

***Thrixspermum musciflorum* Rao & Joseph (Orchidaceae): A new record for Assam, India**

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Abstract

Extended distribution of *Thrixspermum musciflorum* Rao & Joseph, a rare species of Orchidaceae from Tinsukia and Dibrugarh district, Assam is described here. Detailed description, photographs, distributional and ecological details are provided.

Key words: *Thrixspermum musciflorum*, Orchidaceae, new record, Assam.

INTRODUCTION

Thrixspermum Loureiro is a genus of orchids, comprising of around 100 species distributed widely from the Himalayas to Philippines and tropical Islands of S.W. Pacific. So far, 9 species has been estimated from India (Misra 2007) and 3 species were recognized in Assam (Chowdhury 2005). During his field trips in 'Dehing-Patkai Wildlife Sanctuary' located in Dibrugarh and Tinsukia Districts under the Digboi forest Division and 'Joypur Reserve Forest' in the district of Dibrugarh and under the Dibrugarh forest Division, the first author collected an unknown species of orchid that was later on identified as *Thrixspermum musciflorum* A.S. Rao & J. Joseph. Till date this orchid was not known to grow in Assam and the present collection is its first record of occurrence in this state. The present communication provides the description, habitat and photographs [PLATE - I] of *Thrixspermum musciflorum* for its easy recognition.

Thrixspermum musciflorum A.S. Rao & J. Joseph in Bull. Bot. Surv. India 11 (1& 2): 204–205. 1971; Seidenfaden in Opera Botanica 95: 164. 1988; Mishra. Orch. India 318. 2007. *Thrixspermum musciflorum* var. *nilagircum* J. Joseph & Vajr., Indian Forester 107: 648. 1981.

Epiphytic. Stems 3 – 8 cm long, with wiry roots. Leaves many, narrowly oblong, 5 – 6 x 0.8 – 1 cm, trigonal, acute, fleshy, channeled, v- shaped. Inflorescence 3 – 5, longer than leaves, thin at base and thickened at apex, axillary, 1 – 2 flowers opening at a time; peduncles with two minute, adpressed scales. Flowers: sepals and petals pale yellow, lip pale yellow with reddish tint and blotches; floral bracts minute, triangular; sepals unequal; dorsal sepals oblong-ovate, concave, acute, 3 x 6 mm; lateral sepals broadly ovate, acute 4 x 5 mm. Petals oblong-lanceolate, 1.5 x 4.5 mm, blunt; lip 3 lobed with 3 grooved sac at base, 8 x 5 mm; lateral lobes rounded, auriculate, crenate; mid-lobe semicircular, crenate, hairy; disc with centrally placed, tongue like hairy callus; column short, with broad foot; pollinia-4. Capsules long cylindrical, 6 – 7 cm long.

Flowering: April – May

Exsiccatae: Dehing-Patkai Wildlife Sanctuary, Assam, *Gogoi 0514*, ASSAM.

Habitat: Epiphytic on tree trunks.

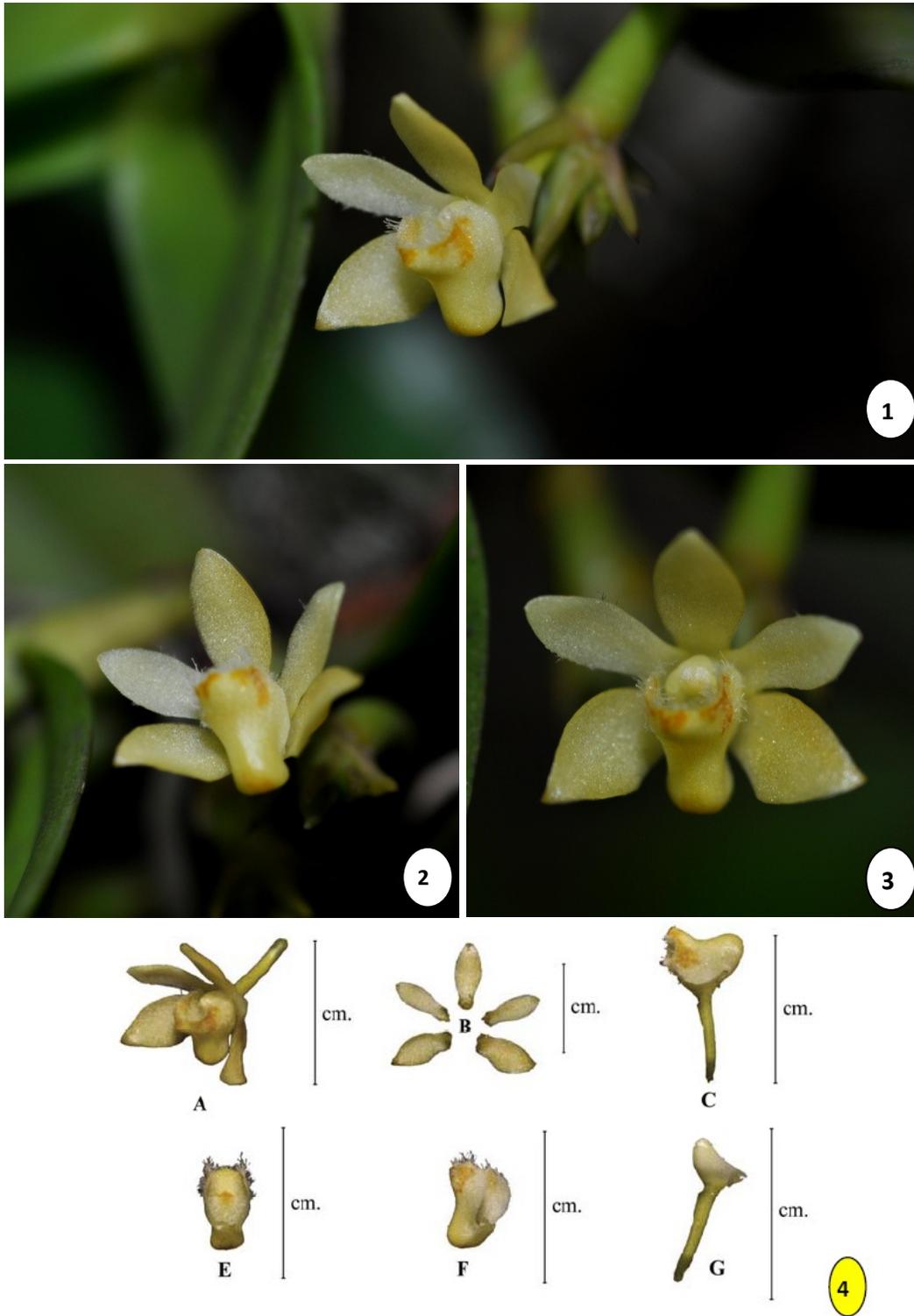


PLATE - I: *Thrixspermum muscaeflorum* Rao & Joseph. Fig. 1. flower with inflorescence; Fig. 2, 3. Close view of flowers; Fig. 4: A. flower, B. perigon, C. lip with ovary, E, F. lip, G. ovary & column.

General Distribution: India, Thailand and Sri Lanka.

Status: Rare, the species was found only in Dehing- Patkai Wildlife Scentury and Joypore Reserve Forest.

CONSERVATION ASPECTS

Tinsukia and Dibrugarh District of Assam comprises of tropical/sub-tropical wet evergreen forest, multistoried in structure and mixed forest with evergreen patches, rich in biodiversity. The agroclimatic condition of these districts of Assam in North-East India is most congenial to the lavish growth and development of wide varieties of Orchid species in natural habitat. Nevertheless, all the orchidaceous plants in this area are facing high risk of threat because of regular and rapid destruction of natural habitat by deforestation, upper layer soil erosion, overgrazing, effects of herbicides which is harmful for many saprophytic and terrestrial species and increase of agricultural lands by clearing forest area, developmental schemes, rapid urbanization, ignorance and finally indiscriminate collection for floral business cause greater harm in the natural population of the species in the region. Many species are now rare and at different levels of threat to the extinction. It is observed that high risk of extinction is possible in the near future if habitat of these species is not conserved in properly. Therefore, conservation of natural habitat is urgently necessary by means of conduction village level awareness programs by government departments and NGOs with constant affiliation with department of forest and wildlife in the regions is the only solution to save our praiseworthy Orchid diversity resources of Dibrugarh district is vanish for ever from nature and through the so called developmental practices.

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