

Plumeria rubra: Frangipani¹

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Introduction

Frangipani is well-known for its intensely fragrant, lovely, spiral-shaped, reddish blooms which appear at branch tips June through November. The tree itself is rather unusual in appearance; the 12 to 20-inch-long, coarse, deciduous leaves cluster only at the tips of the rough, blunt, sausage-like, thick, grey-green branches. Branches are upright and rather crowded on the trunk forming a vase or umbrella



Figure 1. Middle-aged *Plumeria rubra*: Frangipani
Credits: Ed Gilman

shape with age. They are rather soft and brittle and can break but are usually sturdy unless they are mechanically hit or disturbed. The crown loses its leaves for a short time during the winter displaying the coarse-textured, stubby branches. A milky sap is exuded from the branches when they are bruised or punctured.

General Information

Scientific name: *Plumeria rubra*

Pronunciation: ploo-MEER-ee-uh ROO-bruh

Common name(s): Frangipani

Family: *Apocynaceae*

USDA hardiness zones: 10B through 11 (Fig. 2)

Origin: not native to North America.

Invasive potential: has been evaluated using the IFAS Assessment of the Status of Non-Native Plants in Florida's Natural Areas (Fox et al. 2005). This species is not documented in any undisturbed natural areas in Florida. Thus, it is not considered a problem species and may be used in Florida.

Uses: sidewalk cutout (tree pit); deck or patio; specimen; street without sidewalk; container or planter; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; highway median

Availability: not native to North America

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Figure 2. Range

Description

Height: 20 to 25 feet
Spread: 20 to 25 feet
Crown uniformity: symmetrical
Crown shape: vase, round
Crown density: open
Growth rate: slow
Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: entire, undulate
Leaf shape: elliptic (oval), obovate
Leaf venation: brachidodrome, pinnate
Leaf type and persistence: deciduous
Leaf blade length: 12 to 18 inches, 8 to 12 inches
Leaf color: green
Fall color: red
Fall characteristic: not showy



Figure 3. Foliage

Flower

Flower color: pink, red
Flower characteristics: very showy

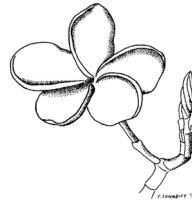


Figure 4. Flower

Fruit

Fruit shape: elongated
Fruit length: 6 to 12 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: does not attract wildlife; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; not showy; can be trained to one trunk; thorns
Pruning requirement: needed for strong structure
Breakage: susceptible to breakage
Current year twig color: brown, green
Current year twig thickness: very thick
Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun or partial shade
Soil tolerances: clay; sand; loam; alkaline; acidic; well-drained
Drought tolerance: high
Aerosol salt tolerance: high

Other

Roots: not a problem
Winter interest: yes
Outstanding tree: yes
Ozone sensitivity: unknown
Verticillium wilt susceptibility: unknown
Pest resistance: resistant to pests/diseases

Use and Management

Frangipani is very susceptible to freezing temperatures and should be adequately protected or planted only in areas which do not freeze in the winter. Plants will grow quickly in full sun on a variety of well-drained soils and is fairly drought and salt tolerant. Reaching a height of 20 to 25 feet with an equal spread, Frangipani works well as a freestanding specimen, a patio tree, or as part of a shrubby border. It displays well in a front yard as an attention-grabber

by the entrance. It can be grown with a single trunk or branched low to the ground into a multi-trunked specimen. Single-trunk specimens could be planted as median or street trees on 15 to 20-foot-centers.

While *Plumeria rubra* produces red-toned flowers, other species offer a variety of colors. *Plumeria alba* has white flowers. *Plumeria obtusa* has white blooms centered in yellow and is variable in form and color. There are other species and cultivars.

Propagation is by cuttings. Large hardwood cuttings should be allowed to dry several days while leafy tip cuttings should be planted immediately. Plants flower at an early age.

Pests

Some common pests are scales, frangipani caterpillar, and nematodes.

Diseases

Root rot can infect plants planted in soils with poor drainage.

Literature Cited

Fox, A.M., D.R. Gordon, J.A. Dusky, L. Tyson, and R.K. Stocker (2005) IFAS Assessment of the Status of Non-Native Plants in Florida's Natural Areas. Cited from the Internet (November 3, 2006), <http://plants.ifas.ufl.edu/assessment.html>