

LECTOTYPIFICATION OF *POROTHAMNIUM* AND *POROTRICHUM* (NECKERACEAE)

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The genus *Porothamnium* M. Fleisch. was established by Fleischer (1908) to accommodate some neckeroid mosses having a soft, dendroid habit, mostly complanate foliage, weaker costa and looser leaf areolation of fusiform, elongate and somewhat papillose cells. The genus has gained wide acceptance despite some difficulties in separating it from the closely related genus *Porotrichum* (Brid.) Hampe. Brotherus (1925) showed that the differences between these genera lay in the peristome teeth and stated that in *Porotrichum* the exostome is papillose throughout on the outer surface except for the cross-striolate base, the basal membrane of the endostome is low, and the cilia are rudimentary or absent.

In contrast, in *Porothamnium* the exostome is cross-striolate well up the teeth and the endostome has a high basal membrane and well developed cilia. De Sloover (1983) additionally suggested that *Porothamnium* is distinct in having a glossy seta and the plants being darker with a more metallic green sheen. Because the peristomial differences are not sharp and clear-cut and rather environmentally induced, Sastre-De Jesús (1987) and Buck (1998, 2003) found no basis for maintaining these genera as separate taxa and considered them congeneric. This concept was subsequently accepted by Enroth (2004), who transferred two species originally described in *Porothamnium* to *Porotrichum*.

Although the congenericity of *Porothamnium* and *Porotrichum* is well documented, it has not been formally sanctioned by either Sastre-De

Jesús (1987) or Buck (1998, 2003), mainly because the generic name *Porothamnium* had not hitherto been typified. When introducing this generic name, Fleischer (1908) gave names for 12 species under it, but none of them were indicated as type. Additionally, he divided the newly established genus into three sections: *Porothamnium* sect. *Pseudoporotrichum* M. Fleisch., *P.* sect. *Thamniadelphus* M. Fleisch., and *P.* sect. *Pandurella* M. Fleisch. and no types were indicated for these sectional names either. Fleischer (1908) considered the first section to be close to the type section of *Porotrichum* and therefore *Porothamnium natalense* (Müll. Hal.) M. Fleisch. is herein selected as lectotype of *Porothamnium*. This species was originally described from KwaZulu-Natal as *Porotrichum natalense* Müll. Hal. (Müller 1899) and was subsequently considered to be conspecific with *Porotrichum molliculum* Broth. by De Sloover (1983), for which the oldest available name is *P. usagarae* Mitt. (Enroth & Hodgetts 1996; Magill & Rooy 1898).

At this point a brief comment on the typification of the generic name *Porotrichum* is needed. This genus was originally described by Bridel (1827) as an unranked taxon within *Climacium* F. Weber & D. Mohr to accommodate two species, namely *C. longirostrum* (Hook.) Brid. from Latin America and *C. neckeroides* Brid. from Oceania. This unranked taxon was subsequently raised to genus by Hampe (1863). According to the compilers of *Index Muscorum* (Wijk *et al.* 1959, 1967) *Porotrichum* was lectotypified by Dixon and

Jameson (1896) and Fleischer (1905) but neither of these 'lectotypifications' was correct.

Dixon and Jameson (1896) stated only that 'The name *Porotrichum* was first applied by Bridel [1827] (as a sub-genus of *Climacium*) to the south American species, *P. longirostrum* (*Hypnum longirostrum* C. M.), with which the present species, according to Mitten [1869], is congeneric'. This sentence does not unequivocally constitute lectotypification because the type element is not clearly indicated by the use of the term 'type' or its equivalent and, more importantly, Bridel (1827) included two species in the subdivision *Porotrichum* of *Climacium*. In contrast, Fleischer (1905) stated that 'Die Typusarten der Bridelschen Sektion *Porotrichum* sind *Climacium* (*Porotrichum*) *longirostrum* (Hook.) Mitt. [...] und *Climacium* (*Porotrichum*) *neckeroides* (Brid.) [...]' but this lectotypification cannot be accepted. This author mentioned both species originally placed by Bridel (1827) in the unranked subdivision *Porotrichum* as types, without clearly indicating either of them as type. Grout (1928) appears to be the first author to indicate correctly *Porotrichum longirostre* as the lectotype of the generic name *Porotrichum*.

Porotrichum (Brid.) Hampe.

Linnaea **32**: 154. 1863 ≡ *Climacium* F. Weber & D. Mohr [unranked] *Porotrichum* Brid., *Bryol. Univ.* **2**: 275. 1827 ≡ *Thamnium* Schimp. [unranked] *Porotrichum* (Brid.) Kindb., *Hedwigia* **41**: 210. 1902. LECTOTYPE: *Porotrichum longirostre* (Hook.) Mitt. (*Neckera longirostris* Hook.) (vide Grout 1928: 7).

Porothamnium M. Fleisch., *Fl. Buitenzorg* **3**: 925. 1908. LECTOTYPE (selected here): *Porothamnium natalense* (Müll. Hal.) M. Fleisch. (*Porotrichum natalense* Müll. Hal.) (= *Porotrichum usagarae* Mitt.) (vide Sastre-De Jesús 1987: 166 and Buck 1998: 119).

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