



Maclura pomifera Osage-Orange¹

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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 (Fig. 1). 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: 5 through 9A (Fig. 2)

Origin: native to North America

Uses: reclamation plant; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

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 outline or silhouette

Crown shape: round; spreading

Crown density: open

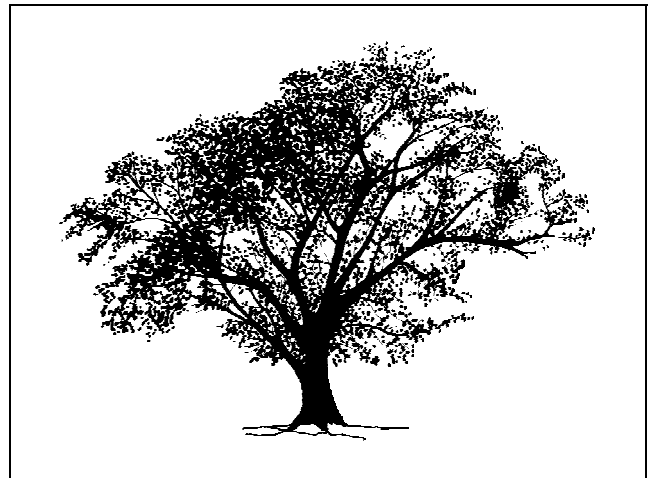


Figure 1. Mature Osage-Orange.

Growth rate: fast

Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: entire; sinuate; undulate

Leaf shape: lanceolate; oblong; ovate

Leaf venation: pinnate

Leaf type and persistence: deciduous

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

Leaf color: green

Fall color: yellow

Fall characteristic: showy

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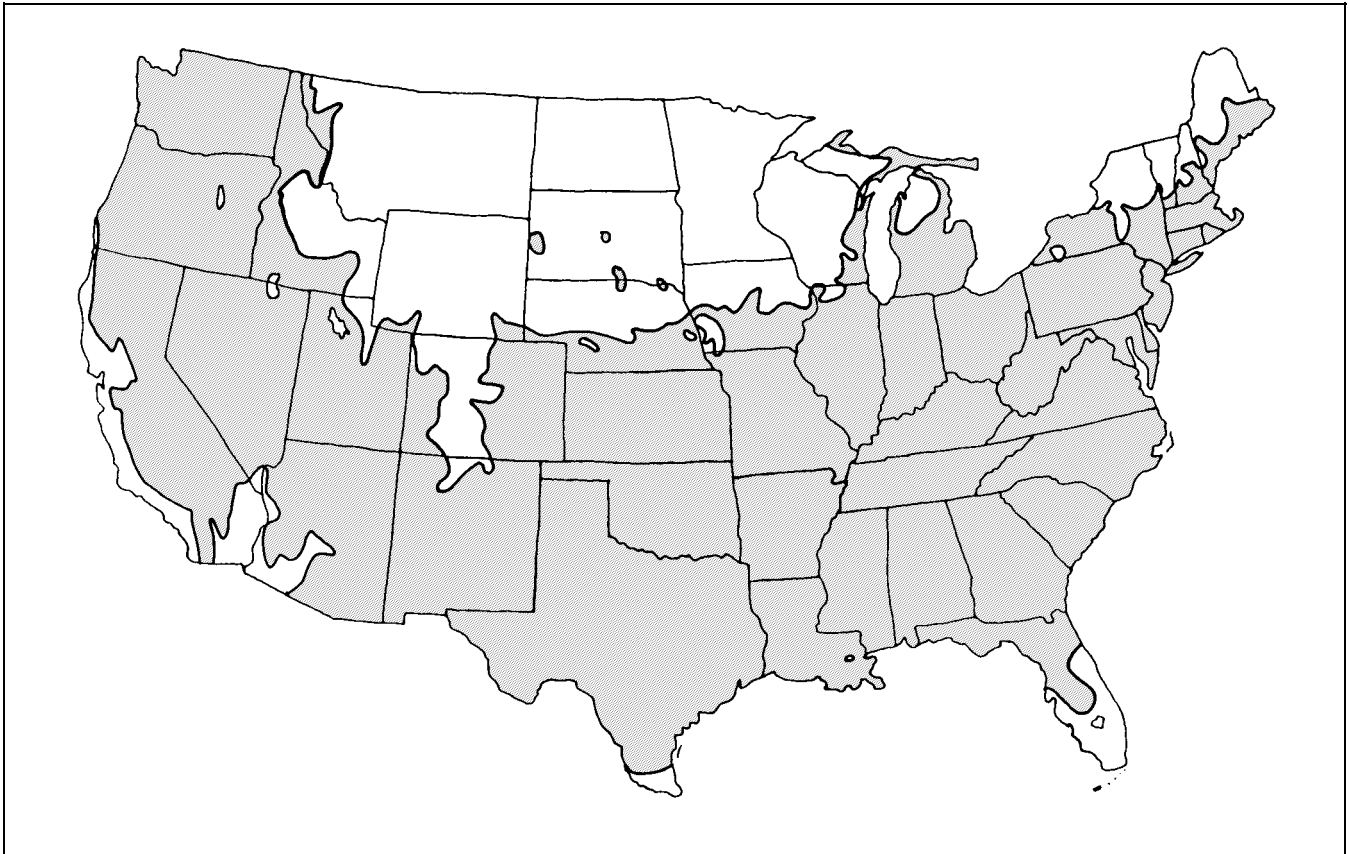


Figure 2. Shaded area represents potential planting range.

Flower

Flower color: white

Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: round

Fruit length: 3 to 6 inches

Fruit covering: fleshy

Fruit color: green

Fruit characteristics: attracts squirrels and other mammals; fruit, twigs, or foliage cause significant litter; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; routinely grown with, or trainable to be grown with, multiple trunks; showy trunk; thorns are present on the trunk or branches

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; alkaline; extended flooding; well-drained

Drought tolerance: high

Aerosol salt tolerance: moderate

Other

Roots: surface roots can lift sidewalks or interfere with mowing

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: little, if any, potential at this time

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: susceptible

Pest resistance: no pests are normally seen on the tree

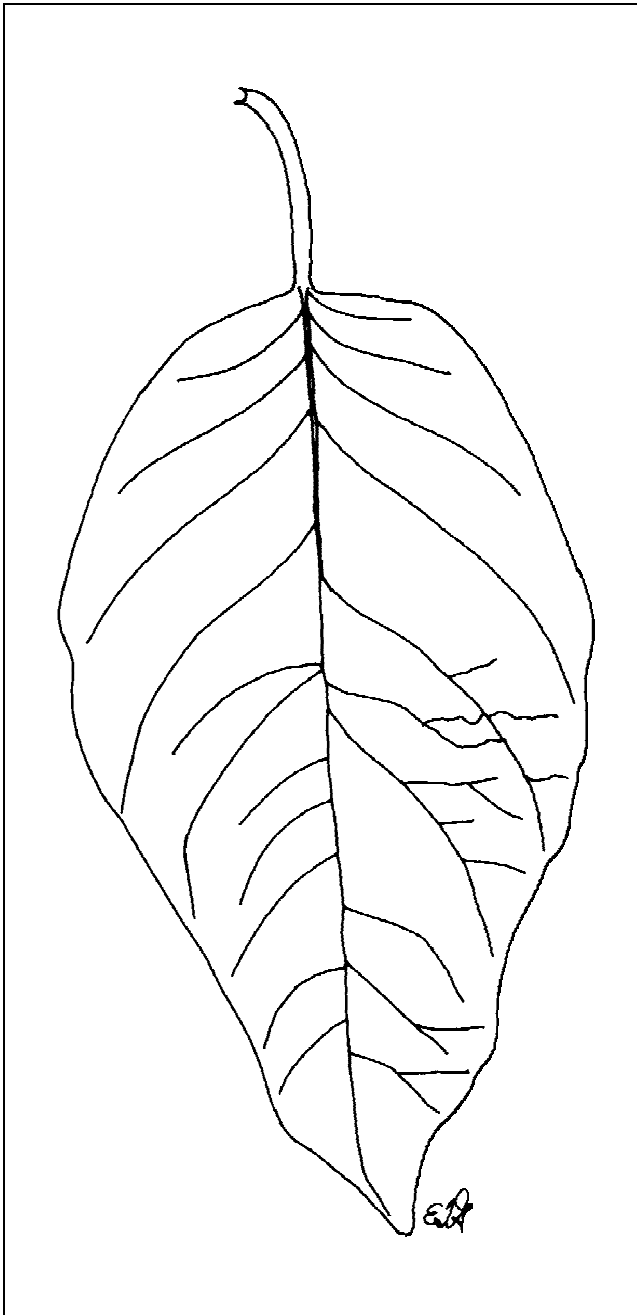


Figure 3. Foliage of Osage-Orange.

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.

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