JULY/AUGUST 2023 | VOL.23:06

Citrus from the Ridge to the Valley

CENTRAL FLORIDA CITRUS EXTENSION

July/August 2023

We are definitely in summer! These days the temperatures are soaring and the only relief we are getting is some rain. Hopefully you have been able to enjoy some vacation time with family and friends.

Many growers have been eagerly awaiting a visual response from the trunk injections done this spring. If you have any information or updates you would like to share, please contact us! We want to hear from you. With just two weeks left in July, check out the online seminar and CEU Days program happening this week, more information can be found inside the newsletter.

August will start gearing us up for fall with the Citrus and Specialty Crop Expo, Packinghouse Day, and the Produce Safety Rule Grower Training. If you missed the opportunity to apply for the CRAFT Existing Tree Therapy program, you have another chance to submit your information before the end of August. See more information on page 3 of this newsletter.

Remember to stay cool out there and drink plenty of water to keep yourself from becoming dehydrated!

UF | IFAS Extension
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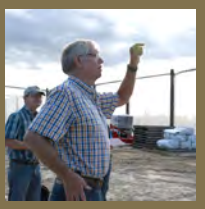

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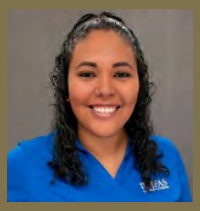

DON'T MISS OUT!

UF IFAS UNIVERSITY of FLORIDA

2023 South Central Florida CEU's Days

POLK COUNTY

3 Opportunities for Pesticide Applicators to Obtain Their Category CEU's

- Time: 9:00 am – 3:30 pm
- Location: UF/IFAS Extension Polk County (1702 S Holland Pkwy, Bartow, FL 33830)
- Cost: $20.00 (Lunch will be included)
- Phone: 863-519-1049 or 863-519-1041

Day 1 July 07

Registration day 1
1:https://www.eventbrite.com/e/polk-county-ceus-days-day-1-agricultural-ceus-tickets-598640970257

6 CEU's in total
- 3 CORE 487 or 482
- 3 Private, Ag Animal, Ag Row Crop, Ag Tree Crop, Ornamental & Turf, Soil & Greenhouse Fumigation, and Demonstration and Research

Day 2 July 14

Registration day 2
https://www.eventbrite.com/e/polk-county-ceus-days-day-2-structural-landscape-ceus-tickets-598665934927

6 CEU's in total
- 3 CORE 487 or 482
- 3 Private, LLO, LCLM, LUF, Limited Structural, Ornamental & Turf, and Demonstration and Research

Day 3 July 21

Registration day 3
https://www.eventbrite.com/e/polk-county-ceus-days-day-3-nat-areas-aquatics-forestry-row-ceus-tickets-598678873627

6 CEU's in total
- 3 CORE 487 or 482
- 3 Private, Aquatic, Forestry, Natural Areas, Right-Of-Way, Ornamental & Turf, and Demonstration and Research

University of Florida is an Equal Opportunity Institution

Don't miss your opportunity to earn CEUs towards your restricted use pesticide license! Scan the QR code to register

CRAFT Re-opens Application Window for Existing Tree Therapies Program

Tamara Wood, Program Manager for the CRAFT Foundation released the following announcement on June 6, 2023 regarding the Existing Tree Therapy program:

We are pleased to announce that the Citrus Research and Field Trial (CRAFT) Foundation has reopened the application window for our Existing Tree Therapy program. The program is designed to provide the industry with a better understanding of the best use patterns, combinations, and timing of newly developed therapies. Eligible therapies have shown promise in restoring health and improving juice quality and quantity, as well as fruit retention in Florida.

The Existing Tree Therapies Program focuses on four primary therapies used on existing plantings, including giberellic acid, 2,4-D, brassinosteroids and the direct systemic application of approved antimicrobials such as oxytetracycline. Existing groves between 10 and 250 acres that will be treated with one or a combination of the aforementioned therapies will be eligible for application into the program. A control area of at least 10 untreated trees must be included in the application. This control may be contained within the treated block, or in an adjacent, similar block. Much like the original CRAFT new planting program, participants will be required to submit related production records and yield data to the CRAFT-USDA Data Portal as a part of the program. In exchange for their participation, growers will receive payments totaling $350 per acre over the course of their three-year agreement.

The application will be open until 5:00 p.m. on August 31, 2023. Participants will be selected through a random lottery, administered by a third-party entity.

If you previously applied for the Existing Tree Therapies program and were not selected in the first lottery, your original application will automatically be reentered into the new lottery pool. If you do not wish to have your prior application considered for the new round, please contact Tamara Wood at tamara@craftfdn.org.

Interested growers can apply for the Existing Tree Therapies program now at www.craftfdn.org. Additional rules and information can be found online at www.craftfdn.org or by calling Program Manager Tamara Wood at tamara@craftfdn.org, or Assistant Program Manager Tina Buice at tina@craftfdn.org.
More information on the next round of the traditional CRAFT New Planting program will be provided at a later date.

Tamara C. Wood
CRAFT Foundation, Inc.
Program Manager
863.698.9276

Upcoming Events

Online Citrus Seminar - July 19, 2023

Coordinator: Dr. Mongi Zekri, Multi-County Citrus Extension Agent, UF-IFAS, SW Florida
Date & time: Wednesday, July 19, 2023, 10:00 AM – 11:00 AM **Location:** Online only via Zoom
Title: Using optimal fertilization and frequent irrigation for managing HLB-affected trees
Speaker: Dr. Davie M. Kadyampakeni, Assistant Professor in Soil and Water Sciences at the UF-IFAS Citrus Research & Education Center in Lake Alfred

Use of elevated macronutrients such as calcium and magnesium increase canopy size and fruit yield in HLB-affected Valencia oranges. Elevated micronutrients such as zinc, boron, manganese and iron increase root density, fruit yield and juice quality.
-Frequent irrigation keeps nutrients in the root zone and improves water and nutrient uptake.
-Using soil moisture sensors that measure water, salinity and temperature together, improve water and nutrient uptake on HLB endemic groves.

To register and attend via Zoom, here is the Zoom link:
https://ufl.zoom.us/j/96708178098?pwd=bmgzNnRwSGN0enMyVEs5ZzJrMExXdz09
After registering, you will receive a confirmation email containing information about joining the Zoom meeting.
Coordinator: Dr. Mongi Zekri, UF-IFAS, maz@ufl.edu
1 CEU for pesticide license renewal and 1 CEU for certified crop advisors

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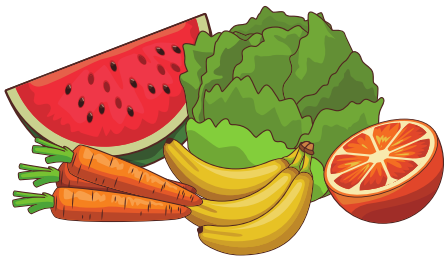
Produce Safety Rule Online Grower Training - August 15 - 17, 2023 (2:30pm - 5:30pm daily)

WHO SHOULD ATTEND
Fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety are encouraged to attend. The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement.

The course will include remote delivery over three days. Each day, trainers will spend approximately three hours of instruction time covering content contained in these seven modules:
• Introduction to Produce Safety
• Worker Health, Hygiene, and Training
• Soil Amendments
• Wildlife, Domesticated Animals, and Land Use
• Agricultural Water (Part I: Production Water; Part II: Postharvest Water)
• Postharvest Handling and Sanitation
• How to Develop a Farm Food Safety Plan



In addition to learning about produce safety best practices, key parts of the FSMA Produce Safety Rule requirements are outlined within each module. There will be time for questions and discussion, so participants should come prepared to share their experiences and produce safety questions.

Click here to register on Eventbrite. Cost $30

Upcoming Events

Citrus and Specialty Crop Expo - August 16-17, 2023

The annual Citrus and Specialty Crop Expo will be held in a new location this year, the Florida State Fairgrounds in Tampa. Take this opportunity to come out, talk with vendors about their products, mingle with friends, and listen to educational seminars. The seminars are currently being planned and agenda information will be available soon. Registration is now open and hotel information is available on the event website https://citrusexpo.net/

Location and Address: Florida State Fairgrounds
4800 US-301
Tampa, FL 33610

Dates and Times: Wednesday, August 16, 2023 8:00 a.m. – 6:00 p.m.
Thursday, August 17, 2023 8:00 a.m. – 2:00 p.m.

Packinghouse Day - August 24, 2023

Currently in its 62nd year, Citrus Packinghouse Day provides information on all matters of interest concerning the harvesting, packing, and shipping of fresh citrus fruit. Shared subject matter from leading members of industry and scientists from Universities and Government Organizations, includes emerging information of critical relevance to industry and topics of general interest. This event is free to attend, with an option to purchase a lunch ticket for $10.

Location:
UF/IFAS Citrus Research and Education Center
700 Experiment Station Rd.
Lake Alfred FL, 33850

Time:
8:30am - 2pm

Click here to Register on Eventbrite and for more information about the event

UF IFAS
UNIVERSITY of FLORIDA

Fall Course Opportunity

CITRUS PEST *Management*

August 23 to December 06

EVERY WEDNESDAY
3 PM - 6 PM

Course Overview

The course provides a comprehensive overview of citrus pests and how best to manage them in today's HLB environment. The content covered is ideal for students and citrus industry personnel working in the area of pest management. The class will be available in-person or online (synchronous).

Course topics include:

- **Identification and biology of citrus pests and diseases**
- **Pest and disease monitoring**
- **Ecological and economic principles as a basis for pest management**
- **Economic thresholds and management models**
- **Integrated pest management in citrus**
- **Citrus IPM in the HLB-era**

How to register

Students are strongly encouraged to register early.

Graduate Students (3 credit hours)
Register online via one.ufl.edu by 5:00 PM on August 22, 2023.

Non-Degree Seeking Students (non-credit)
Registration is open until 5:00 PM on August 22.
Please contact Dr. Larry Duncan
863-956-8822; lwduncan@ufl.edu to register.

RUP and CCA CEUs will be requested.

Cost

The cost of the course is $1,510.32. State tuition waivers are accepted. Citrus industry employees are encouraged to inquire if their employer will cover the cost of the course.

FOR ADDITIONAL INFORMATION, PLEASE CONTACT DR. LARRY DUNCAN
863-956-8822; LWDUNCAN@UFL.EDU.

2023 July/Aug/Sept Weather Outlook

BY CHRIS OSWALT

The National Oceanic and Atmospheric Administration (NOAA) has recently published its latest weather outlook for July/Aug/Sept, and the outlook for temperature and rainfall is particularly noteworthy. According to the outlook, there is a higher probability of above-normal temperatures during this period (as indicated in figure 1). This means that we may expect to experience warmer temperatures compared to what is typically seen during July/Aug/Sept.

The outlook for rainfall (depicted in figure 2) also presents a different picture, with a leaning to above-normal rainfall. This suggests that we may receive about normal amounts of rainfall than would be typical for July/Aug/Sept.

The El Niño Southern Oscillation (ENSO) forecast also plays a crucial role in shaping the weather outlook for this period. Currently we are under strongly building El Niño conditions. The forecast is for existing El Niño conditions to gradually strengthen into the winter of 2023-24.
In conclusion, the latest NOAA weather outlook for the July to Sept 2023 period suggests that we may experience warmer temperatures and above rainfall than what is typical for the period although the U.S. Monthly Drought Outlook has dry conditions abating for peninsular Florida for the July to Sept time period.

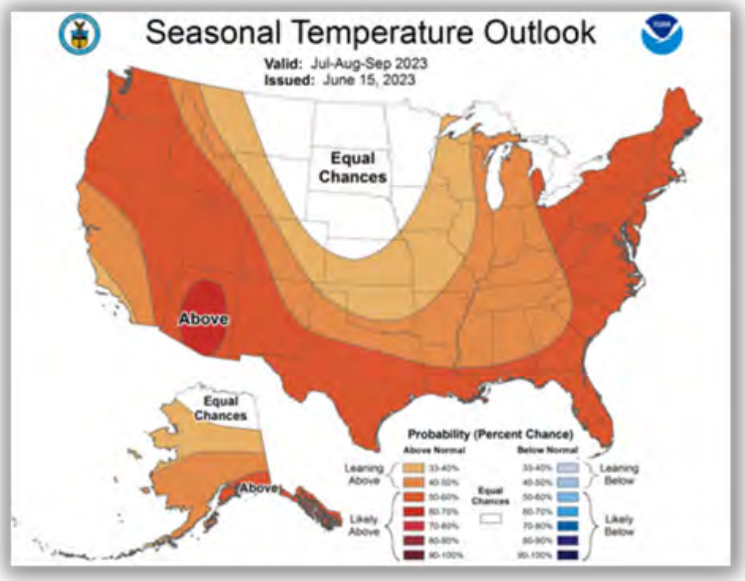


Figure 1. July/Aug/Sept 2023 temperature outlook

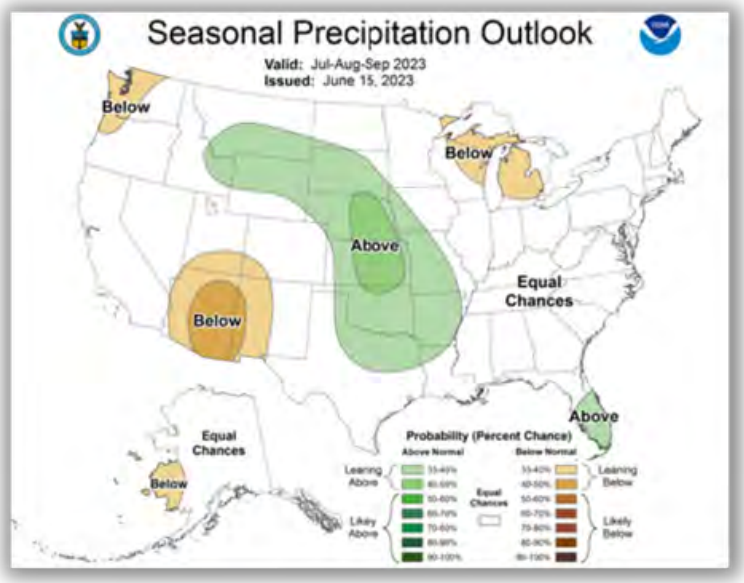


Figure 2. July/Aug/Sept 2023 precipitation outlook

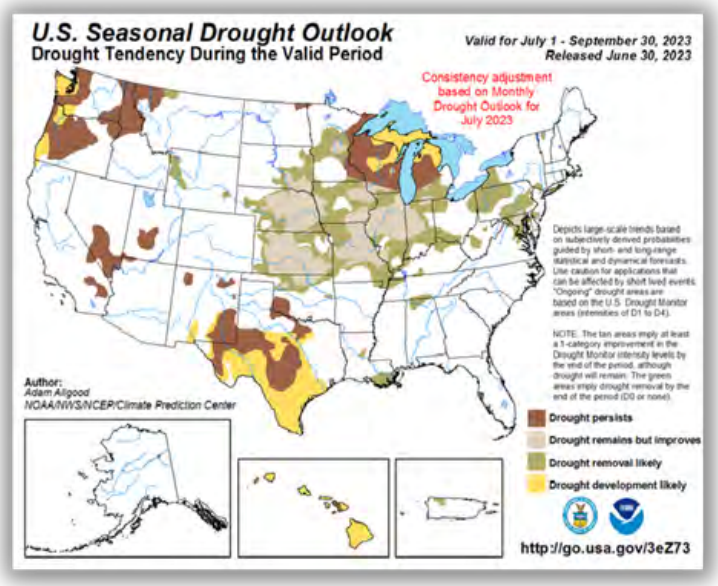


Figure 3. July/Aug/Sept 2023 drought outlook

2023 Hurricane Outlook Update

BY CHRIS OSWALT

The recently updated 2023 hurricane forecast from Dr. Phillip Klotzbach, Colorado State University, Tropical Weather & Climate Research was released on July 6, 2023. Based on the current conditions it looks to be now an above average hurricane season. This would seem out of the ordinary since the El Niño Southern Oscillation (ENSO) has formed as of the NOAA June 8, 2023 ENSO update. In El Niño years you get the typical zonal flow of air aloft causing to some degree issues for hurricane formation and intensification. El Niño looks to be developing with above average seas surface temperatures greater than expected. With having said all this the following table looks at CSU's forecast and the past 30 year or so average.

Forecast Parameters	CSU Forecast 7/6/23	CSU Forecast 4/13/23	Average for 1991-2020
Named Storms	18	13	14.4
Named Storm Days	90	55	69.4
Hurricanes	9	6	7.2
Hurricane Days	35	25	27.0
Major Hurricanes (3,4,5)	4	2	3.2
Major Hurricane Days	9	5	7.4

2023 Hurricane Outlook Update, ctnd.

BY CHRIS OSWALT

So in an effort to bring the probabilities a little closer to our geographical area CSU provided the following information for the state of Florida. For one or more storms there is a 91% probability of at least one named storm coming within 50 miles of Florida, a 63% probability of a hurricane and a 3% probability of a major hurricane. This compares to the climatological average (1880-2020) of at least one named storm at 86%, 56% for a hurricane and 29% probability of a major hurricane. Getting further specific we can look at the probabilities at the coastal counties nearest to our area (7/6/23 update):

2023 Forecast Probabilities (%)						
County	2023 Named Storm	2023 Hurricane	2023 Major Hurricane	Named Storm	Hurricane	Major Hurricane
Pasco	42	20	6	36	17	5
Hillsborough	42	21	8	36	17	7
Manatee	43	22	9	37	18	8
Sarasota	42	20	10	36	17	8
Charlotte	44	20	12	38	17	10
Lee	46	22	14	40	18	11
Brevard	49	20	7	42	17	6
Indian River	43	20	7	37	17	6
St. Lucie	42	18	7	36	15	6
Martin	44	21	8	38	17	7
Palm Beach	49	25	11	42	21	9

Storm activity by month of the year, using Bartow and out 60 nautical miles to determine the following numbers. (1852 to 2017). Based on the historical storm record the months of August, September and October are the busiest using Bartow in this example.

Month of Year	Number of Storms
January	0
February	0
March	0
April	0
May	1
June	8
July	4
August	23
September	24
October	24
November	6
December	1

THOSE PESKY Weeds!

UF IFAS Extension UNIVERSITY of FLORIDA

By: Ajia Paolillo and Dr. Ramdas Kanissery

CLUSTERED PELLITORY

Parietaria praetermissa

Photo Credit: Hardee County grower

Description

Clustered pellitory is a recently established weed in citrus groves. It is native to Florida and other areas in the southeastern United States. Also sometimes called white pellitory, this plant is part of the nettle family and is described as a trailing herb. It prefers a moist shaded environment to grow, which is why it can easily establish and spread under citrus trees in the wetted zone. Not only will this weed rob the tree of water and nutrients, it can also interfere with microsprinkler irrigation. This plant is somewhat low growing, typically about 8 inches tall, but can reach heights of up tp 22 inches. The stems can be pink or green and are herbaceous, meaning non-woody. Small green flowers grow from the leaf axils, where the leaf attaches to the stem.

Photo Credit: R. Kanissery, UF/IFAS

Life Cyle

Clustered pellitory is an annual weed which emerges in the winter and flowers between winter and early summer. Seeds are produced from the flowers located on the stem and at the leaf axils. Each season large quantities of seeds are released and their tiny size make them easily dispersed by the wind, vehicles, and other machinery used in the grove.

Control Methods

Timely weed control implemented before the plants produce seeds can be very effective in limiting the spread of the weed. However, this may be difficult to achieve in the grove. Begin with good sanitation practices of equipment and personnel to limit the movement of seeds from block to block. Use caution when mowing weeds which have begun to seed, as this will aid in dispersing the seeds over a larger area. Discing can incorporate the seeds into the soil, adding to the weed seed bank. Chemical control methods can be used in addition to sanitation to provide more effective residual control. For already emerged plants, glufosinate ammonium products applied with surfactants recommended by the product label can offer good burn down control. Use label rates provided by the manufacturer. After emerged plants have died, apply a pre-emergence herbicide combination of flumioxazin (6 oz/ac) + indaziflam (3 oz/ac) to the bare soil to prevent further seed germination.

For more information on Clustered Pellitory please refer to EDIS document "Identification and Management of Clustered Pellitory (Parietaria Praetermissa) in Citrus Groves."
https://edis.ifas.ufl.edu/publication/HS1341

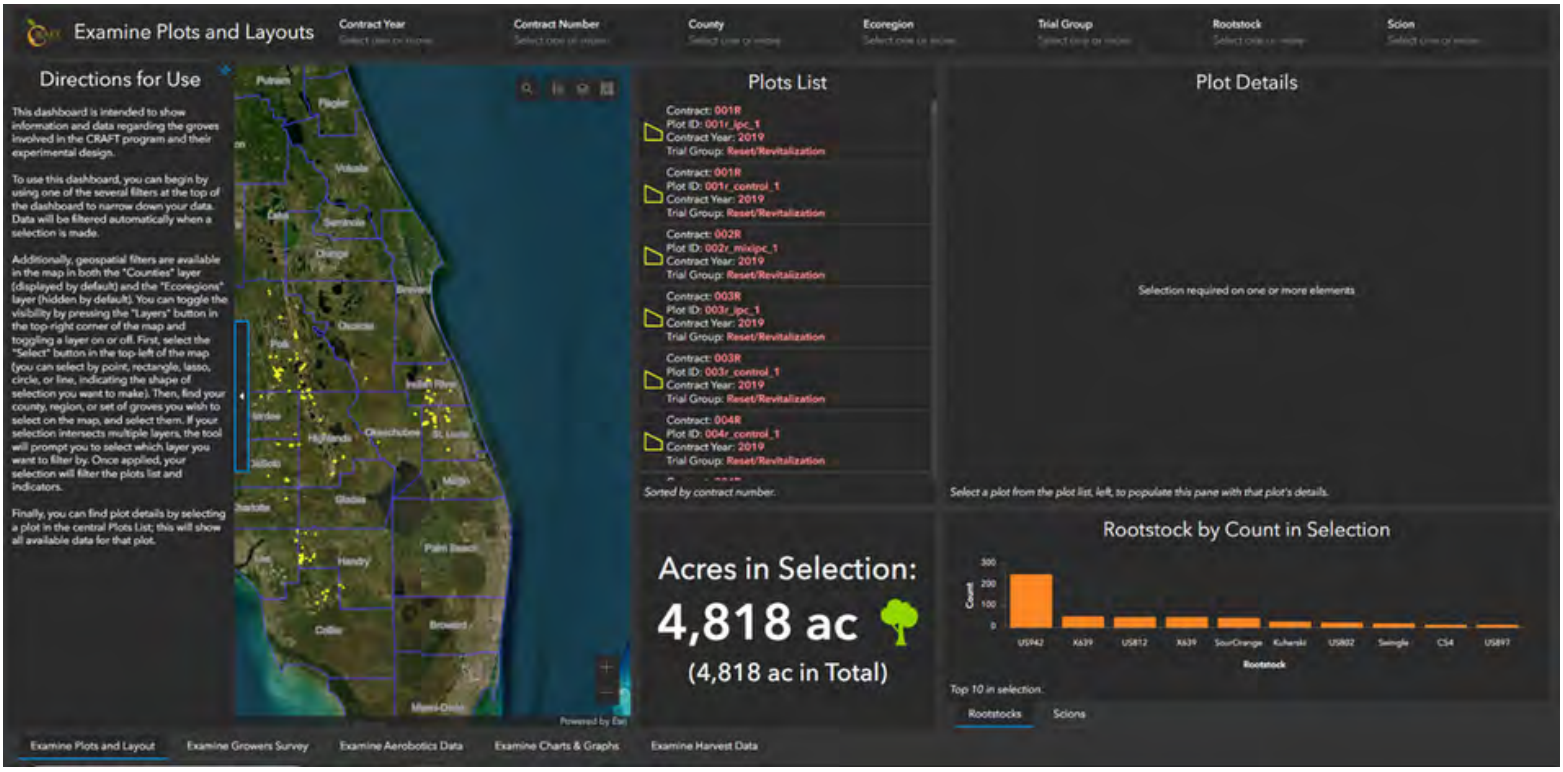
For a list of herbicides labeled for use in Florida citrus please refer to the 2022-2023 Florida Citrus Production Guide https://edis.ifas.ufl.edu/publication/cg013

Exploring the CRAFT Foundation's Public Dashboard

BY AJIA PAOLILLO

Most growers have heard of the Citrus Research and Field Trial Foundation, Inc. (CRAFT), and many growers have field trials, called plots, through the program. Growers are required to enter data from the plots on a timely basis through an online portal. Recently I was looking around on the CRAFT website and I discovered the “Public Dashboard”, which houses the data that has been submitted and can be viewed by anyone looking for information on the field trials. Below is a screenshot of the dashboard when you first enter the page, which defaults to “Examine Plots and Layouts” an option listed down towards the bottom of the page. From this point, users can navigate through many different categories to view data on each plot or a group of plots.

At the top of the page, users can sort and view plots based on contract year, contract number, county, ecoregion, trial group, rootstock, and scion. Each of these categories provides the ability to select one or more options to broaden or narrow down the data to view. The “Contract Year” will show selections by year, which corresponds to the CRAFT Cycle I, II, or III, in which the plot was enrolled. The “Ecoregion” allows users to see all plots in one area, for example, the Southeast Florida Flatwoods. The “Trial Group” allows a user to view plots within groups such as scion/rootstock or fertilizer/nutrition in which treatments are evaluated. Plot locations and boundaries are displayed on the map on the left of the page. Users can also select from the Plots List in the center of the page to view details on specific plots.

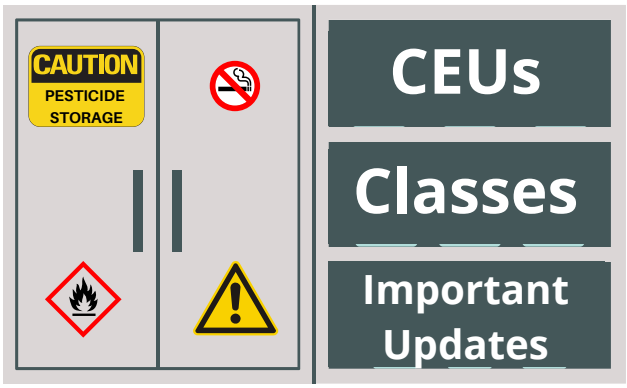


Exploring the CRAFT Foundation's Public Dashboard, cntd.

BY AJIA PAOLILLO

At the bottom of the page, users can view information relating to the grower's survey, aerobotics data, charts and graphs, and harvest data. Directions for use and an explanation of the data shown for each of these options can be found to the far left of the screen. If it is not displayed, simply click on the arrow to view this information. The grower survey gives specific information on the plot such as treatment, tree spacing, pesticide use, fertilizer use, and related costs. The aerobotics data is shown for selected plots only and reports data for tree canopy density and color relating to tree health. The charts and graphs summarize data based on user selections of data to view and provide total acres, number of experimental units by rootstock, and average production costs by category. Since the oldest trees are between 3-4 years old, from Cycle 1, harvest data is limited but is currently reported for approximately 18 plots. Harvest data includes total harvest yield, pre-harvest fruit drop, boxes per acre, and acid/brix ratio.

Information on plots is updated frequently as growers submit their data for each site. Growers and stakeholders can utilize the information on this dashboard to follow the trends in each group/treatment to view and compare data in many ways depending on their needs. For more information, please visit the CRAFT website at https://craftfdn.org/ .



The Pesticide Cabinet

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

CEU Article Update!

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

Important Note: Beginning February 2023, CEU articles will no longer be available in the printed copy of Citrus Industry Magazine. The articles and tests will only be available online at the above website. However, these past issues from 2022 still have printed articles that are eligible for CEU credit until their expiration date which is one year from the publication date:
August 2022, & November 2022.

Need CEUs?

We will be hosting the 2023 South Central Florida CEU's Days in July. For three consecutive Fridays, classes will be offered to fulfill CEU requirements for a variety of licenses and categories. See the flyer in the front of this newsletter for more information and to register.

Looking for another way to learn your Core Exam material?

We have created a series of videos titled "The Right Dose" that are available on YouTube discussing each of the nine chapters found in the General Standards Core Exam Study Manual "Applying Pesticides Correctly" , The videos are available in both English and Spanish "La Dosis Correcta" and can be viewed at your convenience.
Please scan the QR code to access the links to the videos.

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