NOVEMBER 2021 | VOL.21:09

Gitrus from the Ridge to the Valley

CENTRAL FLORIDA CITRUS EXTENSION

November 2021

Harvest season is upon us. We are starting to get some cooler weather, which is a nice change.

In this issue you will find the 2021 Winter Weather Outlook. The Winter Weather Watch program will be starting on November 15, 2021. Register for this program to receive daily weather forecasts that are available for growers to help make decisions about cold protection during the winter months.

This issue also provides information on salt-out of liquid fertilizer tanks, spider mites found in citrus, and some important safety training events that are coming up in the next few months.

The UF/IFAS CREC will be hosting an Open House/Field Day on November 16, 2021, registration information can be found inside this newsletter. There will be a fruit display during the event, and inside the newsletter we have information about other upcoming fruit displays you can participate in.





UF | IFAS Extension

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The Foundation for the Gator Nation An Equal Opportunity Institution

2021-22 Winter Weather Outlook

BY CHRIS OSWALT

The latest NOAA 2021-22 winter weather outlook for temperature and rainfall has us looking at an increased probability of above-normal temperatures (fig 1). The rainfall outlook (fig 2) has us looking at a below-normal chance for rainfall. The El Nino Southern Oscillation (ENSO) forecast is for a continuing transition into La Nina conditions for the 2021-22 winter. Technically we are in an NOAA La Nina advisory as of mid-October. So, in planning for this winter, La Nina conditions are, on average, usually warm and dry winters with plenty of sunshine (fig 3).



Figure 1 Winter 2021-22 temperature outlook





Figure 2 Winter 2021-22 precipitation outlook



Figure 3 Winter La Nina weather pattern

Winter Weather Watch

BY CHRIS OSWALT



UF/IFAS Polk County Cooperative Extension Service

The 2021 - 22 version of the Winter Weather Watch will begin on November 15, 2021. Time is short so send in your subscription form to receive timely agricultural winter weather forecasts and information.

The 2021-22 edition of the Polk County Winter Weather Watch program will begin on November 15, 2021. 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 2021-22 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 Gail Crawford at 863-519-1042 or email at dorothyc@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.

Forecast Product	Above 32 ° F	32º-29ºF	Below 28 ⁰ F
Zone*	Daily 8:30 a.m.	Daily 8:30 a.m.	Daily 8:30 a.m.
6-10 & 8-14 Day Outlooks*	Mon/Wed/Fri 8:30 a.m.	Mon/Wed/Fri 8:30 a.m.	Mon/Wed/Fri 8:30 a.m.
Weekly Outlook	Friday 5:00 p.m.	Friday 5:00 p.m.	Friday 5:00 p.m.
Leaf Freezing Temperatures	Friday 5:00 p.m. & on the Florida Automated Weather Network (FAWN)	Friday 5:00 p.m.	Friday 5:00 p.m.
Special Weather Narratives	As Needed	Daily 3:00 p.m.	Daily 3:00 p.m.
Afternoon Zone*	None	Daily 4:00 p.m.	Daily 4:00 p.m.
Sunset/Brunt	None	As Needed	Daily 7:00 p.m.

*NWS products are subject to changes in schedule timing based on NWS release of these products.

2021 - 2022 WINTER WEATHER WATCH PROGRAM

NOVEMBER 15, 2021 TO MARCH 15, 2022 REGISTRATION FEE: \$100.00

It's once again time to register for the upcoming 2021 - 2022 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 <u>Ag</u> <u>Forecasts</u>, 24 hours a day. <u>Please do not give this</u> <u>number to others</u>. 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.

2021 - 2022 Winter Weather Watch Program

NAME:	PHONE NUMBER:
ADDITIONAL PHONE NUME	BERS:
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EMAIL ADDRESS:	
CITY:	ZIP CODE:
RE	GISTRATION FEE \$100.00
PLEASE RETURN THIS RI	EGISTRATION FORM AND YOUR CHECK PAYABLE TO:

POLK COUNTY EXTENSION CITRUS ADVISORY COMMITTEE PO BOX 9005, DRAWER HS03 BARTOW, FL 33831-9005

UF/IFAS Citrus Research and Education Center Open House and Field Day

On Tuesday, November 16, 2021, the UF/IFAS Citrus Research and Education Center will hold an open house and field day. Information about the program is in the following flyer and registration is free, and lunch is included. Please use the registration link to register if you are interested in attending the program.



Please join us for an Open House/Field Day

Tuesday, Nov. 16, 2021 | 8:30 a.m. – 2:00 p.m. 700 Experiment Station Road | Lake Alfred, Florida 33850

Agenda

8:30AM

Registration

9:00AM

Panel discussion: What you can do now to improve tree health

 An interactive opportunity for growers to engage with a panel of UF/IFAS CREC scientists who will discuss what growers should be doing now to succeed in their groves. Growers will be able to ask direct questions and engage in an open conversation.
10:00AM

Citrus fruit display opens BHG Room 103

On-Farm food safety exhibit (outside)

Root health exhibit (outside)

The how of citrus growth (outside)

Citrus quality and consumer preference (outside)

On-Farm ag water treatment demonstration (outside)

10:30AM

Interactive Educational Exhibits

- Learn more about techniques that you can use in your groves now to increase yield, fight fruit drop, manage pests, improve nutrition, effectively irrigate and deter disease.
- Demonstration of new phone app to identify nutrient deficiencies
- Principles of IPM display
- Hands-on identification of insects and diseases
- Tree health tools and techniques
- Finger lime samples
- Identification of graft transmittable diseases

12:00рм - Lunch

1:00pm

Field tours (field shoes and comfortable clothes recommended)

- Integrated project with reflective mulch, IPCs and kaolin clay
- Grapefruit IPC trial

To register, visit https://crecfieldday21.eventbrite.com | Please register by November 9.

For more information, email or call Jamie Burrow at jdyates@ufl.edu; (863) 956-8648

Please email Jamie Burrow at jdyates@ufl.edu if you require special accommodations to participate in the field tours.

Salt-out of Liquid Fertilizers

BY AJIA PAOLILLO

The use of liquid fertilizers in citrus production has increased over the years. Liquid fertilizers offer the grower a way of applying frequent doses of fertilizer to trees, to optimize nutrient efficiency. Now that we are heading towards the winter months with cold weather and some cold nights, an issue growers may face is liquid fertilizer salt-out in the holding tanks. The term 'salt-out' refers to the fertilizer solids coming out of solution and forming crystals or sediment in the bottom of the tank. This happens to the liquid fertilizer solution when low temperatures occur. In many cases, the solids are difficult to mix back into solution causing the fertilizer to not be as effective and the solids could cause clogging issues in the irrigation lines.

The temperature in which a fertilizer has the potential to salt out is related to the chemical analysis, nutrient sources, and the solubility of these materials in the solution. Different materials have different solubility rates at different temperatures. It is important to remember that various combinations of nutrient materials will also change the temperature at which the solids in the fertilizer will begin to come out of solution and crystalize in the tank. If you choose to apply liquid fertilizer during the winter months, be aware of the potential for this, and purchase fertilizer with formulations that are more stable during colder temperatures.

During these next months, while the cold weather is upon us, take these steps to help reduce the potential for clogging of the lines and emitters due to fertilizer salt out. Before running the fertilizer through your irrigation system, check the holding tank for signs of crystallization and sediment. Agitate the liquid in the tank to attempt to dissolve the solids back into solution. If the solids will not dissolve back into solution, wait until the weather is warmer and attempt agitation again.



Spider Mites in Florida Citrus

BY LOURDES PEREZ CORDERO

If you are a citrus grower in Central Florida, most than likely you have encountered spider mites. These are a common pest of commercial citrus in the state and their characteristic thin webs make them easy to spot in trees. They become more abundant between March and June, when the weather conditions are dry, and the relative humidity is low. Even though the population of some species of spider mites usually peaks during Spring, they can be present throughout the year. Different species of spider mites can be found feeding on the midvein section of mature leaves; however, as the population rises, they start moving to other parts of the leaf and can even feed on the developing fruit nearby. Severe infestations can cause Mesophyll collapse, reduction of photosynthesis, and excessive leaf drop.

The most common species of spider mite that we may find is the Texas citrus mite, Eutetranychus banksi, followed by the citrus red mite, Panonychus citri. These mostly aggregate on the upper leaf surface. The Texas citrus mite can be recognized by their oval shape and tan body with green to black spots. Similarly, the citrus red mite can become abundant throughout the year, including in the nurseries. As their name suggest, these are recognized by their red color. The six-spotted mite, Eotetranychus sexmaculatus, becomes more abundant during Winter, and their population tends to drop around June. Unlike the other mites discussed above, the six-spotted mites commonly aggregate on the lower leaf surface.

Adult males of some species are easily recognized by their long legs compared to the females. When males are predominant on a given population, there is no need for management since this is an indication that the number of mites is in decline. Management of spider mites will also depend on external factors, such as the temperature, relative humidity, and seasonality. Miticides may provide control over different stages of spider mites, except the eggs. On the other hand, petroleum oil can help control eggs. For more information on spider mites and their management, please refer to the 2021-2022 Florida Citrus Production Guide: Rust Mites, Spider Mites, and Other Phytophagous Mites.



Figure 1: Spider mites on citrus leaf Photo credit: Tonya Weeks



Figure 2: Spider mite on web Photo credit: Tonya Weeks

Fresh Florida Citrus Growers, Packers, and Shippers Survey

Funding has been provided from a Florida Citrus Packers, USDA Technical Assistance for Specialty Crops (TASC) grant to improve control of fresh citrus fruit decay. The specific objective of this survey is to gather information to guide research and Extension programs to improve decay control and extend the shelf life of fresh citrus fruit by:

- 1. Understanding the different practices Florida fresh citrus growers, packers, and shippers currently use
- 2. Documenting recent commercial experiences related to fresh citrus fruit decay
- 3. Understanding the most effective means of disseminating new information about decay control to industry

The survey is anonymous, and your participation is voluntary. Please contribute to our knowledge of citrus fruit decay and how you currently manage decay so that we can ultimately develop better control methods that will minimize potential future economic losses.

Access the survey at: <u>https://ufl.qualtrics.com/jfe/form/SV_cNQ7lio28e2FW3X</u>

Please contact Dr. Mark Ritenour if you experience any problems or have questions about the survey. You can contact Mark by phone at 772-577-7359 or by email at ritenour@ufl.edu.



Upcoming Citrus Fruit Displays and Tastings

Below are the dates and locations of the upcoming citrus fruit displays and tastings. Come out to see and taste the varieties on display and give your feedback. For more information on each of these events please visit this link to the New Varieties Development & Management Corporation <u>http://nvdmc.org/upcoming-events/</u> or contact Peter Chaires at <u>pchaires@nvdmc.org</u>

- November 16, 2021 10am: UF/IFAS Citrus Research and Education Center Field Day
- December 3, 2021 10:30am: USDA-ARS A.H. Whitmore Foundation Farm
- December 14, 2021 10am: UF/IFAS Citrus Research and Education Center Plant Improvement Team
- February 15, 2022 10am: UF/IFAS Citrus Research and Education Center Plant Improvement Team



Upcoming WPS Training Events

Highlands County Safety Morning!

BY LOURDES PEREZ CORDERO

Highlands County Growers Heads Up! We will be hosting our Ag Safety Morning on December 16th, 2021. Worker Protection Standards and Safety Training will be provided in person in both English and Spanish at the Highlands Extension Office in Sebring, FL. Both sessions will be happening simultaneously on the same day and location. Check-in will begin at 7:30 am. It is important for agricultural workers and pesticide handlers working in this particular county to fulfill this requirement before the end of the year.

Please keep an eye out for details about pre-registration, registration fee and event agenda throughout the month of November. If any questions arise, please don't hesitate in contacting me at 863-402-6540 or lperezcordero@ufl.edu.

WPS and Safety Training – DeSoto, Hardee, and Manatee counties – March 2, 2022

BY AJIA PAOLILLO

The annual Safety Morning program will be an in-person event held in Arcadia on Wednesday March 2, 2022. This program provides the annual required Worker Protection Standard (WPS) training for workers and pesticide handlers. This training is a federal requirement of agricultural employees that handle, mix, load, or apply pesticides. Please note that, if you hold a current Florida Restricted Use Pesticide (RUP) license, you do not have to complete the annual WPS training requirement.

This year in 2021, we could not have an in-person event due to COVID restrictions. Many of you completed the online training which was provided to fulfill this requirement. I attempted to keep those of us in our area on the same time schedule to avoid anyone going out of compliance before March 31, 2022. If you have any questions please let me know ajiacunningham@ufl.edu. More information about the event and other safety topics included in the program will be available as we get closer to the date.

Chlorpyrifos Tolerance Revocation on Food Crops

There has been no shortage of information circulating around the current state of the active insecticidal ingredient chlorpyrifos. Currently, there are several things that we know and have information on as it relates to food crop uses and the revocation action of the food use tolerances. This discussion concerns the use of chlorpyrifos in Florida citrus.

First, chlorpyrifos is not banned at this time (10/29/21) for Florida citrus. The tolerances for chlorpyrifos have been revoked six months from the issuance of the EPA's final rule. The final rule from EPA can be found at this link: https://www.regulations.gov/document/EPA-HQ-OPP-2021-0523-0001. Six months from the final rule, the date would be February 28, 2022 (as listed in the document). After this date, any residues of chlorpyrifos found on fruit would then need to fall under the current existing use of the material consistent with the following of a legal chlorpyrifos citrus label. In other words, if the label is still valid, applications of the material can be made following that valid label prior to the revocation of tolerance date, but not past that date. Residues detected from applications after this date would render the crop adulterated with an illegal pesticide residue. Notice it is the residues from an application made after the date of tolerance revocation.

Additional information from EPA on chlorpyrifos can be found on the EPA Chlorpyrifos website: <u>https://www.epa.gov/ingredients-used-pesticide-products/chlorpyrifos</u>.

The EPA Chlorpyrifos website has additional specific information on the interim use of chlorpyrifos, how the revocation of tolerances for food uses relates to existing treated crops, and the interim uses (treating of the crop before the 2/28/22 date) are for chlorpyrifos in the "Chlorpyrifos Final Rule FAQs" link: <u>https://www.epa.gov/ingredients-used-pesticide-products/frequent-questions-about-chlorpyrifos-2021-final-rule</u>.

We just wanted you, the growers, to have the necessary information for you to be able to plan for the future as related to any stocks of chlorpyrifos you may have in inventory. The EPA has also indicated that a "Notice of Intent to Cancel" (NOIC) when issued, will be published in the Federal Register. As of now, the NOIC has not occurred, so the existing labels are still current and legal at this time (10/29/21).

Also, at this time, no action has been taken on chlorpyrifos for non-food uses. The tolerance is for food crop uses. So non-food crop uses have not been affected at this time.

I would strongly suggest that if you have stocks of chlorpyrifos, you review the above materials and know your options during this phasing out period for chlorpyrifos.

Farm Labor Supervisor Training

The University of Florida is having their next Farm Labor Supervisor Training - Basic Training 101: Administration and Safety. The classes will be held on December 11th and 12th (8:00 am to 5:00 pm both days). Please note that this is a Saturday and Sunday. The cost per student is \$340/student and will be offered in both English and Spanish. They will be offering the class onsite at their center, SWFREC, Immokalee, or attend by videoconference. The purpose of this course is to provide anyone with farm labor responsibilities the administrative knowledge and tools necessary to cultivate and maintain a culture of safety for farmworkers who are essential to the profitability of Florida's agricultural industry.

- Below are the flyers, in English and Spanish, with all of the information needed to register.
- For further questions or information on what each class covers, please email Barbara Hyman hymanb@ufl.edu.
- UF is available to provide their program at your location if you have ten or more employees that need it. If you are interested in onsite training at your location, please contact Barbara Hyman.





Programa DeCapacitacion Para Supervisores De Trabajo Agrícola ENTRENAMIENTO BASICO 101: ADMINISTRACION Y SEGURIDAD Diciembre 11 Y 12, Del 2021 De 8 am a las 5 pm INSTRUCTORES EN INGLES Y ESPAÑO PARA REGISTRARSE: https://flstrainingdec2021.eventbrite.com

CLASES INCLUIDAS

Conceptos Básicos Para Contratistas Agrícolas y Como Navegar Con Trabajadores H2A Regulaciones De Horas/ Salarios y Supervisando Trabajadores H2A

Técnicas De Comunicación Para Trabajadores Agrícolas Transportación Segura Y Manejando Con Cuidado Como Usar Los Pesticidas Con Seguridad COVID19 Y Seguridad De Los Trabajadores Agrícolas Prevención De Enfermedades Causadas Por El Calor Como Usar Equipo Agrícola Seguramente

¿Quién debe tomar estas clases 8 upervisores laborales, contratistas, lideres de tripulación, conductores de autobuses y camionetas, personal de oficina, gerentes laborales y gerentes de granjas.

Información de la clase: Todos los asistentes de estas clases que completen los cuestionarios del curso obtendrán un Certificado de

COSTO: \$340/POR PERSONA



Domicilio De La Presentacion En Persona : UF/IFAS/SWFREC 2685 SR 29 N IMMOKALEE, FL

Y virtual en Zoom

Si TienePreguntas ComunicarseCon? Barbara Hyman (hymanb@ufl.edu) 0

Dr. Kim Morgan (kimorgan@ufledu)

ifas.ufl.edu



2021-22 Fresh Fruit Trainings

TRAINING TEAM CONTACT INFORMATION

Amir Rezazadeh (Questions & In-Person Scheduling) amir2558@ufl.edu 772-462-1660

Mark Ritenour ritenour@ufl.edu 772-577-7359

Jamie Burrow (Certificates/Technical Support) jdyates@ufl.edu 863-956-8648 Christine Kelly-Begazo (Training Payment) ckellybe@ufl.edu 772-226-4330 x3



- Please note that the Safari browser may not work properly with the program on a desktop or mobile device. It is recommended to use desktop Google Chrome or Firefox browsers.
- You will need to be able to print, scan, and upload the sign in sheet to complete the training modules.
- The cost is \$3.00 per a person total for as many modules as they wish to complete, or a maximum of \$100 per company.

TRAININGS OFFERED IN ENGLISH AND SPANISH





Virtual trainings can be accessed at

https://crec.ifas.ufl.edu/trainings/fresh-fruit/

 Certificates and training kits (hand sanitizer, mask, educational materials, and more) will be sent via FedEx.

Alico Citrus Internships Summer 2022



Company Overview

Alico, Inc. (NASDAQ: ALCO) is a holding company with assets and related operations in agriculture and environmental resources, including citrus and wildlife management. Our mission is to create value for shareholders by managing existing assets to their optimal current income and total returns, opportunistically acquiring new assets and producing high quality agricultural products while exercising responsible environmental stewardship. Our objectives are to produce the highest quality agriculture products, create innovative land uses, opportunistically acquire and convert undervalued assets, sell under productive land, generate recurring and sustainable profit with the appropriate balance of risk and reward, and exceed the expectations of shareholders, customers, clients, growers and partners.

Program Overview

As an intern with Alico Citrus, you will receive an opportunity to see all components of the citrus caretaking business. This is a paid internship. You will have a designated mentor and assigned rotation throughout the organization for the summer. You will get the chance to see all aspects of our business from production to the corporation side. This internship will give you the potential to gain a diverse training along with contact to the citrus industry as well as prospective employment opportunities after college.

Intern Focus

- Production
- Human Resources
- Accounting
- Information Technology
- Business Administration

Qualifications

- Seeking future in employment in the Florida Citrus Industry.
- Basic familiarity with agriculture.
- Basic computer skills.
- Pertaining to the internship, willingness to work outside.
- Self-motivated, detail oriented, honest, and a good personality.
- Ability to relocate to or originally from one of the following counties: Polk, Highlands, Hardee, Desoto, Hendry, Collier, or Lee.
- Freshman through Senior level
- Satisfactory results of a pre-employment background check, drug test, and driving record

Alico Citrus Internship Program Apply Here!

For more information contact: Carisa Keller Internship Coordinator Director of Sustainability 941-268-7495 ckeller@alicoinc.com



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