

## Titan Arum – Frequently Asked Questions (and Answers)

### Is blooming Titan Arum in Sumatra a common occurrence?

No, it is also a sensation there, and as it is said, "everyone rushes into the forest."

### How often has Titan Arum bloomed in all the Botanical Gardens around the world?

There are about 2'000 plants known in cultivation. In recent years, there has been a noticeable increase, probably because the cultivation requirements have been much better understood since the mid-1990s.

### Is the plant endangered in nature?

Yes, very much so. The species was classified as "endangered" in 2018 according to IUCN criteria. Only 45 wild locations on Sumatra are known, each with less than ten mature individuals. The species has declined by over 50% in the last centuries. The causes are habitat loss and targeted collection. Local inhabitants occasionally destroy the plants due to a myth that they could harm humans because of their snake-like leaf stalks.

### Are there Titan Arum-like plants where we are?

The native Arum is a miniature version of the Titan Arum. All its organs are about 1000 times lighter. In Arum, leaves and flowers appear simultaneously, while in the Titan Arum, they alternate.

### What does the bloom really "smell" like?

The flower scent has been chemically well studied. There are two components that result from the breakdown of proteins (putrescine and cadaverine) and are responsible for the odor of carrion. Additionally, two sulfur-containing substances (dimethyl disulfide and trimethyl disulfide) are present, with one particularly identified as the main odor component of open cancer wounds. In other words, the plants mimic "dead" and "terminally ill" flesh to some extent.

### What is the purpose of the large spadix in the center of the flower funnel?

This is where the chemical factory producing the "scent" is located. The metabolism is so intense that the spadix can heat up 9 °C above the ambient temperature, which promotes the dispersal of the "scent." The scent production occurs intermittently, not continuously.

### Who pollinates the Titan Arum flowers?

There have been few observations on wild plants. Various sources mention carrion beetles, carrion flies, and carrion bees.

### Does the Titan Arum actually have the largest flower?

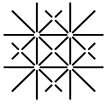
No, but it has the largest inflorescence. The Titan Arum forms a large inflorescence with numerous small flowers at the base of the spathe. However, these flowers do not bloom independently but synchronously and in a highly organized manner.

### What do the fruits look like?

They are 4-6 cm long red berries containing 1-2 seeds, which are dispersed by hornbills (*Buceros* sp.).

### Does the plant die after blooming?

No, after the bloom dies, the plant regrows a leaf that replenishes the corm with reserves. It can then bloom again, typically taking two or three years.



### **What does "Amorphophallus titanum" mean?**

That is the scientific name of the plant. "Amorph" means shapeless or formless, "phallus" means penis, and the Titans are the oldest generation of gods in Greek mythology.

### **What is Titan Arum called in Indonesia?**

Bunga Bangkai, which translates to "Corpse Flower." It is indeed also called "Corpse Flower" or "Titan Arum" in English.

### **How long do Titan Arum plants live?**

This is not known, neither in nature nor in cultivation. They probably live for several decades. Very large corms weighing over 100 kg seem to have a tendency to disintegrate. The plants then produce multiple blooms and break down into independent partial corms.

### **How was Titan Arum discovered for science?**

Italian botanist Odoardo Beccari (1843-1920) observed the leaves and a fruiting plant on August 6, 1878, during a Sumatra expedition, and a blooming specimen on September 5, 1878. He sent some corms and seeds to Florence. While the corms perished, some seeds germinated. Some of these seedlings reached the Royal Botanic Gardens, Kew in London. There, 11 years after the discovery, in 1889, a specimen bloomed outside of Sumatra for the first time.

### **Is cultivating Titan Arum an easy task for Botanical Gardens?**

No, but nowadays, we know quite precisely what is necessary. Provided there is expertise, patience, space, and a suitable greenhouse, there is still the risk of nematode infestation, which can destroy even large plants in a short time.

### **Can you buy Titan Arum?**

In Europe, we are not aware of any sources. There is a specialized nursery in the United States that sells seeds and corms. The corms cost between 15 and 550 USD, but even the largest available corms are not yet capable of blooming. Importing plants from the US is complicated and demanding due to legal reasons.

### **Can Titan Arum be cultivated in a private small greenhouse?**

Not in the long term, as the plant has exceptionally high temperature requirements. The temperature must not drop below 23°C during the day and night. Ideally, it should be 30-33°C during the day. Additionally, the leaf can grow up to 4-5 meters.