



COLLEGE OF AGRICULTURE AND LIFE SCIENCES
SCHOOL OF PLANT AND
ENVIRONMENTAL SCIENCES
VIRGINIA TECH.

E-NEWS



Important Upcoming Dates:

Staff Meeting—March 9, 12:00 -1:00pm at 311 Latham

Donut Tuesday—“Mark Williams”, February 4, 8:30am at 311 Latham

Faculty Meeting—February 14, 3:00 - 4:15pm at Fralin Auditorium

Graduate Student Lunch with Director-March 13, 12:00-1:00pm at TBD

SPES Social—February 28, 4:00 - 6:30pm at Rivermill

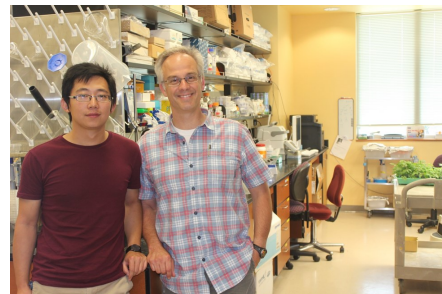
Announcements and News:



SPES has partnered with The Institute for Advanced Learning and Research (IALR) and the Virginia Seafood Agricultural Research and Extension Center to launch a Controlled Environment Agriculture Innovation Center in Danville, VA at the IALR campus. The Innovation Center will leverage technology and research to accelerate advancements, economic development, and regional participation in the developing industry of indoor farming. High-value demonstration crops will include lettuce, herbs, strawberry, blackberry, hemp, and more. Read more about it in the VT News article: <http://bit.ly/2RJqITN>



David Haak and John McDowell are featured in VT News learning more about plant pathogens by using genomic technologies. Before this project began, David and his team had been trying to prove that it was possible to generate a completed assembly in a relatively short period of time – but they needed a relatively complex genome to test their theory. David and his students joined John and his team to investigate the complex genome of *Phytophthora capsici*. The current project was supported by a grant from the Fralin Life Sciences Institute. David and John plan to use this information as supporting data for two new grant proposals. One proposal will focus on tomato and soybean diseases caused by pathogens and the other proposal will focus on lavender. Read more about it in the VT News article: <http://bit.ly/2uCxwU>



The Horticulture Club is meeting spring semester the following dates in the Greenhouse classroom 100 at 6pm: 2/5, 3/4, 3/18, 4/1, 4/22, and 5/6. They have an optional rose arrangement meeting open for everyone on 2/12 for their rose sale that week, and if anybody has any questions please contact Hannah Ambrose, the President of the club at hannah9@vt.edu.



Greg Welbaum with host Dr. Chunlin Long of Minzu University Beijing (L). Greg with his seminar poster at Minzu University (R).

Greg Welbaum recently returned from visiting his long-time colleague Dr. Chunlin Long, an ethnobotanist at Minzu University, Beijing, China. While in China, Dr. Welbaum presented research seminars at Minzu and Huaihua Universities and visited Beijing as well as Hunan and Guizhou provinces. Long and Welbaum have a common interest in traditional Chinese medicinal plants. The pair are interested in studying the use of medicinal plants to improve animal health and reduce antibiotics use in livestock production. The visit was funded by a grant from the Chinese government.



Susan Clark has been named the title of associate professor emerita by the Virginia Tech Board of Visitors. Susan was principal or co-principal investigator on more than \$3.8 million in research grants on teaching, assessment of student learning, student experiential learning, electronic portfolios, and community food security. She authored or co-authored more than 27 peer-reviewed journal articles, three book chapters, and more than 47 peer-reviewed paper presentations. She received many professional honors and awards throughout her career. Read more about it in the VT News article: <http://bit.ly/37CiRZM>

The VCE Master Gardener program will host the 2021 International Master Gardener Conference in Norfolk, Virginia. We are currently soliciting proposals for presentations. Learn more and submit your proposal here: <http://bit.ly/3106AM9>

This is an opportunity to share your research with the public! We will host a group of approximately 1,000+ Extension Master Gardener from across North America and Korea. There are more than 86,076 active Master Gardeners in 49 states who make 8.6 million direct interactions with the gardening public each year. Learn more about International Master Gardener Conference: <https://www.internationalmastergardener.com/>

CALL FOR PROPOSALS

Reach Extension Master Gardeners from around the world. Join us in Norfolk.

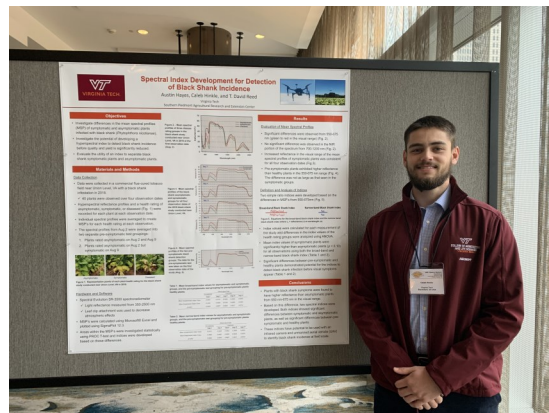
BECOME AN IMGCC SPEAKER!



Motivated by the considerable interest of the undergraduate students regarding the CBD extraction process, Jose Franco Da Cunha Leme Filho decided to start contacting some CBD extraction companies and ask about the possibility of a training/tour to create an experiential learning opportunity to answer students' questions. After some arrangements with a CBD extraction company from Ohio, Jose worked with SPES to arrange transportation and they headed to Ohio. The CBD extraction company provided a great training regarding the ins and outs of supercritical CO₂ extraction process, how to operate the equipment and a tour in their industrial facility. The undergraduate students enjoyed the trip and they were able to spread the message to the students that could not participate. We would like to thank Dr. Ben Tracy, Dr. Wade Thomason and Cameron Bermand for the support.



T. David Reed's master student, Caleb Hinkle presented his paper "Studies of Very Low Nicotine Flue-Cured Tobacco Production" on January 23, 2020 at the 49th Tobacco Worker's Conference in Louisville, Kentucky. Caleb also presented a poster, "Spectral Index Development for Detection of Black Shank Incidence" .



The Environmental Student Organization (ESO) will be meeting on Mondays from 6pm-7pm this spring semester in Davidson Hall, room 125. If you have any questions, please contact the president of the club, Heidi Hahn at hehahn9@vt.edu.

Graduates:

Marco E. Mechan Llontop defended his PhD thesis on November 18, 2019, with Boris A. Vinatzer as his major advisor. Marco accepted a postdoctoral position at Michigan State University.

Graduate Student Awards:



The VT Turfgrass Management Graduate Students recently competed in the 4th Annual WS Connelly and Sons/ Landscape Supply Graduate Student Innovative Research Contest at the Mid Atlantic Turfgrass Expo in Fredericksburg. For this competition the students must effectively present their science to an industry audience rather than their science peers as judged by an industry panel. For 2020, 1st place was awarded to Jordan Booth, 2nd place to Wendell Hutchens, and 3rd place to John Brewer. All of our students did a great job, causing one attendee to comment "The future of our industry is in good hands with students like this".



Grants:

Samtani, J.B., D. Butler and C. Mei. Evaluation of Anaerobic soil disinfestation and bacterial endophyte treatments in strawberry production. Southern Region Small Fruit Consortium \$10,000.

Publications:

Mechan Llontop, M. E., Sharma, P., Aguilera Flores, M., Yang, S., Pollock, J., Tian, L., Huang C., Rideout, S., Heath, L. S., Li S., and Vinatzer, B. A. (2019) Strain-level identification of bacterial tomato pathogens directly from metagenomic sequences. *Phytopathology*. Available at: <http://dx.doi.org/10.1094/PHYTO-09-19-0351-R>.

Reid, J. L., N. J. Holmberg, M. Albrecht, S. Arango-Caro, O. Hajek, Q. Long, and J. Trager. 2020. Annual Under-story Plant Recovery Dynamics in a Temperate Woodland Mosaic during a Decade of Ecological Restoration. *Natural Areas Journal* 40:23-34, 12.

Ellis, M.D., Hoak, J.M., Ellis, B.W., Brown, J.A., Sit, T.L., Wilkinson, C.A., Reed, T.D., and Welbaum, G.E. (2020). Quantitative real-time PCR analysis of individual flue-cured tobacco seeds and seedlings reveals seed transmission of *Tobacco mosaic virus*. *Phytopathology* 110:194-205.

Hilaire, Sheldon S., Brady, Jeff A., Muir, James P. and Bellows, Barbara. Changes in Soil and Plant Microbial Community Populations Following Administration of Manure Containing Oxytetracycline or Monensin. *J Soil Plant Biol* 2019(1): 94-105.