

GROWING TRUE DATE PALMS IN SOUTH FLORIDA

prepared by Joe Garofalo* and Jalil (Jay) Vedae*

During the past few years we've had the opportunity to look at a large number of date palms growing in South Florida, often trying to determine why they look so bad, why they aren't growing vigorously, or why they have died. We mainly speak of *Phoenix dactylifera*, the true date, which is one of the truly expensive palms in our area, especially in the larger sizes.

The other *Phoenix* species commonly seen in South Florida tolerate our conditions fairly well. These include the Canary Island date, *P. canariensis*, the pigmy date, *P. roebelenii*, the wild date, *P. sylvestris*, Senegal date, *P. reclinata*, and various hybrids. It should be noted, however, that some palm specialists feel that none of the *Phoenix* palms are well adapted to South Florida conditions.

PROBLEMS WITH *Phoenix dactylifera*.

With the help of the University of Florida Plant Disease Diagnostic Clinic in Homestead (at the Tropical Research and Education Center -TREC- on 280th St., in the Redlands) the following diseases been reported: Ganoderma butt-rot, Phytophthora bud-rot, Lethal Yellowing, Fusarium wilt, and false smut (Graphiola leafspot), just to mention the worst. We should also mention nutritional problems – mostly deficiencies, & especially potassium.

In recent weeks we've been looking at true dates again. Things are not so good. Many true dates in the area look like they're waiting for something to happen so they can

start growing. It's as if they are recovering from transplant shock very slowly.

At one site in Broward Co. we've been watching four plants since they were planted over four years ago (1998) ... and only one of the four has put out a new leaf—ONE new leaf in over four years! Yet they're all still alive.

At another site (in Homestead) six large dates were installed three years ago, and have lost lower leaves since. Today, a couple of them are down to three or four brown leaves. One is being retained in the landscape though it has had only one very pale leaf for six months. They say hope never dies; date palms, unfortunately, do. These palms are all definitely on their way out.

SOME LOOK GOOD.

Don't misunderstand; there are sites where true dates are doing just fine. But many of them are not doing so fine. Because of this we want to throw out a few thoughts, in the hope of improving things, maybe helping. Neither of us is a palm expert, just horticulturists who read a lot and see a lot of stressed palms every day, and who sometimes find things worth passing on. So, here goes.

THE BASICS.

First, remember that dates, especially true (edible) dates, are desert plants, originally from the Middle East. They don't grow naturally in areas that receive 65 inches of rain each year, most of it during the six

warmest months, with the water-table at two to six feet. Where they are native, dates get 20 to 40 inches of rain per year, which falls in the Winter, and Summers are hot and dry, with low humidity.

In such a climate the environment favors the palms over the disease-causing organisms. In our climate, the environment favors the disease-causing organisms, not desert palms.

They do well in California, especially in the deserts, where it rains a little less than it does in our neck of the woods. It is extremely rare to find dates (the fruit) produced here which are even remotely edible. Failure to fruit or ripen fruit is an indication of not being adapted.

We can also take note that virtually all of the true date trees being planted in Miami-Dade county were shipped in—not grown here. Apparently fruit producers are selling off the older, less productive cultivars to make room for newer, better fruiting cultivars.

WE DO WHAT WE CAN.

Now here's why we sat down and started talking, then writing, about the subject of date palms: if we're going to pay loads of money to ship them in, and loads more to plant and care for them, let's do everything we can to help them survive and look good. There is, after all, nothing quite so beautiful as a date palm, unless it's an avenue of them. Here goes:

CHOOSE THE BETTER CULTIVARS.

Though no cultivars are well adapted to South Florida, it would be best to choose cultivars reported to be more tolerant of humidity and rain. Julia Morton, in her book *Fruits of warm climates*, recommends the following:

- a.) The following cultivars are the most tolerant of humidity and rain: 'Halaway', 'Khadrawy', and 'Kaktoom'.
- b.) The cultivar 'Medjool' is intermediate in its tolerance of humidity and rain.
- c.) The following cultivars are not at all tolerant of humidity and rain, therefore are not good candidates for growing well in South Florida: 'Zahdi', 'Deglet Noor'.

It can be noted, unfortunately, that 'Zahdi', 'Deglet Noor,' and sometimes 'Medjool', are the ones most often offered for sale in South Florida.

After choosing the best cultivars, these recommendations should help you succeed.
INSTALLATION AND MAINTENANCE.

1. Plant them high. Raise the bed, and be sure that no water stands around the roots or in the bottom of the hole. If there's water in the planting hole, it's not a suitable site for a date.
2. Plant them in sand, not muck, not marl.

It *must drain well*.

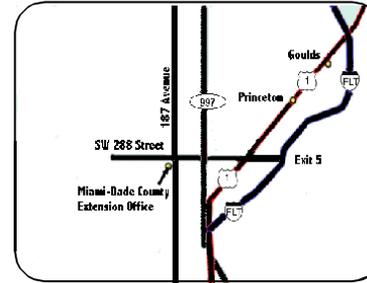
3. Maintain an area around the tree weed-free and flower-free. Don't plant anything around them, especially not turf. For sure, nothing that needs to be watered.
4. Water them during a respectable establishment period (a few months), then almost never again.
5. Keep a very close eye on them. At the first sign of trouble get a diagnosis and treat the problem. There are many problems for which there are no treatments available, but treat anything you can treat, and do so promptly.
6. Be very attentive to the nutritional needs of your palm. South Florida soils are nutrient-poor and typically have a pH above 8.0. Use the "new palm special" formulation, and apply 1.5 lbs./100 square feet four times per year, during the warm months. And keep an eye out for deficiency symptoms, especially potassium and the trace elements. (Refer to *Palm Nutrition Guide* by T.K. Broschat, available from any CES office and on the web.)
7. If you lose a date palm, it would be best not to put another one in that spot. If you must put another one there, first remove as much soil as you can, and replace it with clean sand.
8. Avoid planting in pairs (one may die and spoil the design).
9. Cross your fingers.

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