

Lemonzilla: Is Your Tree Producing Giant Lemons? It May Not Be A Fruit At All

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Some oversized 'mutant' lemon trees are not really lemons. Their rootstock is a different citrus tree that froze back to the roots. (Photo: Harry Deckness of Redding)

Q: My citrus trees produces these large — giant really — mutant looking lemons. Can you tell me what is causing this?

A: There could be several reasons why you have strange looking lemons on your tree.

One of the most common reasons in our area is that your tree is really not a lemon but the rootstock of a citrus tree that froze back to the roots during one of our cold winters. These rootstocks are usually one of three types of trees:

The first type is called a bitter or sour orange, *Citrus aurantium*. It used to be the most common type of rootstock due to its cold and drought hardiness, but has been phased out due to its susceptibility to the Citrus Tristeza Virus

(CTV), also called quick decline disease. This tree looks like a typical citrus tree and has sour fruit that are round or oblong-oval, with a very rough surface and thick rind. They ripen to an orange color; but in our warm climate, many times the fruit fails to turn orange and are yellow at ripening. Because of the sour fruit, most people mistake them for lemons.



(Photo: Harry Deckness of Redding)

The second type of rootstock common to California is the *Poncirus trifoliata*, also called the trifoliolate orange. This type of tree is recognizable by the long thorns on its stems and deciduous trifoliolate leaves. The fruit is green, ripening to yellow with a peach like fuzz covering it. This rootstock is very cold hardy and resistant to CTV, but is not very tolerant of the heat.

A third type of citrus rootstock common to California, and known for its excellent cold hardiness, is the Toyer Citrange. The citrange is a cross between the *Poncirus trifoliata* and the navel orange. It produces lumpy yellowish orange fruit that is bitter.

Another reason for your lemon tree to have mutant-shaped fruit could be due to the citrus bud mite.

The University of California Statewide Integrated Pest Management Program site lists the citrus bud mite as “primarily a pest of coastal lemons, but in recent years has also been found in interior regions of Southern California. The mites feed inside the buds, killing them or causing a rosette-like growth of the

subsequent foliage and distortion of flowers and fruit.” Citrus fruits damaged by this mite can be very strange shapes, and can even have fingers similar to a citron.

To determine if you have mites, look for them on the leaf buds from mid-April to fall.

UC Davis describes these mites as “very small, barely visible, elongated, yellow mite with only four legs that appear to be coming out of their heads. Smaller than red mites.” You will most likely need a hand lens or magnifying glass to see them.

The best control for the citrus bud mite is to use a summer oil spray, or all-season oil spray. These are petroleum oil sprays that are lighter than dormant oils. It’s best to spray trees in May and June, or September through November, to control mites. Use caution when spraying as you can cause severe damage to the tree leaves if temperatures are above 80 degrees.

Natural predators may also be effective and a more practical choice for our hot climate.

For information on other citrus fruit disorders check out the UC IPM page at http://ipm.ucanr.edu/IPMPROJECT/ADS/Fruit_disorders_in_citrus.pdf.

The Shasta Master Gardeners Program can be reached by phone at 242-2219 or email mastergardener@shastacollege.edu. The gardener office is staffed by volunteers trained by the University of California to answer gardeners' questions using information based on scientific research.