Ayress Grinage (E: adg223@cornell.edu, P: 352-575-3053)

**Objective** I am currently a PhD Candidate within the Plant Biology Section of the School of Integrative Plant Science at Cornell University working on palm systematics. My research leverages my expertise on the evolution of *Sabal* (Coryphoideae: Palmae) in the southeastern US, the Caribbean, and Northern South America/Central America to establish a network of genetic, ecological, and morphological resources to monitor local tropical forests under threat from deforestation, climate change, and invasive species.

#### Education

University of Florida, Gainesville, FL

May 2019

Bachelor of Arts in Biology (Summa Cum Laude)

Minor in Spanish

May 2020

Master of Science in Botany

Cornell University, Ithaca, NY

Fall 2020- Present

Doctor of Philosophy in Plant Biology

# **Teaching Experience**

July 2019- May 2020: Instructor For Cross-Disciplinary Lab (X-LAB)

- Instructor for an undergraduate introductory lab that focuses on major concepts from

biology, chemistry, and physics

August 2021-December 2021: Instructor for Plants and People

January 2022-May 2022: Instructor for Functional Plant Biology

## Research Experience

September 2020- October 2020: Lab of Dr. Adam Bogdanove

- Research on *Xanthomonas campestris*
- Genomics of various pathovars of *X. campestris*
- Pathogenicity experiments on various strains of *X. campestris* to determine host range and characterize virulence of these strains

# October 2020-Present: Lab of Dr. Chelsea Specht

- Research on Sabal
- Morphology of the stem *Sabal minor*
- Phylogenomics of *Sabal*
- Population genetics of Sabal minor

### August 2018- May 2020: Lab of Dr. Majure

- Molecular laboratory experience (DNA extractions, chromosome counting, PCR)
- Generic experience scripting (Bash)
- Projects: Systematics of the *Sabal minor* complex (MSc thesis), *Sabal miamiensis* molecular analysis (side-project), Flora of University of Florida Bryophyte barcoding (side-project), biogeography of *Castela* (side project)

#### **Publications**

Dubrow Z, Carpenter S, Carter M, **Grinage A**, Butchachas J, Gris C, Jacobs J, Smart C, Noel L, Tancos M, Bogdanove A. 2022. Sequencing of multiple collections of *Xanthomonas campestris* isolated from

- cruciferous weeds reveals pathovar structure and virulence factors. Molecular Plant-Microbe Interactions. https://doi.org/10.1094/MPMI-01-22-0024-R.
- Majure LC, Blankenship A, **Grinage A**, Noa-Monzón A. 2021. Castela (Simaroubaceae), an impressive New World radiation of thorny shrubs destined for edaphically dry habitats. Brazilian Journal of Botany: 1-13. <a href="https://doi.org/10.1007/s40415-021-00742-8">https://doi.org/10.1007/s40415-021-00742-8</a>
- Griffith MP, Meyer A, **Grinage A**. 2021. Global ex situ conservation of palms: Living treasures for research and education. Frontiers in Forests and Global Change 4: 136 149. https://doi.org/10.3389/ffgc.2021.711414
- **Grinage A**. 2020. A Survey of Sabal Understanding Its Evolutionary History with a Special Focus on the Sabal minor Complex. Master's Thesis, University of Florida. UFRGP.

## Communication

- Gavin-Smyth N, Fant J, **Grinage A**, Zhang J. 2022. Using target capture data for population genetics: assessing allelic diversity within populations of three rare species. Botany 2022, Oral presentation, Abstract ID: 689.
- **Grinage A**, Landis J, Valderrama E, Gandolfo MA, Specht CD. 2021. Deciphering the Tales of Sabal from the Crypt: Insights from Past Collections. Botany 2021, Oral presentation, Abstract ID: 603.
- Murphy TH, **Grinage A**, Majure L. 2021. Barcoding the bryophyte flora of the southeastern United States. Botany 2021, Poster presentation, Abstract ID: 501.
- **Grinage A,** Peverly R, Gandolfo MA. 2021. Comparative Anatomy of the Epidermis of Various Species of *Sabal*. VII World Palm Symposium, Poster presentation, Abstract ID: 3046.
- **Grinage A** and Majure LC. 2019. Systematics of the genus Sabal in the Southeastern US, Sabal ancestral state reconstruction. Celebration of Research 2019, Poster presentation, by the College of Medicine at the University of Florida.
- **Grinage A** and Majure LC. 2018. Systematics of the genus Sabal in the Southeastern US. Fall 2018 Research Undergraduate Symposium, Poster presentation, by the Center for Undergraduate Research at the University of Florida.

## **Synergistic Activities**

- 2021: Reviewer for the Review of Palaeobotany and Palynology
- 2021: Scientist in Every Florida School; where I worked closely with a teacher in Orlando, Florida to develop virtual lesson plans to teach fourth grade students about the plant life cycle using *Arabidopsis thaliana* as a model.
- 2021: GRASSHOPR fellow, where I worked with fellow plant biology graduate students and a middle school teacher at Newfield Middle School (Newfield, New York) to develop lessons to teach students about the natural history of plants.

### **Awards And Funding**

- 2022 Howard Hughes Medical Institute Gilliam Fellowship
- 2022 International Association for Plant Taxonomy Research Grant
- 2022 Eloy Rodriguez Diversity, Equity, and Inclusion Conference Travel Award
- 2022 Andrew W. Mellon Student Research Grant
- 2022 Ford Foundation Fellowship (Honorable Mention)
- 2020-2021 Cornell University Dean's Excellence Fellowship
- 2019 Winona Jordan Undergraduate Thesis Award
- 2018-2019 Bioscience Scholarship (NSF S-STEM 1259498).
- 2018 Carry Lynn Yoder Grant
- 2018 Florida Museum of Natural History Graduate Student Travel Grant.

### **Memberships**

American Society of Plant Taxonomists International Palm Society