THE ELENADU SHORTCROWN BRACHYSTELMA ELENADUENSE SATHYAN. (ASCLEPIADACEAE) - A NEW DISTRIBUTION RECORD FOR TAMIL NADU, INDIA

S. Kaliamoorthy¹, T.S. Saravanan², B.S. Elango³ & G.V.S. Murthy 4

^{1,2,3} Botanical Survey of India, Southern Regional Centre, National Orchidarium & Experimental Garden, Yercaud, Salem District, Tamil Nadu 636602, India

The Eastern Ghats, an uneven terrain running nearly parallel to the eastern coast of India, are divisible into three zones, viz.: northern ghats, middle ghats and southern ghats (Rao 1998). Kolli Hill, one of the present study areas, is one among eight hills in the southern region. It lies at 78°20′-78°30′E & 11°10′-11°30′N, covering about 500km². Forests cover 44% of the total geographical area, agricultural activities take place in 51.6% and other activities cover less than 5% of the area. Annual rainfall varies between 300-750 mm and the soil type varies between red to black clay. The altitude range of the Kolli Hills varies from 200-1415 m. The

geology of the area is characterized by charnockites associated with gneisses and metamorphic rocks. The number of flowering plants in the Eastern Ghats is approximately about 3,500 species (Pullaiah & Rao 2002).



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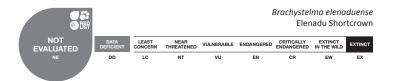
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Yercaud is a component of the

Eastern Ghats situated between 11°48"N & 78°11"E at an altitude of 1400m. Geologically, the Yercaud area is rich in archaean charnoekites with very few belts of granite gneiss. Along the hill slopes, the soil is red sandy-loam. Yercaud has a salubrious climate with a very equitable temperature and receives both the southwest and northeast monsoons. The annual rainfall ranges from 830–1350 mm. The temperature varies from 11–30 °C. Yercaud has the forest types ranging from evergreen to moist deciduous with fragments of shols on its western side (Udayan et al. 2005).

The present plant exploration study was conducted in the month of October 2013 in the above-mentioned hill ranges. Of the many plant species recorded, Brachystelma elenaduense Sathyan., is found to be the new distributional record for these regions in general and Tamil Nadu in particular. A brief botanical description and photographs are provided below to facilitate the easy identification of this species.







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⁴ Botanical Survey of India, Southern Regional Centre, Coimbatore, Tamil Nadu 614003, India

¹ skmoorthybsi@gmail.com (corresponding author),

² rammaheshsaran@gmail.com, ³ yercaudelango@gmail.com,

⁴ gvs.23.murthy@gmail.com



Image 1. Brachystelma elenaduense Sathyan. - entire habit

Brachystelma elenaduense

Sathyan. in Curr. Sci. 47(24): 965 (-966; figs. A-B). 1978 [20 Dec 1978] (as "elenaduensis"); G.D. Arekal & T.M. Ramakrishna, Bull. Bot. Surv. Ind. 24:217, 1982. (Asclepiadaceae).

Material examined: Kolli Hills, Namakkal District, Tamil Nadu, ~1200m, Shevaroy Hills, Salem District, Tamil Nadu, ~1350m, coll. Kaliamoorthy et al. (Images 1,2). A scanty population of mature individuals was observed in the study areas.

Distribution: Near Elenadu, Tumkur District, Karnataka, India.

Description: Erect perennial herb, with tuber-like rhizome; tubers ovate to discoid, brownish fleshy, 2–3 cm in diam. Stems 4.5–11 cm tall, branched, slender, puberulous, internodes approximately 0.4–0.65 cm long; buried part of the stem smooth and whitish in colour. Leaves 1–2.5 cm x 0.6–3 mm fleshy, linear to linear-lanceolate, narrowly acute. Flowers usually solitary 5–9 mm long, axillary, pedicel slender, puberulous; calyx 5-fid, lobes 3–4 mm long, narrowly acute; corolla lobes deltoid, reflexed; purple; corona stamina, 2-seriate; outer corona 5-bifid, obtuse not reflexed; inner corona 5-lobed tridentate, overtopping the anthers; hairy.

Phenology: Flowering: April–June Fruiting: May– September

Habitat and Distribution: This species was found growing amidst grasses on open rocky hill slopes



Image 2. Brachystelma elenaduense Sathyan. from wild - flowers and fruits

deposited with sandy loamy soil at an altitudinal range between 1200–1350 m in both the Kolli and Yercaud Hills of Tamil Nadu. The associated grass species were invariably found to be a *Cymbopogon* species.

Remarks: This species was earlier reported from Elenadu, Tumkur District of Karnataka (Char 1978; Arekal & Ramakrishna 1982). So far none of the published floras of Tamil Nadu has reported this species. The present collection from the Kolli Hills of Namakkal District and Shevaroy Hills of Yercaud, Salem District is not only a new report to the state but also extends its distribution to the Eastern Ghats.

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