

Plant Fact Sheet

SILVER MAPLE *Acer saccharinum* L. Plant Symbol = ACSA2

Contributed by: Kansas State University Forestry Research and USDA NRCS Plant Materials Center Manhattan, Kansas



Figure 1 Silver maple foliage. Photo by Paul Wray, Iowa State University

Alternate Names

soft maple, silverleaf maple, white maple, river maple, swamp maple, water maple

Uses

Biofuels: The species is one of only a few that has the growth rate for serious consideration for biofuel production. Though shrub willow and poplar hybrids are currently receiving greater attention, silver maple has been tested for this use in the Midwest.

Forest Buffers: Silver maple is ideal for riparian forest buffer installations due to its common presence in such sites. It should be planted because of its rapid growth and early maturity. Where silver maple is present in nearby stands, it should not be planted because it produces a prolific quantity of seed. In any planting, it is preferred over box elder.

Ornamental: Its use should be limited as it becomes a liability with age.

Wildlife: Silver maple is not notable for its attractiveness to wildlife, but as a source of fast shading, large woody debris, and litter in streams the species has few rivals. It seems to be a preferred nesting species for Baltimore orioles.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description and Adaptation

Acer saccharinum L., silver maple is one of the fastest growing deciduous trees of the eastern and mid-western forests. It can grow 3-7 feet per year. Silver maple shares many of its sites with red maple, but the two species are easily distinguished. Silver maple is typically a much larger tree with a much larger fruit (called a samara), but the two species are the only native maples with spring seed dispersal. The leaves of silver maple are often larger and more deeply fissured between lobes than those of red maple. Leaves are simple, opposite, deciduous, deeply lobed, narrow, and angled.

Silver maple is adapted wherever adequate moisture is assured, but grows best on well drained but moist river bottom soils. It cannot generally compete with other species in an upland environment (Gabriel 2009). The brittle nature of its wood limits the longevity of the species where high winds or heavy ice accumulations are common. As a pioneer species, silver maple is shade intolerant.



Silver maple distribution from USDA-NRCS-PLANTS Database.

Establishment

Silver maple is among the easiest of trees to establish from seed or transplants. Its rapid growth competes well with other plants, although grass and weed control will improve survival and allow for even better growth. The seed germinates rapidly, and streambanks underneath mature trees are often covered with seedlings shortly after seed dispersal in the late spring, especially along the waterline. The rapid growth means that seedlings are almost always out-planted as 1-0 stock.

Management

In buffer plantings the only management needed is grass and weed control and livestock exclusion. Silver maple is not usually damaged by deer browsing, and is not a preferred target of gypsy moth caterpillars.

On sites where natural regeneration produces too many saplings thinning should be carried out to allow other species to survive.

Pests and Potential Problems

Like other maples, silver maple is susceptible to a wide range of insect and disease problems. Gray mold spot is a foliage disease. A host of root and trunk rots attack silver maple. Because of its brittle wood properties, it is highly susceptible to ice damage.

Cultivars, Improved, and Selected Materials (and area of origin)

There are 58 cultivars names listed on the U.S. National Cultivated Plants list.

A few horticultural selections may exist in the market, but for conservation plantings seedlings from regional wild sources should be utilized.

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