RHEEDEA
Journal of the Indian Association for Angiosperm Taxonomy

Vol. 19(1&2): 50-52 (2009)
ISSN: 0971-2313 (Print edition)
ISSN: 2582-2438 (Online edition)

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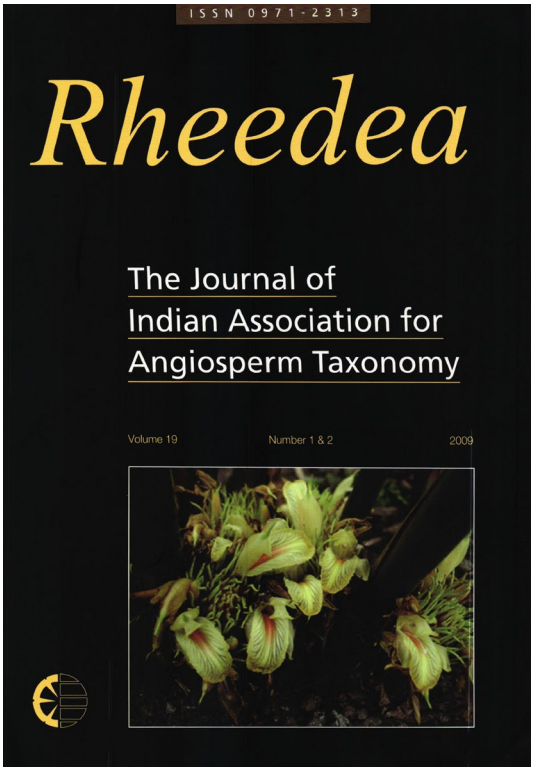

How to cite:

Shimpale V.B., Sutar S.P. & S.R. Yadav 2009. *Sidastrum* (Malvaceae): A New Genus Record for Asia. *Rheedea* 19(1&2): 50-52.

https://dx.doi.org/10.22244/rheedea.2009.19.01.11

Received: 15.07.2009 *Revised and accepted*: 21.08.2009

Published by Indian Association for Angiosperm Taxonomy
This volume of Rheedea is published with partial financial assistance from Department of Science and Technology, Government of India, New Delhi

Rheedea
Vol. 19 (1 & 2)
50-52
2009

Sidastrum (Malvaceae): A New Genus Record for Asia

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Abstract

The genus *Sidastrum* Baker f. represented by *S. micranthum* (A. St.-Hil.) Fryxell (Malvaceae) is reported first time for Asia from Kolhapur district of Maharashtra State, India. Detailed description, illustration and notes on occurrence and distribution of the species are provided in the present paper.

Keywords: *Sidastrum*, *S. micranthum*, Malvaceae, Genus Record, India, Asia

Introduction

During plant exploration, authors collected interesting specimens of Malvaceae from Kolhapur District of Maharashtra State. Critical studies revealed the distinctness of the species from all other known members of Indian Malvaceae (Hooker, 1875; Paul & Nayar, 1988; Paul, 1993; Sivarajan & Pradeep, 1996). Therefore, the material was sent to an Indian expert of Malvaceae, Dr. A. K. Pradeep, University of Calicut; after analysis, he sent the specimens to Dr. Paul A. Fryxell, Rancho Santa Ana Botanic Garden, California, USA, for his comments. Dr. Fryxell identified and stated, "It is *Sidastrum micranthum* (A. St.-Hil.) Fryxell, which occurs in Central and South America, so far as I know this is a first record for India and Asia" (*Pers. comm.*). Identity of the species was further confirmed with published literature (Fryxell, 1978) and matching the specimens with online images of herbarium specimens (K, MO). As this forms an interesting new genus record for India as well as Asia, a detailed description along with illustration are provided to facilitate easy identification. The specimens are deposited at SUK. The genus *Sidastrum* closely resembles *Sida* and therefore the differences between *Sida* (Indian species) and *Sidastrum* are given below:

1. Calyx 10-costate at base; mericarps indurate .....**Sida**

1. Calyx without costae; mericarps relatively fragile.....**Sidastrum**

Sidastrum micranthum (A. St.-Hil.) Fryxell, Brittonia 30: 452. 1978. *Sida micrantha* A. St.-Hil., Fl. Bras. Merid. 1: 190. 1827. **Fig. 1**

Erect shrub, 2 – 3 m high. Stem up to 4 cm in diameter at base, densely pubescent with stiff minute stellate hairs. Leaves ovate, 9.2 – 10.3 × 3.5 – 5.5 cm, cordate, 5 – 9-nerved at base, crenate, acute to acuminate, densely stellate-tomentose on both surfaces; petiole 1.5 – 6.5 cm long, stellate-hairy; stipule linear, 6 – 10 mm long, hairy. Flowers in axillary, condensed racemes or panicles; pedicel 3 – 6 mm long. Calyx 1.5 – 2 mm long, campanulate, 5-lobed; lobes acute at apex, stellate-hairy outside. Corolla exceeding the calyx, off-white, glabrous; petals obovate, 1.5 – 2.2 × 0.8 – 1.2 mm. Staminal column 2 – 3 mm long, antheriferous towards apex, sparsely stellate-hairy. Ovary pentacarpellary, hairy; style 1 – 2 mm long, glabrous; stigmas 5. Mericarps 5, 2.8 – 3.2 × 1.5 – 1.8 mm, longer than persistent calyx, trigonous with acute angles, pale yellow when mature, faintly transversely rugose on sides and stellate-hairy on back, thin-walled; beaks 2, much shorter than mericarp, stellate-hairy; mericarp one-seeded, indehiscent. Seed ovoid, 1.4 – 1.6 × 1.0 – 1.2 mm, trigonous, glabrous, blackish.

Flowering & Fruiting: October – January

Chromosome Number: 2n = 32 (Krapovickas, 1969; Bates, 1976).

Habitat: Along roadsides. The common associates of the species are *Malvastrum coromandelianum* (L.) Garcke, *Sida acuta* Burm.f., *Ludwigia octovalvis* (Jacq.) Raven, *Ipomoea carnea* var. *fistulosa* (Mart. ex Choisy), *Hyptis suaveolens* (L.) Poir., *Alternanthera sessilis* (L.) R. Br. ex DC., *Typha angustifolia* L., *Cyperus* sp., *Cynodon dactylon* (L.) Pers. and *Echinochloa colona* (L.) Link.

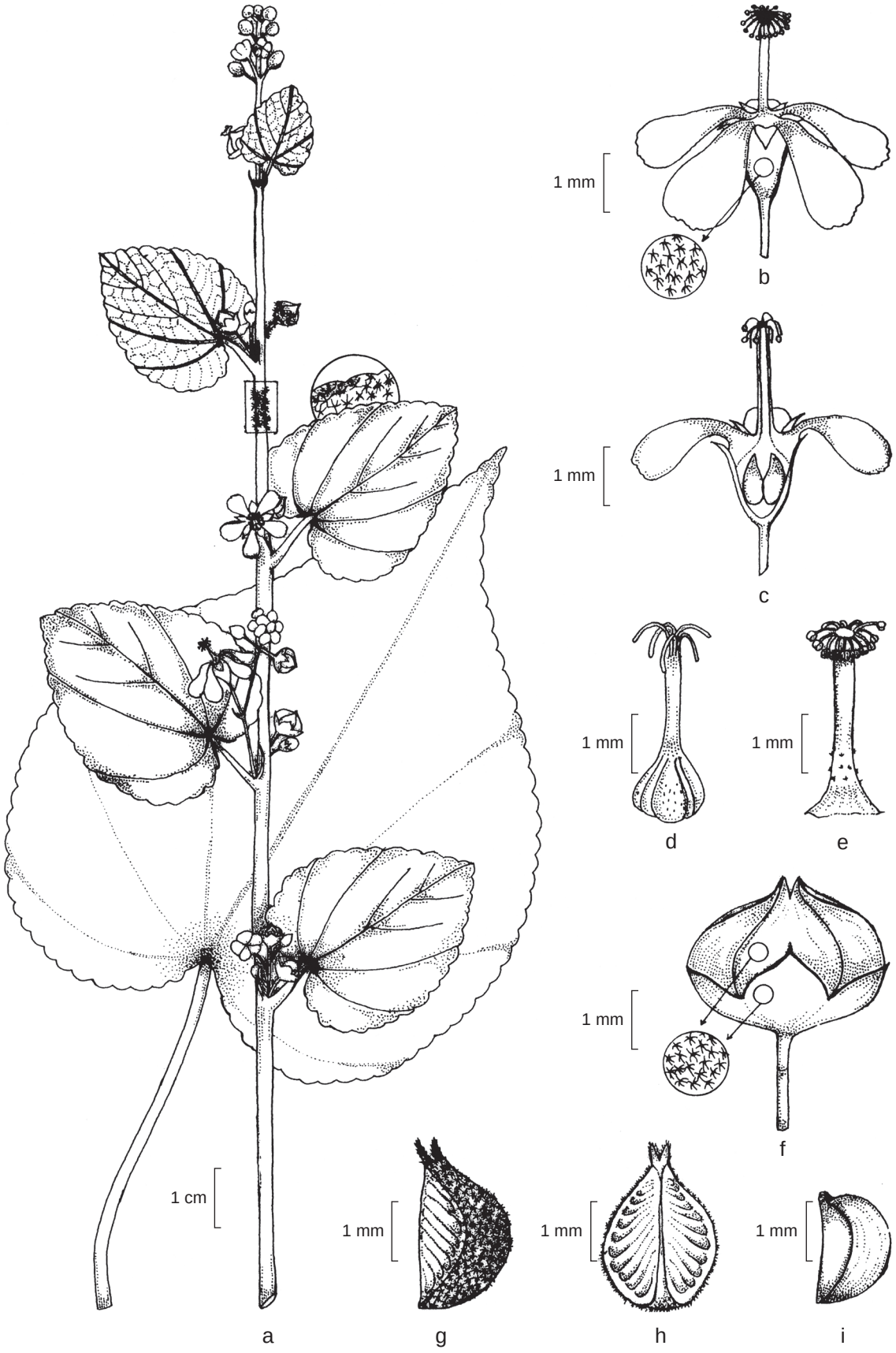

Figure 1. *Sidastrum micranthum* (A. St.-Hil.) Fryxell: **a.** Twig with flowers and Fruits; **b.** Flower; **c.** L. S. of flower; **d.** Gynoecium; **e.** Staminal column; **f.** Fruit; **g, h.** Mericarp – Lateral and ventral view; **i.** Seed. (*Shimpale* 3639)

Distribution: Brazil, Colombia, Costa Rica, Cuba, Guiana and Venezuela; now in India.

Specimens Examined: INDIA, **Maharashtra**, Kolhapur District, Uchgaon, 16°41′ 65.6″ N & 74°16′ 15.6″ E, *c.* 615 m, 14.10.2008, *Shimpale* 3639, *Yadav* 9032 (SUK).

Note: According to Fryxell (1997) the fruiting calyx is simple hairy or rarely stellate-pubescent but it is constantly stellate-pubescent in our collections. The occurrence of this species in the vicinity of Kolhapur Railway station in a small population suggests that it is probably a recent introduction through imported seeds or food grains.

Acknowledgements

Authors are thankful to Dr. A. K. Pradeep, University of Calicut, Calicut and Dr. Paul A. Fryxell, Rancho Santa Ana Botanic Garden, California, USA, for their help in identification and providing relevant literature; to the Head, Department of Botany, Shivaji University, Kolhapur, and the Principal, The New College, Kolhapur, for laboratory facilities.

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Received: 15.7.2009
Revised and Accepted: 21.8.2009