

# EntNem

## Mar - Apr 2023 Newsletter

UF/IFAS Entomology and  
Nematology Department

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## Letter from the Interim Chair



Dear Friends in Entomology  
& Nematology,

As the spring 2023 semester draws to a close, so does my term as interim chair. I am grateful to have had the opportunity to serve you all. I have learned much this semester, thanks to all of you that taught me lessons. I especially appreciate our fantastic professional staff members, without whom this whole large enterprise would come to a halt. There is a lot more going on behind the scenes to support all of our faculty, students, staff, and other stakeholders than I ever realized while a regular faculty member. I also have newfound appreciation for the excellence

shown by our faculty. We are a large body of faculty with diverse job descriptions, skills, and contributions. This diversity is a real strength that allows us to serve our large and varied body of students and stakeholders and I encourage each of you to spend some effort getting to know your fellow faculty better because we can all learn a lot from each other. I also really enjoyed learning about the challenges and triumphs of our graduate and undergraduate students this semester. While our program is far from perfect, I am proud of all you have accomplished this semester. And to those of you that may be graduating with a new undergraduate or graduate degree, we wish you the best in your future career endeavors. Feel free to come back and visit with us anytime, we would be glad to hear from you.

I wish you all an excellent transition from the spring to summer semester.

Dan

# Please welcome our *Newest* members!

## *Robert Annis*

Education/Training Spec. II

Robert joins us as an Education and Training Specialist for PMU. He is no stranger to IFAS, having previously worked for over 20 years as a video producer at IFAS Communication Services.





## Insect ID LAB

In case you haven't noticed, the eastern lubber grasshoppers are out! Many households have a daily ritual of 'lubber hunting' to protect their crinum lily, amaryllis, and other ornamental plants. This is the time of year to deal with them, as they only get harder to kill as they get bigger. Nymphs are black with bold yellow lines, and look quite different from the adults such that many people don't realize they are the same species!







*Farewell*

## Feenix Hartell

We are sad to say goodbye to our wonderful colleague Feenix Hartell, who has accepted a new opportunity and will be moving on to exciting new adventures at UF IFAS Family Youth Community Science. Although we will miss her dearly, we are thrilled to see her embark on a new journey and know that she will continue to make a positive impact wherever she goes.

*We are pleased to announce that*

## Bryony Bonning

has been awarded the prestigious 2023 Culture of Nomination by Dean for Research and Director [Robert Gilbert](#).

**Bryony** has shown remarkable skills in leadership through her nominations for AAAS Fellowships and her valuable service on the Entomology and Nematology Department Faculty Honors Committee.

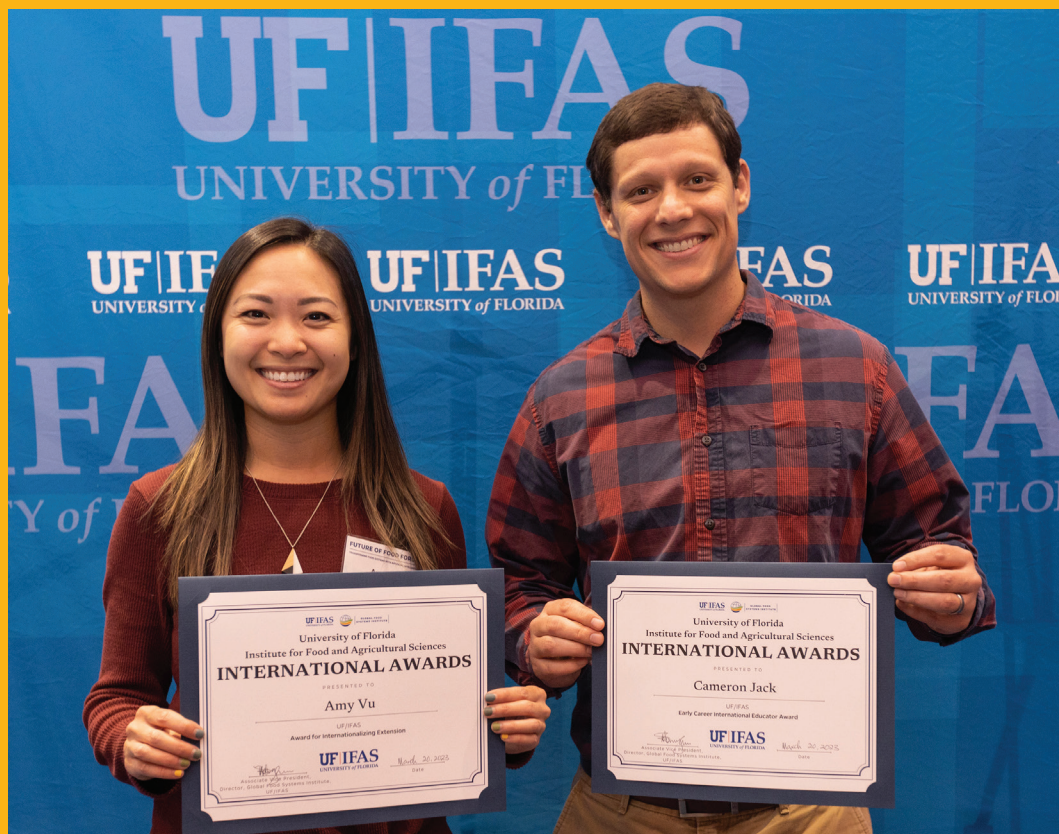




Congrats to **Amy Vu**, State Specialized Program Extension Agent in Apiculture, for winning the Internationalizing Extension award from UF/IFAS and being recognized at the Global Food Systems Institute Future of Food Forum!

**Cameron Jack** has been honored with the title of IFAS Early Career International Educator of the Year! As a result of this recognition, he will now be

nominated for the UF Junior International Educator of the Year award. We eagerly anticipate his success at the upcoming awards ceremony in October.



At the 16th Annual UF/IFAS FAES Research Awards Ceremony on Thursday, May 25th, 2023, two of our esteemed colleagues will receive special recognition awards for their co-authored papers. Bryony Bonning and her co-authors Neil Crickmore, Colin Berry, Suresh Panneerselvam, Ruchir Mishra, and Thomas R. Connor, will be recognized for their paper titled, “A structure-based nomenclature for *Bacillus thuringiensis* and other bacteria-derived pesticidal proteins.”

**De-Fen Mou** and her co-authors Brandon Di Lella, Erica Helmick, and Brian Bahder will be recognized for their paper titled, “Acquisition and Transmission of the Lethal Bronzing Phytoplasma by *Haplaxius crudus* Using Infected Palm Spear Leaves and Artificial Feeding Media.” We extend our warmest congratulations to De-Fen, Bryony, and their co-authors for their outstanding work and contributions to the field.







ENSO organizes group visits to the Florida Museum of Natural History for an exciting exploration of the new Spider Alive exhibit. This captivating exhibition offers educational adventures focused on spiders, scorpions, and other arachnids, featuring a variety of fascinating specimens on display. By purchasing a ticket, you will gain valuable insights into the unique roles these creatures play and their significant ecological importance. Don't miss this opportunity to delve into the world of arachnids and expand your knowledge.

If you haven't already, we encourage you to connect with ENSO on Instagram. By clicking on the Instagram icon below, you'll gain access to information about their members, activities, and upcoming events.

Don't miss out on staying informed and be a part of ENSO.





# Graduate Student Appreciation





Graduate Student Appreciation Week was a smashing success! From April 3rd to the 7th, we had a wonderful time celebrating our hardworking graduate students. On April 6th, faculty and staff came together to provide sandwiches, drinks, and games for our graduate students to enjoy.



The event was a hit, with smiles, laughter, and the sound of pickleball smacking across the lawn of Steinmetz Hall. It was a delight to see our graduate students taking a much-needed break from their studies and enjoying the festivities. The picnic was a great opportunity for everyone to relax, connect, and have some fun.



Although the time was short, we are committed to making next year's Graduate Student Appreciation Week even better. Thank you to everyone who participated in making this event a success, Cameron and Feenix did a terrific job setting the event. We look forward to continuing to celebrate our graduate students in the years to come.



# You are Appreciated





Each year, the Entomology & Nematology Student Organization offers travel grants to deserving graduate students who are committed to professional development. These highly competitive grants are awarded to support students in attending conferences such as the Southeastern Branch Entomological Society of America, where they can network, gain valuable experience, and showcase their research. We are proud to announce that Purity Kendi Muthomi, Tafsir Nur Nabi Rashed, and David Olabiyi have been selected as this year's awardees. We are confident that these exceptional students' dedication and talent will serve them well as they embark on this exciting journey to further their education and careers.



## Congrats!

Abdullah Alomar, Ph.D. candidate, for receiving the American Mosquito Control Association Student Paper Competition Award at the 2023 annual meeting in Reno, Nevada.





The annual national Cotton Disease Council section of The Cotton Beltwide Conference has awarded Rebeca Sandoval Ruiz, student from the **Grabau lab**, 2nd place in the student presentation. Rebeca Presentation was “Influence of carinata winter cropping on reniform nematode,” based on her dissertation research.

## 2023 SEB Winners

Ten-minute Oral Presentation

### **1st place in Ten Minute Poster Presentation**

-John Ternest, PhD Ten minute poster presentation

### **2nd place Ten Minute Poster Presentation**

-Sarah Tafel (Education, Outreach and Teaching)

-Larissa Pereira Lima (MS)

-Lillie Rooney (MS)

-Allan Busuulwa (MS)

-Marcelo Dimase (PhD)

-Allan Busuulwa (MS)

-Sara Salgado (PhD)





We are delighted to welcome Ms. Yi-Ting Hung, our new visiting Ph.D. student from Taiwan (National Chung Hsing University Department of Entomology). Yi-Ting has secured a competitive National Science and Technology Council international award to work with the **Wong lab**, applying her expertise in machine learning and statistical modeling to investigate the interactive effects of diet and microbiome on insect behavior and metabolism. We look forward to the insights and discoveries that Yi-Ting will bring to our research community.

The University scholars program awarded Walker Bensch for his project assessing the impact of land use change on the wing morphology of Southeastern Blueberry Bee (*Habropoda labroisa*). Walker is an undergraduate lab & field technician in the Mallinger Pollinator Ecology and Conservation Lab. He is mentored by Ph.D student Joanna Jaramillo with additional advising from **Dr. Rachel Mallinger**. He is thankful for PhD candidate Sarah Anderson who has shared her collection of *H. laboriosa* samples from her dissertation.



Iris Strzyzewski, a member of **Dr. Martini's Lab**, was honored as a recipient of the Emerging Scholar Honorable Mention Award by the Association for Academic Women (AAW).





Graduate student Clebson Tavares presented a poster on “Screening for bacterial pesticidal proteins with toxicity to *Diaphorina citri*” at the UF/IFAS Citrus Research and Education Center’s (CREC) 11th Annual Research Symposium held on March 24th at Lake Alfred.



Kendi Muthomi, a student with extensive research and development experience in both the US and Kenya, was invited to serve as a panelist at UF’s event ‘Challenging Helicopter Science,’ which was hosted at the Reitz Union. The event aimed to address the issue of researchers from privileged settings conducting research in resource-poor communities without local involvement. Kendi was the only student among four reputable professors on the panel.



Graduate student Marley Iredale presented a poster entitled “Description of amoebic disease in a colony of western honey bees (*Apis mellifera*)” at the Emerging Pathogens Institute Research Day on February 16th.



# ENTOMOLOGY & NEMATOTOLOGY CLUB

Bug Fest, held on April 12, proved to be a delightful and educational experience for all participants. Enthusiastic attendees had the opportunity to learn about fascinating insects, arachnids, and more. Engaging activities like maggot painting and bug face painting added to the excitement and made it an unforgettable event. Additionally, participants gained insights into the world of movie bugs, such as those featured in 'A Bug's Life.' Kudos to the Entomology and Nematology Club for their exceptional efforts in organizing this successful event.



## CALS



CALS 2023 Award Banquet has announced the Entomology and Nematology Club as the CALS Council Club of the Year: Collaboration. The Entomology and Nematology Club has collaborated with several student clubs and organizations throughout UF/IFAS, such as Alpha Zeta and Wildlife Society.

CALS leadership Institute (CALS LI) is a unique leadership development program for undergraduate students enrolled in the college of Agricultural & Life Sciences. The following students have been selected as representative of CALS LI.



Lily Cope  
CALS Leadership  
Institute Cohort 13



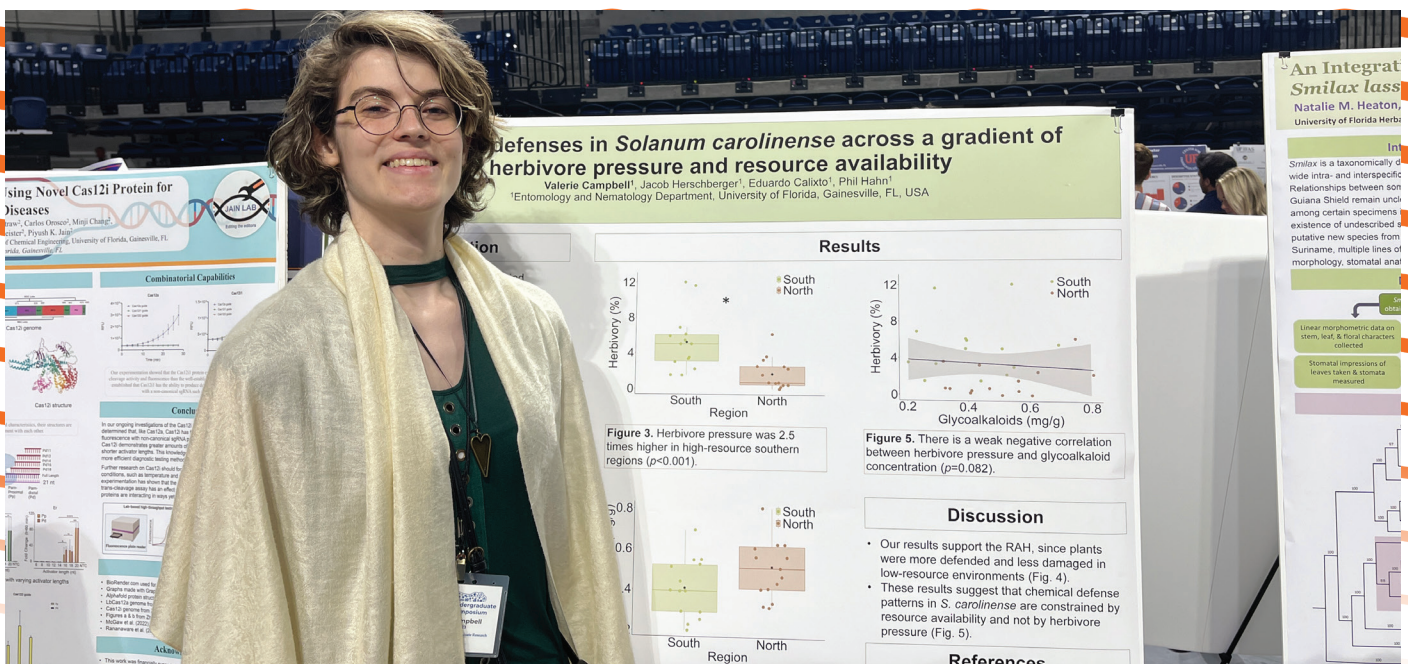
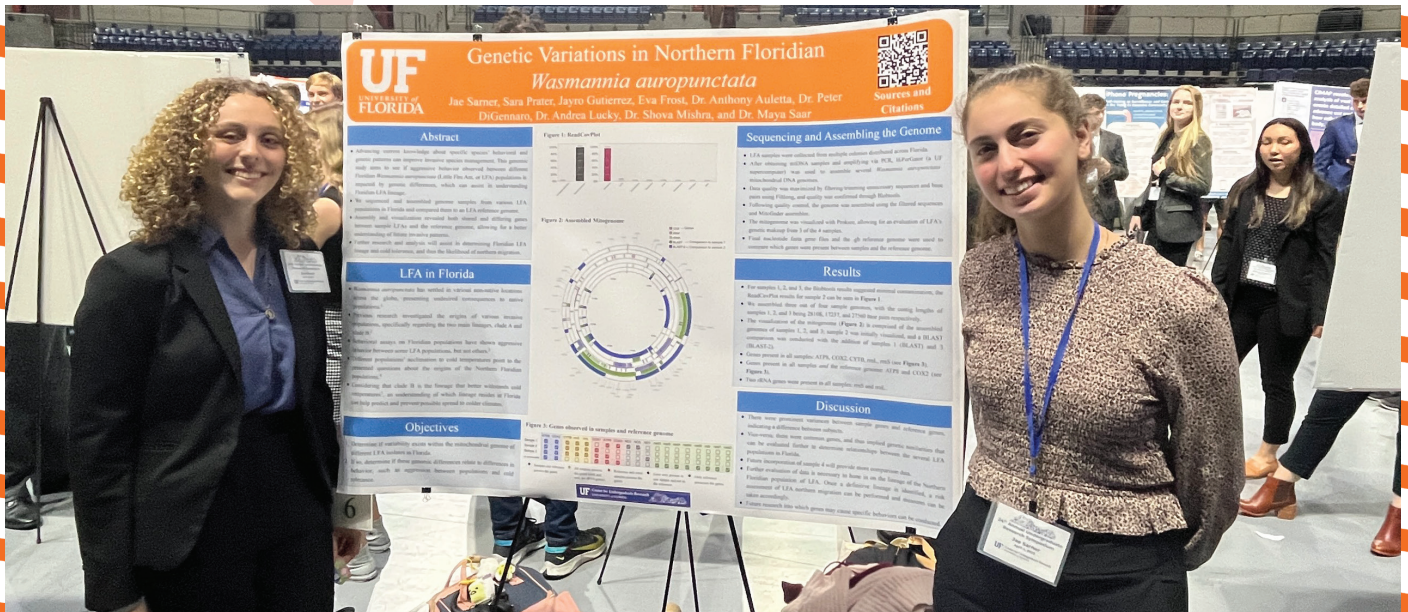
Kenna Stone  
CALS Ambassadors



# Undergraduate Research Symposium!

Entomology & Nematology once again made a strong showing at the Spring Undergraduate Research Symposium, which took place in the O'Connell Center on April 4th, 2023. This event is organized by the UF Center for Undergraduate Research and invites students from all across the university to present the findings of their research. This year, we had 16 talented undergraduates presenting

work that they conducted in Entomology & Nematology labs! Among these presenters were 7 of our outstanding Entomology & Nematology majors/minors, as well as 2 students from the Fall 2022 Insect Research CURE course (co-taught by Drs. **Anthony Auletta**, **Peter DiGennaro**, and **Andrea Lucky**). Congratulations to all of the presenters and their mentors on a job well done!





# CURE

## Course-Based Undergraduate Research Experiences

On April 21st, 2023, the 30 students in the Spring '23 Insect Research CURE (ENY 2890) presented the results of their semester-long research project at a poster symposium in the Steinmetz Hall atrium. The CURE symposium was well-attended by over 60 faculty, staff, and students in the Entomology & Nematology Department- thank you to everyone who came out to support the students and learn more about their research!

The Insect Research CURE, which is led by Dr. Anthony Auletta, provides students with an immersive, hands-on course that engages them in impactful, authentic research. CURE students spend the semester working in collaborative teams on a novel research project, generating publishable data and thus providing new knowledge to the field of entomology. This semester's CURE, which was done in collaboration with Dr. Andrea Lucky, Dr. Jason Williams, and colleagues at Towson University, focused on the taxonomy of the ant genus *Nylanderia*. The 45 student researchers at UF and Towson used morphometric analyses to establish species boundaries among *Nylanderia* specimens from Central America, as part of an NSF-funded taxonomic revision of the genus. This research is still ongoing, but the efforts of our CURE students have already yielded valuable data...and possibly even new species that will be formally described soon! Several of our student researchers will present these findings at the ESA National Meeting later this year.

The Insect Research CURE is always a team effort with a large interdisciplinary teaching team. In addition to Drs. Auletta, Lucky, and Williams, the instructor team for the Spring 2023 CURE also included Aswaj Punnath (graduate TA), Yichen Li (graduate TA), and Dr. John LaPolla (collaborator, Towson University). If you are interested in collaborating on a future CURE, please reach out to Dr. Auletta for more information!





# EDUCATION & OUTREACH:



**Hugh Smith** was in Guatemala March 12-19 working on *Megalurothrips usitatus*, a pest of legumes that has recently become established in south Florida, Mexico and Central America. He visited growers in San Antonio Sinaché near Zacualpa with Manuel Tobar, a student in the Universidad Rafael Landívar's MS program Crop Protection for International Commerce. Hugh will be advising Manuel's MS thesis research on managing *M. usitatus* with snap bean growers in San Antonio Sinaché. March 16-17 Hugh led a training on *M. usitatus* attended by agronomists and bean breeders from across Central America and Colombia with participation from the Centro Internacional de Agricultura Tropical (CIAT). The meeting was covered on the local news

The Florida Museum's outreach crew teamed up with the Lucky Lab's Miles Maxier for an ant-themed Museum in the Parks event with the Children Beyond Our Borders organization. Families learned all about ants as they assembled homemade aspirators, checked bait traps, and went on a nature hike at Alfred A. Ring Park. The presenters were assisted by Ash Punmath and Maya Saar (Lucky Lab), Rachit Pratap Singh (**Kawahara Lab**) and Jen Schlauch (UC Irvine EEB).





# Honey Bee College



The 2023 Spring Bee College was held on March 11 and 12, 2023 and was an exciting and successful event. There were 257 participants, 49 speakers, and 12 vendors. With over 40 courses available, attendees had the opportunity to choose from a range of honey bee-related topics, including hive maintenance, pest and disease identification and treatment, cooking with honey, and the creation of handmade products such as lip balm and candles using beeswax. The UF/IFAS Honey Bee College has been met with great enthusiasm. One of the participants created a great testimonial video highlighting his experience at the event, and we invite you to watch the video by clicking [here](#). Thank you to all who support our great event.

2023 Summer Bee College is just around the corner in Davie, Florida at the [\*\*Ft. Lauderdale Research and Education Center\*\*](#). The event will take place on August 18 and 19, 2023. This event is a smaller scale event compared to our Spring event but is still a fantastic opportunity to learn about beekeeping and network with other honey bee-loving individuals. To take advantage of our Early Bird Discount,

purchase your tickets now through Friday, June 23, 2023. Don't miss out on this great event! More information about the event can be found [here](#).





## Publications

**Kaur, G., L.L. Stelinski, X. Martini, N. Boyd, and S. Lahiri. 2023.** Reduced insecticide susceptibility among populations of *Scirtothrips dorsalis hood* (Thysanoptera: Thripidae) in Strawberry Production. Journal of Applied Entomology [10.1111](#)

**Patel, J.S., S.B. Lee, T. Chouvenc, and N.Y. Su. 2023.** Equivalent colony growth of hybrids of two invasive *Coptotermes* species can threaten urban areas. Journal of Economic Entomology [10.1093](#)

**Mou, D.F., E.E. Helmick, and B.W. Bahder. 2022.** Multilocus sequence analysis reveals new hosts of palm lethal decline phytoplasmas in Florida, U.S.A. Plant Health Progress [10.1094](#)

**Tong, R.L., E.K. Choi, K. Ugarelli, T. Chouvenc, and N.Y. Su. 2023.** Trophic path of marked exuviae within colonies of *Coptotermes gestroi* (Blattodea: Rhinotermitidae). Journal of Insect Science [10.1093](#)

**Alomar, A.A., D.W. Perez-Ramos, D. Kim, N.L. Kendzierski, B.H. Eastmond, B.W. Alto, and E.P. Caragata. 2023.** Native *Wolbachia* infection and larval competition stress shape fitness and West Nile virus infection in *Culex quinquefasciatus* mosquitoes. Frontiers in Microbiology [10.3389](#)

**Tong, R.L., J.S. Patel, J.M. Gordon, S.B. Lee, T. Chouvenc, and N.Y. Su. 2023.** Exuviae recycling can enhance queen oviposition and colony growth in subterranean termites (Blattodea: Rhinotermitidae: *Coptotermes*). Environmental Entomology [10.1093](#)

**Adhikari, R., D.R. Seal, B. Schaffer, O.E. Liburd, and R.A. Khan. 2023.** Within-plant and Within-field distribution patterns of asian bean thrips and melon thrips in Snap Bean. Insects [10.3390](#)

**Sloyer, K.E., N.D. Burkett-Cadena, and L.P. Campbell. 2022.** Predicting the potential distribution of *Culex (Melanoconion) cedecei* in Florida and the Caribbean using ecological niche models. Journal of Vector Ecology [10.52707](#)

**Zimler, R.A., and B.W. Alto. 2023.** Transmission of Asian Zika Lineage by *Aedes aegypti* and *Ae. Albopictus* Mosquitoes in Florida. Viruses-Basel [10.3390](#)

**Telmadarrehei, T., E.M. Kariuki, E. van Santen, E.J. Le Falchier, and C.R. Minteer. 2023.** The effects of soil type and moisture on the survival of *Pseudophilothrips ichini* (Hood). Biocontrol Science and Technology [10.1080](#)

Click here to view the full list of publications. [Link.](#)