



New synonyms for South American/Brazilian Pottiaceae (Bryophyta)

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Abstract

During a taxonomic review of Pottiaceae in Brazil, five new synonyms were discovered for species in the genera *Hyophila*, *Pseudosymblepharis*, and *Weissia*.

Key words: Brazil, *Hyophila*, *Pseudosymblepharis*, *Weissia*, Pottiaceae, taxonomy

Introduction

In an attempt to solve taxonomic problems concerning Pottiaceae of Brazil, a taxonomic review found that five new synonyms were required for species in the genera *Hyophila* Bridel (1827:760), *Pseudosymblepharis* Brotherus (1924:261), and *Weissia* Hedwig (1801:64). The family Pottiaceae includes five subfamilies, six tribes, 77 genera and 1457 species in the world (Zander 1993), being considered the largest family of mosses in the Neotropics. The Pottiaceae are represented in the Neotropics by 55 genera and ca. 360 species (Gradstein *et al.* 2001). About six subfamilies, 33 genera, and 63 species of Pottiaceae are recognized for Brazil (Costa 2011, Costa 2013).

The Brazilian taxa are found in open, often rather dry localities, with the greatest diversity occurring in the mountainous regions, 500-1500 m. The habitats of the Pottiaceae species in Brazil are diverse, but generally are extreme, involving such pressures as desiccation and disturbance, sometimes associated with human activities.

Crosby *et al.* (1999) listed 1356 species for Pottiaceae in the world, of which 601 are considered insufficiently known from a taxonomic point of view. Thus, Pottiaceae includes a large number of insufficiently known species, and, in most cases, with knowledge limited to their original description. Several genera, e.g., *Barbula* Hedwig (1801:115), *Tortula* Hedwig (1801:122), *Trichostomum* Bruch (1829:396), *Weissia* Hedwig (1801:64) present in Brazil are considered problematic and need a regional revision that will likely result in a significant reduction in the number of species recognized.

Material & methods

The investigation is based on the study of types and collections from the following herbaria: BM, H-BR, MG, NY, PC, R, RB, SP. Specimens were investigated using light microscopy.

Taxonomy

1. *Hyophila involuta* (Hook.) A.Jaeger, *Ber. Thätigk. St. Gallischen Naturwiss. Ges.* 1871-72: 354. 1873 (Jaeger 1873).

Basionym:—*Gymnostomum involutum* Hook., *Musci Exot.* 2: 154.1820 (Hooker 1820).

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