

JANUARY 2024 | VOL. 24:01

# Citrus from the Ridge to the Valley

CENTRAL FLORIDA CITRUS EXTENSION

## January 2024

Happy New Year!

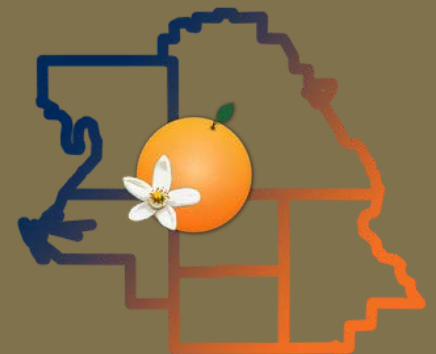
We hope you all had a great start to your year!

In this issue of our monthly newsletter you will find information about the following:

- Winter Weather Watch
- January OJ Break
- Ag Safety Morning + Health Fair 2024
- Brassinosteroids and Fruit Quality and Yield
- Strategies to Enhance Preemergence Herbicide Performance in Citrus

If there are any topics you would like us to explore in a seminar or workshop, please let us know.

The Foundation for the Gator Nation  
An Equal Opportunity Institution



**UF** | IFAS Extension  
UNIVERSITY of FLORIDA

Chris Oswalt  
UF/IFAS Extension  
Polk and Hillsborough  
Counties  
(863) 519-1052  
wcoswalt@ufl.edu



Lourdes Pérez Cordero  
UF/IFAS Extension  
Highlands County  
(863) 402-6540  
lperezcordero@ufl.edu



## **UF/IFAS CREC Citrus Breeding- Lake Alfred**

700 Experiment Station Rd., Lake Alfred, FL – Ben Hill Griffin Auditorium

January 23, 2024      1:00 PM

February 21, 2024      1:00 PM              After the OJ Break

Attendees will be able to sample a range of varieties and complete survey forms that provide valuable feedback to the CREC Plant Improvement Team. Members of the Plant Improvement Team

(Dr.'s Gmitter, Grosser, Chater, Wang) will be present to answer questions. Due to the heavy focus on orange and orange-like material, juice samples are often provided for displayed selections that may have potential in the juice stream. There are a large number of promising selections identified each year, but the team makes a concerted effort to keep the number of displayed selections to a manageable number.

---

## **January OJ Break – January 17th, 2024**

Dr. Ramdas Kanissery and Dr. Fernando Alferex from the UF/IFAS SouthwestFlorida Research and Education Center will be dicussing these important topics:

- Year-round weed management in citrus: Effective and novel approaches
- Brassinosteroid treatments in young and mature citrus trees under HLB. New results and future research directions

---

## **Ag Safety Morning + Health Fair 2024 – March 27th, 2014**

Our Highlands County annual Ag Safety Morning will be held at the Bert J. Harris Jr. Agricultural Center. (4509 George Blvd, Sebring, FL, 33075). In addition to the safety training, this year we will have a Health Fair. Every participant that indicated through Eventbrite their interest to participate will be assigned a time slot in which they can benefit from the services provided. Registration opens on February. Keep an eye out!

---

## **2024 Florida Citrus Growers' Institute**

The Florida Citrus Growers' Institute program will be held on April, on the South Florida State College campus in Avon Park. Make plans now to join us for the all-day educational event complete with CEU's for Certified Crop Advisors and Restricted Use Pesticide license holders and lunch. More details on the agenda and registration will be coming soon!

# January 2024

**UF** | IFAS Extension  
UNIVERSITY of FLORIDA

## OJ Break

January 17, 2024  
10:00 am to 12:00 pm



UF/IFAS Citrus Research & Education Center  
BHG Citrus Hall  
700 Experiment Station Rd  
Lake Alfred, FL

### **Citrus Weed Management & Update on the Use of Brassinosteroid Treatments**

**Dr. Ramdas Kanissery and Dr. Fernando Alferez from the UF/IFAS Southwest Florida Research and Education Center will be discussing these important topics.**

**9:45 am Check-in, BHG Citrus Hall**

**10:00 am Year-round weed management in citrus: Effective and novel approaches.**

**Dr. Ramdas Kanissery**

**11:00 am Brassinosteroid treatments in young and mature citrus trees under HLB. New results and future research directions.**

**Dr. Fernando Alferez**

**12:00 pm Lunch - Sponsored by Mark White (239) 214-1072 and InTerra Solutions**

**Pre-registration is required by Friday January 12, 2024**

**use the following link:**

**[https://ufl.qualtrics.com/jfe/form/SV\\_4loS7yloANScCbO](https://ufl.qualtrics.com/jfe/form/SV_4loS7yloANScCbO)**

**Or Contact Joy Spencer to register 863-519-1041**

**2.0 RUP CEU in Private, Ag Tree, Ag Row, and Demo & Research will be available.**

**1.0 Pest & 1.0 Crop Management Certified Crop Advisor CEU's will be available.**

An Equal Opportunity Institution. UF/IFAS Extension, University of Florida, Institute of Food and Agricultural Sciences, Andra D. Johnson, dean for UF/IFAS Extension. Single copies of UF/IFAS Extension publications (excluding 4-H and youth publications) are available free to Florida residents from county UF/IFAS Extension offices.

In accordance with the provisions of ADA, auxiliary aids and services will be provided upon request with a 10-day notice. Contact Joy Spencer at (863) 519-1041. This material is available in an alternate format upon request.

Highlands County

# Ag Safety Morning & Health Fair 2024

**Date:** March 27th, 2024 @ 8:00AM

**Location:** Bert J. Harris Jr. Agricultural Center  
4509 George Blvd, Sebring, FL, 33875

**Price:** \$15 per person.  
Pre-registration required!

**Registration Link:** <https://agsafetyday2024.eventbrite.com>

CEU's  
requested!



Contact: Lourdes Pérez Cordero  
Phone: (863) 402-6540  
E-mail: [lperezcordero@ufl.edu](mailto:lperezcordero@ufl.edu)

UF/IFAS is an Equal Opportunity Institution

UF | IFAS Extension  
UNIVERSITY of FLORIDA

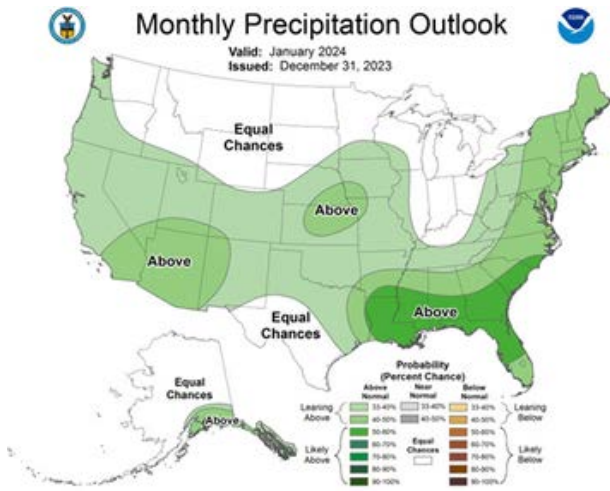


Figure 2 January 2024 precipitation outlook

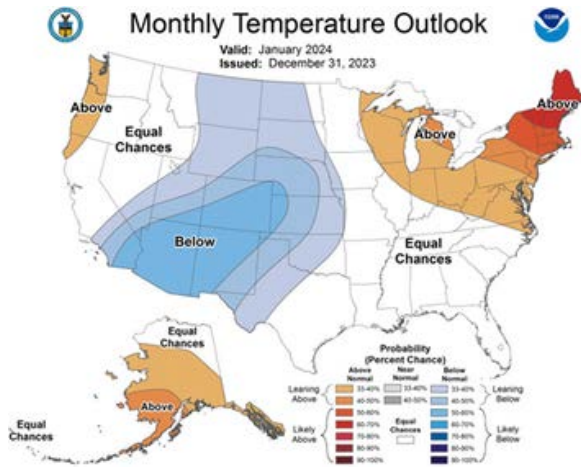


Figure 1 January 2024 temperature outlook

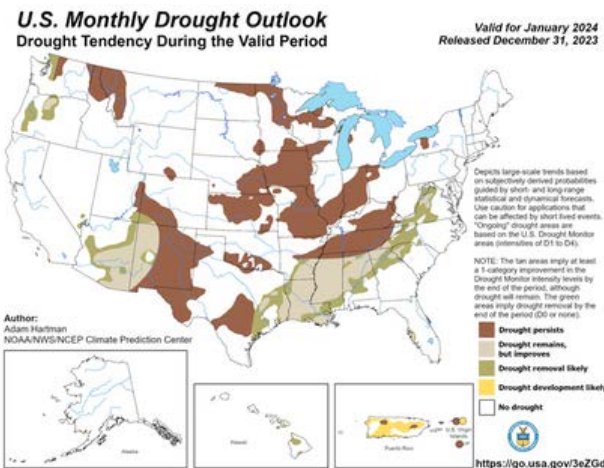


Figure 3 January 2024 drought outlook

# 2024 January Weather Outlook

BY CHRIS OSWALT

The National Oceanic and Atmospheric Administration (NOAA) has recently published its latest weather outlook for January, and the outlook for temperature and rainfall is particularly noteworthy. According to the outlook, there is an equal probability of above or below normal temperatures during this period (as indicated in Figure 1). This means that we may expect to see forecasted temperatures to have an equal probability of above or below normal.

The rainfall outlook (Figure 2) also presents a different picture, with the forecast indicating above-normal rainfall. This suggests that we may receive above-average amounts of precipitation than would be typical for January.

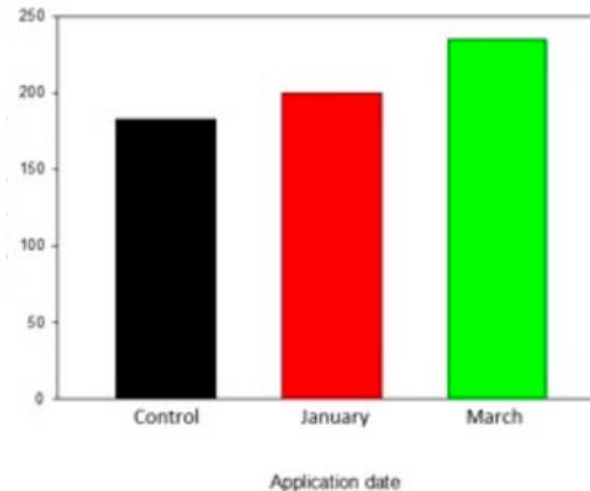
The El Niño Southern Oscillation (ENSO) forecast also plays a crucial role in shaping the weather outlook for this period. Currently, we are under a strongly building El Niño condition. The forecast is for existing El Niño conditions to gradually strengthen into the winter of 2023-24. Although we have not yet experienced the peak El Niño condition, this strengthening is forecasted to result in a persist El Niño condition through March to May of 2024. It is anticipated that these El Niño conditions will transition (with 60%) into a neutral condition during April to June 2024. In this situation, we should generally look for cooler daily temperatures due to increased cloudiness associated with increased rainfall expected during winter El Niño conditions.

In conclusion, the latest NOAA weather outlook for the January 2024 period suggests that we may experience equal chances of above or below normal temperatures and above-average rainfall than what is typical. However, the U.S. Monthly Drought Outlook has dry conditions improving for the west coastal area of peninsular Florida from just north of Tampa to coastal Lee County (depicted in Figure 3).

# Brassinosteroids and Fruit Quality and Yield

**Researchers:** Fernando Alferez, Divya Aryal

**Contact:** Fernando Alferez, [alferez@ufl.edu](mailto:alferez@ufl.edu), UF/IFAS SWFRECC



## Take Home Message:

- Brs improve internal fruit quality by increasing sugar/acid ratio in juice. The best timing to achieve maximum results appears to be closer to harvest, but this needs to be confirmed.
- Brs induce accumulation of certain sugars in the juice.
- Brs increased yield in 'Valencia'.

**Summary:** There are some indications that brassinosteroids (Brs) may advance commercial internal maturity by almost one month in 'Valencia' sweet orange, depending on the time of application. However, the best time of application in this variety and other sweet orange varieties like 'Hamlin', still needs to be determined, so this treatment can become economically feasible. We are working to determine how Brs treatment influences internal maturity in 'Hamlin' and 'Valencia' sweet orange varieties during fruit maturation, with the aim of finding the ideal maturation stage for applying the hormone and obtain the best sugar to acid ratio. Our results for the first season show that in 'Hamlin', Br application increased sugar/acid ratio from 9 to 12 by early December. We also found a higher fructose content in juice from Brs-treated fruit. In 'Valencia' fruit, by harvesting in March, Brix in controls was 8.5, whereas in Brs-treated fruit it was 9.4. We also found an increase in yield after Brs treatment between 9% and 29% depending on the time of application. This needs to be refined to achieve the best results.

Source: Keeping Florida Citrus Growers Informed. Aug 2023, pg. 34. UF/IFAS CREC. Lake Alfred.

# Strategies to Enhance Preemergence Herbicide Performance in Citrus

**Researchers:** Ramdas Kanissery, Robert Riefer

**Contact:** Ramdas Kanissery, [rkanissery@ufl.edu](mailto:rkanissery@ufl.edu), UF/IFAS SWFREC

## Take Home Message:

- Preemergence herbicides are essential for keeping weeds under control in citrus groves throughout the year.
- To effectively prevent weed germination and growth, these herbicides must stay in the upper layer of soil.
- Mixing soil-binding agents with preemergence herbicides improves their effectiveness in sandy soils by helping them stay in the soil for longer periods.



Flumioxazin + soil binding agent  
~3 months after application

Flumioxazin ONLY  
~3 months after application

**Effort Statement:** We conducted the study again during multiple seasons.

**Summary:** Preemergence herbicides, also known as residual herbicides, are highly effective in the long-term suppression of weeds in citrus tree rows. These herbicides remain in the soil and prevent susceptible weeds from germinating. In order to achieve the best weed control results, the preemergence herbicides need to stay within approximately the top five inches of soil, where they can effectively suppress the germination of weed seeds. However, Florida's citrus soils have a high sand content, which causes the herbicide's active ingredients to leach more rapidly from the topsoil. This leads to a reduction in the herbicide's performance. To tackle this problem, a project was conducted to assess the potential of adjuvants called "soil binding agents" or "soil deposition agents" in enhancing the retention and effectiveness of preemergence herbicides in the sandy soils of Florida. One such herbicide tested was flumioxazin, which is commonly known as Chateau®. It was combined with a soil-binding agent called polyvinyl polymer (Trade name: Hydrovant® fA). The mixture, consisting of 8 oz/acre of the herbicide and 0.1% v/v of the soil binding agent, was applied to the citrus tree rows, and its weed control effectiveness was compared to using the herbicide alone. The results of the experiment showed that the combination of the preemergence herbicide and the deposition agent improved overall weed control efficacy compared to using the herbicide alone. These findings indicate that incorporating these adjuvants has the potential to enhance the effectiveness of preemergence herbicides in controlling weeds in citrus groves.

# Food Safety Event Calendar

UF | IFAS Extension  
UNIVERSITY of FLORIDA

## Winter/Spring 2024



**Produce Safety**  
ALLIANCE

### Produce Safety Alliance Grower Training

A one-day course for produce growers and packers who fall under FSMA's Produce Safety Rule.

- **November 30th, 2023 – Immokalee**  
<https://psa113023.eventbrite.com>
- **January 17th – Quincy**  
<https://psa011724.eventbrite.com>
- **January 29th – Wimauma**  
<https://psa012924.eventbrite.com>
- **April 17th – Naples**  
<https://psa041724.eventbrite.com>
- **April 18th – Belle Glade**  
<https://psa041824.eventbrite.com>
- **April 25th – Live Oak**  
<https://psa042524.eventbrite.com>
- **May 23th – Fort Pierce**  
<https://psa052324.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 FSMA's Produce Safety Rule.

- **December 12th - 14, 2023**  
<https://psa121223.eventbrite.com>
- **February 13th - 15th**  
<https://psa021324.eventbrite.com>
- **April 2nd – 4th**  
<https://psa040224.eventbrite.com>
- **May 7th – 9th**  
<https://psa050724.eventbrite.com>

For registration questions, contact [sarahmccoy@ufl.edu](mailto:sarahmccoy@ufl.edu)  
For general food safety questions, contact [taylorlangford@ufl.edu](mailto:taylorlangford@ufl.edu)

**FSPCA**  
FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE

### Preventive Controls for Human Food- Preventive Controls Qualified Individual (PCQI) Training

This three-day course for those covered under FSMA's Preventive Controls for Human Food Rule

- **March 26th – 28th – Lake Alfred**  
<https://fspca032624.eventbrite.com>



### Remote HACCP for Florida Fresh Fruit & Vegetable Packinghouses

A four-day virtual course focuses on HACCP principles for fruit and vegetable packinghouses.

- **January 22nd -25th**  
<https://haccp012224.eventbrite.com>



### 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.fdacs.gov/ofrr](http://www.fdacs.gov/ofrr).



# Are you interested in being a sponsor for this newsletter?

**IF YOU BECOME A SPONSOR, YOUR  
INFORMATION WILL BE FEATURED IN THE  
10 ISSUES OF THIS NEWSLETTER FOR 2024.**

For pricing and other information, please contact  
Chris Oswalt (863) 519-1052  
[wcoswalt@ufl.edu](mailto:wcoswalt@ufl.edu)

or

Lourdes Pérez Cordero (863) 402-6540  
[lperezcordero@ufl.edu](mailto:lperezcordero@ufl.edu)