

North Carolina
Extension Gardener
 Plant Toolbox

Acer rubrum

Common Name(s): Carolina Maple; Curled Maple; Drummond's Maple; Red Maple; Scarlet Maple; Soft Maple; Swamp Maple

Previously known as: *Acer sanguineum*; *Rufacer rubrum*

Phonetic Spelling

AY-ser ROO-brum

Description

Red maple is a native, deciduous tree in the Sapindaceae (maple) family that may grow to 120 feet tall with a trunk 6 feet in diameter, but is more commonly 40 to 70 feet high and 1 1/2 to 2 1/2 feet across. It is a handsome shade tree with a rounded crown and ascending branches to a 30- to 50-foot spread. In nature, it can be found growing in upland deciduous forests, up to at least 1500 meters in elevation.

Red maple is easy to grow in average, medium to wet, well-drained soil in full sun to partial shade. It is tolerant of a wide range of soils, including clay, but prefers moist, slightly acidic conditions. It is very cold hardy and grows faster than Norway and sugar maples, but slower than silver maples.

This is one of the first trees to show color in the fall. The leaves are opposite, with three to five palmate lobes and toothed margins on long red stems. The red maple has a slightly smaller leaf than most other species of maples. Its leaves' most distinctive feature is a rough, saw-like edge. If the leaf margin, or edge, of your maple's leaves appear serrated, it is probably a red maple. The bark of young trees is smooth and silvery-gray, becoming scaly and dark with age. Small, red flowers in clusters mature in late winter, and the tree is one of the first to flower in early spring. During spring, light brown or red-winged samaras mature. In the fall the leaves turn orange-red, though the brilliance of this color can vary among individual trees. It is easy to plant and establish as a transplant of a small specimen bare-root, or balled and burlapped.

This tree is the best choice for a soft maple. It makes an excellent lawn, park, or street tree. It has some tolerance for air pollution. The light, creme-colored wood, which is known commercially as soft maple, is heavy, closed grained, and rather weak. It is used as pulpwood and in the manufacture of furniture and woodenware.

Insects, Diseases, or Other Plant Problems: In alkaline soils, it can develop manganese chlorosis. Watch for aphids, leafhoppers, borers, scale, and caterpillars. Also note that verticillium wilt attacks the vascular system and can be fatal. Canker, fungal leaf spot, and root rots may also occur. Wind and ice may break some branches. This tree has a shallow, flattened root system that may buckle nearby sidewalks or driveways if planted too close.

VIDEO Created by Elizabeth Meyer for "[Trees, Shrubs and Conifers](#)" a plant identification course offered in partnership with [Longwood Gardens](#).

Michael McCarthy Memorial Garden, All Saints Episcopal, Concord

Cultivars / Varieties:

'Armstrong' and 'Armstrong Gold', 'Autumn Fantasy', 'Autumn Flame', 'Autumn Radiance', 'Bowhall', 'Brandywine', 'Burgandy Belle' or 'Magnificent Magenta', 'Embers', 'Franksred', 'Karpick', 'October Glory', 'Red Rocket', 'Red Sunset', 'Somerset', 'Summer Red', 'Sun Valley'



'Red Sunset' Form (Daniel Stowe Botanical Garden, NC)
Jim Robbins
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Trunk
Amanda Munoz
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Leaves
Frankenschulz
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Female flowers
Wendy Cutler
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Male flowers
Wendy Cutler
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Variation in immature samara color
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Bud
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Bark (Asheville, NC)
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Whole tree
Janetandphil
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Gloomy scale
Matt Bertone



Double-winged samaras have a red color.
Carol Jacobs-Carre
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Fall Color
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Leaves
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'Bowhall' Form
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Fruit Form
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'October Glory' Fall Color Form
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'Brandywine' fall color and form
Jim Robbins
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'October Glory' Fall Color Leaf
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'Brandywine' Full Form
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'Brandywine' bark
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'Brandywine' fall leaf color
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fruit
Jim Robbins
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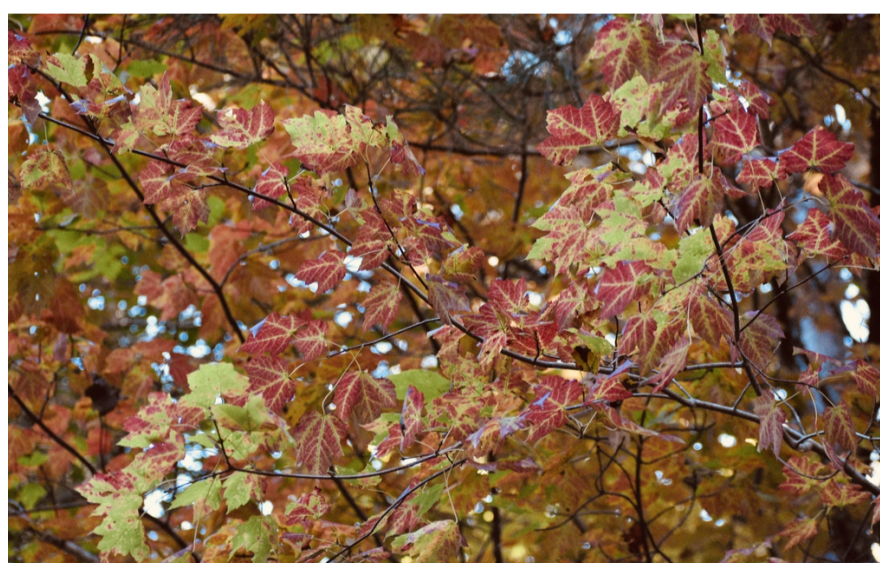
'October Glory' fall leaf color
Jim Robbins
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Fall color and form
Jim Robbins
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Fall Leaves (Warren County,NC)-Fall
Cathy Dewitt
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Leaves (Warren County,NC)-Fall
Cathy Dewitt
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Leaf color (Warren County, NC)-Fall
Cathy Dewitt
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Leaves (Warren County,NC)-Fall
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Leaves (Warren County,NC)
Cathy Dewitt
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Seeds (Halifax County, NC)
Randy Harter
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Leaves (Warren County,NC)-Late Fall
Cathy Dewitt
[CC BY 4.0](#)



Seedling (Cabarrus County, NC)-Late Fall
Hope Duckworth
[CC BY 4.0](#)



Flowering branch (Wake County, NC)-Early spring
Cathy Dewitt
[CC BY 4.0](#)



Flower Close-up (Wake County, NC)-Early Spring
Cathy Dewitt
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Form (Warren County, NC)-Early Spring
Cathy Dewitt
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Flower Close-up (Warren County, NC)-Early Spring
Cathy Dewitt
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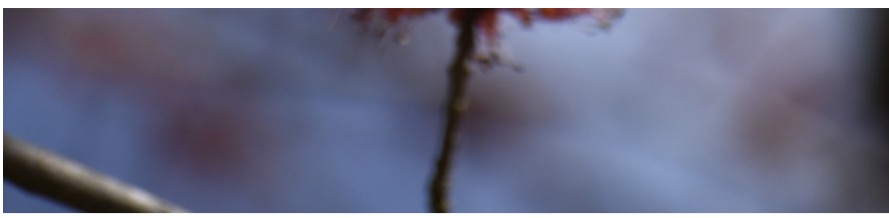


Samara and leaves (Warren County, NC)-Early Spring
Cathy Dewitt
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Form
Cathy Dewitt
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Flowers
Cathy DeWitt
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Attributes:

Genus:

Acer

Species:

rubrum

Family:

Sapindaceae

Uses (Ethnobotany):

Native Americans are known to have used parts of this tree as sweeteners, in food, and in medicine.

Life Cycle:

Woody

Recommended Propagation Strategy:

Root Cutting

Seed

Stem Cutting

Country Or Region Of Origin:

Newfoundland to Florida West to Minnesota Oklahoma and Texas.

Distribution:

throughout North Carolina.

Fire Risk Rating:

low flammability

Wildlife Value:

Bees are attracted to the early nectar source of the flowers. Members of the genus *Acer* support Imperial Moth (*Eacles imperialis*) larvae which have one brood per season and appear from April-October in the south. Adult Imperial Moths do not feed. Flower nectar attracts bees and other pollinators. Seeds are enjoyed by birds. The fruit, along with the buds, are a primary food source for gray squirrels in late winter and early spring. Sprouts are a favorite food for white-tailed deer, but this tree is moderately resistant to damage.

Play Value:

Attracts Pollinators

Buffer

Colorful

Edible fruit

Pieces Used in Games

Edibility:

The sap contains sugar and this can be used as a drink or be concentrated into a syrup by boiling off the water. The syrup is used as a sweetener on many foods. This species only yields about half the quantity obtained from the sugar maple (*A. saccharum*).

Dimensions:

Height: 40 ft. 0 in. - 120 ft. 0 in.

Width: 30 ft. 0 in. - 50 ft. 0 in.

Whole Plant Traits:

Plant Type:

Native Plant

Tree

Woody Plant Leaf Characteristics:

Deciduous

Habit/Form:

Oval

Pyramidal

Growth Rate:

Rapid

Maintenance:

Low

Texture:

Medium

Cultural Conditions:

Light:

Full sun (6 or more hours of direct sunlight a day)

Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture:

Clay

High Organic Matter

Loam (Silt)

Sand

Soil pH:

Acid (<6.0)

Neutral (6.0-8.0)

Soil Drainage:

Good Drainage

Moist

Occasional Flooding

Occasionally Dry

Occasionally Wet

Available Space To Plant:

more than 60 feet

NC Region:

Coastal

Mountains

Piedmont

USDA Plant Hardiness Zone:

2b, 2a, 3a, 3b, 4b, 4a, 5a, 5b, 6b, 6a, 7b, 7a, 8b, 8a, 9b, 9a

Screening

Shade

Wildlife Food Source

Wind Break

**Particularly Resistant To
(Insects/Diseases/Other Problems):**

Resistant to fire in landscape.

Tolerates wet soil occasionally.

Fruit:

Fruit Color:

Brown/Copper

Gold/Yellow

Red/Burgundy

Variegated

Fruit Value To Gardener:

Showy

Display/Harvest Time:

Spring

Summer

Fruit Type:

Samara

Fruit Length:

< 1 inch

Fruit Description:

The paired, winged, fruit is in a "V" shaped, red, pink, or yellow, winged samara about 3/4 of an inch long on drooping stems. They turn tan or brown when mature and drop from the plant. In North Carolina, the samaras are available from April to July.

Flowers:

Flower Color:

Red/Burgundy

Flower Value To Gardener:

Fragrant

Flower Bloom Time:

Spring

Winter

Flower Size:

< 1 inch

Flower Description:

The polygamous flowers grow in short-stemmed drooping clusters in springtime, before the leaves appear. In North Carolina, Red Maple flowers from January to March.

Leaves:

Woody Plant Leaf Characteristics:

Deciduous

Leaf Color:

Gold/Yellow

Green

Orange

Leaf Feel:

Slippery

Leaf Value To Gardener:

Showy

Deciduous Leaf Fall Color:

Gold/Yellow

Red/Burgundy

Leaf Type:

Simple

Leaf Arrangement:

Opposite

Leaf Shape:

Deltoid

Palmatifid

Leaf Margin:

Serrate

Hairs Present:

No

Leaf Length:

3-6 inches

Leaf Width:

3-6 inches

Leaf Description:

Palmately veined with 3 principal triangular lobes (sometimes 5 lobes with the two lower lobes being much smaller). Irregularly and coarsely toothed, medium to dark green above, grayish beneath with hairy veins, petiole 2-4" long and red. Brilliant red, orange, and yellow colors show during fall. The leaves are 2 to 6 inches long and are somewhat broader than long.

Stem:

Stem Color:

Gray/Silver

Red/Burgundy

Stem Is Aromatic:

No

Stem Description:

Stems slender, red, and shiny. Buds are red. Winter buds have three or more scales that overlap like shingles, with one edge covered and the other edge exposed.

Bark:

Bark Color:

Light Gray

Surface/Attachment:

Ridges

Smooth

Bark Description:

Young bark is smooth and light gray.

On old trunks, the bark is thick, dark gray and separated by vertical ridges into large, plate-like, scales.

Landscape:**Landscape Location:**

Recreational Play Area

Riparian

Woodland

Landscape Theme:

Butterfly Garden

Children's Garden

Drought Tolerant Garden

Native Garden

Nighttime Garden

Pollinator Garden

Rain Garden

Winter Garden

Design Feature:

Accent

Shade Tree

Specimen

Street Tree

Attracts:

Bees

Butterflies

Moths

Pollinators

Small Mammals

Songbirds

Specialized Bees

Resistance To Challenges:

Black Walnut

Compaction

Deer

Drought

Fire

Heat

Pollution

Urban Conditions

Wet Soil

Problems:

Problem for Horses