Short communication

Ipomoea triloba L. (Convolvulaceae): A New Angiosperm Record for the Flora of Bangladesh

Md Sharif Hossain Sourav

Department of Environmental Science and Management, North South University, Plot-15, Block-B, Bashundhara, Dhaka 1229, Bangladesh

*Corresponding Author: nature.sourav@gmail.com

[Accepted: 16 February 2016]


Family Convolvulaceae consist of about 50 genera having 1500 species, mainly distributed in tropics and also in subtropical regions of the world. In Bangladesh, this family is represented by 15 genera and 55 species. The genus Ipomoea is represented by 24 species in Bangladesh (Ahmed et al. 2008). A twining climber with pinkish flowers was collected from Dhaka district of Bangladesh in the month of November 2015 which has been identified as Ipomoea triloba is described and illustrated for the first time from Bangladesh. In November 2015, this species was found in Dhaka which associated with Merremia hederacea (Burm.f.) Hallier f., Coccinia grandis (L.) Voigt. & Tinospora cordifolia (Willd.) Hook. f. & Thom. Specimens of this plant were collected from this undisturbed natural habitat (latitude 23°46'18.75; longitude 90°24'45.27) for further study. After details examination of the specimens, carefully consulting relevant literature (Ordetx 1949, Holm et al. 1979, Wagner et al. 1999, Ahmed et al. 2008, Perera & Nilanthi 2015) and seeking expert opinion, the collected material was identified as Ipomoea triloba L., which forms a new record for angiospermic flora of Bangladesh. Hence, the species is hereby presented as a new angiosperm record for Bangladesh.

During an early morning short visit to the fallow fields of Dhaka, Bangladesh in November 2015 conducted to observe flowering of morning glories and other members of the family, this taxon was observed. This species was found to have very small and pink coloured flowers as well as fruits, apparently not matching with any species known till date in Bangladesh. The specimens of the same are deposited at Bangladesh National Herbarium (DACB). The detailed description and illustration of the species based on herbarium material are given below.

Species description

Ipomoea triloba L. Sp. Pl. 1: 161, 1753. (Figs. 1–2)

An annual climber with 1–3 meters long, somewhat angled stems, about 1.5–3.0 mm wide, milky. Leaves are cordate, acuminate, mostly 5–10 cm long (can reach up to 12 cm), longer than wide, not always three-lobed as the specific epithet suggests. Petiole slender, 4.6 to 10 cm, glabrous or sometimes minutely tuberculate, glabrous or pubescent. Inflorescence axillary, peduncle shorter to longer than the petiole, angular toward the apex, one-flowered or cymosely few to several-flowered, branches of the cyme very short. Flowers aggregate, pedicels glabrous, 2.5 to 8 mm, closing before noon, sepal slightly unequal, 8 to 10 mm long, the outer ones little shorter, oblong to narrowly elliptic-oblong, glabrous or sparsely hairy on the back, corolla 5–lobed, funnel-shaped, 20–22 mm long, glabrous, pinkish, with or without white markings, bell-shaped, outer wide 9 mm, inner wide 8 mm when opened. Stamens 5, 8 mm long, stigma 14 mm long, ovary 2 to 4-celled, conical, densely pubescent. Fruit a capsule, about 6–10 mm wide, depressed globose with sharp point, bristly hairy. Seeds glabrous or with a few minute hairs, 4-seeded, 3 mm long. 2.5 mm wide, hard, shiny, chocolate brown.

Flowering & Fruiting: Flowering observed early November, but starts from September to continue till December; fruiting occurs from October to December and during the filed study, both immature and mature fruits were found.
Figure 1. A, *Ipomoea triloba*, from its current habitat; B, Twining stems with leaves and unopened flowers; C, Bloomed flower; D, Fruit bearing twigs.

Figure 2. A, Stem with Leaf and Inflorescence; B, Flower showing pedicel and sepals; C, Leaf and axillary inflorescence; D, A flower; E, Corolla dissected; F, Sepals; G, Stigma; H, Fully opened flower; I, Stamens; J, Seeds; K, Fruit. (Illustrations by: MSH Sourav & Mashuda Pervin)

Habitat: The species was recorded from a wasteland (Fig. 1) adjoining the road. The stem scrambles over the ground and twines into other plants for support. As this grows in close association with other similar-leaved vines, it is very difficult to distinguish in vegetative phase. It can be told apart only after flowers appear. It grows profusely in shade and wet conditions.

Distribution: This species is a native climber of Tropical America (Wagner et al. 1999), now naturalized throughout the tropics (Stone 1970). It was introduced into East and South-East United States. Elsewhere Bangladesh, the nearest occurrence records are found from India, China, Nepal, Myanmar, Pakistan and Sri Lanka (Perera & Nilanthi 2015). In India, it was recorded from Gujarat, Kerala, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal (Magesh et al. 2012).

Uses: The leaves are cooked and eaten as a vegetable and decoction of the leaves is used against stomach ache in Benin, West Africa, where they are also said to be sold sometimes in local markets (Achigan-Dako et al. 2010). Because of the attractive flower and habit, this species can be used as wild ornamental species (Divya & Thomas 2015). It is considered to be an important plant in honey production in Cuba and other Central American countries (Ordetx 1949).

ACKNOWLEDGEMENTS
The author expressed his deep gratitude to Nidhan Singh for revising the papers and Surajit Koley for e-flora of India especially. The author also wants to show his gratitude to J. M Garg for identification and Md. Amanat Ullah for other technical help.

REFERENCES