**2025 Cedric Kuhn and Kenneth E. Papa Outstanding Graduate Student Awards**

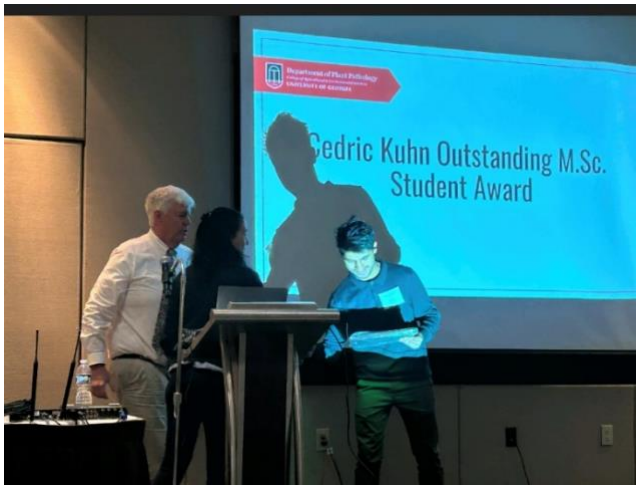
**Department of Plant Pathology, University of Georgia**

The Cedric Kuhn and Kenneth E. Papa Awards recognize the scholarship, professionalism, and excellence in research of two graduate students in the Department of Plant Pathology each year. The 2025 awards were presented at the conclusion of the annual meeting of the Georgia Association of Plant Pathologists (GAPP) in Brasstown Valley Resort, GA, on March 5.

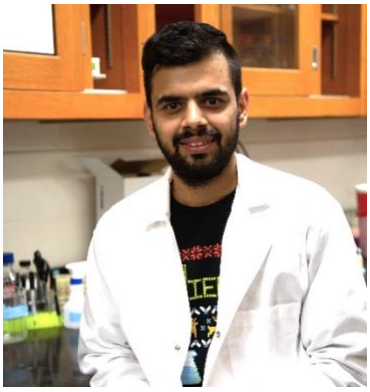
*Nabin Poudel counting root-knot nematode eggs under the compound microscope.*

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 2025 Cedric Kuhn Outstanding M.S. Student awardee is **Nabin Poudel**, a Master's student working with Dr. Intiaz Chowdhury in the Cotton and Vegetable Nematology Lab at the Tifton campus. Nabin's research focuses on evaluating the pathogenicity of recently detected root-knot nematode species in Georgia and their impact on major vegetable crops. Specifically, he is studying *Meloidogyne enterolobii*, *M. floridensis*, and *M. haplanaria*, which were identified in the state for the first time in different vegetable hosts. As Georgia's vegetable industry continues to grow, these nematodes pose a significant threat due to their aggressive nature, broad host range, and limited management options. Nabin's thesis research assesses their ability to cause disease and suppress yields, providing essential insights into their interactions with key vegetable crops. By identifying the pathogenic potential of these species, his research contributes to developing targeted management strategies to safeguard vegetable production in Georgia.




*Nabin extracting root-knot nematode eggs (left) and receiving the Cedric Kuhn Outstanding Graduate Student Award from Drs. Bob Kemerait and Bochra Bahri during the 2025 GAPP meeting (right).*



*Sujan Paudel in Dr. Kvitko's research lab.*

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 2025 Kenneth E. Papa Award was presented to **Sujan Paudel**, a Ph.D. candidate working under the direction of Dr. Brian Kvitko, Associate Professor of plant molecular plant bacteriology. Sujan's research focuses on uncovering the genetic basis of how the bacterial onion pathogen *Burkholderia gladioli* pv. *alliicola* (Bga) causes disease in onions. Vidalia onions, grown on over 12,000 acres in South Georgia, contribute to a staggering $173 million farm gate value. However, Bga poses a considerable threat to the Vidalia onion industry as storage, bulb, and foliar pathogen. Like many *Burkholderia* species, Bga can persist in soil for extended periods without its host, making management efforts particularly challenging. Given the low effectiveness of chemical control, breeding disease-resistant onion varieties offers a sustainable long-term solution. Understanding Bga's disease-causing mechanisms is a crucial step toward developing such resistant varieties.

Onion cells present a toxic hostile environment for bacterial growth due to their production of organic sulfur antimicrobial compounds called thiosulfinates. In another bacterial onion pathogen, *Pantoea ananatis*, thiosulfinate tolerance gene clusters (TTG) enable the bacterium to colonize necrotized onion tissue by conferring tolerance to these defense compounds. Sujan's research also explores whether distantly related *Burkholderia* onion pathogens employ similar strategies to withstand onion-derived antimicrobial compounds. Investigating the thiosulfinates tolerance levels of natural and engineered Bga variants will provide insights into whether adaptation to onion defense compounds is essential for host colonization. By integrating functional genetics and phenotypic assays, Sujan aims to unravel the complexities of bacterial virulence mechanisms in onion infection. Besides research, Sujan also enjoys mentoring other students and is an avid supporter of Arsenal Football Club.



*Sujan in an onion field (left), conducting lab work (middle), and participating in a science communication session at Bayer CropScience, St. Louis.*