

Addition of Orchid *Eulophia pratensis* Lindl. to the Flora of Nashik district, Maharashtra, India

Jatin J. Shrivastava¹, G.S. Chaudhari² and Tanveer A. Khan³

During a botanical exploration in Nashik district, an interesting species, *Eulophia pratensis* Lindl. was collected. This orchid species is recorded for the first time from Nashik district. Nashik district is located between 18°33' and 20°53' North Latitudes and 73°16' degree and 75°16' degree East Longitudes at Northwest part of the Maharashtra State, at 565 meters above mean sea level along the banks of the river Godavari. The vegetation prevalent in Nashik district is of dry deciduous type and the forest cover lie in the western and southern western parts of the district within Surgana, Kalwan, Peth, Dindori, Nashik, Igatpuri, Trimbakeshwar taluks.

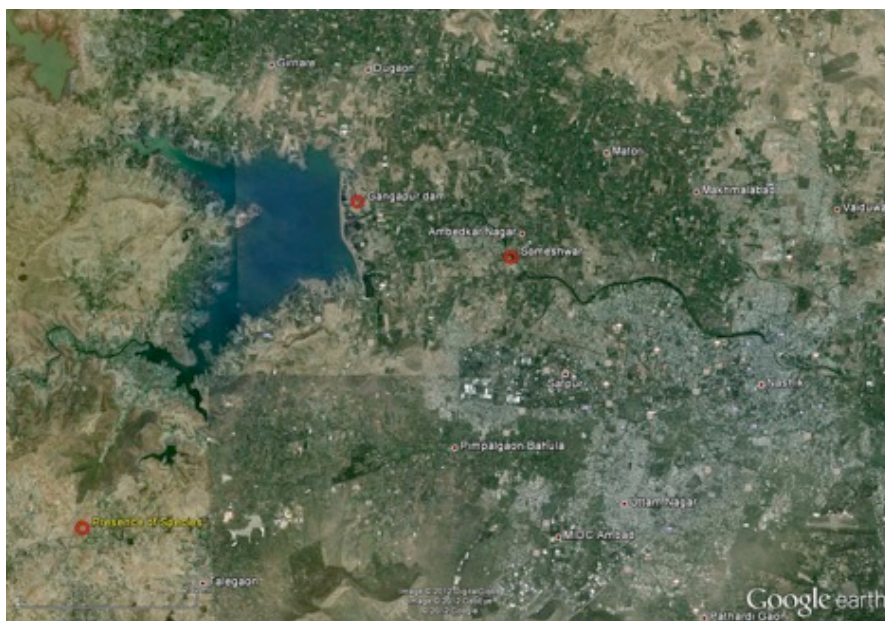
The botanical exploration from Nashik district has been carried out from time to time by a number of workers viz., Cooke (1901–1911) Bailey, (1949) Vaidya and Mahajan (1988), Mahajan and Nikumbh (2000). Lakshminarasimhan and Sharma (1991) published the flora of Nashik district. *Eulophia pratensis* Lindl. is proposed as an addition to the flora of Nashik district, based on the collections from different localities in Nashik district (Table 1).

During a field survey for locating Orchid along the banks of Godavari near Someshwar water falls, a broken rachis with maroon yellow coloured flower was noticed on 24 Dec 2010, further investigation revealed 7–10 individual plants, no specimen was collected as the populations was felt to be very low. Instead photographs of this species were taken with the help of Sony DSC HX1 & DSC-HX100V (With inbuilt GPS).

The specimens photographs were identified in the laboratory using



Image 1: Photograph of *Eulophia pratensis* Lindl. collected across the banks of Godavari river



Map 1: Distribution of *Eulophia pratensis* Lindl. in Nashik along River Godavari. (Map Courtesy : Google earth)

standard floras Cooke (1958), Lakshminarasimhan and Sharma (1991), Hooker (1890) and by consulting the herbarium of Botanical Survey of India, Western Regional Centre, Pune (BSI) as well.

Eulophia pratensis Lindl. in J. Proc. Linn. Soc., Bot. 3:25,1858;

Hook.f., Fl. Brit. India 6:4. 1890; Cooke, Fl. Bombay 3:197.1958 (Repr. Ed). *E. ramentacea* Wight

^{1,3}PG. Department of Botany, M. J. College, Jalgaon.

²PGSTR College, Jalgaon.

Email: ¹justinshri@gmail.com

(corresponding author),

²drgschaudhari@rediffmail.com,

³tanveerkhan04@gmail.com

Table 1: Survey reports along the banks of Godavari river

Date of field visit	Place of survey	Number of individual sighted
24-Dec-2010	Someshwar	9
13-Jan-2011	Someshwar	12
09-Mar-2011	Someshwar	12
22-Dec-2011	Gangapur Dam	06
04-Aug-2012	Someshwar	12
02-Sep-2012	Someshwar	12

Icon. Pl. Ind. Orient.5(1): 8, t. 1666. 1851 non Lindl. 1858; Santapau & Kapadia in J. Bombay Nat. Hist. Soc. 59:58. 1961; Naik, Fl. Marathwada 2:823.1998. Image 1.

Terrestrial herbs up to 60 cm high. Leaves absent (rarely present) during flowering, linear, 15–45 x 4–7 cm acuminate at apex, tapering towards base, pubescent. Rachis faint purple to pale greenish with purple tinge, stout, cylindrical, pubescent. Bracts faint greenish with purple tinge, ovate lanceolate acuminate apex, edges slightly curved and raised. Dorsal sepal oblong 1–2 x 3–4 cm. acute at apex, curved dark maroon at the apex gradually fading to yellow at base, 4–5 veined. Lateral sepals slightly smaller than the dorsal sepal, oblong – ovate, 1–2 x 3–4 cm, acute at apex, curved, faintly Maroon – orange at the apex gradually fading to yellowish white at base. Lateral petals oblong – ovate, 2–3 x 4–5 cm, acute at apex, dark maroon at the gradually fading towards base, lip oblong – ovate 1–1.5 cm long, yellowish white, 3 lobed, Lateral lobes broadly ovate, obtuse, mid lobe oblong ovate, obtuse, with three raised nerves from the middle to the base. Column 3–4 cm long. Spur cylindrical, obtuse. Ovary pale greenish with purple tinge. Capsule pendulous, ellipsoid, C. 2 x 4 cm.

Flowering and Fruiting:

December – April

Distribution: Surgana, Kalwan, and Trimbakeshwar taluks.

Habitat: along the open grasslands at high elevations.

Note: *Eulophia pratensis* Lindl. could be easily differentiated with other *Eulophia* spp. occurring in the area by its brownish maroon flowers with distinct yellow shade and ellipsoid, pendulous capsules.

References:

Bailey, L.H. (1949). *Manual of cultivated plants.* Mcmillan and Co., New York.

Cooke, T. (1901–08). *The flora of the Presidency of Bombay.* 3 Vols. (Reprint) 1967, B.S.I. Calcutta.

Hooker, J.D. (1896). *Flora of British India,* Vol. 6: pp.4. L. Reeve and Co. London.

Lakshminarasimhan, P. and B.D. Sharma (1991). *Flora of Nashik District,* BSI. Fl. Ind. Ser.3 pp641, pl.15.f.52,.

Mahajan, D.R. and D.F. Nikumbh (2001). *An addition to the Flora of Nashik District, Part I (Maharashtra) Biojournal,* (1 and 2), 1–7, June and Dec. 59:58.

Naik, V.N. (1998). *The flora of Marathwada.* Amrut Prakashan, Aurangabad. 2: 823.

Santapau, H. and Z. Kapadia (1961). Critical notes on the Orchidaceae of Bombay state **V.** *Journal of the Bombay Natural History Society,* Vol.58, p.53–67.

Vaidy, P.B. and D.R. Mahajan (1988). *Flora of Tryambakeshwar Hill,* Gazetter of India, Maharashtra State, 704–706.

Acknowledgements:

The authors are grateful to Dr. P. Lakshminarasimhan, Dr. Nilesh Malpure, Mr. C.M. Sabapathy for confirmation of the species *Eulophia pratensis* Lindl. Authors are also thankful to Swapnil Barde, Ameya lele, Vicky Nikumbh, Abhijit Toke, Kailash Patil, for great support.

