

Osage-Orange

By

Scott Hininger

University of Wyoming Extension

Sheridan County

November 24, 2014

The Osage-Orange (*Maclura pomifera*) is a zone 4 tree growing about 40 to 50 feet tall and 50 to 60 feet wide. Other names it goes by are; hedge apple, horse-apple, bodark, Bois d'Arc yellow wood, mock-orange, and bow-wood. Many people have not heard of this tree unless they have been back east. This tree is not very common in the horticulture industry.

This tree was first introduced to us by Meriwether Lewis when he sent samples back to President Jefferson when he started his journey west from St Louis Missouri. The native Americans would travel or trade hundreds of miles to get some of this wood to make bows with, which were very highly prized. This wood is extremely tough and durable.

Before the invention of barb wire this tree was planted in hedges and the saying "Horse high, bull strong and hog tight" were the criteria for a good hedge made with Osage Orange. Tall enough that a horse would not jump it, stout enough that a bull would not push through it and woven so tightly that even a hog could not find its way through! Yes this tree can have some thorns.

The range of this tree was limited to the Red River area when first discovered. However fossil records indicate this tree is well over 100,000 years old and extended from Ontario Canada to the south central United States. When the last glaciation ended the tree did not have the large mammals such as the great sloths, mastodons, prehistoric horses to spread the seeds back north.

This tree has a rounded spreading canopy and often have a multiple form of trunks. This deeply furrowed bark has rust colored bark and roots which is where the "orange" comes from and is an identifying characteristic. The dark green alternative leaves turn a yellow color in the fall, which provides a nice color.

The other interesting characteristic of this tree is the fruit. The size can vary from baseball to softball size. The green color and furrowed texture reminding some of a green colored brain that smell like citrus. They make quite a conversation piece for those who have not seen them. The seeds are edible, but the squirrels really like them. Some people claim these "apples" will keep insects and mice out of areas.

These trees are a member of the mulberry family and are really hardy, being disease, insect resistant and very drought resistant. They are also deer resistant and are not as effected by air pollution. As mentioned before the wood is extremely hard and therefore the tree resist wind and snow damage. The wood also makes good fence posts. This tree will grow in a wide

range of pH conditions and soil types. It is also a fairly fast growing tree given the right growing conditions. This is also a very long lived tree with some specimens documented at over 200 years old.

There are several varieties such as Cannonball, K-2, Smolan, White Shield, and Wichita being some examples. They can be thorn less or nearly so and most varieties are male selections. However the cannonball is a female variety with fruit at 3 pounds. There are not very many nurseries that carry this tree, but it is worth searching the internet for.

Recently, Osage orange has been studied for the chemical properties it contains that may be of economic importance. Oil extracted from the seeds has been tested for its potential as biodiesel. The isoflavone pomiferin has been studied for its antioxidant activity. Osage orange has also had proteolytic enzymes (any of several complex proteins that are produced by cells and act as catalysts in specific biochemical reactions) recently discovered in its fruit.

Trade or brand names used in this publication are used only for the purpose of educational information. The information given herein is supplied with the understanding that no discrimination is intended, and no endorsement information of products by the University of Wyoming Extension is implied. Nor does it imply approval of products to the exclusion of others, which may also be suitable. The University of Wyoming is an equal opportunity/affirmative action institution.