

First known night-flowering orchid discovered

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Botanists have discovered the first known species of orchid that flowers at night, London's Kew Gardens announced on Tuesday. Bulbophyllum nocturnum, found on the island of New Britain near Papua New Guinea, has flowers that consistently open after dark and close in the morning, the only orchid with those characteristics known to science, the Royal Botanic Gardens said.

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Bulbophyllum nocturnum, found on the island of New Britain near Papua New Guinea, has flowers that consistently open after dark and close in the morning, the only one with those characteristics amongst the 25,000 orchid species known to science, the Royal Botanic Gardens said.

The flowers last for one night only, a habit which initially foxed researchers who could not understand why the buds all appeared to wither once they had seemingly reached the size at which they should open.

Wanting to get to the bottom of this, Dutch researcher Ed de Vogel took the plant home with him one evening in order to find out exactly what happened to the buds.

"To his surprise, the bud that was then present opened up at ten in the evening, long after dark, revealing the flower of an undescribed <u>species</u>," a Kew Gardens spokesman said.





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Observations on subsequent buds confirmed that they all opened around 10pm, and closed the next morning around 10am. The flowers lasted only one night, which explained why the buds were seemingly about to open one day and withered the next.

Kew orchid specialist, Andre Schuiteman, and Bulbophyllum expert Jaap Vermeulenof the Netherlands Centre for <u>Biodiversity</u> Naturalis, then teamed up with de Vogel to investigate and describe the new species.



"This is another reminder that surprising discoveries can still be made," Schuiteman said.

"But it is a race against time to find species like this that only occur in primeval tropical forests. As we all know, such forests are disappearing fast. It is therefore increasingly important to obtain funding for the fieldwork required to make such discoveries."

Why Bulbophyllum nocturnum has adopted a night flowering habit is unknown and requires further investigation. However, it may be speculated that its pollinators are midges that forage at night, the Kew sookesman said.

Flowers that open only at night are seen in a relatively small number of plant species, such as the queen of the night cactus, the midnight horror tree and <u>night</u> blooming jasmine, but never been documented amongst orchids.

Many orchids are pollinated by moths, but have flowers which remain open during the day even though they are mainly pollinated after dark.

The new species belongs to a group of plants which are known for their bizarre flowers, which variously resemble leggy insects, small hairy spiders to intricate sea creatures and often have thin filaments which make them move erratically in the breeze - possibly to attract insects.

Kew Gardens will stage an orchid festival from February 4 to March 4 next year.

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