

# *Convolvulus farinosus* (Convolvulaceae): an addition to the Flora of India from Nilgiri Hills

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**Abstract:** *Convolvulus farinosus* L. (Convolvulaceae), recently collected from Nilgiri hills of Tamil Nadu state, is reported here as a new record for the Flora of India. A detailed taxonomic account, including description, illustrations, photographs and field notes are provided to facilitate easy identification of the species in the field.

**Keywords:** Bind weed, Addition, southern Western Ghats, India

## Introduction

The genus *Convolvulus* L., commonly known as 'bind weed', mostly occurs in stony, dry and sandy habitats. It is one of the largest genera in the family Convolvulaceae, characterized by axillary flowers subtended by small bracteoles, filiform stigmas, and a bilocular ovary. Wood *et al.* (2015) carried out taxonomic and morphological study of the genus *Convolvulus* globally and recorded 190 species, while in India ten species have been reported (Meena *et al.*, 2020). During revisionary studies of tribe Convolvuleae in India, a field tour was conducted in peninsular India. During this excursion, authors encountered some interesting specimens of genus *Convolvulus*. Based on taxonomic studies and a review of relevant literature (Hooker, 1883; Baker and Rendle, 1905; Gamble, 1936; Henry *et al.*, 1987; Biju, 1997; Wood *et al.*, 2015; Sanjappa & Sringeswara, 2019; Sankara Rao *et al.*, 2019; Meena *et al.*, 2020), the specimens were identified as *Convolvulus farinosus* L. a species is hitherto not recorded for

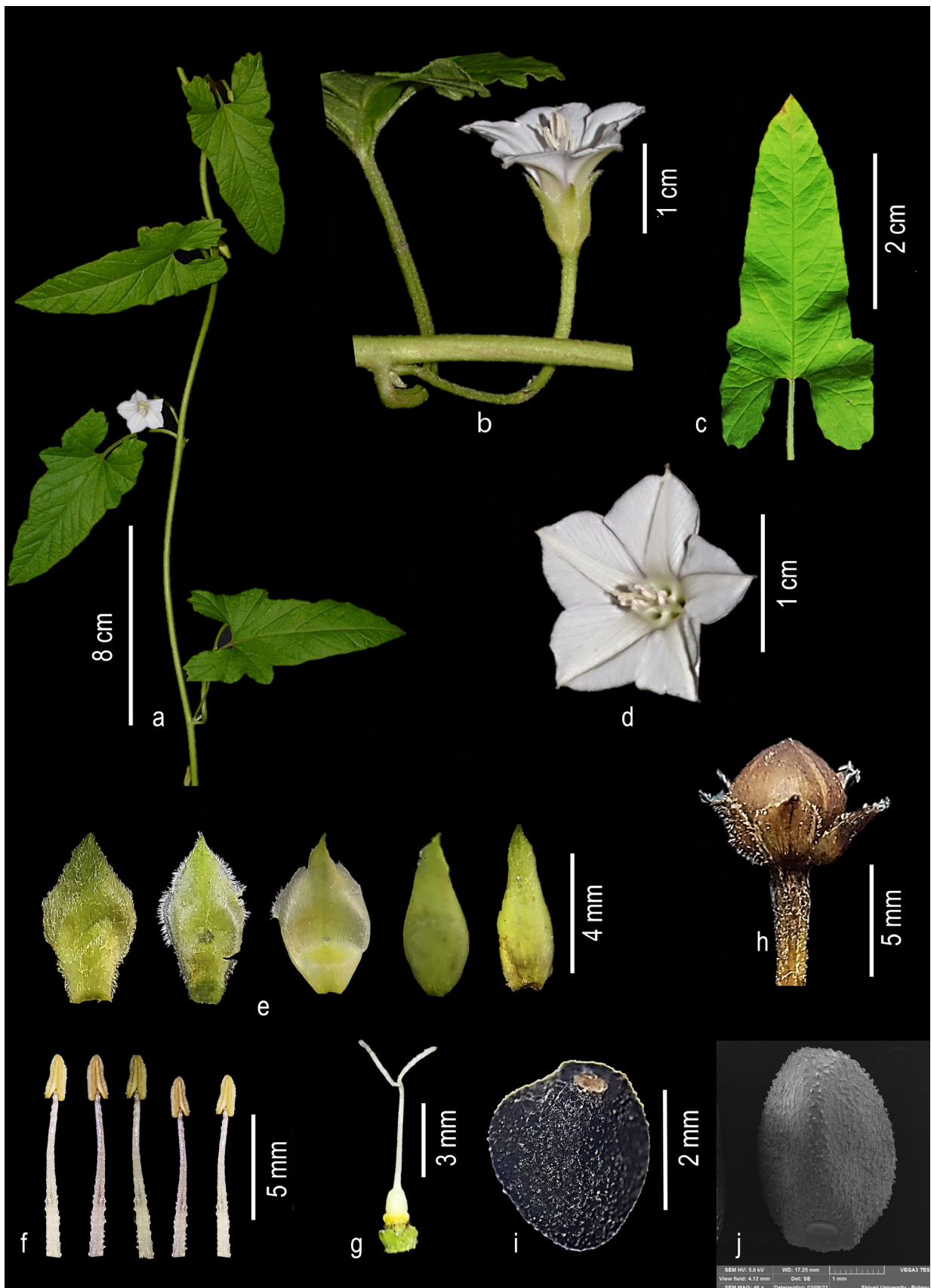
the flora of India. The identity was confirmed by Kathambi Vivian, East African Herbarium (EAH), Tanzania and further validated through virtual comparison with specimens deposited at Kew (K000097340) and Sydney (NSW603525). As this is the first report of *C. farinosus* from India, a detailed description, illustrations, photographic plate, and notes on its distribution are provided.

**Convolvulus farinosus** L., Mant. Pl. 2: 203. 1771 (Linnaeus 1771: 203). Figure 7, t. 1–6. *Type* (designated by Meeuse, 1958: 684): Cultivated plant grown at Uppsala (LINN 218.6!). **Figs. 1 & 2.**

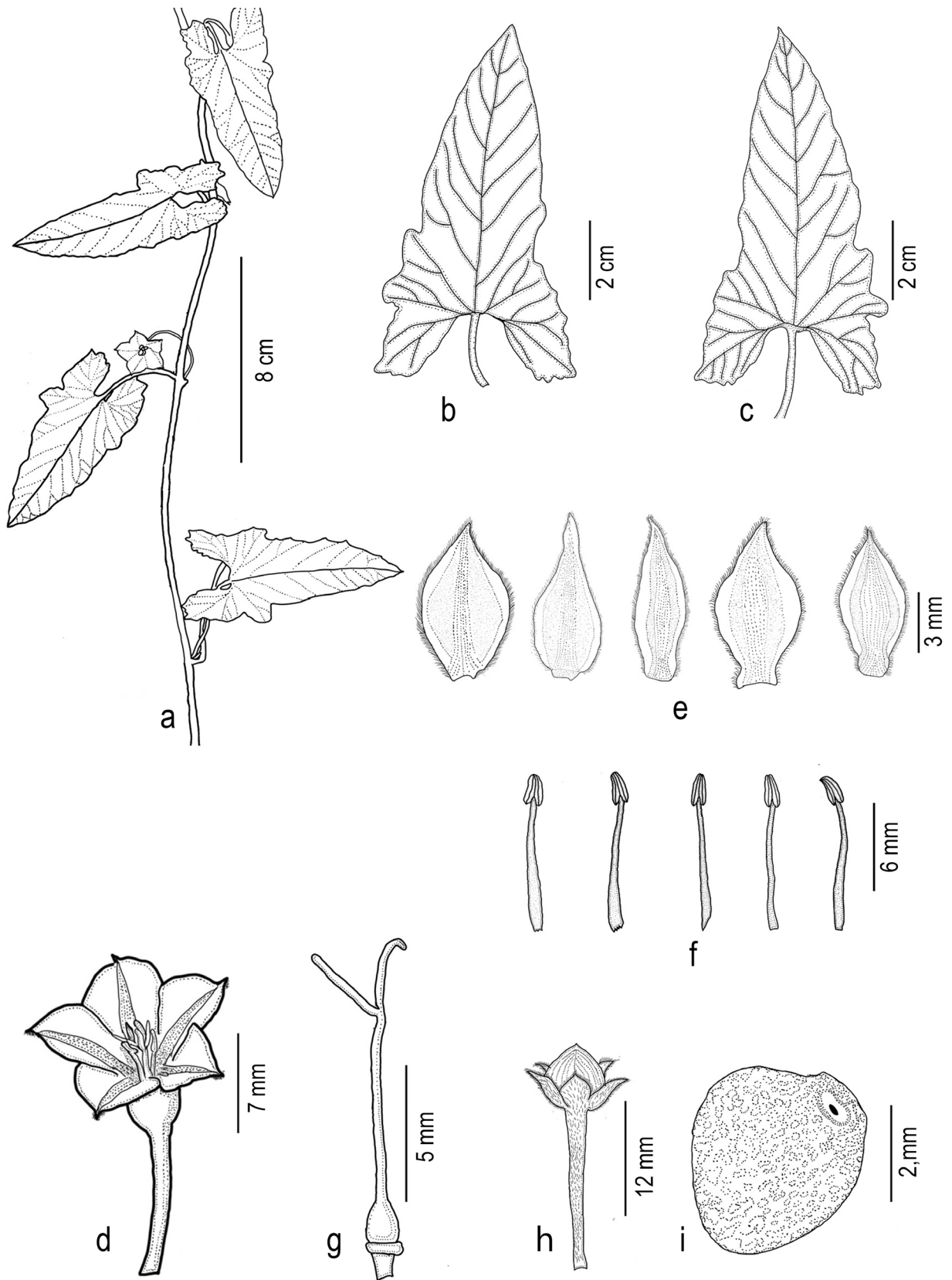
Perennial herbs; pubescent to velvety silky when young. Stem prostrate or twining, grows c. 90 cm long. Leaves petiolate, 4–7 × 1.5–3 cm; leaf blade triangular to cordate-deltoid, auricles acute, obscurely crenate, apex acute to acuminate, leaf margin entire, undulate to serrate; petioles 2–4.5 cm long. Cymes axillary, 1–6-flowered; peduncle c. 4.5 cm long. Bracts linear to linear-lanceolate, subulate, 2–3 mm long, minute; pedicels 1–1.5 cm long. Sepals ovate to lanceolate, 7–9 × 4–5 mm, acute, apex slightly reflexed; outer sepals pubescent; inner glabrous, apex often bent outward. Corolla 1–1.3 cm across, white or pinkish purple, shallowly lobed; mid-petaline bands pubescent at tips. Stamens 5; filaments 5–7 mm, glandular pubescent at the base; anther lobes c. 2 mm long. Ovary glabrous; style 8–10 mm, divided 3–4 mm above the base; stigma linear, 2–3 mm long. Capsules globose, 5–7 mm in diam., pale brown, glabrous, 4-seeded. Seeds blackish, 3–4 mm, sub-trigonous, glabrous, scabridulous.

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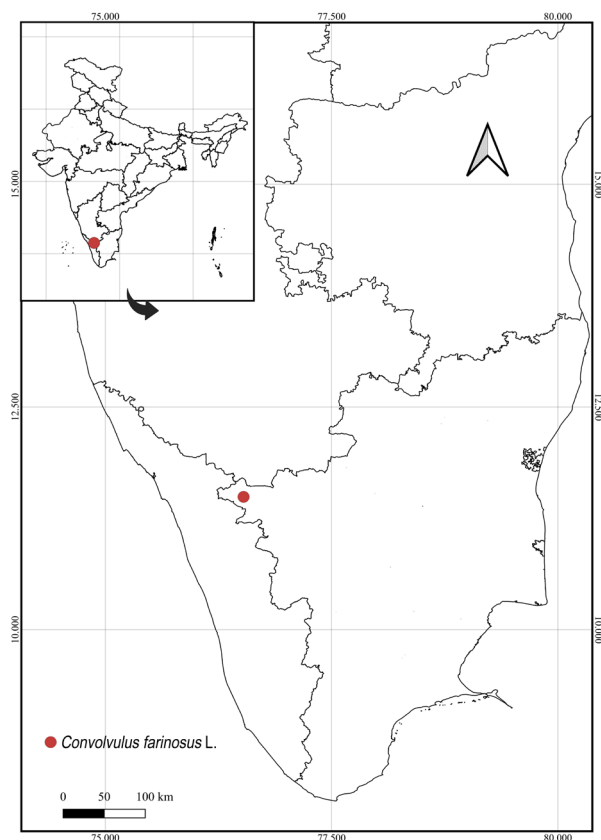
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**Fig. 1.** *Convolvulus farinosus* L.: **a.** Flowering twig; **b.** Flower with Peduncle; **c.** Leaf; **d.** Corolla-top view; **e.** Sepals; **f.** Stamens; **g.** Gynoecium; **h.** Capsule; **i** & **j.** Seed.



**Fig. 2.** *Convolvulus farinosus* L.: **a.** Flowering twig; **b.** Adaxial leaf surface; **c.** Abaxial leaf surface; **d.** Flower; **e.** Sepals; **f.** Stamens; **g.** Gynoeceum; **h.** Fruit; **i.** Seed.



**Fig. 3.** Map showing collection cite of *C. farinosus* L. in India

**Flowering & Fruiting:** Flowering and fruiting from June to July.

**Habitat:** Growing along roadside in Nilgiri forests, in association with *Ipomoea wightii* (Wall.) Choisy, *Cestrum aurantiacum* Lindl., *Mimosa pudica* L.

**Distribution:** The native range of this species is Eritrea to South Africa, Madagascar, Arabian Peninsula (POWO, 2024) and now in India (Fig.3).

**Specimen examined:** INDIA, **Tamil Nadu**, Gudalur district, 11° 29' 18.9" N 76° 31' 26.8" E, 1525 m, 06.07.2023, Sutar & Shimpale PVS01 (NCK!). ETHIOPIA, *s.d.*, Schimper 599 (K [K000097340] digital image!). SYDNEY, *s.d.*, G. Broadhead & L. Broadhead *s.n.* (NSW [NSW603525] digital image!).

**Notes:** *Convolvulus rufescens* Choisy, an endemic species is also reported from the Nilgiri Hills of India, but it differs from *C. farinosus* by having cuneate leaf base, leaf blades strongly dentate, pedicels 8-10 mm long, peduncles 6-8 mm long and filaments glabrous.

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