

A new species of *Beilschmiedia* (Lauraceae) from the Western Ghats, India

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Beilschmiedia tirunelvelica is described and illustrated as a new species from the Western Ghats of Agasthiyamalai Biosphere Reserve, India. The differences to similar taxa are provided with dichotomous key and table.

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Introduction

Beilschmiedia Nees is a pantropical genus comprised ca 200 species (Kostermans 1995). Among these, eight are found in India (Hooker 1886) and two in Tamil Nadu state. Three species are endemic to India, including the new species described here. During field work (1996-2000) in the Kalakkad-Mundanthurai Tiger Reserve, southern Western Ghats in the state of Tamil Nadu discovered a taxon quite different from the Indian species of *Beilschmiedia* Nees hitherto described was collected. It is described as a new species and named after type locality Tirunelveli hills, one of priority key site for conservation.

Beilschmiedia tirunelvelica V. S Manickam, C. Murugan, G. J. Jothi & V. Sundaresan, sp. nov.

Beilschmiedia zeylanicae (Thwaites) Trimen arte affinis, sed gemmis foliorum lanceolatis non oblongis, foliis basi cuneatis, apice acuminatis, (non basi

et apice acutis); petioles brevioribus, 1-1.5 cm longis (non longioribus, 1.5-2 cm longis), inflorescentiis racemosis, brevioribus, ad 5 cm longis (non grandioribus, paniculatis, ad 10 cm longis); pedunculis brevioribus, ad 5 cm longis (non ad 5 cm longis); pedicellis longioribus, 5-7 mm longis (non 1-2 mm longis); tepalis 4, (non 6); fructibus majoribus, ca 4 cm longis (non 2.5 cm longis) differt. – Fig.1

Type. India: Tamil Nadu, Tirunelveli Distr., Agasthiyamalai Biosphere Reserve, Agasthiar Hills, Poongulam, ca 1400 m, 24 May 1999, V. S. Manickam 19103 (Holotype- MH; Isotypes- XCH).

Tree 3-5 m high; bark smooth, dark brown; terminal bud flattened, enclosed by 2 lanceolate (5-8 mm long) scales, glabrous; internodes 1-8 cm long, terete; branchlets flat, glabrous. Leaves opposite, simple, oblong-lanceolate, 7-12 × 3-5 cm, thinly coriaceous, glabrous, base cuneate, margin entire, apex acuminate; nerves 5-7 pairs, prominent on both sides, arcuate, reticulation prominent; petiole 1-1.5 cm long, glabrous, channeled above. Racemes, supra-axillary, 2-5 cm long, glabrous; peduncles up to

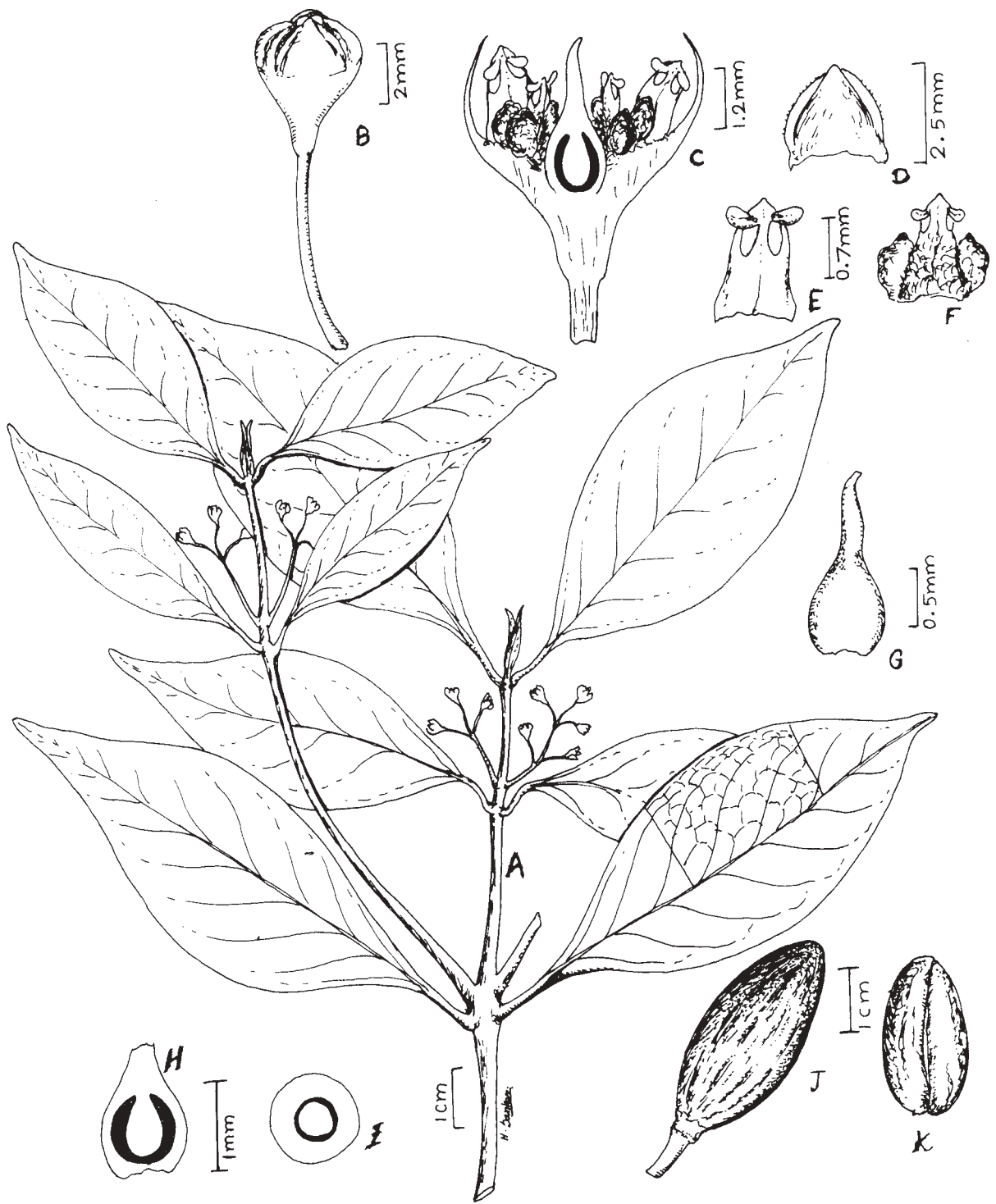


Fig. 1. *Beilschmiedia tirunelvelica* A. Twig. B. Flower bud. C. Flower (l.s.). D. Perianth lobe. E-F. Stamen (Dorsal & Ventral). G. Pistil. H-I. Ovary (l.s. & c.s.) XCH 19103. J. Fruit. K. Cotyledons XCH 18652.

Table 1. Comparison of *Beilschmiedia tirunelvelica* and *B. zeylanica*.

Character state	<i>Beilschmiedia zeylanica</i>	<i>Beilschmiedia tirunelvelica</i>
Terminal bud	elongate, 10 mm long	lanceolate, 5-8 mm long.
Leaves		
Base	acute	cuneate
Apex	acute	acuminate
Petioles	1.5-2 cm long	1-1.5 cm long
Inflorescence	panicles to 10 cm long	racemes to 5 cm long
Peduncles	> 5 cm long	< 1 cm long
Pedicels	1.5-2 mm long	5-7 mm long
Perianth lobes	6	4
Fruits	2-2.5 cm long	ca. 4 cm long

1 cm long. Flowers pale green, 5-6 mm in diam., bisexual, regular; pedicels slender, 5-7 mm long, black when dry. Perianth tube 2-3 mm long, obconical; lobes 4, shallowly lobed, ovate, ca 2.5 mm long, deciduous, margin ciliate, apex obtuse, apiculate. Stamens 4 in 2 whorls; filaments ca 1.5 mm long, flat; anthers 2-celled, introse; staminodes 2, ovoid-cordate, hairy, ca 1.2 mm long. Ovary ovoid, ca 0.5 mm long, glabrous, 1-celled, free from perianth tube; ovule 1, pendulous; style ca 0.75 mm long, slender, articulated, caducous; stigma simple, acute. Drupe oblong, ca 4 × 2 cm, glabrous, pink-purple; cotyledons 2, plano-convex. – Fig. 1.

Flowering and fruiting. March-April.

Ecology. The new species is found in the montane forests at 700-1400 m.

Paratype. India: Tamil Nadu, Kanyakumari Distr., Mahandragiri Hills, on the way to Kailasparvatham, ca 700 m, 26 March 1999, V. S. Manickam 18652 (XCH).

Distribution. Endemic to the Tirunelveli and Kanyakumari Hills; recorded so far only from two localities.

Etymology. The specific epithet named after the Tirunelveli hills southern Western Ghats.

Taxonomic remarks. This new species differs from *Beilschmiedia zeylanica* (Thwaites) Trimen as shown in Table 1 and dichotomous key.

Key to the species of *Beilschmiedia* of India and Sri Lanka

1. Leaves opposite or alternate; terminal buds hairy 2
1. Leaves usually opposite; terminal buds glabrous 5
2. Perianth deeply lobed, segments linear-oblong 3
2. Perianth shallowly lobed, segments ovate *B. brandisii* Hook. f.
3. Leaves opposite *B. sikkimensis* King
3. Leaves sub-opposite 4
4. Flowers subsessile *B. fagifolia* Nees
4. Flowers pedicelled *B. clarkei* Hook. f.
5. Inflorescence racemose *B. tirunelvelica* V. S. Manickam et al.
5. Inflorescence paniculate 6.
6. Terminal buds ovoid *B. gammieana* King
6. Terminal buds lanceolate 7
7. Leaves obtuse at apex *B. zeylanica* (Thwaites) Trimen
7. Leaves obtusely acuminate at apex 8
8. Leaf vines 6-8 pairs *B. wightii* (Nees) Hook. f.
8. Leaf veins 10 pairs *B. assamica* Meissn.

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