

FIRST REPORT ON THE OCCURRENCE OF MEDICINALLY IMPORTANT YELLOW GROUND STAR *CURCULIGO* *ORCHIOIDES* GAERTN. FROM CHINTAMONI KAR BIRD SANCTUARY, SOUTH 24 PARGANAS, WEST BENGAL

1* SOUMYAJIT CHOWDHURY

1* Assistant Professor, Dept of Zoology, MUC Women's College, Burdwan

Corresponding author: wildlifesc@gmail.com

Reviewer: Dipankar Borah

Keywords: Ground Orchid, Chintamoni Kar Bird Sanctuary, Medicinal.

Curculigo orchioides Gaertn., commonly known as the 'Ground Orchid' or 'Yellow Ground Star', is a small, slender perennial, geophilous and scapigerous herb belonging to the family Amaryllidaceae (Prain, 1903; Pandey *et al.*, 2008). The mature plant closely resembles a small young palm, attaining a size of 10-45 cm. and bearing leaves close to the ground with few small, bright yellow flowers blooming during the monsoon months of July-August (Pandey *et al.*, 2008). The species is distributed primarily in the subtropical regions of Asia especially in southern China and India (Cao *et al.*, 2008), including Ceylon, Japan and Nepal (Pandey *et al.*, 2008). However, the plant is reported to be native/ indigenous to India, widely distributed from subtropical parts of the Himalaya to Cape Comorin (Kanyakumari), including West Bengal, from sea-level to 2300 meters above sea level (Chauhan *et al.*, 2010; Pandey *et al.*, 2008).

C. orchioides is reported for the first time from Chintamoni Kar Bird Sanctuary (

22°42'N; 88°40'E) in South 24 Parganas district of West Bengal, India – being an addition to the known list of angiosperms in the sanctuary (Mukherjee, 1994). Previously known as Narendrapur Wildlife Sanctuary, this is the only urban Protected Area near Kolkata, with mixed deciduous forest covering an area of about 17.19 acres (6.95 hectares), flanked by the Adi-Ganga Drainage Scheme Canal on its western side (Anon, 2005). A single individual was observed and photographed (Figure 1) during the rainy season (30th July, 2016) in flowering condition among the forest litter. The observed plant was small (11 cms) with young palm-like appearance, with four leaves arising close to the ground and a single bright yellow flower.

The species, once distributed widely, is now endangered (Chauhan *et al.*, 2010) due to loss of its preferred habitat, reportedly open deciduous forests with less undergrowth in different parts of the subcontinent, including Bengal; the causes of the decline are believed to be climate change and pollution among other factors. The plant is medicinally well recognized due to its broad range of pharmacological activities, including widespread uses in traditional Chinese and Indian (Ayurvedic and Unani) treatments (Cao *et al.*, 2008; Nie *et al.*, 2013; Pandey *et al.*, 2008).

REFERENCES

- Anon. 2005. Notification for declaration of Chintamani Kar Bird Sanctuary (Ref No: 4170-For. Dated 05.10.2005). Govt of West Bengal, Dept. of Forests, Forest Branch.
- Cao D. P., Zheng Y. N., Qin L. P., Han T., Zhang H., K. Rahman & Zhang Q.Y. 2008. *Curculigo orchioides*, a traditional Chinese medicinal plant, prevents bone loss in ovariectomized rats. *Maturitas* 59(4): 373-380.
- Chauhan, N.S., V. Sharma, M. Thakur & V.K. Dixit. 2010. *Curculigo orchioides*: the black gold with numerous health benefits. *Zhong Xi Yi Jie He Xue Bao* (= *Journal of Chinese Integrative Medicine*) 8(7): 613- 623.
- Mukherjee, K. 1994. *Narendrapur Wildlife Sanctuary*. Prakriti Samsad, Calcutta. 14 pp.
- Nie Y., Dong X., He Y., Yuan T., Han T., K. Rahman, Qin L. & Zhang Q. 2013. Medicinal plants of genus *Curculigo*: Traditional uses and a phytochemical and ethnopharmacological review. *Journal of Ethnopharmacology* 147(3): 547-563.
- Pandey, H. C., R.S. Dixit & H.P. Sharma. 1983.A Bibliographical Note on “Kali musli” (*Curculigo orchioides* Gaertn.). *International Journal of Crude Drug Research* 21:1:33-42.
- Prain, D. 1903. *Bengal Plants*. Vol. 2 (*Apocynaceae* - *Selaginellaceae*). Botanical Survey of India, Calcutta. 1159 pp.



Figure 1. *Curculigo orchoides* Gaertn. from Chintamani Kar Bird Sanctuary, West Bengal