

Stephanie M. Adams

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Education

- University of Florida**—Gainesville, FL Aug. 2016 – Aug. 2020
PhD in Forest Pathology, School of Forest Resources and Conservation
Major advisor: Dr. Jason Smith
Project: Physiological, morphological, and biochemical changes in *Persea* species in response to laurel wilt after paclobutrazol treatments
- University of Georgia**—Athens, GA Aug. 2004 – May 2008
Master of Science in Plant Pathology
Thesis Title: Surveying for *Phytophthora* species in water and soil in Georgia
- Western Illinois University**—Macomb, IL Aug. 1998 – May 2003
Bachelor of Science in Botany, Urban Forestry minor
- James Cook University**—Townsville, Queensland Australia Feb. 2001 – Jul. 2001
WIU International Study Abroad Program

Work Experience

- The Morton Arboretum** – Lisle, Illinois
- Plant Health Care Leader** Jun. 2020 – current
- Center for Tree Science Research Fellow** Aug. 2016 – Jun. 2020
- Plant Health Care Research Specialist** Jan. 2012 – Aug. 2016
- Plant Health Care Technician & Tree Pathologist Research Assistant** Sep. 2009 – Jan. 2012
- Research Assistant** Jun. – Sept. 2009
- Supervised volunteers (12 people) and summer interns (2 students)
 - Collaborated with the United States Forest Service on *Phytophthora ramorum* water baiting in Iowa and Illinois (2 Iowa locations, 1 Illinois location) by culturing water baits onto V8PARPH
 - Extracted fungal DNA for sequencing utilizing Qiagen DNeasy Plant Mini kits
 - Cleaned PCR products via ExoSap and Ethanol Precipitation before sequencing
 - Propagated American elms (*Ulmus americana*) by seeds and cuttings
 - Utilized ELISA kits to detect *Xylella fastidiosa* and *Phytophthora* species
 - Performed clinical plant disease diagnostics
 - Met on-site with municipal foresters in six local municipalities to support them in tree insect and disease diagnosis and development of management plans
 - Recommended chemical and cultural disease and pest management strategies
 - Utilized competitive ELISA kit to detect imidacloprid in *Fraxinus pennsylvanica* and *Cercis canadensis*
 - Cultured *Ophiostoma ulmi* and inoculated *Ulmus americana* for Dutch elm disease resistance trials

- University of Florida** – Gainesville, Florida Aug. 2016 – Jun. 2020
- Graduate Student Research Assistant**
- Taught two sections of the Forest Health portion of Forests for the Future (FOR2262), approximately 160 undergraduate students of non-science backgrounds
 - Guest lectured for Foundations in Natural Resources and Conservation (FOR3200C), (60 undergraduate students)

- Volunteered for 4-H Forest Ecology Contest - Forest Health Station
 - Taught students ages 8-18 about forest health topics including diseases, insect pests, and abiotic problems (100 students annually)
 - Created dichotomous keys for all three age groups
- Mentored three undergraduate students in the forest and plant pathological sciences

The College of DuPage – Glen Ellyn, Illinois
Adjunct Faculty, Horticulture Department

Aug. 2013 – current

- Taught the 16-week course Diseases of Ornamental Plants (average 11 students)
- Covered topics including: Basic plant pathology, Principles of disease management, Diseases caused by true fungi, oomycetes, nematodes, viruses, phytoplasmas, and abiotic agents, Common landscape, turf, nurseries, greenhouses, urban forests, and forestry diseases, Economic impacts of native and introduced pathogens
- Laboratory topics and exercises included: Testing for *Phytophthora* species using Agdia ELISA immunostrips, Isolating *Ophiostoma* species, Clinical disease diagnostics using compound and stereo- microscopes, making wet mounts, utilizing resource material for identification

Rainbow Treecare – Minnetonka, Minnesota
Field Arborist and Root Enhancement Foreman

Apr. 2008 – Jan. 2009

- Consulted customers on tree care and plant health issues
- Utilized ArborVue and ArcPad 7.0 and Trimble GPS units for GPS/GIS mapping
- Trained fifteen employees on different arboricultural practices
- Operated forklift, Swinger front-end loader, air compressor, and air spade
- Applied pesticides to trees on clients' properties
- Climbed and pruned trees

University of Georgia – Athens, Georgia
Department of Plant Pathology, Graduate Student Assistant

Aug. 2004 – Apr. 2008

- Baited forest streams, nursery irrigation ponds and soil for *Phytophthora* spp. and *P. ramorum* detection, isolation, and identification
- Taught one Introductory Plant Pathology laboratory
- Trained and supervised three undergraduate laboratory technicians

University of Georgia – Athens, Georgia
Department of Plant Pathology, Research Tech II

Feb. 2004 – Aug. 2004

- Cultured unknown submitted SOD samples
- Performed nested PCR for *Phytophthora ramorum* detection
- Performed transformations, restriction digests and PCR on *Escherichia coli* isolates
- Inoculated tomato plants with *Ralstonia solanacearum* isolates

Bartlett Tree Research Laboratory – Charlotte, North Carolina
Research Intern

May 2003 – Jan. 2004

- Created GPS/GIS map of the Lab's arboretum using a Trimble GPS unit
- Utilized Environmental Systems Research Institute ArcView, ArcMap, ArcCatalog and ArcToolbox software for Lab's arboretum collection

Davey Tree – Denver, Colorado
Plant Health Care Technician

May – Aug. 2002

- Scouted for insect pests and safely applied insecticides and fertilizers
- Counseled homeowners in plant health care

Grants

- **Tree Fund's** John Z. Duling grant, Principle Investigator, 2009, *Evaluating damage resulting from volcano mulching*, \$7000 (<http://www.treefund.org/archives/287>)
- **Tree Fund's** John Z. Duling grant, Principle Investigator, October 2014, *Assessing horticultural products as alternative treatments for managing fungal foliar infections*, \$7500 (<http://www.treefund.org/archives/9098>)

Publications

- The Plant Health Care Report of **The Morton Arboretum** 2010-2011, editor 2012 – 2013.
- *2009 Plant Health Care Year in Review* for **Kramer Tree Specialists** Fall 2009 newsletter Trunkline. Oct. 2009.
- *An Ounce of Prevention in the Autumn* in **The Morton Arboretum's** Plant Health Care Report. Aug. 28, 2009.
- *Taking Care of Your Trees During Construction* in **The Morton Arboretum's** Plant Health Care Report. Aug. 14, 2009.
- *Top Ten Ways to Kill Your Tree* in **The Morton Arboretum's** Plant Health Care Report. Jul. 17, 2009.
- *Getting to the Root of the Problem* for **Rainbow Treecare's** newsletter The Rainbow View, Fall/Winter 2008 – 9.
- Williams–Woodward, J. and Adams, S. M. 2005. Surveying for *Phytophthora ramorum* in ornamental nurseries, home landscapes, and forests in Georgia. **Phytopathology** 95:S111.

Presentations, Guest Lectures, Training Workshops

- *What Arborists Need to Know About Sudden Oak Death*. **Midwest Chapter of the ISA** Annual Conference, Council Bluffs, IA. Jan. 30, 2015.
- *Evaluation of Discolored Woody Tissue Related to Volcano Mulch – Research Results*. **Kansas Arborist Association's** Shade Tree Conference, Topeka, KS. Jan. 16, 2015.
- *Evaluation of Discolored Woody Tissue Related to Volcano Mulch – Preliminary Research Results*. **Kansas Arborist Association's** Shade Tree Conference, Topeka, KS. January 16, 2015.
- *Canker Diseases*. **Kansas Arborist Association's** Shade Tree Conference, Topeka, KS. January 16, 2015.
- *Canker Diseases and Tree Planting and Long-term Tree Health*. **Purdue University Extension**, Fort Dodge, IN. November 14, 2014
- *Current Phytopathology Research at The Morton Arboretum*. **North Central Plant Diagnostic Network**, Lisle, IL. April 4, 2014.
- *Municipal Ash Management Survey Results and Insect and Disease Walking Tour*. **Illinois ISA Chapter** Summer Conference, Monticello, IL. June, 6, 2014.
- *Plant Health Care Research*. **Central States Chapter of the Horticultural Inspection Society**, Lisle, IL. October 23, 2013.
- *2011 & 2012 Municipal Ash Management Survey Results*. **Illinois Arborist Association's** Northwest Municipal Foresters Meeting, Moline, IL. September 19, 2013.
- *Tools for Diagnosis, Hand Lens and Dissecting Microscope Use, A How-To Presentation*. **Illinois Arborist Association's** Summer Conference, Monticello, IL. June 6, 2013.
- *Results of the 2011 Municipal Ash Management Survey*. **Illinois Arborist Association's** Northeast Municipal Foresters meeting, Mount Prospect, IL. May 2012.
- S.M. Adams, T.L. Green, F. Miller, G.W. Watson. Poster: Effects of fine-root stimulation and application rates on imidacloprid detection in ash canopies. **International Society of Arboriculture** Conference, 2010.
- *Isolation and Identification of Phytophthora Species in Water in Georgia*. **Georgia Association of Plant Pathologists** Meeting, Albany, GA. March 13, 2007.
- S. M. Adams and J. L. Williams-Woodward. Poster: Recovery and Identification of *Phytophthora* Species from Water and Soil in Ornamental Nurseries and Forested Areas within Georgia. **International Society of Arboriculture** Conference, 2006.
- *Academic Success and Careers in Agriculture When You Don't Want to be a Farmer*. Guest lectured at the Moline, IL public high school and a **Chicago Public School** biology classes. Moline and Chicago, IL. October 2006.
- *Sampling for Phytophthora species in water in Georgia*. **Georgia Forestry Commission** Cost-Share meeting, Macon, GA. March 2, 2006.

- *Phytophthora Detection in Ornamental Nursery Irrigation Water*. Guest lectured for Dr. Phil Brannen, **University of Georgia's** Disease Tour, Dearing, GA. Summer 2005 and 2007.

Guest Lectures

Western Illinois University (Entomology and Arboriculture), Joliet Junior College (Entomology, Plant Diseases, Introduction to Horticulture), Associated Colleges of the Chicago Area (Economic Botany)

Workshops

- Co-coordinator with Dr. Fredric Miller of annual Forest Health Workshops Illinois Department of Natural Resources, which have been attended by approximately 180 people including IDNR District Foresters, municipal foresters and arborists, commercial arborists, APHIS nursery inspectors, and Illinois Department of Agriculture staff in Lisle, Murphysboro, Mt. Vernon, and Springfield, IL. August 2011 – 2013.
- Chainsaw safety and training with Norm Hall and Paul Blome at Western Illinois University for undergraduate Urban Forestry Students, 2010-2014.

Volunteer Experiences

- Expanding Your Horizons – Plant pathology, botany, and arboriculture, 2013 – present
- City of Naperville – Arbor Day tree sale, 2009 – present
- International Society of Arboriculture (ISA) Tree Climbing Competition (throw line), 2012
- Illinois Arborist Association Tree Climbing Competition: belayed speed climb, work climb, master's challenge, 2009 - present
- Minnesota Society of Arboriculture Tree Climbing Competition: work climb, 2011
- St. Louis Park School District – St. Louis Park, MN
 - Helped fifth and sixth grade English Language Learning students, and worked with special education students on reading, writing, and other skills

Memberships, Groups, and Certifications

- Illinois Pesticide Applicator's Licenses in forestry, ornamentals, and demonstration and research 2009 – current
- Tree Risk Assessment Qualification through the ISA 2013 – 2018 (valid for 5 years)
- International Society of Arboriculture (ISA) 1999 – present, ISA
 - Certified Arborist 2007 – 2017 (SO-5781A)
 - Board Certified Master Arborist 2017 – current (SO-5781B)
- Illinois Arborist Association member 2009 – present, Program Director 2012 – 2015
- Florida Chapter of the ISA member 2016-2020
- American Phytopathological Society member 2009 – present