

## TWO NEW FLOWERING PLANTS ARE NEW DISTRIBUTIONAL RECORDS FROM SATPUDA RANGE OF JALGAON DISTRICT, MAHARASHTRA

\*Tanveer A. Khan<sup>1</sup>, Vivek V. Desai<sup>2</sup> and Umesh K. Patil<sup>2</sup>

<sup>1</sup>Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon-Maharashtra

<sup>2</sup>Biologist Ideal Organization, Jalgaon

\*Author for Correspondence

### ABSTRACT

The present paper deals with addition of two new flowering plants records from different parts of the Satpuda ranges of Jalgaon district, Maharashtra are new distributional records for the first time. These species are *Peristylus constrictus* (Lindl.) Lindl. and *Begonia picta* Sm. are reported for the first time for Satpuda ranges of Jalgaon district, Maharashtra. The study provides a detailed taxonomic description, photographs and relevant information based on fresh collections.

**Keywords:** New Records, Satpuda Ranges, Jalgaon District

### INTRODUCTION

Jalgaon is one of the districts in the Khandesh region of North Maharashtra with great diversity of plants. The present paper deals with the addition of two taxa of flowering plants to the flora of Jalgaon districts, Maharashtra. The Jalgaon district has a total area about 272 sq.km. The total forest area in the district is 72685.27 hectares. On its location in the upper Tapi basin, it forms a distinct topographical unit separated from neighboring Madhya pradesh state by Satpura ranges and form the south by Satmala hilly ranges. The forest of Jalgaon district is of the tropical, dry deciduous type. The vegetation varies with the changes in altitude, aspect and rainfall. While working on floristic of Jalgaon district of Maharashtra we undertook frequent collection tours in every season to study plants.

### MATERIALS AND METHODS

During botanical exploration of Jalgaon district in Maharashtra two interesting species *Peristylus constrictus* (Lindl.) Lindl. (Orchidaceae) and *Begonia picta* Sm. (Begoniaceae) was collected from hill slopes, margins of water courses and in moist shady places in forest at high elevations. The species was identified with the help of pertinent literature (Verma *et al.*, 1993; Lakshminarasimhan *et al.*, 1996; Singh *et al.*, 2001; and Suman *et al.*, 2015) and the taxa were confirmed by Dr. Milind Sardesai, Department of Botany, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and by consulting the BSI western Circle, Pune, herbarium as well. The voucher specimens have been deposited in the herbarium of Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon, Maharashtra.

***Peristylus constrictus*** (Lindl.) Lindl., Gen. Sp. Orchid. Pl. 300. 1835; Lakshmi. in Sharma *et al.*, Fl. Maharashtra St. Monocot. 55. 1996. Sigh *et al.*, in Fl. M. P. 3: 61. 2001; Suman and Chowdhury In: *J. New Biological reports* 4 (2) 159. 2015. *Hermidium constrictum* Lindl. In Edgw. Bot. Reg.18: Subt.1499, 1890. *Habenaria constricta* (Lindl.) Hook. f. in Fl. Brit. India 6:161. 1890. **(Plate I)**

Terrestrial herb, 35-60 cm tall, tuberous; tuber ovate, 4.4 × 3.8 cm. Stem with 2-4 tubular sheaths at base. Leaves clustered near the middle of the stem, more or less whorled, 4-6, ovate-elliptic to broadly lanceolate, acute, shortly petiolate, 6-11cm long and 2.5-5 cm wide, tapering at the amplexicaul base, nerves many.

Flowers in narrow dense spike, 20-30 cm long; bracts 2-4, lanceolate, acuminate, erect, 1.2 mm long. Flowers sweet scented, 2- 2.7 mm long. Sepals pale brown, dorsal sepal concave, 0.7-10 × 1-3 mm, lateral sepals narrower, spreading, 8.5 × 0.5-1mm. Petals white, obliquely ovate, 15 × 5.4- 6 mm long. Lip about as long as sepals or longer, deeply 3-lobed from about the middle, spurred, lateral lobes linear, slightly falcate, diverging, 15 mm long; median lobe oblong, obtuse, 14 mm long. Spur very short,

### Research Article

globose, inflated, 2-3 mm across. Ovary  $8 \times 1.5$  mm. Column broad, about  $2 \times 2$  mm tall. Pollinia clavate, caudicles short with large glands,  $2.1 \times 0.75$  mm. Fruit ellipsoid with short beak, 0.8 - 1cm long.

*Flowering and Fruiting*: July – August.

*GPS Reading*: N  $21^{\circ}18.884'$  E  $075^{\circ}35.377'$  (Elevation 604<sup>m</sup>)

*Distribution*: Rare. In Satpuda ranges. In moist shady places in forest at high elevations. In Maharashtra only reported from Amaravati.

*Specimens Examined*: Jalgaon Dist., Ammba Pani, TAK 3689; Mandap-Nalah, TAK 3907; Vaki, TAK 4169.

***Begonia picta*** Sm., Exot. Bot.2: 81.t.101.1805; Clarke in Hook. f., Fl. Brit. Ind. 2: 638.1879; Verma et al., in Fl. M. P. 1: 506. 1993; Singh et al., Fl. Maharashtra St. Dicot. 2: 79. 2001 (**Plate I**)

Herbs up to 20 cm high, with short tuber. Leaves few (1-3), 5-13 x 3-10 cm, broadlyovate, cordate, serrate, acuminate or sub-acuminate, pilose on upper surface and on nerves on under surface; petioles 3-15 cm long, pilose. Flowers few in paniced cymes. Tepals in male flowers 2 + 2, scarlet or pink; outer tepals sub-orbicular to broadly ovate, obtuse; inner tepals oblong, light pink, smaller. Tepals in female flowers 5, pink, ovate-oblong. Ovary 3-locular; styles 3; stigmas branched, twisted. Capsules 0.7-2 cm long, angled, 3-winged; wings unequal, pubescent; seeds ovoid.

*Flowering and Fruiting*: August-October.

*GPS Reading*: N  $21^{\circ}19.422'$  E  $075^{\circ}35.601'$  (Elevation 687<sup>m</sup>)

*Distribution*: Occasional. Along the hill slopes and in moist rocky places. In Maharastra only reported from Nasik.

*Specimens Examined*: Jalgaon Dist., Jamnya, TAK 2741; Langdha Aamba, TAK 2863; Ammba Pani, TAK 2937.



*Peristylus constrictus* Lindl.



*Begonia picta* Sm.

## Plate I

## **Research Article**

### **RESULTS AND DISCUSSION**

We have gone through all pertinent literature (Kshirsagar, 2008; Tanveer, 2014) and by consulting the BSI Herbarium Pune. To find out the occurrence, distribution and habitat of these species. We found that, these species were not reported in any of the Jalgaon flora. This clearly reveals that, these species are rare to flora of Maharashtra State, even India as a whole. These species are new record to the flora of Jalgaon district of Maharashtra State. The voucher specimens are deposited in the herbarium of Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon.

On close examination of herbarium specimens and detailed scrutiny of literature published till today on these taxa, it can be claimed that these are new records for Satpuda range of Jalgaon district of Maharashtra.

### **ACKNOWLEDGEMENT**

The authors wish to express their gratitude to Dr. Milind Sardesai, (Department of Botany, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad) who confirmed the identity of these species. Thanks are also due to the Principal, H.J. Thim College, Jalgaon, for providing laboratory and library facilities.

### **REFERENCES**

- Hook JD (1890).** *Flora of British India* (L. Reeve and Co, London, UK) **6** 161.
- Kshirsagar SR and Patil DA (2008).** *Flora of Jalgaon District, Maharashtra*. (Bishen Singh Mahendra Pal Singh, Dehradun, India) 302-303.
- Lakshminarasimhan P, Sharma BD, Karthikeyan S and Singh NP (1996).** *Flora of Maharashtra State: (Monocotyledons)* (Botanical Survey of India, Kolkata, India) 55.
- Singh NP, Khanna KK, Mudgal V and Dixit RD (2001).** *Flora of Madhya Pradesh*, (Botanical Survey of India, Kolkata, India) **3** 61.
- Singh NP, Lakshminarasimhan P, Karthikeyan S and Prasanna PV (2001).** *Flora of Maharashtra State Dicotyledon* (Botanical Survey of India, Kolkata, India) **2** 79.
- Suman K and Chowdhury HR 2015.** New distributional record of *Peristylus constrictus* (Lindl.) Lindl. from Southern West Bengal, India. *Journal on New Biological Reports* **4**(2) 159-161.
- Tanveer AK, Desai VV and Gawande NR (2015).** Four New Flowering plant Records from Satpuda Range of Jalgaon District, (MS) India. *Bioscience Discovery* **6**(1) 45-48.
- Verma DM, Balakrishnan NP and Dixit RD (1993).** *Flora of Madhya Pradesh*, (Botanical Survey of India, Kolkata, India) **1** 506.