

GROWING *Trachycarpus fortunei* IN PALM BEACH COUNTY

Submitted by Charlie Beck

Trachycarpus fortunei is native to central and eastern China. It is also found in Japan and Myanmar but these populations are thought to be introduced. This palm is widely cultivated, so the exact location of its origin is unknown. *T. fortunei* is typically found between elevations of 300-7800' in areas of cool wet summers and cold, often snowy, winters. It is considered to be the most cold hardy palm with an upright stem. Its common name is the Windmill Palm.

T. fortunei is a palmate, medium sized palm. It's closely related to *Chamaerops*, the European Fan Palm. It can grow 45' tall on 10" diameter stems. In habitat, leaves measure 3' across and petioles measure 2' long. Petioles are not spiny. Stems are covered with persistent dark brown fiber. Thin ribbon-like ligules emerge with the new leaf. Fronds are not self-cleaning, so it can form a shag of dried leaves. Some drooping of leaf tips might occur, but *T. fortunei* var. '*Wagnerianus*' (formerly *T. wagnerianus*) has very stiff leaf tips and smaller fronds and shorter petioles. This variety has slightly glaucous leaf underside. *T. fortunei* is considered a dioecious palm.

This palm was first brought to Europe in 1830 and became extensively cultivated throughout temperate and subtropical areas. Beautiful specimens grow outdoors in unlikely countries such as United Kingdom, Denmark, and Switzerland. In North America it grows on the west coast from San Diego to British Columbia. It's planted outdoors at the Missouri Botanical Garden. I have seen photos of successful plantings in Ohio. It's reported to be cold hardy to zone 7a, so I probably could have grown it my hometown, Philadelphia, Pa. On the east coast *T. fortunei* is commonly planted in Central and Northern Florida, and it can be found in gardens as far north as Virginia. If you search the web for Virginia Palm Society you can see photos of tall, vigorous palms covered in snow.

This palm is taken for granted by temperate climate, palm growers, just like we take coconut palms for granted in South Florida. Californians repeatedly fail at growing coconuts but that doesn't stop them from trying. *T. fortunei* is not easily grown in South Florida, so it presents a real challenge for local growers.

Some of the factors against successfully growing this palm locally are as follows:

John Kennedy from the Central Florida Palm Society told me that *T. fortunei* grows well in Orlando, inland northern Tampa and Gainesville. John said that it usually declines soon after planting in Vero Beach. Even planting of large palms imported from northern nurseries die soon after planting. He knew a palm enthusiast who dissected the stem of a dying specimen to find a thread of fungus running down the center of the stem. John's theory is that high water tables have a negative effect on this palm. That might be the most important negative factor against its successful growth.

Years ago Fairchild Tropical Botanic Garden had several species of *Trachycarpus* planted. They were mature, healthy specimens and were quite attractive. All of these palms have perished and they are no longer listed on their living plant list. You might remember seeing some of these palms planted outside of the Rare Plant House. The palms might have perished because of Hurricane Andrew in 1992 or they might have succumbed to our South Florida climate.

I planted several 3 gallon specimens of *T. fortunei* in our garden. All died for unknown reasons. Occasionally you find this palm offered for sale at Home Depot. These palms must have been grown up north and shipped south to Palm Beach County. These were large specimens with several feet of stem and they were priced right at \$69 for a 10 gallon pot. Certainly a palm this size would thrive in our garden. Wrong! This palm died just as fast as the smaller ones planted previously. Well, at that time I gave up on *T. fortunei*.

In 2007, our society toured Tom Ramiccio's garden (Tom is our current society president). Tom had a beautiful specimen of *T. fortunei* planted in his yard. Tom bought this palm with 10' of stem from a local nursery. At the time we toured, its overall height was approximately 25' and it was a real beauty! Tom handed out seedling Windmill Palms which were grown from seeds that he collected in Italy and Switzerland. Unfortunately, Tom's

- Resents summer high daytime temperatures accompanied with high humidity (most active growth during cool season)
- Resents summer high nighttime temperatures (not similar to native habitat)
- Possibly harmed by soil borne nematodes
- Moderately susceptible to lethal yellowing
- Moderately susceptible to phytophthora bud rot

beautiful *T. fortunei* started to decline sometime after our visit. It eventually died with the whole crown falling down.

The sight of Tom's palm gave me inspiration to resume my quest to grow it. The seedling that Tom gave me grew vigorously in containers and when it outgrew a 3 gallon pot, I planted it in 20" ceramic pot. I decided that it would live its life in that pot and never be planted out in the garden. Because high winds toppled the palm, I sunk two 4x4" posts in the ground and tied them together with a 2x6". Then I anchored the pot to the support with wire rope. This stabilized the palm. The palm roots have grown through the single drainage hole in the bottom of the pot and have rooted into the ground. Being located in an irrigated area of the garden, I never manually water the pot. I fertilize once a year with Nutricote, Micro-Max, lime and a dusting of Borax. The palm seems happy in this situation and has grown well. It receives full afternoon sunlight. If the palm roots ever split the pot, I'll ring the pot with retaining wall blocks and backfill with potting soil.

Several years ago I visited Jesse Durko's Nursery in Davie, Florida. Jesse usually has some unique plants for sale which include palms and cycads. While perusing the palms, I spotted the most beautiful little palmate palm. It had stiff, dark green, pinwheel leaves and I had no clue what it was. It was *T. fortunei* var. '*Wagnerianus*' and for \$50 it was a bargain. After a few years this palm grew large enough to be transplanted into a 20" ceramic pot. This palm is very happy in this situation and has grown well in full afternoon sun. It's much more compact than the typical Windmill Palm and in my opinion is more attractive.

T. fortunei is rarely offered for sale in South Florida, and rightfully so, because of its poor performance in the ground. But now you know that it can be grown successfully in a pot. Seeds are readily available on the internet. Even Amazon offers seeds and small plants for sale. If you find this palm attractive and you're up to the challenge, give it a try.



Trachycarpus fortunei 9 years from seed
in Beck Garden



Trachycarpus fortunei
42" tall stem in Beck Garden



Trachycarpus fortunei 'Wagnerianus'
in Beck Garden



Trachycarpus fortunei ribbon like ligules in Beck Garden



Trachycarpus fortunei pot anchor in Beck Garden