

# Mitchell L. Helton

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## EDUCATION

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- Iowa State University**, Ames, Iowa May 2021  
Master of Science in Entomology GPA: 3.61/4.00  
Advisers: Drs. Erin Hodgson and Justin McMechan
- Illinois State University**, Normal, Illinois May 2018  
Bachelor of Science in Agronomy and Agribusiness GPA: 3.65/4.00  
Academic Honors: Graduated Cum Laude, Dean's List, GROWMARK Scholarship Recipient
- Lake Land College**, Mattoon, Illinois May 2016  
Associate of Science GPA: 3.70/4.00  
Focus in Coursework: Agribusiness, Soil and Crop Sciences  
Academic Honors: President's List, Dean's List

## RELEVANT EXPERIENCE

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- Iowa State University**, Department of Entomology Ames, Iowa  
*Graduate Research Assistant* May 2019-Present
- Conducted research experiments to gain an overall better understanding of soybean gall midge
  - Developed a model to express the injury severity and yield loss relationship from soybean gall midge feeding
  - Co-project lead for several insecticide efficacy trials in western Iowa
  - Monitored emergence cages to track soybean gall midge emergence and life cycle
  - Iowa cooperator for University of Nebraska-Lincoln's soybean gall midge host plant resistance screening
  - Managed undergraduate student-employees during field work
  - Collaborated as a member of a team conducting similar experiments across Iowa, Nebraska and Minnesota
- Corteva Agriscience**- the agriculture division of DowDupont Champaign, Illinois  
*Research Technician* January 2019-May 2019
- Assisted IMPACT lead with 2019 growing season preparations
  - Received, organized, and labeled seed for IMPACT region
  - Mixed and applied seed treatments for foreign and domestic seed increases
  - Supported the plant breeding team with packaging, organizing, shipping and receiving seed for nurseries
- Corteva Agriscience** - the agriculture division of DowDuPont Champaign, Illinois  
*Research and Development Intern* May 2018-December 2018
- Identified and rated corn plants for corn rootworm, European corn borer, and southwestern corn borer damage
  - Accommodated a research scientist daily with research related to insect trait characterization
  - Carried out protocols for tissue collections, insect infestations, and lab processing samples
  - Assisted the breeding team in nursery pollination tasks, including training and overseeing seasonal employees
  - Analyzed the functionality and usefulness of a newly developed field and lab app for the development team

## The Climate Corporation

Research Intern

New Berlin, Illinois

May 2017-August 2017

- Collected field data in numerous different types of corn and soybean studies
- Headed all tissue and soil sample orders sent in from science team along with other interns
- Oversaw the note-taking and data collection in a corn nitrogen trial, involving plant phenology

## PROFESSIONAL MEMBERSHIPS

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| 1. Entomology Graduate Student Organization member     | 2019-Present            |
| 2. Entomological Society of America member             | 2019-Present            |
| 3. Agriculture Science Club, Illinois State University | August 2016-May 2018    |
| 4. FarmHouse Fraternity, Illinois State University     | September 2016-May 2018 |
| 5. Agriculture Transfer Club, Lake Land College        | August 2014-May 2016    |

## ORAL PRESENTATIONS

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### 2020

#### Research:

1. Entomological Society of America, 11-25 November 2020, Virtual. Injury severity to yield loss relationship for soybean gall midge. **Helton, M. L.**, E. Hodgson, J. McMechan and N. Tinsely.
2. Entomological Society of America – North Central Branch/Southwestern Branch, 20-24 April 2020, Virtual. Insecticide efficacy evaluation and emergence observations for soybean gall midge. **Helton, M. L.**, E. Hodgson, J. McMechan and N. Tinsely.

### 2019

#### Extension:

1. Dort University Agriculture Stewardship Center, 4 September 2019, Sioux Center, Iowa. Soybean gall midge update (120 people). Dean, A. N. and **M. Helton**
2. Armstrong Research Farm, Iowa State University, 18 July 2019, Lewis, IA. Soybean gall midge update (40 people). Hodgson, E. W. and **M. Helton**
3. Northwest Research Farm, Iowa State University, 10 July 2019, Sutherland, IA. Soybean gall midge update (135 people). Hodgson, E. W. and **M. Helton**

### 2018

#### Research:

1. Corteva Agriscience Research and Development Intern Symposium, 6 December 2018, Johnston, Iowa. Evaluation of the ImageInnovation Mobile App. **Helton, M. L.**

## POSTER PRESENTATIONS

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### 2019

#### Research:

1. Entomological Society of America, 17-20 November 2019, St. Louis, Missouri. Insecticide efficacy evaluation for soybean gall midge. **Helton, M. L.**, E. Hodgson, J. McMechan and G. VanNostrand.

## PEER-REVIEWED PUBLICATIONS AND PROCEEDINGS

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1. Hodgson, E. W., and **M. Helton**. 2021. Soybean gall midge efficacy screening program, 2020. Entomological Society of America Arthropod Management Tests, accepted December 2020.

## NEWSLETTER ARTICLES

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1. Dean, A. N., E. Hodgson, and **M. Helton**. "Soybean gall midge larvae active in Iowa." *In* ICM News. 2 July 2020.

## FIELD GUIDES, REPORTS AND OTHER PUBLICATIONS

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1. Hodgson, E. W., G. VanNostrand, A. Dean, and **M. Helton**. 2020. 2020 Yellow Book Report of insecticide evaluation for soybean pests, 34 pp. Department of Entomology, Iowa State University, Publication CROP 3198.
2. Hodgson, E. W., and **M. Helton**. 2020. Soybean gall midge: plant injury score protocol, 2 pp. Department of Entomology, Iowa State University.
3. Hodgson, E. W., G. VanNostrand, A. Dean, and **M. Helton**. 2019. 2019 Yellow Book Report of insecticide evaluation for soybean pests, 35 pp. Department of Entomology, Iowa State University, Publication CROP 3197.

## VOLUNTEER WORK

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- Arthur Fire Department, Food and Toy Drive December 2014-2020
- Meals from the Heartland May 2018
- Leukemia & Lymphoma Society April 2017, 2018
- Be The Match October 2016, 2017