ENH21

UF UNIVERSITY of FLORIDA
IFAS Extension

Ornamental Palms for South Florida [1]

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Palms are a dominant part of south Florida's landscape and add a tropical image to this part of the state. Palms vary greatly in size from those that mature at a height of less than 3 feet with pencil-thick stems to monsters over 100 feet tall with trunks approaching 3 feet in diameter. Palms may be single-stemmed or have multiple trunks (clumping palms). Single-stemmed palms fit into small spaces better than most broadleaved trees since they do not branch. On the other hand, some clumping palms can become too large for typical residential landscapes. Palms may have feather-shaped (pinnate) leaves that impart a relatively fine texture, or fan-shaped (palmate or costapalmate) leaves that are very bold in texture. Some have rather rigid leaves, while others have weeping leaflets that provide additional interest in the landscape. Proper selection will ensure that the palm you plant will be appropriate for your particular site and desired effect.

Although most palms grow best in full sun, some are intolerant of direct sunlight and must be grown in shaded locations. Similarly, most palms are quite tolerant of both wet and dry soils once established. However, there are palms that cannot tolerate drought conditions and others that will not survive in very wet soils. When palms are to be planted near the coast, tolerance to salt spray is another important consideration when selecting palms. Palms listed as having high salt tolerance can be grown in exposed sites near the seashore, those with moderate salt tolerance must be planted in protected sites near the ocean, and those with low salt tolerance should not be planted within 1/4 mile of the seashore.

Typically, palms will fare better in windstorms than broadleaf trees, but some are even better adapted than others. Proper palm selection will improve the chances of a palm thriving in a particular location. Table 1 lists a number of species that can be grown in south Florida landscapes. Although many other species have been successfully grown in south Florida, they are relatively rare in the nursery industry and thus are not readily available.

Palm Maintenance

Palms are often thought to be low maintenance plants in the landscape, but in south Florida's infertile soils, nutrient deficiencies are common and can result in unsightly deficiency symptoms or even death of a palm. Unlike broadleaf trees that usually grow well without fertilization, most palms in Florida landscapes require supplemental fertilization with an

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appropriate palm fertilizer to prevent or treat these deficiencies. For information about palm nutrient deficiencies and proper fertilization see EDIS publications EP273—Nutrient Deficiencies of Landscape and Field-grown Palms in Florida and EP261—Fertilization of Field-grown and Landscape Palms in Florida.

Another maintenance consideration is whether a palm is self-cleaning or not. Many tropical palms have tightly clasping leaf bases that form a smooth green stem-like area just above the true trunk called a crownshaft. Palms with crownshafts that do not have extensive potassium deficiency symptoms are self-cleaning. That is, old senescing leaves will fall off cleanly by themselves. When old leaves of non-crownshaft palms senesce, they will simply hang down against the trunk and must be manually cut off. It is important to note that half-dead or discolored older leaves that remain on a palm for several weeks or longer are probably exhibiting symptoms of potassium deficiency (see EDIS publication EP269—Potassium Deficiency in Palms) and not natural senescence. Natural senescence of healthy old palm leaves takes only a few days for a leaf to turn from completely green to completely yellow and finally completely dead.

Insect Problems

Although most insect pests have a minor impact on palm appearance and health and are not particular about which palms they feed on, there are some exceptions. A few palms are particularly attractive to some insect pests that can become debilitating or even fatal to the palms.

Other Considerations

In addition to palm physical appearance, susceptibility to disease or insect problems, and adaptability to a particular site, other attributes may also be important, especially if small children are present. Many palms have sharp spines on their petioles or trunks that can be quite dangerous. Others have fruits that contain high concentrations of skin-irritating chemicals. Such fruits should not be handled unless rubber gloves are worn.

Planting

Palms may be planted during any season of the year, but the warm, rainy summer months are best. Small, container-grown palms of any species can be transplanted easily. However, some species such as *Archontophoenix* spp. are notoriously difficult to transplant from field nurseries.

Follow the steps below when planting a palm:

1. Dig the hole at least 6 inches larger in diameter than the root ball to ensure that the backfill soil will be in contact with the entire root ball. The hole should be deep enough so that the top of the root ball of a field-grown palm is even with the surface of the ground. For container-grown palms, make sure that the base of the stem (if visible) is about an inch below the surface of the soil.

2. Amending the backfill soil is not recommended.

3. Gently position the palm so that it is upright, and fill around the root ball with soil. Water thoroughly to remove any air pockets.

4. Form a basin with soil around the perimeter of the root ball to retain water during irrigation.

5. A 2- to 3-inch-deep layer of organic mulch will aid in water penetration and retention, moderate soil temperatures, and reduce weed growth.

6. Support large trees with braces to maintain stability during the first 6 to 8 months. Nails should not be driven directly into palm trunks.

7. Water daily for the first few weeks and frequently thereafter until the palms are well established.

For additional information on planting palms see EDIS publication EP001—Transplanting Palms.

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***Scientific Name* Common Names**	**Leaf Type**	**Crownshaft?**	**Typical Height**	**Stem Thickness**	**Growth Habit**	**Growth Rate**	**Salt Tolerance**	**Native?**	**Irritating Fruits?**
Acoelorrhaphe wrightii Paurotis palm, Everglades palm	Fan	No	20 ft	Slender	Clumping	Moderate	Moderate	Yes	No
	Comments: Allow plenty of room to spread. Spiny petioles may be a problem.								
Adonidia merrillii Christmas palm, Manila palm	Feather	Yes	20 ft	Slender	Single-stem	Moderate	Moderate	No	No
	Comments: Well-adapted to south Florida soils. Lethal yellowing may be a problem.								
Aiphanes aculeata Ruffle palm	Feather	No	10 ft	Slender	Single-stem	Moderate	Low	No	No
	Comments: Attractive small, but vicious palm. Spiny trunk and leaves may be a problem.								
Allagoptera arenaria Seashore palm	Feather	No	6 ft	Slender	Clumping	Slow	High	No	No
	Comments: Silvery foliage; excellent seaside palm. No major problems.								
Archontophoenix alexandrae Alexandra palm; King palm	Feather	Yes	40 ft	Medium	Single-stem	Moderate	Low	No	Yes
	Comments: Rigid leaflets often held in vertical plane. Difficult to transplant from a field nursery.								
Archontophoenix cunninghamiana Picabeen palm	Feather	Yes	30 ft	Medium	Single-stem	Moderate	Low	No	Yes
	Comments: Similar to *A. alexandrae*, but leaflets more lax. No major problems.								
Areca catechu Betelnut palm	Feather	Yes	30 ft	Slender	Single-stem	Moderate	Low	No	No
	Comments: Ringed green trunk. Cold-sensitive.								
Areca vestiaria Orange crownshaft palm	Feather	Yes	10 ft	Slender	Single-stem	Moderate	Low	No	No
	Comments: Striking orange-red crownshaft. Cold-sensitive.								
Arenga engleri Dwarf sugar palm	Feather	No	10 ft	Slender	Clumping	Slow	Low	No	Yes
	Comments: Allow plenty of room to spread. Individual stems die after fruiting.								
Arenga pinnata Sugar palm	Feather	No	30 ft	Medium	Single-stem	Moderate	Moderate	No	Yes
	Comments: Stiff black fibers around trunk. Short-lived; dies after fruiting.								
Attalea spp. American oil palms	Feather	No	40 ft	Medium-thick	Single-stem	Slow	Moderate	No	No
	Comments: Large palms with upright form. No major problems.								

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Bismarckia nobilis Bismarck palm	Fan	No	30 ft	Thick	Single-stem	Moderate	Moderate	No	No
	Comments: Attractive blue-green foliage. Fares poorly in windstorms; difficult to transplant from field nursery.								
Butia capitata Pindo palm; jelly palm	Feather	No	12 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Edible fruits; blue-green foliage. Spiny petioles may be a problem.								
Carpentaria acuminata Carpentaria palm	Feather	Yes	40 ft	Medium	Single-stem	Fast	Low	No	Yes
	Comments: Attractive red fruits. Leaves easily tattered by wind; short-lived.								
Caryota mitis Clustering fishtail palm	Feather	No	18 ft	Medium	Clumping	Moderate	Low	No	Yes
	Comments: Unusually fine textured foliage. Palm dies after fruiting.								
Caryota urens Toddy fishtail palm	Feather	No	40 ft	Medium	Single-stem	Moderate	Low	No	Yes
	Comments: Attractive bipinnate foliage; *C. maxima* and *C. no* are similar. Short-lived; dies after fruiting								
Chamaedorea cataractarum Cat palm	Feather	No	6 ft	Very Slender	Clumping	Moderate	Low	No	Yes
	Comments: Grows best in shade. No major problems.								
Chamaedorea elegans Parlor palm	Feather	No	3 ft	Very Slender	Single-stem	Slow	Low	No	Yes
	Comments: Requires shade. No major problems.								
Chamaedorea metallica Miniature fishtail palm	Feather	No	3 ft	Very Slender	Single-stem	Slow	Low	No	Yes
	Comments: Blue-green 2-lobed leaves. No major problems.								
Chamaedorea erumpens/C. seifrizii Bamboo palm/reed palm	Feather	No	6-8 ft	Very Slender	Clumping	Moderate	Low	No	Yes
	Comments: Does best in shade. No major problems.								
Chamaerops humilis European fan palm	Fan	No	10 ft	Slender	Clumping	Slow	Moderate	No	No
	Comments: Leaf color varies from blue-green to light green. Spiny petioles may be a problem.								
Chambeyronia macrocarpa Red feather palm	Feather	Yes	30 ft	Medium	Single-stem	Slow	Low	No	No
	Comments: New leaves of some selections have reddish color. No major problems.								

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Coccothrinax spp Silver palms	Fan	No	15-25 ft	Slender	Single-stem	Slow	High	Yes/no	No
	Comments: *C. crinita* has stiff curly hairs on trunk. No major problems.								
Cocos nucifera Coconut palm	Feather	No	40-60 ft	Medium-thick	Single-stem	Moderate	High	No	No
	Comments: Malayan dwarf has more slender straight trunk; all cultivars susceptible to lethal yellowing.								
Copernicia alba Caranday palm	Fan	No	30 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Light green foliage. Spiny petioles may be a problem.								
Copernicia baileyana Bailey palm	Fan	No	40 ft	Thick	Single-stem	Slow	Moderate	No	No
	Comments: Massive trunk; very majestic; best for large properties. Spiny petioles may be a problem.								
Copernicia hospita Hospita palm	Fan	No	30 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Blue-green foliage. Spiny petioles may be a problem.								
Copernicia macroglossa Cuban petticoat palm	Fan	No	12 ft	Slender	Single-stem	Very Slow	Moderate	No	No
	Comments: Retains a skirt of old leaves; extremely short petioles.								
Copernicia prunifera Carnauba wax palm	Fan	No	30 ft	Medium	Single-stem	Slow-moderate	Moderate	No	No
	Comments: Tolerates wet sites better than other *Copernicia* species. Spiny petioles may be a problem.								
Dictyosperma album Princess palm; hurricane palm	Feather	No	20 ft	Medium	Single-stem	Moderate	Moderate	No	Yes
	Comments: Var. rubrum has reddish foliage when young. Lethal yellowing may be a problem.								
Dypsis cabadae Cabada palm	Feather	Yes	25 ft	Slender	Clumping	Moderate	Moderate	No	No
	Comments: Attractive ringed green trunk. Potassium deficiency may be a problem.								
Dypsis decaryi Triangle palm	Feather	Yes	25 ft	Medium	Single-stem	Moderate	Low	No	No
	Comments: Leaves arranged in three planes. Potassium deficiency may be a problem.								
Dypsis lastelliana Teddy bear palm	Feather	Yes	30 ft	Medium	Single-stem	Moderate	Low	No	No
	Comments: Crownshaft is covered with rusty fuzz. No major problems.								

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Dypsis lutescens Areca palm; butterfly palm	Feather	Yes	25 ft	Slender	Clumping	Moderate	Moderate	No	No
	Comments: Very high nutrient requirements; potassium and nitrogen deficiencies may cause problems.								
Elaeis guineensis African oil palm	Feather	No	40 ft	Medium	Single-stem	Moderate	Moderate	No	No
	Comments: Allow space for large canopy; very high nutritional requirements. Spiny petioles and nutrient deficiencies may cause problems.								
Heterospathe elata Sagisi palm	Feather	No	40 ft	Slender	Single-stem	Slow-moderate	Low	No	No
	Comments: Slow growing until trunk forms. No major problems.								
Howea forsteriana Kentia palm	Feather	No	20 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Does best in shade. Phytophthora bud rot may be a problem.								
Hyophorbe lagenicaulis Bottle palm	Feather	Yes	10 ft	Thick	Single-stem	Slow	High	No	Yes
	Comments: Bulbous trunk when young; holds few leaves. Potassium deficiency may be a problem.								
Hyophorbe verschafeltii Spindle palm	Feather	Yes	15 ft	Medium	Single-stem	Slow	High	No	Yes
	Comments: Similar to *H. lagenicaulis* but narrower trunk. Potassium deficiency may be a problem.								
Hyphaene spp Gingerbread palms	Fan	No	30 ft	Medium	Clumping/ branching	Slow	High	No	No
	Comments: Broad spreading and even branching clumps of stems. Spiny petioles may be a problem.								
Latania spp Latan palms	Fan	No	20 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Blue-green foliage; leaves of juvenile *L. lontaroides* reddish. Leaf skeletonizer insects may be a problem.								
Licuala grandis Licuala palm	Fan	No	8 ft	Slender	Single-stem	Slow	Low	No	No
	Comments: Round leaves; does best in shade. Spiny petioles may be a problem.								
Licuala spinosa Spiny licuala palm	Fan	No	8 ft	Slender	Clumping	Slow	Low	No	No
	Comments: Leaves shaped like spokes of wheel. Spiny petioles may be a problem.								
Livistona australis Australian fan palm	Fan	No	40 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Attractive weeping leaflet tips. Potassium deficiency may be a problem.								

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Livistona chinensis Chinese fan palm	Fan	No	25 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Slow growing until trunk forms. Lethal yellowing may be a problem.								
Livistona decipiens Ribbon fan palm	Fan	No	30 ft	Medium	Single-stem	Slow-moderate	Moderate	No	No
	Comments: Deeply divided weeping leaves. No major problems.								
Livistona rotundifolia Roundleaf fan palm	Fan	No	40 ft	Medium	Single-stem	Moderate	Low	No	No
	Comments: Round leaves; does best in shade. Spiny petioles may be a problem.								
Livistona saribus Taraw palm	Fan	No	50 ft	Medium	Single-stem	Moderate	Moderate	No	No
	Comments: Deeply divided weeping leaves. No major problems.								
Phoenix canariensis Canary Island date palm	Feather	No	40 ft	Thick	Single-stem	Slow	Moderate	No	No
	Comments: Intolerant of wet sites. Spiny petioles, lethal yellowing, fusarium wilt, palm weevils, and potassium and magnesium deficiencies may cause problems.								
Phoenix dactylifera Date palm	Feather	No	50 ft	Medium	Clumping/ single stem	Slow	High	No	No
	Comments: Intolerant of wet sites; gray-green foliage. Spiny petioles and lethal yellowing are potential problems. Texas Phoenix Decline can be a problem.								
Phoenix reclinata Senegal date palm	Feather	No	30 ft	Medium	Clumping	Moderate	Moderate	No	No
	Comments: Requires very large area. The palm is weedy, and spiny petioles may be a problem.								
Phoenix roebelenii Pygmy date palm	Feather	No	12 ft	Slender	Single-stem	Slow	Moderate	No	No
	Comments: Often develops crooked trunks. Spiny petioles and potassium deficiency may be problems.								
Phoenix rupicola Cliff date	Feather	No	25 ft	Medium	Single-stem	Moderate	Moderate	No	No
	Comments: Smaller than *P. dactylifera*. Spiny petioles may be a problem.								
Phoenix sylvestris Wild date palm	Feather	No	40 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Gray-green foliage; smaller than *P. dactylifera*. Spiny petioles and lethal yellowing may be problems.								

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Pinanga coronata Ivory cane palm	Feather	Yes	10 ft	Very slender	Clumping	Moderate	Low	No	Yes
	Comments: Does best in protected shady site. No major problems.								
Pseudophoenix sargentii Buccaneer palm	Feather	No	10 ft	Medium	Single-stem	Slow	High	Yes	Yes
	Comments: Holds only a few leaves; blue-green foliage. No major problems.								
Ptychosperma elegans Solitaire palm	Feather	Yes	25 ft	Slender	Single-stem	Moderate	Low	No	No
	Comments: Often grown as multiples in a container. Can be weedy.								
Ptychosperma macarthurii Macarthur palm	Feather	Yes	25 ft	Slender	Clumping	Moderate	Low	No	Yes
	Comments: Can be weedy.								
Ravenea rivularis Majesty palm	Feather	No	20 ft	Medium	Single-stem	Moderate	Moderate	No	No
	Comments: Stays relatively short for a long time; Light green foliage. Weevils can be a problem.								
Rhapidophyllum hystrix Needle palm	Fan	No	5 ft	Very Slender	Clumping	Slow	Moderate	Yes	No
	Comments: Grows best in shade. Spiny trunks can be a problem.								
Rhapis excelsa Lady palm	Fan	No	8 ft	Very Slender	Clumping	Moderate	Moderate	No	No
	Comments: Grows best in shade. Spreads quickly, which can cause problems.								
Roystonea spp Royal palms	Feather	Yes	70 ft	Thick	Single-stem	Fast	Moderate	Yes/no	Yes
	Comments: Best for large properties. Royal palm bug and potassium deficiency can be problems.								
Sabal causiarum Puerto Rican hat palm	Fan	No	40 ft	Very Thick	Single-stem	Slow	Moderate	No	No
	Comments: Massive trunk; best for large properties. No major problems.								
Sabal mauritiiformis	Fan	No	30 ft	Medium	Single-stem	Moderate	Moderate	No	No
	Comments: Faster growing than *S. palmetto.* Leaves easily tattered by wind.								
Sabal minor Dwarf palmetto; blue palmetto	Fan	No	6 ft	None	Single-stem	Very Slow	Moderate	Yes	No
	Comments: Nice trunkless palm. No major problems.								

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Sabal palmetto Cabbage palm; sabal palm	Fan	No	40 ft	Medium	Single-stem	Very Slow	High	Yes	No
	Comments: Florida state tree. Potassium deficiency and Texas Phoenix Decline can be problems.								
Serenoa repens Saw palmetto	Fan	No	6 ft	Slender	Clumping	Slow	High	Yes	No
	Comments: Blue-green and green forms exist; allow space for spreading. Spiny petioles may be a problem.								
Syagrus coronata	Feather	No	30 ft	Medium	Single-stem	Slow	Moderate	No	No
	Comments: Attractive spiral pattern of old leaf bases. No major problems.								
Syagrus romanzoffiana Queen palm	Feather	No	35 ft	Medium	Single-stem	Fast	Moderate	No	No
	Comments: Poorly adapted for alkaline soils; fares poorly in hurricanes. Potassium, manganese, and boron deficiencies and Fusarium wilt can be problems.								
Syagrus schizophylla Arikury palm	Feather	No	15 ft	Medium	Single-stem	Moderate	Moderate	No	No
	Comments: Small palm with upright form. Potassium deficiency and spiny petioles may be problems.								
Thrinax spp Thatch palms	Fan	No	20 ft	Slender	Single-stem	Slow	High	Yes	No
	Comments: Excellent small palms. No major problems.								
Veitchia spp	Feather	Yes	30-60 ft	Medium	Single-stem	Fast	Moderate	No	No
	Comments: Some species can get too tall for residential properties. No major problems.								
Washingtonia robusta Mexican fan palm	Fan	No	80 ft	Medium	Single-stem	Fast	Moderate	No	No
	Comments: Older specimens are self-cleaning. Fusarium Wilt and potassium deficiency can be problems.								
Wodyetia bifurcata Foxtail palm	Feather	Yes	30 ft	Medium	Single-stem	Fast	Moderate	No	No
	Comments: Poorly adapted for alkaline soils. Potassium and manganese deficiencies may be problems.								
Zombia antillarum Zombie palm	Fan	No	15 ft	Slender	Clumping	Slow	High	No	No
	Comments: Attractive spirally-arranged pattern of spines on trunk. Spiny trunk may be a problem.								