

TAENIOPHYLLUM GLANDULOSUM BLUME - A NEW ADDITION TO ORCHID FLORA OF MANIPUR

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Abstract

Taeniophyllum glandulosum Blume has been collected from Hengbung as a new record for Manipur. The paper describes and illustrates the species for its easy identification. Information on its taxonomic details and distribution pattern is also provided.

Introduction

TAENIOPHYLLUM BLUME represents a group of leafless and epiphytic/ lithophytic orchids with flattened and chlorophyllous roots. It comprises nearly 180 species and is distributed from Japan and India to Pacific Islands and Australia with majority of the species concentrated in New Guinea (Seidenfaden, 1988). Seven species (*Taeniophyllum alwisii*, *T. andamanicum*, *T. arunachalense*, *T. crepidiforme*, *T. glandulosum*, *T. scaberulum*, *T. retrospiculatum*) are met in India. Of these, *T. andamanicum* is endemic to Andaman and Nicobar Islands, whereas all the others are Himalayan and adjacent hill ranges in distribution.

During our orchid surveys in and around Senapati District (Manipur), we collected a leafless and epiphytic orchid, in different stages of development, from Hengbung ($25^{\circ} 13.75' \text{ North} \times 94^{\circ} 00.24' \text{ East}$). It was first sighted on *Pinus kesiya* branches and cones (Fig. 1a, b, 2 a) and subsequently on several broad-leaved phorophytes including *Azalia* sp., *Gardenia jasminoides*, *Schima wallichii*, etc. After a critical examination, it was identified as *Taeniophyllum glandulosum* which identity was revalidated through comparison with herbarium specimens (Joseph 35593 A-H, ASSAM; Barua 1537, ASSAM). Incidentally, the species was collected earlier as *T. khasianum* from Assam (Joseph and Yoganarasimhan, 1967) and subsequently treated as and under *T. tibodasanum* (Seidenfaden, 1988).

In what follows, taxonomic details and illustrated description are provided for an easy identification of the species. Its herbarium specimens have been deposited at Centre for Orchid Gene Conservation of Eastern Himalayan Region (COGCEHR).

Species Description

Taeniophyllum glandulosum Blume Bijdr. Fl. Ned. Ind. 8: 356. 1825; *Sarcochilus aphyllus* Makino, Bot Mag.

Tokyo 1: 75. 1887; *Taeniophyllum aphyllum* (Makino) Makino, Phaner. Jap. IM. 1: t. 11. 1899; *T. tibodasanum* J. J. Sm. Einige neue javanische Orchideen, 29: 248-250. 1931; *T. viride* Carr Gard. Bull. Straits Settlem. 7: 67. 1932; *T. khasianum* Joseph & Yogananda, J. Ind. Bot. Soc. 66 (1): 109. T. 1. 1967.

Plants epiphytic, thallos when young. Shoots highly reduced, leafless. Roots long (1.8-6.0 cm or more), 1-2 mm thick, sub-terete, glabrous, green. Inflorescence 10-15 mm long, terete, erect, glabrous, 3-6 flowered. Rachis yellowish green. Flowers bracteate, pedicellate,

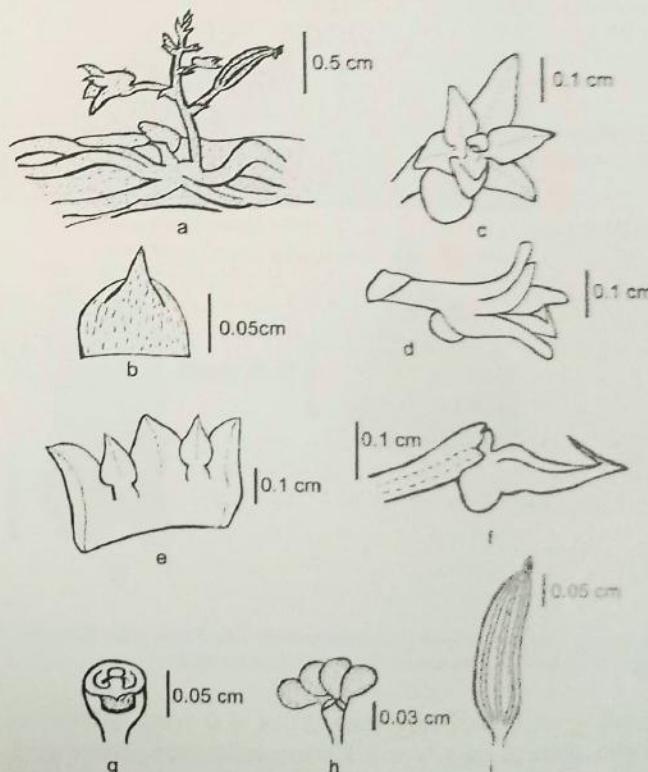


Fig 1 a-i. *Taeniophyllum glandulosum* Bl.: a, Plant with flowers and fruits; b, Bract; c-d, Different views of flower; e, Inner view of perianth; f, Labellum with column; g, Column; h, Pollinia; i, A capsule.

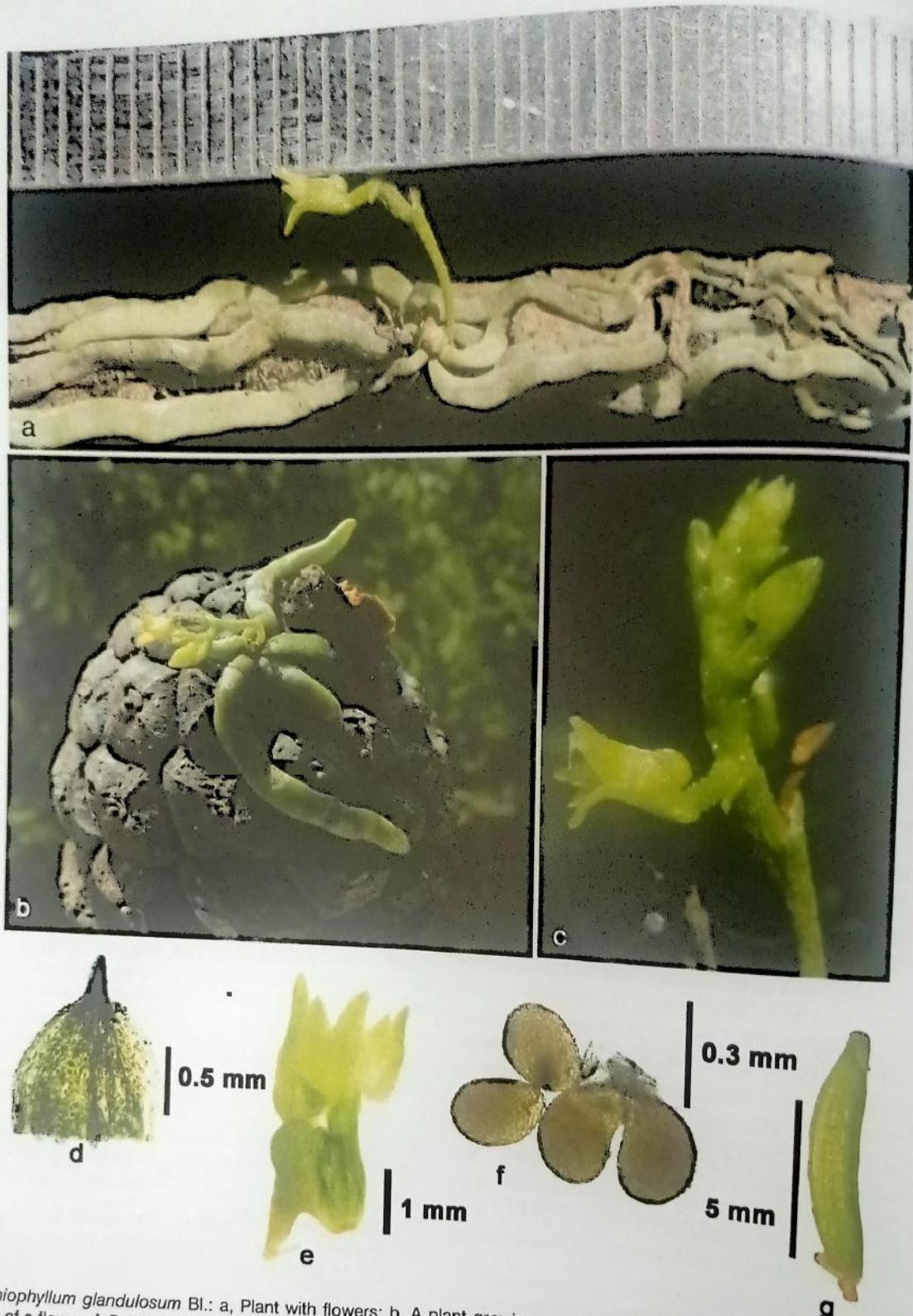


Fig 2 a-g. *Taeniophyllum glandulosum* Bl.: a, Plant with flowers; b, A plant growing on pine cone; c, Side view of a flower; d, Bract; e, A magnified view of a flower; f, Pollinia; g, A capsule.

opening successively, ca. 2.0×4.0 mm, yellowish green. Bracts ca 1.0×1.2 mm, apiculate, persistant. Sepals slightly recurved, ovate-lanceolate, acute, dorsally keeled, connate and shortly humped at base, free above. Petals inserted on sepaline tube, 1.8×1.0 mm, ovate, acute. Labelum $2.0-2.5 \times 0.5-1.0$ mm,

ovate, oblong, channelled, incurved at margin, acuminate; Spur ca 1.2×1 mm, scrotiform. Column 0.5 mm. Pollinia 4, unequal, ovoid, yellow. Ovary pedicellate, 2 mm. Capsule 10×1.5 mm, cylindric, oblong, sub-falcate, ridged, glabrous (Figs. 1a-i, 2a-g).

Flowers and Fruits: February - May

Ecology: A tiny epiphyte found growing on *Pinus kesiya* trees at Hengbung, 1180 msl. It also grows on thin branches of *Schima wallichii*, *Azalia* species, and *Gardenia jasminoide*. It occasionally grows on pine cones as well.

Occurrence: Manipur, Senapati District, Hengbung, 1180 amsl.

Distribution: India (Assam, Meghalaya, Sikkim, Manipur), China, Java, Korea, Malaysia, New Guinea, Taiwan, Thailand, Sumatra.

Specimen Examined: India, Manipur, Hengbung COGCEHR 0002; Joseph 35593 A-H, ASSAM; Barua 1537, ASSAM

Note: At Hengbung, *Taeniophyllum glandulosum* does not exhibit phorophytic specificity; it dwells on *Pinus kesiya* and some broad-leaved phorophytes including *Azalia* sp., *Gardenia jasminoides* and *Schima wallichii*, and It is, however, interesting to note that the species invariably prefers thin branches as its abode. Its common occurrence on a variety of host plants, in the area, may be attributed to its wide ecological amplitude. Incidentally, the plants during early stages of growth and development exhibit flattened foliose structure in accord with similar earlier reports in *T. aphyllum* (Mutsuura et. al., 1962)

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