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Maple, Silver (spp.)

Leaf Color Green

Fall Color Yellow

This plant has attractive fall colors.

Leaf Identification

Type: Simple

Arrangement: Opposite

Venations: Palmate

Margins: Incised and parted

Shapes: Star-shaped

Length: 2in./5cm to 8in./20cm

Fruit Color Brown and green

The fruit is dry and elongated.

Environment

This plant tolerates drought, flooding and some salt.

This plant will grow in very dry to wet or submerged soil.

Suitable soil is well-drained/loamy, sandy or clay.

The pH preference is an acidic to slightly alkaline (less than 6.8 to 7.7) soil.

Landscape Uses

- Woodland garden
- Erosion control

Attributes and Features

- Naturalizing
- Attracts birds
- Attractive fruit
- Fruit can be a litter problem
- Ozone tolerant

Acer saccharinum

Silver Maple, River Maple, Soft Maple

Aceraceae (Maple)

Type Tree, woody plant

Hardy range 3A to 9A

Height 60' to 70' / 18.20m to 21.40m

Spread 50' to 75' / 15.20m to 22.80m

Growth rate Fast

Form Vase shaped

Exposure Partial shade or partial sun to full sun

Persistence Deciduous

Bloom Color Red

Bloom Time Spring

Native Habitat

Stream banks, flood plains and lake edges in loose, well-drained alluvial soil in eastern North America. Found only along streams in the drier portion of its range. Occasionally found on very low pH soil (2.2-3.3). Adapted to survive long periods of inundation.

Native to the following North American locales: Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Iowa, Illinois, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Maine, Michigan, Minnesota, Missouri, Mississippi, New Brunswick, North Carolina, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Quebec, Rhode Island, South Carolina, South Dakota, Tennessee, Virginia, Vermont, Wisconsin, West Virginia

Crown, Branch and Twig

This plant is asymmetrical with a fine texture and has a moderately dense crown.

This plant's bark is not showy.

Branches or twigs are of medium thickness and are thin.

This plant typically grows with one trunk.

This plant has low flammability. National champion is 61 x 82 feet in Iowa.



Culture Notes

Silver Maple will grow in areas which have standing water for several weeks at a time. These trees love water and roots proliferate once they find it - but they do not grow toward water. It grows best on acid soil (it tolerates unusually low soil pH) which remains moist, but adapts to very dry, alkaline soil with good growth. Foliage may turn yellow in alkaline soil requiring regular applications of manganese to keep foliage green. Leaves may scorch in areas with restricted soil space during dry spells in the summer but will tolerate drought if roots can grow unrestricted into a large soil volume. Despite problems this tree causes due to weak branches and messy habit, it grows fast and will continue to be planted. Trees can live 130 years or more in the forest. Try one of the improved cultivars.

Silver Maple can be a prolific seed producer giving rise to many volunteer trees. It often sends up sprouts from the trunk and branches producing an unkempt appearance. Branches often form poor attachments with trunk resulting in branch failure in old, mature specimens. Frequent pruning is required to develop a strong branch structure. Ice and snow loads can cause branch failure in young and old trees.

Like many other large trees, it will lift sidewalks if improperly located too close to sidewalks. There are too many other superior trees to warrant wide use of this species but it does have its place in tough sites away from buildings and people. It makes a great tree for stabilizing stream banks. This tree has little place on most residential lots due to its large size and messy habit. Trees compartmentalize decay well - better than red maples. Silver Maple is severely damaged in ice storms.

Wood weighs about 45 pounds per cubic foot. The wood is considered diffuse porous which means that there is little difference in size between the spring wood pores and the summer wood pores. Pollen on male trees can cause significant allergy problems for some people; females, such as 'Northline', generate no pollen.

Foliage summer nitrogen content on established trees in irrigated landscapes in California ranged from 2.0-3.4 percent.

Maintain adequate mulch area

Clear all turf away from beneath the branches and mulch to the drip line, especially on young trees, to reduce competition with turf and weeds. This will allow roots to become well established and keep plants healthier. Prune the tree so trunks and branches will not rub each other. Remove some secondary branches on main branches with included bark. This reduces the likelihood of the main branch splitting from the tree later when it has grown to become an important part of the landscape. Locate the tree properly, taking into account the ultimate size, since the tree looks best if it is not pruned to control size. The tree can enhance any landscape with its delightful spring flush of foliage. It can be the centerpiece of your landscape if properly located.

Pests, Diseases and Damaging Agents

Trees are susceptible to many pest problems but none so serious to warrant control. Asian long-horned beetle, a new pest in certain regions of the country since 1996, attacks and kills trees. Tunneling by beetle larvae girdles tree stems and branches. Potentially resistant trees include *Metasequoia* (Dawn Redwood), *Taxodium* (Baldcypress), *Corylus colurna* (Turkish Hazelnut), *Quercus* (Oak), *Gleditsia* (Honeylocust), *Tilia* (Linden), *Ginkgo*, and *Gymnocladus dioica* (Kentucky Coffee Tree).

This genus is sensitive to fluoride air pollution, sources of which include glass and brick manufacturing plants and other facilities that heat or treat with acid materials containing fluoride. Symptoms due to fluoride injury are more prominent on the side of the plant facing the pollution source. In deciduous plants, symptoms include leaf browning along the margins of the leaves. A dark brownish band may appear along the boundary between healthy green tissue and the affected brown tissue. Eventually, the entire leaf may turn brown. In conifers, the tips of the current year's needles turn reddish brown. Older needles are typically unaffected. If you suspect fluoride has injured this plant, look in the neighborhood for gladiolus plants. They serve as indicator plants for fluoride air pollution damage because they are very sensitive to it. Other sensitive plants include ash, maple, oak, white pine, poplar, and redbud. Plants that resist injury include birch, flowering cherry, dogwood, hawthorn, American linden, juniper, pear, spirea and sweet gum.

This plant is sensitive to damage from ozone air pollution. Damage can occur in urban or rural areas because ozone can travel long distances away from where it is formed. Typical symptoms on deciduous trees are a flecking or stippling only on the upper side of the foliage between large veins. The small spots or flecks are white, tan or orange-red. Spots or flecks from one-eighth to one-quarter inch long appear on needles of sensitive conifers. Yellow bands that girdle the needle may form, eventually causing the tips of the needles to die and/or needles to drop from the plant. If you suspect ozone is causing damage on this plant, locate White Pines (*Pinus strobus*) in the area to see if they are damaged. White Pines are very sensitive to ozone damage and can serve as indicators of the presence of ozone in concentrations high enough to cause plant damage.

Special Notes

This plant has aggressive roots.

