

GS23-276



Blaire Kleiman conducting arena trials assessing heat stress effects on bumblebee pollination of squash.





Growth Chamber (Percival) used to implement different temperature treatments on the plants and bumblebee micro colonies (Koppert USA).





Open-Top-Chamber prototype with weather station inside.



40 acres zucchini farm (Sam S. Accursio and Sons) in Homeatead, Florida, with 4 floral strips planted throughout.

Farmer and farm worker surveys were conducted pre and mid planting, with conclusionary surveys in Spring 2025.



### **Students Mentored:**

A core group of field assistants was vital to the execution and data collection in these farms, assisted consistently by undergraduate Agroecology interns and mentees: Sarah Tillem, Sophie Ramos, Fabiana Moran, and Natalie Valdes. Others assisted on a semi-regular basis in field/lab work as well.

### **Presentations:**

- 2024 Entomological Society of America Conference, Phoenix, Arizona. ‘Heat Stress Effects on Zucchini and it’s Bumblebee Pollinators’.
- 2024 FIU Earth and Environment Symposium + 3 Minute Thesis Competition, Oral Presentation “Heat Stress And Its Influence On A Tropical Annual Crop And Its Pollinators: Implications For Agriculture In An Era Of Climate Change”.
- 2023/2024 Talk on Plant-Insect Ecology in AGR 4272 Agroecology.
- 2023/2024 Agroecology Symposium, Oral presentation of “Heat Stress Effects on Squash and it’s Pollinators”.
- 2023 Ecological Society of America Conference, Portland, Oregon, Oral presentation of paper “Weeds Enhance Insect Diversity and Abundance and Improve Soil Conditions in Mango Cultivation of South Florida”.
- 2022 Botanical Society of America Conference, Alaska, 1<sup>st</sup> place poster “How weeds affect insects in mango, *Mangifera indica*, cultivation of South Florida”; Oral presentation of paper “Weeds Enhance Pollinator Diversity and Fruit Yield in Mango”.