

RED MAPLE

(*Acer Rubrum*)



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Red maple, often called scarlet maple, swamp maple or soft maple, is a medium-sized tree 50 to 70 feet high, although it occasionally reaches a height of 125 feet and a diameter of 5 feet.

Red maple ranges from Manitoba south to the Gulf of Mexico and east to New Brunswick and Florida. Generally found in swampy sites, it may also occur in drier locations, particularly in the Northeast where it grows with white pine (*Pinus strobus*) and northern hardwoods on moderately moist, sandy loam soils or rocky uplands.

In the leafless landscape of March and April, the bright red flowers of red maple are conspicuous and colorful. The characteristic maple keys, or fruits, continue the color while they are young, gradually becoming green as leaves emerge.

The leaves are 3 to 4 inches long and nearly as broad, occurring opposite one another on the twigs. They are simple, mostly 3-lobed, and coarsely toothed. The upper surface is smooth and bright green with a lighter green, finely pubescent undersurface. Bark on the branches and trunks of young trees is smooth and light gray, breaking into long, narrow scaly plates on older trees.

It is often difficult to distinguish red maple from some of the other maples growing on a cut over right-of-way. In summer, red maple may be distinguished from silver maple (*Acer saccharinum*) by the absence of a silvery white leaf undersurface and by sharp-angled sinuses between the leaf lobes. The leaf sinuses of silver maple are U-shaped. Both species may be distinguished from sugar maple (*Acer saccharum*) by their smaller, heavier-textured leaves which are less coarsely toothed. Also, the center lobe of the sugar maple leaf is somewhat square, rather than triangular.

In winter, red maple may be distinguished from silver

Whether a plant species is desirable or undesirable often depends on the situation in which it occurs. This is true of all the trees to be discussed in this series of articles on identification. For example, maple (*Acer rubrum*) is a useful ornamental in landscape plantings because of its early red flowers, pleasing growth habit, and spectacular autumn foliage coloring. It is a nuisance on the right-of-way because of its resistance to chemical treatment. Similar comments could be made about the other species to be described. They have ornamental, and economic value, but not on a utility right-of-way which must be kept clear of tall vegetation. Strong resistance to treatment makes it especially important that a few "problem" species be clearly recognized when they are encountered in clearance work. Otherwise there may be needless disappointment, and waste of time and material through inappropriate treatment. J. H. Kirch.

maple by its red lustrous twigs and the absence of a pungent odor from broken twigs. Both of these species have numerous round red buds. The buds on sugar maple are conical, sharp-pointed, and brown. The twigs of sugar maple are brown, marked with pale lenticels.

In spring the fruit clusters of red and silver maple generally develop from lateral buds; those of sugar maple are from terminal buds on growth of the current year. The fruits of red and silver maple mature in early summer, but sugar maple keys do not mature until September.

All maples are readily controlled by dormant applications of brushkiller mixtures of 2,4-D and 2,4,5-T or by 2,4,5-T alone, in oil. Applications are generally made with the basal spray or dormant cane technique. Water-borne foliar applications of 2,4-D and 2,4,5-T are not as effective as dormant oil sprays, particularly on sugar maple. Effectiveness can be improved by adding 10 to 20 gallons of oil per 100 gallons of solution, and by using the modified-basal spray technique.

Picloram as a foliage spray is very effective in controlling red maple. Ammonium sulphamate is often used where crops are present along the right-of-way.

Helicopter applications of invert emulsions of 2,4-D and 2,4,5-T have controlled red maple, but rates in excess of 6 pounds per acre of each chemical are needed for complete kill. Recently the addition of monosodium methane arsonate to the water phase of invert emulsions of 2,4-D and 2,4,5-T has increased top and root kills on red maple.

Aerial sprays of 1 1/2 to 2 pounds per acre of picloram in 15 to 20 gallons of water plus thickener have given good root kill of red maple in the Appalachian Mountain region. On moist lowland sites, lower rates have been sufficient.