

Ulmus parvifolia 'Sempervirens': Weeping Chinese Elm¹

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Introduction

An excellent tree that is surprisingly under-used, Chinese elm possesses many traits which make it ideal for a multitude of landscape uses. A fast-growing, deciduous, or evergreen tree, Chinese elm forms a graceful, upright, rounded canopy of long, arching, and somewhat weeping branches which are clothed with two to three-inch-long, shiny, dark green, leathery leaves. This cultivar is almost evergreen in USDA hardiness zones 8b through 10 and has a more weeping habit than the species. Some specimens grow in the typical vase-shaped elm form. In colder regions of the country in fall, these leaves are transformed into various shades of red, purple, or yellow. The tree is evergreen in the southern extent of its range. The showy, exfoliating bark reveals random, mottled patterns of grey, green, orange, and brown, adding great textural and visual interest, especially to its winter silhouette. Chinese elm can reach 80 feet in height but is more often seen at 40 to 50 feet, making it an ideal shade, specimen, street, or parking lot tree.

General Information

Scientific name: *Ulmus parvifolia*

Pronunciation: UL-mus par-vih-FOLE-ee-uh

Common name(s): Weeping Chinese elm, weeping lacebark elm

Family: *Ulmaceae*

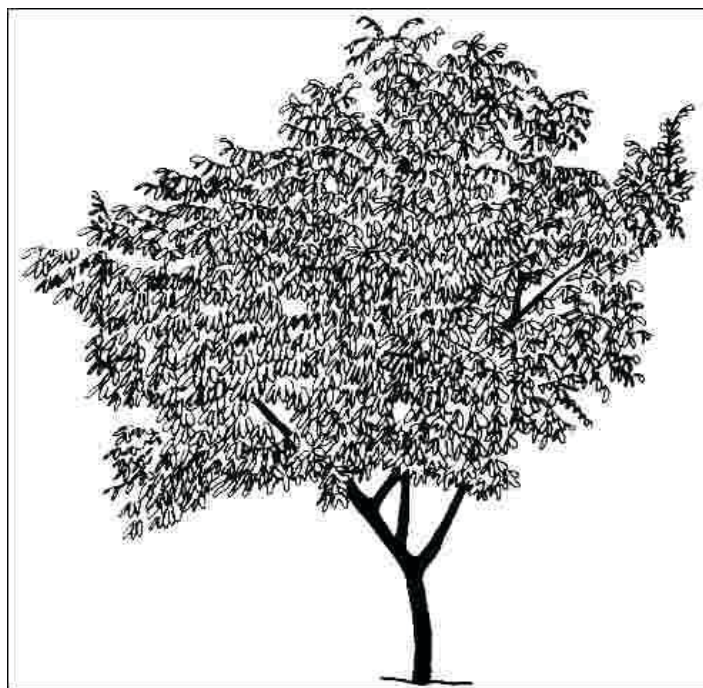


Figure 1. Young *Ulmus parvifolia* 'Sempervirens': Weeping Chinese elm.
Credits: UF/IFAS

USDA hardiness zones: 8A through 10B (Figure 2)

Origin: not native to North America

Invasive potential: not considered a problem species at this time, may be recommended (North, Central, South)

Uses: sidewalk cutout (tree pit); reclamation; urban tolerant; street without sidewalk; shade; specimen; parking lot

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island < 100 sq ft; parking lot island 100–200 sq ft; parking lot island > 200 sq ft; tree lawn 3–4 feet wide; tree lawn 4–6 feet wide; tree lawn > 6 ft wide; highway median

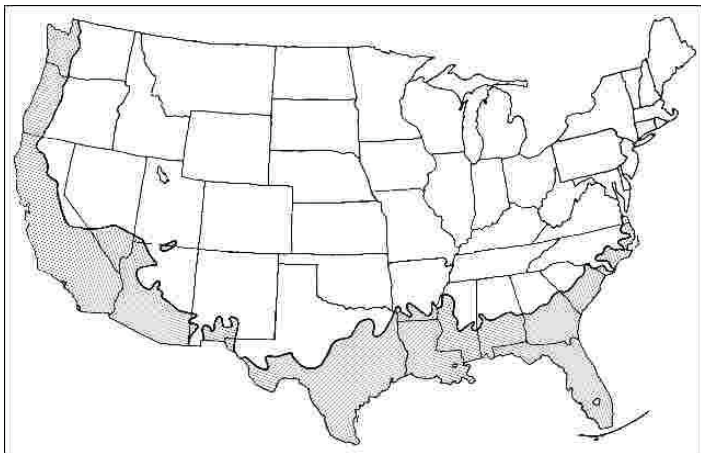


Figure 2. Range.
Credits: UF/IFAS

Description

Height: 35 to 40 feet

Spread: 35 to 50 feet

Crown uniformity: symmetrical

Crown shape: weeping, vase, spreading

Crown density: open

Growth rate: moderate

Texture: fine

Foliage

Leaf arrangement: alternate (Figure 3)

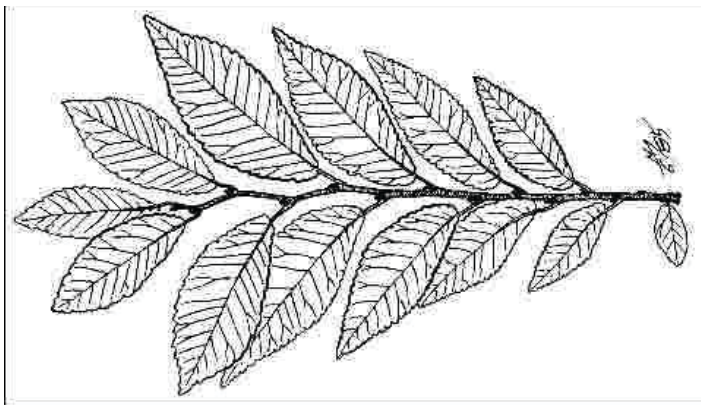


Figure 3. Foliage.
Credits: UF/IFAS

Leaf type: simple

Leaf margin: serrate, serrulate

Leaf shape: obovate, elliptic (oval), ovate

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: red, purple, yellow

Fall characteristic: showy

Flower

Flower color: green

Flower characteristics: not showy

Fruit

Fruit shape: oval

Fruit length: less than 0.5 inch

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; showy; typically multi-trunked; thorns

Pruning requirement: needed for strong structure

Breakage: resistant

Current year twig color: gray, brown

Current year twig thickness: thin

Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun, or partial shade

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

Drought tolerance: high

Aerosol salt tolerance: moderate

Other

Roots: not a problem

Winter interest: yes

Outstanding tree: yes

Ozone sensitivity: unknown

Verticillium wilt susceptibility: susceptible

Pest resistance: resistant to pests/diseases

Use and Management

Select trees with branches spaced along one trunk. It is not essential that this trunk be straight. Buy from nurseries who understand how to train and prune this tree for street and parking lot use, otherwise you may be trimming and pruning low drooping branches on a regular basis. In addition, please do not confuse it with *Ulmus pumila*, the Siberian elm. This tree is far inferior to *Ulmus parvifolia* and should not be planted, except perhaps in extreme climates such as western Oklahoma and Texas where the limits of most other trees are tested.

Chinese elm is often topped in the nursery to create a full head of foliage and branches originate from one point on the trunk. There is not enough room on the trunk to support this type of branch structure, and some may split out from the tree as it ages. This tree may take more effort to properly train and prune than some other species, but it is well worth the effort. It will have a long service life in urban areas with proper training early on.

The root system is comprised of several very large-diameter roots which can grow to great distances from the trunk. These are usually located fairly close to the surface of the soil and can occasionally lift sidewalks. They can get into sewer lines causing severe damage. But they are usually not a problem and should not be caused to eliminate this tree from your urban tree planting program. The Chinese elm species is among the top urban trees on most recommended tree lists in the south and Midwest.

Chinese elm will grow in full sun on a wide range of soils, adapting easily to extremes in pH (including alkaline) or moisture, and tolerates cold, urban heat, and wind.

Trees will look their best, though, when grown in moist, well-drained, fertile soil but they adapt to drought and the extremes of urban sites. Very suitable for street tree pits, parking lot islands, and other confined soil spaces.

Many other cultivars are available: 'Catlin' is dwarf; 'Drake', USDA hardiness zones 7 to 9, has small, dark green leaves, sweeping, upright branches forming a rounded crown, and greater leaf retention being almost evergreen in California and Florida; 'Dynasty' has smooth, dark grey bark, smaller leaves and is vase-shaped, with red fall color in the north; 'Frosty' has a small (0.75-inch-long), white-margined leaf which may revert back to green; 'True Green' has glossy, deep green leaves, a graceful, round-headed outline, and tends to be evergreen; and 'Pendula', with weeping growth habit.

Propagation is by cuttings, or grafts.

Pests

Borers and chewing insects infest elm. It shows considerable resistance to elm leaf beetle and Japanese beetle.

Diseases

It is usually resistant to Dutch elm disease and phloem necrosis. Trunk cankers may develop on young trunks where soil is excessively wet. Twig blight is also a problem.