HIGHLANDS COUNTY CITRUS GROWERS President's Column by Aaron Nelson

Spring is upon us and work in the groves goes from a slow crawl in the winter and early spring to wide open in March, April and May. Post bloom sprays, dry fertilizer, liquid fertilizer, herbicide, lots and lots of irrigation and let's of course not forget about trunk injections! I like the spring. The chance to raise another crop from bloom to harvest is exciting to me. Spring also means turkey season; but I'll stay on topic!

One of the things we like to talk a lot about in the spring is the bloom. These conversations generally end in more questions than answers. Is this the main bloom? How many waves will we have? These are just a few of the questions we always ask during this time. The observations I'll share in this column are about this year's bloom period and will be very similar to the conversations around bloom that we've all had... ending in more questions than answers.

We had two major waves of bloom, neither of which were very heavy. The first wave was a few weeks later than last years first wave which was largely open flowers in late January. I noted this year's first wave being mostly open flowers in mid-February. The second, lighter wave, was open in early March. Once open, neither of the two blooms persisted for very long.

The temperatures in February and March were extremely warm, possibly expediting the bloom period. I, like many of you have noticed over the last several years the lack of nectar in the flowers. I don't know what this means for fruit set but I imagine there are some hungry bees out there. I can't help but wonder what role did reduced leaf canopies from Hurricane lan play in bloom intensity? It's easy to imagine that the trees would prioritize regrowing leaves and roots the first spring after a hurricane rather than pushing a heavy

bloom. I know there's got to be a more sophisticated answer to this question but I'm not going to pretend I know what it is!

MAR 2023

- Tree & Crop Insurance
- New Varieties Update
- Immune-Mediated Disease Lessons
- FL Citrus Show
- Citrus Expo
- National OJ Day
- FL Farm Bureau CARES Program
- OJ Nutrition
- Citrus Industry Conference
- Association Emails
- Ag Literacy Days
- HCCGA Golf Day
- Wedgworth Leadership Inst.

One big positive this bloom period was the relatively low incidence of PFD. There were some seriously foggy mornings but the rains that more efficiently spreads the disease, stayed largely at bay this year. A big outbreak of PFD can be devastating and it was the last thing we needed after a year in which we saw a freeze, a monster of a hail storm, and two hurricanes.

To me, the big question now is can the new therapies that we have available to us help to mediate the drops and restore some internal quality? The answer to that question remains to be seen but I am optimistic. We've all thought to ourselves at one point or another "if we could harvest all of the pieces of fruit that we set, we'd be in good shape!". This year is no different, even if the crop looks light. If we can harvest a better percentage of the fruit we are setting now than in years past, we will be moving in the right direction. Time will tell what kind of crop we ultimately harvest. In the meantime, we must put our heads down and do the hard work that this time of year brings.

All the best,

Aaron Nelson



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2023 Calendar of Events

April 13 Florida Citrus Show @ UF/IFAS IRREC and USDA Hort. Research Lab in Ft. Pierce

> April 27 HCCGA Golf Day @ SUN N LAKE Golf Club, Sebring

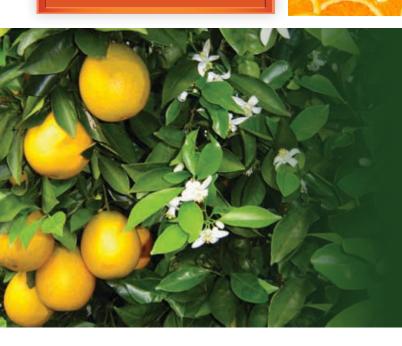
> > May 4 National OJ Day

June 14-16 Annual Citrus Conference @ Bonita Springs

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

December 9 2023 HCCGA Citrus Fun Shoot @ Quail Creek

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



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Federal legislation that would authorize USDA Secretary Vilsack to create a Block Grant program to address Hurricane Ian relief has strong bi-partisan support, and will hopefully make its way through both Houses of Congress in the next 4-6 weeks, after their Easter break, according Florida Citrus Mutual's CEO Matt Joyner. There was funding appropriated in December, but that omnibus legislation did not have the proper language to allow the USDA to move forward with such a program according to their legal counsel. On a parallel track, Citrus Mutual also continues to push for the expansion of USDA's Emergency Relief Program to add natural disasters from 2022 to that 2020-2021 program.



A complicating factor to moving the authorizing legislation through the House of Representatives is the Republican Leadership's return to *"regular order"* which requires committee hearings, multiple votes, etc. So the *"process"* is certainly taking much longer than anyone would like, but there is well founded optimism that ultimately a program will be put in place for active citrus growers. Helping is the fact that we have allies across the nation, as no other agricultural commodities have been able to access the natural disaster relief funds appropriated in December yet either.

Our Association's Golf Day, which is annually sponsored by our good friends at **Heartland National Bank**, is coming up relatively soon on the afternoon of Thursday, April 27th. It should be another great fellowship event, so check out the info in this newsletter if you have any interest in joining the fun.

Citrus Expo 2023 is scheduled for August 16th & 17th. The planning for the Expo, and its educational seminars, is now underway. Seminar topics and speakers will be discussed by a planning group very soon – so it is not too late to offer suggestions if you feel there is a topic that is important to be covered during Expo – just give me a call and let me know.

I want to remind everyone that the Association is utilizing its social media presence more and more through Facebook, Twitter and our blog. Please take advantage of these venues in order to keep up to date on a wide range of topics associated with citrus and agriculture in Florida. Please also encourage your friends and neighbors to follow us on these sites – we are trying to expand our reach and communicate the good stories that our industry has to share. And finally, if you have some content you would like to see get some social media coverage – get it to me.

Speaking of social media, I would encourage each and every one of our members to do something on social media, or elsewhere, on Thursday, May 4th for **National OJ Day**. Take an active role in helping to promote our wonderful product.

I want to remind our grower members that there are at least three governmental entities that you need to make sure you are annually staying current with: the Highlands County Appraisers office, the USDA Farm Service Agency office in Okeechobee and the Highlands Soil & Water Conservation District office at the Bert Harris Ag Center. Having the correct information about your operation on file with these folks can either save you some money or potentially result in you gaining some cost share or grant assistance. So please make it part of your routine to check in with the folks in these offices at least once a year.

Our goal is to keep our members as informed as possible on a wide range of issues, so please never hesitate in contacting me day or night (cell: 863-381-8551) for additional information if you need it; or if I can be of any assistance in any matter, large or small. And remember that if you are not getting very regular e-mail updates from us - please let us know right away.

Thanks, Ray

Info Notes

2022-2023 Florida Citrus Production Guides

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

2022 Florida Citrus Growers' Institute Presentations Online

The 2022 Florida Citrus Growers' Institute was held on April 5th at the South Florida State College Avon Park campus. The educational presentations were recorded and are available online at the citrus agent's website: *https:// citrusagents.ifas.ufl.edu/archived-presentations/2022/*. Here you will also find PDF versions of the slides.

UF/IFAS Podcasts for Growers

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

"Florida OJ Break" License Tags

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



Sales Tax Exemption Forms for Ag Uses

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

UF/IFAS Research Website

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

UF/IFAS OJ Break Programs

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

Restricted Use Pesticide Exams

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

FDOC Webinars

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



Tree & Crop Insurance Deadline - April 15th

The final date to apply for Florida citrus tree and fruit crop insurance coverage for the 2023 crop year is **April 15**. Current policyholders who wish to make changes to their existing coverage also have until April 15th to do so.

Federal crop insurance is critical to the farm safety net, according to the U.S. Department of Agriculture's Risk Management Agency (USDA RMA). It helps producers and owners manage revenue risks and strengthens the rural economy. Coverage is available for avocado trees and mango trees in Miami-Dade County; carambola trees in Lee and Miami-Dade counties; lemon trees in Collier, Glades, Hardee, Hendry, Indian River, Martin, Polk and St. Lucie counties; lime trees in Lee and Miami-Dade counties; and grapefruit trees, orange trees and all other citrus trees (Murcott, tangelo and tangerine) in select Florida counties.

Fruit coverage is available for grapefruit, mandarins, oranges, tangelos, tangerines and tangors in select Florida counties; lemons in Collier, Glades, Hardee, Hendry, Indian River, Martin, Polk and St. Lucie counties; and limes in Lee and Miami-Dade counties.

Growers should contact their insurance agents to see if their counties are covered, and to learn specific details for the 2023 crop year. Policies are sold and delivered solely through private crop insurance agents.

In 2018, University of Florida Institute of Food and Agricultural Sciences economist Ariel Singerman reported that most citrus crops and trees in Florida are covered by crop and tree insurance at some level. See that report at: *https://citrusindustry.net/2018/02/16/vast-majority-of-florida-citrus-is-insured.*

Source: USDA RMA



New Varieties Program Update

The Florida Citrus Commission on March 15 heard an update on four sponsored projects under the New Varieties Development and Management Corp. (NVDMC). Peter Chaires, NVDMC executive director, provided the updates:

1. The primary effort of the U.S. Department of Agriculture Agricultural Research Service's Citrus Scion Breeding Program is to select varieties throughout the 2022–23 season that have commercial potential. To date, ARS has made 24 preliminary commercial quality selections that will require additional evaluation.

2. Postharvest evaluations of promising new fresh citrus fruit selections are testing for external quality, internal quality and shelf life during storage. Mark Ritenour with the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) is running those evaluations.

3. The UF/IFAS Citrus Research and Education Center has identified 10 early-maturing Vernia clones; three of which showed superior health after nine years in the field with no psyllid control. They have all been propagated for further study.

Additionally, two early-maturing OLL clones were propagated and offer real potential to replace Hamlin. Fourteen high-soluble-solids OLL clones were identified as well as two 20-year-old Hamlin trees in the Orie Lee Alligator Hamlin block. DNA fingerprint analysis indicates that both Hamlin trees were on two unique and unidentified zygotic rootstocks. Both Hamlin lines and the OLL lines have been propagated for further study. Multiple crosses have yielded embryos that currently are in tissue culture, and in various stages of development.

Also, two W. Murcott+FG300 and W. Murcott+UF-03 were rescued by grafting. Pathogen-free trees will be produced and planted in a protective structure for use in future breeding efforts. These two parents transmit superior fruit quality traits to triploid progeny, including external fruit color, good size, flavor and the zipper-skin trait.

4. The evaluation of seedling population by UF/IFAS has made six additional selections since October 2022 that are being evaluated. Trees are being grown out in a quarantine greenhouse and will be planted in a replicated test at the teaching orchard/grove in Gainesville in the spring of 2023.

Source: Florida Department of Citrus



Lessons Learned From HLB as an Immune-Mediated Plant Disease

By Nian Wang

How the huanglongbing (HLB) pathogen *Candidatus* Liberibacter asiaticus (*C*Las) causes damage to infected citrus trees has been widely debated. A recent study demonstrates that HLB is an immune-mediated plant disease (Ma et al., 2022). It was discovered that *C*Las infection of citrus stimulates systemic and chronic immune response in phloem tissues, including reactive oxygen species (ROS) production, callose deposition and induction of immune-related genes.

Research has provided evidence that phloem cell death is the key for HLB symptom development, which primarily results from excessive and chronic immune response such as ROS production triggered by **C**Las. This discovery is supported by many other studies and grower observations, including the following:

- CLas lacks homologs of known pathogenicity factors that are directly responsible for causing HLB disease symptoms (Ma et al., 2022).
- Suppressing CLas-triggered ROS production with antioxidants (uric acid and rutin) and immunoregulators [such as gibberellic acid (GA)] mitigates phloem cell death and HLB symptoms.
- Some citrus cultivars, such as Valencia sweet orange, Vernia and Sugar Belle, demonstrate improved tolerance against HLB with horticultural approaches including optimized nutritional programs.
- HLB-tolerant cultivars such as Persian triploid lime contain higher levels of antioxidants and antioxidant enzyme activities than more susceptible cultivars such as Mexican lime (Sivager et al., 2021).

This work is consistent with the results of other University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) researchers.

The finding of citrus HLB as an immune-mediated plant disease provides useful information to guide the battle against this notorious disease. Both horticultural and genetic approaches that suppress ROS damages and promote plant growth can alleviate the harms of HLB to citrus trees.

HLB, Con't from page 7

INTEGRATED HORTICULTURAL APPROACHES

Antioxidants, nutrition and immunoregulators are commonly used to treat human immunemediated diseases by halting or reducing ROS-mediated cell death. Optimized fertilization with macronutrients (nitrogen, phosphorus and potassium), micronutrients and irrigation, along with treatment with antioxidants and hormones can help alleviate HLB damage. For the integrated horticultural approaches, it is important to note that nutrition deficiency, salinity stress and drought cause more ROS production, which will further increase the ROS level triggered by *C*Las.

It is also important to note that a tradeoff relationship exists between growth and immunity in plants (e.g., growth usually suppresses immunity and vice versa). Consequently, horticultural approaches used to promote citrus growth suppress the harmful effects of *C*Las, thus alleviating HLB symptoms. This is indeed consistent with grower observations.

Additionally, it is probable to induce the activity of antioxidant enzymes via application of micronutrients [boron (B), iron (Fe), molybdenum (Mo), nickel (Ni) and zinc (Zn)] to reduce ROS damages. Micronutrients are critical for plant growth. Furthermore, B, copper, Fe, manganese (Mn), Mo, Ni, selenium or Zn at suitable concentrations activate endogenous antioxidative enzymes and non-oxidizing metabolism to mitigate ROS damage (Tavanti et al., 2021). Soil application of Mn and Zn, or magnesium (Mg) and B and foliar spray of Mn, Zn, Mg and Mo significantly alleviated HLB symptoms compared to negative controls (Shen et al., 2013; Atta et al., 2021; Zhou et al., 2021). However, the positive effect on HLB management seems to be limited once HLB causes severe damage to trees (Gottwald et al., 2012).

The micronutrients B, Fe, Mo, Ni and Zn have shown to be able to suppress cell death of citrus cells caused by ROS. The application doses and frequency need to be optimized based on scion/rootstock cultivars, local soil composition and environment. Plant growth hormones, such as gibberellin, can promote plant growth and reduce ROS damages. Gibberellic acid (GA) has been shown to inhibit ROS production.

Foliar sprays of HLB-positive *C. sinensis* trees with GA at both 5 milligrams per liter and 25 milligrams per liter or higher have reduced HLB symptoms and promoted citrus tree growth. Tripti Vashisth's UF/IFAS lab has demonstrated the positive effect of GA treatment on fruit production and tree health of HLB-positive trees (Singh et al., 2022).

It is also probable to suppress ROS damages using antioxidants, such as uric acid, which is yet to be labeled on citrus. Many of the horticultural applications are a double-edged sword that need to be tested in groves to minimize putative negative effect on fruit yield and quality.

As shown in a UF/IFAS field trial, trees have performed well in the presence of HLB with optimized fertilization and irrigation. No significant difference was observed between the different treatments and the non-treated control trees one year after the first treatment. As observed before, the treatment effect might take a longer time to show.

See HLB on page 9

HLB, Con't from page 8

A field trial of micronutrients, gibberellic acid (GA) and uric acid was conducted on HLBsymptomatic trees. The trial took place in a commercial citrus grove of OLL-8 on US-942 trees, which were planted in April 2018. The treatments include micronutrients alone, micronutrients + GA, micronutrients + uric acid and micronutrients + GA + uric acid. Nonspray was used as the negative control. The field trial was under an optimal irrigation and fertilization program. There were no significant differences between different treatments.

GENETIC IMPROVEMENT

UF/IFAS has been generating HLB-tolerant citrus cultivars by enhancing plant tolerance of ROS or reducing ROS production triggered by **C**Las using CRISPR and other modern technologies. The CRISPR genome-editing technology is, so far, the most promising technology that enables the generation of non-transgenic disease-resistant citrus plants (for example, non-transgenic canker-resistant Hamlin sweet orange).

For commercialization, it is critical to make non-transgenic citrus cultivars to get regulatory approvals from the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS), the Environmental Protection Agency (EPA) or the Food and Drug Administration (FDA) and to address concerns of consumers. However, it is important to point out that there are still multiple hurdles.

Researchers need not only to knock-out the genes to enable the edited trees to have improved HLB tolerance/resistance, but they also need to make sure the edits will not affect tree growth, fruit quality and yield. Some promising target genes have been identified. Researchers are generating genome-edited plants for the target genes and investigating their phenotypes.

Genome editing is a long process. It takes more than a year to complete the editing of single cells and regenerating into trees. Finally, the time needed for approval is even longer. For example, even though non-transgenic canker-resistant Hamlin lines have been generated, it was estimated that at least three to five years are needed to go through the Florida citrus budwood program, get approval for new citrus cultivar release and obtain federal approvals by APHIS, FDA and EPA.

SUMMARY

In summary, citrus HLB is an immune-mediated disease. Mitigating ROS and promoting new growth can reduce cell death of phloem tissues, thus controlling HLB. Growth hormones (e.g., GA), nutritional modulation (e.g., micronutrients) and antioxidants (e.g., uric acid) have potential to alleviate ROS damages triggered by *C*Las to reduce cell death of the phloem tissue to mitigate HLB symptoms. Growth hormones and nutrients, by promoting new growth, decrease the proportion of dead cells in phloem tissue, further mitigating HLB symptoms. Growers can test these strategies out before HLB resistant/tolerant citrus cultivars are available.

Genetic improvements that enhance plant tolerance of ROS, prevent overproduction of ROS or evade recognition of *C*Las are likely to generate HLB resistant/tolerant citrus varieties. However, this is a challenging and lengthy process that calls for collaborative efforts by all stakeholders.

Nian Wang (nianwang@ufl.edu) is a professor at the UF/IFAS Citrus Research and Education Center in Lake Alfred

The Florida Citrus Show, taking place on April 13th, is introducing a new look, location and format. Complete details about the seminar sessions will be available soon. However, be sure to mark your calendar for the new and improved **Florida Grower Citrus Show**.

CITUS

Now under AgNet Media management, the Florida Grower Citrus Show is introducing a fun new format for the event. This year, the trade show will feature the **Florida Grower Tailgate Party**. Growers will be able to visit with vendors and sample food from more than 50 exhibitors.

Florida

Be sure to stop and visit each vendor! Exhibitors will be competing for the "top tailgater" award. Growers can vote for their favorite tailgate dish, and the exhibitor with the most votes wins. Growers who participate by voting will be entered into a drawing for a prize.

The tailgate hub will be the center of the action. This will be where you can grab breakfast and a coffee in the morning and a BBQ lunch during the tailgate party in between seminar sessions. Try your hand at cornhole while you network with exhibitors. There is no better place to casually and comfortably network with your fellow growers.

The tailgate party will take place on April 13th in Fort Pierce in the parking lot between UF/IFAS Indian River Research and Education Center and the USDA Horticultural Research Laboratory.

Registration is complimentary for commercial growers, farm owners and managers, professional crop advisers, association executives and board members, and the government, legislative, and agricultural research communities.

When: April 13, 2023 Breakfast: 8:00–9:00 a.m. Trade Show: 8:00 a.m.–2:00 p.m. General session: 9:00–11:00 a.m. Tailgate party: 11:00 a.m.–2:00 p.m. Educational sessions: 2:00–4:00 p.m.

Where: Fort Pierce, Florida at the UF/IFAS Indian River Research and Education Center (2199 South Rock Road) and the USDA Agricultural Research Service U.S. Horticultural Research Laboratory (2001 South Rock Road).

To learn more or pre-register, visit the **FL Citrus Show.com** website at: *https://floridagrower.net/2023-florida-citrus-show/*.

Register Now!

FLCitusShow.com

A FRESH NEW LOOK

When: April 13

Where: A new location at the UF/IFAS Indian River Research and Education Center and the USDA Agricultural Research Service, U.S. Horticultural Research Laboratory in Fort Pierce

Highlights: A new condensed one-day format will bring growers more value in the time spent at the event. An extended lunch period will allow networking with peers and vendors, and educational seminars will include a morning general session and afternoon citrus and vegetable sessions.

The Trade Show Is Now a Tailgate Party!

- Visit more than 50 exhibitors
- Enjoy a smorgasbord of mouthwatering eats, and vote for your favorite foods
- Play America's favorite tailgate game!



"I would encourage growers to attend these events so that they can learn from other growers as well as the research community. We can all benefit from sharing our experiences on what is and isn't working in this challenging environment." -Daniel Scott, President Indian River Citrus League

Schedule:

Breakfast - 8:00 – 9:00 a.m. Trade Show - 8:00a – 2:00 p.m. General Session – 9:00 – 11:00 a.m. Tailgate party – 11:00 a.m. – 2:00 p.m. Educational sessions – 2:00 – 4:00 p.m.

THANK YOU SPONSORS!

APRIL 13, 2023

Florida FOWEI



Citrus Expo 2023

Citrus Expo 2023 is scheduled for **August 16th & 17th**, so please reserve these dates on your calendar. Due to the unforeseen closure of the Lee County Civic Center very recently, the 2023 Citrus Expo will be held at the **Florida State Fairgrounds** in Tampa this year.



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

Complimentary attendance and hot lunch is provided both days to bona-fide grove owners and managers, citrus production managers, professional crop advisors, association executives & board members, government and legislative officials and the citrus research community.

Grower input is strongly encouraged throughout the Expo educational seminar planning process, which will get started very soon. So please email your Citrus Expo topic and/or speaker suggestions to either rroyce@hccga.com or CitrusExpo@AgNetMedia.com.

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National OJ Day – May 4th

Just a quick reminder to all of our members and friends that Thursday, May 4th is National OJ Day. You are encouraged to start to think about how, even in a very small way, you can help assist in reminding your friends, neighbors and business associates that Americans have long had a love affair with orange juice. In fact, we drink nearly one billion gallons a year – making it America's favorite 100 percent fruit juice.

We collectively need to promote this day as a great opportunity to raise a glass the great taste and nutritional benefits of 100% orange juice. At the very least, please ask your social media contacts to go to @*OJfromFlorida* on **Twitter** (#OJselfie posts are encouraged) or *www.facebook.com/FloridaOrangeJuice* on **Facebook** and share a fun post about 100% Florida OJ.

Florida Farm Bureau CARES Program

The Florida Farm Bureau CARES program publicly recognizes Florida farmers and ranchers who demonstrate exemplary efforts to protect Florida's natural resources by implementing Best Management Practices. Recipients are awarded a **This Farm CARES** sign to demonstrate to all Floridians that agricultural producers are fully committed to protecting Florida's environment.

Help Farm Bureau continue to formally recognize and share the stories of Florida farmers and ranchers and their efforts to be good environmental stewards by nominating your own farm/ ranch or that of a colleague. The deadline for nomination throughout the state is June 16, 2023.

To nominate a farmer or rancher for their commitment to conserving our state's natural resources for future generations, go to: *https://floridafarmbureau.formstack.com/forms/caresaward2022*.

E-mail any questions regarding the nomination process to: *Thisfarmcares@ffbf.org* or contact the CARES Coordinator at (352) 204-7609.





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Orange Juice Nutrition Benefits

100% Florida Orange Juice is a naturally nutrient-rich beverage that offers many health benefits. Here are some great Florida OJ informational points to share with friends, neighbors, social media contacts, etc.

Nutrient Rich

One 8-ounce glass of Florida Orange Juice provides well over 100 percent of the recommended Daily Value for vitamin C, and is a good source of potassium, folate, and thiamin. Vitamin C may have antioxidant activity and is needed to form collagen, which forms the basis of skin, bones, and tissue. Orange juice has a unique combination of a variety of nutrients to help contribute to overall health when included as part of a well-balanced diet. Consumption of 100% orange juice has been associated with a greater likelihood that adults and children meet intake recommendations for certain key nutrients.

100% orange juice is the only fruit juice or commonly consumed food that contains a significant amount of the flavonoid, hesperidin, a bioactive polyphenolic compound that may have beneficial effects on human health. Emerging research suggests that hesperidin may help maintain healthy blood pressure and blood vessel function and the intake of total flavonoids has been associated with better mental and physical health in women as they age.

Weight Management

One 8-ounce serving of orange juice is fat-free and, at 110 calories per 8-ounce glass, has fewer calories and higher nutrient density than most other commonly consumed 100% fruit juices. Florida Orange Juice is a healthful and nutrient-rich replacement in the diet for many foods and beverages containing added sugars. Whether you are trying to lose weight or maintain your current weight, Florida Orange Juice can be a healthy addition to any weight loss or weight maintenance diet.

Heart Health & Immune System Support

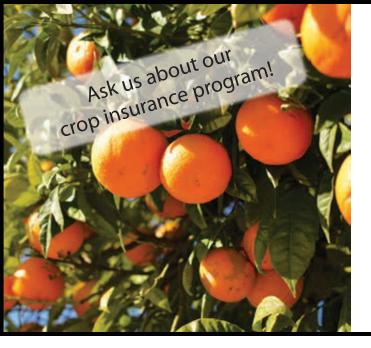
Research suggests that the consumption of Florida Orange Juice may support healthy blood cholesterol levels, blood pressure and blood vessel function, as well as positively impact inflammatory and oxidative stress markers that are associated with the development and progression of cardiovascular disease. An 8-ounce glass of Florida Orange Juice provides vitamin C, plus other nutrients and phytochemicals that may help support a healthy immune system.

Bone and Skin Health & Cognitive Function

Florida Orange Juice has a unique blend of components that may have beneficial effects on bone health from childhood through advancing age. Vitamin C found in Florida Orange Juice can help support collagen production, which is associated with the maintenance of healthy skin and gums. Collagen breakdown in the skin may lead to the appearance of premature aging. Citrus juices, like Florida Orange Juice, may help support brain and cognitive health.

Fruit Intake & Vitamin Absorption

Florida Orange Juice counts as a fruit choice to help meet fruit intake recommendations. Americans, especially children and adolescents, fall well short of meeting fruit intake recommendations. Citrus foods like Florida Orange Juice are high in vitamin C, which may help aid the absorption of non-heme iron (the iron found in plants like spinach, not meat products). Vitamin C-rich foods should be consumed daily to help get the most iron from foods.





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Annual Florida Citrus Industry Conference

Just a reminder to save the dates of June 14th-16th for the Florida Citrus Industry Annual Conference



in Bonita Springs. Florida Citrus Mutual has planned another great conference that will include informative educational sessions with continuing education credits and a number of industry meetings for growers and associated partners to participate in.

There will also be a number of fellowship events, including the return of the Citrus Scramble Golf Tournament, to enjoy and this is an extremely family friendly event and venue if you have not attended the conference at the Hyatt Regency Coconut Point Resort and Spa before.

To learn more, reserve your hotel accommodations or register now for the 2023 Florida Citrus Industry Annual Conference, visit the Citrus Mutual website at: <u>https://flcitrusmutual.com/</u><u>florida-citrus-industry-annual-conference</u>.







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Association E-mails

We want to make sure that all of our members and friends that are expecting to hear from us on a regular basis via e-mail are indeed doing so. You should usually receive several e-mails a week from us in addition to the HCCGA newsletter once a month.

We have occasionally had a few problems with folks not getting some e-mails, and you are strongly encouraged to let us know if you are expecting, and/or wanting, to receive regular e-mail updates from us and are not receiving them.

There could be several reasons if you are not regularly receiving e-mail from us:

One could be that we either do not have an e-mail address for you, or what we have is an incorrect or outdated one. So if you change your e-mail address, please let us know immediately so we can make the changes in our data base.

Another reason could be that your e-mail system may be "bouncing" or "blocking", the messages that come from us due to the e-mail management system we need to utilize. Occasionally it seems that some e-mails are "rejected" or "blacklisted" by "spamcop" or other computer protection services, **especially if you have a centurylink or embarqmail address**. Often this is just a temporary or one day event, but you never can tell. If you normally utilize a **"centurylink or embarqmail"** address but have another e-mail address that you can share with us to use – please do so.

Finally, if you normally receive e-mails from us and something changes, please check your spam folders or filters and see if that helps. Also, never hesitate in letting us know if e-mail communication stops coming so we can collectively work through it.



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

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

Nalk Make

Agriculture Literacy Days

Florida Agriculture in the Classroom, the Florida Department of Agriculture and Consumer Services and the Florida Dairy Farmers created this year's Agriculture Literacy Day book titled **Moovers, Shakers and Milk Makers** that highlights the Florida dairy industry.

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



HCCGA Citrus Connection Advertising rates and specifications



HCCGA produces a monthly newsletter at the completion of each month, and it is published shortly thereafter. The ads you see in this newsletter make it possible for it to be produced and distributed, both in hard copy and electronically. In addition to our membership mailing list, the newsletter is also sent to our entire electronic contact list, which includes firms associated with other agricultural enterprises by e-mail and is archived for one year on the Association's Website: <u>www.hccga.com</u>.

HCCGA Newsletter Advertising Rates

Full Page** - Full Color	\$300.00/month
Full Page** - Black & White	\$225.00/month
Half Page** - Full Color	\$200.00/month
Half Page** - Black & White	\$150.00/month
Third Page* - Full Color	\$1500.00/12 issues
Third Page* - Full Color	\$900.00/6 issues
Business Card* - Full Color	\$500.00/12 issues
Business Card* - Full Color	\$350.00/6 issues
Business Card* - Black & White	\$400.00/12 issues
Business Card* - Black & White	\$250.00/6 issues

* Third page and Business card size ads must be placed for a minimum of six months. ** Half and Full page ads must be placed for a minimum of three months.

Inserts Full Page (8.5 X 11) Insert placement is also available for special occasions. The advertiser provides electronic and 300 hard copy inserts by the first of the month. \$300.00/month

HCCGA Newsletter Advertising Specifications

Full Page 8.5 x 11 inches (with bleed 8.75 x 11.25)
Half Page 8.5 x 5.375 inches (with bleed 8.75 x 5.625)
Third Page 8.5 x 3.5 inches (with bleed 8.75 x 3.75)
Business Card 2.66 x 1.66 inches
Preferred Format for provided ads is high resolution pdf. Eps, jpg, or ai are also acceptable.
Logos should be provided in vector format (eps or ai)
Resolution of provided art should be 300 dpi at actual size in CMYK. **Do not include printers marks (crop marks, etc.) on provided art.**Please embed all fonts or convert to outlines.
If you do not have a graphic designer, that service is available for an additional fee.

2023 HCCGA Golf Day

The Highlands County Citrus Growers Association's annual golf tournament will take place on the afternoon of **Thursday, April 27th**, at the **SUN 'N LAKE Golf Club** in Sebring. So make plans to join us for a fun day of fellowship on the golf course.

A **12:00 PM luncheon and sign-in will precede the 1:00 PM tee off.** Lunch, range balls, on course water-soda-beer, post tournament hors d'oeuvres and a raffle drawing prize ticket will be included in each golfing entry.

The cost is \$100.00 per player (\$400.00 per foursome), and the tournament is open to the public. A four-player team scramble format will be used in the tournament.

Thanks to our friends at **Heartland National Bank** for being the title sponsor of this event again this year. We also appreciate **Highlands County Commissioner Chris Campbell** for his sponsorship of the pre-play luncheon and post play hors d'oeuvres, and **Syngenta** for their sponsorship of the roving beverage cart again this year.

Thanks also go out to our friends **Harvey's Fertilizer, Life Soils, FMC, Carlson Accounting, Somers Irrigation** and **HC Commissioner Scott Kirouac** for sponsoring the six Longest Drive, Closest to the Hole and Closet to the Line contests.

We do still have a couple of sponsorship opportunities available for this event, the Putting Green & Driving Range sponsorships @ \$150.00 each.

Also, if any entity (as **South Ridge Abstract & Title** has already done) would like to provide a quality raffle prize(s) (or contribute \$100.00+ monetarily to do so in their name) for the post play raffle drawings contact Ray or Jan at the HCCGA office.

A tournament registration flier is included in this month's newsletter however; if you need additional info about this event, contact Ray or Jan at the HCCGA office (863) 385-8091 or send your completed registration flier to *admin@hccga.com*.



OUR ADVERTISERS SEE RESULTS! To Discuss Advertising Opportunities Contact the HCCGA Office Today 863.385.8091 or admin@hccga.com

Registration

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MRIUKS

Thursday April 27, 2023

River Greens Country Club Avon Park 12:00 Lunch/Check-In 1:00 Shotgun Start



Heartland National Bank

Team Foursome - \$400.00

Includes 4 players & lunch

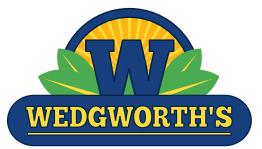
\$50 Gift Certificates Awarded to the winners of special events

Please sign me up for a Team Foursome - \$400.00

Range balls and a participation prize raffle ticket included for all golfing participants

Enclosed is my check for \$	Please Bill Me:
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Phone:	
E-Mail:	E-Mail: admin@hccga.com
Address:	Mail form & check to: HCCGA
	6419 US Hwy 27 S, Sebring, FL. 33876
Player #1	Handicap
Player #2	Handicap
Player #3	
Player #4	

Luncheon & Post Tournament Hors D'oeuvres Complimentary Hot Dogs, Water, Soft Drinks & Beer on Course



Nominations for Wedgworth Leadership Institute Class XII

The UF/IFAS Wedgworth Leadership Institute for Agriculture and Natural Resources (WLIANR) is soliciting nominations for Class XII of its two-year leadership development program.

Utilizing 11 multi-day seminars throughout Florida, the United States, and internationally, WLIANR develops leaders to ensure a strong and adaptable Florida agriculture and natural resources industry for generations to come. WLIANR aims to prepare leaders to assume greater responsibilities in their organizations, industries, and communities; create strategic alliances to build strong networks; analyze complex issues to influence constructive change and to develop a better understanding of self and others, as well as the diverse communities in which we live and work.

To be eligible for consideration, nominees must:

- be at least 25 years old;
- have resided in Florida for a minimum of one year;
- receive a substantial portion of their income from Florida agriculture, natural resources, and/or related industries;
- and demonstrate strong leadership potential.

Self-nominations are accepted. Nominations close **June 1** and applications are due no later than **June 15**. Class XII will begin in Gainesville in November 2023. To learn more about WLIANR and to submit a nomination, visit *wedgworthleadership.com*.

The University of Florida Institute of Food and Agricultural Sciences and Southeast AgNet have partnered to provide the latest news on citrusrelated research in monthly podcasts at: *http:// citrusindustry.net/allinforcitrus/* The podcast, "All in for Citrus," features short

interviews with scientists working to find solutions to citrus greening and other devastating citrus diseases. The podcast complements the UF/IFAS Citrus Research website at: *citrusresearch.ifas.ufl.edu*, and their monthly newsletter.



Start each day the citrus way!





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- BRANDT[®] Manni-Plex[®] Cal-Mag high efficiency foliar calcium/magnesium
- BRANDT Manni-Plex for Citrus high efficiency foliar nutrient combo for citrus
- BRANDT Smart B-Mo high efficiency foliar boron/molybdenum
- Celite[®] 610 mechanical insecticide that contains 100% diatomaceous earth, OMRI Listed

Complexed Nutrients: Feed with Dry Lignosulfates

Agra Sol - dry soluble powder chelated micronutrients

Summer Oil Sprays: Foliar Feed and Protect

- BRANDT Smart K B high efficiency foliar potassium/boron
- Nordox[®] 75 WG or 30/30 copper fungicide, OMRI Listed
- TresOil[®] emulsified fungicide/insecticide spray oil, OMRI Listed

For more information, contact J.R. Gough at Jr.Gough@brandt.co or 863 781 0363



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