Janaina Camara Siqueira da Cunha

Entomology, Texas A&M University
☎ (979) 402-9438 ✉ janainacsc@gmail.com 🏠 https://www.linkedin.com/in/janaina-cunha/

Summary

Ph.D. Student, Graduation: May 2022, Entomology.
Teaching Assistant, Texas A&M University, 2020. Responsible for teaching the Insect Ecology lab.
Research Assistant, Texas A&M University, 2016 - 2017. Worked on the Texas A&M University Insect Collection.
Research Interests: Endophytic Fungal Entomopathogens, Biological control, Chemical Ecology, Microbiology, Integrated Pest Management, Plant-insect-fungi Interactions.
Skills: Fungi culturing, Insect rearing, Statistical Analysis, Volatile collection and analysis, Greenhouse Management, Field data collection, Research design, and Experimental techniques.

Education

Ph.D. in Entomology, *Texas A&M University,* College Station/TX, USA, GPA: 3.5/4.0, **May 2022**
Relevant Subjects: Fungi/Insect/Plant Interactions, Insect Pest Management, Biological Control
Dissertation title: Plant-associated fungi effects on insect herbivores and on a predator

MS in Animal Biology, *Federal University of Pernambuco,* Recife/PE, Brazil, GPA: 3.5/4.0, **February 2015**
Thesis title: Survey of aquatic beetles in protected areas of Atlantic Forest, Pernambuco, Brazil

MBA in Environmental Management and Planning, *University of Pernambuco,* Recife/PE, Brazil, **May 2013**
Thesis title: Environmental Education as a Management Tool in the Protected Area APA Costa dos Corais

BS in Biology, *University of Pernambuco,* Recife/PE, Brazil, GPA: 8.4/10.0, **December 2011**
Thesis title: Dung beetles (Coleoptera: Scarabaeidae) in Brejos de Altitude, Pernambuco, Brazil

Work Experience

Postdoctoral Research Associate, *Texas A&M University,* College Station, TX, Spring 2022 – Current
Performing biological control assays with plant-associated fungi and cotton and potato pests. Potato assays consist of testing commercially available fungal formulations involving analysis of pest performance (fall armyworm, green peach aphids and root-knot nematodes) and plant growth. Conducting cotton assays with chemical ecology to test the difference in volatile organic compounds profile of fungal-treated plants associated with corn earworm damage.

Graduate Research Assistant, *Texas A&M University,* College Station, TX, Fall 2017 – Spring 2022
Investigated the effects of plant-associated fungi applied to cotton plants on the behavior and development of herbivorous - cotton boll weevil, predator-convergent lady beetle species, and plant-associated fungi as direct pathogens of cotton aphids. Responsible for preparing fungal solutions, analyzing fungal plates, and performing assays (behavioral, insect performance and pathogenic).

Teaching Assistant, *Texas A&M University,* College Station, TX, Spring 2020
Assisted in building coursework, writing quizzes, teaching laboratory lectures, and organizing laboratory assays for the Insect Ecology undergraduate course at the Department of Entomology.

Research Assistant, *Texas A&M University, Department of Entomology*, College Station, TX, February 2016 – September 2017
Responsible for updating the Texas A&M University Insect Collection database, including new species, organizing old and new specimens, modifying labels, and fixing name problems.

MS Research Assistant, *Federal University of Pernambuco, Department of Zoology,* Recife-PE, Brazil, November 2012 – March 2015.
Developed projects about the ecology of benthic macroinvertebrates, assisted students in writing projects and supported them during fieldwork. Leader of the ecological analysis and taxonomy of aquatic beetles in the laboratory.

BS Research Assistant, *University of Pernambuco, Biological Sciences Institute,* Recife-PE, Brazil, August 2010 – July 2011
Assisted in the Scientific Collection of Scarabaeidae at ICB/UPE and performed ecological and biological analyses of dung beetles.

Teaching Assistant, *University of Pernambuco*, *Biological Sciences Institute (ICB)*, Recife, PE, Brazil, April 2010 – December 2010
Leader teaching assistant and prepared laboratory material (e.g., quizzes, exams, and lectures) for the Vertebrate Zoology undergraduate course of BS and Licentiate Degrees in Biology.

Extra-Curricular Activities

Grants

Ph.D. Scholarship, Texas A&M University, Fall 2017 – Summer 2021. Sponsor: *CAPES* - Brazil ($144,000)
MS Scholarship, Federal University of Pernambuco, 2013 – 2015. Sponsor: *CAPES* - Brazil ($10,800)
BS Scholarship, University of Pernambuco, 2010 – 2011. Sponsor: *PIBIC*/*CNPq* - Brazil ($1,500)
TA Grant, University of Pernambuco, 2010. Sponsor: *PFA*/*UPE* - Brazil ($1,200)

Award

Travel Award, Department of Entomology, Texas A&M University, November 2019 ($600)
Selected recipient to present at the Entomological Society of America Conference
Travel Award, Department of Entomology, Texas A&M University, November 2024 ($600)
Selected recipient to present at the Entomological Society of America Conference

Leadership

Treasurer, Brazilian Students Association (BRSA), Texas A&M University, 2018–2019
Organized the finances of the association and events for the community
General Officer, Brazilian Students Association (BRSA), Texas A&M University, 2016–2017
Organized events for the Brazilian community and helped new students to accommodate in the city

Events	**Judge/Volunteer**, Entomological Society of America (ESA) Annual Meeting, November 2024 **Symposium Organizer**, Highlighting Women's Research: Sustaining Biodiversity & Conservation, ESA Annual Meeting, November 2020 **Planning Committee**, Ecological Integration Symposium, Texas A&M University, April 2020 **Judge/Volunteer**, Ecological Integration Symposium, Texas A&M University, April 2019

Research

Publications

1. **Cunha, J.C.S.**, Rivera Vega, L.J., Torres, J.B., Suh, C.P.C., Sword, G.A. (2024). Fungal seed treatments of cotton affect boll weevil development. Pest Management Science 80**,** 1566-1576.
2. **Cunha, J. C. S.**, Swoboda, M. H. & Sword, G.A. (2022). Olfactometer Responses of Convergent Lady Beetles *Hippodamia convergens* (Coleoptera: Coccinellidae) to Odor Cues from Aphid-Infested Cotton Plants Treated with Plant-Associated Fungi. Insects 13: 157.
3. Iannuzzi, L., Liberal, C. N., de Souza, T. B., Pellegrini, T. G., **da Cunha, J. C. S.**, Koroiva, R., ... & Leivas, F. W. T. (2021). Sampling Methods for Beetles (Coleoptera). In Measuring Arthropod Biodiversity (pp. 125-185). Springer, Cham.
4. Barretto, J., **da Cunha, J. C. S.,** Silva, F., & Moura, R. C. (2021). Dung beetle communities of altitudinal Atlantic Forest remnants: diversity and composition. International Journal of Tropical Insect Science, 1-9.
5. **Cunha, J.C.S.**; Barros-Filho, R.G.; Silva, R.P.; Santos, I.G.A.; Rodrigues, G.G (2014). Benthic macrofauna and the limnological parameters of a first-order stream in Atlantic Forest of Brazilian Northeast. Acta Limnologica Brasiliensia (Online), v. 26, p. 26-34.

Presentations at Professional Meetings

Oral presentations

1. **Cunha, J.C.S.**; Sword, G.A. (2024). Effects of *Trichoderma virens* on cotton aphids. Entomological Society of America (ESA) Annual Meeting (Phoenix, Arizona, United States).
2. **Cunha, J.C.S.**; Sword, G.A. (2023). Plant-associated *Chaetomium globosum* fungus can directly infect and kill aphids. ESA Annual Meeting (National Harbor, Maryland, United States).
3. **Cunha, J.C.S.**; Sword, G.A. (2021). Plant-associated fungi directly affect cotton aphid survival. ESA Annual Meeting (Denver, Colorado, United States).
4. **Cunha, J.C.S.**; Sword, G.A. (2021). Plant-associated fungi effects on boll weevil growth. Beltwide Virtual Conference.
5. **Cunha, J.C.S.**; Sword, G.A. (2021). Plant-associated fungi effects on boll weevil behavior. Graduate Student Forum – Department of Entomology, TAMU (College Station, Texas, United States).
6. **Cunha, J.C.S.**; Sword, G.A. (2020). Can cotton-associated fungi affect the behavior of an aphid predator? XXI Ecological Integration Symposium (College Station, Texas, United States).
7. **Cunha, J.C.S.**; Sword, G.A. (2019). Cotton-associated fungi affect the behavior of an aphid predator in multitrophic interactions. ESA Annual Meeting (St. Louis, Missouri, United States).

Poster presentations

1. **Cunha, J.C.S.**; Sword, G.A. (2023). Plant-associated fungi affect cotton herbivore reproduction and development. Gordon Research Conference on Plant-Herbivore Interaction (Ventura, California, United States).
2. **Cunha, J.C.S.**; Sword, G.A. (2019). Endophytic Fungi and Integrated Pest Management. ESA Annual Meeting (St. Louis, Missouri, United States).
3. **Cunha, J.C.S.**; Sword, G.A. (2018). Can plant-associated fungi affect multitrophic level interactions in cotton? Texas Plant Protection Association (TPPA) Annual Meeting (College Station, Texas, United States).

Editorial activities

Journal Peer-Reviewer

International Journal of Biodiversity and Conservation, Brazilian Journal of Biology, Biocontrol, Pest Management Science, Neotropical Entomology, Journal of Cotton Research, and Food and Energy Security.

Thesis Committee

Undergraduate Thesis Defense

1. Costa, F.C. (Chair); **Cunha, J.C.S.**; Flores, L.M.A. (2024). Undergraduate Thesis Defense (Bachelor's in Biology) of Vitor Furlan Sesti. Title: Estrutura da Comunidade de Besouros Melolontídeos (Coleoptera: Melolonthidae) em Remanescente de Floresta Atlântica e Matrizes de Cultivo de Cana-de-açúcar. Federal University of Pernambuco, Brazil.

Professional References

Dr. Greg Sword. Regents Professor/Charles R. Parencia Chair in Cotton Entomology – Texas A&M University (TAMU), Department of Entomology (gasword@tamu.edu)

Dr. Anjel Helms. Assistant Professor – TAMU, Department of Entomology (amhelms@tamu.edu)

Dr. Karen Wright. Pollinator Taxonomist – Washington State Department of Agriculture, Pollinator Program (karen.wright@agr.wa.gov)

Dr. Jorge Torres. Adjunct Professor – Rural Federal University of Pernambuco, Department of Agronomy (jorge.torres@ufrpe.br)