Fraxinus americana 'Autumn Applause': 'Autumn Applause' White Ash[1]

Edward F. Gilman and Dennis G. Watson[2]

Introduction

`Autumn Applause' White Ash is a male tree introduced in 1975, growing 40 to 50 feet tall and perhaps 25 to 30 feet wide, and is a cultivar of the species which is native to moist locations. The tree grows rapidly and is almost pyramidal with a round top when young, but gradually slows down and develops an oval shape. `Autumn Applause' White Ash prefers a sunny exposure where it will develop its consistently-outstanding deep red, maroon or purple fall color, whereas the species develops yellow or no fall color. Fall color often comes earlier than on other trees. It has one of the most stunning displays of fall color.



Figure 1. Young *Fraxinus americana* 'Autumn Applause': 'Autumn Applause' White Ash
Credits: Ed Gilman

General Information

Scientific name: *Fraxinus americana*
Pronunciation: FRACK-sih-nus uh-mair-ih-KAY-nuh
Common name(s): 'Autumn Applause' White Ash
Family: *Oleaceae*
USDA hardiness zones: 4B through 9A (Fig. 2)
Origin: native to North America
Invasive potential: little invasive potential
Uses: street without sidewalk; shade; tree lawn > 6 ft wide; highway median
Availability: not native to North America

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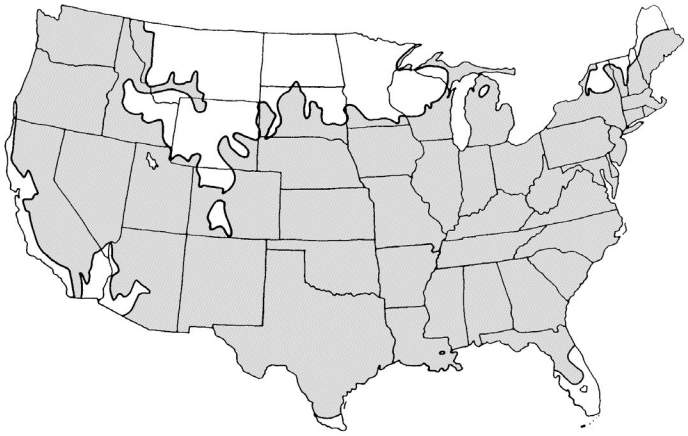


Figure 2. Range

Description

Height: 40 to 60 feet
Spread: 25 to 40 feet
Crown uniformity: symmetrical
Crown shape: round, oval
Crown density: moderate
Growth rate: fast
Texture: medium

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3)
Leaf type: odd-pinnately compound
Leaf margin: entire, serrulate
Leaf shape: ovate, lanceolate
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: purple, yellow
Fall characteristic: showy

Flower

Flower color: green
Flower characteristics: not showy

Fruit

Fruit shape: no fruit
Fruit length: no fruit
Fruit covering: no fruit
Fruit color: no fruit
Fruit characteristics: no fruit

Trunk and Branches

Trunk/bark/branches: branches don't droop; not showy; typically one trunk; thorns

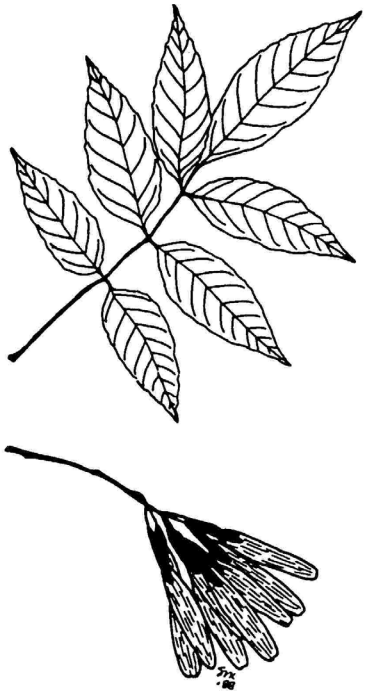


Figure 3. Foliage

Pruning requirement: little required
Breakage: resistant
Current year twig color: brown, gray
Current year twig thickness: thick
Wood specific gravity: 0.60

Culture

Light requirement: full sun, partial sun or partial shade
Soil tolerances: sand; loam; clay; acidic; alkaline; well-drained; occasionally wet
Drought tolerance: moderate
Aerosol salt tolerance: high

Other

Roots: can form large surface roots
Winter interest: no
Outstanding tree: no
Ozone sensitivity: unknown
Verticillium wilt susceptibility: susceptible
Pest resistance: sensitive to pests/diseases

Use and Management

This is a good tree for large open areas but too large for many home landscapes unless shade is needed on the roof. It is well-adapted for use as a street tree but extensive use may be unwise because of potential insect and disease problems as the tree gets older and because of its sensitivity to extreme drought. Ash decline is one of its major problems and is probably caused by a complex of conditions,

including a mycoplasma-like organism. It has taken out many trees in some locations. However, one advantage of `Autumn Applause' is the lack of seeds. Seeds are a constant nuisance on the species and can limit the species' usefulness as a street tree.

Ash which have not been properly pruned can break apart in wind storms, but White Ash has better branch structure than seedling Green Ash. `Autumn Applause' reportedly has better structure than the species with many closely-spaced branches. Be sure to space major branches along the trunk and remove those which are vigorously growing upright with narrow branch crotches. Ash also has a tendency to produce vigorous main scaffold branches opposite each other on the trunk. Remove one so there is only one at each position on the trunk. Some problems with graft incompatibility have occurred with cultivars of White Ash causing tree failure and breakage as the tree grows. Select trees propagated on their own roots.

Grow Ash in the full sun or partial shade preferably in a moist site although the tree does withstand drought fairly well. Growth will be best in slightly acidic, neutral or slightly basic soil pH. Avoid trees which have been budded onto Green Ash.

Pests

Borers can kill trees. The most common borers infesting Ash are Ash borer, lilac borer and carpenterworm. They can infest and ruin even vigorously growing trees but are most common on recently transplanted and trees stressed from other problems. Ash borer bores into the trunk at or near the soil line causing tree dieback. Lilac borer causes swellings on the trunk and limbs where the insect enters the tree. The carpenterworm larvae bore into the heartwood but come to the outside of the tree to push out frass and sawdust. Heavily infested trees can be severely weakened. Keep trees as healthy as possible by fertilizing regularly and watering during dry weather.

Aphids are often seen but are usually not serious.

In late summer, fall webworm covers branches with webbing. The nests in branches close to the ground can be pruned out when first noticed. *Bacillus thuringiensis* will control fall webworm.

The Ash flower-gall looks like a disease but is actually a mite problem. The mites feed on the flowers causing abnormal growth. The galls dry out and persist on the tree into winter. Apply horticultural oil for some control.

Scales can usually be controlled with sprays of horticultural oil.

Diseases

The most serious problem is Ash decline or dieback which has a variety of causes, some poorly understood. The rest of the diseases listed below are usually not serious.

A rust disease causes distorted leaves and swollen twigs. Small, yellow, cup-like structures, producing yellow spores, appear on the infected areas. Controls are usually not needed.

A number of fungi cause leaf spots on Ash. The disease is worse in wet years and is partially controlled by gathering and disposing of diseased, fallen leaves.

Anthracnose is also called leaf scorch and leaf spot. Infected parts of the leaves turn brown, especially along the margins. Infected leaves fall prematurely. Rake up and destroy infected leaves. Chemical controls are not practical or economical on most large trees.

Canker diseases cause branch dieback and death of the tree when the trunk is infected. Try to keep trees healthy with regular fertilization.

Powdery mildew makes a white coating on the leaves.

Ash ring spot virus causes chlorotic yellow or reddish spots or rings on the leaves. Infected trees may be stunted and dieback but this usually does not happen.

Verticillium wilt causes branches of infected trees to wilt and die, eventually the entire tree may die. Keep trees healthy and fertilize infected trees with high nitrogen fertilizer to suppress disease symptoms.