

# Bryophyte flora of the Huon Peninsula, Papua New Guinea. LXIX. Preliminary report on the Sematophyllaceae (Musci), with nomenclatural notes

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Received 26 Apr. 2005, revised version received 10 May 2005, accepted 11 May 2005

Tan, B. C., Koponen, T. & Norris, D. H. 2005: Bryophyte flora of the Huon Peninsula, Papua New Guinea. LXIX. Preliminary report on the Sematophyllaceae (Musci), with nomenclatural notes. — *Ann. Bot. Fennici* 42: 231–233.

We propose the following new nomenclature in the Sematophyllaceae (Musci): *Papillidiopsis brongersmae* (Zanten) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*, *Papillidiopsis cymbiforme* (Bartr.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*, *Radulina orthophylla* (Besch.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*, *Radulina hamata* (Dozy & Molk.) W.R. Buck & B.C. Tan var. *elegantissima* (M. Fleisch.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. & stat. nov.*, *Radulina laevi-hamata* (Dix.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*, *Radulina pendens* (D.H. Norris & T.J. Kop.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*, *Radulina weidenii* (Zanten) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*, and *Warburgiella perfalcata* (Bartr.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*. *Trichosteleum aequoreum* M. Fleisch. *ex* Dix. and *T. grosso-mamillosum* Paris *ex* Dix. are synonymized with *Radulina hamata* var. *scaberula*, and *Trichosteleum sematophylloides* Dix. is lectotypified and synonymized with *Wijkia extenuata* (Brid.) Crum.

Key words: Musci, nomenclature, Sematophyllaceae, taxonomy

A recent floristic revision of the family Sematophyllaceae of Huon Peninsula of Papua New Guinea has led to the necessity to propose some nomenclatural novelties. The main revisions, the first of which is Tan *et al.* (2006), are awaiting publication and since there is a need to use this new nomenclature in other manuscripts under review, we have decided to publish separately, as a short note, the following nomenclatural proposals, lectotype selection, and new synonymizations.

***Papillidiopsis brongersmae*** (Zanten) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*

BASIONYM: *Trichosteleum brongersmae* Zanten, Nova Guinea Bot. 16(16): 340, pl. 321, fig. 3. 1964.

***Papillidiopsis cymbiforme*** (Bartr.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*

BASIONYM: *Trichosteleum cymbiforme* Bartr., Lloydia 5: 287, fig. 54. 1942.

In our interpretation, *Trichosteleum cymbiforme* is a member of *Papillidiopsis* and close to *P. ramulina* (Thwaites & Mitt.) W.R. Buck & B.C. Tan.

***Radulina orthophylla*** (Besch.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*

BASIONYM: *Sematophyllum orthophyllum* Besch., Bull. Soc. Bot. France sér. 3, 45: 122. 1898. — TYPES: Tahiti. 1896 *Nadeaud* 384, 385.

***Radulina hamata*** (Dozy & Molk.) W.R. Buck & B.C. Tan **var. *elegantissima*** (M. Fleisch.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. & stat. nov.*

BASIONYM: *Trichosteleum elegantissimum* M. Fleisch., Musci Fl. Buitenzorg 4: 1326. 1923. — *Radulina elegantissima* (M. Fleisch.) W.R. Buck & B.C. Tan, Acta Bryolichenol. Asiatica 1: 10. 1989 [1990]. — SYNTYPES: Indonesia. West-Java, *Fleischer*; Ost-Java, *Fleischer*; Sumatra, *Fleischer*; Philippines. *Elmer* (FH!).

***Radulina hamata*** (Dozy & Molk.) W.R. Buck & B.C. Tan **var. *scaberula*** (Mont.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. & stat. nov.*

BASIONYM: *Hypnum scaberulum* Mont., London J. Bot. 3: 633. 1844. — *Radulina scaberula* (Mont.) W.R. Buck & B.C. Tan, Acta Bryolichenol. Asiatica 1: 10. 1989 [1990]. — TYPE: Indonesia. Java, 1843, ex Herb. Miguel (isotype NY!).

*Trichosteleum aequoreum* M. Fleisch. ex Dix., J. Linn. Soc. Bot. 43: 320. 1916; M. Fleisch., Musci Flora Buitenzorg 4: 1328. 1923, *syn. nov.* — *Radulina aequorea* (M. Fleisch. ex Dix.) W.R. Buck & B.C. Tan, Acta Bryolichenol. Asiatica 1: 10. 1989 [1990]. — TYPE: Papua New Guinea. Bismarck Archipelago, Mioko Is., *Fleischer's Musci Archiper. Ind. et Polyn. Exsicc. 446* (also as *Kryptogamae Exsiccatae 1899*, H!).

*Trichosteleum grosso-mamillosum* Müll. Hal. in Paris, Ind. Bryol. 1311. 1898, *nom. nud.* — *Trichosteleum grosso-mamillosum* Paris ex Dix., J. Linn. Soc. Bot. 45: 507. 1922, *syn. nov.* — Type: Papua New Guinea. New Guinea orientalis Brit., in montosis Moroka, 1300 m, distr. Moresby, 1893 *Loria* (*Bryoth. E. Levier 697*, not seen).

***Radulina laevi-hamata*** (Dix.) B.C. Tan, T.J. Kop. & D. H. Norris, *comb. nova*

BASIONYM: *Trichosteleum laevi-hamatum* Dix., J. Bot. 80: 31. 1942. — TYPE: Papua New Guinea. Central, The Gap, range above Port Moresby, 2450 m, *C. E. Carr 13823* (BM!).

***Radulina pendens*** (D.H. Norris & T.J. Kop.) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*

BASIONYM: *Trichosteleum pendens* D.H. Norris & T.J. Kop., Ann. Bot. Fennici 22: 388, fig. 10. 1985. — HOLOTYPE: Papua New Guinea., West Sepik, Frieda River, 1100 m, 8.VIII.1981 *Koponen 35847* (H!).

***Radulina weidenii*** (Zanten) B.C. Tan, T.J. Kop. & D.H. Norris, *comb. nova*

BASIONYM: *Warburgiella weidenii* Zanten, Nova Guinea Bot. 16: 330, pl. xxii, fig. 5. 1964. — HOLOTYPE: Indonesia. Irian Barat, Woropko, 100 m, *van Zanten 206* (L!). PARATYPE: Indonesia. Tanah Merah, 50 m, *van Zanten 111* (L!).

***Wijkia extenuata*** (Brid.) Crum

Bryologist 74: 171. 1971. — *Hypnum extenuatum* Brid., Musc. Rec. Suppl. 4: 172. 1819. — *Acanthocladium extenuatum* (Brid.) Mitt., Trans. & Proc. Royal Soc. Victoria 19: 85. 1882. — TYPE: Novâ Hollandiâ (Australia). *Labillardière* (B?, not seen).

*Trichosteleum sematophylloides* Dix., J. Linn. Soc. Bot. 45: 507, tab. 29, fig. 16. 1922, *syn. nov.* — LECTOTYPE (designated here): Indonesia. Irian Jaya, Mt. Durigolo, *Clark 44* (BM!). SYNTYPE: Same locality, *Clark 52* (BM!).

Our examination of the type specimens of *Trichosteleum sematophylloides* convinced us that the two syntypes (*Clark 52* & *44*) collected from the same general locality on Mt. Durigolo represent two expressions of the same species. The lectotype selected by us (*Clark 44*), on which the illustration in the protologue of the new species, *T. sematophylloides*, was based upon, has acute to short-acuminate leaf apices, whereas the other syntype (*Clark 52*) has

gradually long-acuminate leaf apices. We have concluded that *T. sematophylloides* falls under the synonymy of the polymorphic *Wijkia extenuata*, a very widespread Australasian species (see Ramsay *et al.* 2002).

***Warburgiella perfalcata*** (Bartr.) B.C. Tan,  
T.J. Kop. & D.H. Norris, *comb. nova*

BASIONYM: *Trichosteleum perfalcatum* Bartr., *Lloydia* 5: 285, fig. 53. 1942.

## References

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