

GROWING *Elaeis guineensis* IN PALM BEACH COUNTY

Submitted by Charlie Beck

Elaeis guineensis is a large, solitary, pinnate palm native to West and Southwest Africa. Its common name is the African Oil Palm. It's typically found growing along streams, rivers and swampy areas. It also can also be found in drier areas away from water sources. It's a highly adaptable palm. It can reach 60' tall but is usually less than 40'. Stems measure 2' in diameter and when the leaf bases finally detach, the stem has an attractive pattern of knobby leaf scars.

E. guineensis is a monoecious palm which can have both male and female separate, inflorescences growing on a single palm, or both male and female flowers growing on a single inflorescence. Both the fleshy outer seed coat and the actual seed are loaded with oil. Its fruit is the principal source of palm oil and can be used to produce biofuel. Huge areas in the tropics have been deforested to create monocultures of African Oil Palms. Due to this environmental impact, these palm plantations have become very controversial. Large tracts of land in Malaysia, Indonesia, Latin America, and Africa have been cleared and many native plants and animals have been sacrificed due to habitat loss. There is an argument that palm oil production is a more efficient method of oil production because it requires less land than vegetable oil from sources such as soybean, corn, cottonseed, rapeseed, etc.

E. guineensis is a palm well adapted to growing in Palm Beach County's humid climate. This palm is best when planted in full sun but will adapt to growing in the shade. It loves moist soil but will grow without supplemental irrigation. Periodic inundation does not set this palm back.

The large spread of this palm somewhat resembles the Canary Island Date Palm, *Phoenix canariensis*. *E. guineensis* grows faster than *P. canariensis* and it's not susceptible to lethal yellowing. The fronds measure about 15' in length and the petioles are armed with sharp teeth. This is not a self-cleaning palm, so when the palm grows out of reach for pruning, a skirt of dried leaves persist. When the dried palm fronds do release, they are usually not heavy enough to cause damage to under plantings.

We have three *E. guineensis* planted in our garden. Two are planted near a highly alkaline pea gravel driveway and one is planted in sugar sand. After 20 years of growth, all three measure 30 feet tall. These palms survived the hurricanes in 2004 and 2005, so they are wind resistant. The record cold winters of 2009 and 2010 had no effect on our palms, but I did hear that some cold damage occurred in Loxahatchee in those years. If you are located east of the turnpike, you should have no worries of cold sensitivity.

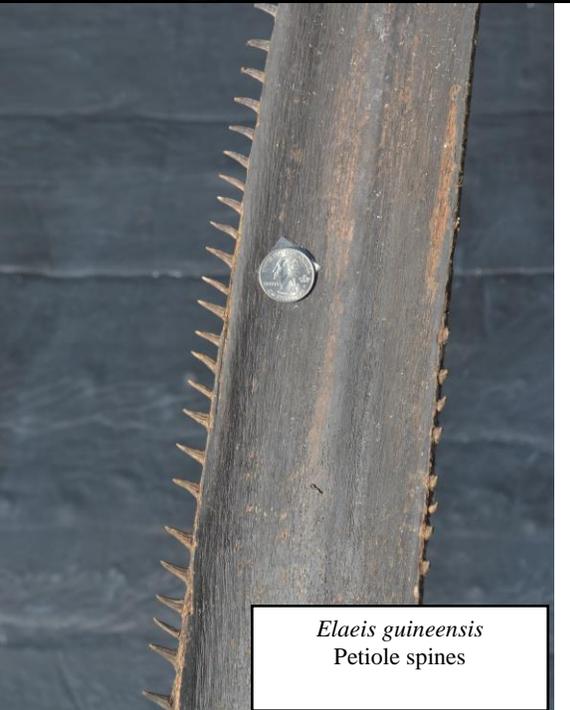
E. guineensis is used as a food source by local wildlife. Squirrels, raccoons and possums enjoy eating the fruit of this palm. Of course the seeds pass through their digestive tract and readily germinate wherever deposited. Many mature palms have copious offspring seedlings but *E. guineensis* rivals our native *Sabal palmetto* and *Roystonea regia* as food source for native fauna and for the widespread dispersal of seeds. I have found seedlings from our palms growing over 500' away from the parent plant. These palm seedlings grow on high, dry areas and they grow at the bottom of 3' deep drainage ditches. These palms survive weeks totally submerged in water without any apparent setback. Fortunately seedlings are killed by an application of Glyphosate (Roundup). The seedlings do not have the waxy coating which make many palms immune to this weed killer. So be warned this palm has invasive tendencies. *E. guineensis* seems not to require any irrigation or fertilization to flourish. I have cut down many large specimens discovered growing in inappropriate locations.



Elaeis guineensis
in the Beck Garden
20 years old



Elaeis guineensis
Leaf base scars



Elaeis guineensis
Petiole spines



Elaeis guineensis in Ruth
Sallenbach's Garden