

# News fEBB

Ecology and Evolutionary Biology Monthly Newsletter

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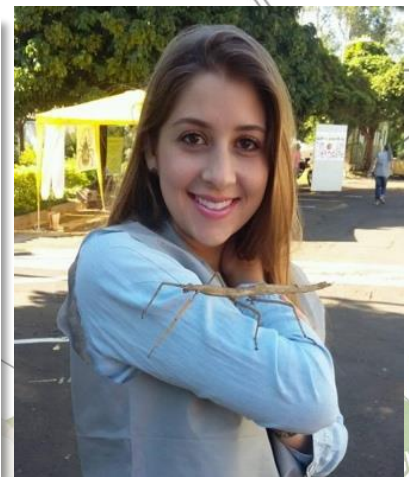
## Announcements

- **Monday EEB Seminars have been postponed until the Fall: Instead check out EvoEcoSeminar Series (M-W-F @ 11 am).**
- **EEB Students and Core faculty are encouraged to compete in the EEB Armchair Challenge! (Email Gil for more information)**
- **Thank you to those who participated in EIS! Videos are now archived online [here](#).**
- **Faith Hardin's MS Thesis defense will be on May 4<sup>th</sup> @10am.**

You can now submit YOUR story for the newsletter online! Click [here](#) to be featured.

## Student Spotlight

**Andreisa Fabri Lima MS** is a visiting doctoral student from the Federal University of Lavras in Brazil where she works under the advisement of Dr. M. Fernanda G.V. Peñafior. For her masters she studied the bioactive compounds of *Solanaceae* against fall armyworm, *Spodoptera frugiperda*. Her project at Texas A&M will explore how insecticides alter plant-insect interactions. She will be using a variety of chemical ecology techniques learned in our lab. We look forward to exchanging ideas and learning from one another over the remaining months!



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# Laboratory Highlight

## The Helms Lab PI: Dr. Anjel Helms



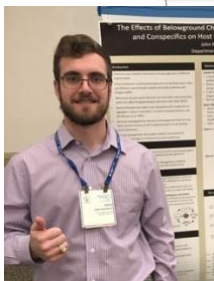
The research in our lab focuses on understanding how chemical compounds mediate interactions among microbes, plants, herbivores, and herbivore natural enemies. We combine analytical chemistry and behavioral ecology in laboratory and field-based research to investigate how organisms use chemistry to navigate, communicate, and defend themselves.

Some of our current projects examine how plants and insect herbivores use chemical information from their environment to assess their risk of attack and how herbivore natural enemies use such information to find potential prey. Visit us at : [helmslab.com](http://helmslab.com)

**Laura Marmolejo** is an undergraduate (c'o 2022) from San Marcos, Texas. Her love for insects growing up led her to pursue a B.S. in Entomology at TAMU. She is currently researching the impacts of vibrations on plant/insect interactions and helping grad student's with projects. When she is not in the lab, she is engaging in many of A&M traditions. After graduation Laura hopes to seek a Masters degree in Entomology.



**John Grunseich** is a second-year M.S. student. John graduated from Texas A&M University in fall 2018 with degrees in Soil and Crop Science and Entomology. He is originally from Bellevue, Texas and is interested in plant-insect interactions and their implications for ecology and integrated pest management. After pursuing a master's degree, he hopes to get involved in research with real-world applications or pursue a PhD in entomology.



**Morgan Thompson MS** graduated with a B.S. in biology from The College of William and Mary in 2016. It was there that she developed a love for insects and scientific research. She then headed to the University of Maryland and graduated in the spring of 2019 with a Master's of Science in entomology. Morgan's research interests include plant-insect interactions, agroecology, and insect community ecology, and she is excited to learn more about chemical ecology and multitrophic interactions in the Helms Lab.



**Natalie Aguirre** is a first year Ph.D. student in the EEB program. Natalie graduated with a B.S. in biology from Pepperdine University. During this time, she completed an honor's thesis conducting research on the interaction of drought stress and pathogen infection in a chaparral shrub species, *Malosma laurina*. She then spent a year as a Fulbright scholar at the Universidad Politecnica in Madrid, Spain, where she studied effect of water stress on Dutch Elm Disease. Natalie is currently interested in studying how plant physiology relates to chemical ecology.

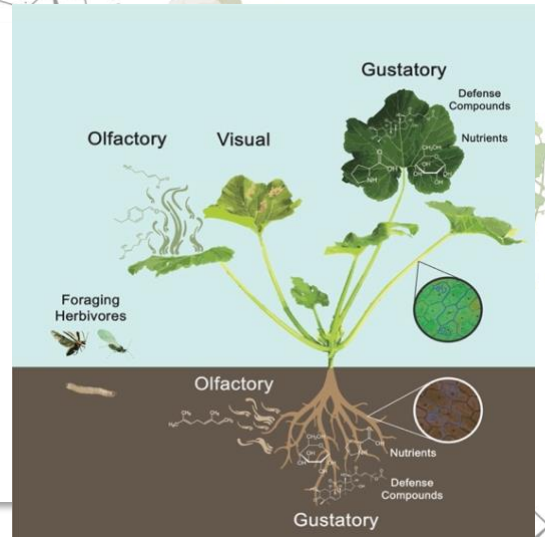


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# Helms Lab News

The Helms Lab recently published a review paper in the journal 'Plants' on how plant-associated microbes modify insect herbivore host-plant selection. We reviewed the scientific literature documenting how beneficial or pathogenic plant-associated microbes alter plant traits in ways that subsequently affect the behavior of insect herbivores. Our review revealed that beneficial plant-associated microbes have context and species-specific effects on herbivore preference. For plant-pathogenic microbes, the effects were strongly correlated with the mode of pathogen transmission. Insect-vectored plant pathogens typically altered plant cues in ways that benefitted pathogen transmission. Whereas for non-vectored pathogens, herbivore preference was linked to performance. To get the full story, please check out our open-access publication here: <https://www.mdpi.com/2223-7747/9/1/6>.



## Texas Ecological Laboratory

Texas Ecological Laboratory grants were awarded to Morgan and Natalie. Morgan's research will examine the chemical ecology underlying insect interactions with a weedy gourd species. Natalie's project will focus on the prevalence of oak wilt disease in Texas and how this disease affects oak-insect interactions. This is a great opportunity for EEB students to consider.

Natalie was chosen as a 2020 winner of the Grant A. Harris Fellowship, which provides graduate students up to \$10,000 of research instrumentation through METER Group, Inc. The award recognizes outstanding environmental science research proposals in honor of Dr. Grant Harris, an esteemed and beloved plant ecologist. Natalie will study the relationship between plant volatile release and stomatal conductance using a Porometer. For more information on Natalie's project, click [here](#).

Gradstudents, we encourage you to apply for grants no matter how small! Goodluck!



**METER**

Laura received second place on her oral presentation at the Aggie Women in Entomology Undergraduate Research Symposium at Texas A&M! Her presentation shared her work on cucumber beetle host-plant preferences.

Congrats Laura!!



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