

(1610) Proposal to conserve the name *Tortula solmsii* against *Tortula limbata* (Pottiaceae, Bryophyta)

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(1610) *Tortula solmsii* (Schimp.) Limpr., Laubm. Deutschl. 1: 660. 1888 (*Barbula solmsii* Schimp., Syn. Musc. Eur. (ed. 2): 200. 1876), *nom. cons. prop.*

Typus: [Portugal] “San Bartholomeo dos Messines in via [...] ad rupes arenarias”, 1866, *Solms-Laubach s.n.* (BM “Flora Lusitanica Algarve”; isotypi: BM “Hampe herbarium”, JE, M).

(=) *Tortula limbata* Lindb., Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 21: 238. 1864, *nom. rej. prop.*

Lectotypus (hic designatus): [Italy] “Italia orientalis, terra de Otranto ad muros” *Rabenhorst s.n.* (RO!).

Tortula solmsii (Schimp.) Limpr. is a Mediterranean-Atlantic species restricted to countries fringing the Mediterranean Sea, the Atlantic Islands and just reaching S.W. England (Long & Hill in J. Bryol. 12: 165. 1982). It is characterised by leaves with flat margins, a nerve ending in the apex or shortly excurrent in a mucro or an apiculus, upper laminal cells conspicuously papillose and leaf marginal cells forming a border of quadrate to short rectangular cells, uni- or less frequently bistratose. The name of this species has consistently been accepted in Europe and widely used in the bryological literature from its publication in 1876, e.g., by Limpricht (Laubm. Deutschl. 1: 660. 1888), Roth (Eur. Laubm. 1: 562. 1904), Monkemeyer (Laubm. Eur.: 303. 1927), Podpera (Consp. Musc. Eur.: 245. 1954), Corley & al. (in J. Bryol. 12: 619. 1981), Zander (in Bull. Buffalo Soc. Nat. Sci. 32: 1–378. 1993), Frey & Frahm (Kleine Kryptogamenfl.: 197. 1995), Crosby & al. (Checklist of Mosses: 259. 1999), Cortini-Pedrotti (Flora dei muschi d’Italia. Sphagnopsida, Andreopsida, Bryopsida (I Parte): 300. 2001). The basionym, *Barbula solmsii*, was lectotypified by the Solms-Laubach specimen cited above by Cano & Gallego in Taxon 52: 613. 2003.

In preparing the manuscript of the genus *Tortula* Hedw. for the “Flora Briofítica Ibérica” project, *Tortula limbata* Lindb. was found to be synonymous with and to antedate *T. solmsii*. *Tortula limbata* is a replacement name for *T. pellucida* Lindb. ex De Not., Musci Ital.: 26.

1862, *nom. illeg.* (non *T. pellucida* Hook. & Grev., Edinburgh J. Sci. 1: 296. 1824) which was described on the basis of a specimen from Otranto (Italy). Lindberg (Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 20: 387. 1863) had also named it *Barbula limbata*, which is also illegitimate being a later homonym of *B. limbata* Mitt. (in Hooker’s J. Bot. Kew Gard. Misc. 3: 354. 1851). The name *T. limbata* has scarcely been cited in the bryophyte literature. It was mentioned by Limpricht (Laubm. Deutschl. 3. 1902), although he suggested that it was probably only a form of *T. marginata* (Bruch & Schimp.) Spruce. Later, it was referred to in phytogeographical studies, but under *T. pellucida* Lindb. ex De Not. by some French botanists from Tunisia (Bizot in Bull. Soc. Bot. France 78: 725. 1931), Spain (Allorge in Bull. Soc. Bot. France: 217. 1941; Allorge & Allorge in Mem. Mus. Hist. Nat.: 98. 1945) and Cape Verde (Potier de la Varde in Mém. Soc. Biogéogr. 8: 360. 1946). From the original description and illustration of De Notaris (Musci Ital.: 26. 1862), Long & Hill (in J. Bryol. 12: 159–169. 1982), who did not study the type material, thought that this species was an intermediate taxon between *T. solmsii* and *T. marginata*, because the marginal cells were clearly elongate-rectangular, as in *T. marginata*, but with an unistratose instead of the typical bistratose margins of *T. marginata*. Other recent workers have considered *T. limbata* to be a synonym of *Tortula marginata* (e.g., Corley & al. in J. Bryol. 11: 619. 1981; Ignatov & Afonina in Arctoa 1: 80. 1992), although some authors have treated it as a subspecies of the latter (Podpera, Consp. Musc. Eur.: 245. 1954; Wijk & al. in Regnum Veg. 65: 89. 1969).

As regards the type of *T. limbata*, the protologue of *T. pellucida* Lindb. ex De Not. gives as the basis of the new species: “Lindb. Herb. et Mss. Ad muros ad Otranto in Italia meridionali legit Cl. RABENHORST ex specimine a Cl. LINDBERGIO benevole communicato, ann. 1861”. In H, where the original material of Lindberg is deposited, Viivi Virtanen kindly looked for but did not find a possible syntype. In RO, there is one sheet containing only one plant, labelled in De Notaris’s handwriting, and it matches the information provided in the protologue; the origin of this material from Lindberg is indicated. This specimen is selected as lectotype of the name.

It has mucronate leaves, with flat margins and a border of cells which vary from quadrate to rectangular at the upper middle part and rectangular to linear at the lower middle part. In cross-section the leaf is unistratose, which distinguishes it from some close taxa such as *T. marginata*, with which it has been synonymized. These characters, especially the excurrent nerve and the unistratose border of quadrate to rectangular cells in the upper middle part of the leaf show that the type specimen is conspecific with *T. solmsii*. Probably, the misinterpretation of this species and its synonymy with *T. marginata* come from the original illustration (Tab. VIII) provided by De Notaris. The figure 8 of this table shows a border of laminal cells which vary from rectangular to linear, very similar to the border found in *T. marginata*. In the type specimen of *T. limbata*, however, these linear cells in the border have mainly been observed at the lower middle part of the leaf, which has also been observed in some specimens of *T. solmsii*.

In summary, the name *T. limbata* has rarely been accepted and when referred to in synonymy has been treated diversely and never in a way that corresponds to the real identity of the type material. Therefore, to maintain common usage, conserving the name *T. solmsii* against *T. limbata*, as is here proposed, seems desirable. The acceptance of the present proposal would both preserve nomenclatural stability (ICBN 14.1) and avoid perpetuating inconsistency in the usage of *T. limbata*. If the proposal were to be rejected, the name *T. limbata*, which is presently generally considered a synonym of *T. marginata*, would have to replace the widespread use by European bryologists of *T. solmsii*, which would be highly undesirable.

ACKNOWLEDGEMENTS

I would like to thank John McNeill for his helpful comments and advice. The curators of the herbaria mentioned in the text are also thanked for their valuable help with the location and loans of the type material. Financial support was provided by the Spanish DGI (MCYT) [Project BOS2000-0296-C03-01] and Fundación Séneca of Murcia [PI-15/00762/FS/01-Project 4631].