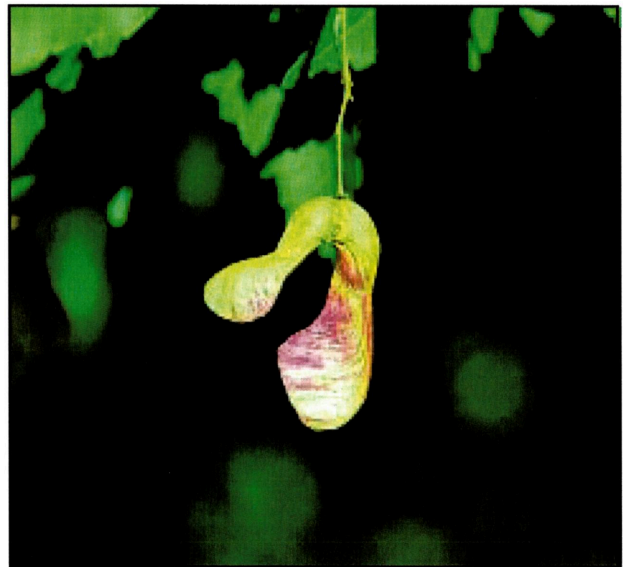# Amur Maple
(*Acer ginnala*)

General Description

A tall shrub or small tree native to northern Asia. Subject to chlorosis on heavy alkaline soils, and susceptible to 2,4-D injury. Popular as a small, multi-stemmed specimen tree. Outstanding bright reddish fall colors are influenced by soil conditions and the cultivar grown. The largest tree in North Dakota is 22 feet tall with a canopy spread of 30 feet.

Leaves and Buds

Bud Arrangement - Opposite.

Bud Color - Reddish-brown or lighter.

Bud Size - 1/8 inch, imbricate buds.

Leaf Type and Shape - Simple, 3-lobed, center lobe longest.

Leaf Margins - Doubly-serrate.

Leaf Surface - Glabrous.

Leaf Length - 1½ to 3 inches.

Leaf Width - 3/4 to 1½ inches.

Leaf Color - Dark green above, light green beneath. Bright red fall color is typical.

Flowers and Fruits

Flower Type - Borne in small panicles.

Flower Color - Yellowish-white, fragrant.

Fruit Type - Paired samaras (schizocarp).

Fruit Color - Brown to red, variable.

Form

Growth Habit - Multi-stemmed, variably rounded in outline.

Texture - Medium-fine, summer; medium-fine, winter.

Crown Height - 15 to 20 feet.

Crown Width - 15 to 20 feet.

Bark Color - Grayish-brown on older branches.

Root System - Fibrous, shallow.

Environmental Requirements

Soils

Soil Texture - Adaptable to a variety of soils, except alkaline or poorly-drained soils.

Soil pH - 4.5 to 7.5. Subject to chlorosis on alkaline soils. Does not tolerate salinity.

Windbreak Suitability Group - Groups 1, 3, 5.

Cold Hardiness

USDA Zone 2.

Water

Prefers moist, well-drained soils. Moderately drought tolerant.

Light

Full sun to partial shade.

Uses

Conservation/Windbreaks

Tall shrub or small tree for farmstead windbreaks, riparian plantings, and highway beautification.

Wildlife

Browsed by deer and rabbits. Seeds eaten by squirrels. Fair cover for songbirds.

Agroforestry Products

Food - Native maples used for sugary sap.

Medicinal - Astringent properties, and some *Acer* species are used in cancer research.

Urban/Recreational

Useful in small landscapes, borders, and masses.

Cultivated Varieties

Compact Amur Maple (*Acer ginnala* 'Compactum', syn. *A. ginnala* 'Bailey Compact')

Embers Amur Maple (*A. ginnala* 'Embers') - Produce showy red samaras in addition to red fall leaf color.

Flame Amur Maple (*A. ginnala* 'Flame')

Red Wing Amur Maple (*A. ginnala* 'Red Wing') - Produce showy red samaras in addition to red fall leaf color.

Related Species

Tatarian Maple (*A. tataricum*)

Hybrid Maple (*A. ginnala* x *A. tataricum*) - See Tatarian Maple.

Pests

Sensitive to phenoxy herbicides. Iron chlorosis commonly occurs in alkaline or poorly drained soils. Leaf spot sometimes occurs. Extracts of *Acer* species have been toxic to insect pests.

AMUR MAPLE
Acer ginnala Maxim.
Plant Symbol = ACGI

Contributed By: USDA NRCS National Plant Data Center

from Conservation Trees and Shrubs for Montana
USDA NRCS Montana State Office

Alternative Name
Siberian maple

Uses
Ethnobotanic: The young leaves were used as a tea substitute (Kunkel 1984). Black, blue, and brown dyes were obtained and dried from the leaves.

Landscaping & Wildlife: The main ornamental value of Amur maple is its red fall color and fruit. This is an excellent, low growing tree for small yards. It is sometimes used for hedges or screens. It has a fair rating for wildlife.

Agroforestry: *Acer ginnala* is used in tree strips for windbreaks. They are planted and managed to protect livestock, enhance production, and control soil erosion. Windbreaks can help communities with harsh winter conditions better handle the impact of winter storms and reduce home heating costs during the winter months.

Status
Introduced into the U.S. Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values. As of 2008, it was considered as potentially invasive in Connecticut.

Description
General: Maple family (Aceraceae). Amur maple is an introduced, deciduous large shrub or small tree. It can be grown as a multistemmed clump or trained into a small tree with a single trunk. It can also be sheared into a hedge. The leaves are simple, opposite; eight to ten centimeters long, and coarsely toothed. The fragrant, creamy whit flowers appear with the new foliage in April and May (Dirr 1997). The fruit samaras are 0.75 to 1 inch long, held in small panicles and are red to brown in color. The bark is smooth and gray on young branches and grayish brown on older branches.

Distribution: Amur maple is native to Manchuria, north China and Japan and is cultivated in gardens and parks (McMinn & Maino 1951). For current distribution, please consult the Plant profile page for this species on the PLANTS Web site.

Adaptation
Acer ginnala grows best in moist well-drained soil, but can tolerate a wide variety of soils, poor soil fertility, and are pH adaptable. This species displays excellent tolerance to dry and alkaline soils (Dirr 1997). It is reasonably drought tolerant. It will tolerate shade, but develops a better fall color if grown in full sun. *Acer ginnala* grows best in colder climates with cool summers. It can be grown in hotter areas if care is taken to prevent dehydration.

Establishment
Propagation from Seed: Pre-soak the stored seed for twenty-four hours and then stratify for one to four months at 1-8°C. Seeds can be harvested when they are fully developed but before they have dried and produced any germination inhibitors. Sow immediately in a seedbed or open frame. Spring sown seeds may not germinate for another year. Transfer to a nursery bed in the first spring (Heuser 1997). If the seeds are harvested too soon they will produce very weak plants or no plants at all (McMillan 1985).

Propagation from Cuttings: Cuttings of young shoots should be done in June or July. The cuttings should consist of two to three pairs of leaves and one pair of

buds on the base. Place cuttings in plastic, bag and seal to prevent moisture loss. They must not be allowed to wilt. Trim the cuttings below the lowest node to remove the lower leaves leaving three or four at the tip. A rooting hormone may be applied to improve rooting before planting. Insert the cuttings in the rooting medium up to half their length so the leaves don't touch each other. The cuttings should root in two to three weeks, after which they can be potted (Heuser1997).

Management
Containerized trees should not be planted in their permanent position until they are twenty centimeters or taller. Amur maple should be pruned in the winter or early spring to help develop and maintain a good single trunk tree form. Amur maple is usually pest free; however, sometimes, spraying is necessary to controls aphids.

Cultivars, Improved and Selected Materials (and area of origin)
'Red Fruit', 'Bailey Compact', 'Flame', 'Compactum' and 'Durand Dwarf' are cultivars of *Acer ginnala*. 'Red Fruit' is a collective term for types whose fruit color is brilliant red (Dirr 1990). 'Bailey Compact' has a compact shrubby form, growing between eight to twelve feet high. 'Flame' is a dense shrub or small tree with red fruits and fiery red fall color (Dirr 1990). 'Compactum' is dense and compact and shows vigorous growth reaching between five to six feet. 'Durand Dwarf' is a shrubby type, with branches more dense than 'Compactum', will grow three to five feet high.

Consult your local nurseries to choose the right cultivar for your specific landscape.

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