

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 (Fig. 1). 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 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

Uses: container or above-ground planter; 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; near a deck or patio; small parking lot islands (< 100 square feet in size); narrow tree lawns (3-4 feet wide); specimen; sidewalk cutout (tree pit); residential street tree; no proven urban tolerance

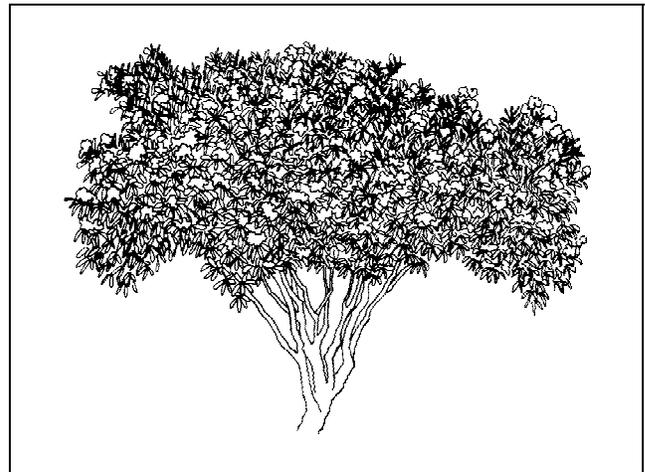


Figure 1. Middle-aged Frangipani.

Availability: generally available in many areas within its hardiness range

DESCRIPTION

Height: 20 to 25 feet

Spread: 20 to 25 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: round; vase shape

Crown density: open

Growth rate: slow

Texture: coarse

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Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: entire; undulate

Leaf shape: elliptic (oval); obovate

Leaf venation: banchidodrome; 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

Flower

Flower color: pink; red

Flower characteristics: fall flowering; pleasant fragrance; spring flowering; summer flowering; very showy

Fruit

Fruit shape: elongated

Fruit length: 6 to 12 inches

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; no significant litter problem; persistent on the tree

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; 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; tree wants to grow with several trunks but can be trained to grow with a single trunk; 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: stout

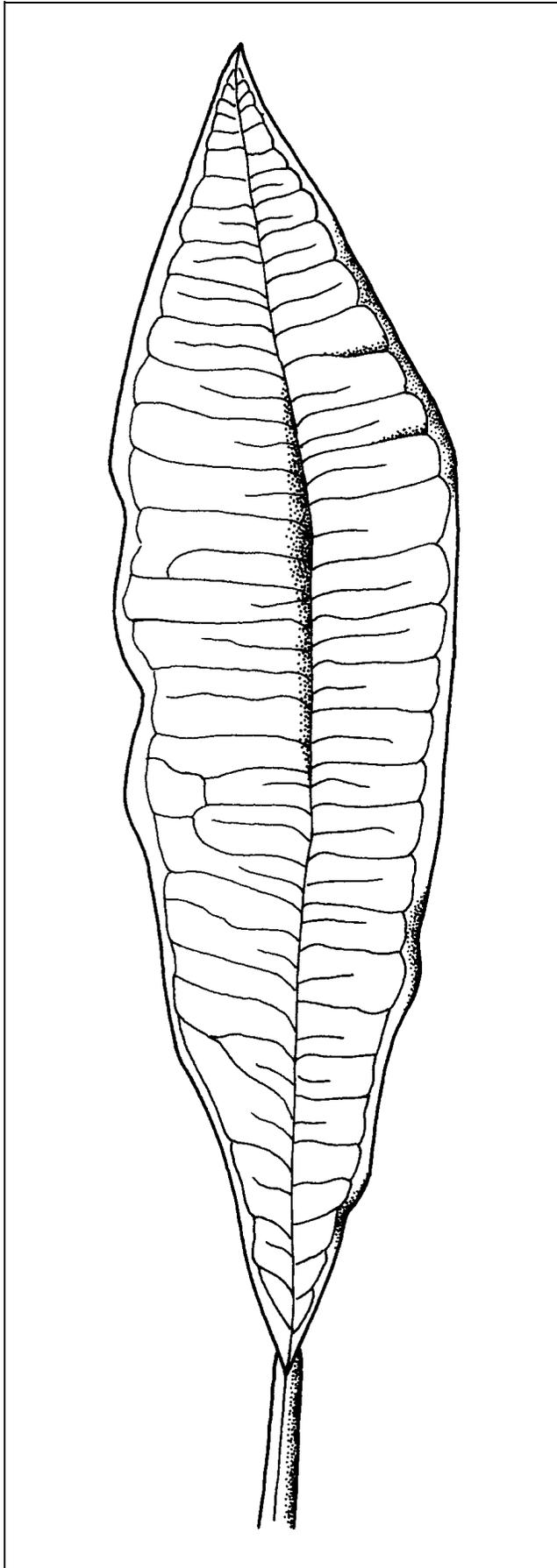


Figure 3. Foliage of Frangipani.

Culture

Light requirement: tree grows in part shade/part sun;
tree grows in full sun

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

Drought tolerance: high

Aerosol salt tolerance: high

Soil salt tolerance: moderate

Other

Roots: surface roots are usually not a problem

Winter interest: tree has winter interest due to
unusual form, nice persistent fruits, showy winter
trunk, or winter flowers

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

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.