

# *Rhizophora mangle*: Red Mangrove<sup>1</sup>

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## Introduction

Red mangrove is one of the most valuable trees for creating and preserving shorelines in south Florida and the Caribbean Basin. Sediments depositing among their adventitious prop roots can eventually build up to create land. Seeds often germinate while they are still on the tree. After they drop, they float to a new location where they can begin growing in the sediment below the water surface.

## General Information

**Scientific name:** *Rhizophora mangle*

**Pronunciation:** rye-ZOFF-for-ruh MAN-glee

**Common name(s):** red mangrove

**Family:** *Rhizophoraceae*

**Plant type:** tree

**USDA hardiness zones:** 10 through 11 (Figure 2)

**Planting month for zone 10 and 11:** year round

**Origin:** native to Florida, the West Indies, Mexico, Central America, and South America

**UF/IFAS Invasive Assessment Status:** native

**Uses:** reclamation plant



Figure 1. Full Form—*Rhizophora mangle*: red mangrove

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Figure 2. Shaded area represents potential planting range.

## Description

**Height:** 20 to 75 feet

**Spread:** 20 to 30 feet

**Plant habit:** round

**Plant density:** dense

**Growth rate:** moderate

**Texture:** medium

## Foliage

**Leaf arrangement:** opposite/subopposite

**Leaf type:** simple

**Leaf margin:** entire

**Leaf shape:** elliptic (oval)

**Leaf venation:** none, or difficult to see

**Leaf type and persistence:** evergreen

**Leaf blade length:** 1½ to 6 inches

**Leaf color:** dark to medium green on top, paler green underneath with tiny black dots that may require a hand lens to view

**Fall color:** no fall color change

**Fall characteristic:** not showy



Figure 3. Leaf—*Rhizophora mangle*: red mangrove



Figure 4. Leaf, Under—*Rhizophora mangle*: red mangrove

## Flower

**Flower color:** white

**Flower characteristic:** emerges in clusters of 2-3 on leaf axils

**Flowering:** primarily early to mid summer, but also year-round



Figure 5. Flower—*Rhizophora mangle*: red mangrove

## Fruit

**Fruit shape:** egg-shaped

**Fruit length:** 1 to 2 inches

**Fruit cover:** dry or hard

**Fruit color:** brown

**Fruit characteristic:** persists on the plant; often with a pencil shaped propagule emerging from the base, extending up to 11", and varying from light green, dark green, to reddish brown

**Fruiting:** late summer to early fall

## Trunk and Branches

**Trunk/branches:** showy; no thorns

**Bark:** reddish brown and smooth, becoming gray and slightly fissured with age

**Current year stem/twig color:** brown

**Current year stem/twig thickness:** medium





Figure 6. Fruit—*Rhizophora mangle*: red mangrove



Figure 7. Bark—*Rhizophora mangle*: red mangrove  
Credits: Gitta Hasing

## Other

**Roots:** can form large surface roots

**Winter interest:** no special winter interest

**Outstanding plant:** not particularly outstanding

**Invasive potential:** not known to be invasive

**Pest resistance:** no serious pests are normally seen on the plant

## Use and Management

Red mangroves will often be seen growing in shallow lagoons away from the land. Plants typically reach 20 feet tall, although old specimens 35 feet tall are not uncommon in undisturbed, natural settings. Plants respond poorly to pruning.

## Reference

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

## Culture

**Light requirement:** full sun

**Soil tolerances:** acidic; alkaline; sand; loam; clay; moist to wet

**Drought tolerance:** low

**Soil salt tolerances:** high

**Aerosol salt tolerance:** high

**Plant spacing:** 36 to 60 inches