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For Covid19 Update from UF and IFAS please visit these links: http://www.ufl.edu/health-updates/

https://ifas.ufl.edu/covid19-information-updates/

As of today, October 9, 2020 GCREC remains closed to the public. Our research continues with a limited number of essential staff, and we are so grateful for their continued dedication. For information contact Christine Cooley <u>ccooley@ufl.edu</u>.

GCREC Faculty Awarded Specialty Block Grants

University of Florida Board of Trustees Thrips management in strawberry and pepper production \$294,854.00 Dr. Sriyakna Lahiri, Assistant Professor Entomology

University of Florida Board of Trustees Improving strawberry water-use efficiency through surge irrigation schemes and plant monitoring technologies \$135,066.00 Dr. Amr Abd-Elrahman, Associate Professor Geomatics

University of Florida Board of Trustees

The impact of Mexican competition on the Florida tomato and strawberry industries: industry trajectories and solutions

\$159,933.00 Dr. Feng Wu, Research Assistant Scientist Ag Economics



Dr. Jim Mertely, Plant Diagnostician for GCREC Plant Clinic Retires After 22 years of dedicated service to the University of Florida and IFAS, Dr. Jim Mertely retires from Gulf Coast Research and Education Center. Dr. Mertely's expertise in plant disease originally assisted many Florida strawberry growers experiencing issues in the Plant City and surrounding areas when GCREC had a strawberry research lab in Dover, Florida. After combining both GCREC centers (Bradenton and Dover) in 2005 and relocating in



Dr. James Mertely and wife Maria.

southern Hillsborough County, Dr. Mertely became the plant diagnostician for the expanded plant clinic, which assisted vegetable growers and ornamental plant nurseries along with the strawberry grower samples a year, his dedication and determination to assist central Florida growers was appreciated by the faculty, staff, growers and industry reps. He not only ran the clinic, but he also was a very active member of Dr. Natalia Peres' plant pathology team and participated in the strawberry research from planting to harvesting. He was a great mentor for grad students and interns. His retirement plan include hiking, fishing and traveling around the country. We wish him the best and he will be sorely missed!

Best wishes

Oh Those Beautiful Hops!

Gulf Coast research on Florida hops continues with great success. Unlike the Pacific Northwest where most U.S. hops are grown, Florida can have two crops a year vs only one. Although still in the early stages of research, Drs. Shinsuke Agehara and Zhanao Deng have been working closely together and are finding that hops, despite issues with nematodes, can be successfully cultivated in Florida. Check out these latest photos from the 2020 fall crop – soon be harvested. To see the harvesting process in action, visit our YouTube page.



Strawberry Planting Season is Here!

Dr. Natalia Peres' plant pathology team is out planting strawberry research plots this week and practicing social distancing along with wearing masks as required by UF/IFAS guidelines.





Strawberry plants arrived at GCREC throughout the last few weeks. Plants are considered annuals in Florida and are sent from either Canada or North Carolina where they are propagated over the summer months. Bare-root plants are planted by hand and a two week establishment period begins immediately with constant overhead irrigation. Harvesting will begin sometime in November. Although growers can get top dollar for early harvests, most strawberries don't have optimal taste until after a few weeks of cooler weather at night. Similar to citrus, the colder weather promotes a chemical response that releases sugar allowing the berries to be much sweeter. Stay tuned for future posts on our strawberry season.

Certified Crop Advisors Training Update

For those of you who have registered, the IFAS Online CCA CEU training course is now open available to access. The course is available from today until Oct 31st. for access at your own convenience 24/7.

For those of you who have already started watching the course, please email Dr. Mylavarapu (<u>raom@ufl.edu</u>) and if you have any technical issues or glitches as you go through the presentations, he can assist you immediately.

For those of you who have not yet registered, please see for details about the course and the link to the registration here: <u>https://ifas-nutrientsystems.catalog.instructure.com/</u>

The registration is open through Oct 31st but we suggest that you register as early as possible so you will have the maximum time and flexibility to complete and earn all the CEUs at your convenience.



PhD Graduate Research Assistantship AVAILABLE at GCREC in plant breeding and genetics at the University of Florida (UF)

A PhD graduate research assistantship is available at the University of Florida's Gulf Coast Research and Education Center in Wimauma, FL beginning in summer or fall 2021. The PhD student will conduct genetic and genomic research and breeding in lantana. PhD student selected for this position will perform genome and transcriptome sequencing, develop molecular markers for important reproductive traits (unreduced female gamete formation and apomixis), investigate the mode of inheritance and genetic mechanisms for these traits, screen germplasm for disease resistance, create desirable diploid and tetraploid breeding parents, and develop sterile, noninvasive, disease-resistant triploid lantana cultivars. The student will leverage existing lantana genetic and genomic resources and generate and analyze new genomic and transcriptomic datasets to find genes controlling the formation of unreduced female gametes and apomictic seeds. Additional research topics (including gene editing, gene cloning, genetic transformation, etc.) and/or ornamental crops may also be pursued, depending on the interests and abilities of the student.

The graduate research assistant will conduct laboratory/greenhouse/field studies, collect data, analyze research results, prepare reports, write journal articles, present research results, and prepare a dissertation. This half-time assistantship will provide an initial stipend (\$25,000 per year) and a full tuition waiver for four years. Opportunities for additional income in the form of fellowship are also available at the UF/IFAS' Department of Environmental Horticulture (https://hort.ifas.ufl.edu/environmental-horticulture-graduate-program/funding/), the home department of the faculty supervisor and the student selected.

Desired qualifications:

An MSc in horticulture, plant science, genetics, or a related field and experience in applied plant breeding and inheritance study are preferred. Experience with molecular marker development and analysis, genotyping by sequencing, and genetic mapping are all beneficial. Other desirable qualities include a strong work ethic, ability to work independently, advanced English language proficiency (verbal and written), and enthusiasm for plant breeding and genetic research. Candidates must also meet the admission requirements of UF's Graduate School and the Department of Environmental Horticulture (<u>https://hort.ifas.ufl.edu/environmental-horticulture-graduate-program/</u>). Interested candidates that meet these qualifications are encouraged to inquire about the position by contacting Dr. Zhanao Deng at <u>zdeng@ufl.edu</u>.

Latest Publications:

Optimal rate of metam potassium for fusarium and purple nutsedge control when applied through the drip tape or with a minicoulter. Kshitij Khatria, Gary E. Vallad, Joe Noling, Nathan S. BoydGulf Coast Research and Education , Center, University of Florida, Balm, FL, USA; Citrus Research and Education Center, University of Florida, Lake Alfred, FL, USA https://doi.org/10.1016/j.cropro.2020.105402.

Selection and Preparation of Planting Material for Successful Hop Production in Florida. S Agehara, A Acosta-Rangel, M Gallardo, G Vallad - EDIS, 2020 - Vol 2020 No 5, UF/IFAS Gulf Coast Research and Education Center. Vol 2020 No 5 /https://doi.org/10.32473/edis-hs1381-2020.

Biopesticides for Management of Bemisia tabaci MEAM1 (Hemiptera: Aleyrodidae) and Tomato Yellow Leaf Curl Virus. Hugh A Smith, Journal of Economic Entomology https://doi.org/10.1093/jee/toaa131.