

Quarterly FSHS Newsletter

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In this issue:

- 1 From the President
- 2 Chairman's Update
- 3 Membership and Conference Announcements
- 4-5 Stone Fruit Research
 Program and Winter
 Practices of Florida
 Peach Trees
- 6 How to Sponsor the FSHS
- 6 2019-2020 FSHS
 Board of Directors &
 Sectional Vice Presidents

A Letter from the President

By Jeff Williamson, FSHS President



Greetings FSHS members!

The 133rd annual meeting of the Florida State Horticultural Society will be here before you know it and I hope you plan to join us

for what promises to be another excellent conference. This year's meeting is scheduled for June 7 through June 10 at the Hyatt Regency in Sarasota which should provide an exceptional venue. There will be something for everyone who has an interest in Florida horticulture or related disciplines including six commodity/subject matter sections, poster sessions highlighting Extension programs, and two student competitions: Student Best Oral Presentation Competition, and Student Best Paper Competition.

Please note that the deadline for title and abstract submission is March 20. The submission process has changed so please follow the instructions for submitting titles and abstracts carefully. These instructions can be found on the FSHS website in the "Call for Titles and Abstracts 2020" link under the

"Conferences" tab.

In my opinion, one of the main benefits of our annual meeting is to provide opportunities for students to have the experience of presenting their research results in a professional setting before they participate at national or international meetings and conferences. I hope that student mentors will support and encourage their students to present at this year's meeting and participate in the student awards competitions.

One of the most important jobs of the President and the Chairman is to fill numerous committees. Over the next few weeks, Chairman McAvoy and I will be calling on many of you to participate on various committees which are necessary for the society to run effectively and efficiently. If asked, please consider the opportunity to serve FSHS in this capacity, or volunteer by contacting Chairman McAvoy or me. I look forward to seeing all of you June 7–10 at the 133rd annual meeting of the Florida State Horticultural Society!

Kind regards,

Jeff Williamson

FSHS President



Update from the Chairman

By Gene McAvoy, FSHS Chairman of the Board

Greetings Florida State Horticultural Society members,

For 132 years, FSHS has united horticulturists from across the state of Florida. In the process, the society has emerged as one of the most prestigious and respected horticultural societies in the country and in fact, the world. Over this period of time, the Proceedings of the Florida State Horticultural Society have served as a repository of the collective knowledge of our members, including both professional and amateur horticulturists, spanning over a century documenting advances in horticultural science, new crops and varieties, new and emerging technologies and so much more that have served as an invaluable reference and resource for horticulturalists around the world.

Like all societies our strength is in our members. One of the strengths of the FSHS community is its diversity: diversity in scientific interests (production, postharvest, breeding), diversity in commodity interests (citrus, ornamentals, tropical and non-citrus fruit, vegetables, other crops, postharvest products, and natural resources), diversity of members in the society (students, post-docs, early career professionals, and accomplished professionals) and the diversity of ecotypes in which our members work.

Despite our strengths, the society had faced challenges in recent years which could eventually undermine its status and perhaps even its existence if not addressed. Some of the challenges have been structural, some fiscal while others are more nebulous yet no less serious if not addressed. Over the past few years, the FSHS Board of Directors has worked diligently to address some of these issues. Last year, the Board worked through a committee composed of current and past Board members to evaluate our By-Laws and recommend changes, which were approved by the membership at last years' meeting. One of these changes was to separate the positions of secretary and treasurer, to better enable the society to monitor its fiscal health and recommend changes.

Over the past decade, the society has suffered a slow decline in its fiscal health. In order to address this, the current Board has worked with the Treasurer and our management team at FSHS to develop a budget that will set the society on a sustainable footing. At our December meeting, the Board approved some minor adjustments to membership fees and in February approved conference registration fees for the upcoming meeting. In examining the budget, one area that stood out was the failure to collect page charges in a timely fashion and in some cases not at all. Pages charges are used to support the Proceeding and failure to collect a portion of these threatened to undermine the fiscal health of the society. In February, the Board considered and approved an updated system of page charges, a portion of which will be due when presenters register for the annual conference.



Another more nebulous challenge is changing attitudes regarding professionalism. A growing challenge to the society and one that threatens to undermine the value of the Proceedings of the Florida State Horticultural Society is the failure by some individuals to submit papers after presenting them at the annual meeting. As stated above, the Proceedings of the Florida State Horticultural Society have served as a repository of the collective knowledge of our members spanning over a century and serves as an invaluable reference and resource for horticulturists around the world. It is simply unacceptable and unprofessional for members to present and not provide documentation of their work.

(Continued on page 6)

Membership and Conference Announcements

Check your calendars, register and make your hotel reservations for the 133nd annual meeting of FSHS that will be held at the Hyatt Regency Sarasota (1000 Boulevard of the Arts, Sarasota, FL 34236; (941) 953-1234) on June 7 to 10, 2020.

The 2020 Meeting of FSHS will feature presentations of applied research pertaining to horticultural and agronomic crops and products, and new developments and practices that have been put into use by growers, processors, allied industries, and other horticultural interests in Florida.

Don't hesitate — **renew your membership, submit your abstract,** and **register early**:



New Membership Fees for 2020					
CATEGORY	MEMBERSHIP FEE				
	Jan-Feb 15	Feb 16*	Annual Meeting (First Day)		
Professional	\$60	\$80	\$105		
Patron	\$200	\$200	\$200		
International	\$70	\$90	\$115		
Student	\$25	\$35	\$50		

^{*}Up to the day before the annual meeting.

Call for Titles and Abstracts to the 133rd Florida State Horticultural Society

Annual Meeting: https://fshs.org/call-for-titles-and-abstracts/ ***Due March 20th***

FSHS Conference Registration					
	Early Bird	April 16 - June 5	On Site		
Member Basic	\$200	\$250	\$275		
Member Full (includes 2 meals)	\$300	\$350	\$375		
Non-Member Basic	\$300	\$350	\$400		
Non-Member Full (includes 2 meals)	\$400	\$450	\$500		
Student Member	\$125	\$150	\$175		
Student Non-Member	\$175	\$200	\$225		

Stone Fruit Research Program and Winter Practices of Florida Peach Trees

By: Ali Sarkhosh, Ph.D.

Assistant Professor & Extension Specialist, Horticultural Sciences Department, University of Florida, Gainesville, FL



Dr. Ali Sarkhosh sarkhosha@ufl.edu

The calendar may show we are still in the heart of Winter, but Florida peach trees have had their brief sleep and are now in high gear for producing the country's first domestically produced peach crop. With the lower-chill requirement varieties developed in whole, or in part by the University of Florida, the state is able to harvest fruit beginning in late March and continue through May. This is a production window where fruit from other states and countries is limited.

Since the 1950's, breeders with the University have been working to release peach varieties suitable for the wide range of our states climate. Peach trees have a chilling requirement during the dormant period of temperatures between 32 and 45F, in order to have a uniform flowering period and proper bud break. Varieties have been developed to grow as far south in the state as Immokalee, which receives 50-100 chill units historically, and North to the panhandle, which receives around 600 chill units.

One of the main challenges peach growers face in our state is the inconsistency or lack of chilling hour accumulation, especially in the most southern regions where the trees are grown. Part of our research program focuses on developing protocols for improving budbreak through timed applications of foliar sprays, such as plant growth regulators, biostimulants, and other products. We also incorporate research involving strategies to increase fruit size, through foliar sprays and selective fruit thinning. Controlling tree canopy size through pruning is also performed in winter and once again after harvest in late spring.

By November, when trees have begun naturally shedding their leaves, an application of concentrated Zinc Sulfate is applied to the foliage to aid in dropping the leaves more quickly. A dormant tree without leaves will be more effective in accumulating any chilling received. Soon

after leaf drop the winter pruning begins. In our orchard, a tractor hedges the trees to a manageable height of 7-8 feet, and the remaining pruning and selective branch thinning is performed by hand. We keep an open center structure for the trees to obtain adequate light distribution to the middle canopy.



Tractor hedger pruning treetops, taken on Jan 8th, 2020.

The date of full bloom can vary quite remarkably from year to year depending on the temperatures experienced. If some adequate chilling is received, and is then followed by a warm period, the trees will begin flowering. This year saw that happen, with full bloom in our lowest chill variety in early January, whereas it was in mid-February just two years ago. With delicate flowers blooming up to 2 months prior to the last frost date in our orchard in North central Florida, it is necessary to have a frost protection system in place to ensure a crop.

Our frost protection system is comprised of overhead impact sprinklers positioned adequately above the tree canopy and placed in every other row. It was necessary to use our system on the early morning of January 22nd. The sprinklers were turned on at midnight at 36F and ran until the temperature reached 40F in the morning and the ice began falling off. The more advanced the flowering stage is, the more susceptible the buds are to frost damage.

(Continued on page 5)

Stone Fruit... continued from page 4



What a difference a week can make in Florida. Left: Photo of orchard taken on January 14. Right: Photo of orchard taken on January 22 after frost protection was used.

If during the post bloom stage flowers are exposed to 28F for 30 minutes, 10% of them will show damage, whereas 90% will be damaged at 25F for the same amount of time. When water changes phases from a liquid to a solid, latent heat is released on the order of 80 calories of heat for every gram that becomes ice. As long as the ice formation continues, the heat release will too. Although the ice coverage is serving a definite function to protect the flowers and small fruit, it sure makes for an incredible photo opportunity.



Flowers in bloom fully encased in ice for protection.

One month after full bloom, fruit thinning begins. This involves removing many small fruits by hand around the size of a nickel and leaving one fruit approximately every 6 inches on a branch. Since peach trees are prolific flowerers, it is not uncommon to remove more than 1000 fruit per mature tree. Since this is a very time-consuming aspect of peach production, our research also involves looking at the effect and timing of products for chemical thinning pur-

poses. Thinning is a very practical way to increase the mature size of the remaining fruit.

We look forward to providing our research results to the Florida industry, and home orchardists alike. Please feel free to contact our lab and visit us at our annual



Hand thinning of fruit.

Stone Fruit Field Day held in April at the University of Florida, Plant Science Research & Education Unit in Citra to hear the latest updates from our program and from other researchers.



Meet the team: Dustin Huff, Biologicals Scientist II, taking peach fruit quality measurement data (left); Jonathan Clavijo Herrera, PhD student, taking peach bud measurement data (center); Shirin Shahkoomahally, PhD student, mixing peach foliar spray treatments (right); Trequan Mcgee, PhD student (not pictured).

Update from the Chairman... continued from page 2

To make it easier for presenters, the Board worked with the Editor to introduce the Scientific Note, a brief one published page synopsis of a presentation as a way of capturing information and documenting it in the Proceedings. It is hoped that this will provide a venue of those presenters who may not have enough information or data for a full-blown paper or who wish to eventually publish elsewhere. The Board acknowledges while occasionally there may be extenuating circumstances which prevent an author from submitting a paper, we also feel that there is no excuse for an author to not communicate with their Sectional VP and Editor if they have a problem in submitting. Indeed, on close examination of this issue, it turns out that there are a number of serial delinquent authors who have failed to turn in papers, or to communicate an intent to publish directly in an ASHS or other refereed journal, unfortunately this number is growing. To address this issue, the Board moved to authorize the President and Editor to contact delinquent authors and bar them from presenting for one year if they do not at least communicate with their respective VP and Editor on the status of their outstanding paper(s).

As Chairman of the Board, I can assure you that the changes the Board is making are being done after careful deliberation and with the long-term viability of the society in mind. I urge you to work with us in ensuring that FSHS will remain sustainable and relevant for the next 100 years.

I look forward to seeing you at the 133 Annual Meeting of the Florida State Horticultural Society conference which will be June 7 to 10, 2020 in Sarasota, Florida! Registration is now open. I encourage you to present and share your good work.

All the best.

Gene McAvoy

Gene McAvoy, Chair

How to Sponsor the FSHS

Our activities and meetings would not be possible without sponsor support.

Sponsor our organization and network with other horticultural professionals in Florida! The FSHS welcomes sponsors for it's annual meeting.

If you're interested in being an FSHS sponsor, please contact Dr. Gene McAvoy at gmcavoy@ufl.edu for an explanatory letter.

FSHS Board of Directors

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Board Member-at-Large: Tom Stopyra **Board Member-at-Large:** Adrian Hunsberger



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