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A new combination in *Torrentaria* (Brachytheciaceae, Bryophyta), with new records of *T. muelleri* in Australia

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Abstract

Rhynchostegium muelleri A.Jaeger is transferred to Torrentaria muelleri (A.Jaeger) Ochyra & Bednarek-Ochyra (Brachytheciaceae).

Introduction

Torrentaria Ochyra is the name of a moss genus of the family Brachytheciaceae which has long been known as *Platyhypnidium* M.Fleisch. Since the latter generic name proved to be illegitimate because it included the lectotype of an earlier generic name, *Platyhypnum* Loeske, the new generic name *Torrentaria* was proposed to replace it (Ochyra 2012). Altogether 15 species were transferred to *Torrentaria* and these are all aquatic mosses, some of which are widely distributed in rheophytic habitats throughout the world. Alas, by a mischance one important and firmly rooted member of *Platyhypnidium* had not been transferred to *Torrentaria* and this error is corrected herein.

Torrentaria muelleri (A.Jaeger) Ochyra & Bednarek-Ochyra, comb. nov.

Rhynchostegium muelleri A.Jaeger, Bericht über die Thätigkeit der St. Gallischen Naturwissenschaftlichen Gesellschaft 1876–1877: 378 (1878) [Hypnum muelleri Sande Lac., Bryologia Javanica 2: 162, pl. 261 (1867), hom. illeg., non Müll.Hal. & Hampe (1855)]

Platyhypnum muelleri (A.Jaeger) Loeske, Hedwigia 50: 243 (1911).

Type citation: "Habitat insulam *Javae*, de Vriese (c. fructu); in m. [montibus] *Gedé* et *Salak*, Teysmann. *Sumatra*: prov. *Padang* in regione superiore, Andrée Wiltens." (Dozy et al. 1867, p. 162)

Syntypes: Indonesia: Jawa: m. Gede et Salak, *Teysmann* – H-BR 3235!; Java (2 specimens, 1 with sporophyte) – H-SOL 1105!].

Torrentaria muelleri is an aquatic moss widely distributed in Asia from India through the Indo-China Peninsula (Myanmar, Thailand, Vietnam and Malaysia) to Indonesia (Sumatera, Jawa, Sulawesi, Papua), Papua New Guinea and the Philippines, with northward extensions to Japan and with isolated stations in the Hawaiian Islands and New South Wales in eastern Australia (Ignatov *et al.* 1999). Herein, two additional records of this species are reported from Queensland, based on the specimens that the authors obtained many years ago from the late G.A.M. Scott and I.G. Stone.

AUSTRALIA, QUEENSLAND: COOK (Anonymous 1975): Mt. Bellenden Ker, Fishery Falls, lat. 17°10'56.80"S, long. 145°53'10.47"E, under water in waterfalls, riparian tropical rain forest, 13 Sep 1985, *G.A.M. Scott 7409* (KRAM B-87048); Downey Creek near Innisfail, lat. 17°39'S, long. 145°46'E, submerged in water, 21 Sep 1988, *I.G. Stone 25090* (KRAM B-86172).

The former genus *Platyhypnidium* was represented in Australia by a single species, *P. austrinum* (Hook.f. & Wilson) M.Fleisch. (Hedenäs 2002). However, this species, along with *Rhynchostegium muriculatum* (Hook.f. & Wilson) Reichardt of New Zealand, is at present placed in the bitypic genus *Hedenaesia* Huttunen & Ignatov (Huttunen and Ignatov 2010). Accordingly, the genus *Torrentaria*, a replacement of *Platyhypnidium*, still consists of only one species in Australia.

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References

Anonymous (1975) [untitled map]. Contributions of the Queensland Herbarium 19: back end paper.

Dozy F, Molkenboer JH, Bosch RB van den, Sande Lacoste CM van der (1867) Hypnum Dill. (em.) Bryologia Javanica 2: 140-220 http://www.biodiversitylibrary.org/item/141865

Hedenäs L (2002) An overview of the family Brachytheciaceae (Bryophyta) in Australia. *Journal of the Hattori Botanical Laboratory* 92: 51–90.

Huttunen S, Ignatov MS (2010) Evolution and taxonomy of aquatic species in the genus *Rhynchostegium* (Brachytheciaceae, Bryophyta). *Taxon* 59: 791–808.

Ignatov MS, Koponen T, Norris DH (1999) Bryophyte flora of the Huon Peninsula, Papua New Guinea. LXII. Brachytheciaceae (Musci), excluding *Homalothecium* and *Palamocladium*. *Acta Botanica Fennica* 165: 23–72.

Ochyra R (2012)¹ The new generic name *Torrentaria*, a nomenclatural consequence of the legitimacy of *Platyhypnum* and the illegitimacy of *Platyhypnidium* (Bryophyta). *Nova Hedwigia* 96: 205–212. http://dx.doi.org/10.1127/0029-5035/2012/0076

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