



RESEARCH COMMUNICATION

Sterculia striatiflora Mast (Malvaceae s.l.) - A new addition to the flora of Assam

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ABSTRACT

Sterculia striatiflora Mast, a rarely known species of Malvaceae s.l., is reported here as a new distribution record and addition to the Flora of Assam, India. A detailed description, colour photographs and other relevant information has been provided for its identification.

Introduction

The broad circumscription of Malvaceae s.l. is known to comprise of 4 traditional families viz. Bombacaceae, Sterculiaceae, Tiliaceae and Malvaceae. It also consists of 245 genera and 4300 species distributed throughout the world especially in the tropics (1, 2). The subfamily Sterculioideae Beilschm., designated earlier as Sterculiaceae (DC) Bartl., is a monophyletic group having four major clades of which genus *Sterculia* L. belongs to the clade *Sterculia* (3). The genus *Sterculia* L. has ca. 200 species reported worldwide (4). Thirty one species of the genus *Sterculia* has been reported in Hooker's Flora of British India (5). Eight species were recorded from the greater Assam (6). During a floristic survey to the Lakhimpur district of Assam in February 2021, the authors came across a plant specimen growing on the tropical moist deciduous forests of Dullung Reserve Forest. After thorough study and extensive consultation with the different existing literatures (5, 6) and herbarium specimens deposited at KEW, this plant was confirmed as *Sterculia striatiflora* Mast. Recent reports are there on the first occurrence of *S. striatiflora* in India from Arunachal Pradesh (7). A voucher specimen (MB001) has been submitted at the Gauhati University Botanical Herbarium (GUBH). A detailed description of the species, coloured photographs and other relevant information are provided here for its identification.

Taxonomic treatment

Sterculia striatiflora Mast. in Hook.f., Fl. Brit. India 1: 356. 1874. *Clompanus striatiflora* (Mast) Kuntze, Revis. Gen. Pl. 1: 78. 1891.

Perennial shrub, 45–50 cm high, bark greenish-grey. Leaves 12–25 × 4–7 cm, simple; lamina oblanceolate, entire, rarely undulate, tip acuminate-caudate, base cuneate; petioles 2–3 cm long, pulvinate below the lamina; stipules lateral, free, subulate-acuminate, 4–5.5 × 1–1.2 mm, green, pubescent, herbaceous. Panicles axillary, 3–8 cm long, male and female flowers on same inflorescence, lax, drooping; Pedicels capillary, 3–4 × 0.6–0.8 mm long; Bracts subulate, 2.8–3.3 × 1–1.4 mm, green, persistent; rachis, petiole, bracts and peduncle densely pubescent. Flowers dioecious, drooping, 1.2–2 × 0.6–0.8 cm; calyx petaloid, pale yellow to dark pink, greenish towards the base, tube 3–4 mm, infundibuliform, lobes 5, lanceolate with margins reflexed outward, joining together at the tips, free in matured flowers, 8–10 mm long, both surfaces densely villous. Male flowers: staminal column 7–10 mm long, curved downwards, glabrous; anther lobes 5, somewhat triangular, yellow, dehiscing longitudinally; pollen yellow, granular. Female flowers: gynandrophore ca. 6 mm long, broadened towards the tip and 5-lobed, each bearing one sterile anther; ovary ca. 2 mm long,

densely villous, hemispherical with 5 lobes; style ca. 2.5 mm long, curved downward, greenish-white; stigma 5-lobed. (Fig. 1 & 2).

Common Name

Grooved Flower Sterculia

Habitat

The species was found growing on the tropical moist deciduous forests of Dullung Reserve Forest, Lakhimpur District, Assam.

Phenology

Flowering was observed in February. Fruits not seen.

Distribution

Myanmar (Burma), India [Arunachal Pradesh (East Siang District, Papum Pare District); Assam (Dullung Reserve Forest, Lakhimpur)]. Only a single population, comprising of 4 plants, were spotted by the authors growing in a sciophytic area in the present locality.



Fig. 1. *Sterculia striatiflora* Mast. A. Habit, B. Inflorescence.

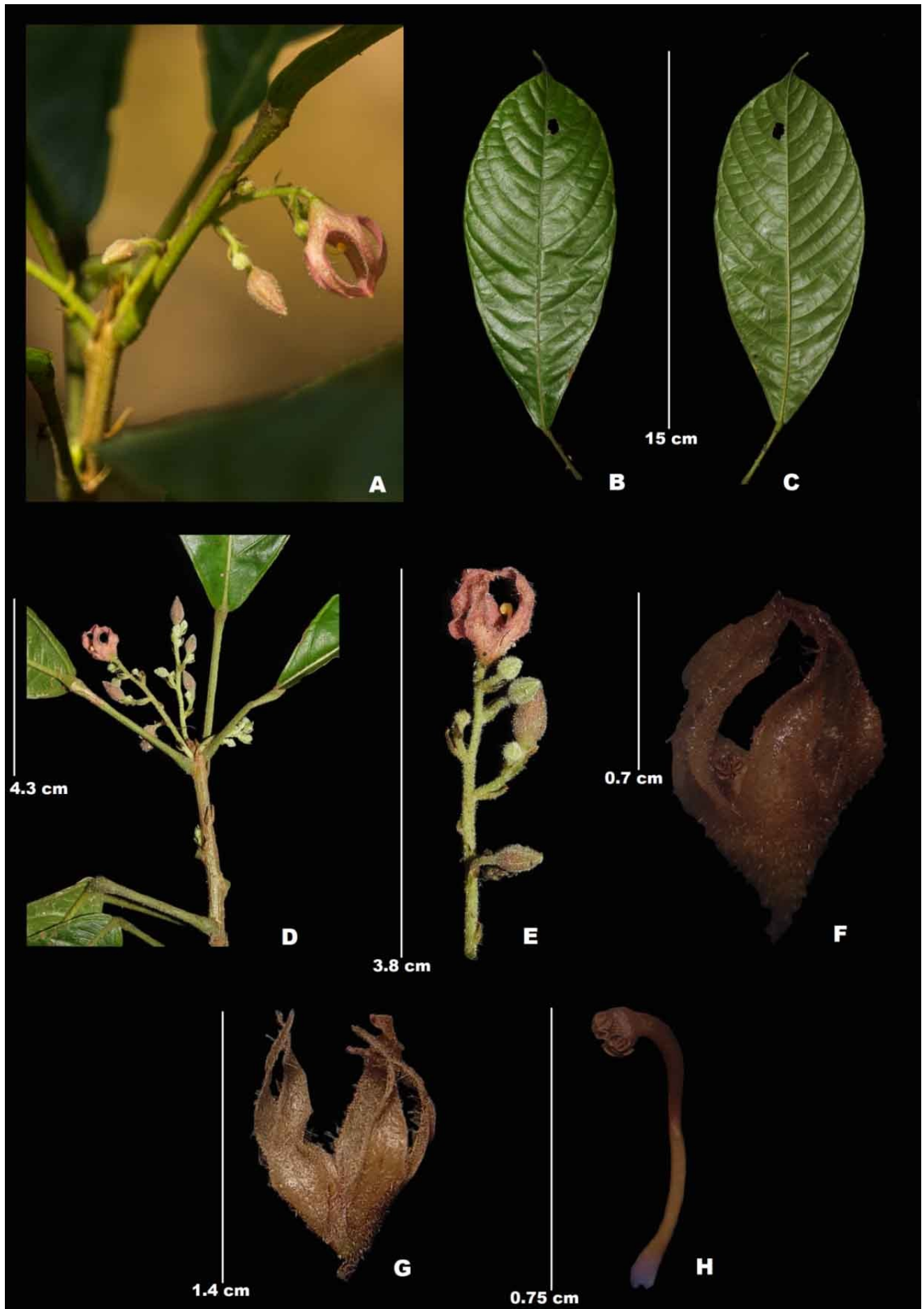


Fig. 2. *Sterculia striatiflora* Mast. A. Habit, B–C. Leaves, D. A part of the stem showing arrangement of leaves and inflorescence, E. Inflorescence, F. Flower, G. Corolla, H. Staminal column.

Specimen examined

Myanmar (Burma), Kachin, 29 March 1837, *s.coll.*, *s.n.* [Acc. No. K000671639 (image!) Holotype]. India, Assam, Lakhimpur district, Dullung Reserve Forest, 27.420003 °N, 94.193385°E, ±103.84 m, 05 February 2021, *M. Baruah MB001* (GUBH!).

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Authors' contributions

MB, MP and ND have prepared the manuscript for correspondence. DD, SKB and BB had collected and identified the plant. All authors read and approved the final manuscript.

Conflict of interests

The authors have no competing interests.

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