

# Gabriel T. LaHue

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## EDUCATION

<b>Cornell University</b>	Plant Sciences	<b>B.S. 2010</b>
<b>University of California, Davis</b>	International Agricultural Development	<b>M.S. 2015</b>
<b>University of California, Davis</b>	Soils and Biogeochemistry	<b>Ph.D. 2018</b>

## ACADEMIC POSITIONS

**Assistant Professor of Soil Science (Tenure-Track)** **Jan. 2022 – Present**  
*Washington State University (Mount Vernon, WA)*  
Department of Crop and Soil Sciences

**Teaching and Research Assistant Professor of Soil Science** **Jan. 2019 – Dec. 2021**  
*Washington State University (Mount Vernon, WA)*  
Department of Crop and Soil Sciences (50% research and extension, 50% teaching)

## RESEARCH AND SCHOLARSHIP INTERESTS

My applied research and Extension program works across diverse cropping systems and focuses on soil-plant-water relationships, soil physical and hydrologic health, soil fertility, and water-nutrient interactions. This includes irrigation scheduling, regulated deficit irrigation, and alternative irrigation methods; impacts of soil management practices on water movement and plant available water; and tailoring nutrient management to soil properties, plant disease risk, and water management strategies.

## OTHER EMPLOYMENT

**Graduate Student Researcher** **Jan. 2014 – Dec. 2018**  
*University of California, Davis (Davis, CA)*  
Advisors: Dr. Bruce Linqvist, Dr. Chris van Kessel (50% research)  
Dissertation: "Water management for improved agronomic and environmental performance in California rice"

**Associate Instructor** **Sep. – Dec. 2017**  
*University of California, Davis (Davis, CA)*  
"Soil Physics" (5-unit graduate and undergraduate course)

**Visiting Researcher** **Oct. 2015 – Mar. 2016**  
*CIAT – International Center for Tropical Agriculture (Cali, Colombia)*  
Advisor: Dr. Ngoni Chirinda (100% research)  
Project: "Technical and socioeconomic barriers to the adoption of alternate wetting and drying in Colombia"

## TEACHING

### A. Credit Courses Taught

- Organic and Sustainable Agricultural Certifications: From Principles to Practice (SOIL SCI 303): Undergraduate course, 2 credits, Everett and Pullman campuses
  - **Spring 2022:** In progress (first-time delivery, developed in Spring and Fall 2021)
- Soils: A Living System (Soil Science 201): Undergraduate course, 3 credits, Global Campus version
  - **Fall 2021** course evaluations: Instructor overall (**4.7/5**), Course overall (**4.3/5**), Instructor enthusiasm (4.9/5), Instructor planning (4.8/5), Instructor communication (4.8/5), Instructor encourages participation (5/5), Instructor gives timely feedback (4.8/5), Instructor communicates student expectations (4.8/5); 34 students (59% response)
  - **Fall 2020** course evaluations: Instructor overall (**4.1/5**), Course overall (**4.1/5**), Instructor enthusiasm (4.8/5), Instructor planning (4.7/5), Instructor communication (4.5/5), Instructor encourages participation (4.7/5), Instructor gives timely feedback (4.4/5), Instructor communicates student expectations (4.6/5); 30 students (57% response)
  - **Fall 2019** course evaluations: Instructor overall (**4.5/5**), Course overall (**3.6/5**), Instructor enthusiasm (4.8/5), Instructor planning (4.5/5), Instructor communication (4.5/5), Instructor encourages participation (4.8/5), Instructor gives timely feedback (4.5/5), Instructor communicates student expectations (4.6/5); 33 students (30% response)
- Soil Fertility Management (Soil Science 547): Graduate course, 3 credits
  - **Fall 2020** course evaluations: Instructor overall (**4.1/5**), Course overall (**3.9/5**), Instructor enthusiasm (4.7/5), Instructor planning (4.6/5), Instructor communication (4.5/5), Instructor encourages participation (4.8/5), Instructor gives timely feedback (3.7/5), Instructor communicates student expectations (4.3/5); 24 students (62% response)
- Advanced Topics in Soil Analysis (Soil Science 503): No course evaluations (single student)

### B. Guest Lectures at WSU and Additional Teaching

- **LaHue, G.T.** “An introduction to soils”. Presentation to Olericulture (Horticulture 320), Mount Vernon through AMS to Pullman, WA, September 24th and 26th, 2019. (Invited guest lecture)
- Griffin LaHue, D.E., and **G.T. LaHue.** “Soil science research, characterization, and soil health assessment”. Presentation to CSS & HORT Graduate Student Tour, Mount Vernon, WA, May 8th, 2019. (Invited guest lecture)

## ADVISING AND MENTORSHIP

### A. Postdoctoral Research Associate

- Navdeep Singh, Projects: Evaluating the contribution of soil organic carbon to improved water-holding capacity through increased compaction resistance; Skagit Basin Supply and Demand Analysis (started September 2020)

### B. Graduate Students

#### 1. Advising

- Harmony Varner, M.S. Student in Soil Science, Project: Farmer-led irrigation experimentation: A model for learning and adaptation (started Fall 2021)
- Jessica Mulvey, M.S. Student in Agriculture (started Spring 2021)

- Tessa Belo, M.S. Student in Soil Science, Project: Impacts of irrigation and fertilization practices on bacterial diseases in onion bulb crops (started Fall 2020, co-advised with Dr. Lindsey du Toit)
- Aidan Kendall (co-advisor), M.S. Student in Horticulture, Project: Developing resource-efficient cider apple production systems (started Fall 2020, primary advisor – Dr. Carol Miles)
- Michael Hipp, M.S. Student in Agriculture (started Spring 2020)
- Cheyenne Sloan, M.S. Student in Soil Science, Project: Valuing nitrogen release from high organic matter soils (Fall 2019 – Summer 2021, co-advised with Dr. Lisa DeVetter)

## 2. Graduate Student Committees

- Justin Maltry, M.S. Student in Soil Science, Project: Soil compaction and drainage in western Washington (started Fall 2020)
- Jason Jacobson, M.S. Student in Agriculture (started Fall 2020)
- Emily Blessington, M.S. Student in Agriculture (started Fall 2019)
- Yingxue Yu, Ph.D. Student in Soil Science, Project: Fate of emerging contaminants in soil (started Fall 2018)

## C. Student Mentorship

- Jessica Schultz, WSU M.S. in Agriculture (Summer 2020)
- Samantha Hordyk, Reed College (Summer 2019, co-mentored with Dr. Deirdre Griffin LaHue)

## **FUNDED GRANTS AND CONTRACTS<sup>1</sup> (Total Awarded to Program at WSU = \$1,185,921)**

- **LaHue G.T.** Impacts of irrigation timing on spinach seed crop performance. Northwest Agricultural Research Foundation, **PI (\$19,845)**, 2022 **(1, 2, 3, 4, 5, 6)**
- **LaHue G.T.**, Waters T., and L. du Toit. Revisiting nitrogen management recommendations in the context of onion bacterial diseases. Columbia Basin Onion Research Committee, **PI (\$22,682)**, 2022 **(1, 2, 3, 4, 5, 6)**
- Frazier M., Ostrom M., Smith R., Griffin LaHue D., **LaHue G.T.**, and M. Brady. From Farmers to Soil Health Managers -- Participatory Design of On-Farm Trials to Stimulate Adoption of Innovative Conservation Techniques by Historically Underserved Farmers in the Puget Sound Region. USDA NRCS Conservation Innovation Grant, **co-PI (\$63,367; \$910,126)**, 2022 – 2025 **(2, 4, 5, 6)**
- Murphy K., Ganjyal G., Griffin LaHue D., Monsavais P., Brueggeman R., Carbonero F., Garland-Campbell K., Jones S., **LaHue G.T.**, McCracken V., McGee R., Neely C., Perrigue M., Solverson P., Szlavecz K., Tang J., Thom-Lyman A., and A. Warner. Optimizing human health from soil to society. USDA NIFA Sustainable Agricultural Systems, **co-PI (\$436,304; \$10,000,000)**, 2022 – 2026 **(2, 4, 5, 6)**
- **LaHue G.T.**, Miles C., Kalcsits L., Galinato S., and T. Collins. Regulated deficit irrigation for improved cider apple quality with reduced water input. WSDA Specialty Crop Block Grant Program, **PI (\$119,959; \$244,085)**, 2021 – 2024 **(2, 3, 4, 5, 6)**
- **LaHue G.T.**, Brady M., and S. Galinato. Farmer-led irrigation experimentation: A model for learning and adaptation. WSU ERI Grant Program, **PI (\$30,056; \$37,227)**, 2021 – 2023 **(1, 2, 3, 4, 5, 6)**

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<sup>1</sup> Key to indicators or description of contributions to funded grants: 1 = Developed the initial idea; 2 = Developed research design and hypotheses; 3 = Authorship of grant application; 4 = Editing and review of grant application; 5 = Developed and/or managed budget; 6 = Managed personnel and project activities.

- Benedict C., Burke I., Griffin LaHue D., **LaHue G.T.**, Potter T., and N. Singh. Tracking the tango between tillage, soil health, and weeds. WSU BIOAg Grant Program, **co-PI (\$4,237; \$39,596)**, 2021 – 2023 **(2, 4, 6)**
- **LaHue G.T.**, Wasko DeVetter L., Griffin LaHue D.E., and C. Benedict. Valuing nitrogen release from high organic matter soils. Washington Blueberry Commission, **PI (\$28,368)**, 2021 – 2022 **(2, 3, 4, 5, 6)**
- **LaHue G.T.**, Waters T., and L. du Toit. Revisiting nitrogen management recommendations in the context of onion bacterial diseases. Columbia Basin Onion Research Committee, **PI (\$21,677)**, 2021 **(1, 2, 3, 4, 5, 6)**
- **LaHue G.T.** Impacts of irrigation management changes on Stemphylium leaf spot control. Washington State Commission on Pesticide Registration, **PI (\$13,918)**, 2021 **(1, 2, 3, 4, 5, 6)**
- **LaHue G.T.** and L. du Toit. Irrigation scheduling and soil moisture thresholds to maximize spinach seed production. Northwest Agricultural Research Foundation, **PI (\$15,468)**, 2021 **(1, 2, 3, 4, 5, 6)**
- DeVetter L.W., Hoheisel G., Davenport J., **LaHue G.T.**, and D. Hill. Optimizing nutrient management for organically grown blueberries east of the Cascade Range. Northwest Center for Small Fruit Research, **co-PI (\$18,498; \$101,874)**, 2021 – 2022 **(4, 5, 6)**
- Yoder J., Bandaragoda C., Greene C., Jobe J., **LaHue G.T.**, Mauger G., Padowski J., Rajagopalan K., Raymond C., and C. Wiseman. Skagit Basin Supply and Demand Analysis. Washington State Department of Ecology, **co-PI (\$49,204; \$603,396)**, 2020 – 2021 **(2, 4, 5, 6)**
- **LaHue G.T.**, Flury M., Neely H., Bary A., and I. Akin. Evaluating the contribution of soil organic carbon to improved water-holding capacity through increased compaction resistance. WSU BIOAg Grant Program, **PI (\$38,737)**, 2020 – 2021 **(1, 2, 3, 4, 5, 6)**
- **LaHue G.T.**, Wasko DeVetter L., Griffin LaHue D.E., and C. Benedict. Valuing nitrogen release from high organic matter soils. Washington Blueberry Commission, **PI (\$16,640)**, 2020 – 2021 **(2, 3, 4, 5, 6)**
- Griffin LaHue D.E., Neely H., Benedict C., and **G.T. LaHue**. Measuring and mitigating soil compaction in red raspberry fields for improved soil conditions. Washington Red Raspberry Commission, **co-PI (\$0, \$10,000)**, 2020 – 2021 **(2, 4)**
- **LaHue G.T.**, Waters T., and L. du Toit. Revisiting nitrogen management recommendations in the context of onion bacterial diseases. Columbia Basin Onion Research Committee, **PI (\$17,381)**, 2020 **(1, 2, 3, 4, 5, 6)**
- Embertson N., **LaHue G.T.**, Clark C., Griffin LaHue D.E., Graham S., and D. Bekenyi. Demonstration of the benefits of subirrigation using water level control structures for improved agricultural irrigation water use. USDA NRCS Conservation Innovation Grant, **co-PI (\$112,951; \$415,291)**, 2020 – 2022 **(2, 3, 4, 5, 6)**
- **LaHue G.T.** Impacts of irrigation management changes on Stemphylium leaf spot control. Washington State Commission on Pesticide Registration, **PI (\$10,545)**, 2020 **(1, 2, 3, 4, 5, 6)**
- **LaHue G.T.** and L. du Toit. Irrigation scheduling and soil moisture thresholds to maximize spinach seed production. Northwest Agricultural Research Foundation, **PI (\$13,046)**, 2020 **(1, 2, 3, 4, 5, 6)**
- du Toit L., Dutta B., Aegerter B., Hoepfing C., Kvitko B., Uchanski M., Bartolo M., Colson G., Coutinho T., Cramer C., Drost D., Gugino B., Hausbeck M., Kalyanamaran A., **LaHue G.T.**, Malla S., Nischwitz C., Putnam A., Rajagopalan K., Reitz S., Sidhu J., Waters T., Wilson R., and J. Woodhall. Stop the rot: Combating onion bacterial diseases with pathogenomics tools and enhanced management strategies. USDA NIFA Specialty Crop Research Initiative, **Collaborator (\$111,840; \$4,044,300)**, 2019 – 2023 **(4, 5, 6)**
- LaHue G.T., Griffin LaHue D.E., Wasko DeVetter L., and C. Benedict. Valuing nitrogen release from high organic matter soils. Washington Blueberry Commission, **PI (\$15,739)**, 2019 – 2020 **(2, 3, 4, 5, 6)**
- Griffin LaHue D.E., LaHue G.T., Benedict C., and L. Wasko DeVetter. Reducing alleyway tillage to decrease costs and improve soil health. Washington Red Raspberry Commission, **co-PI (\$1,083; \$7,070)**, 2019 – 2020 **(2, 4)**

- Miles C., LaHue G.T., Alexander T., King J., and E. Scheenstra. Evaluating regulated deficit irrigation in cider apple orchards for improved water use efficiency, reduced labor input, and improved fruit quality. WSU BIOAg Grant Program, **co-PI (\$4,376; \$39,200)**, 2019 – 2020 **(2, 3, 4, 6)**

### **HONORS, AWARDS, AND FELLOWSHIPS**

- Student Awards at WSU:
  - 2021: Tessa Belo, 4<sup>th</sup> Place, Soil Fertility and Plant Nutrition Division, 5-minute Rapid Oral and Poster Presentation M.S. Student Competition, Soil Science Society of America Annual Meeting
  - 2020: Cheyenne Sloan, 1<sup>st</sup> Place, CAHNRS M.S. Student 3-minute Thesis Competition
- Awards and Fellowships Received Prior to WSU
  - 2016 – 2017, 2017 – 2018: William G. and Kathleen Golden International Agricultural Fellowship,
  - 2017 – 2018: Bert and Nell Krantz Fellowship
  - 2016: D. Marlin Brandon Rice Research Fellowship
  - 2015 – 2016: Milton D. and Mary M. Miller Plant Science Award
  - 2015, 2016: Henry A. Jastro Graduate Research Award
  - 2015 – 2016: Research and Innovation Fellows for Agriculture

### **SCHOLARLY RESEARCH PUBLICATIONS AND PRESENTATIONS**

#### **A. Refereed Journal Articles<sup>2</sup> (Total Published: 8 [2 at WSU])**

##### *Published*

- Kendall A., Alexander T.R., **LaHue, G.T.†**, and C.A. Miles. Summer mechanical hedging is effective for pruning of eight cider apple cultivars. *HortTechnology*. Accepted. **(4, 6, 7)**
- Kendall A., Miles C., Alexander T., Scheenstra E., and **G.T. LaHue\*†**. **2022**. Reduced irrigation during orchard establishment conserves water and maintains yield for three cider apple (*Malus domestica* Borkh.) cultivars. *HortScience*. 57:118–125. <https://doi.org/10.21273/HORTSCI16252-21> **(2, 3, 4, 6, 7)**
- **LaHue G.T.\*** and B.A. Linquist. **2021**. The contribution of percolation to water balances in water-seeded rice systems. *Agric. Water Manag.* 243:106445. <https://doi.org/10.1016/j.agwat.2020.106445> **(1, 3, 4, 5, 6)**
- **LaHue G.T.\*** and B.A. Linquist. **2019**. The magnitude and variability of lateral seepage in California rice fields. *J. Hydrol.* 574:202–210. <https://doi.org/10.1016/j.jhydrol.2019.04.030> **(1, 3, 4, 5, 6)**
- Chirinda N., Arenas L., Katto M., Loaiza S., Correa F., Ishitani M., Loboguerrero A.M., Martinez-Baron D., Graterol E., Jaramillo S., Torres C.F., Arango M., Guzmán M., Avila I., Hube S., Kurtz D.B., Zorrilla G., Terra J., Irisarri P., Tarlera S., **LaHue G.T.**, Scivittaro W.B., Noguera A., and C. Bayer. **2018**. Sustainable and low greenhouse gas emitting rice production in Latin America and the Caribbean: A review on the transition from ideality to reality. *Sustainability*. 10:671. <https://doi.org/10.3390/su10030671> **(5, 6)**
- Chirinda N., Arenas L., Loaiza S., Trujillo C., Katto M., Chaparro P., Nuñez J., Arango J., Martinez-Baron D., Loboguerrero A.M., Lopez-Lavalle L.A.B., Avila I., Guzmán M., Peters M., Twyman J., García M.,

<sup>2</sup> Key to indicators or description of contributions to publications (published, in-press, and in-review): 1 = Developed the initial idea; 2 = Obtained or provided funds or other resources; 3 = Collected data; 4 = Analyzed data; 5 = Wrote/created product; 6 = Edited product; 7 = Student paper; \* = Corresponding author; † = Publication from work at WSU.

Serna L., Escobar D., Arora D., Tapasco J., Maazbel L., Correa F., Ishitani M., Da Silva M., Graterol E., Jaramillo S., Pinto A., Zuluaga A., Lozano N., Byrnes R., **LaHue G.T.**, Alvarez C., Rao I., and R. Barahona. **2017**. Novel technological and management options for accelerating transformational changes in rice and livestock systems. *Sustainability*. 9:1891. <https://doi.org/10.3390/su9111891> **(3, 6)**

- **LaHue G.T.\***, Chaney R.L., Adviento-Borbe M.A., and B.A. Linquist. **2016**. Alternate wetting and drying in high yielding direct-seeded rice systems accomplishes multiple environmental and agronomic objectives. *Agric., Ecosyst. Environ.* 229:30-39. <https://doi.org/10.1016/j.agee.2016.05.020> **(3, 4, 5, 6)**
- **LaHue G.T.\***, Adviento-Borbe M.A., Linquist B.A., van Kessel C., and S.J. Fonte. **2016**. Fertilizer memory effects increase nitrous oxide emissions from zero N controls: implications for estimating fertilizer-induced emission factors. *J. Environ. Qual.* 45:1501-1508. <https://doi.org/10.2134/jeq2015.07.0409> **(3, 4, 5, 6)**

#### *In Review*

- Singh N., Kogan C., Chaudhary S., Rajagopalan K., and **G.T. LaHue\*†**. Effects of controlled drainage and subirrigation on crop yield and soil moisture. Submitted to *Vadose Zone J.* in Dec. 2021 **(2, 3, 4, 6, 7)**
- Belo T., du Toit L., and **G.T. LaHue\*†**. Reducing the risk of onion bacterial diseases through irrigation, fertility, and other cultural management strategies. Submitted to *Agron. J.* in Nov. 2021. **(2, 3, 4, 6, 7)**

#### *In Preparation*

- Varner H., Schultz J., du Toit L., Spawton K., Schacht B., Myhre L., and **G.T. LaHue\*†**. Impacts of irrigation timing and quantity on spinach seed yield, vegetative growth, and *Stemphylium* leaf spot. In preparation for submission to *Irrig. Sci.* **(1, 2, 3, 4, 6, 7)**
- Sloan C., Wasko DeVetter L., Griffin LaHue D., Benedict C., Bryla D., and **G.T. LaHue\*†**. Nitrogen supply from soil organic matter: Implications for nutrient management in northern highbush blueberry. In preparation for submission to *Scientia Hort.* **(2, 3, 4, 6, 7)**
- Carrijo D.R., **LaHue G.T.**, Parikh S.J., Chaney R.L., and B.A. Linquist. Mitigating the accumulation of arsenic and cadmium in rice grain: a quantitative review of the role of water management. In preparation for submission to *Agric. Food Chem.* **(3, 6)**

#### **B. Abstracts (Total: 4 [4 at WSU])<sup>3</sup>**

- Kendall A.C., **LaHue G.T.†**, Alexander T.R., King J., Scheenstra E., and C.A. Miles. **2021**. Regulated deficit irrigation conserves water and maintains yield for three cider apple (*Malus domestica* Borkh.) cultivars. *HortScience*. 56(9) Supplement – 2021 ASHS Annual Conference. S187. <https://doi.org/10.21273/HORTSCI.56.9S.S1> **(3, 4, 6, 7)**
- Kendall A.C., **LaHue G.T.†**, Alexander T.R., King J., Scheenstra E., and C.A. Miles. **2021**. Mechanical hedging in four cider apple bearing habits. *HortScience*. 56(9) Supplement – 2021 ASHS Annual Conference. S155. <https://doi.org/10.21273/HORTSCI.56.9S.S1> **(3, 4, 6, 7)**
- Sloan C., Wasko DeVetter L., Griffin LaHue D., Benedict C., and **G.T. LaHue\*†**. **2020**. Quantifying nitrogen supply from soil organic matter for highbush blueberry production. *HortScience*. 55(9) Supplement – 2020 ASHS Annual Conference. S76. <https://doi.org/10.21273/HORTSCI.55.9S.S1> **(2, 3, 4, 6, 7)**

<sup>3</sup> Key to indicators or description of contributions to publications (published, in-press, and in-review): 1 = Developed the initial idea; 2 = Obtained or provided funds or other resources; 3 = Collected data; 4 = Analyzed data; 5 = Wrote/created product; 6 = Edited product; 7 = Student paper; \* = Corresponding author; † = Publication from work at WSU.

- Alexander T.R., **LaHue G.T.†**, King J., Scheenstra E., and C.A. Miles. **2020**. Optimizing cider orchard performance with irrigation scheduling and regulated deficit irrigation. *HortScience*. 55(9) Supplement – 2020 ASHS Annual Conference. S361. <https://doi.org/10.21273/HORTSCI.55.9S.S1> **(3, 4, 6)**

#### C. Refereed Book Chapters (Total: 1 [0 at WSU])

- Dahlke H.E., **LaHue G.T.**, Mautner M.R.L., Murphy N.P., Patterson N.K., Waterhouse H., Yang F., and L. Foglia. **2018**. Aquifer Recharge as a tool to enhance sustainable groundwater management in California: examples from field and modeling studies. In: J. Friesen and L. Rodriguez Sinobas (Eds.), *Advances in Chemical Pollution, Environmental Management and Protection: Advanced Tools for Integrated Water Resources Management, Volume 3*, pp. 215-275. <https://doi.org/10.1016/bs.apmp.2018.07.003> *Invited submission* **(5, 6)**

#### D. Refereed Technical Reports (Total: 1 [1 at WSU])

- Belo T., du Toit L., Waters T., Derie M., and **G.T. LaHue\*†**. **2021**. Effects of irrigation frequency and final irrigation timing on onion bacterial diseases in the Columbia Basin of Washington, 2020. *Plant Disease Management Reports*. 15:V109 **(2, 3, 4, 6, 7)**

#### E. Non-refereed Technical Reports (Total: 1 [0 at WSU])

- García M.A., Katto M.C., Twyman J., **LaHue G.T.**, and N. Chirinda. **2016**. How might the gender roles affect the implementation of a new water-saving technique for Colombian rice production? Report of gender dimensions in Colombian rice production. Working Paper. CIAT Publication No. 437. International Center for Tropical Agriculture (CIAT), Cali, Colombia. 37 p. **(3, 4, 6)**

#### F. Scholarly Presentations (Total: 8 [4 at WSU])<sup>4</sup>

- **LaHue G.T.†**, Wasko DeVetter L., Griffin LaHue D., Sloan C., and C. Benedict. “Implications of N supply from soil organic matter for nutrient management in northern highbush blueberry production”. Oral presentation at the 2021 ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT, November 9th, **2021**.
- Singh N., Kogan C., Chaudhary S., Rajagopalan K., and **G.T. LaHue†‡**. “Effects of controlled drainage and subirrigation on crop yield and soil moisture: A meta-analysis”. Oral presentation at the 2021 ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT, November 9th, **2021**.
- Belo T., du Toit L., Waters T., Derie M., Schacht B., and **G.T. LaHue†‡**. “Combating onion bacterial diseases through nitrogen fertility management”. Oral and poster presentation at the 2021 ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT, November 9th, **2021**.
- **LaHue, G.T.†**. “Supplemental irrigation strategies for spinach seed production in western Washington”. Oral presentation at the 2019 ASA, CSSA, SSSA International Annual Meeting, San Antonio, TX, November 13th, **2019**.
- **LaHue, G.T.**, and B.A. Linquist. “Subsurface water losses: Seepage and percolation in California rice fields”. Oral presentation at the 2019 Soil Science Society of America Annual Meeting, San Diego, CA, January 8th, **2019**.
- **LaHue G.T.**, and B.A. Linquist. “Subsurface water losses: Seepage and percolation in California rice fields”. Oral presentation at the 2018 Rice Technical Working Group Conference, Long Beach, CA. February 22nd, **2018**.

<sup>4</sup> Key to indicators or description of contributions to publications and presentations: 1 = Developed the initial idea; 2 = Obtained or provided funds or other resources; 3 = Collected data; 4 = Analyzed data; 5 = Wrote/created product; 6 = Edited product; 7 = Student paper; \* = Corresponding author; † = Publication from work at WSU; ‡ = Student presentation

- **LaHue G.T.**, Sandoval-Solis S., and B.A. Linquist. “The influence of the recent California drought on water table levels in the Sacramento Valley”. Poster presentation at the “Toward Sustainable Groundwater in Agriculture” conference, Burlingame, CA. June 29th, **2016**.
- **LaHue G.T.**, Adviento-Borbe M.A., van Kessel C., and B.A. Linquist. “Using alternative water management to reduce greenhouse gas emissions and maintain yields in California rice systems.” Oral presentation at the 2014 ASA-CSSA-SSSA International Annual Meeting, Long Beach, CA. November 4th, **2014**.

## **EXTENSION PUBLICATIONS AND PRESENTATIONS<sup>5</sup>**

### **A. Refereed Extension Publications (Total = 1 [1 at WSU])**

- Yoder J., Chaudhary S., Duarte B., Greene C., Jobe J., **LaHue G.T.†**, Maroney C., Mauger G., Morgan H., Padowski J., Rajagopalan K., Raymond C., Rogers M., Rossman N., Singh N., Timpone-Padgham B., Wiseman C., and J. Won. **2021**. Skagit Water Supply and Demand Synthesis. Story Map Series Prepared for the State of Washington Joint Legislative Task Force on Water Supply. <https://doi.org/10.7273/4n11-9k73> (**2, 3, 4, 5, 6, 7**)

### **B. Non-refereed Extension Publications (Total = 5 [4 at WSU])**

- Belo T., **LaHue G.T.†**, du Toit L., and T. Waters. 2021. When to water? How do irrigation frequency and final irrigation timing influence onion bacterial diseases? *Onion World*. Dec. pp. 6 – 8. Available from: [https://issuu.com/columbiamediagroup/docs/onion\\_world\\_december\\_2021?fr=sNDA4ZDI1Mjg1MDI](https://issuu.com/columbiamediagroup/docs/onion_world_december_2021?fr=sNDA4ZDI1Mjg1MDI) (**2, 3, 4, 6, 7**)
- Gerbrandt E., Wasko DeVetter L., Strik B., Griffin LaHue D., **LaHue G.T.†**, Dossett M., Sweeney M., and V. Stockwell. **2021**. Severe flooding of blueberry fields in southwestern British Columbia and northwestern Washington. 7 pp. Available from: <https://s3.wp.wsu.edu/uploads/sites/2181/2021/12/Severe-Flooding-in-the-Sumas-Flats-Final.pdf> (**6**)
- Wasko DeVetter L.W., Gerbrandt E., Strik B., Melathaopoulos A., Pscheidt J., Weiland J., Zasada I., Stockwell V., Bryla D., Dossett M., Mattupalli C., Benedict C., **LaHue G.T.†**, Griffin LaHue D., Zhu M., Teasdale C., and J. Pond. **2021**. Berry crops and flooding. 5 pp. Available from: [https://agsci.oregonstate.edu/sites/agscid7/files/horticulture/berry/berry\\_crops\\_and\\_flooding\\_12-2021.pdf](https://agsci.oregonstate.edu/sites/agscid7/files/horticulture/berry/berry_crops_and_flooding_12-2021.pdf) (**6**)
- Hills K., and C. Benedict (Eds.), Blua M., Collins D., DuPont T., Griffin LaHue D., Hoheisel G., Jensen A., Keller M., Koenig R., Kruger C., **LaHue G.T.†**, McGuire A., and M. Moyer. **2021**. Washington Soil Health Initiative Roadmap. 124 pp. Available from: <https://s3.wp.wsu.edu/uploads/sites/2464/2021/11/WSU-Soil-Health-Roadmap-Nov-2021-Version.pdf> (**3, 4, 5, 6**)
- Linquist B.A., and **G.T. LaHue**. **2020**. Managing rice with limited water. Agronomy Fact Sheet #6. University of California Cooperative Extension, Davis, California, USA. 2 p. Available from: <https://ucanr.edu/sites/RiceTestSite/files/328502.pdf> (**3, 4, 6**)

### **C. Extension Newsletters and Other Media (Total = 1 [1 at WSU])**

- **LaHue G.T.†**, Belo T., du Toit L., and T. Waters. 2021. Two critical pieces of the puzzle: Irrigation and nitrogen management impacts on bacterial bulb rots. In: Wohleb C., Waters T., and L. du Toit (Eds.) WSU Onion Alerts. Issue 3. 1 Sept. 2021. Available from: <https://mailchi.mp/wsu/wsu-onion-alert-sept1-2021-1305808?e=884d3c4f64> (**2, 3, 4, 5, 7**)

<sup>5</sup> Key to indicators or description of contributions to publications (published, in-press, and in-review): 1 = Developed the initial idea; 2 = Obtained or provided funds or other resources; 3 = Collected data; 4 = Analyzed data; 5 = Wrote/created product; 6 = Edited product; 7 = Student paper; \* = Corresponding author; † = Publication from work at WSU



**D. National Extension and Outreach Presentations (Total: 2 [2 at WSU])<sup>6</sup>**

- **LaHue G.T.**, Alexander T., Scheenstra E., King J., and C. Miles. “Optimizing cider orchard performance with irrigation scheduling and regulated deficit irrigation” Poster presentation at CiderCON 2020, Oakland, CA, January 30th, **2020**. †§
- **LaHue G.T.†§**, Alexander T., Scheenstra E., King J., and C. Miles. “Regulated deficit irrigation: increasing cider orchard water use efficiency and fruit quality?” Oral presentation at CiderCON 2020, Oakland, CA, January 29th, **2020**. †§

**E. State or Regional Extension and Outreach Presentations (Total: 10 [9 at WSU])**

- **LaHue G.T.**, Sloan C., Wasko DeVetter L., Griffin LaHue D.E., and C. Benedict. “Nitrogen supply from soil organic matter: Implications for management in highbush blueberry production”. 2021 Washington Small Fruit Conference, Lynden, WA, December 2nd, **2021**. †§
- Belo T. and **LaHue G.T.** (co-presenters), du Toit L., Waters T., Derie M., and B. Schact. “Combatting onion bacterial diseases through nitrogen fertility management”. Pacific Northwest Vegetable Association Annual Conference and Trade Show, Kennewick, WA, November 16th, **2021**. (Invited presentation) †‡§
- Belo T. and **LaHue G.T.** (co-presenters), du Toit L., Waters T., Derie M., and B. Schact. “Combatting onion bacterial diseases through irrigation management”. Pacific Northwest Vegetable Association Annual Conference and Trade Show, Kennewick, WA, November 16th, **2021**. (Invited presentation) †‡§
- **LaHue G.T.**, and D.E. Griffin LaHue. “Soil fertility and plant nutrition”. WSU Extension Home Horticulture Training, Online, January 23rd, **2021**. (Invited presentation) †
- **LaHue G.T.** “Soils, pesticide fate, and IPM”. WSU Urban IPM and Pesticide Safety Education Program, Online, December 3rd, **2020**, and February 11th, **2021**. (Invited presentation) †
- Sloan C., **LaHue G.T.**, Griffin LaHue D.E., Wasko DeVetter L., and C. Benedict. “Quantifying nitrogen supply from soil organic matter for highbush blueberry production”. 2020 Washington Small Fruit Conference, Online, December 1st, **2020**. †‡§
- **LaHue G.T.** “Soils, pesticide fate, and IPM”. WSU Urban IPM and Pesticide Safety Education Program, Lynnwood, WA, January 23rd and March 5th, **2020**. (Invited presentation) †
- **LaHue G.T.** “Evaluating an irrigation scheduling tool for spinach seed production”. Specialty Seed Growers Western Oregon Workshop, Albany, OR, January 21st, **2020**. (Invited presentation) †§
- **LaHue G.T.**, Sloan C., Griffin LaHue D.E., Wasko DeVetter L., and C. Benedict. “Valuing nitrogen release from soil organic matter”. 2019 Washington Small Fruit Conference, Lynden, WA, December 4th, **2019**. †‡§
- **LaHue G.T.** “Soils, water, and nutrients across latitudes”. Presentation to Agassiz Research and Development Centre, Agriculture and Agri-Food Canada, Agassiz, Canada, February 19th, **2019**. (Invited presentation)

**F. Local Extension and Outreach Presentations (Total: 28 [24 at WSU])**

- **LaHue G.T.** and Varner H. (co-presenters), Schultz J., du Toit L., and K. Spawton. “Soil moisture management and irrigation scheduling for spinach seed crops”. Western Washington Seed Workshop, Mount Vernon, WA, January 14<sup>th</sup>, **2022**. (Invited Presentation) †‡§

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<sup>6</sup> † = Presentation from work at WSU; ‡ = Student presentation, § = Extension presentation to agricultural producers

- Sloan C., **LaHue, G.T.**, Griffin LaHue D.E., Wasko DeVetter L., and C. Benedict. “Quantifying nitrogen supply from soil organic matter for highbush blueberry production”. Western Washington Berry Workshop, Online, March 12th, **2021**. (Invited Presentation) †‡§
- **LaHue G.T.** “Farmer-led experimentation on irrigation”. Western Washington Potato Workshop, Online, February 19th, **2021**. †§
- **LaHue G.T.** “The Organic and Sustainable Agriculture major at WSU Everett”. Skagit Ag Summit, Online, January 29th, **2021**. (Invited Presentation) †
- **LaHue G.T.**, Rajagopalan K., Chaudhary S., Singh N., and J. Fleharty. “Skagit Basin Supply and Demand Analysis: Agriculture Team”. Skagit Agricultural Water Advisory Group, Mount Vernon, WA, January 20th, **2021**. (Invited Presentation) †§
- **LaHue G.T.** “Soil moisture management and irrigation scheduling for spinach seed crops”. Western Washington Seed Workshop, Online, January 8th, **2021**. (Invited presentation) †§
- **LaHue G.T.** “Soils, Water, and Pesticide Transport”. Northwestern Washington Research and Extension Center Lunch and Learn, Online, October 14th, **2020**. (Invited presentation) †
- **LaHue G.T.**, and D.E. Griffin LaHue. “An introduction to soils and soil fertility”. WSU Extension Skagit County Master Gardeners, Online, April 21st, **2020**. (Invited presentation) †
- **LaHue G.T.** “Irrigation planning: Are you starting early enough?”. Whatcom County Small Farm Expo, Online, April 15th, **2020**. <https://youtu.be/WeU-Z-y3eu4> (Invited presentation) †§
- **LaHue G.T.** “Valuing nitrogen release from soil organic matter”. Western Washington Berry Workshop, Mount Vernon, WA, March 13th, **2020**. (Invited presentation) †§
- **LaHue G.T.** “Soils & Water Program Research”. Skagit Men’s Garden Club, Mount Vernon, WA, March 5th, **2020**. (Invited presentation) †
- **LaHue G.T.** “Irrigation and soil moisture”. Manure Nutrient Management Training, Lynden, WA, February 20th, **2020**. (Invited presentation) †§
- **LaHue G.T.** “Evaluating an irrigation scheduling tool for spinach seed production”. Western Washington Seed Workshop, Mount Vernon, WA, January 10th, **2020**. (Invited presentation) †§
- **LaHue G.T.**, Griffin LaHue D.E., Benedict C., and K. Hills. “Northwestern Washington Soil Health Initiative Road-Mapping Workshop”. Mount Vernon, WA, December 17th, **2019**. †§
- **LaHue G.T.**, and D.E. Griffin LaHue. “Soil management for growing good fruit”. Snohomish County Fruit Society, Snohomish, WA, September 12th, **2019**. (Invited presentation) †
- **LaHue G.T.**, Griffin LaHue D.E., and D. Stranik. “Soil health on the dairy”. Field day presentation to dairy farmers in Whatcom County in collaboration with Whatcom Conservation District, Lynden, WA, September 5th, **2019**. (Invited presentation) †§
- **LaHue G.T.** “Irrigation and soil moisture”. Class Presented to Cloud Mountain Farm Center’s internship program, Everson, WA, September 4th, **2019**. (Invited presentation) †§
- **LaHue G.T.** “Soil fertility and soil testing”. Class Presented to Cloud Mountain Farm Center’s internship program, Everson, WA, September 4th, **2019**. (Invited presentation) †§
- **LaHue G.T.**, and D.E. Griffin LaHue. “Soils and climate change”. Presented to the community group Transition Fidalgo and Friends, Anacortes, WA, August 27th, **2019**. (Invited presentation) †
- Griffin LaHue D.E., and **G.T. LaHue**. “Soil health management”. Presentation at the WSU NWREC Field Day, Mount Vernon, WA, July 11th, **2019**. (Invited presentation) †

- Griffin LaHue D.E., **LaHue G.T.**, and E. Schuh. “Soil challenges and opportunities in Western Washington”. Soil health workshop for farmers in Snohomish County in collaboration with the Snohomish County Conservation District, Stanwood, WA, June 6th, **2019**. (Invited presentation) †§
- **LaHue G.T.** “Practical soil management”. Presentation to Skagit Valley College’s Orchard Crop Production Course, Mount Vernon, WA, May 22nd, **2019**. (Invited presentation) †
- **LaHue G.T.**, and D.E. Griffin LaHue. “The soils under your feet: Exploring their diversity, formation, and management”. Presented to the Anacortes Science Cafe, Anacortes, WA, May 16th, **2019**. (Invited presentation) †
- **LaHue G.T.** “An introduction to soils”. Presentation to Skagit Valley College’s Row Crop Production Course, Mount Vernon, WA, April 16th, **2019**. (Invited presentation) †
- **LaHue G.T.**, and B.A. Linquist. "Subsurface water losses: Seepage and percolation in California rice fields". Poster presentation at the 2018 Rice Field Day in Biggs, CA, August 30th, **2018**. §
- **LaHue G.T.**, and B.A. Linquist. "Elucidating the interactions between rice cultivation and groundwater in California". Poster presentation at the 2017 Rice Field Day in Biggs, CA, August 31st, **2017**. §
- **LaHue G.T.**, Adviento-Borbe M.A., van Kessel C., Stogsdill J., and B.A. Linquist. “Using alternative water management to reduce greenhouse gas emissions and maintain yields in California rice systems.” Poster presentation at the 2014 Rice Field Day in Biggs, CA August 27th, **2014**. §
- **LaHue G.T.**, Anderson K., Linquist B.A., van Kessel C., and S.J. Fonte. “Do soils at Russell Ranch have a memory? The effect of fertilization history on nitrous oxide emissions.” Poster presentation at the 2014 Russell Ranch Field Day in Davis, CA, May 28th, **2014**.

## **SERVICE, PROFESSIONAL ACTIVITIES, AND MEMBERSHIP**

### **A. Service to the Department, College, or University**

- Graduate Student Liaison, Northwestern Washington Research and Extension Center (2020 – 2022)
- Executive Committee, Department of Crop and Soil Sciences (2020 – 2022)
- Agricultural and Food Systems Planning and Assessment Committee (2020 – 2022)
- Ad-Hoc Reviewer, Center for Sustaining Agriculture and Natural Resources BIOAG Program (2022)
- Hiring Committee, Horticultural Crops Entomologist (2021 – 2022)
- Hiring Committee, Farmer / Maintenance Mechanic 3 (2021)
- Hiring Committee, Small Fruit Horticulture Postdoctoral Research Associate (2020)

### **B. Service to Professional Groups or Associations**

- Student Competition Judge, SSSA Soil Fertility and Plant Nutrition Division (2021)
- Student Competition Judge, SSSA Soil and Water Conservation and Management Division (2020)
- Reviewer (Agriculture, Ecosystems and Environment; Agricultural Water Management; Agricultural and Forest Meteorology; Agronomy; Agronomy Journal; Agronomy for Sustainable Development; Archives of Agronomy and Soil Science; Global Change Biology; Journal of Environmental Quality; Nutrient Cycling in Agroecosystems, Soil Science Society of America Journal, WSU Extension)

### **C. Service to Government or Community Groups**

- Volunteer firefighter, Mt. Erie Fire District, Skagit County District 11 (2021 – 2022)

**D. Leadership Roles**

- NWREC Faculty Lead for WSU Everett Agricultural and Food Systems Degree

**E. Professional Society Membership**

- American Society of Agronomy (Member since 2014)
- Soil Science Society of America (Member since 2014)
- Crop Science Society of America (2014 – 2018)
- California Irrigation Institute (2017 – 2018)