



Litsea udayanii (Lauraceae): A new species from the southern Western Ghats, India

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Abstract

Litsea udayanii, a new species of Lauraceae from the Anamalai phytogeographical zone of southern Western Ghats is described and illustrated here. The new species resembles *L. cubeba* in its clustered inflorescence and *L. beddomei* in fruits. *Litsea udayanii* differs from *L. cubeba* by its coriaceous leaves, 12 staminodes in the female flowers, ellipsoid fruits, and an enlarged and cup-shaped perianth tube; it differs from *L. beddomei* by its elliptic-oblong leaves with cuneate to rounded base and abaxially prominent tertiary veins, and by its clustered inflorescence. In contrast, *L. cubeba* is characterized by chartaceous leaves, 8–9 staminodes in the female flowers, subglobose fruits, and a small and flattened perianth tube and *L. beddomei* is distinguished by linear-oblong leaves with acute to attenuate base and abaxially inconspicuous tertiary veins, and by inflorescences arranged on 1–5 cm long brachyblasts.

Keywords: Anamalai, Kerala, new species, Western Ghats

Introduction

The genus *Litsea* Lam. (1792: 399) was originally established by Lamarck in 1792. It is one of the largest genera in the family Lauraceae, the species of which form an important component of tropical forests. It comprises ca. 300 species, distributed mostly in tropical Asia but with a few species in the islands of the Pacific, Australia and in North and Central America (Van der Werff, 2001; Van der Werff & Richter, 1996). Comprehensive studies regarding the number and distribution of Indian *Litsea* species were carried out by Hooker (1886) and Gamble (1925). About 45 species were recorded from India and the genus shows maximum diversity in the northeastern states (Arunachal Pradesh, Meghalaya, Sikkim etc.); furthermore it is well represented in Peninsular India (Bhuniya *et al.* 2009, 2010). Twenty-one species of *Litsea* were recorded from South India, of these 17 are endemic to South India (Robi & Udayan, 2013). Ganesan (2011) described one new species from southern Western Ghats and substantiates that the area is rich in *Litsea* species diversity.

During the course of floristic exploration along the Western Ghats of South India, the authors collected specimens of *Litsea*. On closer examination the specimen collected from Anamalai hills turned out to be an undescribed taxon, resembling the widespread *L. cubeba* (Loureiro, 1790: 252) Persoon (1806: 4). After scrutiny of literature and type sheet, it is confirmed that the above *Litsea* is new to science. It is distributed chiefly in Anamalai phytogeographical zone (Figure 3)—Karimalagapuram (Palakkad dist.), Pambadum shola, and Eravikulam NP (Idukki dist.).

Key to the South Indian species of *Litsea*.

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| 1. | Umbels born on 0.5–1 cm long brachyblasts | 2 |
| - | Umbels born on 1–10 cm long brachyblasts | 15 |
| 2 | Umbels sessile or subsessile, clustered | 3 |
| - | Umbels pedunculate, solitary or rarely clustered | 7 |
| 3 | Leaves opposite, fulvous-pubescent below | <i>L. travancorica</i> |
| - | Leaves alternate, pubescent or glabrous below | 4 |
| 4 | Secondary veins 12–18 pairs; lamina fulvous-pubescent, impressinerved; perianth cup sessile or short stalked | <i>L. bourdillonii</i> |