
Pecan Trees

Pecan trees make an excellent shade tree and will produce a good nut crop in several areas of the Verde Valley. In fact, Camp Verde has close to 200 acres in pecans that produce 200,000 lbs of pecans annually. Pecans are relatives of hickory and native to the southern United States.

Deep alluvial soils found on river and stream terraces are the best sites for pecans in the Verde Valley. Whatever the soil conditions, good drainage is the most critical factor when selecting suitable sites. Caliche layers should be well broken up before planting. In addition, sites above 3,500 feet in elevation are rarely suitable for pecans. They may experience spring frost injury, freeze damage and produce poor crops. This includes the cooler, higher elevation sites in Sedona.

Pecan seedlings can produce decent nuts, but there are no guarantees. If your objectives include a high-quality nut crop, then use grafted varieties. More than one (preferably three) proven varieties will increase the nut yield by providing cross-pollination. Some appropriate varieties include: Apache, Burkett, Choctaw, Cheyenne, Mohawk, Sioux, Wichita, and Western Schley. These varieties are grafted to a proven rootstock. Try to buy grafted varieties from reputable New Mexico nurseries. California rootstocks are not well adapted to Arizona growing conditions. Select bare root trees that are five to seven feet tall having a 3/4 to 1 inch diameter six inches above the bud union. In addition, high quality bare root trees should have many pencil sized lateral roots attached to the taproot.

Pecans should be planted between January and mid-March. Never let the roots dry out (not even for one minute). This is the major cause of tree death after planting. When planting, dig a hole at least three feet deep and two feet wide. Fill the hole half full with water, place the tree at the same depth as it was grown at the nursery, then add soil. The soil should force all air pockets out. After 24 hours, check to see if the soil has settled further. If so, add more soil and water again.

Pecan trees need regular watering and should not be considered where water supplies are limited. Irrigation water should not have over 1,000 ppm total dissolved solids to avoid salt burn. On loamy soils, irrigation should be necessary about every 10 to 14 days during the first spring and summer. On sandy soils, it may require irrigation every 7 to 10 days. As a general rule-of-thumb, water should go at least two feet deep and be allowed to dry out on the surface two to three inches between watering. The first year will likely require more frequent irrigations than subsequent years.

The first five years are critical in developing the modified central leader and scaffold branch framework of the tree. Earlier nut production will occur on trees with the fewest pruning cuts. In home gardens, early production could be sacrificed in favor of an aesthetically pleasing tree. Painting the trunks of young trees will prevent sunscald until the canopy is well developed.

Pecans also require close attention to mineral nutrition. Nitrogen fertilization regulates shoot growth. Too little nitrogen results in diminished shoot growth leading to low vigor and reduced photosynthesis. Too much nitrogen results in excessive shoot growth which removes energy from nut production. The correct amount of nitrogen will result in 10 to 16 inches of shoot growth per year and optimum nut yields once the tree reaches bearing age. Zinc nutrition is also critical to pecan growth and nut production. Pecan trees deficient in zinc will have a condition called "rosette". Here, new leaves are greatly reduced in size, have thickened veins, and are brittle to the touch. To avoid this condition, apply zinc sulfate mixed with water directly to the foliage when spring growth begins. In some cases, more than one zinc application is necessary depending on site and pecan variety.

Additional Resources:

[Pecan Production Guidelines For Small Orchards And Home Yard](#), University of Arizona

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