Riley Harding





Technician III
Department of Entomology, Cornell University
524 Barton Lab, 15 Castle Creek Drive, Geneva, NY, 14456
(315) 879-1381 | rsh263@cornell.edu

EDUCATION

The University of Vermont, Burlington, VT, GPA: 3.64. College of Arts and Sciences, 2014. Major: biochemistry (Bachelor of Science)

RELEVANT EXPERIENCE

Cornell University, Department of Entomology at Cornell AgriTech, Geneva, NY 2016 - Present

Technician I-III

- Oversee the cultivation of vegetable crops, maintenance via drip irrigation and fertilization and application of crop protectants on experimental field plots
- Collaborate with Industry personnel, Growers, numerous programs at Cornell University, and Cornell Cooperative Extension
- Manage budgets, purchase materials and supplies for greenhouse, lab and field experiments, train personnel and write safety protocols for research projects
- Organize and analyze field trial data for dissemination in Industry reports and publications
- Co-authored seven scientific journal articles, presented vegetable pest management information at four scientific conferences, and participated in seven extension workshops

Cornell University, Department of Entomology at NYSAES, Geneva, NY 2016

Research Assistant

- Collected and analyzed insecticide efficacy trial data via MS Excel for eventual presentation to local growers throughout Upstate NY
- Conducted laboratory bioassays to test efficacy and susceptibility of various pesticides on onion thrips (*Thrips tabaci*),
- Performed RT-PCR on onion thrips to elucidate the epidemiological components of Iris yellow spot virus in Upstate NY

Willing Worker on Organic Farms (WWOOF), County Donegal, Republic of Ireland 2015 – 2016

Volunteer

• Accomplished the following tasks: planting, transplanting, field preparation and maintenance, irrigation, and animal caretaking

PUBLICATIONS

Refereed Journal Articles

- 1. Iglesias, L., R. L. Groves, B. Bradford, **R. S. Harding**, and B. A. Nault. Management of *Thrips tabaci* in onion using co-applications of bioinsecticides and adjuvants. 2021. Crop Pro. https://doi.org/10.1016/j.cropro.2020.105527
- 2. Nault, B., L. E. Iglesias, **R. S. Harding**, E. A. Grundberg, T. Rusineck, T. E. Elkner, B. J. Lingbeek, and S. J. Fleischer. 2020. Managing Allium Leafminer (Diptera: Agromyzidae): An Emerging Pest of Allium Crops in North America. J. Econ. Ent.113(5):2300-2309. https://doi.org/10.1093/jee/toaa128
- 3. Leach, A., F. Hay, **R. Harding**, K.C. Damann, B. Nault. Relationship between onion thrips (*Thrips tabaci*) and *Stemphylium vesicarium* in the development of Stemphylium leaf blight in onion. 2019. Ann Appl Biol. 176: 55–64. https://doi.org/10.1111/aab.12558
- 4. Leach, A., M. Fuchs, **R. Harding**, and B. A. Nault. 2019. Iris yellow spot virus prolongs the adult lifespan of its primary vector, onion thrips (Thrips tabaci). J. Insect Sci. https://doi.org/10.1093/jisesa/iez041
- 5. Moretti, E.A., **R.S. Harding**, J.G. Scott, B.A Nault. 2019. Monitoring Onion Thrips (Thysanoptera: Thripidae) Susceptibility to Spinetoram in New York Onion Fields. J. Econ. Ent. 112(3): 1493-1497. https://doi.org/10.1093/jee/toz032
- 6. Leach, A., M. Fuchs, **R. Harding**, R. Schmidt-Jeffris and B. A. Nault. 2018. Importance of transplanted onions contributing to late-season iris yellow spot virus epidemics in New York. Plant Dis. 102(7): 1264-1272. https://doi.org/10.1094/PDIS-06-17-0793-RE
- 7. Leach, A., F. Hay, **R. Harding**, and B. A. Nault. 2018.Relationship between *Stemphylium vesicarium* and onion thrips (*Thrips tabaci*) in the development of Stemphylium leaf blight disease. (Presented at the International congress of plant pathology in August 2018)

Non- Refereed Journal Articles

- 1. **Harding, R.**, B.A. Nault. Onion thrips control in onion, 2020. Arthropod Management Tests 46(1): https://doi.org/10.1093/amt/tsab022
- 2. **Harding, R.**, B.A. Nault. Lepidopteran Pest Control in Sweet Corn With Insecticides, 2020. Arthropod Management Tests 46(1): https://doi.org/10.1093/amt/tsaa122

- 3. **Harding, R.**, B.A. Nault, A.J. Seaman. Lepidopteran pest control in sweet corn with insecticides allowed for organic production, 2019. Arthropod Management Tests 45(1): tsaa084, https://doi.org/10.1093/amt/tsaa084
- 4. **Harding, R.**, B.A. Nault, A.J. Seaman. Lepidopteran pest control in sweet corn with insecticides allowed for organic production, 2018. Arthropod Management Tests 45(1): tsaa083, https://doi.org/10.1093/amt/tsaa083
- 5. **Harding, R.**, B.A. Nault, A.J. Seaman. 2020. Potato leafhopper control in snap bean with insecticides allowed for organic production, 2019. Arthropod Management Tests 45(1): tsaa071, https://doi.org/10.1093/amt/tsaa071
- 6. **Harding, R.**, B.A. Nault, A.J. Seaman. 2020. Potato leafhopper control in snap bean with insecticides allowed for organic production, 2017. Arthropod Management Tests 45(1): tsaa071, https://doi.org/10.1093/amt/tsaa070

Manuscripts in Review/Preparation

1. **Harding, R.**, B.A. Nault. Optimizing application frequency of spinosyn insecticides for Allium leafminer (Diptera: Agromyzidae) management on Allium crops in North America. (in preparation)

PRESENTATIONS

- 1. Harding, R. S., and B. A. Nault. 2021. Diamondback Moth: One of Several Insect Pests of Concern. 2021 *Mid-Atlantic Fruit and Vegetable Conference*. February 10, 2021. Virtual session.
- 2. Harding, R. S., and B. A. Nault. 2021. Combating Cole Crop Critters. *2021 Empire State Producers Expo.* January 14, 2021. Virtual session.
- 3. Harding, R. S., L. Iglesias, and B. A. Nault. 2019. Evaluating OMRI-Listed products for pest control on selected vegetable crops. *2019 Ag, Food and Environmental Systems In-service*. November 2019. Cornell Cooperative Extension Ag In-service. Ithaca, NY.
- 4. Harding, R. S., and B. A. Nault. 2019. Onion maggot control in onion: can we get off the insecticide treadmill? Entomological Society of America's Eastern Branch meeting. March 2019. Blacksburg, VA.

CERTIFICATIONS

Certified Pesticide Applicator, Technician 1a.

SKILLS

- Integrated
 Pest
 Management
 (IPM)
- Horticulture
- Microsoft software: Word, Excel and PowerPoint
- Statistical software: PoloPlus, R, SAS, StatCrunch and JMP

RELEVANT COURSEWORK

Biology and Management of Plant Disease (PLPPM 3010)

Fall 2020

Statistical Methods II (BTRY 6020)

Spring 2020

Introductory to Statistics I and II (MAT 200)

Fall 2019

Biochemistry Lab

Fall 2014

Molecular Cloning Lab

Fall 2013

TEACHING EXPERINCE

Guest Lecture- Hobart and William Smith Colleges

2019

Hobart and William Smith Biology Department, Geneva, NY. Prepared and presented guest lecture on invasive insect biology and ecology.

Substitute Teacher-Lyons Central School District

2014-2015

Lyons Middle and High School, Lyons, NY. Taught lesson plans to middle and high school students in Chemistry, Algebra, English and Spanish classes. Provided further academic assistance via tutoring during and after school hours

GRANTS

ESA/ Entomological Society of America Grant Challenge. 2019. Evaluating visual preferences of Allium leafminer to improve monitoring technology. L. Iglesias (PI), D. Stockton and R. Harding. \$1,785 (fully funded)

COMMITTEES/AFFILIATIONS

Hiring Committee for Leadership role for the Field Research Unit at Cornell AgriTech	2020
Safety Health and Environmental Management (SHEM) Committee, Cornell University	2019-present
Chairman of the Food and Beverage Committee at NYSAES	2017

MEMBERSHIPS

Entomological Society of America (2019-current)

AWARDS & HONORS

- 1. Accepted onto Dean's List-The University of Vermont 2012-2014 (4 out of 7 terms)
- 2. Presidential Scholarship The University of Vermont 2011-2014
- 3. Leora Y Streeter scholarship for attendance at The University of Vermont 2011-2014