

## Learning about Black Mangrove *Avicennia nitida*

Black mangroves are often thought of as only growing in tropical regions such as Costa Rica and Panama. However, black mangroves are also found in warmer regions of the United States, such as the southern tip of Louisiana and Florida. Black mangrove is one of three types of mangrove plants that grow in the United States. The other two are red mangroves (*Rhizophora mangle*) and white mangroves (*Laguncularia recemosa*) also grow in the United States. Black mangrove is the only mangrove plant that grows in Louisiana.

**Characteristics.** Black mangrove is an evergreen shrub or small tree, 3-12 meters in height. *Pneumatophores*, pencil-like projects that often rise 5-10 cm, can be found along the horizontal roots. The bark is dark gray or brown and smooth on small trunks. Leaves are opposite, lance-shaped and are thick and leathery. They are 5-11 cm long and 2-4 cm wide. Fine hairs on the underside of the foliage give it a grayish hue.

**Fruit.** The seed is flat, fuzzy and tear-drop shaped, 2-3 cm in length and 1-2 cm in width. As seeds ripen, they turn from bright green to a greenish-yellow. If seeds drop from the shrub into water, the seed coat will loosen and fall off. The cotyledons will swell and open, with the primary root emerging from the widest end.

**Geographic Range.** Black mangroves are found along warm coasts of the United States: Florida, southern Louisiana and southern Texas. It is common in mangrove swamp forests, mainly on the landward side in brackish water, in mud flats of tidal zones of protected silty shores, and at the mouths of rivers. In Louisiana, there is a large community of black mangroves in the Port Fourchon and Grand Isle area. This community is at the northernmost edge of the black mangrove's natural geographic range. It only reaches shrub-size because of cold stress. There are other black mangrove communities scattered throughout the Mississippi River delta.

### Additional Information.

- Mangrove flowers are an excellent source of honey. Flowers are found in clusters on the growing tip of stems and are fragrant.
- Surfaces of the leaves are often covered with scattered salt crystals.
- There are more than 50 species of mangroves found throughout the world.
- Four major factors limit the distribution of mangroves: climate, salt water, tidal fluctuation, and soil type.
- Red mangroves are easily identified by their "prop roots", which are tangled, reddish, aerial roots that branch off from the trunk and lower branches. These prop roots look like giant fingers anchoring the plant in the water.
- White mangroves have no visible aerial root system. The easiest way to identify this plant is by its three-inch long, elliptical (rounded at both ends) leaves. The leaves are yellowish in color and have two distinguishing glands at the base of the each leaf blade where the stem begins.
- Red mangroves are located closest to the water line, followed by black mangroves a little higher up in elevation, and then finally the white mangroves.
- Mangroves provide physical habitat and nursery grounds for a wide variety of marine organisms.
- Mangroves serve as storm buffers by reducing wind and wave action in shallow shoreline areas.

### References:

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Photos by Pam Blanchard