



# *Crataegus phaenopyrum* Washington Hawthorn<sup>1</sup>

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## INTRODUCTION

Washington Hawthorn grows 20 to 35 feet tall in a wide pyramidal shape (Fig. 1). The tree has a rapid growth rate when young, slowing with age. It is tolerant of many different soil types. The small, white, abundant flowers, produced in clusters in late spring are followed by showy orange to red fruit that persist into winter, if not eaten by birds. The fall leaf color is orange to red and can be quite striking.

## GENERAL INFORMATION

**Scientific name:** *Crataegus phaenopyrum*

**Pronunciation:** kruh-TEE-gus fee-no-PYE-rum

**Common name(s):** Washington Hawthorn

**Family:** *Rosaceae*

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

**Origin:** native to North America

**Uses:** Bonsai; recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; specimen; residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

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

## DESCRIPTION

**Height:** 20 to 35 feet

**Spread:** 20 to 25 feet

**Crown uniformity:** symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

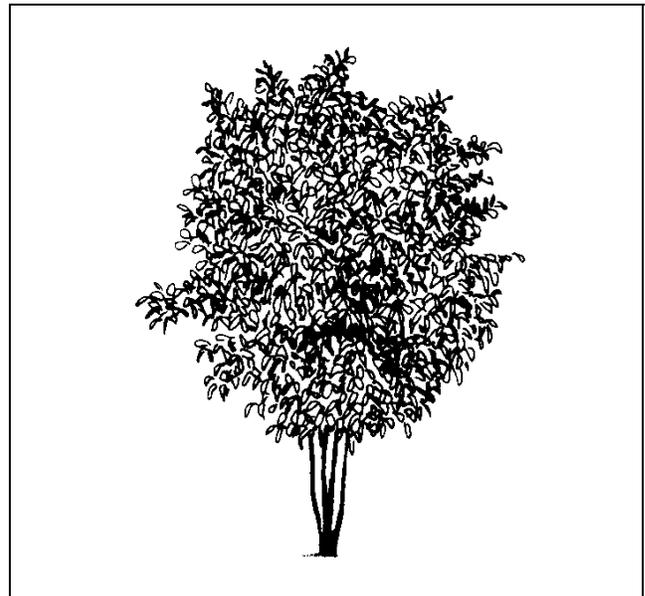


Figure 1. Middle-aged Washington Hawthorn.

**Crown shape:** pyramidal

**Crown density:** moderate

**Growth rate:** medium

**Texture:** medium

## Foliage

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

**Leaf type:** simple

**Leaf margin:** lobed; serrate

**Leaf shape:** ovate

**Leaf venation:** pinnate

**Leaf type and persistence:** deciduous

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

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Figure 2. Shaded area represents potential planting range.

**Leaf color:** green

**Fall color:** copper

**Fall characteristic:** not showy

### Flower

**Flower color:** white

**Flower characteristics:** showy; spring flowering

### Fruit

**Fruit shape:** round

**Fruit length:** < .5 inch

**Fruit covering:** fleshy

**Fruit color:** orange; red

**Fruit characteristics:** attracts birds; 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; not particularly showy; should be grown with a single leader; thorns are present on the trunk or branches

**Pruning requirement:** requires pruning to develop strong structure

**Breakage:** susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

**Current year twig color:** brown

**Current year twig thickness:** thin

### Culture

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

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

**Drought tolerance:** high

**Aerosol salt tolerance:** moderate

**Soil salt tolerance:** poor

### 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:** tolerant

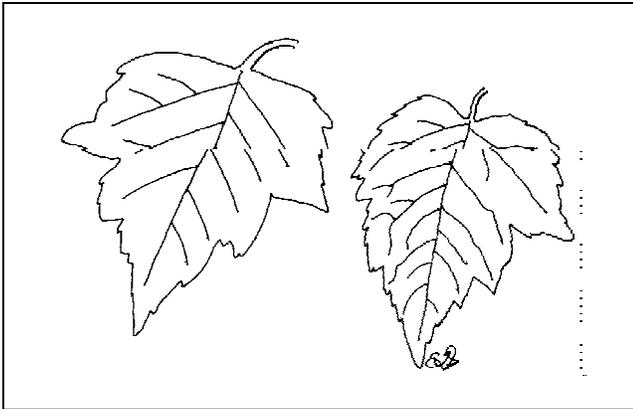


Figure 3. Foliage of Washington Hawthorn.

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

**Pest resistance:** very sensitive to one or more pests or diseases which can affect tree health or aesthetics

### USE AND MANAGEMENT

With lower branches removed, this Hawthorn is quite useful as a street tree where there will not be heavy pedestrian traffic. The thorns are about three inches long and contact with them can be painful. Left unpruned it creates a nice specimen in a lawn with lower branches persisting all the way to the ground. This characteristic also makes it quite suitable as a screen. The bright fruit makes a show in the fall and winter which many people will comment on. Like other Hawthorns, the major problem with the tree is sensitivity to a large variety of insects and diseases.

Older trees are susceptible to splitting apart in ice storms. Crotches with embedded bark are most susceptible. Prune to a single trunk to help prevent this problem.

The cultivar 'Fastigiata' has an upright growth habit.

### Pests

Aphids can be controlled with strong sprays of water from a garden hose, if the colony is in the lower branches. Sometimes the aphids themselves are not seen but the distorted growth, honeydew on the leaves, and sooty mold growing on the honeydew are obvious.

Borer attacks may be prevented if the trees are kept in good vigor with regular fertilization.

Leaf miners symptoms are brown blotches on the leaves.

Lace bugs can be a serious, though occasional, problem. The insect feeding on the undersides of the leaves causes chlorotic flecks on the upper leaf surfaces. The lower sides of the leaves are covered with small, brown, sticky flecks.

The pear slug skeletonizes Hawthorn leaves and these sawfly larvae have a slimy appearance. A few insects can be washed off with a garden hose.

Tent caterpillar nests can be pruned out while still small. Sprays of *Bacillus thuringiensis* may be used. Do not burn nests while the nests are in the tree. The injury from the fire may exceed that caused by the insects.

Scales may be controlled with horticultural oil sprays.

Spider mites are so small they can cause much foliage discoloration before being detected.

### Diseases

**Fire blight:** This disease can be severe in some parts of the country. The first noticeable symptom of fire blight is the browning of branch tips. The tips appear to be burned or scorched and the dead, brown leaves droop but hang on the tree. Cankers form and the bacteria is washed farther down the branch by rain. The bacteria, *Erwinia amylovora*, are spread from diseased to healthy twigs by rain, bees, and other mechanical means. There is no satisfactory chemical control. The disease is less of a problem if trees are not located near apple or pear orchards. Prune out blighted branch tips by cutting a foot or two beyond the diseased wood. Over-fertilizing with nitrogen fertilizer may increase tree susceptibility to fire blight.

Leaf blight attacks most Hawthorns but especially English Hawthorn. The symptoms are small reddish brown spots on the leaves which may run together. Infected leaves drop in August and severely infected trees may be completely bare.

Cedar Hawthorn rust causes orange or rust colored spots on the leaves leading to early defoliation. The fruits and twigs are also attacked. Juniper is an alternate host. Cedar-quince rust attacks fruits. Washington, Lavelle and Cockspur Hawthorn are resistant to rust diseases.

Scab causes leaf spotting and defoliation. The fruit have black raised spots on them.

Powdery mildew causes a white powdery growth on the leaves.