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COLD HARDY CITRUS CONNECTION

UF|IFAS UNIVERSITY of FLORIDA

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2022 Citrus Health Forum

I hope everyone had a great harvest season and 2022 is off to a great start! We are excited to be meeting back in person again in Quincy for the 2022 Citrus Health Forum on February 17th! This workshop aims to cover the major issues that citrus growers in our region are facing. Topics will include insect management, proper tree care, production practices, a grower panel, and an in-field demonstration of mechanical pruning. In addition to the educational program, there will be a trade show of vendors. Following the workshop, the Cold Hardy Citrus Association will hold their meeting. I look forward to seeing everyone there!

For the full agenda and to register please visit:

2022 Citrus Health Forum

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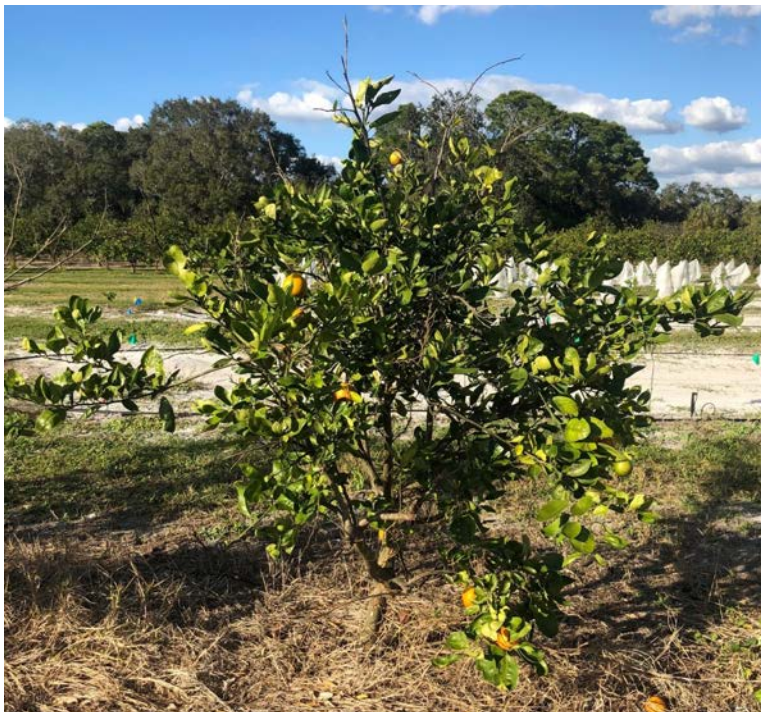
Keep an Eye Out for Citrus Greening this Winter

By: Danielle Sprague, UF/IFAS Jefferson County

Recently, citrus greening or huanglongbing (HLB), the major disease devastating the citrus industry in South Florida, was confirmed in Leon and Washington County, Florida and Grady County, Georgia. Fortunately, in these instances, the tree owners understand the severity of the disease and were willing to remove the infected trees in order to further prevent the spread. With more cases popping up in our region, I wanted to encourage growers to continue to scout for the disease. Although cases have popped up, disease incidence in our region still remains relatively low, therefore scouting and infected tree removal can still be a valuable production practice.



Citrus greening is a bacterial disease caused by the bacteria *Candidatus Liberibacter*. The bacterium is spread by an insect, the Asian citrus psyllid. Psyllids spread the disease by feeding on infected trees and moving on to non-infected trees. The bacterium can also be spread through infected budwood. Therefore, it's important to make sure you are purchasing clean budwood because once the tree is infected, there's little hope for survival as there is no cure for citrus greening.

Citrus greening can be difficult to diagnose as it can be easily confused with nutrient deficiency. Symptoms of citrus greening include yellowing of the veins and a blotchy mottle pattern. Nutrient deficiencies tend to have a symmetrical pattern on each side of the leaf vein whereas citrus greening is asymmetrical. Overall, a tree infected with citrus greening will appear unhealthy with discolored leaves, a thin canopy, and reduced fruit production.

Keep an Eye Out for Citrus Greening this Winter

Early symptoms of citrus greening include yellowing of the leaf veins and a blotchy mottle pattern. These symptoms can be easily confused with nutrient deficiencies. However, nutrient deficiencies tend to have a symmetrical pattern on each side of the leaf vein, whereas citrus greening is asymmetrical. On severely infected trees, leaf drop, shoot die back, and fruit drop occurs. Fruit may be small, misshaped and/or have an abnormal color change. Fruit may also have an off flavor.

Scouting for citrus greening should be done at least four times a year, or more in areas known to have infected trees. The symptoms are most visible now through March while trees are dormant, but can be seen year round. As trees begin to flush in the spring, scouting becomes more difficult because new leaves do not typically express symptoms and older, symptomatic leaves become hidden in the tree canopy. Visually inspect trees by walking or riding through groves. If you see any suspect trees, flag them and send any suspicious samples to the lab to be positively identified. There are several labs in Florida that are able to receive and diagnose samples.

If greening is confirmed, the best thing to do is to remove the tree to prevent additional spread. Fortunately, citrus greening disease incidence in our area is low. Through a proactive approach to dealing with the disease via scouting, early detection, removal of infected trees, and controlling the insect vector, growers can reduce the incidence and spread of the disease. For more information or help with identifying citrus greening, contact your local Extension agent.

Diagnostic Labs:

UF/IFAS North Florida Research & Education Center
155 Research Road
Quincy, FL 32351, 850-875-7140

UF Plant Diagnostic Center
Building 1291, 2570 Hull Rd.,
Gainesville, FL 32611, 352-392-1795

Florida Division of Plant Industry
P.O. Box 147100,
Gainesville, FL, 32614, 1-800-282-5153

Sampling Georgia Citrus Varieties for Brix and Acid

UNIVERSITY OF GEORGIA EXTENSION

By: Jake Price, UGA Extension, Lowndes County

On December 15, 2021 I thought it would be interesting to take juice samples from all the citrus varieties I could get my hands on in one day in which the variety and rootstock were known. I am sure there are other varieties being grown in Georgia and northern Florida, but I was able to find 29 varieties. All samples were taken from five locations in the Valdosta area. I mixed juice from 5 fruit per tree unless otherwise noted to represent each tree. Since all varieties are not ripe at the same time this indicates a Brix/Acid value at a point in time. If varieties were on multiple rootstocks I sampled them separately. I also included the date when the tree was planted.

SAMPLING GEORGIA CITRUS VARIETIES FOR BRIX & ACID

VARIETY	ROOTSTOCK	DATE PLANTED	BRIX	ACID
Southern Frost Navel (UGA)	Flying Dragon	2017	11.7	.6427
Glen Navel	Sour Orange	2014	9.4	.8376
Glen Navel	US-852	2017	10.2	.7506
Cara Navel	US-897	2018	9.5	.7332
Washington Navel	US-852	2017	10	.6500
Sugar Belle Mandarin	US-942	2018	12.9	1.5992
Sugar Belle Mandarin	X-639	2015	12.1	1.5256
Sugar Belle Mandarin	Goutou	2017	12	1.1070
Meyer Lemon	Own roots	2009	7.1	4.9350
Tango Mandarin	US-852	2020	9.6	.8760
Tango Mandarin	X-639	2018	10.9	.9159
Kishu Mandarin	US-852	2017	8.7	.5065
Kishu Mandarin	Rubidoux	2019	10	.6370
Shiranui Mandarin	US-942	2019	11.0	1.0086
Shiranui Mandarin	US-852	2018	11.7	1.3008
Shiranui Mandarin	US-897	2016	13.5	1.3848
Shiranui Mandarin	Swingle	2015	11.8	1.5679
**Golden Grapefruit	Flying Dragon	2009	9.0	1.0116
*Pink Frost Grapefruit (UGA)	Poncirus trifoliata	2009	7.6	1.3751
Marrs Orange	Poncirus trifoliata	2009	10.7	.8393
Ambersweet Orange	US-852	2009	8.1	.5166
Early Pride Mandarin	X-639	2017	11.1	.8792
Sweet Bessie Orange	US-852	2017	6.7	.6633
Orange Frost Mandarin	Own roots	2017	10.6	.9713
Artic Frost Mandarin	Own roots	2015	12.2	.9696
Early Gold Orange	16-6	2008	8.1	.6344
Fairchild Madarin	Flying Dragon	2009	16.1	.9295
Owari Satsuma Mandarin	Kuharski Carrizo	2014	11.4	.7832
Moro Blood Orange	US-942	2019	9.7	1.0683
Poncan Mandarin	Rubidoux	2010	12.2	.6351
Page Tangelo	US-852	2018	12.6	.9581
Hamlin Orange	US-812	2016	9.4	.6876
Sweet Frost Changsha (UGA)	Rubidoux	2016	12.9	.9081
USDA 88-2 (Super Nova)	US-852	2019	14.4	.8221
Keraji Mandarin	US-942	2018	10.7	.4764
*Grand Frost Lemon (UGA)	Poncirus trifoliata	2010	6.3	3.4605
Honey Belle Tangelo	US-897	2018	10.9	1.1848

*Sample collected on 1/9/2022 and only 3 fruit included in the sample

** Two fruit sampled for this variety

Upcoming Grower Meetings

Citrus Irrigation and Nutrient Management Workshop

February 8, 2022

UF/IFAS Citrus REC, Lake Alfred, FL

Click Here For More Information and To Register

Citrus Health Forum: February 17th

UF/IFAS North Florida REC 155 Research Road, Quincy, FL

Time: 8:30 AM EDT

Click Here to Register

Citrus Zoom Seminar - *Scouting and Management of Citrus Diseases*

February 24, 2022

Available via Zoom

Click Here For More Information and To Register

Georgia Citrus Association Conference: February 28th

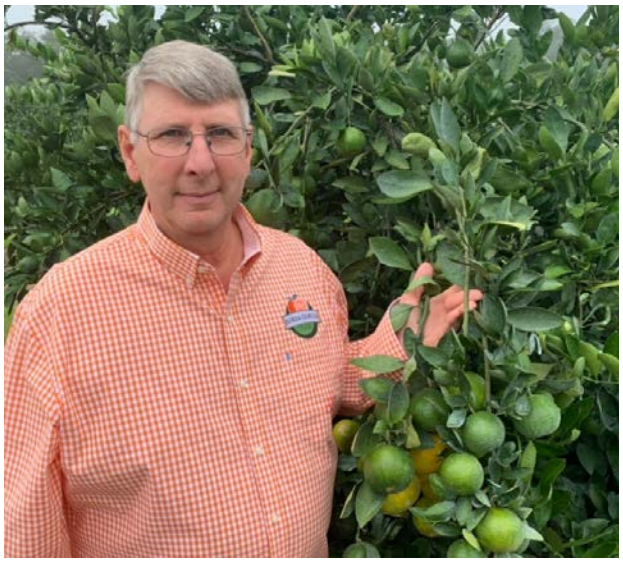
UGA Tifton Conference Center, 2360 Rainwater Road, Tifton, GA

Time: 9:00 AM EDT

Topics include: *Crop Insurance*, *Food Safety*, *Regenerative Farming*, *Organic Growing*, *Nutrition*, *Winter Protection*, *New Citrus Varieties and a Trade Show*

Click Here to Register

COLD HARDY CITRUS ASSOCIATION CORNER



Kim Jones, CHCA President

Well, I think everyone in the Cold Hardy Region has finished citrus harvest. And, all in all, it was a good year. Quality was much better than 2021, yields were better, and we were able to sell all the #1 fruit to the fresh market at favorable prices. This is to be expected as our trees mature and the quality gets better and better.

If you have not heard, the Cold Hardy Citrus Association (CHCA) was able to launch the region name, "Sweet Valley Citrus" at the New York Produce Show in December. Interest was extremely high and while there were 11 other Mandarin companies represented, the Sweet Valley Citrus booth and fruit samples stole the show. Buyers were very excited to hear about the "region brand" and the fact we are on the East Coast with high quality fruit. As we all know, freight has increased so much and the shorter distance to haul can make a big difference in overall delivered price.

The UF/IFAS Citrus Health Forum is being held February 17th at the UF/IFAS North Florida Research and Education Center in Quincy. If you have not signed up, please do so right away. It takes a lot of planning to make this event go smoothly. We have some great speakers and topics and a grower panel that can answer your questions about any part of the citrus industry. We will have a demonstration on mechanical hedging in the afternoon session. You will also hear about "Sweet Valley Citrus" and how you, as a grower, can get involved and be able to label your crop from the Sweet Valley Region (North Florida, South Georgia, and South Alabama). You definitely do not want to miss this!!

REGISTER HERE: 2022 CITRUS HEALTH FORUM