

CURCUMA RUBROBRACTEATA (ZINGIBERACEAE): RANGE EXTENSION AND NEW ADDITION TO FLORA OF MEGHALAYA

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ABSTRACT

The present communication deals with *Curcuma rubrobracteata* as an addition to flora of Meghalaya. The same is described here along with colored field photographs.

Keywords: Zingiberaceae, *Curcuma*, New Addition, Meghalaya, NE India

INTRODUCTION

The family Zingiberaceae are delicate rhizomatous herbs with fleshy inflorescence. The inflorescence is usually a spike with delicate flowers. It is one of the most interesting groups of flowering plants with wide range of morphological features which prefer to grow in damp and humid shady places particularly in tropical forests and are distributed mostly in tropical and subtropical regions of the globe with maximum distribution in SE Asia. *Curcuma* L. is one of the largest genus in family Zingiberaceae with c. 80 species, distributed in the tropical Asia from India to South China, Southeast Asia, Papua New Guinea and Northern Australia (Siriruga *et al.*, 2007). So far 30 species has been reported from India (Jain and Prakash, 1995; Velayudhan *et al.*, 1996; Skornickova and Sabu, 2002) including several new taxa and new records (Sivarajan and Balachandran, 1983; Bhat, 1987; Manglay and Sabu, 1988, 1993; Tripathi, 2001; Skornickova *et al.*, 2003a, b; Skornickova *et al.*, 2004). In Meghalaya the genus is represented by 7 species (Tripathi, 2001; Mao *et al.*, 2016) of which *Curcuma prakasha* S. Tripathi is endemic to Northeast India.

During field exploration in East Khasi hills district, Meghalaya, NE India in July 2016, one of the authors (JS) collected few *Curcuma* species. After critical examination and subsequent literature study (Baker, 1892; Rao and Verma, 1972; Mitra, 1958; Skornickova *et al.*, 2003), one proved to be *Curcuma rubrobracteata* Škorničk., M. Sabu & Prasanthk. This is the first record of the species from Meghalaya. Earlier, it was reported only from the type locality, Mizoram in India. A detailed morphological description and coloured field photographs are provided to facilitate its identification.

Taxonomic Treatment

Curcuma rubrobracteata Škorničk., M. Sabu & Prasanthk in **Gard. Bull. Singapore** 55(1) 89. 2003; Maknoi *et al.* in **Thai Forest Bull., Bot.** 33: 72. 2005. (Figure 1).

Plants rhizomatous, up to 1.4 m tall. Rhizome creeping, slender, c. 1 cm in diam., scales triangular, light brown, papery, having root tubers c. 2.0 × 1.4 cm, white inside. Leafy shoots up to 1.4 m long, leaves 4–6, pseudostem green, c. 40 cm long. Leaves petiolate, ligule c. 1 mm long, light green, petiole green, glabrous, 10–45 cm long. Lamina elliptic-lanceolate, 35–60 × 10–15 cm, green, base attenuate, apex acuminate, glabrous. Inflorescence terminal, but protruding from the base of the pseudostem through lateral slits. Peduncle 4–10 cm long, c. 6 mm in diam., without vegetative bracts. Spike 10 × 7–9 cm. Coma absent. Bracts 20–24 per spike, all fertile, bright red, yellowish green towards the base, bract c. 3.4 × 3.5 cm, glabrous, subtending a cincinnus of 5–7 flowers, usually only 1–3 flowers per spike open at a time. Bracteoles one per flower, 2.0–3.4 × 1.0–3.0 cm, glabrous, white. Flowers c. 6 cm long, yellow-orange, exserted, 1.6–2.0 cm longer than the bracts. Calyx c. 1.2 cm long, white, translucent, hyaline, glabrous, 3-toothed. Corolla tube 3.7–5.0 cm, glabrous. Corolla lobes light yellowish-orange, dorsal lobe c. 14 × 7 mm; lateral lobes c. 12 × 6 mm. Labellum c. 14 × 17 mm, centre deep yellow-orange, obscurely 3-lobed. Lateral staminodes c. 1.0 × 1.2 cm; yellow-orange, hooded over anther. Stamens c. 8 mm long,

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anther versatile, c. 6.0 × 2.4 mm. Anther spurs 3 mm long, incurved. Filament yellow-orange, c. 5 mm long. Ovary trilobular, c. 2.0 × 2.4 mm, pubescent, ovules many. Stigma white. Epigynous glands 2, orange, c. 3 mm long. Fruits not seen [Figure 1].

Flowering: July–August.

Ecology: The plant was found growing on rocky beds underneath *Tectona grandis* L.f. trees in association with *Amorphophallus bulbifer* (Roxb.) Blume, *Macaranga peltata* (Roxb.) Müll. Arg.

Specimen Examined: INDIA. Meghalaya, East Khasi hills, Itamashi, on way to Bholaganj, 25°10'20.6"N & 91°41'42.9"E, 103 m, 26 July 2016, J. Sarma 550 (ASSAM!).

Distribution: India (Mizoram, Meghalaya), China, Myanmar and Thailand.



Figure 1: A. Natural Population; B. Habit; C. Close-in View of Inflorescence; D. Rhizome and Root Tubers

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