

Pawpaw

Asimina triloba

Cultivation Guide



The pawpaw is a small to medium deciduous tree that grows wild in hardwood forests of 26 of the eastern United States, ranging from northern Florida to southern Ontario (Canada) and as far west as eastern Nebraska. The tree grows to about 20 feet high in full sun, but can reach 40 feet high in the shade. It has the largest edible tree fruit native to the United States. With its uniquely flavored fruit, the pawpaw has great potential as a new high-value fruit crop in regions where tobacco is now commonly grown.

The fruit has a powerful aroma and tropical flavor, resembling a combination of ***banana, mango, and pineapple***. There is a commercial processing potential for use of pawpaw fruit in juices, wines, ice creams, yogurts, and baked goods. The fruit is also very nutritious, being higher in some vitamins, minerals, and amino acids than apple, grape, and peach. Natural compounds in the leaf, bark, and twig tissue have insecticidal and anti-cancer properties and may also present a lucrative opportunity for small farmers in the future.

The pawpaw flower has a slight rotten odor and flowers are thought to require cross-pollination by at least **one other pawpaw tree variety**. Flies and beetles are thought to be pollinators of pawpaw flowers.



Trees started from seed will normally begin to bear fruit after **5 to 8 years**, while grafted trees may bear fruit **3 or 4 years** after planting.

The fruit is ripe when it is soft and gives slightly when gently squeezed. Skin color, which is not a reliable indicator of ripeness, can vary from green to bright green, eventually turning brown or black as they ripen.

When fruits on an individual tree begin to ripen, pawpaws from that tree will need to be hand harvested a minimum of every other day for a **1-2 week period**.

While deer will eat the fruits which have fallen to the ground, it is thought that the unpleasant smell the stem emits when damaged keeps the tree from being palatable to deer. (Also true for livestock grazers, i.e. goats, sheep)

Pawpaws are relatively disease-free and have few insect pests, which could make this an excellent crop for organic production. Occasionally, Japanese beetles can damage vegetation, while Sooty mold, a black, superficial growth that covers fruit and detracts from its appearance can be troublesome on pawpaws in years of frequent rainfall.



SITE SELECTION

- For good fruit production the trees should be grown in **full sun**. While it is true that pawpaws are shade tolerant, they will fruit much less in the shade.
- Because of the large size of the leaves, windy sites are damaging and to be avoided.
- Excessively dry sites should be avoided. Moist soils are ideal.



SOIL

- Pawpaws are flexible in their soil requirements but are happiest in a rich, deep, loamy soil with high organic matter content.
- The main thing is good drainage. **The soil must be well drained.** Heavy or waterlogged soils should be avoided.
- Soil pH should be moderately acid to neutral, in the range of 5.5 to 7.0.
- Pawpaws appreciate organic mulch. Copy conditions in a natural forest ecosystem; use layers of decomposing leaves as a mulch.

SPACING

- In an orchard setting, tree centers should be at least 10 feet apart.
- Row widths depend on the size of tractors or equipment -- 20 foot rows should be a minimum width.
- When raising just a few trees for fruit, it is advisable to plant them close -- no further than 30 feet apart in order to ensure good pollination. Flowers are insect pollinated and may need to be hand pollinated for best fruit production.

PLANTING YOUNG TREES

- Prepare the soil in advance of receiving your young pawpaw tree.
- The soil from the hole should be thoroughly loosened to a fine tilth. The hole should be the same depth as the root system, and 2 or 3 times the diameter of the root mass.
- In an orchard setting, plow a furrow down the row, rototill the soil to a loose tilth, and then mound the soil into raised beds.
- Pawpaw trees have fleshy, roots, similar to magnolia. And like magnolia, pawpaws transplant better if moved in the spring, not the fall.
- For the first growing season keep the trees well watered. Do not overwater, however.
- Keep the area completely free of weeds & all competing vegetation up to a 2-foot radius.
- **Weed control is essential to successful establishment.** Remember to mulch!



RESOURCES

- Organic Pawpaw Production (Kentucky State University) <http://organic.kysu.edu/Pawpaw.shtml>
- Pawpaw (Kentucky State University, 1998) <http://www.hort.purdue.edu/newcrop/cropfactsheets/pawpaw.html>
 - Pawpaw Information Web site (Kentucky State University) – Includes: Pawpaw Planting Guide, Cultivars, Nurseries, FAQ, Pawpaw Research and more <http://www.pawpaw.kysu.edu>