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A NEW SPECIES OF CASSINE (CELASTRACEAE) FROM INDIA

N. SASIDHARAN & K. SWARUPANANDAN

Kerala Forest Research Institute, Peechi 680 653, Kerala, India.

ABSTRACT

The new species *Cassine kedarnathii* Sasi. & Swarup. is described from the Silent Valley National Park (India) and illustrated.

INTRODUCTION

Two species of *Cassine* L. (Celastraceae) were recorded from Peninsular India, viz. *C. glauca* (Rottb.) O. Ktze. and *C. paniculata* (Wt. & Arn.) Lo-breau-Call. (Gamble 1915: under *Elaeodendron*; Ramamoorthy 1976). Kostermans (1987) in his taxonomic treatment of the genus in Asia, restricted the name *C. glauca* (Rottb.) O. Ktze. to Sri Lankan materials and assigned the name *C. albens* (Retz.) Kosterm. to Indian materials known as *C. glauca* (Rottb.) O. Ktze.

A giant hollow tree in the Silent Valley National Park attracted the attention of visitors because of its large size (height ca, 30 m and dbh 13 m) and the hollow bole, from base to top, through which sky is visible. The tree had been identified *C. glauca* (Rottb.) O. Ktze. presumably in the absence of flowers and fruits (Subramanian & Singh 1987). On a recent visit to Silent Valley, we were able to collect flowering and fruiting specimens of the tree. This material did not agree with any of the species treated in Kostermans' Revision (1987). Subsequently, the material was referred to Kostermans and he confirmed the novelty of the species. This species is differentiated and described as new below.

Cassine kedarnathii Sasidharan & Swarupanandan, *sp. nov.*, Figs. 1—10.

Affinis *C. congylos* Kosterm. in magnus fructus sed vergens in fructus • ellipsoidus cum crassus mesocarpus et folia elliptico-oblongus acuminatus. Differt e *C. paniculata* (Wt. & Arn.) Lobreau-Call. in petala oblongo, ovaria 2-loculosus et brevior cymeae. Differt e *C. albens* (Retz.) Kosterm. et *C. glauca* (Rottb.) O. Ktze. in magnus florum et fructus. HOLOTYPE : *Sasidharan 3689* (MH).

Differs from *C. paniculata* (Wt. & Arn.) Lobreau-Call. in the oblong petals, two celled ovary and smaller cymes. Differs from *C. albens* (Retz.) Kosterm. and *C. glauca* (Rottb.) O. Ktze. in the larger size of the flowers and fruits. Allied to *C. congylos* Kosterm. in the larger sized fruits, but differs in the ellipsoid fruit with thick mesocarp and elliptic-oblong acuminate leaves.

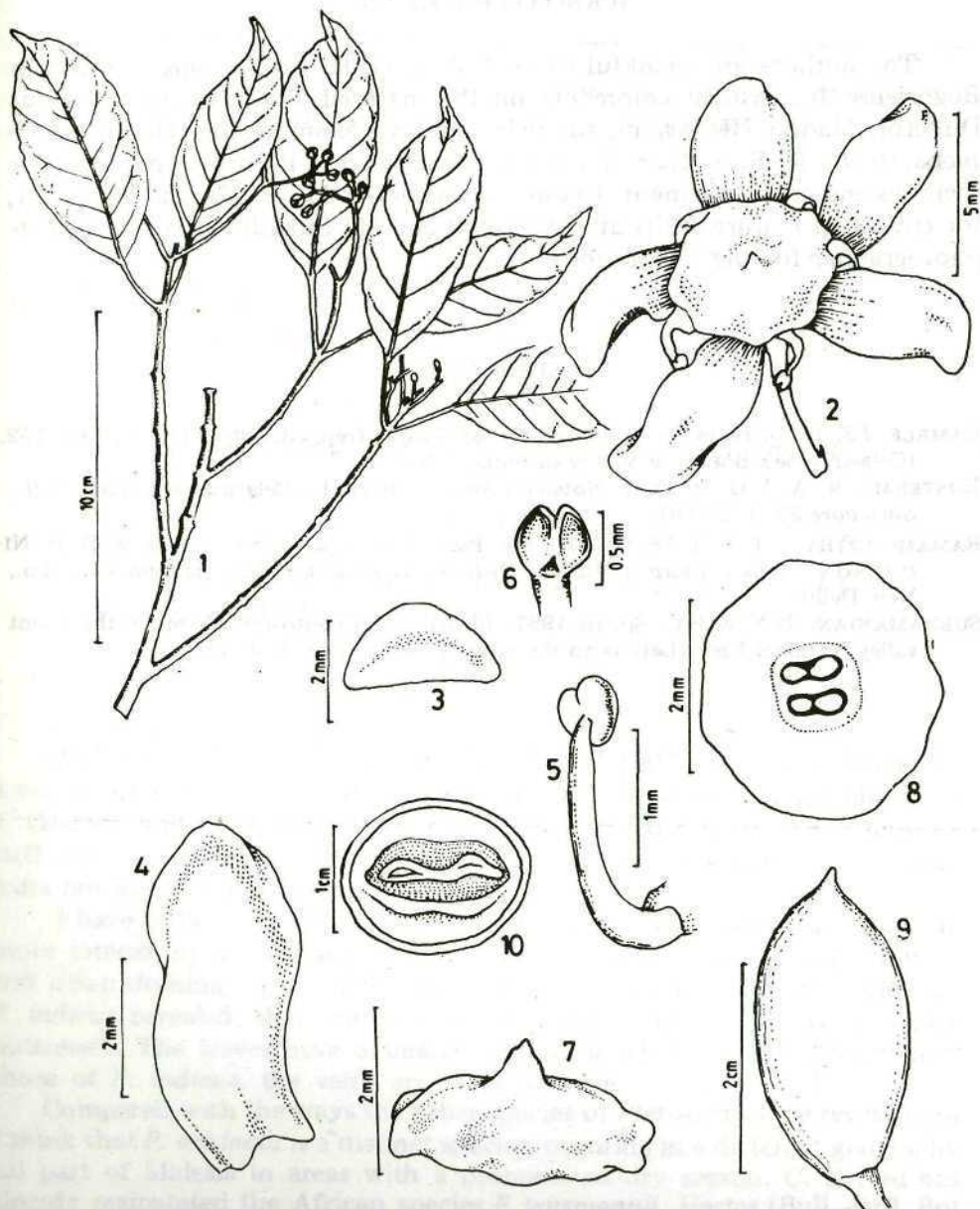
Large trees, up to 30 m tall. Bark greyish brown, inner bark reddish. Leaves opposite, lamina 5—8 x 2—3.5 cm, elliptic-oblong, obtusely caudate acuminate, base acute, margin crenate, slightly thickened, coriaceous, glabrous, lateral nerves 5—9 pairs, secondary laterals present, intercostae reticulate, prominulous above, prominent below, petiole 2—2.5 cm long. Cymes dichasial, terminal and axillary, glabrous. Flowers greenish-yellow, ca. 12 mm across. Pedicels 4—5 mm long. Sepals 5, 1.5 x 3 mm, imbricate, broadly ovate, obtuse, glabrous. Petals 5, 5 x 2—2.5 mm, imbricate, oblong, obtuse, margin slightly revolute. Stamens 5, inserted along the margins of the Wavy annular disc, filaments 2 mm long. Ovary immersed in the disc, 2-celled, cells 2-ovuled, ovules basal. Styles short, stigma entire. Drupe 25—30 x 18—22 mm, ellipsoid, apiculate, green; epicarp thin, putamen slightly compressed, vertically grooved on both sides, one side 3—4 mm thick, the other 5—7 mm, shining brown within. Seed 1. ca. 20 x 17 mm. elliptic, planoconvex, shallowly grooved above, brown. Flowering March to June and fruiting October to November.

DISTRIBUTION: Evergreen forests along the Western Ghats.

ETYMOLOGY: The species is named in honour of Dr. S. Kedarnath, distinguished forest geneticist.

NOTES: In the larger size of the fruits the species is allied to the Sri Lankan species *C. congylos* Kosterm. but differs from it in the ellipsoid fruit with thick putamen and the elliptic oblong acuminate leaves. The large size of the fruit easily distinguishes the species from the other South Indian species *C. albens* (Retz.) Kosterm. and *C. paniculata* (Wt. & Arn.) Lobreau-Call.

SPECIMENS EXAMINED: Kerala State: Palghat distr. Silent valley, ± 800 m, 11—5—1989, fl. & fr. *Sasidharan 3689* (MH); Locality not known 28—4—1905, young fr. *Barber 7064* (MH).



Figures 1—10. *Cassine kedarnathii* Sasi. & Swarup. 1. Flowering twig. 2. Flower. 3. Sepal. 4. Petal. 5. Stamen. 6. Anther. 7. Pistil and disc. 8. Transection of ovary. 9. Fruit. 10. Transection of fruit.

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