Eucommia ulmoides
Hardy Rubber Tree

Edward F. Gilman and Dennis G. Watson

INTRODUCTION

If you want green leaves on a tree during a severe drought, this is your tree! This little-known but urban-tough, very attractive, 40 to 60-foot-high, slow-growing, deciduous tree has a dense, symmetrical oval to rounded crown and low-branched silhouette, making it ideal for use as a specimen, shade or street tree (Fig. 1). The thin, three to eight-inch-long, glossy, dark green leaves are almost totally resistant to pests and disease and remain an attractive dark green throughout the summer, changing only to a paler green before dropping in early fall. The foliage is quite striking and appears to glimmer in the moonlight or when lit from above. Branches ascend forming an upright silhouette in winter. The inconspicuous blooms are followed by the production of small, 1.5-inch-long, flat, winged seeds. Only one or two corrective prunings at an early age normally is all that is needed to develop good structure in the crown.

GENERAL INFORMATION

Scientific name: Eucommia ulmoides
Pronunciation: yoo-KOM-ee-uh ul-MOY-deez
Common name(s): Hardy Rubber Tree
Family: Eucommiaceae
USDA hardness zones: 4B through 7 (Fig. 2)
Origin: not native to North America
Uses: container or above-ground planter; 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; screen; shade tree; small parking lot islands (< 100 square feet in size); specimen; 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: 40 to 60 feet
Spread: 25 to 35 feet

Figure 1. Middle-aged Hardy Rubber Tree.
Figure 2. Shaded area represents potential planting range.

**Crown uniformity:** symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

**Crown shape:** round; spreading

**Crown density:** dense

**Growth rate:** slow

**Texture:** medium

**Foliage**

**Leaf arrangement:** alternate (Fig. 3)

**Leaf type:** simple

**Leaf margin:** serrate

**Leaf shape:** elliptic (oval); oblong; ovate

**Leaf venation:** pinnate

**Leaf type and persistence:** deciduous

**Leaf blade length:** 4 to 8 inches; 2 to 4 inches

**Leaf color:** green

**Fall color:** no fall color change

**Fall characteristic:** not showy

**Flower**

**Flower color:** brown

**Flower characteristics:** inconspicuous and not showy

**Fruit**

**Fruit shape:** oval

**Fruit length:** 1 to 3 inches

**Fruit covering:** fleshy

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

**Trunk and Branches**

**Trunk/bark/branches:** grow mostly upright and will not droop; showy trunk; should be grown with a single leader; no thorns

**Pruning requirement:** requires pruning to develop strong structure

**Breakage:** resistant

**Current year twig color:** brown

**Current year twig thickness:** medium; thick
Culture

**Light requirement:** tree grows in full sun  
**Soil tolerances:** clay; loam; sand; acidic; alkaline; well-drained  
**Drought tolerance:** high  
**Aerosol salt tolerance:** moderate  
**Soil salt tolerance:** moderate

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:** tree has outstanding ornamental features and could be planted more  
**Invasive potential:** little, if any, potential at this time  
**Pest resistance:** no pests are normally seen on the tree

USE AND MANAGEMENT

The Chinese have used the Hardy Rubber Tree for more than 2,000 years for its medicinal value. Trees there rarely reach a mature size since they are harvested regularly and stripped of their ridged or furrowed, grey/brown bark. Hardy Rubber Tree may be the only tree which grows in cold climates from which a rubber product can be obtained. This rubbery substance is visible as thin strands which bridge two sections of a torn leaf.

Hardy Rubber Tree should be grown in full sun on moist soil but when well-established tolerates extensive drought. Trees have been growing in parts of North Carolina for many years without irrigation and have survived extreme drought in very poor, clay soil in the full sun. But they grow slowly. They should be grown and tried more often in urban areas such as in highway medians, along streets and as a medium-sized shade tree. Growth rate appears to be quite slow but could probably be improved with adequate irrigation. The tree is adapted to high soil pH.

Propagation is by seed or cuttings.

**Pests and Diseases**

Amazingly free of any problems but do not plant it in poorly-drained soil.