

GROWING
Encephalartos natalensis* X *Encephalartos woodii
IN PALM BEACH COUNTY

Submitted by Dale Holton

The *Encephalartos natalensis* X *Encephalartos woodii* cross was produced many years ago, possibly in the early 1990's, by the late Mrs. Cynthia Giddy, a well known cycad grower in South Africa. The product of this cross produces a very attractive plant. They are somewhat fast growing and have no special needs. They don't seem to mind if they have irrigation or not and will grow in full sun or shade. If they don't get fertilized, they keep right on growing. This is what I refer to as bullet proof. My plant is about 10-12 years old and is about 5' tall.

Encephalartos natalensis is from Natal, South Africa and was recognized as a species in 1951. There are several forms of this species, each coming from different localities. *E natalensis* is an attractive cycad and is very easy to grow, requiring no special treatments. I have not taken time to learn the different forms and most likely won't. For some reason I have not attempted to acquire plants of this species for sale. It is thought that *E. natalensis* is the closest living relative of *E. woodii*.

Encephalartos woodii is also from Natal, South Africa. There was only one plant of this species ever found and it was a male plant. It was discovered in 1895 by John Medley Wood. The plant was removed from habitat, and taken to botanical gardens, with the Durban Botanical Garden receiving the largest piece. Hundreds of offsets have been produced and distributed to other Botanical Gardens and collectors around the world. The rarity and attractiveness of this plant makes it quite sought after by collectors everywhere. Unrooted offsets sell for \$3,000 and up. They are very fragile in this state and frequently die.

It is thought that crossing a female *E. natalensis* with a male *E. woodii* and then crossing the resulting offspring again with *E. woodii* would, over 3-4 generations make plants that were close to 90% *E. woodii*. The resulting generations are assigned a F number, with the first being F1. My plant is an F1 plant. There are now F2 plants coning, so F3 plants are going to be made soon. These F3 plants should look just like the pure *E. woodii*. I recently acquired seeds of the F1 cross that are now starting to germinate.

Fairchild Tropical Garden has specimens of both *E. natalensis* and *E. woodii*. It is well worth the trip to go and see all the rare cycads in this garden.



Encephalartos natalensis
leaf detail.
(Photo by Dale Holton)



Encephalartos natalensis
X *Encephalartos woodii*
leaf detail.
(Photo by Dale Holton)



Encephalartos woodii
leaf detail
(Photo by Chip Jones)

GROWING *Encephalartos natalensis* X *Encephalartos woodii* Hybrid IN PALM BEACH COUNTY

Submitted by Charlie Beck

In a recent visit to Fairchild Tropical Botanical Garden (FTBG), I was stopped in my tracks by an outstanding cycad. It was a cross between *Encephalartos natalensis* and *Encephalartos woodii*. I've been to FTBG hundreds of times and have never noticed this cycad in the past. I'm never disappointed when visiting FTBG – I usually discover interesting plants that I have not noted previously.

For those of you who may not be aware of the history of *E. woodii*, here is a short summary as reported in Loran Whitelock's book, "The Cycads." *E. woodii* was first discovered in South Africa in 1895. This single male plant is the only specimen ever found in the wild and was estimated to

be several thousand years old. Between 1903 and 1916, eleven propagations were made from this single plant. Seven offsets and four large stems were rooted. Over time, these original eleven propagations were vegetatively reproduced and distributed worldwide to botanical gardens and private collectors. As of 2002, there were an estimated 500 plants in existence – all male plants. While cycads have been known to change sex on rare occasions, i.e., through lightning strike or other trauma, this sex change has not yet occurred with *E. woodii*. Without a female plant, seeds of *E. woodii* cannot be produced. A plan to hybridize *E. woodii* with its closest relative, *E. natalensis*, has been devised. If this cross produces a female hybrid, then this hybrid may then be crossed back with the male *E. woodii*. After five generations of crossing, a 97 percent genetically pure *E. woodii* female would be produced. This method would take a minimum of 75 years. Tissue culture of *E. woodii* has been tried with little success. Propagations by leaf cuttings have been made but this is a very slow process.

Until plants of *E. woodii* are available through large scale reproduction, we will have to enjoy specimens in botanical gardens or appreciate the handsome cross between *E. natalensis* and *E. woodii*.



Encephalartos woodii
in Loren Whitelock's garden.
(Photo by Chip Jones)



Encephalartos natalensis growing
in the Holton garden.
(Photo by Dale Holton)



Encephalartos woodii at
Fairchild Tropical
Botanical Garden
(Photo by Charlie Beck)



Encephalartos natalensis
X *Encephalartos woodii* hybrid growing
at Fairchild Tropical Botanical Garden
(Photo by Charlie Beck)