

# Rainbow Gardens #1 Citrus Varieties Selection 2015

The following list is comprised of varieties that our favorite growers provide. The probability that we have all of them at the same time is slim. We book citrus 6 months in advance of their shipment and then bring in several loads. Once the growers are out of a variety, it may be a year before it becomes available again. Please remember that patience is a virtue. If you want a particular variety listed, call for availability or email your request, including your phone #, to [george@rainbowgardens.biz](mailto:george@rainbowgardens.biz). When it comes in...we will let you know. Due to strict Department of Agriculture laws, citrus may not be brought into the State of Texas. We can only buy certified Texas-grown citrus and the tags must say where they came from.

**Calamondin** (*Citrofortunella mitis*) Attractive quarter-sized oranges on a hardy, upright, small tree rarely reaching 10 feet tall. Typically used as an ornamental and does well in a pot. Fragrant flowers add a nice scent to your garden several times a year followed by an abundance of small fruit. The fruit has a sweet rind and the pulp is tangy and seedy. Use in marmalade, add a zip to iced tea or as a flavoring. The Giant Swallowtail butterfly will lay eggs on this tree. A great source for sling shot ammo. Harvest all year long. A variegated form is often available.

**Grapefruit** (*Citrus paradisi*) In the San Antonio area, they grow to 8-10' tall and about 8-10' wide. Grapefruit tend to be more acidic than oranges and Satsumas. They start to ripen in December and will continue to stay good on the tree until early to mid-spring.

**Rio Red** Grows up to 20' tall with a juicy, deep red flesh wrapped in a smooth skin. Seedless and low in acid this large fruit is very popular.

**Ruby Red** Sweet, red flesh, and it's almost seedless. The most cultivated of the "red" grapefruit. Produces up to 250 a year on a mature tree...set up the farm stand...from October to May.

**Kumquat** (*Citrus fortunella* [disputed name]) A miniature tree in size and shape, growing to 8'x 8', hardy to 17°, ripening in late November. Eat them skin and all. Used in candy and marmalade.

**Meiwa** or **Sweet** Large, round, spicy, sweet, flesh and rind. Meiwa is nearly thornless and usually eaten fresh. Harvest October to March.

**Nagami** (tart) Egg shaped, oval and juicy. Bright orange skin is sweet, flesh is tart. The fruit will keep well on the tree. This sweet and tart treat is my personal favorite. Harvest October to March.

**Lemon** (*Citrus limon*) When it comes to preparing food, lemons are the most important citrus of all. Whether it is on fish, baked into a pie (acceptable as a bribe for the RCW nursery gurus) or on your tortilla chips, picking one off your own tree can't be beat.

**Citrus of the Valley** A selection of a Meyer Lemon introduced by Hines Nursery that was found in the Rio Grande Valley. It has better virus and leaf miner resistance than other Meyers.

**Eureka** This is your standard market lemon, ever-bearing with large crops yearly and a nice tart flavor. Medium-sized fruit that is nearly seedless and yellow when mature. Harvest July to March.

**Improved Meyer** Was developed through a cross between a lemon and a Satsuma orange, with a thin, smooth-skinned fruit that is ever-bearing. The sweet fruit (not suitable for most fish dishes) ripens in late summer and is juicy yet low acid. Hardy to 25°, grows 12' to 15' tall and bears reliably year after year. A dwarf form is available. Harvest August to March.

**Lisbon** A vigorous tree with medium-large, juicy and acidic fruit. Has a prominent nipple and few to no seeds. The main crop ripens in February with a second, smaller crop in May.

**Ponderosa** These are huge lemons, about the size of grapefruit, with a thick rind and large flowers. Hardy to 25° and ripens year round. Somewhat seedy and needs pruning for good shape. Gangly as a young tree, but eventually out grows it.

**Lemonquat** (*Citrus limon x fortunella*) Cross any citrus with a kumquat and the resulting tree is hardier than the non kumquat parent.

**Lime** (*Citrus aurantifolia*) Limes are second only to lemons in importance as a flavoring for food. Plant in a very well-drained bed (listen up...they do not like our clay soil or staying too wet) or in a large pot in full sun.

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Plant them on the south or southeast side of your home to provide the extra protection these gems need. Limes tend to be more of a large shrub than a tree.

**Kaffir** (*Citrus hystrix*) Used in Asian cooking and hardy to 30°. The young tender leaves are edible and the rind is great for zest (anyone for Key Lime Pie?). The fruit is bumpy with little to no pulp. Add the flowers to tea and the leaves to potpourri.

**Mexican** A thorny, small tree with a medium-sized fruit. It bears heavily with very aromatic, juicy and acidic fruit and hardy to 25°. Harvest all year long.

**Mexican Thornless** (*Citrus aurantifolia*) A thornless, small tree with a medium-sized fruit. It bears heavily with very aromatic, juicy and acidic fruit and hardy to 28°. The bartender's lime with the added bonus of having no thorns. Mature fruit is small, green to yellow green ripening in July to December. Best grown in areas with long summers and frost free winters. Harvest all year long.

**Persian** (*Citrus latifolia*) Also known as Bears Lime. The fruit is larger than Mexican lime. Acidic and juicy, flesh matures to yellow and has a thin skin. Cold hardier than Mexican and the tree grows up to 20' tall. They are everbearing and seedless with a characteristic nipple on the blossom end. Fruit ripens from winter to spring. This is the common market lime.

**Mandarin** (*Citrus reticulata*) A native to China, is thought to have received its name because the skin of the orange is similar in color to the robes worn in Imperial China. The mandarin orange comes in a wide range of sizes, from the size of an egg to a medium-sized grapefruit. All are easy to peel.

**Clementine** A variety of mandarin orange, so named in 1902. The exterior is a deep orange color with a smooth, glossy appearance. An early season mandarin producing sweet and juicy fruit that will hold on the tree for months. They tend to be very easy to peel, like a tangerine, but are almost always seedless. For this reason they are sometimes known as seedless tangerines; the Clementine is also occasionally referred to as the Algerian tangerine. They are typically juicy and sweet, with less acid than oranges and this variety is the most widely planted tangerine in California orchards.

**Orange** (*Citrus sinensis*) Possibly a cross between a pummelo and a mandarin, native to Southeast Asia. Sweet oranges are the most commonly grown and sour oranges are used as the rootstock for the sweet ones. They typically have thick skins, making them good for shipping. Sunkist claims that the bigger the navel...the sweeter the orange will be. Usually more sensitive to cold than mandarins and satsumas.

**Valencia** Is the most widely grown orange in the world. Introduced to Florida in 1870. Medium-large, seedless and thick skinned fruit makes for great eating fresh or for juicing. All other true oranges are judged against this beauty. Planting this one allows you to harvest from February to June, when no other citrus are ready.

**Hamlin** discovered in 1879 near Glenwood, Florida, in a grove later owned by A.G. Hamlin, is small, smooth, not highly colored, seedless and juicy but the juice is pale. The fruit is of medium-to-good quality but the tree is high-yielding and cold-tolerant. The fruit is harvested from October to December and this cultivar is now the leading early orange in Florida. In central Texas area, it is budded on trifoliolate orange which gives a high cold tolerance.

**Navel N-33** A medium to large tree with a thick rind, rich in flavor, juicy and seedless.

The classic California navel orange is seedless, easy to peel and has a large, protruding "navel"...hence the name. A nice balance of sweetness and acidity, with easily separated carpels.

**Red Navel** The striking red navel fruit is sugary sweet and very flavorful. It can also be compared to the slight berry flavor of a blood orange but, much better. The fruit color is a beautiful red and is consistent throughout the pulp. The fruit is very large. The tree grows to about 15' but also can be container grown. Red Navels grow and produce fruit for many years but may remain at a height of only 4 to 6 feet even after several years in a container.

**Moro Blood** Deep red-to-almost-purple flesh after a cool snap with an unusual berry-like flavor early ripening and productive.

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**Satsuma** (*Citrus reticulata*) Native to the Satsuma province in Japan, they were considered to be a divine fruit, only served to the aristocracy. Their origins can be traced back to the 15<sup>th</sup> century. They were only shipped out of Japan in the early 1900's. Basically they are a branch on the mandarin family of citrus tree, as they were isolated on the island of Japan. They are hardy to 26 degrees( some say 22°), Satsumas are like Camellias and come in early, mid and late season varieties...so, planting one of each type will provide you with fruit all the way from fall to early spring. At 10' by 10' and a kind of weeping posture, you can grow a lot in a small space. Usually seedless and easy to peel, they are an excellent choice.

**Brown Select** Slightly more cold tolerant than Owari with extremely sweet, seedless fruit. Ripens a week or 2 earlier than Owari.

**Owari** The original Satsuma. Slow growing to 10' to 12'. Produces heavily with sweet and nearly seedless pulp, peels easily. Ripens October through December. Hardest of all mandarins.

**Miho** A great choice, this extremely cold-hardy tree bearing seedless, sweet fruit ripening in late September to early October.

**Seto** Early maturing and very cold hardy with a smooth, thin skin. Best if harvested before Thanksgiving.

**Mr. Mac** Texas variety that is early to mid season ripening. Very easy to peel considered seedless with no thorns. The 'Mr Mac' satsuma was selected as an outstanding old line Owari clone and named to recognize the work Murphy W. McEachern did in maintaining the industry in Southern Louisiana.

**Arctic Frost** This small, spreading evergreen tree has glossy, dark evergreen foliage. White spring flower add a heady fragrance of orange blossoms. In winter it produces juicy, nearly-seedless and easy-peeling fruit. This vigorous grower matures at 8 to 12 feet tall in the ground and 6 feet tall in a container.

**Orange Frost** Our favorite of the newest varieties is the Orange Frost™. This gem is a small, spreading evergreen tree that will grow 10 to 12 feet tall in the ground or 6 feet in a container. It is cold hardy to 15 degrees, or USDA Zone 8b. It is a hybrid of Changsha x Satsuma and is reported to be moderately cold hardy, seedless and good/sweet tasting. It was developed by Dr. Ying Doo Moy a retired plant breeder from the San Antonio Botanical Garden. It is currently in production at Greenleaf Nursery Company in El Campo, TX and is expected to be released in 2014.

**Tangelo** (*Citrus paradisi x reticulata*) A cross between a tangerine and a pummelo and are generally easy to peel and can be easily recognized by their nipple-shaped stem end. These guys need pollinizers...try a Clementine.

**Orlando** A cross between a Dancy tangerine and a Duncan grapefruit, making for a juicy and sweet with a mild flavor. Harvest November to January.

**Tangerine** (*Citrus reticulata*) The word tangerine has a long history and was first recorded in 1710. It means...pertaining to Tangiers...and things that came through the Port of Tangiers were stamped Tangier or Tanger. Crates of citrus were also stamped this way, and called tangerine oranges (oranges from Tangiers, an adjective). The fruit was actually a mandarin orange. Today, there is a distinct difference between mandarins and tangerines. These are the true tangerines.

**Clementine (Algerian)** An early ripening, seedless, small fruit, with a very sweet flavor and reddish-orange skin, easy to peel and almost thornless. Grows up to 12' tall and always a good choice, but harder to find than most...popularity has its drawbacks. Needs a pollinizer...try Sunburst, Orlando or Wekiwa tangelos. Harvest October to December.

**Sunburst** is the most widely grown commercial early Florida tangerine. It is a cross between the two citrus hybrids Robinson and Osceola. The fruit is medium in size, about 2½ - 3 inches in diameter. Fruit shape is oblate and is flattened at the stem end and has a depressed navel. The rind is thin, smooth, and somewhat easily removed. The peel is an outstanding dark orange color with excellent internal juice color. Generally average between 10 to 20 seeds per fruit. In most years the fruit will reach maturity by mid-November and will remain acceptable through late December.

**And now for some stuff we want you to know...**

Citrus are easy, just follow the rules, and the fruit will follow.

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- Maintain even moisture...or your fruit will crack.
  - Use a good citrus food that provides extra Zinc and Magnesium.
  - Use organic fertilizer like Espoma Citrus Food...you're gonna eat 'em ain't ya?
  - Prune to control height and shape.
  - No matter how many flowers you have only 1% to 5% will set fruit...that's the kind of thing we send our kids to college to figure out.
  - Fruit drop happens. It is common on young trees and we recommend you remove the fruit the first year to promote a healthier root system. Your tree will abort excessive fruit to reduce stress. Excessive water during a hot rainy fall can cause up to 25% of the fruit to drop off a mature tree.
  - Excessive water also contributes to root rot and leaf yellowing...did you read about the bed prep?
  - As soon as you see new growth, start spraying with Spinosad and liquid garlic to control leaf miners. The next week use Neem Oil and liquid garlic. Switch back and forth for the best control. When leaves stop growing and get tough...stop spraying.
  - Monitor your trees for the newest, nasty bug in town, the Asian Citrus Psyllid. They carry Huanglongbing (we did not make up that word!!!) aka Citrus Greening Disease. Go to [www.SaveOurCitrus.org](http://www.SaveOurCitrus.org) (Click on signs and symptoms) or [www.aphis.usda.gov/citrusgreening](http://www.aphis.usda.gov/citrusgreening) (click on publications in the middle of the page). Not all of the bugs carry the disease. If you find them act immediately. We have been advised to use a systemic insecticide (rendering this year's crop inedible) and spraying weekly with contact killing insecticides.
  - If it looks like a bird pooped on your tree...leave it alone...it's a Giant Swallowtail butterfly larva. They only eat the leaves and are never so numerous as to be a problem...and the adults are really pretty and help with pollination.
  - Christopher Columbus brought the 1<sup>st</sup> citrus seeds and seedlings to the New World on his second voyage, in 1493.
  - Citrus are actually a type of berry.
  - The segments of pulp are called carpels.
  - The white part beneath the peel is called albedo.
  - If you plant an orange seed, you will not get the same fruit you ate.
  - Only 20% of all citrus grown are eaten fresh.
  - The oils of citrus flowers, leaves and twigs are important to the perfume industry.
  - After chocolate and vanilla, orange is the world's favorite flavor.
  - Our citrus are grafted onto sour or trifoliate orange for insect and disease resistance. Watch for and remove any growth that sprouts from the root stock. It will have clusters of 3 leaves, develop huge thorns and grow VERY quickly. It will outgrow the graft (the part you want and paid for) and is so aggressive it can cause the graft to die. We can show you what to look for.
  - Know your variety. Know when your fruit should start ripening. Remove one that looks smells and feels ripe. Perform a taste test: if it passes, harvest can begin. If it fails, wait a week and try again. Your fruit will not ripen all at once...which is a good thing.
  - Some seedless varieties can produce fruit without pollination...this is called parthenocarpy. Washington navel is an example, but most need to be pollinated by bees...GO BEES! A few need a second variety to produce well, check the list.
  - If you have space, carefully select varieties that will not ripen all at the same time to extend your harvest for most of the year.
  - <http://aggie-horticulture.tamu.edu/extension/homefruit/citrus/citrus.html> is a great page to learn more about problems you may be having...but no pictures.
  - <http://edis.ifas.ufl.edu/HS141> is a great page with good pictures.
- Finally, with great thanks:**
- **Original information provided with permission/and courtesy of Mary-Ann Cumifings  
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