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Short Communication

Confirmation to the occurrence of *Sida angustifolia* Mill. (Malvaceae) in Tamil Nadu

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ABSTRACT

The present collection of *Sida angustifolia* Mill. (Malvaceae), from Sivaganga district, Tamil Nadu, confirms its occurrence in Tamil Nadu which was previously treated as being doubtful. This species is described and a photographic plate given to assist with its future identification.

Keywords: Distribution, Identification, Karaikudi, Malvaceae.

INTRODUCTION

In India and many other countries including China, South East Asia, Africa and South America, the genus *Sida* is widely used to treat a variety of neurological conditions as well as to enhance general health and vitality (Kumar *et al.* 2015; Rahul *et al.* 2024). Root of *Sida* is the source of the well-known drug Bala (Navas *et al.* 2013; Sulaiman *et al.* 2024), which is used to cure rheumatism (Shylaja *et al.* 2006; Shylaja and Nishita, 2009). The genus *Sida* L. is distributed in the pantropical and subtropical regions (Camargo *et al*., 2025), having 275 species (POWO 2025). In India, the genus is represented by 22 species (Kumar *et al.* 2021; Nimbalkar *et al.* 2021) but maximum number of species is reported from South India (Sivarajan and Pradeep 1996; Mao and Dash 2020). The taxonomy of the genus *Sida* is complicated due to morphological variability including the shape and size of leaves, stipules and peduncle joints (Fryxell 1985; Sivarajan and Pradeep 1996; Kumar *et al.* 2001; Guerra *et al*., 2025). However, mericarp morphology is highly useful for distinguishing species within the genus (Sivarajan *et al.* 1992; Bharati 2016; Bovini 2022).

Seven species of *Sida* have been reported from Tamil Nadu (Chandrabose 1983), namely *S. acuta* Burm.f., *S. cordata* (Burm.f.) Borss.Waalk., *S. cordifolia* L., *S. mysorensis* Wight & Arn., *S. rhombifolia* L., *S. schimperiana* Hochst. ex A.Rich. and *S. spinosa* L. Thereafter, *Sida beddomei* (Sivarajan & Pradeep 1996), *S. elongata* Blume var. *balica* (Miq.) Borss.Waalk. (Balachandran *et al.* 2014), *S. ravii* (Dhatchanamoorthy *et al.* 2015) and *S. sivarajanii* Tambde, Sardesai & A.K.Pandey (Tambde *et al.* 2020) are reported from Tamil Nadu.

During systematic survey on the weeds of Sivaganga District, we have collected some curious specimens of *Sida* growing along the banks of Paddy fields. Later we collected the same specimens again from the waste lands of Karaikudi. Critical studies with pertinent literature (Gavade *et al.* 2020), the species was identified as *Sida angustifolia* Mill. Taxonomic status of *S. angustifolia* was recently reinstated by Gavade *et al.* (2020) but they opined that its provenance remains uncertain. Subsequently Narasimhan and Sheeba (2021) did not include the species in flowering plants of Tamil Nadu. Therefore, the present collection from Sivaganga District not only confirms its distribution in Tamil Nadu but also from India.

Taxonomic treatment

Sida angustifolia Mill. Gard. Dict. ed.8. n.3.1768; Gavade & al. in Ann. Bot. Fenn. 57: 280. 2020.

Erect herbs, up to 60 cm long; stem branched, cylindrical, glabrescent. Leaves simple, alternate; petiole 1–3.4 cm long, with 2 blunt green spiny emergences at base; stipules 2, 5 mm long, hairy; leaf blade linear or linear-lanceolate, 3.5–4 × 0.8–1.5 cm, base cordate, margin serrate to crenate, acute apex, basally 3–4 nerved, lateral nerves 3–6 pairs, upper surface smooth, and lower surface covered with minute stellate hairs. Flowers solitary, axillary; peduncles 2–3 mm long; pedicels 1–2 mm long. Calyx tube campanulate, 3–4 mm long; calyx lobes 5, triangular, 1.5–2 mm long, acute at apex, covered with minute stellate hairs. Corolla pale yellow, twisted; petals 5, oblong, 5–6 × 3–4 mm, thinly hairy at base. Staminal column 1.8–2.5 mm long, stellate-pubescent; filaments 1 –1.5 mm long. Ovary 0.8–1.2 mm long, conical, covered with stellate hairs; styles 5, 2–4 mm long, stigma capitate. Fruit a schizocarp, 3.5– 6.7 mm long, grooved between mericarps; mericarps 5, 3–5 mm long, trigonous with 2 divergent awns, dorsally wrinkled; awns 1–2 mm long; seeds ovoid, black, laterally compressed, glabrous.

Biotic association: This species is rarely seen along paddy fields and waste lands and often found with *Boerhavia erecta* L., *Chloris barbata* Sw., *Corynandra viscosa* (L.) Cochrane & Iltis, *Euphorbia hirta* L., *Gomphrena serrata* L., *Oldenlandia umbellata* L., *Phyllanthus amarus* Schumach. & Thonn., *P. maderaspatensis* L., *Sida acuta* Burm.f. and *Tridax procumbans* L.

Flowering & Fruiting: February to April.

Distribution: INDIA (Karnataka, Maharashtra, Tamil Nadu & Uttar Pradesh), BAHAMAS, BRAZIL, COLOMBIA, FRENCH POLYNESIA, MEXICO, SOUTH AFRICA and U.S.

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Specimens examined: India, Tamil Nadu, Sivaganga Distr., on way to Pallathur, 85 m, 26 February 2020, *Dineshkumar & Naveen 10*; Karaikudi, 79 m, 2 April 2020, *C. Rajasekar et al. 63* (Alagappa University Herbarium).

Note: *Sida angustifolia* is often confused with *S. spinosa* L., however the former can easily be distinguished from the latter by its linear-lanceolate leaves, shorter than the mericarp (vs. ovate-cordate leaves, longer than the mericarp in *S. spinosa*) and mericarp notched between awn and lower part of mericarp (vs entire or un notched mericarp in *S. spinosa*).

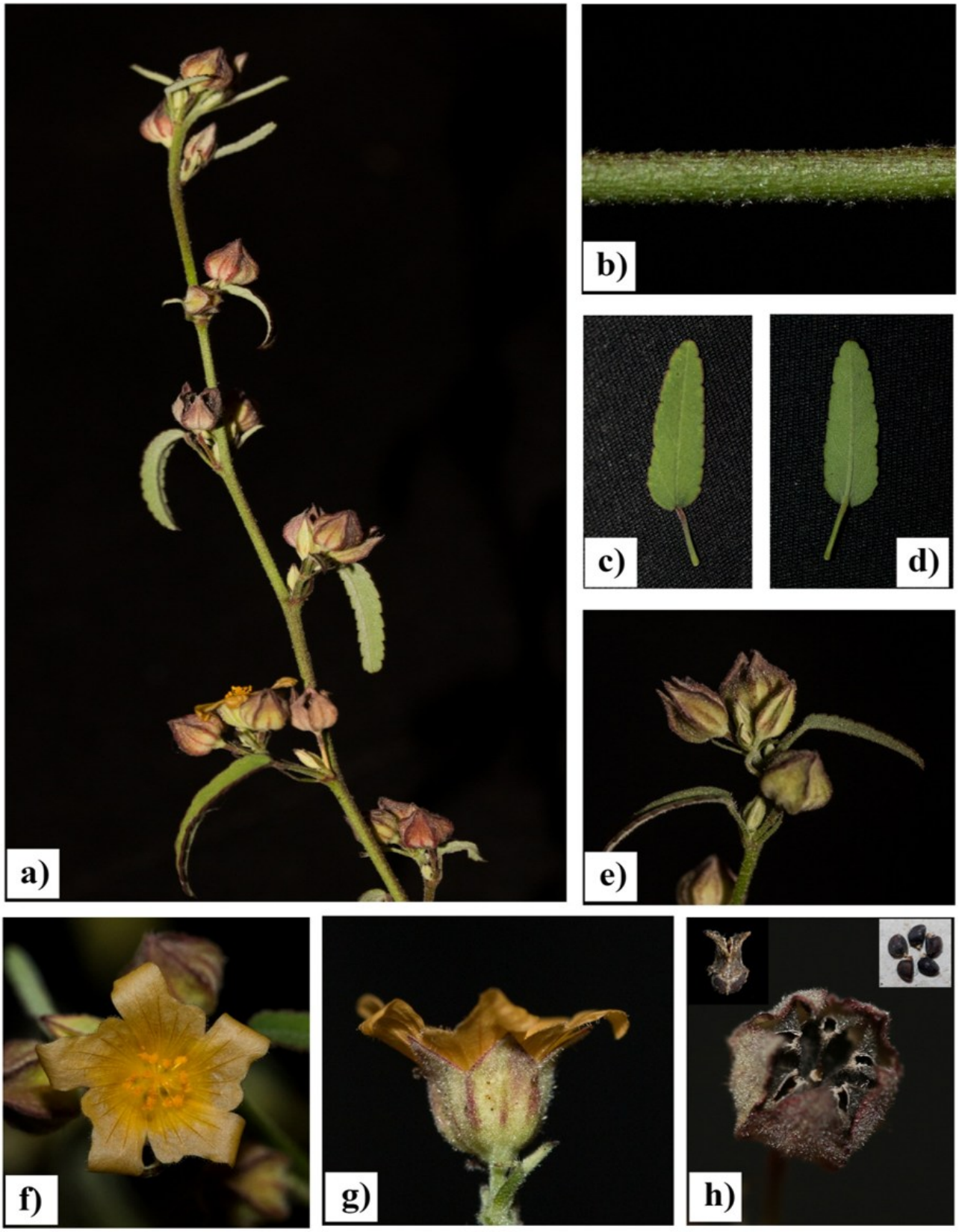


Figure. 1. *Sida angustifolia* Mill. (**a**) flowering twig, (**b**) stem, (**c** & **d**) leaf upper surface and lower surface (e) flower buds, (f & g) flower front view & side view, (**H**) fruits, inset mericarp & seeds.

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