Roystonea spp.: Royal Palm

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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. 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: 10A through 11 (Fig. 2)

Origin: native to North America

Invasive potential: little invasive potential

Uses: street without sidewalk; specimen; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; urban tolerant; highway median

Availability: not native to North America

Description

Height: 50 to 80 feet

Spread: 15 to 25 feet

Crown uniformity: symmetrical

Crown shape: palm, upright/erect

Crown density: open

Growth rate: moderate

Texture: coarse
Roystonea spp.: Royal Palm

Figure 1. Mature Roystonea spp.: Royal Palm

**Foliage**

Leaf arrangement: alternate (Fig. 3)
Leaf type: odd-pinnately compound
Leaf margin: entire
Leaf shape: lanceolate
Leaf venation: parallel
Leaf type and persistence: evergreen
Leaf blade length: 18 to 36 inches

Leaf color: green
Fall color: no color change
Fall characteristic: not showy

**Flower**

Flower color: yellow
Flower characteristics: showy

**Fruit**

Fruit shape: oval, round
Fruit length: less than .5 inch
Fruit covering: fleshy
Fruit color: purple, black
Fruit characteristics: does not attract wildlife; showy; fruit/leaves a litter problem

**Trunk and Branches**

Trunk/bark/branches: branches don't droop; showy; typically one trunk; thorns
Pruning requirement: little required
Breakage: resistant
Current year twig color: not applicable
Current year twig thickness:
Wood specific gravity: unknown

**Culture**

Light requirement: full sun, partial sun or partial shade
Soil tolerances: clay; sand; loam; acidic; slightly alkaline; occasionally wet; well-drained
Drought tolerance: moderate
Aerosol salt tolerance: moderate
Figure 2. Range

**Other**

**Roots:** not a problem

**Winter interest:** no

**Outstanding tree:** yes

**Ozone sensitivity:** unknown

**Verticillium wilt susceptibility:** resistant

**Pest resistance:** resistant to pests/diseases

**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.