

## A note on the distribution and association of *Rosa clinophylla* Thory var. *glabra* (Lindley ex Prain) C. Ghora & G. Panigrahi (Rosaceaea) at the Maldah district of West Bengal, India

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### Abstract:

The present survey expresses the distribution and population of *Rosa clinophylla* Thory var. *glabra* (Lindley ex Prain) C. Ghora & G. Panigrahi in different low laying areas at Maldah district in West Bengal, India.

**Key word:** *Rosa involucrata*, Flora, Maldah, Barind, Distribution

The district of Maldah is located at the central part of the state of West Bengal on the left bank of the river Ganga and it composed of three major land patterns or topographical regions *i.e.* *Tal*, *Barind* and *Diara*. *Rosa clinophylla* Thory var. *glabra* (Lindley ex Prain) C. Ghora & G. Panigrahi is a thorny shrub with semi-scandant branches and are popularly referred as “wild rose of Bengal” and is occasionally found throughout the plains of Bengal (Prain 1903). During March – June these plants produce numerous beautiful white flowers. Survey during 2003 – 2010 in almost all parts of the district of Maldah has revealed its distribution pattern. Out of three topographical areas, in *Diara* region not a single plant was recorded. On the other hand, 14 individuals were recorded from the *Tal* region, more precisely from the *Barbilla* wetland (25°08'34" N & 87°59'52" E) of Ratua II block where the plant is growing sparsely and were upto 2.2 m tall. However, the frequency of this plant is extensive in *Barind* area. There are three major river systems in *Barind* area, one is *Mahananda* which mark the left boundary of *Barind* and some individuals were recorded from the low laying paddy field of Old Maldah block (Jote Arapur panchayet). The Most important river is *Tangan* which divides this area into two equal parts longitudinally and the third river is *Punarbhaba* which runs along the India-Bangladesh border.

The wetlands along the river *Tangan* in this district is generally used for extensive paddy cultivation which gradually destroyed the local population of *Rosa clinophylla* in course of time that was quite high earlier. The species is found occasionally in other wetlands like *Belatuli beel* (25°02'48" N & 88°12'58" E), *Madhaipur beel* (25°27'07" N & 88°12'37" E), *Jatradanga beel* (25°03'31" N & 88°14'22" E), and *Kanchan beel* (25°07'54" N & 88°18'20" E) but now the occurrence of *Rosa clinophylla* is shifted to both the banks of the river *Tangan*. The plants of these wetlands show a peculiar feature *i.e.*, the plants remain dormant during rainy season because they remain submerged under 2 – 3 m of water. But during dry seasons, after receding of water, the dormant rootstalks sprout with new branches which never grow for more than 60 cm. The frequency of *Rosa clinophylla* along the river *Punarbhaba* is quite high and shows the best growth, 2 – 3 m tall forming dense prickly bushes, in the district. During rainy season plants remain immersed in this area. The population is very rich in *Tilasan* (24°55'10" N & 88°19'56" E) areas of *Habibpur* block near Indo-Bangladesh boarder and adjoining part of Nawabganj upazilla of Bangladesh. In *Tilasan* the species grows in abundance and are met almost in every step and is spreading over around 60 hector in the *Barringtonia* forest-floor and riverbank areas. The plants are also growing luxuriantly along the banks of the river *Punarbhaba* associated with

*Lippia javanica* (Burman f.) Sprengel, *Ficus heterophylla* Linnaeus f., *Phragmites karka* (Retzius) Trinius ex Steudel, *Cissampelos pareira* var. *hirsuta* (Buchanan – Hamilton ex DC.) Forman, *Setaria glauca* (Linnaeus) P. Beauvois and *Saccharum spontaneum* Linnaeus and in the floor of Hizal forest [*Barringtonia acutangula* (Linnaeus) Gaertner]. The present observation helps to understand its ideal habitat for flourishing the species and its association. However, the common threat for this species is its habitat loss.

However, the *Rosa clinophylla* is a much variable plant and with a number of recognized taxonomic varieties. The identity of the Maldah population is given below:

***Rosa clinophylla*** Thory var. ***glabra*** (Lindley ex Prain) C. Ghora & G. Panigrahi, J. Jap. Bot. 60 (2): 57. 1985; Fam. Rosaceae Ind. 2: 222. 1995.

*R. involucrata* Roxburgh var. *glabra* Lindley [in Wall. Cat. No. 696 d. 1829] ex Prain, J. Asiat. Soc. Beng. 73(2), no. 5: 202. 1904.

**Exsiccatae:** Barbilla beel, *Monoranjan & AP Das 0365*, dated 16.02.2004; Belatuli beel, *Monoranjan & AP Das 0561*, dated 12.03.2005; Hizal forest, Tilasan, *Monoranjan & AP Das 0960*, dated 16.02.2010; Arapur, *Monoranjan & AP Das 0611*, dated 07.02.2009.

**Indian distribution:** Assam, West Bengal, Orissa and Utter Pradesh

**World distribution:** India, Nepal, Himalaya (Kumaun, Nepal), Bangladesh, Burma, Myanmer, Thailand, Laos.

#### LITERATURE CITED

Prain, D. 1903. *Bengal Plants* 1: 466. (Indian reprint 1999). Bishen Singh Mahendra Pal Singh, Dehra Dun.