

GROWING

Allagoptera arenaria

Caxandó: A Bit of Brazil in Vero

by John Kennedy

What's my favorite palm? What palm am I most familiar with? One answer for both questions: *Allagoptera arenaria*, Seashore Palm from Brazil (common name there either *caxandó* or *côco da praia*).



Allagoptera arenaria growing in the Kennedy Garden.

(Photo by John Kennedy)

Why I'm so familiar with this palm is because the most notable example of our four individuals is growing about 10 feet beyond the front door. I get to see it every time I leave the house.

Hard to miss. The leaves extend about 9 feet high into the thin *Tabebuia umbellata* tree above and are up to 9 feet long, with clusters of curling leaflets spaced along both side of the flexible rachis, dark green above, silver below--highly distinctive. The palm's width is only 6 feet or so, constricted on the east by an expanding *Serenoa repens* and on the west by a declining *Michelia figo*, Banana Shrub.

The palm hasn't heard that it's supposed to be (theoretically) trunkless. There are 11 growing points—I don't want to say it's a clumper, exactly, for it looks different—the tallest of which is 18 inches high. The Fairchild Guide to Palms (online) describes the species as having "branching stems that grow along the ground." My palm went into the ground more than 30 years ago, from a 1-gallon pot.

The oval outline of its island is blurred now but was planted by me in 1980. Landscaping beauty was not the original intention but to block out the house across the street to the north which had reflective film on every window. Coming

out the front door meant being blinded in daylight.

I bought the palm for \$2 at the biennial private sale of Bill Bidlingmayer (my mentor in palms) about a year previously, 1-gallon pots placed in front of their parent, which he had bought at Fairchild in the late 1950s. What strikes me now is that his single *Allagoptera*, then over 20 years old, was barely half the size of mine now. He lived in the Vero Shores subdivision south of Vero Beach near the Indian River, with a very high water table. From my own experience, I've learned that this palm needs excellent drainage in which to flourish, but that couldn't happen on Bill's property. I kept the little palm in the pot, thinking to plant it when it was somewhat larger. Bill told me, however, that the species does not like pots, to plant it right away. Years later, I dug up a seedling from under a shrub: two simple leaves about 4 inches long but the two roots were 14 inches long.

The species also requires full sun for its best. Mine has about three-quarters full sun because the tree above is thinly branched--too beautiful in bloom even to contemplate cutting down. The yellow flowers dropped onto the *Allagoptera* are a seasonal sight.

For several years, long ago, I made sure that I applied palm fertilizer regularly. As far as I eventually understood, this was entirely futile. I never saw any boost in growth or flowering; no fertilizer has been applied for more than 20 years. The palm is beautiful and big without much help or effort on my part, growing ever so slowly. Since I am not an energetic yardman (we won't say lazy), I like that.

Since I got the *Allagoptera* early in my involvement with palms, when I knew very little, I had no idea that this was an infrequently planted species until a long-ago visitor was surprised to see it. Maybe in the last 10 years it has become much more common in Central Florida palm collections, in part because



Infructescence of *Allagoptera arenaria*
(Photo by John Kennedy)

of seed from my palm. While it had bloomed and fruited fairly young, I hadn't really paid much attention until an experienced palm collector showed me how to pollinate the inflorescence. The male flowers are on the narrow tip. I close my hand around the top and bring it down over the larger female flowers below. But the male flowers don't last very long, only a few days before falling off, so when I don't notice that these are open, pollination seems to be hit or miss, with a few sizable fruit (think large grapes) but the rest tiny. The infructescence looks much like an elongated pineapple.

Flowering requires water and heat, though the exact measure of each is unclear. If there is heavy rainfall in March over several days or a week, as happened in 2010, flowering occurs very quickly, with fruit ripe in June. If there is too much rain in the summer, ripening stalls. In the summer of 2010, rain was about two-thirds of normal and in a pattern of heavy rain for a day or two then no rain for a couple of weeks. The fruit stopped ripening. Four infructescences were produced from the heavy March rains. From June through the rest of the summer, there were only two inflorescences. There's another parameter, too. Heat is necessary for ripening so that inflorescences produced in August often don't ripen fruit in October when the temperatures start to cool down (though maybe not perceptibly to sweating humans). If there are unusually warm periods in winter or spring, ripening may eventually occur. If not, the fruitstalk just declines.

The ripe fruit has a very strong sweet odor and is thin and yellow over a large seed. At its smelliest and most juicy, it is the playground for some kind of weevil carrying on pornographic activities. At first when I started cleaning the fruit, I set myself up inside the garage with the door open into the kitchen for the air conditioning. There were strenuous objections to the penetrating smell from the other inhabitants of the house. This task was a slippery unpleasant job, especially outside the house in July or August. Fortunately, I was told that I needn't wait until the fruit was so far gone, that it could be removed as ripe when it first turned from green to yellow. I made some mistakes—cutting off an entire infructescence, potentially more than 100 seeds—thinking mistakenly that it was yellow and ripe. I had to remember that I'm colorblind, not red-green like my brother; green-brown-gray gives me trouble. But I was saved by the fact that I could always smell the fruit at first ripening, and then could clean it with little difficulty.

The fruit is definitely edible, if fibrous, very sweet but not--to me--particularly tasty. Mike Dahme cut a seed in half and I learned that what's inside tastes much like coconut. When I really got into harvesting the fruit, I realized that I had competition. Initially, whatever ate the fruit at night ate the covering, leaving the cleaned seed behind; I was willing to cooperate. However, when entire fruit stalks disappeared, I was driven to wiring the infructescence and tying this to a leaf petiole. I've never discovered which critter, of an array, is so fond of the fruit, guessing raccoons and possums. But my son claims to have seen a squirrel dragging an infructescence away (but these are as big as the squirrel itself!).

Maybe 18 years ago, when the IPS had a seed bank, I noticed that *Allagoptera arenaria* was not on the list. I volunteered my seed which I sent to someone in California (Inga Hoffman?). After two years of doing this, the IPS seed bank was closed down and I was asked to send seed to Fairchild, which I did for a while longer before this, too, came to an end. For a few years I traded seed for palms with a nursery in Orlando, then with the establishment of the Central Florida Palm & Cycad Society (CFPACS) seed bank, my seed went there. In the past two years, little demand has existed for the seed. The small market must be saturated.

Germination takes a long time and is distinctly erratic. For me, it's usually taken about a year, sometimes longer, and then only a few at a time. Charlene Palm, a friend in Satellite Beach, discovered, through experimentation that fresh *Allagoptera* seed would send down a root in as little as two weeks at temperatures in the upper 90s, but no higher than 100 degrees. The first leaf appears later. She estimates germination at 80 to 90 percent. Another friend had a better idea: seeds in a container atop the pilot of her

gas kitchen range. Almost all the seed germinated fairly quickly, though I can't recall how long this took. She now has an electric range, so. . . .

I can testify that *Allagoptera arenaria* is definitely cold tolerant and frost tolerant. The past two winters have had no visible effect on the palm, especially notable since the tree above has been mostly leafless. Last December (2010), there were eight nights at freezing or below at my house. There were also a couple of frosts. The palm was unfazed, not even leaf spots. In the great Christmas freeze of 1989, when the temperature dropped to 18° at Castle Kennedy, the palm, then about a third its present size, showed much damage. But it recovered in the following summer, but didn't flower. A report of no damage to the palm in Oviedo, outside Orlando, during the past winter.

Drought tolerance is a given. I have rarely watered unless there's been no rain for three weeks in the summer. Of course, it is adjacent to the drain field down slope and, doubtless, receives some moisture from this.

The native habitat of Seashore Palm is on the dune line north and south of Rio de Janeiro. This is possibly the most salt tolerant palm. If only it grew faster than molasses, it would likely be planted to hold beaches all around Florida. I have been told that my big palm is in much better shape than those in Brazil, battered by wind and spray, where the only real enemy is bulldozers clearing for beach development.

Another individual of the same species was bought at the same time and planted under another *Tabebuia* about 20 feet away from the first. Tighter in the clutch of a bigger, more densely branched tree, it has not been able to expand but has leaves about 11 feet high, with one of 10 'trunks' 36 inches high. This palm has seldom bloomed because it has been in deeper shade and farther from the drain field. Since the tree was knocked over 90 degrees by Hurricane Jeanne in 2004, the palm has grown higher with more access to the sun but still held tightly in the branches.

Two smaller *Allagoptera* are in the back yard, seed from the first palm in front. One germinated from a seed dropped too close to the wall of the house. It was necessary to remove it, which my son and I did after root pruning several months ahead, then planting in May 2009; the five short adult leaves died in succession but now, two years later, the palm appears to be nearly recovered with three leaves. Though small and out in the open, there was no damage from the two cold winters past. The vulnerable growing point is below ground. The fourth palm, likewise undamaged, is even smaller, planted as a seedling eight years ago.

Since Seashore Palm is so slow-growing, it is quite expensive to buy, particularly in any larger size, that is, with three or four small 'growing points' not yet 'trunks'. Correctly sited, in full sun and good drainage, not only is it cold-, drought-, salt-resistant but seems almost virtually impervious to insect and disease attack.

A small, or maybe not so small, quibble: some individuals—not all in this species--have been reported to succumb to lethal yellowing (LY), which has not reached Vero Beach or Indian River County. The Fort Lauderdale Research & Education Center of the University of Florida (<http://flrec.ifas.ufl.edu/>) lists *Allagoptera arenaria* as rare in the South Florida landscape, indicates its susceptibility to LY is unknown but notes also that the disease has long since killed off the most susceptible palm species, now only striking occasionally at isolated individuals of less common species. Fairchild lists it as not susceptible.

How wonderful! A palm that requires almost no care but the exercise of patience. Ideally, *Allagoptera arenaria* should be purchased by a palm enthusiast at the age of 25. If you're over 25 and can reasonably expect 10 or 15 years more of palm observation, it's still worth getting, particularly in the slightly/somewhat/perhaps larger sizes.
