## GROWING Livistona australis IN PALM BEACH COUNTY

## Submitted by Charlie Beck

Livistona australis is a solitary, medium sized, costapalmate palm native to the east coast of Australia. It ranges from Central Queensland in the north to Victoria in the south (latitude range of 25-37degrees). It is the most widely distributed, and also the most southernmost growing Livistona species. Due to its wide distribution, L. australis' ecological status is of least concern. It grows on hills and in swampy areas, so it should be quite adaptable to climate and moisture requirements. In habitat it can grow to heights of 75 feet. L. australis produces hermaphroditic flowers but is considered functionally dioecious. See article below for definition of the term "functionally dioecious."

L. australis looks quite similar to L. chinensis, the common Chinese Fan Palm, but it is much larger. Stems and leaves are larger, and petioles quite a bit longer. The petioles are armed with medium sized spines. Fruit color is black. Leaf tips droop which enhance its tropical appearance. Once this palm matures and the stem releases the old leaf bases, it becomes mostly self cleaning. It only holds a few old dry fronds. The falling fronds are light and they do not damage under plantings. L. australis is reported to be wind and salt tolerant.

L. australis is quite rare in South Florida. Fairchild Tropical Botanic Garden has only one specimen included in their collection. We have two in our garden and Dale Holton has one over 20 years old in his garden. Dale's L. australis is planted in deep shade and it receives no supplemental irrigation. Its leaves are dark green and it looks very healthy although vertical growth has been slow. If afforded more sunlight I would expect growth to accelerate.

The first time that I saw this palm was in Australia while attending the 2000 Post Biennial trip sponsored by the International Palm Society. Once I saw it, I knew I had to add it to our garden. We planted our first specimen in 2001. It is planted on a berm which is high and never floods. We added a second specimen in 2002. This palm was planted in a low lying area which floods after repeated heavy rainfall. The 13 year old specimen quickly grew a 22' tall stem which measures 17" in diameter. The leaves measure 5' across, and the petioles are 7.5' long. The 12 year old palm in the wet area measures an overall height of 11' to the top of the fronds and the stem is approximately 3' tall. Both of our palms were planted in full sun at an early age. Even though our oldest specimen has been blooming for several years it has not produced any fruit due to it being functionally dioecious. Our younger palm has not yet bloomed.

Both of our *L. australis* suffered from boron deficiency at one time. The deficiency looked quite similar to frizzle top (manganese deficiency). One or two applications of borax quickly cleared up the problem. Boron deficiency might be the reason why so few of these palms are successfully grown in South Florida. As you can see by the two palms in our garden, growth rates can be quite variable. Both of these palms have been fertilized 3-4 times a year with the recommended rate of palm special fertilizer. I think the different growth rates are due to genetic variability and not due to the different planting situations. If you like the appearance of this palm, you can be the first in your neighborhood to plant it. This palm is cold hardy to zone 9a and can be successfully grown anywhere in Palm Beach County.



13 year old Livistona australis in the Beck garden



12 year old *Livistona australis* in the Beck garden



Dale Holton and Bella lending scale to *Livistona australis* in the Holton garden



13 year old Livistona australis in the Beck garden



C O L O R I N T H E G A R D E N

