



## A new taxon of *Lysionotus* (Gesneriaceae) from Northeastern India

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**ABSTRACT:** *Lysionotus gamosepalus* var. *biflorus*, a new variety from northeastern India is described and illustrated with photographs. Information on its ecology is provided. The new taxon is morphologically similar to *L. gamosepalus* var. *gamosepalus* but can be easily distinguished by a combination of characters such as un-branched pair-flowered cyme, hairy corolla and two coiled staminodes.

**KEY WORDS:** Arunachal Pradesh, Gesneriaceae, India, *Lysionotus gamosepalus* var. *biflorus*, New variety.

### INTRODUCTION

During the floristic expedition to northeastern India in 2015, the authors collected several interesting specimens including some Gesneriaceae taxa. One of them was identified as a new species, viz. *Didymocarpus moellerii* A. Joe *et al.* (2016). An interesting taxon of *Lysionotus*, near Salangam, on the way to Tidding from Tezu, Lohit District, Arunachal Pradesh, was also observed. After examining its morphology and comparing it with the known species. It is closely allied to *L. gamosepalus* W.T. Wang (1983), known only from SE Xizang or Tibet autonomous region, China. The new taxon described here was collected from Eastern side of Arunachal Pradesh bordering Myanmar, around 800 kms away from the type locality of *L. gamosepalus* var. *gamosepalus*. Detailed studies of the types (PE00030827, PE00141454, PE I41461), protologues and literature (Clarke, 1874; Hilliard & Burt, 1995; Wang *et al.*, 1998; Burt, 1999; Hilliard, 2001) revealed that the present collection represents a new variety.

### TAXONOMIC TREATMENT

*Lysionotus gamosepalus* var. *biflorus* A. Joe, Hareesh & M. Sabu, *var. nov.* **Fig. 1**

The new variety is similar to *L. gamosepalus* var. *gamosepalus* in having a calyx that is 5-lobed from above the middle and the anther connective with horn-like appendage, but differs from it in having leaves with sub-serrate margin, only two flowers from an axil, a hairy corolla and two coiled staminodes.

**TYPE:** INDIA: Arunachal Pradesh. Lohit District, Tezu-Hayuliang road, 8 kms before Salangam, 27°56'24.5" N 096°22'37.6" E, 1300 m, 8 July 2015, A. Joe & V.S. Hareesh 121955 (holotype CALI, isotypes CALI, CAL).

Terrestrial decumbent sub-shrub, stems 10–40 cm long, glabrous, creeping; internode 2–5 cm long, terete, glabrous, green. Leaves three per node, petiole 0.5–1.5 cm long, glabrous. Lamina 4–14 × 2.5–6.5 cm, ovate or ovate-elliptic, oblique, dark green above and pale green beneath, glabrous, apex acute to acuminate, base rounded to cuneate, margin sub-serrate; lateral veins 5–6 on each side. Inflorescence one per axil, each with only two flowers. Peduncle 3.5–5 cm long, glabrous, green, terete. Bracts 2, 0.6–0.8 × 0.8–0.9 cm, broadly ovate or orbicular, persistent, glabrous, pale green, margin entire, base cordate. Pedicel 0.4–0.5 cm long, terete, glabrous, pale green. Calyx 0.9–1 × 0.7 cm, calyx tube 0.6–0.7 cm long, lobes 5, divided from above middle of calyx, 0.2–0.3 × 0.3 cm, ovate, apex acute, pale green, glabrous, margin entire, reflexed. Corolla 4.3–4.7 cm long, villous, purplish with two yellow stripes on floor of throat; corolla 2-lipped, upper lip 2-lobed, lower lip 3-lobed, lobes broadly ovate with sub-acute or rounded apex; corolla tube 2.4–2.7 cm long, funnel-form, densely hairy outside and sparsely villous within. Stamens 2, filaments 0.7–0.8 cm long, white, strongly coiled, anthers cream; connective appendage horn-like, brown below, 0.1 cm long; staminodes 2, 0.1–0.2 cm long, white, coiled and attached to each other at apex with stigma passing between them. Disc ring-like, margin undulate. Pistil 2.5–2.8 cm long, green, white towards apex, glabrous. Capsule 7–9 cm long, linear, glabrous.

**Distribution, habitat and phenology:** *Lysionotus gamosepalus* var. *biflorus* is an endemic taxon from India, found near Salangam, Lohit District (Arunachal Pradesh). It grows in forest margins under shrubs at an elevation of 1300 m, in association with *Elatostema sessile* J.R. Forst. & G. Forst., *Impatiens siculifer* Hook.f. etc. It flowers and fruits from July to September.

**Etymology:** The varietal epithet is alludes to the two flowered condition from each axil.

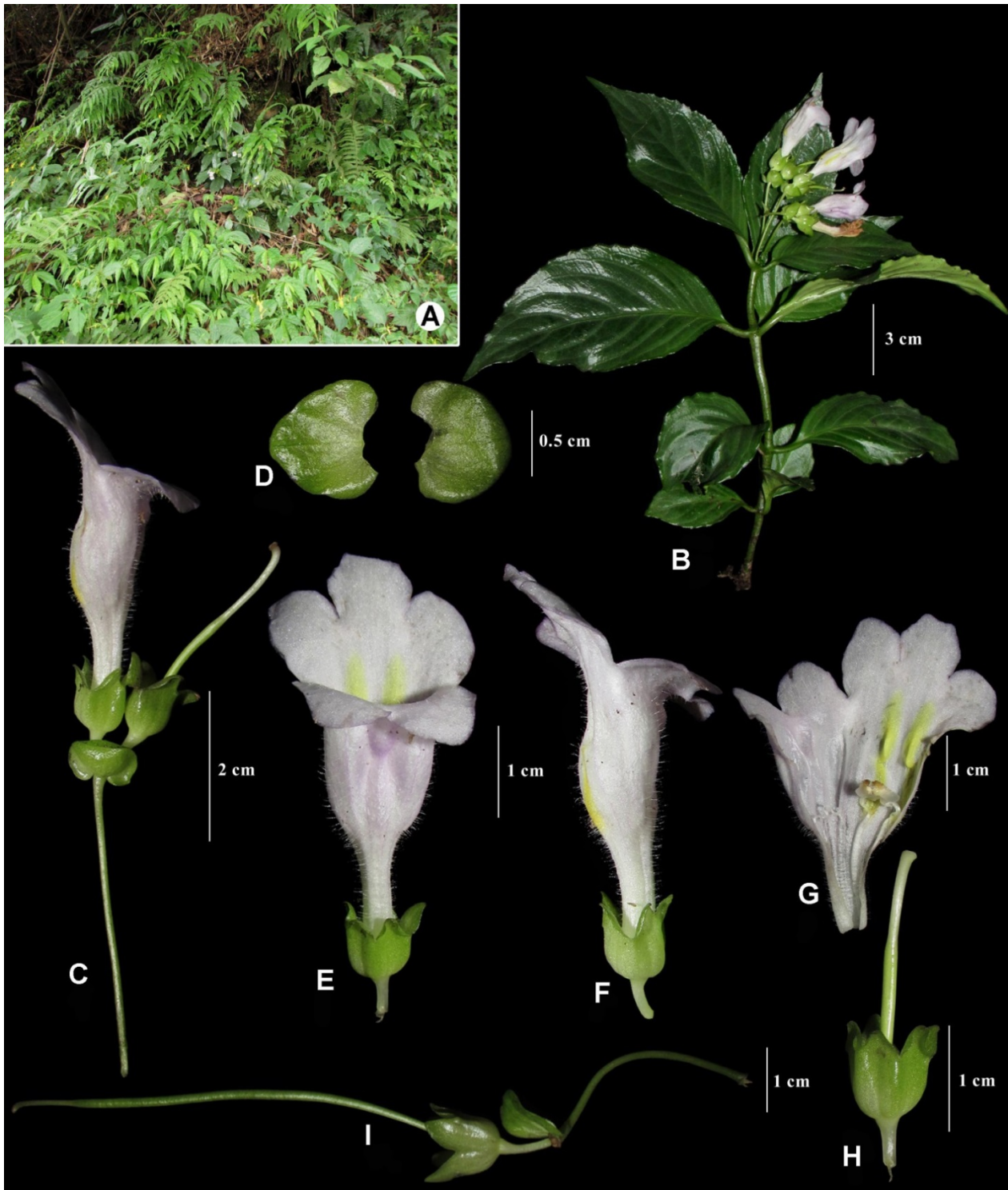


Fig.1. *Lysionotus gamosepalus* var. *biflorus*. A: Habit. B: flowering shoot. C: Inflorescence. D: Bracts. E: Flower, top view. F: Flower, side view. G: Corolla split open. H: Pistil with calyx. I: Capsule with persistent calyx and bract. Photos by Alfred Joe.

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