

# Deciduous Fruit

## Trees 09/16/2023

### for Orange County

#### Laguna Hills Nursery

www.lagunahillsnursery.com

(714) 542-5600

Success depends upon knowing:

#### What is the **MINIMUM CHILL REQUIREMENT?**

Many deciduous fruit trees that evolved in temperate climates require a period of winter cold in order to produce flowers and fruit. We call this period the **minimum chill requirement (MCR)**. These trees evolved the MCR to avoid leafing out prematurely during a warm spell in the middle of winter. Trees that evolved in the colder winter climates have a greater MCR than trees that evolved in mild winter climates. The growth buds do not complete development until they experience an entire typical winter. As soon as the MCR is reached the bud will begin growth with the next warm spell. It is the buds, not the trunk or roots, that must experience the chill.

Researchers have determined that *Chill* involves the number of hours of exposure to temperatures below 55 degrees F and above 33 degrees F. (Apparently there is no chill value for time spent below 34.) The MCR is the minimum number of chill hours (accumulative) that the tree must be exposed to during the fall-winter season for proper flower bud development and subsequent fruiting. Hours spent above 60 degrees F are subtracted. The value of chill varies with the temperature. Maximum chill is received between 36 degrees F and 48 degrees F. Maximum negative chill occurs above 65 degrees F. Many authorities will explain that the year's chill value is determined by summing up all the winter's additions and subtractions; however that total is normally quite low. In my opinion the MCR is like slowly adding water to a cup with a small hole in the bottom. The water is the chill hours accumulating and the size of the hole that water leaks out is the negative chill. The height of the cup represents the variety's MCR. During periods of intense cold the water adds up very quickly. Once the water spills over the top all bloom and growth systems have

been switched on. Growth begins during the next warm spell. By the end of winter the cup's hole enlarges and the water is no longer near the top; but the chill requirement had already been met.

In the orchards of California's Central Valley most commercial fruit trees have MCR's between 500 and 1000 hours. Generally we don't grow many of the same fruit varieties.

In Orange County the lowest chill is found on coastal hilltops (about 200 hours). Most of the flat neighborhoods of central OC get about 300-350 hours. Riverbeds and canyon floors can easily accumulate 500 hours. Gardens within 1/2 mile of the Santa Ana, San Gabriel or Los Angeles River receive 400+ hours. Cold air flows like water and accumulates wherever water will. Extremely cold air can be found along the Trabuco and San Juan creek beds, as well as at the bottom of Laguna Canyon, in the winter. In 1990 temperatures near the creek in San Juan Capistrano fell below 20 degrees F!

Cold air has a natural tendency to flow downhill. It is true that the air is cooler at higher elevations (1 degree for every 200+ feet) due to reduced atmospheric density, but cold air is heavy and still flows downhill.

Lack of winter heat is more important than the intensity of the cold and we find that coastal locations often get 300-400 hours. In hilly cities like Mission Viejo, Laguna Niguel, Orange, Tustin, etc. the hilltops may receive only 250 hours but the low spots in these same neighborhoods can average over 400 hours.

The typical residential yard has several microclimates. A tree on the exposed south wall of a home may receive only half the chill hours compared to a tree on the shaded north side. House walls can radiate heat to a nearby tree while a grass lawn can cool a tree. Cold air collects behind walls and fences.

When growing varieties with marginally high MCRs install the tree several feet off the north wall of a house or on the north side of a large evergreen tree. In that location the tree will be shaded in winter and still receive sunlight (for best fruit quality) in summer. Whitewashing the stems will reduce the temperature during the day. Keeping the tree as short as possible also helps. (The air is noticeably warmer 10 feet off the ground on a quiet winter night.)

To be consistently successful in the benign winter climate of Orange County a deciduous fruit tree must have a relatively low MCR (a.k.a. *low chill*). Truthfully, the MCR's of fruit tree varieties have not been scientifically determined and almost all are just educated guesses. We continue to discover cultivars where their true MCR is much lower than stated in the literature.

Some deciduous fruit trees (Figs, Jujubes, Mulberries, Persimmons) may not have a MCR. We believe these trees are simply set to grow and flower when days exceed a certain temperature and there are no leaves on the branches.

When we list the MCR as a range (for example MCR 300-500) we are listing the range of MCR's listed for that variety from various references.

## Controlling Production

Most mature full size fruit trees can produce more than 400 pieces of fruit at harvest time that typically lasts 2-4 weeks. Few families can consume fruit that quickly. There are several strategies to make production more useful.

1. **Control tree size with summer pruning.**  
Although most fruit trees can grow larger than 15 feet high and wide we prefer to keep each tree about 7-8 feet tall and 5-6 feet wide. Since fruit does not form on current growth (figs and jujubes are the exception) most of this growth can be trimmed off all summer without affecting next year's crop. A tree this size will produce 50-70 fruit per year.
2. **Control size by grouping different varieties.**  
If 4 apple trees are planted within 2 feet of each other, this group is not capable of growing significantly larger than a single tree. This group will still produce a large amount of fruit, but now has 4 different ripening periods. Much more of that fruit can now be consumed by one family.
3. **Do both.** In my own garden we planted 12 apple varieties in 3 groups. Each group is only allowed to grow 8 feet tall and wide. We can pick apples nearly any day between early summer and early winter.
4. **Make a hedge.** Fruit trees can also be planted 3-4 feet apart and maintained as a hedge 4-5' tall.

Consult the brochure **Backyard Orchard Culture**, found on **Dave Wilson Nursery** website for details. An important detail is that summer is the best time to prune for size control. Heavy pruning in winter can eliminate most of the flower buds critical for the next crop.

Generally, we do not recommend genetic dwarf fruit trees. Of the few available varieties none produce superior quality fruit. Semidwarf trees are generally still too large unless pruned.

**Apples** are surprisingly reliable in our area. Most of the popular commercial apples produce regularly in OC (*Honeycrisp* is an exception). A few apples seem to have a very low MCR but most have a back way to get around the requirement. Most apples bloom in May (April-June), no matter what the winter was like. A few bloom in February.

Most apples are at least partially self-fertile, but most orchards plant 2 varieties (with the same bloom period) just in case. To create a heavier bloom, strip off all the leaves grown the previous year by March. (Occasionally we'll have a winter cool enough to cause all the foliage to drop.) Apples begin production by the 4<sup>th</sup> year, but most start much sooner. Apples require hand thinning after fruit set to 1 per cluster or less. We offer semidwarf trees (M111, M7 & Geneva rootstock) that can grow trees 8-20 feet tall, but all can be maintained as low as 4 feet. Many varieties can be espaliered along a fence. Apples require ample water and grow well in lawns. Apples can live over 100 years.

**Notable Pests:** The disease *Fireblight* is occasionally a problem with all cultivars with Gala being most susceptible and Granny Smith least susceptible. Prevent by spraying prior to bloom time with **Garden Phos.** **Codling Moth** larvae (apple worms) can be prevented with proper thinning, choosing early or late ripening varieties, using pheromone lures, or by applying **Spinosad** (organic pesticide) regularly.

**Anna** Blooms February. Large, cylindrical, mostly red fruit with creamy, sweet, tender, crispy white flesh. Harvest July, but often produces significant fruit at other times. Best eaten fresh (poor shelf life). Quality ranges from good to excellent. Often grows fruit the first year. From Israel.

**Arkansas Black Spur** Blooms May. Medium size, dark red fruit with crisp, firm white flesh with some tang. Harvest November. Long hang time. Stores well.

**Ashmead's Kernel** Blooms May. Small to medium golden russeted with creamy yellow, crisp, sweet flesh. One of the all-time top rated apples. Harvest early fall.

**Braeburn** Blooms May. Medium to large green fruit with burgundy stripes. The crisp flesh is slightly tart. Excellent fresh or cooked and stores well. Harvest mid-to-late fall. Long hang time. From New Zealand.

**Dorsett Golden** Blooms February. Large, pink blushed, light yellow-green fruit is crisp, tender and slightly tart. Best fresh, best quality away from coast. Harvest June-July. Often has 2<sup>nd</sup> crop in fall. From the Bahamas. The best pollinator for Anna.

**Fuji** Blooms May. Medium to large, slightly flattened fruit with yellowish green skin covered with grayish red stripes.

Very crisp, very juicy flesh that is honey sweet. Thin heavily for best quality fruit. Best eaten fresh, but stores very well. Ripens in October. Long hang time. From Japan.

**Gala** Blooms May. Small to medium size fruit with yellow skin and scarlet stripes. The finely textured flesh is crisp, aromatic and spicy sweet. Best eaten fresh. Harvest August-September. Highly susceptible to fireblight. From New Zealand.

**Granny Smith** Blooms May. Medium to large round fruit with yellow-green skin. The flesh is firm, crisp, juicy and tart. Eaten fresh or cooked and stores very well. Harvest November-January. If the fruit left on the tree until midwinter it becomes a fabulous sweet yellow apple. From Australia. Can get mildew near coast, but is essentially immune to fireblight and worms.

**Jonagold** Blooms May. Large rounded fruit with yellow skin and red stripes. The cream colored flesh is firm, crisp and juicy. Harvest September. Outstanding fresh or cooked. This hybrid of Jonathan X Golden Delicious is from Cornell University. Pollinator is recommended.

**Pink Lady** Blooms May. Small to medium (old trees make large fruit), cylindrical fruit with yellow green skin heavily blushed with rose. The white flesh is crisp, very sweet and highly flavored. Harvest November-December. From Australia where it is known as Cripp's Pink.

**Spitzenberg** Blooms May. Medium size, red/yellow fruit with yellow flesh. Firm flesh with outstanding flavor. Harvest early fall. Good hang time and stores well.

**Sundowner** Blooms May. Large, round fruit with mostly red skin and crispy white flesh. Slightly sweeter than Pink Lady and slightly more crispy than Fuji. Outstanding quality. Harvest between November-December. From Australia where it is known as Cripp's Red (sibling of Pink Lady). OUR BEST APPLE

**Winesap** (Stayman Double Red Winesap) Blooms May. Large, round fruit with red and green skin. The smooth, juicy flesh has a spicy, wine-like, flavor. From Kansas. Stores and cooks well. Pollinator is recommended.

**Notes on Other Apples:** **Beverly Hills** has decent production and good flavor but ripens quickly. **Ein Shemer** is somewhat like *Dorsett Golden*, a sweet yellow apple. **Golden Delicious** performs decently. **Gordon** is a very large, round, sweet-tart, mostly green apple of good quality discovered in Whittier. **Mollie's Delicious** is a large, Red Delicious type apple (red and yellow skin) than performs well locally. **Mutsu** is a huge yellow green apple with excellent flavor, but a bit too firm for eating without prior storage. Almost too vigorous. **Pettingill** is a large red/green fruit with decent flavor. Discovered near Long Beach. **Pippin** produces a light crop of small apples with excellent flavor. **Honeycrisp**, unfortunately, will only produce decent small fruit following an unusually cool winter.

**Apricots** are reliable producers in the flat areas of Orange County, in canyons and along creek beds where cold winter air settles. Apricot trees grow 15 feet tall, but can be maintained as low as 4 feet tall. Production begins the second or third year. All varieties we offer are self-fertile. Trees on Citation rootstock are well adapted to wet clay soils but dislike dry soil.

**Goldkist** MCR 300 Large all-purpose fruit with red blushed gold skin and very good quality firm, mildly flavored orange flesh. Ripens June. Tends to develop harmless crack lines on fruit exposed to sun. Super vigorous grower.

**Royal (Blenheim)** MCR 400-500 Medium to large fruit with yellow-orange skin and flesh. Very sweet and juicy. Ripens early summer. Old-time favorite, but not reliable in most local areas.

**Tropic Gold** MCR 275 Medium to large fruit, yellow skin with orange blush. The orange flesh is firm with excellent flavor. Ripens early summer. It seems to have a slightly lower MCR than others. OUR BEST APRICOT

**Other Apricots for OC:** **Floragold** should produce well in local gardens. **Katy** has shown spotty performance. **Autumn Royal** has produced big crops in late summer but is highly subject to sun burnt flesh and fruit worms.

**Apriums** are relatively new Zaiger hybrids between apricots and plums. Genetically they are roughly 75% apricot and 25% plum. They resemble apricots but have a slightly more aromatic flavor.

**Cot-N-Candy** MCR 300. New. The medium-large size fruit resembles an apricot with white flesh. Sweet and juicy with superb flavor. Ripens early July. Self-fertile, but needs more testing to determine reliability.

**Flavor Delight** MCR 300. The small fruit resembles a typical apricot. Ripens late spring. Excellent quality. Self fertile, but production is unpredictable.

**Leah-Cot** MCR <300. Large orange fruit with orange flesh. Good flavor, firm texture. Ripens June. Self-fertile. New, but may turn out to be our most reliable aprium.

**Cherries** require more evaluation for local gardens. The varieties listed below are promising. The MCR for most cherries is 700 hours. Mazzard is standard rootstock, Maxma 14 is dwarfing (about 1/3 shorter). New Root is very dwarfing (about 2/3 shorter). Bloom order seems to be Minnie Royal (earliest), Royal Crimson, Royal Lee, Lapins, Brooks (latest)

**Brooks** MCR 300-500 NEW low chill variety created by U. of Calif. Large, firm cherry. Best when pollinated by Lapins.

**Lapins** MCR 300 Large firm, dark red fruit has good flavor. Developed in Canada, but seems to bloom very well locally. Promoted as self-fertile, but we believe it will produce better if *Brooks* is present.

**Minnie Royal** MCR 200-300 Medium size red fruit has firm flesh with good flavor. Ripens early May. Requires pollination by *Royal Crimson*.

**Royal Crimson** MCR 250 Large crimson red fruit. Blooms between *Minnie Royal* and *Royal Lee* so can pollinate either. Royal Crimson is promoted as being self-fertile.

**Royal Lee** MCR 250-350 Medium size red fruit has firm flesh with excellent flavor. Ripens mid May. Requires pollination by *Royal Crimson*.

**Other Cherries we've tried:** **Stella** MCR 600 is less reliable but has superior fruit quality. **Bing** and **Black Tartarian** will rarely fruit.

**Jujubes (Chinese Date)** are reliably productive throughout OC, but best size, sweetness, and flavor needs inland heat. The fruit ranges from marble to chicken egg in size and shape with green/reddish-brown skin and crisp, apple-flavored, extremely sweet flesh. The fruit can be dried. The highly ornamental, weeping trees can grow 20 feet tall but can be pruned heavily in winter limiting height to under 8 feet. Juvenile growth is quite thorny. The thorns can be cut off for safety. Loves heat and inland conditions. Trees begin growth with warm weather and go dormant early. Trees are somewhat self-fertile. Young trees produce better when pollinated with a different variety. Production begins the first year. The fruit ripens in fall. This fruit is highly popular in southern Asia from China to the Middle East. All are grafted onto seedling rootstock.

**Chico** (GI 7-62) Medium size fruit is shaped like a pippin apple. Sweet, crisp flesh is quite good. Ripens early fall.

**GA-866** medium to large size egg-shaped fruit is very sweet. The tree is relatively small. Selected in California.

**Honey Jar** Small round fruit with mahogany-brown skin. Very sweet honey flavor, perhaps the sweetest. Ripens early.

**Li** Large egg-shaped fruit with mahogany-brown skin. Mature green fruit will ripen off the tree. Tree is somewhat short and spreading. From China. **MOST WIDELY GROWN**

**Shanxi Li** Very large fruit (over 2" long) is similar to *Li* but larger. Ripens late.

**Sugarcane** The fruit is similar to *Li*, but smaller. The tree seems to be much more vigorous and highly precocious.

**Mulberries** are reliable in all areas of OC. The fruit resembles blackberries and is very sweet when fully ripe. Excellent fresh, dried, cooked or for preserves. Ripens summer. Many varieties will produce additional crops (on mature trees) if the foliage on some branches is stripped bare a few weeks following the main harvest. The fast growing trees are easy-to-grow. Established trees tolerate poor conditions including drought. Wildlife can make a mess with the black-fruited varieties.

**Black Beauty (Persian)** Large black fruit with sweet, flavorful flesh. Unripe fruit is quite tart. This semidwarf variety should stay under 15 feet, but can be trained as a bush under 5 feet. Persian mulberry trees leaf out in mid-spring.

**Pakistan Red** Very long, maroon fruit 3+ inches in length with very sweet flesh. Fruit can be eaten well before fully ripe. The juice doesn't stain. Ripens late spring-early summer. The tree can grow 20-30 feet. Heavy summer pruning will control size.

**Pakistan Cooke's** Same as above with maroon fruit up to 5 inches in length.

**Teas Weeping** Small sweet black fruit of excellent quality. Heavy production. This small tree will weep to the ground and is very attractive every season of the year. It is a novelty and popular in children's gardens.

**Nectarines** include just a few varieties that perform reliably in OC. Fortunately 2 of the varieties are among the best eating of all Nectarines. Although nectarines are genetically identical to peaches, in addition to their smooth skin they have a different texture. All listed varieties are self-fertile. Standard trees grow 15 feet tall. All can be maintained as low as 4 feet tall. The fruit must be thinned within a month after the bloom to get better quality and decent size. **Notable Pests:** Nectarines should be sprayed every winter for *Peach Leaf Curl* disease with *copper* spray and may require *Thrips* and *Oriental Fruit Moth* worm control with *Spinosad*. These organic products are quite effective. Excess nitrogen fertilizer can cause the fruit to rot (*Brown Rot*) just as it ripens.

**Arctic Star** MCR>300. Fruit has dark red skin and white semi-freestone flesh. Super sweet mild flavor. Outstanding. Ripens mid June. Best away from coast.

**Desert Delight** MCR 150. Large fruit has dark red skin and yellow flesh. Rich and sweet flavor. Harvest in mid June. Our most reliable nectarine.

**Double Delight** MCR>300. Large fruit has dark red skin and yellow freestone flesh. Very sweet and rich flavor. Excellent spring show of double pink flowers. Harvest in mid July.

**Snow Queen** MCR>300. White freestone flesh with excellent sweet, juicy flavor. Outstanding. Harvest late June.

**Other Nectarines for OC:** **Goldmine** MCR 400, is an excellent, white-fleshed variety that ripens in August but requires a cooler than normal winter. **Panamint** MCR 300 has produced heavily but flavor is mediocre.

**Nectaplum** is a hybrid between nectarine and plum. The fruit is essentially a very good white nectarine and the leaves are plum colored. The flavor is both spicy and sweet.

**Spice Zee** MCR 280 The large fruit has deep burgundy skin and the white flesh is sweet with excellent flavor. The large deep pink flowers put on a spectacular show. New leaves emerge red, mature to burgundy and gradually turn green in summer. No pollinator needed. Culture is the same as for nectarines. OUR BEST 'NECTARINE'

**Peaches** include a number of reliable producers of excellent quality. The majority of peaches that are promoted for our climate, in reference books, are bland in flavor due to the fact that most *low chill* peaches ripen in the late spring when it is often overcast. Those peaches are better suited for Florida or Arizona where it is hot in spring. Our best tasting peaches ripen in summer when warm sunny days are guaranteed.

Production begins 2<sup>nd</sup> or 3<sup>rd</sup> year. All listed varieties are self fertile. Standard trees grow 15 feet tall. Citation rootstock is well adapted to wet clay. All can be maintained as low as 4 feet tall. The fruit must be thinned within a month after the bloom to get better quality and decent size. **Notable Pests:** Peaches should be sprayed every winter for *Peach Leaf Curl* disease with *copper* spray and may require *Oriental Fruit Moth* worm control with *Spinosad*. These organic products are quite effective.

**August Pride** MCR 280 Large round fruit with yellow skin and yellow flesh. Good to excellent quality. Freestone, all-purpose fruit ripens late July to early August. Perhaps our best overall peach.

**Donut** MCR 300. Unique flat, bagel-shaped, small to medium size fruit with sunken center. White flesh with mild sweet flavor with a hint of almond. Ripens early July.

**Eva's Pride** MCR 200. Medium size fruit with red blushed skin and yellow flesh. Good flavor for an early peach. Harvest in June.

**Mid Pride** MCR 250. Medium to large fruit with red blushed yellow skin and yellow flesh. Excellent quality. Harvest early summer.

**Peachy Keen** MCR 280. Medium to large fruit with red blushed yellow skin and yellow flesh, red near pit. Very good quality. Harvest early to mid July. Young trees are highly precocious some second year trees producing over 100 quality fruit. Discovered on a beach on the Central California coast.

**Red Baron** MCR 300. Large fruit with yellow skin and flesh. The fruit has a small "beak". Excellent quality freestone flesh. Ripens mid to late July. Spectacular spring show of carnation-like double rose-red flowers.

**Sauzee Swirl** MCR 200. Medium size saucer (donut) style fruit with pinkish red skin and white flesh swirled red. Mild and sweet flavor. Harvest May. Our most reliable "donut" peach but quality varies with cloud cover.

**Tropic Snow** MCR 200. Medium size fruit with red-blushed pale skin and white flesh. The sweet freestone flesh is very good to excellent. Ripens mid-June. From Florida.

**Other Peaches for OC:** **Desert Gold**, **Earligrande**, and **Floridaprince** produce heavily but ripen very early in spring so good flavor is not guaranteed. **Babcock** and **Bonita** make wonderful fruit but require 300+MCR

**Pears** include a few reliable producers of good quality. There are 3 types of pears. The most familiar are the European pears such as Bartlett, Bosc, d Anjou, and Comice. European pears rarely produce in OC. Asian pears include Hosui, Shinseiki and Twentieth Century. These tender, but crispy pears perform well in a few of our colder winter locations. Many Hybrid pears have performed well in OC but most are not very tasty. Pears make take 4 years to start production. Standard pear trees can reach 20 feet tall but can be maintained as low as 4 feet tall. Most pears should be harvested while still firm and ripened indoors. Pear trees tolerate heavy wet soils quite well.

**Notable Pests:** The disease *Fireblight* is frequently a problem. Prevent by spraying at bloom time with **Agri Phos**. *Codling Moth* larve (apple worms) can be prevented with proper thinning or by applying *Spinosad* (organic pesticide).

**Hosui** MCR 325. This Asian pear has very large, round fruit with a brownish-orange, russeted skin. The white flesh is crisp, but tender, very very juicy and sweet. Outstanding flavor. Pollination by Tensosui is recommended.

**Keiffer** MCR 250. This hybrid pear has large fruit with yellow skin. Coarse white flesh has a spicy, sweet flavor. Harvest in early fall.

**Southern King** MCR 300. This hybrid pear may be a cross between Hosui (Asian) with a European pear. It looks and eats like a European pear. It seems to produce well locally but details are yet to come. MAY BECOME OUR BEST PEAR

**Tensosui** MCR 300 This hybrid is thought to be a hybrid between Tennessee and Hosui. The oval fruit has brownish skin and fir, sweet flesh. Very good to excellent flavor. Self-fertile.

**Twentieth Century** MCR 350. This Asian pear has large flat, round greenish yellow fruit with tender, crisp, very juicy white flesh. Sweet and mild. Harvest mid summer. Self-fertile.

**Other pears for OC:** **Comice** is supposed to do well but I've only seen 1 fruit in 25 years. **Fan-Stil**, **Hood**, **Monterrey**, **Moonglow**, and **Orient**, all hybrids, have produced OK with fair quality fruit.

**Persimmons** are reliable producers throughout OC. The main concern is that they all require soil with a high oxygen content (superb drainage). Most varieties are self-fertile. Persimmon trees can grow 30 feet tall but can be maintained as low as 4 feet tall. Production begins within 4 years.

Many persimmons are *astringent* until fully (jelly) ripe. Astringent flesh is a very unpleasant sensation. Your mouth feels like it's full of dry flour even though it is wet. The Fuyu-types are *non-astringent* and can be eaten while still hard.

*There are 2 methods to alleviate the astringency besides just waiting. One method is to freeze the fruit twice. When you thaw the flesh the second time it is edible. The other method is to place the ripe fruit in an airtight container (zip-lock bag is fine) after pouring a few drops of an alcoholic beverage (sake is traditional) on the stem end. The fruit is edible after being enclosed a day or two.*

**Chocolate** Medium to large size oblong dark orange-red fruit. The soft brown flesh has a chocolate-cinnamon flavor and is astringent until ripe. There are seeds.

**Coffecake** (Nishimura Wase) Medium to large, slightly flattened, round fruit with orange skin and orange flesh flecked with brown. The flesh is non-astringent if the flowers are pollinated. (*Chocolate* is the pollinator.) Unpollinated fruit is virtually inedible. Ripens early fall.

**Hachiya** Very large, oblong-conical fruit with orange red skin and flesh. It is astringent until jelly ripe. The excellent flavor is rich and sweet. Ripens mid to late fall. Eaten fresh, dried or for baking. This is the persimmon sold at most supermarkets. Properly dried Hachiya fruit is heavenly.

**Imoto Fuyu** Large flattened, slightly quartered, fruit with dark orange skin and flesh. The non-astringent seedless flesh is sweet and mellow with a slight cinnamon flavor. Can be eaten while crispy or allowed to ripen until soft. Harvest early to mid fall. This variant of Jiro appears to be quite precocious.

**Izu Fuyu** Medium size flattened round fruit with orange skin and flesh. The non-astringent flesh is sweet and mellow. Ripens late summer, much earlier than other Fuyus.

**Jiro Fuyu** Identical to Imoto in appearance and flavor. The fruit ripens about 2 weeks later and the tree is more vigorous, but may require a few more years to start production. This is the most common commercially sold Fuyu.

**Saijo** Small to medium, elongated fruit with light orange skin and flesh. It is astringent until jelly ripe. It is considered to be the very sweetest persimmon. Harvest mid to late fall.

**Plueries** may become our top selling stone fruit if its reliability is confirmed. So far the MCR of two seem to be as low as 200 hours and the only question is pollination. Typically they bloom before other stonefruit and pollination may require 2 or more types of plueries. Pluery is a hybrid between plum and cherry with the fruit being larger than a cherry, smaller than a plum with the taste somewhere in between.

**Candy Heart** MCR 250. The small round fruit is deep burgundy with plum like amber red flesh and a flavor similar to cherry. Harvest is August. Long hang time. Pollinate with *Sweet Treat*.

**Flavor Punch NEW!** MCR 300-350 Small to medium round fruit with orange red skin and amber flesh. Supposed to have a strong, delightful flavor. Harvest in late August. Pollinator requirements not yet determined.

**Sweet Treat** MCR 250. Small to medium egg-shaped red/yellow fruit with amber flesh. Flavor is closer to plum but texture is cherry. Best quality when pick in late July. Pollinate with *Candy Heart*.

**Plums** tend to be unpredictable producers and only a few varieties are reasonably reliable in OC. Production begins within 4 years. Standard plum trees can reach 30 feet tall but can be maintained as low as 4 feet tall. There are no genetic dwarf varieties that perform well locally. Plums are most productive along rivers and in canyons. We only offer "Japanese" plums.

**Beauty** MCR 250. Small to medium size fruit with red and greenish yellow skin. The red flesh is sweet and flavorful. The fruit ripens quickly. Harvest May-June. Self-fertile.

**Burgundy** MCR>300. Medium to large fruit with dark burgundy skin and firm dark red flesh. Sweet and mellow with a small pit. It has an extended harvest in July. Self-fertile and the best pollinator for other plums and pluots. OUR MOST VALUABLE PLUM AND POLLINATOR

**Inca** MCR 275-300. Medium size, heart-shaped fruit with red blushed, golden skin and flesh. Good to very good sweetness and flavor. Harvest in August. OUR BEST YELLOW PLUM

**Santa Rosa** MCR 350+. Medium to large fruit with purplish skin and amber flesh tinted red. Juicy and sweet with a tart skin. Ripens June. Self-fertile. MOST POPULAR, BUT NOT RELIABLY PRODUCTIVE IN MOST LOCATIONS. We also offer the weeping form. (below)

**Satsuma** MCR 275. Small to medium round fruit with maroon blushed greenish skin and deep red flesh. The sweet flesh has a mild flavor. Harvest July. Supposedly requires a pollinator, but seems to be self-fertile. This is the original "blood" plum and is quite reliable.

**Weeping Santa Rosa** MCR>300. Large oval fruit with purple skin and yellow flesh. Superb flavor. The weeping tree only grows 8-10 feet tall. So far, this sport of Santa Rosa seems to have a lower MCR.

**Other plums for OC:** **Methley** is similar to Beauty with red fruit. **Elephant Heart, Golden Nectar, Howard Miracle** and **Mariposa** are all wonderful plums with MCR 400+ that produce well about once every decade locally. European plums have not done well locally as they require cooler winters.

**Pluots** are relatively new hybrids that are winning most fruit tasting tests. Pluots genetically are 75% plum and 25% apricot. They taste like plums but are sweeter and have firmer flesh with a shelf life that approaches 1 month! Pluots require pollination by another pluot variety or plum. *Burgundy* plum and *Flavor Grenade* pluot are the most reliable pollinators. We recommend planting at least 3 pluots or combine any with a *Burgundy* plum. The best 3 locally have been *Dapple Supreme, Flavor Grenade* and *Flavor King*.

**Dapple Supreme** MCR 280. Medium to large dappled red fruit with red flesh. The is rich and sweet and improves if the fruit is left on the tree till early July. Harvest mid June to mid July. OUR MOST RELIABLE PLUOT

**Emerald Drop** MCR 400. Medium to large greenish yellow fruit with orange flesh. The firm and juicy flesh is honey sweet with outstanding flavor. Harvest mid-July through August. *Flavor Grenade* should pollinate. NEW!

**Flavor Grenade** MCR 300. Elongated greenish yellow fruit with red stripes and blush. The flesh is crisp with incredibly powerful flavor. Excellent hang time on tree.

**Flavor King** MCR 350. Large fruit with maroon skin and deep red flesh. Outstanding flavor. Harvest August. If we have a decent winter, the crop is exceptional.

**Splash** MCR 350. Small, round red-orange fruit with orange flesh. Very sweet fresh or dried with outstanding cherry flavor. Harvest early to late July. *Flavor Grenade* should pollinate. Has not produced heavily locally.

**Other pluots:** **Dapple Dandy, Geo Pride** are fair producers. **Flavor Queen** rarely produces. **Flavorosa** produces heavily with mildly sweet fruit with little flavor locally.

**Pomegranates** are easy to grow in OC. Flavor and sweetness are best in warmer inland areas. All are partially self-fertile, producing a bit heavier with pollination by a different cultivar. Heavy production begins the 4<sup>th</sup> year. Ripens fall. Pomegranate trees can grow 15 feet tall but can be maintained as low as 4 feet tall. Pomegranate trees are highly ornamental and the attractive orange red flowers bloom for several months. Water consistently or fruit will split before ripening. Beware of the sharp spines that form at branch tips. Be forewarned: We have seen young trees producing fruit that did not resemble fruit of mature trees. Thrips (insects) cause new growth to twist in late summer-fall.

**Ariana** Large round fruit with bold red skin. Red arils have tiny soft edible seeds and the flavor is a great balance of sweet and tart (slightly more acidic than *Parfianka*). Harvest October/November. OUR FAVORITE FOR FRESH EATING

**Austin** Very large round red/pink fruit brought from Syria to Austin, Texas. Dark red arils are very juicy and sweet with just a hint of tartness. Chewable seeds...ideal for juicing. Harvest in October. POSSIBLY THE BEST POMEGRANATE FOR JUICING.

**Desertnyi** Large, round, light orange fruit with firm, dark red flesh. Small soft, edible seeds. Excellent sweet-tart balance with orange-like, citrus flavor.

**Erin** Large round salmon to light red fruit. The red arils are sweet and juicy and the seeds are soft. This is a tropical pomegranate capable of flowering and fruiting all year! Very precocious; production usually within a year. This is a chance seedling from a fruit eaten in Singapore. Named in memory of Leah's best friend. PERFECT ORNAMENTAL/EDIBLE

**Eversweet** Medium size fruit with pale pink skin and pale red, non-staining flesh. Very sweet and mellow. Soft seeds are large, but edible. Ripens mid September. Semi dwarf tree to 8-10 feet tall. Good near coast.

**Gissarskii Rozovyi** Large salmon pink fruit with light red arils with tiny soft seeds. Sweet, mellow flavor, but with a finishing kick (similar to lemonade). Ripens early fall.

**Parfianka** Large, round, red fruit with firm red flesh. Small, soft edible seeds. Sweet with a hint of acidity. Outstanding flavor like red wine. Usually ranked #1. Vigorous upright plant produces heavy crops. Harvest early to mid fall. THE TOP RATED POMEGRANATE FOR FRESH EATING.

**Pink Satin** Medium to large salmon to red fruit with light pink arils with soft edible seeds. Light, non-staining juice has a sweet, punch flavor. Harvest in October.

**Wonderful** Large round fruit with red skin and ruby flesh. Excellent sweet-tart flavor. Hard seeds. Ripens late fall. THE COMMERCIAL POMEGRANATE.

**Quinces** do well in OC. The large pear-shaped fruit has fuzzy skin and extremely firm flesh. It is usually cooked and made into pies, jams and jellies. Production begins by the 2<sup>nd</sup> or 3<sup>rd</sup> year. Quince trees can grow 15 feet tall but can be maintained as low as 4 feet tall. Quince trees tolerate poor conditions. *Fireblight* is a preventable disease that can cause major damage to the tree.

**Smyrna** Very large fruit with yellow skin and tender light yellow flesh. Ripens fall. Good to very good quality. From Turkey.