

Lysle D. Leach, 1900–1987

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The death of Lysle D. Leach on December 29, 1987, after a long illness with cancer, brought an end to the career of one of plant pathology's truly distinguished scientists and educators. In 1929, as one of the first plant pathologists to be located at the University of California, Davis (then known as the "University Farm"), he played an extremely important role in the development of the fledgling Division of Plant Pathology, at that time an appendage of the Department of Plant Pathology at UC Berkeley.

He believed in a strong curriculum and a well-balanced research program, and during his more than fifty years' association with UC Davis, he was instrumental in the development of the eventually independent Department of Plant Pathology into one of leading departments in the nation.

Lysle was born November 10, 1900, in Stuart, Nebraska. He received his bachelor's degree in agriculture from Kansas State University in 1923 and served as instructor and athletic coach at Eskridge, Kansas, High School from 1923 to 1925. His next move was enrollment for graduate study at Iowa State University where he was awarded an M.S. degree in plant pathology in 1926 and the Ph.D. in the same discipline in 1930. Coming to the University of California in 1928, before the completion of his doctoral study, he joined the staff of the Division of Plant Pathology at Davis in 1929 as junior plant pathologist and instructor. After successive advancements, he attained the rank of professor of plant pathology in 1947 and retired as professor of plant pathology, emeritus in 1968.

From almost his first arrival at UC Davis, Dr. Leach played a key role in the teaching of plant pathology. He first organized and taught a course on plant diseases for nondegree students in 1932 and the following year was assigned the important degree course in general plant pathology required of all plant science majors. His appointment to assistant professor in 1933 represented the first professorship in plant pathology on the Davis campus. The excellence of his course in general plant pathology, which he taught for eighteen years, was recognized not only on the Davis campus but in other universities as well. In 1950, his philosophy and teaching methods for a course in general plant pathology were published as an invitational paper in *The Plant Disease Reporter*. In his later years, with the increased importance of graduate study in the department, Dr. Leach in conjunction with Dr. W. B. Hewitt organized and taught the important graduate course *Advanced Plant Pathology*, which emphasized the principles of plant pathology and a critical review of selected research papers.

Professor Leach's eminence in research, which dealt mainly with sugar beet diseases and seedling diseases of various crop plants, is well documented by his extensive bibliography (more than 120 papers). An early contribution was a method of determining the degree of infestation of field soil by the causal agent of the Sclerotium root rot of sugar beets. This led to a means of predicting plant losses and to effective methods of controlling this major disease. He also did definitive research on the preemergence damping-off of spinach, sugar beets, peas, and watermelons caused by *Pythium ultimum*, *Rhizoctonia solani*, and *Phoma betae*. He found that, other factors being constant, the relative growth rates of the host and pathogen determine to a considerable degree the severity of preemergence infection at different temperatures. Dr. Leach also was heavily involved in

the development of new seed and soil treatment chemicals and their application for the control of seedling diseases in sugar beets, cotton, and other field and vegetable crops. He also made significant contributions to our knowledge of several other sugar beet diseases, including downy mildew, powdery mildew, and Fusarium stalk blight. His research attracted international attention and resulted in his being invited as a consultant on sugar beet diseases to Denmark, Ireland, Chile, and Uruguay. Even after his retirement in 1968, Dr. Leach continued an active research program until shortly before his death that resulted in the publication of some 18 technical papers. His research was largely mission oriented, but it was well conceived, thoroughly conducted, and of immense value to California's agricultural industry.

In addition to his devotion to plant pathology, Professor Leach had a keen interest in student affairs and in the university's athletic program. From 1941 to 1964 he served as faculty representative to the athletic conference in which the university participated and to the National Collegiate Athletic Association. In this capacity he worked effectively to preserve the UC Davis philosophy that an athlete is a student first. Because of his keen interest in student affairs, in 1952 Professor Leach became the first dean of students on the Davis campus, a position he held until 1958. Despite the heavy administrative duties of his new position, he continued an active research program in plant pathology that resulted in the publication of 16 technical papers during this six-year period. He then returned to the Department of Plant Pathology where he served as chair from 1960 until his retirement in 1968. During this period of rapid campus growth, seven new academic appointments were made in the department and the number of graduate students nearly doubled to a maximum of 57.

As a result of Dr. Leach's distinguished career in teaching, research, and administration, he was the recipient of numerous awards and honors. These include the presidency of the Pacific Division of the American Phytopathological Society (1942), Faculty Research Lecturer (1955), presidency of the Davis chapter of Sigma Xi (1960), Miembro Academico, University of Concepcion, Chile (1962), membership on the National Academy of Sciences's committee on plant and animal pests (1963), Who's Who in America (1964), Fellow, American Phytopathological Society (1965), recipient of a resolution of appreciation from the national Cotton Disease Council (1981), election to the Cal-Aggie Athletic Hall of Fame (1984), and the Meritorious Service Award of the American Society of Sugar Beet Technologists (1985). A further honor of great significance was the naming, in 1982, of the campus graduate-student residence complex the Lysle Leach Hall. A final tribute to Professor Leach was his selection by the UC Davis administration to prepare an oral history of his more than fifty years on the Davis campus. This culminated in the fascinating 200-page book "University Plant Pathologist at Davis: Memoirs of Lysle D. Leach" published by the university in 1983.

Lysle was a devoted husband, a caring father, and a very friendly man with a positive outlook on life. For him each day was an opportunity to accomplish something; no problem either in research or administration, was too difficult to solve. He was a great outdoor person who thoroughly enjoyed skiing, hiking, and back-pack fishing trips to the more remote lakes and streams of the high Sierra Nevada. Lysle is tremendously missed by his family and by his friends in the university, the community of Davis, and California's agricultural industry. He is survived by his wife, Jane, to whom he was happily married for nearly 60 years; two daughters, Joann Larkey and Janet Chapman; a son, Douglas; seven grandchildren; and two great grandchildren.