

ELIZABETH “BODIE” FLETCHER

University of Florida - Agronomy Department, Instructional Assistant Professor

Alta Pete (Aim High) · Recta Pete (Seek the Right Things)



EDUCATION

MAY 2025

PH.D. CROP SCIENCE, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

- **Dissertation:** “Assessing and Implementing Value-Added Soybean Innovations in the Soybean Meal and Food Industry.”

AUGUST 2022

M.S. CROP SCIENCE, NORTH CAROLINA STATE UNIVERSITY

- **Thesis:** “Increasing the Resiliency of Soybean to Abiotic Stress by Exploring the Differences in Gene Expression Using RNA-Seq and Field Evaluation.”

MAY 2018

B.S. CROP & SOIL ENVIRONMENTAL SCIENCES, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

TEACHING EXPERIENCE

FALL 2023 –PRESENT

GRADUATE TEACHING SCHOLAR, VIRGINIA TECH

- received \$30,000 total funding

SPRING 2025

PLANT BREEDING AND GENETICS (CSES 4144), VIRGINIA TECH

- Instructor of Record

SPRING 2024

WORLD CROPS (SPES 2244), VIRGINIA TECH

- Co-instructor of Record

SPRING 2021

CROPS: ADAPTATION AND PRODUCTION (CS 213), NORTH CAROLINA STATE UNIVERSITY

- Graduate TA

SPRING 2020

SOILS LAB (PES 2021), CLEMSON UNIVERSITY

- Graduate TA

SPRING 2016

MYSTERIOUS MUSHROOMS MISCHIEVOUS MOLDS (PPWS 2004), VIRGINIA TECH

- Undergraduate TA

GUEST LECTURES

- “The Science of GMOs”, Plant Breeding and Genetics (CSES 4144), Virginia Tech, April 2024
- “Demystifying GMOs”, World Crops (SPES 2244), Virginia Tech, March 2023 & 2024
- “Corn Production Practices”, World Crops (SPES 2244), Virginia Tech, March 2024

LEADERSHIP EXPERIENCE

2022-PRESENT

GRADUATE STUDENT REPRESENTATIVE - CALS ALUMNI BOARD, VIRGINIA TECH

- serve as both an alumnus and a representative for current graduate students within the college at board meetings and events

RESEARCH EXPERIENCE

2022-PRESENT

SOYBEAN BREEDING PROGRAM, VIRGINIA TECH

- Graduate Research Assistant

2020-2022

USDA SOYBEAN NITROGEN FIXATION UNIT, NORTH CAROLINA STATE UNIVERSITY

- Graduate Research Assistant

2019-2020

SOYBEAN BREEDING PROGRAM, CLEMSON UNIVERSITY

- Graduate Research Assistant

2017

MIDWEST RESEARCH INC., UNIVERSITY OF NEBRASKA - LINCOLN

- Research Assistant

2016

SMALL GRAINS BREEDING PROGRAM, VIRGINIA TECH

- Student Employee

PUBLICATIONS

PEER-REVIEWED JOURNALS

Fletcher, E.B.; Rosso, M.L.; Walker, T.; Huang, H.; Morota, G.; Zhang, B. Near-Infrared Reflectance Spectroscopy Calibration for Trypsin Inhibitor in Soybean Seed and Meal. *Agriculture* **2025**, 15, 1062. <https://doi.org/10.3390/agriculture15101062>

Shea, Z., Ogando do Granja, M., **Fletcher, E. B.**, Zheng, Y., Bewick, P., Wang, Z., ... & Zhang, B. A Review of Bioactive Compound Effects from Primary Legume Protein Sources in Human and Animal Health. *Current Issues in Molecular Biology* **2024**, 46(5), 4203-4233.

Fletcher, E.; Patterson, R.; Dunne, J.; Saski, C.; Fallen, B. Evaluating the Effects of Flooding Stress during Multiple Growth Stages in Soybean. *Agronomy* **2023**, 13, 1243. <https://doi.org/10.3390/agronomy13051243>

PRESENTATIONS

POSTERS

Fletcher, E.B.; Rosso, L.; Panta, U.; Zhang, B. CRISPR in the Field: Evaluating Field Performance of CRISPR-Edited Low Trypsin Inhibitor Soybean. Texas A&M Plant Breeding Symposium; February 20, 2025; College Station, TX.

Fletcher, E.B.; Rosso, L.; Panta, U.; Zhang, B. CRISPR in the Field: Evaluating Field Performance of CRISPR-Edited Low Trypsin Inhibitor Soybean. Soybean Breeders Workshop; February 18, 2025; St. Louis, MO.

Fletcher, E.B.; Rosso, L.; Walker, T.; Huang, H.; Morota, G.; Zhang, B. Near-Infrared Reflectance Spectroscopy for Trypsin Inhibitor in Soybean Seed and Meal. ASA-CSSA-SSSA Annual Meeting; November 11, 2024; San Antonio, TX.

Fletcher, E.B.; Rosso, L.; Walker, T.; Huang, H.; Morota, G.; Zhang, B. Development of Near-Infrared Reflectance Spectroscopy for Trypsin Inhibitor in Soybean Seed and Meal. School of Plant and Environmental Sciences Symposium; September 27, 2024; Blacksburg, VA.

Fletcher, E.B.; Wilbur, J.; Randhawa, K.; Zhang, B. Genome Wide Association Study of Quality Traits for Natto Soybean. Soybean Breeders Workshop Symposium; February 13, 2023; St. Louis, MO.

Fletcher, E.B.; Patterson, R.; Dunne, J.; Saski, C.; Fallen, B. Evaluating the Effects of Flooding Stress during Multiple Growth Stages in Soybean. School of Plant and Environmental Sciences Symposium; October 6, 2022; Blacksburg, VA.

Fletcher, B.; Spotanski, J. Big Ag's Dependence on Independent Research Farms – Behind the Scenes of Midwest Research Inc. UNL Summer Research Program Symposium; August 2017; Lincoln, NE.

ORAL

Fletcher, E.B.; Rosso, L.; Panta, U.; Zhang, B. CRISPR in the Field: Evaluating Field Performance of CRISPR-Edited Low Trypsin Inhibitor Soybean. Texas A&M Plant Breeding Symposium; February 20, 2025; College Station, TX.

Fletcher, E.B.; Rosso, L.; Walker, T.; Huang, H.; Morota, G.; Zhang, B. Near-Infrared Reflectance Spectroscopy for Trypsin Inhibitor in Soybean Seed and Meal. School of Plant and Environmental Sciences Graduate Seminar; October 24, 2024; Blacksburg, VA.

AWARDS AND ACHIEVEMENTS

2025

CORTEVA TRAVEL SCHOLARSHIP

- Awarded the Corteva Travel Scholarship to give oral presentation of research at the Texas A&M Plant Breeding Symposium. **(\$1,000)**

2016, 2017 & 2018

VIRGINIA CROP IMPROVEMENT SCHOLARSHIPS

- Awarded the Virginia Crop Improvement Scholarship for three consecutive years. **(\$6,000 total received)**

PROFESSIONAL MEMBERSHIPS

AFA Alliance: Agriculture Future of America 2018-PRESENT

AGLS: Alliance of general education Studies 2024-PRESENT

ASA-CSSA-SSSA 2024 – PRESENT

NACTA: North American Colleges and Teachers of Agriculture 2024-PRESENT

COMMUNITY SERVICE/OUTREACH

AUGUST 2024, volunteered at the annual Town of Blacksburg “Steppin’ Out” event

JUNE 2024, served as a judge of several competitions for the Virginia FFA Annual Conference

OCTOBER 2023, reviewed AFA Student Leadership Conference Applications

AUGUST 2023, volunteered at Plenitud PR, a community garden feeding those in need in Las Marias, Puerto Rico

JUNE 2023, worked the Center for Advanced Innovation in Agriculture (CAIA) table for the Virginia State 4-H Congress College Career Fair

JULY 2021, served as a judge for the North Carolina 4H presentation/public speaking competition.