

A TALE OF TWO *Royals* IN PALM BEACH COUNTY

Submitted by Charlie Beck

Twenty years ago I planted seeds of *Roystonea regia* and *Roystonea oleracea*. The *R. regia* seeds were collected from a mature specimen growing on Center Street in Jupiter and the *R. oleracea* were obtained from a Palm Beach Palm & Cycad Society member who collected the seeds in Venezuela. Back then the *Roystonea* from Venezuela was named *R. venezuelana* but this palm has subsequently been lumped into *R. oleracea*. Both *R. regia* and *R. oleracea* seeds germinated readily and grew quickly in pots. A year later we purchased the land which was to become our palm and cycad garden. These Royal Palms were some of the first palms planted out in our garden in 1993. All of the *Roystonea* palms survived transplanting and grew vigorously.

Brenda and I attended the 1994 International Palm Society biennial tour of Venezuela. We saw large groups of *R. oleracea* growing naturally in swampy areas and also saw some massive specimens grown in cultivation. My first impression was the *R. oleracea* was a much larger palm than *R. regia*. The stems were massive and noticeably larger than our native Royal. The fronds were not plumose like *R. regia*. The leaflets were arranged in two closely spaced planes. This arrangement of leaflets is the feature that distinguishes *R. oleracea* from the other Royal palms.

My second sighting of *R. oleracea* growing in the tropics was in New Caledonia. In 2000, the International Palm Society had their biennial meeting in Noumea, New Caledonia. We toured a field of *R. oleracea* planted many years ago. These specimens were 160 feet tall. We were told that these palms had never weathered a hurricane and that was the reason for their great height. Unfortunately, we were also told that these palms were to be felled for a planned development of the property.

R. oleracea is native to Guadeloupe, Dominica, Martinique, Barbados, Trinidad, Tobago, Venezuela and Columbia. It occurs at sea level to an elevation of 5,200 feet. *R. oleracea* is the tallest of the Royals. In habitat the stems can grow 130 feet tall and 26 inches in diameter. The lower fronds usually are held above horizontal position. *R. oleracea* tend to drop old leaves that are dry. First the leaf turns brown and then the leaf sheath slowly peels from the crownshaft. This drying process greatly lessens the weight of a fallen leaf. Although some might find this drying leaf held to the crownshaft as unsightly, it greatly reduces damage to underplantings when the frond finally releases from the crownshaft.

Brenda and I have seen *R. regia* growing naturally in the Fakahatchee Strand located in Copeland, Florida. This is one of the few natural populations of *R. regia* in Florida. I recommend a trip to this location for any palm enthusiast. These palms are approximately 100 feet tall and they grow on raised mounds in the swamp. They share the canopy with Bald Cypress trees. It is truly an impressive sight.

Both *R. regia* and *R. oleracea* are massive, solitary palms with green crownshafts and pinnate leaves. *Roystonea* species are monoecious. Both palms grow naturally in wet habitat. Both are well adapted to Palm Beach County. With proper fertilization and irrigation, they do not show any nutritional deficiencies. Royal Palm bugs are reported to damage Royal Palms but I have never noticed any damage in our garden. When not properly fertilized I have noticed severe manganese deficiency on *R. regia* grown in commercial settings. This deficiency will pencil point the trunk and eventually will kill the palm



Roystonea oleracea leaf dries before dropping
(Photo by Charlie Beck)

if not corrected. I've never seen this condition on *R. oleracea* but I've never seen this palm planted in a commercial setting.

Both *R. regia* and *R. oleracea* display white flowers (only *R. altissima* have violet flowers and *R. borinquena* have yellow flowers.) Full sun is required for optimum growth.

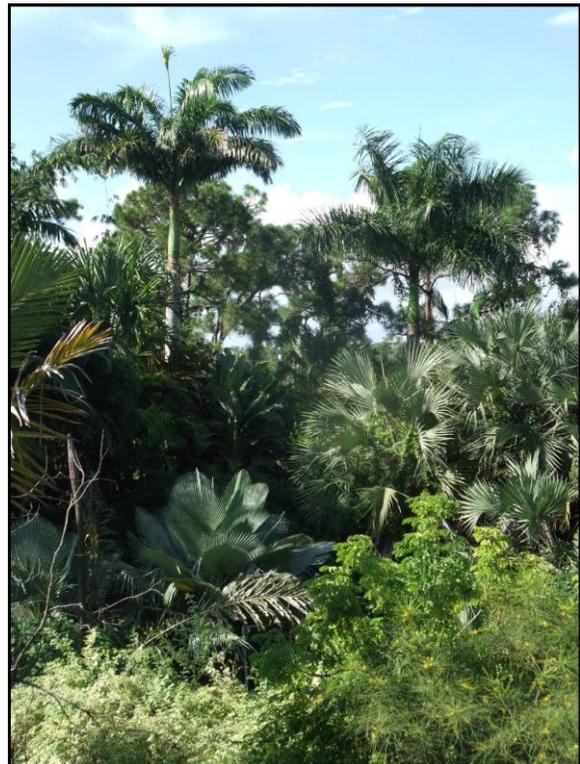
From the original 12 *R. oleracea* we planted in our garden, only 60 percent of the palms survived the hurricanes of 2004 and 2005. We have a friend in Naples, Florida with a single specimen of *R. oleracea*. This palm took several direct hurricane hits over the years and is still thriving in his garden. All of our *R. regia* survived the 2004 and 2005 hurricane seasons with little damage. Even though first impression of *R. oleracea* is that it is larger than *R. regia*, in our garden only the stems are of a greater diameter. Our *R. regia* has a longer crownshaft and leaves and *R. oleracea* is faster growing in our garden. In 20 years *R. oleracea* has grown 32 feet tall vs. 24 feet tall for *R. regia*. Both measurements are to the bottom of the crownshaft.

R. regia and *R. oleracea* have a distinctively different appearance. *R. oleracea* with its almost flat fronds is readily distinguishable from the plumose *R. regia*. *R. regia* has longer leaves and crownshaft. *R. oleracea* has a larger, faster growing stem. *R. regia* appears more hurricane resistant but the fallen fronds are much heavier and can damage underplantings.

I never take our Royals for granted. They are both majestic palms worth planting in Palm Beach County.



160' tall *Roystonea oleracea* growing in New Caledonia.
(Photo by Charlie Beck)





Roystonea oleracea with upright flatter leaves



Roystonea regia with plumose leaves



Natural grove of *Roystonea oleracea* in Venezuela
(All photos on this page provided by Charlie Beck)