

Peltophorum pterocarpum: Yellow Poinciana¹

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean²

Introduction

This upright, handsome, spreading, semi-evergreen tree has a rounded canopy and is capable of reaching 50 feet in height with a 30 to 50-foot spread. Form can be quite variable from tree to tree, unfortunately, eliminating this plant from the palette of many architects. With proper training and pruning in the nursery and in the landscape, a more uniform crown will develop. The dark green, delicate, feathery leaflets provide a softening effect for the tree's large size and create a welcoming, dappled shade. From May through September, the entire tree's canopy is smothered with a yellow blanket of flowers, appearing in showy, terminal panicles and exuding a delicious, grape-like perfume. These flower clusters are followed by four-inch-long seed pods which ripen to a brilliant, coppery red.

General Information

Scientific name: Peltophorum pterocarpum

Pronunciation: pell-TOFF-oh-rum teer-oh-KAR-pum

Common name(s): yellow poinciana **Family:** *Fabaceae* or *Leguminosae*

USDA hardiness zones: 10A through 11 (Figure 2) **Origin:** native to Sri Lanka, Malay Archipelago, Indonesia,

and northern Australia

UF/IFAS Invasive Assessment Status: not considered a problem species at this time, may be recommended (North, Central, South)

Uses: shade; specimen; reclamation; highway median



Figure 1. Full Form - *Peltophorum pterocarpum*: yellow poinciana Credits: UF/IFAS

- 1. This document is ENH-593, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 1993. Revised December 2018. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.
- 2. Edward F. Gilman, professor emeritus, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Department of Agricultural and Biological Engineering Department; Ryan W. Klein, graduate assistant, Environmental Horticulture Department; Andrew K. Koeser, assistant professor, Environmental Horticulture Department, UF/IFAS Gulf Coast Research and Education Center; Deborah R. Hilbert, graduate assistant, Environmental Horticulture Department, GCREC; and Drew C. McLean, biological scientist, Environmental Horticulture Department, GCREC; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

Description

Height: 40 to 50 feet **Spread:** 30 to 50 feet

Crown uniformity: irregular

Crown shape: vase, round, spreading

Crown density: open Growth rate: fast Texture: fine



Figure 2. Range

Foliage

Leaf arrangement: alternate

Leaf type: bipinnately compound; primary leaflets are in pairs of 7 to 15 and are made up of 8 to 20 pairs of secondary leaflets

Leaf margin: entire Leaf shape: oblong



Figure 3. Leaf - *Peltophorum pterocarpum*: yellow poinciana Credits: UF/IFAS

Leaf venation: pinnate

Leaf type and persistence: semi-evergreen

Leaf blade length: 1 to 2 feet; secondary leaflets are ½ to ¾

inch

Leaf color: dark green on top, paler green underneath

Fall color: no color change Fall characteristic: not showy

Flower

Flower color: yellow

Flower characteristics: very showy; fragrant; emerges in clusters on 1-1 ½ long terminal panicals that are covered in

brown pubescence

Flowering: primarily spring to fall



Figure 4. Flower - *Peltophorum pterocarpum*: yellow poinciana Credits: UF/IFAS

Fruit

Fruit shape: flat winged pod **Fruit length:** 2 to 4 inches **Fruit covering:** dry or hard

Fruit color: turns from coppery red to black with maturity **Fruit characteristics:** does not attract wildlife; showy; fruit/

leaves a litter problem

Trunk and Branches

Trunk/branches: branches don't droop; not showy; typically multi-trunked; no thorns



Figure 5. Fruit - *Peltophorum pterocarpum*: yellow poinciana Credits: UF/IFAS

Bark: brown to gray and smooth, becoming rough and fissured with age

Pruning requirement: needed for strong structure

Breakage: susceptible to breakage **Current year twig color:** brown

Current year twig thickness: medium, thick

Wood specific gravity: unknown



Figure 6. Bark - *Peltophorum pterocarpum*: yellow poinciana Credits: Gitta Hasing, UF/IFAS

Culture

Light requirement: full sun

Soil tolerances: clay; sand; loam; alkaline; acidic; well-

drained to occasionally wet **Drought tolerance:** high **Aerosol salt tolerance:** low

Other

Roots: can form large surface roots

Winter interest: no
Outstanding tree: no
Ozone sensitivity: unknown

Verticillium wilt susceptibility: unknown **Pest resistance:** free of serious pests and diseases

Use and Management

Yellow poinciana is a wonderful shade or specimen tree for a large landscape, especially when in full bloom, and it can make a street tree as long as it receives regular pruning to control its weedy, somewhat unkempt habit. Its large size makes it a natural for the wide-open spaces of large lawns or city parks.

Trees can be grown with a single or multiple trunk. Trunks or branches of multi-trunked trees should be well-spaced along a central stem and not allowed to grow larger than half the diameter of the main stem. This will increase wind hardiness. Plant only single-trunked trees along streets and other public areas to ensure a durable plant.

A fast-growing tree, yellow poinciana grows best in full sun on any well-drained soil. Temperatures in the high 20's cause the leaves to drop but these are quickly replaced. Even though yellow poinciana will develop a very large trunk, its shallow, surface roots make it susceptible to being blown over during a hurricane's severe windstorms. Locate the tree about ten feet from sidewalks or pavement so the large surface roots don't cause damage.

Peltophorum inerme is grown in the southern part of Florida (USDA hardiness zone 10b) and in the tropical areas, and is not as hardy. *Peltophorum dubium* is cold hardy to Orlando (USDA hardiness zone 9b).

Propagation is by cuttings or seed. Seeds must be scarified, and seedlings will bloom in four to five years.

Pests and Diseases

No pests or diseases are of major concern.

Reference

Koeser, A.K., Friedman, M.H., Hasing, G., Finley, H., Schelb, J. 2017. Trees: South Florida and the Keys. University of Florida Institute of Food and Agricultural Sciences.