



RESEARCH ARTICLE

Typification of *Litsea deccanensis* (Lauraceae), a replacement name for Nees' *Tetranthera tomentosa*

Anand Kumar¹, Partha Pratim Ghoshal¹ & Tapas Chakrabarty^{2*}

¹Central National Herbarium, Botanical Survey of India, Botanic Garden, Howrah – 711 103, West Bengal, India.

²4, Botanical Garden Lane, Howrah – 711 103, West Bengal, India.

*Email: tchakrab@gmail.com

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Abstract

Litsea deccanensis Gamble, treated by different authors as synonyms of different names, has been recognized here as a distinct species occurring in peninsular India and Sri Lanka. Its replaced name, *Tetranthera tomentosa* Nees, has been lectotypified for unambiguous use of the name.

Keywords

Taxonomy; lectotypification; reinstatement; Sri Lanka; India

Introduction

The genus *Litsea* Lam., with about 350 species, is distributed in tropical Asia, Australia, the western Pacific and North and Central America (1). According to POWO (2), the genus includes 392 accepted species. During our ongoing studies on the Indian Lauraceae, it was found that *Litsea deccanensis* Gamble (3) was first published in the 7th part of *Flora of the Presidency of Madras*. Gamble (3) reported "LITSEA DECCANENSIS, Gamble n. comb. *L. tomentosa*, Heyne; F. B. I. v. 157. *Tetranthera tomentosa*, Roxb.; Wt. Ic. t. 1834"; by including the abbreviation "n. comb.", the author would propose a new combination, but no basionym was reported. The binomials "*L. tomentosa*" and "*Tetranthera tomentosa*" refer, respectively, to *Litsea tomentosa* B. Heyne ex Hook. f. (in Hooker filius [4]) [a later homonym of *L. tomentosa* Blume (1886 vs. 1826) and, therefore, illegitimate under the Art. 53.1 of ICN (5)] and *Tetranthera tomentosa* Roxb. ex Nees (in the 5th volume of *Icones plantarum Indiae Orientalis* by Wight [6]). So, Gamble's *Litsea deccanensis* is a *nomen novum* as per Art. 6.11 (5) pro *Tetranthera tomentosa non L. tomentosa* Blume [and not a new combination as originally stated by Gamble (3)].

Concerning *Litsea tomentosa*, it may be noted that POWO (2) authored this name as *Litsea tomentosa* (Nees) B. Heyne ex Hook. f. Although one may argue that Hooker filius (4) had transferred the name *Tetranthera tomentosa* Nees (7) to *Litsea*, it is to be noted that Hooker filius (4) had implicitly excluded the type of Nees' *T. tomentosa* from *L. tomentosa* Hook. f. by citing Nees's name as synonym of *L. sebifera* Pers. var. *tomentosa* (Nees) Hook. f. (4); so, *L. tomentosa* Hook. f. is not a combination based on the Nees' name, contrary to POWO (2) and it should be cited as *Litsea tomentosa* B. Heyne ex Hook. f.

As regards the second synonym cited by Gamble (3), "*Tetranthera tomentosa* Roxb.; Wt. Ic. t. 1834", Wight used a simplified system of referring to authors and as Nees von Esenbeck (7) published his name as "*Tetranthera tomentosa* Roxb.", Wight followed and cited the same and thus he was actually referring to the name published by Nees von Esenbeck (7). Hence the name *Litsea deccanensis* Gamble is to be treated as a replacement name of *Tetranthera tomentosa* Nees under the genus *Litsea*.

Kostermans (8) designated a lectotype of *Litsea deccanensis* based on a Wight's collection (No. 2531) from peninsular India at Kew (K barcode K000793170, digital image!). However, this cannot be considered as part of the original material for *Litsea deccanensis* since this name replaces Nees's *Tetranthera tomentosa* and, as a consequence, the type of *L. deccanensis* (Art. 7.4 [5]). Nees (7) cited in the protologue: "*Tetranthera tomentosa* Roxb. Wall. Cat. n. 2550, A, B, C, D. *Litsea tomentosa* Hb. Heyn. *T. japonica* ♀ Hb. Wight." We traced the corresponding specimens at BM, CAL, E, G-DC, GZU, K, L, MEL and P. The duplicates of *Wallich* 2550 C at GZU (barcode GZU000254558 – right hand side specimen, digital image!) and K-W (barcode K001116407, digital image!) are sterile specimens collected from Sirmore by Kamroop (a collector) and they evidently belong to some other species. Looking back at Nees's holdings at GZU, we found three specimens of original material, and here designate the good male flowering plant (2550 A) as the lectotype of the name; it agrees well with the protologue and bears identification: "*Tetranthera tomentosa* Roxb."

Hooker filius (4) cited in the protologue of *L. tomentosa*: "*Herb. Heyne, ex Wall. Cat. 2550;*" and additionally cited: "*Tetranthera tomentosa, Roxb. ex Wall. Cat. l. c. A, B;*". As Hooker (4) had not cited all the syntypes under his *L. tomentosa*, it was not homotypic with *Tetranthera tomentosa* Roxb. ex Nees when described. However, as the Hooker's herbarium at Kew contains a good specimen, collected by *Benjamin Heyne in Wallich No. 2550 A* (K barcode K000793168) which is an original material, the same is chosen here as the lectotype; whereby both the names hereby rendered homotypic.

Materials and Methods

The present investigation is based on the study of herbarium specimens (and their digital images) and literature (1-10). The following herbaria were consulted: BM, CAL, CGE, E, G, GZU, K, L, MEL and P.

Results

Lectotypification

Litsea deccanensis Gamble, Fl. Madras, Pt. 7, 1235. 1925.

Tetranthera tomentosa Roxb. ex Nees in Wall., Pl. Asiat. Rar. 2: 65. 1831.

Litsea sebifera Pers. var. *tomentosa* (Roxb. ex Nees) Hook.f., Fl. Brit. India 5: 158. 1886.

Lectotype (designated here): India, without locality and date, *B. Heyne in Wallich, Numerical List No. 2550A* (GZU barcode GZU000254561, digital image!, **Fig. 1**; isolectotypes BM barcode BM000793892, digital image!, CAL barcode CAL0000073548!, CGE barcodes CGE00085153, CGE00085156, G-DC barcodes G00694347, G00694348, K barcode K000793168, K-W barcode K001116405, digital images!).

= *Litsea tomentosa* B. Heyne ex Hook.f., Fl. Brit. India 5: 157. 1886, *nom. illeg., non* Blume (1826).

Lectotype (designated here): India, without locality, 1810, *B. Heyne in Wallich, Numerical List No. 2550A* (K barcode K000793168, digital image!).

Additional syntypes for *Litsea deccanensis*: India, without locality and date, *R. Wight in Wallich Numerical List No. 2550B* (BM barcode BM000951035, digital image!, CAL barcodes CAL0000073549!, CAL0000073550!, CGE barcodes CGE00085154, CGE00085155, E barcodes E00293203, E00393204, G-DC barcode G00694358, GZU barcode GZU000254560, K-W barcode K001116406, L barcode L0036667, digital images!, LE, n.v., MEL barcode MEL582448, digital image!, OXF barcode OXF001469130, n.v., P barcode P01976474, digital image!). India, without locality and date, *Wallich 2550 D* (GZU barcode GZU000254558 – left hand side specimen, digital image!).

Notes: Kostermans (9) reduced *L. deccanensis* to a synonym of *L. quinqueflora* (Dennst.) Suresh which is, however, a quite distinct species, clearly differing from *L. deccanensis* by the glabrous leaves with very prominent minor venation on both surfaces. Gangopadhyay *et al.* (10) treated *L. deccanensis* twice, once as a synonym of *L. ligustrina* (Nees) Fern.-Vill. (p. 441) and again as a synonym of *L. quinqueflora* (p. 442); the former being a synonym of the latter.

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Author's contributions

All authors have equally contributed in the planning of the research and preparation of manuscript.

Compliance with ethical standards

Conflict of interest: The authors declared that they have no conflict of interest.

Ethical issues: None.

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Figure 1. Lectotype of *Tetranthera tomentosa* Nees (GZU000254561).

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