

## **AMBLYANTHOPSIS BHOTANICA (MYRSINACEAE) – A LESSER KNOWN PLANT FROM ASSAM, INDIA**

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### **Abstract**

*Amblyanthopsis bhotanica* (C.B. Clarke) Mez (Myrsinaceae) has been relocated as an extended distribution in Northeast India with a narrow range of distribution. Extensive field exploration is required to assess the population status of this little-known endemic species of eastern Himalaya and the presently known populations require continuous protection.

**Keywords:** Conservation, Eastern Himalaya, Endemic, Extended distribution.

### **INTRODUCTION**

The genus *Amblyanthopsis* Mez (1902) (Myrsinaceae) comprises 4 species namely *A. bhotanica* (C.B. Clarke) Mez, *A. membranacea* (Wall.) Mez, *A. crassifolia* Merr. and *A. philippinensis* Mez distributing in India, Bhutan and Philippines (Anonymous, 2019). Of these, first two are endemic to eastern Himalaya. The *Amblyanthopsis bhotanica* (Mez 1902) was described from Bhutan in the year 1882 as *Ardisia bhotanica* by C.B. Clarke (Clarke 1882). The species was rediscovered from India (North Bengal, Buxaduar forest range) in the year 1976 after a long gap of 140 years by Sikdar (1976). During our field survey, we could relocate the species in Kakoi forest range in North Lakhimpur forest division of Assam bordering Arunachal Pradesh with a narrow range of distribution. A brief note on its extended distribution and conservation status along with photographic illustration is provided here.

*Amblyanthopsis bhotanica* (C.B. Clarke) Mez, Das Pflanzenreich. IV. 236: 211. 1902. *Ardisia bhotanica* C.B. Clarke in Hook. f., Fl. Brit. India 3: 528. 1882. *Tinus bhotanica* (C.B. Clarke) O. Ktze, Rev. Gen. 2: 974. 1891.

Shrubs, up to 2 m high; branchlets smooth, dark purplish. Leaves alternate; petiole dark purplish, 1.0–1.5 cm long, glabrous; leaf blade oblanceolate, 25–37 × 8.5–12 cm, gland dotted throughout, dark green above, pale green beneath, apex acute, base obtuse-attenuate, midvein depressed above, elevated with linear spots below, secondary vein 25–30 on each side of the midvein, depressed above, elevated below, reticulated towards the margin. Inflorescences axillary panicles, to 15 cm long; peduncle purplish, 4–12 cm long, pubescent, apically decurved. Flowers white, 3–4 mm across. Pedicel 0.5–1.3 mm long; bract persistent, obovate, 3–5 × 3–4 mm, gland dotted. Sepals 5, ovate, basally connate up to one third, 2.0–2.5 × 1.0–1.5 mm, with scattered brown dots. Petals 5, white, basally connate, elliptic, 3.0–3.5 × 1.5–2.0 mm, with scattered brown dots, apex acute. Stamens 5, free, 1.5–2.0 mm long; filament 1 mm long; anther basifixed, 0.5–1.0 mm long, apex acute. Gynoecium 2.5 mm long; ovary subglobose, 1.5 mm in diameter glabrous; style longer, 1 mm long; stigma truncate. Fruits globose, 0.5–0.7 cm in diameter, with scattered brown dots, 1-seeded.

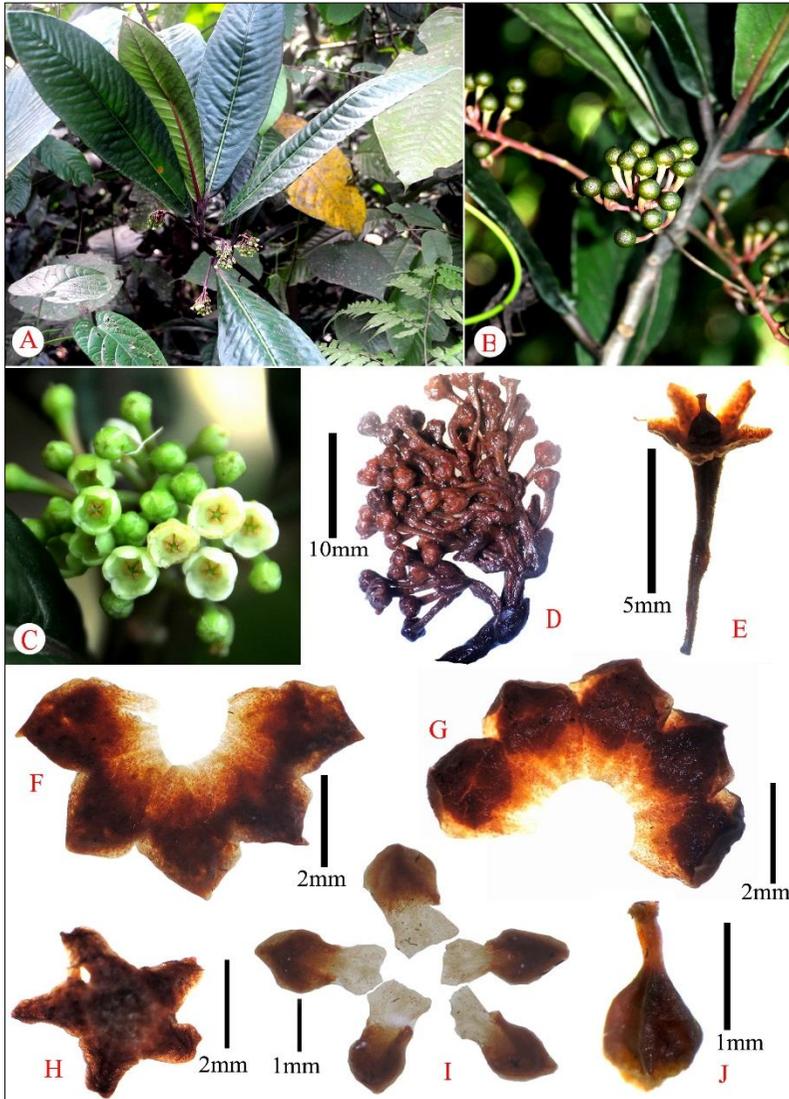


Figure 1: *Amblyanthopsis bhotanica* – A&B. Habit; C. Inflorescence; D. Inflorescence; E. Pedicel with gynoecium; F. Petals (dorsal view); G. Petals (ventral view); H. Sepals; I. Stamens; J. Gynoecium.

**Phenology:** Flowering from May to June and fruiting from July to September.

**Distribution:** INDIA. North Bengal: Buxaduar forest range; Assam: North Lakhimpur District, Kakoi Reserve Forest, ca. 5 km. N.W. of Siajuli, 35 km. North of Lakhimpur town, bordering

Arunachal Pradesh, ca. 250 m. alt., *N. Odyuo & D.K. Roy* 126241, 30 Sept. 2011 (fruiting), ASSAM!, *N. Odyuo & D.K. Roy* 126887, 20 May 2012 (flowering), ASSAM!. BHUTAN.

**Ecology:** The species grows in evergreen forest floors and hilly slopes on the bank of streams

preferably on the sandy soils. The associated species are *Amomum subulatum* Roxb, *Diplazium esculentum* (Retz.) Sw., *Ardisia odontophylla* Wall. ex A.DC., *Goniothalamus simonsii* Hook.f. & Thomson, *Sapindus attenuatus* Wall., *Clerodendrum glandulosum* Lindl..

**Conservation:** IUCN status not yet evaluated. The species was rediscovered after a long gap of 140 year from Buxaduar forest range of West Bengal other than the type locality distributing in a single locality of 3 m<sup>2</sup> in the year 1976. The present report is the second collection after the type with an extended distribution in Northeast India from a single location in Kakoi reserve forest of Assam with about 50 matured individuals distributing in an area of about 100 m<sup>2</sup>. From both recollections, it is cleared that the occurrence and population status of this endemic species is very rare and low as well as fragmented. As thus the species is under pressure of their narrow habitat, less viable population and anthropogenic interferences. So, further investigation is required in the entire areas of the type locality in Bhutan and Southern foothills of eastern Himalayas to ascertain its

IUCN status for conservation point of view. Further, biotechnological approaches through ex-situ conservation of this species by tissue culture and rehabilitate in Botanic Garden are recommended for effective conservation.

#### ACKNOWLEDGEMENT

Authors are grateful to Dr. A.A. Mao, Director, Botanical Survey of India, Kolkata for facilities and encouragement.

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