



## *Solanum trilobatum* L. (Solanaceae) - An overlooked species: A new distributional record for Telangana, India

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### Abstract

*Solanum trilobatum* L., an overlooked species, was collected from the Karimnagar and Yadadri Bhuvanagiri districts and is reported here as an addition to the flora of Telangana state. A detailed description, along with its distribution and photo plate, is provided to facilitate its identification.

**Keywords:** New record, Overlooked, *Solanum*, Telangana, Yadadri Bhuvanagiri

### Introduction

*Solanum* L. is one of the largest and most taxonomically diverse genera with about 1500 species and found on all continents except Antarctica (Vorontsova *et al.*, 2013)<sup>[10]</sup>. In India, the genus is represented by 47 taxa (Meena *et al.*, 2020)<sup>[7]</sup>, many of these are valued for food, ornamentation, or medicinal properties. The present paper deals with a new distributional record of *Solanum trilobatum* L. to Telangana state. The plant is extensively used in Siddha and Ayurveda system of medicine for various medicinal purposes and as food supplement in southern part of India and Southeast Asia (Ghosh *et al.*, 2022; Anonymous, 1972 & 2011)<sup>[1, 2, 4]</sup>. The bitter roots are consumed as an electuary, decoction, or powder, while the berries and flowers are used to relieve cough. A decoction prepared from different parts of the plant is also employed in the treatment of chronic bronchitis (Thammanna & Rao, 1990)<sup>[9]</sup>.

### Materials and Methods

While doing random floristic documentation studies in Telangana state, the flowering and fruiting specimens of *Solanum* with prickles were collected along the roadsides of village outskirts, hedges of agricultural fields in Karimnagar district and Manepally hills, near Swarnagiri Temple of Yadadri Bhuvanagiri districts of Telangana state, in June & September 2025. Based on the standard literature (Gamble and Fischer, 1915-35; Hooker, 1872-1897; Kalidass & Panda, 2019)<sup>[5, 6]</sup> the specimen identification was confirmed. The specimens were made into herbarium using standard methodology (Jain & Rao, 1977) and preserved at Herbarium Hyderabadensis (HY), Osmania University, Hyderabad. Complete details of the plant, habitat, associated species, geographical coordinates, and elevation were recorded in the field. The scrutiny of literature revealed that the genus *Solanum* was reported by 9 species (Pullaiah & Sadasivaiah, 2024)<sup>[8]</sup> from Telangana and the present collection has not been listed, hence, it is reported here as new distributional record to the state. The detailed description, distribution, field photographs are provided for the easy identification of the species.

### Taxonomic treatment

*Solanum trilobatum* L., Sp. Pl. 1: 188. 1753. *Solanum acetosaeifolium* Lam., Encycl. 4: 306. 1797.

Perennial or annual, climbing bushy shrubs, up to 1.2 m height. Stem much branched, branches terete, green, with recurved prickles, base flat, about 6 mm long, glabrous, light yellowish in colour. Leaves simple, alternate or sub-opposite, 1.8–5 × 1.5–4 cm long, blade, ovate, obtuse at base, apex acute to acuminate, more or less deltoid-triangular, lobes irregular or sinuate, margin entire to lobed, hastate (tri lobed) or five lobed, few leaves prickly on the midrib; petiole 1–4 cm long, terete, prickly. Inflorescences extra-axillary, solitary or in few-flowered, cymes; peduncle 3–6 cm long, glabrous; pedicels about 1.5 cm long. Flowers 2–3 cm across, Calyx green, 5–6 mm diam., 5-lobed; each lobe 1.5 – 3 mm long, triangular or deltoid, glabrous, persistent. Corolla blue, 2.5–3 cm diam., 5-lobed; each lobe 1.5–2 cm long, ovate to lanceolate, upper surface with stellate hairs, apex mucronate, margin ciliate or wavy. Stamens 5, 8–10 mm long, epipetalous, adnate to the base of petals; filaments 1.5 mm long; anther 6–8 mm long, lanceolate, yellow, basifixed, apical pores dehiscent. Ovary globose-ovoid, 1.5 mm long, glabrous; style 14–16 mm long, slender, glabrous; stigma capitate, green. Berries globose, 8–12 mm diam., green at young, bright red at maturity, shiny. Seeds discoid, compressed, 2 mm in diam., pale brownish yellow.

**Distribution:** (i) Global: Deccan Peninsula, Sri Lanka and Java (ii) India: Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Pondicherry, Rajasthan, Tamil Nadu, Telangana (present study), West Bengal.

**Flowering and Fruiting:** July – January.

**Ecology:** *Solanum trilobatum* L. was found growing along the roadsides on *Neltuma juliflora* (Sw.) Raf., *Ziziphus mauritiana* Lam. In village outskirts, on hedges of agricultural fields and hill bases, disturbed lands with support of *Mesosphaerum suaveolens* (L.), other associates include *Achyranthes aspera* L., *Crotalaria hebecarpa* (DC.) Rudd, *Parthenium hysterophorus* L., *Sida acuta* Burm.f., *Senna uniflora* (Mill.) H.S. Irwin & Barneby, *Spermacoce articularis* L.f., *Tridax procumbens* L.

**Specimen examined:** Godishala village, Saidapur Mdl., Karimnagar district & Manepally hills, Near Swarnagiri

Temple, Yadadri Bhuvanagiri district, Telangana, India, L.

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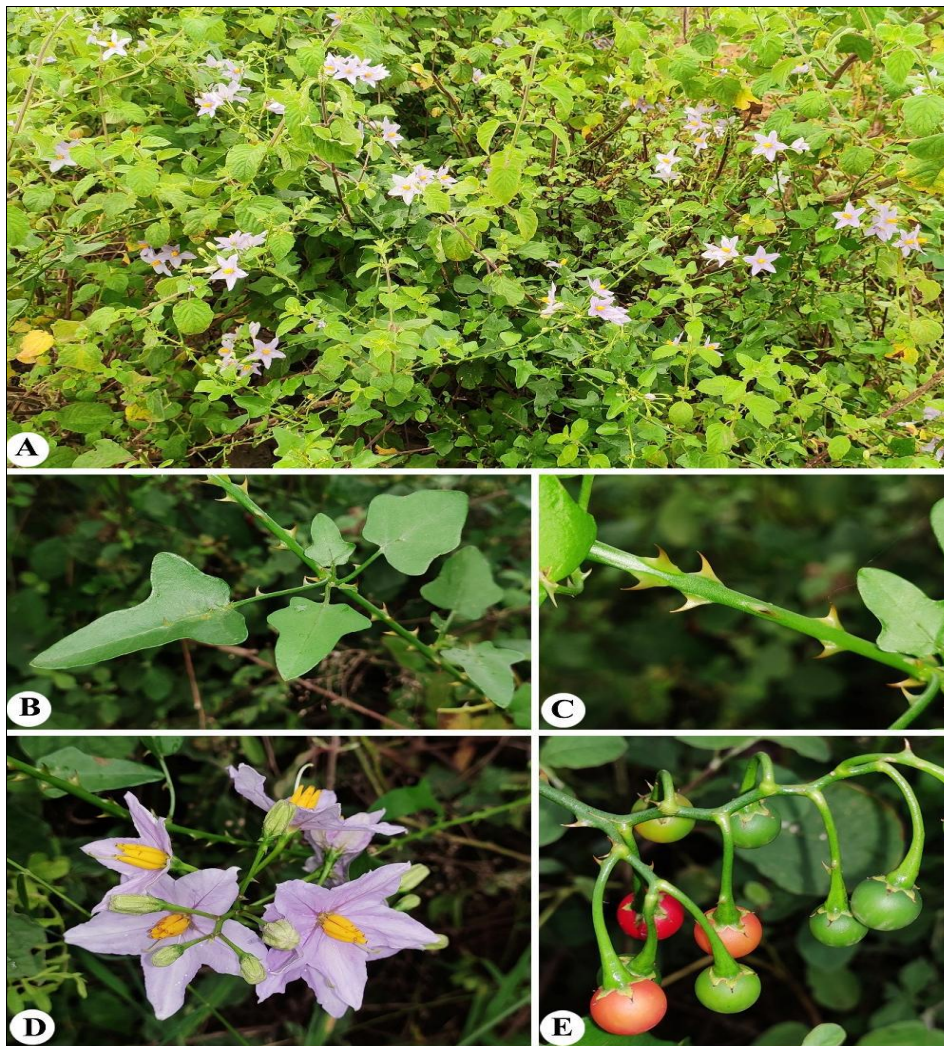


Fig 1: *Solanum trilobatum* L.; A. Habitat; B. Leaves; C. Prickles; D. Flowers; E. Berries

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