COLD HARDY CITRUS CONNECTION

UF IFAS UNIVERSITY of FLORIDA

IN THIS ISSUE

We hope this season is off to a great start! In this edition of the Cold Hardy Citrus Connection, you'll find an update on the Asian Citrus Psyllid and Citrus Greening in our region from UF/IFAS North Florida and Research Center Entomologist, Dr. Xavier Martini. You'll also find a survey for assessing cold damage to your trees for this year as well as links to upcoming citrus production meetings. Be sure to register for this month's *Citrus Update* on April 20th at 12PM. The topic for this month's update is insect pest management. This year's *Florida Citrus Show* will be held in-person, May 12-13th in Ft. Pierce, FL.

Please do not hesitate to reach out to our team if we can help you in any way. Enjoy!

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Citrus Greening and Asian Citrus Psyllid Update for Florida Panhandle and Georgia

By: Xavier Martini, UF/IFAS NFREC Entomologist

As we enter warmer months, risk of citrus greening infestation is increasing. Asian citrus psyllid (ACP) is the vector of the bacteria that causes Huanglongbing (HLB) or citrus greening, the most economically damaging citrus disease worldwide. While South and Central Florida have to deal with the disease and the pest on a daily basis, North Florida and Georgia have been preserved from the pest and the bacterium.

Since the discovery of Asian citrus psyllid and HLB in the Florida panhandle in 2016, and subsequently in Alabama a couple of years later, cold-hardy citrus growers have been legitimately worried that the disease and the pest may expend in the area. Fortunately, this did not happen. While ACP can be easily found in residential areas along the Gulf of Mexico, and in some inland clusters in Bristol or Live Oak, no case of HLB has been found in commercial groves west of the Suwannee river. This success can be credited to ACP early detection, rapid eradication of the population and removal of infected trees when possible. Last year our team organized a new release of parasitic wasps against ACP in county on the Gulf of Mexico, and the effort will continue next summer.

Nevertheless, growers should stay alert and keep an eye on possible new ACP infestation of their grove and scout their trees for HLB symptoms. In the war against HLB, early detection is the key. ACP adults (Fig. 1) tend to aggregate on flush, and ACP nymphs only feed and develop on them (Fig. 2).

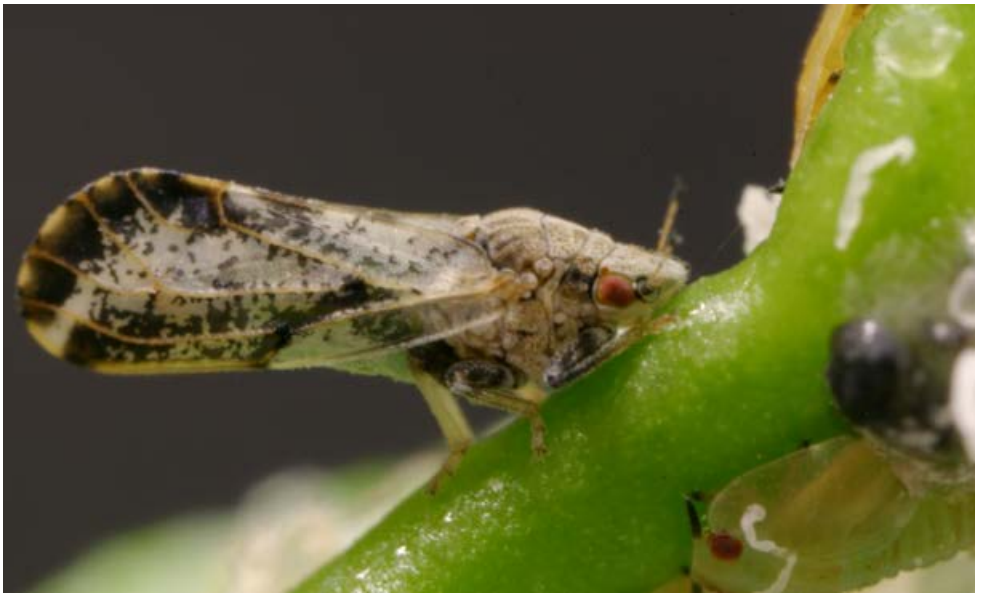


Fig. 1: Asian citrus psyllid adult feeding. Note the black coloration on wings and the vertical position with abdomen up in the air

Greening and Psyllid Update Continued (Continued)

Therefore, those flush should be the prime focus of any sampling effort against ACP. It is recommended to sample at least 10 flush on 20 different trees preferentially on each border of the citrus grove. Yellow sticky traps can also be disposed on citrus. Sticky traps should be hanged at shoulder height on full-sun exposed branch and can be collected every two weeks.

If psyllids are found, you should contact your local extension agent right away to organize the response. In addition to the infested grove, it would be preferable that any citrus in a 5 miles radius would be sprayed too, as well as any groves where agricultural workers may have traveled to prevent further expansion of the pest.

Initial HLB scout can be done at first based on symptoms (Fig. 3). Any tree with irregular yellowing on leaves (Fig. 3B) should be considered as potentially infected until diagnostic. Diagnostic can be done through PCR testing, either through FDACS, or with the plant pathology clinic at the NFREC. A fast and innovative way to detect infected tree is with the use of dogs, specifically trained to recognize the odor of infected trees. Each dog has > 99% accuracy, and each tree is tested by two different dogs leading to 1 wrong diagnostic out of 10,000 trees. Canine detection has the big advantage to be fast (one grove can be done in one day) and relatively cheap considering the number of trees tested.

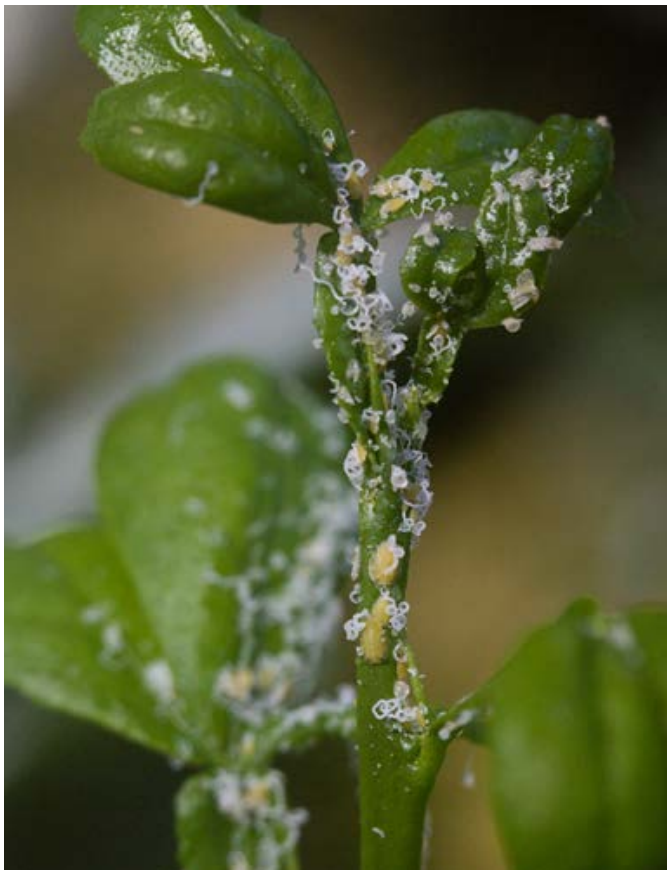


Fig. 2: Asian citrus psyllid nymph on a shoot. Note the yellow color and the white honeydew to help with identification.

Greening and Psyllid Update (Continued)

In summary these are the 5 – points strategy, name SAFER that we propose to continue to preserve our groves from HLB:

1. **Scout** your grove for Asian citrus psyllid on a regular basis especially between June to November
   - Sticky traps
   - Flush inspection

2. **Act:** If you find Asian citrus psyllid in your grove, do not wait.
   - Treat immediately with a foliar application
   - Contact your local IFAS extension agent to let us know
   - Scout your grove 1 and 2 weeks later to see if the application has been efficient

3. **Find:** trees with HLB
   - Visual inspection. Send any suspicious samples to our plant clinic at the NFREC
   - Scout with canine detection

4. **Educate** your neighbor and colleagues about the need to control ACP, and to monitor their groves for HLB.

5. **Remove** immediately any tree positive for greening.

Fig. 3: citrus with HLB (A). Note the asymmetric discoloration of the leaves (B). Photo credit: Erik Lovestrand.

UNIVERSITY OF GEORGIA EXTENSION

By: Jake Price, UGA Extension, Lowndes County

If you experienced cold damage, please consider taking this short survey. Simply email your answers to Jake Price at jprice@uga.edu

Cold Damaged Citrus Survey

1. In what county are your damaged trees located?

2. What is your best estimate of the lowest temperature when the damage occurred?

3. Circle what variety/varieties of trees were noticeably damaged or killed?

Owari Brown Select Shiranui Meyer Lemon Navel Sugar Belle

Other _____

4. What year did you plant the trees in this damaged field?

5. What rootstock/rootstocks were used on these trees?

Rubidoux Flying Dragon Rich 16-6 Kuharski Carrizo C-35

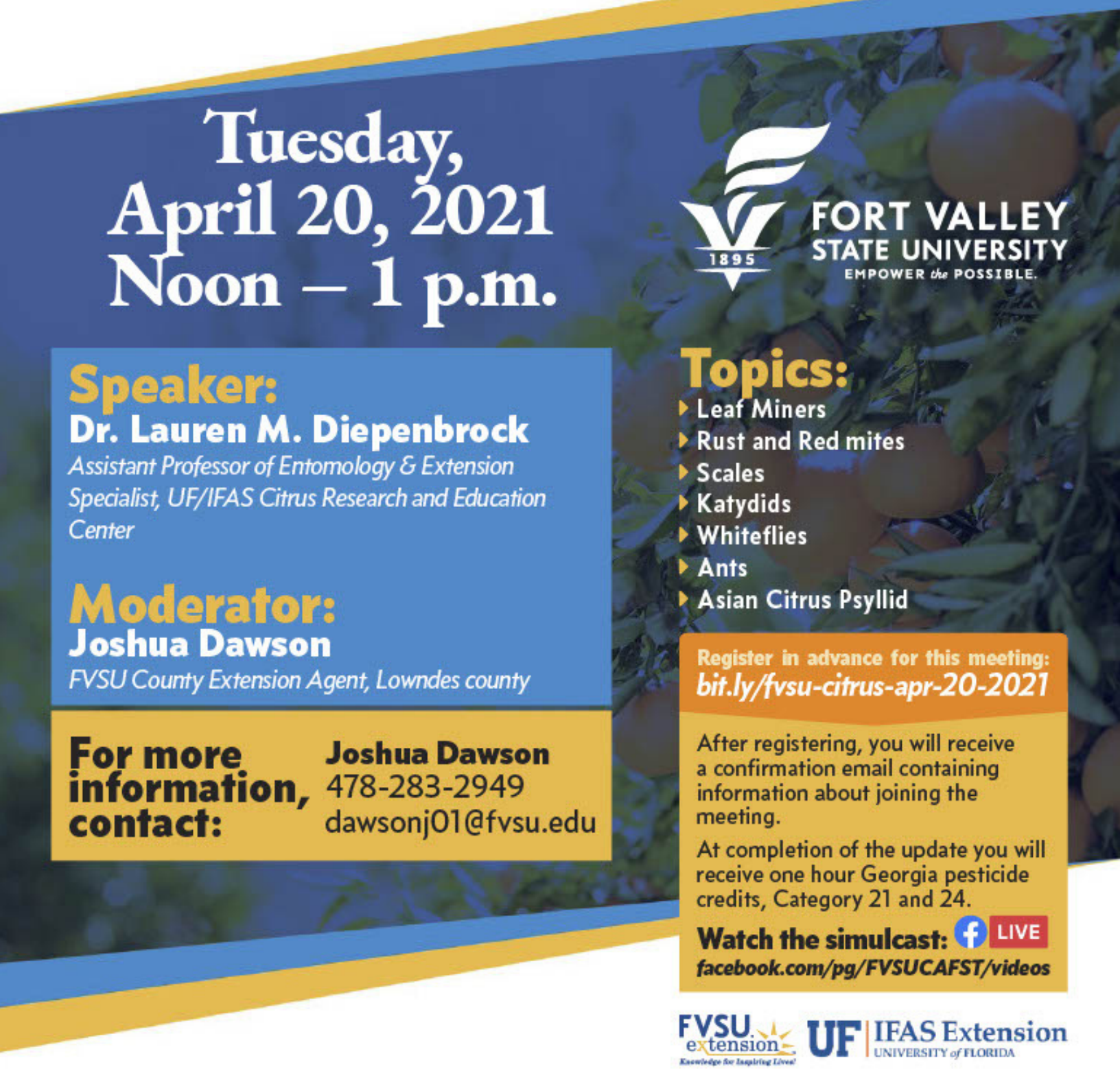
6. Did you have a tissue analysis done on this field? If so please email a copy to me or tell me the Nitrogen level. jprice@uga.edu

Yes No

7. Were these trees in a low area?

Yes No

CITRUS UPDATE:
INSECT MANAGEMENT



Tuesday,
April 20, 2021
Noon – 1 p.m.

FORT VALLEY STATE UNIVERSITY
EMPOWER *the* POSSIBLE.

Speaker:
Dr. Lauren M. Diepenbrock
Assistant Professor of Entomology & Extension Specialist, UF/IFAS Citrus Research and Education Center

Moderator:
Joshua Dawson
FVSU County Extension Agent, Lowndes county

Topics:
- Leaf Miners
- Rust and Red mites
- Scales
- Katydids
- Whiteflies
- Ants
- Asian Citrus Psyllid

Register in advance for this meeting:
bit.ly/fvsu-citrus-apr-20-2021

After registering, you will receive a confirmation email containing information about joining the meeting.

At completion of the update you will receive one hour Georgia pesticide credits, Category 21 and 24.

Watch the simulcast: LIVE
facebook.com/pg/FVSUCAFST/videos

For more information, contact:
Joshua Dawson
478-283-2949
dawsonj01@fvsu.edu

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UF | IFAS Extension UNIVERSITY of FLORIDA

Upcoming Grower Trainings:

FVSU Citrus Update: 12PM, April 20, 2021
Speaker: Dr. Lauren Diepenbrock; Topic: Citrus Insect Management
Click Here to Register

Virtual Citrus Seminar: 10AM EST, April 28, 2021
Speaker: Dr. Sarah Strauss; Topic: Cover Crops in Citrus
Click Here to Register

UF Food Safety Virtual Office Hours: 3:30-4:30 PM EST, May 6, 2021
Answers to your coronavirus and food safety questions.
Click Here to Register

Florida Citrus Show: May 12-13, 2021
Havert L. Fenn Center, Fort Pierce, FL
Click Here to Register

Remote Produce Safety Alliance Grower Training

A virtual course for fruit and vegetable growers and packers who fall under the FSMA Produce Safety Rule.

Produce Safety ALLIANCE

May 25-27th, daily from 2:30-5:30PM
Click Here to Register

June 15-17th, daily from 2:30-5:30PM
Click Here to Register

UF IFAS UNIVERSITY of FLORIDA

FFVA FLORIDA FRUIT & VEGETABLE ASSOCIATION

PSA Grower Training in SPANISH:
April 22-23, daily from 11AM-4:30PM
Click Here to Register

All PSA Remote Trainings require advanced registration. Cost is $25, which includes training materials and certificate of attendance issued by AFDO. Seats are limited. Video and audio capabilities are required. For questions, contact Taylor Langford at taylorlangford@ufl.edu

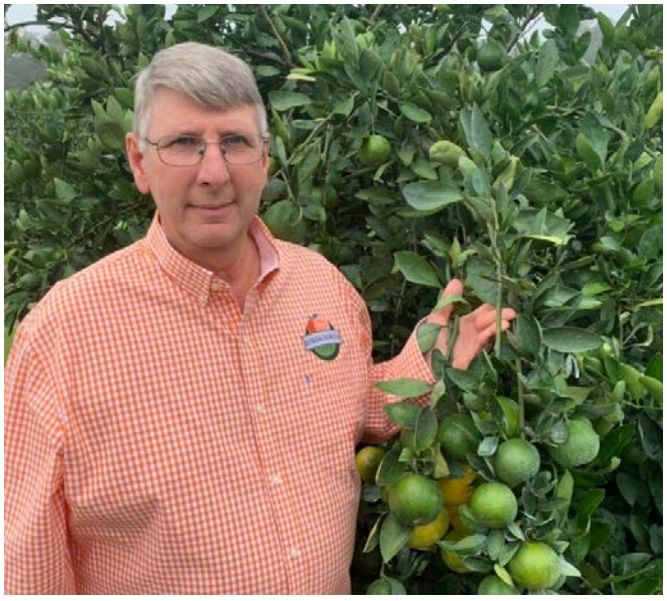
Training materials and certificate are funded through the Florida Department of Agriculture and Consumer Services (FAIN #U18FD005909)

COLD HARDY CITRUS ASSOCIATION CORNER

What is Cold Hardy Citrus and what makes it special?

Those are questions I hear a lot in citrus conversations. And simply put, citrus grown in the Cold Hardy region, defined as North Florida, South Georgia, and South Alabama is considered Cold Hardy Citrus.

One would think that climate and temperatures would be the only factors, but soil profile is also a major contributor to the unique characteristics of Cold Hardy fruit. This region, for the most part, has a clay subsoil that allows moisture and nutrients to stay in the root zone longer allowing the tree to have these elements available at all times. The healthier the tree, the better the fruit.



Kim Jones, CHCA President

One of our missions in the Cold Hardy Citrus Association (CHCA) is to help get the word out about the uniqueness of the Cold Hardy fruit. With the region experiencing exponential growth, it is essential to have a plan to market fruit from our region. We are fortunate we were able to obtain a USDA Grant in 2020 to help us develop and implement this marketing plan. We are past the first quarter of the year and while still in the research stage, we are seeing information that is very promising and encouraging.

Our goal is to have a home for all the fruit produced by Cold Hardy Citrus Association growers. And soon, we will be having calls or meetings to share what we have learned and begin a strategy that can include your crop.

COLD HARDY CITRUS ASSOCIATION CORNER

If you are already a member, thank you for your continued support. If you aren't a member, please join as soon as possible so you will be able to reap the benefits of this important effort.
If you need a Cold Hardy Association application, email me @ kim@floridageorgiacitrus.com.

Click Here for a CHCA Membership Application