

## 2024 Cedric Kuhn and Kenneth E. Papa Outstanding Graduate Student Awards Department of Plant Pathology, University of Georgia

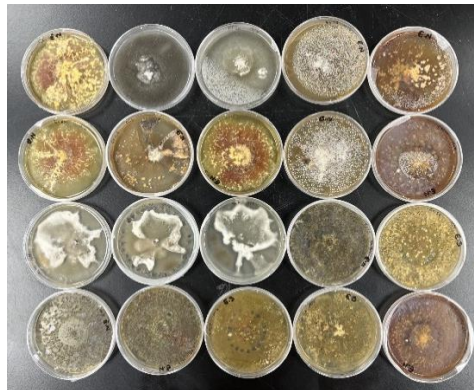
The Kenneth E. Papa and Cedric Kuhn Awards recognize the scholarship, professionalism, and excellence in research of two graduate students in the Department of Plant Pathology each year. The 2024 awards were presented at the conclusion of the annual meeting of the Georgia Association of Plant Pathologists (GAPP) in Savannah, GA, on March 6th.



*Xiomy Janiria Pinchi Davila (Kuhn awardee) in the University of Georgia's Trial Gardens.*

The Kenneth E. Papa Outstanding Graduate Student Award is presented in honor of Ken Papa (1931-1986), a former professor in the Department of Plant Pathology, who was a renowned fungal geneticist and one of the first geneticists at the University of Georgia. He played a major role in the Plant Pathology graduate program through his service as Graduate Coordinator, and was elected Fellow of the Georgia Academy of Science in 1977. The 2024 Kenneth E. Papa Award was presented to Xiomy Janiria Pinchi Davila, a Ph.D. candidate working under the direction of Dr. Anny Chung, Assistant Professor of Plant Ecology. Xiomy's research focuses on *Sorghum bicolor*, understanding how its root microbiome assembles, and using root microbiomes to develop better management strategies to improve biomass feedstocks for sustainable biofuel production. As global demand for

biofuels is projected to grow by 28% in the next five years, sorghum has emerged as a promising genetic model for biofuel feedstock research due to its worldwide use, high productivity, stress tolerance, and low input requirements. Sorghum's ability to tolerate harsh environments may be enhanced by its association with microorganisms that colonize the roots, such as dark septate fungi (DSE) and arbuscular mycorrhizal fungi (AMF). In her research, Xiomy aims to disentangle how host age, length of drought, and drought severity affect root exudates, root-microbiome assembly and host biomass. She also tests if early DSE arrival induces strong priority effects over AMF colonization, host interaction outcome, and root-microbiome assembly.



*Xiomy Janiria Pinchi Davila's field research (left) and her lab work (middle and right.)*

The Cedric Kuhn Outstanding M.S. Student Award is presented in honor of Cedric Kuhn (1930-2000), who in the late 1950s became Georgia’s first plant virologist. Kuhn was first located at the Georgia Experiment Station in Griffin, later transferring to the Athens campus. He served as the first Graduate Coordinator in the Department of Plant Pathology, playing an instrumental role in the development of the doctoral program. Kuhn was named a Fellow of the American Phytopathological Society (APS) in 1987 and was awarded the D.W. Brooks Excellence in Research Award in 1989. The 2024 Cedric Kuhn Outstanding M.S. Student awardee is **Walt Sanders**, who is mentored by Dr. Phillip Brannen, Extension Fruit Disease Specialist. Walt’s research focuses on further understanding one of the oldest fungicidal chemistries: elemental sulfur. He studies sulfur’s interaction with novel spray techniques, the phytotoxic effects of sulfur, and the use of surfactant adjuvants in commercial tank mixes and air induction nozzles. This research seeks to gain insight into sulfur’s capability to cause damage, which will be crucial in further controlling the fungal disease powdery mildew, particularly with its rising resistance to systemic fungicides.

Walt also received 1<sup>st</sup> place in the 2024 GAPP Oral Presentation Competition for “Utility of sulfur and surfactant products for enhancing disease control of grapevine powdery mildew.”



*Walt Sanders in the field (left) at GAPP (middle) and with mentor Dr. Phillip Brannen (right.)*