NOTE

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

Chandrasekharan Nair Manju[1,2*], Raveendranpillai Prakashkumar[2], Bhavana Prajitha[2], Venda Kkullathil Rajilesh[2] and Karadi Parambath Anoop[2]

1. Department of Botany, The Zamorin's Guruvayurappan College, G.A. College PO, Calicut-14, Kerala, India.
2. Malabar Botanical Garden, G.A. College PO, Calicut-14, Kerala, India.
** Corresponding author. Email: manjucali@gmail.com*

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

ABSTRACT: *Trichosteleum stigmosum* 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 stigmosum*.

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. stigmosum* 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 stigmosum 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

臺灣大學學術期刊資料庫

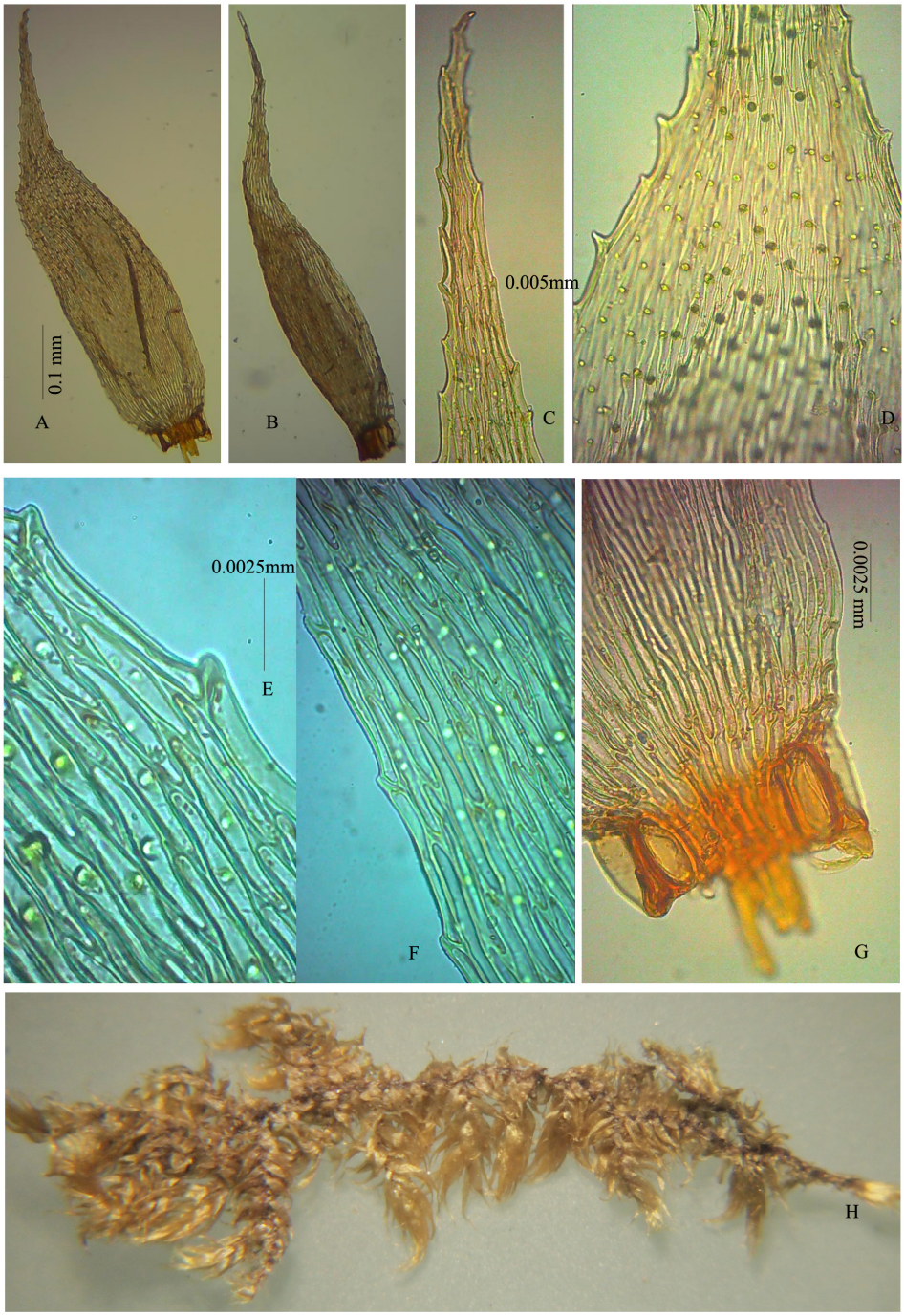


Fig. 1 *Trichosteleum stigmosum*; A & B: Leaves, C & D: Leaf tip cells, E & F: Leaf marginal cells, G: Alar cells, H: Habit.

臺灣大學學術期刊資料庫

of the Zamorin's Guruvayurappan College, Calicut.

LITERATURE CITED

Buck, W. R. and B. C. Tan. 1989. The Asiatic genera of Sematophyllaceae associated with *Trichosteleum*. Acta Bryolichenol. Asiat. **1**: 5-19.

Gangulee, H. C. 1981. Mosses of Eastern India and Adjacent regions. Bishen Singh Mahendra Pal Singh. (Vol. III), New Central Book Agency Pvt. Ltd., Calcutta, India., pp. 1547-2142.

Manju, C. N., K. P. Rajesh and P. V. Madhusoodanan. 2009. Bryophyte Diversity in Kerala Part of Agasthyamalai Biosphere Reserve in Western Ghats. Taiwania **54**: 57-68.

Tan, B. C. and Y. Jia. 1999. A preliminary revision of Chinese Sematophyllaceae. J. Hattori Bot. Lab. **86**: 1-70.

印度的新紀錄種報導 – 長喙刺疣蘚

Chandrasekharan Nair Manju[1,2*], Raveendranpillai Prakashkumar[2], Bhavana Prajitha[2], Venda Kkullathil Rajilesh[2] and Karadi Parambath Anoop[2]

1. Department of Botany, The Zamorin's Guruvayurappan College, G.A. College PO, Calicut-14, Kerala, India.
2. Malabar Botanical Garden, G.A. College PO, Calicut-14, Kerala, India.
* 通信作者。*Email: manjucali@gmail.com*

(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。

臺灣大學學術期刊資料庫