

CHIONANTHUS MONTANUS Bl. (OLEACEAE)—A NEW RECORD FOR INDIAN FLORA

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ABSTRACT

While examining the Indian material of *Chionanthus* L. represented in various herbaria of India, the authors have identified *Chionanthus montanus* Bl.—a Malesian species from Andaman & Nicobar Islands, hitherto unrecorded for Indian flora. The species apparently resembles *C. parkinsonii* (Hutch.) Bennett & Raizada, occurring in the same region. The two, however, can be easily distinguished by a number of characters on a comparative study.

The paper presents a key to the 5 species of *Chionanthus* so far recorded from Andaman and Nicobar Islands along with a detailed illustrated account of *C. montanus* Bl.

INTRODUCTION

CLARKE (1882) recorded 8 species of *Chionanthus* (under *Linociera* Sw.) from India, of which 3, *C. ramiflora* Roxb. (*Linociera macrophylla* Wall. ex G. Don); *C. terniflora* (Wall. ex G. Don) Griffith (*L. terniflora* Wall. ex G. Don); and *C. palembanicus* Miq. (*L. pauciflora* Clarke var. *palembanicus* Cl.) were reported from Andaman & Nicobar Islands. Later, HUTCHINSON (1919) described a new species from Andaman Islands—*Chionanthus parkinsonii* (Hutch.) Bennet & Raizada (*Linociera parkinsonii* Hutch.), based on specimens collected by PARKINSON. PARKINSON (1922), however, included only two species in his 'Forest Flora of Andaman Islands', excluding *C. ramiflora* and *C. palembanicus*. While studying the specimens of Indian Oleaceae available in Indian herbaria, the authors have come across a number of specimens collected from Andaman as well as Nicobar Islands which in fact belong to *Chionanthus montanus* Bl., a Malesian species hitherto unrecorded for Indian flora. KURZ's (1877) *C. montanus* Bl. from Burma represents a different species.

C. montanus Bl. which is so far not known from extra-Malesian Islands, now extends in its distribution to Andaman & Nicobar Islands. The material of this species, available in Indian herbaria, indicates that it was collected from Andamans as early as in 1884, but somehow remained undetected, probably for its close resemblance with *C. parkinsonii*. It can, however, be distinguished from the latter by the narrower angle between the lateral veins and the midrib, and in the arching upwards, ovate sepals, the two petals of each pair adnate only near the base, comparatively broader anthers and pistil with somewhat distinct style.

C. montanus Bl. is described and illustrated (Figs. 1-15), showing comparison with *C. parkinsonii* (Hutch.) Bennet & Raizada. A key is provided for determination of the various species of *Chionanthus* occurring in Andaman & Nicobar Islands as confirmed by the authors.



FIGS. 1-8. *Chionanthus montanus* Bl. : 1. Flowering twig, 2. Bract, 3. Flower, 4. Calyx, 5. Pair of petals, 6. Stamen, 7. Pistil, 8. Fruit.

FIGS. 9-15 : *Chionanthus parkinsonii* (Hutch.) Bennett & Raizada : 9. Part of leaf (lower surface), 10. Bract, 11. Flower, 12. Calyx, 13. Pair of petals, 14. Stamen, 15. Pistil.

Key to the species

- 1. Calyx lobes ovate
 - 2. Panicles pubescent *C. terniflora*
 - 2. Panicles glabrous
 - 3. Panicles elongated, 4-12 cm long *C. ramiflora*
 - 3. Panicles abbreviated, 1-1.5 cm long *C. montanus*
 - 1. Calyx lobes triangular
 - 4. Petals in two pairs *C. parkinsonii*
 - 4. Petals not in pairs. *C. palembanicus*
- Chionanthus montanus* Blume Bijdr. 1.681 (1825) *non* Kurz; *Chionanthus monticola* Blume Mus. Bot. lugd. Bot. 1.317 (1849); *Linociera montana* DC. Prodr. 8 : 297 (1844).

Shrubby tree, 5-8 m high, branches cylindrical, ribbed, lenticellate, glabrous, grey to brownish in dried specimens. Leaves simple, opposite, estipulate, petiolate; lamina oblanceolate or narrow to broadly elliptic, abruptly acuminate with blunt tip, base cuneate, 6.5-14.5 × 3.5-5.5 cm, entire, thick-coriaceous, glabrous, midrib not impressed above, only slightly raised and tinged red beneath ; lateral veins 6-7 pairs arising at a narrower angle from midrib and curving upwards to unite with the next higher one, venation pattern on both the surfaces somewhat obscure; petiole 4-6 mm long, glabrous, channelled. Panicles 1-1.5 cm long, glabrous, few-flowered. Flowers pedicellate, in clusters of two to three, pedicel up to 2mm long, glabrous, bracteate; bracts boat-shaped, acute, 1mm long, margin hairy, otherwise glabrous on both surfaces; calyx, 1.5 mm long, 4-lobed, sepal-lobes somewhat ovate, acute, 0.3 mm long, pubescent at the margin, otherwise glabrous; corolla glabrous, petals 4, in two pairs, each petal somewhat truncate at base and gradually tapering upwards, 3mm long, margin of narrower upper portion involute in dried specimens, petals of each pair joined only at near the base and enclose a stamen between them; stamens 1-1.5 mm long, glabrous, filament minute, anthers 1mm broad, basifixed; pistils 1-1.5 mm long, glabrous, style upto 0.6 mm long (about half of the total length of the pistil); stigma somewhat triangular to globose. Fruit ellipsoid, 1-1.4 × 0.5 cm, dark-brown in dried specimens.

Distribution—Malesian Islands and Andaman & Nicobar Islands.

Specimens examined—India, Andaman & Nicobar Islands, Port Blair, fl, 25.3.1884, *King's Collector* 168 (CAL); Port Blair, fl, 17.3.1884, *King's Collector* 159 (CAL); Andamans, fl, 1884, *King's Collector s. n.* (CAL); Andamans, Ster. 1884, *King's Collector s. n.* (CAL); Andaman, fl, 1884, *King's Collector s. n.* (CAL); South Andamans, Dhanikari, + 50m. fl, 6.2.1974, *N. C. Nair* 859, "Tree ±5m; branches grey with small projections; leaves dark green above, pale below, flowers small in axillary cymes, white, Few." (PBL); South Andamans, Chiriatapu, ±50m . fr, 28.2.1975. *N. Bhargava* & *N. C. Nair* 2268, "Leaves glabrous dark green above, pale below; flower white; fruits green, ellipsoid" (PBL); North Nicobar, East Bay Katchal Islands, Sea level, fr, 19.12.1974, *P. Chakraborty* 2210, "±8m; flowers in fascicles, axillary, light yellow, fragrant" (PBL).

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REFERENCES

- BENNET, S. S. R. & RAIZADA, M. B. (1981). Nomenclatural changes in some flowering plants. *Ind. J. For.* **4**(1) : 68.
- CLARKE, C. B. (1882). In J. D. Hooker's, *The Flora of British India*, **3** : 607-611. L. Reeve & Co., London.
- HUTCHINSON, J. (1919). XII. *Decades Kewensis*, *Kew Bull.*, 1919 : 229.
- KURZ, S. (1877). *Forest Flora of British Burma*, **2** : 159.
- PARKINSON, C. E. (1922). *A Forest Flora of the Andaman Islands*. Bishen Singh Mahendra Pal Singh, Dehradun.