

Aulacopilum beccarii (Erpodiaceae: Bryophyta) from Chinnar Wildlife Sanctuary in Idukki District, Kerala, India

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ABSTRACT

Manju C. N., Manjula K. M., Deepa K. M., Rajesh K. P. & Chandini V. K. 2015. *Aulacopilum beccarii* (Erpodiaceae: Bryophyta) from Chinnar Wildlife Sanctuary in Idukki District, Kerala, India. *Geophytology* 45(1): 63-66.

Aulacopilum beccarii (family Erpodiaceae) is described from the Chinnar Wildlife Sanctuary in Idukki District, Kerala. The genus *Aulacopilum* is described here as a new addition to the moss flora of Kerala, along with its species *A. beccarii*.

Key-words: *Aulacopilum*, Erpodiaceae, new record, Chinnar Wildlife Sanctuary, Idukki District, Kerala, India.

INTRODUCTION

Müller (1843) established family Erpodiaceae on the basis of genus *Erpodium* (Brid.) Brid. ex Rchb. and a single species, *E. domingense* (Spreng.) Brid. Several taxonomic changes have been made in this family and at present Erpodiaceae has 5 genera and 24 validly published species (Daniels et al. 2012). Three genera, viz. *Aulacopilum*, *Erpodium* and *Solmsiella*, are distributed in India (Bruehl 1931, Chopra 1975, Gangulee 1976, Daniels 2004, 2010, Lal 2005). Daniels et al. (2012) reported all these genera from Tamil Nadu. So far, this family has not been reported from Kerala. The present paper reports *Aulacopilum* from Idukki District of Kerala along with its species *A. beccarii*. Plants of Erpodiaceae are a group of pleurocarpous mosses with mono- or di-morphic leaves. The

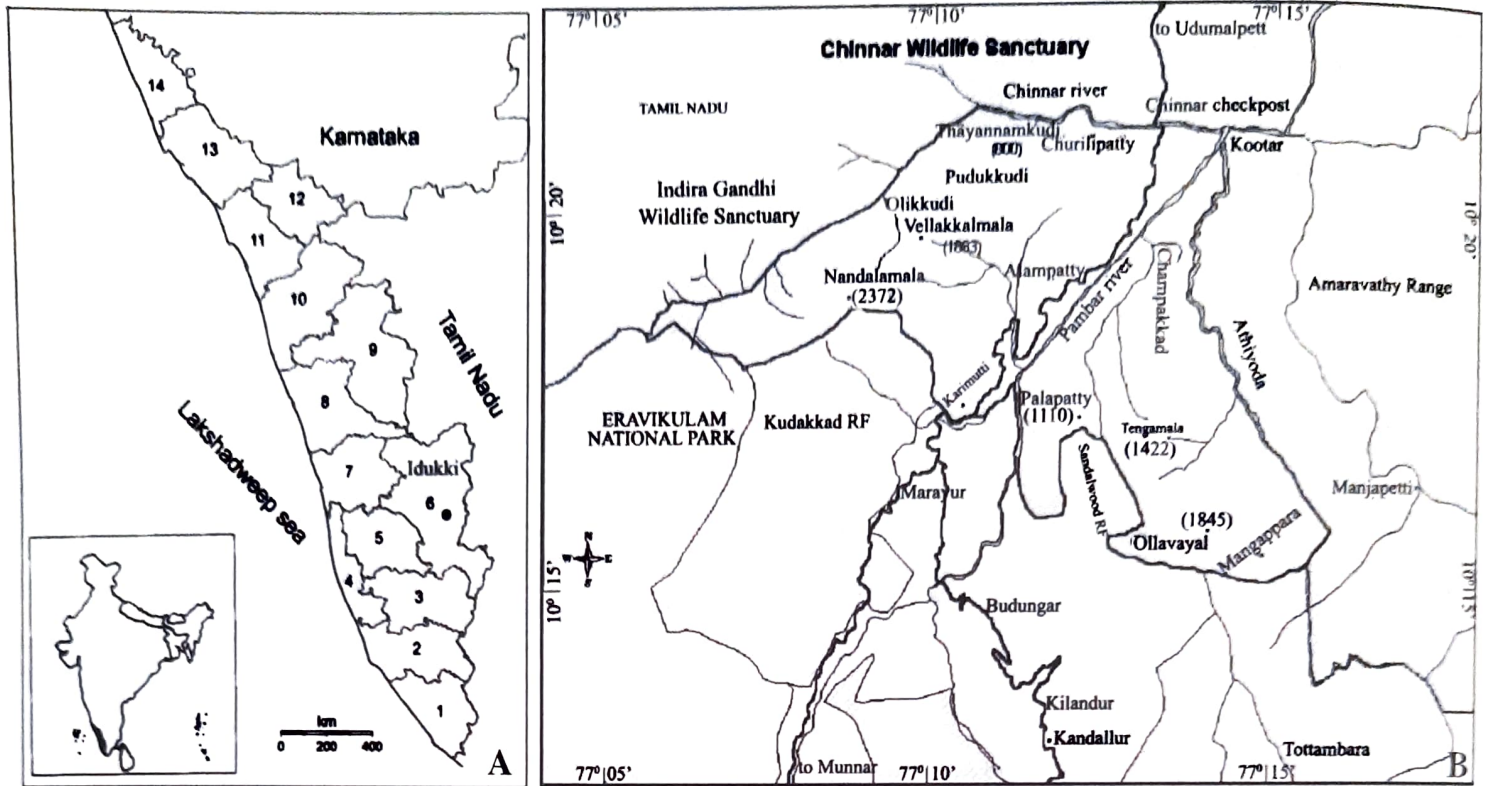
specimens are lodged at Calicut University Herbarium (CALI).

TAXONOMIC TREATMENT

Aulacopilum beccarii (Müll.Hal. ex Venturi) Mitt.,
J. Linn. Soc., Bot. 13: 308. 1873.

Plate 1, figures A-O

Erpodium beccarii Müll.Hal. ex Venturi, Nuovo Giorn. Bot. Ital. 4: 18. 1872; Broth. in Engl. & Prantl, Nat. Pflanzenfam. ed. 2, 2(11): 3. 1925; Crum, Beih. Nova Hedwigia 23: 211. 1972; Pursell, Mem. New York Bot. Gard. 69: 586. 1994; Hodgetts, J. Bryol. 19: 116. 1996; Stone, J. Bryol. 19: 494. 1997; Magill & van Rooy in Leistner, Fl. S. Africa: 453. 1998; Pursell & Allen, Monogr. Syst. Bot. Missouri Bot. Gard. 90: 524. 2002; Daniels et al., Taiwania 57(2): 169. 2012.



Text-figure 1. A. Map of Kerala showing location of Chinnar Wildlife Sactuary in Idukki district. B. Chinnar Wildlife Sactuary, Idukki district, Kerala.

Erpodium paraguense Besch., Mém. Soc. Sci. Nat. Math. Cherbourg 21: 265. 1877.

Erpodium lorentzianum Müll. Hal., Linnaea 42: 384. 1879.

Erpodium hanningtonii Mitt., J. Linn. Soc., Bot. 22: 313. 1886.

Erpodium joannis-meyeri Müll. Hal., Flora 73: 486. 1890.

Erpodium menyharthii Müll. Hal., Verh. K. K. Zool.-Bot. Ges. Wien 43: 13. 1893.

Eropodium opuntiae Cardot, Rev. Bryol. 37: 6. 1910.

Description: Plants yellowish green, 1-2 cm long, slender, in loose mats, creeping, irregularly branched; rhizoids clustered along ventral surface of stem, brownish; Leaves deeply concave, 1-1.4 × 0.40-0.50 mm, oblong-ovate, crenulate-papillate at margin, acute to acuminate, tapering to a uniseriate, awn brittle, ecostate; awn broad at base, ca. 0.6 mm long, distantly serrulate; cells thin-walled, hexagonal to quadrate, multipapillate; papillae 2-5 per cell; apical cells 10-18 × 6-10 μm; median ones 8-16 × 6-12 μm; basal cells

10-30 × 10-16 μm; Sporophytes on branches, perichaetial leaves larger than vegetative leaves, 1.6-2.4 × 0.4-0.6 mm, ovate-oblong, entire, acuminate; cells elongate-rhomboid; apical ones 32-64 × 8-10 μm, epapillate; median ones 28-44 × 10-16 μm, multipapillate; basal cells 10-28 × 10-16 μm, epapillate; seta short, 0.25-0.30 μm high, capsules immersed, ca. 0.94 × 0.56 μm, cylindric to ovoid; operculum convex, rostellate, calyptra ca. 0.56 × 0.30 μm, mitrate, plicate; spores small, globose to ovoid, 28-40 × 24-38 μm, papillate.

Habitat and distribution: Corticolous. In India, this species is distributed in Tamil Nadu (Daniels et al. 2012) and Kerala (present collection). Elsewhere, the species is distributed in Africa, Australia, Mexico and South America.

Specimens examined: India, Kerala, Idukki District, Chinnar Wildlife Sanctuary (480 m); 87273 Manju & Rajesh, 15.01.2003 (CALI).

Remarks: So far, the genus *Aulacopilum* was not known from Kerala and therefore it is described here as a new addition to the moss flora of Kerala (Chinnar Wildlife Sanctuary).

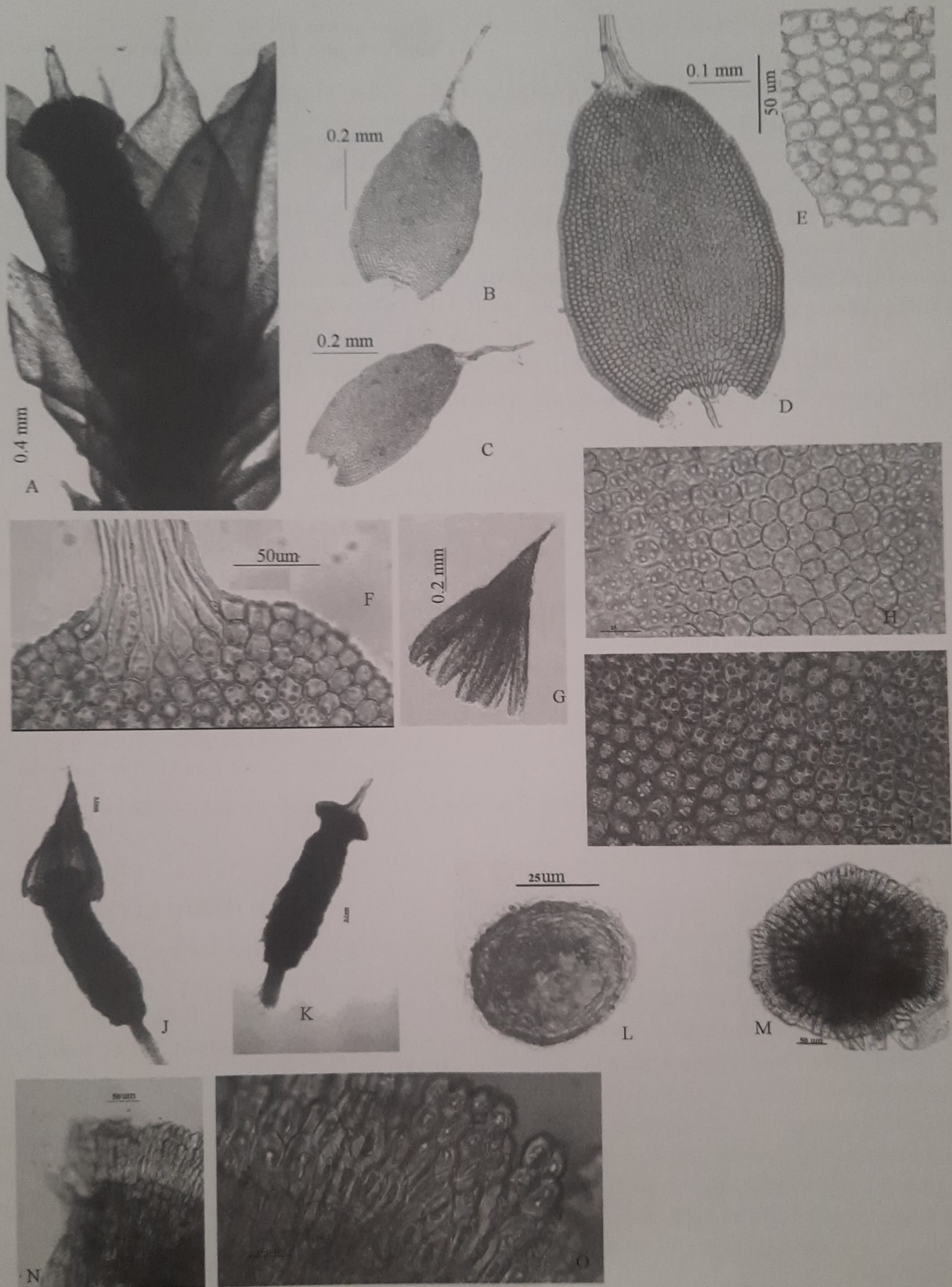


Plate 1

A-O. *Aulacopilum beccarii* (Müll.Hal. ex Venturi) Mitt. A. Perichaetial branch with sporophyte. B-D. Leaves. E. Marginal cells of leaf. F. Leaf tip, enlarged. G. Calyptra. H-I. Basal cells. J-K. Sporophyte. L. Spores. M. Calyptra, inner view. N. Peristome teeth. O. Peristome teeth, enlarged.

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- the genera. *Rec. Bot. Surv. India* 13: 1-135.
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