

# Osage Orange

*Maclura pomifer*

Family: Moraceae (Mulberry)

**USDA Hardiness Zones:** 5 – 9A

**Growth Habit:** A tree native to the northeastern United States is also known as Osage apple or Bois d'arc. The Osage orange can grow to heights of 30 to 50 feet with a spread of 20 to 40 feet. The crown shape is round and spreading with an open crown density. The overall tree growth rate is fast.

In order to maintain the tree form, heavy pruning may be necessary; otherwise it will convert to a shrub form. Osage oranges grow best in full sunlight and can handle most soil types but prefer well drained soil. It can withstand almost any weather or soil condition once it becomes established.

**Cultivars and Propagation:** Thornless and fruitless varieties of Osage orange are available, such as: *Maclura pomifera* 'inermis', 'Witchita', 'White Shield', and 'Park'. Propagation can be made by planting seed or making root cuttings. Young trees are easily transplanted. If an Osage orange tree is chosen, it is best to choose a male tree or a fruitless variety in order to avoid the mess created by the fruit.

**Leaves:** Alternate, simple, oblong/ovate. Leaves can be 3 to 5 inches long and 2 to 3 inches wide with a spine/thorn at the base of each leaf. Thorns are also present on the trunk and branches. The leaves are a shiny, dark green above and a paler green below. They will turn a bright, showy yellow in the fall.

**Bark:** Is dark, deeply furrowed and has an orange tinge

**Flowers:** Small, pale green, inconspicuous. Male and female reproduction elements occur on separate individual plants. Female plants that are isolated will still produce fruit but they will lack seed.

**Fruit:** Spherical, bumpy, 4 to 5 inches in diameter. The fruit is made up of numerous small drupes that are crowded and have grown together making a sphere. They are yellow-green in color and filled with a sticky white latex sap. This juice is acidic and milky in color making the fruit inedible, although squirrels, cattle and horses eat the small seeds.

The fruit has been used to deter spiders, cockroaches, boxelder bugs, crickets, fleas, and other arthropods, but this method has not been proven.

**Wood:** Bright orange in color, Osage orange wood is strong, durable, and dense. It was used by Native Americans to build bows and other furniture and the wood is still used today to create tool handles, tree nails, fence posts, and electrical insulators.

**Pests & Diseases:** No major insects or disease issues.

**Uses:** Osage orange was originally used for windbreaks or as cattle deterring hedges prior to the creation of barbwire. Currently it is still being used for windbreaks and also used as a reclamation plant and has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought is common.

**Extra Knowledge:** In a Civil War battle, the Battle of Franklin (Tennessee), the Federal (Union) soldiers created above ground trenches made of Osage orange to stop the Confederate soldiers from making their way to the Federal soldier's parapets. The Confederate soldiers had to work their way through a thick tangle of branches and thorns while being shot at in order to engage the Federal soldiers in hand to hand combat.

**Sources:**

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