

Deciduous Fruit & Nuts for the Low Desert

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This information has been reviewed by university faculty.

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OOPERATIVE **EXTENSION**

For optimum fruit production in the low desert, choose deciduous fruit tree varieties that have low "chilling requirements," early maturing fruit, and are self pollinating.

- Most deciduous fruit and nut trees from temperate climates require a genetically determined amount of cold weather (chill hours) to set fruit. While there is still some disagreement in the scientific community around how to precisely calculate chill hours, a good rule of thumb is to count the number of hours between November 1st and February 15th that are between 32° and 45° F. These hours are cumulative and need not be continuous. The most benefit is derived from chilling hours occurring in December and January. Daytime temperatures above 60° F during this period may negatively affect the cumulative total. Most areas of Maricopa County average between 300 to 400 chilling hours per year. By selecting varieties of fruit that require around 250 hours of chilling to set fruit you can be sure of a full crop almost every year.
- Select varieties which mature before the hot summer temperatures arrive and avoid sunburning fruit.
- If space is a consideration, choose a self-fruitful/self-pollinating variety. Many deciduous fruit trees require cross pollination to bear fruit. Thus, it is necessary to have two varieties of the same type of fruit in order for either tree to bear abundant fruit. A self-pollinating variety will have good fruit set even with only one tree.

The rootstock onto which a fruit tree is grafted can impact the tree in a variety of ways:

- provide disease resistance or tolerance for pathogens such as Root-Knot Nematodes, Oak Root Fungus, and Phytopthora;
- improve performance in a particular soil type, i. e. some rootstocks perform well in clay soils, others in sandy soils;
- control growth rate and mature size;
- increase drought tolerance;
- · increase salt tolerance; and
- modify fruit quality including taste, texture, size and yield.

Your local nursery should offer fruit trees that are grafted onto appropriate rootstocks for your area

The following is a list of low-chill deciduous fruit trees which should do well in the low desert and are available at local nurseries. This is not an all-inclusive list and many of these varieties are still untested in the low desert of Arizona. In addition, many new varieties are developed every year. Use the three criteria identified above when selecting fruit trees for your yard.

Apples

- ✓ Anna: Remarkable fruit for mild-winter climates in Southern Arizona. Heavy crops of sweet, crisp, flavorful apples even in low desert. Fresh or cooked. Keeps 2 months in refrigerator. Chilling requirement 200 hours. Self-fruitful or pollinated by Dorsett Golden or Ein shemer.
- ✓ Beverly Hills: Produces a pale yellow medium sized fruit. Chilling requirement 300 hours. Self-fruitful.
- ✓ Ein shemer: Heavy-bearing, very low chilling requirement of 100 hours. Sweet yellow apples in early summer (June in the low desert). Excellent pollenizer for Anna. Self-fruitful.
- Fuji: Recently introduced from Japan, has quickly become California's favorite apple. Sweet, very crisp and flavorful, excellent keeper. Dull reddish-orange skin, sometimes russeted. Chilling requirement listed as 600

At a Glance

Select deciduous fruit tree varieties that:

- · require less than 400 hours chilling;
- produce early maturing fruit;
- are self pollinating (if space is premium).

- hours, but preliminary testing in the low desert indicate that it may be less. Self-fruitful.
- Gala: Wonderful dessert apple from New Zealand. Crisp, nice blend of sweetness and tartness, rich flavor. Skin reddish-orange over yellow. Chilling requirement listed as 500-600 hours, preliminary testings suggest it maybe less. Self-fruitful.
- ✓ Golden Dorsett: Outstanding sweet apple for warm winter areas. Firm, very flavorful, sweet like Golden Delicious. Productive throughout the low desert. Good early season sweet apple. Chilling requirement of 100 hours. Self-fruitful.
- ✓ Gordon: Produces a reddish-green fruit for fresh use and cooking. Chilling requirement, 400 hours. Self-fruitful.

Apricots

- Castlebrite: Firm and juicy. Good flavor when fully ripe, otherwise somewhat tart. Good size. Bright orange with red blush. 450 chill hours. Self-fruitful.
- **Gold Kist**: Excellent backyard apricot for warm winter climates. Freestone, very good quality. Heavy bearing. Early harvest, late May to early June. Requires 300 chill hours. Self-fruitful.
- ✓ Katy: Large, all purpose flavorful freestone. Tree ripe fruit is subacid (not tart). A favorite apricot for warm-winter climates. Early harvest, late May to early June. Requires 400 chill hours. Self-fruitful.
- **Modesto**: Commercially grown for shipping. 300-400 hours chilling. Self-fruitful.
- ✓Patterson: A vigorous tree. Fruit are medium to large in size with good firm, modestly flavorful flesh. Good for freezing, drying, and canning. Requires 500 chill hours. Self-fruitful.
- Royal Rosa: Extremely vigorous, more disease tolerant than other apricots. Bears young and heavy. Especially nice fruit: sweet, low acid, fine flavor. Very early harvest (early-to-mid May). Excellent backyard apricot. Requires 500 chill hours. Self-fruitful.

Figs

- ✓Black Mission: Popular and flavorful for eating fresh or dried. Medium to large pear-shaped fruit has skin which is black-purple and strawberry-colored flesh. Tree is large and long lived. Well adapted to elevations below 2,000 feet.
- ✓Brown Turkey: Sweet tasting and best eaten fresh. Bell shaped medium to large fruit has browish- purple skin with pink flesh. Tree is large and best adapted to 2,000 3,000 feet. Not as prolific as Mission.
- ✓ Conadria (White): Mild and sweet with whitish-pink flesh. Large fruit with cream to light green colored skin. Good, eaten fresh or dried. Tolerates heat well.

✓White Kadota: Good, fresh or dried, suitable for canning. Fruit is medium sized with yellow skin. Flesh is amber with few seeds. Hot weather aids in ripening.

Peaches



- ✓Bonanza Miniature: Popular yellow freestone large fruit is sweet, low in acid, with a mild, refreshing flavor. Mid-to-late May in low desert climates. Five- to six-foot tree. Chilling requirement very low, 250 hours or less. Self-fruitful.
- **August Pride**: Large, all-purpose yellow freestone for mild-winter climates. Sweet, aromatic, rich flavor, one of the best. Chilling requirement less than 300 hours. Self-fruitful.
- ✓Babcock: Long-time favorite white-fleshed freestone. Sweet and juicy, aromatic, low in acid. Very high-scoring in taste test. Chilling requirement of 250-300 hours. Self-fruitful.
- ✓ Desert Gold: Very early ripening: mid-May in Arizona.

 Tree-ripened fruit has good flavor and sweetness for such an early variety. Yellow Clingstone. Heavy bearing. Chilling requirement of 250 hours. Self-fruitful.
- ✓ Desert Red: An excellent quality, firm cling peach that has good color. Produces large fruit when thinned and girdled. Chilling requirement of 200-300 hours. Self-fruitful.
- ✓ Earligrande: Medium size, low-chill peach from Gulf Coast Texas. Yellow semi-freestone. Very early (May). Successful in Arizona and similar climates. Chilling requirement of 275 hours. Self-fruitful.
- **Eva's Pride**: Delicious, fine-flavored peach with very low-chilling requirement. Medium- to large-sized yellow freestone. Ripens early-to-late May. Chilling requirement of 100-200 hours. Self-fruitful.
- Flordaking: High quality early season peach. Large, firm, flavorful semi-freestone, very sweet when fully ripe. Mid-May in warm winter climates. Chilling requirement 450 hours or less. Self-fruitful.
- ✓ Flordaprince: From Florida, successfully grown in Arizona. Yellow, semi-cling, larger fruit than Desert Gold, more tolerant of desert heat. Ripens late April to early May in Arizona. Very good quality when tree-ripe. Chilling requirement of 150 hours. Self-fruitful.
- **Flordagrande**: Excellent yellow-fleshed semi-freestone peach. Flesh will have some red coloration at maturity. Requires less than 100 chill hours.
- May Pride: Very early-ripening, semi-freestone peach for warm winter climates. Ripens in May with Desert Gold. Delicious, sweet and tangy fruit. Very large for such an early peach. Large, showy pink blossoms. Chilling requirement 175 200 hours. Self-fruitful.
- Mid-Pride: Best yellow freestone for warm winter climates. Mid-season peach. Chilling requirement of 250 hours. Self-fruitful.

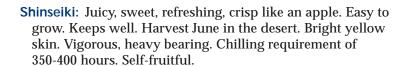
- ✓ Tropic Beauty: Excellent quality yellow flesh, firm freestone peach. Produces a large fruit when thinned and girdled properly. Chilling requirement of 100-200 hours. Good for the low desert. Self-fruitful. Ripens early May.
- ✓ Tropic Snow: Medium-sized fruit. Skin is white with red blush. White sweet flesh. Good flavor. Freestone. Ripens early May. Chilling requirement 175-200 hours. Self-fruitful.
- ✓ Tropic Sweet: Good quality freestone, yellow-fleshed peach. Fruit are very large when thinned and girdled properly. Ripens just after Tropic Beauty. Chilling requirement of 100-200 hours. Self-fruitful. Ripens mid-May.
- Vallegrande: This is an excellent quality, semi-freestone, yellow-fleshed peach. Flesh is firm and ripens to 60% blush at maturity. Flesh becomes red as fruit matures. Chilling requirement of 100-200 hours. Self-fruitful. Ripens early May.

Pears

Flordahome: Very nice quality, sweet, smooth-textured, juicy, flavorful. Early bloom. Chilling requirement less than 400 hours. Partly self-fruitful.

Kieffer: Medium to large late season fruit. Canning/cooking. Sprightly flavor, coarse texture. Resists fireblight, tolerates hot climates. Dependable crops. 350 hours. Self-fruitful.

Asian Pears



Yakumo: Early harvest, before Shinseiki. Slight tapered neck, instead of round shape of other Japanese pears. Very nice quality - sweet, juicy, refreshing. Crisp like apple when ripe. Chilling requirement of 450 hours. Pollenizer required.

Persimmons

Fuyu (Jiro) ("Apple Persimmon"): Medium size, flat shape, still hard when ripe, non-astringent. Cool or hot climate. Hardy, attractive tree, practically pest free. Chilling requirement 200 hours. Self-fruitful.

Giant Fuyu: Larger, not so flat as Fuyu. Crunchy when ripe like Fuyu. Sweet, flavorful, non-astringent. Easy to grow, cool or hot climates. Chilling requirement of 200 hours. Self-fruitful.

Izu: Very sweet, tasty, non-astringent. Fruit ripen about three weeks before Fuyu. Medium to large size, round shape. Relatively small tree, good choice for backyard persimmon. Sometimes difficult to start from bareroot. Chilling requirement of 100 hours. Self-fruitful.

Plums

Beauty: Sweet, flavorful plum. Red over yellow skin, amber flesh streaked red. Chilling requirement of 250 hours. Self-fruitful.

- ✓ Gulf Gold: Green-skinned plum which turns yellowish when ripe. Juicy, sweet, yellow flesh. Chilling requirement of 250 hours. Self-fruitful.
- ✓ Gulf Ruby: Sweet, juicy plum, with reddish-purple skin and amber flesh. Chilling requirement of 250 hours. Self-fruitful.

Methley: Juicy, sweet, red flesh, mild flavor. Reddish purple skin. Attractive tree, heavy bearing and vigorous. Chilling requirement of 250 hours. Self-fruitful.

✓ Santa Rosa: Most popular plum in California and Arizona. Juicy, tangy, flavorful. Reddish-purple skin, amber flesh tinged red. Chilling requirement of 300 hours. Self-fruitful.

Quince



Orange Quince: Large, round, bright yellow fruits often exceed 1 lb. Flavorful, aromatic, used for cooking. Early harvest. Old variety. Cold hardy, yet low chilling requirement of 300 hours. Self-fruitful.

Pineapple Quince: Heavy crops of large, tart fruit used in baking, jams, and jellies. Profuse, ornamental bloom. Cold hardy, yet low chilling requirement of 300 hours. Self-fruitful.

Almonds



- ✓ All-in-One (semi-dwarfing): Medium to large. Soft shelled with good quality sweet kernels. Classified semi-dwarf to 15 feet. Chilling requirement of 500 hours (may not be suited for Salt River Valley). Self-fruitful. Number 1 almond for home orchards.
- ✓ Garden Prince Genetic Dwarf: Compact, lushly foliated 10-12 foot tree. Soft shell, kernels especially sweet and tasty. Bears young and heavy. Chilling requirement of 250 hours. Self-fruitful.

Pecans



- ✓ Neplus Ultra: Large soft-shelled nut, long broad flat kernel. Chilling requirement of 250 hours. Needs pollenizer. Best pollenizer: Nonpareil.
- Nonpareil Almond: No. 1 commercial almond, the standard of quality. Inter-fruitful with All-In-One and Neplus. Chilling requirement 400 hours. Pollenizer required.
- ✓ Cheyenne: Bears heavy and early. Nuts are medium size, soft shell, with excellent kernel quality. Tree is somewhat susceptible to limb breakage; slow growing tree.
- ✓ Choctaw: Tree is vigorous and is an excellent producer. Moderately precocious. Produces pecans of outstanding quality. Shells are thin and cracks into half kernels very easily.
- ✓ Comanche: Medium to large sized nuts, nearly round, thin shelled. Good producer, nut quality is excellent. Nuts tend to sprout.
- ✓ Sioux: Good producer with small to medium sized nuts with outstanding kernel quality. A little slow to begin producing, moderately precocious.
- ✓ Western Schley (Western): Easy to grow, nut long, tapered, medium sized, thin-shelled, good kernel quality. Self-fruitful. Early bearing 4 to 5 years. Recommended for single tree planting in home garden. Less affected by zinc deficiency than other cultivars. Prolific. Tendency for nuts to sprout (pregerm) in the low desert.
- ✓ Wichita: Highly flavored, medium to large sized nuts are well-filled, soft shell. Plump, rich, distinctively flavored kernel. Bears heavy at young age. Pollinators are Cheyenne or Western Schley. Prone to zinc deficiency. Strong tendency for nuts to sprout (pregerm) in the low desert.

Grapes

- ✓ Cardinal: Clusters large to medium in size. Very large, seeded, cherry red berries become reddish black with maturity. Use for arbor or summer house. Spur pruned.
- ✓ Exotic: Berries are black, large, seeded, crisp and sweet. Berry irregular to oval in shape and has large clusters. Ripen in July. Spur pruned.
- ✓ Fantasy: Large, black, seedless berry used for table or raisin. Excellent flavor. Ripens in July. Cane pruned.
- ✓ Flame seedless: light red, seedless, crisp, sweet berry. Cool nights are required for full color development. Ripens June July. Spur pruned.

- ✓Perlette: Pale green, round, crisp, juicy seedless medium sized berry. Larger than Thompson, unique flavor - mild aromatic in flavor. Spur pruned, ripens in June.
- ✓Ruby seedless: Dark red, sweet, crisp, excellent fresh or raisin. Ripens after Thompson seedless. Chilling requirement of 100 hours, self-fruitful. Ripens in June. Spur pruned.
- ✓ Thompson seedless: Most popular grape. Green, seedless berry, fresh or raisin. Very sweet. Self-fruitful. Chilling requirement of 100 hours. Ripens mid June July. Cane pruned.

Kiwi

Tomari Male: Pollenizer for Vincent Female. Does not bear fruit. One male can pollinate up to eight Vincent females.

Vincent Female: Low chilling required, which is adapted to Southern California. Tasty, well-regarded fuzzy skinned fruit. Pollinated by Tomuri male.

Blackberries

- ✓Brazos: Very vigorous, thorny, erect plant which produces an abundance of large high quality berries. Berries are large, attractive appearance and heavy yields, tart acid flavor.
- ✓ Rosborough: Vigorous moderately upright canes which produces well in a wide variety of soil and climatic conditions. Fruit are large, attractive in appearance and have a sweeter flavor than Brazos.

Strawberries

- ✓ Camerosa: Plants are large and vigorous. Fruit are large, firm wedge shaped berries of good quality.
- ✓ Chandler: Plant is large and vigorous. Produces nice berries which are smaller than Camerosa, but tend to be sweeter.
- ✓ Sequoia: Produces a big vigorous plant. Fruit are large, wedge shaped of high quality, but soft when ripe.
- ✓ Tioga: This plant is very large and vigorous with big, dark green glossy leaves. Fruit are very large, firm wedge shaped berries of medium quality.

Deciduous Fruit and Nut Chart and Harvesting Calendar for the Low Desert

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