

Benjamin D. Brenizer

Research Scientist I
Iowa State University

Contact Information

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Education

B.S. Animal Ecology (Interpretation of Natural Resources option)

Iowa State University

Ames, Iowa

May 2014

A.S. Criminal Justice

Indian Hills Community College

Ottumwa, Iowa

May 2011

Certifications/Training

Biological Risk Assessments for Researchers Training

Completed March 2, 2021; Expires March 1, 2024

Laboratory Safety: Core Concepts Training

Completed March 2, 2021; Expires March 1, 2024

Tractor Safety Guidelines Training

Completed March 2, 2021; Expires March 1, 2024

Fire Safety and Fire Extinguisher Training

Completed February 26, 2021; Expires February 26, 2022

Respirator Certified

Certified April 13, 2016 – February 23, 2022

Title IX Supervisor Training

Completed August 25, 2020; Expires August 25, 2022

Autoclave Safety Training

Completed February 28, 2020; Expires February 27, 2023

USDA Permits + Plant Protection Quarantine Training

Completed January 31, 2020; Expires January 30, 2022

Hazardous Materials Shipping Awareness Training

Completed January 28, 2020; Expires January 27, 2022

Biohazardous Materials: An Introduction Training

Completed January 10, 2020; Expires January 9, 2023

Emergency Response Guide Video Training

Completed January 10, 2020; Expires January 9, 2023

NIH Guidelines Training

Completed January 6, 2020; Expires January 5, 2023

Laboratory Safety: Compressed Gas Cylinders Training

Completed September 25, 2019; Expires September 24, 2022

Heat Related Illness Training

Completed September 25, 2019; Expires September 24, 2022

Laboratory Safety: Chemical Storage Training

Completed September 25, 2019; Expires September 24, 2022

Iowa Pesticide Applicators License (Categories: 10 and 1B) Certification Number: 48069

Certified March 2016 – December 2021

Project Wild Certified

Certified May 2014

Publications

Gassmann, A. J., Shrestha, R. B., Kropf, A. L., St. Clair, C. R. and **Brenizer, B. D.** 2020.

Field-evolved resistance by western corn rootworm to Cry34/35Ab1 and other *Bacillus thuringiensis* traits in transgenic maize. *Pest Management Science* 76:268-276

Gassmann, A. and **Brenizer, B.** 2020. 2019 Iowa evaluation of insecticides and plant-incorporated protectants. Iowa State University, Department of Entomology. File number 306-19.

Gassmann, A. and **Brenizer, B.** 2020. Evaluation of soil-applied insecticide and Bt corn for management of corn rootworm in central Iowa. Central Iowa Research and Demonstration Farm Progress Report, Iowa State University

Gassmann, A. and **Brenizer, B.** 2019. 2018 Iowa evaluation of insecticides and plant-incorporated protectants. Iowa State University, Department of Entomology. File number 305-18.

Gassmann, A. and **Brenizer, B.** 2019. Evaluation of soil-applied insecticide and Bt corn for management of larval corn rootworm in central Iowa. Central Iowa Research and Demonstration Farm Progress Report, Iowa State University.

Presentations

Guest speaker at Central Decatur Community High School agronomy class. Educated a class of high school students on beneficial and pest insect species located in Iowa agricultural landscapes. April 21, 2014

Presented a poster showing how to create Western corn rootworm rearing trays to AGEDS (Agricultural Education and Studies) 327 class. March 18, 2013

Work Experience

Research Associate II/Research Scientist I

Iowa State University

Spring 2018-Present

- Following regulations from EPA, USDA, and Iowa State University EHS
- Designing plot maps and planning research plot locations by following Industry protocols
- Planting corn research plots with a four-row John Deere Max Emerge™ 7100 Integral Rigid Frame Planter
- Mixing and applying various commercial and experimental insecticides at the appropriate rates to research plots
- Collecting data and samples from research plots for various industry stakeholders
- Writing field reports for agricultural research plots
- Analyzing stand count, root injury, and yield data using SAS Enterprise software
- Hiring and managing 4 - 7 employees to maintain research plots, construct field research equipment, and collect research data
- Procuring supplies for both the research lab and field research
- Assisting graduate students with various research projects
- Repairing and maintaining field and lab research equipment

Research Associate I

Iowa State University

Spring 2016-Spring 2018

- Rearing three separate colonies of Western corn rootworm for use in research
- Growing corn plants in a greenhouse for bioassay research and feeding Western corn rootworm colonies
- Aiding postdoctoral research associate in conducting bioassays for various industry stakeholders
- Hiring and managing 1-4 student employees to maintain insect colonies and general lab upkeep
- Collecting Western corn rootworm from research fields around Iowa for bioassay research
- Keeping laboratory space organized and maintain a laboratory notebook

Entomology Intern

DM Crop Research Group

Spring 2015-Spring 2016

- Rearing agricultural insect pests including Western corn rootworm, Fall armyworm, brown marmorated stink bug, and green stink bug
- Preparing and assisting with planting corn and soybean research plots
- Collecting insects from research plots around Iowa

Undergraduate Lab Assistant – Entomology Department (Dr. Gassmann’s Lab)

Iowa State University

Fall 2012 - Spring 2015

- Collecting insect samples from around the Midwest using various collection techniques including sweep nets, pitfall traps, sticky traps, and manual aspirators. Samples were collected from corn, soybean, and wheat fields in Wisconsin, Illinois, Missouri, and Iowa.
- Identifying and organizing insects collected from research fields
- Feeding Western corn rootworm colonies, cleaning insect cages, counting emerging insects, and recording data
- Constructing research equipment including Berlese funnels and field emergence cages