

## Quick Facts: The Titan Arum

- > The titan arum has one of the largest flowering structures in the plant kingdom. While this structure looks like a huge single flower, it's actually an inflorescence, or stalk of many flowers.
- > The titan's flowers grow at the base of the central phallus-like structure, or spadix, and are hidden by a skirt-like covering called a spathe. The spathe is bright green on the outside, and when it blooms, it reveals a deep burgundy on the inside.
- > The rare titan arum is a tropical plant, having been found by Italian botanist Odoardo Beccari in Sumatra, Indonesia, in the late 1800s. It grows near the edges of rain forests, which means it needs warm day and night temperatures and high humidity.
- > The plant got its common name, "titan arum," from the naturalist Sir David Attenborough, who thought viewers of his BBC series *The Private Lives of Plants* would be offended by the plant's Latin name, *Amorphophallus titanum*, or giant misshapen penis.
- > The titan arum is sometimes called the "corpse flower," because when it blooms it smells like rotting flesh. The smell attracts insects such as carrion beetles and flies that pollinate the plant. And such pollination is important, because the titan arum can't self-pollinate; its female flowers mature before the male, or pollen-producing, flowers.
- > As the plant blooms, it actually heats up to human body temperature. That heat allows the stench to carry farther, and it also helps attract pollinators.
- > It takes at least seven years for the titan arum to bloom for the first time, and sometimes it can take even longer. The one in NC State University's conservatory greenhouse took 13 years to bloom for the first time.
- > Subsequent blooms often occur every three to seven years for the rest of the plant's life.
- > Titan arums can, in theory, live indefinitely. Pollinating the plants can sometimes kill them as it sucks a great deal of energy from the plant. They are also at risk from pathogens.
- > During its life cycle, the titan arum produces one large single leaf at a time. The leaf's petiole looks like the trunk of a small tree, reaching 10 to 15 feet. After about 15 or 16 months, it goes dormant. After dormancy it will either grow another single leaf or a bloom, with the bud taking months to form. After it breaks the soil surface, it will grow steadily for a few weeks. (Brandon Huber's titan arum at NC State grew by nearly six inches one day!)
- > When the inflorescence finally opens fully, it remains open for a day or two before collapsing and restarting the life cycle. Blooms are typically from 4 to 8 feet tall.
- > If the titan arum is pollinated, the female flowers turn into bright orange-red fruits. Inside the fruits are seeds that can develop into new corms.
- > There are now three titan arums growing in the NC State University conservatory greenhouse. Lupin (our original corpse flower that is named after the Werewolf in the Harry Potter series), Wolfgang (a young plant in the leaf cycle phase) and a yet-to-be named clone of Lupin.
- > You can continue to follow Lupin's progress on Twitter and Instagram at #Lupin2016 – named for its original bloom year.

### Sources:

Biological Sciences Greenhouse, Ohio State University <https://biosci.greenhouse.osu.edu/titan-arum-faqs>  
United States Botanical Garden <https://www.usbg.gov/corpse-flower-bloom-2013>  
University of California at Berkeley Botanical Garden <http://botanicalgarden.berkeley.edu/titan-arums/>