

CITRUS TREES



Yuma is home to two citrus tree nurseries and produce hundreds of trees for home centers and commercial citrus producers throughout the US.

Citrus trees can be planted from pots, containers or boxes or as, "balled and burlapped" trees.

Plant a citrus seed from a Valencia orange and what do you get? A Valencia orange tree just like the one your seed came from? Nope - you can never be sure exactly what you'll get because plants grown from seed are all slightly genetically different. Trees vary in individual size and in the size and sweetness of their fruit. And, some trees may be more resistant to diseases.

Naturally, citrus growers, to ensure the best possible crop, want to make sure all their trees are of the same high quality. To do this, each new tree they plant is grown, or propagated, not from a seed but by grafting or, budding. In most citrus trees, the scion, or top of the tree, is a different variety from the roots or rootstock of the tree. Citrus growers plant trees whose tops will grow tangelos or lemons on a rootstock that has special characteristics like disease resistance, quick to bear fruit or restricting tree size for easier harvesting.

After the rootstock is a year old, a single bud is taken from a branch of the desired scion variety and inserted into the bark of the young seedling. This bud grows into the top of the tree that produces the fruit.

Citrus will grow in most soils from sandy to adobe clay, provided it drains well. Sandy soils must be watered and fertilized more frequently than soils with a higher clay content and growers can add organic matter such as manure or compost to improve water and nutrient holding abilities.

Unlike most other fruit trees, citrus trees don't require regular pruning. Commercial growers trim tree tops to keep them smaller so they are easier, safer and less expensive to pick, and "hedge" the sides to let more sunlight into the trees to improve yields. Hand pruning opens up the trees to allow more sunlight into the center.

Protection from frost is critical. Most citrus will freeze when fruit temperature drops to 27-28°F. The main methods of frost protection in Yuma are by wind and water. Wind machines -- large fans on poles about fifty feet above the grove -- are turned on when the temperatures near freezing.

The fans mix the slightly warmer air above the grove with the colder air near the ground, which warms the air around the tree.

Citrus flower buds begin to form in early winter and develop through late winter and spring. More than 99% of citrus flowers fall off the tree. The ones that remain become fruit. Temperature and moisture are critical factors during and immediately after flowering.

Citrus trees are generally found in 3 sizes at maturity. Standard citrus trees: As a rule of thumb, standards grow 18 to 25 feet tall when they are planted in the ground where their roots are unrestricted. Mature size is typically achieved after 10 to 15 years, as citrus are not fast growers.

Semi-dwarf trees: Customarily, semi-dwarf trees grow about two thirds the size of standard trees, or in the 10 to 18 foot tall range. Again, to reach their full size they must have unrestricted root runs. Dwarf trees: Grafted onto dwarfing rootstock usually reach a mature height of 4 to 6 feet.

A grafted tree will normally start bearing some fruit within a year.

Rootstocks are almost universally used for propagation of citrus they combine good fruit traits with good root traits in the same tree. Most cultivars that produce good quality fruit do not produce their own roots with resistance to root diseases. Grafted trees also begin bearing fruit many years earlier than trees reproduced by seed.

Budded citrus consistently reproduce good fruit traits, while plants derived from seed often do not.

'Budding' refers to the particular form of grafting best suited for the propagation of citrus trees. In a bud graft, a bud, along with some bark (budwood), is removed from the variety of tree (scion) the grower is trying to propagate. The bud is then inserted beneath the bark of a host tree (rootstock).

As any citrus can be budded on any other citrus, many home owners enjoy having a 'fruit salad' tree in their yard since they can have several different varieties of citrus on the same tree.

An bud, known to budders as an "eye," is the tiny green bump just above the point of attachment of a leaf, on the stem. It will eventually form the new citrus tree.

To ensure survival and growth, the buds must be pressed against the rootstock and must never dry out. During the budding process, the buds are typically wrapped in grafting tape or a wide rubber band.

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