

DOES *PREMNA PROCUMBENS* MOON (VERBENACEAE) OCCUR IN SOUTHERN INDIA ?

P. DANIEL AND A. RAJENDRAN

Botanical Survey of India, Coimbatore

A B S T R A C T

The reported occurrence of *Premna procumbens* Moon in Southern India is based on the mistaken identity of *P. wightiana* Schauer. *P. procumbens* Moon is found to be endemic to Sri Lanka (Ceylon). *P. wightiana* is endemic to the Southern Western Ghats and seems to be rare needing further surveys to establish the exact status of this species.

Premna procumbens was described by Moon (1824) and was later enumerated by Trimen (1895). For the first time it was reported from Southern India in 1924 by Gamble *op. cit.* based on a collection by C.E.C. Fischer from Mundanthurai (in Tirunelveli District) on the Western Ghats of Tamil Nadu. Its inclusion in the *Flora of Tamil Nadu* (1987) is based on this collection of Fischer. It was also listed from Mysore (Kolar) by Thirumalachar *et al.* (1942) and included by Razi (1946), Sharma *et al.* (1984) and Singh (1988). Moldenke and Moldenke (1983) in their revision of the Verbenaceae of Ceylon observe that *P. procumbens* is endemic to Ceylon and that it has been doubtfully listed from Southern India (Mysore). But by excluding Tirunelveli out of the purview of their doubt they seem to have given the benefit of doubt. In connection with the revision of the Indian Verbenaceae one of us happened to collect some specimens of a *Premna* sp. from Mundanthurai, the same locality from where Fischer had earlier collected. These matched well in all

respects with the specimens collected by Fischer so much so we almost concluded that we had re-collected *P. procumbens* several decades after Fischer. However, when we critically studied these specimens as well as that of Fischer *vis-a-vis* the type of *P. procumbens*, photographs of specimens from Kew and specimens received on loan from Peradeniya (PDA) we found that the present as well as Fischer's Mundanthurai specimens were not *P. procumbens*. Further comparative studies of the specimens in MH proved that they belonged to *P. wightiana*, an endemic but variable species particularly in the size of the inflorescence which might have led to the confusion in the identity of this plant in the past. This variability may be emphasised with the observation made by Wight (1849), "The thyrses or panicle of the specimen, selected for representation, seems to be much larger than the one seen by him (Schauer), as he designates in his character small (paniculis terminalibus parvis sub-thyrsoideis) and indeed it is so much above the average size, that, did not my series of specimens present every gradation, I should almost have been led to view

it as a distinct species". This identity was confirmed after studying the protologue and type of *P. wightiana*. These two species can be differentiated as shown below.

- | | | |
|---|---|---------------------------------|
| 1a. Leaves ovate-lanceolate or oblong-lanceolate, repand-serrate-dentate at margins except the cyme, 2—3 cm long. ... | cordate or subtruncate at base, extreme apex; inflorescence a ... | <i>P. procumbens</i> (Plate 2). |
| 1b. Leaves ovate, obtuse at base, entire in the lower upper; inflorescence a thyrsoid panicle, 2.5—9.5 cm long. ... | half and serrate in the ... | <i>P. wightiana</i> (Plate 1). |

The listing of *P. procumbens* from Mysore (Kolar), on the other hand, appears to have been based on the mistaken identity of the more wide-spread species, *P. tomentosa* Willd. Hence the identity and nomenclature of the species under discussion are set right, a brief description and notes on distribution together with field observations are also provided.

Premna wightiana Schauer in A. DC., Prodr. 11 : 635. 1847; Beddome, For. Man. 173. 1873; C. B. Clarke in Hook. f., Fl. Brit. India 4 : 578. 1885; Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4(3a) : 170. 1894; Brandis, Indian Trees 511. 1906; C. Fischer in Rec. Bot. Surv. India 9(1) : 141. 1921; Gamble, Fl. Madras 1096. 1924 (Repr. ed. 2 : 767. 1957); Ahmedullah & Nayar, Endem. Pl. Indian Reg. 1 : 133. 1987; Srinivasan in A. N. Henry *et al.*, Fl. Tamil Nadu 1. 2 : 168. 1987. *P. procumbens* auct. non Moon 1824; Gamble, Fl. Madras 1096. 1924 (repr. ed. 2 : 767. 1957); Srinivasan in A. N. Henry *et al.*, Fl. Tamil Nadu 1. 2 : 167. 1987. *P. thyrsoides* Wight, Icon. Pl. Ind. Orient. 4(3) : 213. t. 1485. 1849; C. B. Clarke in Hook. f., Fl. Brit. India 4 : 579. 1885; Bourd., For. Trees Travancore 290. 1908; Rama Rao, Fl. Pl. Travancore 316. 1924. *P. serratifolia* auct. non L. 1771; Vajravelu *et al.* in J. Econ. Tax. Bot. 10 : 286. 1987; Srinivasan in A. N. Henry *et al.*, Fl. Tamil Nadu 1. 2 : 167. 1987, p.p. *P. latifolia* var. *viburnoides* sensu Srinivasan in A.N. Henry *et al.*, Fl.

Tamil Nadu 1. 2 : 167. 1987, p.p., non C. B. Clarke 1885.

Shrubs, erect or scandent, 2-3 m tall; branches and branchlets subterete or obscurely 4-angular, lenticellate. Leaves ovate, entire-obtuse at base, irregularly serrate in the upper half, abruptly acuminate at apex, 5.5-10 × 2.6-4.5 cm, chartaceous, glabrous or sparsely pubescent, paler when dry; petioles 0.5-3 cm long, canaliculate, glabrous. Inflorescence a terminal, thyrsoid panicle, 2.5-9.5 × 2.5-3 cm, composed of 4-25 decussate-opposite branching cymes. Flowers cream-coloured. Calyx campanulate, 4-lobed. Corolla infundibular, 5-lobed, 2-lipped, densely hairy in the throat. Stamens 4, didynamous; filaments 1.5-2 mm long. Drupes obovoid, 4.5 × 3.5-4 mm, green, shiny, black when mature; fruiting calyx cup-shaped, 3-3.5 × 4-4.5 mm, glabrous, membranous.

Type: Wallich Num. List No. 1770, Herb. Wight, Soratoor et Dindygul (Microfiche!).

Fl. & Fr.: May-Jan.

Ecology: Occurs in scrub jungles, in rock crevices. Often found in association with *Lantana camara* var. *aculeata*.

Distribution: Endemic to Tamil Nadu (Madurai, Ramanathapuram and Tirunelveli Districts; Coimbatore, Clarke *loc. cit.* & Fischer *loc. cit.*) and Kerala (Quilon).

Notes: Holdings in herbaria indicate that this species has a very restricted distribution. Incidentally, many of the specimens had been wrongly determined. Its occurrence

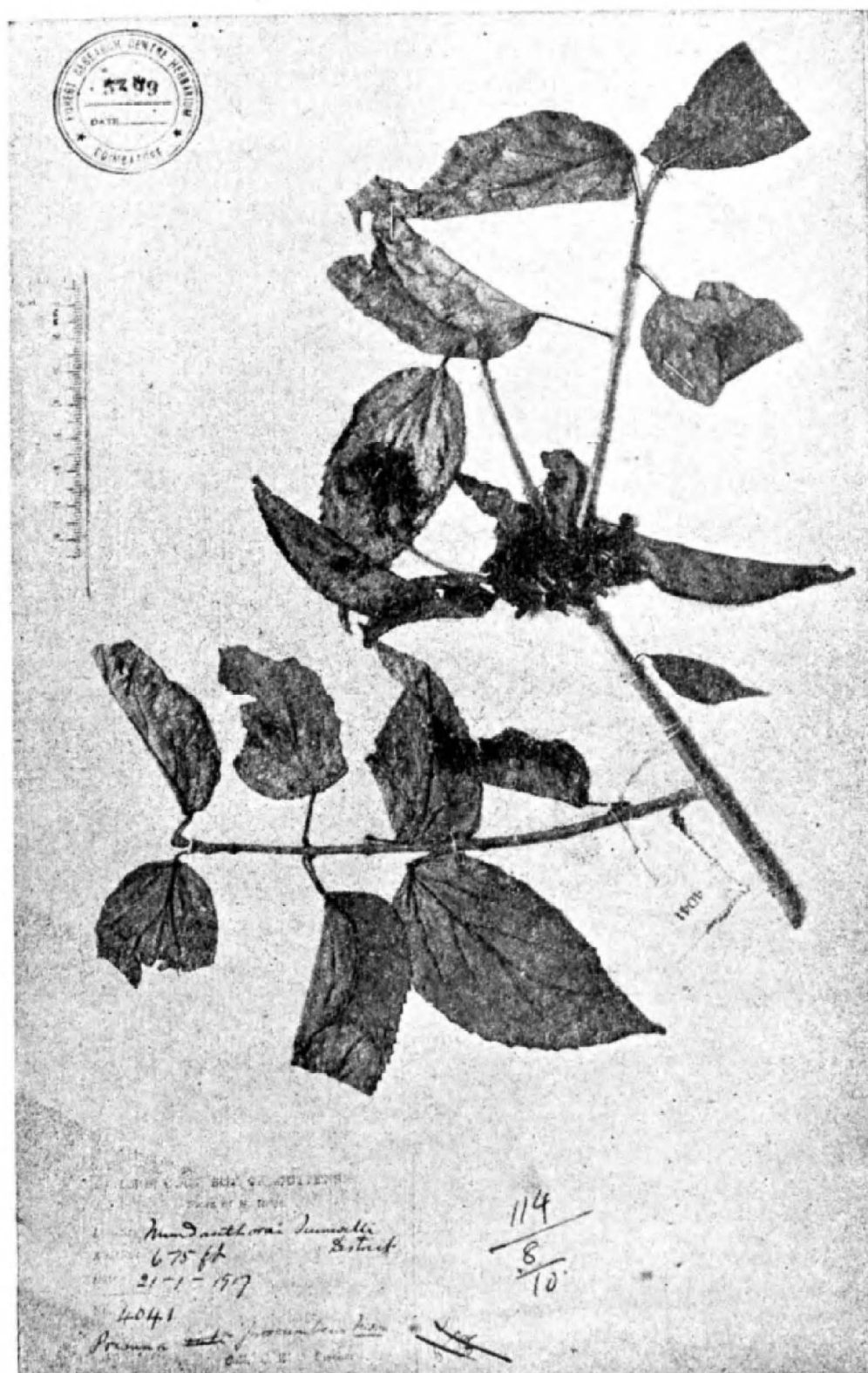


Plate 1. *Premna wightiana* Schauer
(C.E.C. Fischer 4041, FRC).

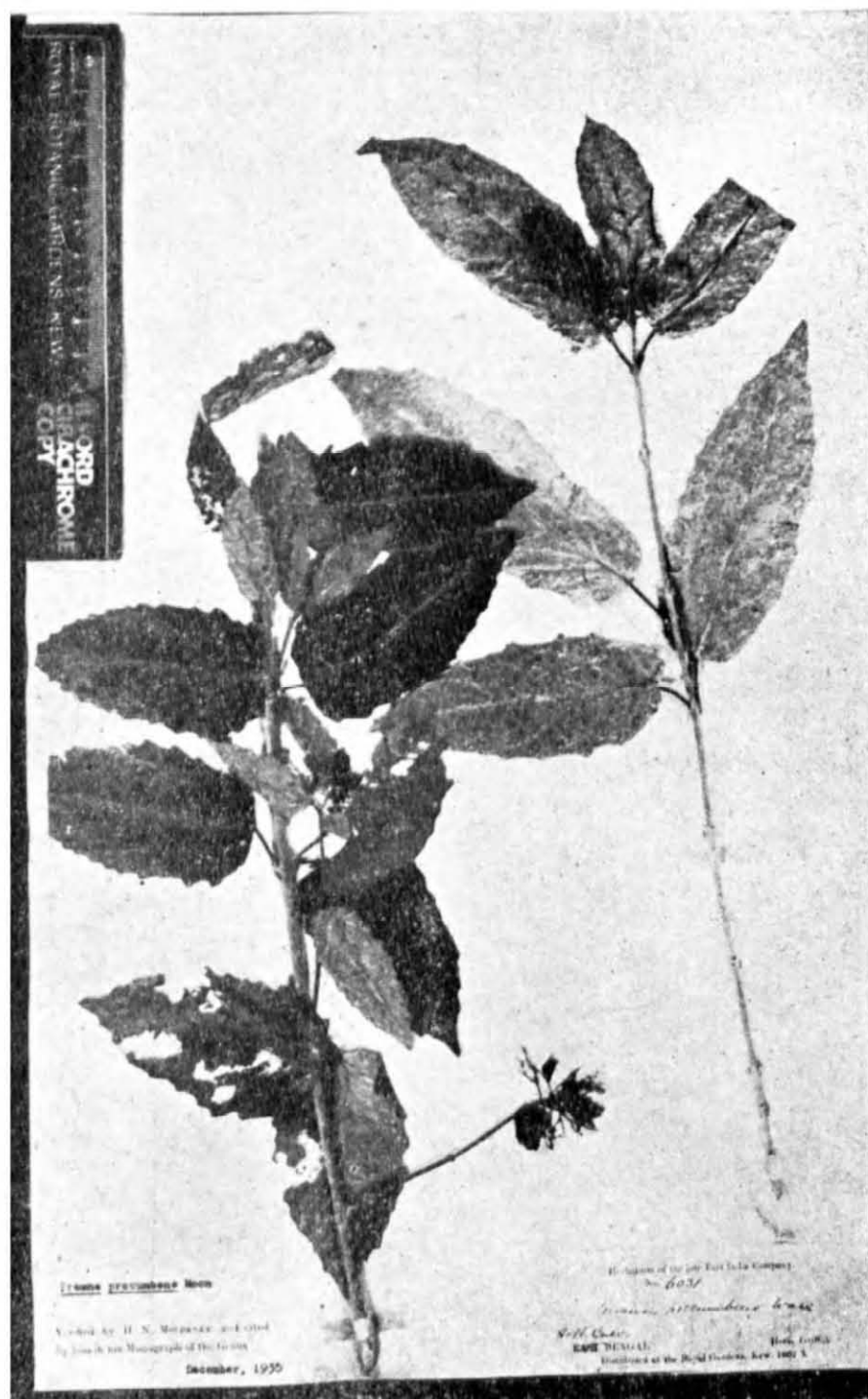


Plate 2. *Premna procumbens* Moon
(Hort. Calc. Bengal, HEC No. 6031, K).

in Coimbatore is based on Beddome's collection from the Anamalais (*vide* Clarke, *loc. cit.*). We have not seen any specimen collected from this area. The only specimen from Kerala (Quilon) was collected by Bourdillon in 1894. It has not been mentioned in recent works (Mohanan, 1984; Subramanian, 1980) though much botanical collection work has been done in this district. Wight (*loc. cit.*) mentions Courtallum also under distribution. Though there is a specimen from Courtallum collected by Rangachari in 1915, it seems that it has not been re-collected from there thereafter as it is not listed by Nair and Nayar (1987). Field notes in a few collections (K. M. Sebastine 25074, B. V. Shetty 27942, M. Chandrabose 51379 and S. R. Srinivasan 79752) say that its occurrence is common in the areas collected. In the present field studies it is found to be rare in that only a few shrubs were seen in a few isolated areas. In view of the fact that it has not been re-collected from Quilon and Courtallum for more than 9 and 7 decades respectively and that it is found to be rare in the localities now collected, it is suggested that intensive field surveys be conducted in the other known localities to establish the exact status of this species especially when it has to face the threat of competition from an alien, ubiquitous weed like *Lantana camara* var. *aculeata*.

Specimens studied : All in MH, unless otherwise indicated.

Premna wightiana Tamil Nadu; Foot of Pulneys, Beddome s.n. (Acc. No. 39867) Sirumalai, 10.10.1959, J. Pallithanam 5180 (BLAT); Sirumalai 9.12.1959, J. Pallithanam 5263 (RHT); Madurai Dist., Forest near Kodai Road, 500 m, 13.6.1961, K. M. Sebastine 12533 (2 spec.), determined as *P. serratifolia*; Palani-Velancombai, 400 m, 1.8.1965, K. M. Sebastine 25074 (2 spec.); Parapalar Dam, 540 m, 19.10.1977, M. Chandrabose 51379 (2 spec.), determined

as *P. latifolia*; Foothills of Highwavy mountains, 23.5.1989, A. Rajendran 86574; Ramanathapuram Dist., River bank of Ayyanarkoil, 300 m, 22.09.1971, E. Vajravelu 38683 (2 spec.), determined as *P. serratifolia*; Sethur hills, Sarthakoil, 500 m, 12.12.1983, S. R. Srinivasan 79752 (2 spec.); Tirunelveli Dist., Naterikal, 23.9.1914, Rangachari 10990, 10996, determined as *P. integrifolia*; Courtallum, 14.9.1915, Rangachari 12185; Vasudevanallur, 23.9.1917, P. S. Jivanna Rao 15162 (3 spec.), determined as *P. integrifolia*; Mundanthurai, 675 ft., 21.1.1917, C. E. C. Fischer 4041, determined as *P. procumbens* (CAL, FRC); Vasudevanallur, ca 500 ft., 14.11.1925, S. R. Raju 17812, determined as *P. latifolia* var. *virburnoides*; Forest near Papanasam Project, 200 m, 7.11.1959, K. M. Sebastine 9566 (2 spec.), determined as *P. latifolia* var. *virburnoides*; Kalakkadu R. F., 300 m, J. Joseph 1519 (2 spec.), determined as *P. serratifolia*; Peiyar-Vanathirtham, 15.7.1964, A. N. Henry 19905, determined as *P. latifolia* var. *virburnoides*; Kombai river-Ayilandan Pillai Estate road, 325 m, 24.7.1966, B. V. Shetty 27942 (2 spec.), determined as *P. serratifolia*; Mundanthurai, Forest Rest House to Kariar Dam, ca 206 m, 4.10.1987, A. Rajendran 86717. Kerala: Quilon, sides of canals, 4.5.1894, T. F. Bourdillon s.n. (Univ. Coll., Trivandrum). Herb. Wight 2310 (Acc. No. 348177, CAL).

Premna procumbens Wallich Num. List No. 1780, Moon s.n. from Ceylon (Type, Microfiche!). Herb. Griff. Hort. Calc. Bengal., HEC No. 6031; Herb. Hook., HBC & Ceylona; Herb. Benth., Hort. Bot. & Ceylona (K, Photo!). Wall., Acc. No. 3482279; HBC (8, 9), 3.6.58, Acc. No. 348280; CP 325, Acc. No. 348281 (CAL). Ratnapura-Palmadulla, 27.8.1963, D. Amaratunga 706 (PDA).

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