

Gleditsia aquatica, Water Locust¹

Michael G. Andreu, Melissa H. Friedman, and Robert J. Northrop²

Family

Fabaceae, legume or pea family

Genus

Gleditsia is the name of the locust genus. Linnaeus, who is also known as the father of taxonomy, gave the name to this genus in 1748 to honor his colleague, Johann Gottlieb Gleditsch, who directed the Berlin Botanical Gardens.

Species

The species name *aquatica* comes from the Latin word *aqua*, which means “water,” and refers to the tree’s preference for wet or boggy soils.

Common Name

Water locust

The name “water locust” is a direct translation of the scientific name of this tree, with *Gleditsia* referring to the locust genus and *aquatica* translating to water.

Description

This deciduous tree is native to Florida and its natural range stretches from South Carolina to central Florida, across Louisiana to eastern Texas, and up the Mississippi River valley to southern Illinois and Indiana. Water locust can grow well in both sunny and shady conditions as long as it receives plenty of water. It generally reaches 75 feet in

height, but heights of up to 90 feet have also been reported. The leaves are bipinnately compound and are 12–30 inches long. Leaflets are oval in shape, 1–3 inches long, have a shiny surface and smooth edges, and occur in 6–14 pairs on a leaf. Three- to 5-inch-long thorns may protrude through the thin, grayish-brown bark of the trunk and branches. Male and female flowers are small, greenish white, and bell shaped. Flowers bloom in late spring and appear in clusters on soft, vertical, twig-like structures that only flowers grow on. Fruits are 1- to 2-inch-long flat pods that are dark brown and shiny. Pods mature late in the summer months, are dehiscent or open on their own when ripe, and contain one, flattened, round seed, rarely exhibiting up to three.



Figure 1. Water Locust (*Gleditsia aquatica*), Tosohatchee Wildlife Management Area, Orange County, FL, July 2012. Credits: Mary Keim, CC BY-NC-SA 2.0, <http://flic.kr/p/cFNUaS>

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2. Michael G. Andreu, associate professor; Melissa H. Friedman, research scientist; School of Forest, Fisheries, and Geomatics Sciences; and Robert J. Northrop, Extension forester, UF/IFAS Extension Hillsborough County; UF/IFAS Extension, Gainesville, FL 32611.

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Allergen

Pollen from *Gleditsia* spp. is moderately allergenic.

Applications

Commercial/Practical

Water locust wood is hard and strong and has been used to make fence posts over the last century. Additionally, the wood is desirable for cabinetry, although this is less well known because lumber from this tree is generally scarce.

Horticultural

Water locust's wide, spreading root system and affinity for hydric conditions makes it a useful specimen for erosion control on wet banks of freshwater systems. While not widely available, planting this tree in residential yards or other public locations may be less than ideal, since the long and sharply pointed thorns on the main trunk and branches can be hazardous.

Additional References

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