Welcome to the fifth volume of the Cold Hardy Citrus Connection! Time sure flies when you’re having fun! This quarterly newsletter was started in 2020 to provide information to growers in the cold hardy citrus growing region with relevant information and we hope we’ve been able to do that over the last four years. Please share your suggestions on how we can improve it by taking our short survey. To complete the survey, please use the link here: Cold Hardy Citrus Connection Survey

It appears that this season is already off to a great start with many growers reporting a record bloom. It is encouraging to see after the yields we saw last year. Now is the time to have your pest management and fertility programs in place. If we can help with this, please reach out to us!
2024 Citrus Health Forum Recap
By: Abbey Payne, UF/IFAS Extension Jackson County

The 2024 Citrus Health Forum was held on February 22, at the North Florida Research & Education Center (NFREC) in Quincy, Florida. There were six educational presentations and a tradeshow with 10 booths. This year’s Citrus Health Forum was centered around prevention of citrus Huanglongbing (HLB) or what is known as “Citrus Greening.” This disease is most prevalent in South and Central Florida, but our North Florida growers want to be as prepared as possible in order to help protect the industry in this part of the state.

The first presentation was given by Dr. Renato Beozzo Bassanezi, from Araraquara, Brazil. He is employed through the Fundecitrus (Fund for Citrus Protection) which is an institution that was started in the late 1970s to help support citrus growers and their development in the industry. Dr. Bassanezi presented his research on inoculum reduction in citrus groves. Through his research, he has been able to conclude there are no resistant citrus varieties to the disease and no treatment plan that can eradicate HLB fully or keep the tree’s fruit yield as it was when the tree was healthy. Dr. Bassanezi also recommends removal of diseased trees, with psyllid control on a regional scale within and outside of commercial citrus groves, for ultimate success in attempting to control the spread of HLB. To view Dr. Bassanezi’s presentation, please use this highlighted link: Bassanezi – Inoculum Reduction is Essential for Controlling HLB

Dr. Michael Rogers presented the second topic and gave updates on recent research the UF/IFAS Citrus Research & Education Center (CREC) has performed. He explained that Florida’s initial response to HLB and psyllid control has been scouting, diseased tree removal, and buying trees from protected nurseries within Florida. The CREC’s current research is centered around the root health of diseased trees, adequate fertilization techniques, and tree stress reduction. To view the full presentation, please use the following link: Rogers - Advances in HLB & ACP Research

Our third presentation was provided by Dr. Xavier Martini. Dr. Martini provided the latest updates with specific citrus pests, since the December 2022 freeze event. He touched on how the freeze caused extreme stress in citrus groves, such as defoliation systems which could deter citrus whiteflies, scale insects, and rust mites. But now that trees are beginning to heal from the freeze damage and show new growth, they are more susceptible to citrus leafminers, aphids, and Asian citrus psyllid.
Before the December 2022 freeze, Dr. Martini and his staff scouted 6 sites for citrus psyllid. From these sites, 31 psyllid insects were isolated for observation in Apalachicola, Florida and Bristol, Florida. After 4 days of below freezing temperatures, no psyllids survived in the Bristol location and only one in Apalachicola. Even though the freezing temperatures put a halt on the psyllid population, it did not eradicate the pest completely, as adult psyllids were located at both sites again in April 2023. To view Dr. Martini’s presentation further, please use the following link: Martini – 2024 Citrus Pest Update

The fourth presentation was given by Dr. Muhammad Shahid, based at the NFREC in Quincy. Dr. Shahid presented information on important considerations for the establishment of a new citrus grove. With the boom of beginning farmers entering citrus production, it is important to understand the key things to consider for ultimate fruit crop success. Dr. Shahid touched on grove site selection, recommended irrigation systems, variety and rootstock selections, canopy management, and more. To view Dr. Shahid’s presentation, please use the following link for full access: Dr. Muhammad Shahid - Starting a New Grove

Dr. Davie Kadyampakeni gave the fifth presentation on the topic of improving water management qualities in irrigation for more sustainable commercial citrus production. Dr. Kadyampakeni is an Associate Professor at the UF/IFAS CREC in Lake Alfred, where his research focuses on citrus water and nutrient management. Dr. Kadyampakeni presented the growers in attendance with information on the importance of irrigation management and the tools available that can aid them. There are plant-based and soil-based moisture sensors on the market to help growers adapt their irrigation schedules based off their tree’s needs and the soil they reside in to hopefully save irrigation and fertigation costs over a period of time. Because the soil type is mostly sand in Florida, more information on irrigation management is needed to optimize water usage. Dr. Kadyampakeni’s presentation can be accessed using the following link: Dr. Davie Kadyampakeni - Water and Nutrient Management

After a wonderful lunch, attendees loaded up on trolleys and headed to the research citrus groves on site at NFREC. In the grove, Dr. Shahid and Dr. Fernando Alfrez gave a pruning demonstration and presented information on a new variety they have been evaluating. Dr. Alferez demonstrated for the growers on how to prune a young tree (aged between one to two years old) to open up the canopy naturally to optimize the potential fruit yield.
Growing Cold Hardy Citrus: Essential Tips and Strategies for Planting Citrus

Dr. Muhmmad A. Shahid, UF/IFAS NFREC, Assistant Professor of Horticulture/Fruit Physiologist  
Dr. Shahid Iqbal, UF/IFAS NFREC, Postdoc Scholar, Horticulture Sciences

Citrus is an important fruit crop in Florida with a lot of health benefits and economic importance. Successfully establishing a citrus grove depends on the climate-adoptive cultivar, planting site, and planting method. Properly planting citrus trees is crucial for their long-term health and productivity. Prior to planting, determine the soil characteristics such as pH, fertility, nutrient level, well-drained, and topography. Below are some important considerations to take into account before planting a citrus tree.

- Planting time is very important for establishing a good root system. Planting in the cold hardy region can be done any time mid-April to early August.
- Remove weeds and grass from the planting area.
- Dig a hole about 8-10 inches larger than the root ball of the plant. In commercial settings hole can be dug with tractor or excavator-operated drill (Fig. 1).

![Figure 1. Digging holes and planting citrus. Photo credit: Muhammad Shahid.](image)

- Fill the hole with water.
- Remove the plant from the pot and check the damaged roots.
- Remove any girdling roots or J roots (Fig. 2) before planting. It is very important otherwise trees will experience reduced growth or even death later on.
- Place the plant in water-filled hole to the same level as the top of the root ball. Do not put the bud union (grafting point) below the soil.
- Add the soil back to the hole to fill the air packet under and around the root ball.
- Do not add fertilizer to the hole at the time of planting. Fertilization application should be made after the tree has settled with the soil.
- Check the next day for any air pockets/cracks that may remain. If so, fill them with soil and water.
New plants should be irrigated regularly for an initial 2–3 months for adequate growth.

Install tree wraps, as they provide protection to the tree trunk from applications of herbicides. Additionally, the wraps minimize light interception by trunk tissue thereby reducing sucker growth (Fig. 3).

Figure 2. Plant with J roots (left) and root girdling (right).

After planting, proper management is needed to ensure healthy and vigorous growth. Provide regular irrigation to the plants for an initial 2–3 months, as the plants require it for an established healthy root system and adequate growth. Fertilizer is very important to the newly planted citrus plant as it requires the proper nutrients for its growth. After planting, wait 4–6 weeks before applying fertilizer to allow the plant to acclimate to its new environment. Apply the proper rate of fertilizer according to the age after planting, every 3–4 months. For more information on fertilization, please visit: Nutrition Management for Citrus Trees

Mulching is an important technique to conserve soil moisture, reduce weed growth, and maintain soil temperature. Apply fabric mulch or straw mulch around the base of the plant. Mulching also helps the plant prevent pests and disease and creates a healthier environment for the citrus tree roots. Pruning is also an important technique to care for and manage healthy citrus trees. It promotes healthy growth, improves air circulation, and enhances fruit production. It is important to prune the citrus tree at the proper time with proper equipment. Remove the dead, diseased,
and damaged branches. Prune citrus trees to maintain a balanced and open canopy (Fig 4), allowing proper sunlight and promoting growth.

Figure 4. A diagrammatic representation of correct scaffold branch orientation: outward, like the spokes of a wheel, with no crowding from 5 main branches (diagram on left) rather than forming a full and bushy center (diagram on right). Credits: Timothy Ebert, UF/IFAS CREC.

- New plants should be irrigated regularly for an initial 2–3 months for adequate growth.
- Install tree wraps, as they provide protection to the tree trunk from applications of herbicides. Additionally, the wraps minimize light interception by trunk tissue thereby reducing sucker growth (Fig. 3).

In conclusion, planting a citrus tree successfully involves careful consideration and management of various factors to ensure optimal growth, fruit production, and overall plant health. Key considerations include selecting a suitable site, well-drained soil, and full sunlight exposure, choosing appropriate citrus varieties, and soil preparation. Proper planting techniques, irrigation, mulching, fertilization, and pruning are essential for tree health growth. For any further information such as variety selection, planting, fertilization, plant care etc., please contact Dr. Muhammad Shahid at mshahid@ufl.edu

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Big Yields Expected in 2024

By: Jake Price, UGA Citrus Extension Agent

The freeze of 2022 reduced the Georgia citrus crop significantly. With many trees damaged after the freeze and others losing foliage this was not a complete surprise. From my estimates, 4.6 million pounds of fruit were sold through packing plants and other outlets in 2023. This was down from 11.5 million in 2022 (a 60% reduction in fruit).

At the Owari rootstock trial in Valdosta, the results were similar. These trees lost on average, 55% of their foliage in 2023 which reduced yields. In 2023 the fruit yield per acre was 23,220 pounds. The fruit yield in 2022 was 48,240 pounds. The 2023 yield was about a 52% reduction in fruit from 2022.

With reduced yields in 2023, many growers anticipate a large crop in 2024. So far from my observations, this looks to be true. With less fruit production in 2023, trees added a lot more vegetative growth and increased their canopy volume. The satsuma bloom at the research plot was very large and occurred over a couple of weeks. The peak was probably around March 20th, with a few scattered blooms left as of early April. Other satsuma groves I have observed are about a week behind and also have large blooms.

The last time I saw a bloom this large with a short duration at the rootstock trial was in 2021. That year the yield per acre was 61,334 pounds which was a huge amount of fruit. Many trees suffered broken branches and a lot of fruit was touching the ground despite raising the canopy that spring.

The Tango rootstock trial also had a very large bloom (Fig. 1). Tango blooms earlier than sastuma. Peak bloom was about the first week of March. It will be interesting to see how much fruit they produce this year.

With large fruit loads expected growers need to pay close attention to tree health this year. Make sure to fertilize properly as trees are expected to have a big crop. Prune up lower limbs so fruit will not be touching the ground.

Not much is known about fruit thinning satsumas but this may be a good year to experiment with fruit thinning to see if it makes a difference in fruit quality.

At the Owari research plot in 2021, satsuma fruit had good size, but fruit quickly turned soft. Large clusters of fruit took forever to totally turn orange. Thinning large clusters may help fruit turn a better color. There are many things that we still need to learn about growing satsumas and other citrus in Georgia and northern Florida!
Seven Things You Should Know Before Creating Your First Marketing Plan

By: Karen Nardozza, President & CEO, Moxxy Marketing

Surprisingly, many midsize and large companies don’t have marketing plans. They might have lists of projects they want to do, like videos, ads, social media posts or new websites. But there’s no understanding of how those projects will help achieve the company’s goals or how to prioritize them.

In my twenty years of working in marketing and advertising, I’ve learned an important truth: companies that follow marketing plans have a competitive advantage. They operate more efficiently and have a clearer vision of what they want to accomplish, how they’ll do it and what it will cost.

If you’re committed to more strategic marketing for your company, here are seven things you should know about marketing plans in order to effectively implement this new initiative.

1. Effective plans only need two parts.
   First, you will need to create a document that details your goals, current situation, SWOT analysis (strengths, weaknesses, opportunities and threats), competitors, target audiences, brand position, strategies, tactical ideas and success metrics.
   Second, you will need a 12-month, calendar-style spreadsheet. This calendar is organized by tactical categories that detail what will happen when and what the cost will be. A plan can include more than this, but these are the basic components that give leaders the information needed to focus their attention and resources.

2. It doesn’t need to be lengthy.
   The most useful plans are concise. You can communicate key information in six pages of bullet points and brief sentences. Long narratives are counterproductive. The tactical dashboard is usually an additional three to five legal-sized pages that detail key information.

3. The process is as important as the plan.
   While the plan itself should be short, you need to be willing to spend some time developing it. Leaders and managers with roles in the implementation of various parts of the plan should be involved. This is an effective way to get team buy-in, build consensus and get your staff working together.
   My process starts with a group planning session. This is led by a facilitation team that probes to uncover all pertinent information, keeps discussions on track and takes notes. The facilitators should be from outside your company. This encourages unbiased thinking and provides objective marketing expertise. It usually takes two additional, short sessions to complete the planning process, ending with a presentation of the final plan and a discussion about implementation.
4. Reference it regularly.
Your plan should be used and reviewed on an ongoing basis. I suggest monthly or quarterly team meetings to assess progress and success. I keep my company’s marketing plan posted in clear view as a continual reminder to stay focused. Most entrepreneurs I know are easily distracted -- myself included. Put structure in place to keep the plan relevant and hold your team accountable.

5. It’s meant to be updated.
Your plan should keep you and your team focused, preventing you from chasing every new marketing opportunity that presents itself. However, it’s not meant to be a static document. Situations change, additional information becomes available and some opportunities truly are too good to pass up.
The insights and decisions your team made during the planning process will help you filter and prioritize new information throughout the year so that you can adjust the plan accordingly to take advantage of great opportunities. Additionally, your plan should be redone annually in order to allow for greater review and adjustments.

6. It’s a culture-building tool.
Besides improving a company’s branding, advertising, public relations and sales efforts, sharing your marketing plan with new employees helps them understand the company and their roles in its initiatives. It may not be appropriate to share the entire plan with all employees (everyone doesn’t need budget details). But sharing your goals, current situations, SWOT, competitors, target audiences, brand position and such will help employees understand the company and how it’s implementing its mission.

Throughout several decades, I’ve helped companies -- large and small -- develop their first marketing plans. Without exception, everyone from the CEO to the sales team to the marketing manager has been excited and energized by the process and its deliverables.
A marketing plan has the powerful effect of improving engagement, communication, teamwork and performance. Key employees know what goals and results are expected because they participated in setting them. They have a vested interest in the plan’s implementation and success, and by reviewing it quarterly, they are motivated to stay on track. Understanding a company’s priorities gives employees clarity on how they should work together to achieve goals day in and day out, and the marketing plan gives them actionable guidance on how to do it.
After a few planning sessions, you can have more clarity and confidence than ever before on how to move your company’s marketing forward -- and maybe even newfound enthusiasm and cooperation from your team to boot!
Spring has arrived in our Cold Hardy Citrus region and it’s the time of year to enjoy the smell of the blooms in our groves. I hope everyone is seeing a good crop in the process of setting up on their trees. It seems like the blooms are looking better this year. A post bloom spray should be applied in the next few weeks.

The Cold Hardy Citrus Association (CHCA) Board of Directors held a board meeting in March at the UF/IFAS NFREC in Quincy. The board has decided to use one of our grower’s with marketing expertise to help monitor our website and create social media content for the association as opposed to using a marketing company. We plan on telling the story of the growers in the Sweet Valley region through our social media outlets and will be contacting members so please be willing to share your story.

June will start a new membership year and we will be doing a membership drive to grow our membership. See the attached membership application at the end of the newsletter. We appreciate those that have kept up with membership. If you have any questions or need more information, please feel free to reach out to a board member or email us at coldhardycitrus@gmail.com

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Current Board of Directors:
Mark Clikas, President
Buster Corley, Vice-President/Treasurer
Kyli Lamar Brown, Secretary
Directors: Kim Jones, Mack Glass, Grant Glass,
Matt Cruce, Joe Mattingly, Erik Anderson, Jason Goldman,
and Will McGee
Cold Hardy Citrus Association, Inc
Membership Application

Type of Membership requested (circle choice):

Grower/Producer - Commercial producers and growers of citrus (30 or more trees)

Allied - Processors, suppliers, vendors, re-sellers, brokers, and similar activities

Honorary - Those that have rendered notable service to the CHCA or the industry

Dooryard/Ornamental Growers - Individuals growing less than 30 trees and are not considered commercial by selling product.

Education and Advisory - Individuals directly engaged in extension, teaching, and research, plus agency personnel involved in the protection and regulation of the citrus industry.

Grower/Producer and Allied Memberships are $100/year. Only Grower/Producers may vote on Cold Hardy Citrus Association matters and can be elected to the Board of Directors or serve as an Officer. Allied Members have a committee representative on the Board of Directors. There are no dues for the other types of memberships. You may be represented in more than one category.

Name of Organization/Farm __________________________________________________________

Primary Contact Person (First and Last Name) ______________________________________

Secondary Contact Person (First and Last Name) ____________________________________

Mailing Address (Street, City, State, & Zip Code) __________________________________

County and State your grove is established in ____________________________

Phone Number for Primary Contact ____________________________________________

Email for Primary Contact ______________________________________________________

(your primary source for communication will be your email address, please print clearly)

Phone Number for Secondary Contact __________________________________________

Email for Secondary Contact __________________________________________________

Do you need assistance in Marketing your product? ________________________________

Would you be interested in serving on the Board of Directors or a Committee ______

Information about your grove is voluntary and will be used for regional planning purposes.

Current number of Trees Planted ____________ Tree Spacing _________________________

Varieties Planted ________________________ Rootstock Planted ______________________

Year Planted or anticipated to be planted _________________________________________

Mail this application and payment to: Cold Hardy Citrus Association,
P O Box 226, Monticello, FL 32345
Inquiries to coldhardycitrus@gmail.com