

Kaitlin Hopkins, PhD

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EDUCATION

- May 2021 Texas A&M University, College Station, TX
Doctor of Philosophy in Horticulture
Dissertation: Exploring the Potential Commercial Significance of
Ratibida columnifera (Nutt.) Wooton & Standl. for the Green Industry.
Co-Advisors: Michael A. Arnold, Charles R. Hall
GPA 3.71
- August 2016 Stephen F. Austin State University, Nacogdoches, TX
Master of Science in Biology with Botany emphasis
Thesis: *Sarracenia alata*: Light Response Characterization and Seed Germination
Requirement
Advisor: Dennis A. Gravatt
GPA 3.74
- May 2014 Stephen F. Austin State University, Nacogdoches, TX
Bachelor of Science in Agriculture
Concentration in Horticulture and Biology
GPA 3.47 (Cum Laude)

RELEVANT COURSEWORK

- B.S. in Agriculture, Stephen F. Austin State University
 - Agriculture Industry, Horticulture and Society, Agricultural Economics, Natural Resources Economics, Agricultural Development, Floriculture, Annuals and Perennials, Fruit and Vegetable Production, Plant Propagation, Plant Breeding, Nursery Management, Farm Management, Soil Science, Landscape Plant Materials, Soil-Plant Relations, Fundamentals of Ag. Technology, Greenhouse Management, Economic Entomology, Chemistry
- M.S. in Biology, Stephen F. Austin State University
 - Principles of Botany, Plant Physiology, Biometrics, Local Flora, Genetics, Scanning Electron Microscopy, Biochemistry, Advanced Plant Anatomy, Advanced Studies in Plant Pathology, Plant Ecophysiology, Plant Ecology
- PhD coursework, Texas A&M University
 - Science of Foods for Health, International Floriculture Marketing, Post-Harvest Biology, Applied Physiology of Horticultural Crops, Grant Proposal Writing, Survey of Marketing, Statistics I and II, Applied Analytics, Plants for Landscape Design II

RESEARCH EXPERIENCE

- 2018-2021 Department of Horticultural Sciences, Texas A&M University
Graduate Teaching Assistant
Dissertation: Exploring the Potential Commercial Significance of *Ratibida columnifera* (Nutt.) Wooton & Standl. for the Green Industry
- Collected wild germplasm, and contributed to the program's collection via vegetative propagation
 - Active collaboration with scholastic and industry colleagues involved with botanic gardens and native plant societies to gain germplasm from distant locations within the native range.
 - Conduct germination experiments involving benefits of pretreatments such as soaking in water, as well as cold stratification and acid scarification.
 - Conduct ongoing seed storage trials to determine the optimal storage conditions to maintain viability long term.
 - Conduct germination experiment involving the developmental maturity of the seed head, and location of seed on inflorescence.
 - Conduct Vegetative propagation experiments to determine optimal hormone concentration, benefits of bottom heat, best developmental stage to take cuttings, and measuring rooting success between a select few germplasms.
 - Facilitated and managed field trial for unique *Ratibida columnifera* selections.
 - Generate a consumer preference survey to determine any preference for flower color, petal shape, petal number, and price in *Ratibida columnifera*. Providing insight into marketing success of potential cultivars.
 - Maintain *Ratibida columnifera* germplasm collection in greenhouse, in nursery production, and trial beds.
 - Analyze data using JMP, SAS, and R statistical software.
- 2018 Department of Horticultural Sciences, Texas A&M University
Water-use efficiency of herbaceous perennial bedding plants.
- Managed greenhouse allocated for experiment spanning a 5-month time period
 - Experimentation included use of differing soilless media
 - Conducted water use efficiency experiments on herbaceous/semi-woody perennials.
 - Gathered data using LI-COR 6400, soil probes, and SPAD meter.
 - Analyzed data using JMP and SAS software
- 2017 Department of Horticultural Sciences, Texas A&M University
Fertility trials with vegetable crops.
- Managed greenhouse allocated for experiment spanning a 5-month time period

- Utilized differing fertilizer sources (three organic and one inorganic) at different levels on patio container edibles.
- Gathered data using LI-COR 6400 and SPAD meter.
- Analyzed data using SAS.

2015

Department of Biology, Stephen F. Austin State University

Thesis: Characterization of light response curves for *Sarracenia alata*.

Germination optimization of *Sarracenia alata*.

- Field collection of *Sarracenia alata* samples from herbaceous seep in Angelina National Forest.
- Managed and maintained *Sarracenia alata* samples while in greenhouse for experimentation.
- Utilized LI-COR 6400 equipment to develop whole pitcher light response curves. This involved developing methodology using a hand-crafted chamber to use with the LI-COR 6400.
- Gathered data using a spectrophotometer and a LI-3100C Area Meter
- Analyzed and interpreted germination experiment outcomes involving pretreatments of varying hormone and stratification.

RELEVANT EXPERIENCE

2020

TAMU HortTrec, Somerville, TX

Graduate student worker-nursery assistant

- Collaborated with a team of colleagues including professors, graduate and undergraduate students, and nursery employees to ensure that nursery crops were healthy and maintained
- Responsible for maintaining plant health, hydration, and treatment of plants being utilized for university study.
- Utilized Integrated Pest Management (IPM) at all times
- Monitored for emergencies related to plant stock, and collaborated in addressing remedies for unforeseen complications.
- Responsible for plant material maintenance tasks including watering, fertilizing, transplanting, pruning, repairing irrigation, and ensuring an appropriate amount of stock plants as to be fiscally and practically responsible
- Performed maintenance and organizational tasks in greenhouse, nursery, and field settings
- Involved in collaboration to install and maintain experiments for doctoral student colleagues

2019-2020

Southern Region American Society for Horticultural Science

Registration assistant

- Involvement with the registration front desk for the 2019 and 2020 annual conferences.

2013

Soil, Plant, and Water Analysis Laboratory, Nacogdoches, TX

Laboratory secretary/Data entry and interpretation

- General Secretarial Duties
- Interacted with customers in person, on phone, and email
- Facilitated financial transactions between laboratory and customers
- Responsible for condensing client's test results in a usable manner based on customer needs.
- Responsible for communication and interpretation of data analysis to the customers
- Managed documentation of results in electronic form
- Generated test result reports
- Distributed soil reports by mail, email, and fax
- Ensured proper storage of clientele results for future use
- Collaborated with professors and students on class projects.
- Responsible for receipt and preparation of soil and hay samples for testing.
- Occasionally performing soil tests in the lab

PUBLICATIONS

- 2019 Hopkins, K.A., Gravatt, D.A., Whole leaf photosynthetic light response in a carnivorous plant species: *Sarracenia alata*
(Published-*Photosynthetica*, Vol. 57, issue 4)
- 2019 Hopkins, K.A., Gravatt, D.A., Effects of Cold Stratification and Hormones on Seed Germination of *Sarracenia alata*.
(Published- *Texas Journal of Science*, Vol. 71, Issue 1, Article 7)

POSTER PRESENTATIONS

- 2021 American Society of Horticultural Science Annual Conference, (Virtual) Denver, CO
Consumer Preferences of *Ratibida columnifera* (Nutt.) Wooten & Standl. Floral Characteristics
- 2020 Southern Region American Society for Horticultural Science Annual Conference, Louisville, KY
Pretreatment Techniques for Seed Propagation in *Ratibida columnifera* (Nutt.) Wooten & Standl.
- 2019 Department of Horticultural Sciences, College Station, TX
Pretreatment Techniques for Seed Propagation in *Ratibida columnifera* (Nutt.) Wooten & Standl.
- 2019 American Society for Horticultural Science Annual Conference, Las Vegas, NV
Morphological Traits of Commercial Floricultural Interest in *Ratibida columnifera* (Nutt.) Wooten & Standl in Texas.
- 2018 Department of Horticultural Sciences, College Station, TX
Exploring the Potential Commercial Significance of *Ratibida columnifera* (Nutt.) Wooten & Standl. for the Green Industry.

- 2017 Floriculture Research Alliance, Annual Meeting 2017, Portsmouth, NH
Organic fertilizer to Control Growth Size in Container Edibles.
- 2016 ASPB Conference, Plant Biology 2016, Austin, TX
Hopkins, K.A., Gravatt, D.A., *Sarracenia alata*: Light Response Characterization and Seed Germination Requirement.

TEACHING EXPERIENCE

Fall 2021-Current School of Agricultural Sciences, Sam Houston State University, Huntsville, TX

Assistant Professor-Tenure Track

- Developed coursework for PLSC 3320, PLSC 4369, and PLSC 5391
- Responsible for student understanding of concepts and objectives
- Manage course plant materials
- Manage online content and accessibility
- Conduct office hours to accommodate students
- Ensure inclusivity among students and peers

Fall 2018-Spring 2021 Department of Horticultural Sciences, Texas A&M University

Lead Teaching Assistant, *HORT 202: Horticultural Sciences and Practices Laboratory*

- Provided instruction of introductory horticultural concepts and course materials to students on a combined digital and in person platform
- Responsible for training and organization of other teaching assistants
- Manage the teaching assistant group in Lab preparation and tear down
- Manage laboratory space and equipment
- Purchase and replenish laboratory materials as needed
- Primary contact for teaching assistants regarding classroom issues, and ensuring appropriate and timely resolution
- Contact collaborators of the lab regarding upcoming class trips
- Ensure proper sanitization of workspace for students following University's outlined precautions for pandemic
- Foster a positive workplace climate
- Conduct office hours to accommodate students on an as needed basis

2016-2021 Teaching assistant, *HORT 202: Horticultural Sciences and Practices Laboratory*

- Facilitate laboratory sections in instruction and grading per semester (approximately 18 students per section)
- Instruction provided utilizing a combined online and in person modality
- Administer and grade weekly lab quizzes and lab reports
- Create plans for greenhouse management
- Utilize IPM in greenhouse and laboratory setting
- Cultivate plant material for use in laboratory

- Manage experiments performed by the students
- Set up and tear down labs each week
- Maintain sanitized learning environment
- Ensure student understanding of introductory horticultural concepts
- Conduct office hours to accommodate students on an as needed basis

Fall 2019-Fall 2020

Department of Horticultural Sciences, Texas A & M University

Teaching assistant, *HORT 201: Horticultural Sciences and Practices*

- Recorded lecture sessions twice per week to make available to the students (Approximately 350 students per semester)
- Printed and distributed exams (four exams plus a final exam)
- Proctored all exams
- Facilitate grading of Exams
- Organized exams and attached grade reports to exam packet.
- Redistributed exams to students
- Correspond with students when needed

2017

Guest Lecturer, *HORT 201: Horticultural Sciences and Practices*

- Facilitated lecture for 350 students regarding photosynthesis and respiration.

2016

Teaching Assistant, *HORT 201: Horticultural Sciences and Practices*

- Recorded lecture sessions twice per week to make available to the students (Approximately 350 students per semester)
- Responsible for management of recorded materials for use by students
- Tasked with printing and appropriate distribution of multiple exams.
- Proctored all exams
- Organized exams and attached grade reports to exam packet.
- Redistributed exams to students

2014-2016

Department of Biology, Stephen F. Austin State University

Teaching Assistant

BIO 121L: Concepts of Biology

- Facilitated one laboratory section in instruction and grading per semester (Approximately 40 students per section)
- Preparation and tear down of labs each week
- Administered and graded weekly quizzes
- Ensured student understanding of biological concepts.
- Conducted office hours to accommodate students

BIO 131L: Introduction to Botany

- Facilitate one laboratory section in instruction and grading per semester (Approximately 40 students per section)
- Preparation and tear down of labs each week
- Administered and graded weekly quizzes
- Ensured student understanding of botanical concepts.
- Conducted office hours to accommodate students

HONORS AND AWARDS

Fall 2020	Willie Mae Harris Fellowships, Outstanding Graduate Teaching Assistant, Texas A&M University, Department of Horticultural Sciences
Summer 2019	Willie Mae Harris Fellowships, Outstanding Graduate Teaching Assistant, Texas A&M University, Department of Horticultural Sciences
Fall 2018	Poster presentation, 3 rd place, Department of Horticultural Sciences, College Station, TX
Spring 2013	Dean's List, Stephen F. Austin State University
Spring 2012	Presidents List, Stephen F. Austin State University
Fall 2011	Dean's List, Stephen F. Austin State University

AFFILIATIONS

American Society for Horticultural Sciences, Member
 American Society of Plant Biologists, Member
 Texas Nursery and Landscape Association- Member
 TAMU Horticultural Graduate Council- Member
 Southern American Institute of Floral Design, Member
 Phi Theta Gamma- Local SFA Social/Service Sorority
 SFA Horticulture Club- student lead and organized club for horticulture students

SKILLS

Instrumentation: Proficient in LI-COR 6400, light microscopy, spectrophotometry. Familiar with scanning electron microscopy.

Software: Proficient in Excel, PowerPoint, Word, Workday, familiar in GIMP photo editing software

Statistical: Proficient in JMP, familiar in R, SAS, and SPSS

SERVICE

2013-current	Charity 5Ks
2013-2016	Highway clean ups
2013-2019	Donations to various Organizations
2013-2016	Assisted local autistic private school, Helping House, with various activities
2013-2016	Fundraising for Autism Speaks
2013-2018	Participant in MLK day of service at SFASU/TAMU
2013-2018	Participant in The Big Event at SFASU/TAMU