

# CURRICULUM VITAE

University of Idaho

**NAME:** Mary E. Ridout

**DATE:** November 2019

**RANK OR TITLE:** Assistant Professor/Extension Educator, Agriculture and Horticulture

**DEPARTMENT:** Southern District Extension  
College of Agricultural and Life Sciences

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**DATE OF FIRST EMPLOYMENT AT UI:** 2006

**DATE OF TENURE:** 2024

**DATE OF PRESENT RANK OR TITLE:** 2019

## EDUCATION BEYOND HIGH SCHOOL:

### Degrees:

Ph.D. Natural Resources—Plant Microbe Interactions, University of Idaho, Moscow, ID  
M.S. Plant Science--Horticulture, University of Idaho, Moscow, ID  
B.S. Plant Science—Horticulture, Minor: Crop Science, University of Idaho, Moscow, ID  
A.A.S. Biological Science, Wenatchee Valley College, Omak, WA

### Additional Coursework for Credit:

### Certificates and Licenses:

Statewide Pesticide Consultant, Idaho Professional Applicator License #60980 (SW, ST), ISDA, 2019-present  
Heartsaver® FirstAid CPR AED, American Heart Association, 2017-present

## EXPERIENCE:

### Teaching, Extension and Research Appointments:

Assistant Professor, University of Idaho Extension. Washington County, Southern District.  
Major responsibilities include educational programming in horticulture, agriculture, and 4-H youth development. 2019-present.  
Plant Science Instructor, University of Idaho, College of Agriculture and Life Sciences, Department of Plant Science. 2018-2019.  
Post Doctoral Fellow, University of Idaho, College of Natural Resources, Department of Forest, Rangeland, and Fire Science. 2014-2019.  
Natural Resources Research Associate, University of Idaho, College of Natural Resources, Department of Forest, Rangeland, and Fire Science. 2010-2014.  
Horticultural Research Assistant, University of Idaho, College of Agriculture and Life Sciences, Department of Plant Science. 2007-2009.  
Laboratory and Field Assistant, University of Idaho College of Agriculture and Life Sciences, Dept. of Plant, Soil and Entomological Sciences, 2007-2009.  
Ecological Research Aide, University of Idaho College of Agriculture and Life Sciences, Dept. of Plant, Soil and Entomological Sciences, Biocontrol Unit. May-August 2006.

### Non-Academic Employment including Armed Forces:

Nursery Technician, quality control, Walla Walla Nursery, Summer 2009.  
Farm worker, forage and livestock production. 1997-2005.

**Consulting:**

Forest and woody plant pathogen consulting and diagnostics, Plant Pathology and Symbiosis lab, University of Idaho, College of Natural Resources. 2012-2018.

**TEACHING ACCOMPLISHMENTS:****Areas of Specialization:**

Horticulture and agricultural crop and forage production, weed management, plant pathology, 4-H Youth development.

**Courses Taught:**

PLSC 201 Introduction to Horticulture, Spring 2019  
 PLSC 340 Nursery Management, Fall 2018  
 PLSC 480 Plant Science Field Trip, Fall 2018  
 PLSC 102 Science of Plants in Agriculture, Fall 2018  
 SOIL 425/525 Microbial Ecology, Spring 2017  
 PLSC 205 General Botany, Spring 2014  
 PLSC 205 General Botany, Spring 2013  
 PLSC 205 General Botany, Spring 2012  
 PLSC 205 General Botany, Spring 2011

**Students Advised:**

## Undergraduates:

Harding, Abigail, University of Idaho College of Natural Resources, summer RA, 2016  
 Williams, Michelle, University of Idaho College of Natural Resources, REU, summer 2014  
 Moran, Kathleen, University of Idaho College of Natural Resources, REU, summer 2013  
 Leighton, Elizabeth, University of Idaho College of Natural Resources, REU, summer 2012  
 Vitale, Angela, University of Idaho College of Natural Resources, REU, summer 2011

## Graduates:

Served on graduate committee  
 Abigail Ferson, Master of Science, Natural Resources, 2019-present  
 Shawna Faulkner, Master of Science, Natural Resources, 2015-2017

**Non-Credit Classes, Presentations, Workshops, Seminars, Invited Lectures, etc.:**

Why Mushrooms Matter: microbes, weeds, and your pasture. 2020 Living on the Land informational session, Caldwell, ID. November 2, 2019.  
 Mycorrhizal fungi in the nursery: snake oil or silver bullet? Invited talk. 2018 Idaho Nursery and Landscape Association Horticultural Expo. Boise Center, Boise, ID. January 25, 2018.  
 How Fungi Make the World a Better Place, Environment Appreciation undergraduate course, Weber State University, Ogden UT. February 10, 2016.  
 Plant-soil feedbacks and weed control: why microbes matter. Invited talk. 2015 Annual Channeled Scablands Cooperative Weed Management Association Workshop. Eastern Washington University, Cheney, WA. March 25, 2015.  
 Microbiomes: the Unseen Component in Restoration, REM 440 Restoration Ecology undergraduate course, Dept. Forest, Rangeland, and Fire Sciences, University of Idaho, Moscow, ID. February, 2015.  
 Little Things that Make a Difference: Endophytes in Forestry. Invited talk. Intermountain Forest Tree Nutrition Cooperative, University of Idaho, Moscow, ID. April 3, 2012.  
 Micro-ecosystems: Endophytes and their role in forest improvement. Invited talk. 39th Annual Meeting of the Inland Empire Tree Improvement Cooperative. Coeur d'Alene, ID. February 29, 2012.  
 Reforestation from the inside out: potential of endophytes for tree improvement. Invited talk. Inland Empire Reforestation Council 2012 Annual Meeting, Coeur d'Alene, ID. February 28, 2012.  
 Potential benefits of endophytes in seedling production. 31st Intermountain Container Seedling Growers' Association Meeting. October 4, 2011. Moscow, ID. Invited talk.

**SCHOLARSHIP ACCOMPLISHMENTS:****Publications, Exhibitions, Performances, Recitals:****Peer Reviewed/Evaluated:****Journals:**

- Ridout, M.E., B. Godfrey, and G. Newcombe. 2019. Effects of antagonists on mycotoxins of seedborne *Fusarium* spp. in sweet corn. *Toxins* 11(8): 438.  
<https://doi.org/10.3390/toxins11080438>
- Ridout, M.E., K. Schroeder, S. S. Hunter, J. Styer, and G. Newcombe. 2019. Priority effects of wheat seed endophytes on a rhizosphere symbiosis. *Symbiosis*, 78(1), pp.19-31..
- Newcombe, G., A. Harding, M.E. Ridout, and P.E. Busby. 2018. A hypothetical bottleneck in the plant microbiome. *Frontiers in Microbiology: Plant Microbe Interactions*, 9: e1615.
- Ridout, M.E. and G. Newcombe. 2018. *Sydowia polyspora* is both a foliar endophyte and a preemergent seed pathogen in *Pinus ponderosa*. *Plant Disease* 102(3): 640-644.
- Ridout, M.E., J. Houbraken, and G. Newcombe. 2017. Xerotolerance of *Penicillium* and *Phialocephala* fungi, dominant taxa in fine lateral roots of woody plants of the intermountain Pacific Northwest, USA. *Rhizosphere* 4: 94-103.
- Ridout, M.E., B. Godfrey, and G. Newcombe. 2016. First Report of *Fusarium temperatum* in diseased sweet corn ears in the western United States. *Plant Disease* 100(12): 2527.  
<http://dx.doi.org/10.1094/PDIS-04-16-0518-PDN>
- Ridout, M.E. and G. Newcombe. 2016. Winter wheat benefits from novel symbioses with forest fungi. *Fungal Ecology* 20: 40-48.
- Busby, P.E., M.E. Ridout, and G. Newcombe. 2016. Fungal endophytes: Modifiers of plant disease. *Plant Molecular Biology*. 90(6): 645-655. DOI 10.1007/s11103-015-0412-0.
- Ridout, M.E. and G. Newcombe. 2014. The frequency of modification of *Dothistroma* pine needle blight severity by fungi within the native range. *Forest Ecology and Management* 337: 153-160.
- Ridout, M.E. and R.R. Tripepi. 2010. Initial chemical and physical properties of potting mixes amended with anaerobically digested cattle biosolids. *Acta Horticulturae*. (ISHS) 891:167-172.
- Ridout, M.E. and R.R. Tripepi. 2009. Improving seed germination of native perennial *Phlox longifolia*. *Native Plants Journal* 10(2): 80-89.

**Abstracts and Proceedings:**

- Ridout, M. E. and R. R. Tripepi. 2010. Growth of four native plant species in potting mixes amended with anaerobically digested cattle manure. Abstract. In: *HortScience* 45(8) S235-S235. American Society of Horticultural Science.
- Ridout, M. E. and R. R. Tripepi. 2008. Production of native plants in potting media amended with aged cattle biosolids. Abstract. In: *HortScience* 43(4) 1263-1263. American Society of Horticultural Science.

**Research Reports:****Peer Reviewed (in press or submitted):**

- Kobziar, L.N., Pingree, M., Watts, A.C., Nelson, K.N., Dreaden, T.J., Ridout, M.E. 2019. Accessing the life in smoke: a new application of unmanned aircraft systems (UAS) to sample wildland fire bioaerosol emissions and their environment. *Fire* (accepted pending revision)

**Other:****Thesis and Dissertations:**

- Dissertation: Function and Significance of Endophyte Communities in a Northern Idaho Mixed Conifer Forest. University of Idaho, Moscow, ID. Adviser: George Newcombe.
- Thesis: Container Production of Native Plant Species in Potting Media Amended with Cattle Biosolids. University of Idaho, Moscow, ID. Adviser: Robert Tripepi.

**Scholarly Presentations and Other Creative Activities:****Slide Sets/Power Point:**

Ridout, M.E. 2019. The intersection of seed microbial ecology and plant disease management: lessons from the field. 2019 IAPP Annual Meeting, November 6, 2019. Twin Falls, ID.

**Displays and Posters:**

Ridout, M.E. and G. Newcombe. 2014. The frequency of modification of *Dothistroma* needle blight severity by fungi within the native range. 2014 IUFRO World Congress. October 6-11, 2014. Salt Lake City, UT. Poster.

Ridout, M.E. and G. Newcombe. 2014. Endophytes as seedling pathogens in Ponderosa pine. 2014 IUFRO World Congress. October 6-11, 2014. Salt Lake City, UT. Poster.

Ridout, M.E., G. Newcombe, and M. Coleman. 2012. Select endophytes for improvement of growth and disease resistance in forest trees. Center for Advanced Forestry Systems 2012 Meeting. June 2012. Bangor, ME. Poster, presented by Coleman.

**Professional Meeting Papers, Workshops:**

Ridout, M.E., G. Newcombe, and M. Coleman. 2013. Select endophytes for improvement of growth and disease resistance in forest trees. Center for Advanced Forestry Systems 2013 Meeting. April 10, 2013. Brunswick, GA.

Ridout, M.E., G. Newcombe, and M. Coleman. 2011. Select endophytes for improvement of growth and disease resistance in forest trees. Center for Advanced Forestry Systems 2011 Meeting. June 14, 2011. Seattle, WA.

**Grants and Contracts Awarded:**

The wheat microbiome and falling numbers, 2018. \$3621. Idaho Wheat Commission. Sam Hunter Co-PI and author, IBEST, University of Idaho; Mary Ridout, Co-PI and Author.

Beneficial endophytes for winter wheat, 2016-2017. \$55,689. Idaho Wheat Commission. George Newcombe, PI, University of Idaho; Mary Ridout, Co-PI and Author, University of Idaho; Kurtis Schroeder, Co-PI, University of Idaho.

Molecular analyses of *Fusarium* spp. reductions in sweet corn seed by *Fusarium*-antagonistic fungi, 2016. \$8,952. George Newcombe, PI, University of Idaho; Mary Ridout, Co-PI and Author, University of Idaho; Bruce Godfrey, University of Washington, Co-PI and Author.

Beneficial endophytes for winter wheat, 2015-2016. \$49,856. Idaho Wheat Commission. George Newcombe, PI, University of Idaho; Mary Ridout, Co-PI and Author, University of Idaho; Kurtis Schroeder, Co-PI, University of Idaho.

Improved resistance to disease in sweet corn via symbioses, 2015-2016. \$38,450. HM-Clause Inc. George Newcombe, PI, University of Idaho; Mary Ridout, Co-PI and Author, University of Idaho; Ron Baker, Co-PI, HM-Clause.

Improved resistance to disease in sweet corn via symbioses, 2014-2015. \$32,999. HM-Clause Inc. George Newcombe, PI and Author, University of Idaho; Mary Ridout, Co-PI and Author, University of Idaho; Ron Baker, Co-PI, HM-Clause.

**SERVICE:****Major Committee Assignments:****University of Idaho:**

College of Agricultural Promotion and tenure committee, Dept. of Forest, Rangeland, and Fire Sciences, University of Idaho, Moscow, ID. 2012.

Faculty selection committee, Assistant Professor of Horticulture, Woody Plant Physiology. Dept. of Plant, Soil, and Entomological Sciences, University of Idaho, Moscow, ID. 2009.

**Professional and Scholarly Organizations:**

American Phytopathological Society 2017-present  
National Agriculture in the Classroom Organization 2019-present  
Idaho Assotion of Plant Protection 2019-present

**Outreach Service:**

**Miscellaneous Extension Publications:**

Ridout, M. E. 2004. Cooley Spruce Gall Adelgid. University of Idaho Nursery Extension Note.  
<http://citeserx.ist.psu.edu/viewdoc/download?doi=10.1.1.540.6387&rep=rep1&type=pdf>

**Popular Press:**

Ridout, M.E., 2020 Master Gardener Information Night, Living in The News, October 21, 2019.  
Ridout, M.E., Weiser Middleschool's Afterschool Launches Hydroponics Project, Living in The News, October 18, 2019.