



Urban Harvest

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Citrus Greening Disease – What’s it all about?

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You have probably been reading news reports and social media from local nurseries about a ban on selling citrus in Harris County. The ban was temporary, and has already been lifted. We wanted you to know more about this issue so you don't become overly concerned about your current or future plans to grow citrus in your own backyard.

What was the ban all about?

First, let's address the reasons for the ban. The Texas Department of Agriculture (TDA) issued the ban because **one citrus tree** infected with Greening Disease was found in a Harris County retail nursery. The infected tree was not grown by a citrus producer in Harris or surrounding counties. The TDA worked with the Texas Nursery and Landscape Association to contact growers, wholesale and retail nurseries to temporarily suspend the sale of all citrus trees until an assessment could be made. They moved very quickly. In less than a week's time a strategy was developed and conditions for sale were communicated to the industry.

Can I buy citrus trees now?

Local retailers are once again permitted to sell citrus trees, although a transportation quarantine remains. Each tree will have a label that informs the buyer that the tree must remain in Harris, Fort Bend, or Montgomery counties. The actual wording of the label is "Prohibited for movement outside of Quarantine Area – Penalty for violation - TDA". There is a fine associated with violating this requirement. Nursery professionals will be able to answer all of your questions at the point of sale.

Expansion of the Quarantine

In recent months the transportation quarantine has been extended to Fort Bend and Montgomery counties. This step actually makes it easier for homeowners to move trees within the quarantine counties because you may now purchase a tree at any nursery in the quarantine zone and move the tree to a planting site within the three-county zone.

What is Greening Disease?

Greening Disease got its name because many of the affected fruits have a thick peel that remains green on the bottom of the fruit giving the fruit a two-toned appearance. It is also known as Yellow Dragon Disease or Huanglongbing (HLB). It is caused by a bacterium that is spread by an insect known as the Asian Citrus Psyllid (ACP). This tiny insect transmits the disease to the citrus trees during feeding. Not all ACP are infected with HLB, but once they are infected, they carry the disease for the rest of their lives.

There is no cure for HLB. Once a tree is infected, it will eventually die. The early symptoms may show up on only one branch, but pruning the affected branch will not stop the disease. Once symptoms are apparent, it is systemic to the entire tree. HLB will eventually affect the appearance and table quality of the fruit. It will become bitter, oddly shaped, oddly colored and inedible.

Why is HLB so serious?

The value of citrus to the Texas economy is approximately \$200 million. HLB has had a significant effect on Florida citrus production and it has the potential to do the same in Texas. The entire industry is working to slow the spread of the disease down while they look for possible solutions. We are not alone in the effort. Florida, California and Texas are joined by the USDA's Agricultural Research Services Division. International research is ongoing and the research community is in cooperation.

Is it safe for me to eat my citrus?

Since a tree may be infected long before symptoms appear, it is very important for you to know that eating the fruit poses no threat to human health, pets or wildlife. Pollinators are not affected when they forage the flowers for nectar or pollen.

What is the agricultural community doing about HLB?

There are several agencies and agricultural colleges doing research now into controls and options. None have been confirmed to be successful as of yet, but some of the work does show promise. One of the most promising is the intercropping of guava in the citrus groves. Scientists in Japan, Viet Nam and Ft. Pierce Florida are all using this cultural practice in test plots. They report no incidences of HLB in the intercropped plots, whereas they report 30% infection in their control plots. The thought is that volatile compounds produced by the guava may disrupt the ACP's ability to locate the citrus host. Since cultural practices do not involve chemicals or transgenics (GMO), they would likely find broad public support.

Is there anything I can do to help?

Yes! In fact, we all need to participate in slowing the spread of HLB. Here are some things you can do:

- 1) Observe the quarantine rules. If you buy a citrus tree in the quarantine area, keep the tree in the quarantine area. No cheating. There are great nurseries in the surrounding counties. If you intend to plant outside of the quarantine area, buy your tree from the closest local nursery in that county.
- 2) Do not bring any citrus trees into Texas. This has been a rule for a long time, but not everyone is aware of it. You cannot transport citrus trees into Texas across any of our state lines.
- 3) The quarantine and transport rules also apply to close citrus relatives Orange Jasmine (*Murraya paniculata*), Chinese Box Orange (*Severinia buxifolia*), Curry Leaf (*Murraya koenigii*), Limeberry (*Triphasia trifolia*) and Calamondin (*Citrus mitis*), all of which can serve as hosts for HLB.
- 4) Keep your trees healthy. Healthier specimens are less susceptible to all diseases in general. Symptoms will be more reliable in an otherwise healthy tree because there is less chance of confusing HLB with a nutritional deficiency.
- 5) Inspect your trees regularly. Look for signs of the ACP insect and for symptoms of the disease. This site has good visual identification images, <http://www.citrusalert.com/about-citrus-greening/>. Some of the symptoms mimic other problems such as nutritional deficiencies. Verify before you act. Observation of the ACP insect does not automatically mean you will have infected trees.
- 6) If you suspect that you have an infected tree, report it to the Texas Department of Agriculture toll free at 1-800-TELL-TDA (1-800-835-5832) or the TDA regional office in San Juan at 956-787-8866.

- 7) Destroy any tree verified to be infected. There is nothing to be gained and much to be lost by allowing an infected tree to remain in place.
- 8) Plant citrus. This may seem odd advice, but it's a numbers game. Not all trees in the area will be affected. Citrus is a healthy addition to your diet. Plant it, grow it and enjoy it. Houston is a wonderful place to grow citrus, and we should not allow ourselves to miss the opportunity for fresh, homegrown fruits just because something COULD happen.

Additional reading:

<http://californiacitrusthreat.org/huanglongbing-citrus-greening.php>

<http://www.crec.ifas.ufl.edu/extension/greening/index.shtml>

<http://www.texascitrusgreening.org/citrus-greening/about-the-disease/>

<http://www.ars.usda.gov/citrusgreening/>

http://www.nytimes.com/2013/05/10/us/disease-threatens-floridas-citrus-industry.html?pagewanted=all&_r=0

https://www.texasagriculture.gov/Portals/0/Files/ACP/Citrus/FAQ_Citrus%20Greening_4_21_14.pdf

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