As we work together to recover from Hurricane Ian, we want to stress the importance of continuing to document storm related damage including fruit and tree loss, as this can increase once the full effect of the storm is realized. If you have not done so already, contact the USDA's Farm Service Agency (FSA) and the Natural Resource Conservation Service (NRCS) to apply for funding in their assistance programs. In this newsletter we have again included for you, important information pertaining to these programs. Important Update!! The deadline to apply for the EQIP Emergency Assistance program is November 15!!

This months issue also has information on the Winter Weather Watch program, leaf nutrient concentrations, and upcoming pesticide exam review classes.

UF/IFAS Horticulturalist Dr. Christopher Vincent would like to work with growers on damage assessments and long term recovery of trees. More information on this survey found in the newsletter.

The Foundation for the Gator Nation
An Equal Opportunity Institution
2022 Winter Weather Outlook

BY CHRIS OSWALT

The latest NOAA 2022 winter weather outlook for temperature and rainfall has us looking at an increased probability of likely above-normal temperatures (fig 1). The rainfall outlook (fig 2) has us looking at an equal chance of above or below normal rainfall. The El Nino Southern Oscillation (ENSO) forecast is for La Nina conditions (around 75% chance) for the winter of 2022-23 (December-February). There is a 54% chance that La Nina will transition into ENSO neutral conditions in February to April 2023. The general weather pattern for La Nina conditions calls for drier conditions with less cloudiness and therefore warmer temperatures (fig 4).

Figure 1. Winter2022-23 temperature outlook

Figure 2. Winter 2022-23 precipitation outlook
2022 Winter Weather Outlook, ctd.

BY CHRIS OSWALT

Figure 3. Winter 2022 drought outlook

Figure 4. General weather pattern under La Niña conditions
The 2022-23 edition of the Polk County Winter Weather Watch program will begin on November 15, 2022. The program provides growers with winter weather forecast information specifically geared toward agricultural interests in West Central and Southwest Florida. The program provides subscribers with an unlisted phone number for (24 hour/7 days a week) access to daily weather forecasts. The zone forecasts are from the National Weather Service (NWS) and are listed on the automated phone menu, so you can select the products you are interested in. Forecasts include the zone forecasts, 6-10 and 8-14 day outlook forecasts. In addition to the forecasts we have special weather narratives provided as needed in the event of freezing temperatures and a weekly outlook provided by our own meteorologist Fred Crosby. When freezing temperatures are predicted in our area additional updates will include the afternoon zone forecast and the modified sunset brunt minimum temperature equation. If this is not enough we will also provide the weekly citrus leaf freezing temperatures and the 2022-23 Winter Weather Watch manual.

Subscriptions for the Winter Weather Watch program are only $100.00 for the entire 4 month period (Nov 15 to Mar 15). The cost is about the same as one tank (well maybe two now days) of gas for your pickup truck. You can subscribe to the Winter Weather Watch by completing and returning a “subscription form” or calling Joy Spencer at 863-519-1041 or email at j.spencer@ufl.edu

**Forecast Schedule**

The following schedule lists the products available from the Winter Weather Watch. The times and specific days of week and the forecasted minimum temperature dictate when these forecasts products will be updated. Our Winter Weather Watch area includes the following areas by county: Pasco, Hillsborough, Polk, Highlands, Hardee, Manatee, Sarasota, DeSoto, Charlotte, Lee, Glades, Hendry and Inland Collier.
<table>
<thead>
<tr>
<th>Forecast Product</th>
<th>Above 32°F</th>
<th>32°-29°F</th>
<th>Below 28°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone*</td>
<td>Daily 8:30 a.m.</td>
<td>Daily 8:30 a.m.</td>
<td>Daily 8:30 a.m.</td>
</tr>
<tr>
<td>6-10 &amp; 8-14 Day Outlooks*</td>
<td>Mon/Wed/Fri 8:30 a.m.</td>
<td>Mon/Wed/Fri 8:30 a.m.</td>
<td>Mon/Wed/Fri 8:30 a.m.</td>
</tr>
<tr>
<td>Weekly Outlook</td>
<td>Friday 5:00 p.m.</td>
<td>Friday 5:00 p.m.</td>
<td>Friday 5:00 p.m.</td>
</tr>
<tr>
<td>Leaf Freezing Temperatures</td>
<td>Friday 5:00 p.m. &amp; on the Florida Automated Weather Network (FAWN)</td>
<td>Friday 5:00 p.m.</td>
<td>Friday 5:00 p.m.</td>
</tr>
<tr>
<td>Special Weather Narratives</td>
<td>As Needed</td>
<td>Daily 3:00 p.m.</td>
<td>Daily 3:00 p.m.</td>
</tr>
<tr>
<td>Afternoon Zone*</td>
<td>None</td>
<td>Daily 4:00 p.m.</td>
<td>Daily 4:00 p.m.</td>
</tr>
<tr>
<td>Sunset/Brunt</td>
<td>None</td>
<td>As Needed</td>
<td>Daily 7:00 p.m.</td>
</tr>
</tbody>
</table>

*NWS products are subject to changes in schedule timing based on NWS release of these products.
2022 - 2023 WINTER WEATHER WATCH PROGRAM

NOVEMBER 15, 2022 TO MARCH 15, 2023
REGISTRATION FEE: $100.00

It’s once again time to register for the upcoming 2022 - 2023 Winter Weather Watch Program. Upon receiving your $100.00 registration payment, you will be sent an unlisted telephone number with which you can retrieve the latest Ag Forecasts, 24 hours a day. Please do not give this number to others. The Winter Weather Watch Program is funded by the registration fees to pay for telephone equipment rentals, long distance calls, repairs and our consulting meteorologist.

------------------------------------------------------------------------------------------------------------------

2022 - 2023 Winter Weather Watch Program

NAME: __________________________________ PHONE NUMBER:____________________

ADDITIONAL PHONE NUMBERS:__________________________________________________

COMPANY:_________________________________________________________________

MAILING ADDRESS:________________________________________________________________

EMAIL ADDRESS:_______________________________________________________________

CITY:__________________________________________ZIP CODE:___________________

REGISTRATION FEE $100.00

PLEASE RETURN THIS REGISTRATION FORM AND YOUR CHECK PAYABLE TO:

POLK COUNTY EXTENSION CITRUS ADVISORY COMMITTEE
PO BOX 9005, DRAWER HS03
BARTOW, FL  33831-9005
Factors Affecting Nutrient Concentration of Citrus Leaves

BY CHRIS OSWALT

From time to time, growers may have compelling reasons to collect and analyze citrus leaf samples at different times of the year. Current tables allow growers to interpret the results of their citrus leaf analysis based on the collection and analysis of 4 to 6-month-old leaves from non-fruiting twigs (figure 1). This begs the question of the potential consequences of interpreting samples taken from leaves other than those recommended.

The following discussion may help you understand the possible implications of leaf sampling outside the current recommendation window. It also must be understood that leaf nutrient levels are transient and change during the growing season based on the nutrient supply and demand of plant growth and fruiting. The information is based on healthy citrus trees without citrus greening.

Within the tree, the mobility of citrus nutrients will affect leaf concentrations. Nutrients considered mobile in plants are nitrogen, phosphorus, potassium, magnesium, sulfur, and chlorine. These will depend on the time of year, and the source/sink relationship within the tree will move from older leaves into newly developing flush leaves. Calcium, iron, zinc, copper, manganese, boron, and molybdenum are non-mobile nutrients; thus, movement from older leaves to other parts of the tree is significantly reduced. This information will be helpful in our subsequent discussion with interpreting citrus leaf analysis.

Leaf age can affect the nutrient concentration in citrus leaf samples. Nitrogen is less consistent and variable based on nitrogen fertilization timing, specifically on sandy soils with low nitrogen reserves. Nitrogen uptake and mobility are relatively fast, and samples taken immediately after fertilizer applications will likely have higher nitrogen concentrations. Leaf nitrogen levels will decrease with leaf age. The levels are relatively stable in the 4 to 6-month age range when taken from non-fruiting twigs. Phosphorus and potassium decrease with leaf age. Calcium, boron, iron, and manganese increase with leaf age. Magnesium increases with leaf age to about the 6-month timeframe, then decreases. Copper and zinc remain stable with increasing leaf age.

The consequences of sampling fruiting twigs versus non-fruit twigs can also result in a difference in leaf nutrient levels. Fruiting twig leaves will contain high calcium and magnesium levels and lower nitrogen, phosphorus, potassium, zinc, copper, iron, and boron levels.

Leaves collected from flushing shoots have slightly lower nitrogen, potassium, and magnesium levels. These lower levels are likely due to the nutrients' mobility (as mentioned previously) within the tree.
The size of the leaf and the location within the tree has an effect on nutrient levels. Although differences exist, larger leaves have higher potassium levels, so the collection of normal/average size leaves is adequate. The location on the tree does affect the nutrient concentration of citrus leaves. Examples would be potassium (in Valencia orange) significantly higher at the 0 to 6-foot height than at a height greater than 6 feet. Potassium was also more elevated on inside versus outer canopy leaves, while magnesium was lower inside the canopy. So it would be best to collect samples randomly from around the tree canopy and not just one location on all trees.

Considerations for tree-to-tree variation or variations due to rootstock and scion must be recognized. Samples should be collected from uniform and representative trees to minimize sample variation. Significant differences can occur between trees on different rootstocks and scions. This becomes somewhat problematic if the trees are interplanted. Suppose they are in separate blocks or interplanted. In that case, one could collect samples of each known combination to determine if there are significant differences in the nutrient concentration of the different groups of trees. Once this is done, a decision can be made on how to best handle this variation.

Irrigation management can potentially affect nutrient concentrations. Excessive irrigation can lead to the leaching of highly soluble plant nutrients resulting in potentially deficient concentration levels in leaves.

Fruit load can also affect leaf nutrient concentrations. In "on" years (heavy crop years), magnesium levels could be lower in seedy citrus varieties, especially grapefruit. Heavy crops during "on" years can result in a decrease in leaf nitrogen, phosphorus, and potassium and an increase in leaf calcium levels (figure 2).

As previously mentioned, this information was developed on healthy citrus trees without citrus greening. So this is in no way to be considered absolute in all situations, but hopefully provides some insight in helping with the interpretation of samples collected outside of the usually recommended leaf age and type.

Figure 2. A mature citrus tree with a large crop of fruit
Citrus Fruit Display and Tasting

BY AJIA PAOLILLO

Come out and taste varieties showcased by UF/IFAS, the USDA, and the New Varieties and Development Foundation. Researchers are interested in your opinion of how these new varieties taste and appear. As we know consumer acceptance and preference drive sales. The information you provide during the event is valuable in making decisions about releasing new varieties.

CRAFT Cycle 4 - Still Accepting Applications

BY AJIA PAOLILLO

Many growers participate in the Citrus Research and Field Trial program, otherwise known as CRAFT. This program was started in 2019 and is a collaborative effort with growers to plant new trees and implement various production and cultural practices in the field trials. Growers can still submit their applications online at [www.craftcdn.org](http://www.craftcdn.org) for Cycle 4. The deadline for applying is 5:00pm on November 30, 2022. Projects selected for Cycle 4 funding must be planted between October 1, 2022, and June 30, 2024. Please see the website [www.craftcdn.org](http://www.craftcdn.org) for the full list of rules and eligibility requirements.

The various project topics of interest for Cycle 4 include:

- Rootstock and scion combinations – Early and Mid-Season, OLL varieties, and new scions
- Biostimulants – Evaluate impact of PGRs and hormones on fruit drop
- Pest Management – Management of other pest including Diaprepes and snails
- Resets – Evaluate additional co-factors on mature trees within reset blocks
- Plant and soil nutrition – Practices to enhance plant and soil nutrition

**Hurricane Ian Damage** If you have an existing project in Cycles 1, 2, or 3 and you sustained damage from Hurricane Ian, please report that damage to Tamara Wood, Program Manager as soon as possible. She stated at the Florida Citrus Mutual meeting, on October 12, 2022 that they will look into how to address lost trees due to the hurricane and will provide that information to growers once they receive it.

If you have additional questions regarding the program please contact Tamara Wood, Program Manager at tamara@craftcdn.org or Tina Buice, Assistant Program Manager at tina@craftcdn.org.
Hurricane Recovery Resources

Disaster Assistance Programs
BY AJIA PAOLILLO

Growers have suffered major losses due to Hurricane Ian and will look to crop insurance and disaster assistance programs to cover their losses. During the days and weeks after the storm, it is critical that growers collect the information needed for these programs. On October 12, 2022, Florida Citrus Mutual hosted a meeting which was supposed to be the initial crop forecast luncheon. However, the meeting focus shifted to hurricane recovery since the storm. Attending were representatives from the USDA Farm Service Agency (FSA) and the National Resource Conservation Service (NRCS), the Florida Department of Agriculture and Consumer Services, UF/IFAS, and FEMA. Each group had resources and information available at the meeting which they also provide online. Below are key steps that were discussed at the meeting that growers should take in assessing and reporting information on storm related damage. Even if you do not have crop insurance, these steps are still suggested to document your losses:

- **Document all damage.** This cannot be stressed enough. Pictures are essential! Videos are not recommended as they are difficult to download and access. Whatever information you can document will be helpful. Keep receipts and invoices for services and supplies.

- **If you have not already done so, contact your crop insurance agent as soon as possible.** There will be a long line of folks needing the adjusters' services and you want to make sure you are on the list. Go over your policy to determine if there are time limitations on reporting damage. If you wait too long, your losses may not be considered eligible for the claim.

- **Contact the USDA Farm Service Agency (FSA) to report damage and fruit loss.** The two programs available from the FSA are the Tree Assistance Program (TAP) and the Emergency Conservation Program (ECP). There is no production program available right now for citrus. You may already be familiar with TAP for cost share replacement of HLB affected trees or from Hurricane Irma. If you will be applying for this program for damaged trees from Hurricane Ian, you must contact the FSA and apply within 90 days of the storm. Unlike the TAP for HLB trees which can be applied for over a cumulative 6-year period of loss, the hurricane damage criteria are much more time limited. However, you can apply for TAP for both HLB and hurricane damage. For hurricane damage the work must be completed in 12 months, and growers can request an extension of up to 24 months if necessary. The TAP program allows for tree rehabilitation along with tree replacement. Please be advised though, to get cost share money for rehabilitating trees you must also have a loss in trees. The ECP is a program for debris removal and rehabilitating farmland. This program is awaiting funding, but when you contact the FSA apply for this program too. Once funding is hopefully approved, they can begin working with you. Please be advised that these programs require onsite inspections by FSA representatives. If possible do not begin working or removing trees or debris until after the inspections. They did state at the meeting they are aware that some work must be done in the grove at this time. Essential work that needs to be done to function and work in the grove should be very well documented and provided to the inspector.

Please click on these links for facts sheets on each program:

- Tree Assistance Program (TAP)
- Emergency Conservation Program (ECP)

The preferred method of contacting the FSA is by phone. They are very limited on staff and are in the process of hiring more people. Currently all calls are going to the main call center. You will provide your information and then be placed on the register documenting that you contacted the office. From there, your information will be routed to your local FSA office and a representative will contact you. Again, there will be many people they will need to get to but, initial contact in a timely manner is very important. If you visit an FSA office or call and speak with a representative, be sure to document the date and time of any correspondence, again for proof of contact. Table 1 on the next page provides the names and contact information for our area county FSA representatives.
Disaster Assistance Programs, contd.

Table 1 USDA Farm Service Agency local office contact information

<table>
<thead>
<tr>
<th>County</th>
<th>Representative</th>
<th>Local Office Phone Number</th>
<th>Office Physical and Mailing Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeSoto, Hardee, Manatee</td>
<td>Marcinda Kester County Executive Director <a href="mailto:marcinda.kester@usda.gov">marcinda.kester@usda.gov</a></td>
<td>(863) 773-4764 Ext 2</td>
<td>Hardee County FSA 316 N 7th Ave Wauchula, FL 33873</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>Main Call Center Number: 1-877-508-8364 (8am-8pm M-F)</td>
<td>(813) 752-1474 Ext 2</td>
<td>Hillsborough County FSA 201 S Collins St Ste 201 Plant City, FL 33563</td>
</tr>
<tr>
<td>Polk</td>
<td></td>
<td>(863) 533-2051</td>
<td>Polk County FSA 1700 Hwy 17 S Bartow, FL 33830</td>
</tr>
<tr>
<td>Highlands</td>
<td>Jenny Hoover County Executive Director <a href="mailto:jenny.hoover@usda.gov">jenny.hoover@usda.gov</a></td>
<td>(863) 763-3345 Ext 2</td>
<td>Okeechobee County FSA 450 US Highway 98 N Okeechobee, FL 34972</td>
</tr>
</tbody>
</table>

- **Contact the USDA NRCS to apply for their EQIP funding, which is their main assistance program.** Call the main office in Gainesville at (352) 338-9500 or email SM.NRCS.FL.DISASTERINFO@USDA.GOV. EQIP has funding available through two programs – the EQIP Emergency Assistance program and the EQIP General program. Please note that growers can apply for both types of programs. **Important Update!! The deadline to apply for the EQIP Emergency Assistance program is November 15!!** Each program covers certain practices such as fencing, pest management systems (now includes IPC’s), and clearing and snagging to assist growers in their operations. If you are already enrolled in the general program and you have hurricane damage let the NRCS representative know. The practices you can get funding for will fall under the two types of programs. That is why you should apply for both programs. For example, assistance with irrigation costs falls under the general program and not emergency assistance.

Remember, it is very important to document everything. Work cannot be started until an inspection from an NRCS representative is completed. However, in this program growers can apply for an early waiver which allows them to start working in the grove before an inspection is done. The early waiver does not guarantee that funding will be provided. If you have a question about if a practice is covered under the programs, please let me know and I will try to find out the answer, or you can ask the NRCS. Be sure to think about all the types of practices you do in the grove that may be covered. Each practice category has a code which the NRCS website offers further explanations in factsheets - click here. Please see the following fact sheet with more information on the EQIP Emergency Assistance program.

Another program that is available through the USDA is the Disaster Set-Aside Program. This was not discussed at the meeting, however, I did find some information online. This program seems to provide assistance to growers with existing FSA debts in counties designated as disaster areas. The program allows some payments to be set-aside and paid at the end of the loan term. For more information please speak with an FSA representative and you may [click here](#) for a fact sheet on this program.
The US Department of Agriculture’s Natural Resource Conservation Service (NRCS) offers the Environmental Quality Incentives Program (EQIP). This program is available to growers through two funding sources: 1) EQIP Emergency Assistance Program and 2) EQIP General Program. The following information includes examples of conservation practices that citrus growers should consider when applying for funding. Growers are encouraged to apply for both the emergency and general programs, as each program funds different practices. The examples given here are not guaranteed to be covered, nor is this list exhaustive. Please discuss ALL the practices you are implementing in your operation that may be applicable under each program with your NRCS representative when applying for funding.

**Practices to Consider When Applying for EQIP**

<table>
<thead>
<tr>
<th>Practice Code &amp; Name</th>
<th>Examples of practices used in groves</th>
<th>Practice Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 326 Clearing &amp; Snagging (feet)</td>
<td>Debris removal from canals and streams, Clearing of vegetation and obstructions</td>
<td>Obstruction removal from improved or natural streams</td>
</tr>
<tr>
<td>PC 384 Woody Residue Treatment (acre)</td>
<td>Burning, shredding, or chipping trees and disposal onsite, Remove inoculum sources for fungal diseases and to reduce pest pressure</td>
<td>Manages woody plant residues to improve site conditions</td>
</tr>
<tr>
<td>PC 500 Obstruction Removal (number)</td>
<td>Structures, buildings, vegetation, other debris, Pump sheds, barns, offices, pole barns</td>
<td>Debris removal &amp; disposal to implement conservation practices and improve water quality</td>
</tr>
<tr>
<td>PC 327 Conservation Cover (acre)</td>
<td>Conservation areas, improving wildlife habitats with permanent vegetation, Plantings to improve water quality, reduce soil erosion and sediment movement</td>
<td>Perennial vegetation established for water and soil conservation</td>
</tr>
<tr>
<td>PC 342 Critical Area Planting (acre)</td>
<td>Sites with high erosion: slopes, hill sides, road banks, canal and ditch banks, Sides of high middles in bedded groves</td>
<td>Erosion control using permanent vegetation where normal vegetative growth is difficult</td>
</tr>
<tr>
<td>PC 382 Fence (feet)</td>
<td>Many types of materials - barbed or smooth wire, wood or metal posts, Typical grove fencing and high fences</td>
<td>Barrier to restrict people, regulate livestock and wildlife movement</td>
</tr>
<tr>
<td>PC 595* Pest Management Conservation System (acre)</td>
<td>Individual plant covers (IPCs), CUPS, Reflective mulch, fabric mulch (Diaprepes)</td>
<td>Using environmental conservation related pest management methods</td>
</tr>
<tr>
<td>PC 325 High Tunnel System (sq. feet)</td>
<td>Not utilized in citrus, but consider this if you have other crops, Planted in native soil, raised beds 12in max height - vegetables, strawberries, etc.</td>
<td>System used to protect crops from weather or extend growing season</td>
</tr>
</tbody>
</table>

* This practice is covered under both the emergency assistance and general programs
### Practices to Consider When Applying for EQIP

Ajia Paolillo, UF/IFAS Extension Multi-County Citrus Agent and Emma Keller, Executive Director Peace River Valley Citrus Growers Association

#### EQIP General Program Funding

<table>
<thead>
<tr>
<th>Practice Code &amp; Name</th>
<th>Examples of practices used in groves</th>
<th>Practice Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 340* Cover Crop (acre)</td>
<td>Cover crop between rows, in row, in fields</td>
<td>Non cash crop used to reduce soil erosion and improve soil and plant health</td>
</tr>
<tr>
<td>PC 449 Irrigation Water Management (acre)</td>
<td>Soil moisture sensors</td>
<td>Managing irrigation water volume, frequency, and rate of application</td>
</tr>
<tr>
<td>PC 443** Irrigation System Surface/Subsurface (acre)</td>
<td>Low middle drainage systems</td>
<td>Irrigation delivered on the surface using contour levees, furrows, etc.</td>
</tr>
<tr>
<td>PC 430** Irrigation Pipeline (feet)</td>
<td>Mainline irrigation pipes, back flow prevention devices, pressure reducers, relief valves, etc.</td>
<td>Pipes and components to move irrigation water for application or storage</td>
</tr>
<tr>
<td>PC 441** Irrigation System Microirrigation (acre)</td>
<td>Chemigation/fertilization injection stations and components</td>
<td>Irrigation system delivering water above or below soil in small, frequent quantities</td>
</tr>
<tr>
<td>PC 447** Irrigation System Tailwater Recovery (number)</td>
<td>Retention pond erosion, sealing or lining, storm protection</td>
<td>Facilities used to collect, store, and move tailwater for reuse in irrigation</td>
</tr>
<tr>
<td>PC 356** Dike and Levee (feet)</td>
<td>Berms and wetland barriers</td>
<td>Barriers used to protect against flooding and regulate water. Made from using soil or other materials.</td>
</tr>
<tr>
<td>PC 587** Structure for Water Control (number)</td>
<td>Ditch bank risers and tide gates for water level control, float devices and monitoring stations for measurement, inverted siphons, bridges, pipes, and culverts to move water under, over, or around barriers</td>
<td>Structures and components used to measure and control water rate, level, and flow</td>
</tr>
<tr>
<td>PC 484 Mulching (acre)</td>
<td>Compost, mulch, organic matter applications</td>
<td>Use of plant residues or other materials for crop protection, erosion control, improve soil moisture control, etc.</td>
</tr>
<tr>
<td>PC 380 Establishment** PC 650 Renovation** Windbreak/Shelterbelt (feet)</td>
<td>Eucalyptus trees or other varieties used for windbreaks</td>
<td>Trees and/or shrubs planted in a linear fashion and upwind from protected areas</td>
</tr>
</tbody>
</table>

* This practice is covered under both the emergency assistance and general programs
** These practices are not listed on the EQIP General Factsheet, but may still be eligible for funding, please ask NRCS if it is applicable to your operation

The information in this document was sourced from the individual "Conservation Practice Standard Overview" documents which can be found here [https://www.nrcs.usda.gov/resources/guides-and-instructions/conservation-practice-standards](https://www.nrcs.usda.gov/resources/guides-and-instructions/conservation-practice-standards). There are more practices eligible for the general EQIP program than what is listed above. We have just highlighted some of those practices more commonly found in citrus groves. Please see the EQIP Factsheet for full list of practices and talk with your NRCS representative. If you have not already done so, call the NRCS main office line to document having made contact with the agency (352) 338-9500. A representative will contact you to discuss your application. Also be sure to apply for the early start waiver through the EQIP Emergency Assistance program. This is not a guarantee of funding, however, this will allow you to begin working in your grove before the required inspection is completed.

An Equal Opportunity Institution
USDA FSA Hurricane Ian Recovery Informational Session

The USDA Farm Service Agency (FSA), in cooperation with UF/IFAS Extension will host two informational sessions, please see details below.

FSA offers a variety of commodity and disaster assistance programs, farm loan opportunities, and conservation programs for farmers, ranchers, and producers. Please join us to learn more about how we can assist in recovering from Hurricane Ian and other services we offer to assist you in your agricultural endeavors.

**Date & Time**
November 15th 9:30-11:30am

**Location**
UF/IFAS Indian River Research & Education Center
2199 South Rock Road
Fort Pierce, FL 34945

**Date & Time**
November 22nd 1:00-2:30pm

**Location**
UF/IFAS Extension Highlands County
4509 George Blvd.
Sebring, FL 33875

**Contact**
USDA Farm Service Agency
Florida State Office
Savanna.Turner@usda.gov

Persons with disabilities who require accommodations to participate in this meeting should contact Savanna Turner at 352-379-4541 or dial 7-1-1 to access telecommunication relay services.

*USDA is an equal opportunity provider, employer and lender.*
Assessing Tree Recovery from Hurricane Ian

BY DR. CHRISTOPHER VINCENT

Why?
Growers affected by flooding and high winds from Hurricane Ian have seen the immediate effects, but the stress to the trees will have longer lasting effects as well. Flooding with weaken the root system at a time when roots would normally be growing. Winds have bent branches and stems, making it harder for them to move water to leaves and sugars to fruits. These effects will affect the leaves and the trees' ability to grow. We don’t know how big these effects will be or how long trees take to recover. Growers need to know what the real cost of the storm was, how quickly trees can recover, and how best to restore trees to productive health.

What?
We want to survey trees around the state to learn how long it takes trees to recover, to predict growth and production. We need trees from a wide variety of locations to be able to understand how the different windspeeds, flooding and topography impacted how the trees suffered and recover. We are also looking for a range of treatments, like IPCs, fungicides, kaolin, or reflective mulch, which should help trees recover. Our assessment will not harm the trees, and we won’t apply any treatments ourselves.

Who?
You! We are looking for growers with Valencia- or Hamlin-type sweet oranges, or grapefruits from around the state. The only things we will need from you are locations, permission, and some background information, like flooding. The rest will be on us. We won’t share any grower-specific information with anyone else, but we will share our monthly observations with participants so those who join will get some up-to-date insight about how recovery is going in general. If you are willing please send an email with your name and phone number to Christopher Vincent (civince@ufl.edu).

Fresh Fruit Growers and Packers

UF/IFAS' newest breeder, Dr. John Chater, is investigating a possible problem with soft Sugar Belle fruit the past two seasons. To better document this and seek a solution, he has developed a brief survey accessible at https://ufl.qualtrics.com/jfe/form/SV_bCIRJAkQYe6S0xU

Please take just a few minutes to complete the survey if you have experienced problems with soft fruit the past couple years.
The Pesticide Cabinet

Your central location for upcoming CEU workshops, pesticide license exam review classes, and more.

General Standards Core Exam Review Class

Date: Thursday November 10, 2022       Time: 8:30am-12:30pm
Location: UF/IFAS Extension DeSoto County
          507 Civic Center Dr.
          Wauchula, FL 33873
Cost: $15/class       $26/study guide
Instructor: Ajia Paolillo
Registration: https://corereviewclass111022.eventbrite.com

This class will review the required information for the General Standards Core exam to obtain restricted use pesticide licenses in Florida

4 CEUs available in: Core

Ag Tree Crop CEUs and Training

Date: Wednesday November 30, 2022       Time: 8am-12pm
Location: UF/IFAS Citrus Research and Education Center
          700 Experiment Station Rd.
          Lake Alfred, FL 33850
Cost: $15/class
Instructors: Luis O. Rodriguez, Chris Oswalt, Ajia Paolillo
Registration: Online using Eventbrite - Click here to register

This class will review the required information for the Ag Tree Crop exam to obtain restricted use pesticide licenses in Florida

4 CEUs available in: Private, Ag Row Crop, or Ag Tree Crop (Max of 4 CEUs)

CEU Reminder!

Core CEU's are always available online through Citrus Industry magazine https://citrusindustry.net/ceu

Most of our events, both in-person and online also offer CEUs
Food Safety Event Calendar
Fall/Winter 2022

Produce Safety Alliance Grower Training
A one-day course for produce growers and packers who fall under FSMAs Produce Safety Rule.
- **October 26th** - Live Oak
  [https://psa102622.eventbrite.com](https://psa102622.eventbrite.com)
- **November 1st** - Dover (Strawberry Grower’s Assoc.)
  [https://psa110122.eventbrite.com](https://psa110122.eventbrite.com)
- **November 15th** - Homestead
  [https://psa111522.eventbrite.com](https://psa111522.eventbrite.com)
- **November 16th** - Homestead (Spanish)
  Email: taylorlangford@ufl.edu
- **November 17th** - Immokalee (Spanish)
  Email: taylorlangford@ufl.edu
- **November 18th** - Immokalee
  [https://psa111822.eventbrite.com](https://psa111822.eventbrite.com)

Remote- Produce Safety Alliance Grower Training
A three-day, three-hour virtual course for fruit and vegetable growers and packers who fall under FSMAs Produce Safety Rule.
- **August 22nd-24th** – Remote PSA Training
  [https://psa082222.eventbrite.com](https://psa082222.eventbrite.com)
- **December 6th-8th** – Remote PSA Training
  [https://psa120622.eventbrite.com](https://psa120622.eventbrite.com)

Remote-HACCP for Florida Fresh Fruit and Vegetable Packinghouses
This four-day virtual course focuses on HACCP principles for fruit and vegetable packinghouses.
- **November 29-December 2nd**
  Email: taylorlangford@ufl.edu

Preventive Controls for Human Food-Preventive Controls Qualified Individual (PCQI) Training
This three-day course for those covered under FSMAs Preventive Controls for Human Food Rule
- **TBA**
  Email: taylorlangford@ufl.edu

Beyond the Basics: A Hands-on Food Safety Analysis
This one-day course is targeted at those who have already attended a food safety training and are looking for a more in-depth and hands-on experience. It is not a substitute for a PCQI or PSA Grower Training for FSMA.
- **October 27th-Live Oak**
  Email: taylorlangford@ufl.edu

Sign up for an On-Farm Readiness Review
A free educational opportunity intended to prepare growers for FSMA Produce Safety Rule inspection. Participants must have taken a Produce Safety Alliance Grower Training. To sign up for an On-Farm Readiness Review, visit: [www.fda.gov/ofrr](http://www.fda.gov/ofrr).

For registration questions, contact sarahmccoy@ufl.edu.
For general food safety questions, contact UFFoodsafety@ifas.ufl.edu.
Thank you for your support!

If you would like to be a sponsor, please contact
Chris Oswalt: wcoswalt@ufl.edu or
Ajia Paolillo: ajiacunningham@ufl.edu

Recognition of a sponsor does not constitute endorsement of a company or product.

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