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REDISCOVERY OF *STROBILANTHES KHASIANA* (ACANTHACEAE): A LITTLE-KNOWN ENDEMIC SPECIES OF NORTH EAST INDIA

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ABSTRACT

A presumably extinct species, *Strobilanthes khasiana* (Nees) Anderson (Acanthaceae) is rediscovered after a lapse of 93 years from the Khasi Hills of Meghalaya, India. A detailed description with along additional notes and photographs, is provided.

Key words : Acanthaceae, Endemic, Khasi hills, Meghalaya, Recollection.

Introduction

Strobilanthes Blume is one of the most fascinating genera in the family Acanthaceae for its gregarious nature, irregular flowering and varied habitats (Venu, 2006; Mascarenhas and Janarthanam, 2013; Augustine, 2018). It is the second species rich genus in the family with about 463 accepted species (POWO, 2025) mainly distributed in the tropical and subtropical regions of Asia (Hu *et al.*, 2011; Wood and Scotland, 2021). In India, *Strobilanthes* is represented by 167 species (Arisdason *et al.*, 2020) and the maximum diversity is seen in the central and southern parts of Peninsular India, the Himalayas and hills of NE India (Wood *et al.*, 2022). Recent field surveys in various places of Meghalaya, an interesting species of the genus *Strobilanthes* was collected from Khasi Hills, characterized by tufted axillary spikes, subrotate corolla with only two fertile stamens and globose, ribbed pollen with septa forming crossbars between the ribs. Detailed taxonomic studies with the perusal of relevant literature (Nees, 1847; Clarke, 1884) and study of herbarium specimens identified the species as *Strobilanthes khasiana* (Nees) T. Anderson.

Taxonomy

Strobilanthes khasiana T. Anderson, J. Linn. Soc., Bot. 9: 471. 1867. *Endopogon khasianus* Nees, Prodr. 11: 104. 1847. *Listrobanthes khasiana* (Nees) Bremek., Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Sect.

2. 41(1): 254. 1944.

An under shrub, up to 1.2 m high; stems terete, glandular-pubescent. Leaves opposite, unequal in each pair; lamina ovate, 3–10 × 1.8–4.5 cm, thinly coriaceous, viscid hairy on both surfaces, crenate to serrate along margins, acuminate at apex, cuneate to rounded at base; secondary veins 4–9 pairs, obscure above, impressed beneath; petioles 1–3.5 cm long, hirsute. Inflorescence of dense spikes arising in tufts in the leaf axils; spikes interrupted, 3–10 cm long. Bracts persistent, foliaceous; upper bracts elliptic 1–1.5 cm long, glandular-hairy; lower bracts oblanceolate-spathulate, 0.5–1 cm long, hairy. Bracteoles linear, 0.5–0.7 cm long, hairy. Calyx hairy, 0.8–1.2 cm long, deeply 5-cleft; lobes linear, sub equal, gradually tapering towards apex, swollen at base, hairy. Corolla straight, narrowly cylindrical, abruptly widened below the mouth, 1.5–2 cm long, pubescent; tube basally slender, then funnel-shaped; lobes ovate, 0.2–0.3 × 0.2–0.3 cm, glabrous, acute at apex, base with purple eyes. Fertile stamens 2; anthers pale yellow, ovoid, 1–1.5 mm long, obtuse at apex, pollen grains globose, 10 μm, ribbed, with septa forming crossbars between the ribs; filaments white, 1.2–1.5 cm long, equal, hairy up to half from the base. Ovary ovoid, 0.5–1.2 mm long, glabrous, 2-locular; ovules 2 per locule; style linear, glabrous, 1.5–1.7 cm long, curved at apex; stigma rounded. Capsules fusiform, 5–7 mm long, hairy at apex, 4-seeded. Seeds ovate, 2 mm in diam., areole large, conspicuous.

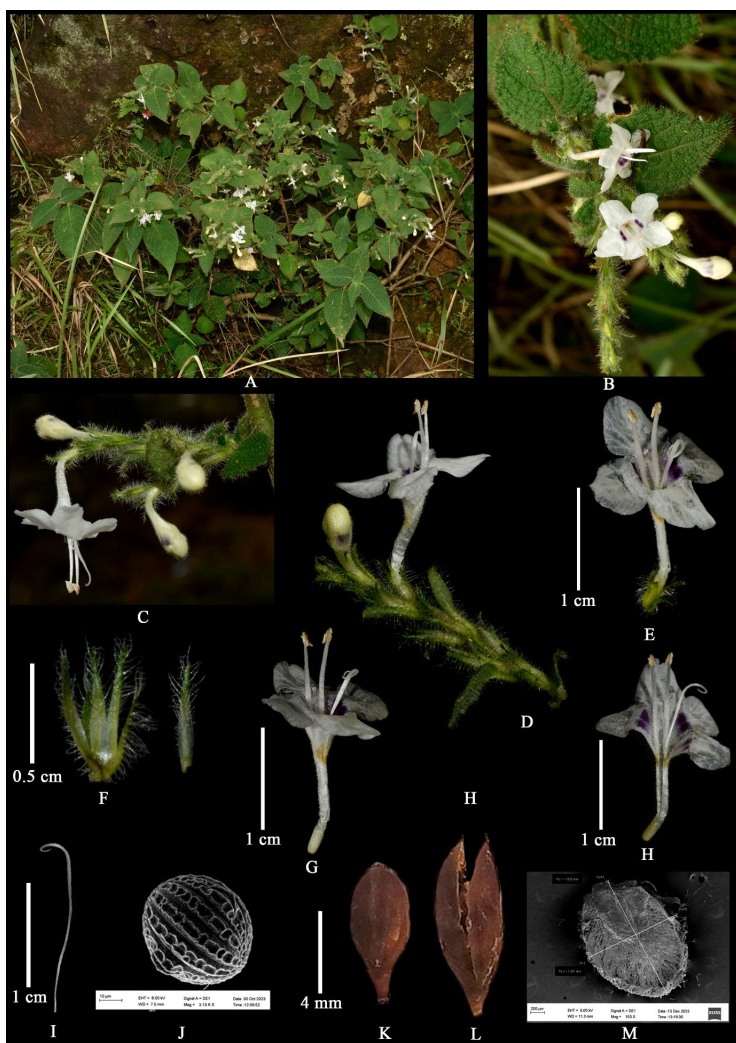


Fig. 1 : *Strobilanthes khasyana* (Nees) Anderson. A. Habit; B & C. Inflorescence; D. Inflorescence with bracts and bracteole; E. Close up of flower; F. Calyx and sepal; G. Corolla with fertile stamens; H. Corolla split open showing the stamens & style; I. Style; J. SEM micrograph of pollen grains; K & L. Capsule; M. SEM micrograph of seed.

Flowering and Fruiting : August–January.

Distribution : India (Meghalaya, Sikkim? and West Bengal?). Endemic (Singh *et al.*, 2015; Arisdason *et al.*, 2020).

Specimens examined: INDIA. North Bengal. East Himalaya, Darjeeling?, *W. Griffith* 6094 (K, image K000882909!); *W. Griffith* s.n. (K, image K000882912!). Meghalaya. Khasi Hills, Nartiang, 20 Nov 1871, *C.B. Clarke* 15226 (K, image K000882913!); *J.D. Hooker & T. Thomson* s.n. (K, image K000882911); 3–4,000 ft., *J.D. Hooker & T. Thomson* s.n. (CAL0000019847 & CAL0000019848!); Cherrapunjee, *J.D. Hooker & T. Thomson* s.n. (K, image K000882907!); Khasia Mamloo, 27 Aug. 1850, *J.D. Hooker & T. Thomson* s.n. (K, image K000882910!); Mawmluh, 9 Nov. 1930, *P.C. Kanjilal*

8793 (ASSAM!); Mawsynram, 1380 m, 25 Aug. 2023, *R. Kottaimuthu, N. Odyuo & Y. Mahesh* 143312 (ASSAM!).

Nees von Esenbeck (1847) originally described *Strobilanthes khasyana* under the name *Endopogon khasyanus* Nees based on a specimen collected by William Griffith from Khasya mountains, Meghalaya. Since the characters of *Strobilanthes khasyana* are quite different from all others, Bremekamp (1944) placed this species under the monotypic genus *Listrobantes* Bremekamp. So far, it is known only by very few older collections (Wood *et al.*, 2003; Bhattacharya, 2019; Roy *et al.*, 2023), the latest being by Kanjilal from Mawmluh in 1930. Other than this, no other collections are available in any Indian herbaria, namely ARUN, ASSAM, BSHC and CAL. Therefore, the present collection is a recollection after a gap of 93 years from Meghalaya.

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