

**AN EMENDED DESCRIPTION OF *CINNAMOMUM PALGHATENSIS* GANGOP. (LAURACEAE) AND A NOTE ON ITS DISTRIBUTION IN SOUTHERN INDIA**

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ABSTRACT: The original description of *Cinnamomum palghatensis* Gangop. was based on fruiting material. The present study provides detailed description of the species including floral character as additional information to the protologue and also confirmed its distribution from Palghat to Konkan region of Western Ghats.

Key words: *Cinnamomum palghatensis*, Lauraceae, emended description, extended distribution, Western Ghats, India

INTRODUCTION

The Genus *Cinnamomum* Schaeffer of Lauraceae with 250 species, is distributed from South East Asia to Australia [3]. In India it is represented by 45 species of which 22 species are occurring in Southern India. Among that 16 are remarkably endemic to Southern Western Ghats [2]. Gangopadhyay [1] described *Cinnamomum palghatensis* from a fruiting specimen deposited at Madras Herbarium (MH) of Botanical Survey of India, Southern Regional Circle, Coimbatore (MH 62860) which was collected by Vajravelu in May 1979 from Palakkad (Palghat) District of Kerala, India. During the revision of the genus *Cinnamomum* in Western Ghats, the authors identified several specimens of *Cinnamomum palghatensis* collected from many districts of Northern Kerala and even one in Konkan (Concan) Ghats but were treated under different species of *Cinnamomum* at Madras Herbarium (MH) and Calicut University Herbarium (CALI). Therefore, the description of this species has been emended by adding flowering characters based on new field observations along with the distribution details in southern India. Illustration and other relevant details are provided to facilitate the identification and conservation of this little known species. The species is conserved in the field gene bank of Jawaharlal Nehru Tropical Botanic Garden and Research Institute for further study.

TAXONOMIC TREATMENTS

Type: India. Kerala. Palghat Dist.: Singampatti to Vattapparai, 625 m, 29.05.1979, Vajravelu 62860 (Isotype: MH!)
Trees, 15 - 25 m tall; branchlets slender. Leaves linear to linear-lanceolate, 11 - 35 x 2.4 - 4.3 cm, stiffly coriaceous, paler beneath, base acute, margin undulate, apex acute to obtuse; lateral nerves starting from 1 - 3 cm above the base at different levels and reaching nearly 4 cm below the apex, merging into the margin, prominent above, raised below; secondary nerves parallel, 1 mm apart, prominent; petioles to 2 cm long, slender. Inflorescence axillary, extra axillary or pseudoterminal, 8 - 14 cm long, slender, angular, branched with 2 - 3 branches, each branch with 4-6 flowered; pedicel slender. Flowers 0.9 - 1 cm long, densely brown or rusty pubescent; perianth of 6 tepals in 2 rows of 3 each; tepals orbicular, ca. 2 mm long, obtuse at apex, densely fulvous pubescent, thick, fleshy and glandular. Stamens 9 in 3 whorls of 3 each; whorls 1st & 2nd with anthers ca. 1.8 mm long, 4-celled, fleshy, introrse; filaments sericeous, as long as the anthers; anthers of 3rd whorl ca. 2 mm long, 2-celled, glands large, attached to the middle of the filaments, shortly stipitate, extrorse; staminodes ca. 1.5 mm long, hastate, stipes with dense hairs on either side. Ovary ellipsoid, ca. 1.5 mm long; style 1 mm; stigma peltate. Fruit oblong, ca. 1.6 cm long; cupule cup shaped, large, 2.4 cm high, 2.8 cm wide, shallow, ribbed, thick, which bears broad bases of withered tepals, pubescent within. Seeds ribbed (Fig. 1).

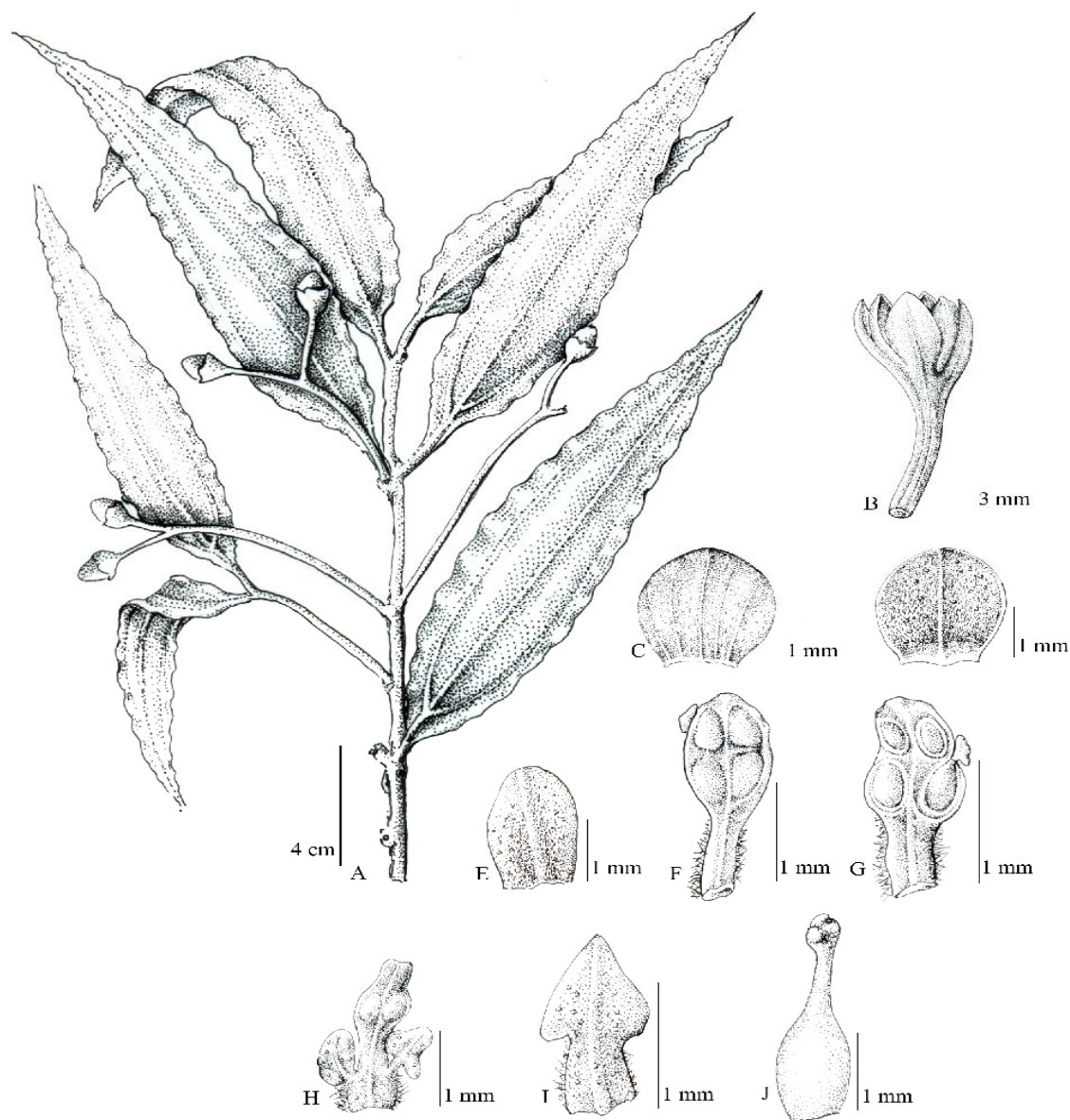


Fig. 1. *Cinnamomum palghatense* Gangop. A. A twig; B. Flower; C - E. Tepals; F- H. Stamens; I. Staminode; J. Pistil.

Flowering and Fruiting: September to June.

Distribution: India, Western Ghats of Karnataka, Kerala and Tamil Nadu. Sparsely distributed in the evergreen forests at an altitude between 625-1000 m.

Note: The first collection of specimens of this species dates back to 1887 and 1903 from Konkan (Concan) region presently under the political boundary of Karnataka and from Tambracheri ghat, Kozhikode district of Kerala by two unknown collectors respectively and remained unrecognized more than a decade. Gangopadhyay [1] recognized this species based on collection of Vajravelu from Palghat and reported as endemic to type locality. Now the present study confirmed that this species occur in Southern Western Ghats which fall under Karnataka, Kerala and Tamil Nadu. The additional information on the extent of occurrence forms a new distributional records to the flora of Karnataka and Tamil Nadu. The species is easily distinguished by the leaves with undulate margin, glands in the floral parts and ribbed seeds.

Specimens examined: India. Karnataka, Concan Ghat, 20.07.1887 *s.coll.*, *s.n.* (MH Acc. No. 44460); Chickmagalur Dist., Mudigiri, ± 914 m 31.08.2013, Geethakumary. 75883 (TBGT). Kerala, Kannur Dist., Nedumpoil pass, ± 672 m, 11.10.2012, Geethakumary 74931 (TBGT); Kozhikode Dist., Tambracheri ghat, *s.coll.*, *s.n.* 1903 (MH Acc. No. 44462); Malappuram Dist., Philip Mathew 33752 (id. as *C. riparium*) (CALI); Nadugani, ±500m, 7.11.2012, Geethakumary 75224 (TBGT); Palghat Dist., Kannikatty to Pothundy, 725 m., 28.02.1975, E. Vajravelu 45798 (MH); Singampatti to Vattaparai, 625 m, 29.05.1979, Vajravelu 62860 (MH); Walayar, 21.11.1979, Shylaja 26213 (id. as *C. verum*) (CALI); Silent Valley ±875 m, 6.11.2012, Geethakumary 74969 (TBGT); Tamil Nadu, way to Gudallur, ±625 m, 07.11.2012, Geethakumary 75282 (TBGT).

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