

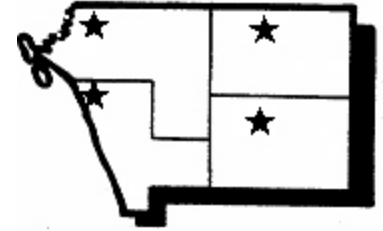
West Central Citrus Letter

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Highly Suspect Greening Samples from Hardee County

Recently, a number of highly suspect samples for greening were collected from a Hardee County citrus grove. A number of positive trees have been reported in both DeSoto and Manatee County. With highly suspect samples in previously unreported areas, growers need to pay close attention to their groves and begin a comprehensive inspection to determine the presence or absence of greening infected trees. Once greening has been identified, general consensus is to remove any and all positive trees to reduce future spread of the disease. In addition to surveying and infected tree removal, attempts to control citrus psyllids is also important to reduce vector spread of greening.

Information on greening and psyllid management can be found at various web sites including the University of Florida's EDIS site – (<http://edis.ifas.ufl.edu/>) or at the Citrus Research & Education Center site – (www.crec.ifas.ufl.edu).

Observations from Brazil Citrus Grower Tour

With the recently completed citrus grower tour to Brazil, I came away very impressed by the way many growers are addressing citrus greening issues within their citrus plantings in Brazil. I was also impressed by the 15 Florida growers who participated in the tour, their comments, and commitment to modify their production programs to aggressively address greening. A few of our growers were initially doubtful about the need to manage greening at the beginning of the trip,

but this perception rapidly changed as we visited many plantings. While in Brazil, we also looked at other problems that Brazil has that we don't have like citrus variegated chlorosis (CVC), leprosis, black spot, and various fruit borers. Hopefully, these problems will not find their way to Florida in the future. However, with our track record in minimizing new pest introduction, we need to monitor for these pests over time.

It was stated that many of the smaller Brazilian growers may only be conducting limited inspections whereas larger growers are aggressively managing greening. While we visited mainly with large growers, most were positive about the future of citrus and how they would minimize the impact of greening over time.

I would propose that many of these growers are using a three-prong approach to address greening. This approach could be referred to as a three-legged stool. Without any one of the legs, the stool will not function. Just as with their program, without any one of the three practices the likelihood of success is greatly reduced. The three legs or approaches they incorporate into their production programs include: 1) survey groves to identify greening positive trees; 2) eradication of greening positive trees; and, 3) aggressively manage the vector of greening, the psyllid.

It was indicated by many in Brazil that to only suppress the psyllid without identifying and removing the positive trees would most likely fail with time. To be successful, positive tree identification and removal is an important component to greening management.

Many of the growers we visited were surveying their grove or groves three or four times per year. The purpose of the survey was to find trees that exhibit visual greening symptoms. This survey could be made by walking the block or using an elevated platform mounted to a standard 70 +/- horse power tractor. The platform system had two platform areas, an upper and lower platform. These platform areas allowed four inspectors to ride on the equipment at the same time while being driven by a tractor driver. The bottom two inspectors looked at the lower portion of the tree while the inspectors on the upper platform inspected the upper and tops of the trees.

One large grower felt that by using the platform system, they were able to find a significantly higher percentage of the greening positive trees as compared to walking the grove. To allow the inspectors to effectively communicate with the tractor driver, a horn system was installed. When the inspectors saw suspicious foliage they simply pressed the horn button which indicated the need for closer inspection.

This platform allowed the inspection of 1,200 trees per day per inspector whereas walking provided inspection of 500 to 700 trees per day per inspector. Inspection rates will vary by tree size and foliage condition.

Visual symptoms they were trying to find included: 1) blotchy appearance to the foliage or what we commonly refer to as blotchy mottle; 2) misshaped or lopsided fruit; 3) aborted seeds within the fruit; and 4) veinal patterns to the leaves.

Upon inspecting the leaf, they would mark the foliage with a pen to compare the tissue color/pattern on either side of the midrib. When differences occur, they indicate these samples as highly suspicious and request additional testing or verification by a supervisor.

Once trees were positively identified, they were removed within a day or less. Tree removal consisted of cutting the tree off just above the soil surface and then applying herbicides to kill the remaining tree stump to assure that sprouts do not reappear. To remove the tree without applying a stump killer would not be effective as sprouts that emerge will exhibit greening symptoms with time.

When growers surveyed for psyllids, the inspection method and treatment threshold levels varied somewhat between growers. Some growers

would inspect 1% of the trees in a block whereby inspecting 3 newer flushes per tree. Once any of the flushes was found to be infested, then the entire tree was considered to be infested. Once 10% of the trees were infested, the entire block would be sprayed. In other locations where greening is known to be present, the treatment threshold levels were reduced.

Please understand that numerous researchers and growers are working on developing treatment thresholds for psyllids and better recommendations will be developed. It was very apparent that control/suppression of the psyllid is essential to the long-term suppression of greening.

In addition to the above three-prong approach, growers also have very aggressive nursery industry program regulations to assure that nursery trees are disease free from greening as well as other diseases. Many of these same management aspects are being incorporated into our Florida nursery production system.

Florida citrus growers must determine their objectives within their citrus operation and begin to aggressively survey their grove for greening and manage citrus psyllids. Without aggressive programs, the long-term viability of their groves is being put at greater risk.

If you have questions about our April trip to Brazil to view their industry and greening control practices, please do not hesitate to call or email. Also, if you would like to contact some of the tour participants, I would be more than happy to supply names and locations so that you may discuss their observations.

Pesticide License Review & Testing

The Extension Service will be conducting a pesticide license review and testing class at the Hardee County Extension Service Office in Wauchula on Tuesday, June 26. The class will review the material contained in the manuals to obtain a 'private' restricted use pesticide license. The class will begin at 9 AM and conclude at 12 noon. Testing will begin at 1 PM. Three continuing education units (CEUs) will be offered for those who wish to renew their licenses by continuing education units. The CEUs will be in the 'core' category (2 CEUs) and 'private applicator' category (1 CEU).

Pre-registration is requested prior to June 19. A registration fee of \$20.00 is required for those wishing to take the exam and attend the review class. The registration fee covers the required pesticide manuals as well as refreshments. If you wish only CEUs, the registration fee is \$3.00 per person. To register for the class, please contact the Hardee County Extension Service Office at 863-773-2164.

Train-the-Trainer & Understanding WPS Requirements

The Extension Service will be conducting a Worker Protection Standards (WPS) training class on June 28 to train growers and farmers as to the requirements of WPS as well as conducting a train-the-trainer class. The class will be conducted at the Hardee County Extension Service Office beginning at 3:00 PM and concludes at 5:00 PM.

Pre-registration is requested by calling the Hardee County Extension Service Office in Wauchula at 863-773-2164. Registration fee of \$5.00 per person is requested to cover program costs.

Two CEUs for use in renewing the restricted use pesticide license have been requested from the Department of Agriculture and Consumer Services.

Newsletter Renewal

In last month's citrus newsletter you received a newsletter renewal card. If you have not returned the renewal card, please do so as soon as possible. If you are not sure if you returned the card, please call the Extension Service Office in Wauchula at 863-773-2164 to renew. If you would rather receive the newsletter by email, they can accept that request as well.

Dates to Remember

June 26	Pesticide License Review and Testing, Wauchula
June 28	WPS, Train-the-Trainer, Wauchula
Aug. 22, 23	Citrus Expo, Ft. Myers

Sincerely,

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