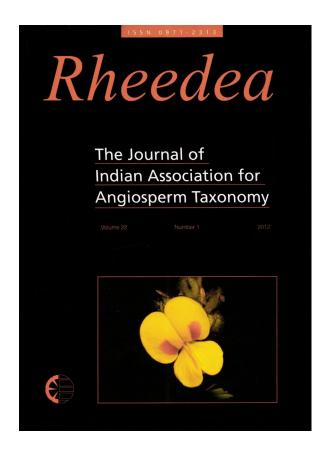




# *Trichosanthes quinquangulata* (Cucurbitaceae) – A new record for India from Andaman Islands

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## *Trichosanthes quinquangulata* (Cucurbitaceae) – A new record for India from Andaman Islands

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#### Abstract

*Trichosanthes quinquangulata* A. Gray (Cucurbitaceae) is reported first time for India from Andaman Islands. A detailed description and photographs are provided for identification.

Keywords: Andaman Islands, Cucurbitaceae, India, New Record, Trichosanthes quinquangulata

#### Introduction

Trichosanthes L. is one of the largest genera of the family Cucurbitaceae with c. 100 species distributed in India, China, Taiwan, Japan, southeast Asia, New Guinea and northeast Australia (Schaefer & Renner, 2011). In India, the genus is represented by 22 species (Chakravarty, 1982), of which four species, viz., T. cucumerina L., T. dioica Roxb., T. ovigera Blume and T. tricuspidata Lour. have been recorded from Andaman and Nicobar Islands (Rao, 1986; Lakshminarasimhan & Rao, 1996; Mathew, 1998; Pandey & Diwakar, 2008). While working on the flora of Little Andaman Island the author came across few Trichosanthes specimens annotated as T. tricuspidata Lour. at PBL. On scrutiny, the specimens were identified as T. quinquangulata A. Gray, earlier known from north Vietnam, Taiwan, Malay Peninsula, Sumatra, Java, Borneo and Philippines and not reported from India (Chakravarty, 1959, 1982; Jeffrey, 1980). Hence, it is reported here for the first time from India. A detailed description and photographs are provided.

Trichosanthes quinquangulata A. Gray, U.S. Expl. Exped., Phan. 1: 645. 1854; Cogn. in A. DC. & C. DC., Monogr. Phan. 3: 378. 1881; Craib, Fl. Siam. 1: 753. 1931; C.H. Yueh & C.Y. Cheng, Acta Phytotax. Sin. 12: 443. 1974; C. Jeffrey, Cucurbitac. East. Asia: 41. 1980; Rugayah & W.J. de Wilde, Blumea 42: 479, t. 1a. 1997; Rugayah, Berita Biol. 5: 681. 2001; Duyfjes & Pruesapan, Thai Forest Bull., Bot. 32: 96. 2004.

Climber. Stem finely channeled, glabrous, blackish brown. Leaves simple, broadly ovate to suborbicular,  $8-17\times6-15$  cm, deeply cordate at base, thin-



Fig. 1. *Trichosanthes quinquangulata* A. Gray: a. Habit; b. Leaf base with numerous glands; c. Bracts with circular glands; d. Fimbriate calyx of male flower; e. Calyx and corolla of male flower; f. Fruits.

coriaceous, shallowly to deeply 5(– 7)-palmately lobed; lobes broadly ovate, subentire to remotely dentate at margins, acuminate to caudate-acuminate at apex, verrucose, glabrous, rarely scabrid on nerves above, blackish brown above on dry, glabrous, greenish brown below on dry; main nerves 5(– 7) pairs, prominent; tertiary nerves prominent; glands numerous, scattered and mostly confined

to base of nerve axils; petioles 3 - 7 cm long, channeled, glabrous to minutely scabrid; tendrils 2 – 5-branched. Male inflorescences axillary, racemose, up to 15 cm long; rachis up to 9 cm long, finely channeled, glabrous. Flowers white; bracts broadly ovate, c.  $2 \times 1$  cm, attenuate at ends, entire at margins, glabrous with few circular glands. Calyx 5-lobed; lobes lanceolate, c. 1.4 cm long, entire to laciniate at margins; tube up to 3 cm long. Fruits globose, up to 5 cm, smooth, glabrous, green when young, brilliant red on ripening; dry pericarp thick, brownish yellow; seeds oblong, c. 10 × 5 mm, compressed, surrounded by greenblack pulp.

Flowering & Fruiting: November – March.

Habitat & Ecology: This species is commonly found in littoral and deciduous forests from sea level to 50 m, in association with Scaevola taccada, Manilkara littoralis, Barringtonia asiatica, Cordia dichotoma, Thespesia populnea, Dodonaea viscosa, Sophora tomentosa, Tournefortia argentea, Dendrolobium umbellatum, Ardisia oxyphylla, Clerodendrum inerme, Allophyllus cobbe and Crinum asiaticum.

Distribution: India (Andaman Islands), Indonesia (Borneo, Java, New Guinea, Sumatra), Malay Peninsula (Malaysia, Myanmar, Thailand), Philippines, Taiwan and Vietnam.

Specimens examined: INDIA, Andaman Islands, North Andaman Islands, Aerial Bay, 20 m, 21.11.1976, N.G. Nair 4859; Middle Andaman Islands, Austin II, 20 m, 1.2.1959, K. Thothathri 9152; South Andaman Islands, Shaitanghadi, 50 m, 8.3.1976, N.P. Balakrishnan & N.G. Nair 3590; Havelock Island, 29.8.1977, R.K. Premanath 5966; Little Andaman Island, way to forest nursery, 10 m, 1.1.1976, N. Bhargava 3283; Way towards forest nursery, 21.11.1977, N. Bhargava 6538; Dugong creek, 27.11.1977, N. Bhargava 6587; Dugong creek, 1.2.1981, R.K. Premanath 8366; on the way to South Bay, 15.8.2004, L. Rasingam 17583 (PBL).

Note: Trichosanthes quinquangulata differs from T. tricuspidata by having 5 - 7-lobed leaves with numerous glands on leaf base, entire bracts with numerous circular glands, fimbriate calyx and globose fruits.

Uses: In Philippines the seed fried oil is applied externally to calm itchiness. The seed powder is mixed with wine to make a drink and used to assuage stomach-aches (Wiart, 2006).

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#### Literature Cited

- Chakravarty, H.L. 1959. Monograph of Indian Cucurbitaceae (Taxonomy and distribution). Rec. Bot. Surv. India 17(1): 1 - 234.
- Chakravarty, H.L. 1982. Cucurbitaceae. In: Thothathri, K. (Ed.), Fasc. Fl. India. Fasc. 11. Botanical Survey of India, Howrah. pp. 1 - 136.
- Jeffrey, C. 1980. Further notes on Cucurbitaceae V\*. The Cucurbitaceae of the Indian subcontinent. Kew Bull. 34: 789 - 809.
- Lakshminarasimhan, P. & P.S.N. Rao 1996. Supplementary list of angiosperms recorded (1983 - 1993) from Andaman and Nicobar Islands. J. Econ. Taxon. Bot. 20: 175 - 185.
- Mathew, S.P. 1998. A supplementary report on the flora and vegetation of Bay Islands, India. J. Econ. Taxon. Bot. 22: 249 - 272.
- Pandey, R.P. & P.G. Diwakar 2008. An integrated check-list flora of Andaman & Nicobar Islands, India. J. Econ. Taxon. Bot. 32: 403 – 500.
- Rao, M.K.V. 1986. A preliminary report on the angiosperms of Andaman and Nicobar Islands. *J. Econ. Taxon. Bot.* **8**: 107 – 184.
- Schaefer, H. & S.S. Renner 2011. Cucurbitaceae. In: Kubitzki, K. (Ed.), The Families and Genera of Vascular Plants. Vol. 10. Springer-Verlag, Berlin. pp. 112 – 174.
- Wiart, C. 2006. Medicinal Plants of Asia and the Pacific. Taylor & Francis Group, CRC Press, USA. pp. 112 - 113.

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