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## *Porotrichum cavifolium* comb. nov. (Musci: Neckeraceae)

Robert E. Magill and Bruce Allen

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166, U.S.A.

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**ABSTRACT.** Recent collections and new morphological information justify the transfer of *Pirella cavifolia* to *Porotrichum* and its treatment within Neckeraceae in the *Moss Flora of Mexico*.

New morphological evidence and a review of recent collections of *Pirella cavifolia* (Card. & Herz.) Card. have led to the following reevaluation of its relationships.

*Pirella cavifolia* is a small, dendroid moss known from the West Indies and Mexico south through Guatemala (San Marcos, *Croat 40961A*, MO) to Panama (Darién, *Allen 8917C*, MO) and Colombia (Risaralda, *Wolf 1435*, MO). The species has undifferentiated alar cells and clearly differs from other members of *Pirella* in having obovate leaves that are broader above and lack a distinct flattened apical portion. The sporophyte of *P. cavifolia* is unknown.

Allen (1987), in a broad survey of pseudoparaphyllia in the Pterobryaceae, found that the family is characterized by the presence of filamentous pseudoparaphyllia. In his survey, the only two species that lacked such structures were considered misplaced in the Pterobryaceae. *Pirella cavifolia* does not have filamentous pseudoparaphyllia; instead, it appears to have either folious pseudoparaphyllia or rudimentary branch leaves around its branch primordia. The absence of sporophytic evidence for *P. cavifolia* makes its placement problematical, but on the basis of its lack of filamentous pseudoparaphyllia we exclude the species from the Pterobryaceae.

The presence in this species of folious structures around the branch primordia, a dendroid habit, undifferentiated alar cells, and especially the occasional production of flagelliform gemmiferous branches all indicate the Neckeraceae as a likely placement for it. Within the Neckeraceae, *Porotrichum* could accommodate it. This transfer is therefore made so that the species can be treated within the Neckeraceae for the *Moss Flora of Mexico*.

***Porotrichum cavifolium*** (Card. & Herz.) Magill & Allen, comb. nov. Basionym: *Pirea cavifolia* Card. & Herz. in Card., *Rev. Bryol.* 38: 39. 1911. *Pirella cavifolia* (Card. & Herz.) Card., *Rev. Bryol.* 40: 17. 1913. TYPE: Mexico. Hidalgo: Honey-station, *Pringle 15668* pro parte (holotype, PC). Illustrations: Thériot (1940, pl. 54, 5a–5f as *Jaegerinopsis ramosa*); Arzeni (1954, pls. 22–23).

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### Literature Cited

- Allen, B. 1987. On distinguishing Pterobryaceae and Meteoriaceae by means of pseudoparaphyllia. *Bryol. Times* 42: 1–3.
- Arzeni, C. B. 1954. The Pterobryaceae of the southern United States, Mexico, Central America and the West Indies. *Amer. Midl. Naturalist* 52: 1–67.
- Thériot, I. 1940. Complément au catalogue des mousses de Cuba III. *Mem. Soc. Cub. Hist. Nat. "Felipe Poey"* 14: 349–372.



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