

Crotalaria lanceolata (Leguminosae - Faboideae): A new record for India

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Abstract

Crotalaria lanceolata E. Mey., a pantropical species collected from Mandya district of Karnataka is reported for the first time from India. Detailed description, notes on distribution and photographs are provided for easy identification.

Keywords: *Crotalaria lanceolata*, India, Karnataka, new record.

Introduction

Crotalaria L., one of the largest genera of Leguminosae comprises c. 700 species, is chiefly distributed in tropical and subtropical regions of the world (Polhill, 1982; Mabberley, 2017). Ansari (2008) recorded 93 species, 1 subspecies, 17 varieties and 2 formae in India. In southern India, it is represented by 67 species and 8 infraspecific taxa (Sibichen & Nampy, 2007; Jabbar *et al.*, 2010; Krishnaraj *et al.*, 2011; Krishnaraj & Mohanan, 2012; Binu *et al.*, 2012). During a survey of medicinal plants in Mandya district of Karnataka state, the second author collected an interesting specimen of *Crotalaria* (only two individuals were found) with trifoliolate, linear-lanceolate leaflets. Careful examination with the relevant literature (Baker, 1871; Drummond, 1972; Pope *et al.*, 2003; Ansari, 2008; Li *et al.*, 2010; Leverett & Woods, 2012; Garcia *et al.*, 2013; Tiwari & Ansari, 2014; Flores & Tozzi, 2018) and comparison with type specimens, it was identified as *Crotalaria lanceolata* E. Mey. and is reported here as a new record to India.

Crotalaria lanceolata E. Mey., *Comm. Pl. Africa-Australia* 1: 24. 1836; Baker in Oliver *et al.*, *Fl. Trop. Africa* 2: 36. 1871; R.B. Drumm., *Kirkia* 8(2): 218. 1972; Pope *et al.*, *Fl. Zambesiaca* 3(7): 140. 2003; J.Q. Li *et al.* in Z.Y. Wu *et al.*, *Fl. China* 10: 106. 2010; Leverett & Woods, *Castanea* 77(4): 371. 2012; Garcia *et al.*, *R. Bras. Bioci.*, *Porto Alegre* 11(2): 214. 2013; A.S. Flores & Tozzi, *Phytotaxa* 346(1): 42.

2018. *C. mossambicensis* Klotzsch, *Naturw. Reise Mossambique* 6: 60, t.10. 1861. **Fig. 1.**

Annual herbs up to 1.25 m tall. Stems erect, branched, terete, ribbed, pilose when young, glabrescent when mature. Leaves 3-foliolate; petioles 3–5 cm long; petiolules 1–2 mm long; leaflets linear to linear-lanceolate, 4–14 × 0.5–1.5 cm, sparsely pilose or glabrous, cuneate at base, acuminate or mucronate at apex, entire along margins. Stipules absent. Inflorescence a terminal raceme, upto 20 cm long, 10–40-flowered. Pedicels 3–5 mm long. Bracts subulate to filiform, 0.5–3 mm long, expanded at base. Bracteoles subulate, narrow, 0.3–1 mm long inconspicuous, persistent, normally inserted at base of calyx or rarely on pedicels. Calyx sub-campanulate, c. 3 mm across, 5-lobed, pubescent; lobes triangular, c. 1 mm long, pubescent, shorter than tube. Petals 5, yellow with reddish-purple veining outside; standard petal broadly elliptic to orbicular, c. 1 cm long, with 2 appendages below; wing petals oblong, c. 1 cm long, marginally pilose at base; keel petals c. 1 cm long, rounded at apex, margins pubescent, beak long. Anthers dorsifixed, 1.3–1.6 mm long. Ovary 5–6 mm long, stipitate, glabrous; style curved. Pods oblong, narrowly cylindrical, curved at apex, 2–4 × 0.5–1.5 cm, glabrous, brown or black when mature; seeds c. 30, obliquely cordate, c. 2 × 2 mm; seed coat orange or red.

Flowering & fruiting: June–September.

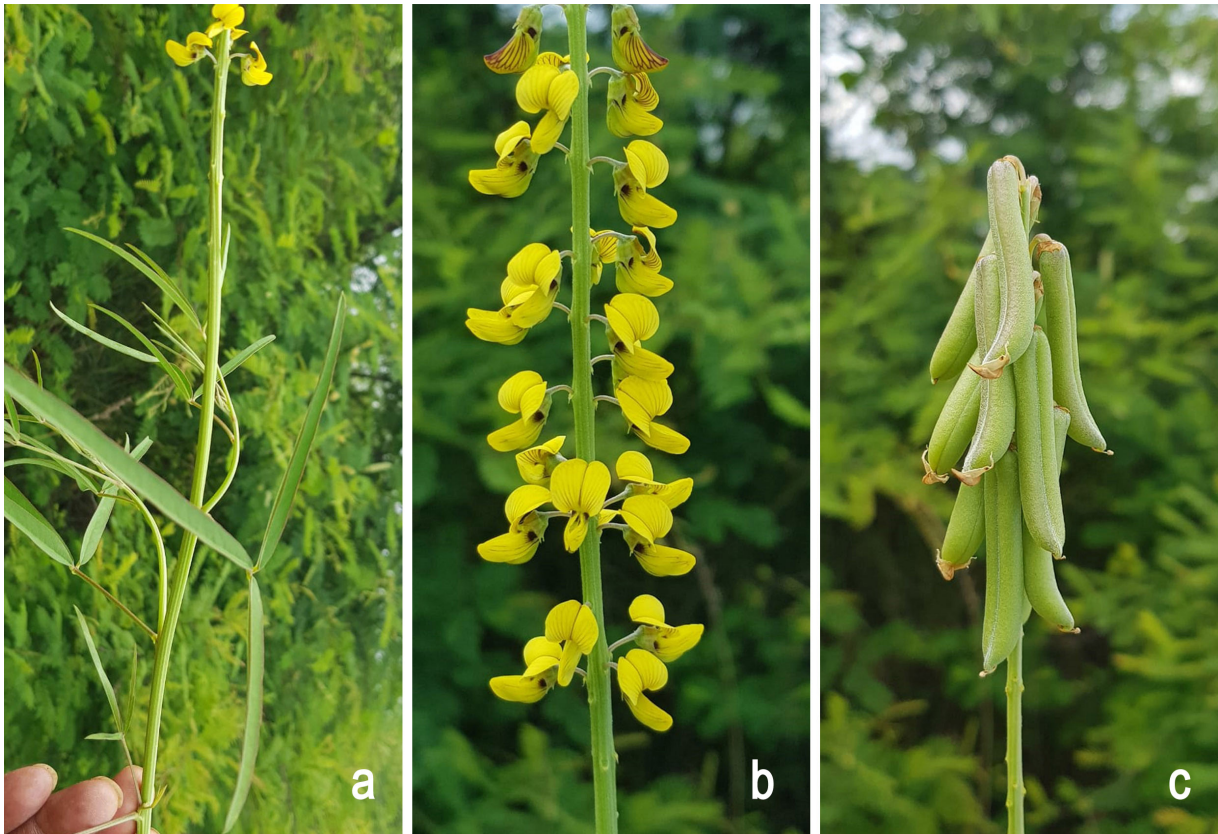


Fig.1. *Crotalaria lanceolata* E. Mey. **a.** A flowering branch; **b.** Closer view of Raceme; **c.** Closer view of Pods

Habitat: Growing in cultivated land at an altitude of 745 m along with *Balanites aegyptiaca* (L.) Delile, *Crotalaria pallida* Aiton, *Endostemon viscosus* (Roth) M.R. Ashby and *Solanum surattense* Burm.f.

Distribution: Native to Tanzania to South Africa, Madagascar. Introduced into Alabama, Bolivia, Brazil, China South-Central, China Southeast, Colombia, Florida, Honduras, Leeward Is., New South Wales, Paraguay, Queensland, South Carolina and Taiwan. (<http://www.plantsoftheworldonline.org>)

Notes: Authors could not locate any additional populations even after a careful search for this species in the vicinity, where the whole area is covered by a mono-dominant population of *Crotalaria pallida* Aiton. Most probably, this species might have entered the locality through horticultural trade, especially through the import of Water Melon [*Citrullus lanatus* (Thunb.) Matsum. & Nakai.] seeds from Sudan for cultivation in Mandya district of Karnataka.

Specimens examined: INDIA, **Karnataka**, Mandya district, Mallasandra, 12°54' 56.62" N; 78° 50'25.51" E., 745 m, 22.06.2018, N.M. Ganesh Babu, S.K. Manjunatha, V.J. Umesh & Hanumantharayappa 121203 (FRLH).

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