

Recollection of *Canscora pauciflora* Dalz. (Gentianaceae) and note on extended distribution from Maharashtra, India

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Abstract:

Canscora pauciflora Dalz. an Indian endemic species is reported for the first time from Maharashtra state. Apart from the type collection, the species was previously collected from Karnataka and Kerala. The present collection has a taxonomic value as the species was originally described from Maharashtra. It also highlights northernmost distribution of the species. This article provides detailed description, photographs and distributional notes of the *Canscora pauciflora*.

Key Words: Endemism, floristic, *Canscora*

Introduction:

The generic name *Canscora* is derived from Latin ‘Kansjan-cora’ is the name given by van Rheedee (1690). The genus *Canscora* was first established by Lamarck (1785: 601) to include a single species *C. perfoliata* Lamarck (1785: 601). The diagnostic characters as given by Lamarck include branched, angular stem, oval-pointed leaves, 2–3-flowered inflorescence, rounded and perfoliate bracts, 4 unequal petals (2 larger and 2 smaller) and 4 unequal stamens. The genus *Canscora* is represented by 11 species worldwide, of which six are reported from South India (Shahina, 2014). *Canscora shrirangiana* Kambale et. al has been recently described from lateritic plateaus of Goa (2018).

An endemic *C. Pauciflora* Dalz. (1850) being considered conspecific to *C. diffusa* (Thiv 2003). Nevertheless, Shahina (2014) resurrected distinctness of *C. pauciflora* from *C. diffusa* by the linear-lanceolate, non-foliaceous bracts, few flowered inflorescences, thickened pedicel and striate calyx. (2014). Although it was described from Bombay, Maharashtra by Dalzell (1850), the species was collected by subsequent workers from Karnataka and Kerala. No single specimen has been collected or known from Maharashtra apart from the type collection. The Flora of Maharashtra State (Dicotyledons) published by Botanical Survey of India has reported the species in different districts of state as Cooke, op. cit. Hence this is the first report on the collection of specimens after 170 years from the state of Maharashtra.

Thus, in present communication provided morphological description, photo plate and distinguishing characters of *C. pauciflora* for correct identification and reported new distributional records from Satara district (Maharashtra). The present work also enlightens the uttermost extended distribution of species in Maharashtra.

Materials and Methods:

During the floristic survey of Satara district (Maharashtra), some specimens belonging to genus *Canscora* were collected from Ambedare and Yavateshwar hills. The specimens of the taxon were procured and herbarium was prepared using standard herbarium procedures (Jain,1977). Initially we identified unknown *Canscora* species as *C. Diffusa*(Vahl) R. Br. ex Roem. &Schult. But after critical examination of specimens through perusal of literature (Rao and Hemadri 1976; Hooker 1879) and scrutiny of type specimens and other species of genus *Canscora* from Dr. Mayur Nandikar who is working on Dalzell's collection from India confirmed the identity of doubtful specimens as *Canscora pauciflora* Dalz. Though after the revision of genus for south India the species is not collected from Maharashtra state which comprises type locality (Cooke, 1908; Konkan) for this taxon. Hence, we have collected and relocated the taxon after its first collection from Maharashtra.

Result and Discussion:

Canscora pauciflora Dalz. in Hook. J. Bot. & Kew Gard. Misc. 2: 136.1850; C. B. Cl. in Hook. f. Fl. Brit. India 4: 104. 1883; Cooke, Fl. Pres. Bombay 2: 258 (Repr.); Singh in Fl. Maharashtra State, Dicotyledons 2: 403. 2001.

Erect, annual, glabrous herbs, 4–60 cm tall. Stems 4-winged; branches lax, dichotomous. Leaves sessile; blades linear-lanceolate, 15–40 × 5–30 mm, 3-nerved; apex acute; base attenuate. Cymes terminal or axillary, lax, dichasial; pedicels thickened below the calyx, 3–12 mm long; bracts green, linear-lanceolate, not foliaceous, 3–5 × 0.5–1 mm. Calyx green, hyaline in between, striate, persistent; lobes-4, linear-lanceolate, 6–6 × 0.5–1.75 mm; apex acute-acuminate. Corolla rose, pink or white, tubular or funnel-shaped; tube 3.5–5 mm long; lobes-4; 2 upper lobes equal, orbicular, 2–5 × 1–3 mm; lower lobes fused at the apex forming a deep slit in which one large stamen is lodged, 3–4 × 1–2 mm. Stamens 4, anisomorphic (1 large, 3 small); upper stamen filament not broadened below the anther, 1–2 mm long; lower stamen filament 0.5–0.9 mm long; upper stamen anther orange, lower yellow-white, linear-oblong. Ovary green, cylindrical, 3–6 × 0.6–0.9 mm; style rose-white, filiform, exserted, 2–4 mm long; stigma bilobed; lobes white, obovate, 0.3–0.8 × 0.4 mm, papillose. Capsule brown, oblong-subcylindric, 4–6 × 1–2.5 mm. Seeds 0.2–0.6 × 0.2–0.35 mm; testa brown, reticulate.

Habitat: Hilly slopes, open lands especially with water logging.

Association: *Senecio*, *Vicoa*, *Grasses*, *Alysicarpus*, *Tricholepis*, *Cassia*, *Artemisia*

Phenology: September – December

Distribution: India (Maharashtra, Karnataka, Kerala)

Table 1: Taxonomic comparison between *Canscora pauciflora* and *C. diffusa*

Taxonomic Trait	<i>Canscora pauciflora</i> Dalz.	<i>C. diffusa</i> (Vahl) R. Br. ex Roem. & Schult
Stem	4 - winged	4 - winged
Leaf	ovate to lanceolate	linear - lanceolate
Leaf base	attenuate	cuneate
Inflorescence	Terminal or axillary Lax cyme (dichasial)	dense cyme
Flower	3- 16 flowered	3 -75 flowered
Bract	Linear -lanceolate, Not foliaceous	Broadly ovate Foliaceous
Pedicel	sharply quadrangular; thickened below calyx	not thickened below calyx
Calyx	striate	without wings or striations
Corolla	orbicular, without white veins	Orbicular
Stamen	1 small 3 large	1 small 3 large
Anther	upper orange; lower yellow-white	upper orange; lower yellow-white
Filament	upper stamen filament 1-2 mm long; lower stamen filament 0.5-0.9 mm long	upper stamen filament 1-1.8 mm long; lower stamens filament 0.5–0.9 mm long
Ovary	Stigma papillose.	Stigma not papillose.
Seed	testa brown, reticulate	testa brown, reticulate

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Fig.: *Canscora pauciflora* Dalz. Lectotype

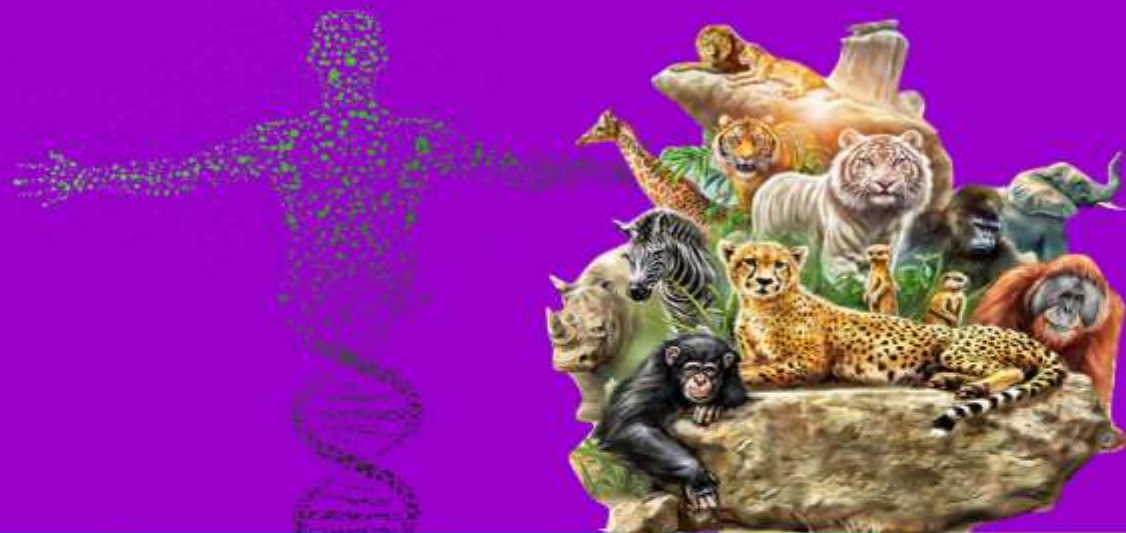
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