HIGHLANDS COUNTY CITRUS GROWERS President's Column by Aaron Nelson

This past January, the first trunk injectable formulations of Oxytetracycline hit the market. Since then, many growers have gone all in on this new therapy to mitigate some of the effects of citrus greening. Over the course of the last 6 months there have been countless hours spent injecting millions of trees all over the State. So, what have we learned? What follows in this column comes from what I've experienced as well as conversations I've had with other growers about their experiences with OTC trunk injections.

Every tree is different – one of the most surprising things to me has been how much variability there has been in uptake from tree to tree. While some trees take up the product in less than half an hour, others take several hours and, in some cases, don't take the material at all. Tree health is generally a good indicator of whether or not a tree will take in product. In general, the weaker the tree is, the slower it sucks up product. Factors like hole drilling location, time of day, soil moisture content and temperature also play a role in uptake.

More ground covered – initial estimates for the number of injections one man could do in a day were in the 200-300 range. Turns out, in many cases one worker can double that estimate or more in a day! While it has no doubt been a major undertaking to cover as much acreage as we have, I'm thankful it has gone a little quicker than anticipated.

Injectors, injectors, injectors – because crews have been able to move through groves so quickly, it has necessitated more injectors than many of us thought we'd need. Efficiencies are severely hampered when you must go back through the grove two and three times to find empty injectors to keep the men drilling supplied. Another reason having plenty of injectors is a must is that they break; and break a lot! Repairing and redeploying injectors back into service can be a full-time job.

MAY 2023

- Valencias on US-942
- Pile Burning Course
- USDA Crop Forecast
- Ag Literacy Days
- Soil & Leaf Sampling
- IPCs and Citrus Varieties
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break; and break a lot! Repairing and redeploying injectors back into service can be a full-time job. **Timing** – early in the year when temperatures were cool and soil moisture was adequate, I saw little to no phytotoxic effects from the OTC treatments. It didn't seem like you could give a tree enough to hurt it. When the

temperatures started climbing and the soil started drying out in March and April I began noticing what I've been calling "bronzing" in groves shortly after they'd been treated. Other than having discolored yellowish leaves, which can last a few weeks, the trees seem otherwise fine. Is this a big deal? Yet another question that needs answering.

These are just a few of the practical things I've learned since starting trunk injections. I suspect, as things usually do, that the way in which we tackle this job in the future will evolve and look different than it does today. I'm optimistic that this new OTC therapy will manifest itself in healthier trees, better yields and improved quality this year. We could certainly all use it!

Aaron Nelson



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2023 Calendar of Events

June 14-16 Annual Citrus Conference @ Bonita Springs

July 20 Certified Pile Burner Course @ Bert J. Harris Ag Center

August 16-17 Citrus Expo @ Florida State Fairground, Tampa

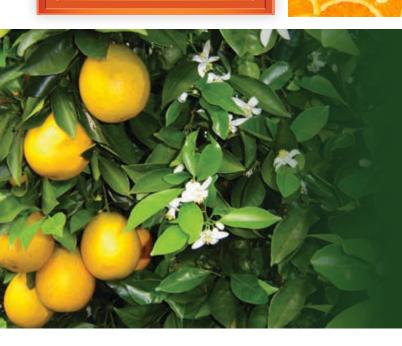
September 6-8 49th Annual Agricultural Labor Relations Forum @ Wyndham Grand Orlando Resort Bonnet Creek

> October 12 Initial 2023-2024 USDA Citrus Crop Forecast and Florida Citrus Mutual Grower Luncheon

November 14-16 Ag-Venture @ Highlands County Fairgrounds

December 9 2023 HCCGA Citrus Fun Shoot @ TBA

For additional information about any of these meetings or events, contact Ray or Jan at the HCCGA office



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We would like to thank **Representative Kaylee Tuck, Senator Erin Grall** and **Senator Ben Albritton** for all of their great work during the recent Florida legislative session. We are indeed fortunate to have these three passionate advocates representing our region of the State.

Citrus fared extremely well in the most recent legislative session and **Governor DeSantis** is expected to sign a budget with roughly \$65 million earmarked for citrus marketing, research and new varieties development. Thank you to Ben, Erin, Kaylee and others such as **Florida Ag Commissioner Wilton Simpson** for helping our industry move forward through these trying times.



Our representative in the US Congress, **Congressman Scott Franklin**, has also been busy working along with other members of the Florida congressional delegation to secure legislation that will authorize a block grant program to assist growers as they expend resources recovering from the effects of Hurricane Ian.

We are indeed very fortunate to have **Raymond McIntyre** serving as our Highlands County's Property Appraiser. Our Association is in regular contact with Raymond and his staff regarding the many issues that affect your property's ad valorem taxable valuation. On that note, see the message to our grove owners from Mr. McIntyre below:

To say that this has been a difficult year for the Florida citrus industry would be an understatement. Shortly after hurricane Ian, this office made the decision to reduce all citrus assessments to the base Iand value (\$1,500.00) for the 2023 tax year. This decision was based on field observations and communication with local citrus growers about the level of production loss. Production statistics published by the USDA so far this year support that decision. Due to production loss and other compounding factors, many growers are making difficult decisions about their groves.

Properties that appear to be transitioning out of citrus may well receive a letter from this office requesting communication. If you own a grove in this category, clear communication will help us provide you with the best service possible as you make the transition to other forms of bonafide agriculture (**such as a fallow citrus designation under the Citrus Health Response Program**) or even to a non-agricultural use. As always, our goal is to serve.

So, if you have questions regarding how a change in use may affect your assessment or if there is anything else that we can do to help you, please do not hesitate to contact us.

Production work on the 2023 HCCGA Annual Member Directory is now underway. Members need to make sure that they have provided us with up-to date contact information so it can be included in this year-round resource tool. If any Associate members want to enhance their presence in this year's directory through advertising, contact Ray or Jan at the HCCGA office.

Save the dates for a few things coming up: the 2023 Citrus Expo, and its very informative educational sessions, is coming up on **August 16th & 17th** at the Florida State Fairgrounds in Tampa. The initial USDA 2023/2024 Citrus Crop Forecast and Florida Citrus Mutual BBQ luncheon will be on **October 12th**. And for some great outdoor fun and fellowship – not to mention some tremendous food & raffle prizes - the 2023 HCCGA Citrus Fun Shoot will be held on Saturday, **December 9th**.

Our goal is to keep our members as informed as possible on a wide range of issues, so please never hesitate in contacting me day or night (cell: 863-381-8551) for additional information if you need it; or if I can be of any assistance in any matter, large or small.

Thanks, Ray



Info Notes

2023 Ag Labor Relations Forum

Save the dates of September 6th-8th for the 49th Annual Agricultural Labor Relations Forum at the Wyndham Grand Orlando Resort Bonnet Creek. Presented by the Florida Specialty Crop Foundation, the forum educates agricultural employers, including growers, shippers, farm labor contractors, and other employers, on compliance with agricultural labor laws and sound relations practices. Registration information and the agenda should be available, and shared, soon.

2022-2023 Florida Citrus Production Guides

The 2022-2023 Florida Citrus Production Guides are available to pick up at the UF/IFAS Highlands County Extension office or the handbooks are available online (with printable sections) at: <u>https://edis.ifas.ufl.edu/cg101</u>.

2023 Florida Citrus Growers' Institute Presentations Online

The 2023 Florida Citrus Growers' Institute was held on April 4th at the South Florida State College Avon Park campus. The educational presentations were recorded and are available online at the citrus agent's website: Here you will also find PDF versions of the slides. *https://citrusagents. ifas.ufl.edu/archived-presentations/2023/*

UF/IFAS Podcasts for Growers

UF/IFAS and Southeast AgNet have partnered to provide the latest news on citrus-related research in a monthly "All in for Citrus" podcast. The podcasts feature short interviews with scientists working to find solutions to citrus greening and other devastating citrus diseases. The podcast complements the new research update website and citrus newsletter at: <u>http://citrusresearch.ifas.ufl.edu/ newsletter-sign-up/</u>. Podcasts may be downloaded to your mobile phone, tablet or computer to be listened to at your convenience.

FDOC Webinars

The Florida Department of Citrus hosts monthly webinars in order to provide key information on various topics important to the Florida Citrus industry. To receive notifications on webinars and other topics, please e-mail *news@citrus.myflorida.com* and ask to be added to FDOC's email distribution list.

Sales Tax Exemption Forms for Ag Uses

Florida Farm Bureau has a very informative page on their website that lists a number of potential agriculturally related items that may be exempt from sales tax. It also contains a recommended exemption form to be utilized. It can be found at: <u>https://www.floridafarmbureau.org/agricultural-sales-tax-exemptions-in-florida/</u>

UF/IFAS Research Website

The updated Citrus Research and Education Center (CREC) website at <u>https://crec.ifas.ufl.edu/citrus-research/</u> is now live. The revamped site has the latest research information on HLB management, detailed information on rootstock trials, access to on-line presentations from UF/IFAS research scientists, EDIS documents sorted by topic for easy access, and more.

UF/IFAS OJ Break Programs

The central Florida UF/IFAS citrus extension agents are providing an OJ Break Grower meeting series in a twice monthly virtual program format. Upon registration you will be sent a Zoom link for each meeting. To see the upcoming meeting topics and register for the Zoom notice – go to: <u>https://citrusagents.ifas.ufl.edu/oj-break/</u>.

Restricted Use Pesticide Exams

Restricted Use Pesticide exams are done using laptops at most UF/IFAS county Extension offices. Whether you are taking the test for the first time, renewing your license, or adding a new category, you can take your exam at most county Extension offices. In Highlands County, the Extension office is scheduling exams for Wednesdays and Fridays. You can schedule your exam online at <u>https://pesticideexam.</u> *ifas.ufl.edu/public/countyList.faces*.

"Florida OJ Break" Tags

The HCCGA office has a very good supply of the "Take A Florida Orange Juice Break" license plates to share. Please feel free to stop by the HCCGA office and get one for your vehicles. We also have a limited supply of a few other types of OJ related tags.



Valencia on US-942 Rootstock Is Favored Florida Tree

For at least the last four years, the Valencia SPB-1-14-19 orange has been the most-produced citrus variety in Florida, and US-942 has been the favored rootstock. So, it makes sense that the Valencia SPB-1-14-19 on US-942 rootstock has been the most-produced tree combination for four years running. That information was provided at April's Florida Citrus Growers' Institute in Avon Park by Ben Rosson, chief of the FDACS Bureau of Citrus Budwood Registration.

"It just depends on what was available and what the customer called for," Rosson said.

Top Combinations

In 2022–23, 288,888 Florida-produced trees were Valencia SPB-1-14-19 on US-942. The next most-produced trees were:

- Valencia SPB-1-14-19 on Kuharske (177,310 trees)
- Valencia SPB-1-14-19 on Swingle (161,135)
- Valencia SPB-1-14-19 on US-812 (52,502)
- Valencia SPB-1-14-19 on X-639 (37,311)
- Vernia UF 35-15 on Kuharske (29,942)
- Vernia UF 35-15 on US-942 (26,493)

In 2021–22, 420,366 trees were Valencia SPB-1-14-19 on US-942. Valencia SPB-1-14-19 also held the next three spots on Kuharske, X-639 and Swingle rootstocks, in order. The fifth most-produced tree in 2021–22 was Vernia UF 35-15 on US-942.

Top Scions

2021–22 was the most recent season for which Rosson presented production figures for individual scions and rootstocks. Top scions that year were:

- 1.63 million Valencia SPB-1-14-19
- 293,334 Vernia UF 35-15
- 174,304 Hamlin 1-4-1
- 122,516 Valencia F-55-4

Top Rootstocks

Top rootstocks were:

- 944,047 US-942
- 618,206 Kuharske
- 498,462 X-639
- 330,438 Swingle

Nursery Numbers

Rosson reported that 44 commercial citrus nurseries in Florida produced 3.6 million trees in 2022. In 2021, 45 nurseries produced 4.8 million trees. In 2020, 37 nurseries produced 3.9 million trees. In 2019, 41 nurseries produced 3.9 million trees. The vast majority of those trees are for commercial groves. Rosson said about 10% to 15% are produced for the retail dooryard market.

You can download Rosson's full presentation at: *https://citrusagents.ifas.ufl.edu/media/crecifasufledu/citrus-agents/growers-institutes/2023/Rosson_FCGI_2023.pdf*.

Certified Pile Burning Course

The Florida Forest Service and University of Florida Cooperative Extension Service will be conducting an In-Person Certified Pile Burners Course in Highlands County. The number of trainings offered and attendance at each training is very **LIMITED**, so act quickly if you want to participate. Registration is through Eventbrite.

- <u>Date:</u> July 20th, 2023
- <u>Time:</u> 8:30 AM 4:30 PM
- Location: Bert J Harris Jr. Agricultural Center
- Pre-registration is *required* and the class is limited to 50 people
- The cost of the class is \$50
- Eventbrite Registration Link: https://highlandspileburner23.eventbrite.com

Note: To register you need to know your Florida Forest Service Customer Number (*the number that you are required to give the FFS when you call in for your burn permits. If you do not know it please call the local FFS office and ask them to create one for you*).

The course will teach you how to burn piles legally, safely, and efficiently. If you burn piles regularly and are not already certified, you should consider registering for this training. When the weather is dry, certified pile burners will receive priority for authorization to burn, are allowed to burn up to two hours longer per day and get multiple day authorizations.

There will be a test at the end of the session. You must receive a grade of 70% or higher on the exam. This class is the first step to becoming a certified pile burner. After taking the class you will need to demonstrate a proper pile burn with your local FFS office to become certified. Once you are certified it will be noted with your customer number.

Questions about the course should be directed to: Lourdes C. Pérez Cordero Agriculture & Natural Resources Extension Agent I UF/IFAS Extension Highlands County 4509 George Blvd. | Sebring, FL 33875 Office: (863) 402-6540 | (863) 402-7147 E-mail: *Iperezcordero@ufl.edu*

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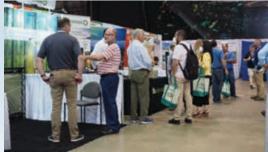
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Aug 16–17









SAME GREAT SHOW, NEW LOCATION

Florida's premier agricultural event will have a new home this year. The Citrus & Specialty Crop Expo has relocated to the Florida State Fairgrounds in Tampa due to the upcoming closing of the Lee Civic Center in North Fort Myers.

The venue offers plenty of space to host the Expo's trade show and educational programs. The fairgrounds and agriculture have long been allied, hosting events for 4-H, FFA, the Ag Hall of Fame, Ag-Venture and many others.



















USDA Citrus Crop Forecast Update

June, 2023

All Oranges 15.8 Million Boxes

The 2022-2023 Florida all orange forecast released On June 9th by the USDA Agricultural Statistics Board is 15.8 million boxes. The total includes 6.15 million boxes of non-Valencia oranges (early, mid-season, and Navel varieties) and 9.60 million boxes of Valencia oranges.

Non-Valencia Oranges 6.15 Million Boxes

The forecast of non-Valencia orange production is 6.15 million boxes. The Navel forecast, included in the non-Valencia portion of the forecast is 240,000 boxes, 4 percent of the non-Valencia total. Harvest is over for the season.

Valencia Oranges 9.60 Million Boxes

The forecast of Valencia orange production is 9.60 million boxes. The Row Count survey conducted May 31, 2023, showed Valencia harvest is virtually complete.

All Grapefruit 1.82 Million Boxes

The forecast of all grapefruit production is 1.82 million boxes. The white grapefruit forecast is increased 10,000 boxes to 250,000 boxes. The red grapefruit forecast is increased 10,000 boxes to 1.57 million boxes. The Row Count survey conducted May 31, 2023, indicated that harvest is virtually complete for these varieties.

Tangerines and Tangelos 490,000 Boxes

The forecast for tangerines and tangelos is 490,000 boxes down 10,000 boxes from the previous forecast. This production level is 35

percent less than last season's final production of 750,000 boxes. This forecast number includes all certified tangerine and tangelo varieties.



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Agriculture Literacy Days

Florida Agriculture in the Classroom, the Florida Department of Agriculture and Consumer Services and the Florida Dairy Farmers created this year's Agriculture Literacy Day book titled **Moovers**,

Shakers and Milk Makers that highlights the Florida dairy industry.

Any interested agriculture industry representatives are invited to read to local elementary school kids. You are asked to schedule classroom visits with schools at least two weeks before readings. For more information about the program, and to secure the materials you need for a classroom visit, go to: *https://faitc.org/ag-literacy-day.*

There is no set date for this program, please find a date that works best for you as the volunteer reader and the school. We believe that *Everyday is Ag Literacy Day!*

Citrus Soil and Leaf Sampling

We will soon be approaching the optimum time of the year (*July-September*) to collect citrus soil and leaf samples for analysis. Soil and leaf sampling is a key component to the evaluation of a citrus nutrition program **AND** the Citrus BMP record keeping and documentation that is required today. Annual sampling, and its subsequent analysis, will provide you a good idea of the nutritional trends that have been occurring within specific grove blocs from year to year. **Remember to retain records for all soil and leaf analysis results.**

Select representative trees from each grove bloc that you intend to manage nutritionally the same. Typically 15 to 20 trees are selected within a grove bloc for sampling and collect your leaf and soil samples from these trees. You can reduce the year to year variability in interpreting your analysis results by some degree by utilizing samples from the same trees from one year to the next. With the availability of affordable GPS technology nowadays, from a portable unit in your truck to most smart phones, the opportunity to utilize it in order to sample the same areas (trees) year after year should be taken advantage of.

Soil analysis can provide very specific information that you can use in your nutritional program decisionmaking. This information includes soil pH, phosphorous, calcium, magnesium and copper *(if you specifically request the copper analysis).*

From these 15 to 20 trees, take a single soil core of an 8 inch depth from within the irrigation pattern of each tree. Place the sampling cores in a clean nonmetal bucket for collection. When you have collected all the necessary cores from a production bloc -thoroughly mix the sample cores together. Take approximately one pint of the soil from the mixed sample for analysis.

Also, don't forget that not all soil testing laboratories use the same extraction procedures to determine soil nutrient levels. UF/IFAS recommends utilizing the Mehlich 3 extraction method *(it may even be required in future Citrus BMP manuals – so consider using it)*. You may even want to consider sending samples from the same "bucket" to differing labs to compare results. Make sure if you change soil testing labs from one year to the next, or utilize different extraction methodologies, that you understand how to properly interpret the results and appropriate tables.

Leaf analysis can be utilized for all essential elements including those determined in the soil analysis. As mentioned above, leaf samples can, and should be, collected from the same trees as the soil samples. One hundred healthy, and representative, leaves from the 15 to 20 trees should be collected. These leaves should be 4 to 6 months old from non-fruiting twigs. This time frame will generally be between the months of July to September. In handling the leaf samples, keep the collected leaves out of the heat. If they cannot be sent out immediately, place in a refrigerator for overnight storage.

For macronutrient analysis, the leaves need not be washed. If micronutrient analysis is desired, then the leaves will need to be washed well to remove surface contamination. Washing of leaves can be done by soaking the leaves in a mild detergent solution and rubbing them between your thumb and forefinger. The washing of leaves should be done as soon as possible after collection. Some micronutrients are exceedingly difficult to remove (copper, manganese and zinc) through surface washing. This should serve as a reminder that it may be exceedingly difficult to make judgments utilizing leaf analysis if you are applying frequent nutritional sprays.

IPCs and Citrus Varieties

By Fernando Alferez

Five years of UF/IFAS data in trials across the state have shown that individual protective covers (IPCs) are effective in preventing HLB until they are removed. This has been shown in sweet orange varieties such as Valencia and Hamlin. In these varieties, it has been demonstrated that the covers can protect the trees for as long as 30 months after planting. This provides an advantage resulting in better fruit quality as the tree is already producing fruit when the IPC is removed.

As a result, there are now trees of bearing age that are free from HLB in Florida for the first time in years. However, one aspect of IPC use is often overlooked. Varietal differences may dictate IPC feasibility or the time the covers can be maintained on the tree.

With this idea in mind, a UF/IFAS research project began more than three years ago using three promising mandarin varieties (Sugar Belle, Early Pride and Tango) grafted on two different rootstocks, sour orange and US-942. Trees were covered with 6-foot IPCs.

The trial results may help to make informed decisions when deciding to adopt IPCs in newly planted mandarin groves. Early Pride did not perform well under cover regardless of the rootstock. A large percentage of trees were affected by branch dieback during the second year, and some trees died after the third year.

Sugar Belle performance was very interesting. By the first and the second year, trees under IPCs grew larger and more uniformly than unprotected trees. But after the second year, these differences were lost. By the third year, non-covered trees were larger with better defined canopies. This effect was more visible in trees on US-942 than on sour orange, probably because of more vigorous growth. It was remarkable also that covered Sugar Belle trees did not set almost any fruit, in contrast with non-covered trees. Finally, Tango trees, irrespective of the rootstock, performed much better under IPCs than the non-covered trees, showing better canopy density, larger and greener leaves, and taller trees that were able to set fruit.

In summary, the research shows that IPCs are a great tool to protect sweet orange and Tango mandarin trees for about three years. IPC use on Sugar Belle should be limited to the first two years after planting. Other varieties affected by branch dieback, such as Early Pride, should not be covered by IPCs.

Fernando Alferez is an assistant professor at the UF/IFAS SWFREC in Immokalee





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HCCGA Member Directory

We have commenced work on producing our 2023 Annual Grower & Associate Member Directory. This year we plan to have the Directory distributed to Association members in late July. This 8.5 X 11 full color booklet has become a valuable resource guide for our members, grower and associate alike. This year's directory will include Association information such as: Grower contact information, Associate Member Bios, Sponsorship Recognitions, Board Members, Officers, etc.

> All members (especially associates) should make sure that they complete and return the informational form that was mailed out to all current members in late May. If you did not receive a letter about the member directory, please let us know.

The directory serves as a valuable year-round resource guide for all of our members, and it behooves associate members to have the proper biographical

and contact information available in the publication. Having your updated contact information included in this Directory is a must!

Now is the time for members to think about taking advantage of the advertising opportunities (at the same pricing levels as the past several years) that this Directory provides. An advertising rate sheet will be included in the mailing that all members should receive.

There are several different advertising options available: guarter (\$200.00), half (\$300.00) and full page (\$450.00) black and white ads and half page (\$400.00) and full page (\$600.00) full color ads.

Contact Jan or Ray at the HCCGA office at (863) 385-8091 or admin@hccga.com if you would like additional information about advertising pricing or acquiring an enhanced presence in this year's Annual Member Directory.



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Leadership Highlands 2024

South Florida State College is now accepting applications for the Leadership Highlands Class of 2024. The Leadership Highlands program has been developing local leaders since the pilot class graduated in 2000. The mission of the Leadership Highlands program is "to develop Leaders with a thorough understanding of, and strong sense of commitment to, Highlands County and an appreciation for the strength found in our County's abundant diversity".

Founded and nurtured by the three Highlands County Chambers of Commerce and select alumni, who comprise the Leadership Highlands Advisory Board, the goals of the program are to familiarize the participants with the infrastructure, agencies and economic enterprises that exist in Highlands County; to expose the participants to the range of needs in the community and to identify the resources available to meet those needs; to provide participants the opportunity to meet and exchange ideas with each other and existing community leaders, so as to learn from the backgrounds and perspectives of one another; and to encourage civic participation and volunteer involvement in the community.

The Program kicks off with an August 22, 2023 orientation session and features 10 full day sessions held once a month (one session is actually a two day trip to Tallahassee in February) that explore different aspects of Highlands County's complex matrix of industries governance and various community organizations. Graduation from the program will be after session ten on June 6, 2024.

Class size is limited and is by invitation of the selection committee. For information about enrollment or participation, please contact Kris Juve, Coordinator, Leadership Highlands at SFSC at 863-784-7189 or *juvek@southflorida.edu*. for additional information. Applications are due by August 16, 2023. The program's application can be downloaded at: *https://www.southflorida.edu/current-students/degrees-programs/special-programs/leadership-highlands.*

Members of the agricultural community (especially early and mid-career young adults) are encouraged to consider participation in this program.





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USDA Assistance for 2022 Natural Disasters

U.S. Agriculture Secretary Tom Vilsack recently announced two programs that collectively provide \$3.7 billion in assistance to crop and livestock producers who sustained losses due to natural disasters like Hurricanes Ian and Nicole in 2022. They are the Emergency Relief Program (ERP) and Emergency Livestock Relief Program.

To participate in the programs, producers should have or be prepared to have the following forms on file with the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA):

- Form AD-2047, Customer Data Worksheet (as applicable to the program participant)
- Form CCC-902, Farm Operating Plan for an individual or legal entity
- Form CCC-901, Member Information for Legal Entities (if applicable)
- Form AD-1026, Highly Erodible Land Conservation and Wetland Conservation Certification

Most producers, especially those who have previously participated in USDA FSA programs, will likely have these required forms on file. However, those who are uncertain or want to confirm should contact the FSA office at the Okeechobee USDA Service Center at (863) 763-3345.

Producers with eligible crop losses who did not have federal crop insurance or Noninsured Crop Disaster Assistance Program (NAP) risk management coverage for 2022 and intend to apply for ERP assistance will need to pull together revenue information that is readily available from most tax records. The FSA encourages producers to have their tax documents from the past few years and supporting materials ready, including Schedule F (Form 1040) Profit or Loss from Farming. FSA will not require these forms to be submitted with the ERP application, but will require a certification, similar to adjusted gross income certification that has been used for many years for farm bill programs. Applicants simply report and certify to the information required for the program.

Crop producers who have federal crop insurance coverage should ensure that information on file with their insurance agent is accurate and that any pending activities needed to file loss claims for 2022 are addressed as soon as possible. Producers who received ERP assistance last year or who will receive assistance for 2022 losses are required to purchase crop insurance or NAP for the next two crop years.

See DISASTERS on page 14



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DISASTERS, Con't from page 13

USDA Extends Application Deadline for Revenue Loss Programs to July 14

USDA is extending the deadline for the Emergency Relief Program (ERP) Phase Two and Pandemic Assistance Revenue Program (PARP) to July 14, to give producers more time to apply for assistance. The original deadline was June 2.

Producers who receive ERP payments are statutorily required to purchase crop insurance or Noninsured Crop Disaster Assistance Program (NAP) coverage for the next two available crop years.

Find more information on FSA cooperative agreements and contact information for the nine organizations please visit *fsa.usda.gov/programs-and-services/cooperative-agreements/index*.

Eligibility

To be eligible for ERP Phase Two, producers must have suffered a decrease in allowable gross revenue in 2020 or 2021 due to necessary expenses related to losses of eligible crops from a qualifying natural disaster event. Assistance will be primarily to producers of crops that were not covered by Federal Crop Insurance or NAP, since crops covered by Federal Crop Insurance and NAP were included in the assistance under ERP Phase One.

To be eligible for PARP, an agricultural producer must have been in the business of farming during at least part of the 2020 calendar year and had a 15% or greater decrease in allowable gross revenue for the 2020 calendar year, as compared to a baseline year.

Producers should contact their local FSA office to make an appointment to apply for ERP Phase Two and PARP assistance. Producers should also keep in mind that July 15 is a major deadline to complete acreage reports for most crops. FSA encourages producers to complete the ERP Phase Two application, PARP application and acreage reporting during the same office visit.

ECP Application Deadline Extended

USDA has also extended the deadline for applications from agricultural producers for the Emergency Conservation Program (ECP) to address damages from Hurricane Ian. The application deadline has been extended to July 24.

Work by Florida Citrus Mutual and others continues on the federal legislative front to authorize a "block grant program" that would be administered by USDA for more intensive hurricane recovery relief. It is hoped that such a program will be congressionally approved in the next several weeks and operational by later this summer.



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Agricultural-Environmental Leadership Award Winner: Brite Leaf Citrus Nursery

Florida Commissioner of Agriculture Wilton Simpson recently announced the three 2023 winners of the Agricultural-Environmental Leadership Award. One of the three companies selected was HCCGA Associate member **Brite Leaf Citrus Nursery**.

The Agricultural-Environmental Leadership Award has been presented annually since 1994 and spotlights environmentally innovative growers and ranchers who share a commitment to protecting and preserving Florida's resources while continuing to produce the world-class agricultural goods.

Brite Leaf Citrus Nursery, located near Lake Panasoffkee, specializes in the growth of commercial, retail, and wholesale citrus trees within fully enclosed, inspect-proof greenhouses spanning 90,000 square feet. Owners Nate and Anna Jameson prioritize land sustainability and have implemented eco-friendly measures to reduce water and fertilizer usage through best management practices.

Transitioning from overhead to drip irrigation has resulted in 60% water savings, reducing water consumption from 24,000 to less than 10,000 gallons per day. Brite Leaf Citrus Nursery also employs coconut coir, a sustainable by-product of coconut oil, as their potting medium due to its sanitation properties and compatibility with a liquid fertigation system. Outside the greenhouses, the nursery has planted pine trees as windbreaks and to create natural habitats for local wildlife. Brite Leaf Citrus Nursery also is a recipient of the Florida Farm Bureau CARES Award.

Congratulations to the folks at Brite Leaf Citrus Nursery for this well deserved recognition.



Citrus & Specialty Crop Expo: *New Location, Same Great Show*

The Citrus & Specialty Crop Expo is scheduled for **August 16th & 17th at the Florida State Fairgrounds in Tampa**. The event is being relocated due to the upcoming closure of the Lee Civic Center in North Fort Myers.

"When we learned that Lee Civic Center would not be available, our team set out to find an alternate location that was large enough to host an event like the Expo. Fortunately, the fairgrounds meets those needs, and we are excited to present another great event for growers and industry stakeholders," said Robin Loftin, AgNet Media president.

Begun in 1992, the Expo has grown to become the world's premier seminar and trade show program for citrus and specialty crop growers and industry professionals. The two-day event is organized and operated by AgNet Media, in cooperation with numerous researchers and industry organizations. Its primary goal is to provide unequalled education and industry fellowship opportunities annually for growers, industry leaders, decision-makers and vendors.

Complimentary attendance and a hot breakfast and lunch are provided both days to commercial grove owners and managers, citrus production managers, vegetable and specialty crop growers, professional crop advisors, association representatives and the agricultural research community.

Educational seminars will be presented in the morning and afternoon of August 16th and will conclude after a morning session on August 17th. The trade show will be open throughout the event with ample time for growers to visit vendors and network with their peers.

Some highlights of the seminars include:

- New HLB therapies and their application
- Monitoring tree health as new therapies like trunk injection are applied
- A look at new citrus rootstocks and varieties
- Citrus best management practices updates
- Pest and disease management
- Sourcing disaster relief dollars and other funds
- CEUs and CCAs will be available

CITRUS & SPECIALTY CROP EXPECTALTY CROP

Don't miss the 2023 Citrus & Specialty Crop Expo. Show planners are working hard to present another exceptional event well worth your time! For more information, visit: *www.CitrusExpo.net*.



CRAFT's mission is to move lab and research solutions into commercial groves for commercial-scale field trials, collect data on the results of those field trials and create an integrated data management system allowing growers, researchers and other interested parties to analyze the efficacy and efficiency of various strategies, treatments and therapies.

For additional information, contact Tamara Wood - 863.698.9276 or tamara@craftfdn.org

Projects Selected for Existing Tree Therapies Program

The Citrus Research and Field Trial (CRAFT) Foundation received nearly 700 eligible applications representing more than 42,000 acres for its new Existing Tree Therapies Program. A random lottery drawing was recently conducted by a third party, and 194 projects have been selected for inclusion in the program. The remaining applications have been placed on a waitlist.

CRAFT staff is in the process of contacting all applicants regarding their status.

The projects will be between 10 and 100 acres and focus on one or more of four primary therapies used on existing plantings. The therapies include gibberellic acid, 2,4-D, brassinosteroids and the direct systemic application of approved antimicrobials such as oxytetracycline hydrochloride.

CRAFT has submitted requests to various agencies for funding that would allow the continued development of both the traditional CRAFT new-planting program and the Existing Tree Therapies Program. Assuming those funds are all approved, the application window for the Existing Tree Therapies Program would most likely reopen in early summer 2023, followed by the traditional CRAFT program in late summer/early fall 2023.

Questions regarding the CRAFT programs can be addressed to Program Manager Tamara Wood at tamara@craftfdn.org or 863-698-9276, or to Assistant Program Manager Tina Buice at tina@craftfdn. org or 863-214-3731.

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Snail Management in Florida Citrus

By Lauren Diepenbrock

Snail management is becoming a more common discussion in Florida citrus with the arrival of a newer species (*Bulimulus bonariensis*, previously referred to as *Bulimulus sporadicus* in the Southeast. This snail is a new challenge for citrus growers. UF/IFAS, now with funding from the CRDF, is developing the knowledge to provide management recommendations to mitigate the impact of this pest.

The first emergence of newly hatched snails was seen in Florida in late April through early May. The smallest recovered snail was only 3 millimeters in diameter. These small young snails are hard to detect. It is likely that populations of snails go undetected for several generations due to the small size of the younger life stages. Until snails are larger, or the population is high enough to begin clogging irrigation, they are easy to miss in fields.

Snail management research is in the early stages for this pest. At present, there are six baits and one liquid molluscicide registered for use on snails in Florida citrus: Deadline GT, Deadline M-Ps, IronFist, Ferroxx, Ferroxx AQ, Sluggo (baits) and Slug-Fest (liquid). In a laboratory study, all baits were found to be effective in killing *B. bonariensis* within a seven-day period. Field evaluations are just now beginning for these materials.

Molluscicides can provide short-term relief, but finding a predator is often key to long-term snail and slug management. Nicole Quinn, an expert in biological control, has joined the UF/ IFAS team to search for naturally occurring predators that can be supported in groves to help control snail populations. Additionally, BASF is looking for naturally occurring populations of a predatory nematode that is used in Europe for snail and slug management and may be a tool for managing *B. bonariensis.*

Lauren Diepenbrock is an assistant professor at the UF/IFAS CREC in Lake Alfred



Silicon Could Benefit Florida Citrus

There has been much focus on the benefits of applications of plant growth regulators like gibberellic acid and 2,4-D, and more recently oxytetracycline hydrochloride to improve the health of citrus trees infected with HLB.

Silicon also has been highlighted for its potential benefits to citrus. Mohammad Adnan Shahid, UF/ IFAS assistant professor, gave a presentation on the element during the Citrus Water and Nutrient Management Workshop held earlier this year at the Citrus Research and Education Center in Lake Alfred.

His presentation revealed some surprising facts about silicon, including that it is the second most abundant element in the Earth's crust, making up nearly 26%, behind oxygen at 49%. Silicon is also in plants, ranging from 0.1% to 10% (dry weight basis).

While the element is abundant and is used in other crops, it has not been used much in Florida citrus. Shahid said that's because it has not been researched much in the state's signature crop. He aims to change that by working with colleagues on a few research projects out of the UF/IFAS North Florida Research and Education Center in Marianna, where he is based.

Official Recognition

One action that moved silicon into the mainstream of specialty crop production was its categorization as a plant "beneficial substance" in 2012 by the Association of American Plant Food Control Officials. Prior to that time, all fertilizers that contained silicon listed it as a "non-plant food ingredient" on the product label. The product is also approved by the Organic Materials Review Institute.

These designations led to many new fertilizer products containing silicon hitting the market. Shahid has studied the element in other crops at previous research positions in other states. His work demonstrated silicon can have beneficial impacts on crops.

Benefits To Citrus

While more research needs to be conducted, Shahid says early observations indicate silicon can benefit citrus production. "It can be beneficial for both fresh and processed citrus production, because it improves yield by increasing fruit size and number, and it strengthens the root system resulting in improved nutrient and water-use efficiency," he said. "Based on our research so far and known literature, it could be most beneficial in inducing tolerance to abiotic stresses such as salinity, heat and cold, and biotic factors (pest and disease management)."

See SILICON on page 21



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SILICON, Con't from page 20

Those benefits could extend to Asian citrus psyllid (ACP) management and even improved health of HLB-infected trees. A study conducted in Columbia demonstrated that silicon applications (foliar, soil and foliar + soil) reduced ACP populations by as much as 60% compared to the control (no silicon). Shahid is currently in talks with UF/IFAS colleagues in hopes of conducting a collaborative study on ACP and HLB.

"I am highly interested in this project, since silicon also promotes root growth and strengthens the root structure," he said. "My hypothesis is that silicon could induce the resistance to HLB or mitigate the effects of the disease by strengthening the cell walls in roots."

In other crops, silicon applications have been proven to help plants withstand drought. In his presentation, Shahid provided examples of ornamental crops that showed a dramatic difference between the control and two rates of silicon [25 and 50 parts per million (ppm)] applied foliar, drench or in combination after receiving no water for seven days.

Other studies have shown that silicon application improves the shelf life of produce items and can significantly improve root mass in plants.

Cold Tolerance

One way silicon might be most beneficial to citrus, especially in North Florida and South Georgia, is by providing improved cold tolerance. Shahid is cooperating with a grower in Perry, Florida, with on-farm trials at three sites. Part of that study is to evaluate cold protection induced by silicon applications. The trial got an excellent test during the late December freeze that sent temperatures below freezing for multiple days.

The trial is studying two rates (50 ppm and 100 ppm) applied at various frequencies. After the freeze, there were clearly visible differences in damage between silicon-treated trees and the control.

Shahid said he believes silicon has the potential to be a beneficial addition to Florida citrus fertilizer programs, but stressed more research is needed. He's currently working with colleagues to obtain funding for further studies.

Courtesy of Frank Giles, Editor-in-Chief, AgNet Media Publications



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