

Edward Elmer Wilson, 1900–1985

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Edward E. Wilson, Professor Emeritus of Plant Pathology at the University of California, Davis, and longtime resident, died on January 27, 1985, after a long illness, thus ending more than a half-century of dedication to research and teaching. Dr. Wilson, son of Winifred Rebecca and Sydney Johnson Wilson, was born at Waupac, Wisconsin, on December 22, 1900. He is survived by his wife, Adelyn C. Wilson, his daughter, Nancy Serr, two grandsons, David and Jeffrey, and three great-grandchildren.

After graduating from high school in Burkesville, Kentucky, in 1919, he majored in agriculture at the University of Kentucky, then transferred to the University of Wisconsin to receive his B.S. degree in 1924. He continued into graduate study in plant pathology under Professor G. W. Keitt and earned his Ph.D in 1927. Immediately thereafter, he was offered and accepted the position of instructor. In June 1929, he traveled to California to accept the position of assistant plant pathologist at the University of California, Davis, where he pursued a long and productive career devoted to research on diseases of deciduous fruit and nut crops. He was promoted to professor and plant pathologist in the experiment station in 1946. Dr. Wilson retired as professor emeritus in 1968 but continued his scholarship by authoring (jointly with J. M. Ogawa) a comprehensive book entitled *Fungal, Bacterial, and Certain Nonparasitic Diseases of Fruit and Nut Crops in California*.

Dr. Wilson published extensively on studies of bacterial, fungal, and nonparasitic diseases of fruit and nut crops. For many years, he was the only pathologist in California whose time was devoted exclusively to diseases of these crops. His research on the etiology and control of the olive knot disease is credited with saving a number of olive orchards from the severe outbreak of this disease after the freeze of 1932. His interest in diseases caused by pseudomonads took him next to an exhaustive study of bacterial canker of stone and pome fruits. This involved comparisons of *Pseudomonas prunicola* (*P. syringae* pv. *syringae*) isolates and a critical study of the factors affecting development of this canker disease. He next discovered and described two new canker diseases of walnuts: bark canker, caused by *Erwinia nigrifluens*, and phloem canker, caused by *E. rubrifaciens*. He also isolated a bacteriophage associated with bark canker and studied its relationship to the two *Erwinia* species. His earlier interest in olive knot influenced him next to make an in-depth study of oleander tumors caused by the same pathogen (*P. savastanoi*). In his work with isolates from oleander and olive, he studied their metabolic behavior, their synthesis of indoleacetic acid, and the histopathology and systemic invasion of the host plant, and on the basis of physiological, serological, and pathological evidence, showed that *P. savastanoi* from olive and *P. tonelliana* from oleander are the same organism.

In the area of fungal diseases, Dr. Wilson studied the epidemiology of the branch wilt disease of walnuts caused by *Hendersonula toruloidea* and showed the relationship of nutritional and water stress to disease development. His interest in fungal diseases led to research on European canker of apples

caused by *Nectria galligena* that examined the mode of infection and the role of protective and eradicated fungicides in disease control. He pioneered the use of eradicated sprays for control of brown rot in apricots and almonds. His research interest extended to a study of almond bud failure where he determined the presence of two disorders: a serious, noninfectious (genetic) bud failure and a somewhat similar condition in the cultivar Drake caused by a virus related to the willow-twig disease of peaches. His research on the many facets of plant diseases caused by various parasitic and nonparasitic agents and his pioneering studies on bacterial diseases and on aerial dissemination of fungal spores led to his selection in 1951 as the ninth faculty research lecturer on the Davis campus. He was able to strike a happy balance between basic and applied research that resulted in his authorship or coauthorship of some 113 scientific papers and one book.

Dr. Wilson prepared and taught the first course on the Davis campus dealing with diseases of fruits, nuts, and vines; this course continues to be required in the department's graduate program. He directed the research of numerous graduate students seeking M.S. and Ph.D. degrees and served on many Ph.D. qualifying examination and dissertation committees and M.S. thesis committees. His students included W. B. Hewitt, H. N. Miller, N. F. Sommer, R. D. Schein, N. W. Schaad, C. J. Mirocha, A. R. Magie, J. D. Paxton, and F. M. Zeitoun.

Dr. Wilson had been a member of The American Phytopathological Society since 1922, serving as councilor of the Pacific Division (1943) and as editor-in-chief of *PHYTOPATHOLOGY* (1958–1960), where he introduced many innovations that improved the quality of the publication. He later served on the society's Committee on Monographs (1961–1963) and Committee on Publications (1960–1964). He was also a member of the editorial board of the *American Journal of Botany* and was invited to participate in a seminar on biological communications by the American Institute of Biological Sciences in Washington, D.C., in June 1961. At the University of California, Davis, Dr. Wilson served on several college and university committees including the very important Committee on Budget and Interdepartmental Relations. Likewise, within the Department of Plant Pathology, he served well on a variety of committee assignments and on several occasions served as acting chairman of the department.

As an international authority on fruit diseases and their control, Dr. Wilson spent two months investigating an outbreak of olive knot in Tunisia. One of the highlights of his foreign travels was a trip with his wife to Japan, where he addressed the 11th Annual Pacific Science Congress in Tokyo.

Dr. Wilson was also a member of the American Mycological Society, Sigma Xi, and the American Association for the Advancement of Science, in which he was elected a Fellow. In 1966, on the basis of his outstanding career in research and teaching, his international reputation as an authority on diseases of fruit and nut trees, and his service to The American Phytopathological Society, Wilson was honored by election as a Fellow.

Dr. Wilson was a kind and considerate man who took a keen interest in the welfare and development of his students. California agriculture, plant pathology, his peers in the department, and his friends in the community of Davis will miss this talented, dedicated scientist and tried and true friend.