

# CHOOSING A FRUIT TREE FOR YOUR ALAMEDA YARD

October, 2018

ALAMEDA  
BACKYARD  
GROWERS

## BEFORE YOU BUY A FRUIT TREE

Know if the variety you want needs a pollinizer; you may get no or only a partial crop

Know what your neighbors have planted; maybe someone close has your potential pollinizer

Know the ease of care

- Easiest to care for: Feijoas, Persimmons, Figs
- Moderate care needed: Japanese Plums, Apricots, Pluots, Citrus
- Most care needed: Apples, Asian Pears, Pears, Peaches, Nectarines

Know the soil conditions in your yard: do you have any soil-borne diseases?

- Oak Root Fungus (Armillaria) or other root rots
- Root Knot Nematodes
- Verticillium Wilt

## THE IDEAL LOCATION IN YOUR YARD

**For Apricots, Japanese Plums, Pluots, Peaches or Nectarines:** partial or full shade from December to mid-February; as much sun as possible the rest of the year.

**For Apples, Pears and Asian Pears,** partial or full shade from December through March; as much sun as possible the rest of the year.

**For Persimmons, Figs or Feijoas,** a sunny spot either all year or from April through November, with partial or full shade from November through March acceptable.

**For Citrus,** a year-round sunny spot is best.

Ideally, plant

Away from the house (roof rats)

Away from the fence (to reduce colonizing by ants and theft/damage by critters; to protect the roots of your tree)

Away from a sidewalk, driveway or patio (fruit dropping making a mess)

In an area free of lawn or pavement (tree roots need good access to water)

In a place with complete access to tree from all sides (for better harvesting and tree care)

Colder spring locations are okay for apples and pears

Warmer spring locations are better for early-blooming species:

## ROOTSTOCKS

The majority of Alameda has loose, sandy soil. Which may be easy for tree roots to sink into and take firm anchor, but not so benign when it comes to potential disease challenges. Two of these are Oak Root Fungus (Armillaria), with which our formerly oak-forested island is riddled, and Root Knot Nematode, which thrives in sandy soil.

Many stone fruit trees that are widely sold are grafted onto rootstocks that are susceptible to Oak Root Fungus that will work in our climate and soil:

## OAK ROOT FUNGUS

**Peach and Nectarine:** there are currently no peach or nectarine rootstocks that are resistant.

**Plum, Pluot, Apricot, Aprium:** The only rootstock that is effectively resistant is *Marianna 2624*.

**Persimmon:** the D. Lotus rootstock is naturally resistant.

**Fig:** on own roots, which are resistant.

**Apples, Asian Pears, European Pears:** may have some resistance unless the tree is sick.

## ROOT KNOT NEMATODE

**Peaches, Nectarines and Apricots** *Nemagard* and *Nemared* rootstocks are resistant to Root Knot Nematodes, but susceptible to Oak Root Fungus. *Lovell* rootstock is also susceptible.

**Plums, Apricots, Pluots, Apriums, Peaches and Nectarines:** the Zaiger Genetics rootstock *Citation*, like *Nemagard*, has excellent Root Knot Nematode resistance. It also helps with semi-dwarfing (more effective in peaches than in plums), gives the fruit a higher sugar content and encourages the young tree to be bearing earlier and heavier (precocity). **But it is susceptible to Oak Root Fungus.**

**Figs** are highly susceptible to Root Knot Nematodes, especially in sandy soil.

## **ACCUMULATED WINTER CHILL REQUIREMENTS (CHILL HOURS)**

25 years ago the Alameda U. C. Cooperative Extension office gave an estimate of our expected average winter chill (chill hours) as 500 chill hours 50% of the years, with the assumption that the balance would be lower, not higher.

Winter chill is necessary for proper overall functioning of a deciduous, temperate zone fruit tree to break out of dormancy and allow blossoming and leafing out in a uniform, timely manner. The formal tracking of chill hour accumulation starts every November 1 and ends February 28. Any given hour when the outside temperature falls between 45 and 33 degrees F equals one chill hour. This is an old style of measuring and not always accurate for our mild-winter climate, since warm winter days may help roll back accumulated chill, but the nursery industry uses these chill hour ranges when marketing their trees, so it's at best a partial guide for Alameda fruit growers. Many fruit varieties and cultivars need not just the summer heat we can't provide here, but a heavy dose of chill hours (some apples need 1,000 hours, while some peaches need as many as 800). You may see fruit trees with chill hour requirements higher than 500; these may be in the nursery for customers living in the Oakland Hills, San Leandro, Hayward, etc. The upshot is, an Alamedan buys a fruit tree that needs 700 chill hours at his/her own risk!

## **THE SIZE OF THE TREE**

Consider the amount of space you have to allow a healthy fruit tree to grow in your yard. According to the Alameda County Master Gardener / ucanr website, you can expect a standard apple tree, for example, to grow to 30 ft. tall. An apple variety on semi-dwarfing rootstock may reach 15 ft. tall by 10 ft. wide. On a dwarfing rootstock, it may reach only 6 to 10 ft. tall. Keeping a standard-sized tree pruned to a 10ft. size will stress the tree considerably. Choosing a semi-dwarf or dwarf size tree is a much better choice for the life of the tree.

Although the category of "semi-dwarf" sounds like the tree will self-regulate its size, that only holds true for Citrus varieties. Stone and Pome fruits may be slowed down by the rootstock they (their scion) was grafted on, but semi-dwarfing effects only work on certain fruit types, and only

so far. Example: the semi-dwarfing rootstock *Citation* will curb a peach or nectarine to 8 to 10 ft., when a standard rootstock would allow them to grow to 25 ft. tall and wide. But a Santa Rosa Plum on *Citation* rootstock can easily pass the 20 ft. tall mark, if it's never pruned back for size. The same tree can be kept shorter and smaller, all the way down to a "fruit bush" size (see Dave Wilson Nursery videos for a peek at these).

Genetic dwarf trees are not just dwarfed at the rootstock; they are fully dwarfed, with dramatically-shortened internodes (the stem spacing between leaf nodes). They will not exceed their labelled size, usually reaching 6 ft. tall.

## TREE VARIETY LONGEVITY

According to the Dave Wilson Nursery website, you can expect the following productive years from these trees:

- Apple and Pear, standard, 20 to 40 years
- Apple and Pear, semi-dwarf, 15 to 25 years
- Asian Pear, 15 to 25 years
- Apricot, 20 to 40 years
- Fig, 30 to 40 years
- Nectarines, Peaches and Plums, 15 to 25 years
- Persimmons, 30 to 50 years

**A note on multi-budded fruit trees (2-, 3- or 4-in-1's ).** These may be space-savers, allowing you to have several cultivars of a fruit on one tree (usually on semi-dwarfing rootstock). The best chance for success is being able to choose a tree with all the cultivar grafts similar in girth and vigor. Although one or more of the cultivars may be inherently more vigorous in the long run and need heavier pruning to keep the tree in balance as it grows, it's important to allow each graft to develop to a similar size. One or more grafts may grow at a different rate, will be puny compared to the others and/or stick straight up while the others are gracefully diagonal; you'll have to learn to prune your tree to bring it back into balance.

Multi-budded apples on an espalier support may be the easiest of all the multi-budded trees to handle, as pruning may be easier to accomplish, using its flat design as your guide. Multi-budded "Fruit Salad" trees may be wonderful or not, depending on how many of the cultivars are suited to your yard's microclimate, planting spot, and whether any grafts need more winter chill than you can provide year-to-year. Multi-budded stone fruit is often grafted onto *Citation* rootstock (an excellent rootstock, but very susceptible to Oak Root Fungus [*Armillaria*]).