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Florida-Friendly Landscaping™ PROGRAM

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Gymnocladus dioicus: Kentucky Coffeetree[1]

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Introduction

This is a medium-growing tree that will reach a height of about 70 feet while spreading 45 to 60 feet. The state tree of Kentucky should be used more often because it is adaptable to many soils, including alkaline, has interesting bark and grows with an open canopy allowing light to penetrate to the ground for adequate turf growth beneath the canopy. The coarse branch texture in the winter is also quite unique, forming an interesting silhouette of only several large branches. Large seed pods hang on the tree in the winter but can be a litter problem when they fall in the spring. They are very hard and can be `shot' from a lawnmower running over the fruit. Male trees are sometimes available and they do not set fruit, but this is often unreliable. The seeds (in a 5 to 10-inch-long pod) and leaves may be poisonous to humans. The pod contains seeds which used to be roasted as a coffee substitute. The leaves are bipinnately compound and can be up to 18 inches long, resembling walnut.



Figure 1. Middle-aged *Gymnocladus dioicus*: Kentucky Coffeetree
Credit: Ed Gilman

General Information

Scientific name: *Gymnocladus dioicus*

Pronunciation: jim-NOCK-luh-dus dye-oh-EE-kuss

Common name(s): Kentucky Coffeetree

Family: *Leguminosae*

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

Origin: native to North America

Invasive potential: little invasive potential

Uses: street without sidewalk; reclamation; shade; specimen; highway median

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

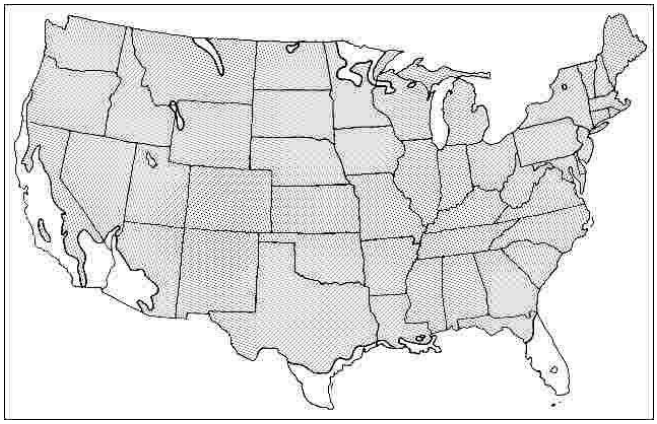

Figure 2. Range

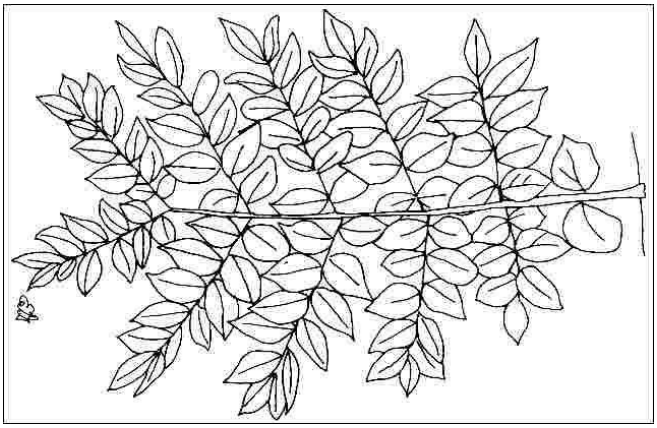

Figure 3. Foliage

Description

Height: 65 to 70 feet

Spread: 45 to 60 feet

Crown uniformity: irregular

Crown shape: oval

Crown density: open

Growth rate: moderate

Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: bipinnately compound, odd-pinnately compound

Leaf margin: entire

Leaf shape: elliptic (oval), ovate

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: white/cream/gray

Flower characteristics: not showy

Fruit

Fruit shape: pod or pod-like, elongated

Fruit length: 6 to 12 inches, 3 to 6 inches

Fruit covering: dry or hard

Fruit color: green, brown

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

Trunk and Branches

Trunk/bark/branches: branches droop; showy; typically one trunk; thorns

Pruning requirement: little required

Breakage: resistant

Current year twig color: brown, green

Current year twig thickness: very thick

Wood specific gravity: unknown

Culture

Light requirement: full sun

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

Drought tolerance: high

Aerosol salt tolerance: moderate

Other

Roots: not a problem

Winter interest: yes

Outstanding tree: yes

Ozone sensitivity: sensitive

Verticillium wilt susceptibility: unknown

Pest resistance: free of serious pests and diseases

Use and Management

The trunk normally grows straight up through the crown and is very strong. Branches grow at wide angles to the trunk and are usually well-spaced along the trunk. This configuration adds to the durability of the tree. Be sure that major limbs are kept at less than about half the diameter of the trunk to ensure that they remain well-attached to the tree. The crown is round or oval in youth, becoming more upright and oval with age.

Some people object to the sparse branching when this tree is young, but some pruning to create more branches can help. Any shortcomings of the tree are made up by the almost total lack of insect or disease problems. Lawns grow well beneath the tree due to the light shade cast by the thin, open canopy.

Kentucky Coffeetree is well-adapted to urban soil and could be used more often and, like most trees, does best when provided with irrigation until well-established. Amazingly tolerant of drought and poor soil once established although it is native to rich bottomland soil. Used as a street tree in some communities. Be careful using the tree in a lawn since the pods could become projectiles from mowing equipment.

Male cultivars without fruit should be available soon. These will be well-suited for planting along streets.

Propagation is by seed, or grafting male plants.

Pests and Diseases

No pests or diseases of major concern.

[1] This document is ENH446, one of a series of the UF/IFAS Department of Environmental Horticulture. Original publication date November 1993. Revised December 2006. Reviewed February 2014. Visit the Ask IFAS website at https://ask.ifas.ufl.edu for the currently supported version of this publication. © UF/IFAS. This publication is licensed under CC BY-NC-ND 4.0 *To learn more about creating and maintaining attractive landscapes that protect Florida's water and natural resources, visit ffl.ifas.ufl.edu/.*

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