

A new combination in *Microsorium* (*Polypodiaceae*, Fern)

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माइक्रोसोरम (पॉलिपोडियेसी) में एक नवीन संयोजन

जयदीप मजूमदार

सारांश

फाइमैटोसोरस बेड्डोमी जो एक स्थानीय प्रपृग है, जिसे माइक्रोसोरम कस्पीडेटम से ऊपरी भाग में स्थित पिन्नी की डेकोरेंट बेस के आधार पर अलग किया गया है। फाइलोजेनेटिक (वंशावली) संबंधी अध्ययन ज्ञान के आधार पर इस जाति को माइक्रोसोरम में स्थानांतरित कर दिया गया है।

ABSTRACT

The endemic fern, *Phymatosorus beddomei*, was distinguished from *Microsorium cuspidatum* by its decurrent bases of pinnae on upper part of the frond. Based on updated knowledge of phylogenetic relationships this species is formally transferred to *Microsorium*.

Keywords: Endemic, *Microsorium*, New Combination, *Phymatosorus beddomei*

INTRODUCTION

Taxonomy of “microsoroid ferns” (Family Polypodiaceae J. Presl & C. Presl Subfamily Microsoroideae B. K. Nayar) was significantly revised by Hennipman & al., (1990), Bosman (1991), Nootboom (1997), Schneider & al., (2004) and Kreier & al., (2008).

Pichi Sermolli (1973) erected the genus *Phymatosorus* Pic. Serm. to accommodate species with the “sori often being sunk in distinct cavities which appear as small tubercles on the upper surface of the frond”. However, sunken sori are not a feature restricted to this genus. Nootboom (1997) noted that morphological difference between *Phymatosorus* and *Microsorium* Link was not obvious, and he sank *Phymatosorus* in *Microsorium*.

Further molecular phylogenetic studies (Schneider & al., 2004, Kreier & al., 2008) also supported Nootboom’s (1997) treatment and indicated broader concept of *Microsorium* and PPGI (2016) accepted placement of *Phymatosorus* in *Microsorium*.

Although species previously placed in *Phymatosorus* have combinations in *Microsorium* (see Nootboom 1997), one species *Phymatosorus beddomei* S. R. Ghosh (1985: 434) (**Fig. 1**), endemic in South India, was not formally transferred to *Microsorium*.

Phymatosorus beddomei was first distinguished by Ghosh (1985) from *Microsorium cuspidatum* (D. Don) Tagawa by its decurrent bases of pinnae on upper part of the frond (**Fig. 1**). Fraser-Jenkins (1997) reduced it as synonym of *Microsorium cuspidatum*. Later Fraser-Jenkins



Fig. 1. Holotype of *Phymatosorus beddomei* (India. H.C. Levinge s.n. CAL). © The Director, Botanical Survey India, Kolkata; reproduced with permission.

(2008) treated it as subspecies: *Phymatosorus cuspidatus* (D. Don) Pic. Ser. subsp. *beddomei* (S. R. Ghosh) Fraser-Jenk. Considering morphological difference, I prefer to treat it as distinct species. It is formally transferred here to *Microsorium*.

NEW COMBINATION

Microsorium beddomei (S. R. Ghosh) Mazumdar comb. nov.

Phymatosorus beddomei S. R. Ghosh, J. Econ. Taxon. Bot. 6(2): 434. 1985. *Phymatosorus cuspidatus* (D. Don) Pic. Ser. subsp. *beddomei* (S. R. Ghosh) Fraser-Jenk., Taxon. Revis. Indian Subcontinental Pteridophytes 55 2008.

Type:- India. Kerala, Travancore, Devicolum, 5 May 1883, H. C. Levinge s.n. (Holo: CAL!) **(Fig. 1).**

Distribution:- India (Kerala, Tamil Nadu).

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