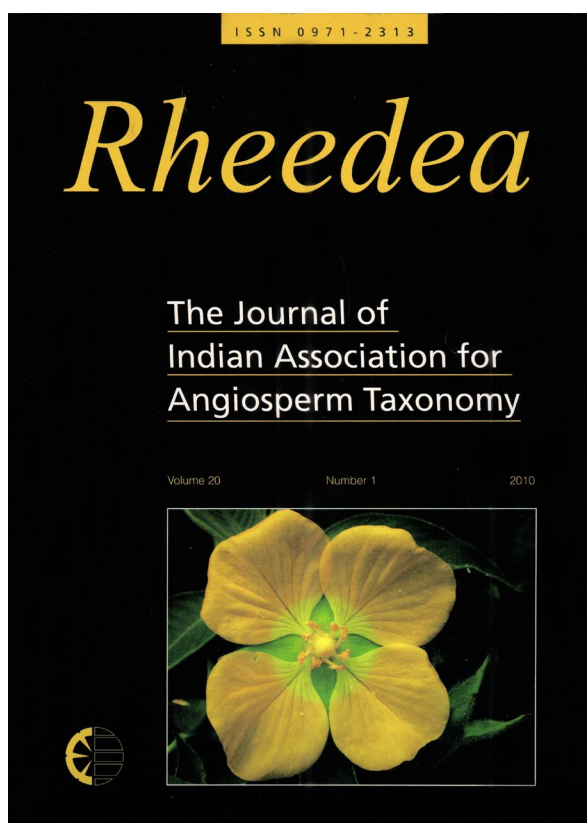




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Predeep S.V. & A.P. Balan



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## *Dalbergia sericea* (Leguminosae – Papilionoideae): A new record of introduction in Southern India

S.V. Predeep\* and A.P. Balan

Department of Botany, S.V.R.N.S.S. College, T.P. Puram P.O., Vazhoor, Kottayam – 686 505, Kerala, India.

\*E-mail: predeepsv@yahoo.com

### Abstract

*Dalbergia sericea* G. Don known so far from the Himalayas of India, Bhutan and Nepal is reported for the first time for Southern India from Kerala. A detailed description, illustration and relevant notes are provided.

**Keywords:** *Dalbergia sericea*, Kerala, New record, Southern India

### Introduction

While exploring the Legume Flora of Kerala, the authors came across an interesting specimen of *Dalbergia* collected near Munnar, Idukki district, Kerala. The species resembles *D. lanceolaria* L.f. but differs in fruits being distinctly narrow and smaller in size. After critical studies and consultation with specimens deposited at CAL, it is identified as *D. sericea* G. Don, a native of the Himalayas, North-eastern India and Bhutan (Thothathri, 1987). This species is distributed in Arunachal Pradesh, Assam, Meghalaya, Rajasthan, Sikkim, Uttar Pradesh and West Bengal in India as well as in Nepal and Bhutan (Sanjappa, 1992). This species might have been introduced as a shade tree in the coffee plantations of Munnar during the British rule and is now naturalized around Munnar, particularly on roadsides between Munnar and Marayoor, forming the most dominant *Dalbergia* species in this route. The report of its occurrence in Kerala is the first record to the Southern India. A detailed description, illustration and relevant notes are provided to facilitate its easy identification in the field.

***Dalbergia sericea*** G. Don, Syst. 2: 375. 1832; Prain in J. Asiat. Soc. Bengal 70: 51. 1901; Duthie, Fl. Upper Gangetic Plain 1(1): 265. 1903; Prain, Bengal Pl. 1: 410. 1903 & in Ann. Roy. Bot. Gard. 10(1): 85. 1904; Brandis, Indian Trees: 237. 1907; Thothathri, Tax. Rev. Dalberg.: 160. 1987. *D. hircina* Buch.-Ham. [in Wallich, Cat.: 5871B. 1832, nom. nud.] ex Benth. in Miquel, Pl. Jungh. 1: 256. 1852 & in J. Linn. Soc., Bot. 4 (Suppl.): 46. 1860; Brandis, Forest Fl. N.W. India: 151. 1874; Baker in Hooker, Fl. Brit. India 2: 236. 1876. *D. stenocarpa* Kurz in J. Asiat. Soc. Bengal

44: 205. 1875; Baker in Hooker, Fl. Brit. India 2: 238. 1876; Gamble, Darjeeling List: 29. 1878. **Fig. 1**

Medium to large-sized trees, 40 – 60 m tall; trunk up to 2 m at gbh; young shoots silky-tomentose. Leaves imparipinnate, alternate, 14 – 22 cm long; leaflets 13 – 21, alternate, ovate-oblong, 1.5 – 4.2 × 1.4 – 2.3 cm, obtuse-cuneate at base, obtuse-retuse with a minute mucro at apex, chartaceous, densely adpressed silky-pubescent, glabrescent with age; lateral nerves 8 – 10 pairs, obscure; rachis 10 – 20 cm long, including 1.5 – 3 cm long petiole, silky-pubescent; petiolules 2 – 3 mm long, densely pubescent; stipules caducous. Panicle 3 – 4(–5) cm long, axillary, dense-flowered, silky-pubescent; peduncle c. 1.5 cm long; bracts ovate, minute, pubescent outside; bracteoles linear-oblong, 1 – 1.5 mm long, pubescent outside, caducous. Flowers c. 5 mm long, white, tinged with blue; pedicels 2 – 3 mm long, pubescent. Calyx campanulate, densely silky-pubescent outside; tube c. 1 mm long, 5-lobed; upper 2 lobes connate at base up to 3/4th; lateral lobes ovate, c. 1 × 1 mm, subacute; lowest lobe lanceolate, c. 1.5 mm long. Standard orbicular, c. 4.5 mm, thickened near claw; claw c. 1 mm long; wings oblong, c. 3 × 1.25 mm, shortly auricled; claw c. 1.25 mm long, slender; keels obliquely ovate, c. 3 × 2 mm, shortly auricled; claw c. 1 mm long. Stamens 10, diadelphous; staminal sheath c. 3 mm long; filaments alternately long (c. 2.5 mm) and short (c. 1.5 mm); anthers ovoid, c. 0.2 mm long. Ovary oblong, c. 3 × 1 mm, silky-pubescent; ovules 2 – 5, on marginal placenta; stipe c. 1 mm long; style 1 – 1.2 mm long, up curved, glabrous;

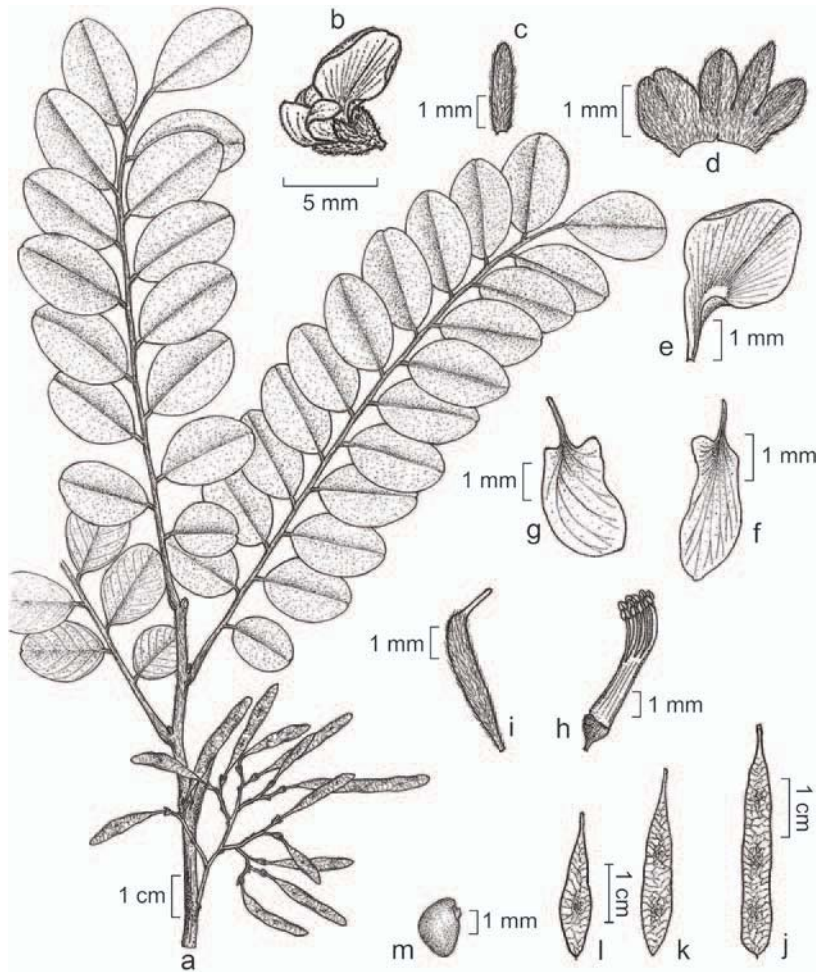


Fig. 1. *Dalbergia sericea* G. Don: a. Habit; b. Flower; c. Bracteole; d. Calyx; e. Standard; f. Wing; g. Keel; h. Androecium; i. Pistil; j, k, l. Fruits; m. Seed.

stigma simple. Pods elliptic-oblong or oblong, 2.2 – 6 × 0.5 – 0.7 cm, acute-obtuse at apex, tapering towards base into a 3 – 4 mm long slender stalk, flat, glabrous, reticulately nerved especially on seed portion; seeds 1 – 3(– 5), subreniform, c. 3.5 × 2.5 mm, compressed, chocolate-brown.

*Flowering:* February – April; *Fruiting:* June – September.

*Habitat:* Along slopes of mountains at 1400 – 1600 m.

*Distribution:* India (Arunachal Pradesh, Assam, Meghalaya, Rajasthan (Mt. Abu), Sikkim, Uttarakhand and West Bengal), Bhutan and Nepal.

*Specimens examined:* INDIA, **Kerala**, Idukki district, Munnar, 23.10.2007, S.V. Predeep & A.P. Balan 20277 (CAL, MH, KFRI). **Sikkim**, Sikkim Terai, Sivoke, s. die, S. Kurz s.n.; Sikkim, without precise locality, August 1878, Gamble s.n. (CAL – Acc. No. 131090, type of *D. stenocarpa* Kurz); Mungpoo, May 1900, Dr. Prain's Coll. s.n. (CAL). **West Bengal**,

Darjeeling, 26.5.1884, C.B. Clarke 35535-C (CAL). N.W. India, 1892, J.F. Duthie 2322 (CAL).

*Notes:* The habit of this tree is referred to as a shrub or a medium-sized tree by some workers (Baker, 1876; Brandis, 1907; Thothathri, 1987). Notes on some herbarium sheets at CAL also record the same observation. However, our field observation of the Munnar plants shows it to be a very large tree attaining c. 60 m height and trunk c. 2 m at gbh. This indicates a north-south difference in growth pattern.

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