## William Earl Cooper, 1917-1970

D. E. Ellis, J. C. Wells, and C. J. Nusbaum



William Earl Cooper, a member of the North Carolina State University faculty since 1948, died at Raleigh July 20, 1970, after an extended illness.

Earl was born on December 25, 1917, in Bradley County, Arkansas. He grew up on the family farm, and after graduating from the New Edinburg High School in 1936, was employed as a timber cruiser

by the Southern Lumber Company until 1938. He then entered Arkansas A&M College and received the Bachelor of Science degree in Botany in 1942. During his college days he was employed as Observer in Charge of an Off-Airways Weather Station located on the Arkansas A&M campus.

After graduation, Earl went to the Fruit and Truck Branch Experiment Station at Hope, Arkansas, as Scientific Assistant. In 1944 he entered Oklahoma A&M College, where he received his M.S. degree in July, 1945, with a major in Botany and Plant Pathology. His thesis was on top necrosis, a virus disease of guar. He entered Louisiana State University in September, 1945, to work toward his Ph.D. degree which he received in May, 1948, with a major in Plant Pathology and a minor in Agronomy. His doctoral dissertation was on the distribution and role of soil Actinomyces antibiotic to *Pythium arrhenomanes*, the causative agent of sugarcane root rot.

Dr. Cooper joined the faculty of plant pathology at North Carolina State University on May 1, 1948, and entered immediately upon a productive research career on diseases of peanuts and cotton. His many contributions made him one of the leading authorities in his field. His research, together with that of graduate students under his direction and cooperative studies with plant breeders and agronomists, laid a solid foundation for the control of the major peanut and cotton disease in North Carolina and elsewhere. The discovery, characterization, and selection of the only known source of resistance to southern stem rot caused by Sclerotium rolfsii in the cultivated peanut and of high level resistance to leaf spot in wild relatives of peanut were among his most significant contributions. The latter, through collaboration with one of his graduate students, was made possible by his basic studies on the growth and sporulation of the pathogen. He also made many other notable contributions leading to the effective control of nematode-induced diseases by crop rotations and nematicides, of pod rot of peanuts, and of leaf spot by fungicidal sprays. Soundness of experimental design and meticulous attention to detail in applying treatments and recording and interpreting data always characterized his field and laboratory studies. This facilitated the application of his experimental results to specific field problems and subsequent adoption of economical, effective practices by growers. His greatest contributions, however, have been made on the biology and ecology of the pathogens causing southern stem rot and peanut leaf spot.

Although his major efforts were directed toward peanuts, Dr. Cooper also made significant contributions to the control of cotton diseases. His work on the control of seedling diseases and on the etiology and control of diseases caused by nematodes is outstanding.

At North Carolina State University, Dr. Cooper was promoted to Associate Professor in 1960 and to Professor in 1966. On July 1, 1970, he became Emeritus Professor, having retired June 30 because of illness. He was always a generous, cooperative, and modest man who gave unselfishly of his time and energy to the advancement of both scientific and academic affairs. He was a member of The American Phytopathological Society, the Entomological Society of America, the American Genetic Association, the American Association for the Advancement of Science, the American Institute of Biological Sciences, the N. C. Academy of Sciences, Phi Kappa Phi, and the Society of the Sigma Xi.

After his death, a gift by his daughter, Mrs. Beth Faircloth, and her husband to the NCSU Agricultural Foundation was placed in trust to establish a memorial fellowship award for outstanding graduate students in plant pathology.

Dr. Cooper was preceded in death by his wife, Beatrice, H. in 1968. He is survived by a daughter, Mrs. Beth Faircloth; his mother, Mrs. Rosa Carter Cooper; three brothers; two sisters; and two grandchildren.