



Glochidion zeylanicum var. *arborescens* (Phyllanthaceae): A new distributional record for South India

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Abstract: *Glochidion zeylanicum* var. *arborescens* (Blume) Chakrab. & M. Gangop. (Phyllanthaceae), a native of Southeast Asia, which was hitherto recorded from Andaman & Nicobar Islands, Northeast India (Arunachal Pradesh, Assam and Mizoram) and Odisha, is reported for the first time from the Seshachalam Biosphere Reserve of Andhra Pradesh. Detailed description and photo plate are provided for easy identification.

Key words: Andhra Pradesh; *Glochidion*; Phyllanthaceae; Seshachalam Biosphere Reserve; South India

Introduction

The genus *Glochidion* J. R. Forst & G. Forst. is represented by ca. 320 species distributed in tropical Asia to Northern Australia and Polynesia, a few species in Madagascar and tropical America (Chakrabarty & Gangopadhyay, 1995, 2012; Balakrishnan & Chakrabarty 2007). In India, the genus is represented by ca. 22 species and 8 varieties, of which 3 species and one variety are reported from Andhra Pradesh (Babu, 1997; Chakrabarty & Gangopadhyay, 1995, 2012). Recently, one new species was described from the Seshachalam Hills (Rasingam *et al*, 2014). The Seshachalam hills spread in Chittoor and Kadapa districts of Andhra Pradesh were declared as Biosphere Reserve by Government of India in the year 2010. The Reserve lies between the latitudes of 13° 38" and 13° 55" N and the longitudes of 79° 07" and 79° 24" E with an area of ca. 4755.99 km². The hill ranges vary in elevation from 400 to 1370 m with an average altitude of 700 m above msl. This phytogeographic region is floristically rich with ca. 1756 species of flowering plants (Sudhakar, 2012). While exploring the flora of Talakona area of Seshachalam Biosphere Reserve, one of the authors was collected *Glochidion* species. A critical analysis of protologue and relevant taxonomic literature revealed that the species is *Glochidion zeylanicum* var. *arborescens* (Blume) Chakrab. & M. Gangop.; therefore, the present collection establishes a new distributional record for the flora of South India. Detailed description and a photo plate (Fig. 1) are provided for facilitating easy identification.

Taxonomic treatment

Glochidion zeylanicum* var. *arborescens (Blume) Chakrab. & M. Gangop., J. Econ. Taxon. Bot. 19: 228.1995; Chakrab. & M. Gangop. in Fl. Ind. 23: 430. 2012. *Glochidion arborescens* Blume, Bijdr. Fl. Ned. Ind. 584. 1826; Kanjilal *et al*, Fl. Assam 4:188. 1940. *Phyllanthus arborescens* (Blume) Müll.Arg. in Flora 48: 370.1865 & in DC., Prodr. 15(2): 279. 1866. *Glochidion hirsutum* auct. non (Roxb.) Voigt, 1845: S. Panda & A.P. Das in J. Bombay Nat. Hist. Soc. 88: 469. 1992; *Glochidion sclerophyllum* Hook. f., Fl. Brit. India 5: 313. 1887, *p.p.*

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Trees, up to 15 m high; branches spreading, terete, greenish-brown, densely pubescent. Leaves 5-13 x 3-5.5 cm, oblong, elliptic, elliptic-lanceolate, ovate-oblong or suborbicular, asymmetric, obtuse or rounded at base, entire along margin, apiculate-acuminate at apex, glabrescent on upper surface, densely pubescent on lower surface, more prominent on veins, coriaceous; lateral nerves 6-8 pairs; petiole ca. 4 mm long, pubescent. Inflorescences axillary, sessile, fascicled, male and female flowers mixed or in separate fascicles, densely pubescent. Male flowers: up to 6 in each fascicle, pale green; pedicels 4-10 mm long, filiform, pubescent; tepals 3+3, free, oblong or ovate, 1-2.5 x 0.6-2 mm, unequal, spreading and recurved; stamens 5, anthers connate, ca. 1.5 mm long. Female flowers: 1-7 in each fascicle, pale green; bracts triangular, ca. 1.5 mm long; pedicels 2-6 mm long, pubescent; tepals 3+3, ovate, oblong or deltoid, ca. 1.5 x 0.5 mm, pubescent without, glabrous and glaucous within; gynoecium ca. 1.2 mm long, ovary subglobose, 0.8-1 x 0.6-0.8 mm, pubescent; styles free, linear, 0.2-0.3 mm long, glabrous, connivent to erect or united and columnar conical to clavate, ca. 1.5 mm long; apical lobes 4-5, suborbicular. Fruits capsular, depressed-globose, 3.5-4 x 5-7 mm, 8-seeded; seeds ca. 3 x 2 mm, glabrous.

Flowering & Fruiting: April-December.

Habitat: Occasional along waterfalls in moist deciduous forests.

Distribution: World: Bangladesh, Banka, Borneo, Java, Malay Peninsula, Myanmar and Thailand; INDIA: Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Mizoram, Odisha, West Bengal and now reported from Andhra Pradesh.

Specimens studied: INDIA: Andhra Pradesh, Talakona (13° 48'43.7" N & 79° 13' 05.5" E), 852 m, Seshachalam Biosphere Reserve, Chittoor district, 09.09.2014, P.V. Prasanna and Sankara Rao 4332 (BSID).

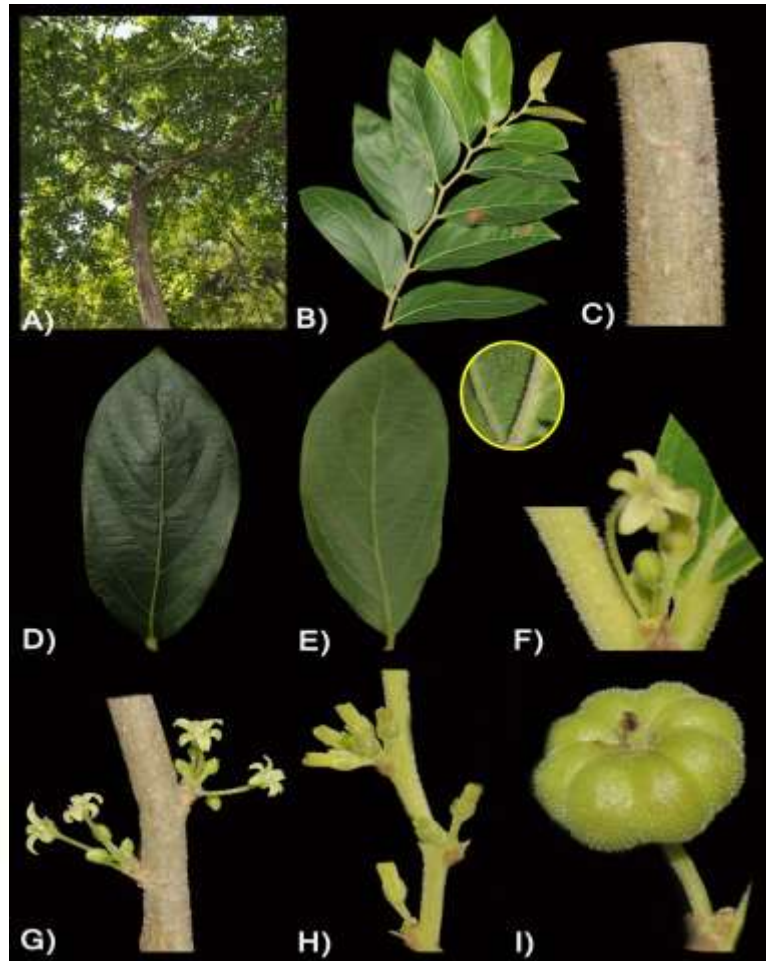


Figure 1: *Glochidion zeylanicum* var. *arborescens* **A.** Habit; **B.** Branch; **C.** Part of branch; **D-E.** Adaxial and abaxial view of leaves; **F.** Inflorescence (mixed); **G.** Male inflorescence; **H.** Female inflorescence; **I.** Fruit.

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