fshs.org

Quarterly
FSHS Newsletter

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Meet Our New President!

An introduction by John L Griffis, Jr.

I was raised in West Texas where my father was a cotton and vegetable farmer. I attended Texas Tech University for a few years and earned degrees in Chemistry, Microbiology and Horticulture. In the Fall of 1978, I entered the PhD program in Environmental Horticulture at the University of Florida and conducted plant tissue culture research with coconuts under the direction of Dr. Tom Sheehan.

In Spring 1983, I accepted the position of Director of Research & Development with Oglesby Plants International and I worked there until the Fall of 1986 when that business relocated to the Florida panhandle. I was then supervisor at RLR Plants (foliage greenhouses) in Apopka until I was hired as an instructor in the Citrus & Horticulture Dept. at Florida Southern College starting Fall 1988. I was fortunate to be selected as a Fulbright scholar to Africa University, Zimbabwe in 1993-94.

I was promoted to professor at FSC where I remained until Summer 2003, when I accepted the Asst. Foliage Plant Specialist position in the Tropical Plant & Soil Sciences Dept. at the University of Hawaii at Manoa. In 2004, I was selected as Fulbright scholar to the University of Mauritius. I remained at UH until 2009, when I was offered the Bernese B. and Sidney R. Davis Endowed Chair for Horticultural Education & Research at Florida Gulf Coast University and I'm still there!

In 2015-16, I was selected as Fulbright scholar to Ege University in Turkey. Since 1995, I have also conducted more than 30 volunteer international projects for the USAID Farmer-to-Farmer program.

See: Professor's biotechnology consulting bears fruit in Africa

Dr. Griffis's class in Ethiopia

I received the USA President's Volunteer Service Award four times and I received the Outstanding International Horticulturist award from ASHS in 2018.

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At FGCU, I teach three courses each semester and sometimes one course in the summer. The most commonly taught course is a General Education Plant science course, but I teach a range of different horticulture courses under Special Topics and I also frequently teach the undergraduate course in research design.

I conduct undergraduate research in three areas: 1) micropropagation protocols, 2) development of a subtropical fruit crop for commercial production, and 3) greenhouse nutrition programs for foliage plant production, particularly aimed at improving BMGs and reducing ground water contamination for the various crops studied.

My hobby is collecting one particular type/brand of Hawaiian shirts.

I have been a member of FSHS since my time at UF and I have previously served twice as Vice President of the Ornamental Section and as a Board member. I am honored to serve as your president.

Aloha,
JG

Marketing Coordinator Needed

Are you an "internet guru"? Interested in helping your society flourish?

FSHS is currently searching for a Marketing Coordinator who can also work with our website operations to promote the Society effectively.

The current (not yet final) "job" description follows, but it is not the entire story. We are willing to negotiate the "term of office", as the marketing coordinator position is currently vacant – so we need someone yesterday. Please contact John Griffis if interested: jgriffis@fgcu.edu

MARKETING COORDINATOR

The Marketing Coordinator is elected for a five (5)-year term, with an option for a second term, and chairs the Publicity Committee. The Marketing Coordinator is responsible for helping to develop and implement the Society's marketing plan. Besides **developing a variety of methods to disseminate a sustained stream of information to members** and potential members about the society and the important services it provides, an important focus is to identify groups and individuals that are not current members, but whose interests overlap with those of FSHS, and to send targeted information and invitations to those people to become members. The Marketing Coordinator is also responsible for obtaining photographs and other material/ information that can be used to showcase the society.

The marketing coordinator will manage the existing FSHS social media accounts including Facebook, LinkedIn and Twitter and will establish an Instagram account for the Society. Additional social media sites might be added as needed. Since ASHS is managing our website, the Marketing Coordinator will also work with ASHS staff to be sure that the required marketing information, such as conference dates and notices, is current on the website.

Passion Fruit: The Challenges of Launching an Alternative Crop

By Mark Bailey

Sustainable Agriculture & Food Systems Agent
UF/IFAS Extension Marion County

Passion fruit is a rapidly growing perennial vine that produces dazzling flowers that turn into uniquely delicious fruit. It has been grown in South Florida for many years and has largely remained a limited regional crop until recently. With the assistance of the University of Florida, small farms across Central and North-Central Florida are beginning to plant passion fruit. Perhaps the simplest reason why passion fruit has not expanded throughout much of Florida is that it simply has not been tried. Indeed, many of the potential growers in Central and North Central Florida may have not even heard of this crop. There are three key components to launching an alternative crop: how to produce a crop, adoption of the crop by growers, and the effective marketing of the crop. Each of these components are of equal importance.

To better understand how to grow passion fruit it is important to know where the plant originated. Passion fruit originated from the tropical regions of South America and is grown throughout the world in warm climates. Under ideal growing conditions it can go from seed to a mature plant in as little as a year. Once we understand the conditions the plant is naturally well-adapted for, the next task is to provide for those needs in the context of local growing conditions. Florida contains USDA hardiness zones 8 through 11 and the production practices for one zone will vary substantially compared to another. This is especially the case when production moves from a warmer to a cooler climate.

To grow an uncommon crop like passion fruit, growers must first be aware that the crop even exists. An effort to increase grower's awareness of this crop will need to be made in order to successfully launch the crop. Once adequate awareness is reached, growers can begin the process of assessing whether or not passion fruit is right for them based upon a range of variables.

The production of any crop involves at least some degree of risk of loss and passion fruit is certainly no exception. A hard freeze can kill the plant and it is susceptible to a range of pests and pathogens. Prospective growers will need to have a balanced understanding of the expected risks as well as the attractive characteristics. An informed decision about whether or not to plant this crop will allow for a grower to make a decision that is best for their situation. Likely the greatest threat to a farm's survival is financial risk. At this time there are no establishment and production cost standards due to limited examples to base these standards upon. That said, general estimates can be calculated to give prospective growers a range of expected costs. Initially, a grower should be encouraged to plant small acreage to learn the production aspects as well as limit their financial risks. Once a grower has a successful crop then it could be strategically expanded.

One of the most attractive aspects of passion fruit production is that it can fetch a very high price both per fruit and on a per acre basis. The USDA's Agricultural Marketing Service generates daily reports on passion fruit sales that originate overseas as well as from domestic production. This can be a helpful tool in tracking current prices and inform growers of the value of their crop. Presently, passion fruit can range between about $1 to $2 per fresh fruit. Given the rapid maturation of vines and expected fruit yield per acre, it may attract growers who want to try something new that compares very favorably to other conventional crops.

Another fundamental challenge to launching passion fruit across much of Florida is the lack of information about recommended varieties, well-established production standards, and a disease management plan. Variety trials will need to be a key component of future research efforts. Varieties will need to be assessed for characteristics such as potential yield, size, appearance, disease resistance, fruit quality, flavor, sugar content, and aromatic qualities. A notable risk for passion fruit production outside of the South Florida is due to freezing temperatures. Established passion fruit plants can survive light freezing temperatures, however a hard freeze around 25°F or lower will very likely kill the plant. To mitigate the risk from freezing, cold protection standards will need to be established. High tunnel production is a viable option that could provide excellent protection for the crop from a range of environmental hazards. Research into many of the aforementioned variables is beginning and is expected to continue until all fundamental questions have actionable answers.

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Reshaping Learning Experiences for FSHS Conference

Dr. Taylor Clem, UF/IFAS Extension Nassau County
Tia Silvasy, UF/IFAS Extension Orange County

The 134th Annual Meeting of the Florida Horticultural Society's Agroecology and Natural Resources Section successfully highlighted wonderful research from extension agents, specialists, researchers, and students. Each topic clearly addresses Florida's horticultural needs, including industrial hemp trials, cover crop planting, biodiversity, and landscape mosaics. Compared to previous years, abstract submissions for the section were down. Therefore, the section's presentations only occurred in the morning. Nonetheless, the previous section Vice President, Tia Silvasy, prepared a Monday afternoon Agroecology and Natural Resources field trip to Tiger Bay State Forest.

UF/IFAS Extension Agents, Tia Silvasy (left) and Lisa Strange (right), exploring Tiger Bay State Forest together.

Although different than a traditional FSHS conference, the field trip provided participants an opportunity to explore some of the area's important natural resources. After learning about the research from the presenters in the conference room, participants explored Tiger Bay's unique habitats. The 15,000-acre property largely consists of swamps spotted with pine islands throughout the property. This forest is among several publicly owned lands creating wildlife corridors for endangered, threatened, or of special concern – including black bears and bald eagles. Participants explored a two-mile trail, discussing the different plant communities and habitats seen within the park. Participants saw multiple species on their tour, including a Box Turtle and *Carphephorus* wildflowers.

Visiting Tiger Bay State Forest reinforced the need for the research presented in the Agroecology and Natural Resources section. Additionally, the field trip became an opportunity to introduce a different learning opportunity for the FSHS conferences.

FSHS is coming to Sarasota for the June 5-7, 2022 Conference!

We'll be meeting at the Sarasota Hyatt Regency, a great place FSHS has visited before.

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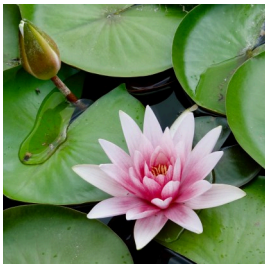
Water Sports

Soak up the Florida sun with outdoor activities at our resort-style hotel. Take advantage of our waterfront location and enjoy paddle boarding, kayaking, pedal boating, fishing, and more water sports during your stay at Hyatt Regency Sarasota.

Marie Selby Botanical Gardens 1.4 MI / 2.25 KM AWAY

Take a scenic stroll through the Marie Selby Botanical Gardens. Located less than 10 minutes from Hyatt Regency Sarasota, this outdoor local attraction houses over 20,000 living plants across 15 acres of lush tropical land in Downtown Sarasota.

https://selby.org/visit/



We'll be celebrating the start of the FSHS conference with a special day at the Marie Selby Botanical Gardens. Plan to spend your Sunday, June 5, 2022 with us at this magnificent attraction.

Better Together: Citrus Science & Friendship

By J. Scott Angle, Ph.D

Vice President for Agriculture and Natural Resources, University of Florida Institute of Food and Agricultural Sciences

Dr. J. Scott Angle
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When citrus breeder Fred Gmitter travels the globe in search of a tree or a technology that could help the Florida citrus industry, he brings a grower with him.

Tom Hammond has been there with Fred in South Africa, Sicily, Corsica, Spain, Japan, and China. They're good traveling companions because they can talk citrus for hours on end. Through two very different lenses, they're looking for the same thing—something they can take back to 16 acres in Vero Beach.

The experimental block at Hammond Groves has been the site of maybe 10,000 shots at new citrus varieties. For more than 20 years, Tom has kept the block out of commercial production and dedicated it not just to science, but to a particular scientist.

For Tom, the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) is, for the most part, Fred. The years, the miles, the drinks and the laughs have cemented a friendship. He trusts Fred or anyone Fred sends from his team to visit the experimental block. And Tom knows years is what it takes. Like friendship, science is a long game.

Fred sees Tom's selfless sacrifice of land and time as a gift to research and to the industry. Tom sees a scientist who has given his life to the search for trees that will provide him and his peers with a livelihood.

The American Society for Horticultural Science this year recognized Fred for a career of sustained excellence, including significant contributions to advancing the science of horticulture and service to the profession. His peers elected him a Fellow of ASHS, the highest honor the Society offers.

When Fred and Tom are not traveling, they're texting. Fred works two hours from Vero, at the Citrus Research and Education Center in Lake Alfred, so their 20-year conversation often plays out in quick bursts on their smartphones.

For example, Tom will ask Fred if he's taken a close look at a tree in row 27—great-looking fruit. Fred's reply is either yes, I have, or no, but now I will. Tom brings an important set of eyes to the research. While Fred's thinking phenotypes and genetics, Tom is thinking visual appeal, easy peel and suitability for moving through a packinghouse.

Other times, it's Fred letting Tom know he'll be in town and Tom responding that he'll see him for lunch at the Italian Grill.

Fred Gmitter (pictured above) and Tom Hammond (pictured below) exemplify the relationships on which citrus science is built, how UF/IFAS and the citrus industry together solve challenges.

The Hammond Groves block is arguably one of the birthplaces of the "Bingo" mandarin. UF/IFAS used Hammond's place to put Bingo budsticks on existing rootstocks to accelerate proof of propagation needed for a patent. Hammond's 16 acres is currently a hotbed for UF-914 grapefruit, which Fred is convinced

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Passion Fruit...continued from page 3

Even if growers continue to expand acreage of passion fruit production and implement effective production practices it is only half of the equation. Marketing a crop is every bit as essential as harvesting a good yield. A grower's success is typically measured in profitability and with an effective marketing plan, even before the first fruit is harvested, this is achievable.

A comprehensive approach to launching passion fruit will greatly bolster a successful expansion of passion fruit into new regions of Florida. As growers increasingly become aware of this crop so to is the acreage expected to increase. While passion fruit is not a crop that is without risk, it does provide a tremendous opportunity in a non-saturated domestic market, it can produce a crop quickly, and is among the highest value crops that can be grown in Florida. Over all, passion fruit is a very attractive alternative crop with great potential.

Better Together...continued from page 5

will be a contributor to the Florida citrus industry in part because of its great in part because of its great taste.

Fred and Tom exemplify the relationships on which citrus science is built, how UF/IFAS and the citrus industry together solve challenges. These relationships are essential to overcoming a threat as vast and complex as HLB. Fred and Tom demonstrate that these relationships can be more than transactional. They can be fun.

UF/IFAS has a powerful research engine, what I would argue is the finest citrus research program in the world. That research is bolstered not just by the work in the lab but with grower input like Tom's texts and trips with Fred.

All of us—scientists and growers alike—are fortunate that Tom is driven by a service ethic. He wants to give back to the citrus industry for the livelihood it has afforded him since he went into business 31 years ago. The best way he sees to do that is to help Fred contribute to the industry.

J. Scott Angle is the University of Florida's Vice President for Agriculture and Natural Resources and leader of the UF Institute of Food and Agricultural Sciences (UF/IFAS).

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