* (Hedw.) Aust.
- Hypnum holdridgei** Crum & Steere, Amer. Midland Natural. 60(1): 46. 1958.
ISOTYPE. Haiti: top of Morne la Selle, L.R. Holdridge 1890a (CANM 188317).
- Hypnum mirabile** Bartr., Bryologist 50: 208. 1947.
ISOTYPE. Guatemala: Huehuetenango, in the first gap above San Juan toward Chemal, A.J. Sharp 4999 (CANM 197572).
= *H. cupressiforme* var. *lacunosum* Brid.
- Hypnum obtusifolium** Hook. in Drumm., Musci Bor. Amer. n. 193. 1828.
ISOTYPE. Canada: Alberta, Rocky Mts., DRUMMOND, MUSCI BOR. AMER. 193 (CANM 267895).
= *Scleropodium obtusifolium* (Jaeg. & Sauerb.) Kindb. ex Mac. & Kindb.
- Hypnum orbicularicordatum** Ren. & Card., Bull. Herb. Boiss. 4: 19. 1896(1).
ISOTYPE. Canada: Northwest Territories, côte N.O. de la baie d'Hudson, Depot I., G. Comes, RENAULD & CARDOT, MUSCI AMER. SEPT. 249 (CANM 197579).
= *Calliergon cordifolium* ssp. *orbicularicordatum* (Ren. & Card.) Grout
- Hypnum pulchrum** Hook. in Drumm., Musci Bor. Amer. n. 180. 1828.
ISOTYPE. Canada: Ontario (Upper Canada), DRUMMOND, MUSCI BOR. AMER. 180 (CANM 197573).
= *Callicladium haldanianum* (Grev.) Crum
- Hypnum vagans** Hook. in Drumm., Musci Bor. Amer. n. 166. 1828.
ISOTYPE. Canada: British Columbia, Rocky Mts., "La grande Côte", W of the "Height of Land", DRUMMOND, MUSCI BOR. AMER. 166 (CANM 268619).
= *Brachythecium hylostatum* Hig. & Hig.
- Hypnum vaucherif. gracile** Ando, J. Sci. Hiroshima Univ. ser. B, Div. 2 (Botany), 16: 14. 1976.
HOLOTYPE. United States: Montana, Flathead Co., Bad Rock Canyon, Shepard Memorial Spring, F.J. Hermann 20648 (CANM 189469).

Hypnum vaucheris f. tereticaulis

Ando, J. Sci. Hiroshima Univ. ser. B, Div. 2 (Botany), 16: 12. 1976.
HOLOTYPE. Canada: Alberta, Bow River Watershed, Junction Lookout Road crossing of Sheep R., C.D. Bird & J.L. Glenn 14279 (CANM 189442).

Hypopterygium japonicum Mitt., J. Linn.

Soc. Bot. 8: 155. 1864.
ISOTYPE. Japan: Nagasaki, Oldham (CANM 197575).

Hypopterygium novae-guineae Bartr., Rev.

Bryol. Lich. 30: 201. 1961.
ISOTYPE. New Guinea: Western Highlands Dist., Wabag area, Lai-Ambum Divide, track from Upper Ambum Valley to Sirunki, R.G. Robbins 3142 (CANM 197576).

Hypopterygium pseudotamarisci C. Müll.,

Linnaea 38: 645. 1874.
SYNTYPE. Mexico: San Cristobal, C. Mohr, 1857 (CANM 197580).
= *H. tamariscinum* (Hedw.) Brid.

Isopterygium cylindricarpum Card., Rev.

Bryol. 37: 56. 1910.
SYNTYPE. Mexico: Mexico, Amecameca, PRINGLE, PLANTAE MEXICANAE 10606 (CANM 197581).
= *Herzogiella cylindricarpa* (Card.) Iwats.

Isopterygium robusticaule Bartr.,

Bryologist 49: 122. 1946.
PARATYPE. Guatemala: Dept. Alta Verapaz, Cerro de Aqua Tortuga (Sahacoc), vicinity of Cubilgütz, J.A. Steyermark 44584 (CANM 197582).

Jaegerina guatemalensis Bartr.,

Bryologist 49: 116. 1946.
ISOTYPE. Guatemala: Dept. Izabal, Montana del Mico, between Bananera and "La Presa", J.A. Steyermark 39202 (CANM 197583).

Leiomela lopezii Griffin, Rev. Bryol.

Lich. 43: 383. 1977.
ISOTYPE. Venezuela: Estado Tachira, Distrito Jauregui, paramo El Batallon, above the town of La Grita, D. Griffin, M. Lopez & L. Ruiz-Teran 461 (CANM 259012).

Leptobryum pyriforme var.

flagellifera Holz., Musci Acro. Bor. Amer. Eur. n. 617. 1927.
ISOTYPE. Canada: British Columbia, Sandon, Safety Switch, F.A. MacFadden, HOLZINGER, MUSCI ACRO. BOR. AMER. EUR. 617 (CANM 197584).
= *L. pyriforme* (Hedw.) Wils.

Leptodictyum riparium f. *obtusum*

Grout, Moss Flora N. Amer. 3: 65. 1931.
ISOTYPE. United States: Connecticut, New Haven, bank of West R., G.E. Nichols, GROUT, N. AMER. MUSCI PLEUR. 355 (as *Amblystegium vacillans* Sull. forma) (CANM 171536).
= *L. riparium* var. *obtusum* (Grout) Grout

Leptodontium integrifolium Williams,

Bull. Torrey Bot. Cl. 43: 324. 1916.
ISOTYPE. Peru: Ollantaytambo, Cook & Gilbert 704a (CANM 197585).

Leptodontium orcuttii Bartr., J.

Washington Acad. Sci. 21: 289. 1931.
ISOTYPE. Mexico: Hidalgo, Mineral del Chico, C.R. Orcutt 6731 (CANM 197586).
= *L. flexifolium* (With.) Hampe

Leptodontium spinosum Williams,

Bryologist 33: 73. 1931.
ISOTYPE. Columbia: Dept. Santander, E.P. Killip & A.C. Smith 17530 (CANM 197587).
= *Zygodon pichinchensis* (Tayl.) Mitt.

Leptodontium valerianum Bartr., J.

Washington Acad. Sci. 19: 18. 1929.
ISOTYPE. Costa Rica: San José, Piedra Blanca, J. Valerio 86 (CANM 197588).

Leskea austini Aust., Musci Appal. n.

268. 1870.
ISOTYPE. United States: New Jersey, Sussex Co., Austin; Illinois, Fulton Co., Wolf, AUSTIN, MUSCI APPAL. 268 (CANM 197589).
= *Lindbergia brachyptera* (Mitt.) Kindb.

Leskea grandiretis Lindb. ex

Broth., Act. Soc. Sci. Fenn. 19(12): 97. 1892.
ISOTYPE. U.S.S.R.: Caucasus, Ossetia, Balta ad fl. Terek, V.F. Brotherus, 19 May 1881 (CANM 197590).
= *Lindbergia brachyptera* (Mitt.) Kindb.

Leskeodon robbinsii Bartr., Rev. Bryol.
Lich. 30: 200. 1961.
ISOTYPE. New Guinea: Western Highlands Dist., Wabag area, Laou Lake area, Yobobos grasslands, Limbo R. Camp, 16 mi. SE of Laiagam, R.G. Robbins 3191 (CANM 197591).

Leucobryum brevifolium Bartr., Mem. New York Bot. Gard. 10: 4. 1960.
ISOTYPE. Venezuela: Edo. Bolivar, Chimata Massif, J.A. Steyermark & J.J. Wurdack 726 (CANM 197592).

Leucobryum glaucovirens Card., Rev. Bryol. 36: 69. 1909.
ISOTYPE. Mexico: Veracruz, near Jalapa, PRINGLE, PLANTAE MEXICANAE 10496 (CANM 197593).
= *L. antillarum* Besch.

Leucodon macrosporus Williams, Contr. U.S. Nat. Herb. 16: 23. 1912.
ISOTYPE. Panama: vicinity of Camp Aguacatal, eastern slope of Chiriquí Volcano, W.R. Maxon 5276 (CANM 197594; 197595).

Leucoloma renaudii Broth., Rec. Bot. Surv. India 1: 313. 1899.
ISOTYPE. India: Coorg, 7 mi. SW of Verajpet, T.L. Walker 293 (CANM 197596).

Leucoloma walkeri Broth., Rec. Bot. Surv. India 1: 313. 1899.
ISOTYPE. India: South Coorg, T.L. Walker 294 (CANM 197597).

Leucomium compressum Mitt., J. Linn. Soc. Bot. 12: 502. 1869.
SYNTYPE. San Gabriel: Fl. Negro, R. Spruce 803b (CANM 197598).

Macromitrium leptocarpum Broth., Rec. Bot. Surv. India 1: 318. 1899.
SYNTYPE. India: Coorg, near Verajpet, T.L. Walker 132 (CANM 197600).

Macromitrium morobense Bartr., Bryologist 48: 117. 1945.
ISOTYPE. New Guinea: Morobe Dist., Rawlinson Range, M.S. Clemens 12448a (CANM 197601).

Macromitrium palmense Williams, Torreya 14: 25. 1914.
ISOTYPE. Costa Rica: vicinity of La Palma, W.R. Maxon 480 (CANM 156334).

Macromitrium portoricense Williams, Bryologist 32: 69. 1929.
ISOTYPE. Puerto Rico: Maricao to Monte Alegreillo, E.G. Britton 2638 (CANM 197602; 197603).

Macromitrium shankii Crum, Bryologist 55: 281. 1952.
ISOTYPE. Honduras: Morazan, vicinity of El Zamorana, P.J. Shank (CANM 123733).

Macromitrium undosum Card., Rev. Bryol. 36: 108. 1909.
ISOTYPE. Mexico: Jalisco, near Guadalajara, PRINGLE, PLANTAE MEXICANAE 10560 (CANM 197604).
= *Groutiella undosa* (Card.) Crum & Steere

Macrothamniella robbinsii Bartr., Rev. Bryol. Lich. 30: 206. 1961.
ISOTYPE. New Guinea: Western Highlands Dist., Wabag area, track to Sugarloaf Mts. from Tale R., Tsak Valley, S of Wapenamanda, R.G. Robbins 2839 (CANM 197599).

Merceyopsis mexicana Bartr., J. Washington Acad. Sci. 18: 577. 1928.
ISOTYPE. Mexico: Jalisco, San Sebastian, E of Segundo Arroyo, Y. Mexia 1568a (CANM 197605).
= *Scopelophila ligulata* (Spruce) Spruce

Meteoriump laevifolium Mitt., J. Linn. Soc. Bot. 12: 441. 1869.
SYNTYPE. Jamaica?: Brocüs (CANM 197606).
= *Papillaria penicillata* (Dozy & Molk.) Broth.

Meteoriump serricolum C. Müll., Bull. Herb. Boiss. 6: 116. 1898.
SYNTYPE. Brazil: Estado de Minas Gerais, Serra do Itacolumy, E. Ule 1454 (CANM 161744).
= *Squamidium serricola* (C. Müll.) Broth.

Micromitrium austini Sull. in Aust., Musci Appal. n. 45. 1870.
ISOTYPE. United States: New Jersey, Closter, AUSTIN, MUSCI APPAL. 45 (CANM 197607).

Micromitrium megalosporum Aust., Musci Appal. n. 47. 1870.
ISOTYPE. United States: New Jersey, near Camden; Pennsylvania, Philadelphia, AUSTIN, MUSCI APPAL. 47 (CANM 137937).

- Mielichhoferia multiflora** Bartr.,
Farlowia 2: 312. 1946.
ISOTYPE. Chile: Prov. de Nuble,
Cordillera de Chillan, H.
Rovainen, 15 April 1929 (CANM
111692).
- Mielichhoferia praticola** Card., Rev.
Bryol. 38: 3. 1911.
ISOTYPE. Mexico: Ixtaccihuatl,
P.A. Purpus 3711 (CANM 197608).
- Mittenothamnium subthelisteum** Card.,
Rev. Bryol. 37: 55. 1910.
SYNTYPE. Mexico: Morelos, Parque
Station, PRINGLE, PLANTAE MEXICANAE
10697 (CANM 197609).
- Mnium andrewsianum** Steere, Bryologist
61: 175. 1958.
PARATYPES. Canada: Northwest
Territories, Great Bear Lake, Port
Radium, Eldorado Mine, near and just N
of Labine Point, W.C. Steere 10136
(CANM 111299); Franklin Dist.,
Baffin I., Pond Inlet, D. Coombs 21
(CANM 220966); Great Bear Lake, E
end of McTavish Arm, Port Radium, N of
Labine Point, W.C. Steere 10461
(CANM 212246); Great Bear Lake, Hunter
Bay E of Sloan River, W.C. Steere
10602 (CANM 233499). United States:
Alaska, Schrader Lake-Peter Lake area,
Brooks Range, Franklin Mts., just NW of
Mt. Chamberlin, W.C. Steere 18909
(CANM 145501); Brooks Range, Endicott
Mts., SW end of Chandler Lake, W.C.
Steere 18302 (CANM 145502).
Greenland: Svartenhuk Pen, Umiarfik
Fjord, Amitsoq, K. Holmen 13020
(CANM 145503).
= *Rhizomnium andrewsianum*
(Steere) Kop.
- Mnium arizonicum** Amann, Rev. Bryol.
52: 23. 1925.
ISOTYPE. United States: Arizona, Pima
Co., Santa Catalina Mts., Mt. Lemon,
E.B. Bartram, BARTRAM, MOSES S.
ARIZ. 72 (CANM 145520).
- Mnium drummondii** Bruch & Schimp., London
J. Bot. 2: 669. 1843.
ISOTYPE. Canada: Alberta, Smoking R.,
DRUMMOND, MUSCI BOR. AMER. 257 (CANM
147372).
= *Plagiommium drummondii* (Bruch &
Schimp.) Kop.
- Mnium inclinatum** Lindb., Not. Sallsk.
Fauna Flora Fennica Forhandl.
9: 48. 1868.
ISOTYPE. Sweden: Lappon Titensis,
S.O. Lindberg, July 1856 (CANM
146823).
= *Plagiommium cuspidatum* (Hedw.)
Kop.
- Mnium orthorrhynchum** var. **tenellum**
Bruch & Schimp., London J. Bot.
2: 669. 1843.
SYNTYPE. Canada (?): DRUMMOND, MUSCI
BOR. AMER. 259 (CANM 146513).
= *M. marginatum* (With.) Brid.
ex P. Beauv.
- Moenckemeyera obtusifolia** Williams,
Bull. New York Bot. Gard.
3(9): 113. 1903.
SYNTYPE. Bolivia: Tumupasa, R.S.
Williams 1703 (CANM 197614).
- Nanothecium foreauii** Dix. & P. de la
Varde, Ann. Crypt. Exot. 3: 181. 1930.
ISOTYPE. India: Travancore, Kannan
Deva Hills, G. Foreau 1221 (CANM
259394).
- Nanomitrium austini** var. **floridum**
Grout, Moss Fl. N. Amer. 2: 71. 1935.
ISOTYPE. United States: Florida,
Sanford, S. Rapp, GROUT, N. AMER.
MUSCI PERF. 289 (CANM 197615).
= *Micromitrium austini* Aust.
- Neckera eucarpa** var. **secundifolia**
Williams, Bull. New York Bot. Gard.
6(21): 241. 1910.
ISOTYPE. Bolivia: Tacacoma, R.S.
Williams 1997 (CANM 197616).
- Neckera menziesii** Hook. in Drumm.,
Musci Bore. Amer. n. 162. 1828.
ISOTYPE. Canada: Alberta, Rocky Mts.,
DRUMMOND, MUSCI BOR. AMER. 162 (CANM
197617).
= *Metaneckera menziesii* (Hook.
ex Drumm.) Steere
- Oreas mexicana** Thér., Smiths. Misc.
Coll. 81(1): 2. 1928.
ISOTYPE. Mexico: Michoacan, vicinity
of Morelia, Cerro Azul, Bro.
Arseña 4793 (CANM 117555).
= *Hypnodontopsis mexicana* (Thér.)
Robins.
- Oreoweisia ligularis** Mitt., J. Linn.
Soc. Bot. 12: 53. 1869.
SYNTYPE. Ecuador: Andes Quitoensis, in
monte Picillum, Jameson (CANM
197619).
= *O. bogotensis* (Hampe) Mitt.

Orthotrichum brigantiacum Culm., Rev. Bryol. 53: 19. 1926.
ISOTYPES. France: Dép. des Hautes Alpes, Montagne des Guibertes bei Briancon, P. Culmann, BAUER, MUSCI EUR. AMER. EXS. 1922 (CANM 152785); Dép. des Hautes Alpes, Montagne des Guibertes, near Briancon, P. Culmann, HOLZINGER, MUSCI ACRO. BOR. AMER. EUR. 645 (CANM 152786).

Orthotrichum epapillosum Lawt. & Herm., Bryologist 76: 437. 1973.
ISOTYPE. United States: California, Lassen Co., ca. 21 mi. N of Lichtfield, F.J. Hermann 24764 (CANM 219535).

Orthotrichum flowersii Vitt, Bryologist 74: 159. 1971.
ISOTYPE. United States: Utah, Washington Co., Zion Canyon, S. Flowers 2584 (CANM 219786).

Orthotrichum johnstonii Bartr., Rev. Bryol. Lich. 13: 132. 1942.
ISOTYPE. Chile: Aguada Grande, near Antofagasta-Atacama provincial boundary, I.M. Johnston 17 (CANM 197622).

Orthotrichum juranum var. **defluens**
Culm., Rev. Bryol. 53: 55. 1926.
ISOTYPE. France: Dép. des Hautes Alpes, Vallée du Rabious, P. Culmann, BAUER, MUSCI EUR. AMER. EXS. 1923 (CANM 152820).
= *O. cupulatum* var. *luridum* Hag.

Orthotrichum keeverae Crum & Anders., J. Elisha Mitchell Sci. Soc. 72: 281. 1956.
ISOTYPE. United States: North Carolina, Alexander Co., Brushy Mts., Rocky Face Mt., near Hiddenite, L.E. Anderson & C. Keever 7575 (CANM 197623).

Orthotrichum lescurii Aust., Musci Appal. n. 163. 1870.
ISOTYPE. United States: northern New Jersey and southern New York, AUSTIN, MUSCI APPAL. 163 (CANM 153116).
= *O. strangulatum* f.
lescurii (Aust.) Vitt

Orthotrichum ohioense Sull. & Lesq. in Aust., Musci Appal. n. 169. 1870.
ISOTYPE. United States: Ohio and adjacent states, AUSTIN, MUSCI APPAL. 169 (CANM 153500).

Orthotrichum pringlei C. Müll., Bull. Torrey Bot. Cl. 13: 120. 1886.
ISOTYPE. United States: Oregon, Winchester Bay, Coos R., C.G. Pringle, October 1881 (CANM 153214).
= *O. lyellii* Hook. & Tayl.

Orthotrichum sordidum Sull. & Lesq. in Aust., Musci Appal. n. 168. 1870.
ISOTYPE. United States: New Jersey; New York; Massachusetts, Cambridge, L. Lesquereux & T.P. James, AUSTIN, MUSCI APPAL. 168 (CANM 153825).

Papillaria haitensis Crum & Steere, Amer. Midland Natural. 60(1): 28. 1958.
ISOTYPE. Haiti: Môrne des Commissaires, F.P. Mackaness 92 (CANM 197624).

Phascum cuspidatum var. **americanum**
Ren. & Card., Bot. Gaz. 30: 12. 1900.
SYNTYPE. United States: Wisconsin, Madison, L.L. Cheney, RENAUD & CARDOT, MUSCI AMER. SEPT. 267 (CANM 197625).
= *P. cuspidatum* Hedw.

Phascum subexsertum Hook. in Drumm., Musci Bör. Amer. n. 9. 1828.
ISOTYPE. Canada: Saskatchewan, Carlton House, DRUMMOND, MUSCI BOR. AMER. 9 (CANM 267896).
= *Pottia bryoides* (Dicks.) Mitt.

Philonotis aristifolia Bartr., Farlowia 1: 177. 1943.
ISOTYPE. Burma: Mt. Nwalabo, Tavoy, F.G. Dickason 8203 (CANM 197626; 197627).
PARATYPE. Burma: Langoon, Insein, F.G. Dickason 8158 (CANM 122882; 150690).

Philonotis hermannii Robins., Phytologia 45: 460. 1980.
ISOTYPE. Bolivia: Dept. Cochabamba, NW slope of Mt. Tunari, 28 km NW of Cochabamba, F.J. Hermann 25135 (CANM 276054).

Philonotis laxitexta Froehl., Ann. Naturh. Mus. Wien 57: 40. 1950.
ISOTYPE. Iran: Prov. Teheran, Montes Elburs Centr., in valle Pasgaleh, K.H. & F. Rechinger 6883 (CANM 220635).

Philonotis luteola Bartr., Farlowia
2: 315. 1946.
ISOTYPE. Chile: Fuegia media,
Estancia Vicuma, Puesto 20, Cerro
Fuentes, H. Rovainen, 3 January
1929 (CANM 111694).

Philonotis marchica var.
coloradensis Ren. & Card., Bot.
Gaz. 22: 51. 1896.
ISOTYPE. United States: Colorado,
Boulder Co., Springdale, M.
Holzinger, RENAULD & CARDOT, MUSCI
AMER. SEPT. 300 (CANM 151340).

Physcomitrella californica Crum &
Anders., Bryologist 58: 4. 1955.
SYNTYPE. United States: California,
Solano Co., Lake Chabot near Vallejo,
L.F. Koch 1320 (CANM 138657;
229545).

Physcomitrium collenchymatum Gier, Kans.
Acad. Sci. Trans. 58: 330. 1955.
ISOTYPE. United States: Missouri,
Clay Co., shore of Cooley Lake, SW 1/4 SI,
T51N, R30W, L.J. Gier 6924 (CANM
197633).

Pilosium serrulatum Williams, J.
Washington Acad. Sci. 20: 178. 1930.
ISOTYPE. Haiti: Dép. du Nord,
vicinity of St. Michel de l'Atalaye,
E.C. Leonard 7248 (CANM 197634).

Pilotrichidium brunnescens Besch., Ann.
Sci. Nat. Bot. ser. 6, 3: 244. 1876.
ISOTYPE. Guadeloupe:
l'Herminier (CANM 197635).

Pilotrichum funale Wils., Ann. Mag. Nat.
Hist. 20: 378. 1847.
ISOTYPE. Jamaica: Port Royal, G.
McNab, 1847(?) (CANM 197637).
= *Papillaria nigrescens* (Hedw.)
Jaeg.

Pilotrichum leoni Williams, Bryologist
26: 50. 1923.
ISOTYPE. Cuba: Pico Turquino, High
Maestra, Fre. Leon 11220 (CANM
197638).
= *P. lophophyllum* Sull.

Pireella squarrosa Arz., Amer. Midland
Natural. 52(1): 33. 1954.
ISOTYPE. Haiti: Morne des
Commissaires, on route to Savanne
Zombi, F.P. Mackaness 99 (CANM
197658).

Plagiothecium denticulatum var.
bullulae Grout, N. Amer. Musci
Perf. n. 450. 1915.
ISOTYPE. United States: Idaho, Elmore
Co., Boise National Forest, Atlanta,
F.A. MacFadden, GROUT, N. AMER.
MUSCI PERF. 450 (CANM 245136).
= *P. denticulatum* (Hedw.) B.S.G.

Plagiothecium groutii Card. & Thér.,
Bot. Gaz. 37: 379. 1904.
ISOTYPE. United States: New York,
Hempstead, L.I., A.J. Grout,
GROUT, N. AMER. MUSCI PLEUR. 196 (CANM
130634; 197641).
= *Isopterygium tenerum* (Sw.)
Mitt.

Plagiothecium micans var. **latifolium**
Grout, N. Amer. Musci Pleur.
n. 480. 1922.
ISOTYPE. United States: Florida,
Sanford, S. Rapp, GROUT, N.
AMER. MUSCI PLEUR. 480 (CANM 130637).
= *Isopterygium tenerum* (Sw.)
Mitt.

Plagiothecium passaicense Aust., Bull.
Torrey Bot. Cl. 5: 24. 1874.
ISOTYPE. United States: New Jersey,
Morris and Bergen Co., Passaic, AUSTIN,
MUSCI APPAL. 352 (CANM 197642).
= *Isopterygium pulchellum* (Hedw.)
Jaeg. & Sauerb.

Plagiothecium subfalcatum Aust., Musci
Appal. n. 366. 1870.
ISOTYPE. United States: New Jersey;
New York, C.F. Austin;
Pennsylvania, T.P. James, AUSTIN,
MUSCI APPAL. 366 (CANM 197643).
= *Isopterygium distichaceum*
(Mitt.) Jaeg. & Sauerb.

Platygyriella jamaicensis Bartr., J.
Washington Acad. Sci. 26: 14. 1936.
ISOTYPE. Jamaica: Newmarket, C.R.
Orcutt 7263 (CANM 197644).

Platygyrium perichaetiale Card., Bull.
Soc. Bot. Genève ser. 2, 3: 287. 1911.
ISOTYPE. Korea: Quelpaert,
U. Faurie 276 (CANM 197487).
= *Entodon perichaetialis* (Card.)
Nog. & Toyama

Pleuriditrichum marylandicum Andr. &
Herm., Bryologist 62: 120. 1959.
ISOTYPE. United States: Maryland,
Prince Georges Co., 1 mi. S of
Beltsville, USDA Plant Industry
Station, F.J. Hermann 14328 (CANM
197649).

Pleuridium californicum Grout, Moss Fl.
N. Amer. 1: 32. 1936.
ISOTYPE. United States: California,
Altadena, C.C. Kingman,
HOLZINGER, MUSCI ACRO. BOR. AMER. 330
(as *P. bolanderi* C. Müll.) (CANM
197646).

Pleuridium holdridgei Crum & Steere,
Amer. Midland Natural. 60(1): 7. 1958.
ISOTYPE. Haiti: Morne des
Commissaires, Jardin Bois, L.R.
Holdridge 3179 (CANM 197647).

Pleuridium ravenii Aust., Bull. Torrey
Bot. Cl. 6: 142. 1877.
SYNTYPES. United States: South
Carolina, H.W. Ravenel,
HOLZINGER, MUSCI ACRO. BOR. AMER. 473
(CANM 197648); South Carolina,
H.W. Ravenel, Rhode Island,
Bennett, New Jersey, C.F. Austin,
AUSTIN, MUSCI APPAL. SUPPL. 1: 457
(CANM 112273).

Pleuropus appressifolium Williams, Bull.
New York Bot. Gard. 8: 373. 1914.
SYNTYPE. Philippines: Northern Luzon,
Benguet Prov., Loakan, Bagiuo,
R.S. Williams 1881 (CANM
197651).
= *Homalothecium appressifolium*
(Williams) Broth.

Pogonatum hirtellum Kelly, Bryologist
44: 94. 1941.
ISOTYPE. Mexico: Hidalgo, Michoacan,
T.C. Frye & E.M. Frye, FRYE, MOSS
EXSICCATI 43 (CANM 122866; 197652).

Pogonatum sinuatodentatum Card., Rev.
Bryol. 37: 5. 1910.
SYNTYPE. Mexico: Veracruz, near
Jalapa, PRINGLE, PLANTAE MEXICANAE
10700 (CANM 197654).
= *P. tortile* (Sw.) Brid.

Pohlia andrewsii J. Shaw, Bryologist
84: 70. 1981.
ISOTYPE. Canada: Yukon Territory,
Dawson area, 17 km E of the Yukon-
Alaska border on Hwy 3, J. Shaw
(CANM 266201).

Pohlia faeroensis C. Jens., Bot. Faeröes
Dan. Invest. 1: 150: 1901.
SYNTYPES. Denmark: Faerö Is., Bordö,
Gravdal, C. Jensen, 17 May 1896
(CANM 140845); Faerö Is., Syderø, near
Famien, C. Jensen, 8 May 1896 (CANM
140846).
= *Bryum minutum* Lesq.

Pohlia porosa Lindb. f., Bull. Torrey
Bot. Cl. 27: 318. 1900.
ISOTYPE. United States: Washington,
Mt. Rainier, J.A. Allen, ALLEN,
MOSES OF THE CASCADE MTS., WASH. 56
(as *P. (Cacodon) porosa* Lindb.
f.) (CANM 197656).
= *P. cardotii* (Ren.) Broth.

Pohlia tundrae J. Shaw, Bryologist
84: 65. 1981.
ISOTYPE. United States: Colorado,
Pitkin Co., near Aspen at the top of
Independence Pass, J. Shaw 2595
(CANM 266202).

Pohlia zacatecana Williams, Bryologist
26: 33. 1923.
ISOTYPE. Mexico: Zacatecas, between
Bolanos and Guadalajara, J.N.
Rose, 20 September 1897 (CANM
197657).

Polytrichum juniperinum var.
arcticum Kuc, Bryophytorum
Bibliotheca 2: 42. 1973.
HOLOTYPE. Canada: Northwest
Territories, Axel Heiberg I., White
Glacier, M. Kuc M148 (CANM
209637).

Porothamnium neomexicanum Card., Rev.
Bryol. 37: 8. 1910.
ISOTYPE. United States: New Mexico,
Socorro Co., Mogollon Mts., W fork of
Gila R., O.B. Metcalfe 474 (CANM
276785).
= *Metaneckera menziesii* (Hook.
ex Drumm.) Steere

Pottia fosbergii Bartr., Bryologist
33: 18. 1930.
ISOTYPE. United States: California,
Los Angeles Co., Claremont, E side of
Indian Hill, F.R. Fosberg D24a
(CANM 197660).

Pottia nevadensis Card. & Thér., Bot.
Gaz. 37: 365. 1904.
ISOTYPE. United States: Nevada,
Ormsby Co., King's Canyon,
C.F. Baker, HOLZINGER, MUSCI
ACRO. BOR. AMER. 155 (CANM 197662).

Pottia randii Kenn., Rhodora
1: 78. 1899.
ISOTYPE. United States: Maine, Baker
I., E.L. Rand, 15 July 1898 (CANM
197663).
= *Desmatodon randii* (Kenn.) Laz.

- Pottia riparia** Aust., Musci Appal. n.
112. 1870.
ISOTYPE. United States: New Jersey
(Palisades and northern) and southern
New York, AUSTIN, MUSCI APPAL. 112
(CANM 127020).
= *Hyophila involuta* (Hook.)
Jaeg. & Sauerb.
- Pottia texana** Wareham in Grout, Moss Fl.
N. Amer. 1: 201. 1939.
ISOTYPE. United States: Texas, near
San Marcos, C. Wright, SULLIVANT
& LESQUEREAUX, MUSCI BOR. AMER. (Ed. 2)
117 (as *P. minutula* Schwaegr.)
(CANM 197661).
- Prionodon arsenei** Thér., Smiths. Misc.
Coll. 78(2): 25. 1926.
ISOTYPE. Mexico: Puebla, Esperanza,
Bro. Arsène 4747 (CANM 197664).
- Prionodon solorzanoi** Card., Rev. Bryol.
37: 7. 1910.
SYNTYPE. Mexico: Hidalgo, near Honey
Station, PRINGLE, PLANTAE MEXICANAE
10489 (CANM 197665).
- Prionodon undulatus** Mitt., J. Linn. Soc.
Bot. 12: 420. 1869.
ISOLECTOTYPE. Colombia: Novae-
Granatenses, Andes Bogotenses, ad viam
inter Tipaquirá et Pacho,
J. Weir, Reliquiae of V.F.
Brotherus No. R 11689 (CANM 256648).
- Pseudoditrichum mirabile** Steere &
Iwats., Can. J. Bot. 52: 701. 1974.
ISOTYPE. Canada: Northwest
Territories, Great Bear Lake, E end of
McTavish Arm, near Hunter Bay, below
first falls of Sloan R., W.C. Steere
10589 (CANM 219785).
- Pseudoleskea artariae** Thér., Rev.
Bryol. 25: 11. 1898.
PARATYPE. Italy: Prov. Comensis,
Argegno ad Larium, F. Aug.
Artaria, 20 July 1898 (CANM
197667).
= *Pseudoleskeopsis artariae*
(Thér.) Thér.
- Pseudosymbelpharis bartramii** Thér., J.
Washington Acad. Sci. 19: 16. 1929.
ISOTYPE. Costa Rica: Prov. de
Heredia, Cerros de Zurquí, NE of San
Isidro, P.C. Standley & J. Valerio
50701 (CANM 197668).
- Pterygoneurum pusillum** var. **brevisetum**
Sav., Bull. Jard. Bot. Princ. URSS
26: 79. 1927.
ISOTYPE. U.S.S.R.: Rossia austr.-
orientalis, Astrachan in vicin. lac
Baskunczak, V.P. Savicz, L.I. &
V.P. SAVICZ, BRYOTHECA ROSSICA 6 (CANM
197670).
= *P. ovatum* var. *humile*
(Amann) Podp.
- Pterygoneurum subsessile** var.
kieneri Hab., Rhodora
51: 128. 1949.
ISOTYPE. United States: Nebraska,
Chase Co., 8 mi. W of Champion,
W. Kiener 10627 (CANM 116640).
- Pterygophyllum novae-guineae** Bartr.,
Rev. Bryol. Lich. 30: 200. 1961.
SYNTYPE. New Guinea: Western
Highlands Dist., Wabag area, Sugarloaf
Mts., track from Tale R. in Tsak Valley
S of Wapenamanda, R.G. Robbins
2828 (CANM 197669).
- Ptychomitrium exaratifolium** Robins.,
Bryologist 62: 227. 1960.
ISOTYPE. South Africa: Transvaal,
Ship Mt., vicinity of Pretorius Kop,
Kruger National Park, R.K. Godfrey
GH-690c (CANM 197671).
- Ptychomitrium godfreyi** Robins.,
Bryologist 62: 225. 1960.
ISOTYPE. South Africa: Natal, 25 mi.
NE of Ladysmith, R.K. Godfrey GH-
1889a (CANM 197672).
- Renaudia subpilifera** Williams, J.
Washington Acad. Sci. 20: 176. 1930.
ISOTYPE. Dominican Republic: Prov. de
Barahona, Polo, Loma la Haut, W.L.
Abbott 1879 (CANM 197675).
= *Pilotrichella cuspidans* Ren. &
Card.
- Rhabdoweisia fugax** var. **tenerrima**
Bartr., Bryologist 50: 213. 1947.
ISOTYPE. Guatemala: Quetzaltenango,
Cerro de Sija, A.J. Sharp 5035
(CANM 197676).
- Rhacomitrium elongatum** Ehrh. ex
Frisvoll, Gunneria 41: 74. 1983.
ISOTYPE. Norway: Sør-Trøndelag,
Skaun, Djupsjøåsen, A.A.
Frisvoll, 31 May 1982 (CANM
280102).

Rhacomitrium lawtonae Irel., Bryologist
73: 707. 1970.
HOLOTYPE. Canada: British Columbia,
Queen Charlotte Is., Moresby I.,
Mitchell Inlet,
W.B. Schofield 15433 (CANM
160062).

Rhaphidostegium lozanoi Card., Rev.
Bryol. 37: 57. 1910.
SYNTYPE. Mexico: Federal Dist., Cima,
PRINGLE, PLANTAE MEXICANAE 10803 (CANM
197678).

Rhaphidostichum papuanum Bartr.,
Brittonia 11: 95. 1959.
ISOTYPE. New Guinea: Chimbu sub-
dist., Eastern Highlands, Mt. Wilhelm,
R.G. Robbins 731 (CANM 197679).

Rhegmatodon pringlei Card., Rev. Bryol.
37: 58. 1910.
ISOTYPE. Mexico: Puebla, Teznitlan,
PRINGLE, PLANTAE MEXICANAE 15285
(CANM 197680).

Rhizomnium appalachianum Kop., Ann. Bot.
Fennici 10: 11. 1973.
ISOTYPE. Canada: Ontario, Nipissing
Dist., Algonquin Provincial Park,
Highland Hiking Trail, NW of Whitney,
T. Koponen 22774 (CANM 212178).

Rhizomnium gracile Kop., Ann. Bot.
Fennici 10: 16. 1973.
ISOTYPE. Canada: Manitoba, 3-5 mi. E
of Fort Churchill along road to Twin
Lake Hill, H. Crum 6679 (CANM
145480).

Rhizomnium hattori Kop., J. Hattori
Bot. Lab. 34: 378. 1971.
ISOTYPE. Japan: Kyushu I., Kumamoto
Pref., Kuma-gun, Yunomae-cho, Mt.
Ichibusa, T. Koponen 11023 (CANM
206918).

Rhizomnium tuomikoskii Kop., J. Hattori
Bot. Lab. 34: 375. 1971.
ISOTYPE. Japan: Miyazaki Pref.,
Nichinan-shi, Sakatani, Inotani, Z.
Iwatsuki & M. Mizutani, NOGUCHI &
HATTORI, MUSCI JAP. 1082 (as *Mnium*
punctatum Schreb.) (CANM 111388).

Rhynchostegiopsis lutescens Britt.
ex Broth., Nat. Pfl. ed. 2,
11: 263. 1925.
PARATYPES. Jamaica: Blue Mts., slopes
of Sir John and summit, E.G.
Britton 1142 (CANM 197685; 197682);
G.E. Nichols 184 (CANM 197681).

Rhynchostegiopsis planifolia Crum &
Bartr., Bull. Inst. Jamaica Sci. ser.
8: 55. 1958.
ISOTYPE. Jamaica: Blue Mt. Peak
track, R.G. Robbins 89 (CANM
197683).
= *R. lutescens* Britt. ex
Broth.

Rhynchostegium argute-serratum Bartr.,
J. Washington Acad. Sci. 26: 13. 1936.
ISOTYPE. Jamaica: Booby Woods, May
Hall, C.R. Orcutt 6962 (CANM
197684).

Rhynchostegium geophilum Aust., Musci
Appal. n. 345. 1870.
ISOTYPE. United States: New Jersey,
C.F. Austin; Pennsylvania,
T.P. James; New York, C.H.
Peck, AUSTIN, MUSCI APPAL. 345 (CANM
197649).
= *Taxiphyllum taxirameum* (Mitt.)
Fleisch.

Rhynchostegium pringlei Card., Rev.
Bryol. 37: 70. 1910.
SYNTYPES. Mexico: Morelos,
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10525 (CANM 197686); Morelos,
Cuernavaca, PRINGLE, PLANTAE MEXICANAE
10434 (CANM 197687).
= *Eurhynchium pringlei* (Card.)
Crum & Anders.

Schistidium holmenianum Steere & Brass.,
Bryologist 79: 208. 1976.
ISOTYPE. United States: Alaska,
vicinity of Ogotoruk Creek, S of Cape
Thompson, Chukchi Sea, near SW end of
Brooks Range, W.C. Steere 63-507
(CANM 244580).

Sciaromium bartlettii Crum & Steere,
Amer. Midland Natural.
60(1): 40. 1958.
ISOTYPE. Haiti: southern peninsula,
Beaumont to Morne Geffrard,
Arrondissement de Jérémie (N of divide
on road from Les Roseaux to Les Cayes),
H.H. Bartlett 17665 (CANM
197691).

Sciaromium bellii Broth., Oefv. Finsk.-
Vet. Soc. Foerh. 40: 189. 1898.
SYNTYPE. New Zealand: Southland, Lime
Hills, W. Bell 505 (CANM
197692).

Scleropodium julaceum Lawt., Bull.
Torrey Bot. Cl. 94: 22. 1967.
ISOTYPE. United States: California,
Los Angeles Co., Sepulveda Canyon,
F.A. MacFadden 18595 (CANM
197693).

Scorpiurium circinnatum f.
pterigynandroidea Bott. & Weiss
in Bauer, Musci Eur. Exs. n.
1331. 1915.

ISOTYPE. Italy: Toscana, Pisa, Monte
Pisano, Marquis Ant. Bottini &
E. Weiss, BAUER, MUSCI EUR.
EXS. 1331 (CANM 177273).

Scouleria marginata Britt., Bull. Torrey
Bot. Cl. 22: 42. 1895.
ISOLECTOTYPE. United States:
Washington, Spokane Falls,
S. Watson, 24 September 1880
(CANM 197546).

Seligeria tristicha var. *laxa* Holz.,
Bryologist 5: 63. 1902.
ISOTYPE. United States: Vermont,
slides at Willoughby, G.G.
Kennedy, 13 June 1896 (CANM
114316).
= *S. tristichoides* Kindb.

Sematophyllum angusticupes Broth., Rec.
Bot. Surv. India 1: 326. 1899.
SYNTYPE. India: Coorg, near Verajpet,
T.L. Walker 160 (CANM 197695).

Sematophyllum angustirete
Bartr., Bryologist 50: 207. 1947.
ISOTYPE. Guatemala: Baja Verapaz,
near Civija, A.J. Sharp 5120
(CANM 197694).

Sematophyllum gracile Bartr., Rev.
Bryol. Lich. 30: 203. 1961.
ISOTYPE. New Guinea: Western
Highlands Dist., Wabag area, Tsak
Valley, Tale R. track to Sugarloaf
Mts., R.G. Robbins 2771 (CANM
197696).

Sematophyllum tenuicarpum Williams,
Bull. New York Bot. Gard.
6: 253. 1910.
ISOTYPE. Bolivia: Tumupasa,
R.S. Williams 2066 (CANM
197697).

Solmsiella kurzii Steere, Bryologist
37: 97. 1935.
ISOTYPE. United States: Florida, edge
of Lake Miccosukee, $\frac{1}{2}$ mi. S of Judge
Hopkin's camp, H. Kurz 85 (CANM
152188).
= *Erpodium biseriatum* (Aust.)
Aust.

Sphagnum acutifolium var.
flavicomans Card., Rev. Bryol.
11: 55. 1884.
ISOTYPE. France: Ile Miquelon,
Delamare, RENAUD & CARDOT, MUSCI
AMER. SEPT. EXS. 145 (CANM 102073).
= *S. flavicomans* (Card.) Warnst.

Sphagnum acutifolium var. *intermedium*
Aust., Musci Appal. n. 15. 1870.
ISOTYPE. United States: southern New
Jersey; Canada: New Brunswick,
J. Fowler, AUSTIN, MUSCI
APPAL. 15 (CANM 102480).
= *S. warnstorffii* Russ.

Sphagnum coryphaeum Warnst., Hedwigia
29: 189. 1890.
SYNTYPE. Colombia: Novae-Granatenses,
Andes Bogotenses, ad viam inter Bogota
et Fusagasuga, J. Weir, Reliquiae
of V.F. Brotherus No. R 11711 (CANM
256662).
= *S. meridense* (Hampe) C. Müll.

Sphagnum molluscum var. *hydrophilum*
Warnst., Sphagn. Univ. 275. 1911.
SYNTYPE. U.S.S.R.: Kaliningrad,
(Prussia: Königsberg), zwischen
Schwentlund und dem Waldhause (Cranz),
C. Baenitz, 20 September 1892
(CANM 105667).
= *S. tenellum* var.
hydrophilum (Warnst.) Wijk &
Marg.

Sphagnum splendens Maass, Bryologist
70: 193. 1967.
HOLOTYPE. Canada: Québec, Abitibi
Co., 50 mi. W of Chapais, W.S.G.
Maass, 5 September 1965 (CANM
259993).

Splachnobryum julaceum Besch., Rev.
Bryol. 18: 76. 1891.
ISOTYPE. Guadeloupe: Matouba, Ed.
Marie (CANM 197698).
= *S. obtusum* (Brid.) C. Müll.

Splachnum heterophyllum Drumm., Musci
Bor. Amer. n. 37. 1828.
ISOTYPE. Canada: Alberta, DRUMMOND,
MUSCI BOR. AMER. 37 (CANM 197699).
= *S. vasculosum* Hedw.

Splachnum intermedium Drumm., Musci Bor.
Amer. n. 39. 1828.
ISOTYPE. Canada: Manitoba, York
Factory, DRUMMOND, MUSCI BOR. AMER.
39 (CANM 197700).
= *S. sphaericum* Hedw.

- Stereodon richardsonii** Mitt., J. Linn.
Soc. Bot. 8: 42. 1865.
LECTOTYPE. Canada: Northwest Territories, Great Bear Lake, J. Richardson, DRUMMOND, MUSCI BOR. AMER. 211 (CANM 176512).
= *Calliergon richardsonii* (Mitt.) Kindb.
- Stereophyllum panamense** Bartr. in Crum & Arz., Rev. Bryol. Lich. 22: 158. 1953.
ISOTYPE. Panama: Canal Zone, between Madden Dam and Saddle 11 near Alahuela, J.A. Steyermark & P.H. Allen 16518 (CANM 197701).
- Streptopogon matudianus** Crum, Bryologist 55: 51. 1952.
ISOTYPE. Mexico: Veracruz, El Puerto, A.J. Sharp 689 (CANM 197702).
- Symblepharis tenuis** Williams, Bryologist 31: 110. 1928.
ISOTYPE. Peru: Prov. of La Convencion, Dept. Cuzco, C. Bües, October 1920 (CANM 197703).
- Sympysodon integrifolius** Bartr., Rev. Bryol. Lich. 30: 198. 1961.
ISOTYPE. New Guinea: Western Highlands Dist., Wabag area, Lower Lai Valley near Yalis, R.G. Robbins 2658 (CANM 197704).
- Synthetodontium pringlei** Card., Rev. Bryol. 36: 111. 1909.
SYNTYPE. Mexico: Federal Dist., Canada, Valley of Mexico, PRINGLE, PLANTAE MEXICANAE 10557 (CANM 197705).
- Syrrhopodon elongatus** Sull., Proc. Amer. Acad. Arts Sci. 5: 280. 1861.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES 49 (CANM 252291).
- Syrrhopodon recurvulus** Mitt., J. Linn.
Soc. Bot. 12: 120. 1869.
ISOTYPE. Cuba: WRIGHT, MUSCI CUBENSES 47 (as *S. gaudichaudii* Mont.) (CANM 252292).
= *S. gaudichaudii* var. *recurvulus* (Mitt.) Thér.
- Syrrhopodon robbinsii** Bartr., Brittonia 13: 369. 1961.
ISOTYPE. New Guinea: Madang Dist., Lower Ramu-Atitau, foothills, Adelbert Range near Josephstaal, R.G. Robbins (CANM 197706).

- Syrrhopodon rubiginosus** Mitt., J. Linn.
Soc. Bot. 12: 125. 1869.
ISOTYPE. Venezuela: Orinoco, prope cataractas Maypures, R. Spruce 18b (CANM 123735).
- Syrrhopodon sordidus** C. Müll., Bot. Zeit. 6: 766. 1848.
ISOTYPE. Venezuela: Prov. de Carabobo, N. Funck & L.J. Schlim 617 (CANM 252289).
= *S. circinatus* (Brid.) Mitt.
- Syrrhopodon theriotii** Bartr., Contr. U.S. Nat. Herb. 26: 73. 1928.
PARATYPE. Costa Rica: Prov. de Heredia, Cerro de las Lajas, P.C. Standley & J. Valerio 51527 (CANM 252290).
- Taxiphyllum howellianum** Crum & Anders., J. Elisha Mitchell Sci. Soc. 74: 38. 1958.
ISOTYPE. United States: North Carolina, Macon Co., Howell Tract, below Cowee Gap, W of Cashiers, L.E. Anderson 11071 (CANM 197707).
= *Isopterygium distichaceum* (Mitt.) Jaeg. & Sauerb.
- Taxiphyllum machrisianum** Crum, Contr. Sci. Los Angeles Mus. 18: 5. 1957.
ISOTYPE. Brazil: Goias, Chapada dos Veadeiros, 4 km N of Veadeiros, E.Y. Dawson 14748a (CANM 197708).
- Tayloria chiapensis** Crum, Bryologist 54: 270. 1951.
ISOTYPE. Mexico: Las Chiapas, near San Cristobal, J. Munch, 21 December 1907 (CANM 197709).
- Tayloria cochabambae** C. Müll., Nuov. Giorn. Bot. Ital. n. ser. 4: 11. 1897.
ISOTYPE. Bolivia: Prov. Cochabamba, near Choquecamata, Germain, June 1889 (CANM 197710).
- Thuidium brevisetum** Bartr., Rev. Bryol. Lich 30: 201. 1961.
ISOTYPE. New Guinea: Western Highlands Dist., Wabag area, Mt. Hagen near Yaramanda, R.G. Robbins 2723 (CANM 197711).
- Thuidium pycnangiellum** C. Müll. ex Broth., Bot. Jahrb. 24: 283. 1898.
ISOTYPE. Africa: Camerunia, P. Dusen 225 (CANM 197712).

- Thuidium robbinsii** Bartr., Brittonia
13: 376. 1961.
ISOTYPE. New Guinea: Madang Dist., Lower Ramu-Atitau, near Nagaru Village, Keram R., R.G. Robbins 1548 (CANM 197713; 197714).
- Thuidium robustum** Card., Rev. Bryol.
37: 52. 1910.
SYNTYPES. Mexico: Federal Dist., Cima, PRINGLE, PLANTAE MEXICANAE 10579 (CANM 197715; 197718); Federal Dist., Cima, PRINGLE, PLANTAE MEXICANAE 10537 (CANM 197716; 197717).
- Thuidium scitum** var. *aestivale*
Aust., Musci Appal. n. 301. 1870.
ISOTYPE. United States: New Jersey and New York, AUSTIN, MUSCI APPAL. 301 (CANM 168959).
= *Thuidium scitum* (P. Beauv.)
Aust.
- Timmia norvegica** Zett., Oefv. K. Vet.-Ak. Foerh. 19: 364. 1862.
ISOLECTOTYPE. Norway: Kongsvold, Dovre, J.E. Zetterstedt, 10 August 1858 (CANM 152115).
PARATYPE. Norway: Kongsvold, J.E. Zetterstedt, 1854 (CANM 152117).
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ISOTYPE. Denmark: Jutland, Bulbjerg, T. Christensen, BRY. DANICA EXS. 439 (CANM 197720).
= *T. flavovirens* var. *glareicola* (T. Christ.) Crundw. & Nyh.
- Tortella mollissima** Broth. ex Bartr., Bryologist 50: 203. 1947.
ISOTYPE. Mexico: Veracruz, Zacualpan, P.A. Purpus 9361 (CANM 197721).
- Tortella subfragilis** Crum & Steere, Bryologist 59: 250. 1956.
ISOTYPE. Puerto Rico: Sierra de Luquillo, Mt. Britton peak, W.C. Steere 7091 (CANM 126484).
- Tortella tortuosa** f. *falcata*
Lisowski, Bryotheca Polonica Fasc. VII, n. 208. 1956.
ISOTYPE. Poland: Bieszczady Zachodnie - pars occidentalis montis Rawka, S. Lisowski, LISOWSKI, BRYOTHECA POLONICA FASC. VII. 208 (CANM 126740).
- Tortula arcuata** Mitt., J. Linn. Soc. Bot. 12: 163. 1869.
ISOLECTOTYPE. Bolivia(?): Andes Quitensis, W. Jameson (CANM 197722).
- Tortula aurea** Bartr., Bull. Torrey Bot. Cl. 51: 339. 1924.
ISOTYPE. United States: Arizona, Pima Co., Santa Catalina Mts., Bear Canyon, E.B. Bartram, BARTRAM, MOSSES S. ARIZ. 98 (CANM 197723).
= *Pseudocrossidium aureum* (Bartr.) Zander
- Tortula bistratosa** Flow., Bryologist 54: 278. 1951.
ISOTYPE. United States: Utah, Salt Lake Co., about 12 mi. W of Salt Lake City on U.S. Hwy. 40, S. Flowers 7412-A (CANM 197725).
- Tortula bryoides** Hook. in Drumm., Musci Bot. Amer. n. 135. 1828.
ISOTYPE. Canada: British Columbia or Alberta?, Rocky Mts., DRUMMOND, MUSCI BOR. AMER. 135 (CANM 197726).
= *Desmatodon laureri* (Schultz) B.S.G.
- Tortula cainii** Crum & Anders., J. Elisha Mitchell Sci. Soc. 74: 35. 1958.
ISOTYPE. Canada: Ontario, Simcoe Co., Buck Lake, near Sparrow Lake, R.F. Cain 1035 (CANM 197728).
- Tortula connectens** Card., Rev. Bryol. 36: 87. 1909.
SYNTYPE. Mexico: Mexico, above Toluca, PRINGLE, PLANTAE MEXICANAE 10526 (CANM 197730).
= *T. obtusissima* var. *connectens* (Card.) Thér.
- Tortula fragilifolia** Bartr., Bull. Torrey Bot. Cl. 51: 338. 1924.
ISOTYPE. United States: Arizona, Santa Cruz Co., White House Canyon, Santa Rita Mts., E.B. Bartram, BARTRAM, MOSSES S. ARIZ. 87 (CANM 197731).
= *T. fragilis* Tayl.
- Tortula papillosa** var. *meridionalis* Warnst., Krypt. Fl. Brandenburg 2: 265. 1904.
ISOTYPE? Italy: Prov. Comensis, Valle S. Martino, F. Aug. Artaria, 20 March 1898 (CANM 197732.)
- Tortula petriei** Broth. ex Beck., Trans. New Zealand Inst. 29: 441. 1897.
ISOTYPE. New Zealand: Westland, Kelly's Range, D. Petrie, 1896 (CANM 197733).

- Tortula propagulosa** Sharp, Bryologist
36: 20. 1933.
ISOTYPE. United States: Tennessee,
Knoxville, F.F. van Deventer Estate,
A.J. Sharp, GROUT, N. AMER. MUSCI
PERF. 255 (CANM 197734).
- Tortula stanfordensis** Steere, Bryologist
54: 119. 1951.
SYNTYPE. United States: California,
Santa Clara Co., Stanford University
Campus, 686 Mayfield Road, W.C.
Steere, 26 March 1951 (CANM
197735).
- Trachyloma indicum** var. **teretiraramum**
Miller & Manuel, J. Hattori Bot. Lab.
51: 313. 1982.
PARATYPE. New Guinea: eastern
highlands, Bismarck Ranges, Mt. Wilhelm,
slopes S of Lake Aunde, L.K. Wade,
August 1966 (CANM 201605).
- Trachyphyllum inflexum** var.
patentifolium Dix. & P. de la
Varde, Ann. Crypt. Exot.
3: 181. 1930.
ISOTYPE. India: Tinnevelly Dist.,
Mundathurai, G. Foreau 977 (CANM
183571).
- Trematodon lozanoi** Card., Rev. Bryol.
36: 68. 1909.
ISOTYPE. Mexico: Jalisco, Eztatlan,
C.G. Pringle 10613 (CANM
197736).
- Trematodon perssonorum** Allorge & Thér.
ex Allorge, Rev. Bryol. Lich.
20: 179. 1951.
SYNTYPE. Azores: S. Miguel, Lagos das
Furnas, V. & P. ALLORGE, BRYOPHYTA
AZORICA 64 (CANM 197737).
- Trichosteleum Robbinsii** Bartt.,
Brittonia 13: 378. 1961.
ISOTYPE. New Guinea: Madang Dist.,
Lower Ramu-Atitau, near Bangansop
Village, Sangan Stream gorge, Adelbert
Range, R.G. Robbins 1645 (CANM
197738).
- Trichosteleum sepikense** Bartt.,
Brittonia 13: 378. 1961.
ISOTYPE. New Guinea: Sepik River
Dist., Wewak-Angoram area, Murak
Lagoons, Sepik R. mouth, R.G.
Robbins 2580 (CANM 197739).

- Trichostomopsis brevifolia** Bartt.,
Bryologist 34: 61. 1931.
ISOTYPE. United States: California,
Los Angeles Co., Verdugo Hills, La Tuna
Canyon, above Johnson's Ranch, F.A.
MacFadden 8107 (CANM 197740).
= *Didymodon australasi* (Hook. &
Grev.) Zander
- Trichostomopsis fayae** Grout, Moss Fl. N.
Amer. 1: 228. 1939.
ISOTYPE. United States: California,
Los Angeles Co., San Fernando Valley,
F.A. MacFadden 8172 (CANM
197749).
= *Didymodon australasi* (Hook. &
Grev.) Zander
- Trichostomum angustifolium** Crum &
Steere, Amer. Midland Natural.
60(1): 13. 1958.
ISOTYPE. Haiti: southward from
Kenscoff (24 km S of Port-au-Prince) to
the crest of the mountain ridge,
H.H. Bartlett 17694 (CANM
197751).
- Trichostomum chlorophyllum** C. Müll.,
Linnaea 38: 635. 1874.
ISOTYPE. Mexico: Mirador,
F. Sartorius, 1873 (CANM
197741).
- Trichostomum clintoni** C. Müll., Linnaea
38: 636. 1874.
ISOTYPE. Mexico: in terra nuda locis
siccis planitiei Cordovae et prope
Huatusco, C. Mohr (CANM 197742).
- Trichostomum fallaciosum** Welch & Crum,
Bryologist 62: 168. 1959.
ISOTYPE. Jamaica: Portland Parish,
John Crow Mts., SW of Ecclesdown,
W.H. Welch 17709 (CANM 197744).
- Trichostomum indigenes** Ren. & Card., Bot.
Gaz. 22: 50. 1896.
ISOTYPE. Canada: Newfoundland, Bay of
Islands, A.C. Waggoner, RENAULD &
CARDOT, MUSCI AMER. SEPT. 280 (as
Barbula indigenes (Ren. & Card.)
Ren. & Card.) (CANM 197343).
= *Barbula unguiculata* Hedw.
- Trichostomum spirale** Grout, Moss Fl. N.
Amer. 1: 162. 1938.
ISOTYPE. United States: Wisconsin,
Polk Co., St. Croix Falls, C.F.
Baker, November 1897 (CANM 197748).

Ulota cervina Hoe & Crum, Bryologist
74: 487. 1971.
ISOTYPE. United States: Hawaii, Maui,
Kipahulu Valley, vicinity of Base Camp
3, W.J. Hoe 1803.0 (CANM
208773).

Webera elatior Dix. & Sainsb., Trans. R.
Soc. New Zealand 75: 179. 1945.
ISOTYPE. New Zealand: Mt.
Girdlestone, Tongariro National Park,
G.O.K. Sainsbury 966 (CANM
197655).
= *Pohlia elatior* (Dix. & Sainsb.)
Sainsb.

Webera integra Card., Rev. Bryol.
38: 4. 1911.
ISOTYPE. Mexico: Ixtaccihuatl,
P.A. Purpus 3715 (CANM 197613).
= *Mniobryum integrum* (Card.)
Broth.

Weissia andrewsii Bartr., Bryologist
30: 82. 1927.
ISOTYPE. United States: Arizona, Pima
Co., Santa Catalina Mts., mouth of
Canada del Oro, E.B. Bartram,
HOLZINGER, MUSCI ACRO. BOR. AMER. EUR.
666 (as *W. cespitata* (Bry. germ.)
Jur.) (CANM 125011).

Weissia macrocarpa Hook. in
Drumm., Musci Bor. Amer. 74. 1828.
ISOTYPE. Canada: Alberta, among the
Rocky Mts., DRUMMOND, MUSCI BOR. AMER.
74 (CANM 197753).
= *Mielichhoferia macrocarpa*
(Hook.) Bruch & Schimp.

Weissia sinaloensis Bartr., Bryologist
28: 65. 1925.
ISOTYPE. Mexico: Sinaloa, Mazatlan,
E.B. Bartram, HOLZINGER, MUSCI
ACRO. BOR. AMER. EUR. 567 (as
Hyophila sinaloensis (Bartr.)
Bartr. (CANM 197577).
= *Hyophila sinaloensis* (Bartr.)
Bartr.

Weissia turbinata Drumm., Musci Bor.
Amer. n. 64. 1828.
ISOTYPE. Canada: Manitoba, York
Factory, DRUMMOND, MUSCI BOR. AMER. 64
(CANM 197754).
= *Tayloria lingulata* (Dicks.)
Lindb.

Weissiopsis spathulifolius Crum &
Bartr., Bull. Inst. Jamaica Sci. ser.
8: 23. 1958.
ISOTYPE. Jamaica: Ocho Rios Bay,
R.G. Robbins 63 (CANM 197746;
197747; 197752).

Zygodon oligodontus Card., Rev. Bryol.
36: 107. 1909.
ISOTYPE. Mexico: Federal Dist., Cima,
PRINGLE, PLANTAE MEXICANAE 10546 (CANM
197755).
= *Z. leibmannii* Schimp.

HEPATICAE

Anastrophylleum mayebarae Hatt., J. Jap. Bot. 28: 141. 1953.
ISOTYPE. Japan: Yakushima I., Kosugidani, K. Mayebara, HATTORI, HEP. JAP. 202 (CANM 137).
= *A. bidens* (Nees) Steph.

Anastrophylleum tenuie H. Williams, Bryologist 71: 34. 1968.
ISOTYPE. Canada: Ontario, Bruce Co., St. Edmund Twp., N of Emmett Lake, H. Williams 1848 (CANM 10713).

Anthoceros husnoti Steph., Rev. Bryol. 15: 49. 1888.
ISOTYPE. France: Mesnil-Hubert-Pont-d'Onilly (Orne), HUSNOT, HEP. GALLIAE 171 (CANM 265).

Aphanolejeunea teotonii V. Allorge & Jov.-Ast, Rev. Bryol. Lich. 19: 21. 1950.
SYNTYPE. Azores: S. Miguel, Parc José de Canto, Furnas, V. & P. ALLORGE, BRYOPHYTA AZORICA 34 (CANM 358).

Aplozia atrovirens var. **riparioides** Bernet, Cat. Hepat. S.-O. Suisse 60. 1888.
ISOTYPE? Switzerland: dans les ravin d'Onex et de Bernex, près de Genève, H. Bernet, March (CANM 4137).
= *Jungermannia atrovirens* Dum.

Aspiromitus argillaceus Steph., Sp. Hep. 5: 970. 1916.
ISOTYPE. Java Occ.: Res. Batavia, Buitenzorg, V. Schiffner, VERDOORN, HEP. SELECT. CRIT. 198 (CANM 10531).
= *Anthoceros argillaceus* (Steph.) Verd.

Asterella sanoana Shim. & Hatt., J. Hattori Bot. Lab. 9: 25. 1953.
ISOTYPE. Japan: Nagano Co., by Chikuma R., Ikura near Azusayama, D. Shimizu & S. Sano, HATTORI, HEP. JAP. 203 (CANM 428).

Athalamia glauco-virens f. **subsessilis** Shim. & Hatt., J. Hattori Bot. Lab. 12: 58. 1954.
ISOTYPE. Japan: Saitama Co., Chichibu Mts., at Kaminakao of Otaki, D. Shimizu, HATTORI, HEP. JAP. 253 (CANM 437; 10781).
= *An nana* (Shim. & Hatt.) Hatt.

Calypogeia allorgei Buch & Perss., Soc. Sci. Fennica Comm. Biol. 8(7): 5. 1941.
SYNTYPE? Azores: S. Jorge, entre Calheta et Topo, V. & P. ALLORGE, BRYOPHYTA AZORICA 8 (CANM 1304).

Cephalozia mayebarae Hatt., J. Hattori Bot. Lab. 3: 37. 1948.
ISOTYPE. Japan: Kyrshu, Kumamtot, Kuma, Isshoochi, K. Mayebara, HATTORI, HEP. JAP. 66 (CANM 1725).
= *Lophozia mayebarai* (Hatt.) N. Kitag.

Drepanolejeunea canceroides Miller & Bonner, Nova Hedwigia 11(Beih.): 53. 1963.
PARATYPE. Micronesia: Ulul Atoll, H.A. Miller & H.O. Whittier 1023A (CANM 2624).

Fossombronia alaskana Steere & Inoue, Bryologist 77: 66. 1974.
ISOTYPE. United States: Alaska, Brooks Range, LDe Long Mts., Noluck Lake, W.C. Steere 72-360 (CANM 15326).

Fossombronia cristula var. **verdoornii** Chalaud, Annales Bryol. 4: 146. 1931.
ISOTYPE. Java Occ.; Res. Priangan, G. Gede, F. Verdoorn, VERDOORN, HEP. SELECT. CRIT. 59 (CANM 10529).

Frullania inconstans Verd., Nova Guinea 14: 543. 1932.
ISOTYPE. Nova Guinea Hollandica: in m. Goliath, De Kock, VERDOORN, HEP. SELECT. CRIT. 297 (CANM 10530).

Frullania mayebarae Hatt., Bot. Mag. Tokyo 65: 13. 1952.
PARATYPE. Japan: Kyushu, Kumamoto, Ohno, sides of Kuma R., K. Mayebara, HATTORI, HEP. JAP. 125 (CANM 3035; 10789).

Frullania nodulosa f. **irreflexa** Verd., Ann. Crypt. Exot. 1: 220. 1928.
ISOTYPE? Banga: (insula archip. males. occ.), Soengeiliat, Teymann, VERDOORN, HEP. SELECT. CRIT. 44 (CANM 10427).

Gongylanthus pringlei Steph., Sp. Hep. 3: 44. 1906.
ISOTYPE. Mexico: Michoacan, Patzcuaro, C.G. Pringle, UNDERWOOD & COOK, HEP. AMER. 106 (CANM 1379).

Jungermannia alpestris var. **litoralis**
H. Arnell, Hepat. Galliae 207. 1901.
ISOTYPE. Sweden: Insula Scommarn, provinciae Gestrikland, H. Arnell, HUSNOT, HEP. GALLIAE 207 (CANM 5150).
= *Lophozia alpestris* (Schleich. ex Web.) Evans

Jungermannia crenuliformis Aust., Bull. Torrey Bot. Cl. 3: 10. 1872.
ISOTYPE. United States: New Jersey, Closter, C.F. Austin, AUSTIN, HEP. BOR. AMER. EXS. 31 (CANM 7262).

Jungermannia dumortieri Libert, Pl. Crypt. Ard. Exs. n. 311. 1837.
ISOTYPE. France: LIBERT, PL. CRYPT. ARD. EXS. 311 (CANM 13959).

Jungermannia hiugaensis Amak., J. Hattori Bot. Lab. 22: 6. 1960.
ISOTYPE. Japan: Kyushu, Miyazaki Co., Mr. Okue, T. Amakawa, HATTORI, HEP. JAP. 267 (CANM 10782).

Jungermannia novae-caesareae Evans, Bull. Torrey Bot. Cl. 20: 308. 1893.
SYNTYPE. United States: New Jersey, Atsion, A.W. Evans, UNDERWOOD & COOK, HEP. AMER. 172 (CANM 5364).
= *Lophozia laxa* (Lindb.) Grolle

Jungermannia plagiochilooides Amak., J. Hattori Bot. Lab. 22: 25. 1960.
ISOTYPE. Japan: Kyushu, Fukroka Pref., Tsukushi-abakei, T. Amakawa, HATTORI, HEP. JAP. 570 (CANM 4236).

Jungermannia rupicola Amak., J. Hattori Bot. Lab. 22: 23. 1960.
ISOTYPE. Japan: Kyushu, Miyazaki Pref., Mt. Okue NW of Nobeoka, T. Amakawa, HATTORIA, HEP. JAP. 572 (CANM 4251).

Jungermannia ventricosa var. **gemmaipara**
Hush., Hepaticologia Gallica 36. 1881.
ISOTYPE. France: Le Châtellier (Orne), HUSNOT, HEP. GALLIAE 34 (CANM 5473).
= *Lophozia ventricosa* (Dicks.) Dum. (sens. lat.)

Lejeunea cardoti Steph., Bot. Gaz. 17: 172. 1892.
SYNTYPE? Mexico: Patzcuaro, C.G. Pringle, UNDERWOOD & COK, HEP. AMER. 136 (as *Lejeunea (Micro-Lej.) cardoti* Steph.) (CANM 6172).

Lejeunea tsukiensis Miller & Bonner, Nova Hedwigia 11(Beih.): 56. 1963.
PARATYPE. Micronesia: Sorol, H.O. Whittier & H.A. Miller 1212B (CANM 4522).

Lepidolaena weindorferi Herz., Annales Bryol. 6: 103. 1933.
ISOTYPE. Australia: Tasmania, Wilmot, Weindorfer, VERDOORN, HEP. SELECT. CRIT. 229 (CANM 10528).

Lophozia floerkii var. **hyperborea**
Schust., Nat. Mus. Canada Bull. 164: 21. 1959.
PARATYPE. Canada: Northwest Territories, Ellesmere I., E side of U.S. Range, ca. 9-10 mi. W of Mt. Olga, R.M. Schuster 35572 (CANM 790).
= *Barbilophozia hyperborea* (Schust.) R. Stotl. & B. Stotl.

Lophozia pellucida Schust., Can. J. Bot. 39: 978. 1961.
ISOTYPE. Canada: Northwest Territories, NE Ellesmere I., S end of Dumbbell Bay at head of Parr Inlet, S of Alert, R.M. Schuster 35141 (CANM 5368).

Marchesinia trollii Herz., Annales Bryol. 5: 137. 1932.
ISOTYPE. Panama: Azuero, Cerro Canajaque, K. Troll, VERDOORN, HEP. SELECT. CRIT. 156 (CANM 10527).

Marsupella paroica Schust., Bryologist 60: 145. 1957.
PARATYPES. United States: Virginia, Smyth Co., near summit of White Top Mt., R.M. Schuster 38064; 38086 (CANM 5880; 5881); Virginia, Grayson Co., near summit of Mt. Rogers, R.M. Schuster 38005 (CANM 5883).

Marsupella pseudofunckii Hatt., J. Hattori Bot. Lab. 4: 63. 1950.
PARATYPE. Japan: Kyushu, Kumamoto, Hitoyoshi, K. Mayebara, HATTORI, HEP. JAP. 118 (CANM 5887; 10787).

Mastigolejeunea liukuensis var.
mayebarae Hatt., J. Jap. Bot.
26: 299. 1951.
PARATYPE. Japan: Kyushu, Kumamoto,
Isshoichi, K. Mayebara, HATTORI,
HEP. JAP. 140 (CANM 5959; 10790).
= *M. humilis* (Gott.) Schiffn.

Metzgeria conjugata Lindb., Soc. Sci.
Fennica 10: 495. 1875.
ISOTYPE. Ireland: Glena, S.O.
Lindberg, 22 July 1873 (CANM 6021).

Microlejeunea rotundistipula var.
pallida Hatt., J. Hattori Bot. Lab.
5: 53. 1951.
PARATYPE? Japan: Kyushu, Miyazaki,
Obi, S. Hattori & T. Kurata,
HATTORI, HEP. JAP. 84 (CANM 6184).
= *Lejeunea pallide-virens* Hatt.

Peltolepis quadrata var. **japonica**
Shim. & Hatt., J. Hattori Bot. Lab.
12: 69. 1954.
ISOTYPE. Japan: Nagano Co., Akadake
Peak of the Yatsu volcano,
D. Shimizu, HATTORI, HEP. JAP.
278 (CANM 6826; 10786).
= *P. japonica* (Shim. & Hatt.)
Hatt.

Plagiochila allorgei Herz. & H. Perss.,
Rev. Bryol. Lich. 14: 161. 1944.
ISOTYPE. Azores: S. Miguel, Furnas,
V. & P. ALLORGE, BRYOPHYTA AZORICA 18
(CANM 6851).

Plagiochila confundens var.
alpinoides Herz., Annales Bryol.
4: 126. 1930.
ISOTYPE? Panama: Peninsula Azuero,
Cerro Canajaque, K. Troll,
VERDOORN, HEP. SELECT. CRIT. 9 (CANM
10526).

Plagiochila echinata Schust., Amer.
Midland Natural. 62: 341. 1959.
PARATYPES. United States: South
Carolina, Pickens Co., near the
"Narrows" of Estateoe Creek gorge,
R.M. Schuster 37624; 37625 (CANM
7098; 7097).
= *P. euryphyllum* ssp.
echinata (Schust.) Inoue

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 Bot. Lab. 18: 18. 1957
 PARATYPES? United States: North
 Carolina, Columbus Co., 1.5 mi. E of
 Whiteville, R.M. Schuster 30045
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Whatcom Co., Mt. Baker National Forest,
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