Roystonea spp.  
Royal Palm$^1$

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INTRODUCTION

Notably popular as street or specimen trees, Royal Palms make a neat, tidy, yet stately landscape element for large landscapes, often reaching 50 to 100 feet in height in almost as many years (Fig. 1). The tall, smooth, cement grey trunks are capped with a glossy, green crown shaft several feet high and a beautiful, broad, dense crown of soft, gently drooping, feathery fronds. Flowers are incredibly fragrant, even from 50 feet away and are produced periodically throughout the year but mostly in summer. The old fronds should be removed before they drop since they can cause injury or damage to plants or property when allowed to fall. One frond will fall about every month.

GENERAL INFORMATION

Scientific name: Roystonea spp.  
Pronunciation: roy-STOW-nee-uh species  
Common name(s): Royal Palm  
Family: Arecaceae  
USDA hardiness zones: 10 through 11 (Fig. 2)  
Origin: native to North America  
Uses: large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; narrow tree lawns (3-4 feet wide); specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common  
Availability: generally available in many areas within its hardiness range

Figure 1. Mature Royal Palm.

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DESCRIPTION

Height: 50 to 80 feet  
Spread: 15 to 25 feet  
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms  
Crown shape: palm; upright  
Crown density: open  
Growth rate: medium  
Texture: coarse

Foliage

Leaf arrangement: alternate  
Leaf type: odd pinnately compound  
Leaflet margin: entire  
Leaflet shape: lanceolate  
Leaflet venation: parallel  
Leaf type and persistence: evergreen  
Leaflet blade length: 18 to 36 inches  
Leaf color: green  
Fall color: no fall color change  
Fall characteristic: not showy

Flower

Flower color: yellow  
Flower characteristics: pleasant fragrance; showy; spring flowering

Fruit

Fruit shape: oval; round  
Fruit length: < .5 inch  
Fruit covering: fleshy  
Fruit color: black; purple  
Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; showy

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will not droop; showy trunk; should be grown with a single leader; no thorns  
Pruning requirement: needs little pruning to develop a strong structure  
Breakage: resistant  
Crown shaft: yes
Culture

**Light requirement:** tree grows in part shade/part sun; tree grows in full sun

**Soil tolerances:** clay; loam; sand; slightly alkaline; acidic; occasionally wet; well-drained

**Drought tolerance:** moderate

**Aerosol salt tolerance:** moderate

Other

**Roots:** surface roots are usually not a problem

**Winter interest:** no special winter interest

**Outstanding tree:** tree has outstanding ornamental features and could be planted more

**Invasive potential:** little, if any, potential at this time

**Verticillium wilt susceptibility:** not known to be susceptible

**Pest resistance:** long-term health usually not affected by pests

USE AND MANAGEMENT

Royal Palms grow quite rapidly when given an abundance of water and fertilizer in full sun or dappled shade. They withstand strong winds and salt spray very well but some foliage injury will be evident on Royal Palm located next to the ocean. It is not really suited for beach side planting as Sabal Palm is. The young developing fronds grow in a distorted, frizzled manner in alkaline soil. This is usually attributed to manganese or iron deficiency in the leaves. It can be prevented with regular applications of a suitable fertilizer or by planting in soil with a pH less than about 7.5.

*Roystonea elata* is native to Florida and *Roystonea regia* to Cuba. Cuban Royal Palm has less prominent secondary leaf veins and nearly globose fruit. Many nurseries do not distinguish between these two species since they are very similar.

Propagation is by seed.

Pests

Some of Royal Palm’s pests are palm leaf skeletonizer, Royal Palm bug, giant palm weevil, and scales when young. Any of these can be troublesome in localized areas.

Diseases

Ganoderma butt rot is the most serious problem on Royal Palms. It kills trees which it infects. The disease often enters the trunk through injuries on the lower trunk and roots.