

striated; outer larger, c. 1.8 x 1.2 mm; inner smaller, c. 1.3 x 1 mm; striations glandular, visible outside, invisible inside. Disc glands 4, whitish-yellow, alternate with tepals, glabrous, c. 0.6 x 0.8 mm; midrib prominent; side nerves obscure. Stamens 4; filaments yellow, connate, c. 0.5 mm long; anthers 4, yellow, dehiscing transversely, c. 0.4 x 0.6 mm. Female: Pedicles glandular striate just above middle, broadened towards apex, c. 16 x 0.02-0.12 mm. Tepals 5 or 6, ovate, subequal, c. 3 x 1.3 mm, pinkish-brown, tinged whitish-yellow, connate at base, distantly crenate-dentate at margin, bluntly acute at apex, striated; striations glandular, visible outside, invisible inside; midrib prominent; side nerves obscure, 8-10. Disc glands combined as fleshy ring, c. 0.2 x 2.2 mm. Ovary yellow, globose, 3-valved, glabrous, c. 0.6 mm across; styles 3, each bifid from base, glabrous, c. 0.8 x 0.1 mm. Capsules subglobose, smooth, 3-lobed, 2-seeded in each lobe, glabrous. Seeds 6, trigonous, brown, minutely pubescent, c. 4 x 2.1 mm.

**Specimens examined:** Tamil Nadu: Kalakad-Mundanthurai Tiger Reserve, 8° 20'-8° 53' N and 77° 10'-77° 35' E, Aruvatheeti, c. 490 m, 19.viii.1998, M.B. Viswanathan, N. Ramesh, M. Maridass & U. Manikandan 1149.

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44. REDISCOVERY OF *PHYLLANTHUS ROTUNDIFOLIUS* KLEIN EX WILLD.,  
EUPHORBIACEAE, AFTER 101 YEARS (1899-2000)  
IN KANCHIPURAM DISTRICT, TAMIL NADU, SOUTH INDIA

(With one text-figure)

The Flora of Tamil Nadu (II: 238.1987) records the distribution of *Phyllanthus rotundifolius* Klein ex Willd. in Chengalpattu, Ramanathapuram, Thanjavur and Tirunelveli districts. The Madras Herbarium, Coimbatore, holds 5 sheets from Chengalpattu; 4 from Ramanathapuram; 5 from Thanjavur; 4 from Tirunelveli district and 1 from Puthukottai district. The Chengalpattu district (now Kanchipuram district) collections were from

Elliot's Beach - Madras and Sadras Beach during 1883, 1899 and 1900. All determined by J.S. Gamble in 1915.

This is a rediscovery after 101 years (1899-2000) from Kanchipuram district, Tamil Nadu (RHT 61774 from Mamallapuram Sand dunes - 6.i.2000). I got only 3 plants of this threatened species in an overgrazed area. Mayuranathan, P.V. reported this (Flowering Plants of Madras, p. 264) in 1929 and later workers could not locate

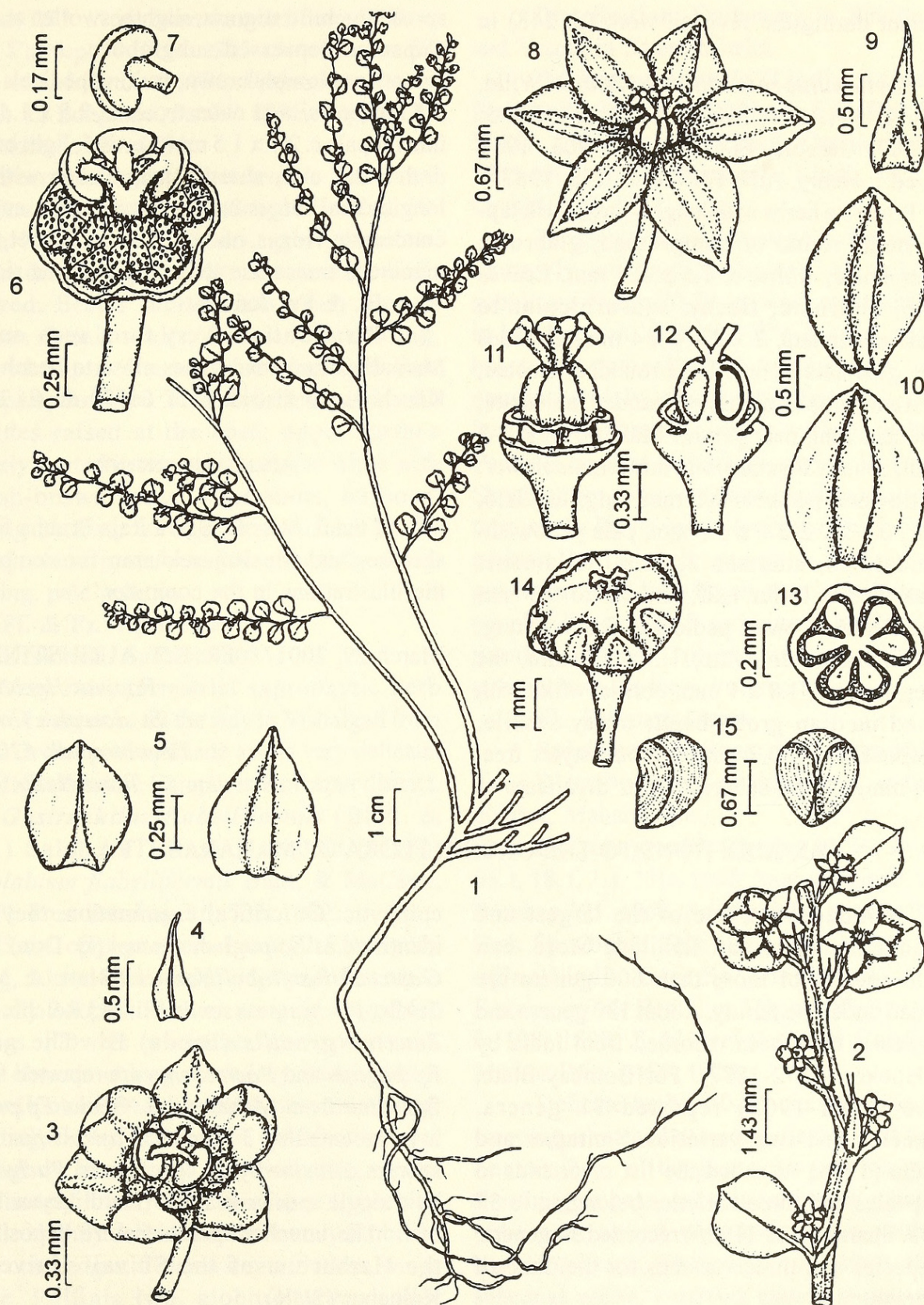


Fig. 1: *Phyllanthus rotundifolius* Klein ex Willd; 1. Habit, 2. Inflorescence, part ♂, 3. Flower, 4. Bract, 5. Perianth-lobes, 6. Staminal column with disk, 7. Stamen ♀, 8. Flower, 9. Bract, 10. Perianth-lobes, 11, 12 & 13. pistil: entire, l.s. & t.s., 14. Fruit, 15. Seed (RHT 61774)

this plant during the revision work (p. 248) in 1994.

*Phyllanthus rotundifolius* Klein ex Willd. Sp. Pl. 4: 584.1805; Hook.f. Fl. Brit. India. 5: 299.1887; Gamble, Fl. Madras 2: 903. 1957 (repr. ed.); Henry, A.N. Fl. TN. II: 238. 1987.

Prostrate herbs with long, woody, thick tap-root; stems round or compressed, glabrous; stipules linear, white, c. 1.5 x 0.4 mm. Leaves simple, alternate, fleshy, sub-orbicular to obovate-spathulate, 2 x 2 - 4 x 4 mm, glabrous above, glaucous below, base rounded-cuneate, margin entire, apex obtuse or rounded, apiculate; petiole to 1 mm, pale yellow. Male flowers: 2-3 per axil, usually together with one female flower; male flowers: pedicels 0.5 mm long; tepals 6, elliptic, 0.3 x 0.2-0.7 x 0.5 mm, pale yellowish-green midrib; stamens 3, small, filaments connate in the lower half; anthers to 0.3 mm across. Female flower: pedicel to 0.8 mm long; tepals 6, the outer ovate, 1.5 x 1.2 mm, the 3 inner obovate, 1.8 x 1 mm, obtuse, white with a broad median green band; ovary sessile, subglobose, 0.5 x 0.7 mm, smooth; styles free, to 0.4 mm, at first suberect, later divaricate to

spreading, bifid stigmas, slightly swollen at apex. Capsules depressed-subglobose, 1 x 2 mm, smooth, yellowish-brown; fruiting pedicels up to 2.5 mm; persistent outer tepals c. 2.5 x 1.4 mm, inner tepals c. 2.5 x 1.5 mm; seeds 6, light brown, c. 1 x 0.5 mm, sharply triquetrous with 6-7 longitudinal ridges on the dorsal facet, and 5-6 concentric ridges on each ventral facet, with numerous transverse striae between the ridges.

**Fl. & Fr.:** January.

**Distribution:** Very rare; seen only in Mamallapuram sand dunes close to beach area, Kanchipuram district RHT 61774 dt. 6.i.2000.

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#### 45. ADDITIONS TO THE ORCHID FLORA OF MAHARASHTRA

Orchidaceae is one of the largest and economically important families. More than 25,000 species of more than 600 genera are recorded under the family. About 130 genera and 900 species have been recorded from India by J.D. Hooker (1872-1897). For Bombay State, Cooke (1901-1908) reported 31 genera, 85 species and two varieties. Santapau and Kapadia (1966) extended the list of orchids to 116 species and three varieties belonging to 37 genera. Sharma *et al.* (1996) recorded 34 genera, 109 species and three varieties for the State of Maharashtra.

During our field studies in southwestern Maharashtra, we came across four rare and interesting orchids: three terrestrial and one

epiphytic. On critical examination, they were identified as *Epipogium roseum* (D. Don) Lindl. *Gastrochilus flabelliformis* (Blatt. & McC.) Saldh., *Pachystoma senile* (Lindl.) Reichb. f. and *Zeuxine gracilis* (Breda) Bl. The genera *Epipogium* and *Pachystoma* are reported for the first time from Maharashtra. Genus *Epipogium* is represented by 3 species, *Gastrochilus* by 12 species, *Zeuxine* by 15 species and *Pachystoma* by a single species in India (Karthikeyan 1989).

The voucher specimens are deposited in the Herbarium of the Shivaji University, Kolhapur (SUK).

*Epipogium roseum* (D. Don) Lindl., in J. Linn. Soc. 1: 177. 1857; Sant. in Proc. Nat. in. Sci. India 24 B: 138; Sant. & Kapad. Orch.



Augustine, K. T. 2002. "Rediscovery of *Phyllanthus Rotundifolius* Klein Ex Willd., Euphorbiaceae, After 101 Years (1899-2000) in Kanchipuram District, Tamil Nadu, South India." *The journal of the Bombay Natural History Society* 99, 562-564.

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