A Titan Arum Flowers at Eastern Illinois University
June, 2010

Introduction

Welcome to the second flowering of the **Titan Arum** at Eastern Illinois University. Its scientific name is ***Amorphophallus titanum*** and is also called the **Corpse Flower** because the odor released by the mature inflorescence smells like rotting meat.

Where do they grow?

The Titan Arum is native to the Jambi Province in Sumatra, Indonesia. Sumatra is located between Thailand and Australia. Italian Botanist Odoardo Beccari discovered the Titan Arum in Sumatra in 1878.

What is its life cycle?

Our Titan Arum is currently in its flowering phase. During vegetative growth, the plant produces only a single leaf at a time. The leaf may last for a year or two and reach up to twenty feet tall by fifteen feet wide with a petiole as large as a person's thigh. The energy captured by the leaf is stored in an underground tuber. The tuber will be dormant for six to nine months after each leaf dies back before sending up another leaf (or flower!). In cooler climates that experience winter, the tuber will remain dormant during winter months and send up another leaf when the temperature warms up in the spring. When the tuber reaches a minimum size, it produces a flower. First flowers appear after five to seven years of growth, then can re-occur every two to three years thereafter. The tuber will continue to get larger as the years go by and can reach up to 200 pounds.

What are the flower's parts?

The bloom can look like a giant loaf of French bread with an upturned frilly skirt. The central "loaf" is called a ***spadix*** and the outer skirt is called a ***spathe***. Since the structure is actually composed of multiple flowers, the entire bloom is referred to as an ***inflorescence***.

The ***spadix*** color can range from yellow to maroon and its upper portion releases a strong odor when it is ready to be pollinated. The reproductive portion of the plant is in the base of the skirt. These female flowers (produce seeds) are at the very bottom of the spadix and the male flowers (produce pollen) are right above them. Unfortunately, the flowers are not visible until after the spathe unfolds.

The ***spathe*** is maroon on the inside with a yellow edge and green on the outside. It opens up during peak bloom and falls off after blooming has finished.

Why does it smell so bad?

The strong odor is produced by dimethyl disulfide and dimethyl trisulfide (which smells like rotten eggs). Native Sumatrans can locate the plant by smell from fifty feet away. The odor, presumably, is intended to attract flies, beetles and wasps that search for and feed on dead animals. These insects carry pollen from one plant to another without knowing it and fertilize the female flowers while walking on the plant.

Where did Eastern's Titan Arum come from?

The seed for the Titan Arum at Eastern Illinois University was obtained from the University of Wisconsin – Madison in 2001. The ovule donor was “Big Bucky” and the pollen donor was “Mr. Magnificent” from the Marie Selby Botanical Gardens in Sarasota Florida. The seeds for both “Big Bucky” and “Mr. Magnificent” were collected by Dr. James R. Symon during a trip to Sumatra in 1993 on a BBC expedition filming *The Private Lives of Plants*. Dr. Symon collected the seeds from the sole *A. titanium* found in fruit and distributed the seeds to U.S. and British conservatories and greenhouses for cultivation.

The Titan Arum plant was grown by Steven Malehorn, Thut Greenhouse Manager, Department of Biological Sciences, Eastern Illinois University.

For information about parking, viewing hours, etc: http://www.eiu.edu/~biology/news/titan_arum_2010.php