How to handle citrus problems in home landscape

Texas A&M AgriLife Extension Service — Galveston County Office

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Q: My citrus produced a heavy crop last year but has set very few fruits this year. What happened?

A: The problem with your citrus trees is a classic case of what is known as alternate bearing — also called alternate year bearing, biennial bearing or uneven bearing — which is the tendency of citrus and other types of fruit trees to produce a heavy crop one year (called the "on-crop" year) followed by a light crop or no crop the following year (called the "off-crop" year).

Alternate bearing persists because the tree uses most of its energy (stored carbohydrate reserves) and available nutrients to mature a larger-than-normal crop with little or insignificant energy being left to provide sufficient growth for the next crop.

Consequently, the following crop is lighter, so the tree typically produces more growth than normal which sets up yet another year of higher production ... and another "feast to famine" cycle is repeated.

This phenomenon is common to nearly all fruit and nut trees, to some degree.

In the Texas Gulf Coast area, pecans can be an extreme example of alternate bearing as trees will produce an abundance of nuts one year and virtually none the next.

Now to what to do with your citrus, I offer the following:

• In order to begin to break the cycle, be sure to provide good care of citrus trees throughout the growing season including adequate soil fertilization.

Nitrogen fertilization rates should be increased during high-production years and deceased during years of low production.

• We had some dry spells last winter and the 2011 spring season has been exceptionally dry.

Providing supplemental irrigation to maintain adequate soil moisture throughout the year also is very important.

It is better to water deeply and less frequently rather than to water lightly and more frequently.

• Thinning of fruits in a heavy production year also is suggested to help avoid depletion of a plant's energy reserves near the end of the growing season.

It would be best to thin fruits early (by late June/ early July in our area) when fruits are still relatively small and most stands a good probability of staying attached until harvest time.

Remember, citrus plants can drop fruit prematurely at any time if stressed by low soil moisture.

Q: Do citrus trees need pollinators of different varieties to produce fruit?

A: Most varieties are self-pollinating and do not require a pollinator.

Q: I have an orange tree that is producing fruit and flowers at the same time. Is this unusual?

A: Young citrus trees often flower and fruit when they are in a stress condition, such as in a container with crowded roots.

They might also bloom and fruit initially after planting out in the yard.

The young trees often need a few years to establish good root systems and make enough top growth to support a good crop.

Q: I have a Meiwa kumquat tree that I planted this spring and it already has set a decent crop of fruit.

I was told by a friend to remove any fruit that set during the first season of growth to make the tree stronger for the future. Is this correct?

A: Technically, the advice you received was sound. You will indeed increase future growth and fruit production by removing any fruit that might set.

A commercial grower with acres of year-old citrus trees would be well advised to thin

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out or eliminate all fruit the first year.

But let's face it. We usually buy plants to enjoy. And with citrus much of the enjoyment comes from harvesting fruit from our own trees.

While your Meiwa kumquat might set a large number of flowers, the actual fruit set likely is to be low during its first year of growth.

Allowing a few fruits to mature to satisfy your curiosity and taste buds is understandable.

The amount of reduction in future growth and production is relatively minor, especially if the tree is provided proper care, including adequate watering and fertilization.

If you have one or two trees in your backyard and provide them with good care throughout the year, the reduction in production in future years would barely be noticeable if you leave a few fruits to mature and savor during the first year of growth.