

FRUIT, NUT AND GRAPE VARIETIES FOR HOME ORCHARDS

University of California Cooperative Extension In the Sierra Foothills

Matching the proper variety to the available site is essential to successful backyard production of fruits, nuts, and berries. Varieties listed here have been grown successfully in home plantings, some are successfully grown in commercial orchards and vineyards from Mariposa County in the south to Shasta County in the north.

Varieties are listed generally by the order of maturity. Actual harvest will vary from a week to about a month depending on the number of varieties, their location in the foothills, and management practices.

Some varieties listed are more easily obtained than others, and, in some localities, other varieties not listed may perform well and could be planted if available.

Annual pruning helps to regulate crop load on most trees and vine varieties. Even so, too much fruit usually sets on apple, apricot, nectarine, peach and plum trees. Thin (remove from the tree) 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 from the crop overload. Remove excess fruit by hand pulling. L Space remaining fruit 4 to 8 inches apart.

It is highly desirable to grow trees that are easy to maintain from ground level or a short ladder. Tree size depends on rootstock, inherent vigor of the particular variety in question, site conditions, and management practices. Historically, fruit trees were planted 20 feet apart, nut trees 25 to 30 feet and grapes 10 to 12 feet. With appropriate pruning and training practices today, trees can be planted much closer. Most fruit trees, including almonds, can be spaced 8 to 12 feet apart, large nut trees 15 to 25 feet, and grapes 6 to 10 feet.

Since deer and rabbits damage trees and vines, 6 to 8 foot vertical fences may be necessary for protection. Narrow wire mesh on the bottom 2 to 3 feet of deer fence effectively excludes rabbits.

Special pollination, environmental needs and pest problems are briefly noted wherever different from normal. When cross-pollination is required, at least two varieties are needed. Only the better pollinizing varieties are suggested. If no special pollination comments are made, assume a single tree of any variety listed will set good crops. The flowers or small fruit of some trees (like almonds and apricots which bloom early in the spring) can be killed by frost many years; thus, a tree can end up as a flowering ornamental rather than as a fruiting tree.

Various publications on care of fruits, berries, nuts, and grapes, pruning, and pest and disease control are available at your local U.C. Cooperative Extension - Farm, Home and 4-H Office.

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 1500 to 3500 feet. These are general guidelines. Pronounced differences can occur among microclimates in the foothills.

SECTION I

ALMONDS

Only suitable for warmest locations below 1500 feet elevation. To avoid frost damage to flowers and small nuts, 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, Mission, Butte

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. Semi-dwarf trees may be obtained by using spur type varieties or by using one of the following rootstocks: MM 106, MM 111, or M7A.

Usually 2 to 3 sprays are needed to control worms (codling moth) in apple fruit.

Recommended varieties:

Gravenstein, Red Delicious, Golden Delicious, Empire, Stayman Winesap, Granny Smith, and Fuji

Use Golden Delicious as a pollinizer for other varieties; a single tree of Golden Delicious is self-fruitful without a pollinizer. Gravenstein has 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, Patterson

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 in rows 10 to 12 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

Blueberry - Blue Crop, Ray, Herbert, Jersey

Raspberry - Willamette, Heritage

Strawberry - Early summer crop - Chandler, Pajaro, Sequoia, Tioga
Continuous summer crop - Fern, Hecker

CHERRIES

Trees are susceptible to bacterial canker disease. Birds often destroy fruit. Plant two varieties for cross-pollination. (Royal Ann or Napoleon, Bing and Lambert will not pollinate each other.)

Recommended varieties:

Sweet dark fleshed - Burlat, Bing, Van
Sweet White fleshed - Rainer and Royal Ann
Sour or pie - Montmorency, Early Richmond

Recommended rootstocks:

Mazzard, Colt (Avoid Mahaleb because of gopher attraction and root rot problems.)

CHESTNUTS AND FILBERTS

Chestnuts and Filberts are grown at elevations from 1000 to 3000 feet, and any two varieties of the same type nut will cross-pollinate. Plants are hard to find in California and take 8 to 10 years to bear fruit.

CITRUS

Plant only in minimum frost areas below 1500 foot elevation facing south or west. (See notes under Almonds.) Winter temperatures below 26°F cause damage. Fruit temperatures below 24°F can kill whole trees.

Recommended citrus varieties:

Grapefruit - Marsh Seedless

Lemons - Lisbon, Meyer (a dwarf tree with low acid lemons that tolerates winter cold best).

Mandarins - Satsuma (ripens in fall), Cleopatra

Oranges - Washington Navel (winter), Valencia (summer).

FIGS

Fig trees are easy to grow and tolerate poor or shallow soils. Unused figs often spoil in 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 and spaced 7 to 8 feet apart in rows 10 to 12 feet apart. Vertical stakes or posts with 1 or 2 wires on the side, or with "T" tops with wire are desirable supports for grapevines. Cane prune Thompson seedless and Concord. Spur prune other varieties. Frost (31°F) damages new shoots and fruit clusters in April or May, so plant where the frost is minimized. Spraying or dusting sulfur for mildew is necessary on wine and table grapes, but rarely needed with American types.

Recommended varieties:

Table - Cardinal, Flame Seedless, Thompson Seedless, Tokay, Ribier, Muscat of Alexandria

American type (for jelly or juice) - Concord, Niabell, Pierce

Red wine varieties - Merlot, Ruby Cabernet, Cabernet Sauvignon, Zinfandel, Petite Sirah

White wine varieties - Chenin Blanc, Sauvignon Blanc, French Colombard, Semillon, Orange Muscat

KIWIFRUIT

Select the warmest, most frost-free site, and use one male pollinizer vine for each 6 to 10 Haywards. Frost (29°F) will damage new shoots in April and May and can damage fruit before it is mature in the fall (mature about November 1). Plant vines 15 to 20 feet apart, and train on trellis or arbor similar to those used for grapes.

Recommended variety:

Hayward

NECTARINES

All nectarine trees need a good dormant (winter) spray for leaf curl disease and they may need sprays for worms during the summer.

Recommended varieties:

Yellow freestone - Firebrite, Flavortop, Summer Grand, Red Gold, Fantasia

White freestone - Snow Queen, Stanwich

Yellow clingstone - Flamekist, Fairlane

OLIVES

Olive trees grow easily on a wide variety of soils. Trees tolerate drought, but irrigation increases fruit size.

Recommended varieties:

Mission, Manzanillo, or Sevilano

PEACHES

All peach trees need a good dormant (winter) spray for leaf curl disease and they may need sprays for worms during the summer.

Recommended varieties:

Yellow freestone - Springcrest (ripens in early June), Flavorcrest, Elberta, Suncrest, Fortyniner, Fay Elberta, O'Henry, Fairtime
White freestone - Nectar, Babcock, Paradise
Yellow clingstone - Loadel, Andross, Halford

PEARS

Infections of fireblight can kill limbs or whole trees, and 2 to 3 sprays are needed to control worms (codling moth) in fruit. Bartlett sets without cross-pollination from any other variety.

Recommended varieties:

European - Bartlett, Bosc (for baking), El Dorado, Comice (store Comice @ 30-36°F for 1 or 2 months).

Asian - Shinseiki, Hosui, Twentieth Century, Shinko

Use *Pyrus betulaefolia* root stock. 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:

Barton, Wichita, Western Schley

PISTACHIOS

Plant below 1500 foot elevation. Pistachios are drought-tolerant trees.

Recommended varieties:

Kernan, Peteres (for pollinizer only)

PERSIMMONS

Trees are easy to grow in most soils and need no pest control

Recommended varieties:

Hachiya, Fuyu (Firm and non-astringent), Chocolate (brown flesh around seeds)

PLUMS

Japanese

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, especially in Placer County, plum trees die from bacterial canker. Trees on peach rootstock tolerate bacterial canker better than plum rootstock. However, in heavy clay soils plum rootstock is preferred over peach.

Recommended varieties:

Redskin with amber flesh - Santa Rosa (Ripens late June), El Dorado, Laroda, Friar, Casselman, Queen Ann (ripens in September).

Yellow-green Wickson, Kelssey

European

European plums are sweeter than Japanese plums. Use two varieties for pollinization.

Recommended varieties:

Sugar, Express and President

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

Control worms (codling moth) with 2 to 3 sprays each year.

Recommended varieties:

Pineapple, Orange

WALNUTS

Sprays for Husk fly maggots may be necessary in some areas.

Recommended varieties:

Hartley, Tehama, Chandler, Howard, Scharsch Franquette

Recommended rootstock:

Paradox hybrid

SECTION II

1500 - 3500 FEET

Note: All trees will grow well at elevations 3600 to 4500 feet, but crops may be greatly reduced or eliminated by spring frosts.

APPLES

See Section I comments.

Recommended Varieties:

Gravenstein, Paula Red, Golden Delicious, Red Delicious, Empire, Stayman Winesap, Red Rome Beauty, Newtown, Pippin, 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 types.

CHERRIES

See Section I for varieties and comments.

Plant only on hilltops above 2000 feet to avoid frost and bacterial canker infections.

GRAPES

Cardinal and Thompson Seedless limited to warm sites below 2500 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, training and pruning varieties see Grapes in Section I.

Recommended varieties:

Same as Section I but add Chardonnay and White Reisling to the white wine varieties.

PEACHES AND NECTARINES

Even in warmer sites, crops are often damaged seriously by spring frosts. See Section I for recommended varieties.

PEARS

European varieties same as Section I. Japanese varieties are usually damaged by spring frosts, except in warmest sites.

QUINCES

Recommended varieties:

Pineapple, Orange

WALNUTS

Satisfactory only on ridges on warmer sites 1500 to 300 feet.

Recommended varieties:

Tehama, Hartley, Chandler, Howard, Scharsch Franquette

Recommended rootstock:

Paradox

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