

Tolypanthus maclurei (Merrill) Danser (Loranthaceae): An Addition to Flora of India, from Manas National Park, Assam

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Abstract The present communication reports an extended distribution of *Tolypanthus maclurei* (Merrill) Danser in India where it has been collected from Bhuyapara Range of Manas National Park of Assam state. The species is so far considered as endemic to China and present record extends the known geographic distribution from China to South Asia. A detailed revised description, photographs, phenology and host species have been provided for easy identification of the species.

Keywords *Tolypanthus maclurei* · New record · Rare · Endemic · Eastern Himalaya · India · China

The genus *Tolypanthus* (Blume) Blume (Loranthaceae) comprises of six species of parasitic shrubs and distributed from India and Sri Lanka to Southern China [1]. In India, three species viz. *T. involucratus* (Roxb.) Tiegh., *T. lageniferus* Tiegh. and *T. lunatus* Rajasek has so far been reported [9]. During the floristic exploration of Baksa district (BTAD) of Assam, the authors collected some specimens of a parasitic shrub growing on *Lagerstroemia parviflora* Roxb. from Bhuyapara Range of Manas National Park. After critical examination of the specimens and scrutiny of the relevant literature [4–9], the plant was identified as *Tolypanthus maclurei* (Merrill) Danser, hitherto not recorded from India. Further consultation of the most important literature [2, 3, 9] and herbarium specimens in the major Indian Herbaria (ARUN, ASSAM, BSHC and CAL) revealed that the taxon was not yet reported for the

Indian Himalayan region. Hence, the present collection of *Tolypanthus maclurei* from the Manas National Park, Assam, represents an extension of its distribution range to the Indian part of the Eastern Himalaya and forms a new record for the flora of India. The voucher specimens are deposited at the Herbarium of Botany Department, Gauhati University, (GUHB) for future reference. A details description of the species along with its photographs and illustration is provided.

Tolypanthus maclurei (Merrill) Danser, Bull. Jard. Bot. Buitenzorg, sér. 3. 10: 355. 1928; Qui et Gilbert, Flora of China, 5: 239. 2003. *Loranthus maclurei* Merrill, Philipp. J. Sci. 21: 494. 1922.

Type South Eastern China, Fukien province, Taai Yeung Shaan, F. A. McClure 6801, July 21, 1921 (US00107318!).

Parasitic shrubs 1–2 m height, stems with dark brown, glabrous. Branches patent, blackish, smooth. Leaves alternate to subopposite; petiole 0.5–1 cm; leaf blade oblong-ovate, 5–8 × 1.5–4 cm, subleathery, glabrous, base cuneate or obtuse, margin entire, apex obtuse, midveins and lateral veins prominent abaxially, deep red 5–6 pairs, alternate. Bracts 4, 1 bract subtending each flower, much broader than flower, free or connate into bell-shaped involucre, 1–1.5 × 1–1.5 cm, green with red at the tip, apex acute. Inflorescences axillary, peduncles 4–5 mm long, solitary. Flowers bisexual, 5-merous, actinomorphic, pedicel 0.8–1 mm. Calyx ovoid, limb cupular, persistent 2–4 mm. Corolla sympetalous, reddish, tube 8–12 mm long; lobes oblong, reflexed. Stamens inserted at base of corolla lobes; filaments short, 2–2.5 mm; anthers 4-loculed, 1.5–2 mm, elliptic-oblong. Ovary 1-loculed, subglobose, 2.5–3 mm long. Fruit ellipsoid, 5–8 mm long, smooth, minutely and sparsely stellate hairy (Figs. 1, 2).

Flowering February–April. *Fruiting* April–June.

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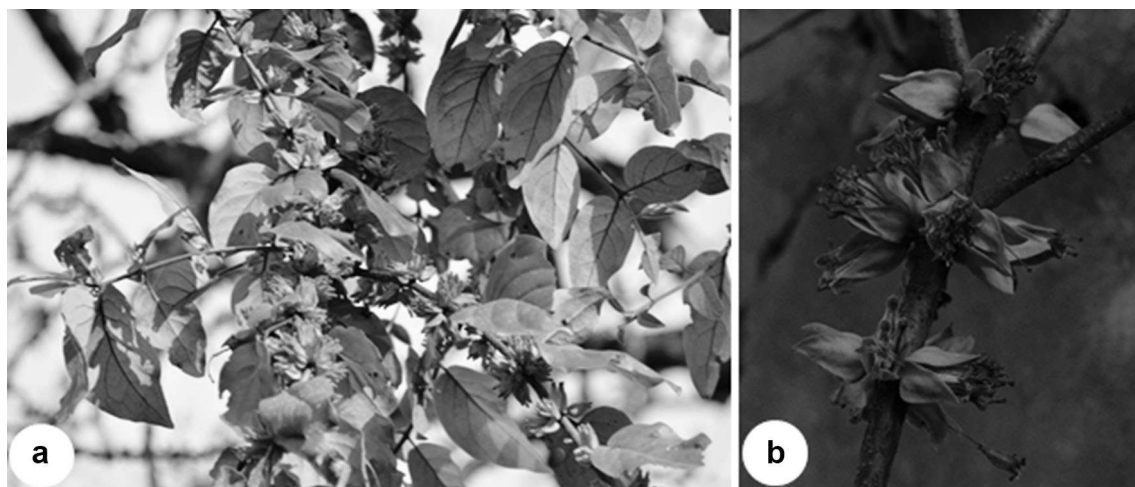


Fig. 1 *Tolypanthus maclurei* (Merrill) Danser. **a** Habit, **b** inflorescences showing bract

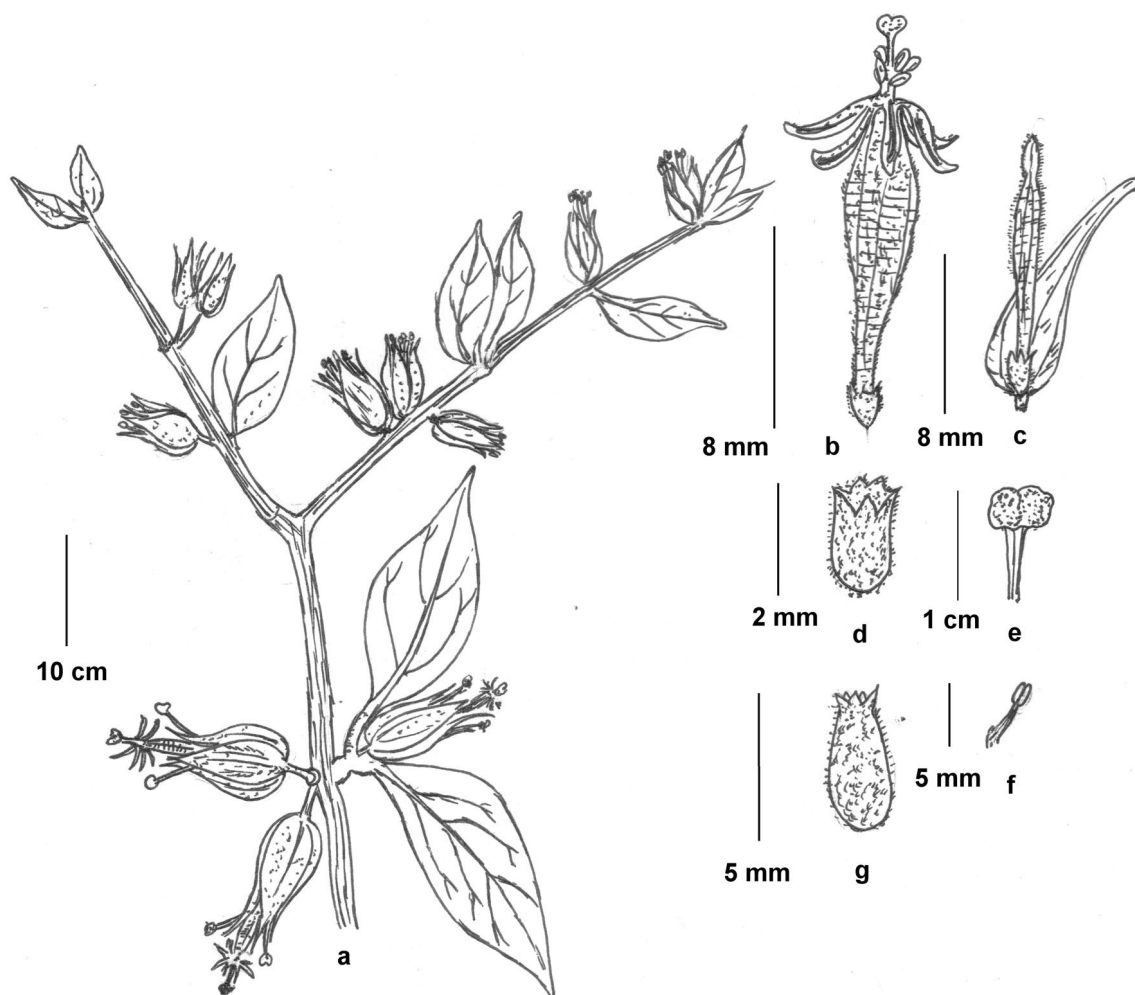


Fig. 2 *Tolypanthus maclurei* (Merrill) Danser. **a** Flowering branch, **b** flower, **c** flower bud with bract, **d** calyx, **e** stigma, **f** stamen, **g** fruit

Ecology Parasitic on shrubs and trees in thickets. In the present study, it was found on *Lagerstroemia parviflora* Roxb and *Dillenia pentagyna* Roxburgh.

Distribution INDIA (Assam, Manas National Park), CHINA (Jiangxi, Fujian, Hunan, Guangdong, Guangxi, Guizhou).

Specimen Examined Manas National Park, Bhuyapara Range, Woodland Area, Baksa District, Assam, 26°49'001"N and 91°05'675"E, EL. 172 m., 28 February, 2016, *D. Baro* 323 (GUBH).

Note The species is recorded so far as endemic to China [6].

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