

**Short communication**

New distributional record of *Zingiber roseum* (Roxb.) Roscoe from Satpuda hill ranges of Jalgaon district, Maharashtra, India

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INTRODUCTION

Genus *Zingiber* Mill. (Zingiberaceae) is represented by 141 species distributed mainly in tropical forests of Asia. From Maharashtra 7 species have been reported (Sharma *et al.* 1996, Almeida 2009, Chandore *et al.* 2012). These plants are characterized by inflorescence arising directly from the rhizome with peduncle very short or absent. Earlier floristic studies in Satpuda hills of Khandesh region have not recorded any wild ginger species belonging to the genus *Zingiber* (Patil 2003, Kshirsagar 2008, Khan 2019). During our botanical survey of Satpuda hills, we came across a colony of herbaceous plants with distichous leaves with basal sheaths overlapping to form pseudostem, in Aamba Pani forest of Satpuda hills of Jalgaon district, on hill slopes dominated by Bamboo *Dendrocalamus strictus* (Roxb.) Nees and Karvi *Strobilanthes callosa* Nees vegetation, sharing habitat with *Cheilocostus speciosus* (J. Koenig) C. Specht, and *Habenaria plantaginea* Lindl. Detailed morphological examination of the specimen observed with the help of literature confirmed it as *Zingiber roseum* (Roxb.) Roscoe. Close examination with the help of pertinent literature revealed that this species is not recorded earlier from Satpuda hill ranges of Jalgaon district, and Khandesh region of Maharashtra. It is the new distributional record of this species from Satpuda ranges, Maharashtra state. The occurrence of this rare wild ginger species underlines its range extension from western ghats to Satpuda hills, signifying floral wealth of Satpuda hill ranges.

MATERIALS AND METHODS

During our botanical explorations in Satpuda hill ranges of Jalgaon district, we came across a tall perennial herb with inflorescence almost buried in the soil on a moist hill slope near rocky stream in the dense and shady forest patch. The plant specimen was collected for proper morphological investigation. The voucher specimen has been deposited in the herbarium collection of School of Environment & Nature Conservation, Jalgaon. Thorough morphological scrutiny of the specimen was carried out and the taxa was confirmed by Dr. Milind Sardesai, Pune and Dr. R. G. Khose, Ahmednagar. It was identified as *Zingiber roseum* (Roxb.) Roscoe, a perennial herb.

RESULTS

Zingiber roseum (Roxb.) Roscoe, Trans. Linn. Soc. London 8:348. 1807; Baker in Hook. f., Fl. Brit. India 6: 244. 1892; M. Sabu, Zingiberaceae and Costaceae of South India, 244. 2006; Chandore *et al.* 2012. [Fig. 1] *Zingiber roseum* an add. Fl. Maha., Kar. and Goa (Ind.) JBNHS, 109(3), Sep–Dec 2012.

Amomum roseum Roxb., Pl. Coast Coromandel 2: 15 pl. 126. 1800.

Vernacular name: Rosy Ginger.

Tall herbs. Rhizome thick, fleshy, pinkish from outside and white to pale yellow within. Roots many, fleshy. Pseudostem (leafy shoot) ca. 1.5 m tall, basal portion covered by long sheaths. Leaves short petiolate, ligulate, ligule bilobed, ca. 2 cm, membranous; lamina 30–41 × 8–10 cm, elliptic-lanceolate, leaf apex acuminate, base narrowed, cuneate, adaxially glabrous, abaxially white pubescent. Inflorescence produced directly from the rhizome, almost buried in the soil, peduncle very short, spike 4–6 cm, dense. Bracts 3.5–5.0 × 1.0 cm, broadly

ovate, imbricating, red. Flower 3 cm long, pale yellow. Calyx tubular, membranous. Corolla tube longer than bracts, white; segments subequal, red, dorsal lobe recurved, lateral lobes smaller, linear. Labellum shorter than the corolla lobes, oblong, cuneate, slightly three-lobed, margin recurved, somewhat crisp, white, with yellow markings on side lobes. Anther sessile; thecae 1 cm long; crest 0.7 cm long, red; style long filiform, stigma ciliate, slightly projecting from the anther crest. Capsule elliptic red, trigonous, seeds black, 6–7 × 3–4 mm, aril white.

Flowering and fruiting: August–October.

Elevation: 800 m.

Specimen examined: Munjoba-Aamba Pani forest, Yawal, Jalgaon district, Maharashtra, LMS-0015 (SoENC).

Distribution: Rare perennial herb. Prefers evergreen and moist deciduous forests at high altitude, growing on shady hill slopes near streams. In Satpuda hills a small colony of this species was found in moist shady slope near a rocky stream, dominated by Bamboo and Karvi vegetation. In Maharashtra it is earlier reported from Amboli (Sindhudurg district).

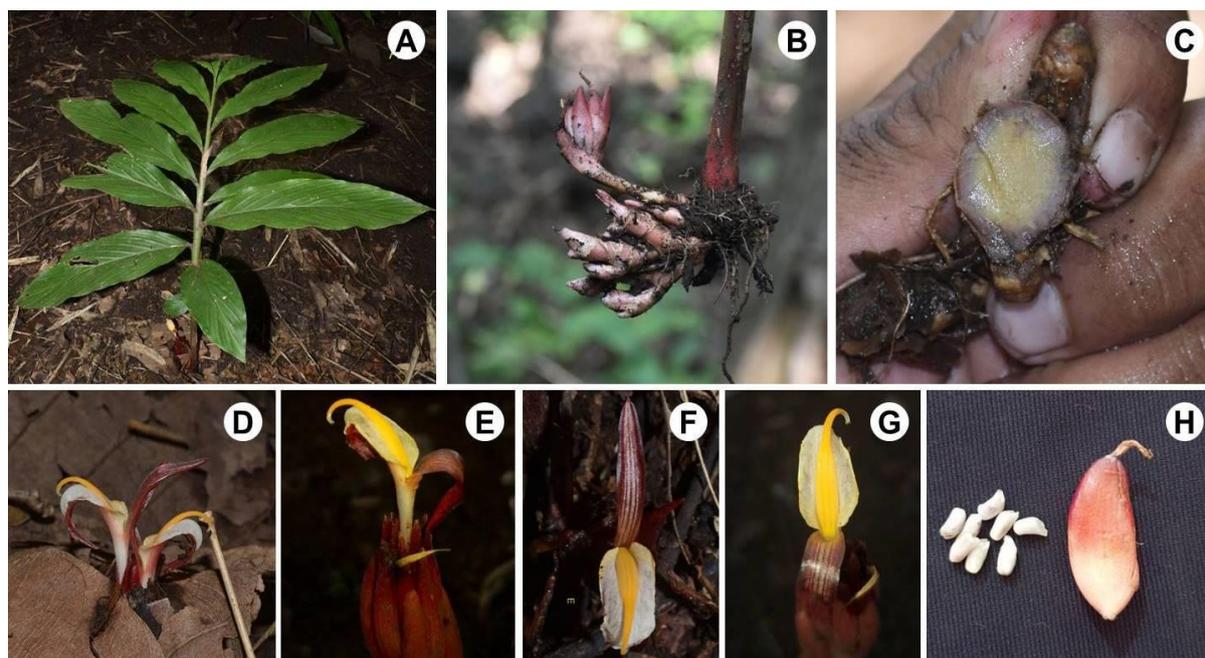


Figure 1. *Zingiber roseum* (Roxb.) Roscoe: **A**, Habit; **B**, Rhizome; **C**, Section of rhizome showing pale yellow middle portion; **D**, Flowers (Side view); **E**, Single flower; **F**, Flower (Top view); **G**, Flower showing ciliate stigma, slightly projecting from the anther crest; **H**, Capsule and seeds with white aril.

CONCLUSION

Through perusal of literature and consultation with BSI herbarium, Pune, it was observed that *Zingiber roseum* (Roxb.) Roscoe is only reported from Amboli, Sindhudurg district in Maharashtra and is not earlier reported from Jalgaon, Dhule and Nandurbar districts of Maharashtra state (Sharma 1996, Patil 2003, Kshirsagar 2008, Almeida 2009, Chandore 2012, Khan 2019). Thus, this species has been recorded for the first time from Jalgaon district and Khandesh region of Maharashtra State. This clearly reveals, this species is rare to the flora of Maharashtra and even to the flora of India. This also shows that present paper is the second report of this species from Maharashtra. It is a new distributional record of this species from Satpuda hill ranges of Maharashtra. Encroachment, uncontrolled collection for trade, cattle grazing and man-made forest fires are serious threats to this already endangered species. There is urgent need to conserve and protect habitat of this rare perennial herb.

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