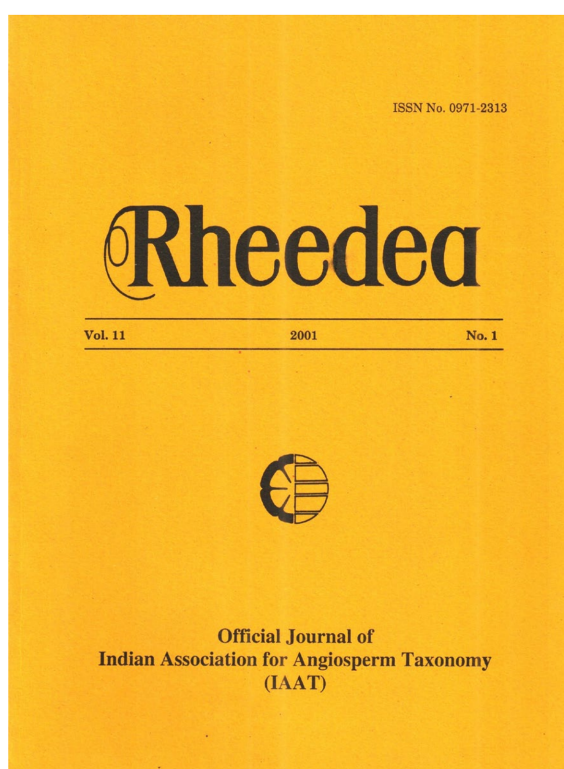




Sida unicornis Marais (Malvaceae), A new record for India

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***Sida unicornis* Marais (Malvaceae), A new record for India**

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Abstract

Sida unicornis Marais is reported here for the first time from India. A complete description, illustration and other relevant notes are provided.

INTRODUCTION

The genus *Sida* Linn., has about 200 species distributed in tropical and subtropical regions of the world. Taxonomically it is one of the most difficult groups displaying wide range of morphological variability (Fryxell, 1985). Prior to this report, 17 species were known to occur in India falling under 6 sections of *Sida* viz., *Sidae*, *Cordifoliae*, *Nelavagae*, *Spinosae*, *Malachroideae* and *Stenindae* (Sivarajan & Pradeep, 1996).

Taxonomic delimitation of species by traditional characters such as shape of leaves, stipules and peduncle joints are found often difficult due to considerable range of interspecific and intraspecific variations. However, mericarp morphology is highly useful for distinguishing species within the genus (Sivarajan *et al.*, 1992).

During the course of floristic investigation in southern Kerala the authors collected an interesting species of *Sida* along the wayside to Bonaccord forest in Thiruvananthapuram district. Unlike any other Indian *Sida*, this species is most striking for its single-awned pubescent mericarp. The specimen was further referred to Dr. Paul A. Fryxell, University of Texas and he commented . . . "a good match with *Sida unicornis* Marais and also add . . . the single awn in the mericarp is distinct but it may be due to the failure of dehiscence?". To find out the distinctiveness of the taxon, we have multiplied the plant through seeds by 5 consequent generations in our Field Gene Bank at Tropical Botanic Garden, Palode and found the mericarp as single-awned and indehiscent in all the generations.

Sida unicornis was first collected by Bouton, probably between 1769-1864 from Port Louis and banks of the River Noire of Mauritius. But the specimen remained an enigma for many years until recognized and published as a new species by W. Marais in 1983. According to him it may well occur in other parts of the world, but overlooked because of the past

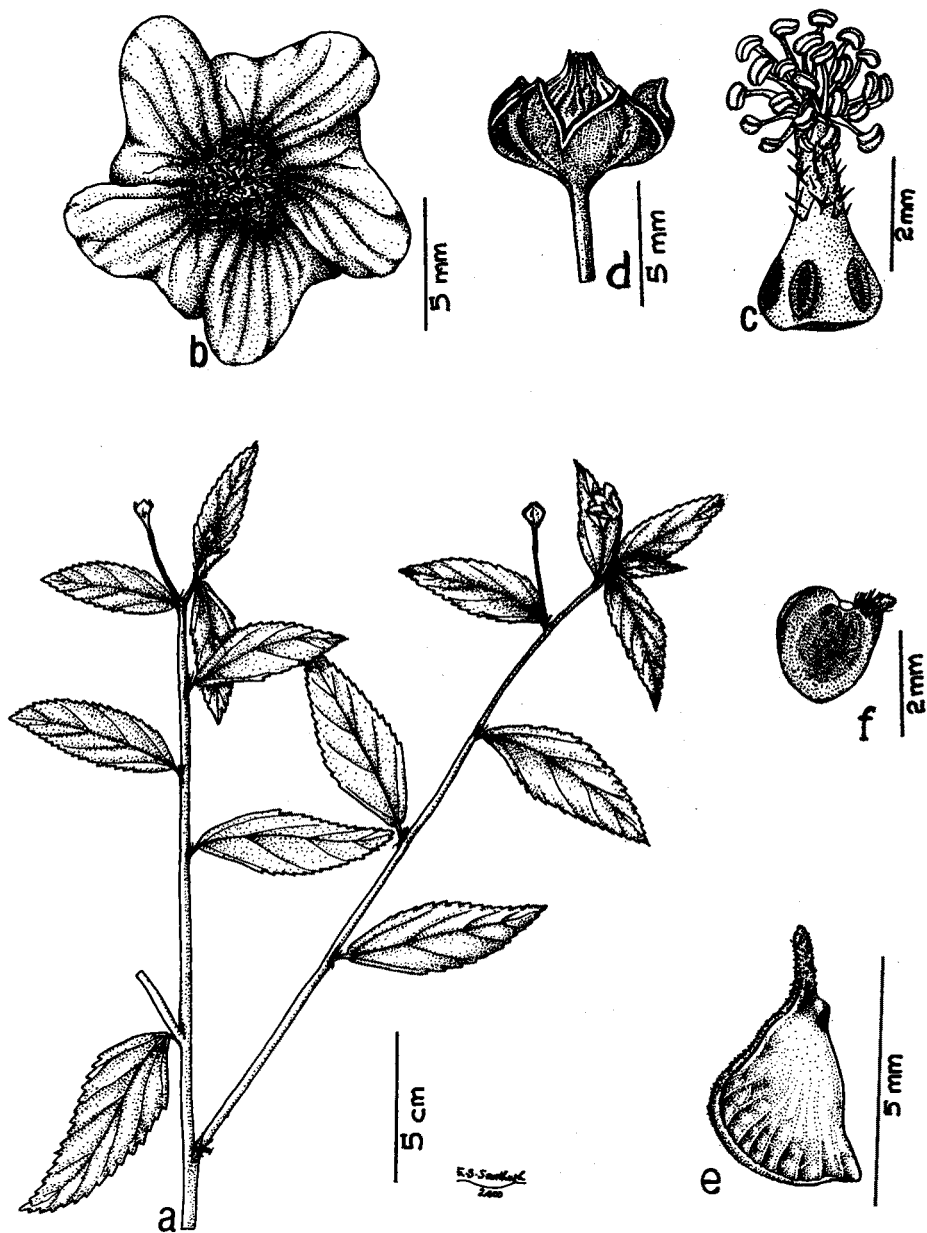
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Fig. 1. *Sida unicornis* Marais: a. Flowering twig; b. Flower – view from top; c. Staminal column; d. Fruit with accrescent calyx; e. Mericarp; f. Seed.

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confusion of five species under the name *Sida rhombifolia* L. However, there is no record of the occurrence of this species in India so far and is being reported as a new record here. A detailed description and illustration are provided here to facilitate its easy identification.

***Sida unicornis* Marais**, Kew Bull. 38: 42. 1983.

Erect branched undershrubs to 1.5 m tall; stem terete, green and purplish, minutely pubescent with short stellate hairs. Leaves 2-7 x 0.5-2 cm, elliptic-rhomboid or narrowly obovate, rounded to truncate at base, acute at apex, crenate-serrate and entire towards the base, lateral nerves 3-5 pairs, shortly 3-nerved at base, green and glabrous above, pale beneath, cinereous with short stellate hairs; petiole to 0.6 cm long, minutely pubescent, shortly pulvinate at both ends; stipules up to 7 mm long, linear, 1-nerved. Flowers axillary, solitary; pedicels to 1.5 cm long in flower, to 3 cm in fruit, sparsely stellately hairy, articulate above the middle; calyx 5-7 mm diam., campanulate, 10-ribbed at base, stellately pubescent, 5-lobed, lobes 3 mm long, triangular, apex acute-acuminate, glabrous within; corolla to 1.2 cm diam., pale yellow, petals 8-10 x 6-7 mm, obliquely obovate, truncate or cuneate at base, shortly hairy without and glabrous within, stellate-hairy at base; staminal column to 3.5 mm long, stellate-pubescent, antheriferous at apex; ovary 2 mm in diam., conical, glabrous; style 8-10; stigma capitate. Mericarp 8-10 (-11), 5 x 3 mm, enclosed in calyx, trigonous with acute angles, pale, distinctly and transversely rugose on sides and back, apex beaked with a single awn, stellately hairy. Seeds to 2 mm long, black, smooth, minutely hairy at hilum.

Distribution: Native of Mauritius, naturalised in India.

Habitat: Found growing along roadsides in plane and open places of deciduous forests.

Flowering and Fruiting: Round the year.

Specimens examined: INDIA, **Kerala:** Thiruvananthapuram Dist., Bonaccord, 8.02.95, Santhosh Kumar 26861 (TBGT); *Ibid.*, 30.10.95, Santhosh Kumar 26884 (TBGT).

The section *Sidae* of *Sida* has 8 species in India viz., *S. acuta* Burm. f., *S. alnifolia* L., *S. ovata* Forrsk., *S. rhombifolia* L., *S. rhomboidea* Roxb. ex Fleming, *S. scabrida* W. & A., *S. subcordata* Span., and *S. unicornis* Marais. These species can be distinguished by the following key.

- | | |
|--------------------------------------|-----------------|
| 1a. Leaves distichous | <i>S. acuta</i> |
| 1b. Leaves not distichous | 2 |
| 2a. Mericarp indehiscent | 3 |
| 2b. Mericarp dehiscent at apex | 5 |

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- 3a. Fruiting pedicels 3-7 mm long *S. ovata*
- 3b. Fruiting pedicels 20-30 mm long 4
- 4a. Awns completely included in the calyx, glabrous *S. rhomboidea*
- 4b. Awns exceeding the calyx, pubescent *S. unicornis*
- 5a. Leaves concolorous; pedicels not jointed *S. scabrida*
- 5b. Leaves not concolorous; pedicels jointed 6
- 6a. Leaves near to stem base always obovate, retuse or truncate at apex *S. alnifolia*
- 6b. Leaves not as above 7
- 7a. Leaves shallowly cordate at apex; staminal column glandular and simple hairy
..... *S. subcordata*
- 7b. Leaves truncate or rounded at base; staminal column glabrous *S. rhombifolia*

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