ARISTOLOCHIA ELEGANS MAST. (ARISTOLOCHIACEAE) - A NEW ANGIOSPERMIC RECORD FOR BANGLADESH

Md. Oliur Rahman¹, Sumona Afroz² and Md. Abul Hassan²

Bangladesh National Herbarium, Chiriakhana Road, Mirpur 1

Dhaka 1216, Bangladesh

Keywords: Aristolochia elegans Mast., New record, Bangladesh

Aristolochia L., a member of the family Aristolochiaceae consists of about 500 species, and is distributed in tropical and temperate Asia, Africa, Europe and America (Heywood 1993). In Bangladesh, Aristolochia is represented by only three species, namely A. indica L., A. saccata Wall. and A. tagala Cham. (Hooker 1886, Prain 1903, Heinig 1925). Recently, during the course of scrutiny of Aristolochia specimens deposited at the Bangladesh National Herbarium (DACB), the authors came across three interesting specimens. After critical examination, these specimens have been identified as Aristolochia elegans Mast. It should be noted here that seeds of this species were first collected by Prof. M. Salar Khan from the Chittagong Hill Tracts area in wild state in 1995. The seeds were then sown in the Botanic Garden of the University of Dhaka; plants grew and flowered. The specimens deposited at the DACB were collected from those plants in 1997.

Aristolochia elegans was not reported earlier from the territory of Bangladesh in the relevant literature of this region, viz. Hooker (1886), Prain (1903), Heinig (1925), Cowan (1928), Raizada (1941), Datta and Mitra (1953), Sinclair (1955), Khan and Afza (1968), Khan and Banu (1972), Huq and Khan (1984), Khan and Hassan (1984), Alam (1988), Khan et al. (1994), Mia and Khan (1995), Rahman and Hassan (1995), Rahman and Uddin (1997), Uddin et al. (1998), Uddin and Rahman (1999), Rashid et al. (2000), Khan and Huq (2001), Uddin et al. (2003), and Rahman (2004a, b). It is being reported here as a new record for the country and a new addition to the Flora of Bangladesh. The specimens have been preserved at the DACB.

The detailed description and illustrations of the taxon prepared from the examined specimens are appended below.

¹Corresponding author. Present address: Department of Botany, University of Dhaka, Dhaka 1000, Bangladesh. E-mail: oliurrahman@yahoo.com ²Department of Botany, University of Dhaka, Dhaka 1000, Bangladesh.

156 RAHMAN et al.

Aristolochia elegans Mast., Gard. Chron. 2: 301 (1885). Schmidt, Repert. Spec. Nov. Regn. Veg. 23: 299 (1927); Bor & Raizada, Some Beaut. Ind. Climb. Shrubs : 26 (1954); Parker, For. Fl. Punj. 5: 421 (1956); Qaiser, Fl. W. Pak. 110: 4 (1977); Phuphathanaphong, Fl. Thailand 5(1): 13 (1987). Aristolochia littoralis Parodi in Anal. Soc. Cient. Argent. 5: 155 (1878). (Plate 1)

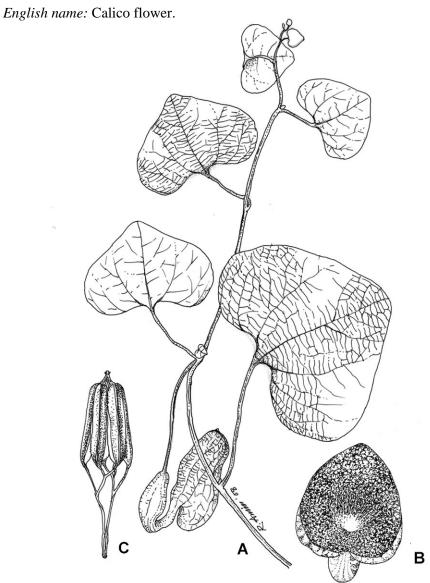


Plate 1. Aristolochia elegans Mast. A. Twining leafy shoot (\times 1), B. A flower (\times 0.8), C. A fruit (\times 0.9).

A slender woody climber. Stem glabrous, branches pendulous. Leaves with pseudo-stipules, pseudo-stipules leaf-like, amplexicaul; petioles 2-6 cm long, slender, glabrous;

ARISTOLOCHIA ELEGANS MAST. 157

lamina $4\text{-}10 \times 5\text{-}11$ cm, triangular to broadly ovate, apex obtuse or rounded, base cordate, margin entire, glabrous on both surfaces, but young leaves pubescent, palmately finely 3-nerved, venation reticulate, obscure. Flowers solitary, axillary, on long pedicels, bent, more than 6 cm long. Perianth white or greenish with purple-black or purple-brown mottling; utricle obliquely ellipsoid, $2.2\text{-}2.8 \times 1.2\text{-}1.6$ cm, tube bent upwards, somewhat funnel-shaped at the top, $1.2\text{-}2.0 \times 0.4\text{-}0.7$ cm, expanding abruptly into a nearly circular shallow cup, limb orbicular, 5-7 cm in diameter. Stamens 6; anthers linear, c 4×1 mm. Gynostegium c 5.5×4.5 mm, cylindrical. Ovary 6-locular, ovules many in each locule; stylar column short, cylindrical; stigmatic lobes 6, flattened, apically pubescent outside, with margins recurved outwards. Fruit a capsule, c 4 cm long and 2 cm across, 6-valved. Seeds many, flat, 2-5 mm long. *Flowering and fruiting period*: June-October.

Ecology: Grows in the forests, also cultivated in gardens.

Specimens examined: **Dhaka**: Dhaka University Botanic Garden, 04.06.1997, M.S. Khan, K. 9924 (DACB); Dhaka University Botanic Garden, 10.08.1997, A. Hassan and O. Rahman (DACB); Dhaka University Botanic Garden, 23.09.1997, A. Hassan (DACB).

Distribution: A native of Brazil, but is now cultivated throughout the tropical and temperate regions of the world.

References

Alam, M.K. 1988. Annotated checklist of the woody flora of Sylhet forests. Bulletin 5. Plant Taxonomy Series. Forest Research Institute, Chittagong, pp. 1-153.

Cowan, J.M. 1928. The flora of Chakaria Sundarbans. Rec. Bot. Surv. Ind. 11: 197-225.

Datta, R.M. and Mitra, J.N. 1953. Common plants in and around Dacca city. Bull. Bot. Soc. Beng. **7**(1&2): 1-110.

Heinig, R.L. 1925. List of Plants of Chittagong Hill Tracts. The Bengal Government Branch Press, Darjeeling, pp. 1-84.

Heywood, V.H. 1993. Flowering Plants of the World. Oxford University Press, New York, pp. 1-336.

Hooker, J.D. 1886. Aristolochiaceae. Flora of British India. 5: 74-77. L. Reeve & Co. Ltd.

Huq, A.M. and Khan, M.S. 1984. A preliminary taxonomic report on the angiospermic flora of Moheskhali Island-1 (Dicotyledons). Dhaka Univ. Stud. Part B, **32**(2): 19-31.

Khan, M.S. and Afza, S. 1968. A taxonomic report on the angiospermic flora of Teknaf and St. Martin's Island. Dacca Univ. Stud. B, 16(2): 23-50.

Khan, M.S. and Banu, F. 1972. A taxonomic report on the angiospermic flora of Chittagong Hill Tracts-2. J. Asia. Soc. Bangladesh **17**(2): 59-88.

Khan, M.S. and Hassan, M.A. 1984. A taxonomic report on the angiospermic flora of St. Martin's Island. Dhaka Univ. Stud. B, **32**(1): 71-84.

Khan, M.S. and Huq, A.M. 2001. The vascular flora of Chunati Wildlife Sanctuary in south Chittagong, Bangladesh. Bangladesh J. Plant Taxon. **8**(1): 47-64.

Khan, M.S., Rahman, M.M., Huq, A.M., Mia, M.M.K. and Hassan, M.A. 1994. Assessment of biodiversity of Teknaf Game Reserve in Bangladesh focusing on economically and ecologically important plant species. Bangladesh J. Plant Taxon. 1(1): 21-33.

158 RAHMAN et al.

Mia, M.M.K. and Khan, B. 1995. First list of angiospermic taxa of Bangladesh not included in Hooker's Flora of British India and Prain's Bengal Plants. Bangladesh J. Plant Taxon. 2(1&2): 24-45.

- Prain, D. 1903. Bengal Plants. Vol. 2. Indian Reprint 1981. Botanical Survey of India, Calcutta, pp. 663-1319.
- Rahman, M.O. 2004a. Second list of angiospermic taxa not included in Hooker's 'Flora of British India' and Prain's 'Bengal Plants'-Series I. Bangladesh J. Plant Taxon. 11(1): 77-82.
- Rahman, M.O. 2004b. Second list of angiospermic taxa not included in Hooker's 'Flora of British India' and Prain's 'Bengal Plants'-Series II. Bangladesh J. Plant Taxon. 11(2): 49-56.
- Rahman, M.O. and Hassan, M.A. 1995. Angiospermic flora of Bhawal Narional Park, Gazipur, Bangladesh. Bangladesh J. Plant Taxon. 2(1&2): 47-79.
- Rahman, M.A. and Uddin, S.B. 1997. Angiospermic flora of Sitakund in Chittagong, Bangladesh. Bangladesh J. Plant Taxon. 4(1): 17-36.
- Raizada, M.B. 1941. On the Flora of Chittagong. Indian Forester 67(5): 245-254.
- Rashid, M.H., Rahman, E. and Rahman, M.A. 2000. Additions to the angiospermic flora of the Moheskhali Island, Cox's Bazar, Bangladesh. Bangladesh J. Plant Taxon. 7(1): 43-63.
- Sinclair, J. 1955. The flora of Cox's Bazar, East Pakistan. Bull. Bot. Soc. Beng. 9(2): 84-116.
- Uddin, S.B. and Rahman, M.A. 1999. Angiospermic flora of Himchari National Park, Cox's Bazar, Bangladesh. Bangladesh J. Plant Taxon. 6(1): 31-68.
- Uddin, M.Z., Hassan, M.A. and Khan, M.S. 2003. An annotated checklist of angiospermic flora of Rema-Kalenga Wildlife Sanctuary (Habiganj) in Bangladesh II.a: Magnoliopsida (Dicots). Bangladesh J. Plant Taxon. **10**(1): 79-94.
- Uddin, S.N., Khan, M.S., Hassan, M.A. and Alam, M.K. 1998. An annotated checklist of angiospermic flora of Sita Pahar at Kaptai in Bangladesh. Bangladesh J. Plant Taxon. 5(1): 13-46.

(Manuscript received on 29 April 2008; revised on 26 May 2008)