

# HANNAH RAE SWEGARDEN

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Department of Horticulture - Ithaca, NY 14850  
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## EDUCATIONAL BACKGROUND

**Ph.D.**, *Cornell University*, Ithaca, NY (August 2015 – present)

- School of Integrated Plant Sciences - Horticulture
- Minors in Plant Breeding and Food Science
- Working Dissertation: “Leafy Brassicas with Enhanced Aesthetics for Fresh Markets”
- Advisor: Dr. Phillip Griffiths
- Cumulative GPA: 3.89

**M. Sc.**, *University of Minnesota*, St. Paul, MN (Sept 2012 – June 2015)

- Applied Plant Sciences Graduate Program - Horticulture Track
- Thesis Title: “Evaluation and Characterization of Variation Within Heirloom Dry Bean (*Phaseolus vulgaris* L.) Cultivars”
- Advisors: Drs. Thomas Michaels and Craig Sheaffer
- Cumulative GPA: 3.75

**B. Sc.**, *University of Wisconsin - Eau Claire*, Eau Claire, MN (Sept. 2006- Sept. 2010)

- Biology Major w/ Chemistry Minor
- Cumulative GPA: 3.70 (Magna Cum Laude)

## PUBLICATIONS AND REPORTS

Swegarden, H., and C.C. Sheaffer and T.E. Michaels,. 2015. Yield stability of heirloom dry bean (*Phaseolus vulgaris* L.) cultivars in Midwest organic production. *HortScience*. 51(1):8-14.

Swegarden, H. 2015. Selection of commercial and heirloom common bean (*Phaseolus vulgaris* L.) for organic production in Minnesota. Master’s Thesis. Univ. of MN, St. Paul, MN.

Anderson, J., H. Swegarden, A. Jacobson, and T. Tiede. 2014. Empowering graduate students in the plant sciences through student-driven symposia. *CSA News Magazine*. 59:48-45. doi:10.2134/csa2014-59-10-19.

Swegarden, H and T.E. Michaels. 2014. Potential gain from selection in heirloom dry beans (*Phaseolus vulgaris* L.). In: Miklas, P., editor. Annual Report of the Bean Improvement Cooperative. Proceedings of the 56<sup>th</sup> Biennial Bean Improvement Cooperative (BIC) Conference.; 2013 Oct 28-30; Portland, OR: Prosser, WA, Bean Improvement Cooperative. (*In Publication*)

## **INVITED ORAL PRESENTATIONS**

Swegarden, H. March 2016. Pollination methods for beans and brassicas. Guest demonstration: PLBR 2250 - Plant Genetics. Ithaca, NY.

Swegarden, H. January 2016. Development of novel kale genotypes for emerging markets. Annual Graduate Field of Horticulture Review Day. Ithaca, NY.

Swegarden, H. October 2014. Seeds of Biodiversity. Guest lecture: HORT 2031 - Organic food: How to grow it, where to buy it, can it feed the world? Minneapolis, MN.

Swegarden, H. April 2014. Heirloom seed: A future rooted in the past. Presented at: Graduate Revels at Northrop. Minneapolis, MN.

Swegarden, H. November 2013. Potential gain from selection in heirloom dry beans. Presented at: Applied Plant Sciences (APS) Seminar Series. St. Paul, MN.

Swegarden, H. November 2013. Heirloom seed: Lessons from the past. Presented at: Unfolding New Leaves: Envisioning the Future of Horticulture Science. St. Paul, MN.

## **CONTRIBUTED ORAL PRESENTATIONS**

Sheaffer, C., T. Michaels, H. Swegarden, and C. Flavin. July 2014. Minnesota beans: From farm to table. Presented at: University of Minnesota Southwest Research and Outreach Center's Organic Field Day. Lamberton, MN.

Swegarden, H. and C. Flavin. April 2014. Graduate student research perspective: Organic dry bean research at the University of Minnesota. Presented at: What's Up in Sustainable Agriculture (WUSA) Seminar Series. St. Paul, MN.

Sheaffer, C., T. Michaels, H. Swegarden, and C. Flavin. March 2014. Dried beans in organic production systems. Presented at: Midwest Organic and Sustainable Education Service (MOSES) Conference. LaCrosse, WI.

Michaels, T., C. Sheaffer, H. Swegarden, and C. Flavin. January 2014. Organic dry bean production systems and cultivar choices. Presented at: MN Organic Conference. St. Cloud, MN.

Michaels, T., C. Sheaffer, H. Swegarden, and C. Flavin. November 2013. Organic dry bean production systems and cultivar choices. Presented as part of: eOrganic Webinar Series. Online.

## **POSTER PRESENTATIONS**

Swegarden, H., T. Michaels, and C. Sheaffer. February 2015. Varietal evaluation of commercial edible dry bean (*Phaseolus vulgaris* L.): Guiding varietal development for Minnesota organic

production. Poster presentation at: Midwest Organic and Sustainable Education Service (MOSES) Conference. LaCrosse, WI.

Swegarden, H. and T. Michaels. March 2014. Potential gain from selection in heirloom dry beans. Poster presentation at: Pioneer Plant Breeding Symposium. St. Paul, MN.

Swegarden, H. and T. Michaels. March 2014. Potential gain from selection in heirloom dry beans. Poster presentation at: Midwest Organic and Sustainable Education Service (MOSES) Conference. LaCrosse, WI.

Swegarden, H. and T. Michaels. October 2013. Potential gain from selection in heirloom dry beans. Poster presentation at: Bean Improvement Cooperative (BIC) Conference. Portland, OR.

### **GROWER OUTREACH AND FIELD DAY PRESENTATIONS**

- Student Organic Seed Symposium (SOSS) Field Tour - Aug. 10, 2015 – Madison, WI
- SWORC Organic Field Day - July 16, 2014 - Lamberton, MN
- NDSU Organic Field Day - July 15, 2014 – Carrington, ND
- Organic Field School (OFS) Field Day - Sept. 8, 2013 - Northfield, MN
- Student Organic Seed Symposium (SOSS) Field Tour - Aug. 5, 2013 - Mt. Vernon, WA
- SWORC Organic Field Day - July 9, 2013 - Lamberton, MN

### **TEACHING EXPERIENCE**

Cornell's Center for Teaching Excellence GET-SET Workshops:

- Designing Learning Outcomes for Your Course (Sept. 28, 2015)
- Integrating Technology into Your Classes (Oct. 2, 2015)
- Tips on Writing a Strong Teaching Philosophy (Oct. 31, 2015)
- Designing Research Assignments to Use Primary Literature (Nov. 9, 2015)
- How to Facilitate and Evaluate Group Work and Projects (Feb. 19, 2016)
- Enhance Your Teaching by Understanding Students' Learning Styles (Feb. 29, 2016)

Spring 2014. *Teaching Assistant*, University of Minnesota. Department of Horticultural Science. HORT 3131: Student Organic Farm: Planning, Growing, and Marketing.

Spring 2013. *Teaching Assistant*, University of Minnesota, Department of Horticultural Science. HORT 1014: The Edible Landscape.

Spring 2009. *Student Academic Apprentice*, University of Wisconsin – Eau Claire, Chemistry Department. CHEM 103: General Chemistry I.

## MENTORING EXPERIENCE

**Mentee: Lisa Keim.** Summer 2016. Undergraduate Summer Research Scholar: Screening of kale (*Brassica oleracea* var. *acephala*) accessions to characterize carotenoid variability in existing germplasm.

**Mentee: Jay Kovach.** Summer/Fall 2014. Theodora and Arnold Johnson Undergraduate Research Internship: Examination of proper seed starting media and transplant date for wolfberry (*Lycium barbarum*) use in local production.

**Mentee: Nancy Feldis.** Summer/Fall 2014. Undergraduate Research Opportunities Program (UROP): Root Formation and *Rhizobium* Nodulation Evaluation in Heirloom Dry Bean (*Phaseolus vulgaris* L.) Rooting Systems.

**Summer Research Assistants:** Summer 2013-2014. Managed a crew of three students during the 2013 and 2014 field seasons. Field activities included planting, plot maintenance, data collection, harvest, and processing of multiple field plots across the state. Mentees include: Trentin Tracana, Laura Hayes, Sanna Beek, Matt Kispert, and Sarah Mittlestadt.

## MASTER'S PROJECT-RELATED ACTIVITIES

- Outreach work with Regional Sustainable Development Partnerships (RSDP) aimed at understanding supply-chain avenues in local markets through distributor, co-op, farmer's market, restaurant, and CSA surveys
- Culinary evaluations of heirloom dry bean cultivars in partnership with local restaurants
- Molecular diversity analyses of heirloom dry beans using genotyping-by-sequencing (GBS) protocols through Cornell's Institute for Genomic Diversity
- Nutritional analyses of heirloom dry beans in collaboration with member of the university's Department of Food Science

## EXTRACURRICULAR LEADERSHIP

- University-Based Activities
  - Cornell University
    - Society for Horticulture Graduate Students (SoHo)
      - President (June 2016 - present)
      - Active Member (Sept 2016 - present)
    - Graduate Student Science Communication Discussion Group
  - University of Minnesota
    - Interdisciplinary Graduate Group in Food Studies (Sept 2013 - May 2015)
    - APS Graduate Student Association (Sept 2012 - May 2015)
      - President (June 2014 - May 2015)
        - Co-Chair of Plant Breeding Symposium - March 2015
        - Aid in Coordination of Annual APS Graduate Club Events
      - Vice President (June 2013 - May 2014)

- Pioneer Plant Breeding Symposium Committee
  - Monsanto Production Agriculture Symposium Committee
  - Selection Committee for the 2014 Hayes-Phillips Award
- APS Horticultural Track Representative (Sept 2012 - May 2013)
  - Dept. of Horticulture Seminar Series Committee (Sept 2013 - May 2014)
  - Dept. of Horticulture Curriculum Committee (Jan 2012 - May 2013)
- External Activities
  - NYSAES Extension and Outreach Position (Fall 2015 - present)
  - Steering Committee for the Society for Organic Seed Systems (SOSS)
  - Teaching and Learning in an Active Learning Classroom Certificate (Spr. 2014)
  - Hope For Tomorrow Mentorship Program (Sept 2013 - May 2016)

## **AWARDS AND RECOGNITIONS**

- 2016 ASA, CSSA, and SSSA Future Leaders in Science Award – Expenses Paid Trip to the Congressional Visits Day (CVD) in Washington DC (March 2016)
- UMN William H. Alderman Graduate Student Award - \$3,000
- Applied Plant Sciences (APS) Travel Award(s) - \$400-\$700