

Abroma augustum (Malvaceae), A New Addition to the Flora of Tamil Nadu, India

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Abstract

Short Communication

A new distribution record for *Abroma augustum* (L.) L.f. (Malvaceae) in Tamil Nadu. This species has been documented from the Thamirabarani River basin in Tirunelveli District during a wetland survey. The morphological description, colour photograph, notes on phenology and distribution map of the species are provided for better understanding.

Keywords: *Abroma augustum*, taxonomy, Nomenclature, Tamil Nadu.

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1. INTRODUCTION

During a floristic survey of wetlands in the Tirunelveli District of Tamil Nadu, India, the first author collected an interesting species from the wetland of the Thamirabarani River basin near Papanasam. The specimen was critically examined and identified as *Abroma augustum* (L.) L.f., commonly known as Devil's Cotton. The species was first published in "Suppl. Pl.: 341" in 1782. In the Malvaceae family, there is only one accepted species in the genus *Abroma* Jacq. This species has not been previously recorded in Tamil Nadu; thus, this study documents it as a new distribution record for the state.

2. TAXONOMY

Abroma augustum (L.) L.f. Suppl. Pl.: 341 (1782).

Synonyms

Abroma fastuosum Jacq. in Hort. Bot. Vindob. 3: 3 (1776), *Theobroma augustum* L. in Syst. Nat., ed. 12. 2: 233 (1767), *Abroma alatum* Blanco in Fl. Filip.: 605 (1837), *Abroma angulatum* Lam. in Encycl. 1: 126 (1783), *Abroma angulosum* Poir. in J.B.A.M.de Lamarck, Encycl., Suppl. 1: 322 (1810), *Abroma commune* Blanco in Fl. Filip.: 606 (1837), *Abroma denticulatum* Miq. in Pl. Jungh.: 288 (1854), *Abroma elongatum* Lam. in Encycl. 1: 127 (1783), *Abroma javanicum* Miq. in Fl. Ned. Ind. 1(2): 183 (1859), *Abroma molle* DC. in Prodr. 1: 485 (1824), *Abroma obliquum* C.Presl in Reliq. Haenk. 2: 143 (1835), *Abroma sinuosum* W.Bull in Nursery Cat. (William Bull) 199: 11 (1884), *Abroma wheleri* Retz. in Observ. Bot. 5: 27 (1788).

Description

Abroma augustum is an woody shrub, erect, up to 4 m tall, stem 5-8 cm diameter at base and branching from 1-2 m in height; Leaves alternate, simple and highly variable, showing heterophylly with two forms: Lobed leaves (on upright/orthotropic branches): large up to 25-35 × 25-35 cm, cordate-ovate with 3-5 lobes, petiole 20-30 cm long, venation palmately 3-7 veined, and margin irregular toothed. Unlobed leaves (on horizontal/plagiotropic branches): lanceolate up to 15-20 × 10-12 cm, Petiole 1.5-2 cm, base cordate, margins denticulate, venation palmate-pinnate and pubescent. Inflorescence terminal cyme; 1-3 flowers, but only 1 flower develops, peduncle 1-4 cm long; bracts 6-8 mm long. Flowers bisexual, 5-merous; involucre bracts 2, pedicel 1-3 cm long, articulate. Calyx 5, entire, triangular, 1.5-2 × 0.8-1 cm, green, pubescent; petals 5, spoon-shaped, 2 × 1 cm, base concave and dark purple, glabrous. Stamen tubular, short, 5 fascicles of anthers alternating with 5 petal-like staminodes, each fascicle with 3-4 anthers; ovary superior, 1-2 mm long, 5-lobed, 5-celled, style 1-2 mm long, with 5 branches. Fruit an obconical capsule 4-5 cm × 3-4 cm, base rounded, top truncate, 5-winged and angled, seed cylindrical-ovoid, many. (Figure 1)

Specimen Examined

Tamil Nadu, Tirunelveli District, Thamirabarani River Basin near Papanasam, 11-04-2025, S. Akash & A. Rajesh 701. The herbarium specimen has been submitted to Annamalai University Herbarium (AUH).

Flowering & Fruiting

December – June.

Conservation Status

The IUCN Red List assessment (IUCN, 2025) indicates that the conservation status of the documented plant is "Not Evaluated" (NE). This classification emphasises the necessity for further taxonomic and ecological research to establish appropriate conservation priorities.

DISTRIBUTION

According to the Plant of the World Online (POWO, 2025), the distribution of recorded species includes regions such as Assam, Bangladesh, Borneo, Cambodia, South-Central China, Southeast China, East Himalaya, Java, the Lesser Sunda Islands, Malaya,

Maluku, Myanmar, Nepal, New Guinea, the Nicobar Islands, the Philippines, the Solomon Islands, Sulawesi, Thailand, and Vietnam. The species has also been introduced to various locations, including Cameroon, the Caroline Islands, Congo, the Democratic Republic of Congo, Queensland, Trinidad and Tobago, and Vanuatu.

In India, this species has been documented in several locations, including Atikroy in Unakoti District, Tripura (Das *et al.*, 2025), Assam (Prakash *et al.*, 2014), Bangladesh (Sujaye *et al.*, 2025), Odisha (Jena *et al.*, 2023), Maharashtra (Singh *et al.*, 2000), and Kerala (Sasidharan, 2013). However, there have been no previous records of its presence in Tamil Nadu. This study reports the species for the first time from Tirunelveli districts, thus extending its known range into Tamil Nadu.

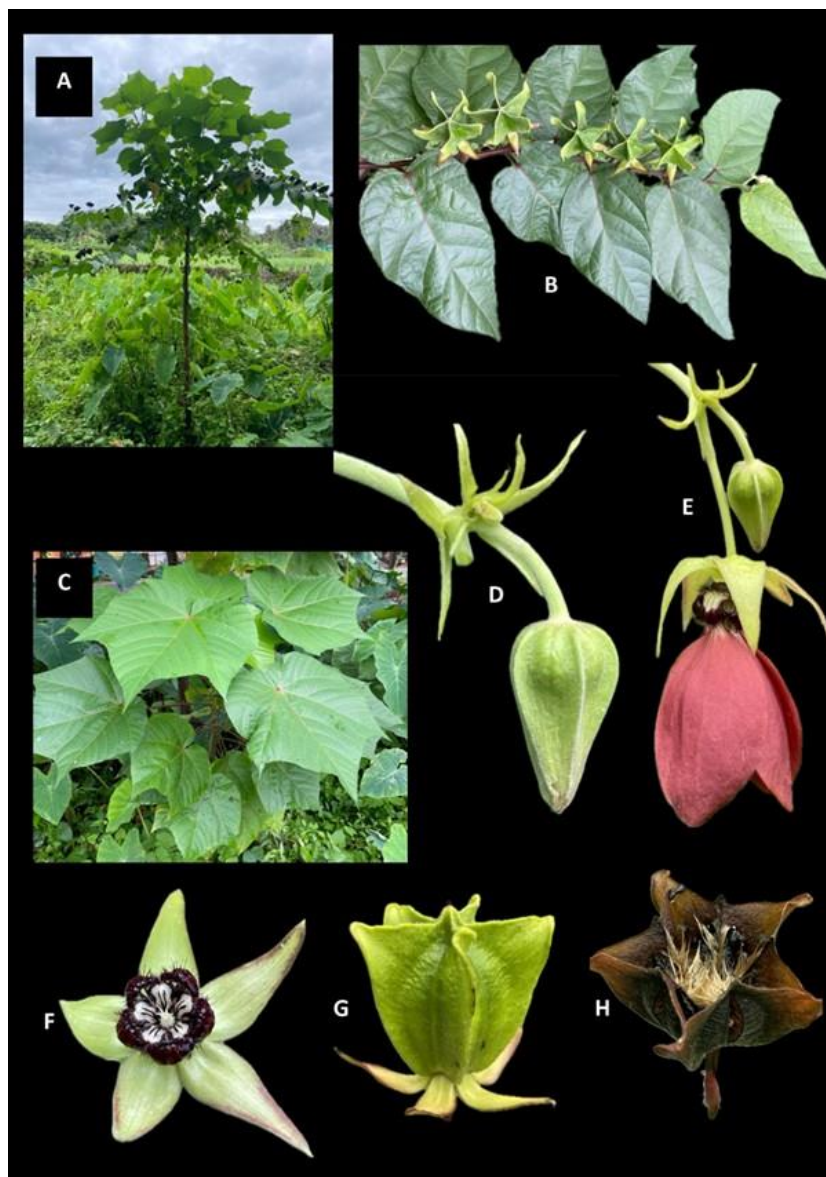


Figure 1 A. Habit, B. Mature twig, C. Young leaves, D. Bud, E. Inflorescence, F. Flower without corolla, G. Immature fruit, H. Mature fruit of *Abroma augustum*

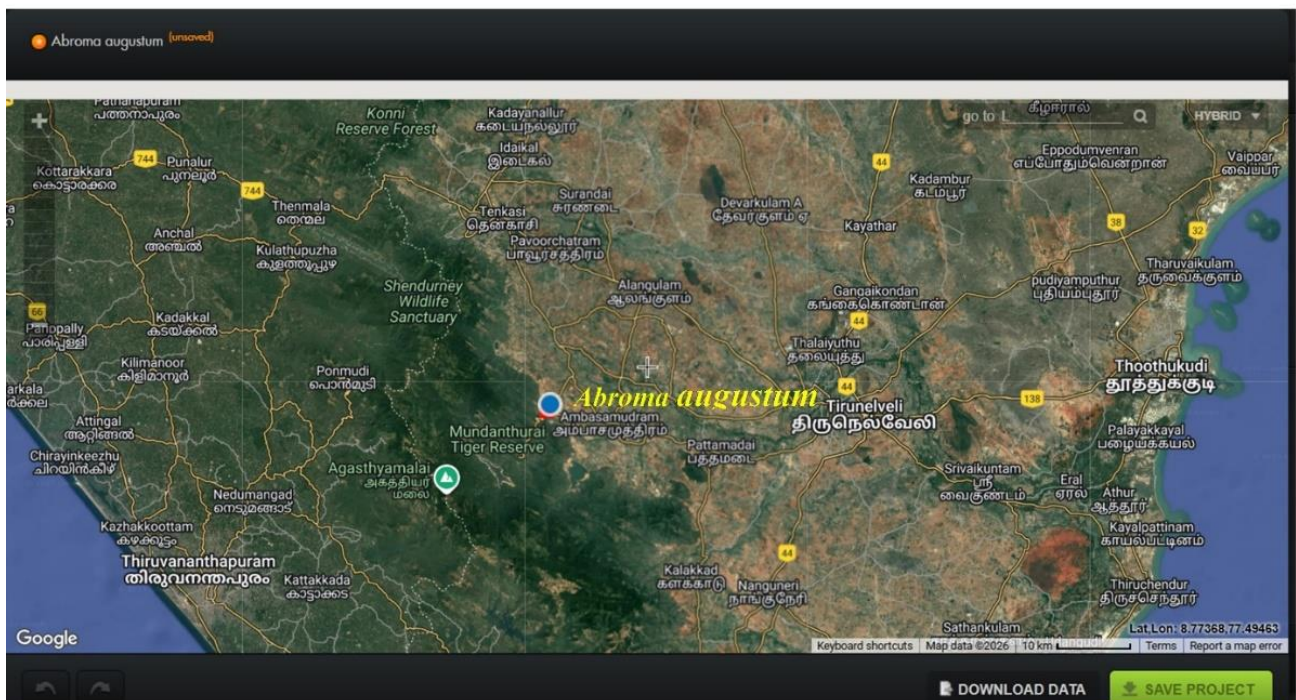
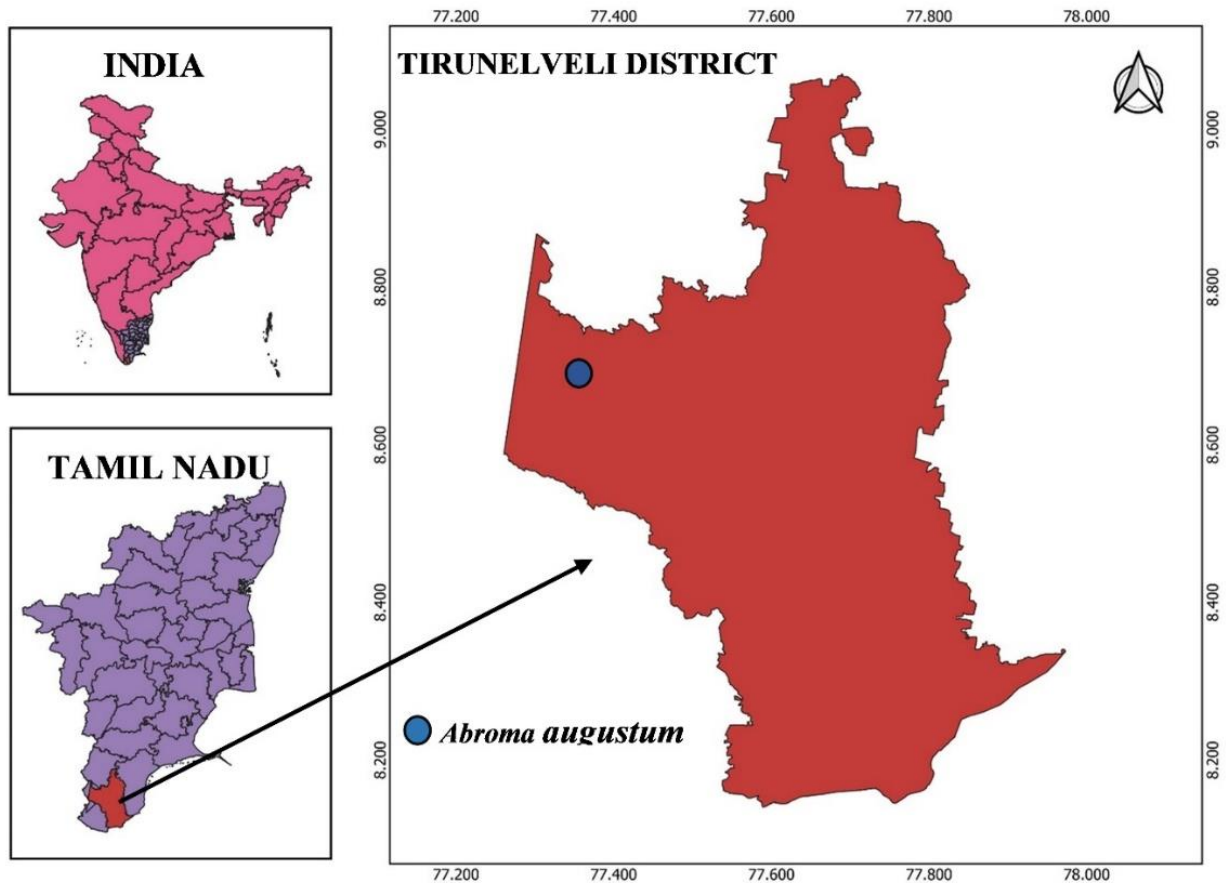


Figure 3: The study area map shows the distribution of *Abroma augustum* recorded from Tirunelveli District in Tamil Nadu

Habitat

Grows wild along roadsides, in wetlands, river basins and other moist areas.

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