

Notes on Palm Cultivation in Florida

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Palms being such a distinct and conspicuous part of the scenery in our state it is natural that they are being so popularly used for landscape effects around our dwellings as well as in parks and where there is room for them in street planting.

While they usually are of fairly easy culture and even found thriving under adverse conditions they respond very much to good care and thus readily repay in more luxuriant growth and tropical effect when properly treated. Even our lowly saw palmetto which makes our piney woods so monotonous will, if given a chance, develop into a creditable plant.

By far most palms are started from seeds. While some clump palms are capable of being divided it is hardly practical to do so. One exception is the Lady palm *Rhapis flabelliformis*; this palm divides very well and soon makes good specimens, and as seeds of it are difficult to obtain it is often increased by division. Seeds may in many instances be obtained locally where now many more species have reached the fruiting stage than was the case not so very many years ago. Others of course have to be and are being imported from the various countries where they grow and anyone wishing to grow an extensive collection of palms will be obliged to do so. Care must be taken to get fresh seeds as so many lose their vitality very quickly. All seeds should be cleaned of pulpy matter before planting and it may be in order here to state that this pulpy matter of some Arengas and Caryotas possesses burning and stinging characteristics, which some of us have found out by rather painful experience. They should be cleaned with a stiff wire brush. Either clay pots or seed flats are suitable receptacles for seeding, the size and depth of same depending on the

number and size of the seeds to be planted. Use a soil preferably rich in humus and enough sand to make a light mixture⁵ in order to secure good drainage. Small seeds may be covered about four times their thickness, larger ones about an inch. Coconuts may be planted in the open and barely buried. After seeding the containers should be moved to a suitable place and kept damp but not soggy. A greenhouse is the ideal place as conditions there are more easily controlled, and a slat house is also quite serviceable.

Germination of a seed takes place in some instances rather quickly, four to six weeks in some sorts, in others much more slowly. Some seeds germinate almost spontaneously, others very irregularly; in the latter case it is well to pot those that have germinated. It is generally practiced to pot the seedlings as soon as they can be handled and repot them when needed, using pots as small as will accommodate the plants. Seeds of such species as the various *Hyphaene* or *Borassus* require different treatment. Their hypocotyl extends down quite a distance and they will require a box of about 6" square and 30" deep to accommodate them. In these they may be grown until ready for planting in permanent positions. It is also quite feasible to plant these seeds permanently in their respective situations but they will there require the same treatment as a plant would in regard to watering.

When considering that palms when once planted will be growing in the same situation for years and according to their nature many will reach a very large size, it would seem most important to make the proper preparations. Our Dade County lands are largely a soft coral rock, most other land here being very poor sand—so there is very little soil here that will produce good plants

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and suitable material must be added. In the rock large holes must be dug or blasted, the rock removed and replaced with good soil. In sandy areas it is not so difficult to dig the holes but suitable material must be added. These holes should be 6 feet in diameter and 3 feet deep for large-growing palms and one cannot stress the importance of the fact that it pays to spend liberally in the right preparation as the results will show for years to come. Plants from the propagation house should not be planted out until they are of sufficient size. They are easier to take care of in the house and if planted out too small they are easily choked out by weeds or damaged by mowers and other tools. Plants in 6" pots may well do, but larger sizes are preferable. Smaller plants require water more often and even though we get plenty of rain at times there are also long periods of drought when frequent watering is needed.

Many of our palms may be moved successfully in large cities. This of course is done where immediate effects are desired and with today's machinery presents no difficult problem. It should be accomplished preferably during the warm, damp, growing season. The plants should be dug with a large ball of soil and planted as soon as possible, then watered very thoroughly so the ground will settle without leaving any air pockets around the ball of roots. Brace the palms well with stout wires fastened to a collar of wire with a piece of rubber hose covering. Wooden braces are often used but not recommended as it is detrimental to drive nails into the palm trunk. Care must be exercised in handling large palms as a sudden drop of one may easily damage the bud and it is certainly advisable to remove enough of the foliage to balance the loss of roots in the digging of them. Most of our commonly seen palms move readily but some of them, owing to a poor root system, do not. Butias, at least in this section, do not seem to take hold, and

such palms as Scheelea and our beautiful native *Coccothrinax* or Silver palm even less so. Watering is necessary for a long time after planting, or at least until the plants have developed a good new root system.

Palms are heavy feeders and do need considerable fertilizer. A good feeding program is to make three applications a year. A 4-7-5 formula is good for spring and summer, then one with somewhat more potash for the fall so as to harden the plants up somewhat for our sometimes rather cool winters. The amount used will naturally depend on the size of the palms. Forty pounds a year for a full-grown plant is not too much.

When kept growing thriftily and in good condition palms on the whole are not troubled much with diseases or many insect pests. Scales and aphids are at times rather plentiful on some species but a thorough spraying with a good oil spray can control them. Some of the newer sprays, such as Malathion in an oil mix, have lately been used with good results.

Some years ago our fine Royals were troubled with a fungus disease which apparently was caused by scale insects chewing the leaf covering and thus giving the fungus a chance. Spraying for the insects early seems to have disposed of that pest so now this disease is not so common. A fungus is rather prevalent on *Cocos plumosa*. This one may be caused or helped by some deficiency in the soil. At any rate an additional supply of manganese applied directly to the bud of the palms as well as spread on the ground around them helped a great deal. One serious pest is the palm beetle which lays its eggs in the palm buds where they hatch and devour the growing part. If the damage is noted in time, which is rather difficult, they can be destroyed with a solution of DDT applied right in the bud. Usually the beetles are not noticed until too late, in which case the plant by all means should be destroyed and the grubs all killed.

Unfortunately these beetles show a decided preference for choice plants and seem to be particularly fond of *Latania* and *Phoenix canariensis*.

While it has proven possible to grow with success a very large number of palms in this section of the country, it has also been found that many of the importations have been failures. No doubt some of the ultra-tropical ones do not like our occasional rather cool

temperatures; others may not like certain soil conditions, but it has been interesting to try them and several of the newer ones have proven most satisfactory. As more are being tried under various conditions and in different parts of the state, no doubt those interested in importing and trying new species will not only get a lot of good experience but may also enrich our palm flora to some extent.

Palms of the Oregon Coast

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(Oregon, or some part of it, lies in the same latitude with upstate New York, Vermont and southern Maine.)

My accidental discovery of a twenty-foot fan palm growing at the entrance of a suburban Portland apartment building was what sparked my interest in the subject of palms. I reasoned that if one palm had withstood the rigors of our northerly climate surely others might be found, especially along the milder coastal sections of our state. "There are palm trees growing in Oregon," was a remark I subsequently made to many of my acquaintances and was usually greeted in return with a skeptical raise of the eyebrows. I could hardly blame them for their attitude, for most Oregonians have been thoroughly indoctrinated by the California Chamber of Commerce into believing that they reside just two shades from the North Pole.

All in all Portland is an unlikely place for palms. In two years I have only been able to locate one other palm. This was a small two-foot specimen which succumbed to a very severe freeze a year ago; however, according to the owner it had survived two winters at least, and possibly more. It is still conceivable that there may be others growing in some of the older residential areas of this city of 400,000 population.

Since my initial discovery and interest two years ago I have been able to locate perhaps a dozen or so mature palms along Oregon's mild coastal strip. These and the one in Portland can probably be relegated to one genus surely, that of *Trachycarpus*. And possibly *Chamaerops*, with *Washingtonia* a doubtful third.

I should explain before going further that the State of Oregon enjoys three or even four distinct climates, beginning on the coast with an extremely mild marine climate. Portland and the Willamette Valley in the interior has greater temperature extremes than the immediate coast, and experiences a true combination of the marine of the coast and the continental climate, which prevails east of the Cascade Range.

A fourth might be described as comprising a small mountain ringed valley in southwestern Oregon, in which are situated the towns of Grant's Pass and Medford. Here also is the small historic town of Jacksonville, an early-days gold mining center and the site of the oldest living palm tree in Oregon. This tree was planted in 1871 by the son of Peter Britt, pioneer photographer and