

## Maple Trees and Their Fruit

Lori C.

Rutgers Master Gardener of Hunterdon County

Maples are deciduous trees with over 150 varieties in the Acer genus. They can be found across North America, much of Europe, East Asia, and in the Southern Hemisphere. The size, growth rate, and shape of the trees vary by species with the Japanese maple about eight feet tall, while the sugar maple can grow to 100 feet. Many maples are valued for their size as shade trees and for their colorful fall leaves, ranging from yellow to bright orange and red. Some species have interesting bark.





The ideal soil is rich and well-drained. Maples do well in most pH ranges, but many prefer slightly acidic soil. Most thrive in full sun to part shade, with some requiring protection from the sun to prevent leaf scorch.

Some fast-growing maples, such as red or silver maples, have soft wood and may be damaged by ice storms, while slower-growing maples have hard wood and require less maintenance. The bark of most maples is thin and can easily be damaged,



exposing the tree to disease and insects. The feeding roots of most maples are shallow, so protecting the roots and trunk with three-to-four inches of mulch is helpful.

Maples may experience trouble from borers, aphids, scales, leaf spots, tar spot, anthracnose, bacterial leaf scorch, canker and collar rot.



The fruit consists of winged seeds, called samaras, joined in pairs. The seed is only winged on one side. Maple fruit are called keys, as the shape is similar to that used to wind a clock. Using seeds to produce new plants is referred to as seed dispersal. A maple uses the wind for dispersal, which allows the seeds to travel a good distance from the parent. This enables the maple to expand to new territory without interfering with the parent's growth.

When the seeds fall, they gracefully perform a rotating motion. Nicknamed "helicopters", they resemble a helicopter rotor blade descending without power. Not all winged seeds rotate like the maple. Its rotation is due to the center of gravity being located near the terminal end of the wing.

## Sources:

Clemson Cooperative Extension factsheet: Maple

Trees of Stanford: Acer (Maple) Notes

University of Notre Dame, Biomechanics in the Wild: Whirlybirds, Helicopters & Maple seeds

## **Photo Credit:**

Nancy M. - Rutgers Master Gardener of Hunterdon County