

GASTRODIA LOHITENSIS: SPECIES IN NEWS

- **Discovery and Location:** *Gastrodia lohitensis*, a rare, leafless orchid, classified as “Endangered” under preliminary IUCN criteria, was discovered by Indian botanists in Lohit district, Arunachal Pradesh.
- **Habitat:** This orchid thrives in the dense, shaded undergrowth of bamboo thickets, particularly around Tezu in Arunachal Pradesh.

Unique Adaptations and Characteristics

- **Non-photosynthesis:** Unlike typical orchids, *Gastrodia lohitensis* does not depend on sunlight for nutrition. It follows a myco-heterotrophic lifestyle, obtaining nutrients from fungi that decompose leaf litter.
- **Distinctive Morphology:** Growing to a height of 50-110 cm, this orchid has unique linear calli and ridges on its flower lip, distinguishing it from other orchids in Southeast Asia.

Specialized Ecological Niche

- **Habitat Specificity:** *Gastrodia lohitensis* grows exclusively under dense bamboo canopies, showing a highly specialized habitat preference.
- **Ecological Role:** This species plays a unique role in its ecosystem by depending on fungi, highlighting an intricate relationship within its habitat.



Conservation Challenges

- **Limited Distribution and Vulnerability:** Found only in a specific part of Lohit district, *Gastrodia lohitensis* faces survival challenges due to its restricted range.



- **Threats to Habitat:** Its natural habitat is at risk from human activities, such as bamboo harvesting and expanding agriculture, which disrupt the delicate environment it requires to thrive.

Urgent Need for Habitat Protection

- **Importance of Habitat Conservation:** Conservationists stress the need to protect the bamboo thickets that sustain *Gastrodia lohitensis*. Preserving these habitats is vital to prevent the orchid's decline.
- **Broader Conservation Significance:** Safeguarding this species contributes to maintaining biodiversity and ecological balance in Arunachal Pradesh, one of India's most biologically diverse regions.

Orchid Research and Development Centre

- In 1979 the Government of Arunachal Pradesh established the Orchid Research and Development Centre (ORDC) at Tipi, and the Sessa Orchid Sanctuary 20 km away.
- The ORDC is actively engaged in exploration and collection of Orchid species, cultivation in orchidaria and gardens for their taxonomic study, conservation of rare and endangered species, creation of germplasm collections and multiplication of rare species through tissue culture techniques.

Source: <https://www.indiatodayne.in/arunachal-pradesh/story/new-orchid-species-discovered-in-arunachal-pradeshs-lohit-district-1113677-2024-10-30>

<https://arunachaltourism.com/sessa/>