The taxonomic identity of *Jasminum matthewii* (Oleaceae)

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**Abstract**

*Jasminum matthewii* P.S. Green has been treated here as a heterotypic synonym of *J. angustifolium* (L.) Willd. var. *hirsutum* P.S. Green. Further a taxonomic key to distinguish three varieties of *J. angustifolium* has been provided.

**Keywords:** Heterotypic Synonym, *Jasminum angustifolium* var. *hirsutum*, Variations

**Introduction**

While studying the disjunct distribution and population status of some Indosrilankan taxa distributed in tropical dry evergreen forests of Tamil Nadu, authors have examined the type specimen of *Jasminum matthewii* P.S. Green deposited at RHT. A critical examination of protologue (Green, 2003) and herbarium specimens housed at AURO and RHT revealed that *J. matthewii* need to be relegated to a heterotypic synonym of *J. angustifolium* (L.) Willd. var. *hirsutum* P.S. Green, which was earlier reported as an addition to the flora of India from Tamil Nadu (Gastmans & Balachandran, 2006). Further, the morphological variations extant among three varieties of *J. angustifolium* were evaluated critically for the first time based primarily on fresh and herbarium specimens (Appendix 1) collected from Coromandel coast of northern Tamil Nadu (Kancheepuram, Villupuram and Cuddalore districts) and Union Territory of Puducherry. This includes 19 accessions of var. *angustifolium*, 11 accessions of var. *hirsutum*, and 21 accessions of var. *sessiliflorum* (Vahl) P.S. Green.


Type: INDIA, Tamil Nadu, Villupuram district, Puthupet Sacred Grove, 26.5.1999, K.T. Augustine & K.M. Matthew 60741 (Holotype K000545676, image!; Isotype RHT!). Fig. 1a

Shrub, twining or straggling, slender, evergreen, tomentose. Leaves opposite, broadly ovate to elliptic-oblancoleate, (1–)2–4(–6) × (0.7–)1–2(–4) cm, rounded to subcordate at base, entire at margins, obtuse to broadly acute with mucro at apex, subcoriaceous; lateral veins (3–)4–5 pairs, prominent on both surfaces; domatia 1 or 2 pairs on vein axils beneath; pedicels 4–8 mm long. Inflorrensce a cyme, terminal, only on side shoots; pedicels 11 mm long, 1–3(–4)-flowered; pedicels 4–8 mm long. Calyx tube 1–1.5 mm long, 5-lobed; lobes filiform, 1–2 mm long. Corolla hypocrateriform, white, fragrant; tube 11–14 mm long; lobes 5, rarely 7, 12–13 × 2–4 mm. Berries paired, rarely single, 7–8 × c. 10 mm, black and shiny when ripe.

**Flowering & fruiting:** Throughout the year.

**Habitat:** Growing under partial shade to open sunlight, especially in forest openings, gaps and edges of sacred groves, reserve forests, hillocks and along the fences; from the eastern coastal plains to 650 m on the eastern hillslopes of the Western Ghats.


Distribution: India (Tamil Nadu and Union Territory of Puducherry) and Sri Lanka.

Key to three varieties of *J. angustifolium*

1. Leaves recurved at margins; secondary veins distinct on both surfaces; domatia present at axils of veins beneath. .......... var. **hirsutum**

1. Leaves not recurved at margins; secondary veins indistinct on both surfaces; domatia absent at axils of veins beneath .......... 2

2. Venation distinct only on upper surface; inflorescence a cyme, (1–)3-flowered, sessile; calyx lobes 3–4 times longer than tube; fruiting calyx much longer than fruits. .... var. **sessiliflorum**

2. Venation obscure on both surfaces; inflorescence a cyme or corymb, (1–)4–7-flowered, pedunculate; calyx lobes almost equal to tube; fruiting calyx shorter than fruits .... var. **angustifolium**

Green (1985) stated that the presence or absence of pubescent hair in the species of *Jasminum* is of no taxonomic significance. During the present study, presence of tomentose or pubescence hair in all these varieties were noticed in the newly sprouted branches after summer rain. However, hairs persist only in the var. *hirsutum* throughout and in other two varieties, viz., *angustifolium* and *sessiliflorum* the hairs become either puberulent or glabrous at maturity. The presence of domatia at the axils of lateral veins on the lower surface of leaves in var. *hirsutum* and *J. matthewii* strongly suggests that both are same taxon. Green (2003) allied his new species, *J. matthewii* with *J. amabile*, a species endemic to Nepal. Till date, the latter is known only by the type collection. Therefore, there is little justification in comparison between these
two species as they are biogeographically disjunct in distribution.

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Literature Cited


Appendix 1: Specimens examined


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