



# *Pterocarya stenoptera* Chinese Wingnut<sup>1</sup>

Edward F. Gilman and Dennis G. Watson<sup>2</sup>

## INTRODUCTION

Chinese Wingnut is a 40 to 70-foot-tall, deciduous tree with large, substantial branches which spread as wide as the tree is tall (Fig. 1). The 6 to 12-inch-long leaves are composed of many, finely-toothed, oval leaflets, and do not display any appreciable fall color. Of particular interest are the 6 to 12-inch-long seed clusters, green strings of winged seeds suspended below the branches which turn brown and fall in autumn. The tree grows at a phenomenal rate. A six-year-old tree in Raliegh was about 25 feet tall and wide with a 14-inch trunk diameter. The trunk can reportedly grow to at least eight feet in diameter.

## GENERAL INFORMATION

**Scientific name:** *Pterocarya stenoptera*

**Pronunciation:** teer-oh-KAIR-ee-uh sten-OP-ter-uh

**Common name(s):** Chinese Wingnut

**Family:** *Juglandaceae*

**USDA hardiness zones:** 6B through 11 (Fig. 2)

**Origin:** not native to North America

**Uses:** shade tree; residential street tree; no proven urban tolerance

**Availability:** grown in small quantities by a small number of nurseries

## DESCRIPTION

**Height:** 40 to 70 feet

**Spread:** 40 to 60 feet

**Crown uniformity:** irregular outline or silhouette

**Crown shape:** round; vase shape

**Crown density:** open

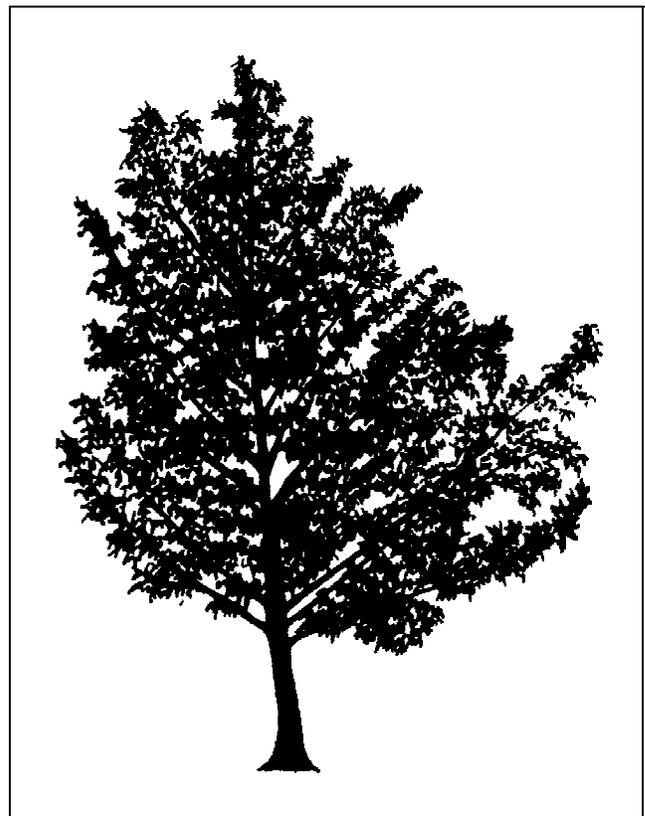


Figure 1. Young Chinese Wingnut.

**Growth rate:** fast

**Texture:** coarse

## Foliage

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

**Leaf type:** odd pinnately compound

**Leaflet margin:** serrate

1. This document is adapted from Fact Sheet ST-533, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



Figure 2. Shaded area represents potential planting range.

**Leaflet shape:** elliptic (oval); oblong  
**Leaflet venation:** pinnate  
**Leaf type and persistence:** deciduous  
**Leaflet 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:** green  
**Flower characteristics:** inconspicuous and not showy

#### Fruit

**Fruit shape:** elongated  
**Fruit length:** .5 to 1 inch  
**Fruit covering:** dry or hard  
**Fruit color:** brown; green  
**Fruit characteristics:** does not attract wildlife; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

#### Trunk and Branches

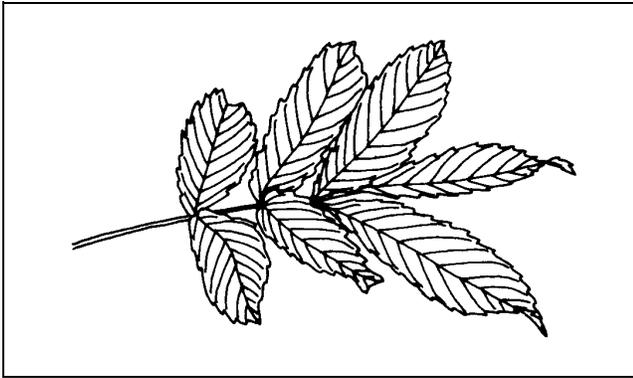
**Trunk/bark/branches:** grow mostly upright and will not droop; not particularly showy; should be grown with a single leader; no thorns  
**Pruning requirement:** requires pruning to develop strong structure  
**Breakage:** resistant  
**Current year twig color:** brown  
**Current year twig thickness:** thick

#### Culture

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

#### Other

**Roots:** surface roots can lift sidewalks or interfere with mowing  
**Winter interest:** no special winter interest  
**Outstanding tree:** not particularly outstanding  
**Invasive potential:** No entries found.



**Figure 3.** Foliage of Chinese Wingnut.

**Pest resistance:** no pests are normally seen on the tree

### **USE AND MANAGEMENT**

Chinese Wingnut may perform well as a street or shade tree but the aggressive roots may make it unsuitable for use in a lawn or garden. It should be considered for broader use as an urban tree but it is largely untested, so use it with caution. Locate it well away from (10 feet or more) a sidewalk or driveway so the large-diameter surface roots will not lift the concrete or asphalt.

Prune early in the life of the tree to form a good, strong structure by spacing major limbs several feet apart along a central trunk. Do not allow these limbs to grow more than about two-thirds the diameter of the trunk to encourage formation of a strong branch collar.

Chinese Wingnut grows quickly in full sun and moist soil, and is ideally located beside a stream or pond. The trees are tolerant of clay, wind, drought, and compacted soil once the trees have become well established. Any necessary pruning should be done in the summer to prevent the bleeding which occurs in spring or winter.

Propagation is by seed or cuttings.

### **Pests and Diseases**

No pests or diseases are of major concern are known at this time.