

Rare Orchid *Gastrodia Keyiensis*

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Why in News?

Scientists discovered a new species of rare, leafless orchid, *Gastrodia keyiensis*, in the Keyi Panyor district of Arunachal Pradesh.

- **Location**- Recorded in a shaded gorge along the right bank of the **Keyi River** (after which the species is named) at an altitude of approximately **1,000 meters**.
- **Local Name** - Referred to as "**Oram Opuh**" (meaning "**Ghost Flower**") in the indigenous Nyishi dialect, reflecting its cryptic, subterranean life cycle and fleeting appearance.
- **Micro-Habitat** - Grows under deep shade amid thick layers of decaying leaf litter within moist bamboo groves.
- **Holomycotrophic / Mycoheterotrophic Life** - **Completely lacks chlorophyll and functional leaves**, rendering it incapable of photosynthesis.
- **Fungal Symbiosis** - Obtains all essential organic carbon, water, and mineral nutrients via obligate parasitic/symbiotic associations with subterranean soil fungi.
- **Morphology**
 - Reaches up to 35 cm in height, bearing 1 to 3 flowers per stalk.
 - Flowers exhibit a white to pale-bluish hue with a distinctive, strongly curved yellow apex on the labellum (lip).
 - Features a broadly obovate basal labellum section marked by 6 to 7 prominent, longitudinally thickened ridge structures that distinguish it from related Asian *Gastrodia* species.
- **Cryptic Life Cycle** - Spends nearly its entire life cycle hidden as an underground rhizome, emerging above the forest floor only briefly during its short flowering phase.
- **Conservation Status - IUCN Category** - Assessed as **Data Deficient (DD)** due to the lack of exhaustive population surveys and its highly elusive nature.
- Its currently recorded **Area of Occupancy (AOO)** is estimated at just 4 km², with only 5 flowering individuals documented at the type locality.
- **Orchid Hotspot** - Reinforces Arunachal Pradesh's standing as India's "**Orchid Paradise**", home to over **600 documented orchid species** (~50% of India's total orchid flora).
- **Ecological Baseline** - Underlines the ecological vulnerability of Eastern Himalayan bamboo-grove ecosystems to localized habitat fragmentation and road construction.



Reference

[India Today | 'Ghost Flower' orchid](#)



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