THE MOSS DISTICHO PHYLLUM CEYLANICUM
NEW TO THE BRYOFLORA OF INDIA
FROM THE WESTERN GHATS

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The moss Distichophyllum ceylanicum is added here to the bryoflora of India from the Agasthyamalai Biosphere Reserve in the southern Western Ghats. The species is described and illustrated.

Key words: Agasthyamalai, Distichophyllum ceylanicum, Western Ghats

INTRODUCTION


Surveys carried out in the Agasthyamalai Biosphere Reserve in the southern Western Ghats led to the discovery of the moss Distichophyllum ceylanicum (Mitt.) Paris, which is incidentally new to the bryoflora of India and is hence reported here. This discovery adds one more species to the genus thereby raising the number of species to 11. A brief description and illustration are provided for the species. The specimen is housed at the herbarium of Scott Christian College, Nagercoil (SCCN).
Figs 1–7. *Distichophyllum ceylanicum* (Mitt.) Paris – 1 = plant; 2 = stem (cross section); 3–4 = leaves; 5 = leaf apical cells; 6 = leaf median cells; 7 = leaf basal cells (drawn from K. C. Kariyappa 3724)
**Distichophyllum ceylanicum** (Mitt.) Paris
(Figs 1–7)


Plants laxly caespitose, yellowish green. Stems erect, simple, rarely branched, 5–10 mm high, 0.2–0.24 × 0.14–0.18 mm, ovate, without a central strand; cortical cells 1-layered or 2-layered, 14–30 × 4–6 mm, roughly rectangular, thin-walled; medullary cells 24–44 × 8–30 mm, irregularly hexagonal, thick-walled. Leaves dense, erectopatent, complanate, 1.4–1.6 × 0.48–0.64 mm, elliptical-obovate to spatulate, entire, flat, bordered at margin, obtuse, short-acuminate; apical cells 10–16 × 6–8 μm, quadrate-hexagonal; median ones 14–18 × 12–16 μm, quadrate-hexagonal; basal ones 30–40 × 12–16 μm, rectangular, narrower towards margin; border cells 120–140 × 6–8 μm, narrower, elongate, cartilaginous, 3-rowed at base, 1- or 2-rowed at apex; costa more than 3/4 as long as leaf. Sporophyte not seen.

Habitat: rupicolous, in montane forests, ca 1,868 m.
Distribution: Sri Lanka and India: Western Ghats of Tamil Nadu (Tirunelveli), rare.


**DISCUSSION**

*Distichophyllum ceylanicum* is restricted to Sri Lanka and the southern Western Ghats in India, which are generally treated as one biogeographical unit (Gunawardene et al. 2007). Hence, it may be concluded that the species is a narrow endemic confined to a small part of the southern Western Ghats and Sri Lanka. This emphasises the need to redlist this species. In the southern Western Ghats, *D. ceylanicum* was discovered in montane evergreen forests, which stresses the need for the conservation of tropical rain forests of the Western Ghats, particularly the wet evergreen ones.

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