

## ***Aristolochia platanifolia* (Klotz.) Duch. (Aristolochiaceae): A new record for Assam, India**

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*Aristolochia platanifolia* (Klotz.) Duch (Aristolochiaceae) is collected from Borjan, Padumani-Bherjan Wildlife Sanctuary, Tinsukia district, Assam and is reported as new record for Assam.

*Aristolochia* L., is a core genus of the family Aristolochiaceae comprising of about 120 species, and is distributed in tropical and temperate Asia, Africa, Europe and America (Heywood, 1993; Mabberley, 1977). Several members of the genus have been used extensively in traditional Chinese and Indian medicines for the treatment of hypertension, leukocyte enhancement, rheumatism, eczema, snakebite, festering wounds and as analgesic and diuretic and against tumours (Kupchan and Doscoth, 1962; Bensky *et al.*, 1993; Thirumal *et al.*, 2012). In India, Hooker (1886) reported only 8 species and Kanjilal *et al.* (1934) reported 4 species from Assam. However, the proper documentation of the genus in India is yet to be accomplished.

During a recent floristic study undertaken in Tinsukia district of Assam the authors has collected some interesting specimens. After critical studies and scrutiny of literatures (Hooker, 1886) the collected specimen were identified as *Aristolochia platanifolia* (Klotzsch) Duch, a species hitherto not reported from Assam. However, Hooker (1886) mentioned its distribution as Eastern Himalaya, Mishmi Mountains, Khasia Mountains, Sikkim and E. Nepal. Scrutiny of literatures (Hooker, 1896; Kanjilal *et al* 1934, Paul *et al.*, 2010) revealed that the species has not been reported from Assam earlier. A detail taxonomic account of the species along with distribution is provided here in the present communication. The voucher specimens are deposited in the Herbarium of Botany Department, Gauhati University (GUHB) for future reference.

*Aristolochia platanifolia* (Klotzsch) Duch., in DC., Prodr. 15(1): 437.1864; Hooker f., Fl. Brit. India 5:78.1886; *Siphisia platanifolia* Klotzsch. Monatsb. Akad. Wiss. Berl. 1859: 603.1859.

A stout climber with elongated rootstock and corky fissured bark of the stem. Leaves very broad, deeply digitately 3-lobed, glabrous above, tomentose beneath, lobes glaucous, pubescent tomentose or woolly beneath, base rounded-cuneate or cordate, lobes very variable, lobules few, acute or acuminate; petiole 5-12 cm., often stout and twining. Flowers axillary and solitary, also in villous cymes on the old wood, perianth tomentose or villous, mouth obtusely 6-angled, lips recurved, villous with purple papillose

hairs. Perianth yellowish with purple external veins, sac 2.5 cm. long, tube as long, golden yellow within, mouth 2.5 cm in diam. Capsule 10-15 by 2.5 cm in diam., linear-oblong with 6 ribs divided by deep furrows (Figure 1 & Figure 2).



**Figure 1.** *A. platanifolia* at natural stage.

**Flowering:** Oct.-Nov. ; **Fruiting:** March-April

**Specimen examined:** Borjan, Padumani-Bherjan Wildlife Sanctuary, Tinsukia District, Assam, J. Sarma & S. Baruah, 120, 121 (N 27° 26' 008", E 95° 44' 393", EL about 38 m msl), Forest Department, Assam and Herbarium of Botany Department, Gauhati University (GUBH).

**Distribution:** India: Assam, Sikkim; Nepal, Bhutan

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**Figure 2.** *A. platanifolia* at flowering stage.

## REFERENCES

- Bensky, D., Gamble, A., Kaptchuk, T. and Bensky, L.L. 1993. Chinese Herbal Medicine: Materia Medica. (Rev. edn). Eastland Press. Washington, U. S. A.
- Heywood, V.H. 1993. Flowering Plants of the World. Oxford University Press. New York.
- Hooker, J.D. 1886. Aristolochiaceae. Flora of British India. Vol .5. L. Reeve & Co. Ltd. London.
- Kanjilal, U.N., A. Das, Kanjilal, P.C. and Dey, R.N. 1934. Flora of Assam. Vol. II. Govt. Of Assam. Shillong.
- Kupchan, S.M., Doscoth, R.W. 1962. Tumor inhibitors (I) aristolochic acid, the active principle of *Aristolochia indica* J. Med. Pharm. Chem. 5:657-659.
- Mabberley, D.J.M. 1997. The Plant-Book. Cambridge University Press, Cambridge, U.K.
- Paul, S., Devi, N. and Sarma, G.C. 2010. Diversity of some medicinally important species of *Aristolochia* Linnaeus (Aristolochiaceae) in Assam, India. *Pleione* 4(2).250-255.
- Thirumal, M., Vadivelan, R., Kishore, G., Brahmaji, V.S. . 2012. *Aristolochia bracteolata*: An Overview on Pharmacognostical, Phytochemical and Pharmacological properties. *Crit. Rev. Pharm. Sci.* 1: 66-78.