

PSS Student Research Symposium

Date: April 23, 2024
Location: TTU Dairy Barn

Program Schedule: Oral Sessions – morning

8:30 - 9:00 AM *Coffee social*

Time	Oral Presentation Title	Speaker	Student Level	Research Area
9:00 AM	PSS Student Research Symposium: Opening Remarks & Introductions			
Session 1				
9:05 AM	Symphony of Symbiosis: A Single-Cell Transcriptomic Exploration of Soybean-Microbe Interactions	Leo D'Agostino	Ph.D.	Plant Molecular Genetics
9:20 AM	Cotton yield and fiber quality responses to nitrogen rates, soil physicochemical properties, and topography	Rupak Karn	Ph.D.	Crop Science
9:35 AM	Effect of different herbicides on soil health in the cotton production system	Jasleen Makkar	M.S.	Crop Science
9:50 AM	Develop a deep learning tool to assess sink capacity in grain sorghum	Mayank Bangari	Ph.D.	Crop Science
10:05 AM	Transcriptomic profiling of a hatching defective mutant of <i>Chlamydomonas reinhardtii</i>	Matteo Tosoni	Ph.D.	Crop Science
10:20 AM Break				
Session 2				
10:35 AM	Understanding the molecular mechanism of Sugarcane Aphid resistance in Sorghum	Pallavi FNU	Ph.D.	Plant Molecular Genetics
10:50 AM	Investigation of Cotton Fiber-to-Fiber Friction	Susmita Saha	M.S.	Cotton Fiber Quality
11:05 AM	Effect of different biosolid-based fertilizers on selected soil chemical properties and growth of wheat (<i>Triticum aestivum</i>)	Sandesh Bhatta	Ph.D.	Soil Science
11:20 AM	First evidence of the presence of endofungal bacteria in orchid mycorrhizal fungi	Harshita Sharma	M.S.	Plant Ecology & Soil Science
11:35 AM	Grazing Potential of Prussic Acid Free (PaF) Forage Sorghum and Pearl Millet Under Dryland and Irrigated Conditions	Alondra Cruz	Ph.D.	Forage Research
Noon - 1:00 pm Lunch Break				



Program Schedule: Poster Session – afternoon

Session 3: 1:00 – 4:00 pm	Poster Presentation Title	Speaker	Student Level	Research Area
Poster # 1	Effects on Nutrient Availability in Soils Impacted by Swine Wastewater under the Use of Hydrotalcite as a Soil Amendment in Different Environmental Conditions	Ezra Alcaarez and Jacob Jones	B.S.	Agronomy
Poster # 2	Irrigation management effects soil C accumulation under long term compost application in semi-arid systems	Diego Arcelay Sanchez	MS	Soil Science
Poster # 3	Effect of early and late POST emergence herbicides on weed suppression, crop injury, and biomass yield of industrial hemp	Preetaman Bajwa	MS	Agronomy
Poster # 4	Soil Respiration Response to Moisture and Manure Addition with N Stabilizer	Noelia Curbelo-López	MS	Soil Science
Poster # 5	Impact of Cover Crops, Tillage, and Cotton-Sorghum Rotation on Soil Water Dynamics: Challenges and Opportunities	Lee Fischel	MS	Agriculture Sciences
Poster # 6	Addressing Pre-harvest Sprouting in Grain Sorghum by Integrating Seed Physiology and Genetics	Yusa Ichinose	MS	Forage Research
Poster # 7	Impact of irrigation levels on herbicide activity in the cotton production system	Jasleen Makkar	MS	Crop Science
Poster # 8	Elucidating the Role of Flavonoid Biosynthesis Molecules in Symbiotic Microbe Interaction	Lakshmi Venkat Sai Ram Nagalla	MS	Plant-Microbe Interactions
Poster # 9	Assessing Precision Irrigation Management using Satellite Remote Sensing	Oluwatola Adedeji	Ph.D.	Precision Agriculture
Poster # 10	Effect of planting date on cotton seedling emergence, yield and fiber quality	Zelalem Alemar	Ph.D.	Crop Science
Poster # 11	Effects of N-fertilizer type on soil greenhouse gas emissions in monoculture vs. mixed pasture forage systems	Raavi Arora	Ph.D.	Soil Science
Poster # 12	Exploring Gene Regulation of Triacylglycerol Accumulation in <i>Chlorella sorokiniana</i> under Nitrogen and Phosphorus Deprivation	Claudio Barrera Duarte	Ph.D.	Genetic Regulation
Poster # 13	Assessing the effects of hardwood biochar application on soil physical, chemical, and biological parameters in west Texas	Arjun Kafle	Ph.D.	Horticulture & Soil Science
Poster # 14	Dynamic estimation of cotton nitrogen content through deep learning with unmanned aerial systems and satellite images	Rupak Karn	Ph.D.	Crop Science
Poster # 15	Exploring the Impact of Aeroponic Nozzle Type on Carrot Growth and Root Architecture	Dario Rueda Kunz	PhD	Horticulture
Poster # 16	Optimizing cotton's root system architecture to improve adaptive response to water-deficit stress	Micayla Lamb	Ph.D.	Crop Science
Poster # 17	Transcriptome analysis of different developmental stages of <i>Volvox carteri</i> reveal dynamic change of genes during development	Vy Le	Ph.D.	IGCAST
Poster # 18	Coupled Water and Energy Transport in the Soil-Plant-Atmosphere Continuum under a Semi-Arid Climate of West Texas	Xinying Ling	PhD	Soil Science
Poster # 19	Characterization of <i>hs1</i> as a key regulator of heat and drought tolerance in Sorghum	Zhiyuan Liu	Ph.D.	Plant Molecular Genetics
Poster # 20	Effect of liquid and supercritical fluid CO ₂ on the dissolution of cotton liners	Amir Shahin Shamsabadi	Ph.D.	Fiber & Biopolymer Science
Poster # 21	Effect of segregation distortion on genetic map construction	Avinash Shrestha	Ph.D.	Plant Genetics, Breeding, and Biotechnology
Poster # 22	Characterization of a mutant population for global sorghum improvement	Shejal Soumen	Ph.D.	Functional Genomics
4:00 PM	Awards Ceremony			