

Sugar Maple

Acer saccharum

Hard Maple

Sugar Maple, often colloquially called hard maple, is one of the largest and more important of the eastern hardwoods. One of the earliest trees to break dormancy in spring, it is tapped for syrup. One gallon of syrup is made from reducing 35-40 gallons of sap. The wood is valued for furniture, flooring, countertops, gunstocks, cutting blocks, bowling pins, and musical instruments. Growth is slow, but Sugar Maples are long lived, more than 300 years, and will attain more than 100 feet in height. Important as wildlife trees, Sugar Maples provide browse for deer, rabbits, and porcupines; pollen for bees and other insects; and seed for squirrels. Cavity nesters frequent the tree. Its northern range overlaps with its first cousin, the Red Maple, though it doesn't extend as far south and is rarely found south of the Ohio River Valley.



Identification

Leaves

Opposite, simple palmate, 3-6 inches, five lobed (3 full with 3 points, 2 partial often only single pointed), green above and lighter green below.



Bark/Wood

Variable, but generally grayish brown. Furrowed at maturity. Wood is heavy, close grained, and light brown in color.



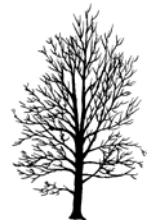
Flower/Fruit

Monoecious. Yellowish, small, clustered, hanging from stems appearing with leaves. Double, winged 1 inch horseshoe samaras turning brown in autumn.



Form

Medium to tall tree with very dense elliptical crown. Strong lateral roots with extensive branching.



Uses

Principal source of maple syrup. Concentration by evaporations produces the maple syrup in a 40:1 ratio. Wood is highly valuable for flooring, countertops, gunstocks, cutting blocks, and veneers. Bird's eye grain especially prized.

Ethnobotany

Native Americans used the bark as an analgesic and as a remedy for hives and muscle aches. Tea brewed from the inner bark was used to treat cough and diarrhea.

Native Distribution

Restricted to cool, moist climates, Quebec westward to Ontario, south to the Ohio River Valley.

Establishment

In drier climates, shade is necessary for seedling survival. Supplemental moisture beneficial.

Growing Conditions and Culture

Mature Size 100'Hx50'Wx3'dbh
 USDA Zone 3-8
 Light Requirements Shade Tolerant

Soils Varied
 Drought Tolerant? No
 Inundation Tolerant? No

Pests/Damaging Agents

New growth is browsed by many mammals. Diseases of Sugar Maple generally deform, discolor, or decrease volume, but seldomly kill the tree. Heartwood rot common.

Similar Species

Red Maple
 Sugar maple flowers are yellow vs red. Sugar Maple lobes have three distinct points; Red Maple more serrated and whitish underneath. Scaly plates on bark of Red Maple. Horseshoe samara vs angular.

Propagation

Seed - cold stratification for 35-90 days.

Source(s)

Orion Farms, Philadelphia, NY.