

## ***Tipularia josephi* Rchb.f. ex Lindl. (Orchidaceae): a new generic record for Nagaland, India**

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### **Abstract**

*Tipularia josephi* Rchb.f. ex Lindl. (Orchidaceae) is reported as a new distributional record for the orchid flora of Nagaland. A detailed description along with colored photograph is provided for its easy identification in the field.

**Key words:** *Tipularia josephi*, New record, Nagaland.

### **INTRODUCTION**

With about 25,000 – 35,000 species, representing 800 genera, the Orchidaceae is one of the largest families of flowering plants with worldwide distribution (Choudhery 2009). In India, c. 1331 species are listed, of which maximum number of c. 890 species occur in North-East India (Rao 2007). As part of ongoing floristic diversity work in Mt. Japfu, located in Kohima district of Nagaland, the first author (KS) collected an interesting orchid at an altitude of 2932 m AMSL. After consultation of literatures (Pearce & Cribb 2002; Lucksum 2007; Chen *et al.* 2009) the plant was identified as *Tipularia josephi* Rchb.f. ex Lindl. which was never mentioned in previous literature on the orchids of Nagaland (Chankija *et al.* 1992; Hynniewta *et al.* 2000; Deb *et al.* 2003; Deb & Imchen 2008). So, the present finding is a new distributional record for the orchid flora of Nagaland.

A detailed description along with photographs is provided for its easy identification in the field (PLATE I). The voucher specimens were deposited in the Herbarium of the Department of Botany (NUH), Nagaland University, Lumami, Nagaland, India.

### **Taxonomic treatment**

***Tipularia josephi* Rchb.f. ex Lindl.** in J. Proc. Linn. Soc., Bot. 1: 174. 1857. Pearce & Cribb, Orch. Bhutan: Fl. Bhutan 3(3): 244. 2002. [PLATE - I]

Plants terrestrial, 22 – 50 cm tall. Pseudobulbs subglobose, arranged in clumps and connected by short rhizome with few elongated roots. Leaves solitary; lamina broadly ovate-elliptic, undulate, acute, base rounded, plicate with prominent veins; petiole 2 – 3 cm long, channeled. Racemes laxly 10 – 32 flowered, erect, from the base of the pseudobulbs; peduncle bracteolate, 14 – 25 cm long, erect, striated, smooth, pale-green, tinged with purple, slender; rachis 4 – 12 cm long; floral bracts triangular, c. 0.4 mm



**PLATE - I:** *Tipularia josephi* Rchb.f. ex Lindl.: **A.** Habit; **B.** Flowers; **C.** Mounted voucher specimen (Photos by: Kikruoneino Sachü)

long. Flowers 1 – 1.4 cm across, spreading horizontally; sepals and petals similar, spreading, lanceolate, 3 – 5 x 0.5 – 1.6 mm, acute, pale green with brownish-purple spots; pedicel with ovary 5 – 7 mm long. Labellum 3-lobed near base, pale green, spurred, narrowly oblong-ovate, c. 3.4 x 1.5 mm; lateral lobes ovate, with an oblong callus; mid-lobe ligulate, acuminate, with an oblong callus at base; spur curved, spreading horizontally, c. 6 mm long. Column straight, 1 - 1.4 mm long. Pollinia 4 in 2 groups, yellow, c. 0.5 – 0.7 mm long, clavate.

*Flowering:* July – August

*Specimen examined:* INDIA: Nagaland, Kohima district, Mt. Japfu, Kigwema village, N 25° 36' 953" and E 094° 04' 120", altitude 2932 m, dated 22.08.2015, K. Sachü 67 (NUH).

*Habitat & Ecology:* Growing on mountain peak associated with ferns, *Ophiopogon intermedius* D. Don and *Platanthera* sp. Only three individuals of *Tipularia josephi* were observed during the field survey.

*Distribution:* Nepal, Bhutan, China, Myanmar, NE India (Sikkim and Nagaland).

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