# PTERI DOPHYTA

## **CURRICULUM VITAE**

Dept. of Botany and Plant Sciences, University of California Riverside 900 University Ave., Riverside, CA 92521 951-555-5555 pdoph012@ucr.edu | pdophyta@fastmail.com

#### **EDUCATION**

**M.S. Plant Biology**, University of California, Riverside (UCR) June 2022 Master's Thesis: An investigative approach to disease resistance and treatment of Phytophthora sojae, Pythium spp. and Fusarium graminearum in mapped soybean populations.

**B.S. Plant Biology**, University of Nebraska-Lincoln (UNL)

#### **RESEARCH INTERESTS**

Research interests include plant pathology, restoration ecology, invasive species ecology, and mycorrhizal ecology. Current research investigates disease resistance and treatment of *Phytophthora sojae, Pythium spp.* and *Fusarium graminearum* in soybeans. Previous focus included active vegetation restoration in the Midwest and an understanding of restoration techniques such as control of invasive species, intervention seeding, and natural recovery from the seedbank of native species.

#### **RESEARCH EXPERIENCE**

Graduate Student Research Assistant, UCR

Supporting existing research on *Phytophthora sojae* and *Pythium spp*. Engaging in independent research on *Fusarium graminearum* in relation to soybean crops. Assisted as needed in COVID-19 efforts to develop plans to maintain specimens in the plant growth facilities, lathhouses, and on associated farmland.

Undergraduate Research Assistant, UNL

Supported research in the Kiesselbach Crops Research Laboratory related to how mycorrhizae affect sorghum growth during drought conditions. Collected and analyzed soil samples from agricultural fields for a 5-year study. Assisted with recreating drought and optimal sorghum growth conditions in a test lab for comparative analysis.

2017 - 2019

2019 - Present

June 2019

- U.S. Forest Service Intern, UNL Career Experiences in Natural Resources Science 2018
  - In conjunction with the Charles E. Bessey Nursey, supported the U.S. Forest Service's mission to restore ecosystem health in the Midwest. Assisted in the seed-extraction process and national forest repopulation projects in the Rockies under supervision of USFS Biologist, Richard Gilbert. Occasionally participated in education and outreach efforts at the National Grasslands Visitor Center.

#### **TEACHING EXPERIENCE**

**Teaching Assistant**, UNL Fundamentals of Biology, Laboratory (Spring 2017, 25 students)

#### **AWARDS & HONORS**

E. Lucy Braun Award, Ecological Society of America, \$1200 (2020) Chancellor's Fellowship, \$18000 UCR (2019) Magna Cum Laude, UNL (2019) Student Luminary Award, UNL, \$1000 (2018) Nebraska Seed Trade Association Scholarship, \$1000 (2015)

#### SERVICE

#### Botany Graduate Student Association (GSA) Officer, UCR

Acting as liaison to the Graduate Educational Advisory Committee. Managing inperson and virtual social events sponsored by both the Department and the larger GSA organization. Notifying fellow students of travel grant funding opportunities as in-person research and professional development opportunities open up with changing COVID regulations.

Intern, Center for Conservation Biology, UCR

2019 - 2021

2019 - 2020

2021 - Present

 Collaborated with designated center researchers on a carbon sequestration project as related to soil ecology and the impact on fungi populations. Helped close out the project for publication; additional contributions were reduced due to COVID-19 restrictions.

Mentor, Queens of STEAM, UCR

Mentored young women in high school in Science, Technology, Engineering, Art, and Math (STEAM). Demonstrated scientific opportunities, providing support for career exploration and aiding with college applications. Enriched STEM education at local high schools through hands-on and virtual presentations. Volunteer, Center for Plant Science Innovation, UNL

 Assisted with community engagement efforts alongside graduate students, postdoctoral associates and faculty members. Co-facilitated 3 sessions of informational activities for elementary school students and co-presented general public presentations on plant pathology in low-income farming communities.

### **PROFESSIONAL ASSOCIATIONS**

Student Member, American Phytopathological Society (APS)	2021 - Present
Student Member, Soil Ecology Society	2019 - Present
Student Member, Ecological Society of America (ESA)	2018 - Present

## **INVITED TALKS**

- 1) Dophyta P. Diurnal mycorrhizal fungi productivity in relation to carbon sequestration. Ecological Society of America Annual Meeting. August 2020. Invited virtual presentation.
- 2) Dophyta P. and R. Gilbert. Impact of seed extraction processes on the restoration of forests in the Rockies. University of Nebraska, Kearney, Department of Biology Seminar. April 2018. Invited oral co-presentation.

## PUBLICATIONS

- 1) Dophyta P., F.G. Capillaceum, and G.B. Oleracea. 2021. Quantitative disease resistance in relation to Phytophthora sojae and two species of Pythium in eight soybean nested association mapping populations. Crop Science, in press.
- 2) Epipremnum A., F.G. Capillaceum, G.B. Oleracea, and P. Dophyta. 2021. Patterns of diurnal mycorrhizal fungi productivity revealed with observational carbon sequestration applications in soil ecology. New Phytologist, in press.
- 3) Helix, H., C.I. Araliaceae, H. Algeriensis, and P. Dophyta. 2020. Effects of mycorrhizae on sorghum growth and photosynthesis under Midwest drought conditions. Applied Soil Ecology 147, doi: 10.1016/j.apsoil.2019.103370.