



Ulmus crassifolia Cedar Elm¹

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INTRODUCTION

Cedar Elm is a native North American deciduous tree which reaches 50 to 90 feet in height with a spread of 40 to 60 feet and forms a rounded silhouette (Fig. 1). Trees 118 feet tall have been documented in the wild. The stiff and rough-textured, dark green leaves fade to bright yellow to red/brown before dropping in fall. The inconspicuous, green, summertime flowers are followed by the production of winged seeds in late summer or early fall.

GENERAL INFORMATION

Scientific name: *Ulmus crassifolia*

Pronunciation: UL-mus krass-ih-FOLE-ee-uh

Common name(s): Cedar Elm

Family: *Ulmaceae*

USDA hardiness zones: 6 through 9 (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 parking lot islands (100-200 square feet in size); 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

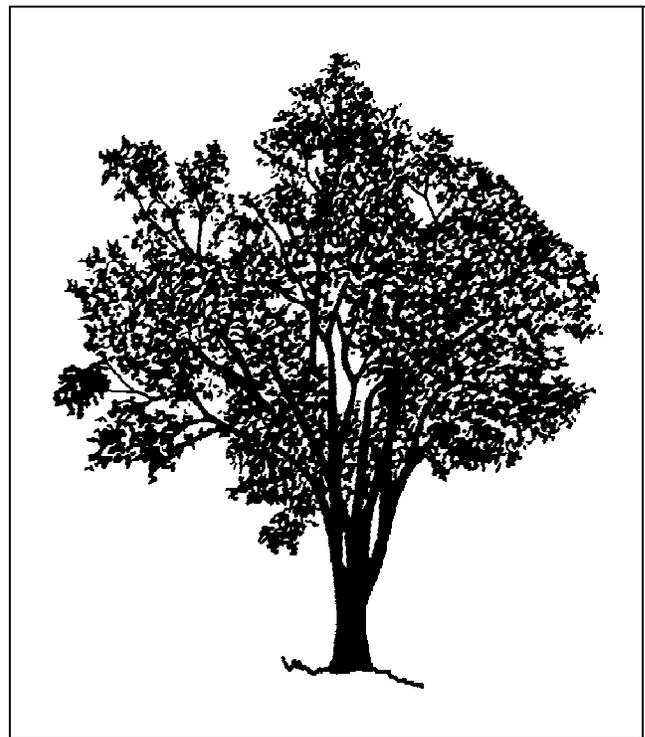


Figure 1. Mature Cedar Elm.

DESCRIPTION

Height: 50 to 70 feet

Spread: 40 to 60 feet

Crown uniformity: irregular outline or silhouette

Crown shape: round; vase shape

Crown density: moderate

Growth rate: medium

Texture: fine

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Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: crenate; double serrate; serrate

Leaf shape: elliptic (oval); obovate

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: yellow

Fall characteristic: showy

Flower

Flower color: green

Flower characteristics: fall flowering; inconspicuous and not showy

Fruit

Fruit shape: oval

Fruit length: 1 to 3 inches; .5 to 1 inch

Fruit covering: dry or hard

Fruit color: green

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; no significant litter problem

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; 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: brown; gray

Current year twig thickness: thin

Culture

Light requirement: tree grows in part shade/part sun; tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline; extended flooding; well-drained

Drought tolerance: high

Aerosol salt tolerance: moderate

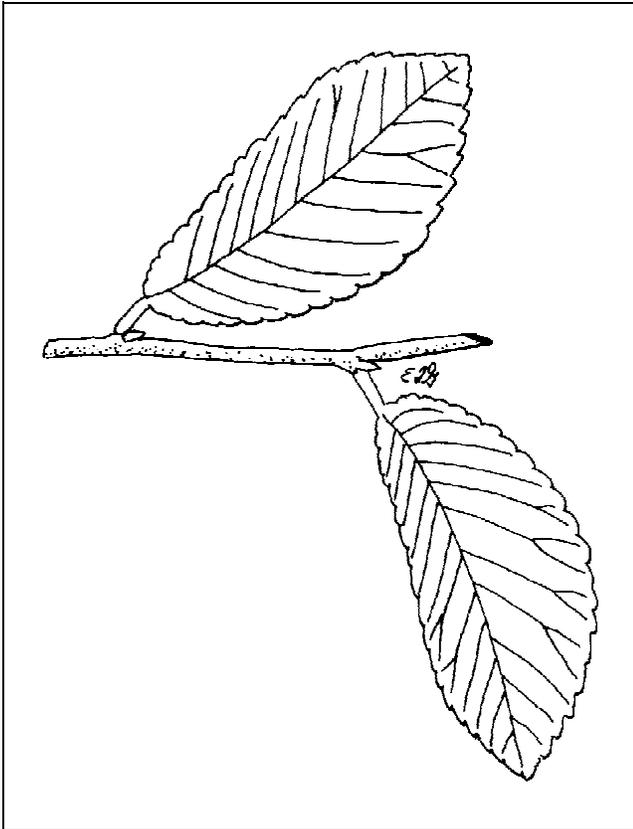


Figure 3. Foliage of Cedar Elm.

Cedar Elm should be grown in full sun on well-drained soil, acid or alkaline. It is very drought-tolerant once established and tolerates wet soil well. However, mistletoe can engulf the tree leading to its demise.

Propagation is by seed.

Pests

Elm leaf beetles can feed on foliage. Aphids can also drop copious amounts of honey dew beneath the canopy.

Diseases

Dutch elm disease kills trees. Powdery mildew can be a problem in some years.

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

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

It would be a low maintenance shade and street tree except for its thin, somewhat drooping branches which are somewhat susceptible to breakage at the crotches of major limbs. Some of this could be avoided by maintaining a regular pruning and training program in the early years after transplanting. Strive to keep branches no larger than about two-thirds the diameter of the trunk. Cedar Elm has been used extensively (almost exclusively in some local areas) in Texas as a street tree for many years due to its adaptability to wet, poor soil conditions. However, it is always best to diversify the tree species in an area so that if a major problem arises on one species, it will only effect a portion of the tree population in the community.