

Ceropegia evansii

Taxonomy

Kingdom: Plantae
Phylum: Tracheophyta
Class: Equisetopsida
Order: Gentianales
Family: Apocyanaceae
Genus: *Ceropegia*
Species: *evansii*
Authority: McCann

Taxonomic Notes

C. evansii McCann, *C. evansii* var. *media* H. Huber (presently known as *C. media*).

Assessment information

Red list category and criterion: Critically Endangered B2ab(iii,iv,v) + C2a(i) + D.

Justification

Ceropegia evansii is assessed as Critically

Endangered since it is restricted to a very small range which is less than 100 km² and area of occupancy is less than 10 km² in three severely fragmented populations with less than 50 mature individuals. The species is under threat due to habitat loss, fragmentation of population, and tubers are eaten by locals.

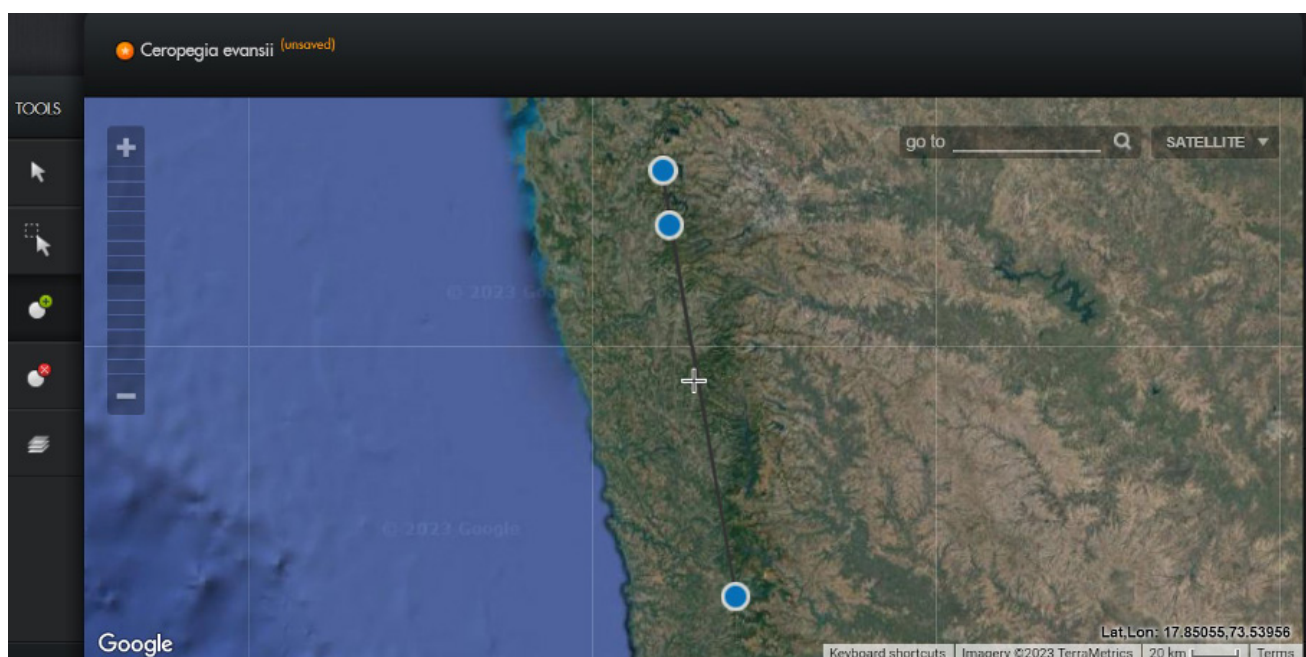
Geographic range information

Range: The species is distributed at few locations in patches in Pune, Ratnagiri, and Raigad of Maharashtra state (Singh et al. 2022).

Countries of Occurrence: Native to India (Maharashtra).

Extent of Occurrence (EOO): Estimated to be less than 100 km².

Area of Occupancy (AOO): Estimated to be less than 10 km².



Distribution map (Geocat.iucnrestlist.org).

Number of locations: The species is severely fragmented in Ratnagiri, Pune, and Raigad districts.

Population

There are estimated to be less than 50 mature individuals in the population of Ratnagiri, Pune, and Raigad districts. (Aparna pers. obs. 2023).

Population trends

The population trend is unknown since no studies are conducted.

Habitat and Ecological information

Ceropegia prefers very specific habitat, on the edges of forest and hill slopes associated with *Strobilanthes callosa* and *Carissa congesta* (Rawat 2008).

It is a perennial twining herb that has a fibrous root system, the stem is glabrous, the lamina is membranous, ovate-lanceolate in shape, the apex of the leaf is acute or acuminate, and a rounded base. Cyme inflorescence with bi-seriate corona which is saucer-shaped (Kambale & Yadav 2019).

System

A perennial herbaceous climber.

Information on threats

Threats: There are many threats to the species. Destruction of habitat, forest fragmentation, introduction of exotic weeds, fragmentation of population, highly specific 'fly trap flower' pollination mechanism (Rawat 2008).

Use and Trade

Use: The tubers are eaten by local people (Kambale & Yadav 2019).



Ceropegia evansii in the forest of Ratnagiri district, Maharashtra. © L.M. Aparna.

Trade: All *Ceropegia* species are included in the negative list of exports and imports (COP11 2022).

Information on Conservation Action

Conservation: The species is not in any systematic conservation program. There is no systematic research in place other than opportunistic surveys.

Research needed: Systematic survey on morphology, population studies, population in wild and in nursery, studies on micro-propagation, habitat monitoring are all needed.

Education: Outreach program about the species among local communities, forest department, students and other stakeholders is needed.

References

COP11 (2022). Decisions on Amendment Proposals. Eleventh Meeting of the Conference of Parties. CITES. <https://cites.org/eng/cop/11/decisions.shtml>. Accessed on 18 January 2024.

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Rajdeo, S., R. Shinde & S. Mandar (2022). Notes on extended distribution on two critically endangered *Ceropegia* species (Apocynaceae). *Xplore- The Xavier's Research Journal* 13(1): 31–35.

Rawat, G.S. (2008). Special habitats and threatened plants of India. *ENVIS Bulletin: Wildlife and Protected Areas* 11(1): 239.

Tetali, P., S. Tetali, P. Lakshminarasimhan, P.V. Prasanna & B.G. Kulkarni (2003). Rediscovery of *Ceropegia evansii* McCann, Asclepiadaceae, from Maharashtra. *Journal of Bombay Natural History Society* 100(1): 162–165.

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