

# *Maclura pomifera*: Osage-Orange<sup>1</sup>

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

## 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.

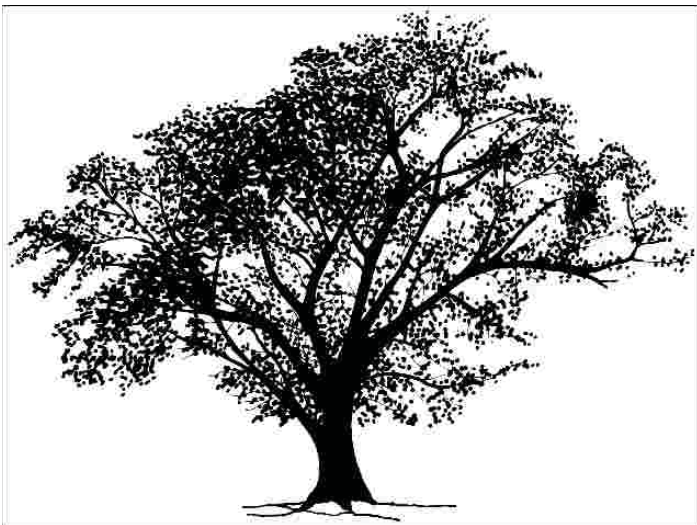


Figure 1. Mature *Maclura pomifera*: Osage-Orange

## 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

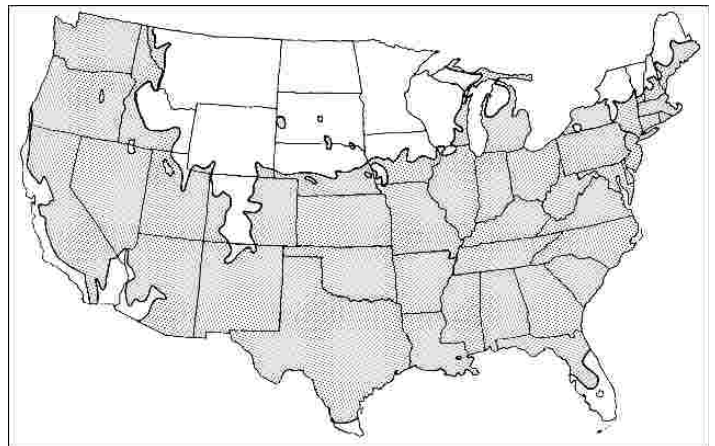


Figure 2. Range

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## 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

## 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

## 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

## 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

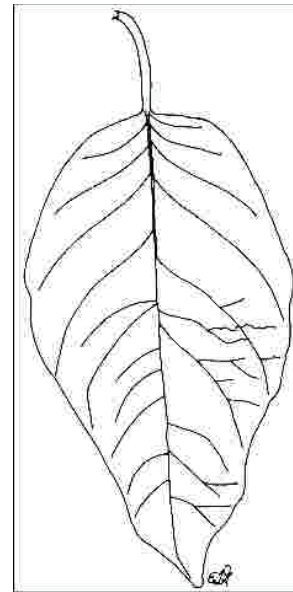


Figure 3. Foliage

**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.