

Phellodendron amurense: Amur Corktree¹

Edward F. Gilman and Dennis G. Watson²

Introduction

Growing 30 to 40 feet tall with an equal or much greater spread, Amur Corktree has a short trunk and an open, rounded, spreading canopy which makes it ideal as a durable shade tree. Male clones can be used for street and parking lot planting because they produce no fruit. The deciduous, dark green, pinnately compound leaflets change to bronze and yellow in the fall before dropping. The insignificant yellow/green flowers appear in late May to early June on 2 to 3.5-inch-long panicles, and are followed by small black drupes which sometimes persist into winter, if not first devoured by birds. These black fruits give off a strong odor when crushed and create a mess on a sidewalk and some people may find it more desirable to only plant male trees ('Macho') which will not produce this fruit. The

species can naturalize as seeds readily germinate in the landscape.

General Information

Scientific name: *Phellodendron amurense*

Pronunciation: fell-oh-DEN-drawn am-moor-EN-see

Common name(s): Amur Corktree, Chinese Corktree

Family: *Rutaceae*

USDA hardiness zones: 3B through 8B (Fig. 2)

Origin: not native to North America

Invasive potential: invasive non-native

Uses: specimen; shade; street without sidewalk; urban tolerant; highway median

Availability: somewhat available, may have to go out of the region to find the tree

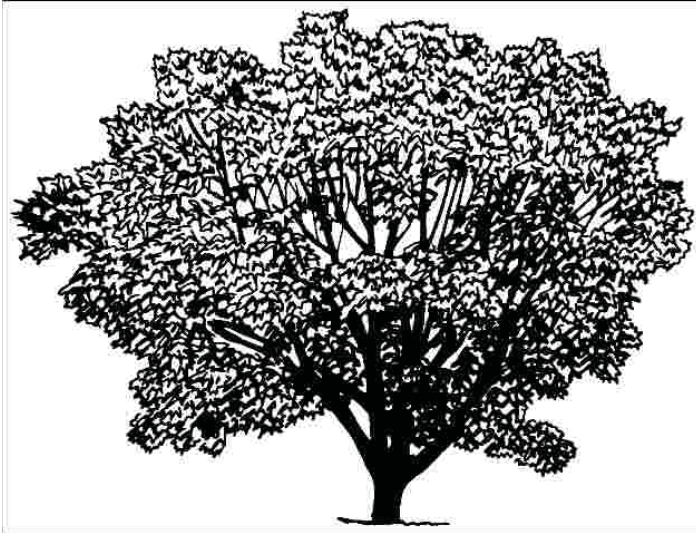


Figure 1. Middle-aged *Phellodendron amurense*: Amur Corktree

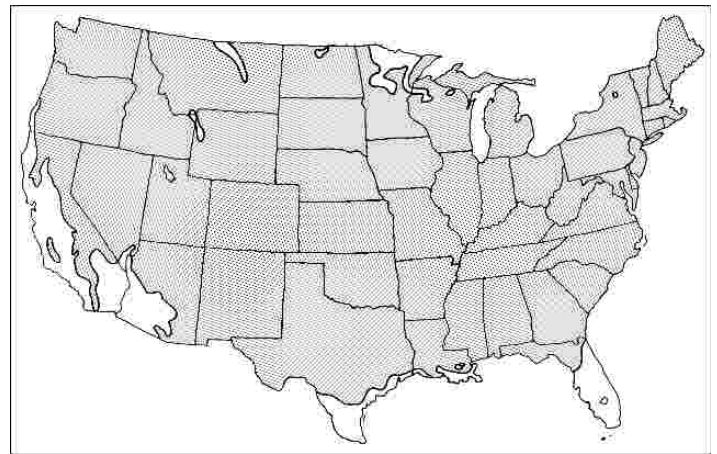


Figure 2. Range

1. This document is ENH-596, one of a series of the Environmental Horticulture, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date November 1993. Revised December 2006. Reviewed May 2011. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
2. Edward F. Gilman, professor, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

Description

Height: 30 to 40 feet

Spread: 40 to 60 feet

Crown uniformity: irregular

Crown shape: vase, round, spreading

Crown density: open

Growth rate: moderate

Texture: medium

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3)

Leaf type: odd-pinnately compound

Leaf margin: entire, undulate

Leaf shape: ovate, elliptic (oval)

Leaf venation: pinnate, reticulate

Leaf type and persistence: deciduous

Leaf blade length: 2 to 4 inches

Leaf color: green

Fall color: copper, yellow

Fall characteristic: showy

Flower

Flower color: white/cream/gray, green

Flower characteristics: not showy

Fruit

Fruit shape: oval

Fruit length: less than .5 inch, .5 to 1 inch

Fruit covering: fleshy

Fruit color: black, green

Fruit characteristics: attracts birds; showy; fruit/leaves 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: thick

Wood specific gravity: unknown

Culture

Light requirement: full sun

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

Drought tolerance: high

Aerosol salt tolerance: moderate

Other

Roots: can form large surface roots

Winter interest: yes

Outstanding tree: yes

Ozone sensitivity: unknown

Verticillium wilt susceptibility: susceptible

Pest resistance: free of serious pests and diseases

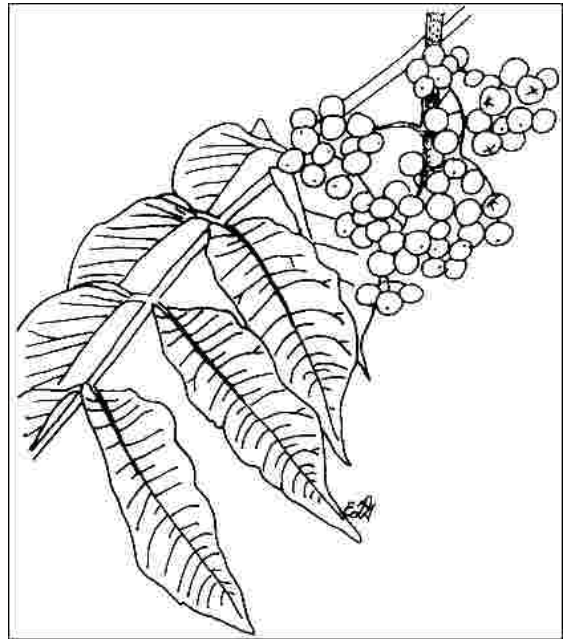


Figure 3. Foliage

Use and Management

The attractive grey/brown bark is deeply ridged and furrowed, and on mature trees it takes on a corky texture. Branches are usually borne low on the trunk, droop and grow horizontally forming a spreading habit. The shallow root system needs plenty of room to expand in order to establish the tree properly.

The fruitless (male) cultivar 'Macho' has thick, leathery leaves and a more pleasing, upright-spreading growth form. 'Macho' should be planted instead of the species due to its less spreading and less drooping habit which makes it more suited for street tree planting. Pruning usually is not required once good branch structure is established early in the life of the tree. Allow for adequate soil space for root development so they do not lift sidewalks and pavement. 'Shademaster' is also fruitless and available in the trade.

Amur Corktree grows rapidly and prefers to be grown in full sun on deep, rich soil but will tolerate any soil, acid or alkaline. It tolerates wet soil and drought. Once highly recommended as a street and urban-tolerant tree, it does not appear to hold up to the rigors of city life under certain conditions, particularly restricted soil spaces (although the experts appear to disagree as to the tolerance of this tree to city life - the tree may be more sensitive to soil conditions than is commonly realized).

Propagation is by seed, which germinate readily.

Pests and Diseases

This tree is virtually pest-free.