UF IFAS Extension UNIVERSITY of FLORIDA

Florida-Friendly Landscaping™ PROGRAM

ENH-527
doi.org/10.32473/EDIS-ST368-1993

Maclura pomifera: Osage-Orange[1]

Edward F. Gilman and Dennis G. Watson[2]

https://ffl.ifas.ufl.edu/

Introduction

This deciduous North American native tree rapidly grows 30 to 40 feet tall with a spread of 20 to 40 feet and creates a dense canopy, making it useful as a windbreak. Young trees can develop an upright, pyramidal habit. The large, three to six-inch-long by two to three-inch-wide, shiny, dark green leaves turn bright yellow in fall before dropping, although this color change is not quite as noticeable on trees grown in the southeastern United States. The bark is deeply furrowed and has an orange tinge to it, and the strong, durable wood is bright orange in color.

General Information

Scientific name: *Maclura pomifera*

Pronunciation: muh-KLOO-ruh poe-MIFF-er-uh

Common name(s): Osage-Orange, Bois-D'Arc

Family: *Moraceae*

USDA hardiness zones: 5A through 9A (Fig. 2)

Origin: native to North America

Invasive potential: little invasive potential

Uses: reclamation; urban tolerant

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

Description

Height: 30 to 40 feet

Spread: 20 to 40 feet

Crown uniformity: irregular

Crown shape: spreading, round

Crown density: open

Growth rate: fast

Texture: coarse



Figure 1. Mature *Maclura pomifera*: Osage-Orange
Credit: Ed Gilman

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: entire, undulate, sinuate/undulate

Leaf shape: ovate, lanceolate, oblong

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: 2 to 4 inches, 4 to 8 inches

Leaf color: green

Fall color: yellow

Fall characteristic: showy

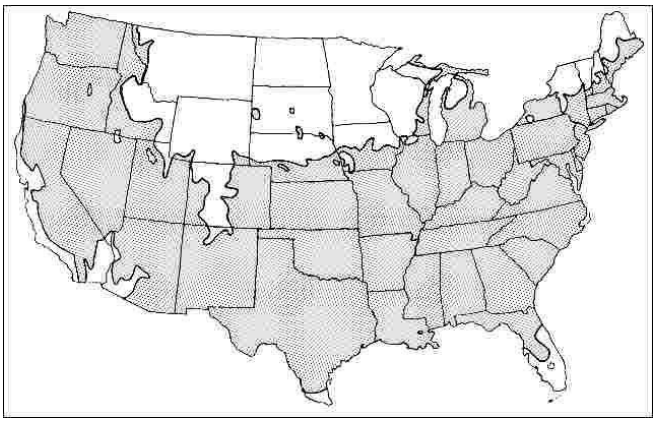

Figure 2. Range

Flower

Flower color: white/cream/gray

Flower characteristics: not showy

Fruit

Fruit shape: round

Fruit length: 3 to 6 inches

Fruit covering: fleshy

Fruit color: green

Fruit characteristics: attracts squirrels/mammals; showy; fruit/leaves a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; showy; typically multi-trunked; no thorns

Pruning requirement: needed for strong structure

Breakage: resistant

Current year twig color: brown

Current year twig thickness: thick

Wood specific gravity: unknown

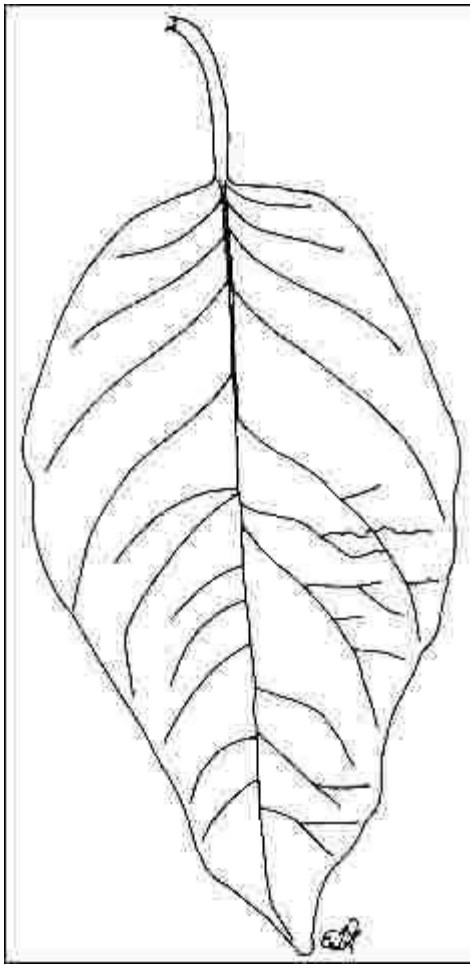

Figure 3. Foliage

Culture

Light requirement: full sun

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

Drought tolerance: high

Aerosol salt tolerance: moderate

Other

Roots: can form large surface roots

Winter interest: no

Outstanding tree: no

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: susceptible

Pest resistance: free of serious pests and diseases

Use and Management

It is reported that the Osage Indians made their hunting bows from this beautiful and hard wood, and it is also used to make furniture. From April to June, Osage-Orange puts out its inconspicuous green flowers but these are followed by the very conspicuous fruits. The fruits are four to five-inch-diameter, rough-textured, heavy green balls which ripen to yellow-green and fall in October and November. These fruits are inedible, the juice acid and milky, but squirrels relish the small seeds buried inside the pulp. When the fruits drop, they can be very messy and, for this reason, male, fruitless trees should be selected if you plant this tree. Osage-Orange is thorny, just like true citrus trees, and forms thickets if left to grow on its own. However, there are thornless cultivars available.

Osage-Orange should be grown in full sun on well-drained soil. This tough, native plant can withstand almost anything once established - heat, cold, wind, drought, poor soil, ice storms, vandalism - but appreciates regular watering when young until it is established.

Thornless, fruitless cultivars include `Witchita', `White Shield', and `Park'.

Propagation is by seed, cuttings, and root-cuttings. Young trees are easily transplanted.

Pests and Diseases

No pests or diseases are of major concern.

[1] This document is ENH-527, one of a series of the UF/IFAS Department of Environmental Horticulture Department. 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/.*

[2] Edward F. Gilman, professor emeritus, UF/IFAS Department of Environmental Horticulture; Dennis G. Watson, former associate professor, UF/IFAS Department of Agricultural and Biological Engineering, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information, and other services only to individuals and institutions that operate in compliance with applicable federal and state non-discrimination laws and policies. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A&M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, Dean for UF/IFAS Extension.