

(2768) Proposal to conserve Paepalanthus, nom. cons. against the additional name, Tonina (Eriocaulaceae)

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(1827–28), so it is likely that the specimen came from there. The other possibility is *E. setigerum* (Sodiro) Diels, which is distributed from Mexico to Bolivia, with additional records from Hispaniola (see Kessler & al. in Phytotaxa 353: 32. 2018). Cuming visited many of these countries during his second voyage (1828–30). The date of April 1834, which was written on the specimen, is not a collection date (Cuming was living in England from 1831 to January 1836) and does not help on identifying the origin of the specimen. The collection number "151" also does not help with this issue, since there are different species from different localities under "*Cuming 151*" (e.g., the syntype of *Lastrea propinqua* J. Sm., from the Philippines, K000235735). Without knowing the origin, the distinction between sterile specimens of *E. florencei* and *E. setigerum* is often impossible. In any case, *A. webbii* is much older and would displace any of the species names mentioned above.

The specimen from Panama (*Webb s.n.*), which was selected as the lectotype of *Acrostichum webbii* by Rouhan & Cremers (l.c.), certainly came from Panama and represents *E. setigerum*, which was originally described in *Acrostichum* by Sodiro (in Anales Univ. Centr. Ecuador 4: 174. 1890). Although *A. webbii* (1845) has priority over *A. setigerum* (1890), it would be highly undesirable to have a rarely used name replacing a well-established one. The type of *A. setigerum* is at K, not at Q or QPLS as respectively suggested by Mickel (l.c. 1995: 279) and Mickel & Smith (in Mem. New York Bot. Gard. 88: 309. 2004). Because the species is widely distributed in the Neotropics, the name *E. setigerum* has been used in all major fern floras and checklists for the countries in which it occurs, such as for Mexico by Mickel & Smith (l.c.) and Mickel & Montes (in Diego-Pérez & Fonseca, Fl. Guerrero 37: 53–54. 2009), Mesoamerica by Mickel (l.c. 1995: 279), Colombia by Forero & Gentry (Lista Anot. Pl. Depto.

Chocó: 28. 1989) and Murillo-Pulido & al. (Pteridóf, Colombia: 248. 2008), Ecuador by Jørgensen & León-Yánez (in Monogr. Syst. Bot. Missouri Bot. Gard. 75: 133. 1999), Peru by Mickel (in Fieldiana, Bot., n.s., 27: 160, 1991), and Bolivia by Sundue (in Nee, Fl. Parg. Nac. Amboró 1: 291. 2011) and Kessler & al. (l.c.). Some older floras treated this species as E. crinipes C. Chr., a name that has been considered a synonym of E. setigerum since Mickel (l.c. 1995: 279). This was done for Haiti by Christensen (in Kungl. Svenska Vetenskapsakad. Handl. 16(2): 76. 1936), Guatemala by Mickel (in Fieldiana, Bot., n.s., 6: 218. 1981), Chiapas by Smith (in Breedlove, Fl. Chiapas 2: 108. 1981), and Oaxaca by Mickel & Beitel (in Mem. New York Bot. Gard. 46: 172. 1988). Additionally, the name E. setigerum has appeared in several molecular phylogenetic studies, such as Rouhan & al. (in Molec. Phylogen. Evol. 33: 745-763. 2004), Lóriga & al. (in Pl. Syst. Evol. 300: 937-951, 2014), and Matos & al. (in Int. J. Pl. Sci. 179: 296-313. 2018), and in a study of perine evolution by Moran & al. (in Int. J. Pl. Sci. 171: 872-881. 2010).

Because of its long use, replacing *Elaphoglossum setigerum* with *E. webbii* would cause confusion. It seems best to reject the name *E. webbii* so that *E. setigerum* can continue to be used.

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(2768) Proposal to conserve *Paepalanthus*, nom. cons. against the additional name, *Tonina* (*Eriocaulaceae*)

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- (2768) *Paepalanthus* Mart. in Ann. Sci. Nat., Bot., ser. 2, 2: 28. Jul 1834 [*Eriocaul*.], nom. cons.
 - Typus: *P. erigeron* Mart. ex Koern. (in Martius, Fl. Bras. 3 (1): 390. 10 Jul 1863) (typ. cons.).
- (=) *Tonina* Aubl., Hist. Pl. Guiane 2: 856. Jun–Dec 1775, nom. rej. prop.
 - Typus: *T. fluviatilis* Aubl.
- (=) *Dupatya* Vell., Fl. Flumin.: 35. 7 Sep–28 Nov 1829, nom. rej. Typus: non designatus.

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Paepalanthus Mart. (in Ann. Sci. Nat., Bot., ser. 2, 2: 28. 1834) is the name of a widespread genus that in the broad sense includes 477 species found in subtropical and tropical America, Africa and Madagascar (Govaerts & al., World Checklist of Vascular Plants; https://wcvp. science.kew.org, accessed 29 Jun 2020). Molecular phylogenetic studies have shown that Paepalanthus is paraphyletic with Brazilian Actinocephalus (Kórn.) Sano (in Taxon 53: 99. 2004), while the North American Lachnocaulon Kunth (Enum. Pl. 3: 497, 1841) and the widespread aquatic Tonina Aubl. (Hist. Pl. Guiane 2: 856. 1775) are embedded within it (Andrade & al. in Taxon 59: 379-388. 2010; Giulietti & al. in Rodriguésia 63: 1-19. 2012; Trovó & al. in Bot. J. Linn. Soc. 171: 225-243. 2013), but no taxonomic changes were made at the time of these phylogenetic studies. The genus was first expanded by Mabberley (Mabberley's Pl. Book. 2017), after which further combinations were made by Christenhusz & al. (Global Flora 4: 69. 2018), to make species names under those genera available for use under Paepalanthus.

Paepalanthus had already been conserved against the earlier Dupatya Vell. (Giulietti & al. in Taxon 47: 743–744. 1998), but it came to our attention that the widespread, monotypic, Neotropical genus Tonina has priority. Tonina fluviatilis Aubl. is in use in the aquarium trade, but a name change would have little effect on this trade. It is likely that the name Tonina will persist at least for some time in horticulture and may in the long run be used as a common name, rather than a scientific one. Adoption of Paepalanthus fluviatilis (Aubl.) Christenh. & Byng in horticultural and ecological studies seems to be only a matter of time. Overall, the name Paepalanthus appears much more frequently in the scientific literature than Tonina, as evidenced by a Google Scholar search on 22 July 2020 for either name coupled with "Eriocaulaceae", with more articles including the former by 1730 to 300 and article titles by 147 to 3.

The name *Giliberta* Cothen. was also published before *Paepalanthus* in a relatively obscure publication (Cothenius, Disp. Veg. Meth.: 16. 1790), but in the original manuscript, a reference was made to "Touina [sic] Aubl. guian. p. 857". Even though the spelling and page indicated were incorrect, it is unmistakably an illegitimate

superfluous name, homotypic to *Tonina*, and thereby unavailable for use, so it need not be considered further.

As an alternative to lumping these genera together, Paepalanthus could be split to maintain the genera Actinocephalus, Lachnocaulon and Tonina. Actinocephalus was originally described as a subgenus of Paepalanthus (Sano, l.c.: 99-107), with which it shares many characters, and has recently been shown not to be monophyletic (Andrino & al. in Bot. J. Linn. Soc.: boaa070, 2020 [https://doi.org/ 10.1093/botlinnean/boaa070]). Splitting the genus is likely to be taxonomically disruptive, as it could cause a further escalation of generic names (up to 10 new names have been suggested) that are likely to be difficult to distinguish in the field as they will be mostly based on minute technical characters. Moreover, the morphological diversity of this clade exhibits high levels of homoplasy, and concepts of the traditional subclassification of Paepalanthus are not consistent with the phylogenetic studies (Andrino & al., l.c.). This will result in recircumscription of the clades but will still leave us with Paepalanthus s.str. that lacks any synapomorphies to distinguish it from the new genera. A large number of new combinations will be required to satisfy the need to keeping the genera monophyletic, and a large number of species will not be able to be placed because they have not yet been sequenced and their morphology alone will make generic placement difficult if not impossible.

In addition, recognition of multiple genera will not reflect the close relationships and similarity of these taxa. Therefore, the most stable and least disruptive option is to maintain the conserved *Paepalanthus* and reject *Tonina* against it, allowing nomenclatural stability at the genus level and paving the way to reorganise the subgeneric classification of *Paepalanthus* s.l. as previously conceived.

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(2769) Proposal to conserve the name *Distichia* Nees & Meyen (*Juncaceae*) against *Distichia* (Brid.) Brid. (*Neckeraceae*)

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(2769) Distichia Nees & Meyen in Nees, Cyperaceae: 76. 1841 [Junc.], nom. cons. prop. Typus: D. muscoides Nees & Meyen.

(H) Distichia (Brid.) Brid., Bryol. Univ. 2: 787, 811. 1827 (ante
 21 Nov) (Neckera [unranked] Distichia Brid., Muscol.
 Recent. Suppl. 4: 137. 18 Dec 1818) [Mosses], nom. rej. prop.

Typus (vide Van der Wijk & al. in Regnum Veg. 26: 135. Dec 1962): *D. pennata* (Hedw.) Brid. (*Neckera pennata* Hedw.).

Distichia Nees & Meyen (in Nees, Cyperaceae: 76. 1841) is a long-recognized genus of high-elevation cushion plants with three species distributed along the Andean cordilleras, including

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