

RARE TITAN ARUM TO BLOOM

The world's largest flower (technically, "un-branched inflorescence") – and one of the smelliest – is expected to bloom at Foster Botanical Garden as early as July 2, 2015. The flower of the Titan Arum is about five to six feet tall, although some have attained heights of more than 10 feet. It is also known as the "corpse plant" for its distinctive aroma when in full bloom.

The Titan Arum, or corpse plant, has the scientific name of *Amorphophallus titanum*, which is native to Indonesia, the Philippines, and other islands of the south Pacific. Plants bloom sporadically.

The flower lasts only a few days. It consists of a fragrant spadix of flowers, which resembles a large loaf of French bread. The spadix is wrapped by a spathe, which looks like a large petal and is green on the outside and dark burgundy red on the inside. Inside the spathe, the spadix is either greenish or purplish in color. The base of the spadix consists of two rings of small flowers, an upper ring of male flowers and the lower ring of female flowers.

The flower is pollinated by carrion-eating beetles and flesh flies. The scent of the flower imitates rotting meat in order to attract the pollinating insects. The flower's deep red color and texture contribute to the illusion that the spathe is a piece of meat. When the flower is blooming, the tip of the spadix rises to approximately the temperature of the human body, which helps the "perfume" to volatilize and spread in the air.

After the flower dies, a single leaf, which reaches the size of a small tree, grows from the underground corm, which is something like a large potato. The leaf grows on a mottled green stalk that branches into three sections at the top, each containing many leaflets, creating a shape similar to that of an umbrella. The leaf structure may reach up to 20 feet tall and 15 feet across. The leaf dies every year, and a few months later a new one grows in its place. The process repeats. Occasionally, a flower arises instead of a leaf.

In cultivation, the Titan Arum generally requires 7 to 10 years of vegetative growth before blooming for the first time. In this case, there has been 8 years of growth from seed. After the initial blooming, there may be considerable variation in blooming frequency. Some plants may not bloom again for another 7 to 10 years, although others may bloom every two to three years. There have been cases of back-to-back blooms occurring within a year, and simultaneous growth of both a leaf and a flower.

Analyses of chemicals released by the spadix shows the "stench" includes dimethyl trisulfide (found in limburger cheese), trimethylamine (found in rotting fish), and isovaleric acid (found in sweaty socks).