Fraxinus velutina
Velvet Ash

Edward F. Gilman and Dennis G. Watson

INTRODUCTION

This fast-growing, deciduous, native North American tree reaches a height of 30 to 50 feet, depending upon cultural conditions (Fig. 1). It is capable of growing taller in its native habitat. The three to six-inch-long leaves are divided into multiple leaflets and turn a brilliant yellow in fall before dropping. The inconspicuous, green, springtime flowers are followed by the production of showy, persistent fruits. The tree has been widely grown in California and in parts of the west including Texas.

GENERAL INFORMATION

Scientific name: Fraxinus velutina
Pronunciation: FRACK-sih-nus vell-LOO-tih-nuh
Common name(s): Velvet Ash, Modesto Ash, Arizona Ash
Family: Oleaceae
USDA hardiness zones: 7 through 8 (Fig. 2)
Origin: native to North America
Uses: 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; reclamation plant; shade tree; sidewalk cutout (tree pit); 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: 30 to 50 feet
Spread: 45 to 60 feet
Crown uniformity: irregular outline or silhouette
Crown shape: round
Crown density: moderate
Growth rate: fast
Texture: medium

Figure 1. Middle-aged Velvet Ash.
Foliage

Leaf arrangement: opposite/subopposite
Leaf type: odd pinnately compound
Leaflet margin: serrate
Leaflet shape: elliptic (oval); lanceolate
Leaflet venation: pinnate
Leaf type and persistence: deciduous
Leaflet blade length: 2 to 4 inches; less than 2 inches
Leaf color: green
Fall color: yellow
Fall characteristic: showy

Flower

Flower color: green
Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: elongated
Fruit length: .5 to 1 inch
Fruit covering: dry or hard
Fruit color: green; tan

Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; 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; no thorns
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: gray
Current year twig thickness: medium; thick

Culture

Light requirement: tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; occasionally wet; alkaline; well-drained
Drought tolerance: high
Other

Roots: surface roots are usually not a problem  
Winter interest: no special winter interest  
Outstanding tree: not particularly outstanding  
Invasive potential: little, if any, potential at this time  
Ozone sensitivity: tolerant  
Verticillium wilt susceptibility: susceptible  
Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics  

USE AND MANAGEMENT

The tree has been traditionally difficult to maintain due to the development of many upright trunks originating from the same position on the main trunk. This condition has lead to the creation of weak trees which often break apart at the base of the multiple trunks. Careful pruning and branch selection is required during the first 15 years after planting to ensure good, strong trunk and branch development. It is important to purchase good quality planting stock which has a central leader and no upright multiple trunks. This will make the tree much easier to maintain in the landscape. Some horticulturists do not recommend planting this tree due to the high pruning requirement and susceptibility to breakage.

Velvet Ash should be grown in full sun on any soil and will tolerate both alkaline and rocky soils. It is tolerant of wet soil and has been extensively used along streets in areas with poor drainage. Roots often grow close to the soil surface causing a nuisance by breaking sidewalks and curbs.

The cultivar ‘Arizona’ is widely planted but reportedly has the same problems as the species.

Propagation is easily done by seed.

Pests

It is very susceptible to borers. Trees often have a short-life.

Diseases

Texas Ash is susceptible to verticillium wilt.