

Mosses from the Mascarenes - 5.

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Abstract: A list of *Pottiaceae* specimens is presented. *Trichostomum bombayense* C.Müll. is transferred to the genus *Pseudosymblepharis* Broth., and a new combination is made: *Pseudosymblepharis bombayensis* (C.Müll.) P. Sollman. Five new synonyms are proposed. Gametophyte characters, separating non-fruiting material of *Pseudosymblepharis bombayensis* from *Trichostomum tenuirostre* (Hook. & Tayl.) Lindb., are listed.

Introduction

This is the fifth of a series of papers dealing with the mosses of the Mascarenes and more specifically with taxa belonging to the family *Pottiaceae*. The senior author (GE) has given background information in previous papers (Een 1976, 1978, 1989), which is not repeated here, except for the list of localities. Additional material was collected in Réunion in 1969 by M. Onraedt.

All the identification work, including studies of type material, has been done by the junior author (PS), who is responsible for all comments. He has duplicates of most of the here mentioned specimens in his private herbarium.

List of localities, leg. Een 1962.

Mauritius

Loc.10. Le Pouce, on rocks blasted for the old road from Port Louis to St. Pierre, alt. 1800 feet.

Réunion

Loc.1. Cilaos, 100 m. above the village, alt. 1100 m.

Loc. 2. Cilaos, Réserve Biologique, alt. 1200 m.

Loc.19. Forest above St. Denis, zone de branle, alt. 1700-1900m.

Loc.25. La Grande Montée, upper part, alt. 1450 m.

M000 and R000 are collection numbers in herb. Een.

List of species

Anoectangium aestivum (Hedw.) Mitt.

Réunion: Le Guillaume (Saint Paul) dans les domaines des Frères, sur les pierres d'une grotte de N.D. de Lourdes, alt. circa 800 m., leg. Onraedt 1969-12-24, in #69R1002, separated from *Hyophila involuta* (BR).

Barbula indica (Hook.) Spreng.

Réunion: Le Guillaume (Saint Paul) dans les domaines des Frères, sur les pierres d'une grotte de N.D. de Lourdes, alt. circa 800 m., leg. Onraedt 1969-12-24, in #69R1002, with gemmae, separated from *Hyophila involuta* (BR).

Bryoerythrophyllum campylocarpum (C.Müll.) Crum s.str.

Réunion: Loc. 19 (R392).

Published by Een (1976) as *Anoectangium impressum* Hampe. This specimen differs in no important character from the many African collections seen of *Bryoerythrophyllum campylocarpum*. The following type material was studied:

Didymodon (Erythrophyllum) integrifolius Brotherus in Mildbread, Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. 2: 147. Ph. S. Fig. 11. 1910. Syn. nov. Type: (Zaire), Rugege-Bergland, Katandaganya-Berg, an einem Steinblock ... circa 1900 m., 14 Aug. 1907, J. Mildbread 727, herb. Brotherus (H, holo).

This type specimen is in a sterile non-fruiting condition. It is best treated as *Bryoerythrophyllum campylocarpum*, a species which is rather common in many parts of Africa.

Hyophila involuta (Hook.) Jaeg.

Réunion: Avirons, Oratoire de Lourdes, alt. 400 m., surface cimentée, inclinée, exp. est, leg. Thérésien Cadet, 1963-08-03, CT23 (Herb. Een R594); Saint François, sur les hauteurs de Saint-Denis, 7 Dec.

1969, leg. Onraedt 69R05 (BR); Le Guillaume (Saint Paul) dans les domaines des Frères, sur les pierres d'une grotte de N.D. de Lourdes, alt. circa 800 m., 24 Dec. 1969, leg. Onraedt 69R1002 (BR).

Hyophila potieri Besch. ("poterii"), Ann. Sc. Nat. Bot. ser. 6, 9: 341. 1880. Syn. nov. Type: (Madagascar), Nossi Comba, 1879, Marie 61, herb. Bescherelle (BM, lecto; selected here).

Pseudosymblepharis bombayensis (C.Müll.) P. Sollman, comb. nov.

Basionym: *Trichostomum bombayense* C.Müll., Syn. Musc. Frond. II: 628. 1851. Type: (India), Bombay, herb. Kegelianum no. 10.025 ... herb. Brotherus (H, lecto; selected here).

Note 1. For a discussion on the correct type material, see Townsend (1983).

Note 2. The lectotype also contains *Diaphonodon procumbens* (C.Müll.) Ren. & Card. (formerly *Neckera procumbens* C.Müll.) as stated in Müller's original description.

Réunion: Loc. 2 (R180); 25 (R324, R354).

The junior author has studied some 700 specimens from mainly tropical localities throughout the geographical range of this species. About 108 of them came from Africa. He has also seen many types belonging to the same group (*Oxystegus* (Limpr.) Hilp., *Pseudosymblepharis* Broth., *Tortella* (Lindb.) Limpr. and *Trichostomum* Bruch). Very likely, after a complete revision, it will be concluded that only one (very) variable pantropical species belongs to the genus *Pseudosymblepharis*. Compare especially with the remarks in Norris & Koponen (1989: 93-95) and Zander (1993: 80).

R180 was first identified by Bizot (1968: 480) as *Trichostomum cylindricum* (Bruch) C.Müll., better known as *Trichostomum tenuirostre* (Hook. & Tayl.) Lindb.

Especially smaller, non-fruiting samples are sometimes very difficult to tell apart. The best characters for identifying poorly developed spe-

cimens are listed here:

*Pseudosymblepharis
bombayensis*

*Trichostomum
tenuirostre*

Leaf base not or hardly expanded, nor sheathing.

Leaf base often expanded to sheathing.

~~Yellowish transitional cells absent~~

Yellowish, elongated, sinuose and thick-walled transitional cells present in most leaves but variably expressed.

Upper 2/3 of lamina, and especially the borders, wavy or undulate in most leaves.

Upper 2/3 of lamina plane, or nearly so, in most leaves.

Costa at leaf base on ventral side at least 80 μ m wide, often much more; on dorsal side brownish or reddish, dull.

Costa at leaf base on ventral side mostly less than 80 μ m wide; on dorsal side whitish, glistening.

Laminar papillae in mid leaf dense, in surface view obscuring the lumen.

Laminar papillae in mid-leaf not obscuring the lumen, which is pluri-papillose.

Leaf margin just above leaf base often with undulate "shoulders", especially in older and larger leaves, but otherwise plane.

"Shoulders" absent.

Leaf margins nearly always forming straight lines.

Leaf margins, especially near apex, bulging somewhat irregularly, seldom forming straight lines.

Rhizoids tubers not known.

Rhizoid tubers sometimes present. Conf. Zander (1993: 87)

Trichostomum brachydontium Bruch

are identical with this wide-spread and variable subcosmopolite. (Cf. Sollman 1993). The following three types clearly belong to *T. brachydontium*. All of them were described from sterile non-fruited specimens.

Mauritius: 10 (M416); Garden at Phoenix, clay paths, shady situations, fairly common, alt. 1250 ft., rainfall 80 ins. Leg. R.E. Vaughan M/113, 27 Feb. 1962 (Herb. Een M473). - Réunion: Loc. 1 (R322).

Trichostomum ayresianum Schimp. ex Besch., Ann. Sc. Nat. Bot. ser. 6, 9: 342. 1880. Syn. nov. Type: Mauritius, June 1862, Ayres, herb. Hooker "88(Sch.)" (BM).

Several African *Trichostomum* type specimens were studied, as it could be suspected that they

Trichostomum flavescens Dix., K. Norsk. Vid. Selsk. Foerh. 9 (11): 39. 1936. Syn. nov. Type: (Zaire), Elisabethville, on ant heap, 15 Feb. 1930, O.A. Høeg 525, herb. Dixon (BM, holo).

Trichostomum trirete Dix., K. Norsk. Vid. Selsk.

Foerh. 9 (11): 38. 1936. Syn. nov. Type: (Zaire), Belgian Congo, W. of Albertville in small stream Kobogwe, at Makala near Greinerville, on sandstone, 27 April 1930, O.A. Høeg 548, herb. Dixon (BM, holo).

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