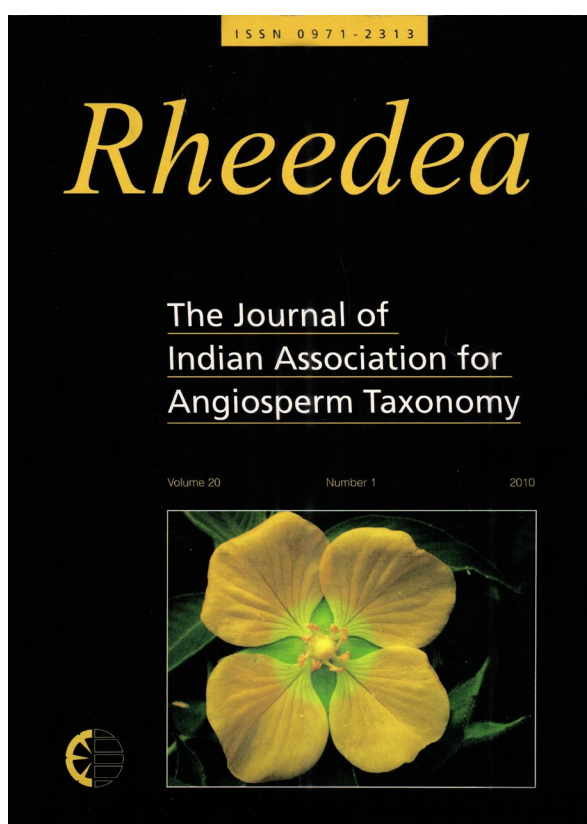




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Solanum cordatum (Solanaceae) – A new record to Southern India

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Abstract

While preparing an inventory of flowering plants of the Kolli hills, Namakkal district, Tamil Nadu, Southern India, some specimens of *Solanum* L. were collected and identified as *S. cordatum* Forssk. On scrutiny of literature, it is revealed that this species is known only from Gujarat in India and forms a new record to Southern India. Hence, a detailed description, phenology and illustration are provided to facilitate easy identification of the species.

Keywords: Kolli hills, New record, *Solanum cordatum*, Southern India

Introduction

During the intensive floristic survey in the Kolli hills, Namakkal district, Tamil Nadu, Southern India, specimens of *Solanum* L. collected by the first author were sent to CAL, and were then forwarded to Kew, for identification. The specimens were identified as *S. cordatum* Forssk. This species was known by the name *S. gracilipes* Decne. (Clarke, 1892; Cooke, 1905; Deb, 1979, 1980) which is now treated as a synonym of *S. cordatum* (Forsskål, 1775; Wood, 1984; Hepper & Friis, 1994). A detailed description, nomenclature, phenology and illustration are provided to facilitate the identification of species.

Solanum cordatum Forssk., Fl. Aegypt.-Arab.: 47. 1775; Wood in Kew Bull. 39: 134. 1984; Hepper & Friis, Pl. Forssk. Fl. Aegypt.-Arab.: 232. 1994. *S. gracilipes* Decne. in Jacq., Voy. Inde 4: 113, t. 119. 1844; Clarke in Hooker, Fl. Brit. India 4: 237. 1883, excl. syn.; Cooke, Fl. Bombay 2: 268. 1905; Deb in Hawkes *et al.*, Biol. Tax. Solanac.: 107. 1979 & in J. Econ. Taxon. Bot. 1: 47. 1980.

Armed, scrambling undershrubs, 60 – 100 cm high, stellate-tomentose throughout; stems ash-white, prickled; prickles 1.8 – 2.2 × 0.2 – 0.8 mm, curved or straight, broad at base, narrowed with sharp end, yellow. Leaves suborbicular, orbicular, rhomboid or orbicular-oblong, 1.5 – 6.5 × 1.2 – 5 cm, cuneate, attenuately cuneate or decurrent at base, faintly irregularly sinuate or repand, obtuse or acute at apex, dark green above, pale green

below; midrib with 1 or 2 prickles on either side; lateral nerves 4 – 7 pairs, rarely with 1 or 2 prickles; petioles up to 2.2 × 0.1 cm, very narrowly winged, prickly. Flowers solitary, supra-axillary; pedicels slender, up to 3.5 × 0.1 cm, prickly. Calyx campanulate-rotate, 6 – 7 × 4 – 5 mm; tube 2 – 3 × 3 – 5 mm, stellate-tomentose outside, glabrous inside, 5-lobed; lobes linear-deltoid or subulate, 4 – 5 × 1 – 2 mm, entire, bluntly obtuse at apex. Corolla 1.5 – 2 cm across, blue outside, bluish white inside, purple at throat, 5-lobed; lobes orbicular, 8 – 10 mm, faintly sinuate or undulate, obtusely acuminate at apex, stellate-tomentose outside, glabrous inside. Stamens 5; filaments 1 – 3 × 0.5 – 0.8 mm, flat, glabrous; anthers lanceolate, 5 – 7.2 × 1.5 – 2 mm, dorsifixed, slightly curved, yellow, poricidal. Ovary ovoid, c. 2 × 1.2 mm, sparsely pubescent with multicellular trichomes, dull white; ovules many; style c. 8 × 0.1 mm, curved, glabrous; stigma capitate. Berries globose-ovoid, 8 – 9 × 7 – 8 mm, yellowish red; fruiting pedicels 2.5 – 3.7 × 0.1 – 0.2 cm, accrescent; fruiting calyx lobes lanceolate, c. 1.2 × 0.3 cm, accrescent; seeds subreniform to orbicular, 3.8 – 4 × 3 – 3.2 mm, verrucose, dark blackish brown at centre, pale blackish brown at margin.

Flowering: October – November; *Fruiting:* November – January.

Habitat: This species is found in moist deciduous forests under the shade of rocks. Associated species

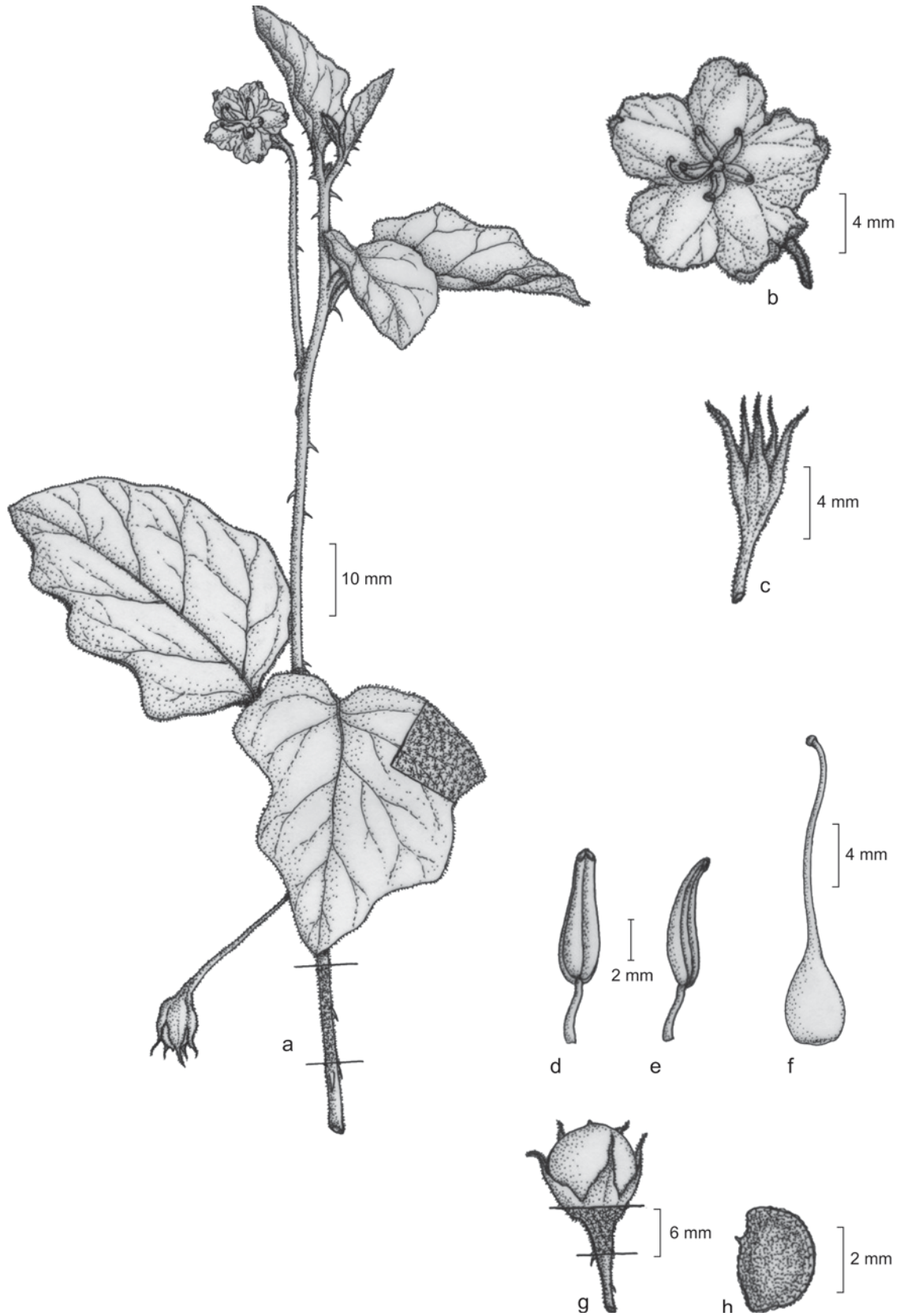


Fig. 1. *Solanum cordatum* Forssk.: a. Twig; b. Flower; c. Calyx; d, e. Stamen, dorsal and ventral views; f. Pistil; g. Berry; h. Seed.

include trees such as *Neolitsea scrobiculata* (Meisn.) Gamble and *Memecylon bremeri* M.B. Viswan.; shrubs such as *Pouzolzia bennettiana* Wight and *Stenosiphonium russellianum* Nees; herbs such as *Begonia malabarica* Lam., *Commelina longifolia* Lam. and *Didymocarpus tomentosus* Wight. Occurrence of this species in moist deciduous forests of Eastern Ghats is of phytogeographical interest as it was known only from dry desert areas.

Distribution: West Asia (Saudi Arabia, Yemen, Oman, Afghanistan and Pakistan) to India. India: Gujarat and reported herein from Tamil Nadu.

Specimens examined: INDIA, **Tamil Nadu**, Namakkal district, Kolli hills, 11°8' N and 78°20' E, Sethukadai, ±850 m, 10.10.2005, A. Ramachandran 846; Sethukadai, ±850 m, 15.10.2006, A. Ramachandran 0933; Sethukadai, ±850 m, 7.10.2007, M.B. Viswanathan 010 (Department of Plant Science Herbarium, Bharathidasan University).

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