

**Amorphophallus titanum: A flowering plant species with largest unbranched inflorescence in the world**

**Amorphophallus titanum** (Becc.) Becc. (Araceae), commonly known as “Titan Arum”, is a flowering plant species with largest unbranched inflorescence in the world. It is confined to the rainforests of western Sumatra in the Indonesian Archipelago, on steep hillsides at altitude ranges from 120 to 365 m above sea level (Brown, 2000). It was first described by an Italian botanist and explorer, Dr. Odoardo Beccari, who encountered the species while travelling in tropical Southeast Asia in 1878 (Kew, 2006).



**Amorphophallus titanum** (Becc.) Becc. (Titan Arum)  
at the Princess of Wales Conservatory,  
Royal Botanic Gardens, Kew

Photo Courtesy: A. McRobb,  
Royal Botanic Gardens, Kew

The Titan Arum produces a massive inflorescence (3 – 3.5 m in height) consisting of an upturned bell-shaped spathe, enveloping the flower-bearing spadix portion – one of the largest flowering structures in the plant kingdom. Spathe is green-speckled with cream on the outside, and rich crimson on the inside. It has ribbed sides and a frilled edge, and can be up to 3 m in circumference, and the whole inflorescence is borne on a 25 – 35 cm high peduncle. The inflorescence rises from a corm, a swollen underground stem modification, for storing food (Attenborough, 1995). The corm is more or less spherical in shape and weighing about 70 kg or more (to 91 kg), considered to be the largest such structure known in the entire plant kingdom. It takes six years for a seed-grown plant to reach flowering size. When the flowers are ready for pollination, the spadix heats up and emit a

disgusting smell, reminiscing the smell of a decomposing meat (due to presence of butyric aldehyde), hence, the Indonesians call the plant, “Bunga Bangkai” means ‘Corpse Flower” or “Corpse Plant” (Brown, 2000). The rotting meat-like odour attracts carrion beetles or sweat bees that pollinate the flowers.

After the inflorescence dies back and in its place a single leaf emerges. The solitary leaf grows to a height of 6 – 7 m and 5 m across. The leaf has a strong glossy green petiole mottled with cream, and bears numerous leaflets. The plant produces bright scarlet fruits that attract Rhinoceros Hornbills (**Buceros rhinoceros**) and other rainforest birds that eat them and disperse their seeds (Brown, 2000).

### **References**

**Attenborough, D. 1995.** *The Private Life of Plants*. BBC Books, London.

**Brown, D. 2000.** *Aroids: Plants of the Arum Family*. Second Edition. Timber Press, Oregon.

**Kew, 2006.** *Titan Arum*. Information Sheet O10. Royal Botanic Gardens, Kew. [www.kew.org](http://www.kew.org)

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