MITCHELL WESTMORELAND

MITCHELL.WESTMORELAND@USU.EDU

EDUCATION

Utah State University, Crop Physiology (Plant Science), Ph.D. Student 2023
Utah State University, Biology, B.S., *Cum laude* 2018

RESEARCH EXPERIENCE

Graduate Research Assistant, Crop Physiology Laboratory, Utah State Univ. 2019-Present
Ecological Field Technician, Western Forest Initiative, Utah State Univ. Summer 2019
Biological Science Technician, Forage and Range Research Laboratory, USDA 2017-2019

TEACHING EXPERIENCE

Co-Instructor, USU online, The Science and Technology of Medical *Cannabis* Cultivation 2021

Instructor, PSC 4900, The Science of Cannabis Cultivation: Principles and Practices Spring 2021

Teaching Assistant, PSC 5720/6720, Environmental Plant Physiology Spring 2021

Teaching Assistant, PSC 5430/6430, Plant Nutrition Fall 2020

Teaching Assistant, PSC 5720/6720, Environmental Plant Physiology Spring 2020

SCHOLARSHIPS AND AWARDS

John Seymour Memorial Scholarship 2021-2022

Bertrand D. Tanner/Campbell Scientific Graduate Fellowship 2021-2022

Bertrand D. Tanner/Campbell Scientific Graduate Fellowship 2020-2021

PROFESSIONAL MEMBERSHIPS

Sigma Xi 2021 - Present
American Society for Horticultural Sciences 2019-Present

PUBLICATIONS

Westmoreland, F.M., Kusuma, P., & B. Bugbee 2021. Cannabis lighting: Decreasing blue photon fraction increases yield but efficacy is more important for cost-effective cannabinoid production. PLOS ONE 16(3): e0248988

Kusuma, P., Westmoreland, F.M., & B. Bugbee, 2021. Far-red photons above 750 nm can delay flowering in short-day soybean and Cannabis: Implications for phytochrome activity (*In review*)

INVITED TALKS

Phosphorus fertilization: An environmentally responsible approach, March 2021
Utah Hemp Seminar

Phosphorus fertilization: principles and applications to medical hemp, Nov 2020
PSC 5430/6430 – Plant Nutrition

Introduction to hemp and spectral effects on plant growth and development, Oct 2020
PSC 1040 – Introduction to Plant Science

Phosphorus fertilization: An environmentally responsible approach, *Cannabis Conference* — July 2020

Increasing fraction of blue photons decreases yield but not cannabinoid concentration of cannabis, *Cannabis Conference* — July 2020

Hemp research updates at Utah State University, *2020 Urban and Small Farms Conference* — March 2020

Hemp (*Cannabis sativa* L.) response to drought depends on growth stage, *Plants, Soils and Climate Graduate Seminar* — Feb 2020

Hemp research at Utah State University, *Utah Hemp Seminar* — Feb 2020

High light, high oxygen, and high CO2 to improve rooting of Cannabis, *HortCon* — Nov 2019

PUBLIC OUTREACH

Industrial Hemp in Utah as a high value crop for CBD oil. *The County Seat.* — July 2020

Once outlawed hemp being cultivated in Cache Valley. *Cache Valley Daily*. — Sept 2019