

GUAZUMA

West Indian elm, Bay Cedar

Guazuma ulmifolia

Malvaceae

ECHO® PLANT INFORMATION SHEET

Description

Guazuma is a small to medium-sized tree that grows 2-30 meters (m) tall, with a trunk that is 30-60 centimeters (cm) wide. Its leaves form a compact, rounded canopy, remaining green throughout the year (except in areas with a long dry season). The sapwood and heartwood are light brown and pink to brown, respectively. Flowering occurs during most of the year, with peak bloom times dependent on location. Mature fruit capsules are hard, black, and bumpy, containing many small seeds.

Origin

Guazuma is native to the Caribbean and tropical America.

Uses

During the dry season, when pasture grass is less abundant, guazuma can be a very vital source of fodder for livestock. Both the leaves and fruit are fed to cattle, but too much fruit can lead to intestinal obstruction in cattle. Within pastures, scattered guazuma trees provide shade. Planted around the borders of pastures, they also serve as living fence posts.

The wood is a source of fuelwood/charcoal and is used to make products such as boxes/crates, shoe horns, and tool handles. Used for light construction, the wood is said to be easy to work with but susceptible to termites and not very durable. Rope and twine are made with the bark and young stems.

Crushed seeds, soaked in water, have been used to treat diarrhea, dysentery, colds, coughs, contusions, and venereal disease

Common Names

- Spanish
 - Guasimo
 - Guácima
- French
 - bois d'orme

Cultivation

- **Elevation** - to 1,200 m in the tropics
- **Rainfall** - 500 - 1700 mm, with 700-1500 mm being optimal
- **Soil Types** - Does well in most well drained soils with pH 5.5 - 7.5; colonizes disturbed areas
- **Temperature Range** - 10° - 36° C, with 22-32°C being optimal
- **Day Length Sensitivity** - Short day (<12 hours)
- **Light** - Prefers full sun

Guazuma can be propagated from seeds, cuttings and root stumps. Seed germination (60 to 80% for fresh seed) is maximized by pouring boiling water over the seeds, letting them soak for 30 seconds, and then draining the water. Seeds will germinate within 1 to 2 weeks after planting, producing seedlings that can be transplanted when 30 to 40 cm tall. When root stumps are used, leave them in a nursery until a stem diameter of 1.5 to 2.5 cm is reached.

Harvesting and Seed Production

Fodder production is enhanced by regular pruning. Guazuma trees in Honduras, pruned four times in a year, produced 10 kg/tree of dry matter consisting of leaves and young stems.

Pests and Diseases

Guazuma does not have serious insect or disease problems. Occasional problems have been caused by defoliating insects (primarily *Phelypera distigma*) and a stem borer (*Aepytus* sp.).

Cooking and Nutrition

Though the seeds are edible, fresh or cooked, it is used more as a food for livestock than humans. Crude protein is higher in the young leaves (16 to 23%) than young stems (7 to 8%). In vitro dry matter digestibility ranges from 56 to 58% for young leaves and 31 to 36% for stems.

References

Ecocrop: <http://ecocrop.fao.org/ecocrop/srv/en/cropView?id=6562>;

<http://ecocrop.fao.org/ecocrop/srv/en/dataSheet?id=6562>

Orwa C, A Mutua, Kindt R , Jamnadass R, S Anthony. 2009 Agroforestry Database:a tree reference and selection guide version 4.0.
http://www.worldagroforestry.org/treedb/AFTPDFS/Guazuma_ulmifolia.PDF