

Richard William Weires, Jr.

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Professor Richard Weires served as an entomologist studying the biology and management of insects and mites on tree fruit from 1974 until 1990 in Cornell's Hudson Valley Laboratory at Highland, New York. In addition to his skills and experience as a fruit entomologist, he had diverse interests in horticulture and was dedicated to the advancement and improvement of the fruit industry in Eastern New York. He enjoyed interacting with fruit growers individually and collectively at meetings and conferences, and worked tirelessly to ensure that the results from his research program were widely used by the fruit industry in New York and elsewhere in the Eastern United States.

Rick was born in Faribault, Minnesota. As a youth he maintained a large insect collection. He later became interested in agricultural entomology while he was employed as an inspector in a vegetable cannery in his home town. He earned a B.A. degree in political science at Bowling Green State University in 1966 and continued in this institution until obtaining an M.A. degree in 1968. He completed a Ph.D. degree in entomology under Dr. H. Chaing at the University of Minnesota in 1972, and subsequently conducted post-doctoral work as a research fellow investigating the ecology of arthropods in alfalfa planting systems.

He came to the Hudson Valley Laboratory in 1974 as a research associate with a joint assignment in research and extension. The general focus of his work was to study the biology and ecology of insects and mites attacking fruit crops in the Hudson Valley and to develop improved management programs that could be utilized by growers in the region. He was promoted to associate professor in 1981 and became a professor in October of 1990.

During his seventeen-year career at Cornell, Rick faced unique professional challenges because of the geographical isolation of the Hudson Valley Laboratory from both the Cornell campus and the New York State Agricultural Experiment Station at Geneva and the mandate of the laboratory to work closely with the fruit industry in Eastern New York. He was able to overcome these constraints and to develop an integrated research and extension program that was not only relevant to the fruit industry in Eastern New York, but became known throughout the other major fruit-growing regions in the United States and Canada.

In addition to his general studies of the biology and ecology of arthropod pests and important parasites and predators, he excelled in conducting large-scale research trials on arthropod control and management in commercial apple orchards. He was particularly adept at designing these trials so that the results were particularly useful to fruit

growers. One of his earliest contributions to the apple industry in Eastern New York was to develop an improved management program for two leafminer species that had become serious pests in apple orchards in the Hudson Valley because they had become resistant to commonly used insecticides. He initially conducted laboratory tests to formally confirm this resistance and followed this discovery with additional laboratory and field tests to identify insecticides that could be used to effectively control this pest. He was also involved in basic ecological studies to compare the biology and damage caused by the two species and worked cooperatively with other scientists in the Northeastern United States to map the geographical distribution of the two species in major apple production areas within the region. Finally, he worked cooperatively with other scientists to develop sampling and monitoring techniques that could be used to detect the pest in commercial orchards and to define damage levels of this foliar pest that would require treatment to prevent economic damage. Because of his pioneering research efforts, apple growers in the Hudson Valley were able to effectively manage this pest and prevent serious losses of their crop during the late 1970s. Subsequently, as insecticide-resistant populations of these leafminer species were detected in other apple-growing regions, the results from his pioneering research efforts were widely used by other tree fruit entomologists to develop improved management programs for this pest in other parts of New York State and in many apple growing regions throughout the Eastern United States.

Another of his most important research contributions was the study of economics of insect damage on the packout of fruit from commercial apple orchards. He was one of the first scientists to set up large-scale management trials against multiple species of insects damaging fruit and he examined the economic impact of different levels of this pest damage on the percentage of fruit that is acceptably marketed as fresh fruit. Such information is vital to the development of realistic treatment threshold levels for insect pests that directly damage apple fruit. Because of his early work in this research area, many other fruit research and extension personnel throughout the United States have recognized the importance of economic studies of pest damage on fruit packout and have also conducted similar studies on other pest species.

He was recognized as a world authority on the various kinds of leafrollers that damage fruit. He organized and hosted several regional conferences on this important group of insect pests. He also tested the mass release of sex attractants to prevent the mating and reproduction of leafrollers in orchards. This novel control technique could be used to reduce the use of conventional toxic insecticides.

In 1990, he completed a chapter on the biology and management of leafroller pests in orchards in the Eastern United States for a current book on the biology and management of the World's leafroller pests of fruit.

Rick worked tirelessly in his extension program to educate growers about the biology and management of insects and to communicate the results of his research in extension meetings and through various extension publications. He was always willing to take time to answer individual grower's questions over the telephone and make personal visits to diagnose problems in orchards in Eastern New York. Because of his warm sense of humor and ability to simplify results from complex research trials, he was probably asked to speak at grower meetings throughout the Eastern United States and Canada more frequently than any other tree fruit entomologist within the region. Certainly, this popularity at grower meetings resulted from his proficiency in communication, his attitude toward extension, and the importance of his research and extension activities to fruit growers within the state and elsewhere throughout the region.

He had a warm, outgoing personality and enjoyed interacting with all different types of people. His sense of humor was legendary and he could always be counted on to provide several good jokes at any gathering. He was very active in community affairs and particularly enjoyed working with youth. For many years he coached little league baseball teams and also coached basketball teams for the Catholic Youth Organization and the New Paltz Middle School. He loved fishing; enjoyed running and downhill skiing.

He is survived by his widow, Diane; and two sons, Rhett, a 1991 graduate of Cornell University, and Nathan, who will enter Cornell in the fall of 1991.

Richard W. Straub, Harvey Reissig, Wendell L. Roelofs