GROWING
Syagrus botryophora
IN PALM BEACH COUNTY

Submitted by Charlie Beck

Syagrus botryophora is a pinnate palm endemic to Brazil. Its natural habitat is tropical rainforest ranging from sea level to an altitude of 1,200 feet. It grows in a thin strip of land along the Atlantic coast between the tropical latitudes of 12 and 18 degrees south. The rainfall in this area is year round and there is no dry season. It grows in clayey lateritic soil which is heavy in iron and aluminum. This soil can be used as the raw material for making bricks. Its native area is threatened by habitat loss. It has been reported that much of the natural tree cover in this area is lost.

S. botryophora has a solitary stem which can grow 18 to 50 feet tall. Stems measure less than one foot in diameter. This palm is monoecious and a single specimen can set viable seeds. The fronds are strongly recurved and the leaflets are arranged in two planes to form a V-shape when looking down the rachis. Unlike many other *Syagrus* species the leaflets are not plumose. At the base of the fronds an ornamental fiber covers the stem. This species is reported to be one of the fastest growing palms - up to 6' of stem height per year. Due to this rapid growth, the crown of leaves is elongated while holding many ranks of healthy green leaves. Unfortunately this palm is not self-cleaning. It does hold several dried fronds but they do eventually drop and the number of dried fronds is low and they do not detract from this palm's attractiveness. This palm looks like a small version of *Carpentaria acuminata*.

Syagrus botryophora is a relative newcomer to South Florida. Fairchild Tropical Botanic Garden (FTBG) first planted this palm in 2003. The palms planted at FTBG looked very healthy and they grew very rapidly. They had a very unique appearance due there small scale and their elongated crown of green fronds. I thought this palm would be strong grower in Palm Beach County. I soon planted one in our garden. I expected to see rapid growth as with the specimens at FTBG but the palm just lingered and didn't want to grow at all. Keep in mind that this palm received regular irrigation and was fed with a quality palm fertilizer at the recommended rates. Eventually it died. If my memory serves me correctly, this whole process was repeated with a second palm. It also died. In 2006 I tried a third *S. botryophora* convinced that I could be successful. At this time the palms at FTBG had grown quite tall. I thought that ample doses of dolomitic lime might raise the soil PH and supply extra magnesium to mimic growing conditions at FTBG. Well that didn't work either, so I tried an application of boron. That DID work. Since 2006 I have only applied boron twice, so it doesn't take a lot of extra effort. This palm responded with super-fast growth. In 9 years since planting it is now almost as tall as my 22 year old Maypan hybrid coconut palm which is also considered a fast growing palm.

When you consider that this is truly a tropical palm which grows in lateritic soil in its native habitat, it makes sense that it wasn't grown in South Florida earlier than it was. If you compare our 26.5 degree latitude to its native latitude of 12-18 degrees you might expect that it might be cold sensitive in our area, but it is reported to be cold hardy to USDA zone 9b which should cover most of Palm Beach County. I guess we should not be surprised that our sugar sand soil would be deficient in some required element.

Our specimen measures about 35' tall and the stem is 6" in diameter at waist height. Our fronds measure only 4' in length similar to the palms planted at FTBG. Reference books say that fronds can measure up to 9' long but I've never seen one with fronds that are that long. Four foot long fronds seem the typical length. I planted our palm in full sun and it seems well adapted to growth in full sun from an early age.

Reference books say that this palm is not wind resistant. Our palm has never been tested by a hurricane, but the older palms at FTBG survived hurricane activity in 2005 and 2006. Dale Holton confirmed, that in his experience, this palm is not resistant to high winds.

If you like the look of a palm with recurved fronds this might be the one for you. If properly fed it will probably be the fasted growing palm in your garden. Its small scale and rapid growth might make it the perfect palm for your landscape. I think it would be exceptionally handsome planted in groups beside a two story home.

9 year old *S. botryophora* beside
22 year old Maypan Coconut

Syagrus botryophora extended crown

Syagrus botryophora stem fiber

Syagrus botryophora infructescence