



Rediscovery of an endemic plant *Caralluma diffusa* (Wight) N.E. Br. (Asclepiadaceae) from Coimbatore District, Tamil Nadu, India, after 160 years

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The genus *Caralluma* R.Br. of the Asclepiadaceae family is of interest to botanists and succulent lovers alike. Gandhi (1999) brought to light the inadequacy of information and the need for a critical look at the Indian *Caralluma*. There are 110 species of *Caralluma* occurring in southern and eastern Africa, extending to the north into the Mediterranean and to the east through Arabia and India (Willis 1973). In India, the genus is represented by 13 species and five varieties (Jagtap & Singh 1999). *Caralluma diffusa* (Wight) N.E.Br. was first collected by Robert Wight, and named by him as *Boucerosia diffusa*, from Coimbatore in 1850. Henry et al. (1978) listed 224 species of rare and threatened

flowering plants from southern India. They stated that “No specimens of *Caralluma diffusa* had been deposited in MH”. It is one of the endemic species occurring in Coimbatore District. Gamble (1923) gave the distribution of this species as Deccan, arid rocky hills near Coimbatore at an elevation of about 600m. Srinivasan (1987) also indicated in Flora of Tamil Nadu that its distribution is only from Coimbatore District in Tamil Nadu and the threat status mentioned as rare and threatened. Chithra & Nair (1999) include 11 species of various genera in the family Asclepiadaceae and among which *Caralluma diffusa* (Wight) N.E.Br. and *Caralluma nilagiriana* Kumari & Subba Rao are considered as endemic to Tamil Nadu. Rao et al. (2003) have also included this species under ‘indeterminate status’.

However, while working on the chasmophytic flora of Coimbatore District, we collected this species from Madukkarai Hills of Western Ghats. This plant is usually seen in rock crevices. The local people use the sap of young stems to treat obesity. This note will facilitate the identification of the plants in the wild (Image 1). This species is now under heavy biotic pressure and it is doubtful whether the existing population will continue to survive in those localities. This wild plant is well suited for rock gardens and it can be conserved through ex situ cultivation. The endemism is prone to changes when more and more botanical explorations are undertaken and additional knowledge on the distribution of species are gathered at regional level.

This species is unique for its diffuse branches, very stout and attractive flowers in dense umbels (Hooker 1883). The species of this genus are generally pollinated by small scadophagous, dipterons and perhaps also by beetles (Stevens 1976).

Caralluma diffusa (Wight) N.E. Br.

in Gard. Chron. 2: 369. 1892; Gamble, Fl. Pres. Madras 2: 862. 1923; Srinivasan in Henry et al., Fl. Tamil Nadu 2: 81. 1987; Jagtap & Singh, Fasc. Fl. India 24: 201. 1999. *Boucerosia diffusa* Wight, Ic. Pl. Ind. Or. t. 1599. 1850; Hook.f. Fl. Brit. India 4: 78. 1883.

Specimen examined: 20.vi.2008, Madukkarai Hills, Coimbatore District, Tamil Nadu, coll. Binu Thomas, 3081 Bharathiar University, Department of Botany Herbarium (BUH) (Fig. 1).

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Image 1. *Caralluma diffusa* (Wight) N.E. Br.

Type: India: Madras Presidency; Coimbatore District, arid rocky mountains near Coimbatore at 600m elevation.

Stem fleshy; branches ascending, 4-angled, nearly of equal thickness throughout the branches; internodes 6–12 mm long, 5–15 mm thick, glabrous. Leaves absent, leaf scars present, with appendage-like growth at nodes on angled portion. Flowers in terminal umbellate cymes, many-flowered; bracts ca. 1.5x0.5 mm, triangular, acute at apex, glabrous; pedicels terete, 5–6 mm long, 1–1.5 mm thick, glabrous. Calyx 5-lobed, divided up to base; lobes ca 3x1 mm, lanceolate, acute at apex, glabrous. Corolla campanulate, ca. 8mm long; tube ca. 5mm long; lobes 5, ca. 3x2 mm, ovate, acute at apex, ciliate at margin only, otherwise glabrous. Corona biseriate; the outer annular, arising from base of stamens, closely intact; lobes 5, ca. 2.5x1.5 mm, with two horn like appendages widely separated from each other; the inner variable, ca. 1mm long, linear, arising from inner side of outer corona, overlapping anther-lobes. Stamens 5, ca. 2.5mm long; pollinia 5, pollen masses solitary in each anther cell, yellow, waxy with pellucid layer attached by light brown caudicles. Gynostegium ca. 1.5mm long.

Flowering & Fruiting: April–September.

Distribution: Endemic to Coimbatore, Tamil Nadu.

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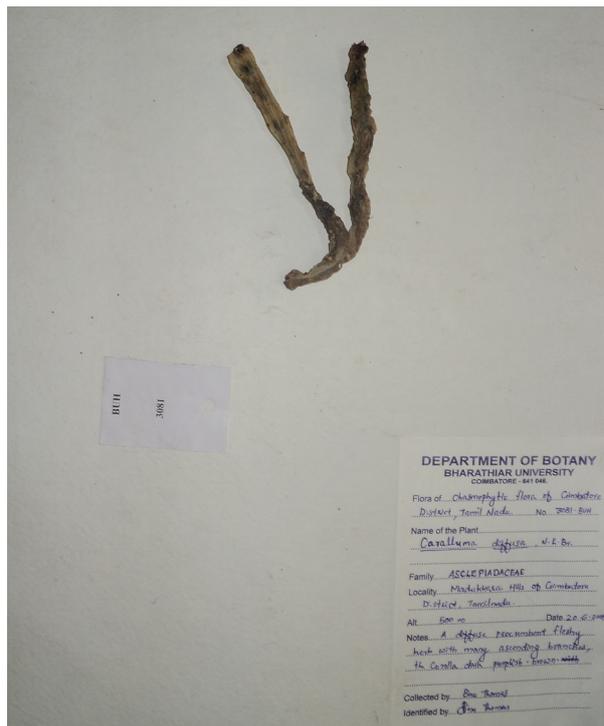


Figure 1. Herbarium of *Caralluma diffusa*

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