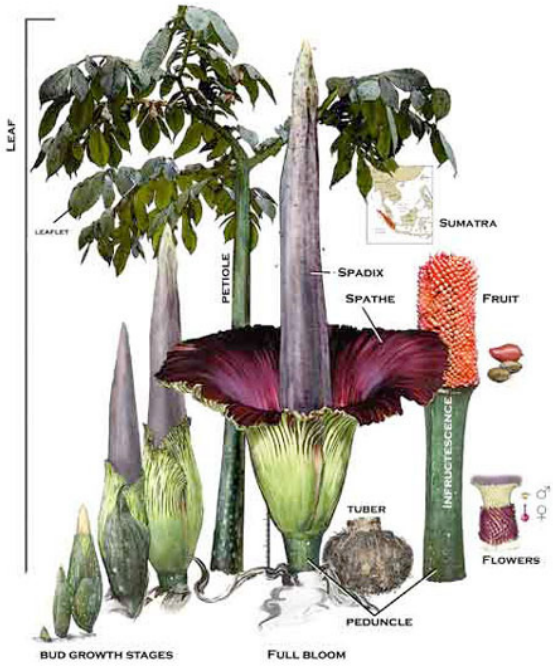
Titan Arum

Amorphophallus titanum

The Titan Arum, also known as the Corpse Plant, is one of the largest flowering structures of its kind in the world. It can grow 12 ft tall and its tuber (storage root) can weigh up to 200 lbs.

Amorphophallus titanum is native to the rainforests of Sumatra, Indonesia, where it is can be found on slopes and hillsides along the edges of the forest. Not only is it uncommon in nature, but it flowers only rarely. In cultivation, it generally takes 7-10 years to bloom, and may die or flower only rarely thereafter. For example, one specimen at Kew Botanic Garden in England flowered in 1889 and did not flower again until 1926!

What looks like an individual flower is actually a group of flowers called an inflorescence. The bell-shaped structure is a modified leaf (spathe) that is green on the outside, but deep red-purple on the inside. The column-like structure (spadix) is mostly sterile tissue that is used to diffuse the scent throughout the forest to attract pollinators. The actual flowers are very small and located at the base of this column, hidden by the modified leaf. There are about 450 female flowers in a ring at the base, and 500-1,000 male flowers above them.



University of Wisconsin

What's that smell?

When the flowers are ready for pollination, the spadix emits a nauseating scent meant to attract carrion flies, which are attracted to rotting meat. The female flowers open first, and are only receptive for one day. Then the male flowers open to provide pollen for one day. If pollination is successful, bright red fruits are formed. In the wild, these are eaten by giant Hornbill birds, which help to disperse the seeds.

After two days, the inflorescence begins to collapse. The plant then sends up a single gigantic leaf about 16 ft. tall, which will produce sugars and starches to be stored in the tuber. It goes dormant for 3-7 months, after which the plant will send up another leaf. Eventually another inflorescence emerges, growing upwards at a rate of some 4 inches per day.

The inflorescence generates heat in order to help disperse its odor. It's about the same temperature inside as we are: 96.8°F.

At one time, it was rumored that elephants pollinated Titan flowers.

The first documented flowering in the United States was at New York Botanical Garden in 1937. It was actually designated as the official flower of the Bronx in 1939, only to be replaced in 2000 by the Daylily.

It is believed the plant originated in the late Cretaceous period, and is related to our native Jack-in-the-Pulpit and Skunk Cabbage.

The Cornell Titan

Our specimen was grown from seed from a plant that flowered at the University of Wisconsin in 2002. This is the first time it has flowered. We hope that appreciation of this amazing plant can lead to increased efforts at conserving the habitat of these and other rare plant species. Titans are under threat as the forests of Indonesia disappear due to illegal logging and the cultivation of oil palms.

Cornell University
College of Agriculture and Life Sciences