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After 150 Years, This Bizarre Plant Was Rediscovered in Malaysia

Thismia neptunis spends most of its life underground, only making a rare appearance to bloom



Thismia neptunis (Phytotaxa)

By [Jason Daley](#)
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In 1866, [Odoardo Beccari](#)—the pioneering Italian naturalist who explored the wildlife of Sarawak, New Guinea and parts of Malaysia—came across an odd little plant. The alien-looking bloom was just peeking through the wet soil near a river in western Sarawak in Borneo, Malaysia. Beccari made detailed sketch of the 3.5-inch “fairy lantern,” dubbed *Thismia neptunis*, and moved on. But as Rafi Letzter reports for [LiveScience](#), no one saw the strange flower again, until last year when a Czech team rediscovered the oddball plant in the same region where Beccari made the find a century and a half before.

“To our knowledge, it is only the second finding of the species in total,” the team from the Czech Republic’s Palacký University and the Crop Research Institute write in their paper published in the journal [Phytotaxa](#). “We therefore provide its amended description, inclusive internal characters, and very first photographic documentation of this iconic and, due to its peculiar appearance and also the name, almost mythical plant.”

This mythical nature comes not only from its century-and-a-half vanishing act but also from its weird lifestyle. As Letzter reports, it is a mycoheterotroph, a type of plant that does not use photosynthesis. Instead, it derives nutrients from fungus in the soil that is

attached to nearby photosynthesizing plants. For most of its existence the plant lives underground, but when it's time to flower, it sends up a cream white stalk topped with a burnt orange bulb. Once at its full height, the bloom opens into a shape akin to the alien eggs of the 1986 science fiction thriller *Aliens*—with three antennae protruding from the surface.

The plants only bloom a few weeks out of the year and don't make an appearance every year, reports [Bob Yirka at Phys.org](#). So researchers have to be at the right place and time to spot the strange flower.

As Letzter notes, the researchers are unsure how the plants are pollinated. Dead flies lay in the blossoming flowers, hinting at insect help. But further analysis is necessary to support this hypothesis.

As Letzter reports, the find raises hope that the team can find two other plants that Beccari described but researchers have yet to spot since. As [Kristin Hugo at Newsweek](#) reports, the area is close to the edge of human development and the researcher believe fewer than 50 individuals of *neptunis* exist in the world, suggesting a critically endangered listing.

This is not the only lost species to recently re-emerge from the rainforest. Just a few months ago, researchers revealed that they [had discovered a species of clearwing moth](#) in Malaysia that was first described 130 years ago. Last year, a species [called the Cobra Lily](#) was rediscovered in India after 80 years. And in 2016, four species of tropical impatiens believed to be extinct [were rediscovered](#) in India's Western Ghats.

Botanists have also been searching for *T. neptunis*' cousin, *Thismia americana*, in the Chicago region for over a century. In 1912, a grad student [found an unusual species in a wet prairie in the area](#). Botanists encountered the species for five years until it disappeared in 1916. The area was then developed.

Researchers have since conducted several searches for other populations of the plant. But each time they came up [empty handed](#), making the latest find of the oddball plant's relative all the more special.

About Jason Daley

Jason Daley is a Madison, Wisconsin-based writer specializing in natural history, science, travel, and the environment. His work has appeared in *Discover*, *Popular Science*, *Outside*, *Men's Journal*, and other magazines.

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