

OBITUARIES

DR. ARTHUR W. LINDQUIST
1903-1980

Dr. Arthur W. Lindquist, Medical and Veterinary Entomologist and a well-known authority on insect biology and control, died on March 11, 1980, approaching the age of 77 in Lindsborg, Kansas, from a heart ailment.

Art was born on a farm northwest of Lindsborg, Kansas, on March 17, 1903. He graduated from Bethany College in 1926. On August 5, 1928, he was married to Juanita Orr in Longmont, Colorado. In 1929 he entered graduate school at Kansas State University and earned a Master's Degree in 1931. He then became an employee of the USDA as a livestock entomologist in Uvalde, Texas, which began 31 years of continuous service with the Department. He worked for the Department on gnat problems in Clear Lake, California, from 1938-42. During World War II (1942-46) he was a project leader in the Insects Affecting Man and Animals Research Laboratory at Orlando, Florida, working on military entomology problems and the development of DDT for annoying and disease carrying insects. From 1946 to 1953 he was stationed in Corvallis, Oregon, and led a group researching biology and control of medical and veterinary insects. From Corvallis he was transferred to USDA headquarters in Washington, D.C. area to serve as Chief of the Insects Affecting Man and Animals Research Branch of the Entomology Research Division within the newly organized Agricultural Research Service of the USDA. From 1953 to his retirement in July of 1962, he led the program on insects affecting man and animals within the Department. In 1962, Art and his wife returned to the farm in Lindsborg, Kansas, for retirement. However, he didn't really retire, but maintained an active role and interest in his field. He was a truly dedicated scientist and entomologist who had many achievements and influenced others to similar dedica-

tion and achievement. Art is survived by his wife, Juanita; two sons, Donald and Roger; five grandchildren, and two great-grandchildren. His wife, Juanita, is a lovely, enthusiastic, and dedicated lady who was truly a help and inspiration to Art in his many endeavors. His son, Donald, is an entomologist with the National Program Staff of AR, SEA, USDA; his son, Roger, an engineer in Corvallis, Oregon.

Art served in many societies in leadership roles and received many recognitions for his achievements. He was President of the Pacific Branch of ESA in 1953, and of AMCA in 1957. He served as Chairman of Medical and Veterinary Entomology Section of ESA in 1954. He received individual or shared group awards from USDA and in 1961 received the USDA's Distinguished Service Award for original research and forceful leadership. He was elected a Fellow of the American Association for the Advancement of Science. From his alma mater he received an honorary doctorate and the Alumni Award of Merit. In 1975 he received the AMCA's Medal of Honor for Distinguished Contributions to Mosquito Control and in the same year he received the Royal Order of the North Star from the King of Sweden for work done in entomology.

Art was involved in early work in the 30's on screwworm biology and control and helped support and develop Knippling's concept of the sterile male release. His studies indicating the low density of screwworms in nature supported the potential practicality of this new concept for screwworms. He supported research to develop the concept with other insects and was one who recognized the significance of literature reports of sterilization caused in fruit flies by exposure to radiation as a means of inducing sterility into males and females to be released in the sterile insect release technique. He

was a member of the Orlando team which did much to develop DDT for use against medically important insects and arthropods. At Corvallis, he and his group pioneered research in man and animal insects in the use of radiolabelled tracers and systemic insecticides among other achievements. All of these accom-

plishments came with additional practical and basic research on biology and control. By the time he assumed duties as Chief of the Branch, he had a strong background and intimate knowledge of research in the field which allowed him to develop a strong and productive program in this area. Not only did he sustain this pro-



gram, he also fostered cooperative relationships and working agreements with other groups including State, national, and international agencies.

To work for or with Art Lindquist and his insects affecting man and animals research group over time resulted in developing respect, admiration, and love for the man and his wife Juanita. To the new entomologist entering the group it might take a little time to fully realize this. Art had a way about him when he visited laboratories. He would look at a young scientist and ask: "What have you done to push back the boundaries of science today?" or "Are you working 14 or more hours a day?" When I finally summoned the courage to ask him if he meant five or seven days a week and he laughed, I began to realize that everything the man did reflected his dedication and zeal toward science and his chosen profession—entomology. Such a quality may be intangible, but fortunately it can be perceived and passed on to others to influence them.

Art carried his interest, dedication, and zeal into and through his retirement. He and Juanita made many trips to different parts of the United States for vacations or

to visit family, relatives, and friends. These trips generally included visits to laboratories where Art could talk research, keep current, and encourage others. He continued to attend scientific meetings such as the AMCA, ESA, and international congresses. He served as a consultant for international agencies, particularly the International Atomic Energy Agency (IAEA). He, with his wife's help, served for 10 years after his retirement as Technical Director of a short course on the use of radiation and radioisotopes in entomology organized by IAEA and conducted cooperatively by the University of Florida, USDA, and AEC. The Lindquists developed a "family" of friends from the students from developing countries attending this course and enjoyed following the careers of many of them through cards and letters or just informal contacts at meetings.

Art will be remembered by his many friends and associates for his abilities and accomplishments as well as his interest and zeal for science and entomology; attributes and qualities which he maintained throughout his career and retirement.

—Donald E. Weidhaas

FRANK J. MURPHEY

1920–1979

Dr. Frank J. Murphey died September 27, 1979. He had been retired since March of 1979, having found it necessary to give up his chosen work because of medical disability. Dr. Murphey had a long association with the University of Delaware, beginning shortly after World War II as a student and ending as an Associate Professor of Entomology in the Department of Entomology and Applied Ecology. He obtained all of his degrees at the University of Delaware, the B.S. as an Entomology-Plant Pathology major, the M.S. as an Entomology major, and the Ph.D. in Biological Sciences.

He was a dedicated scientist, a patient and thorough teacher, and had a beautiful sense of loyalty to his alma mater. Early in his student years he became interested in the problems of mosquito biology and the controls directed at them. When he was appointed to the faculty he continued his research on mosquitoes and made significant contributions to the present integrated pest management system employed by the State's mosquito control section of the Department of Natural Resources and Environmental Control. He developed the concept of testing chemical pesticides as well as