

**BIDARIA INDICA RAHMAN & WILCOCK A RARE AND LITTLE KNOWN ENDEMIC FROM
NILGIRI DISTRICT OF TAMIL NADU, INDIA**

P.S. UDAYAN, INDIRA BALACHANDRAN AND P.N. RAVINDRAN

*Centre for Medicinal Plants Research (CMPR), Arya Vaidya Sala, Kottakkal
Malappuram district, Kerala*

e-mail : avscmpr@sify.com / avscmpr@yahoo.co.in

Bidaria indica Rahman & Wilcock, belonging to the family Asclepiadaceae is a rare endemic species found rarely in the Western Ghats regions of Karnataka, Kerala and Tamil Nadu. Present collection from Naduvattam forest, near Ooty (Western Ghats), Nilgiri district, extended its distribution towards North Tamil Nadu. After Beddome's type collection, in 1857 it is for the first time this species is collected, after a lapse of 148 years from Tamil Nadu. This is also a new report from this district. The specimens have been compared with the specimens housed in Madras Herbarium, (MH), Coimbatore. A brief description together with ecological notes is provided for better understanding of this endemic and little known taxon.

Bidaria indica Rahman & Wilcock in *Blumea* 34(1): 99-101. 1989 et 34 (2): 520. 1990; Nayar, *Hot Spots End. Pl. India, Nepal and Burma* 199. 1996; Jagtap & Singh, *Fasc. Fl. India* 24. 67. 1999; Udayan & al., *My Forest* 37(1): 327. 2001. *Gymnema montanum* (Roxb.) Hook.f., var. *beddomei* Hook.f. in Hook., *Fl. Brit. India* 4 : 32. 1883; Srinivasan in Henry & al., *Fl. Tamil Nadu Ser. 1.2*: 85. 1987; Vajravelu, *Fl. Palghat dist.* 289. 1990. *Bidaria montana* (Roxb.) Rahman & Wilcock var. *pubiflora* (Hook.f.) Jagtap & Singh in *Biovigyanam* 16(1): 62. 1990. *Gymnema montanum* Hook.f. var. *pubiflora* Hook.f. in Hook.f., *Fl. Brit. India* 4 : 32. 1883. (ASCLEPIADACEAE).

A climbing shrub; branchlets terete, minutely lenticellate. Leaves oblong-elliptic, 5-12.5 × 1.5-3.8 cm, glabrous above, sparsely hairy on nerves below, with 5-6 minute black glands at the base of lamina, acuminate at apex, entire along margins, obtuse to subacute and rarely subcordate at base; lateral nerves 4-6 pairs, looping along the margins; petioles 1-2.2 cm long, densely hirsute. Inflorescence axillary, condensed cymes resembling pseudo-umbels, 7-13 per cyme; peduncles 0.5-1.5 cm long. Flowers c. 1 cm across, usually 2 per cyme. Calyx-lobes 5, oblong, 6 × 3 mm across, minutely hirsute without, densely hairy at base, margins ciliate, obtuse at apex, green. Corolla tubular below, lobed above; corolla-tube c. 3 mm long, outside sparsely hirsute inside, glabrous, yellow; corolla-lobes 5, ovate, 4 × 3 mm across, obtuse at apex, hirsute without, glabrous within, ciliate along margins, reflexed, yellow. Corona of single row, reduced to 5 fleshy narrow double ridges, adnate to the throat of corolla lobes, lanceolate, 2 × 1 mm, alternate to petal lobes, brown. Staminal column cylindrical, fleshy, 2 × 1 mm, yellow; Stamens 5, brown. Carpels 2, ovoid, fused, c. 2 mm long, glabrous, yellow; styles fused; stigma capitate, about 1 mm across, white. Follicles usually solitary, rarely in pairs, sub-woody, elliptic-lanceolate, 10.5 × 1.5 cm, smooth, glabrous; seeds numerous, ovate-oblong, 1.8 × 0.8 cm, papery, yellow, glabrous; coma numerous, white-silky, up to 5 cm long.

Fl. & Fr.: March July.

Distribution : Endemic to Western Ghats. Earlier reports were from Mukkali forest (Palakkad district, Kerala), Anamalai hills (Coimbatore district, Tamil Nadu), and Kemmangundi forest of Chickmagalur district, Karnataka (Udayan & al. 2001).

Habitat : Rare in semi-evergreen forests.

Specimen examined : P.S. Udayan & al., 03536 collected from Naduvattam forest near Ooty, Nilgiri district, Tamil Nadu, at an altitude of ± 1820 m on 11.05.2005. Only 3 mature individuals could be located in the area.

Notes : The present collection from Naduvattam forest is the second collection from Tamil Nadu, after a lapse of 148 years, Beddome's type collection. The highly disjunct, extended distribution of this species in Western Ghats shows its unique distributional pattern. We could observe only three mature individuals in the area. Three voucher specimens of this species are deposited in the herbarium of Centre for Medicinal Plants Research, (CMPR), Arya Vaidya Sala, Kottakkal, Malappuram, Kerala.

ACKNOWLEDGEMENTS

The authors are thankful to the authorities of Arya Vaidya Sala (AVS), Kottakkal and TATA trust, Mumbai for the financial support. Dr. G.V.S. Murthy, Joint Director, Botanical Survey of India and Dr. N. Sasidharan, Scientist, KFRI, Peechi, for referring the specimen and giving expert opinion. We express our gratitude to the authorities of Tamil Nadu Forest Department and Mr. R. Ganesan, I.F.S., District Forest Officer, Nilgiri South Division, Udthagamandalam for granting permissions and co-operation during field visit. We are also thankful to Mr. N.K. Janardhanan of AVS Herbal Garden, for assisting during the field visit.

REFERENCE

- UDAYAN, P.S., K. RAVIKUMAR AND S. NOORUNNISA BEGUM. 2001. Additions to the flora of Chikmagalur district, Karnataka. *My Forest*. 37(1): 325-334.