



## NOTE

## *Trichosteleum stigmatum* Mitt. (Sematophyllaceae) from Silent Valley National Park, a New Record for India

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(Manuscript received 28 November 2011; accepted 15 March 2012)

**ABSTRACT:** *Trichosteleum stigmatum* Mitt. a rare moss is reported from Silent Valley National Park in the Western Ghats of India.

**KEY WORDS:** India, national park, new record, Sematophyllaceae, Silent Valley, *Trichosteleum stigmatum*.

### INTRODUCTION

*Trichosteleum* Mitt. a pantropical genus of the family Sematophyllaceae, was revised by Buck and Tan (1989) and was divided into two segregate genera, *Radulina* Buck & Tan and *Trichosteleum* Mitt. The genus *Trichosteleum* is characterised by unipapillose cells at vegetative and perichaetial leaves (Tan and Jia, 1999). The genus is known in India with about seven species viz. *T. glaucovirens* (Mitt.) Broth. (syn. *Rhaphidostichum glaucovirens*), *T. luxurians* (Dozy & Molk.) A. Jaeger (syn. *Papillidiopsis luxurians*), *T. boschii* (Dozy & Molk.) A. Jaeger, *T. stissophyllum* (Hamp.) A. Jaeger (syn. *Papillidiopsis stissophylla*), *T. hamatum* (Dozy & Molk.) A. Jaeger (Syn. *Radulina hamata*), *T. punctipapillosum* Gangulee, *T. stereodontoides* Gangulee (Gangulee, 1981). Among these, one species viz., *Trichosteleum boschii* (Dozy & Molk.) A. Jaeger was described from South India (Manju et al., 2009). During our survey in Silent Valley National Park we could collect another species of *Trichosteleum* viz., *T. stigmatum* Mitt., which was not recorded earlier from India hence reported here. It differs from *T. boschii* (Dozy & Molk.) A. Jaeger, in having larger leaves with much longer and often twisted leaf acumens; leaf margin faintly denticulate below and sharply denticulate above. But in *T. boschii* leaf margin is smooth below, faintly denticulate above and leaf tip is long acuminate and subulate.

### TAXONOMIC TREATMENT

*Trichosteleum stigmatum* Mitt., J. Linn. Soc., Bot. J. Linn. Soc., Bot. 10: 181. 1868.

*T. sepikense* E.B. Bartram, Brittonia 13: 378. 1961.

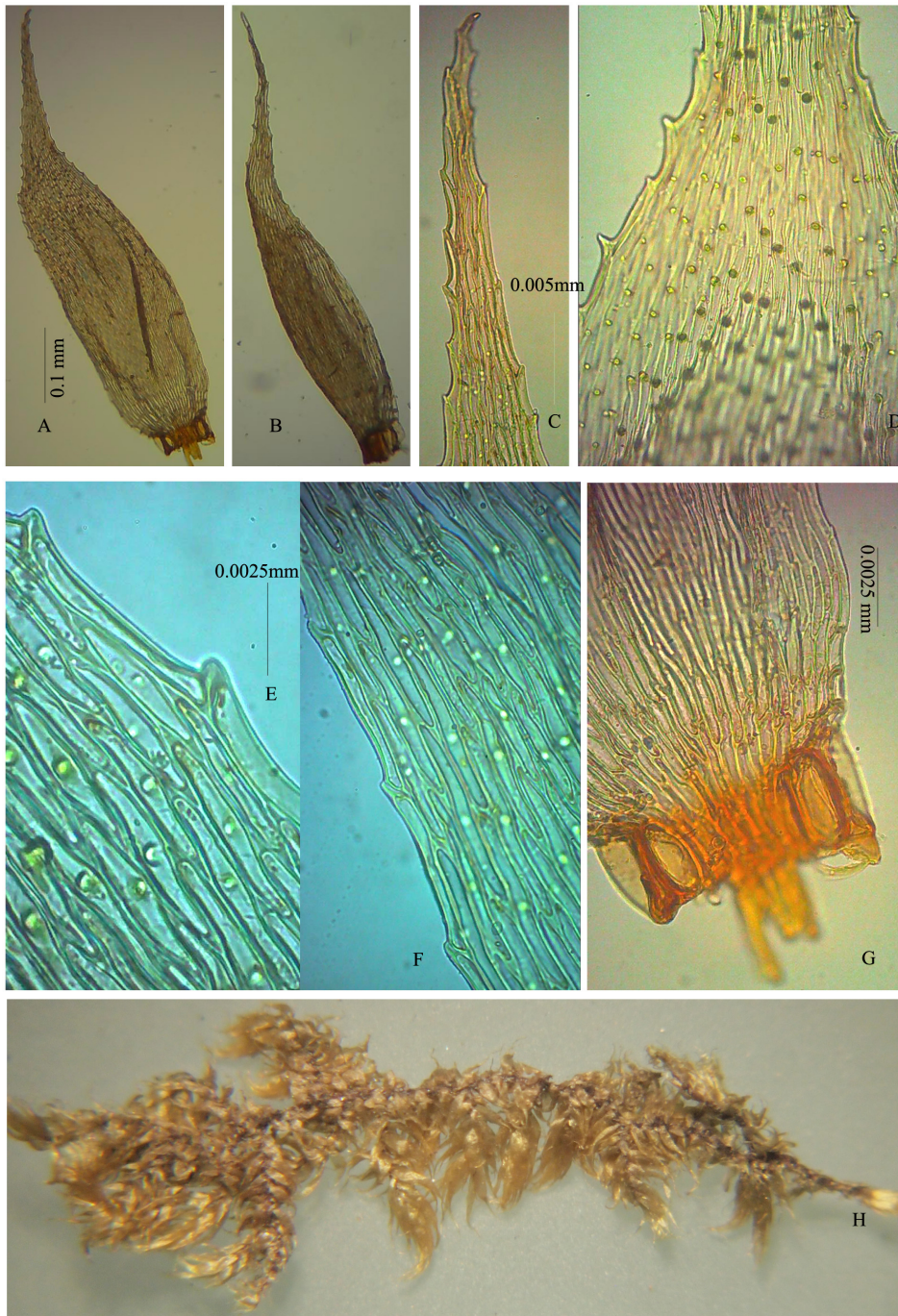
Plants yellowish-green to brownish, medium size in low tufts, glossy plants, main stem creeping, 2-2.5 cm long, irregularly branched; stem and branch leaves appressed to wide-spreading, primary branches erect, 2-3 mm, leaves complanate, spreading, oblong-lanceolate, falcate, strongly concave, gradually long acuminate-subulate acumen, margins plane, slightly reflexed near the long acumen; basal leaves small, 0.28 mm long, towards tip 0.57 mm long, 83 µm wide, apex erect to nodding, margin faintly denticulate below, margin at apex sharply dentate, ecostate; leaf cells oblong-linear, fusiform, cells at tip elongated-rhomboidal, 45-52 × 37 µm, basal cells 30-36 × 50-55 µm, with one papilla on centre except for extreme tip and basal cells; alar cells distinct with one row of large, oblong cells, 55-58 × 150-156 µm, with a few smaller irregular cells above, yellowish brown. Sporophyte not observed. (Fig. 1 A-H)

Examined specimens: INDIA, Kerala, Palakkad District, Silent Valley National Park (1300 m), 11. 09. 2011, Rajilesh, Anoop & Hareesh 5332, 5333 (MBG)

Distribution: India (Kerala), China (Hainan, Guangdong, Guangxi), Borneo, Philippines, Papua New Guinea, Oceania (Samoa, Fiji).

### ACKNOWLEDGEMENTS

The authors are thankful to the Kerala State Council for Science Technology & Environment (KSCSTE), Thiruvananthapuram for the financial assistance. We are thankful to the staff members of the Kerala Forest Department for extending support during our field study. First author sincerely acknowledge the support provided by the authorities



**Fig. 1** *Trichosteleum stigosum*; A & B: Leaves, C & D: Leaf tip cells, E & F: Leaf marginal cells, G: Alar cells, H: Habit.



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## 印度的新紀錄種報導 - 長喙刺疣蘚

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(收稿日期：2011年11月28日；接受日期：2012年3月15日)

**摘要：**本文報導在寂靜谷國家公園發現的一種稀有蘚類 - 長喙刺疣蘚在印度的新紀錄分布。

**關鍵詞：**印度、新紀錄種、錦蘚科、寂靜谷、長喙刺疣蘚。