

Voodoo Lily, *Amorphophallus konjac*



Voodoo lily is a perennial generally grown as a curiosity for its interesting foliage. Native to warm subtropical to tropical areas of eastern Asia, including Vietnam, Japan and China south to Indonesia, *Amorphophallus konjac* has been known by several other scientific names including *A. rivieri*, *A. rivieri* var. *konjac*, *A. mairei*, and *Hydrosme rivieri* as well as numerous common names including Devil's tongue, dragon plant, elephant yam, konnyaku, leopard arum, snake palm and umbrella arum (and some of the common names also refer to other species of arums). The starchy tubers are edible and this plant is grown for food in some parts of the world, processed into a tasteless flour or stiff jelly (which can be used as a vegan substitute for gelatin). The Japanese use konjac flour to make shirataki noodles, and the starch is used to make a popular Asian fruit jelly snack.

Voodoo lily in leaf.

This plant in the philodendron family (Araceae) produces a single leaf from a subterranean tuber (sometimes incorrectly called corms). The globose tuber can grow up to 50 pounds and a foot in diameter. The tuber shrinks away as the new leaf grows and during the growing season a new, larger tuber replaces it. The fleshy leaf stalk (petiole)



is a very interesting

A single leaf is produced from each bulb.

mottled pinkish-gray and olive green. The single intricate leaf consists of a horizontal blade on the vertical petiole which is divided into three sections, giving an umbrella-like effect. The leaf blade is deeply dissected and divided into numerous small leaflets. The petiole has multiple branches, so that large specimens resemble a small tree. The size of the leaf is related to the size of the tuber, so the bigger the tuber, the bigger the leaf will grow, up to 4 feet across. Plants can grow up to 4-6 feet tall. Even in tropical climates voodoo lily requires a dry, dormant rest period every year. The leaf only lasts for one growing season and will naturally senesce in late summer or fall.



The leaf stalk is mottled pinkish gray and olive green.



The large leaf spreads out to give an umbrella-like effect.

Larger tubers (about the size of a grapefruit or larger) may produce single inflorescence in late winter or spring before the foliage appears. A heavy stalk bears a large, shiny brown-purple to maroon ruffled spathe (a sheathing bract) up to 3 feet long surrounding the longer pale green to purple or mottled spadix (a flower spike with a fleshy axis). These monoecious plants have tiny individual female flowers (pistils) in a zone at the bottom of the spadix, another zone of stamens (the male flowers) and a sterile area at the top. When in bloom it produces an odor like a dead animal, the smell intended to attract the carrion flies that are its natural pollinators. If this is objectionable the flower can be cut off or covered with a plastic bag to confine the smell. Pollinated flowers will be followed by a globose berry, although this is rare in home-grown plants. It may be a month or more before the leaf emerges after flowering.



Amorphophallus konjac produces a single large, smelly flower from each bulb. Photos courtesy of David Waugh, Morningwood Farm, Mt. Horeb, WI.

As a tender plant, the leaf is very frost sensitive (although buried tubers are supposedly hardy to zone 6), and must be grown indoors as a house plant or as a seasonal outdoor plant. It is easy to plant the tubers outdoors once the soil has warmed and dig them again in the fall once the weather cools. In the Midwest where the growing season is relatively short, it is often better to start the tubers indoors and move them outside once nighttime temperatures remain above 55F. They can be transplanted into the ground, be sunk in the container into the ground up to the rim, or be kept in containers on a patio or deck.

Voodoo lily does best in rich, organic soil or soil-less growing medium. Plant the tubers when the pinkish growing tips start to show. Because the roots do not come from the base of the tuber, but from the top and grow out horizontally to help support the leaf, the tubers should be placed deeply below the surface – approximately as far below the soil surface as the tuber is wide. The container should be at least twice the diameter of the tuber that is planted to accommodate the spreading roots. As warm weather plants they will only grow when conditions are warm enough. Voodoo lily tolerates most conditions from full shade to full sun, but does in partial sun. It also needs consistent moisture when growing and can even tolerate standing in water; potted ones can be sunken into a shallow water garden. It is a heavy feeder, and can be fertilized heavily through the growing season.



This small tuber has started to sprout with the pinkish growing tip just showing.

The growing medium should be allowed to dry and no more fertilizer provided in the late summer or fall when the leaf begins to senesce.

Containers outside should be tipped over to allow them to dry out completely. Do not cut off the leaf until it is completely brown.

During the winter rest period the tuber can remain in its pot in the dry growing medium or can be removed from the growing medium and stored in peat moss. It is often recommended to wait until spring to separate any small new tubers from the parent. In any case, the tubers should be kept on the dry side so they won't rot, in fairly warm conditions (42-50F).

Voodoo lily readily produces offsets. The plant is easily propagated by separating the snake-like, stoloniferous tubers with rounded ends from the parent plant. They can also be grown from seed, although this is not commonly available.

– *Susan Mahr, University of Wisconsin - Madison*

Additional Information:

- The Genus *Amorphophallus* – on the International Aroid Society website at www.roid.org/genera/amorphophallus/amorph.php
- The Cultivation of *Amorphophallus* – on the International Aroid Society website at www.roid.org/genera/amorphophallus/amcult.php#Planting