

## A Catalogue of the Bryophytes of the Guianas. II. Musci.

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(Studies on the flora of the Guianas 54)

**Abstract.** This catalogue provides an annotated listing of the mosses (MUSCI) reported from the Guianas (Guyana, Surinam, French Guiana), based on work on the Moss Flora of Suriname, which is now nearing completion. In total 238 species in 90 genera are listed. A list of synonyms (including 10 new ones) and a systematic arrangement of the genera and families are also provided. The following new combinations are proposed: *Callicostella guatemalensis* (Bartr.), *Sematophyllum lonchophyllum* (Mont.), *Sematophyllum pacimoniense* (Mitt.) and *Trichosteium intricatum* (Thér.).

### Introduction

The first part of this catalogue dealing with the Hepaticae and Anthocerotae of the Guianas, was compiled by Gradstein & Hekking (1989). It gives a first survey of the liverwort and hornwort flora of the Guianas which was little known so far. The mosses of the Guianas have been studied since many years and the results are embodied in three parts of the Flora of Suriname (Florschütz 1964, Florschütz-de Waard 1986 and in prep.). The present catalogue is mainly based on this Moss Flora, in which also collections of French Guiana and Guyana are included. Older literature records have all been incorporated in this Flora and are omitted here except for those referring to genera treated in part 3.

Important new information became

available from publications of Onraedt & Cremers (1982) for French Guiana, Florschütz-de Waard & Bekker (1987) for West Suriname, and Gradstein & Florschütz-de Waard (1989) for Mount Roraima in Guyana as well as from unpublished collections, among others of G. Cremers (French Guiana), H. Cornelissen & H. ter Steege (Guyana) and D. Montfoort & R. Ek (French Guiana). Data of these collections are included if they present new country records. In total 238 species in 90 genera are listed, including 50 species not yet treated in the hitherto published parts of the Flora.

Records from Im Thurm or Mc. Connell & Quelch collections labelled "Mt. Roraima, British Guyana" have been excluded since Steyermark (1981) indicated that these collections have been taken from the Venezuelan side of this

area. The moss collections of S.R. Gradstein et al. are the first from the Guyana side of Mt. Roraima and are included here. Many of these species proved new to the Guianas and seem to be representatives of a tropical mountain forest flora, which in the Guianas is largely confined to the Pakaraima Mountains in Guyana. A few of these have in the meantime also been collected in lowland forest of Guyana e.g. at Mabura Hill by H. Cornelissen & H. ter Steege. The latter new records have also been listed in this catalogue, to show occurrence of these species in lowland areas as well.

### Alphabetical list of species

The published records are cited by the abbreviations given below. Unpublished records, marked with an asterisk, are included if they represent a new country record. The new records are based on herbarium material present in U; identifications are by the author unless otherwise indicated.

#### Literature abbreviations:

A = Aublet 1775  
 BAR = Bartram 1939, 1948  
 CM = C. Müller 1848, 1896  
 DM = Dozy & Molkenboer 1854  
 F = Florschütz 1964  
 FW = Florschütz-de Waard 1986  
 FW2 = Florschütz-de Waard in prep.  
 FWB = Florschütz-de Waard & Bekker 1987  
 FG = Frahm & Gradstein 1987  
 G = Graham 1933  
 GF = Gradstein & Florschütz-de Waard 1989  
 M = Meyer 1818  
 MIT = Mitten 1869  
 MON = Montagne 1835, 1840  
 OC = Onraedt & Cremers 1982  
 P = Paris 1906  
 RI = Richards 1934  
 W = Williams 1914

*Acroporium pungens* (Hedw.) Broth. - SURINAM: CM as *Leskea*; DM as *Hypnum*; FWB as *A. guianense*; FW2 - GUYANA: MIT as *Sematophyllum pungens* and as *S. guianense* sp. nov.; RI, also as *A. guianense*; BAR 1939; GF; FW2 - FRENCH GUIANA: MON 1835, 1840 as *Leskea*; P as *Sematophyllum guianense*; OC, also as *A. guianense*; FW2.

*Archidium ohioense* C. Müll. - SURINAM: FWB. - FRENCH GUIANA: \*Cremers 5441.

*Barbula agraria* Hedw. - GUYANA, SURINAM, FRENCH GUIANA: F.

*B. arcuata* Griff. - GUYANA: MIT as *Tortula subulifolia*.

*B. indica* (Hook.) Spreng. - SURINAM: F as *B. crügeri* - FRENCH GUIANA: OC as *B. crügeri* - GUYANA: \*Maas & Westra 4201.

*Brachymerium sipapoense* Bartr. - SURINAM: F - FRENCH GUIANA: \*Cremers 6765.

*B. wrightii* (Sull.) Broth. - SURINAM: F as var. *mnioides* Florsch. - FRENCH GUIANA: \*Cremers 8032.

*Breutelia tomentosa* (Brid.) Jaeg. - GUYANA: GF.

*Bryohumbertia filifolia* (Hornsch.) Frahm - SURINAM: F as *Campylopus nanofilifolius* - GUYANA: FG.

*Bryum apiculatum* Schwaegr. - SURINAM: F as *B. crügeri*.

*B. argenteum* Hedw. - SURINAM: F as *B. candicans* - GUYANA: GF.

*B. beyrichianum* (Hornsch.) C. Müll. - SURINAM: F as *Rhodobryum* - FRENCH GUIANA: \*Cremers 9008.

*B. billardieri* Schwaegr. - GUYANA, SURINAM: F as *B. truncorum*; GF - FRENCH GUIANA: OC.

*B. capillare* Hedw. - SURINAM: FWB - FRENCH GUIANA: \*Montfoort 510.

*B. coronatum* Schwaegr. - GUYANA, SURINAM, FRENCH GUIANA: F; OC; GF.

- Callicosta bipinnata* (Schwaegr.) C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB; OC; GF.
- C. evanescens* C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB; OC.
- C. fendleri* (C.Müll.) Crosby - SURINAM: FW - FRENCH GUIANA: \*Aptroot 396.
- Callicostella grossiretis* Bartr. - FRENCH GUIANA: FW as *Schizomitrium*.
- C. guatemalensis* (Bartr.) J.Florsch., *comb. nov.* (*Hookeriopsis guatemalensis* Bartr., *Bryologist* 49: 120. 1946) - SURINAM: FW; FWB, both as *Schizomitrium*.
- C. merkelii* (Hornsch.) Jaeg. - SURINAM, FRENCH GUIANA: FW; FWB, both as *Schizomitrium*; OC as *C. scabriseta* (the herbarium material (U) proved to belong to this species).
- C. pallida* (Hornsch.) Aongstr. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB, both as *Schizomitrium*; OC as *C. depressa* and *cf. C. radicans* (the herbarium material (U) proved to belong to this species); GF.
- C. rufescens* (Mitt.) Jaeg. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB, both as *Schizomitrium*.
- Callicostella sp.* (aff. to *C. rivularis*) - GUYANA: \*Cornelissen 142 pp.; GF - FRENCH GUIANA: \*ex. hb. Mont. (L) as *Pterygophyllum depressum* var. *sterilis* (the herbarium material (U) proved also to belong to this species).
- Calymperes afzelii* Sw. - GUYANA, SURINAM, FRENCH GUIANA: F as *C. donnellii*; FWB; OC as *C. donnellii*.
- C. erosum* C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC; GF.
- C. guildingii* Hook. & Grev. - SURINAM: F - GUYANA: GF
- C. levyanum* Besch. - SURINAM: F.
- C. lonchophyllum* Schwaegr. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC; GF.
- C. mitrafugax* Florsch. - SURINAM: F.
- C. nicaraguense* Ren. & Card. - GUYANA, SURINAM: F; FWB; GF - FRENCH GUIANA: no collections known; the collections mentioned by OC proved to belong to *Syrrhopodon incompletus* and *S. hornschurchii*).
- C. othmeri* Herz. - GUYANA, SURINAM: F as *C. nicaraguense* p.p. (see Reese 1990) - FRENCH GUIANA: \*Cremers 7621.
- C. palisotii* Schwaegr. subsp. *richardii* (C.Müll.) S.Edwards - GUYANA, SURINAM, FRENCH GUIANA: F as *C. richardii*; FWB; OC as *C. richardii*.
- C. platyloma* Mitt. - GUYANA, SURINAM: F; FWB - FRENCH GUIANA: \*Montfoort 511.
- C. rubiginosum* (Mitt.) Reese - SURINAM: F as *C. rufum*; FWB - FRENCH GUIANA: OC - GUYANA: \*Boom & Gopaul 7149 (NY), det. W.R. Buck.
- C. smithii* Bartr. - GUYANA, SURINAM: F; GF - FRENCH GUIANA: \*Cremers 5920 (in OC reported as *C. lanceolatum*).
- C. uleanum* Broth. - SURINAM; FRENCH GUIANA: F.
- C. venezuelanum* (Mitt.) Pitt. ex Broth. - GUYANA, SURINAM, FRENCH GUIANA: F; OC; GF.
- Campylopus arctocarpus* (Hornsch.) Mitt. - SURINAM: F - FRENCH GUIANA: OC; FG.
- C. cubensis* Sull. - SURINAM: F as *C. harrisii* - GUYANA, FRENCH GUIANA: GF; FG.
- C. lamellinervis* (C.Müll.) Mitt. - GUYANA: \*Boom & Gopaul 7620 (NY) (det. J.P. Frahm).
- C. luteus* (C.Müll.) Par. - GUYANA: GF; FG.
- C. pilifer* Brid. - GUYANA: GF; FG.
- C. richardii* Brid. - GUYANA: GF; FG.
- C. savannarum* (C.Müll.) Mitt. - GUYANA, SURINAM: F (also as subsp. *bartlettii*); FWB; GF; FG - FRENCH GUIANA: \*Cremers 7118.
- C. subcuspidatus* (Hampe) Jaeg. - SU-

- RINAM: F as *C. praealtus* - GUYANA: GF; FG.
- C. surinamensis* C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; GF; FG.
- C. trachyblepharon* (C.Müll.) Mitt. - GUYANA: F; FG.
- Chrysohypnum diminutivum* (Hampe) Buck - GUYANA: BAR 1939 as *Mittenothamnium*; GF; FW2 - SURINAM: FWB as *Mittenothamnium*; FW2 - FRENCH GUIANA: OC as *Mittenothamnium*; FW2.
- Crossomitrium patrisiae* (Brid.) C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB; OC, also as *C. herminieri* and *C. subepiphyllum* (see Florschütz-de Waard 1986); GF.
- C. sintenisii* C.Müll. - SURINAM: Allen 1990 - GUYANA: GF as *C. calomicron* (see Allen 1990).
- Cyclodictyon varians* (Sull.) O.Kuntze - SURINAM: FW.
- Daltonia longifolia* Tayl. - GUYANA: GF.
- Dicranella hilariana* (Mont.) Mitt. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; GF.
- Dicranoloma brittonae* Bartr. - GUYANA: GF.
- Ectropothecium leptochaeton* (Schwaegr.) Buck - GUYANA: RI as *E. apiculatum*; GF; FW2. - SURINAM: FWB as *E. apiculatum*; FW2 - FRENCH GUIANA: MON 1840 as *Hypnum elegantulum* (the herbarium material proved to belong to this species); P as *E. guianae*, *sp. nov.*; OC as *E. globitheca*; FW2.
- Entodontopsis leucostega* (Brid.) Buck & Ireland - GUYANA: FW as *Stereophyllum*.
- E. nitens* (Mitt.) Buck & Ireland - GUYANA, SURINAM: FW; FWB, both as *Stereophyllum obtusum*.
- E. rhabdodonta* Card. - SURINAM: FW as *Stereophyllum*.
- Eucamptodontopsis pilifera* (Mitt.) Broth. - SURINAM: F - GUYANA: GF.
- Fissidens austro-americanus* Pursell & Reese - SURINAM: F as *F. brevipes* (see Pursell & Reese 1985) - FRENCH GUIANA: OC as *F. brevipes* (the cited collection proved to belong to this species). *F. brevipes* Besch. - no reports. According to Pursell & Reese 1985, the collections cited in F for Suriname belong to *F. austro-americanus* and *F. ramicola*.
- F. diplodus* Mitt. var. *richardsii* (Williams) Pursell - GUYANA: F. as *F. muriculatus* var. *richardsii* - SURINAM: \*Florschütz & Maas 3075 - FRENCH GUIANA: \*Cremers 9146.
- F. donnellii* Aust. - GUYANA: GF.
- F. flavinervis* Mitt. - SURINAM: Pursell 1984 - FRENCH GUIANA: \*Cremers 6806
- F. flexinervis* Mitt. - Surinam: \*Florschütz-de Waard & Zielman 5296 (det. R.A. Pursell).
- F. geijskesii* Florsch. - SURINAM: F, *sp. nov.*
- F. guianensis* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB as *F. elegans* (see Pursell 1984: 235); OC.
- F. inaequalis* Mitt. - SURINAM: F - GUYANA: \*Cornelissen 137 (det. R.A. Pursell).
- F. intermedius* C.Müll. - GUYANA, SURINAM: F; FWB - FRENCH GUIANA: \*Cremers 8641.
- F. intramarginatus* (Hampe) Mitt. - SURINAM: \*Florschütz & Zielman 5724 (det. M.A. Bruggeman-Nannenga).
- F. kegelianus* C.Müll. - SURINAM, FRENCH GUIANA: F.
- F. leptophyllum* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F, also as *fo. obtusissimus*, *fo. nov.*
- F. mollis* Mitt. - SURINAM: F.
- F. neglectus* Crum - SURINAM: \*Florschütz & Zielman 5760 (det. M.A. Bruggeman-Nannenga).
- F. microcladus* Twait. & Mitt. - SURINAM: Pursell 1984.
- F. pauperculus* Howe var. *pauperculus* - SURINAM: F; FWB.
- F. pauperculus* Howe var. *surinamensis*

- Florsch. - SURINAM: F - FRENCH GUIANA: \*Montfoort 512.
- F. pennula* Broth. - SURINAM: F; FWB.
- F. prionodes* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F, also as fo. *flexinervis*, *hornschuchii* and *puiggarii*, fo. nov.; FWB; OC; GF.
- F. radicans* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC.
- F. ramicola* Broth. - SURINAM: \*Florschütz 2073 (det. R.A. Pursell); this collection was erroneously recorded as *F. brevipes* in F.
- F. ravenellii* Sull. - SURINAM: Pursell 1984 - FRENCH GUIANA: \*Aptroot 15308 (det. M.A. Bruggeman-Nannenga).
- F. reticulosus* (C.Müll.) Mitt. - SURINAM: F; FWB.
- F. scariosus* Mitt. - SURINAM: F - GUYANA: GF - FRENCH GUIANA: \*Cremers 8952.
- F. similiretis* Sull. - SURINAM: F; FWB, both as *F. asplenioides* (see Bruggeman-Nannenga 1987) - FRENCH GUIANA: OC as *F. asplenioides* - GUYANA: \*Cornelissen 202.
- F. weirii* Mitt. - SURINAM: F - FRENCH GUIANA: \*Montfoort 593.
- Floribundaria cardotii* (Broth.) Broth. - SURINAM: \*Florschütz & Zielman 5034.
- F. floribunda* (Dozy & Molk.) Fleisch. - SURINAM: \*Florschütz 4751 - FRENCH GUIANA: \*Cremers 412.
- Funaria bonplandii* (Hook.) Broth. - GUYANA: GF.
- F. hygrometrica* Hedw. var. *calvescens* (Schwaegr.) Mont. - SURINAM: F - GUYANA: \*Maas et al. 5778; GF.
- Glossadelphus* see *Phyllodon*.
- Groutiella apiculata* (Hook.) Crum & Steere - GUYANA, SURINAM, FRENCH GUIANA: F; OC both as *G. mucronifolia*.
- G. obtusa* (Mitt.) Florsch. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC; GF.
- G. tomentosa* (Hornsch.) Wijk & Marg. - SURINAM, FRENCH GUIANA: F as *G. fragilis*; OC as *G. schlumbergeri* - GUYANA: \*Jansen-Jacobs et al. 220B.
- Hemiragis aurea* (Brid.) Kindb. - GUYANA: FW; GF.
- Henicodium geniculatum* (Mitt.) Buck - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; GF (all as *Leucodontopsis*); OC as *Forsstroemia*.
- Holomitrium arboreum* Mitt. - GUYANA, SURINAM, FRENCH GUIANA: F also as *H. williamsii*; FWB; OC; GF.
- Hookeriopsis* - Buck (1987) in a rather radical rearrangement of the Hookeriales, splitted the genus *Hookeriopsis* into 4 new genera. I here maintain the concept of the genus *Hookeriopsis* sensu lato.
- H. diffusa* (Mitt.) Jaeg. - GUYANA: GF.
- H. falcata* (Hook.) Jaeg. - GUYANA, SURINAM, FRENCH GUIANA: FW; OC as *H. variabilis* (a duplicate of the material (U) proved to belong to this species); GF.
- H. parkeriana* (Hook. & Grev.) Jaeg. - GUYANA, SURINAM: FW; GF.
- H. undata* (Hedw.) Jaeg. - GUYANA: FW as *H. crispa*; GF.
- Hydropogon fontinaloides* (Hook.) Brid. - SURINAM, FRENCH GUIANA: F.
- Hydropogonella gymnostoma* (B.S.G.) Card. - GUYANA: F - SURINAM: FWB.
- Hyophila involuta* (Hook.) Jaeg. - SURINAM, FRENCH GUYANA: F as *H. tortula*; FWB; OC - GUYANA: \*Gradstein 4728.
- Hypnella diversifolia* (Mitt.) Jaeg. - GUYANA: GF; (FW as *Neohypnella*; this Mc. Connell & Quelch collection was erroneously reported for Guyana, see introduction).
- H. pallescens* (Hook.) Jaeg. - GUYANA, SURINAM, FRENCH GUIANA: FW; OC, both as *H. cymbifolia*; GF (The collections of the Mount Roraima are included here, adding a considerable extension to the variation of this species. These collections of high altitudes vary in

size, colour (orange tinged), absence of costae or indistinction of papillae, but these deviations are too intermixed to delimitate a new species).

*Isodrepanium lentulum* (Wils.) Britt. - SURINAM, FRENCH GUIANA: FW; OC - GUYANA: GF.

*Isopterygium tenerum* (Sw.) Mitt. - GUYANA: MIT ; CM 1896 as *Plagiothecium radicesetum* sp. nov.; GF; FW2 - SURINAM: FWB; FW2 - FRENCH GUIANA: \*Montfoort 513; FW2.

*Jaegerina scariosa* (Lor.) Artz. - SURINAM: FWB - GUYANA: \*Jansen-Jacobs et al. 220 - FRENCH GUIANA: \*Montfoort 516.

*Leiomela bartramoides* (Hook.) Par. - GUYANA: GF.

*Leiomitrium scaberrimum* (Broth.) Wijk & Marg. - GUYANA: GF.

*Lepidopilidium portoricense* (C.Müll.) Crum & Steere - GUYANA, SURINAM, FRENCH GUIANA: FW; OC; GF.

*Lepidopilum affine* C.Müll. - SURINAM: FW; FWB.

*L. cubense* (Sull.) Mitt. - SURINAM, FRENCH GUIANA: FW.

*L. polytrichoides* (Hedw.) Brid. - SURINAM, FRENCH GUIANA: FW, OC.

*L. purpurascens* Schimp. ex Besch. - GUYANA: GF.

*L. radicale* Mitt. - SURINAM, FRENCH GUIANA: FW.

*L. scabrisetum* (Schwaegr.) Steere - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB; OC as *L. falcatulum* (a duplicate of the material (U) proved to belong to this species); GF.

*L. stolonaceum* C.Müll. - GUYANA, SURINAM: FW; FWB - FRENCH GUIANA: \*Aptroot 298, 558.

*L. surinamense* C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB; OC as *L. tortifolium* (a duplicate of the material (U) proved to belong to this species); GF.

*Lepyrodontopsis trichophylla* (Hedw.) Broth. - GUYANA: GF - FRENCH

GUIANA: \*Cremers 9165 (det. W.R. Buck).

*Leskeodon cubensis* (Mitt.) Thér. - GUYANA: GF.

*Leucobryum albidum* (Brid.) Lindb. - GUYANA: GF. - FRENCH GUIANA: \*Cremers 4134.

*L. antillarum* Schimp. ex Besch. - GUYANA: F. - FRENCH GUIANA: \*Cremers 6794, 6801 (these collections, in OC reported as *L. giganteum*, proved to belong to this species).

*L. crispum* C.Müll. - GUYANA, SURINAM: F - FRENCH GUIANA: OC.

*L. giganteum* C.Müll. - GUYANA: GF. - FRENCH GUIANA: no records; a duplicate of the collections mentioned in OC (U) proved to be *L. antillarum*.

*L. laevifolium* Broth. - GUYANA: GF.

*L. martianum* (Hornsch.) C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC; GF.

*Leucoloma cruegerianum* (C.Müll.) Jaeg. - GUYANA, SURINAM: F; GF. - FRENCH GUIANA: \*Cremers 1579.

*L. serrulatum* Brid. - GUYANA, SURINAM: F; FWB; GF - FRENCH GUIANA: OC.

*L. tortellum* (Mitt.) Jaeg. - GUYANA, SURINAM: F; FWB - FRENCH GUIANA: OC.

*Leucomium strumosum* (Hornsch.) Mitt. - SURINAM: CM 1848 as *Acosta cuspidata*, gen. nov. (*hom. illeg.*); DM as *Hypnum cuspidatifolium*; FWB as *L. lignicola* and *L. cuspidatum*; FW2 - GUYANA: CM1896 as *L. guianense*, sp. nov.; RI as *L. compressum* and *L. connexum*; GF; FW2 - FRENCH GUIANA: OC as *L. lignicola*; FW2.

*L. steerei* Allen & Veling - GUYANA: Allen 1987, sp. nov.; GF; FW2.

*Leucophanes mittenii* Card. ex Par. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC as *L. calymperatum*.

*Macromitrium cirrosum* (Hedw.) Brid. - SURINAM, FRENCH GUIANA: F, also as *M. schwaneckeanum* - GUYANA: GF; \*Cornelissen 1027, 1035.

- M. leprieurii* Mont. - SURINAM, FRENCH GUIANA: F; OC - GUYANA: GF.
- M. pellucidum* Mitt. - GUYANA, SURINAM: F; FWB - FRENCH GUIANA: OC.
- M. perichaetiale* (Hook. & Grev.) C.Müll. - GUYANA: GF - SURINAM: \*Florschütz & Maas 2968, 3027.
- M. podocarpi* C.Müll. - SURINAM: F - FRENCH GUIANA: OC.
- M. portoricense* Williams - SURINAM: F - FRENCH GUIANA: \*Montfoort 10.
- M. punctatum* (Hook. & Grev.) Brid. - GUYANA, SURINAM, FRENCH GUIANA: F as *M. pentastichum*; FWB; OC as *M. pentastichum*; GF.
- M. standleyi* Bartr. - GUYANA: GF.
- M. stellulatum* (Hornsch.) Brid. - GUYANA, SURINAM: F - FRENCH GUIANA: \*Cremers 9025.
- M. trinitense* Williams - GUYANA: GF - SURINAM: \*Florschütz 4851, 4863.
- M. ulophyllum* Mitt. - GUYANA: GF.
- Meiothecium boryanum* (C.Müll.) Mitt. - SURINAM: CM1848 as *Pterogonium urceolatum*, corrected in CM 1851 as *Neckera boryana*, sp. nov.; DM as *Neckera*; FW2 - GUYANA: \*Cornelissen 968A; FW2 - FRENCH GUIANA: \*Aptroot 15513; FW2.
- Meteoridium remotifolium* (C.Müll.) Manuel - SURINAM, FRENCH GUIANA: F as *Meteoropsis*; OC - GUYANA: \*Jansen-Jacobs 381A; GF.
- cf. *Microdus muralis* (Hampe) Par. - FRENCH GUIANA: \*Gradstein 5781.
- Micromitrium telephorotheicum* (Florsch.) Crosby - SURINAM: F as *Nanomitrium*.
- Mittenothamnium reptans* (Hedw.) Card. - GUYANA: Williams 1921 as *M. volvatum* (a duplicate of the material (U) proved to belong to this species); GF; FW2 - SURINAM: \*Florschütz 4747; FW2 - FRENCH GUIANA: \*Cremers 4213; FW2.
- Mniomalia viridis* (Mitt.) C.Müll. - SURINAM: FWB - FRENCH GUIANA: OC - GUYANA: GF; \*Cornelissen 944.
- Neckeropsis disticha* (Hedw.) Kindb. - GUYANA, SURINAM, FRENCH GUIANA: F; FW; FWB; OC.
- N. undulata* (Hedw.) Reichdt. - GUYANA, SURINAM, FRENCH GUIANA: F; FW; FWB; OC.
- Octoblepharum albidum* Hedw. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC; GF.
- O. cocuiense* Mitt. - GUYANA, SURINAM: F; GF - FRENCH GUIANA: OC.
- O. cylindricum* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; GF.
- O. erectifolium* Mitt. - SURINAM: F - FRENCH GUIANA: OC - GUYANA: \*Maas & Westra 4222.
- O. pellucidum* C.Müll. - GUYANA, SURINAM: F; FWB - FRENCH GUIANA: \*Cremers 6847.
- O. pulvinatum* (Dozy & Molk.) Mitt. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB.
- O. stramineum* Mitt. - GUYANA, SURINAM: F - FRENCH GUIANA: \*Montfoort 519 (collections mentioned in OC proved all to be *O. cocuiense*).
- Orthostichidium guyanense* (Mont.) Broth. - FRENCH GUIANA: F
- Orthostichopsis crinita* (Sull.) Broth. - GUYANA: F; GF - FRENCH GUIANA: OC - SURINAM: \*Florschütz & Maas 2881, 2992.
- O. tetragona* (Hedw.) Broth. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC.
- Papillaria deppei* (Hornsch.) Jaeg. - SURINAM: F.
- P. nigrescens* (Hedw.) Jaeg. - GUYANA, SURINAM: F - FRENCH GUIANA: \*Cremers 8857.
- Philonotis uncinata* (Schwaegr.) Brid. var. *glaucescens* (Hornsch.) Florsch. - SURINAM, FRENCH GUIANA: F - GUYANA: \*Gradstein 4729.
- P. uncinata* var. *gracillima* (Aongstr.) Florsch. - GUYANA, SURINAM: F.

*P. uncinata* var. *uncinata* - GUYANA, SURINAM : F.

*Phyllocladon truncatulus* (C.Müll.) Buck - FRENCH GUIANA: \*Montfoort 509.

This species, better known as *Glossadelphus*, has recently been placed in *Phyllocladon* for priority reasons (see Buck 1987b).

*Phyllocladon falcifolium* (Schwaegr.) Crosby - GUYANA, SURINAM, FRENCH GUIANA: F as *Drepanophyllum*; OC; GF.

*Phyllogonium fulgens* (Hedw.) Brid. - GUYANA, SURINAM: F; GF - FRENCH GUIANA: OC.

*P. viride* Brid. - GUYANA: \*Jansen-Jacobs et al. 383 - SURINAM: \*Florschütz & Maas 2921 - FRENCH GUIANA: \*Cremers 7640, 9038.

*Pilosium chlorophyllum* (Hornsch.) C.Müll. - GUYANA, SURINAM, FRENCH GUIANA: FW; FWB; OC; GF.

*Pilotrichella pentasticha* (Brid.) Wijk & Marg. - GUYANA, SURINAM, FRENCH GUIANA: F as *P. versicolor*; OC.

*Pirella cymbifolia* (Sull.) Card. - SURINAM: \*Gradstein 4649.

*P. pohlii* (Schwaegr.) Card. - GUYANA, SURINAM, FRENCH GUIANA: F; OC.

*Polytrichum juniperinum* Hedw. - GUYANA: GF.

*Porotrichum korthalsianum* (Dozy & Molk.) Mitt. - SURINAM: FW - FRENCH GUIANA: \*Bekker 2314 A.

*P. piniforme* (Brid.) Mitt. - SURINAM: FW as *Pinnatella* - FRENCH GUIANA: \*Cremers 9134.

*P. substriatum* (Hampe) Mitt. - SURINAM, FRENCH GUIANA: FW; OC (both as *P. plicatulum*).

*Potamium deceptivum* Mitt. - GUYANA: CM 1896 as *Aptychus leucodontaceus*, *sp. nov.*; FW2 - SURINAM: \*Florschütz 2070; FW2.

*P. vulpinum* (Mont.) Mitt. - FRENCH GUIANA: MON 1835 as *Neckera vulpina*, *sp. nov.*; FW2 - GUYANA: RI; BAR 1939; FW2 - SURINAM: FWB; FW2.

*Pseudocryphaea flagellifera* (Brid.) Britt. - GUYANA, SURINAM: F.

*Pterogonidium pulchellum* (Hook.) C.Müll. - SURINAM: CM 1848 as *Hypnum microtheca*, *sp. nov.*; DM as *Hypnum microtheca* and as *Neckera pulchella*; FW2 - FRENCH GUIANA: MON 1840 as *Pterigynandrum pulchellum* and *P. intricatum* (the cited Leprieur collection (PC) proved to belong here); OC; FW2.

*Pyrrhobryum spiniforme* (Hedw.) Mitt. - GUYANA, SURINAM, FRENCH GUIANA: F as *Rhizogonium*; GF.

*Racopilum tomentosum* (Hedw.) Brid. - GUYANA, SURINAM: F; GF - FRENCH GUIANA: \*Cremers 9104 bis.

*Renauldia paradoxica* Allen - GUYANA: GF - FRENCH GUIANA: \*Cremers 11070.

*Rhacocarpus purpurascens* (Brid.) Par. - GUYANA: GF.

*Rhacopilopsis trinitensis* (C.Müll.) Britt. & Dix. - GUYANA: RI; BAR 1939; GF; FW2 - SURINAM: \*Florschütz & Zielman 5029; FW2 - FRENCH GUIANA: OC; FW2.

*Schlotheimia jamesonii* (Arnott) Brid. - SURINAM: F - FRENCH GUIANA: \*Cremers 4189, 7121.

*S. rugifolia* (Hook.) Schwaegr. - SURINAM, FRENCH GUIANA: F; FWB; OC - GUYANA: \*Cornelissen 1037.

*S. torquata* (Hedw.) Brid. - GUYANA, SURINAM: F; FWB; GF - FRENCH GUIANA ? : F.

*Sematophyllum cochleatum* (Broth.) Broth. - SURINAM: \*Florschütz 218; FW2 - FRENCH GUIANA: \*Cremers 4743; FW2.

*S. galipense* (C.Müll.) Mitt. - GUYANA: BAR 1939 as *Rhaphidostichum guianense*, *sp. nov.*; GF; FW2 - SURINAM: \*Florschütz 1477; FW2.

*S. lonchophyllum* (Mont.) J.Florsch., *comb. nov.* (*Hypnum lonchophyllum* Mont., Syll. Gen. Spec. Pl. Crypt.: 10. 1856) - FRENCH GUIANA: MON



1856 as *Hypnum lonchophyllum*, *sp. nov.*; FW2 - SURINAM: FWB; FW2.

This species as well as *S. pacimoniense* was transferred to the genus *Potamium* by Mitten (1869), but except for a semi-aquatic habitat they have little in common with, for instance *P. vulpinum* which has a very different peristome. The peristomes in *S. lonchophyllum* and *S. pacimoniense* are the same as in other *Sematophyllum* species, though the exostome teeth show a median furrow. This furrow however is not constantly present and is apparently correlated with the degree of thickening of the dorsal plates.

*S. octodiceroides* (C.Müll.) Broth. - SURINAM: \*Geijskes 50; FW2.

*S. pacimoniense* (Mitt.) J. Florsch., *comb. nov.* (*Potamium pacimoniense* Mitt., J. Linn. Soc. 12: 474. 1868) - SURINAM: \*Florschütz 4784; FW2.

For comment see under *S. lonchophyllum*.

*S. subpinnatum* (Brid.) Britt. - GUYANA: CM 1896 as *Aptychus concinnus*, *sp. nov.* and *A. grammicarpus*, *sp. nov.*; G as *S. loxense* and *S. admistum* (the cited collection, Graham 201 (NY), proved to belong to this species); RI, also as *S. caespitosum* and *S. loxense*; BAR 1939 as *S. caespitosum* and *S. loxense*; GF; FW2 - SURINAM: CM 1848 as *Leskea caespitosa* and *Leskea kegeliana*, *sp. nov.*; DM as *Hypnum kegelianum*; FWB; FW2 - FRENCH GUIANA: A as *Hypnum caespitosum*; MON 1835 as *Leskea caespitosa*; FW2.

*S. subsimplex* (Hedw.) Mitt. - GUYANA: M as *Hypnum richardii*; W; G as *Rhaphidorrhynchium*; RI as *Rhaphidorrhynchium*; BAR 1939 as *Rhaphidorrhynchium*; GF; FW2 - SURINAM: CM 1848 as *Hypnum subsimplex* and *H. richardii*; DM as *Hypnum richardii* and *H. subsimplex*; BAR 1948; FW2 - FRENCH GUIANA: MON 1835 as

*Leskea microcarpa* (the herbarium material (PC) proved to belong here); 1835, 1840 as *Hypnum subsimplex* and *H. richardii*; P as *Rhaphidostegium*; FW2 *Sphagnum cuspidatum* Ehrh. ex Hoffm. var. *serrulatum* (Schlieph.) Schlieph. - GUYANA, SURINAM: F.

*S. denticulatum* Brid. - GUYANA: F as *S. auriculatum* Schimp. var. *ovatum* Warnst.

*S. magellanicum* Brid. - GUYANA: F; GF.

*S. negrense* Mitt. - GUYANA: GF.

*S. perichaetiale* Hampe - GUYANA, SURINAM: F as *S. palustre* (see Eddy 1977: 386); GF.

*S. portoricense* Hampe - GUYANA: F

*S. tenerum* Sull. & Lesq. - GUYANA: GF.

*Spiridentopsis longissima* (Raddi) Broth. - GUYANA: F.

*Splachnobryum obtusum* (Brid.) C.Müll. - SURINAM: F.

*Squamidium leucotrichum* (Tayl.) Broth. - GUYANA, SURINAM: F; GF - FRENCH GUIANA: OC.

*Stereophyllum* - see also *Entodontopsis*.

*S. radiculosum* (Hook.) Mitt. - GUYANA: \*Stoffers et al. 387.

*Syrhophodon circinatus* (Brid.) Mitt. - FRENCH GUIANA: \*Montfoort 11 (det. W.D. Reese).

*S. cryptocarpus* Dozy & Molk. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC.

*S. elatus* Mont. - SURINAM, FRENCH GUIANA: F as *S. incompletus* var. *elatus*.

*S. gaudichaudii* Mont. SURINAM: F - GUYANA: GF.

*S. helicophyllus* Mitt. - GUYANA: GF.

*S. hornschurchii* Mart. - GUYANA, SURINAM: F as *S. surinamensis* p.p. (see Reese 1977: 17); FWB; GF - FRENCH GUIANA: \*Cremers 7608.

*S. incompletus* Schwaegr. var. *incompletus* - GUYANA, SURINAM, FRENCH GUIANA: F; FWB.

- S. incompletus* Schwaegr. var. *lanceolatus* (Hampe) Reese - GUYANA, SURINAM: F as *Calymperes lanceolatum* - FRENCH GUIANA: no records; the collections mentioned in OC as *Calymperes lanceolatum* proved to belong to *Calymperes smithii*.
- S. incompletus* Schwaegr. var. *luridus* (Par. & Broth.) Florsch. - GUYANA, SURINAM, FRENCH GUIANA: F; GF.
- S. lepriurii* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F; OC; GF.
- S. ligulatus* Mont. - GUYANA, SURINAM, FRENCH GUIANA: F; FWB; OC; GF.
- S. lycopodiodes* (Brid.) C.Müll. - GUYANA: GF.
- S. parasiticus* (Brid.) Besch. var. *disciformis* (C.Müll.) Florsch. - SURINAM: F; FWB - GUYANA: \*Cornelissen 540; GF - FRENCH GUIANA: \*Montfoort 517.
- S. parasiticus* (Brid.) Besch. var. *flexifolius* (Mitt.) Reese - SURINAM: F as var. *parasiticus* p.p. (see Reese 1981: 247) - GUYANA: GF; \*Cornelissen 506 - FRENCH GUIANA: \*Cremers 8352.
- S. parasiticus* (Brid.) Besch. var. *parasiticus* - SURINAM: F; FWB - GUYANA: GF; \*Cornelissen 513 - FRENCH GUIANA: \*Cremers 5141.
- S. prolifer* Schwaegr. - SURINAM, FRENCH GUIANA: F; OC.
- S. prolifer* var. *acanthoneurus* (C.Müll.) C.Müll. - SURINAM: \*Florschütz & Maas 3122 (det. W.D. Reese).
- S. prolifer* var. *cincinnatus* (Hampe) Reese - GUYANA: GF - SURINAM: \*Daniels & Jonker 1233 B (det. W.D. Reese) - FRENCH GUIANA: \*Cremers 7638.
- S. prolifer* var. *papillosus* (C.Müll.) Reese - GUYANA: GF - SURINAM: \*Maguire 24598 p.p. (det. W.D. Reese) - FRENCH GUIANA: \*Cremers 6213.
- S. prolifer* var. *prolifer* - SURINAM: \*Daniels & Jonker 1124 A (det. W.D. Reese) - FRENCH GUIANA: \*Bekker 2271 A.
- S. rigidus* Hook. & Grev. - GUYANA, SURINAM, FRENCH GUIANA: F; GF.
- S. simmondsii* Steere - SURINAM: F as *S. brevisetus*, sp. nov.; FWB - GUYANA: \*Cornelissen 561 - FRENCH GUIANA: \*Cremers 5898.
- Taxithelium impellucidum* (C.Müll.) Par. - GUYANA: CM 1896 as *Sigmatella impellucida*, sp. nov.
- The type, a Quelch collection from Guyana, could not yet be located. Presumably it will be a synonym of *T. planum* or *T. quelchii*.
- T. planum* (Brid.) Mitt. - SURINAM: CM 1848 as *Hypnum planum* var. *instratum* (the cited Kegel collections (GOET) are no exceptions on the usual variation in this species); DM as *Hypnum*; FW; FW2 - GUYANA: W; G; RI; BAR 1939; GF; FW2 - FRENCH GUIANA: P; OC, also as *T. nepalense* (the herbarium material proved to belong to this species); FW2.
- T. pluripunctatum* (Ren. & Card.) Buck - SURINAM: FWB as *Taxithelium* sp.; FW2 - GUYANA: \*Cornelissen 234; FW2 - FRENCH GUIANA: Thériot 1934 as *T. patulifolium*, sp. nov.; FW2.
- T. quelchii* (C.Müll.) Par. - GUYANA: CM 1896 as *Sigmatella quelchii*, sp. nov.; G; FW2 - SURINAM: FWB; FW2 - FRENCH GUIANA: \*Cremers 4248; FW2.
- Though this species has been synonymized with *T. planum* by Buck 1985, it will be maintained in the Moss Flora of Suriname as a separate species because it is in the Guianas well-defined from *T. planum*.
- Thamniopsis killipii* (Williams) Bartr. - GUYANA, SURINAM: FW; GF.
- Thuidium involvens* (Hedw.) Mitt. - SURINAM: CM 1848 as *Hypnum gratum* (the collection Kegel 514 (GOET) belongs here); DM as *Hypnum*; FWB; FW2 - FRENCH GUIANA: MON as *Hypnum gratum*; OC as *T. campanulatum* (the herbarium material proved to belong to

this species); FW2 - GUYANA: \*Jansen-Jacobs et al. 1239.

***T. tomentosum*** Schimp. - GUYANA: CM 1896 as *T. verrucipes*, *sp. nov.* (the type could not yet be studied, but it presumably will belong here); RI; GF both as *T. antillarum*; FW2 - SURINAM: BAR 1948 as *T. acuminatum* (a duplicate of the cited collection proved to belong to this species); FW2 - FRENCH GUIANA: A as *Hypnum delicatulum* (It is obvious that this must be a wrong identification. The moss collections of Aublet could not be studied for they seem to be lost); OC as *T. antillarum* and as *T. pseudodelicatulum* (a duplicate of the cited collection (hb. M. Onraedt) proved to belong here); FW2.

***Trichosteleum bolivarense*** Robins. - SURINAM: \*Florschütz 4798; FW2 - GUYANA: \*Gradstein 5678; FW2.

***Trichosteleum fluviale*** (Mitt.) Jaeg. - SURINAM: FWB; FW2 - FRENCH GUIANA: OC; FW2 - GUYANA: \*Jansen-Jacobs et al. 225 B; GF.

***T. hornschurchii*** (Hampe) Jaeg. - SURINAM: \*Lanjouw & Lindeman 619; FW2 - GUYANA: \*Cornelissen 208; FW2 - FRENCH GUIANA: \*Cremers 6307.

***T. intricatum*** (Thér.) J. Florsch., *comb. nov.* (*Acroporium intricatum* Thér., Ann. Bryol. 7: 159. 1934) - FRENCH GUIANA: Thériot 1934, as *Acroporium intricatum*, *sp. nov.*; FW2 - SURINAM: \*Florschütz 433; FW2 - GUYANA: \*Smith 2520 (cited by Bartram 1939 as *Rhaphidorrhynchium subsimplex*); FW2.

This species has minute but distinct papillae and belongs undoubtedly in *Trichosteleum*.

***T. micropyxis*** (C.Müll.) Broth. - GUYANA: CM 1896 as *Aptychus micropyxis* *sp. nov.* - FRENCH GUIANA: no records; the collection mentioned in OC proved to be *T. fluviale*

The type from Guyana could not yet be located. Presumably it will prove to be identical with *T. fluviale*

***T. papillosum*** (Hornsch.) Jaeg. - GUYANA: CM 1896 as *Sigmatella guianae*, *sp. nov.*; RI; BAR 1939 as *T. ambiguum* (the cited Smith collection (U) proved to belong to this species); GF; FW2 - SURINAM: CM 1848 as *Hypnum spirale*, *sp. nov.*; DM as *Hypnum*; BAR 1948; FWB; FW2 - FRENCH GUIANA: OC, also as *T. rubrisetum* (a duplicate of this collection (U) proved to belong to this species); FW2.

***Trichostomum brachydontium*** Bruch - GUYANA: GF as *T. duidense*; \*Smith 3132 (det. Zander)

***Vesicularia vesicularis*** (Schwaegr.) Broth. - SURINAM: CM 1848 as *Acosta swartzii*, *gen. nov.* (*hom. illeg.*); DM as *Hypnum subdenticulatum* and *H. surinamense*, *sp. nov.*; FWB; FW2 - GUYANA: RI as *V. vesicularis* var. *amphibola*; BAR 1939 as *V. amphibola*; GF; FW2 - FRENCH GUIANA: OC, also as *V. amphibola* and *V. crassicaulis*; FW2.

***Wijkia costaricensis*** (Bartr. & Dix.) Crum - SURINAM: \*Florschütz 1504; FW2 - FRENCH GUIANA: \*Cremers 9243; FW2.

***Zelometeorium patulum*** (Hedw.) Manuel - GUYANA, SURINAM, FRENCH GUIANA: F as *Meteoriopsis*; FWB; OC, also as *Z. recurvifolium* (a duplicate of the herbarium material proved to belong here); GF.

#### List of synonyms

Synonyms, already recorded in the Moss Flora of Suriname, are not mentioned here again.

*Acosta swartzii* (Schwaegr.) C.Müll., *hom. illeg.* = *Vesicularia vesicularis* (see Müller 1851: 242)

The type of this species, a Kegel collection from Suriname, bears the

label *Hookeria swartzii* Schwaegr. In the description of *Acosta* (*gen. nov., hom. illeg.*) Müller (1848) cited the latter name as a synonym. Later, in Synopsis 2 (1851), he mentioned *Acosta swartzii* again as a synonym of *Vesicularia* (*Hypnum*) *denticulatum*. The type collection (GOET) proved indeed to belong to *Vesicularia vesicularis*.

*A. cuspidata* C. Müll. = *Leucomium strumosum* (see Allen 1987: 669)

*Acroporium guianense* (Mitt.) Broth., *syn. nov.* = *A. pungens*

This species was described by Mitten (1869) being slightly smaller than *A. pungens* with leaves papillose at apex. These characters proved to be variable and leaves with and without papillae may occur on the same plant, even in the type collection (NY).

*A. intricatum* Thér. = *Trichosteleum intricatum* (Thér.) *comb. nov.*

*Aptychus concinnus* C. Müll. = *Sematophyllum subpinnatum* (see Dixon 1920: 89)

*A. grammicarpus* C. Müll. = *Sematophyllum subpinnatum* (see Dixon 1920: 89)

The type, a Quelch collection from Guyana (BM), proved indeed to be identical with *S. subpinnatum*.

*A. leucodontaceus* C. Müll., *syn. nov.* = *Potamium deceptivum* (see under *P. leucodontaceum*)

*A. micropyxis* C. Müll. = *Trichosteleum micropyxis* (cf. Brotherus 1925: 439)

The type of this species, a Quelch collection from Guyana, could not yet be located.

*Barbula crügeri* C. Müll. = *B. indica* (see Zander 1979: 185)

*Bryum candicans* Tayl. = *B. argenteum* (see Ochi 1980: 110)

*B. crügeri* C. Müll. = *B. apiculatum* (see Ochi 1980: 128)

*B. truncorum* (Brid.) Brid. = *B. billardieri* (see Ochi 1971: 503)

*Calymperes donnellii* Aust. = *C. afzelii*

(see Edwards 1980: 67)

*C. lanceolatum* Hampe = *S. incompletus* var. *lanceolatus* (see Reese 1977: 13)

*C. richardii* C. Müll. = *C. palisotii* subsp. *richardii* (see Edwards 1980: 81)

*C. rufum* Herz. = *C. rubiginosum* (see Reese 1975: 92)

*Campylopus harrisii* (C. Müll.) Par. = *C. cubensis* (see Frahm 1985: 274)

*C. nanofilifolius* (C. Müll.) Par. = *Bryohumbertia filifolia* (see Frahm 1982: 365)

*C. praealtus* (C. Müll.) Par. = *C. subcuspidatus* (see Frahm 1981: 445)

*C. savannarum* (C. Müll.) Mitt. subsp. *bartlettii* (Bartr.) Florsch. = *C. savannarum* (see Frahm & Gradstein 1987: 315)

*Drepanophyllum falcifolium* (Schwaegr.) = *Phyllodrepanium falcifolium* (see Crosby 1970: 345)

*Ectropothecium apiculatum* Mitt. = *E. leptochaeton* (see Buck 1983: 311)

*E. globithecata* (C. Müll.) Mitt. = *E. leptochaeton* (Ando & Nishimura, pers. comm.)

*E. guianae* Broth. & Par., *syn. nov.* = *E. leptochaeton*

The type of this species is a Michel collection from French Guiana (PC). According to Veling & Florschütz-de Waard (The Mosses of Suriname Part 3, msc.) it fits well within the variation of *E. leptochaeton*.

*Fissidens muricatus* Mitt. = *F. diplopus* (see Pursell 1980: 256)

*Forsstroemia geniculata* (Mitt.) Par. = *Henicodium geniculatum* (see Buck 1989b: 534)

*Glossadelphus truncatulus* (C. Müll.) Fleisch. = *Phyllodon truncatulus* (see Buck 1987b: 519)

*Groutiella fragilis* (Mitt.) Crum & Steere = *G. tomentosa* (see Vitt & Crum 1970: 145)

*G. mucronifolia* (Hook. & Grev.) Crum & Steere = *G. apiculata* (see Vitt 1979: 11)

*Holomitrium williamsii* Bartr. = *H. arboreum*

*Hookeriopsis crispa* (C. Müll.) Jaeg. = *H.*

- undata* (see Buck 1987a: 219)
- H. guatemalensis* Bartr. = *Callicostella guatemalensis* (Bartr.) *comb. nov.*  
The new combination *Schizomitrium guatemalensis* (Bartr.) J. Florsch. was made in Florschütz-de Waard 1986, but afterwards the name *Callicostella* was conserved.
- Hyophila tortula* (Schwaegr.) Jaeg. = *H. involuta* (see Chen 1941: 185)
- Hypnella cymbifolia* (Hampe) Jaeg. = *H. pallescens* (see Crosby, Allen & Magill 1985: 126)
- Hypnum lonchophyllum* Mont. = *Sematophyllum lonchophyllum* (see under *Potamium lonchophyllum*)
- H. microtheca* C. Müll., *syn. nov.* = *Pterogonidium pulchellum*  
The type collection, Kegel 518 from Suriname (GOET), proved to be identical with *Pterogonidium pulchellum*.
- H. richardii* Schwaegr. = *Sematophyllum subsimplex*  
Mitten already mentioned this species as a "forma minor" of *Sematophyllum subsimplex*. The type could not yet be located, but all older collections from the Guianas bearing this name proved to be *Sematophyllum subsimplex*.
- H. spirale* C. Müll. = *Trichosteleum papillosum* (see Müller 1851: 273)
- H. surinamense* Dozy & Molk. = *Vesicularia vesicularis* (see Buck 1984: 181)
- Isopterygium radicisetum* (C. Müll.) Broth., *syn. nov.* = *I. tenerum*  
This species was described as a *Plagiothecium* from Guyana. The isotypes, Quelch 1265 (NY, PC), are identical with *I. tenerum* according to Zielman & Florschütz-de Waard (The Mosses of Suriname Part 3, msc.)
- Leskea kegeliana* C. Müll. = *Sematophyllum subpinnatum* (see under *S. kegelianum*)
- Leucodontopsis geniculata* (Mitt.) Crum & Steere = *Henicodium geniculatum* (see Buck 1989: 534)
- Leucomium compressum* Mitt. = *L. strumosum* (see Allen 1987: 669)
- L. connexum* Ren. & Card. = *L. strumosum* (see Allen 1987: 669)
- L. cuspidatum* (C. Müll.) Jaeg. = *L. strumosum* (see Allen 1987: 669)
- L. guianense* C. Müll. = *L. strumosum* (see Allen 1987: 669)
- L. lignicola* Mitt. = *L. strumosum* (see Allen 1987: 669)
- Macromitrium pentastichum* C. Müll. = *M. punctatum* (see Vitt. 1979: 6)
- M. schwaneckianum* Hampe = *M. cirrosum*
- Meteoriopsis patula* (Hedw.) Broth. = *Zelometeorium patulum* (see Manuel 1977b: 118)
- M. remotifolia* (C. Müll.) Broth. = *Meteoridium remotifolium* (see Manuel 1977a: 49)
- Mittenothamnium diminutivum* (Hampe) Britt. = *Chrysohypnum diminutivum* (see Buck 1984: 182)
- Nanomitrium telephorotheceum* Florsch. = *Micromitrium telephorotheceum* (see Crosby 1968: 116)
- Neckera boreana* C. Müll. = *Meiothecium boryanum*
- N. vulpina* Mont. = *Potamium vulpinum*
- Neohypnella diversifolia* (Mitt.) Welch & Crum = *Hypnella diversifolia* (see Crosby, Allen & Magill 1985: 127)
- Pilotrichella versicolor* (C. Müll.) Jaeg. = *P. pentasticha* (see Robinson 1967: 34)
- Pinnatella piniformis* (Brid.) Fleisch. = *Porotrichum piniforme* (see Sastre-de Jesus 1987: 189)
- Plagiothecium radicisetum* C. Müll., *syn. nov.* = *Isopterygium tenerum* (see under *I. radicisetum*)
- Porotrichum plicatulum* Mitt. = *P. substriatum* (see Sastre-de Jesus 1987: 174)
- Potamium leucodontaceum* (C. Müll.) Broth., *syn. nov.* = *Potamium deceptivum*  
Isotypes of the Quelch collection from Guyana (BM, PC) proved to be identical with *P. deceptivum*.

The latter is difficult to distinguish from certain forms of *Sematophyllum subpinnatum* if sterile, but the sporogones with slender, erect exostome teeth and rudimentary endostome segments in one of the collections (PC) are typical for *Potamium deceptivum*.  
*P. lonchophyllum* (Mont.) Mitt. = *Sematophyllum lonchophyllum* (Mont.) comb. nov.  
*P. pacimoniense* Mitt. = *Sematophyllum pacimoniense* (Mitt.) comb. nov.  
*Rhaphidostichum guianense* Bartr. = *Sematophyllum galipense* (see Buck 1989a: 192)  
*Rhizogonium spiniforme* (Hedw.) Bruch. = *Pyrrhobryum spiniforme* (see Manuel 1980: 68)  
*Rhodobryum beyrichianum* (Hornsch.) Hampe = *Bryum beyrichianum* (see Ochi 1981: 26)  
*Schizomitrium* B.S.G. = *Callicostella* (C.Müll.) Mitt (nom. cons.)  
*Sematophyllum caespitosum* (Hedw.) Mitt. = *S. subpinnatum* (see Buck 1983a: 309)  
*S. guianense* Mitt., syn. nov. = *Acroporium pungens* (see under *A. guianense*)  
*S. kegelianum* (C.Müll.) Mitt. = *S. subpinnatum* (see Dixon 1920: 88)  
 The type of this species is a Kegel collection from Suriname (GOET). It was described as being different from *S. caespitosum* (= *S. subpinnatum*) in the curved branches and homomallous, cochleariform leaves, but these characters are typical for one of the many forms of the latter species.  
*S. loxense* (Hook.) Mitt. = *S. subpinnatum* (see Dixon 1920: 87)  
*Sigmatella guianae* C. Müll., syn. nov. = *Trichosteleum papillosum* (see under *T. guianae*)  
*S. quelchii* C.Müll. = *Taxithelium quelchii*  
*Sphagnum auriculatum* Schimp. = *S. denticulatum* (see Dirkse & Isoviita 1986:

388)  
*Stereophyllum leucostegum* (Brid.) Mitt. = *Entodontopsis leucostega* (see Buck & Ireland 1985: 104)  
*S. obtusum* Mitt. = *Entodontopsis nitens* (see Buck & Ireland 1985: 104)  
*S. rhabdodonta* (Card.) Grout = *Entodontopsis rhabdodonta* (see Buck & Ireland 1985: 105)  
*Syrrhopodon brevisetus* Florsch. = *S. simmondsii* (see Reese 1978: 217)  
*S. incompletus* Schwaegr. var. *elatus* (Mont.) Florsch. = *S. elatus* (see Reese 1984: 125)  
*Taxithelium patulifolium* Ther. = *T. pluripunctatum* (see Buck 1985: 48)  
*Thuidium antillarum* Besch. = *T. tomentosum* (Buck, pers. comm.)  
*Tortula subulifolia* (Sull.) Mitt. = *Barbula arcuata* (see Zander 1979: 199)  
*Trichosteleum guianae* (C.Müll.) Broth., syn. nov. = *T. papillosum*  
 The type of this species, a Quelch collection from Guyana (BM), is identical with *T. papillosum*  
*Trichostomum duidense* Bartr. = *T. brachydontium* (see Sollman 1984: 55)  
*Vesicularia amphibola* (Mitt.) Broth. = *V. vesicularis* (see Buck 1984: 181)  
*V. crassicaulis* (Mitt.) Broth. = *V. vesicularis* (see Buck 1984: 181)  
*V. subdenticulata* (C.Müll.) Broth. = *V. vesicularis* (see Buck 1984: 181)  
*V. surinamensis* (Dozy & Molk.) Broth. = *V. vesicularis* (see Buck 1984: 181)

## Systematic arrangement of the Genera and Families

### SPHAGNACEAE

*Sphagnum*

### FISSIDENTACEAE

*Fissidens*

### DICRANACEAE

*Bryohumbertia*

*Campylopus*

*Dicranella*

- Dicranoloma*  
*Eucamptodontopsis*  
*Holomitrium*  
*Leucoloma*  
*Microdus*  
**LEUCOBRYACEAE**  
*Leucobryum*  
*Leucophanes*  
*Octoblepharum*  
**CALYMPERACEAE**  
*Calymperes*  
*Syrrhopodon*  
**POTTIACEAE**  
*Barbula*  
*Hyophila*  
*Trichostomum*  
**EPHEMERACEAE**  
*Micromitrium*  
**FUNARIACEAE**  
*Funaria*  
**SPLACHNACEAE**  
*Splachnobryum*  
**BRYACEAE**  
*Brachymenium*  
*Bryum*  
**PHYLLODREPANACEAE**  
*Mniomalia*  
*Phyllodrepanium*  
**RHIZOGONACEAE**  
*Pyrrhobryum*  
**BARTRAMIACEAE**  
*Breutelia*  
*Leiomela*  
*Philonotis*  
**ORTHOTRICHACEAE**  
*Groutiella*  
*Leiomitrium*  
*Macromitrium*  
*Schlotheimia*  
**RACOPILACEAE**  
*Racopilum*  
**HYDROPOGONACEAE**  
*Hydropogon*  
*Hydropogonella*  
**HEDWIGIACEAE**  
*Rhacocarpus*  
**LEUCODONTACEAE**  
*Henicodium (Leucodontopsis)*  
*Pseudocryphea*  
**PTEROBRYACEAE**
- Jaegerina*  
*Orthostichidium*  
*Orthostichopsis*  
*Pireella*  
*Renauldia*  
*Spiridentopsis*  
**METEORACEAE**  
*Floribundaria*  
*Meteoridium*  
*Papillaria*  
*Pilotrichella*  
*Squamidium*  
*Zelometeorium*  
**PHYLLOGONIACEAE**  
*Phyllogonium*  
**NECKERACEAE**  
*Isodrepanium*  
*Neckeropsis*  
*Pinnatella*  
*Porotrichum*  
**BRACHYTHECIACEAE**  
*Lepyrodontopsis*  
**THUIDIACEAE**  
*Thuidium*  
**HOOKERACEAE** (in the latest proposal for a rearrangement in the Hookeriales by Buck (1987a) this family should now be named Callicostaceae)  
*Callicosta*  
*Callicostella*  
*Crossomitrium*  
*Cyclodictyon*  
*Daltonia*  
*Hemiragis*  
*Hookeriopsis*  
*Hypnella*  
*Lepidopilidium*  
*Lepidopilum*  
*Leskeodon*  
*Thamniopsis*  
**LEUCOMIACEAE**  
*Leucomium*  
**PLAGIOTHECIACEAE**  
*Entodontopsis*  
*Pilosium*  
*Stereophyllum*  
**SEMATOPHYLLACEAE**  
*Acroporium*  
*Phyllodon (Glossadelphus)*  
*Meiothecium*

*Potamium*  
*Pterogonidium*  
*Sematophyllum*  
*Taxithelium*  
*Trichosteium*  
*Wijkia*

## HYPNACEAE

*Chrysohypnum*  
*Ectropothecium*  
*Isopterygium*  
*Mittenothamnium*  
*Rhacopilopsis*  
*Vesicularia*

## POLYTRICHACEAE

*Polytrichum*

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