The San Joaquin Valley is the most important area in the state for production of tree fruit and nut crops like almond, apple, cherry, chestnut, fig, kiwifruit, loquat, nectarine, olive, peach, pear, pecan, persimmon, pistachio, plum, pomegranate, prune, quince, and English and black walnut.

What's important for growing fruit and nut trees in the valley? It's the soil, water, and the summer and winter weather. This relatively flat region is blessed with some of the best soils in the world. For the most part the soil is made up of alluvial deposits from several California rivers: Stanislaus, Tuolumne, Merced, Fresno, San Joaquin, Kings, Kern, and Kaweah. Maximum temperatures average 104° F in summer but day and night averages even out to 84 degrees. Winter lows average 45°, but the last few years serves as a reminder that the temperature can fluctuate widely.

**Winter chill requirements:** Chilling, or the number of hours below 45°F, is an important climatic factor when choosing what variety to plant. Chilling influences bud break, fruit set, and fruit development. Most varieties require 200 to 2000 chilling hours in the winter to break dormancy in a normal manner. Insufficient chilling is probably the most limiting climatic factor for sweet cherry, peach, apricot, nectarine, and apple. Our part of the valley averages about 800 winter chill hours. It is not uncommon for cherry varieties to need 1000 hours of chilling.

Other items to consider besides winter chill requirements when choosing a variety of tree are personal taste, space available in the yard, whether the tree is self-fertile or needs a pollinizer, and the time that the fruit are mature to pick and eat.

**Would you like to grow fruit trees in your back yard, but think they are too messy, and you don't have enough space?** Put away your fears and just choose the right spot and start thinking about luscious fruit in summer. You can grow four backyard fruit trees in the space of one commercial tree. That sounds good to me, since I prefer several kinds of fruit throughout the summer not a ton of one kind that are all ripe at once.

**Bare Root Planting:** Believe it or not NOW is the perfect time to establish your backyard orchard whether it is 1 tree or a dozen trees. Bare root fruit trees (also roses and landscape shrubs and trees) are available in nurseries and there is a wide selection of varieties. They are less expensive and easier to plant than container plants.

**Planting scheme:** Growing trees in limited spaces poses interesting challenges, often solved by growing in containers, planting dwarfs, choosing multiple varieties per tree, or using" high density" plantings. Just remember to prune trees to keep them small.

**Plant 3 trees in the same hole?** "Backyard orchard culture" popularized by Dave Wilson Nursery promotes planting two to four trees in the same amount of space needed for one full-sized tree. You can plant 3 or 4 trees in the same hole spacing them about 18 inches to 2 feet apart. Plant three in a triangle pattern or four in a
square. Close planted trees don't grow as large as trees that are spaced farther apart but do have a better chance at cross-pollination.

Fruit trees are grown on either standard or semi-dwarfing rootstock and are maintained at a much smaller size. Branches form at a low height when the bare-root tree is cut off at knee height or slightly lower at planting in January. In May 3 or 4 main branches are selected and again cut back by one-third. All other branches are removed. In August the growth is cut back again by one-third. The result is a tree approximately hip high after the first growing season. After a couple more years of training to get 6-8 total branches per tree, the tree is kept at a short height for the rest of its life by pruning. The backyard hobby grower decides the ultimate height of the tree and the goal is to keep it around 8 feet tall.

"EZ-Pick trees" are a tree concept from L.E. Cooke Nursery developed specifically for home orchards. EZ-Pick trees are low-branching fruit trees that have been trained in the growing grounds at the wholesale nursery. There are many varieties of several fruit trees available this bare-root planting season. Our local retail nurseries carry the varieties that produce well here, while distant nurseries carry varieties suitable for their growing regions. Pruning is still needed to maintain the tree's small size.

Fruit Cocktail trees: Also available are multi-budded trees or a three-in-one tree. In this case the nursery chooses the varieties that are most widely adapted and that most people will like and buds them on to the same rootstock. So, each main scaffold is a different variety. The trick is to keep an eye on these trees and heavily prune the variety that starts to dominate the whole tree.

The GOAL is the same: No matter how you plant, the goal is to prune, spray, thin, net, and harvest without using a ladder.

In accordance to the Stay-at-Home guidelines, the Master Gardeners have cancelled all public events at this time, but if you send us an email or leave a message on our phone lines, someone will call you back!

Master Gardeners in Tulare County: (559) 684-3325; Kings County at (559) 852-2736

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