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NOTE

REDISCOVERY, AFTER OVER A CENTURY, OF THE ENDEMIC CLIMBING VINE *ARGYREIA LAWII* (CONVOLVULACEAE) FROM THE WESTERN GHATS OF INDIA

Pramod R. Lawand, Rajaram V. Gurav & Vinod B. Shimpale

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REDISCOVERY, AFTER OVER A CENTURY, OF THE ENDEMIC CLIMBING VINE *ARGYREIA LAWII* (CONVOLVULACEAE) FROM THE WESTERN GHATS OF INDIA

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Argyreia Lour., a taxonomically complex genus of the family Convolvulaceae is represented by 135 taxa (Staples & Traiperm 2017) distributed in south eastern Asia, China, and the Indian subcontinent. In India, the genus is represented by about 40 species and is the second most species-rich genus of Indian Convolvulaceae. The genus has not been revised in its entirety which has resulted in the ambiguous identifications of many taxa. Some species are known only from their type localities and particularly, endemic species are poorly represented in the herbaria. So the authors have undertaken the revisionary studies in the genus *Argyreia* with a critical appraisal on an exploration and nomenclature; the present communication is the outcome of it.

The Western Ghats of India, one of the eight hottest hotspots of biodiversity (Myers et al. 2000), harbors endemic and threatened biodiversity of India. An exploration of the northern Western Ghats of India in the year 2016–2017 resulted in the collection of

Argyreia lawii from two localities, viz., Bhudargad Fort and Patgaon, Kolhapur District of Maharashtra State. A relevant literature study (Clarke 1883; Cooke 1908; Biju 1997) revealed that the species was re-collected after a lapse of more than 100 years. The species was described by Clarke (1883) based on collections made by J.S.

Law and named the species to honour his botanical contributions. Law collected the specimens from populations of the species in Malabar, Konkan Province and Bababudhan Hills of Karnataka State. After the type collections made by Law prior to 1883, no collections from the Konkan Province have been reported. Cooke (1908) mentioned that he had not seen any specimen from the Bombay Presidency in Flora of the Presidency of Bombay. It was further written that Talbot might not have collected it as he did not mention about locality. Singh et al. (2001) in flora of Maharashtra State cited the species on the authority of Talbot (1902). The digital flora of Karnataka (<http://florakarnataka.ces.iisc.ac.in>, accessed on 04 July 2018) by Sankara Rao et al. (2012) reports the occurrence of *A. lawii* from Chikkamagaluru District of Karnataka State based on the reference of Sharma et al. (1984). But it is clearly mentioned in the flora of Karnataka analysis that the species was not collected by them from Chikkamagaluru District. We searched at another type locality, Bababudhan Hills in Chikkamagaluru District and found populations of the species locally abundant. Therefore, the present collections are the recollection after the type collection.



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***Argyreia lawii* C.B. Clarke**

in Hook.f., Fl. Brit. India 4:190. 1883 (Images 1–4).

Lectotype (designated by Lawand and Shimpale): Karnataka, Bababoodan (Bababudhan) Hills s.d., Law 28 *Argyreia*, (K000830722 digital image!).

Description: A semi-woody 1–1.5 meters high climber or sometimes prostrate shrub. Stem older semi-woody, young purple, strigose-villous, hairy, terete. Leaves simple, alternate, 7–11 × 3–6 cm, base cordate, apex acute, strigose on both the surfaces, secondary veins 6–7 pairs, conspicuous below; petiole 2–4 cm long, dorsally grooved, purple in colour, hairy like stem. Inflorescence a compact 4–9 flowered cyme; peduncle 6–12 cm long, longer than the petiole, purple coloured, terete, hairy

like stem. Flowers sub-sessile, bracteate. Bracts 2, 1–2 cm long, linear-lanceolate, apex acute, bract of flower in fork larger, lance-ovate, midvein prominent, persistent, green, purple at margin, white hairy on both the sides. Calyx 5, polysepalous, sepals, sub equal, 0.7–1.0 cm long, ovate, apex acute, inner three wider than the outer two, strigose outer, glabrous inside, outer sepal purple margined, inner hyaline on margins. Corolla funnel form, pink-purple, 4–5 cm long × 4–5 cm wide, hairy outer on midpetaline bands, throat purple ca. 1 cm wide, corolla lobes twisted in bud and shortly apiculate in flower. Stamens 5, inserted in corolla tube, unequal in length, 2.5–3.5 cm long, filaments pink, dilated and glandular hairy at base, anthers basifixed, pale pink. Ovary 1–3 mm in diameter



Image 1. *Argyreia lawii*: A—habit | B—habit closeup | C—Corolla front view | D—Corolla side view. © V.B. Shimpale.

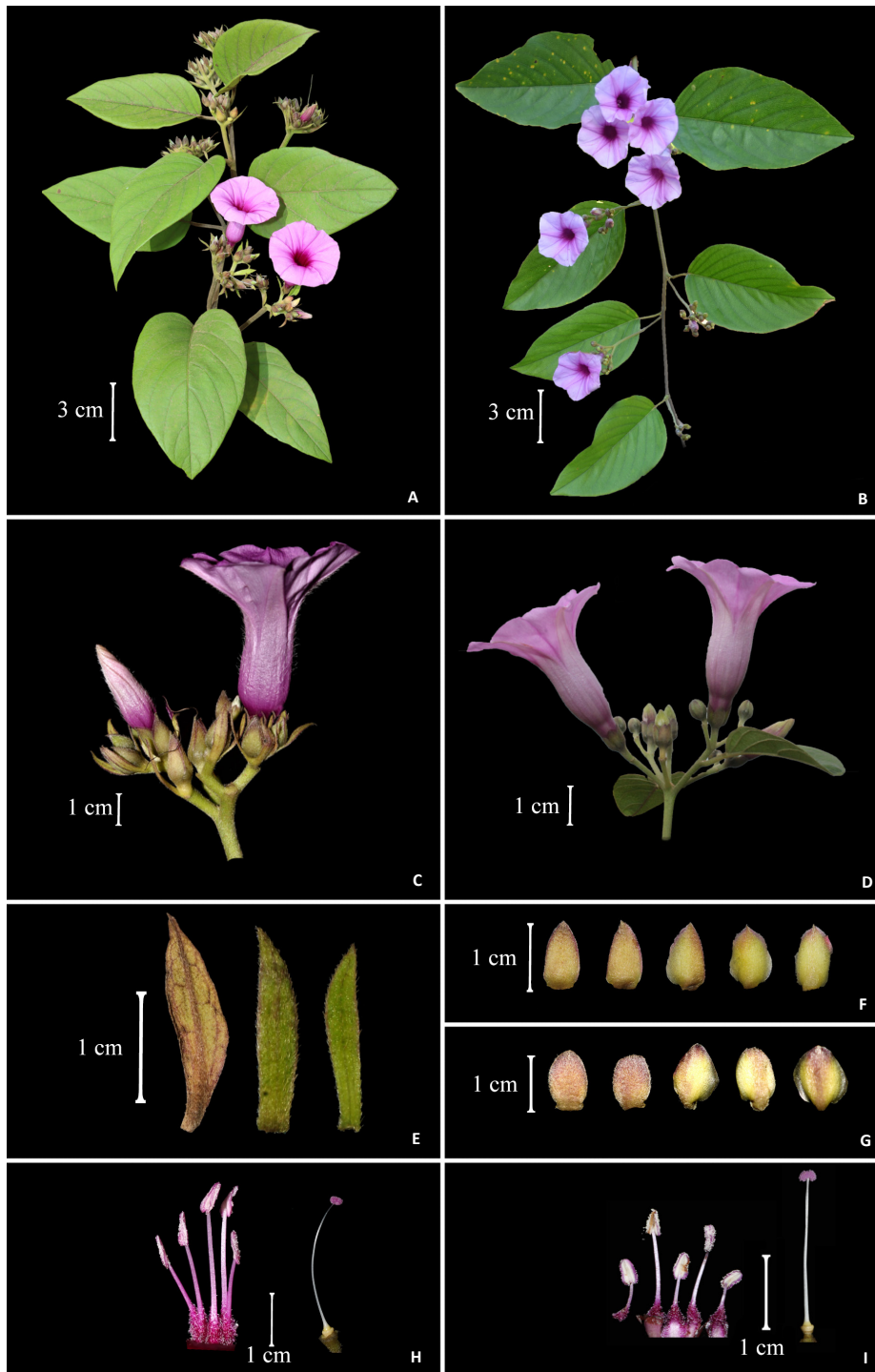


Image 2. *Argyreia lawii*: A—flowering twig | C—an inflorescence | E—bracts | F—sepals | H—reproductive parts. *Argyreia elliptica*: B—flowering twig | D—an inflorescence | G—sepals | I—reproductive parts. © P.R. Lawand.

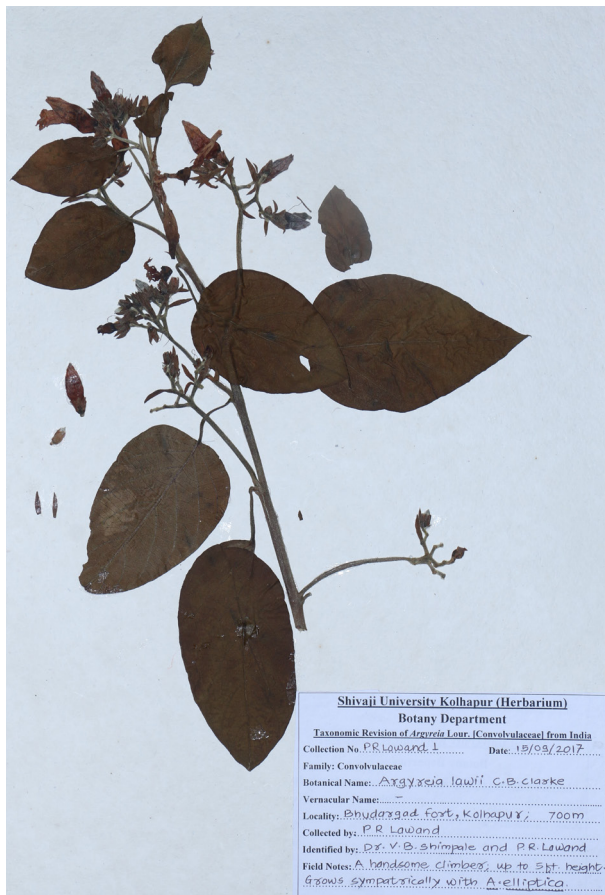
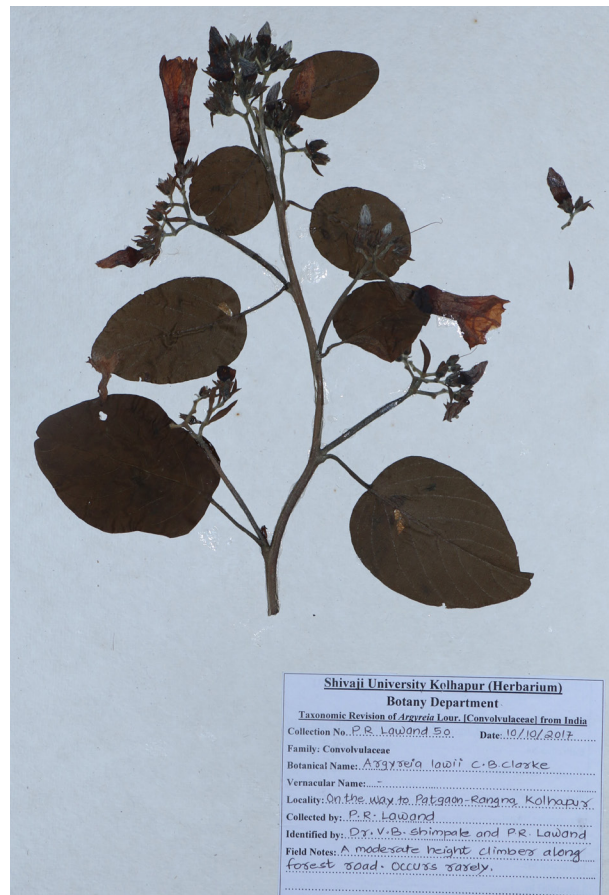
encircled by an annular disc; style-1; stigma biglobose, pink. Fruit a berry, ca.1cm across, yellow.

Specimens examined: K000830722, K000830721 (K), 00135003 (GH), 00584825 (P) digital image!, s.d., Bababoodan Hills, Karnataka, India, coll. Law 28 *Argyreia*; PR Lawand1 (SUK), 15.ix.2017, 700 m Bhudargad Fort,

Kolhapur District, Maharashtra coll. P.R. Lawand (Image 3); PRLawand50 (SUK), 10.x.2017, Patgaon, Kolhapur District, Maharashtra, coll. P.R. Lawand (Image 4).

Phenology: Flowering: August–October; Fruiting: November–January.

Habitat and Distribution: The populations of *Argyreia*

Image 3. Herbarium of *Argyrea lawii* [# PRLawand1 (SUK)].Image 4. Herbarium of *Argyrea lawii* [# PRLawand50 (SUK)].Table 1. Morphological comparison of *Argyrea lawii* and *A. elliptica*.

Character	<i>Argyrea lawii</i>	<i>Argyrea elliptica</i>
Habit	Climber up to height of 1–1.5 meters	Huge climber up to height of 10–12 meter
Bracts	1–2 cm long, persistent in flower	3–4 mm long, early caducous
Inflorescence architecture	A lax (loosely arranged), dichotomously branched cyme	Compactly arranged cyme

lawii were encountered along forest roadsides at 700–800 m elevation. The species grows sympatrically with *A. elliptica* (Roth ex Roem. & Schult.) Choisy. *A. lawii* can be readily distinguished by the presence of linear-lanceolate, persistent bracts while in *A. elliptica* bracts are very early caducous (Table 1). Till date, the species is known from three localities from two different states, i.e., Bababudhan Hills from Karnataka, and Bhudargad Fort and Patgaon from Maharashtra, India.

In the two subpopulations at Bhudargad Fort and Patgaon in Kolhapur District of Maharashtra, we could observe 4–6 mature individuals. The populations are frequent at Bababudhan Hills, Karnataka but the total area may not exceed 10km².

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