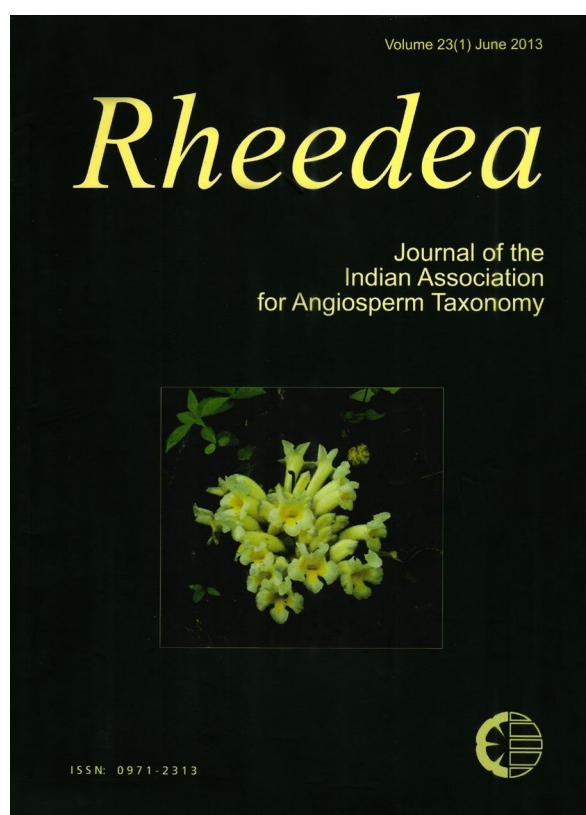




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# Rediscovery of an endemic and rare *Premna paucinervis* (Verbenaceae) from the Western Ghats after a century

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## Abstract

*Premna paucinervis* (C.B. Clarke) Gamble is endemic to the Southern Western Ghats. It has been rediscovered after type collection from the Wagamon hills along the Western Ghats of Kerala after a lapse of 140 years and describing the hitherto unknown fruits. A detailed taxonomic description and color photographs of the species are provided.

**Keywords:** *Premna paucinervis*, Rediscovery, Southern Western Ghats, Verbenaceae.

## Introduction:

The genus *Premna* L. with c. 200 species worldwide and is distributed chiefly in Tropical and Subtropical Asia, Africa, Australia and the Pacific Islands (Harley *et al.*, 2004). In India, it is represented by 31 species and 6 varieties (Rajendran & Daniel, 2002). During the botanical survey in Wagamon forest areas in southern Kerala, a *Premna* plant was collected which is distinct from the other *Premna* spp. reported from the Western Ghats. Further study identified this to be *Premna paucinervis* (C.B. Clarke) Gamble, which was never collected after 1872 (Rajendran & Daniel, 1994). *P. paucinervis* was first collected by R.H. Beddome (1872) from Anamalais, Western Ghats (Tamil Nadu) and treated under *Premna purpurascens* Thwaites. Clarke (1885) considered this as *P. purpurascens* Thwaites var. *paucinervis* but later, Gamble (1924) treated this as a distinct species and named it as *P. paucinervis*.

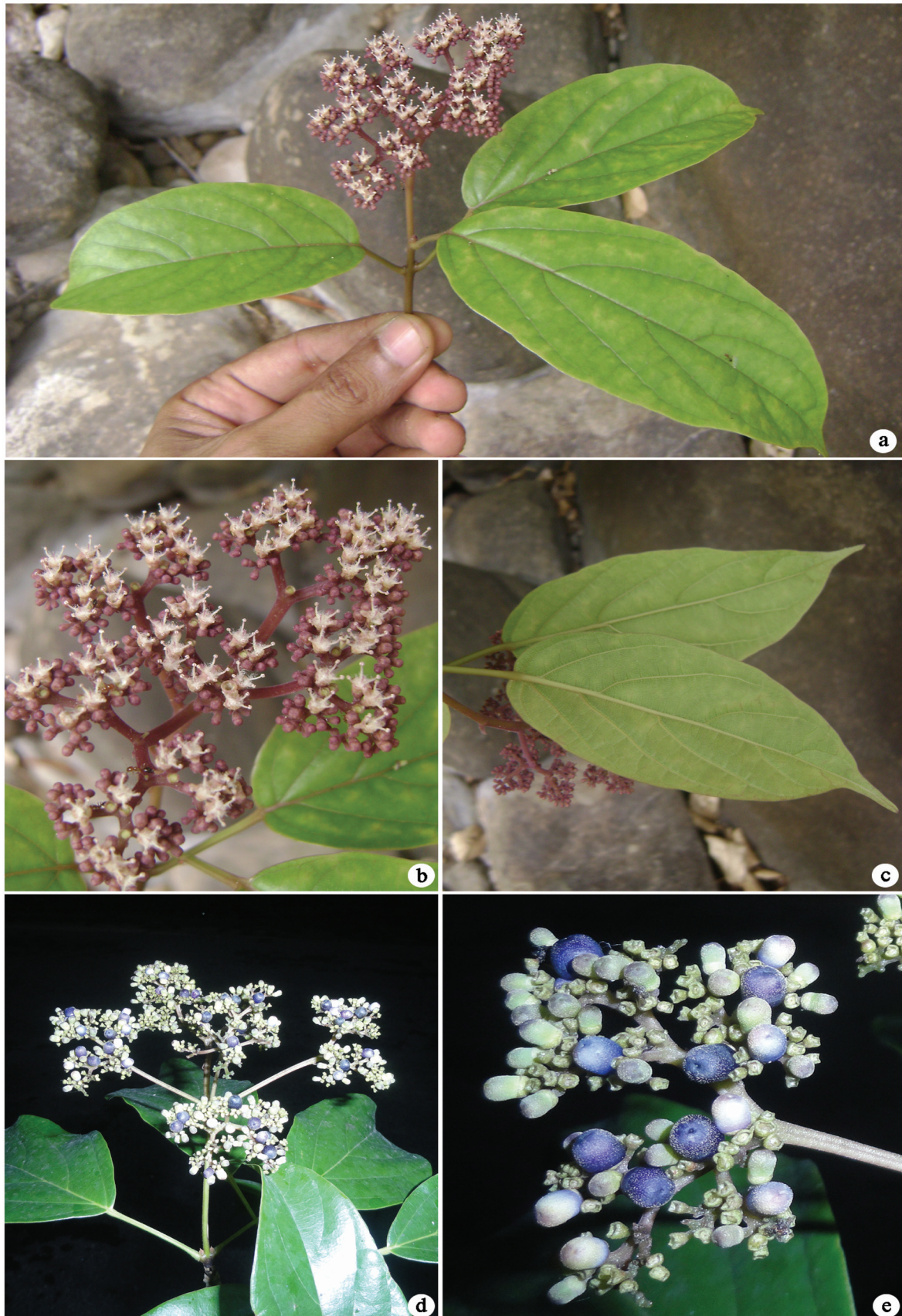
The present collection, made from Wagamon forest area of Kottayam district is a rediscovery of this endemic plant, outside its type locality, after a lapse of 140 years. After critical examination and further comparison with the original description and type specimen available at K (280, Holotype!) and MH (Acc. No. 39876!), its identity has been confirmed as *Premna paucinervis*. The voucher specimens are housed at Kerala Forest Research Institute (KFRI) herbarium. A description based on fresh specimens is given for easy identification.

***Premna paucinervis*** (C.B. Clarke) Gamble, Fl. Pres. Madras 1095. 1924; A.N. Henry *et al.*, J. Bombay Nat. Hist. Soc. 79: 693. 1979; Moldenke, Phytologia Mem. II: 264. 1980; Vajr. & P. Daniel in Jain & Sastry, Mat. Cat. Threat. Pl. India 31. 1983; Ahmedullah & Nayar, Endem. Pl. Indian Region 1: 133. 1987; Sriniv. in A.N. Henry *et al.*, Fl. Tamil Nadu 2: 167. 1987; Rajendran & P. Daniel, Indian Verbenaceae 267. 2002. *Premna purpurascens* Thw. var. *paucinervis* Clarke in Hook. f., Fl. Brit. India 4: 574. 1885. *Typus*:—INDIA, **Kerala**, Anamalais, 3000, June 1872, R.H. Beddome 280 (Holotypus, K). *Premna purpurascens* sensu Beddome, Fl. Sylv. S. India 173. 1872, non Thwaites 1861; C.E.C. Fischer in Rec. Bot. Surv. India 9 (1): 140. 1921.

**Fig.1**

Epiphytic climber (sometimes lithophytic); stem terete, glabrous and lenticellate; branchlets subterete, dark brown, young parts sparsely pubescent, with raised circular or semi-circular leaf scars. Leaves opposite-decussate, lamina chartaceous, ovate, elliptic-oblong, 4–17 × 4–7.5 cm, acute to obtuse at base, entire to slightly repand at margins, abruptly acuminate at apex, membranous, glabrous on both surfaces, minutely puberulous on nerves beneath, pungent smell when bruised; lateral nerves 4–6 pairs, prominent beneath, marginally looped, nervules reticulate; petioles slender, 2–4.5 cm long, slightly swollen at both ends (visible only in live specimens), adaxially channeled, puberulous, glabrous when mature.





**Fig. 1** *Premna paucinervis*: **a-c** Flowering twig; **d,e** Fruiting twig

Inflorescence terminal corymbs, composed of 3–4 opposite branched cymes, peduncle red colored,  $\pm 5$  cm long, slender, obtusely 4-angular, pubescent, slightly sulcate between angles; bracts foliaceous, lanceolate; bractlets subulate, 3 mm long. Flowers sessile, 2 mm across, minute. Calyx cupular, 2-lipped, 5-toothed,  $1 \times 1$  mm, pubescent; lower lip subentire; upper lip minutely 3-toothed, ciliate at margins. Corolla infundibular, 2-lipped; lower lip 3-lobed, lobes obovate, obtuse; upper lip 1-lobed, entire; tube narrow,  $\pm 2$  mm long, densely villous at throat. Stamens 4, didynamous, epipetalous; filaments filiform, 2–3 mm long, slightly exerted, slightly villous; anthers ovoid, 2-celled. Ovary obovoid, truncate at apex,  $1 \times 1$  mm, glabrous; style slender, 2 mm long; stigma 2-lobed, divaricate, lobes equal, subulate. Drupes oblate, flattened at the poles,  $c. 4 \times 3$  mm, surface punctuate, dark blue when ripe; fruiting calyx saucer-shaped  $c. 2$  mm across, pubescent, margin undulate, slightly divided; seeds obovoid, 3 mm long, smooth.

**Ecology:** The associated plant species found in the habitat are *Tarenna canarica* (Bedd.) Bremek., *Diospyros nilagirica* Bedd., *Humboldtia vahliana* Wight, *Diospyros hirsuta* L.f., *Syzygium laetum* (Buch.-Ham.) Gandhi, *Blachia umbellata* (Willd.) Baill. The habitat is prone to destruction because of the Rubber plantation activities and encroachment. It inhabits in near rocky areas on the banks of river. Flowering & Fruiting occurs between March to June and it is locally rare.

**Specimens examined:** INDIA, **Kerala**, Idukki district, Aruvioda, 29.4.1994, *Jomy Augustine* 13649 (KFRI); Kottayam district, Wagamon, 500 m, 03.4.2010, *A. J. Robi* 22999 (KFRI); Kulamavu, 700 m, 24.4.2013, *A. J. Robi* 23400 (KFRI); Palakkad district, Anamallays, head of Nelliampathy Ghats, 3000, *s.die*, *R. H. Beddome*, *s. n.* (MH!). **Tamil Nadu**, Anamallays, 3000, June 1872, *R. H. Beddome* 280 (Holotype, K!).

**Distribution:** India (Kerala, Tamil Nadu).

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