

GRACE FLUSCHE OGDEN

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EDUCATION

Doctor of Philosophy, Soil Science

June 2020- May 2023

Department of Plant and Soil Sciences

Oklahoma State University | Stillwater, OK

- o Designed curriculum & implemented new course "Cropping Systems"
- o Dissertation title: "Sweep tillage influence on soil health and weed management"

Master of Science, Plant and Soil Science

December 2020

Department of Plant and Soil Science

Texas Tech University | Lubbock, TX

- o Thesis title: "The influence of glufosinate in auxinic-based herbicide systems"

Bachelor of Science, Plant and Soil Science

May 2018

Department of Plant and Soil Sciences

Oklahoma State University | Stillwater, OK

PROFESSIONAL EXPERIENCE

Assistant Professor of Agronomy

August 2023- Present

Dual appointment

College of Agricultural Sciences and Natural Resources

Texas A&M University- Commerce

Texas A&M AgriLife Research | Commerce, Texas

Graduate Research Assistant of Soil and Water Conservation

June 2020- May 2023

Department of Plant and Soil Sciences

Oklahoma State University | Stillwater, OK

Graduate Research Assistant of Weed Science

June 2018- December 2020

Department of Plant and Soil Science

Texas Tech University | Lubbock, TX

Undergraduate Researcher & Niblack Scholar

October 2016 - May 2018

Department of Plant and Soil Sciences

Oklahoma State University | Stillwater, OK

Field Research Technician

May 2016- August 2016

Crop Guard Research, Inc. | Hinton, OK

REFEREED PUBLICATIONS

Garcia, GA, JG Warren, SA Abit, C Garcia, and **G Flusche Ogden** (2022) Sample processing impacts on single wet sieve aggregate stability analysis. *Agriculture and Environmental Letters*, Vol 7 (2), 1-6.

Flusche Ogden, G and PA Dotray (2022) Managing Palmer amaranth (*Amaranthus palmeri*) with sequential applications of glufosinate and 2,4-D. *Journal of Experimental Agriculture International*, Vol 44 (9), 180-187.

Ogden, GF and PA Dotray (2021) Using glufosinate in sequential application systems with dicamba on Palmer amaranth. *Journal of Experimental Agriculture International*, Vol 43 (4), 10-20.

Flusche, GK, S Folchert, T Danielson, and D Franks (2016) The use of rice as a sugar source in yeast fermentation: will yeast take the bait? *Journal of Introductory Biology Investigators*, Vol 3, 1-2.

Flusche, GK, and T Gull (2015) Comparison of two adjuvants in an experimental in an experimental *Actinobacillus equuli* vaccine in horses. *Research Reports from Life Science Freshman Research Scholars*, Vol 1, 12-16.

TECHNICAL PUBLICATIONS/ POPULAR ARTICLES

Lofton, J, T Baughman, J Rice, and **G Flusche Ogden** (2023) Wheat herbicide rotation restrictions to soybean in Oklahoma. *Oklahoma State Cooperative Extension Fact Sheet*, PSS-2798.

Champagne, R and **G Flusche Ogden** (2021) Navigating mental health in graduate school. *CSA News*, Vol 66 (12), 36-38.

Flusche Ogden, G, R LaCroix, P Boyle, and MT Tancredi (2021) Permanent funding sought for graduate student travel grants. *CSA News*, Vol 66 (8), 40.

Manuchehri, MR, **G Ogden**, and Crose, JA (2019) Herbicide programs for Italian ryegrass control in winter wheat. *Oklahoma State Cooperative Extension Fact Sheet*, PSS-2791.

TEACHING EXPERIENCE

Instructor: PLS 1307 Intro to Plant Science. Fall 2023. 3 credit hours. 75 students.

Instructor: PLS 1107 Intro to Plant Science Lab. Fall 2023. 1 credit hour. 18 students.

Instructor: PLS 309 Intro to Soil Science. Fall 2023. 3 credit hours. 29 students.

Instructor: PLNT 4443/5543 Cropping Systems (OSU). Fall 2021/2022. 3 credit hours. 27 students.

Teaching Assistant: PLNT 2013 Applied Plant Science (OSU), 2 lab sections. Spring 2021/2022. 50 students.

Teaching Assistant: PLNT 1213 Introduction to Plant and Soil Systems (OSU), 3 lecture sections. Fall 2020/2021. 350 students per semester.

Teaching Assistant: PSS 4421 Principles of Weed Science (TTU), 1 lecture and 2 lab sections. Fall 2018/2019. 50 students per semester.

PROFESSIONAL PRESENTATIONS & MEETING ABSTRACTS

Invited Oral Presentations:

Flusche Ogden, G and JG Warren (2022) Controlling tumble windmill grass with sweep tillage. Oklahoma State University Winter Crops School. December 14, 2022.

Flusche Ogden, G and JG Warren (2022) Sweep tillage impact on soil health. Oklahoma State University Winter Crops School. December 14, 2022.

Flusche Ogden, G and JG Warren (2022) Sweep tillage influence on soil health and weed management in sorghum. Oklahoma State University Sorghum Field Day in Nardin, OK. August 18, 2022.

Flusche Ogden, G (2021) Tillage impact on delayed preemergence herbicides. Oklahoma Cooperative Extension Service Northeast District Ag In-Service.

Oral Presentations:

Flusche Ogden, G, JG Warren (2023) Weed control benefits and soil response to sweep tillage. Western Society of Weed Science Annual Meeting.

Flusche Ogden, G, AC Thelin, JG Warren, MR Manuchehri (2022) Managing tumble windmill grass with sweep tillage. American Society of Agronomy Annual Meeting.

Flusche Ogden, G, and JG Warren (2022) Sweep tillage impact on tumble windmill grass. Western Society of Weed Science Annual Meeting.

Flusche Ogden, G, JG Warren, MR Manuchehri (2021) Tillage impacts on preemergence herbicide efficacy in Oklahoma winter wheat. American Society of Agronomy Annual Meeting.

Flusche Ogden, G, MR Manuchehri, JG Warren. (2021) Tillage system impact on efficacy of delayed preemergence herbicides in winter wheat. Western Society of Weed Science Annual Meeting.

Flusche Ogden, G, PA Dotray, U Torres, JD Everitt (2020) The importance of glufosinate for managing Palmer amaranth (*Amaranthus palmeri*) in auxin-based herbicide systems. Weed Science Society of America Annual Meeting.

Flusche Ogden, G and PA Dotray (2019) Sequential application timings of Liberty and Engenia. West Texas Agricultural Chemical Institute.

Flusche Ogden, G and PA Dotray (2019) Managing Palmer amaranth (*Amaranthus palmeri*) with XtendiMax and Liberty with and without Warrant. Texas Tech University Annual Biological Society Symposium.

Ogden, GK, and MR Manuchehri. (2018) Italian ryegrass management in Oklahoma winter wheat. Proc. Oklahoma State University Niblack Research Scholars Symposium.

Ogden, GK, MR Manuchehri, JA Crose, KE Cole (2018) Development of pinoxaden resistant Italian ryegrass in Oklahoma winter wheat. Oklahoma State University Plant and Soil Sciences Research Symposium.

Posters:

Flusche Ogden, G and JG Warren (2022) Tumble windmill grass: producer survey. Oklahoma State University Winter Crops School.

Mustain, S, **G Flusche Ogden**, JG Warren (2022) Oklahoma soil response to sweep tillage. Students of Agronomy, Soils, and Environmental Sciences Annual Meeting.

PROFESSIONAL PRESENTATIONS & MEETING ABSTRACTS, CONTINUED

Posters, continued:

Thelin, AC, **G Flusche Ogden**, JG Warren (2022) Sweep tillage impact on soil aggregate stability. Oklahoma State University Undergraduate Research Symposium.

McPeak, MR, JG Warren, **G Flusche Ogden** (2022) Soil aggregate stability from agriculturally utilized areas and natural areas. Oklahoma State University Freshman Research Scholar Symposium.

Brewster, A, JG Warren, **G Flusche Ogden** (2022) Oklahoma tillage and crop trends. Oklahoma State University Freshman Research Scholar Symposium.

Flusche Ogden, G, and JG Warren (2021) Sweep tillage impact on corn, wheat, sorghum rotations. Oklahoma State University Winter Crops School.

Flusche Ogden, G, PA Dotray, JD Everitt (2020) The importance of glufosinate for managing Palmer amaranth (*Amaranthus palmeri*) in auxin-based herbicide systems. Southern Society of Weed Science.

Flusche Ogden, G, PA Dotray, U Torres, JD Everitt (2020) Sequential applications of Liberty® and Enlist® or XtendiMax®. Beltwide Cotton Conference.

Flusche Ogden, G and PA Dotray (2019) Sesame response to preemergence herbicides. Proc. TTU Grad Stud Research Poster Contest.

Flusche Ogden, G, PA Dotray, JD Everitt (2019) Managing Palmer amaranth with sequential applications of dicamba and glufosinate with and without acetochlor. Weed Sci. Soc. Am.

Flusche Ogden, G, PA Dotray, JD Everitt (2019) Palmer amaranth control following sequential applications of XtendiMax and Liberty with and without Warrant. Proc. South. Soc. Weed Sci.

Ogden, GF, PA Dotray, JD Everitt (2019) Managing Palmer amaranth with XtendiMax® and Liberty® with and without Warrant®. Proc. Beltwide Cotton Conf.

Ogden, GF, PA Dotray, KR Russell, JD Everitt (2018) Sequential timings of Liberty® 280 SL and XtendiMax® with VaporGrip Technology® with and without Warrant® for Palmer amaranth management. West Texas Ag. Chem. Inst.

Ogden, GK, MR Manuchehri, KE Cole, JA Crose, AC Hixson (2018) Management of Italian ryegrass in Oklahoma winter wheat. Proc. OK EPSCoR Research Day at the Capitol.

Ogden, GK, MR Manuchehri, AC Hixson, KE Cole, JA Crose (2018) The development and management of ACCase resistant Italian ryegrass in Oklahoma. Proc. West Soc. Weed Sci.

Ogden, GK, MR Manuchehri, AC Hixson (2017) Management of herbicide resistant Italian ryegrass in Oklahoma. Proc. Stud. Agron. Soil. and Environ. Sci.

Ogden, GK, MR Manuchehri, AC Hixson (2017) Preemergence weed management systems in winter wheat. OK State Plant and Soil Sci. Res. Symp.

Ogden, GK, MR Manuchehri, AC Hixson (2017) Pyroxasulfone weed management systems in Oklahoma winter wheat. Proc. West Soc. Weed Sci.

Flusche, GK, M Montelongo, T Gull (2015) Comparison of two adjuvants in an experimental *Actinobacillus equuli* vaccine in horses. Life Sci. Freshman Res. Scholar Symp.

SPECIAL COURSES & PROFESSIONAL DEVELOPMENT

Teaching Workshop

Spring 2021 & 2023

Oklahoma State University | Spring Teaching Workshop

Invasive Species Training

Spring 2022

Oklahoma State University | NREM 5033 Ecology of Invasive Species

Grant Writing

Spring 2022

Oklahoma State University | GRAD 5891 Special Topics in Grantsmanship

Herbicide Mode of Action and Herbicide Resistance Training

Spring-Summer 2019

University of Tennessee | "Herbicide Mode of Action and Resistance in Weeds" shortcourse

Texas Tech University | PSS 5324 Modes and Mechanisms of Herbicides

SERVICE & LEADERSHIP

- OSU Department of Plant and Soil Sciences Graduate Student Organization (GSO) President 2022-23
- Western Society of Weed Science Student Liaison 2021-23
- Mentored 5 undergraduates 2021-2023
- ASA-CSSA-SSSA Congressional Visits Day delegate 2019 and 2021
- OSU Department of Plant and Soil Sciences GSO President 2020-21
- ASA-CSSA-SSSA Graduate Student Committee (ACS238) member 2019-21
- ASA Graduate Student Board Representative 2020
- ASA Women's Representation and Recognition Taskforce member 2019
- Texas Tech University Department of Plant and Soil Science Graduate Council Vice President 2018-19
- OSU Agronomy Club President 2017-18
- Students of Agronomy, Soil, and Environmental Science (SASES) National Corresponding Secretary 2016-17

PROFESSIONAL MEMBERSHIPS

American Society of Agronomy, 2016 to present

Soil Science Society of America, 2016 to present

Crop Science Society of America, 2016 to present

Western Society of Weed Science, 2017 to present

HONORS & AWARDS

- OSU Department of Plant and Soil Sciences Outstanding PhD Student 2023
- American Society of Agronomy, PhD oral presentation, 3rd place, Section 1: Weedy and Invasive Plant Species 2022
- Western Society of Weed Science, 1st place, Agronomy, PhD oral presentation 2022
- OSU Winter Crops School, 3rd place PhD poster 2021
- West Texas Agricultural Chemicals Institute Scholarship recipient 2019
- North American Weed Science Contest 2019, Team Sprayer Calibration- 1st place
- Texas Tech University Graduate Student Poster Contest 2019- 2nd place, Plant and Soil Science Division
- Weed Science Society of America, 2nd place, master's student poster, section II 2019
- ASA-CSSA-SSSA Future Leader in Science Award 2018
- West Texas Agricultural Chemicals Institute 2018- 2nd place, graduate student poster
- American Society of Agronomy Frank D. Keim Graduate Fellowship Recipient 2018
- OSU Honors College Degree Recipient 2018
- Oklahoma EPSCoR Research Day at the Capitol 2018- 3rd place, Research University Category- "Management of Italian ryegrass in Oklahoma winter wheat"
- OSU Creating Opportunities for Responsible Development (CORD) Award Recipient 2018
- OSU Plant and Soil Science Department "Outstanding Senior" 2018
- OSU College of Agriculture Sciences and Natural Resources Dean's Excellence Award Recipient 2017-18
- OSU "Senior of Significance" 2017-18
- Students of Agronomy, Soil, and Environmental Sciences Undergraduate Research Poster Contest 2017- 1st place, Section II
- Niblack Research Scholar- April 2017-18
- Western Society of Weed Science Undergraduate Poster Contest 2017 – 1st place
- OSU Plant and Soil Sciences Research Symposium 2017 – 2nd place, undergraduate poster
- OSU Honors College- General Honors Award 2017
- OSU Office of the Vice President of Research Video Contest 2016 – 1st place, undergraduate – "The coolest research on campus"
- Sitlington Undergraduate Research Scholar – 2016-17
- Clerico Family Foundation Scholar – 2014-18
- Life Science Freshman Research Scholar – 2014-15