

Laguncularia racemosa, White Mangrove¹

Michael G. Andreu, Melissa H. Friedman, Mary McKenzie, and Heather V. Quintana²

Family

Combretaceae, white mangrove family.

Genus

Laguncularia stems from the Latin word *laguncul*, which means "a little flask," and refers to the shape of the white mangrove's fruit.

Species

The species name, *racemosa*, comes from the Latin root *racemus*, or "a cluster" in reference to the growth pattern of the fruits.

Common Name

white mangrove

Some suggest that the common name, "white mangrove," is based on the white salt deposits that are expelled from the leaves and form surface deposits. Others speculate that the name is based on the white flowers.

Description

This native evergreen tree grows in the coastal areas of south Florida, the Caribbean, and Central America. It is generally found further upland than black (*Avicennia germinans*) and red (*Rhizophora mangle*) mangroves, and can reach heights of 30 to 40 feet in full sun. Leaves are simple, opposite, and between 1 and 3 inches long. The tops and undersides of the leaves are light green with a thick, leathery, and smooth exterior. One distinguishing characteristic of the white mangrove is the presence of two glands on the petiole just below the leaf base, where excess salt is excreted. The bark is light brown with vertical ridges and can grow a single- or multi-stemmed trunk. Inconspicuous and fragrant white flowers bloom almost year round, occurring as spikes in leaf axils or on the tips of branches. Oblong fruit pods are green to brownish and about 3/4 inches in length. Each pod contains one seed and the fruit ripens in the fall.

Storm Tolerance

White mangrove is very salt tolerant and acts as a protective barrier along coastal environments, preventing erosion and damage.

-
1. This document is FOR 263, one of a series of the School of Forest Resources and Conservation, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date June 2010. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
 2. Michael G. Andreu, assistant professor of forest systems, School of Forest Resources and Conservation; Melissa H. Friedman, biological scientist, School of Forest Resources and Conservation, IFAS, University of Florida, Plant City Center; Mary McKenzie, research assistant, School of Forest Resources and Conservation; and Heather V. Quintana, research assistant, School of Forest Resources and Conservation

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. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Millie Ferrer-Chancy, Interim Dean

Applications

Commercial/Practical

The hard and strong wood of white mangrove has been used for many purposes, from lumber and planks to fence posts and tools. The wood is particularly desirable because it's resistant to dry wood termites.

Cultural

Since early settlement, the most common uses of white mangrove were as a fuel source and for tanning leather.

Horticultural

White mangrove is not commonly used as a landscape plant because it typically grows in coastal or brackish water. However, white mangrove hedges would be a beneficial landscape addition for coastal waterfront properties because they act as a natural windbreak. In addition, white mangrove's extensive root system helps prevent soil erosion, adding a line of protection for homes of coastal residents.

Medicinal

Historically, the high tannin content in the bark of white mangrove was used as a tonic to treat fevers, skin wounds, ulcers, dysentery, scurvy, and to prevent tumors. In addition, the leaves were used as a source of minerals.

Wildlife

Mangrove forests serve as an important breeding ground for fish, crustaceans, and birds. These species are not only necessary for the food web, but some of the crustacean and fish species support local fisheries. The spatial extent of mangrove forests has declined due to coastal development. Consequently the availability of valuable marine nurseries and rookeries has declined.

References

Austin, D. F. 2004. *Florida ethnobotany*. Boca Raton, FL: CRC Press.

Borrer, D. J. 1988. *Dictionary of root words and combining forms* (1st ed.). Mountain View, CA: Mayfield Publishing Company.

Floridata.com. 2003. *Conocarpus erectus var. sericeus*, Retrieved from http://www.floridata.com/ref/C/cono_ere.cfm

Haehle, R. J. and J. Brookwell. 2004. *Native Florida plants: Low-maintenance landscaping and gardening*. Lanham, MD: Taylor Trade Publishing.

Nelson, G. 1994. *The trees of Florida: A reference and field guide*. Sarasota, FL: Pineapple Press.