

RESEARCH ARTICLE

Chonemorpha fragrans (Apocyanaceae): a new distributional record for Tripura, India

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Abstract

Chonemorpha fragrans (family: Apocyanaceae) is recorded here as a new record for Tripura state in India. Taxonomic descriptions, relevant notes, and photographs are provided for easy identification.

Keywords: *Chonemorpha fragrans*; New Record; Climber; Apocyanaceae; Tripura; North East India

1. Introduction

The Apocyanaceae is one of the largest families, with about 4000 species distributed worldwide (Middleton, 2007). The genus *Chonemorpha* G. Don comprises ten accepted species (POWO, 2022). In India, the genus is distributed with only five species, among which *Chonemorpha assamensis* Furtado and *C. pedicellata* Rao are endemic to the country (BSI, 2022). Due to its location in the Indo-Burma Biodiversity Hotspot and its proximity to Himalayan biodiversity hotspots, the state of Tripura has a diverse floral population. Deb (1983), about 40 years ago, conducted a floristic exploration of the state, and more recently, other floristic works have been completed (Majumdar et al., 2012; Majumdar and Datta, 2014; Debbarma et al., 2022). According to Deb (1983), 22 species from 20 genera of Apocynaceae occur in Tripura. Darlong and Bhattacharyya (2016) reported *Chonemorpha verrucosa* as the only species of this genus from Tripura. While exploring the diversity of climbers in Tripura, Northeast India, during 2020–2022, we encountered a large woody climber of the *Chonemorpha* genus in Simna, West Tripura District. After a critical examination of the plant parts, relevant literature (Lal and Rawat, 2009; Middleton, 2007; Majumdar et al., 2012) and available online resources (BSI, 2022), this was identified as *Chonemorpha fragrans* (Moon) Alston, which forms a new distributional record for Tripura, hence reported.

2. Methodology

The collected materials were thoroughly processed following the standard protocol (Jain and Rao, 1977), and herbarium specimens were prepared. The herbarium sheets were deposited at the herbarium of the Department of Botany, Tripura University (TUH).

1. Taxonomic treatment

Chonemorpha fragrans (Moon) Alston, Ann. Roy. Bot. Gard. 11: 203. 1929. *Echites fragrans* Moon, Cat. Pl. Ceylon: 20. 1824 (Figure 1).

Large woody climbers, 20–30 m high. Branchlets sparsely to very densely pubescent, lenticellate. Leaves: petiole 0.6–1.2 cm long, densely pubescent; blade ovate to lanceolate, 10–18 × 8–10 cm, acuminate, lateral veins prominent with 10–12 pairs, hairy above and beneath. Stem pubescent with copious lenticels, green basely brown, milky latex present. Inflorescence terminal paniculate

cyme, 10–30 cm long. Calyx connate about half of its length, fused into a tube with 5 lobes, 0.7–0.8 cm. ca. 1 cm long, lobe dissected 1/3 of calyx tube, gamosepalous. Corolla white yellow at middle portion, fragrant, tube 3.5–5.2 cm long, petal lobes 4–4.5 cm long, twisted. Stamens inserted at corolla base, epipetalous, sagittate, remains disk of a 5-crenate or 5-dentate ring, 0.8–0.9 cm long, anther dithecous. Ovaries 0.2–0.4 cm long, Carpels two, 1.3–1.5 cm long. Glandular disc at the base connate by style and stigma. Fruit a pair of follicles, follicles cylindrical to fusiform, 20–25 cm long.

Flowering and fruiting: April–August.

Distribution: Bangladesh, Borneo, Cambodia, China, South-Central, East Himalaya, Myanmar, Nepal, Philippines, Sri Lanka, INDIA: Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Meghalaya, Odisha, Sikkim, Uttar Pradesh, West Bengal, and now in Tripura.

Habitat and Ecology: In the forest margin region and river edges. Giant liana often climbs up into large trees in the forest.

Specimen examined: Tripura, West Tripura district, 24°3'25.2"N, 91°23'59.964"E; elev. 35 m asl. 10.06.2020, Datta & Das 2782 (TUH).

3. Conclusion

Present report documents the extended geographical distribution of *Chonemorpha fragrans* in Tripura, the occurrence of which is not common in the state. Habitat destruction and grazing are the leading threats to the species in the state.

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Author's contributions

All the authors equally contributed in the development of the manuscript.

Conflict of interests

The authors have no conflict of interest.

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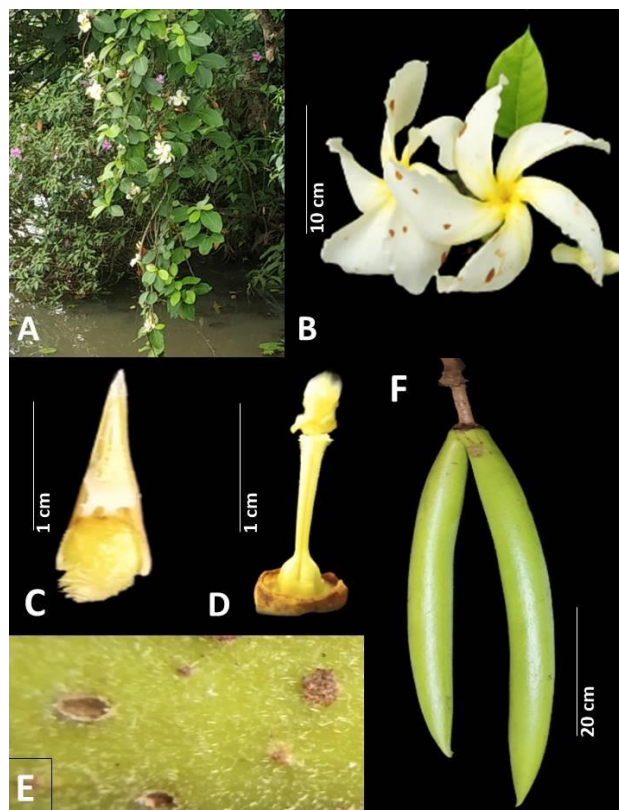


Figure 1. *Chonemorpha fragrans* (Moon) Alston A. Habiat B. Mature Flowers. C. Androecium D. Gynoecium. E. Lenticels of Stem. F. A pair of follicle.