## IN MEMORIAM

## Kenneth D. Arbuthnot 1902-1962

Kenneth Derwin Arbuthnot, Research Entomologist, Entomology Research Division, U. S. Department of Agriculture and Assistant Professor of Entomology, Oklahoma State University, Stillwater, Oklahoma, died of a heart attack at his home on May 22, 1962, at the age of 59. He was born at Ni Wot, Colorado, November 17, 1902. Undergraduate study was at Colorado Agricultural and Mechanical College where he earned the degree of Bachelor of Science in 1926. He also took graduate work in entomology, genetics, plant breeding, and plant pathology at Michigan State University (1926-1928) and Oklahoma State University (1953-1965).

Professor Arbuthnot was instructor in entomology at Michigan State University from 1926 to 1928. Since 1928 he had been employed as Research Entomologist by the U. S. Department of Agriculture. During the 1928-1953 period, his tours of duty included Monroe, Michigan; Toledo, Ohio; New Haven, Connecticut; Waltham, Massachusetts; and Ankeny, Iowa. During this time his research involved genetic, ecological, and biological control studies on the European corn borer. Since 1953 he was stationed at Oklahoma State University, in charge of investigations of corn insects in Southwestern United States.

He was a member of Kappa Kappa Psi, Alpha Zeta, and Sigma Xi honorary fraternities. His membership in the American Association of Economic Entomologists began in 1927 and in the Enotomological Society of America in 1953. While a member of the Cambridge Entomological Club, he served as Vice President in 1944. His service in the Central States Entomological Society included that of Vice President in 1957 and President in 1958, and he was a member since 1954. He also was active in the Oklahoma Academy of Science and the Southern Corn Improvement Conference.

Mr. Arbuthnot's research has been published in 33 papers, and he was senior author of 19. His earliest research on poison baits for grass-hopper control was published in 1927. Since 1928 his publications have dealt with biological control, genetics, and the ecology of the European corn borer and on the biology, plant resistance, and insecticidal control of the southwestern corn borer.

Important entomological contributions by Mr. Arbuthnot included (1) demonstration by laboratory studies that genetically different strains of the European corn borer occur in the United States, (2) discovery of the relationship between climatic conditions and the annual number of generations of European corn borer throughout its known world distribution and interpretation of these data for the United States, (3) contributed information by laboratory studies that was the basis for manipulating parasites in storage for use in timing releases to coincide with biology of the European corn borer, (4) along with co-workers, discovered the presence of the protozoan parasite, Perezia pyraustae Paillot, of the European corn borer and studied its importance as a control factor in the United States, and (5) his research along with State cooperators provided the basis for the first recommendations for insecticidal control of the southwestern corn borer and the sugarcane borer on corn.

Mr. Arbuthnot is survived by two sons, Kenneth Roy of Monett, Missouri, and Frederick James of Park Forest, Illinois. His wife, Mikred

Edna Arbuthnot, preceded him in death on January 12, 1962. "Ken", as he was affectionately known to his friends, was a devoted husband and father. Friends and associates marvelled at his untiring devotion to Mrs. Arbuthnot during the years of her serious illness and his ability to carry on a full research program. In spite of trying times, he always remained cheerful and was an inspiration to all who knew him.

His sudden death ended more than 34 years of fruitful entomological research. His loss is keenly felt by his associates, friends, and family. He always was deeply interested in students and was always ready to counsel them on problems regarding course work and research.

H. L. Chada