

Type material in the moss herbarium of Samuel Elisée von Bridel, 1.

Author: Zippel, Elke

Source: Willdenowia, 36(2) : 913-935

Published By: Botanic Garden and Botanical Museum Berlin (BGBM)

URL: <https://doi.org/10.3372/wi.36.36222>

The BioOne Digital Library (<https://bioone.org/>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<https://bioone.org/subscribe>), the BioOne Complete Archive (<https://bioone.org/archive>), and the BioOne eBooks program offerings ESA eBook Collection (<https://bioone.org/esa-ebooks>) and CSIRO Publishing BioSelect Collection (<https://bioone.org/csiro-ebooks>).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

ELKE ZIPPEL

Type material in the moss herbarium of Samuel Elisée von Bridel, 1.

Abstract

Zipfel, E.: Type material in the moss herbarium of Samuel Elisée von Bridel, 1. – Willdenowia 36: 913-935. – ISSN 0511-9618; © 2006 BGBM Berlin-Dahlem.
doi:10.3372/wi.36.36222 (available via <http://dx.doi.org/>)

The herbarium of the Botanic Garden and Botanical Museum Berlin-Dahlem (B) contains as one of its historical collections the moss herbarium of Bridel (1762-1828). A list of the type material in the first 250 of 1006 folders (containing specimens of *Archidium*, *Bartramia*, *Bryum*, *Campylopus*, *Dicranum*, *Didymodon*, *Dryptodon*, *Encalypta*, *Grimmia*, *Gymnostomum*, *Hookeria*, *Hydropogon*, *Leucobryum*, *Leucophanes*, *Octoblepharum*, *Orthotrichum*, *Phascum*, *Racomitrium*, *Rottleria*, *Sa-proma*, *Schistidium*, *Sphagnum*, *Splachnum*, *Trichostomum*, *Ulota* and *Weissia*), i.e. 119 types of names published by Bridel and other authors, is presented with collection data, notes on the specimens and, if available, revision data. Lectotypes are designated for the names *Dryptodon carnosus*, *Gymnostomum rufescens*, *Orthotrichum floerkei*, *O. stramineum*, *Phascum megapolitanum*, *P. nepalense*, *Schistidium imberbe* var. *atrovirens*, *Sphagnum contortum*, *S. pentastichum* and *Trichostomum nigricans*.

Introduction

Samuel Elisée von Bridel[-Brideri], one of the foremost bryological leaders of his time, wrote two exceptionally important books on mosses: “Muscologia recentiorum”, which contains two volumes (Bridel 1797, 1801, 1803) as well as four supplements (Bridel 1806, 1812, 1817, 1822) and “Bryologia universa” (Bridel 1826, 1827). Bridel was born on 28 November 1762 in Crassier (Switzerland). He studied at the University of Lausanne and later went to Gotha (Thuringia, Germany), where he taught the sovereign’s children, princes August and Friedrich von Sachsen-Gotha. Bridel died on 7 January 1828 in Gotha.

The largest part of Bridel’s moss herbarium was acquired by the Botanical Museum Berlin (Hornschuch 1829). Fortunately, this collection was separated from the main herbarium during World War II and therefore escaped the destruction by an air raid in the night of 1-2 March 1943. The location of the other parts of his herbarium is unknown, but his written remains, consisting of 24 letters, some diaries and other personal documents, is kept at the Forschungsbibliothek Gotha Schloss Friedenstein in Thuringia, Germany (Hopf, in litt.).

The Bridel moss herbarium of the Botanic Garden and Botanical Museum Berlin-Dahlem (B) contains 1006 folders. Each folder holds between one and about thirty specimens. Some of the specimens, especially those of *Phascum* species, are minute and may consist of a single shoot. A number of folders contain a single species, but others may contain more than one species. The label data on the specimens are mostly very poor like in other collections of this time. At times Bridel wrote three or four names and synonyms on the labels, and it is sometimes difficult to determine which of the names Bridel considered correct. In addition, some of the labels contain notes from two or three other scientists, and as a result it can be very difficult or impossible to determine collector, collection locality, or collecting year. Furthermore it is difficult to determine for many specimens whether the date of the label represents the collecting date or the accession date, e.g., a specimen collected by La Pylaie in Newfoundland, bears the date 1925, but this represents the year Bridel got the specimen from the Paris museum, not the year it was collected. Many of the labels are marked "Bryol. Univ.", indicating that the specimens were used for Bridel's monumental work "Bryologia universa". The labels on these specimens at times contain the same collection data as is cited for those species in "Bryologia universa". The herbarium specimens are filed in the same order as they were treated in his publications, especially in "Bryologia universa".

In the process of entering the first quarter of the Bridel collection's data in Specify (a database application for biological collection acquisition and management, see <http://www.specifysoftware.org>) many partly unlabelled type specimens were identified. Since the protologue for these species in Bridel's publications agrees with the notes on the labels, most of these specimens represent holotypes (Art. 9 A4 of the International Code of Botanical Nomenclature, Greuter & al. 2004). The richness of the Bridel collection can also be seen in that it contains syntypes or isotypes of species described by many authors such as Arnott, Beauv, Bernhardt, Bory, Bruch, Funck, Green, Hedwig, Hooker, Hoppe, Hornschuch, Kaulfuss, Link, Mielichhofer, Müller, Nees von Esenbeck, Pylaie, Röhling, Schkuhr, Schleicher, Schrader, Schultz, Schwaegrichen, Smith, Swartz and Warnstorf.

In the following list the type specimens contained in the first 250 folders of the Bridel moss herbarium are documented. To make this list easier to use, the taxa are listed alphabetically. For each species the list contains: (1) the basionym along with a complete citation of its place of publication; (2) the presently accepted name of the species in bold face (according to Index Muscorum (Wijk & al. 1962, 1964, 1967, 1969) and other standard lists (Corley & al 1981, Crosby & al. 1983, Ignatov & Afonina 1992); (3) collection localities and collectors as given in the protologue; (4) the label data on the specimen; (5) the herbarium sheet number in square brackets; (6) additional notes as to the quality of the specimen or revisions in which the specimen has been cited. The list is not exhaustive, and since bryologists during Bridel's time actively exchanged specimens surely more type specimens will be discovered among these species in the collection not described by Bridel.

In the present paper very few lectotypes have been designated. Further lectotypifications should be the work of future monographers.

List of the types in the Bridel herbarium

Archidium phascoides Brid., Bryol. Univ. 1: 747. 1827, nom. illeg. $\equiv$ *Phascum globiferum* Bruch in Flora 8: 281. 1825

Type citation: Bridel: "In arvis campisque humidis argillosis arenosisque circa Bipontium Germaniae Transrhenanae copiose habitat, caespitosum. Clar. Bruchius detexit et humanissime communicavit." – Bruch: "In der Gegend um Zweibrück kommt diese ausdauernde Moosart nicht selten auf Äckern und öden Felder, sowohl auf sandigen, als thonigen etwas feuchten Böden vor."

Isotypes: [Germany, Rheinland Pfalz] "Bey Zweibrück auf Thonboden" [B 31 0017 01-1]; "Biponti in terra Bruch Sept. 1825 misit" [B 31 0017 01-2, under *Archidium phascoides*].

Notes: *Archidium phascoides* is the type of the generic name *Archidium* Brid.

$\equiv$ *Archidium alternifolium* (Hedw.) Schimp. (Snider 1975).

Barbula mucronata Brid. see *Racomitrium flavipes* Brid.

Bartramia pentasticha Brid., Muscol. Recent. 2(3): 134. 1803 ≡ *Conostomun pentastichum* (Brid.) Lindb. f.

Type citation: “In freto Magellanico, unde a Commersono relata est mihique a cel. Iussieu comunicata, habitat.”

Holotype: [Chile] “E freto Magellanico Commersony retulit. Paris 1797” [B 31 0115 01].

Bruchia vogesiaca Schwägr., Spec. Musc. Frond., Suppl. 2(2): 91. 1824 ≡ *Saproma vogesiacum* (Schwägr.) Brid., Muscol. Recent. 1: 52. 1826

Type citation: “In praeruptis frigidis nivosis montis Hoheneck et Kastelberg tract. Vogesorum ad terram in stercore vaccino. Mougeot, 24. Sept. 1822.”

Isotype: [France, Vosges] “Ex Mt Honeck Vogesor. 1822” [handwriting Mougeot?], “Ad terram madidam [unreadable] Mt Hohneck Vogesor ad 16. Sept 1822” [handwriting Bridel] [B 31 0043 01-1].

Notes: Five cushions with capsules. *Saproma vogesiacum* is the type of the generic name *Saproma* Brid.

Bryum turbinatum var. *minus* Hook. in Kunth, Syn. Pl.: 57. 1822 ≡ *Didymodon megalocarpus* Arn. in Mém. Soc. Linn. Paris 5: 266. 1827 ≡ *Splachnum turbinatum* Brid., Bryol. Univ. 1: 780. 1827, nom. illeg. ≡ *Haplodontium megalocarpum* (Arn.) Jaeg. (Koponen & Koponen 1978)

Type citation: Hooker: “Crescit in convallibus Andium Novo-Granatensium, inter Almaguer et Pasto, alt. 1200-1500 hex.” – Bridel: “In covallibus Andium Novo-Granatensium inter Almaguer et Pasto altitudine 1200-1500, hexapodum caespitose habitat. Clar. Humboldt & Bonpland detexerunt, Kunth communicavit.”

Isotype: [Columbia] “Kunthis misit 1825” [B 31 0187 01].

Notes: One small cushion with one sporophyte.

Bryum orthodontium P. Beauv. see *Octoblepharum serratum* Brid.

Campylopus caespiticius Brid., Muscol. Recent. Suppl. 4: 77. 1819 [1818] ≡ *Dryptodon caespiticius* (Brid.) Brid. ≡ *Grimmia caespiticia* (Brid.) Jur.

Type citation: “In Monte Sancti Bernhardi Helvetiae habitat, unde lectum accepi.”

Holotype: [Switzerland, St Bernhard] “Schl. St. Bernan” [B 31 0156 01-1].

Notes: Probably collected by Schleicher (“Schl.”); in the Bridel herbarium filed under *Dryptodon caespiticius*.

Campylopus cirrhatus Brid., Bryol. Univ. 1: 479. 1826

Type citation: “In Alpihus Carinthiacis habitat ubi clar. Hornschuchias cum *Dicrano gracilescence* commixtum legit, et communicavit.”

Holotype: [Austria, Carinthia] “In Alpihus Carinthiacis cum *Dicrano gracilescence* leg. Hornschuch 1819” [B 31 0158 01-2].

= *Cynodontium gracilescens* (Web & Mohr) Schimp. (Frahm 1999).

Campylopus curvifolius Brid., Muscol. Recent. Suppl. 4: 78. 1819 [1818]

Type citation: “E Silesiâ sub nomine *Grimmia geniculata* missum accepi. Seliger invenit.”

Lectotype (designated by Muñoz & Pando 2000: 86): [Czech Republic] “E comitatu Gletziensi. Seliger 1802” [B 31 0157 01].

Notes: One small shoot with one sporophyte; specimen revised as *Didymodon rigidulus* Hedw. by Allen, confirm. Zander, confirm. Muñoz & Pando.

= *Didymodon rigidulus* Hedw. (Muñoz & Pando 2000).

Campylopus laevigatus Brid., Muscol. Recent. Suppl. 4: 76. 1819 [1818] ≡ *Grimmia laevigata* (Brid.) Brid.

Type citation: “In Tyrole Italico, item circa Romam, Neapolin et in Insulâ Ischiâ in rupibus apicis 1806 abunde legit.”

Lectotype (designated by Cao & Vitt 1986: 181): [Italy] “Italia. Roma. Napoli. Ischia. 1806” [B 31 0142 01]; paralectotype: [Italy, Alps]. “In Tyrole Italico. Februar 1806” [B 31 0142 02-1].

Notes: Perhaps each of the three rows of glued lectotype specimens corresponds to one collection place (Geissler & Maier 1995).

Campylopus squalidus Brid., Muscol. Recent. Suppl. 4: 77. 1819 [1818] ≡ *Racomitrium lanuginosum* subsp. *squalidum* (Brid.) Brid. (Frahm 1999)

Type citation: “Inter muscos ex Insulâ Borboniâ adlatos neglectum inveni.”

Holotype: [Réunion] “Ile de Bourbon Bory d’ St Vincent 1803” [B 31 0170 01-1].

= *Racomitrium lanuginosum* (Hedw.) Brid. (Vitt & Marsh 1988).

Conostomum boreale Sw. in Neues J. Bot. 1(3): 26. 1806

Type citation: “In alpinum Lapponiae Tornesis locis irriguis Wahlenberg; inque alpius scoticis, Ben Lammond: Dickson.”

Isotype?: [Lapland] “E Lapponica” [handwriting not Bridel] [B 31 0114 01-1].

= *Conostemon tetragonum* (Hedw.) Lindb.

Dryptodon brevifolius Brid., Bryol. Univ. 1: 775. 1827

Type citation: “In Helvetiâ habitat ubi Schleicher in rupibus detexit.”

Lectotype (designated by Muñoz 1999: 144): “Schleicher Herb. Candolle” [B 31 0163 01 1].

= *Grimmia laevigata* (Brid.) Brid. (Muñoz 1999).

Dryptodon carnosus Brid., Bryol. Univ. 1: 206. 1826

Type citation: “In Britannîâ habitat unde amicus Green misit.”

Lectotype (designated here): [United Kingdom] “*Dryptodon/Trichostomum carnosus* Dicks. Mellibi? Dicks” [B 31 0162 01-1].

Notes: Ten small shoots. Bridel (1826) cited this specimen as “*Trichostomum carnosum* Dicks. Green in litt.”

= *Racomitrium heterostichum* (Hedw.) Brid. (Frisvoll 1988).

Dryptodon schultzei Brid., Bryol. Univ. 1: 199. 1826, nom. illeg. ≡ *Trichostomum decipiens* Schulz, Prodr. Fl. Stargard. Suppl.: 70. 1819 ≡ *Grimmia decipiens* (Schulz) Lindb.

Type citation: Bridel: “In saxis graniticis ad viam regiam prope pagum Geveziehn Stargardiensis ditionis habitat. Clar. Schultzeus detexit.” – Schulz: “Ad pagum Gevezien an der Landstrasse”.

Isolectotype (the lectotype, designated by Geissler & Maier 1995: 499, is at G, another isolectotype is at H-Sol): [Germany, Mecklenburg-Vorpommern] “Schultzeus misit 1819” [B 31 0155 01-1].

Notes: Two small samples.

Encalypta cylindrica Funck ex Nees & al., Bryol. Germ. 2(1): 52. Apr 1827 ≡ *Encalypta cylindrica* Funck ex Brid., Bryol. Univ. Suppl. 1: 767. Nov 1827

Type citation: Bridel: “In Witschthal, Alpinum Tyrolensium caespitose habitat. Clar. Funckius detector communicavit.” – Nees & al.: “Wurde im Sommer 1825 von Herrn Funck im Witschthal in Tyrol entdeckt, wo sie den, uns von dem Entdecker gütigst mitgetheilten Exemplaren zufolge, auf sehr lockerer, schwarzer Dammerde wächst.”

Lectotype (designated by Horton 1983: 464): [Alps] “Witschthal Funk 1826” [B 31 0107 01].

= *Encalypta affinis* Hedw. f. subsp. *affinis* (Horton 1983).

Encalypta elongata Funck ex Brid., Bryol. Univ. 1: 767. 1827 ≡ *Encalypta fimbriata* var. *elongata* Brid., Bryol. Univ. 1: 767. 1827

Type citation: “Prope St Gertrud in Martell-Thal Tyrolis. Funck.”

Holotype: [Italy, South Tyrol] “Bey St Gertrud in Martell” [handwriting Funck] “Funck 1826” [handwriting Bridel] [B 31 0112 01].

= *Encalypta affinis* Hedw. f. subsp. *affinis* (Horton 1983).

Encalypta obtusifolia Funck ex Brid., Bryol. Univ. 1: 766. 1827

Type citation: “In Tyrolis montibus Schlerngebirg dictis prope Botzen caespitose habitat. Clar. Funck detexit et communicavit.”

Holotype: [Italy, South Tyrol] “Schlerngebirg bey Botzen. Jul. 25. Funck” [B 31 0105 01-1].

Notes: Two cushions with capsules.

= *Encalypta rhyptocarpa* Schwägr. s.lat. (Horton unpubl.).

Encalypta vulgaris var. *mutica* Brid., Muscol. Recent. Suppl. 4: 28. 1819 [1818]

Type citation: “In Sylva prope Fontainebleau legi.”

Holotype: [France, Île-de-France] “Prope Fontainebleau cum *Weissia curvirostre*. Okt. 1807” [B 31 0106 02-1].

Notes: Five sterile shoots; specimen revised as *Encalypta* cf. *streptocarpa* Hedw. (Horton unpubl.).

Grimmia affinis Hornsch. in Flora 2: 443. 1819

Type citation: “Auf Felsenblöcken der Tauernkette und an diese angrenzender Gebirge in Gesellschaft mit *Gr. incurva* Schwaegr., *Gr. obliqua* mihi und *Gr. ovata*.”

Lectotype (designated by Deguchi 1979: 158): [Austria] “*Grimmia affinis* nobis. Windischmattreyer Tauern” [handwriting Hornschuch] [B 31 0135 01-1].

Notes: *Grimmia affinis* is accepted by many authors (e.g. Cao & Vitt 1986).

= *Grimmia longirostris* Hook. (Muñoz 1998a, Muñoz & Pando 2000).

Grimmia alpicola Hedw., Spec. Musc. Frond.: 77. 1801, nom. rej.

Type citation: “Suevica. O. Swartz. In saxis, ad rivulos alpinus.”

Isotype: [Sweden] “Ipse Swarzius misit” [B 31 0121 01-1].

Notes: Holotype in G; specimen revised as *Schistidium agassizii* Sull. & Ledw. (Blom, Ochyra, both unpubl.).

= *Schistidium agassizii* Sull. & Ledw.

Grimmia apiculata Hornsch. in Flora 2: 85, corr. 443. 1819

Type citation: “In kleinen polsterförmigen Rasen an etwas feuchten Felsenwänden der Messerlingwand auf dem Windischmattreyer Tauern.”

Lectotype (designated by Deguchi 1979: 159): [Austria] “Windischmattreyer Tauern” [handwriting Hornschuch]. “Hornschuch misit 1819” [handwriting Bridel] [B 31 0144 01-1].

Notes: Isolectotype in H-SOL; see also Cao & Vitt (1986).

= *Grimmia fuscolutea* Hook. (Muñoz 1999).

Grimmia atrata Miel. ex Hornsch. in Flora 2: 85. 1819

Type citation: “An Felsen bei der Grube Schwarzwand in der Grosarl.”

Lectotype (designated by Deguchi 1979: 170): [Austria, Styria] “Grosarl. Hornschuch misit 1819” [B 31 0142 03-1].

Notes: Isolectotype in F.

Grimmia crinita Brid., Muscol. Recent. Suppl. 1: 95. 1806, nom. conserv. prop. (Muñoz 2000)

Type citation: “In totâ Europâ Australiori habitat miseram vitam in aridis degens. In Pago Vaudensi ad muros Lausannae legi, Roger Neoduni, praeterea in Valle-Clausâ Gallo-Priuinciae, Massiliae, in Occitania et Catalonia ad muros saxaque copiose reperi.”

Lectotype (designated by Geissler & Maier 1995: 499): [Switzerland] “Avril 02. Roger” [B 31 0119 01-5]; paralectotypes: [Switzerland] “Lausanne” [B 31 0119 01-3], [France, Marseille] “Muri de Marseille. Avril 1802” [B 31 0119 03-1].

Grimmia donniana var. *bohemica* Brid., Bryol. Univ. 1: 176. 1826

Type citation: “In Sudetis. Ludw.”

Lectotype (designated by Muñoz 1998b: 379): [Europe, Sudetic Mountains] “*Grimmia donniana* Schku. Ludwigius dedet. 1812. Circa der Schneekoppe Sudetum” [B 31 0133 02-2].

= *Grimmia donniana* Sm. (Muñoz 1998b).

Grimmia elongata Kaulf. in Sturm, Deutschl. Fl., Abth. II, Cryptog. 15: [14] ic. 1816

Type citation: "Im August 1812 auf der Seethaler Alpe in Steyermark in Steinritzen mit reifen Früchten, leg. Kaulfuss."

Lectotype (designated by Geissler & Maier 1995: 500): [Austria, Styria] "In Alpibus Styriae. Kaulfuss. 1824" [B 31 0136 01-1].

Grimmia ericoides Pyl. ex Brid., Bryol. Univ. 1: 768. 1827

Type citation: "In calcareis insulae Terre Neuve caespitibus densis amorphis habitat. Clar. La Pylaie detexit nosque illâ donavit."

Lectotype (designated by Frisvoll 1988: 147): [Canada, Newfoundland] "Terre Neuve, La Pylaie 1825" [B 31 0125 01, the first 5 shoots].

Notes: The herbarium sheet contains six shoots. The first five shoots belong to *Raeomitrium microcarpon* (Hedw.) Brid. (= *Grimmia ericoides* Brid.), the sixth to *R. fasciculare* (Hedw.) Brid. (Frisvoll 1988).

= ***Racomitrium microcarpon*** (Hedw.) Brid. (Frisvoll 1988).

Grimmia helvetica Schkuhr, Deutschl. Kryptog. Gew. 2(2): 48. 1811

Type citation: "Habitat in Helvetia. Dieses Moos erhielt ich von Schleicher aus der Schweiz."

Isotype: [Switzerland] "Schkuhr 1806" [B 31 0121 01-2].

Notes: Revised as *Schistidium singarense* (Schiffn.) Lazarenko (Blom 1996) and as *Schistidium helveticum* (Schkuhr) H. Deguchi (Ochyra unpubl.).

Grimmia incurva Schwägr., Spec. Musc. Frond., Suppl. 1(1): 90. 1811

Type citation: "Legi in summibus alpibus Carinthiae, Glockner alisque similibus primaevae, in Sudetum fossis nivalibus sterilem observavit C. Ludwig."

Paralectotype: [Europe, Sudetic Mountains] "Ludwigius dedet 1911. In fossis nivalibus Sude-tum" [B 31 0143 01-2].

Notes: The lectotype, designated by Deguchi (1979: 190), is in G.

Grimmia latifolia Brid., Bryol. Univ. 1: 162. 1826 [non (Schwägr.) F. Weber & D. Mohr, Bot. Taschenb.: 147. 1807]

Type citation: "In Americâ septemtrionali prope Noveboracum, unde D. Torrey misit, habitat."

Holotype: [USA] "Torrey New York 1820" [B 31 0117 01].

Notes: Revised as *Schistidium confertum* (Funck) Bruch & Schimp. (Deguchi 1979) and as *S. viride* Blom. nom. prov. (Blom unpubl.).

Grimmia longirostris Hook., Musci Exot. 1: 62. 1818

Type citation: "Locis scopulosis, apricis, in declivitate montis Chimborazo, altid. 2380 hexapod., siper porphyrite. (Regnum Quitense.) Humboldt & Bonpland."

Isolectotype?: "H B. Hbr., Synops" [B 31 0139 01-1].

Notes: Bridel (1826) cited this specimen: "In saxis porphyriticis Montis Chimborazo altitudine 2380. Hexapodum dense caespitosa habitat. Humboldt & Bonpland detexerunt."

Note: The lectotype, designated by Deguchi (1984: 21), is at BM.

Grimmia patens Hornsch. in Flora 2: 84. 1819

Type citation: "Ist von unserem Freunde, Herrn Apotheker Funck, auf dem Fichtelgebirge gefunden und in vielen seiner Hefte als *G. ovata* ausgegeben worden."

Isolectotype? (lectotype, designated by Muñoz & Pando 2000: 43, in GOET, another isolectotype in JE): Label without citation of location ("*Grimmia patens* Hornsch, *Grimmia ovata* Funck.") [B 31 0137 01-1].

Notes: Bridel (1826) cited this specimen: "In monte pinifero Franconiae ad rupes caespitose habitat. Clar. Funckius detexit, ac cum *G. ovata* commutasse videtur."

= ***Grimmia longirostris*** Hook. (Muñoz & Pando 2000).

Grimmia pilifera P. Beauv., Prodr. Aethéogam.: 58. 1805

Type citation: “Les Etats-Unis d’Amerique.”

Lectotype (designated by Muñoz & Zippel 2006: 560): [USA] “America borealis, Palisot Beauvois” [B 31 0130 01-1].

Notes: Bridel (1822) wrote about the occurrences of the species “In Americae Foederatae provinciis plurimis ad rupes caespitibus densis vivit. Palisot-Beauvois inde retulit et communicavit.”

Grimmia rigida Brid., Bryol. Univ. 1: 768. 1827

Type citation: “In insulâ Terre Neuve in saxis et glareosis caespitose habitat. La Pylaie detexit et communicavit.”

Holotype: [Canada, Newfoundland] “Terre Neuve. La Pylaie” [B 31 0126 01-1].

Notes: The collection is mixed with *Orthotrichum* sp.

= *Schistidium maritimum* (Turner) Bruch & Schimp. (Deguchi 1979).

Grimmia rivularis Brid. in J. Bot. 1800(1): 276. 1801 ≡ *Schistidium rivulare* (Brid.) Podp.

Type citation: “quam ad Thuringici saltus rivulos frigidos, ex. gr. prope Klein-Schmalkalden, saxis aqua roridis adhaerentem imo et in aqua fluitantem reperi.”

Holotype: [Germany, Thuringia] “Prope Klein-Schmalkalden, ad saxa rivulorum” [unreadable] “Augusto 1799” [B 31 0122 01-3].

Grimmia strigosa Brid., Bryol. Univ. 1: 171. 1826

Type citation: “In Alpibus valesiacis in rupibus habitat. Thomas anno 1820 aestate detexit.”

Lectotype (designated by Bednarek-Ochyra 2003: 434): [Switzerland, Wallis, or France, Alpes de Savoie] “Thomas in Valesia et Sabaudia” [B 31 0128 01-7, see Fig. 1]; isolectotypes: [B 31 0128 01-2 to B 31 0128 01-6].

Notes: The herbarium sheet contains seven shoots, numbered 1-7. The first, slightly branched shoot, B 31 0128 01-1, was designated by Deguchi (1979) as lectotype [“holotype”] of the name *Grimmia strigosa* Brid., which he synonymized with *Schistidium gracile* (Roehl.) Limpr., whereas shoots 2-7 [B 31 0128 01-2-6] he determined as *Racomitrium heterostichum* Hedw. In contrast, Bednarek-Ochyra (2003), as did Blom (1996), identified B 31 0128 01-1 as *S. papillosum* Culm, and the other, more robust and more branched shoots, B 31 0128 01-2-7, as *G. strigosa*, selecting B 31 0128 01-7 as lectotype of that name, which she placed in the synonymy of *R. microcarpon* (Hedw.) Brid. Earlier Blom (1996) had identified B 31 0128 01-2-7 as *R. affine* (Web. & Mohr) Lindb.

= *Racomitrium microcarpon* (Hedw.) Brid. (Blom 1996, Bednarek-Ochyra 2003).

Grimmia trichodon Brid., Bryol. Univ. 1: 171. 1826 ≡ *Schistidium trichodon* (Brid.) Poelt

Type citation: “In Alpibus italicis et in Apenninis aestate 1820 cum thecis deoperculatis legimus.”

Holotype: [Italy, Italy Alps or Apennin] “In Alpibus italicis et Apenninis März 1820 legit” [B 31 0127 01-1].

Gymnostomum bartramioides Brid., Bryol. Univ. 1: 79. 1826

Type citation: “In rupibus madidi Tyrolis, ubi in der Messerlingwand auf dem Windischmattreyer Tauern, Hornschuchius detexit, et Helvetia ubi nuperius Schleicher legit dense caespitose habitat.”

Syntypes: [Austria, Carinthia] “Kärthner Alpen. 1. Hornschuch misit. 1819” [B 31 0068 03-1]. Kärthner und Tiroler Alpen. 2 [B 31 0068 03-2].

= *Bartramia compacta* Hornsch.

Gymnostomum calcareum Nees & Hornsch., Bryol. Germ. 1: 153. 1823

Type citation: “Wächst auf Kalksteinbrecchie des Ofenlochberges bey Salzburg (Funk! Hsch. Schnitzlein!), und auf demselben Gestein in der Gegend von München (v. Martius! Hsch.).”

Isotype: [Germany, Bavaria]. “An den Nagelfluhwänden bei München an der Isar” [B 31 0052 01-3].

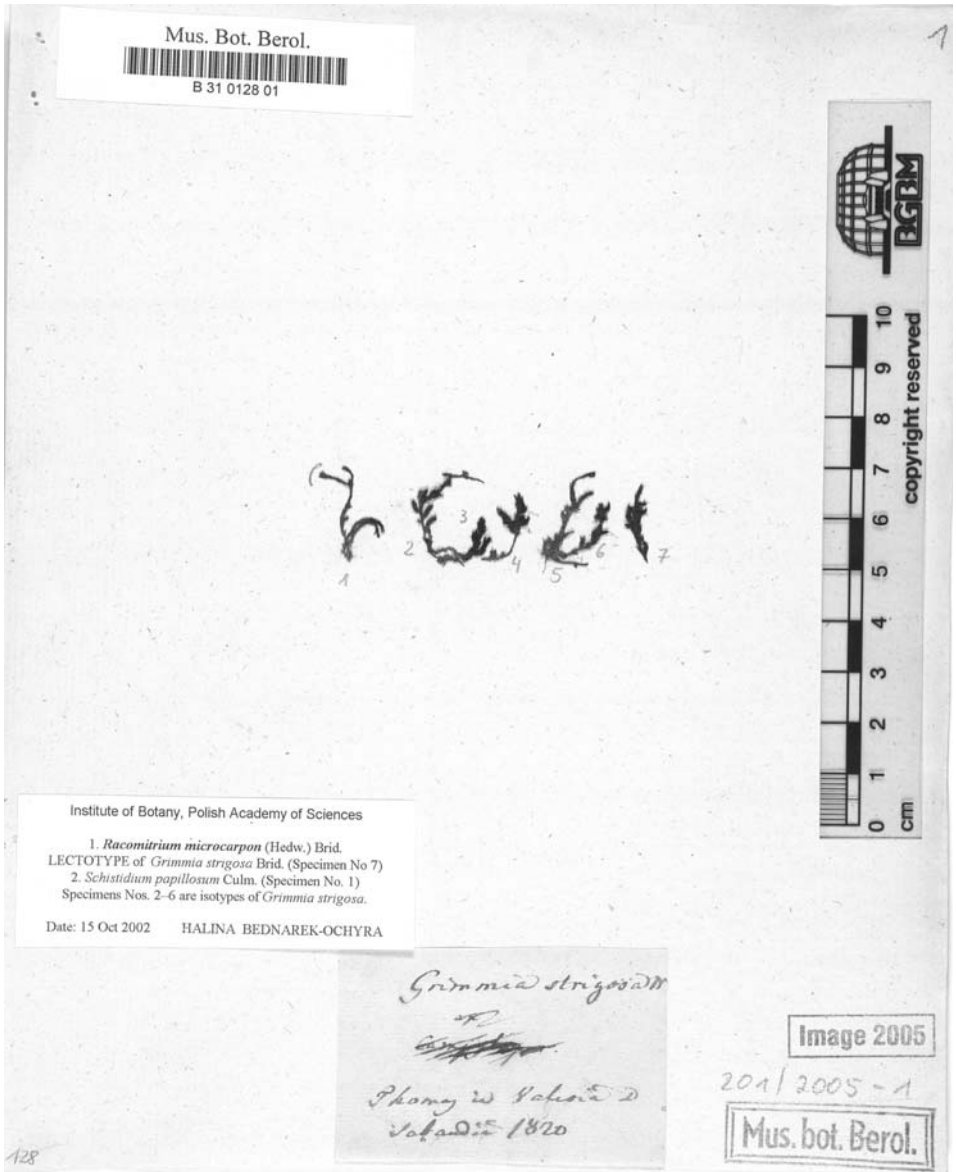


Fig. 1. Lectotype of *Grimmia strigosa* Brid.

Gymnostomum curvirostrum Brid. in J. Bot. 1800(1): 273. 1801, nom. illeg.

Type citation: "In Alpibus Salisburgensibus Flörkius etiam legit."

Holotype: [Austria, Salzburg] "Salzburger Gebirge. Flörke 1800" [B 31 0074 05-1].

= *Hymenostylium recurvirostre* (Hedw.) Dixon (Zander 1977).

Gymnostomum cuspidatum Röhl. in Ann. Wetterauischen Ges. Gesamnte Naturk. 2(1): 130. 1810

Type citation: "Von diesem Moos habe ich nur einige Exemplare von mir. Ich fand es in der Folge unter einem bei Braubach aufgenommenen vermischten Haufen, und kann daher auch über

den Wohnort, so wie über manches andere, das sich am besten an Ort und Stelle erkennen lässt, keine Auskunft geben.”

Isotype?: Röhling. No. 10 [B 31 0080 01-1].

Notes: One small sample. Bridel (1822) cited the type specimen, therefore this specimen is probably original material.

= *Tortula truncata* (Hedw.) Mitt.

Gymnostomum erythrostomum Brid., Bryol. Univ. 1: 84. 1826

Type citation: “In Helvetiae et Sabaudiae Alpibus editoribus Thomas 1820 detexit.”

Holotype?: [France] “Savoie” [B 31 0073 01-2].

Notes: This is the only one of four *Gymnostomum erythrostomum* specimens corresponding with the protologue.

= *Gymnostomum aeruginosum* Sm.

Gymnostomum flaccidum Brid., Muscol. Recent. Suppl. 4: 20. 1819 [1818]

Type citation: description without notes to location or habitat, “Species distincta, genus obscurum.”

Original material: In patria quod sit ignota [B 31 0081 01-1].

= *Bryum atrovirens* Brid.

Gymnostomum homomallum Brid., Bryol. Univ. 1: 757. 1827

Type citation: “Circa Dax ad terram ceasptosum legit D. Grateloup; clar. Candolleus communicavit.”

Holotype: [France, Aquitaine, Dax] “Grateloup Herb. Cand. Dez. 1825” [B 31 0056 01].

Notes: Revised by C. Müller as *Leptotrichum homomallum* (Hedw.) Hampe.

= *Ditrichum heteromallum* (Hedw.) E. Britton

Gymnostomum irretitum Brid., Bryol. Univ. 1: 758. 1827

Type citation: “Circa Monspezzulanum in terrâ udiusculâ anno 1802 legissimus caespitibus valde compactis et radicularum copiosissimarum intertextarum congerie stuposus.”

Holotype: [France, Languedoc-Roussillon, Montpellier] “Circa Monspezzulanum in terrâ. 1802” [B 31 0063 01].

Notes: One small cushion; specimen revised by someone unknown as *Weissia reflexa* Brid.

= *Gyroweisia reflexa* (Brid.) Schimp.

Gymnostomum leptostomum Brid., Bryol. Univ. 1: 758. 1827, nom. illeg. [non Hook., Musci Exotici 2: 169. 1820]

Type citation: “In insulâ Madagascar, unde relatum clar. Desvaux communicavit, caespitose habitat.”

Holotype: “Madagascar. Desvaux. 1825” [B 31 0064 01].

Notes: Only on shoot with two capsules.

= *Leptostomum erectum* R. Br.

Gymnostomum pallidisetum Nees & Hornsch., Bryol. Germ. 1: 166. 1823

Type citation: “Wächst bey Heiligenblut in Oberkärnthen auf Glimmerschieferfelsen, die von dem Wasserdunst des herrlichen Gösaitzstalles unaufhörlich benetzt werden, auch an ähnlichen Orten bey dem Leiterbachfall (Bauernsprung) daselbst (Hsch.), auf der Schweidecker Alpe (v. Martius!).”

Isotype(?): [Austria, Carinthia] “Gösnitzwasserfall bei Heiligenblut” [handwriting Hornschuch], “Heilig Blut in Carinthiae. Hornschuch misit 1819” [handwriting Bridel] [B 31 0072 02-4].

Gymnostomum reflexum Brid., Bryol. Univ. 1: 63. 1826

Type citation: “Circa Romam in terrâ nudâ habitat.”

Holotypus: [Italy] “Schleich. Roma 1806” [B 31 0050 01].

Notes: Well preserved specimen with capsules. Revised by C. Müller as *Pottia minutula*.

= *Pottia davalliana* (Sm.) C. E. O. Jensen

Gymnostomum rufescens Schultz, Prodr. Fl. Stargard.: 278. 1806

Type citation: "Prope Neubrandenburg gleich hinter der Krappmühle am Wege nach Woggersin."
Lectotype (designated here): [Germany, Mecklenburg-Vorpommern] "Flor. Stargard" [handwriting Schultz] [B 31 0048 01].

Notes: Some minute shoots with capsules. Type not in ROST, where the herbarium of Schultz is deposited (Nauenburg, in litt.).

Gymnostomum rupestre Schleich. ex Schwägr., Spec. Musc. Frond., Suppl. 1(1): 31. 1811

Type citation: "In Helvetia valle Servan legit Schleicher."

Isotypes(?): [Switzerland] "Ex Helvetia Schleicher" [B 31 0066 01-2], "Schleicher ex Helvetia" [B 31 0066 01-3].

= *Gymnostomum aeruginosum* Sm.

Gymnostomum sepincola Funck, Cryptog. Gew. Fichtelgeb. 28: 1. 1822

Type citation: "Unter Hecken bei Gefrees. Mart.

Isotype: [Germany, Bavaria] "Funck prope Gefrees. 1822" [B 31 0062 01].

Notes: Small sample, some shoots with capsules. Holotype in M.

= *Hymenostomum microstomum* var. *obliquum* (Nees & Hornsch.) Huebener

Gymnostomum subsessile Brid., Muscol. Recent. Suppl. 1: 35. 1806 ≡ *Pterygoneurum subsessile* (Brid.) Jur.

Type citation: "Circa Jenam in solo argillaceo nudo terra fere prosus sepultum habitat."

Syntypes: [Germany] "Jena. Erfurt. forte Göttingen. 1800" [B 31 0091 01-1], "Jena. März 1798" [B 31 0091 01-4].

Notes: Type of the generic name *Schistidium* Brid., Muscol. Recent. Suppl. 4: 20. 1819 [1818].

Gymnostomum tetragonum Brid., Muscol. Recent. Suppl. 1: 270. 1806 ≡ *Pyramidula tetragona* (Brid.) Brid.

Type citation: "Prope Gotham in septem Stagnorum vivinia in arvis Mense Octobri 1805 primus legi; inde amicus Plaubel in totâ suburbicâ regione abunde reperit."

Holotype: [Germany, Sachsen-Anhalt] "Gotha in arvis" [B 31 0089 01-1].

Notes: Type of the generic name *Pyramidula* Brid., Muscol. Recent. Suppl. 4: 20. 1819 [1818].

Gymnostomum tortipes Brid., Bryol. Univ. 1: 100. 1826

Type citation: "In Americâ septemtrionali circa Philadelphiam habitat. Clar. Bernhardi communicavit."

Holotype: [USA] "Americi septemtrionali circa Philadelphia, Bernhardi 1822" [B 31 0085 01].

= *Physcomitrium pyriforme* (Hedw.) Hampe (Smith 1994).

Gymnostomum truncatulum var. *solivagum* Brid., Bryol. Univ. 1: 69. 1826

Type citation: "In ericetis Plumstead Cantiae et Hampstead prope Londinum solitarie degens legit amicissimus Green et communicavit."

Holotype: [UK] "Ex Anglia misit Green 1821" [B 31 0057 07].

Gymnostomum viridulum Brid., Bryol. Univ. 1: 66. 1826

Type citation: "In Galline australis glareosis habitat. Gratveloup detexit; clar. De Candolle communicavit."

Holotype: [France] "D. Grateloup. DeCandolle misit 1822. DC. no 28" [B 31 0053 01] – Fig. 2.

Notes: Two small cushions and one little shoot, which were revised by Zander (unpubl.) as two different species, *Gymnostomum mosis* (Lorentz) Jur. & Milde and *G. calcareum* Nees & Hornsch. Whitehouse & Crundwell (1991) regard all material of the sheet as the same species: "currently known as *Gymnostomum luisierei* (Sérgio) Sérgio ex Crundw., but *Gymnostomum viridulum* has priority."

Hookeria splachnoides Schleich. ex Schwägr., Spec. Musc. Frond. Suppl. 1(2): 340. 1816 ≡ *Tayloria splachnoides* (Schwägr.) Hook.

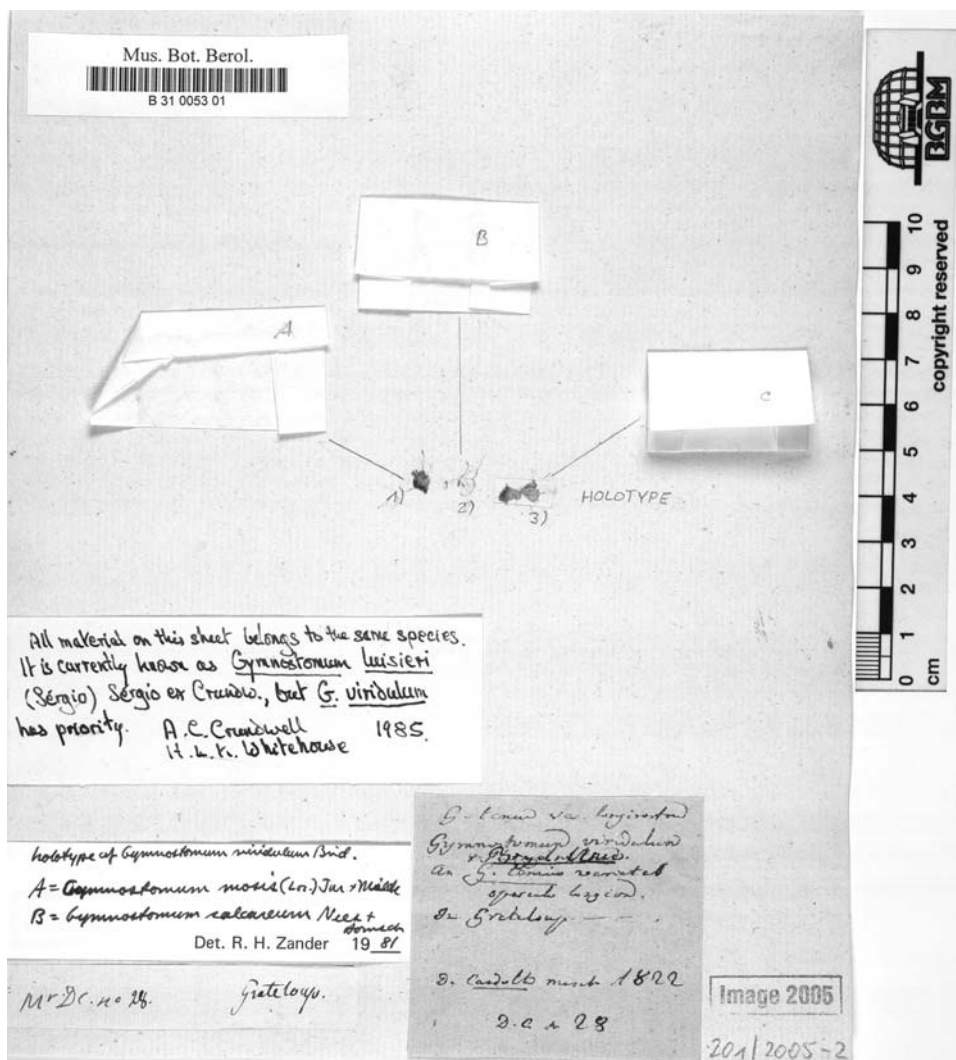


Fig. 2. Holotype of *Gymnostomum viridulum* Brid. – small label left from Grateloup, label right from Bridel.

Type citation: “Legit in Helvetia Schleicher, in Tyroli australi D. Lehmann, Hafniensis.”

Isotype(?): [Switzerland] "Schweizer Alpen. Schleicher detexit. 1816" [B 31 0203 01-5].

Leucobryum boryanum Besch. in Ann. Sci. Nat., Bot., ser. 6, 9: 335. 1880

Type citation: "La Réunion: Lieux frais de la plaine des Chicots, en touffes épaisses, molles et stériles, Bory (hb. Cosson.); Frappier (hb. Mus. Par.); plaine des FougPres, avril 1839, Lépervanche (hb. Thuret)."

Isosyntype(?): [Réunion] “Bourbon” [B 31 0016 01-1].

Notes: Deposited under *Sphagnum javense*. See also notes to *S. iridans* Brid.

= *Leucobryum javense* (Brid.) Mitt.

Leucophanes fragile Brid., Bryol. Univ. 1: 765. 1827

Type citation: "In insula Australiae Ualan ad terram caespitose habitat."

Holotype: [Australia, Ouallan] “In insula Ualan. Dumont d’Urville. Paris 1826” [B 31 0103 01-1]. = *Syrrhopodon involutus* Schwägr. (Reese & Stone 1995).

Leucophanes octoblepharioides Brid., Bryol. Univ. 1: 763. 1827

Type citation: “In insula Java unde clariss. Nees v. Esenbeck habuit et humanissime in usum communicavit, et in regione Nepal Indiae ex Herbario Candolleano caespitose ad terram habitat.”

Lectotype (designated by Salazar Allen 1993: 62): [Indonesia] “Java” [B 31 00101 01-2]; paralectotype: “Ex Herbar Candolle” [B 31 00101 01-1].

Notes: Type of the generic name *Leucophanes* Brid., Bryol. Univ. 1: 763. 1827. Isolectotype at BM in herb. Nees.

Leucophanes squarrosus Brid., Bryol. Univ. 1: 764. 1827

Type citation: “In Insula Amboine unde clar. Dumont d’Urville retulit et communicavit caespitose ad terram habitat.”

Holotype: [Indonesia, Moluccas, Ile d’Amboine] “Dumont d’Urville. Paris 1825” [B 31 0100 01]. = *Leucophanes candidum* (Schwägr.) Lindb. (Salazar Allen 1993).

Octoblepharum albidum Hedw., Spec. Musc. Frond.: 50. 1801

Type citation: “E Providentiae insula acceperat Dillenius, Swartz in Jamaica.”

Original material(?): “In Insula Providentiae. Sprengel” [B 31 00100 01-2].

Octoblepharum serratum Brid., Muscol. Recent. Suppl. 1: 86. 1806, nom. illeg. ≡ *Orthodon serratus* Bory in Schwägrichen, Spec. Musc. Frond., Suppl. 2(1): 23, pl. 106. 1823, nom. illeg. ≡ *Bryum orthodontum* P. Beauv., Prodr. Aethéogam.: 48. 1805 ≡ *Tayloria orthodonta* (P. Beauv.) Demav.

Type citation: Bridel: “In Insula Bourbon ad terram humidam prope truncos auersos habitat. Stirps elegantissima rarius occurens, quam Bory de St Vincent detexit, et amice communicavit.” – Bory: “In insula Borboniae lectum dedit cl. Richard; in Indiae regno Nepal prope Narram Hetty lectum; miserunt Hookerus & Taylor.” – Beauvois: “rapportee de l’île de Bourbon, par M. Bory-St-Vincnet”.

Isotype: [Réunion] “Ile de Bourbon ad terram. Bory de St Vincent” [B 31 0181 01].

Notes: *Orthodon serratus* is the type of the generic name *Orthodon* R. Br.

Orthodon serratus Bory see *Octoblepharum serratum* Brid.

Orthotrichum commutatum Bruch, Bryol. Univ. 1: 784. 1827

Type citation: “In rupibus quarziosis humidis in rivulorum viciniis prope Bipontium clar. Bruchius detexit et communicavit. Nos autem jam anno 1820 in lapidicinis calcareis ad Sylvam Kraneberg prope Gotham legimus, at pro merâ Orthotrichi anomaly varietate habuimus.”

Holotype: [Germany, Rheinland-Pfalz] “Auf nassen Quarzbrocken in der Nähe kleiner Bäche. Zweybrück” [B 31 0213 01-2].

Notes: Revised by D. H. Vitt 1970 as *Orthotrichum cupulatum* var. *rudolphinum*. = *Orthotrichum cupulatum* Hoffm. ex Brid. (Vitt 1973).

Orthotrichum confertum Bruch, Bryol. Univ. 1: 783. 1827

Type citation: “Ad rupes vallis fluvio Nahe irrigatae ubi clar. Bruch detexit, et in saxis Mandelstein Germanis dictis ubi clar. Funck legit, caespitibus pulvinatis densissimis habitat.”

Lectotype (designated by Vitt 1973: 125): [Germany, Rheinland-Pfalz] “Felsen in dem Nahethale” [B 31 0208 01-1].

= *Orthotrichum cupulatum* Hoffm. ex Brid. (Vitt 1973).

Orthotrichum curvatum Brid., Bryol. Univ. 1: 791. 1827 ≡ *Grimmia curvata* (Brid.) De Sloover

Type citation: “In Insulâ Terre Neuve habitat.”

Holotype: [Canada, Newfoundland] “Terre Neuve. La Pylaie. Paris 1825” [B 31 0244 01-1,2+4].

Notes: This sheet contains six shoots with one label from Bridel. Shoots 1-4 were revised by C. Downloaded From: <https://complete.bioone.org/journals/Willdenowia> on 22 May 2025

Müller (unpubl.) as *Grimmia patens* Br. Sch., and shoots 5-6 as *Orthotrichum pylaisei*. According to Muñoz (unpubl.) only the shoots 1, 2 + 4 belong to the holotype of *O. curvatum* and shoot 3 is *Schistidium gracile* (Roehl.) Limpr. See also Vitt (1973) and Deguchi (1979).
= *Grimmia ramondii* (Lam. & DC.) Margad. [= *Grimmia patens* (Hedw.) Bruch & Schimp. ≡ *Racomitrium patens* (Hedw.) Huebener] (see Muñoz & Pando 2000).

Orthotrichum diaphanum Schrad. ex Brid., Muscol. Recent. 2(2): 29. 1801

Type citation: “Prope Goettingam et in Ducatu Brunswicensi ad arborum truncos asseresque fastigiatim haitat, e Schraderi detectum, nec alibi, quod sciam, hucusque tectum. Amice Persoon benigne communicavit.”

Lectotype (designated by Vitt 1973: 174): [Germany, Niedersachsen]. “Circa Gottingam legit Schraderus. Persoon dedit. 1800” [B 31 0237 01-6].

Orthotrichum fallax Bruch ex Brid., Bryol. Univ. 1: 787. 1827

Type citation: “In cortice Populi circa Bipontium habitat. A Bruchio detectore donatum possidemus.”

Holotype: [Germany, Rheinland-Pfalz] “An Pappeln. Bruch” [handwriting Funck] [B 31 0224 01-1].

Notes: This specimen is unambiguously part of the Bruch collection from Zweibrücken, where Bruch collected various epiphytes.

= *Orthotrichum pumilum* Sw. (Vitt 1973).

Orthotrichum fasciculare Brid., Bryol. Univ. 1: 790. 1827

Type citation: “In Insulae Terre Neuve arboribus habitat. Clar. La Pylaie detexit et communicavit sed fructu carens.”

Holotype: [Canada, Newfoundland] “Terre Neuve. La Pylaie. Paris 1825” [B 31 0243 01-1].

= *Ulota phyllantha* Brid. (Vitt 1973).

Orthotrichum fastigiatum Bruch ex Brid., Bryol. Univ. 1: 785. 1827

Type citation: “In cortice Populi circa Bipontium caespitibus parvulis habitat. Clar. Bruchius detexit et communicavit.”

Holotype: [Germany, Rheinland-Pfalz] “An Pappeln” [handwriting Funck]. “Funck ab Bruch” [handwriting Bridel] [B 31 0221 01-1].

Notes: See note under *Orthotrichum fallax*.

= *Orthotrichum affine* Schrad. ex Brid.

Orthotrichum floerkei Hornsch., Bryol. Univ. 1: 783. 1827

Type citation: “In Alpibus Germanicis, ubi Floerkus et Hornschuchius detexerunt, et circa Falaise Normandiae ubi D. de Brebisson legit et communicavit, in saxis dense caespitosum habitat.”

Lectotype (designated here): [France, Calvados] “Ad Saxa. Falaise” [B 31 0212 01-1].

= *Orthotrichum cupulatum* Hoffm. ex Brid.

Orthotrichum gymnostomum Bruch ex Brid., Bryol. Univ. 1: 782. 1827

Type citation: “In sylvis ad Populi tremulae truncos circa Bipontium habitat. Clar. Bruchius detexit et communicavit.”

Holotype: [Germany, Rheinland-Pfalz] “An Stämmen von Populus tremula in einem Wald bei Zweibrücken” [B 31 0205 01-1].

Orthotrichum immersum Brid., Bryol. Univ. 1: 786. 1827

Type citation: “In insulâ Terre Neuve unde clar. La Pylaie retulit et communicavit caespitibus omnium maxime compactis habitat.”

Holotype: [Canada, Newfoundland] “Terre Neuve. La Pylaie. Paris 1925” [B 31 0223 01-1].

= *Orthotrichum pallens* Bruch ex Brid. (Lewinsky 1977).

Orthotrichum jutlandicum Brid. see *Ulota phyllantha* Brid.

Orthotrichum leucomitrium Bruch ex Brid., Bryol. Univ. 1: 789. 1827

Type citation: "In cortice Populi circa Bipontium habitat. Bruchius legit, Funckius dedit."

Holotype: [Germany, Rheinland-Pfalz] "In populi, Bipontium. Funk. 1826" [B 31 0238 01-1].
= *Orthotrichum diaphanum* Brid.

Orthotrichum obtusifolium Brid., Muscol. Recent. 2(2): 23. 1801

Type citation: "As salices prope Goettingam et circa Ienam, unde accepi, habitat. Clar. Persoon etiam ex Hercynia misit."

Lectotype (designated by R. Ochrya): [Germany, Harz Mountains] "Jena" [B 31 0230 02-3].

Orthotrichum pallens Bruch ex Brid., Bryol. Univ. 1: 788. 1827

Type citation: "In sepibus spinosis circa Bipontium in arbustis, in arboribus sylvaticis nunquam, a clar. Bruchio lectum est nobisque communicatum."

Holotype: [Germany, Rheinland-Pfalz] "An [?] u. Waldbäumen bey Zweybrück" [B 31 0233 01-1].

Orthotrichum patens Bruch ex Brid., Bryol. Univ. 1: 787. 1827

Type citation: "In arboribus campestribus sylvaticisque praesertim Populo circa Bipontium caespitose habitat. Clar. Bruchius detexit et communicavit."

Holotype: [Germany, Rheinland-Pfalz] "An Feld- und Waldbäumen bey Zweybrücken" [hand-writing Bruch] [B 31 0225 01-1].

Orthotrichum pylaisii Brid., Bryol. Univ. 1: 722. 1826

Type citation: "In insulâ Terre Neuve, ubi cla. La Pylaie detexit et communicavit, in arboribus cum Grimmiâ apocarpâ promiscue vivit."

Holotype: [Canada, Newfoundland] "Terre Neuve. La Pylaie. 1825" [B 31 0242 01-1].

Orthotrichum radiculosum Brid., Bryol. Univ. 1: 791. 1827

Type citation: "In Insulâ Terre Neuve. La Pylaie?"

Holotype: [Canada, Newfoundland] Terre Neuve. La Pylaie. Paris 1826 [B 31 0245 01-1].

Notes: Specimen revised by Crum & Vitt (unpubl.) as *Grimmia maritima* Turn.

= *Schistidium maritimum* (Turner ex Robert Scott) Bruch & Schimp.

Orthotrichum rogeri Brid., Muscol. Recent. Suppl. 2: 9. 1812

Type citation: "In monte Jura ad fagorum truncos Roger detexit et amice communicavit."

Holotype: [Jura mountains] "In monte Jura ad fagorum de cortices. 1802" [B 31 0229 01-1].

Orthotrichum sehlmeieri Bruch ex Brid., Bryol. Univ. 1: 784. 1827

Type citation: "In rupibus circa Bipontium, Basaltis deliscentibus prope Cusel et saxis in monte Pinifero caespitose habitat. Clar. Sehlmeier detexit, Bruchius Funckiusque communicaverunt."

Lectotype (designated by Lewinsky 1977: 78) [Germany] "Auf [unreadable] Basalt bei Cusel" [B 31 0219 01-1]; paralectotypes: [Germany, Rheinland-Pfalz] "An Felsen bey Zweybrück" [B 31 0219 02-1], [Germany, Bavaria] "An Felsen auf dem Fichtelgebirg" [B 31 0219 02-2].

= *Orthotrichum rupestre* Schwägr. (Vitt 1973, Lewinsky 1977, 1993).

Orthotrichum speciosum Nees, Deutschl. Fl., Abth. II, Cryptog. 17: [5]. 1819

Type citation: "Dr. Martius fand diese ausgezeichnete Moospecies auf seiner Reise in die Graffschaft Werdenfels. Mein Freund, Herr Apotheker Funck zu Gefrees, besitzt dieselbe Moosart schon seit langer Zeit, an Baumstämmen auf dem Fichtelgebirge gesammelt, in seiner Sammlung."

Isotype: [Germany, Bavaria] "Fichtelgebirge. Funck." [B 31 0218 01-1].

Notes: The holotype is also at B.

Orthotrichum stellatum Brid., Bryol. Univ. 1: 274. 1826

Type citation: "In Massachusetts Americae septentrionalis ad arbores habitat. D. Torrey Noveboraco misit."

Holotype: [USA] "Torrey a Noveboraco misit 1820" [B 31 0210 01-1].

Orthotrichum stenocarpum Brid., Bryol. Univ. 1: 271. 1826

Type citation: “In arboribus sylvaticis in comitatu Kinzoff (ex inscriptione) caespitose habitat. Clar. de Candolle amice communicavit.”

Holotype: [Switzerland] “Comté de Kinzoff. Genève” [handwriting DeCandolle]. “De Candolle 1822” [handwriting Bridel] [B 31 0206 01-1].

= *Orthotrichum pulchellum* Brunt.

Orthotrichum stramineum Hornsch. in Bridel, Bryol. Univ. 1: 789. 1827

Type citation: “Bruch. Hornsch.” [without location].

Lectotype (designated here): [Germany, Rheinland-Pfalz] “Bey Zweybrück” [B 31 0235 01-1].

Notes: This specimen is probably collected by Bruch.

Orthotrichum strangulatum P. Beauv., Prodr. Aethéogam. : 81. 1805

Type citation: “De l’Amerique septentrionale. Mühlenberg.”

Notes: According to Vitt (unpubl.) doubtfully type material, without location notes on label [B 31 0209 01-2], lectotype in G.

Orthotrichum strictum Brid., Bryol. Univ. 1: 289. 1826

Type citation: “In Massachusets Americae septentrionalis ad rupes habitat. Cooley detexit, D. Torrey communicavit.”

Original material(?): [USA, New York] Ad rupes. Torrey in Noveboraco 1820 misit [B 31 0232 01-2].

= *Ulota maricana* Mitt.

Orthotrichum sturmii Hoppe & Hornsch. in Flora 2(1): 89. 1819

Type citation: “Auf Felsen um Heiligenblut und Mattrey.”

Isotype: [Austria, Carinthia] “H[ornschuch] in rupibus subalpinis prope Heiligenblut. Hornschuch misit. 1819” [B 31 0214 01-1].

Notes: Holotype in C.

= *Orthotrichum rupestre* Schleich. ex Schwägr.

Orthotrichum submarginatum Brid., Bryol. Univ. 1: 792. 1827

Type citation: “In Insulâ Terre Neuve. La Pylaie.”

Holotype: [Canada, Newfoundland] “In Insula Terre Neuve. La Pylaie. Paris 1825” [B 31 0230 01-1].

= *Racomitrium aciculare* (Hedw.) Brid. (Vitt 1973, Lewinsky 1993).

Orthotrichum tenellum Bruch ex Brid., Bryol. Univ. 1: 786. 1827

Type citation: “Prope Bipontium detectum Bruchii benevolentiae debemus.”

Lectotype (designated by Vitt 1973: 150): [Germany, Rheinland-Pfalz] “an Waldbäumen, [unreadable] Pappeln bey Zweybrücken” [B 31 0222 01-2+3].

Notes: The sheet contains three cushions. According to Lara & Garilleti (unpubl.) only the central and right cushions belong to *Orthotrichum tenellum*.

Orthotrichum umbonatum Brid., Bryol. Univ. 1: 787. 1827

Type citation: “In Saltu Thuringico ad pedem montis Inselsberg in fagis Plaubelius noster Julio 1826 detexit.”

Holotype: [Germany, Thuringia] “In saltu Thuringiae ad pedem Monte Inselsberg in fagus de Plaubel. Julio 1826” [B 31 0226 01-1].

Notes: Sheet with two different cushions revised by Vitt (unpubl.) as *Orthotrichum striatum* and *O. stramineum*: “holotype of *O. umbonatum*, Bridel probably means *O. stramineum*.”

= *Orthotrichum stramineum* Hornsch.

Phascum apiculatum Brid., Muscol. Recent. Suppl. 4: 8. 1819 [1818]

Type citation: “Prope Salopiam Angliae Green legit et communicavit.”

Holotype: [United Kingdom, Scotland] “Circa Salopiam Anglia Green. 1817” [B 31 0034 02].

Notes: The collection contains only one minute shoot.

= *Tortula acaulon* (With.) Zander [= *Phascum cuspidatum* Hedw., see Crosby & al. 2000].

Phascum bryoides Dicks. see *P. gymnostoides* Brid.

Phascum crassinervium Schwägr., Spec. Musc. Frond., Suppl. 1(1): 4. pl. 2, upper part. 1811 =

Ephemerum crassinervium (Schwägr.) Hampe

Type citation: “Crescit in Pensilvaniae terra argillosa inter confervas, lectum a beato Muehlenbergio.”

Original material(?): [USA, Pennsylvania] Ludwigius dedet. 1814. In Pennsylvania Mühlenberg [B 31 0028 01].

Notes: One minute sample. The date “1814” means probably the date when Bridel received the specimen.

Phascum globiferum Bruch see *Archidium phascoides* Brid.

Phascum grandiusculum Brid., Muscol. Recent. Suppl. 1: 9. 1806

Type citation: “Circa Gotham in aggeribus humidis inundaris pinguibus ad rivulum Leine semel tantum legi.”

Holotype: [Germany, Sachsen-Anhalt] “Circa Gotham in aggeribus madides et limosis inundatum ad rivulum Leine Aprili 1799” [B 31 0038 02, under *Phasum elatum* Brid].

= *Phascum cuspidatum* var. *elatum* (Brid.) Drumm.

Phascum gymnostoides Brid., Muscol. Recent. Suppl. 1: 7. 1806, nom. illeg. = *Phascum bryoides* Dicks., Fasc. Pl. Cryptog. Brit. 4: 3. 1801.

Type citation: Bridel: “In ericetis et siluis Britanniae Dickson detexit, inde prope Clapham in Bedfordshire ad fontes Rev. Abbot; nuperius autem in arvis trifolio consitis circa Gotham cum *Gymnostomo truncatulo* et *Laersia lanceolata*, quae habitu valde aemulatur et cum quibus hucusque probabiliter commixtum est, nec non cum *Phascum cuspidato* abunde crescens Plaubel legit. Circa Jenam etiam habitare dicitur.” – Dickson: “In ericetis et sivis”.

Syntype of *P. gymnostoides*: [Germany, Thuringia] “Circa Gotham, Jenam, 1797 cum *Phasco subulato* et *Laersia lanceolata* in arvis Trifoliae” [B 31 0041 01-2].

Notes: Two small cushions with capsules.

Phascum intertextum Brid., Muscol. Recent. Suppl. 4: 8. 1819 [1818]

Type citation: “In colle arenoso Round Hill dicto prope Salopiam Britanniae amicus Green detexit et communicavit.”

Holotype: [United Kingdom, Scotland] “Prope urban Salope. Anglia Green detexit et communicavit 1802” [B 31 0035 05, under *Phascum cuspidatum*].

Notes: Four minute specimen.

= *Tortula acaulon* (With.) Zander [= *Phascum cuspidatum* Hedw., see Crosby & al. 2000].

Phascum megapolitanum Schultz, Prodr. Fl. Stargard. Suppl.: 63. 1819

Type citation: “Prope Neobrandenb. am Rande des kleinen Ihlpols.”

Lectotype (designated here): [Germany, Mecklenburg-Vorpommern] “S. flor. Starg. Suppl [hand-writing Schultz] [B 31 0037 01].

Notes: One minute specimen. Type not in ROST, where the herbarium of Schultz is deposited (Nauenburg, in litt.).

= *Physcomitrella patens* (Hedw.) Bruch & Schimp. (Tan 1979)

Phascum nepalense Brid., Bryol. Univ. 1: 755. 1827

Type citation: “In Nepal Indicâ regione habitat. Inter muscos inde in Europam a Wallichio missos neglectum vidimus.”

Lectotype (designated here): “Wallich” [B 31 0036 01-1].

Notes: Two minute specimens.

Phascum proliferum Green ex Brid., Muscol. Recent. Suppl. 4: 9. 1819 [1818]
 Type citation: “In angliae circa Salopiam gramineis lectum Green communicavit.”
 Holotype: [UK, Scotland] “Prope Salopiam in Anglia. Green 1817 misit” [B 31 0038 01].
 = *Tortula acaulon* (With.) Zander (Crosby & al. 2000)

Phascum rostellatum Brid., Muscol. Recent. Suppl. 4: 9. 1819 [1818] ≡ *Weissia rostellata* (Brid.) Lindb.
 Type citation: “Ex Anglia accepi.”
 Holotype: [United Kingdom] “Amicus Green a Britannia misit” [B 31 0039 01].
 Notes: Three minute specimens.

Racomitrium borbonicum Brid., Bryol. Univ. 1: 218. 1826
 Type citation: “In insulâ Bourbonis inter Cladonias semper sterile lectum est.”
 Holotype: [Réunion] “Ile de Bourbon. Bory St Vincent. 1803” [B 31 0171 01-1].
 Note: Bory de Saint Vincent travelled to Mauritius and Reunion in 1801, and was back in Paris in 1802. The date “1803” probably refers to the year when Bridel got the specimen.
 = *Racomitrium lanuginosum* (Hedw.) Brid. (Vitt & Marsh 1988).

Racomitrium cataractarum Brid., Bryol. Univ. 1: 776. 1827
 Type citation: “In Hercyniâ Suevicâ superiore ad cataractas rivulosque in saxis perpetub rorodis caespitose habitat. Diligentissimus Braun detexit et communicavit.”
 Holotype: [Germany, Harz Mountains] “In rupibus aqua semper rorantibus ad cataractas et rivulos Hercynia Suevica superiore leg. (Braun) 1825 D. Bauer” [B 31 0174 01-1].
 = *Racomitrium aquaticum* (Schrad.) Brid. (Bednarek-Ochyra, unpubl.).

Racomitrium falcifolium Brid., Muscol. Recent. Suppl. 4: 82. 1819 [1818]
 Type citation: “In Monte Brevent Sabaudiae legit Dejean sed sine fructu.”
 Holotype: [France, Alpes de Savoie] “Du Brévent” [B 31 0179 04-1].
 = *Ptychomitrium polyphyllum* (Sw.) Bruch & Schimp.

Racomitrium flavipes Brid., Muscol. Recent. Suppl. 4: 81. 1819 [1818], nom. illeg. ≡ *Barbula mucronata* Brid., Musc. Recent. Suppl. 1: 268. 1806 ≡ *Dialytrichia mucronata* (Brid.) Brotherus
 Type citation: Bridel 1819: “In Villâ Pamphili Romae in *Quercis ilicis* truncis cum *Pterigynandro Smithii* promiscue crescens, fide schedularum nostrarum, passim legi. Aprili capsulae maturabantur. Enndem Dejean e Delphinatu misit in rivulis ? prope Viennam lectum.” – Bridel 1806: “Prope Viennam Delphinatus in aquis habitat. Déjean communicavit.”
 Holotype: [Austria] “In rivulis Delphinatus circa Vienne, leg. Dejean 1803” [B 31 0178 01-2].
 Other original material of *R. flavipes*: [Italy] “Roma in villa Pamphili ad Ilicis trunciscum *Pterigynandrum smithii*. April 1806” [B 31 0178 01-3].

Rottleria gymnostomoides Brid., Bryol. Univ. 1: 105. 1826, nom. illeg. ≡ *Gymnostomum rottleri* Hedw., Spec. Musc. Frond. Suppl. 1, 1: 24. 1811.
 Type citation: Bridel: “In muris tutosis Tranquebariae caespitose habitat. Rev. Rottler detexit.” – Hedwig: “In muris limosis Tranquibaricis legit rev. Rottler”.
 Holotype: [India] “In muris limosis Tranquebariae in India” [B 31 0088 01].
 Notes: *Rottleria gymnostomoides* is the type of the generic name *Rottleria* Brid. One minute specimen with one capsule.

Schistidium imberbe var. *atrovirens* Brid., Bryol. Univ. 1: 119. 1826
 Type not designated.
 Lectotype (designated here): [USA] “D. Torrey New York” [B 31 0094 04-1]; isoelectotype: “in cupressetis prope Noveboracum. D. Torrey Sept. 1820” [B 31 0094 04-2].

Sphagnum aculeatum Warnst. in Bot. Centralbl. 9: 97. 1882

= *Sphagnum tumidulum* Besch. var. *tumidulum* (Eddy 1985).

Type citation: “Ile de Bourbon; gesammelt von Commerson? 1803.”

Holotype: [Réunion] “No. 1, de l’Ile de Bourbon” [handwriting Bridel], “No. 1. *Sphagnum aculeatum* mihi nov. spec. 9.11.81. Warnstorff” [handwriting Warnstorff] [B 31 0001 01-1].

Notes: One minute shoot.

Sphagnum contortum Schultz, Prodr. Fl. Stargard. Suppl.: 64. 1819

Type citation: “Ad pagum Jatzke in dem Bruch an der Eichhorster Pfarrwiese.”

Lectotype (designated here): [Germany, Mecklenburg-Vorpommern] “Fl. Starg Suppl.” [handwriting Schultz]. “S. Schultzig misit 1819” [handwriting Bridel] [B 31 0007 01].

Notes: One shoot. Holotype not in ROST, where the herbarium of Schultz is deposited (Nauenburg, in litt.).

Sphagnum crassisetum Brid., Muscol. Recent. Suppl. 1: 15. 1806

Type citation: “In America septentrionali habitat ubi Michaux legit.”

Holotype: [USA] “Amerique Septentrionale. Herb. Michaux. Pal. Beauvois 1800” [B 31 0006 01]. = ***Sphagnum squarrosum*** Crome (Crum 1984, Gao 1994).

Sphagnum cymbifolium var. *revolutum* Warnst. in Bot. Centralbl. 9: 98. 1882

Type citation: “Von Torrey in Nord-Amerika gesammelt.”

Holotype: [USA, New York] “D. Torrey Noveboraco ad America Septentrionale 1820 misit” [B 31 0001 05].

Notes: Only two shoots with one damaged capsule.

= ***Sphagnum palustre*** L.

Sphagnum denticulatum Brid., Bryol. Univ. 1:10. 1826

Type citation: “In aquario fontis publici oppidi Bruyeres Vogesorum invenerunt Mougeot & Nestler a quibus gratâ mente accepimus.”

Holotype: [France, Vosges] “In aquario oppidi Bruyenes Vogesorum. Mougeot & Nestler 1820” [B 31 0010 01].

Sphagnum ericetorum Brid., Muscol. Recent. Suppl. 1: 19. 1806

Type citation: “In insulae Bourbon ericetis et humidiusculis, ex. gr. in planitie quam des Chicots vocant Bory de St Vincent legit.”

Holotype: [Réunion] “Bryers de l’Ile de Bourbon. Bory St Vincent” [B 31 0014 01].

Notes: Only the top of one shoot.

Sphagnum hypnoides Braun ex Brid., Bryol. Univ. 1: 752. 1827

Type citation: “Ad ripas lactis Hornsee in Hercyniâ Suevicâ inferiore quas saepe ingentibus stratis obducit, habitat.”

Lectotype (designated by Flatberg 1988: 15): [Germany, Harz mountains] “*Sphagnum cuspidatum* gamma *hypnoides* mihi. Confr. bot. Zeitg. 1825 No 40. Ueberzieht die Ufer des Hornsees in grossen Decken und geht nur an einigen Orten (unter Gesträuch), die der völligen Entwicklung dieses Moores günstiger zu sein scheinen, in die gemeine Form des *Sph. cuspidatum* über [handwriting Braun]”, “Ad ripas locus Hornsees in Hercynia Suevica. Braun. 1825” [handwriting Bridel] [B 31 0012 05-1].

Sphagnum iridans Brid., Muscol. Recent. Suppl. 1: 20. 1806., nom. illeg. ≡ ***Sphagnum javense*** Brid., Muscol. Recent. 2(1): 27. 5 f. 3. 1798 ≡ ***Leucobryum javense*** (Brid.) Mitt.

Type citation: Bridel 1806: “In silvis alpinis insulae Java primus legit Commerson, in editissimis insulae Bourbon nuperius inuenit Bory de St Vincent.” – Bridel 1798: “In sylvis Alpinis Insulae Javae ad montem coeruleum et Susere anno 1768 Mense Octobri Commersonus legit.”

Holotype: [Indonesia, Java] “Sub hoc nomerei in herbario Commersonii” [B 31 0016 01-3]; isotype: “Java” [B 31 0016 01-2].

Notes: Folder 16 contains one sheet with three specimens, one from Réunion, collected by Bory de St Vincent ([Réunion] “Bourbon [B 31 0016 01-1]”) and cited as syntype in the protologue of

S. iridans Brid., and two specimens from Java, collected by Commerson in October 1768 “ad montem coeruleum et Sasere.” (Bryol. Univ. 1, 19). To the specimen from Réunion, Okamoto and Yamaguchi added some figures of habit, leaves, leaf apices, margins and bases, and cross sections of leaf. It represents *Leucobryum boryanum* Bensch. according to Yamaguchi (1993) and is possibly an isosyntype of that name.

Sphagnum macrophyllum Bernh. ex Brid., Bryol. Univ. 1: 10. 1826

Type citation: “In America septentrionali circa Philadelphiam habitat. Clar. Bernhardi communicavit.”

Holotype: [USA, Philadelphia] “Philadelphia in Americi. Bernhard. 1822” [B 31 0009 01].

Notes: Only top of one shoot.

Sphagnum pentastichum Brid., Muscol. Recent. Suppl. 1: 16. 1806

Type citation: “Ex Americi septentrionali a Boscq allatum Cel. Decandolles dedit.”

Lectotype (designated here): [USA] “De l’Amerique. Paris 1803” [B 31 0011 08-1].

Notes: One shoot with six capsules.

= ***Sphagnum cuspidatum*** Ehrh. ex Hoffm. (fide C. Müller, unpubl.).

Sphagnum pulchricoma Müll. Hal., Syn. Musc. Frond. Cogn. 1: 102. 1848

Type citation: “Brasilia: Desvaux.”

Holotype: Brasil, 1822 No 1 [handwriting Desvaux?] “E Brasilia. Desvaux. 1826” [handwriting Bridel] [B 31 0005 04-2].

Notes: Only one shoot.

= ***Sphagnum recurvum*** P. Beauv. s.str. (Crum 1980, Anderson 1990).

Sphagnum pylaesii Brid., Bryol. Univ. 1: 749. 1827

Type citation: “In insulae Terre Neuve sphagnosis caespitose habitat semper sterile. Clar. La Pylaie detexit et communicavit.”

Holotype: [Canada, Newfoundland] “Terre Neuve. La Pylaie. Paris 1825” [B 31 0002 01].

Sphagnum sedoides Brid., Bryol. Univ. 1: 750. 1827

Type citation: “In insulá Terre Neuve intra Jungermannias habitat. Clar. La Pylaie detexit et communicavit semper sterile lectum.”

Holotype: [Canada, Newfoundland] “In Insula Terre Neuve inter Jungermannias. La Pylaie. Paris. 1826” [B 31 0003 02].

= ***Sphagnum pylaesii*** Brid. (Crum 1980, Anderson 1990).

Sphagnum sedoides var. *prostratum* Brid., Bryol. Univ. 1: 751. 1827

Type citation: “In Armoricae occidentalis interioris turfosis paludosisque depressis inter montes Arrées ad pedem montis St Michel prope Chateaulin habitat, rarissimum.”

Holotype: [France, Bretagne] “Á la base de la punta meridionale de la montagne St Michel près de Chateaulin” [handwriting La Pylaie], “In Armorica occidentale. Paris 1825” [handwriting Bridel] [B 31 0003 01].

Notes: Only some separated shoots.

= ***Sphagnum pylaesii*** Brid. (Crum 1980, Anderson 1990).

Splachnum bavaricum Brid. in J. Bot. 1800(2): 288. 1801

Type citation: “Etiam prope Halam Saonum in uliginosis a Sprengelio lectum est.”

Holotype: [Germany, Sachsen-Anhalt] “Sub hoc nomina a Sprenglero et Halé missum ad uliginosis prope Halam dictatum” [B 31 0196 03].

Notes: Three shoots with two sporophytes.

= ***Splachnum sphaericum*** Hedw.

Splachnum flagellare Brid., Muscol. Recent. Suppl. 1: 145. 1806

Type citation: “In Sudetum montibus Ludwig primus omnium legit, inde ex Helvetia sub nomine

S. Ouati misit Schleicher, tanden in Saltu Thuringico prope Oberhof ad rupes madidas amicus Plaubel reperit.”

Syntypes: [Switzerland] Helvetia. Schleicher. [B 31 0191 01-1]; “Germany, Thuringia, Ludwigus. Inter Oberhof et [unreadable] in aquam fluans [unreadable] 1802” [B 31 0191 01-2].
= *Tayloria serrata* (Hedw.) Bruch & Schimp. (Koponen 1984 unpubl.).

Splachnum magellanicum Brid., Muscol. Recent. 1(2): 105. 1797 ≡ *Tayloria magellanica* (Brid.) Mitt.

Type citation: “In freto magellanico vbi gregatim habitat verosimiliter in torfaceis uliginosis a Commersono lectum est. Cl. de Iussieu et des Fontaines benignitate possideo.”

Holotype: [Chile] “Commerson. Detroit de Magellan Iussieu. Paris 1797” [B 31 0183 01].

Splachnum refractum Brid., Muscol. Recent. Suppl. 1: 145. 1806

Type citation: “In Alpibus Austriacis lectum e Schwägrichenii benevolentia possidea.”

Holotype: [Austria] “Austria. Schwägrichen” [B 31 0196 01].

= *Splachnum sphaericum* Hedw.

Splachnum turbinatum Brid. see *Bryum turbinatum* var. *minus* Brid.

Trichostomum decipiens Schultz see *Drytodon schultzii* Brid.

Trichostomum fasciculare Hedw., Spec. Mus. Frond.: 110. 1801 ≡ *Racomitrium fasciculare* (Hedw.) Brid.

Type citation: “Habitat ad saxa in Bructero, Achtermannshoehe aliisque Hercynia montibus.”

Isosyntypes(?): [Germany, Sachsen-Anhalt, Harz Mountains, Brocken] “E Bructero” [B 31 0172 01-1]. “E monto Bructero Hercynia” [B 31 0172 03-1+2].

Trichostomum incurvum Hoppe & Hornsch. in Flora 2: 89. 1819

Type citation: “Auf kahlen Felsenblöcken bey Heiligenblut, mit vollkommenen Früchten im Juni, im Nassfelde und am Wege von Mattrey nach Deferreggen ohne Früchte.”

Isolectotype: [Austria, Carinthia] “*Drytodon incurvum* mihi. An Felsenblöcken in Oberkärnten” [handwriting Hornschuch], “Hornschuch misit 1819” [handwriting Bridel] [B 31 0149 01-1].

Notes: Lectotype in GZU (Cao & Vitt 1986).

= *Grimmia elatior* Bruch ex Bals.-Criv. & De Not.

Trichostomum nigricans Brid., Muscol. Recent. Suppl. 1: 242. 1806

Type citation: “Ex Helvetia ubi in aquosis probabiliter habitat Schleicher misit.”

Lectotype (designated here): [Switzerland] “Helv. Schl., Schulz” [B 31 0177 01-1].

Notes: Schleicher noted on the label “*Trichostomum aquaticum* ou nouvelle.” This is the only of the three collections in the *Trichostomum nigricans* folder, which corresponds with the protologue in location and collector.

= *Cinclidotus riparius* (Host ex Brid.) Arn.

Trichostomum obtusifolium P. Beauv., Prodr. Aethéogam.: 91. 1805

Type citation: [USA] America septentrionale.”

Lectotype (designated by Bednarek-Ochyra 2001: 45): “J’en fais un nouveau genre avant les *Dicranum aciculare*, *pulvinatum* et autres espèces B dents fendues. Palisot de Beauvois” [B 31 0175 01-1].

Notes: One shoot only.

= *Anomodon minor* (Hedw.) Fuern (Bednarek-Ochyra 2001).

Trichostomum sudeticum Funck, Deutschl. Moose: 26. 1820 ≡ *Drytodon sudeticus* (Funck) Brid., Bryol. Univ. 1: 195. 1826 ≡ *Racomitrium sudeticum* (Funck) Bruch & Schimp.

Type citation: “Ad saxa in Sudetis (am Weisswasser im Teufelsgrund).”

Isolectotype: [Sudetic y Mountains] “Funckius in Sudetis legit” [B 31 0151 01-1].

Notes: Lectotype, designated by Frisvoll (1984: 316), at M. Filed under *Drytodon sudeticus*.

Ulota phyllantha Brid., Muscol. Recent. Suppl. 4: 113. 1819 [1818] = *Orthotrichum jutlandicum* Brid., Bryol. Univ. 1: 296. 1826, nom. illeg.

Type citation: “In Jutlandiae maritimis prope Tundern in salicibus legit Ludwig et communicavit.”

Holotype: [Jutland, Denmark] “E Danice maritimus. Ludwigius. 1811” [B 31 0241 01-1].

Weissia longicollis Link, Muscol. Recent. Suppl. 4: 45. 1819 [1818]

Type citation: “In Lusitaniae Serra de Gerez habitat a celeb. Linkio detecta.”

Holotype: [Portugal, Braga] “Linkii prox. videt. Flor. Lusitan. Serra di Gerez.” [B 31 0182 01].

Notes: Only one shoot with sporophyte.

= *Entosthodon attenuatus* (Dicks.) Bryhn.

Type material of Bridel names in genera treated here but not present in the collection in B

Dicranum cribrosum Brid., Muscol. Recent. Suppl. 1: 212. 1806

Typus: “Ad caput Bonae Spei habiat Thunberg legit.”

Notes: The lectotype, designated by Deguchi (1979), is in H-SOL.

Dryptodon obtusus Brid., Bryol. Univ. 1: 198. 1826

Type citation: “In Germani B, Helvetiâ, Italiâ et Africâ ad caput bonae spei in saxis et rupibus habitat, pulvinatus, canescens.”

Notes: The folder of this species [B 31 0154] contains no original material. Lectotype in OXF-Dill (Frisvoll 1984).

Encalypta squarrosa Brid., Muscol. Recent. Suppl. 1: 93. 1806

Type citation: “In insula Bourbon habitat. In planitie des Chicots dicta caespites ingentes formantem invenit Bory de St Vincent et benigne donavit.”

Grimmia apocarpa var. *apiculata* Brid., Muscol. Recent. Suppl. 1: 97. 1806

Type citation: “In Monte Olymp Mysiae a D. Seezen lecta est.”

Orthotrichum affine Brid., Muscol. Recent. 2(2): 22. 1801

Type citation: “Hassiae et prope Goettingam.”

Orthotrichum cupulatum Hoffm. ex Brid., Muscol. Recent. 2(2): 25. 1801

Type citation: “Ad arborum truncos et in saxis hinc inde Goettingam, unde cel. Hofmannus, qui primus hanc speciem enucleavit, benigne misit, in Anglia, Gallia circa Lutetiam, Scandinavia, Silesia, Helvetia etc. habitat.”

Notes: All specimens of *Orthotrichum cupulatum* in the herbarium of Bridel [B 31 0207] were collected after 1801, therefore none represents type material.

Orthotrichum octoblephare Brid., Muscol. Recent. 2(2): 24. 1801

Type citation: “prope Edenbüttel” and “prope Vegesack.”

Phascum elatum Brid. in J. Bot. 1800(1): 269. 1801

Type citation: “Prope Gotham in limosis et inundatis mense Martio anno 1796 passim legi.”

Notes: The specimen B 31 038 02-2 has following collection data: “Circa Gotham in aggeribus madides et limosis inundatis ad rivulum Leine. Aprili 1799” and was collected probably by Bridel himself. Due to the different collection dates it seems not to be the type of *Phascum elatum* Brid.

Sphagnum magellanicum Brid., Muscol. Recent. 1(2): 24. 1798

Type citation: “In Freto Magellanico habitat unde a Commersono allatum in Phytophylacio Parisiensi vidi.”

Notes: The Herbarium Bridel contains only one specimen with one small shoot of this taxon: Herb. E. Commerson, Paris 1809 [B 31 0001 06-1]. Dated 1809 (probably the year, when Bridel got the specimen), it is evidently no type material.

Acknowledgements

Bruce Allen, Werner Greuter, Norbert Kilian, Harald Kürschner and Wolf-Henning Kusber are kindly thanked for helpful comments on the manuscript and Sandy Berger for correcting the English text.

References

- Anderson 1990: A checklist of *Sphagnum* in North America north of Mexico. – *Bryologist* **93**: 500-501.
- Bednarek-Ochyra, H. 2001: The identity of *Racomitrium obtusifolium* Musci, *Grimmiaceae* from North America. – *Cryptog., Bryol.* **22**: 41-46.
- 2003: The correct identity of *Grimmia strigosa*. – *Bryologist* **106**: 431-434. [[CrossRef](#)]
- Blom, H. 1996: A revision of the *Schistidium apocarpum* complex in Norway and Sweden. *Bryophyt. Biblioth.* **49**.
- Bridel, S. 1797, 1801, 1803: *Muscologia Recentiorum* **1**, **2(1)**, **2(2)**. – Gotha & Paris.
- 1806, 1812, 1817, 1822: *Muscologia recentiorum Supplementum* 1-4. – Gotha.
- 1826-27: *Bryologia universa* **1-2**. – Leipzig.
- Cao, T. & Vitt, D. H. 1986: A taxonomic revision and phylogenetic analysis of *Grimmia* and *Schistidium*, *Bryopsida*, *Grimmiaceae* in China. – *J. Hattori Bot. Lab.* **61**: 123-247.
- Corley, M. F. V., Crundwell, A. C., Düll, R., Hill, M. O. & Smith, A. J. E. 1981: Mosses of Europe and the Azores: an annotated list of species, with synonyms from the recent literature. – *J. Bryol.* **11**: 609-689.
- Crosby, M. R., Schultze-Motel, U. & Schultze-Motel, W. 1983: Katalog der Laubmoose von Madagaskar und den umliegenden Inseln. – *Willdenowia* **13**: 187-255.
- , Magill, R. E., Allen, B., He, S. 2000: A Checklist of Mosses. – Published on the internet <http://www.mobot.org/MOBOT/tropicos/most/checklist.shtml>.
- Crum, H. A. 1980: A guide to the identification of Mexican Sphagna. – *Contributions from the University of Michigan Herbarium* **14**: 25-52.
- 1984: *Sphagnopsida, Sphagnaceae*. – North American Flora, series 2, New York Botanical Garden Bronx. Ser. II, **11**: 1-180.
- Deguchi, H. 1979: A revision of the genera *Grimmia*, *Schistidium* and *Coscinodon* Musci of Japan. – *J. Sci. Hiroshima Univ., Ser. B, Div. 2*, **16**: 121-256.
- 1984: Studies on some Patagonian species of *Grimmiaceae* (Musci, *Bryophyta*). – Pp. 17-72 in: Inoue, H. (ed.), *Studies on cryptogams in southern Chile*. – Tokyo.
- Eddy, A. 1985: A revision of African *Sphagnales*. – *Bull. Brit. Mus. (Nat. Hist.) Bot.* **12**: 77-162.
- Enroth, J. 1990: Bryophyte flora of the Huon Peninsula, Papua New Guinea. XXXVI. *Leucobryaceae*, Musci. – *Acta Bot. Fenn.* **139**: 65-120.
- Flatberg, K. I. 1988: *Sphagnum viridum* sp. nov., and its relation to *S. cuspidatum*. – *K. Norske Vidensk. Selsk. Skr.* **1**: 1-64.
- Frahm, J. P. 1999: A type catalogue of *Campylopoideae* and *Paraleucobryoidae* (Musci, *Dicranaceae*), Part II, *Campylopus*. – *Trop. Bryol.* **16**: 17-102.
- Frisvoll, A. 1984: Lectotypification of *Racomitrium affine*, *R. heterostichum*, *R. microcarpon*, *R. obtusum* and *R. sudeticum*. – *J. Hattori Bot. Lab.* **57**: 299-318.
- 1988: A taxonomic revision of the *Racomitrium heterostichum* group (*Bryophyta*, *Grimmiales*) in N and C America, N Africa, Europe and Asia. – *Gunneria* **59**: 1-289.
- Gao, C. (ed.) 1994: *Flora bryophytorum sinicorum* 1. *Sphagnales*, *Andreaeales*, *Archidiales*, *Dicranales*. – Beijing.
- Geissler, P. & Maier, E. 1995: Lectotypifications of Central European *Grimmia* species (Musci, *Grimmiaceae*). – *Candollea* **50**: 495-514
- Greuter, W., McNeill, J., Barrie, F. R., Burdet, H. M., Demoulin, V., Filgueiras, T. S., Nicolson, D. H., Silva, P. C., Skog, J. E., Treharne, P., Turland, N. J., Hawksworth, D. L. 2000 (ed.): In-

- ternational Code of Botanical Nomenclature (Saint Louis Code) adopted by the Sixteenth International Botanical Congress St Louis, Missouri, July-August 1999. – Königstein.
- Hornschuch, F. 1829. Bridels Moossammlung. – Flora **25**: 559-560.
- Horton, D. G. 1983. A revision of the *Encalyptaceae* Musci, with particular reference to the North American taxa. Part II. – J. Hattori Bot. Lab. **54**: 353-532.
- Ignatov, M. S. & Afonina, O. M. (ed.) 1992: Checklist of mosses of the former USSR. – Arctoa **1**: 1-85.
- Koponen, A. & Koponen, T. 1978: The identity of *Splachnum turbinatum* and *Tayloria henryae* (Musci, Splachnaceae). – Ann. Bot. Fenn. **15**: 89-91.
- Lewinsky, J. 1977: The family *Orthotrichaceae* in Greenland. – Lindbergia **4**: 57-103.
- 1993: A synopsis of the genus *Orthotrichum* Hedw. Musci, *Orthotrichaceae*. – Bryobrothera **2**: 1-59.
- Muñoz, J. 1998a: Materials toward a revision of *Grimmia* (Musci, Grimmiaceae): Nomenclature and taxonomy of *Grimmia longirostris*. – Ann. Missouri Bot. Gard. **85**: 352-363. [[CrossRef](#)]
- 1998b: A taxonomic revision of *Grimmia* subgenus *Orthogrimmia* (Musci, Grimmiaceae). – Ann. Missouri Bot. Gard. **85**: 367-403. [[CrossRef](#)]
- 1999: A revision of *Grimmia* (Musci, Grimmiaceae) in the Americas 1: Latin America. – Ann. Missouri Bot. Gard. **86**: 118-191. [[CrossRef](#)]
- 2000: Proposal to conserve the name *Grimmia crinita* Musci, *Grimmiaceae* against *Dicranum phascoideum*. – Taxon **49**: 289-290. [[CrossRef](#)]
- & Pando, F. 2000: A world synopsis of the genus *Grimmia*. – Monogr. Syst. Bot. Missouri Bot. Gard. **83**: 1-133.
- & Zippel, E. 2006: Typification of *Grimmia pilifera* (Grimmiaceae). – Bryologist **109**: 560-561. [[CrossRef](#)]
- Reese, W. D. & Stone, I. G. 1995: The *Calymperaceae* of Australia. – J. Hattori Bot. Lab. **78**: 1-40.
- Salazar Allen, N. 1993: A revision of the pantropical moss genus *Leucophanes* Brid. – Bryophyt. Biblioth. **46**.
- Smith, D. K. 1994: *Funariaceae*. – Pp. 427-442 in: Sharp, A. J., Crum, H. & Eckel, P. M. (ed.), Moss flora of Mexico. – Mem. New York Bot. Gard. **69**.
- Snider, J. A. 1975: A revision of the genus *Archidium* Musci. – J. Hattori Bot. Lab. **39**: 105-201.
- Tan, B. C. 1979: A new classification for the genus *Physcomitrella* B. S. G. – J. Hattori Bot. Lab. **46**: 327-336.
- Vitt, D. H. 1973: A revision of the genus *Orthotrichum* in North America, North of Mexico. – Bryophyt. Biblioth. **1**.
- & Marsh, C. 1988: Population variation and phytogeography of *Racomitrium lanuginosum* and *R. pruinosum*. – Nova Hedwigia Beih. **90**: 235-260.
- Warnstorf, C. 1882: Die Torfmoose im königlichen botanischen Museum zu Berlin. – Bot. Centralbl. **9**: 96-102.
- Whitehouse, H. L. K. & Crundwell, A. C. 1991: *Gymnostomum calcareum* and its allied plants in Europe, North Africa and the Middle East. – J. Bryol. **16**: 561-579.
- Wijk, R., Margadant, W. D. & Florschütz, P. A. 1962, 1964, 1967, 1969: Index Muscorum 2-5. – Regnum Veg. **26**, **33**, **48**, **65**.
- Yamaguchi, T. 1993: A revision of the genus *Leucobryum* (Musci) in Asia. – J. Hattori Bot. Lab. **73**: 1-123.
- Zander, R. H. 1977: The tribe *Pleuroweisieae*, *Pottiaceae*, *Musci* in Middle America. – Bryologist **80**: 233-269. [[CrossRef](#)]

Address of the Author:

Dr Elke Zippel, Botanischer Garten & Botanisches Museum Berlin-Dahlem, Freie Universität Berlin, Königin-Luise-Str. 6-8, D-14195 Berlin, Germany; e-mail: e.zippel@bgbm.org