

Strobilanthes pothigaiensis (Acanthaceae) — a new species from southern Western Ghats, India

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Summary. *Strobilanthes pothigaiensis*, a new species of *Strobilanthes* (Acanthaceae) allied to *S. foliosus* T. Anderson from southern Western Ghats, India, is described and illustrated.

Key Words. India, new species, southern Western Ghats, *Strobilanthes*.

Introduction

Agasthiyamalai (Pothigai) hills in the southern Western Ghats of India, with their unique flora of biological interest, high diversity and endemism, have been selected as one of the plant diversity centres within India (Davis *et al.* 1995), and subsequently declared as a Biosphere Reserve in 2001. In recent years about 50 new plant taxa have been described from the area. While working out the strict endemics of this region (Gopalan & Henry 2000) an unidentified plant was noticed from herbarium material in MH. After critical studies this proved to be a new species of *Strobilanthes* which is described and illustrated below

Taxonomy

Strobilanthes pothigaiensis Gopalan & Chithra sp. nov. *S. foliosus* T. Anderson affinis, sed foliis integris, margine leviter recurvatis (nec serrulatis); inflorescentia spicata (nec capitata); bracteis externorum non foliaceis (nec foliaceis), ellipticis ad ovatis (nec non ellipticis ad ovatis); bracteolis anguste lanceolatis (nec linearibus); corollarum cylindrico-basibus ventricosum-partibus $\frac{1}{4}$ longis (nec $\frac{1}{2}$ longis); filis in inferi $\frac{2}{3}$ pilosis (nec omnino pilosis) et staminodiis carentibus (nec 2) differt. Typus: India, Kerala, Thiruvananthapuram Distr., *J. Joseph* 44628 (holotypus CAL; isotypi K, MH).

Shrub, to 1.5 m tall; branchlets short, nodes very close; bark brown, lenticellate. Leaves clustered towards tip, opposite, simple; petioles 2 – 8 mm long, rounded beneath, flat or minutely sulcate above; lamina ovate-lanceolate, 1 – 5.7 × 0.4 – 2.5 cm, coriaceous, rugose above, base cuneate to attenuate, entire, margin

slightly recurved, acuminate (acumen up to 8 mm long), penninerved; midrib prominent above; lateral nerves up to 7 pairs, raised beneath, prominent on both surfaces, curved upwards. Inflorescence spicate, terminal or axillary on leafless nodes; peduncles angular, pubescent or puberulent, sulcate; bracts elliptic-ovate, 6 – 8 × 2.5 – 3.5 mm, coriaceous, minutely ciliolate along margin, acute-acuminate; bracteoles 2, narrowly lanceolate, 6 – 8 × 1 – 2 mm, coriaceous, concave, minutely ciliolate along margin, subacute. Flowers zygomorphic, bisexual. Calyx tube campanulate, 3 – 5 mm long; lobes 5 (– 6), unequal, 2 (– 3) short, 3 long, linear-lanceolate, 2 – 6 mm long, obtuse at apex, scabrous, puberulous within. Corolla maroon, tubular or cylindrical-ventricose or campanulate, c. 2 cm long; tube narrowly cylindrical at base (2 – 6 mm long), campanulate or ventricose above (c. 1 cm long), white hirsute without, long white hairy (opposite to stamens) and remaining portion glabrescent-glabrous within; lobes broadly ovate, c. 3 × 3 mm, margin undulate, apex apiculate; nerves prominent from base to apex. Stamens 2, adnate in tubular portion and free in campanulate portion of corolla; filaments up to 12 mm long, flat, dilated on either side, long white dense ciliate from base to middle ($\frac{2}{3}$), glabrous towards apex (2 – 3 mm length); anthers ovoid, c. 3 × 3 mm, 2-loculed, apiculate at apex, dorsifixed. Disc obconical or cupular, c. 1 mm long, glabrous. Ovary superior, oblong-obovoid, c. 1.5 mm long, 2-loculed; ovules 2 in each locule; style filiform, c. 13 mm long, white hairy (glabrous at base in buds), dilated elliptically below stigma; stigma simple, linear, c. 2.5 mm long, bent, undulate on one side. Fruit not seen. Flowering September – December. Fig. 1.

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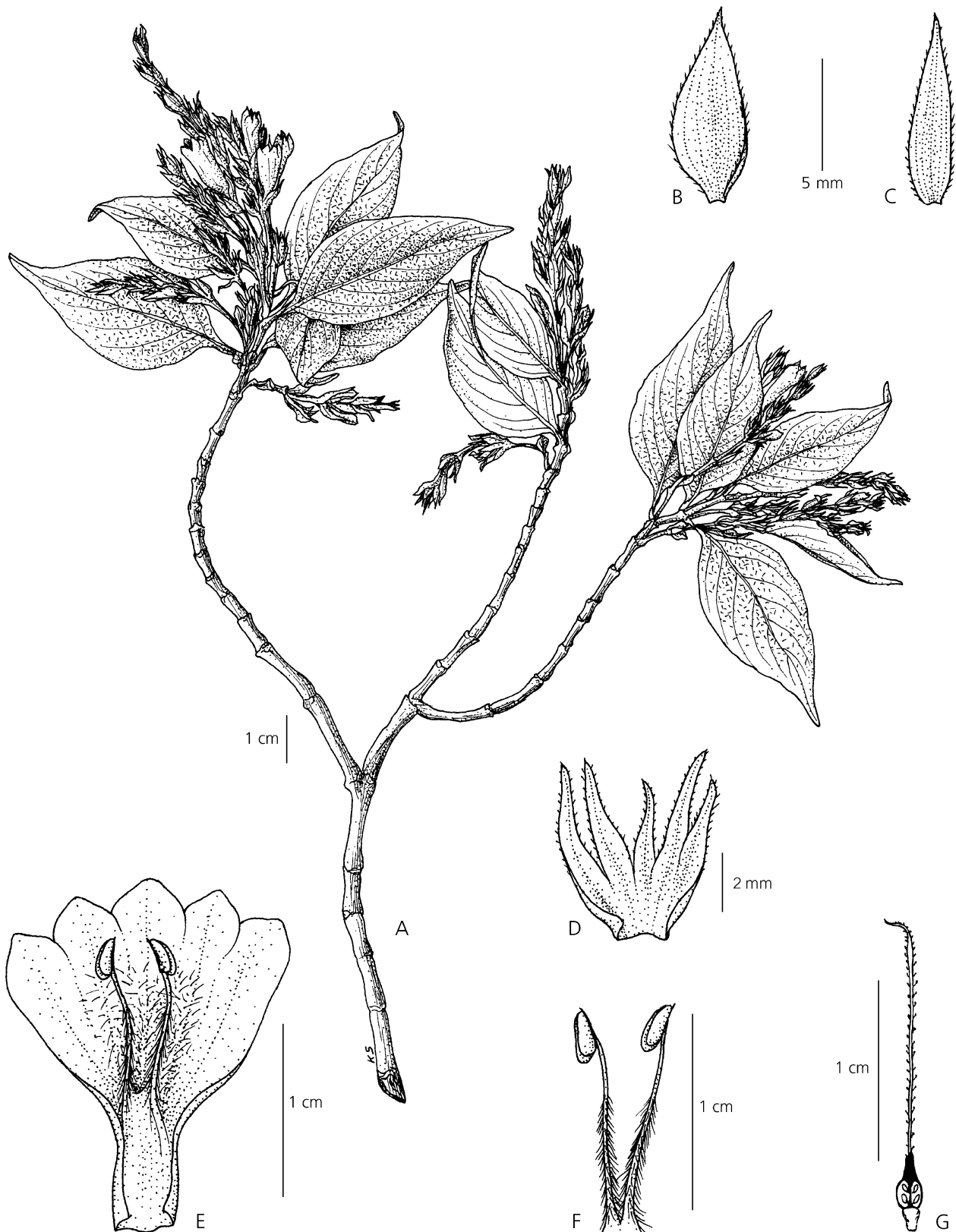


Fig. 1. *Strobilanthes pothigaiensis*. A habit; B bract; C bracteole; D calyx, opened up; E corolla, opened up; F stamens; G pistil (l.s. of ovary). From the type specimen, *J. Joseph* 44628. DRAWN BY K. SIVANANDAN.

Table 1. Comparison of morphological characters between *Strobilanthes pothigaiensis* and *S. foliosus*.

<i>Strobilanthes pothigaiensis</i> sp. nov.	<i>S. foliosus</i> T. Anderson
Leaves entire with slightly recurved margin	Leaves serrulate at margin
Inflorescence spicate	Inflorescence in capitate heads
Outer bracts elliptic-ovate, not foliaceous	Outer bracts foliaceous
Bracteoles narrowly lanceolate	Bracteoles linear
Cylindric base of corolla $\frac{1}{4}$ as much as ventricose portion. Tube narrowly cylindrical at base, 2 – 6 mm long, ventricose portion 10 mm long	Cylindric base of corolla $\frac{1}{2}$ as much as ventricose portion. Tube c. 15 mm long, ventricose portion c. 18 mm long
Filaments $\frac{2}{3}$ hairy; staminodes absent	Filaments hairy throughout; staminodes 2

DISTRIBUTION. Rare, scarcely distributed in the Agasthiyamali hill tops.

INDIA. Kerala, Thiruvananthapuram Distr., southern Western Ghats, Western slopes of Agasthiyamalai (Pothigaimalai), c. 1600 m, 6 Oct. 1973, *J. Joseph* 44628 (holotype CAL; isotypes K, MH).

HABITAT. Along exposed shola forests bordering grassy or rocky slopes; 1600 m.

CONSERVATION STATUS. *Strobilanthes pothigaiensis* distribution is very much restricted and the population is very small. Within its range it is fairly scarce and its habitat is under threat due to the pilgrims visiting to worship ‘Agasthiya Maharishi’ during January to May. It is rated as ‘Critically Endangered’ (CR B1a,D) following the IUCN Criteria (2001).

ETYMOLOGY. The specific epithet *pothigaiensis* refers to Pothigaimalai, an ancient name for Agasthiyamalai as in Old Tamil Sangam Literature from where the species was collected.

NOTES. The new species is allied to *Strobilanthes foliosus* T. Anderson, but differs in several characters outlined in Table 1. It is an extremely rare plant located only once from a very difficult interior area of Western Ghats. Further attempts to relocate it by various collectors have not met with any success. Venu (2006) does not recognise the separate status of *Phlebophyllum* Nees. This view is followed here.

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