



## IN MEMORIAM

Roland N. Jefferson  
Professor of Entomology, Emeritus  
Riverside  
1911 — 2001

Professor Roland Newton Jefferson was born in Washington, D.C., on November 7, 1911, and passed away in Sacramento, California on July 16, 2001. He is survived by his daughters, Mary Jefferson Henwood and Lorraine Jefferson. His wife, Dorothy Lefebre Jefferson, who passed away in 1995, was the founder of Jefferson Transitional Programs of Riverside, a nationally recognized non-profit organization for the advancement of mental health education.

Dr. Jefferson obtained his B.S. degree in 1934 and his M.S. degree in 1936 from the Virginia Polytechnic Institute (VPI) in Blacksburg, Virginia. After receiving his M.S., he was employed at the Virginia Agricultural Experiment Station as an assistant entomologist over a three-year period. During this time, he took periods of leave of absence for graduate study at Iowa State College. There followed an academic year assignment as acting instructor in biology at VPI. Further graduate studies were undertaken at Iowa State and he obtained his Ph.D. in entomology there in 1942. In relation to his previous service in the R.O.T.C., he entered the Officers Reserve Corps in the fall of 1942 and was discharged at the rank of captain in 1946.

In November 1946, he joined the Division of Economic Entomology of the University of California Citrus Experiment Station (UCR), which at that time supervised instruction and research in entomology at UCLA. His appointment was on the Los Angeles campus as assistant professor of entomology and assistant entomologist in the Agricultural Experiment station. There he conducted research on the entomological problems of herbaceous ornamental plants and soon organized a new lecture and laboratory course in this field. He was advanced to the associate professor level in 1953, becoming full professor in 1959. He was transferred to UC Riverside in 1960 where he remained until his retirement in 1977.

His background in instruction at UCLA proved invaluable in establishing a teaching curriculum after moving to UCR. In 1962, he played a major role in the development of the new undergraduate and graduate instructional programs in entomology at UCR. He provided a commendable degree of leadership by volunteering to undertake responsibility for the core course in insect morphology, although he had no experience or specialization in this field, other than as a student. His genuine interest in instruction and in students at large and their welfare provided a welcomed stimulus to experiment station researchers at Riverside as they formed the core of an instructional faculty. In 1964, he devoted a sabbatical year at MacDonald College of McGill University, in furtherance of his competence in teaching and research, in association with the imminent insect morphologist of the day, Dr. E. M. DuPorte. There he began research on the morphology and histology of the female sex pheromone glands of noctuid moths, later expanded to include that of antennal pheromone receptors. These efforts were physiologically-oriented and resulted in a relationship with the vital studies of Professors Shorey and Gaston of the UCR Department of Entomology in a new thrust into application of pheromones in the control of injurious insects. This culminated in a series of research articles and Dr. Jefferson's co-authorship in 1968 of a major review entitled "Insect Sex Pheromones" in the Annual Review of Entomology and a classic in this field. These extensive series of papers resulted in Dr. Jefferson's association with the Division of Toxicology and Physiology rather than the Division of Economic Entomology in an administrative reorganization.

Dr. Jefferson's "open laboratory" in insect histology was favored by the graduate students of the department, encouraging its use in their related research. Dr. Jefferson served the department as graduate advisor and in admissions committees and he insisted on admissions of students of high quality and promise. He took an active part as well on matters of educational policy at the campus level.

In his extensive and primary field of research which began at UCLA and in continuation at UCR, Dr. Jefferson established himself as one of the foremost authorities on the entomological problems of floricultural crops in California, involving a large number and wide variety of pests on a broad selection of host plants. Eventually these research efforts extended to the protection of turf grasses and to woody ornamentals grown in green houses. This research was altogether in support of an important part of California agriculture as well as a national agricultural resource -- the production of ornamental plants and their seeds for local use and export. In his professional experience in the 1930s as an agricultural entomologist in Virginia, the dominant insecticides were persistent arsenicals and fluorides, nicotine compounds and fumigants such as hydrogen cyanide. Dr. Jefferson enthusiastically took part in the extensive development as well as the restriction of post-war organic insecticides, in the development of techniques in the detection of pesticide resistance and the promotion of varieties of plants resistant to pests. An important dimension of his career was his presentation in public lectures in a multitude of University Extension and industry meetings. He presented research papers at various times before the Entomological Society of America, its Pacific branch, and before the Entomological Society of Quebec.

It is established that Dr. Jefferson successfully carried out two entirely different research programs: the protection of ornamental plants from pests, and studies in insect morphology and chemical ecology. This is considerably more demanding than if these fields of endeavor were intimately interrelated. He is remembered not only for his life-long diligence and dependability, but as well for his daring to undertake a completely new area of teaching and research.

Martin M. Barnes  
Theodore W. Fisher  
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