GROWING
Caryota no
IN PALM BEACH COUNTY

Submitted by Charlie Beck

Caryota no is native to Borneo rainforests. Borneo is located 1° north of the equator, so this is truly a tropical palm. It is considered endangered due to deforestation and harvest of edible palm hearts. This is a solitary palm so there is no regeneration after harvesting the heart. In habitat, this palm can reach a height of 75'and stems measure 18-24" in diameter. *Caryota* is the only palm genus with bipinnate fronds. Attached to the rachis of this palm are opposite secondary rachis which then hold the leaflets. This characteristic makes the fronds appear fernlike. The secondary rachis can measure 7' long, so the overall frond width might approach the total length of the frond. This palm is reported to be one of the largest species of the genus. The common name is the Giant Fishtail Palm.

What sets this palm apart from others in the genus is its upright growth habit. Although this palm is considered a giant, its footprint in the landscape is reduced by its fronds growing mostly upward and rarely ever extending horizontally from the stem. The petioles and rachis are very straight and stiff. The fronds are not self-cleaning so a long pole saw will be needed to remove the dried fronds. If you cut through the petiole you will notice that the petiole is thick and has a rounded cross-section. When the leaf bases release from the stem they are large and heavy.

Another distinguishing feature is that the leaflets are stiff and leathery. They have a well-defined shape with jagged tips. The leaflets are dark green above and either green or silver below. Many other large *Caryota* species display lax weeping leaflets held on less upright petioles.

All species of *Caryota* are monocarpic. Once blooming begins, fronds cease to emerge and all of its stored energy is directed into producing flowers and possibly seeds. Inflorescences begin emerging from the top of the stem and then proceed toward the bottom. Each inflorescence produces single sex flowers. Even though male and female inflorescences are produced on the same palm, individual blooming palms may not produce viable fruit. The timing of pollen release from male flowers must coincide with female flowers being receptive. Two or more fruiting palms will tend to produce more viable fruit. The palm dies after the last inflorescence closest to the ground is spent. The inflorescences are pendulous and can grow 6' long. Seeds are black and contain irritating calcium oxalate crystals. Handling fruit without the protection of gloves is not recommended.

We have two *Caryota no* specimens in our garden. They were planted 10 and 7 years ago. These palms are some of the fastest growing palms in our garden. Palms with large diameter stems usually take a lot of time to commence vertical growth, but these palms exploded out of the ground. The 10 and 7 year old specimens measure 25' and 20' respectively to the lowest leaf base. These palms are planted in moist low areas in the garden and have been well fed throughout their short lives. Fronds measure about 15' long and 12' wide. The stem diameters measure 21" and 17" in diameter at waist level. Unfortunately both palms commenced flowering this year. I believe this premature flowering was caused by lack of any supplemental irrigation over the last several months. We have had problems with our irrigation well and these palms were shocked by lack of water. These palms thrived even though flooded many times in past years. They have been inundated for 2 weeks at a time without any noticeable negative effect. A quality palm fertilizer is usually all that is required for robust growth. I have included photos of blooming palms which display declining fronds which do not look their best. Notice yellow leaf tips and leafless secondary rachis. If your palm shows these characteristics, it's probably ready to bloom. I also included photos taken a couple of years ago which show healthy, actively growing fronds.

Some reference books recommend this palm for USDA zones 11 and 10b but I think they would grow quite well in zone 10a. Our garden is in zone 10b and we haven't noticed any cold damage after our record cold 2009-2010 winter seasons. This palm is successfully grown in coastal Southern California. I suspect this palm would grow successfully anywhere a coconut palm thrives.

Be warned. *Caryota no* is not wind resistant. Along with *Arenga pinnata*, it is one of the least wind resistant palms. It was the first palm to topple in 2004 Hurricane Frances. This is a large, heavy palm that should not be planted near your home. Even though we lost our initial planting in 2004, we quickly replaced it in 2005 with a 3 gallon specimen.

Caryota no might be a great palm for your garden. Its unique, upright, bipinnate fronds with stiff leaflets will certainly add visual interest to your garden. I believe it's much more attractive than *Caryota obtusa* (formerly known as *C. gigas* or Thai Mountain Giant) and it's certainly a more vigorous grower. Don't let your opinion of fishtail palms

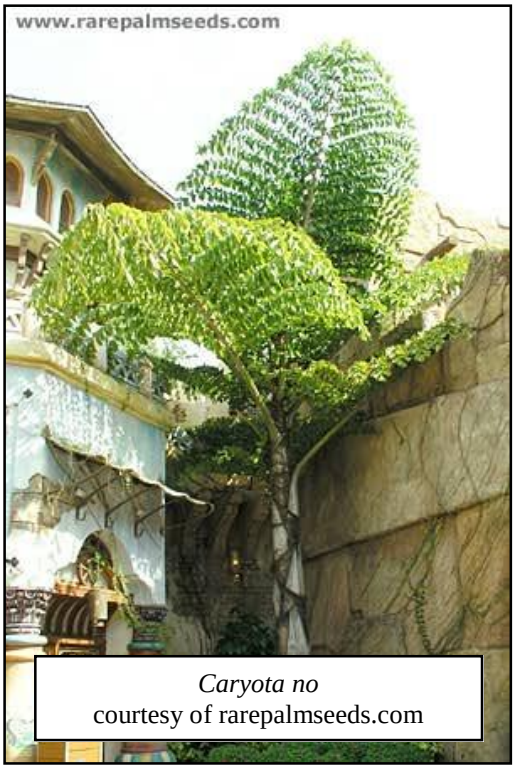
be swayed by the common, clumping *Caryota mitis*. That palm requires a lot of thinning and cleaning to look its best. Solitary fishtail palms can be quite attractive.

Caryota no

Blooming 10 year old *Caryota no*

Same Caryota no prior to blooming

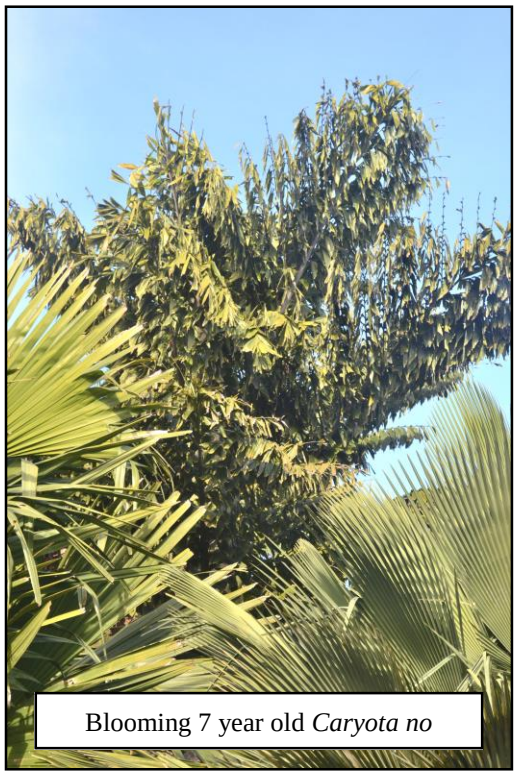
Caryota no inflorescence



Caryota no
courtesy of rarepalmseeds.com

Caryota no

Same Caryota no prior to blooming



Blooming 7 year old *Caryota no*

Chambeyronia macrocarpa var. hookeri

Phytelephas aequatorialis
Auction plant