



Roystonea spp. Royal Palm¹

Edward F. Gilman and Dennis G. Watson²

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: *Areaceae*

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

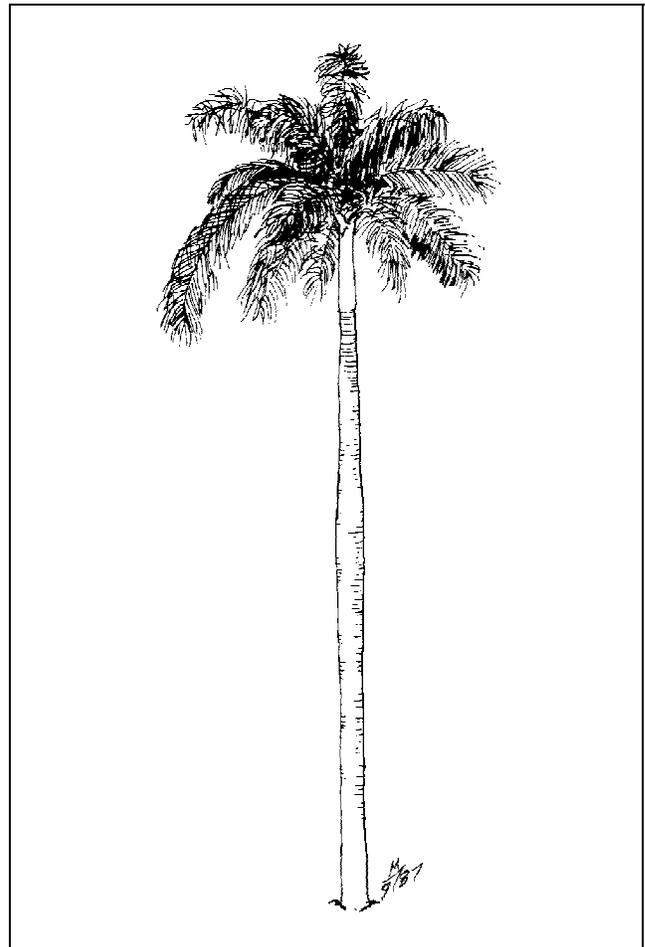


Figure 1. Mature Royal Palm.

Availability: generally available in many areas within its hardiness range

1. This document is adapted from Fact Sheet ST-574, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



Figure 2. Shaded area represents potential planting range.

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

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.

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.