

# An additional distribution record of *Ceropegia rollae* Hemadri from Chavandwadi, India

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(Received 22 April, 2022; Accepted 22 June, 2022)

## ABSTRACT

*Ceropegiarollae* Hemadri (Apocynaceae) an endemic and critically endangered plant was first time recorded from a mountain pass in the Western Ghats ranges of Maharashtra known as Naneghat. The note describes additional distribution photographic record of *Ceropegiarollae* on flat terrain at elevation of 842 m Chavandwadi village. Chavandwadi is the base village of Chavand Fort (Prasannagad) which is a hill fort situated 30 km from the modern-day town of Naryangoan in Junnar Taluka of Pune district in Maharashtra, India.

**Key words :** *Ceropegiarollae* Hemadri, Chavandwadi

Family name	Asclepiadaceae
Botanical name	<i>Ceropegiarollae</i> Hemadri
Local name	Kharpudi
BSI-Envis	Endangered
Regional IUCN_ Status	Critically Endangered [B1b (i, ii, iii, iv, v), c (i, ii, iii, iv); C2b]
Endemic to	Maharashtra
Habitat	On hill tops and slopes among grasses at an altitude of over 1000 m

The highly economic, botanically curious genus *Ceropegia* L. (Apocynaceae Juss.) is native to India with the greatest number of species concentrated in Western Ghats which may be designated as the 'cradle of *Ceropegia*'. Of the global reported 240 species distributed tropical and sub-tropical Asia, Africa, Australia and Malaysia an in canary and Pacific islands, presently there are a total of 67 taxa

of *Ceropegia* in India of which, 58 species, two sub-species and five varieties are found in India (Malpure *et al.*, 2006; Diwakar and Singh, 2011; Kambale *et al.*, 2012; Kamble and Yadav, 2012), of which 35 species and one variety (ca. 56%) are endemic to Western Ghats where most are either critically endangered, endangered or vulnerable as per the IUCN categories and are also listed in the Red Data Book of Indian Plants (Nayar and Sastry, 1988). Of these, 50% (17 species and one variety) are strictly endemic to Maharashtra. Locally known as 'Hanumangada', 'Kharpudi', 'Khartundi', and 'Tilori', the genus is found mostly on plateaus and regions with gravelly and lateritic soils. Grazing, habitat destruction by anthropogenic agents, and pollination stress are the major causes of population shrinkage and collapse. Severity of anthropogenic pressures is extreme in these regions where shepherds and local inhabitants relish and devour these

plants to a great extent. As a result, several species of the genus are critically endangered or endangered, and face the risk of extinction in the near future.

*Ceropegiarollae* Hemadri also known as Rolla's *Ceropegia* is a tall erect, tuberous herb, endemic to Western Ghats of Maharashtra. It has pubescent stem with ovate Leaves which are puberulous from above. Cymes are subaxillary and terminal, many flowered, peduncle and pedicels hirsute. The plant flowers during August- September with flowers having a slightly inflated base and flower size about 2.3-3.5 cm long with tube length about 1.5-2.5 cm; petals 8-13 x 2.5 mm, linear oblong, hairless. Outer corona of five short, entire or notched lobes, ciliate, inner erect, sub clavate.

It was described in 1969 on the basis of 1965 collections from Dhak Fort, Junnar, Pune District in Maharashtra (Hemadri, 1969). In 2001 the species was found to be restricted to a small pocket on the Ahmednagar - Pune border (Mishra and Singh, 2001) at Dhak fort, Durga fort (in Pune) and Harishchandragad (in Ahmednagar).

During an assessment study by Rajeev Kumar Singh, BSI, *C. rollae* could not be located from any other site except the earlier three in Ahmednagar and Pune districts with an entire area occupancy of only 25 sq. km indicating a drastically collapse of about 75% of an area that once covered approximately 100 sq. km. Additionally, there was also disruption in the continuity of the populations as origi-



nally *C. rollae* was more or less evenly spread throughout its entire region while the current population consists of only sporadic and fragmented small patches of 12 to 15 individuals each. In Junnar, Pune District, the type locality population at Dhak fort consisted of about 50 individuals and Durga fort had only some 30 individuals while the Harishchandragad fort population in Ahmednagar district comprised 35 individuals.

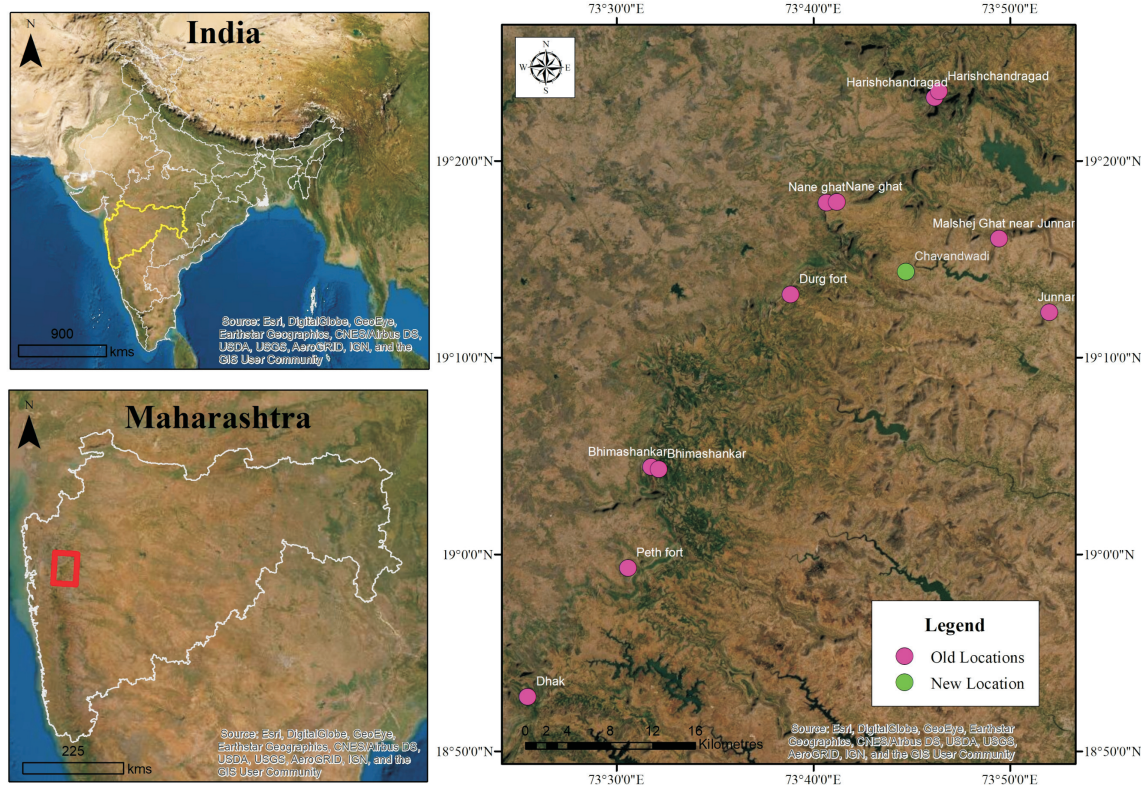
While starting the trek from Chavandwadi village to Chavand Fort (Prasannagad) on 14<sup>th</sup> August 2019, we came across 2 plants of *Ceropegia*. After carefully looking at the plant, I was sure that it was *Ceropegia* but getting a record on flat area was something surprising for me. Hence, I decided to take a few photographs. After returning back, those photographs were shown to Dr. Rajdeo Singh, Assistant Professor in Botany, St. Xavier's College. He confirmed that it was *Ceropegiarollae*. On further discussion with him I understood that it is new distribution record of the species at 842m elevation.



This distribution record would add to the knowledge about how and where the species is distributed. It would help in further understanding about the distribution of the species and in turn help in conservation of this endemic species.

### Acknowledgements

The authors are thankful to Dr. Rajdeo Singh, Assistant Professor in Botany, St. Xavier's College, for



identification. We would like to thank Late. Dr. Shraddha N. Shimpi for making me interested in botany. We are grateful to the Paool Trekkers, Dombivli

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