

## Three New Distributional Records of Flowering Plants from the Satpuda Range of Khandesh Region of Maharashtra, India

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**Abstract:** Three species of flowering plants, *Oxystelma esculentum* (L.f.) R. Br., *Artocarpus lakoocha* Roxb., *Phyllocephalum tenue* (Cl.) Narayana have been reported first time in the khandesh region from the satpuda range of khandesh region of Maharashtra. All the species have been described along with colored photographs.

**Keywords:** Khandesh, Satpuda range, Three flowering plants, New records.

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### 1. INTRODUCTION

Khandesh region consists of three districts Jalgaon, Dhule and Nandurbar. Total area of Khandesh is of 10,431 square miles. Khandesh region lies between 20° 8' and 22° 7' North latitude and 73° 42' and 76° 28' East longitude. The forests of Khandesh region are tropical, dry deciduous type where in the Teak (*Tectona grandis* L.) is the predominant species. The vegetation varies with the changes in altitude, aspect and rainfall. The vegetation of various places depends totally upon the changes in altitude and rainfall. During botanical explorations of Khandesh region (Satpuda ranges) in Maharashtra state three interesting specimens were collected from wet open grassland on hill slope and margins of waters courses. Close examination with the help of literature and herbarium specimens reveal that they belong to distinct and new distributional records for Khandesh region, which was never recorded from Khandesh region in previous literatures [1-2] (Patil 2003; Kshirsagar 2008). A detailed description along with photographs are provided (Plate-1). The voucher specimens were deposited in the herbarium of the Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon, Maharashtra.

### 2. MATERIALS AND METHODS

#### 2.1 Taxonomic Treatments

*Oxystelma esculentum* (L.f.) R. Br. in Mem. Wern. Soc. 1: 40. 1809 printed in 1811 ex Sch. in L. Syst. Veg. 6: 89. 1820; Cooke, Fl. Pres. Bombay 2: 216. 1958. (Repr.); Mudgal *et al.*, in Fl. M. P. 2: 82. 1997; Singh *et al.*, Fl. Maharashtra St. Dicot. 2: 372. 2001. *Periploca esculenta* L.f. Sp. Pl. 168. 1781. 'Dudhani, Dudhialata'

Perennial, Twining herbs or undershrubs; roots tuberous; stems branched, slender, terete, glabrescent. Leaves petiolate, 4-8 x 0.5-2.0 cm, oblong-linear to linear-lanceolate, apex mucronate, base truncate. Flowers in drooping lateral cymes. Corolla pinkish outside, deep pink inside, with purplish reticulations; Corona stamina, biseriate, outer fleshy, cup shaped, completely adnate to base of stamina-colum, inner of 5 lobes, ovate-lanceolate, 2-keeled within, produced above into incurved subulate tips. Follicles tapering to apex, c 8 x 1.5 cm, ovoid-lanceolate, glabrous. Seeds ovate or suborbicular, black, coma silky white.

**Flowering and Fruiting:** September – December

**GPS Reading:** 20° 55.452' E 75° 42.409' (Elevation 225<sup>m</sup>)

**Distribution:** Rare. In satpuda ranges. In moist shady places in forest at high elevations, also growing along the river banks. In Maharashtra reported from Ahmednagar, Chandrapur, Kolhapur, Raigad, Pune and Thane.

**Specimens examined:** Jalgaon Dist., Langdha Aamba, TAK 2894; Waghur Dam, TAK 3156; Jamnya, TAK 3704.

**Uses:** The Plant is antiseptic as well as galactagogue. Fresh roots are prescribed in jaundice while leaves, flowers and fruits are eaten.

**Artocarpus lakoocha** Roxb. Fl. Ind. 3: 524. 1832; Hook.f. Fl. Brit. India 5: 543. 1886; Mudgal *et al.*, in Fl. M. P. 2: 606. 1997; Singh *et al.*, Fl. Maharashtra St. Dicot. 2: 931. 2001. 'Uomt, Otamb, Lowi, Barhal'.

Large, deciduous trees, 15-20 m high; branchlets softly tomentose or villous. Leaves oblong-elliptic or subovate, 10-30 cm long, thinly coriaceous, glabrous or softly tomentose above, pubescent beneath, base rounded, apex cuspidate; young leaves often serrate at margins; nerves 8-12 pairs; petioles 1.5-2.5 cm long, stipules lanceolate. Male heads 1.5-2.5 cm across, oblong or globose, pubescent; bracteoles clavate, puberulous. Female flowers with anthocarps completely united. Syncarp 5.0-7.5 cm across, lobulate, smooth, velvety, wrinkled, yellow. Seeds oblong, few.

**Flowering and Fruiting:** March-July

**GPS Reading:** N 20°45.163' E 75°32.957' (Elevation 246<sup>m</sup>)

**Distribution:** Rare, a single tree found at Nandra, Rare to Khandesh region. along the hill slopes and in moist rocky places. Elsewhere in Maharashtra reported from Sindhudurg, Kolhapur and Pune.

**Specimens examined:** Jalgaon Dist., Nandra, TAK 2705.

**Phyllocephalum tenue** (Cl.) Narayana in Curr. Sci. 51: 439. 1982; Uniyal in Hajra *et al.* Fl. India 13: 345. 1995; Singh *et al.* Fl. Maharashtra St. Dicot. 2: 232. 2001. *Centratherum tenue* Cl. Compd. India 4. 1876; Cooke, Fl. Pres. Bombay 2: 636. 1958 (Repr.). 'Parnagumphi'

Herb, up to 1.5 m tall, erect, dichotomously branched, glabrous; stem tinged with purple. Leaves upto 15 x 6 cm, broadly elliptic-lanceolate, acute to acuminate at apex, serrate along margins, short-hairy above, white woolly beneath; upper leaves sessile. Heads c 1.3 cm across, purple; Outer involucre bracts foliaceous, inner most scarious, white tomentose. Pappus pale reddish, much shorter than corolla tube. Achenes faintly 10-ribbed, glabrous.

**Flowering and Fruiting:** October -November

**GPS Reading:** N 20°57.676' E 75°33.704' (Elevation 334<sup>m</sup>)

**Distribution:** Occasional, along the margins of streams, hill slopes, among grasses along forest roads and in marshes of wet grasslands at high elevations. In Maharashtra reported from Kolhapur, Raigad and Sindhudurg.

**Specimens examined:** Jalgaon Dist., Manudevi TAK 3467;

### 3. RESULTS AND CONCLUSIONS

We have gone through all Indian floras [3-7] (Sigh *et al* 2001; Mudgal *et al* 1997; Hook 1886; Cooke 1958; Yadav and Sardesai 2002). and to find out the occurrence, distribution and habitat of taxon *Oxystelma esculentum* (L.f.) R. Br., *Artocarpus lakoocha* Roxb., *Phyllocephalum tenue* (Cl.) Narayana. We found that, these taxon was not reported in any of the Khandesh floras. This clearly reveals that, these taxon are rare to flora of Maharashtra State, even India as a whole. These taxon are new distributional records to the Khandesh region.

On close examination of herbarium specimens and detailed scrutiny of literature published till today on these three taxa, it can be claimed that these are new distributional records for Khandesh region of Maharashtra.

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**Oxystelma esculentum (L.f.) R.Br.**



**Phyllocephalum tenue (Cl.) Narayana**



**Artocarpus lakoocha Roxb. Habit**



**Artocarpus lakoocha Roxb. Fruit**

### Plate:I

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