Delonix regia
Royal Poinciana

Edward F. Gilman and Dennis G. Watson

INTRODUCTION

This many-branched, broad, spreading, flat-crowned deciduous tree is well-known for its brilliant display of red-orange bloom, literally covering the tree tops from May to July (Fig. 1). There is nothing like a Royal Poinciana (or better yet, a group of them) in full bloom. The fine, soft, delicate leaflets afford dappled shade during the remainder of the growing season, making Royal Poinciana a favorite shade tree or freestanding specimens in large, open lawns. The tree is often broader than tall, growing about 40 feet high and 60 feet wide. Trunks can become as large as 50 inches or more in diameter. Eighteen-inch-long, dark brown seed pods hang on the tree throughout the winter, then fall on the ground in spring creating a nuisance.

GENERAL INFORMATION

Scientific name: Delonix regia
Pronunciation: dee-LOE-nicks REE-jee-uh
Common name(s): Royal Poinciana
Family: Leguminosae
USDA hardiness zones: 10B through 11 (Fig. 2)
Origin: not native to North America
Uses: reclamation plant; shade tree; specimen; 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

DESCRIPTION

Height: 35 to 40 feet
Spread: 40 to 60 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: spreading; vase shape
Crown density: moderate
Growth rate: fast
Texture: fine

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: bipinnately compound
Leaflet margin: entire
Leaflet shape: oblong
Leaf type and persistence: semievergreen
Leaflet blade length: less than 2 inches
Leaf color: green
Fall color: no fall color change
Fall characteristic: not showy

1. This document is adapted from Fact Sheet ST-228, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: November 1993.
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.

Flower

Flower color: orange; red
Flower characteristics: summer flowering; very showy

Fruit

Fruit shape: elongated; pod
Fruit length: 12 inches or more
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; routinely grown with, or trainable to be grown with, multiple trunks; not particularly showy; no thorns
Pruning requirement: requires pruning to develop strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break
Current year twig color: brown; green
Current year twig thickness: medium; thick

Culture

Light requirement: tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; alkaline; well-drained
Drought tolerance: high
Aerosol salt tolerance: low

Other

Roots: surface roots can lift sidewalks or interfere with mowing
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
Pest resistance: long-term health usually not affected by pests
USE AND MANAGEMENT

Royal Poinciana will provide fullest flowering and best growth when planted in full sun locations. Tolerant of a wide variety of soils and conditions, Royal Poinciana needs to be well-watered until established, then only during the severest droughts. Grass grows poorly beneath poinciana. Do not plant closer than about 10 feet from pavement or sidewalks, since large surface roots often grow beneath them and can destroy them. Early pruning is required to encourage development of branches which are well-attached to the trunk. This will help compensate for the weak wood. Train the tree so the major limbs are located 8 to 12 feet from the ground to allow for adequate clearance beneath the tree. To develop a strong, durable tree, prune major limbs to prevent them from growing to more than half the diameter of the trunk.

Propagation is by seed.

PESTS AND DISEASES

No pests or diseases are of major concern although caterpillars can eat some foliage. There is a root fungus which can kill a weakened tree.