

**Short Communication**

**CROTALARIA BIFARIA L.f. (LEGUMINOSAE – PAPILIONOIDEAE): A  
NEW DISTRIBUTIONAL RECORD FOR EASTERN INDIA**

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**ABSTRACT**

*Crotalaria bifaria* earlier known from Peninsular India, Gujarat and Rajasthan is reported as a new record for Eastern India from Palkot Wildlife Sanctuary, Jharkhand. A detailed description, photographs and distribution map are provided for facilitating easy identification of this species.

**Keywords:** *Crotalaria bifaria*, Eastern India, Leguminosae – Papilionoideae, New Record

**INTRODUCTION**

The genus *Crotalaria* L. (Leguminosae – Papilionoideae) is represented by c. 700 species, and distributed chiefly in tropical and subtropical regions of the world (Mabberely, 2008). In India, the genus is represented by 93 species, 1 subspecies, 17 varieties and 2 formae, of which c. 80 species are distributed in Peninsular India, and the remaining 13 are found in eastern and north-eastern regions (Ansari, 2008).

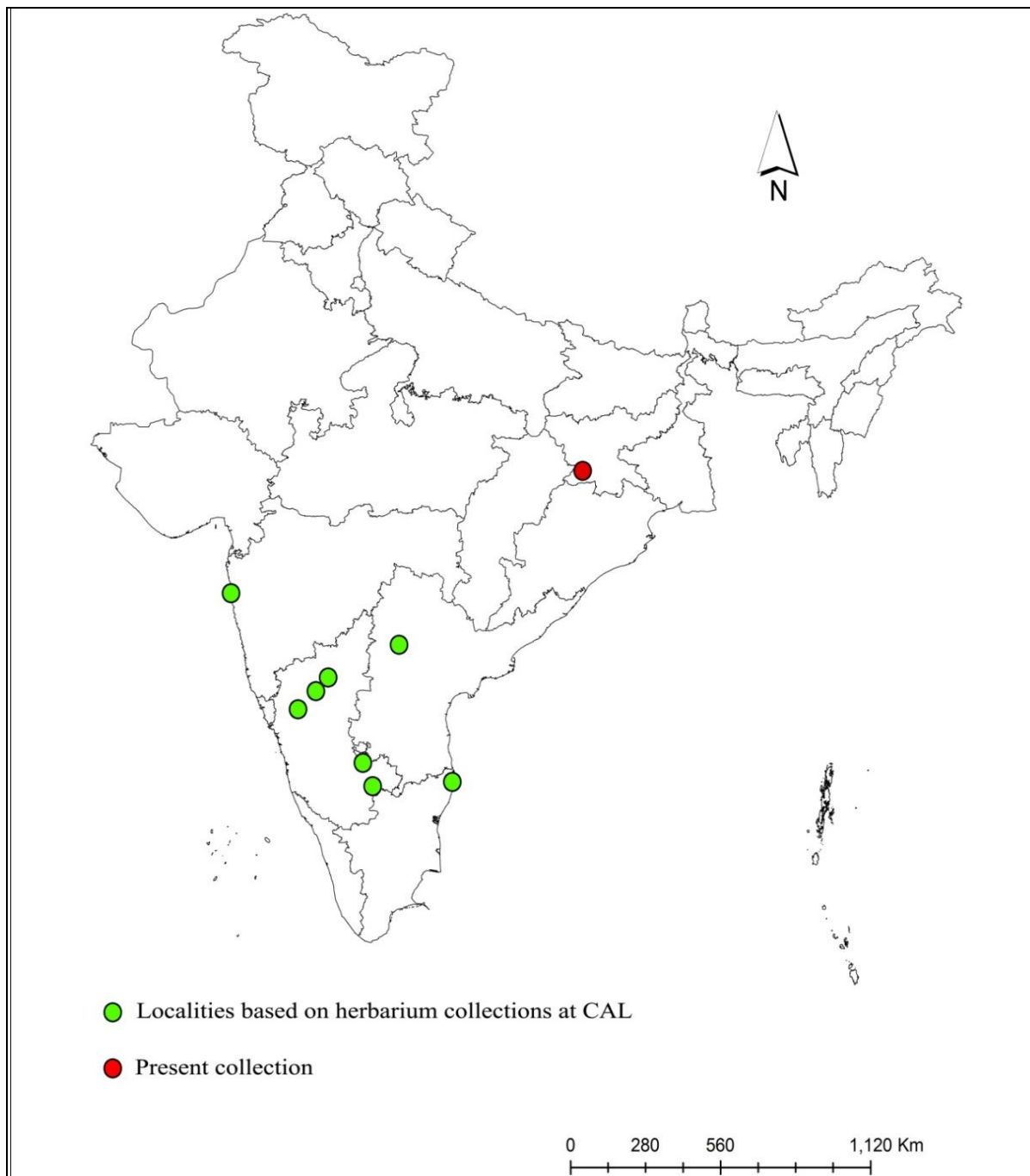
To assess the angiosperm diversity of Palkot Wildlife Sanctuary, Jharkhand intensive field explorations have been conducted during 2010–2013, during which a species of *Crotalaria* was collected. A careful scrutiny of herbarium specimens housed at CAL revealed that it is *Crotalaria bifaria* L.f. and on perusal of literature (Gandhi, 1976; Shah, 1978; Sundararaghavan *et al.*, 1981; Vajravelu, 1983; Saldanha, 1984; Singh, 1987; Singh, 1988; Sanjappa, 1992; Kothari, 2000; Pullaiah & Ramamurthy, 2001; Sasidharan, 2004; Nayar *et al.*, 2006; Ansari, 2008), it is found that this species is distributed in Peninsular India, Gujarat and Rajasthan. Kumar & Sane (2003) included Odisha under distribution based on Pullaiah & Ramamurthy (2001), which is a mistake, as Odisha is not included by the latter. Thus the present collection is a new distributional record for Eastern India, and hence a detailed description, photographs, distribution map are provided here to facilitate its identification.

***Crotalaria bifaria* L.f.**, Suppl. Pl.: 322. 1781; Wight & Arn., Prodr. Fl. Ind. Orient.: 188. 1834; Wight, Icon. Pl. Ind. Orient.1: 17, t. 30. 1838; Baker in Hook.f., Fl. Brit. India 2: 69. 1879; G.L. Shah, Fl. Gujarat 1: 192. 1978; K.M. Matthew, Fl. Tamilnadu Carnatic: 362. 1983; Sanjappa, Leg. India: 117. 1991; Pull. & al., Fl. E. Ghats 2: 162. 2001; A.A. Ansari, *Crotalaria* L. India: 161. 2008. **Figure 1 & 2.**

Spreading herb, up to 60 cm long. Stems branched, terete, slightly striate, puberulous. Leaves simple, bifarious, orbicular, elliptic-ovate or oblong-lanceolate, 0.5–2 × 0.6–3.3 cm, obtuse at base, slightly crisped, entire at margins, mucronate or apiculate at apex, subcoriaceous, puberulous above, sparsely pilose beneath, especially on veins; lateral veins 2–4 pairs, arcuate, anastomosing intramarginally; petioles 0.5–2.5 mm long, pubescent; stipules ovate, 2–3 mm long, acuminate at apex, slightly reflexed, pilose. Racemes terminal; peduncles stout, 3.5–6 cm, puberulous. Flower 1, 1.2–1.6 × 1.7–2.2 cm; pedicels 2–8 mm long, puberulous, striate, broadened at apex; bracts 2, opposite, below calyx, ovate-lanceolate or ovate-cordate, 4–6 mm long, acuminate at apex, slightly reflexed, puberulous. Calyx deeply 5-lobed; tube short, 2-lipped; lobes 1–1.3 × 0.3–0.4 cm; upper lip 2-lobed, lobes lanceolate, acuminate at apex; lower lip 3-lobed, lobes linear-lanceolate, distinctly veined, pubescent. Corolla slightly exserted, bluish; vexillum obovate-orbicular, 1–1.8 × 0.8–1.7 cm, bluish purple-veined; claw 1–2 mm long,

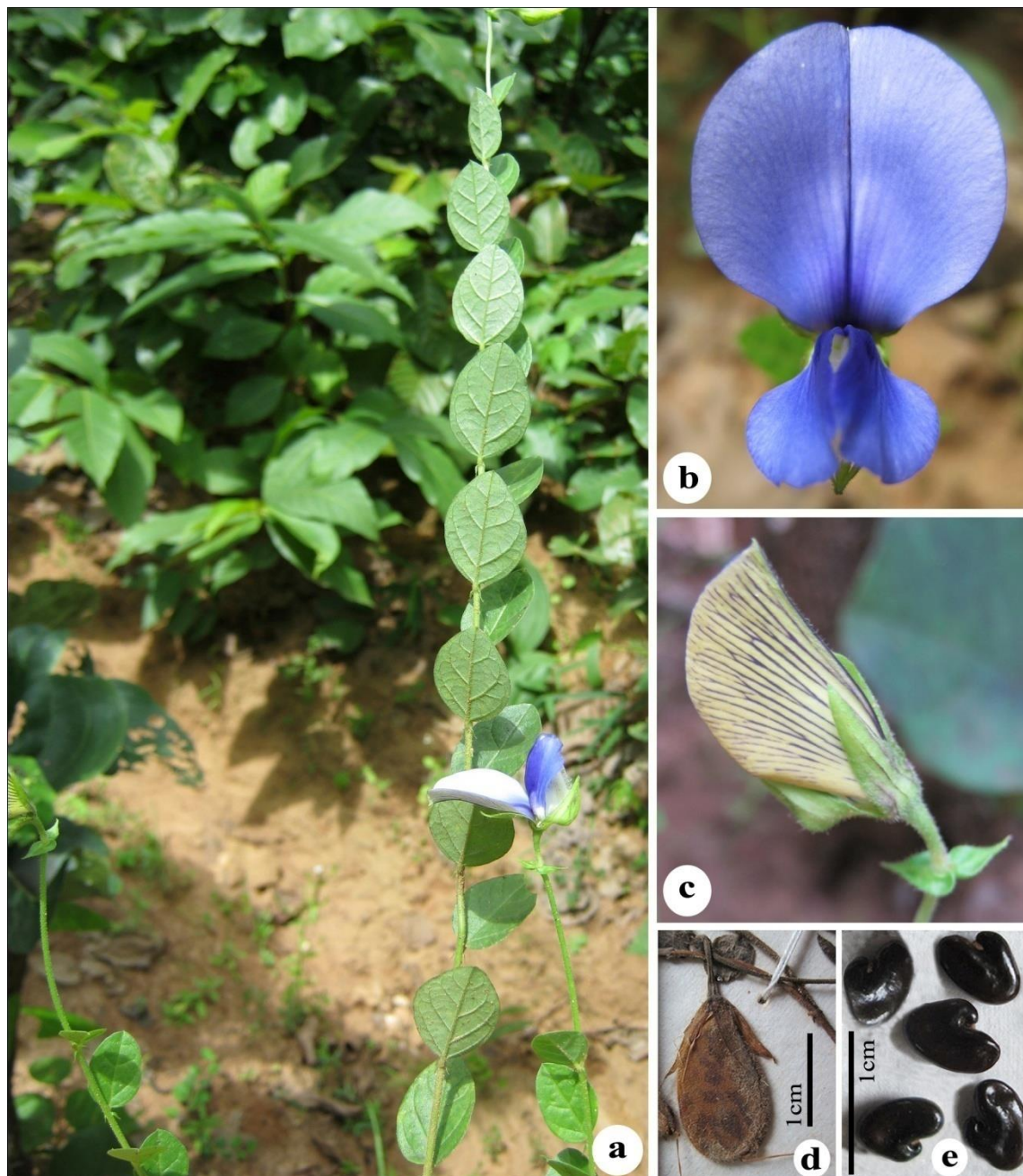
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pubescent; wings obovate-spathulate,  $0.8-1 \times 0.2-0.4$  cm; keels  $1.3-1.6 \times c. 0.8$  cm, margins ciliate at base, long-beaked, twisted. Stamens 10, monadelphous, dimorphic; longer anthers 5, linear, 2-3 mm long; shorter anthers 5, globose, 0.2-0.5 mm. Ovary subsessile, oblong,  $6-7 \times c. 1.5$  mm, pubescent on one side only; style 7-14 mm long; stigma flat or globose. Pods obovoid-oblong,  $1-3 \times 1-1.5$  cm, pubescent or minutely appressed-hispid, brown or dark brown (immature green pods with black patches), with persistent style. Seeds 6-8, reniform,  $3-5 \times 3-5$  mm, glossy, blackish.



**Figure 1: Distribution map of *Crotalaria bifaria* L.f. based on herbarium collections deposited at CAL**

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**Figure 2: *Crotalaria bifaria* L.f.: a. Habit; b. Flower; c. Vexillum with bluish-purple veins, calyx and bracts; d. Fruit; e. Seeds**

**Flowering and Fruiting:** October–February.

**Habitat:** Scrub jungles and dry deciduous forests, 600 m.

**Specimens Examined:** **Andhra Pradesh:** ICRISAT site, 30 km NW of Hyderabad, 28.10.1976, *L.J.G. van der Maesen* 2610 (CAL) & 01.09.1978, *L.J.G. van der Maesen* 3226 (CAL). **Jharkhand:** Gumla, Palkot Wildlife Sanctuary, Pozenga forest, 22°47'47.7" N, 84°39'46.2" E, 600 m, 02.10.2012, *V.K. Mastakar* 42007 (CAL). **Karnataka:** Badami, September, 1910, *A. Meebold* 11299 (CAL); Bangalore, Lalbagh, March, 1904, *Cameron s.n.* (CAL); Bijapur district, Ksmatagi, 14.09.1979, *S.R. Ramesh & B.R. Ramesh* KFP9261 (CAL); Dharwar, 22.11.1889, *W.A. Talbot* 1960 (CAL); Hassan district, near

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Shantigrama, 15.10.1978, C.J. Saldanha & K.R. Keshava Murthy KFP3317 (CAL); Mysore, *Beddome s.n.* Maharashtra: Bombay, 1878, N. Dalzell s.n. (CAL). **Tamil Nadu:** Herb. Wight Propr. Wight 593, 687 (CAL).

**Distribution:** INDIA: Peninsular India, Gujarat, Jharkhand (Palkot Wildlife Sanctuary) and Rajasthan. SRI LANKA.

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