

## *Malus baccata* Siberian Crabapple<sup>1</sup>

Edward F. Gilman and Dennis G. Watson<sup>2</sup>

### INTRODUCTION

One of the many selections of flowering Crabapple, Siberian Crabapple is a deciduous tree with a rounded canopy of spreading branches, ultimately reaching 20 to 50 feet in height (Fig. 1). The very fragrant blooms appear in great abundance, and the single, 1.5-inch-diameter flowers are pink when in bud but open up to white. The blooms are followed in fall by long-lasting, bright red or yellow fruits which are very popular with the birds or can be used to make a delicious jelly. Some selections make a mess of a walk or driveway as the fruit falls in the fall and winter.

### GENERAL INFORMATION

**Scientific name:** *Malus baccata*

**Pronunciation:** MAY-lus back-AY-tuh

**Common name(s):** Siberian Crabapple

**Family:** *Rosaceae*

**USDA hardiness zones:** 2 through 7 (Fig. 2)

**Origin:** not native to North America

**Uses:** Bonsai; container or above-ground planter; espalier; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; trainable as a standard; narrow tree lawns (3-4 feet wide); specimen; residential street tree; no proven urban tolerance

**Availability:** generally available in many areas within its hardiness range

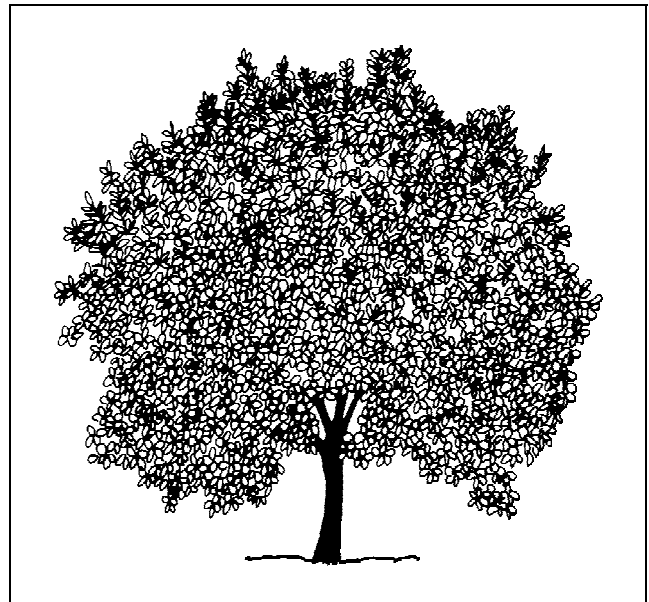


Figure 1. Middle-aged Siberian Crabapple.

### DESCRIPTION

**Height:** 20 to 35 feet

**Spread:** 15 to 25 feet

**Crown uniformity:** irregular outline or silhouette

**Crown shape:** round; spreading

**Crown density:** dense

**Growth rate:** medium

**Texture:** medium

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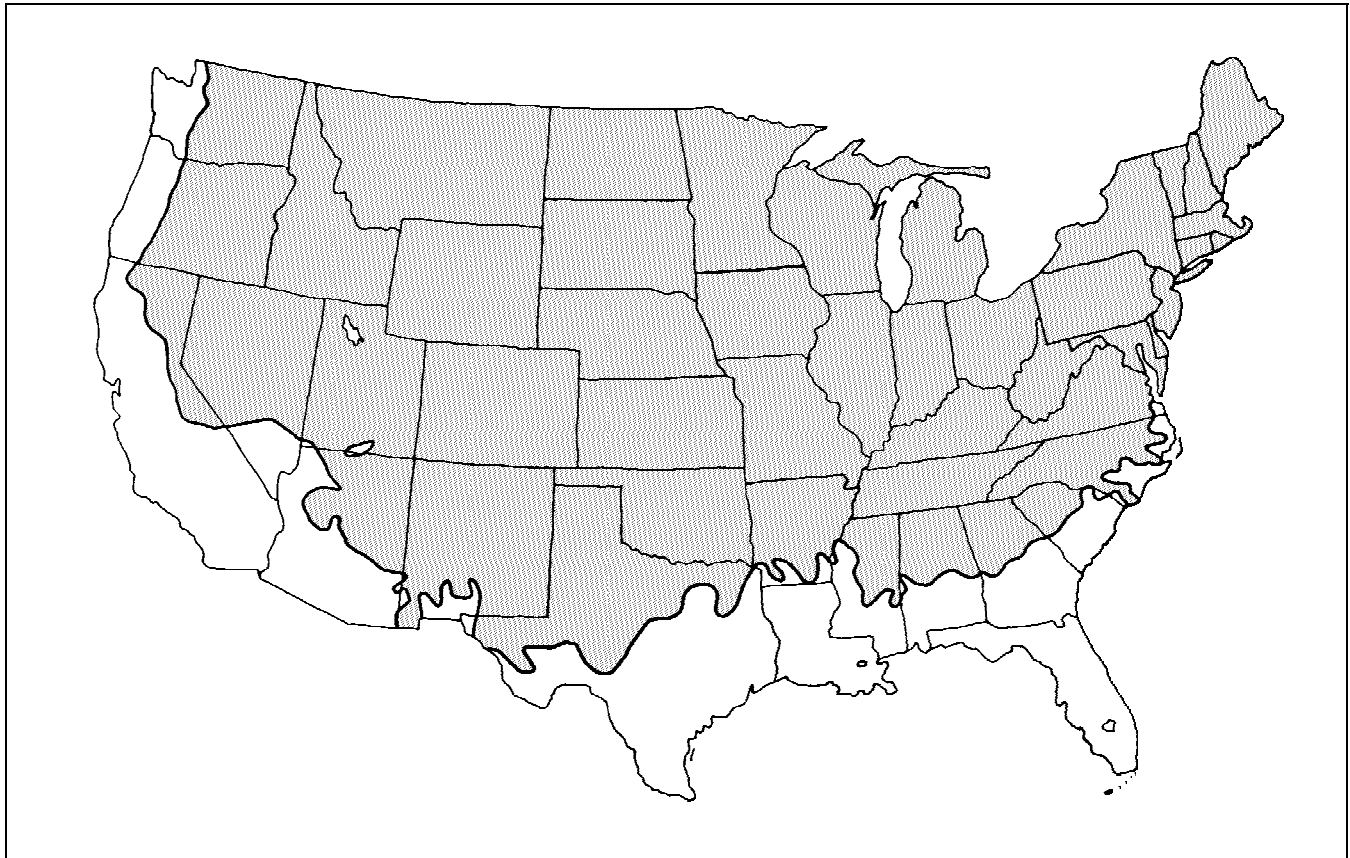


Figure 2. Shaded area represents potential planting range.

### Foliage

**Leaf arrangement:** alternate (Fig. 3)

**Leaf type:** simple

**Leaf margin:** crenate; serrate; serrulate

**Leaf shape:** elliptic (oval)

**Leaf venation:** banchidodrome; pinnate

**Leaf type and persistence:** deciduous

**Leaf blade length:** 2 to 4 inches; less than 2 inches

**Leaf color:** green

**Fall color:** yellow

**Fall characteristic:** not showy

### Flower

**Flower color:** white

**Flower characteristics:** pleasant fragrance; spring flowering; very showy

### Fruit

**Fruit shape:** round

**Fruit length:** < .5 inch

**Fruit covering:** fleshy

**Fruit color:** red; yellow

**Fruit characteristics:** attracts birds; attracts squirrels and other mammals; suited for human consumption; no significant litter problem; persistent on the tree; showy

### Trunk and Branches

**Trunk/bark/branches:** droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; routinely grown with, or trainable to be grown with, multiple trunks; not particularly showy; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns

**Pruning requirement:** needs little pruning to develop a strong structure

**Breakage:** resistant

**Current year twig color:** brown

**Current year twig thickness:** medium; thin

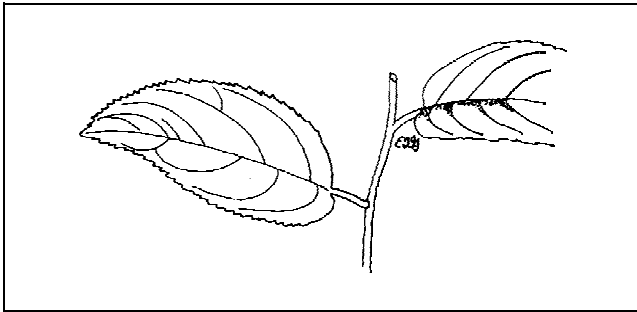
### Culture

**Light requirement:** tree grows in full sun

**Soil tolerances:** clay; loam; sand; acidic; occasionally wet; alkaline; well-drained

**Drought tolerance:** moderate

**Aerosol salt tolerance:** low



**Figure 3.** Foliage of Siberian Crabapple.

**Soil salt tolerance:** moderate

### Other

**Roots:** surface roots are usually not a problem

**Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

**Outstanding tree:** not particularly outstanding

**Invasive potential:** little, if any, potential at this time

**Ozone sensitivity:** sensitive or moderately tolerant

**Verticillium wilt susceptibility:** not known to be susceptible

**Pest resistance:** long-term health usually not affected by pests

## USE AND MANAGEMENT

Pruning should be completed by late spring to ensure next year's flower buds are not removed. Trees normally branch low, but train to develop a central trunk if planting along a street or other area where pedestrian or vehicle clearance is required. Some low branches will probably need removing as the tree grows to allow for clearance. Crabapples need occasional thinning to eliminate water sprouts or crossed-branches and to open up the crown, to help prevent leaf diseases. The crown is normally full of foliage creating dense shade.

Crabapple selections with upright branches make great street trees where a small tree is needed. Do not plant those with a low-branching, spreading form along a street or in a parking lot as the tree will require regular pruning and will not be able to develop properly. But the low-branching types make wonderful specimens where there is adequate room for horizontal spread, or in a wide highway median.

Siberian Crabapple grows in moist, well-drained, acid soil in full sun locations for best flowering and disease resistance. It is not extremely drought tolerant and not really adapted to alkaline soil, and not for

extreme west Texas. Grows very well on the Texas panhandle, where there are a number of apple orchards.

The cultivar 'Columnaris' grows in USDA hardiness zones 4 to 8a, has single white blooms, upright columnar growth, 30 feet high and eight feet wide, yellow fruit blushed red, reportedly very susceptible to scab and fireblight; 'Jackii', USDA hardiness zones 2 to 7, upright-spreading, grows 20 to 30 feet high and 15 feet wide, has pink-tinged white buds, purplish or maroon-red fruit, is reportedly disease-resistant. There are many, many cultivars - be sure to select those which are disease-resistant. Contact the Ornamental Crabapple Society, Morton Arboretum, Lisle, Illinois 60532 for more information on Crabapples.

Trees produced on their own roots are preferred. Grafted or budded trees are more uniform in habit and performance than seedling trees.

### Pests

Aphids infest branch tips and suck plant juices.

Fall webworm makes nests on the branches and feeds inside the nest. Small nests can be pruned out or sprayed with *Bacillus thuringiensis*.

Scales of various types are usually controlled with horticultural oil.

Mites are too small to see easily so can cause much foliage discoloration before being detected. Mites are usually controlled with horticultural oil.

Tent caterpillar builds tents or nests in trees in early summer or late spring. Feeding occurs outside the nest. Small nests are pruned out or simply pull the nest out of the tree and crush the caterpillars. Do not burn nests while they are still in the tree since this can cause severe damage to the tree and could start an uncontrolled fire.

### Diseases

Siberian Crabapple is susceptible to scab. Infection takes place early in the season and dark olive green spots appear on the leaves. In late summer the infected leaves fall off when they turn yellow with black spots. Infected fruits have black, slightly raised spots. Use resistant varieties.

Fire blight susceptible trees have blighted branch tips. Leaves on infected branch tips turn brown or black, droop, and hang on the branches. The leaves look scorched as by a fire. The trunk and main branches become infected when the bacteria are washed down the branches. Cankers form and are separated from adjacent healthy bark by a crack. The infected bark may be shredded. Use resistant cultivars when available, and do not over-fertilize.

Powdery mildew is a fungus which coats leaves with mycelia resembling white powder.

Rust causes brown to rusty-orange spots on the leaves. Badly spotted leaves fall prematurely. Redcedars are the alternate host.

Crabapples are subject to several canker diseases. Prune out infected branches, avoid unnecessary wounding, and keep trees healthy.