



EXTENDED DISTRIBUTION OF DENDROBIUM PEGUANUM LINDL. (ORCHIDACEAE) IN MAHARASHTRA, INDIA

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Date of online publication- 30th December 2016

Dendrobium peguanum Lindl. is reported here for the first time from the Ratnagiri District of Maharashtra. A detailed description and colored photographs are provided.

Key words: Orchid, *Dendrobium*, Ratnagiri, Lanja

Ratnagiri district is a coastal district of traditional Konkan region of the Maharashtra State, situated in the western coast of India. The district has north-south length of 180 km and average east-west extension of 64 km. Sahyadri hills surrounds the district in the east beyond which there are Satara, Sangli and Kolhapur districts, Raigad district in the north, the Arabian Sea in the west and Sindhudurg district in the south. The total area of the district measures 8,208 sq. kms and the population is 16, 15, 069 (2011). The average annual rainfall is 3364 cms (2013) and the literacy rate is 74.26 %. Over 85 % of the land surface in the district is hilly. All rivers in the district originate in the Sahyadri ranges and flow from east to west and merge in to Arabian Sea. The district has 167 km long sea coast which contains many beaches and forts. The district can be divided physically into three zones such as coastal zone, middle zone and hill area zone. The coastal zone extends to about 10-15 km from sea coast and generally has low altitude and about 2500 mm rainfall. The middle zone lies between the coastal and hill areas and generally has a medium altitude. It is most accessible due to Mumbai-Goa highway as well as Konkan railway. The hill area zone includes western slopes of the Sahyadri and extends up to about 10–15 km. It generally has medium to high altitude with high rainfall of about 3400 cm. A large area of this zone is covered by forest.

Dendrobium Swartz comprises approximately

1500 species and is one of the largest genera of Orchidaceae. It is widespread in tropical and subtropical regions of Asia and Australia, from India to Japan, south to Malaysia and Indonesia, east to Australia, New Guinea and the Pacific islands (Cribb and Govaerts 2005 Wood 2006 Zhu *et al.* 2009).

Authors came across an interesting population of an epiphytic orchid while conducting the floristic survey of Lanja tehsil in the Ratnagiri District of the Maharashtra State. After critical study of the collected sample and scrutiny of available literature, the orchid species has been identified as *Dendrobium peguanum* Lindl. The available literature on floristic of the district and review of literature on orchids revealed that the taxa have not been reported from the district by the previous workers. Therefore it is the first report of its extended distribution from the Ratnagiri District in Maharashtra.

Yadav and Sardesai (2002) have reported this taxa from the Kalakdara, Kolhapur District, Maharashtra; Almeida (2009) have reported this taxa from Atgaon, Igatpuri, Thane, Kasara, Nasik and Kolhapur. Lakshminarsimhan (1996) have reported this taxa from Bombay, Thane, Pune and Nasik. None of the previous workers have described this taxa from the Ratnagiri District, hence it shows an extended distribution and new report for the Ratnagiri District.

Dendrobium peguanum Lindl. in *J. Proc. Linn. Soc. Bot.* 3: 19, 1958; Santapau and Kapadia, *Orchids of Bombay* 84, t. 18, 1966; Lakshminarsimhan in Sharma et al., *Fl. Maharashtra (Monocotyledons)* 24, 1996; Yadav and Sardesai, *Fl. Kolhapur District* 462, 2002; Almeida, *Fl. Maharashtra* 5(a): 39, 2009. *Callista pygmaea* Kuntze Revis. Gen. Pl. 2: 655, 1891. *Dendrobium fesselianum* M. Wolf *Orchidee (Hamburg)* 41: 97, 1990. *Dendrobium pygmaeum* Lindl. *Gen. Sp. Orchid. Pl.* 85, 1830; Hook.f., *Fl. Brit. Ind.* 5: 717, 1890. *Dendrobium wallichii* A. D. Hawkes and A. H. Heller in *Lloydia* 20: 125, 1957

An epiphytic herb with stout, leathery, tufted, ovoid to globose or oblong-conical, fleshy pseudobulbs; Pseudobulbs 1.5×0.8 -1.1 cm, 2-4 noded; sometimes 3 noded. Leaves sessile, 2-4, coriaceous, broadly elliptic to linear-oblong, leathery, obtuse, entire, alternate, midrib prominent below. Flowers in racemes, sometimes congested, 2-14 flowered, arising from the apex of pseudo bulb, peduncle short, 0.8-1.3 mm in diameter, greenish purple with oblong-lanceolate, membranous sheaths at the base. Flowers bracteate, pedicellate, $3-7 \times$ c. 2 mm membranous, greenish-white or pale brown in colour, pedicellate ovary 4-7 mm long, straight or sometimes curved, green. Sepals white tinged, sub-equal, presence of purple or green colouration towards the base, acute, entire, glabrous, 1-nerved. Mentum 2-4 mm long, cylindrical or sub-conical, obtuse. Petals $8-9 \times$ c. 1.2 mm, white, spatulate, linear at the base, obtuse or sub-acute, glabrous, 3-nerved. Lip 3-lobed, $7-9 \times$ c. 4 mm. Anthers small, oblong-conical, attached on the top of the column. Pollinia minute, 4 in number, golden-yellow. Capsule dark brown, ribbed, c. 14×6 mm.

Flowering: December to February

Fruiting: March to April

Exsiccate: KGM 3164 and RAS 349; India, Maharashtra, Ratnagiri Distict, Lanja Tehsil,

Lanja Village, Shewarwadi at N $16^{\circ}51.323'$ latitude and E $073^{\circ}32.421'$ longitude and at elevation of 267 m from the mean sea level in the Shewarwadi, village Lanja of the Ratnagiri District.

Distribution: The genus *Dendrobium* is the second largest group in Orchidaceae with 900 species (Dressler, 1993) and widely distributed in the countries like India, China, South East Asia, Japan, Malaya, Philippines, New Guinea, Australia, Pacific Islands and New Zealand, with highest concentration of more than 150 species in Papua New Guinea.

In India, it is the second largest genus among the orchid and represented by 103 species distributing in the Eastern Himalayas, Western Himalayas, Western Peninsular, Andaman and Nicobar Island (Singh et al., 2001).

Ecology: The species was found epiphytic on a mango tree. A large population of the taxa has been observed growing luxuriantly on the stems at



Figure 1 Habit of *Dendrobium peguanum* Lindl.



Figure 2: Pseudo bulb of *Dendrobium Peguanum* Lindl.

Authors would like to thank Principal of Arts, Commerce and Science College, Lanja for giving the opportunity to use laboratory and library facility. Also authors extend their sincere thanks to Mrs. Sweedle Cerejo-Shivkar for her help in the identification of the taxa.

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