

## On the identity of *Ixora johnsoni* (Rubiaceae) - A less known endemic plant of southern Western Ghats, India

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### Abstract

*Ixora johnsoni* Hook. f. is a rare, endemic and less known taxon of southern Western Ghats (Kerala). Its taxonomic identity was quite confused due to insufficient description, lack of illustration and poor representation in herbaria. Complete description, line drawing, pertinent notes etc. are provided to resolve the problem.

### INTRODUCTION

The authors, during the course of their floristic exploration of the Kottayam, district in Kerala state, collected specimens of the genus *Ixora* L. Detailed study of the specimens revealed that they resembled *I. johnsoni* Hook. f. On consultation of MH, the authors came across specimens of the same taxon identified as *I. polyantha* Wt. This caused confusion in the identity of the species and the specimens were referred to Dr. Diane M. Bridson of Kew, who confirmed it to be *I. johnsoni* Hook. f..

*Ixora johnsoni* Hook. f. (1880), a rare, endemic and less known species of southern Western Ghats, was described based on a single collection of Rev. Johnson made in 1865 from Wennamala, Cochin. Later Calder in 1915 and Puri in 1957 collected this taxon from Konni (Pathanamthitta Dist.) and Peerumedu (Idukki Dist.) respectively of Kerala. Gamble (1921) included this species in Flora of the Presidency of Madras under the authority of Hooker and Calder. Gamble described it as a small tree or large shrub, and Husain and Paul (1989) described its fruits as blue at maturity. These characters are certainly doubtful because, in the original protologue Hooker had not mentioned anything about its habit and fruit colour. Moreover, the type in K was represented by a single flowering shoot with inadequate field notes. The authors observed that this pretty plant is only an undershrub of 30-50 cm height with rarely branched stem and red fruits.

Insufficient description, lack of illustration and poor representation in herbaria added to the confusion of its taxonomic identity. We herein provide a detailed description, line drawings, pertinent notes, etc. to facilitate identification of the species.

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***Ixora johnsoni*** Hook. f., Fl. Brit. India 3: 139. 1880; Gamble, Fl. Pres. Madras 2: 630. 1921; Husain & Paul, J. Econ. Tax. Bot., Addl. Ser. 6: 131. 1989.

Undershrubs, 30-50 cm tall. Leaves opposite, simple, entire, petiolate; petioles 3-9 mm long, leaf blade 9-22.5 x 4.5-13.5 cm, elliptic-obovate, cuneate at the base, acute-mucronate at apex, with 9 to 14 pairs of lateral veins. Stipules interpetiolar, to 5.5 mm long, laterally joined to half way from base forming a tube, broadly triangular with a slender cusp ca. 2.5 mm long, hairy on the inner surface. Inflorescence short peduncled, 4-9 mm long, sparsely puberulous with branchlets and pedicels articulated at ramifications, each unit a corymb of 9-16 flowers. Flowers sessile to shortly pedicelled; pedicels 1-4 mm long, sparsely puberulous; bracts to 5 mm long; bracteoles to 4 mm long. Calyx lobes 4, linear-triangular, acute at tip, longer than ovary, to 6 mm long, sparsely puberulous. Corolla white, tubular; slender, glabrous, 15-27 mm long with 4 lobes, each to 9 mm long, oblong, naked at the throat. Stamens 4, attached at mouth alternating with corolla lobes; filaments short, to 2.5 mm long, anthers linear, to 5.5 mm long, beaked at the tip, 2-fid, and mucronate at base, sub-basifixed. Ovary 2-celled, ovules one in each locule, axillary; style slender, 17-32 mm long; stigmas 2, to 4 mm long, usually coiled. Fruits a didymous berry, red when ripe, to 7 mm in diam., glabrous with accrescent calyx; seeds 2.

*Flowering & Fruiting:* September - April.

*Habitat and Ecology:* Evergreen and deciduous forests. Also found in rubber and teak plantations at altitude 50-180 m.

*Distribution:* Endemic to Kerala. Apparently scarce (Henry *et al.*, 1978). The authors could find few populations of the species in central Kerala. *I. johnsoni* is included in the list of "Rare and Threatened Plants of India" by Threatened Plants Committee of Botanic Gardens Conservation Co-ordinating Body in 1983.

*Specimens examined:* Kerala: Wennamala, Cochin, *Johnson 1066* (K); Travancore, Konni, 29 Mar., 1915. *Calder 1563* (K); Kottayam Dist., Mookanpetty, 4 Dec., 1991. *Mathew Dan 13414* (TBGT); *ibid.*, 10 Jun., 1993. *Santhosh Kumar 17501*; *ibid.*, 28 Jun., 1993. *Santhosh Kumar 17532*; *ibid.*, 9 Apr. 1994. *Santhosh Kumar 17539*; *ibid.*, 19 Sept., 1993. *Santhosh Kumar 18209* (TBGT).

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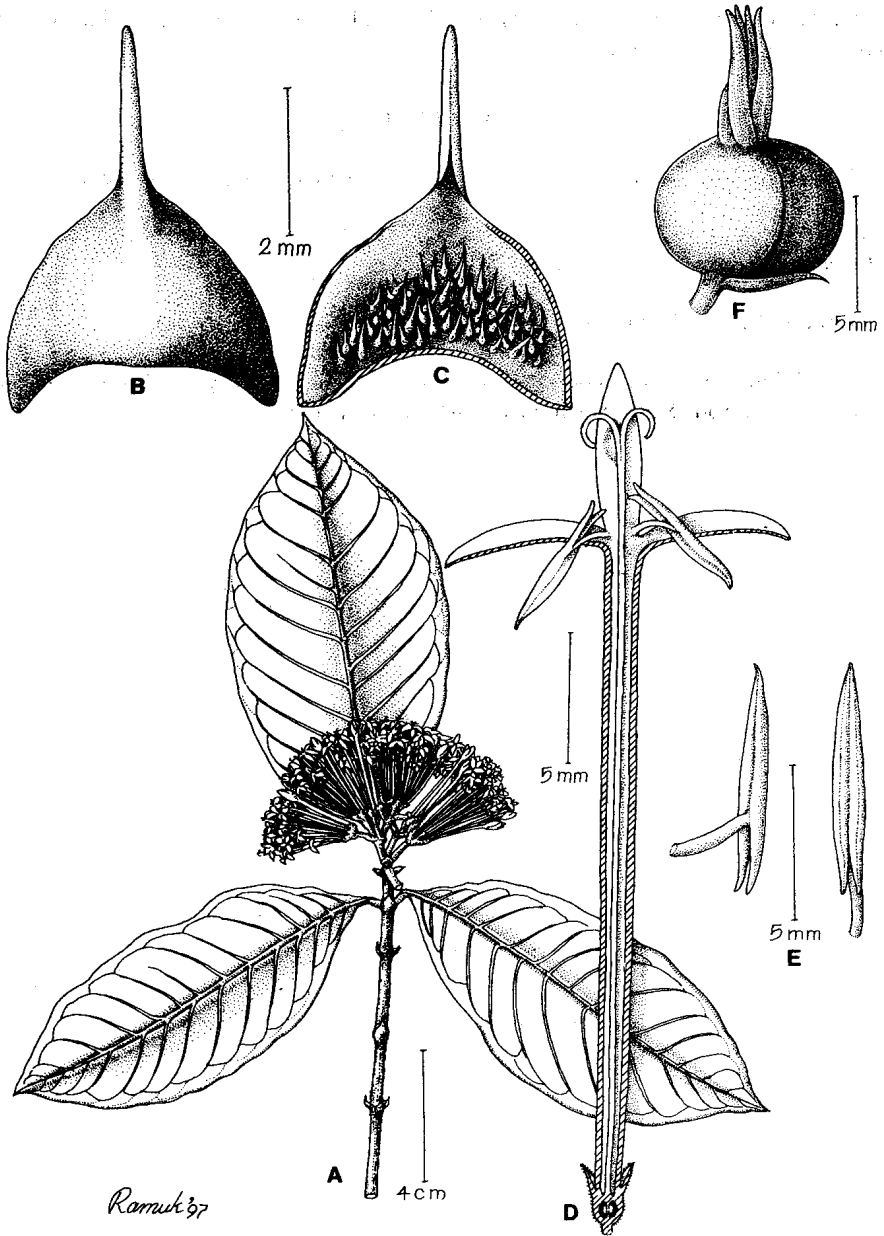


Fig. 1. *Ixora johnsoni* Hook. f.: A. Habit; B. Stipule - abaxial view; C. Stipule - adaxial view; D. L.S. of flower; E. Stamen - lateral and front view; F. Fruit.

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