

***Amblystegium serpens* (Hedw.) Schimp.
(Amblystegiaceae: Bryophyta) from Indian Peninsula**

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Abstract

Amblystegium serpens of the family Amblystegiaceae is reported for the first time from Western Ghats of Kozhikode district and this report forms the first collection from Peninsular India.

Key words : *Amblystegium serpens*, Indian Peninsula, New record, Western Ghats.

INTRODUCTION

Amblystegium serpens belonging to the family Amblystegiaceae is small to medium sized pleurocarpic moss of moist to aquatic areas. It is known as creeping feather moss and this species is used in aquarium trades. Generally this species is found on moist, shady, under trees and bushes, and also on dead wood, bark and rocks. This species is found growing along with other mosses like *Brachythecium* sp. Eventhough this species doesn't grow in water in nature, it is cultivated submerged in aquarium, where it forms delicate, upright shoots. This growth habit gave it the vernacular name "nano moss" in the aquarium hobby. This species is characterised by lanceolate leaves and have an acuminate tip and the midrib reaching to the middle of the leaf or slightly above. This species was earlier reported from India from Kashmir¹. However this is the first report of the genus along with the species to Peninsular India. A brief description with photograph is provided and specimens are lodged at the Zamorins Guruvayurappan College Herbarium (ZGC).

Taxonomic description

Amblystegium serpens (Hedw.) Schimp., Bryologia Europaea 6: 53. pl. 564 (fasc. 5556 Monogr. 9. pl. 3). 1853; Gangulee, Mosse E. India 3: 1677. 1978. *Hypnum serpens* Hedw., Species Muscorum Frondosorum 268-269. 1801. *Hypnum contextum* Hedw., Sp. Musc. 273. 1801. *H. spinulosum* Hedw., Sp. Musc. 269. 1801. *Amblystegium pinnatum* Schimp., Lor. Bryol. Notizb. 74. 1865.

Plants in loose to thin mats, yellowish to dark greenish, irregularly branched, main stem creeping, 12 cm long, form extensive, intricate patches, branches filiform; rhizoids reddish-brown, 10-14 μ m, smooth, in scattered fascicles on ventral portion of prostrate stem; stem leaves very small, 0.5 mm long and 0.2 mm wide), lanceolate to ovate lanceolate, long acuminate with acute apex, acumen straight, erect or erect-spreading; branch leaves smaller than stem leaves, less spreading, branch leaves linear-lanceolate, 0.89-1 mm long and 0.2-0.3 mm wide, leaf

margins plane and entire or weakly serrulate in distal area, not decurrent; median cells smooth, 6-8 μ m wide, long rhomboidal, thin-walled, not pitted, alar cells quadrate with walls not strongly thickened, only gradually differentiated from adjacent laminal cells, 13.38-15.61 μ m long and 8.92-11.15 μ m wide, apical cells gradually more elongate than median cells, 33.4-37.91 μ m long and 4.46-6.69 μ m wide; costa single, delicate, does not extend beyond mid-leaf; capsules very common found on main branches and lateral branches, brown to dark brownish, about 2 mm long, curved and cylindrical, borne on a long seta, and have a conical lid, inclined to horizontal, exothecial cells in regular vertical rows, 20 μ m wide, calyptra whitish, Spores finely papillose, 15-18 μ m. (Fig.1)

Specimens examined

Kerala, Kozhikode, Anakkampoyil, Marippuzha (800 m), 08.08.15, Pournami & Aswathy, 13411a, 15462a; Olichuchattam (750m), 28.10.2015, Manju & Rajesh, 15362 (ZGC). It is found on bark of trees along with *Cheilolejeunea* sp. and on moist rocky patch along riverine area.

Distribution

India (Kashmir, Ladakh), Tibet, Japan, Pakistan, China, Canada, Mexico, Argentina, Chile, New Zealand, Africa^{1&2}. This species is not reported from Peninsular India. Hence the present collection is a new record for Peninsular India.

CONCLUSION

The present study reports a highly economically important moss species *Amblystegium serpens* from the foothills of Western Ghats in Kozhikode district. This species has not yet reported earlier from the peninsular India, hence the present collection forms a new record of occurrence to Peninsular India.

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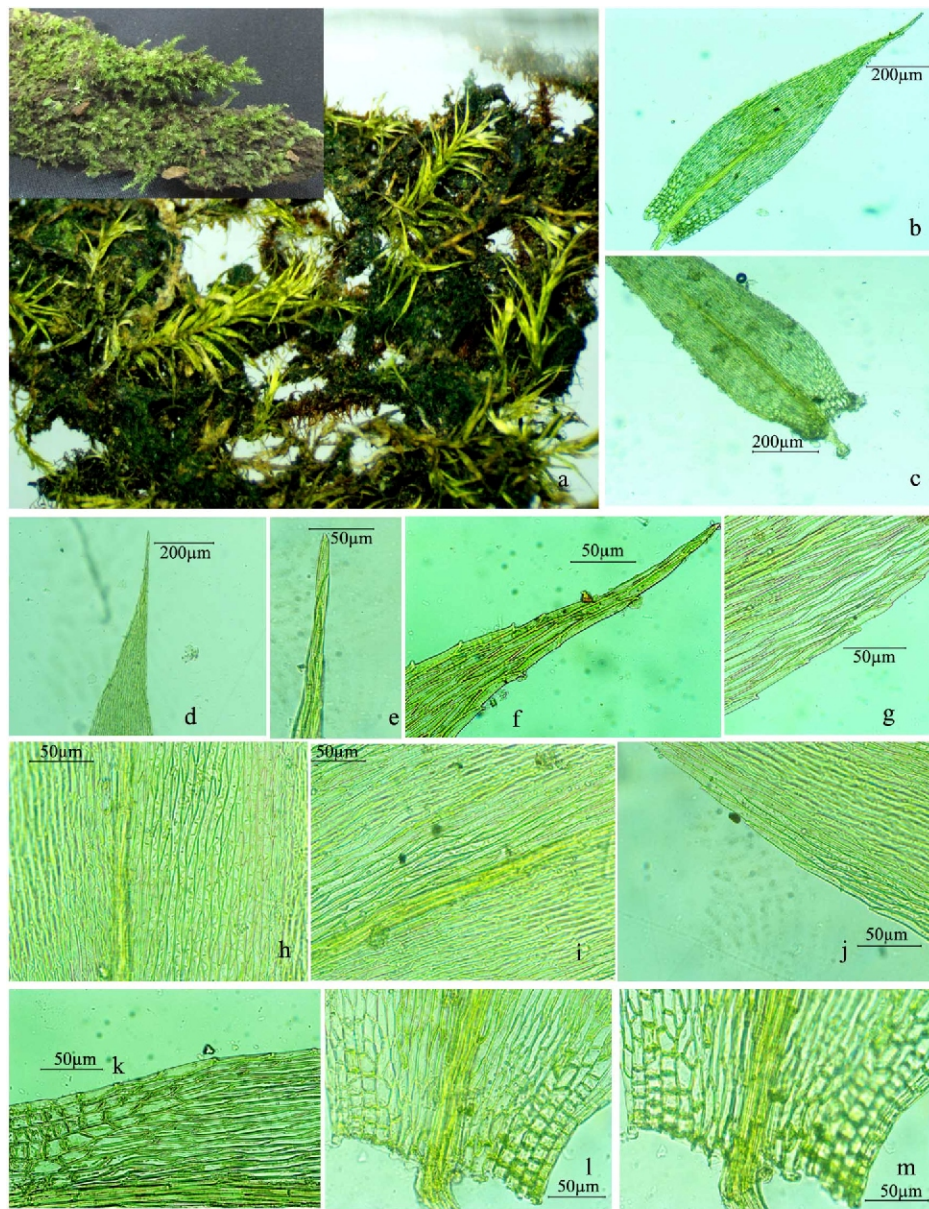


Figure 1. *Amblystegium serpens* a. habit, b. leaf, c. base of stem leaf, d,e&f. leaf tip, g. margin above mid leaf, h&i. leaf middle cells, j. margin below mid leaf, k,l &m. leaf basal cells

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