



Ixora agasthyamalayana, a new species of Rubiaceae from India

M. Sivadasan^{1,*} and N. Mohanan²

¹Department of Botany, University of Calicut, Calicut University, P.O., 673 635, Kerala, India

²Tropical Botanic Garden and Research Institute, Palode P.O., Thiruvananthapuram, 695 562, Kerala, India

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Abstract. *Ixora agasthyamalayana*, a new species of Rubiaceae from India is described. It belongs to *Ixora* sect. *Otobractum* Brem. of subgenus *Ixora*. The new species is allied to *I. elongata* Heyne ex G. Don and *I. barbata* Roxb. ex Sm.

Key words: India; *Ixora agasthyamalayana*; *Ixora* sect. *Otobractum*; Rubiaceae.

The genus *Ixora* Linn. (Rubiaceae) with over 400 species includes shrubs and small trees distributed in tropical and subtropical regions of the world. The large number of the species makes delimitation difficult. In India the genus is represented by about 43 species (Husain and Paul, 1989).

Recent exploration of Agasthyamala Hills on the southern end of Western Ghats in Thiruvananthapuram District of Kerala State yielded a taxon quite different from the species of *Ixora* hitherto described (Hooker, 1880; Gamble, 1921; Bremekamp, 1937, 1938, 1959; Husain and Paul, 1989). It belongs to *Ixora* section *Otobractum* Brem. of subgenus *Ixora*.

Ixora agasthyamalayana Sivadasan et Mohanan, sp. nova (Fig. 1) -TYPE: India, Kerala State, Thiruvananthapuram Dist., Athirumala on Agasthyamala Hills, 1000 m, 5 February 1988. *Mohanan TBG&RI 8968* (holotype: K; isotype: CAL, MH, TBGT).

Species insignis a speciebus notis bene distincta; *Ixorae elongatae* Heyne ex G. Don affinis, a qua inflorescentia glabra, laxa, pauciflori differt.

Small trees. Leaves opposite, simple, entire,

petiolate; petiole to 1.5 cm long, leaf blade 15-22 cm long, 6-8 cm wide, elliptic-oblong, base cuneate, tip acute, lateral veins ca. 18-20; the pair of leaves at the base of the peduncle small, sessile, cordate, acuminate. Stipules interpetiolar, to 5 mm long, laterally joined to half way from base forming a tube, apex broadly triangular with a slender cusp of ca. 1 mm and keeled, hairy on the inner surface.

Inflorescence long peduncled, lax compound corymbs, glabrous, ca. 15 cm long; branchlets and pedicels articulated at ramifications; each unit of corymb 10-15-flowered, flowers sessile and pedicelled, pedicels ca. 2 mm long; bracts and bracteoles very small, to ca. 1-2 mm long, linear-triangular; calyx lobes 4, broadly triangular, shorter than ovary, tip acute to rounded, to ca. 0.5 mm long; corolla light pinkish, tube slender, glabrous, 1.25 cm long, lobes 4, to 0.5 cm long, oblong, a few silky white hairs present on the inner side of the lobes toward base just above the faux of corolla tube, throat naked, stamens 4, attached at mouth, alternating with corolla lobes, filaments short, to 2 mm long, anthers linear, to 2.75 mm long, tip pointed, 2-fid and mucronate at base, sub-basifixed; ovary 2-celled, ovules one in each locule, placentation axile, style slender, to ca. 0.5 cm long, tip fusiform, longitudinally cleft forming two stigmatic lobes; fruit a didymous berry, 1 cm diam., seeds 2.

*Corresponding author.

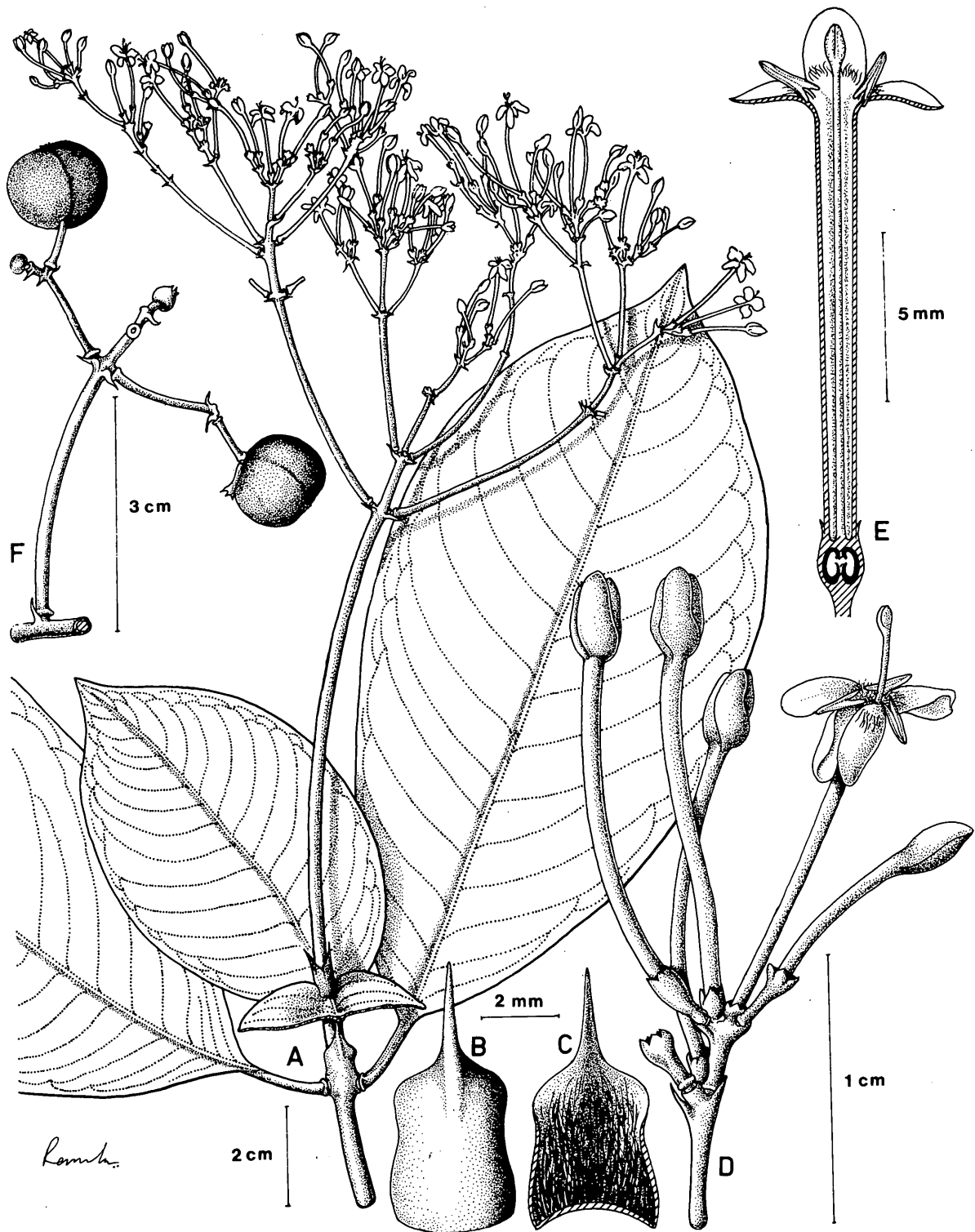


Fig. 1. *Ixora agasthyamalayana*. A, a twig with terminal articulated inflorescence; B, stipule, abaxial view; C, stipule, adaxial view, showing white silky hairs; D, a small unit of the compound corymb, showing pedicellate and sessile flowers; E, flower, longitudinal section; F, fruits.

Ixora agasthyamalayana grows in deep evergreen forests. It is not very common and so far known only from the type locality; flowering and fruiting almost throughout the year.

The new species is named after the name of the area, Agasthyamala Hills, from where it was collected. This is comparatively a very less disturbed area in the Western Ghats with a unique flora having an estimated number of about 2000 species, of which about 150 are endemic (Henry *et al.*, 1984).

Additional specimens examined. Kerala State, Thiruvananthapuram Dist., Athirumala on Agasthyamala Hills, 1000 m, 15 October 1988, Mohanan TBG&RI 4440 (TBGT); *ibid.*, 1100 m, 15 December 1990, Mohanan TBG&RI 10245 (TBGT); Attayar on Agasthyamala Hills, 700 m, 22 December 1989, Mohanan TBG&RI 9167 (TBGT); *ibid.*, 800 m, 15 December 1990, Mohanan TBG&RI 10260 (TBGT).

The new species resembles *Ixora elongata* Heyne ex G. Don in vegetative characters but differs in habit, inflorescence and floral characters. The inflorescence is comparatively long reaching to about 20–25 cm in *I. elongata*. The glabrous nature of the inflorescences and flowers is a distinguishing character of *I. agasthyamalayana* which stands in contrast to the densely pubescent condition of *I. elongata*. The size and shape of bracts, bracteoles and calyx lobes also differ with those of *I. agasthyamalayana*. In *I. elongata* they are long-subulate. The new species also differs in having few-flowered, lax inflorescences and the tree habit against the many-flowered, dense inflorescences and shrubby habit of *I. elongata*.

Ixora agasthyamalayana resembles *I. barbata* Roxb. ex Sm. in characters like shape and size of leaf, presence of small sessile cordate leaves at the base of the peduncles and the articulated nature of inflorescence-branches. But it differs in the number of pairs of lat-

eral veins in the leaves. *Ixora barbata* has only about 12 pairs of lateral veins as opposed to 18–20 pairs in *I. agasthyamalayana*. There is a difference in shape of the calyx lobes also. In *I. agasthyamalayana* they are broadly triangular, while in *I. barbata* they are long-triangular to subulate.

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印度仙丹花屬一新種——*Ixora agasthyamalayana*

M. Sivadasan¹ and N. Mohanan²

¹印度 Calicut 大學植物系

²印度 Kerala 熱帶植物園及研究所

本文描述印度發現之仙丹花屬新種植物 *Ixora agasthyamalayana*。本新種隸屬仙丹花亞屬耳苞組，與 *I. elongata* Heyne ex G. Don 和 *I. barbata* Roxb. ex Sm. 近緣。