

Acer rubrum 'Gerling': 'Gerling' Red Maple¹

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Introduction

This cultivar of red maple has a dense, rounded crown and is a slow grower, reaching a height of 30 feet with a wider spread. Unless irrigated or on a wet site, red maple is best used north of USDA hardiness zone 9. Trees are often shorter in the southern part of its range unless growing next to a stream or on a wet site. The newly emerging leaves and red flowers and fruits signal that spring has come. They appear in December and January in Florida, later in the northern part of its range. The seeds of red maple are quite popular with squirrels and birds. This tree is sometimes confused with red-leaved cultivars of Norway maple. It is well suited as a street tree in northern and mid-south climates in residential and other suburban areas, but the bark is thin and easily damaged by mowers. Its small stature makes it a candidate for planting near overhead wires.



Figure 1. Middle-aged *Acer rubrum* 'Gerling': 'Gerling' Red Maple
Credits: Ed Gilman

General Information

Scientific name: *Acer rubrum*

Pronunciation: AY-ser ROO-brum

Common name(s): 'Gerling' red maple

Family: Aceraceae

USDA hardiness zones: 4A through 8B (Fig. 2)

Origin: native to North America

Uses: reclamation; Bonsai; highway median; screen; shade; street without sidewalk; deck or patio; tree lawn 3–4 feet wide; tree lawn 4–6 feet wide; tree lawn > 6 ft. wide

Availability: not native to North America



Figure 2. Range

1. This document is ENH-204, one of a series of the Environmental Horticulture, UF/IFAS Extension. Original publication date November 1993. Revised December 2006. Reviewed February 2014. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

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Description

Height: 30 to 35 feet
Spread: 25 to 35 feet
Crown uniformity: symmetrical
Crown shape: round, pyramidal
Crown density: dense
Growth rate: moderate
Texture: medium

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3)
Leaf type: simple
Leaf margin: incised, serrate, lobed
Leaf shape: ovate
Leaf venation: palmate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: yellow, orange, red
Fall characteristic: showy

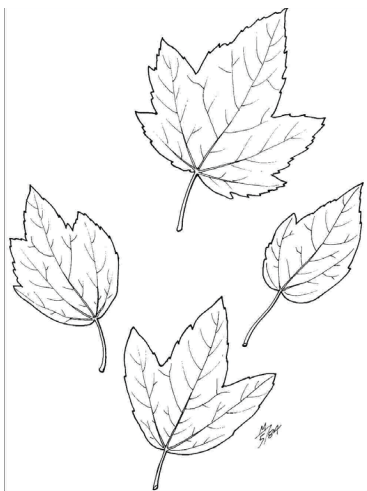


Figure 3. Foliage

Flower

Flower color: red
Flower characteristics: showy

Fruit

Fruit shape: elongated
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: red
Fruit characteristics: attracts birds; showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; not showy; typically one trunk; thorns
Pruning requirement: needed for strong structure
Breakage: resistant
Current year twig color: gray, reddish
Current year twig thickness: medium
Wood specific gravity: 0.54

Culture

Light requirement: full sun, partial sun or partial shade
Soil tolerances: sand; loam; clay; acidic; well-drained; extended flooding
Drought tolerance: moderate
Aerosol salt tolerance: low

Other

Roots: can form large surface roots
Winter interest: yes
Outstanding tree: no
Invasive potential: little invasive potential
Ozone sensitivity: unknown
Verticillium wilt susceptibility: susceptible
Pest resistance: resistant to pests/diseases

Use and Management

The outstanding ornamental characteristic of red maple is red, orange, or yellow fall color (sometimes on the same tree) lasting several weeks. This cultivar of red maple puts on a good display of fall color.

The tree makes the best growth in wet places and has no other particular soil preference, except chlorosis may develop on alkaline soil where it also grows poorly. Irrigation is often needed to support street tree plantings in well-drained soil in the south. Roots can raise sidewalks as silver maples can, but they have a less aggressive root system and so they make a good street tree. Surface roots beneath the canopy can make mowing difficult.

Red maple is easily transplanted and usually develops surface roots in soil ranging from well-drained sand to clay. It is not especially drought-tolerant, particularly in the southern part of the range, but selected individual trees can be found growing on dry sites. This trait shows the wide range of genetic diversity in the species.

A number of other cultivars are listed. Due to graft-incompatibility problems that cause the tree to break apart, preference should be given to cultivars produced on their

own roots. In the northern and southern end of the range, choose cultivars with regional adaptation. The cultivars are 'Armstrong'—upright growth habit, almost columnar, somewhat prone to splitting branches due to tight crotches, 50 feet tall; 'Autumn Flame'—45 feet tall, round, above average fall color; 'Bowhall'—upright growth habit, branches form embedded bark, graft incompatibility on grafted trees; 'October Glory'—above average fall color, excellent tree, retains leaves late, 60 feet tall; 'Red Sunset'—above average orange to red fall color, does well in the south in USDA hardiness zone 8, probably the best cultivar for the deep south, oval, 50 feet tall; 'Scanlon'—upright growth habit; 'Schlesinger'—good fall color, rapid growth rate; 'Tilford'—globe-shaped crown. Variety *drummondii* suitable in USDA hardiness zone 8.

Pests

Leaf stalk borer and petiole borer cause the same type of injury. Both insects bore into the leaf stalk just below the leaf blade. The leaf stalk shrivels, turns black, and the leaf blade falls off. The leaf drop may appear heavy but serious injury to a healthy tree is rare.

Gall mites stimulate the formation of growths or galls on the leaves. The galls are small but can be so numerous that individual leaves curl up. The most common gall is bladder gall mite found on silver maple. The galls are round and at first green but later turn red, then black, then dry up. Galls of other shapes are seen less frequently on other types of maples. Galls are not serious, so chemical controls are not needed.

Aphids infest maples, usually Norway maple, and may be numerous at times. High populations can cause leaf drop. Another sign of heavy aphid infestation is honey dew on lower leaves and objects beneath the tree. Aphids are controlled by spraying or they may be left alone. If not sprayed, predatory insects will bring the aphid population under control.

Scales are an occasional problem on maples. Perhaps the most common is cottony maple scale. The insect forms a cottony mass on the lower sides of branches. Scales are usually controlled with horticultural oil sprays. Scales may also be controlled with well-timed sprays to kill the crawlers.

If borers become a problem it is an indication the tree is not growing well. Controlling borers involves keeping trees healthy. Chemical controls of existing infestations are more difficult. Proper control involves identification of the borer

infesting the tree then applying insecticides at the proper time.

Twig borers can cause die-back of the terminal 8 to 12 inches of small-diameter branches. This is usually not serious and does not require control measures, but it can be a problem on young trees in the nursery.

Diseases

Scorch may occur during periods of high temperatures accompanied by wind. Trees with diseased or inadequate root systems will also show scorching. When trees do not get enough water they scorch. Scorch symptoms are light brown or tan dead areas between leaf veins. The symptoms are on all parts of the tree or only on the side exposed to sun and wind. Scorching due to dry soil may be overcome by watering. If scorching is due to an inadequate or diseased root system, watering may have no effect.

Nutrient deficiency symptoms are yellow or yellowish-green leaves with darker green veins. The most commonly deficient nutrient on maple is manganese. Implanting capsules containing a manganese source in the trunk will alleviate the symptoms. Test soil samples to determine if the soil pH is too high for best manganese availability. Plants exposed to weed killers may also show similar symptoms.

Tar spot and a variety of leaf spots cause some concern among homeowners but are rarely serious enough for control.