

BEST BARE-ROOT FRUIT TREES

Presentations and group discussion of the best low-chill, edible plants for the South Coast, including new cultivars!

Topics

- Suggested cultivars for backyard success in Coastal Southern California
- What is a bareroot fruit tree?
- What is grafting and why do we need to know
- Why choice of root stock matters
- Selecting trees for size
- Planting the tree
- Chill hours and Pollination
- Q&A Session

Suggested Cultivars (Larry):

Here is a list of some “no brainer” fruit trees for Coastal Southern California.

Chill hours are listed below in parentheses (per Bay Laurel Nursery:

<https://www.baylaurelnursery.com/low-chill-bare-root-varieties.html>).

This list below includes mainly self-fruitful varieties (exceptions noted) for increased chance of success.

Food for thought: What are the advantages of having multiple varieties? You would enjoy an extended harvest season! See fruit variety harvest dates at:

https://www.davewilson.com/sites/default/files/fruit_nut_chart_hg_2010.pdf

Apples:

Dorsett Golden (100 hrs)

Anna (200 hrs; caveat: short harvest season)

Beverly Hills (300 hrs)

Fuji (400 hrs)

White Winter Pearmain (400 hrs)

Yellow Bellflower (400 hrs)

Pears (European):

Hood (100-200 hrs; requires pollinator)

Monterrey (300 hrs)

Keiffer (200-300 hrs)

Pears (Asian):

20th Century (300-400 hrs)

Hosui (300-400 hrs; requires pollinator)

Shinseiki (250-300 hrs)

Peaches:

Eva's Pride (100-200 hrs)

Mid Pride (250 hrs)

August Pride (300 hrs)

Red Baron (250-300 hrs)

Apricots:

Flora Gold (400 hrs)

Tropic Gold (350 hrs)

Gold Kist (300 hrs)

Plums:

Santa Rosa (300 hrs)

Burgundy (300 hrs)

Methley (250 hrs)

Satsuma (300 hrs; requires pollinator)

Nectarines:

Arctic Star (white) (300 hrs)

Desert Delight (100-200 hrs)

Interspecific Varieties:

Spice Zee nectarplum (200-300 hrs)

Emerald Drop pluot (400 hrs; requires pollinator: Santa Rosa or Burgundy plums)

Flavor King pluot (400 hrs; requires pollinator: Flavor Supreme pluot, Burgundy, Santa Rosa or Late Santa Rosa plum)

Plumcots (problematic - self sterile and hard to get pollinated - needs specific apricot pollinator)

Cherries:

Mini Royal (2-300 hrs; requires pollinator)

Royal Lee (2-300 hrs; requires pollinator)

Royal Crimson (2-300 hrs)

Blueberries (easier if grown in pots to control pH of soil):

Sharpblue (150-250 hrs)

Jewel (200 hrs)

Raspberries:

Baba (low chill)

Willamette (low chill)

Blackberries:

no recommendations at this time - newer varieties may offer some promise

Additional considerations:

- Several pear varieties, both european and asian types, show sensitivity to fire blight. The Bay Laurel website discusses this to help you select a more resistant variety.
- The following are all low chill: Pomegranates (cuttings often work), Persimmons, Figs, Jujubes, Kiwifruit, Mulberries.
- Multiple budded or "Fruit-salad" trees (eg. 4-in-1 or 2-in-1) can be challenging to keep thriving in a balanced way through pruning - usually there is a dominant cultivar and struggling cultivars.

What is a bareroot fruit tree? (Larry):

- Definition
- Preferred over potted because
 - Roots growing into native soil will have a head start vs. potted version
 - Shipping weight/cost reduced
 - Stable while in dormancy

What is grafting and why do we need to know (Russ):

- Like people, seeds are genetically different than either parent
- Grafting preserves and exploits a specific clone with predictable traits, results
- Cultivar - fruiting tissue from a specific clone of known quality
- Rootstock - rooting tissue, either from seed or clone, with predictable traits like disease resistance, drought tolerance, or salt tolerance
- Precise cuts to join cultivar and rootstock - each with optimized, essential traits
- Bareroot trees will come pre-grafted
- A few fruits do grow from seeds or cuttings
- Advanced grafting: can create multi-grafted trees (aka: "franken-trees" or "fruit-salads").
 - A fun grafting achievement
 - Can bring cross-pollinators closer
 - Challenges: Pruning to maintain balanced growth

Why choice of rootstock matters (Larry):

- Recommended ones
- Stone fruit: Nemagard is excellent, Citation not so good
- Apple: M111 is a great all around rootstock
- Is the dwarf/semi-dwarf alternative always better when size matters?

Selecting trees for size (Russ):

- Large trees need large space or regular pruning. Over time, big trees wreak havoc
 - Crack concrete sidewalk, driveways, walls, foundations
 - Break and/or invade pipes
 - Invasive roots can be an issue - eg. Mulberries
 - Overshadow other plants
 - Make fruit collection difficult
 - Choices: dwarf, semi-dwarf, or standard

Planting the tree (Larry):

- Location - Important factors to consider (co-localize plants with similar needs)
 - Water
 - Sun
 - Space
 - Soil Texture
 - Slope
 - Shade/Chill
- Planting
 - Spacing between trees
 - Single vs. multiple trees per hole (aids cross-pollination, etc.)
 - Square hole
 - Test for drainage quality - a “perk” test
(<https://todayshomeowner.com/diy-soil-drainage-perk-test-for-your-yard/>)
 - In poor-draining soils - use a shallow hole, keep half of root ball above grade, add mound
 - Amendments - only when necessary
 - Consider adding fertilizer with mycorrhizal inoculant (e.g. Island Seed and Feed Landscape mix or Dr. Earth Organic & Natural Root Zone mix)
 - How mycorrhizae work: <https://www.youtube.com/watch?v=0oyqPZJj-2w>
 - Soak new tree briefly (30-120 minutes) in water just before planting
 - Get in ground soon after receipt

Chill hours (Russ):

- Some trees require long cold nights and do not bear fruit in Coastal Southern California
- However, trees with “Low-chill” hours will often work great here
- Achieving sufficient chill hours will enable fruit set, proper growth of tree
- Chill hours defined: Traditionally, the total number of hours in 32-45F range
- Required to release from dormancy
- Different for each cultivar
- Predictions can be off due to unusually warm winters - risk of reduced fruit set
- Newer methods for counting chill hours can explain better results than predicted in some cases

- ❑ Some microclimates (e.g. near creek canyon or in chilly corner of property) may enable improved performance with higher chill varieties
- ❑ Note: Chill hours for Apples and Pears are being re-evaluated. Many “high-chill” cultivars actually do fine here, whereas high-chill stone fruit is still unlikely to bear

Pollination (Russ):

- ❑ Required for fruit set
- ❑ Types of trees: Self-fruitful or requires pollinator (another tree) within 50 feet
- ❑ Both flower types must be open at same time
- ❑ Doubles demand for space (but consider multiple trees per hole or “franken tree”)
- ❑ When pollinator is available, yield often improved even when self-fruitful
 - ❑ High yield is great, but only IF you have a plan for all that fruit

Local Nurseries:

La Sumida (source: Dave Wilson)

Knapp Nursery (source: Dave Wilson)

Terra Sol (few bare roots available)

Seven Day (few bare roots available)

Ordering Online and Further Reading:

<https://www.baylaurelnursery.com/low-chill-bare-root-varieties.html>

<https://www.treesofantiquity.com/>

<https://www.groworganic.com/collections/bareroot-trees>

<https://www.davewilson.com/home-gardens>