

***Crotalaria pallida* Aiton var. *obovata* (G. Don) Polhill (Fabaceae) - an extended distribution for Gujarat, Maharashtra, Goa and Karnataka**

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Abstract: *Crotalaria pallida* Aiton var. *obovata* (G. Don) Polhill (Fabaceae) is reported as a new distributional record for the states of Gujarat, Maharashtra, Goa and Karnataka. In India, it is reported from Sikkim, Tamil Nadu and Kerala. A detailed description along with a photo plate is provided for easy identification of the taxa.

Keywords: *Crotalaria pallida* var. *obovata*, Fabaceae, Goa, Gujarat, Karnataka, Maharashtra, new record.

Crotalaria L. is one of the largest genera with about 700 species distributed mainly in tropical and subtropical regions of the world with the highest concentration in Africa (Polhill 1982; Adema 2006; Mabberley 2008). It is the largest legume genus in India also, having 93 species, two subspecies, 17 varieties and two formae (Ansari 2008). During a botanical exploration in the Western Ghats, Maharashtra, a few specimens of *Crotalaria* were collected from Gophan in Raigad District which were later identified and confirmed as *Crotalaria pallida* Aiton var. *obovata* (G. Don) Polhill. Further, while scrutinizing the herbarium specimens deposited in BSI herbarium it was observed that many erstwhile collections from Gujarat, Maharashtra, Goa and Karnataka were identified as *Crotalaria pallida* Aiton and the same were determined as *C. pallida* var. *obovata*. This taxon was already known to occur in Kerala, Sikkim and Tamil Nadu (Ramachandran 1988; Sanjappa 1991; Mathew 1996). Hence, the present collection forms a new record for the states of Gujarat, Maharashtra, Goa and Karnataka showing their wide distributional range. A detailed description and photographs of a recent collection is provided here for easy identification of this taxa.

***Crotalaria pallida* Aiton var. *obovata* (G. Don) Polhill** in Kew Bull. 22: 265. 1968; Ramachandran & Nair, Fl. Cannanore, 132. 1988; Sanjappa, Legumes India 126. 1991; Ansari, *Crotalaria* India 341. 2008. *C. falcata* Vahl ex DC. Prodr., 2: 132. 1825. *C. obovata* G. Don, Gen. Syst., 2: 138. 1832.

Erect, well branched undershrubs, 1–2 m high; branchlets puberulous. Leaves 3-foliolate; petioles ca. 4cm long; stipules filiform, caducous. Leaflets obovate, 3–6x2–3 cm, obtuse - emarginate at apex, entire along margin, cuneate at base, membranous, glabrous above, glaucous and pubescent beneath; petiolule ca. 3mm long, woolly. Racemes terminal and lateral, elongated, up to 25cm long; peduncles ca. 5cm long; bracts linear, ca. 4mm long, caducous; bracteoles subulate, ca. 1–2 mm long, adpressed to



Image 1. *Crotalaria pallida* Aiton var. *obovata* (G. Don) Polhill; A - Habit; B - Pods; C - Inflorescence; D - Leaflets; E - Seeds.

calyx. Flowers numerous, 1.0–1.5 cm long, laxly arranged. Calyx tube campanulate, ca. 3mm long, truncate at base and strongly deflexed against the pedicels; lobes lanceolate, 4–5 mm long, acute at apex, adpressed pubescent. Corolla yellow with purple stripes, twice as long as calyx; vexillum yellowish-purple, oblong-elliptic, ca. 1.2x0.8 cm, obtuse-rounded at apex, claw ca. 3mm long; wing petals elliptic, ca. 1.0 x 0.3 cm; keel petals falcate, ca. 1.2x0.5 cm, ciliate on both margins. Staminal sheath ca. 8mm long; free filaments 4–8 mm long; anthers linear-lanceolate, ca. 3mm long; style ca. 1 cm long, curved, pubescent on the inner side. Pods oblong or subcylindric, 3–4x0.6–0.7 cm, shortly

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Image 2. *Crotalaria pallida* Aiton var. *pallida*
A - Habit; B - Inflorescence; C - Pods.

stipitate, sometimes slightly curved, glabrescent.
 Seeds 40–60, reniform, ca. 3x2 mm, brown (Image 1).

Specimens examined: Gujarat: 115175A (BSI), 26.ix.1968, Kandla, coll. R.S. Raghavan.
 Maharashtra: 195033 (BSI), 21.viii.2013, 18°28'74"N & 73°02'57.3"E Gophan, Raigad District, coll. Sameer Patil; Pune, Ganesh-khind garden, Woodrow s.n. (BSI); 108010 (BSI), 16.xi.1965, Ratnagiri, coll. B.G. Kulkarni; 115374 (BSI), 25.ix.1968, Thane, coll. K.V. Billore. Goa: 88332 (BSI), 30.iv.1963, Panjim, coll. K.C. Kanodia; 125101 (BSI), 07.x.1970, Patrem, coll. N.P. Singh; Goa-Near Cathedral, W.A. Talbot s.n. (BSI). Karnataka: 74832 (BSI), 30.ix.1961, Mysore, Kalgundi, Sampaje Road, coll. A.S. Rao; 85973 (BSI), 24.ii.1963, Mysore, Chippehde, Watecolly, coll. A.S. Rao.

Flowering & Fruiting: Throughout the year.

Habitat: It grows along disturbed forest borders, roadsides and in open wastelands and commonly found associated with species such as, *Calotropis gigantea* (L.) R.Br., *Mimosa pudica* L., *Urena sinuata* L., *Senna tora* (L.) Roxb. and *Malachra capitata* (L.)

Distribution: INDIA (Sikkim, Gujarat, Goa, Maharashtra, Karnataka, Kerala, Tamil Nadu); Madagascar, North and South America.

Key to the varieties

1a. Leaflets elliptic-ovate, 6–13 cm long, acute-apiculate at apex; flowers in dense racemes, bright yellow; anthers oblong; seeds cordiform (Image 2)..
*C. pallida* var. *pallida*

1b. Leaflets obovate, 3–7 cm long, obtuse-emarginate at apex; flowers in lax racemes, yellow with purple stripes; anthers linear-lanceolate; seeds reniform.....*C. pallida* var. *obovata*

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