Adriane N. Fifield

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# EDUCATION

**Aug. 2022**–**Present**

**M.S Entomology** Texas A&M University–College Station, TX

**Aug. 2017**–**May 2021**

**B.S. Microbiology**

**Minor Entomology** Kansas State University–Manhattan, KS

# RESEARCH EXPERIENCE

**Mar. 2022**–**Sept. 2022** *Technician I*, Texas A&M University, Department of Entomology, College Station, TX with Dr. Anjel Helms.

* Rears nematode species, *Heterorhabditis bacteriophora, Steinernema carpocapsae, Steinernema riobrave,* for infection assays
* Performs regular plant care and maintenance of *Gossypium hirsutum* (cotton).

**June 2021**–**Mar. 2022** *Biological Science Aid*, USDA-ARS Southern Plains Agricultural Research Center, Insect Control and Cotton Disease Research Unit, College Station, TX with Dr. Lindsey Perkin.

* Ordered lab supplies
* Performed weekly maintenance cleaning of the Illumina Miseq system
* Assisted with genome library preparations using Illumina MiSeq platform
* Experience in DNA and RNA extractions using Qiagen QuiaAmp DNA micro kit
* Set up quantitative PCR reactions to determine presence of plants in gut of cotton flea hopper
* Reared and maintained *Tribolium castaneum* colonies for insect relatedness project to determine genetic variability among insect communities
* Dissected southern green stink bug, *Nezara viridula,* guts to determine contents through PCR

**Mar. 2019**–**June 2021** *Biological Science Aid*, USDA-ARS Center for Grain and Animal Health Research, Stored Product Insect and Engineering Unit, Manhattan, KS with Dr. Erin Scully

* Collected field samples from semiochemical lure baited traps
* Trained in BSL-2 practices and procedures
* Assisted with insect dissections and collected insects for gene expression studies
* Performed behavioral study in the wind tunnel using trichodiene
* Performed behavioral choice assay using mycotoxin contaminated wheat
* Reared and maintained seven species of stored product insect colonies
* Dissected lesser grain borer, *Rhyzopertha dominica,* guts for population genetics study
* Assisted graduate students, post docs, and scientists with sample prep and data collection and data processing

**Sept. 2019**–**May 2020** *Student Lab Assistant*, Entomology Department, Kansas State University, Manhattan, KS with Dr. Thomas Phillips.

* Prepared ham mite, *Tyrophagus putrescentiae*, diet
* Reared ham mites and red legged ham beetles, *Necrobia rufipes*
* Assisted graduate students, lab technicians, and visiting scholars to prepare experiments, and collect results

**PEER REVIEWED PUBLICATIONS**

Scully, E.D., A.R. Gerkin, **A.N. Fifield**,V.N. Nguyen, N. Van Pelt, F.H. Arthur. 2021. Impacts of Storicide II on internal feeders of Brown rice. J. Stored Prod. Res. 90: 101758. <https://doi.org/10.1016/j.jspr.2020.101758>.

# PRESENTATIONS

**Fifield, A.N.,** C. Suh, A.M Helms. Influence of Chemicals Produced by Entomopathogenic Nematodes on Terpene Aldehyde Production in Cotton. 2023 Beltwide Cotton Conference. New Orleans, LA. Jan. 11, 2023

**Fifield, A.N.**, E.D. Scully, A.R. Gerkin. Behavioral responses of *Tribolium castaneum* to mycotoxin contaminated wheat. 3rd Annual Kansas State University Undergraduate Research Poster Symposium. Manhattan, KS. Dec. 11, 2018.

**Fifield, A.N.**,E.D. Scully, V.N. Nguyen. *Tribolium castaneum* attraction to the fungal volatile trichodiene. 4th Annual Kansas State University Undergraduate Research Poster Symposium. Manhattan, KS. Dec. 10, 2019.

# PROFESSIONAL SOCIETY MEMBERSHIP

**2019**–**Present** Entomological Society of America

**2019**–**2021** Kansas State Popenoe Entomology Club

**2019-2020** Undergraduate Popenoe Club Development Committee

# PROFESSIONAL DEVELOPMENT

**Feb. 2020** Girls Researching Our World (G.R.O.W) Workshop facilitator for the K-State Office for the Advancement of Women in Science and Engineering (KAWSE), Waters Hall, Kansas State University, Manhattan, KS.

Attendance: 24 Students ages (9–14)

**Oct. 2019** Kansas State University Popenoe Entomology Club Résumé/C.V. Workshop facilitator, Waters Hall, Kansas State University, Manhattan, KS.

Attendance: 5 Graduate and 2 Undergraduate Students

# HONORS AND AWARDS

**Fall 2020** KS-LSAMP Scholar

*Scholar program to support underrepresented minorities in STEM academic success*

**REFERENCES**