JUNGERMANNIA OBLIQUIFOLIA (SCHIFFN.) VÁŇA (MARCHANTIOPHYTA) FROM INDIA

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Jungermannia L. is one of the prominent genera of the family Jungermanniaceae with about 125 species distributed worldwide (Amakawa, 1959, 1960; Váňa, 1975, 1996; Hong, 1997, 2003; Váňa and Hong, 1999). In India, it is known by 54 species (Bapna and Kachroo, 2000). Jungermannia subgenus Plectocolea is represented by 11 valid species in India of which four are known to occur in South India (Udar and Kumar, 1981; Bapna and Kachroo, 2000; Alam et al., 2007)

During a recent survey in the Western Ghats, authors collected *Jungermannia obliquifolia* (Schiffn.) Váňa of the subgenus *Plectocolea*, from the wet evergreen forests of Aralam Wildlife Sanctuary in Kannur district of Kerala state. This is the first record of occurrence for Indian subcontinent with phytogeographical importance, hence an illustrative account is provided.

Class: Hepaticopsida, Order: Jungermanniales, Family: Jungermanniaceae

Jungermannia obliquifolia (Schiffn.) Váňa, J. Hattori Bot. Lab. 36: 68. 1972. *Nardia obliquifolia* Schiffn., Denkschr. Akad. Wiss. Wien, KI. Math.-Naturw. 67: 191. 1898.

(Plate 1)

Plant dioecious, olive-green, 10-30 mm long and 0.5-1.0 mm wide. Stem soft, suberect, branching by subfloral innovations. Rhizoids 13-15 μm wide, numerous, originating from stem epidermal cells, decurrent along stem as distinct fascicle, mostly intensive purple. Leaves obovate to oblong-ovate, lateral intercalary (*Plagiochila* type), distant to imbricate, sometimes with undulating margins, apices recurved when dry, 0.8-1.4 mm long, 0.5-1.0 mm wide; leaf cells thin-walled, trigones absent, middle and upper leaf cell 15.5-20.5 μm long diagonally, basal cells elongated, 40-62 × 16-20 μm. Male inflorescence lateral intercalary with 4-10 pairs bracts, antheridia 1 or 2 per bract with biseriate stalk. Female inflorescence terminal on main stem, female bracts in one pair, larger than the leaves, perianth exserted, narrowed towards crenulate mouth, 2-3 plicate, 0.82 mm in diameter; perigynium short, 0.3-1.5 mm long diagonally per perianth. Sporophyte not seen.

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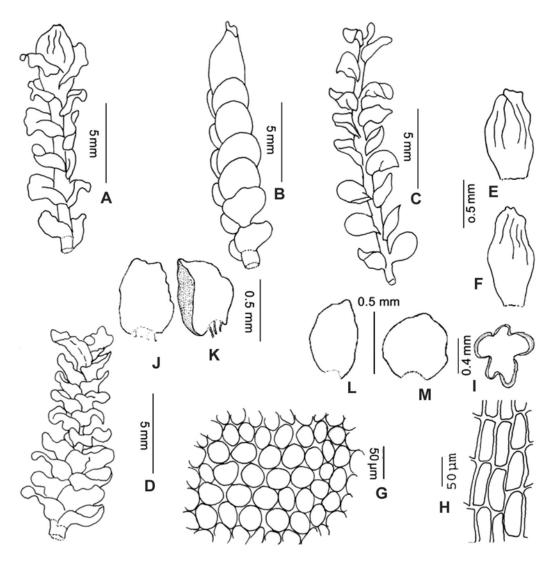


Plate 1. *Jungermannia obliquifolia*. A & B. Plant with perianth; C. Sterile plant; D. Antheridial plant; E & F. Perianth; G. Middle cells; H. Basal cells; I. Transverse section of perianth; J & K. Female bracts; L & M. Male bracts.

Specimens examined: India, Kerala, Kannur district, Aralam Wildlife Sanctuary, Chavachi, (400 m) 7 February 2003, Manju, C.N. & K.P. Rajesh 87649 (CALI, EGR); Meenmutty (750 m) 8 February 2003, Manju, C.N. & K.P. Rajesh 88120 (CALI).

Ecology: On land cuttings in wet evergreen forests.

Distribution: Java, Celebes, Sumatra, the Philippines and Australia (Váňa, 1975). This is the first record for Indian subcontinent.

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