



Research Article

Distributional Notes on *Merremia aegyptia* (L.) Urb. (Convolvulaceae) and *Vachellia leucophloea* (Roxb.) Maslin (Leguminosae: Mimosoideae)

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Abstract: During botanical exploration tour to Gautam Buddha Wildlife Sanctuary in 2012–15, the first author collected two species namely *Merremia aegyptia* (L.) Urb. and *Vachellia leucophloea* (Roxb.) Maslin. These collections from the Sanctuary are reported here as new records for the Flora of Bihar. Detailed morphological description, habitat, phenology, distribution and colour photographs are provided.

Keywords: Bihar, *Merremia aegyptia*, new records, *Vachellia leucophloea*

Introduction

Gautam Buddha Wildlife Sanctuary is situated in Gaya district of Bihar and Hazaribagh & Chatra districts of Jharkhand. The Sanctuary lies between 24°19'–24°31' N and 84°59'–85°17' E, covers an area of 259.46 km². Mohane and Goari are the main rivers. In course of botanical exploration tour to the Sanctuary, two interesting species were collected which were later identified as *Merremia aegyptia* (L.) Urb. (Convolvulaceae) and *Vachellia leucophloea* (Roxb.) Maslin (Leguminosae: Mimosoideae). Perusal of literatures (Haines 1910, 1921–25; Mooney, 1950; Varma, 1981; Singh, 1986; Bhattacharya and Sarkar, 1998; Paria and Chattopadhyay, 2000 & 2005; Singh *et al.*, 2001; Sharma and Sarkar, 2002) revealed that these species were not so far reported from Bihar and hence reported here as new record for the Flora of Bihar. Detailed morphological description, habitat, phenology, distribution along with colour photographs are provided.

***Merremia aegyptia* (L.) Urb., Symb. Antill. (Urban).** 4(3): 505. 1910. *Ipomoea aegyptia* L., Sp. Pl. 1: 162. 1753. (Fig. 1A-F)

Twinning herbs; stems densely hirsute, long hairy. Leaves thin, palmately 5-lobed; lobes elliptic-lanceolate, acute at apex, cuneate at base, silky pubescent. Inflorescences axillary, 1–3-flowered cymes; bracts small, linear. Sepals 5, elliptic-oblong, densely long hairy. Corolla white, funnel-shaped, shallowly lobed, faintly reflexed. Stamens 5, partially included; anthers twisted. Ovary 4-locular; styles entire; stigma biglobose, included. Capsules ovoid, 1.2–2 cm across, drooping, dehiscing valvately or

circumscissile or irregularly; seeds trigonous, glabrous.

Flowering & Fruiting: September-January.

Habitat: Found growing near Harnahi forest block, Gaya district, Bihar in association with *Helicteres isora* L., *Ipomoea biflora* (L.) Pers., *Martynia annua* L. and *Mukia maderaspatana* (L.) M. Roem.

Distribution: India: Western Deccan Peninsular region (Gujarat, Maharashtra and Rajasthan).

World: Widespread in Old World and South America.

Specimen examined: Gaya, Harnahi, 10.11.2014, Anand Kumar 63512 (CAL).

***Vachellia leucophloea* (Roxb.) Maslin, Seigler & Ebinger, Blumea 58: 42. 2013. *Mimosa leucophloea* Roxb., Pl. Coromandel 2: 27, t. 150. 1798. *Acacia leucophloea* (Roxb.) Willd., Sp. Pl., ed. 4, 4: 1083. 1806; Haines, Bot. Bihar Orissa: 325. 1922. (Fig. 1G-H).**

A medium sized tree, 4–7 m tall; young branches velvety pubescent. Leaves bipinnate, 3–5 cm long; rachis pubescent, with rounded glands at the base of lower pinnae and in between upper pinnae; petioles 0.5–1 cm long, pubescent; stipules spinescent, in pairs, straight; pinnae 6–8 pairs, 2.5–3.5 cm long; leaflets 14–19 pairs, sessile, oblong, 2.5–8 mm long, obtuse at apex, truncate at base, pubescent. Inflorescences pedunculate heads on terminal or axillary panicles; bracts whorled and fused basally, about or below the middle of the peduncles. Flowers white. Calyx campanulate, villous, shortly 5-toothed. Corolla hairy outside, shortly 5-toothed. Stamens numerous, free. Ovary oblong; stigma indistinct. Pods flat or cylindrical,

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turgid, 10–15 cm long, brown velvety, semi-dehiscent; seeds 10–20.

Flowering & Fruiting: May-February.

Habitat: Dry deciduous forests.

Distribution: **India:** Delhi, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal. **World:** East Timor, Indonesia (Java, Bali),

Malaysia, Myanmar, Pakistan, Sri Lanka, Thailand, Vietnam (southern); introduced in Trinidad and Mauritius.

Specimen examined: Gaya, Bhalua, 08.09.2012, Anand Kumar 57171 (CAL).

Note: Genus *Vachellia* is characterized by stipular spines at nodes that can either be straight, deflexed or weakly falcate. Haines reported this plant from Odisha (from Balasore and Cuttack to Sambalpur).



Fig. 1: A-F. *Merremia aegyptia* (L.) Urb.: A. Habit, B. Leaf, C & D. flower side and front views, E. young fruits, F. matured fruit; G-H. *Vachellia leucophloea* (Roxb.) Maslin: G. Habit, H. inflorescence.


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