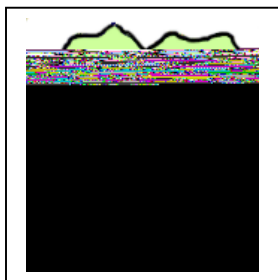


# Fruit, Nut, and Grape Varieties for Home Orchards

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To insure successful production of fruits, nuts, grapes, and berries in home orchards it is essential that proper varieties be selected. The varieties listed in this publication are well suited to our particular conditions. It is quite possible that some varieties not listed may perform well in certain locations.

Annual pruning is important to help regulate crop load and fruit size on most tree and vine varieties. Despite this, apples, apricots, nectarines, peaches, and plums often set too much fruit. Thin 1/3 to 2/3 of the fruit when it is 1/2 to 1 inch in diameter to obtain desirable fruit size and to prevent limb breakage. Remove excess fruit by hand pulling. Space remaining fruit 4 to 8 inches apart.

Most home orchardists find it more convenient to care for trees that are short in stature. This means that trees can also be planted much closer than in years past. Tree size can be limited by rootstocks and management practices. Most fruit trees can be spaced 6-12 feet apart, nut trees 10-20 feet, and grapes 4-6 feet.

Vertebrate pests such as deer and rabbits can damage trees and vines so it may be necessary to install fencing for protection. Narrow wire mesh on the bottom 2 feet will exclude most rabbits. Fencing 7-9 feet tall will exclude most deer.

Cross pollination is required on several varieties and at least two different varieties are required in these circumstances. If no pollination comments are made, assume a single tree will be fruitful. Section I, which follows, describes fruits, nuts, and grape varieties generally suited to

elevations from 300 to 1500 feet. Section II covers plantings suitable for elevations from 1,500 to 3,500 feet. These are general guidelines and micro-climates can create vast differences in the foothill region. A wealth of information is also available at <http://homeorchard.ucdavis.edu>.



## Section I 300-1,500 Feet

### Almonds

Only suitable for warmest locations below 1,500 ft. elevation. To avoid frost damage to flowers and small fruits, plant only in locations of minimum frost, such as tops of hills, on hillside slopes or near heated buildings. Avoid low areas between hills.

Recommended varieties:

Nonpareil, Carmel, All-in-one (self fruitful), Butte, and Hall

Two varieties are needed for cross pollination. Mission and Butte are two late-blooming varieties which can pollinate each other. The earlier blooming, soft shelled Nonpareil may be pollinated by Carmel or other mid-blooming varieties.

### Apples

Generally best results are obtained on North slopes and on cool bottomland. Semi-dwarf trees are preferred for early fruiting and ease of culture. M7a is a good semi-dwarf, resistant to fireblight. M9 needs staking, not good anchor so not good for windy sites.

Recommended varieties:

Gravenstein, Red Delicious, Golden Delicious, Empire, Stayman, Winesap, Sierra Beauty, Granny Smith, Anna, Ashmead's Kernal, Enterprise, Gala, Golden Supreme, William's Pride, and Fuji.

Use Golden Delicious, Fuji, flowering crab apple, or other variety that blooms at the same time as a pollinizer for other varieties; a single tree of Golden Delicious is self-fruitful. Gravenstein and Stayman's Winesap have sterile pollen. Use Empire or Granny Smith to pollinize Gravenstein.

### Apricots

Plant only in areas of minimum frost (see Almonds).

Recommended varieties:

Royal (Blenheim), Modesto, Royalty, Harcot, Tilton, Perfection, Patterson, Moorpark, GoldenGlo, and Golden Amber.

### Berries

Blueberry and Raspberry plantings do best on cool North slopes. Blackberry varieties do best on sunny slopes. They should be planted 4 to 5 feet apart in rows 10 feet apart and canes trained on 4 foot high, 2 wire trellis. Each year after harvest, old canes are removed and new canes are wrapped around the wires. Blueberries do well on acid soils of the foothills and are planted 5 to 6 feet apart and do not need trellis support. Raspberries are planted 3 to 4 feet apart in rows. Strawberries are planted on raised beds. Plants are set 8 to 12 inches apart in rows 36 inches apart. Planting is best done in late July or around the first of November.

Recommended varieties:

Blackberry- Olallie, Boysen, Thornless Everbearing Black, Smoothstem, Tay, Thornfree, and Marion.

Blueberry- Blue crop, Ray, Herbert, Jersey, Coville, Pemberton, Duke, Toro, Nelson, Olympia, and Atlantic.

Raspberry- Willamette and Heritage.

Strawberry- For early summer crop: Chandler, Pajaro, Sequoia, Tioga, Douglas, and Benton. For continuous summer crop: Fern, Hecker, Ozark Beauty, Selva, Tristar, and Brighton.

### Cherries

Plant two varieties for cross-pollination. (Royal Ann or Napoleon, Bing, and Lambert will not pollinate each other.)

Recommended varieties:

For sweet dark flesh: Burlat, Early Burlat, Craig's Cromson (self-fruitful), Lapins (self-fruitful), Utah Giant, Glacier, Bing, Berryessa, Hardy Giant, Sunset, and Van. For Sweet white flesh: Ranier and Royal Ann. For sour: Montmorency, Meteor,

North Star, and Early Richmond. Recommended rootstocks: Mazzard, Colt, GMG1, Biselo 5 and 6, and Mahaleb.

### **Chestnuts and Filberts**

Chestnuts and Filberts are grown at elevations from 1000 to 3000 feet. Any two varieties of the same type nut will cross-pollinate.

### **Citrus**

Plant only in minimum frost areas below 1500 feet elevation facing South or West. Winter temperatures below 26° F can damage. Fruit temperatures below 24° F can kill whole trees.

Recommended varieties: Grapefruit- marsh seedless. Lemons- Lisbon and Meyer (a dwarf tree with low acid lemons that tolerates winter cold best). Mandarins- Satsuma and Cleopatra. Oranges- Washington naval and Valencia.

### **Figs**

Fig trees are easy to grow and tolerate poor or shallow soils. Unused figs often spoil on the tree or ground and attract fruit flies.

Recommended varieties: Black Mission, Brown Turkey, White Kadota.

### **Grapes**

Vines are normally planted bare root from January to March or as a potted plant May to July and spaced 4 to 7 feet apart in rows 6 to 10 feet apart. Cane prune Thompson Seedless and Concord. Spur prune other varieties. Spraying or dusting with sulfur for mildew is often necessary on wine and table grapes, but rarely needed with American types.

Recommended varieties: Table- Cardinal, Flame Seedless, Perlette, Black Monukka, Thompson Seedless, Tokay, Ribier, and Muscat of Alexandria. American type (for jelly or juice)- Concord, Niabell, Cambell Early, Niagara, Interlaken Seedless, and Pierce. Red wine varieties: Merlot, Cabernet Sauvignon, Zinfandel, Cabernet Franc,

and Syrah. White wine varieties- Sauvignon Blanc and Chardonnay.

### **Nectarines**

Recommended varieties: Yellow freestone- Flavortop, Juneglo, Red Gold, Stribling Giant Free, Independence, Panamint, Pioneer, and Fantasia. White freestone- Arctic Rose, Gold Mine, Silver Lode, Heavenly White, Stribling White Free, and Stanwick. Yellow clingstone- Flame Kist, and Liz's Late.

### **Olives**

Olive trees grow easily on a wide variety of soils. Won't tolerate poorly drained soils. Trees tolerate drought once established, but irrigation increases fruit production and size. Recommended varieties: Ascolana, Mission, Manzanillo, Sevillano, and Lucca.

### **Peaches**

All peach trees need a good dormant spray for leaf curl disease and they may need sprays for worms during the Summer. Recommended varieties: Yellow freestone- Autumn Gold, Gold Dust, Flamecrest, Elberta, Suncrest, Fortyniner, Fay Elberta, Halberta, Halehaven, Indian Free (peach leaf curl resistant), J.H. Hale, July Elberta, O'Henry, Nectar, Ranger, Redglobe, Redskin, Reliance, Rio Oso Gem, and Fairtime. White freestone- Nectar, Babcock, Donut, and Arctic Supreme. Yellow clingstone- Loadel, Andross, Indian Blood Cling, Orange Cling, and Halford.

### **Pears**

Bartlett sets without cross-pollination from any other variety. Rootstocks: *Pyrus betulaefolia* is the most tolerant to decline. *P. ussurenensis* (asian rootstock) is more resistant to fireblight but causes quick decline if infected with MLO. *P. communis* (French rootstock) is tolerant to declining and resistant to Oak Root Rot Fungus. Quince can also be used as a rootstock.

Recommended varieties: Anjou, Bartlett, Bosc, El Dorado, Seckel, Sure Crop, and Comice. Asian- Shinseiki, Hosui, Twentieth Century, and Shinko. Asian pears are usually partially self-fruitful, but set

better with cross pollination when bloom conditions are unfavorable. Asian pears need to be thinned to no more than one fruit per blossom cluster.

### **Pecans**

Heat is needed for best kernel development. Deep soil is needed for best tree growth. Recommended varieties: Wichita, and Western Schley.

### **Pistachios**

Plant below 1,500 foot elevation. Pistachios are drought tolerant trees. Recommended varieties: Kernan, and Peters (for pollinizer only).

### **Persimmons**

Trees are easy to grow in most soils and need no pest control. Recommended varieties: Hachiya, Fuyu, and Chocolate.

### **Plums**

Japanese plums bloom earlier than European plums; they, therefore are more susceptible to frost injury. Use Santa Rosa, Laroda, or Wickson as the pollinizer for all Japanese plums. In many locations, plum trees die from bacterial canker. Trees on peach rootstock tolerate bacterial canker better than plum rootstock. However, on heavy clay soils plum rootstock is preferred over peach. Recommended Japanese varieties: Redskin with amber flesh- Autumn Rosa, Beauty, Black Amber, Burbank, Santa Rosa, El Dorado, Laroda, Nubiana, and Friar. Red skin and flesh- Satsuma, Elephant Heart, and Mariposa. Yellow- Wickson, and Kelsey. Recommended European varieties: Sugar, Green Gage, French Prune, Imperial, Express, Brooks, and President.

### **Pluots**

All need a pollinator. Another pluot or Santa Rosa Plum work well.

Recommended varieties: Dapple Dandy, Flavor King, and Flavor Supreme.

### **Pomegranates**

Rains may cause fruit to crack, however, let them hang on the tree as they will ripen even though cracked. Recommended variety: Wonderful.

### **Quinces**

Recommended varieties: Pineapple and Orange.

### **Walnuts**

Recommended varieties: Adams, Cooke's Giant Sweet, Idaho, Mayette, California Black Walnut, Hartley, Tehama, Chandler, and Franquette.



## Section II 1,500-3,500 Feet

### Apples

See section I comments. Recommended varieties: Gravenstein, Paula Red, Golden Delicious, Red Delicious, Empire, Stayman Winesap, Red Rome Beauty, Newtown, Pippin, and Granny Smith. Use Golden Delicious as a pollinizer for all varieties, except use Empire for Gravenstein which has sterile pollen.

### Berries

See Section I for berry varieties.

### Cherries

See Section I for varieties and comments. Plant only on hilltops above 2,000 feet to avoid frost and bacterial canker infections.

### Grapes

Cardinal and Thompson Seedless limited to warm sites below 2,500 foot elevation. Later maturing varieties fail to mature before Fall rains and frost ruins crops. Note that late Spring frosts will

damage shoots and grape clusters at the higher elevations unless provided frost protection. For spacing and pruning, see Section I. Recommended varieties: Same as Section I.

### Pears

Same as in Section I.

### Plums

European varieties same as Section I. Japanese varieties are usually damaged by Spring frosts, except in warmest sites. Extremely cold hardy varieties: Stanley, Blue Damson, Sprite Cherry Plum, and Delight Cherry Plum.

### Quinces

Recommended varieties: Pineapple and Orange.

### Walnuts

Satisfactory only on ridges on warmer sites at 1,500 to 3,000 feet elevation. Recommended varieties: Tehama, Ambassador, Hartley, Chandler, Howard, and Franquette.



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