

# PLANT HEALTH CARE REPORT



## Red Maple

Red maple (*Acer rubrum*) is a medium-sized shade tree that grows in most landscapes. During the summer it has deep green leaves. It is one of the earliest trees to flower in the spring and provides dramatic color in the fall. Many red maple cultivars have been selected for fall color and specific crown shapes. Armstrong Gold® is a good cultivar for narrow spaces or along street rights-of-way. 'October Glory' has a nice rounded form and beautiful orange and red fall foliage.



Red maple  
with  
growing  
season  
foliage



*Acer  
rubrum*  
'October  
Glory'

Red maple is native from Maine to Florida and west to Wisconsin and is adapted to a wide variety of acidic soils. It tolerates both very dry and moist sites but grows best in moist, well-drained soils. Growth is fastest in full sun; however, the tree will tolerate shade when it is young.

Yellowing between the veins of leaves, known as interveinal chlorosis, is a symptom of manganese deficiency. When soil pH is higher than 6.0, manganese is converted to forms that are not available to the plant. This deficiency may also occur in soils with low manganese levels or poor drainage and in trees with root disorders.

The most common cause of red maple decline is the presence of girdling roots that cause reduced water and nutrient movement to the crown. When planting, it is important to break up the root ball and laterally extend the roots away from the stem. Proper irrigation also contributes to the longevity of urban-planted red maples.

Red maple is susceptible to leaf spot diseases which may disfigure leaves and cause early defoliation. Cankers, diseases of the bark, occur mainly after severe winters. They cause branch dieback and can kill the tree if they progress into the stem. Wilt and root diseases caused by *Verticillium*, *Phytophthora*, and *Armillaria* can cause dieback of the crown and eventual death. Red maple is susceptible to several important decay fungi which attack the wood. These fungi enter through improper pruning cuts and other injuries to the stem and branches. Decay can structurally weaken the stem, increasing the potential for tree failure.

Numerous insects and mites attack red maple. The most prolific and common insect is gloomy scale (*Melanaspis tenebricosa*). Leaf-feeding caterpillars include spongy moth (*Lymantria dispar*) and tent caterpillar (*Malacosoma disstria*). Mites or midges may cause galls on leaves when they lay eggs in early spring. Aphids feed on leaves which reduces vigor. They also produce honeydew which may become colonized by black sooty mold fungi. Cottony maple scales (*Pulvinaria innumerabilis*) cause white coatings on twigs.

Sapsuckers and squirrels both wound red maple to access the sweet sap. These wounds may girdle the stem or provide entry for canker fungi.

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## Monitoring and Treatment Considerations for Red Maple

### Winter

Monitor for scale, cankers and twig borers; treat as needed. Apply dormant treatment to suppress overwintering insects. Remove dead, dying, diseased, and broken branches. Reduce or remove branches to promote appropriate structure. Expose and inspect root collar for problems; add mulch as needed but ensure mulch is not piled against the stem. Sample soil for nutrient and pH levels. Fertilize, adjust pH, and amend soil according to soil analysis.

### Mid-spring

Apply fungicide treatments to suppress anthracnose and leaf spot as needed. \*Inject flare roots to treat manganese deficiency or adjust soil pH as needed on a 3-year schedule.

## Late spring

Monitor leaf-feeding and scale insects; treat as needed. Take soil and foliar nutrient sample if micronutrient deficiency is suspected. Repeat soil pH treatment as needed.

## Early summer

Repeat fungicide treatments to suppress anthracnose and leaf spot as needed. Monitor leaf-feeding and scale insects; treat as needed.

## Mid to late summer

Monitor irrigation and soil moisture to minimize water stress, especially on newly planted trees.

## Fall

If sucking insects were problematic this past growing season, consider treating with an appropriately timed systemic product.

\*Inject flare roots to treat manganese deficiency or adjust soil pH as needed on a 3-year schedule.

\*Systemic injections are available to treat manganese deficiency. This treatment can be applied at any time except when the tree is frozen, during drought, or on trees with severe root damage. Fall treatment rates are higher than spring. Treatment should not be repeated more than once every three years.

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