



Crataegus phaenopyrum 'Fastigiata' 'Fastigiata' Washington Hawthorn¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

This cultivar of Washington Hawthorn probably grows 20 to 25 feet tall in a narrow pyramidal or columnar 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* 'Fastigiata'

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

Common name(s): 'Fastigiata' 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: grown in small quantities by a small number of nurseries

DESCRIPTION

Height: 20 to 25 feet

Spread: 10 to 15 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

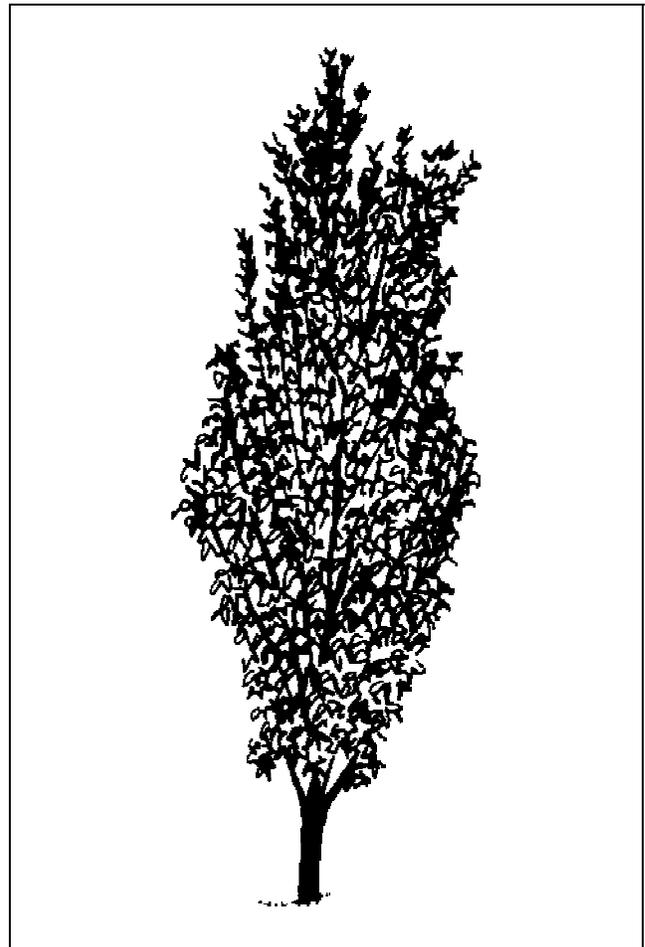


Figure 1. Young 'Fastigiata' Washington Hawthorn.

or less identical crown forms

Crown shape: columnar; upright

Crown density: moderate

Growth rate: medium

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2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



Figure 2. Shaded area represents potential planting range.

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

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: grow mostly upright and will not droop; 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; alkaline; well-drained

Drought tolerance: high

Aerosol salt tolerance: low

Soil salt tolerance: poor

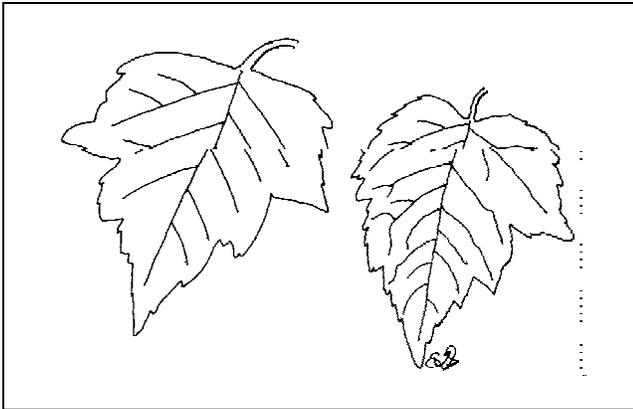


Figure 3. Foliage of 'Fastigiata' Washington Hawthorn.

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

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

This Hawthorn is quite useful as a street or median strip tree where there will not be heavy pedestrian traffic. The thorns are one to 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 if planted on eight-foot centers. 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.

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 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.