Charles Leonard Fergus, 1917-1986

Richard D. Schein



Charles Leonard Fergus, professor emeritus of botany at The Pennsylvania State University, died December 25, 1986. He had retired from the university in 1983.

Dr. Fergus, known to his friends and colleagues as Leonard, Len, or Lennie, was born November 11, 1917, in Ottawa, Kansas, and attended the public schools there. He received the A.B. degree in 1940 from Ottawa University (Kansas) in biology and chemistry, and the master's degree in botany (mycology) under A. J. Mix at

the University of Kansas in 1942. After a period in the United States Navy with the rank of lieutenant, he entered The Pennsylvania State University in 1945 and finished a Ph.D. under James W. Sinden in 1948. The dissertation was entitled "Growth and Ethylene Production of *Penicillium digitatum* Sacc." He was appointed instructor in 1948, assistant professor in 1949, associate professor in 1953, and professor in 1960.

He was married in 1942 to Ruth Foote; to this union were born three sons, Charles L., Michael F., and Brian S.

In 1950, Fergus and C. L. Morris published one of the first reports of the oak wilt disease; during the next decade, with colleagues and students, he published almost 30 papers on aspects of this disease and its causal fungus. At that time, botany and plant pathology were in the same department, and Leonard taught forest pathology and plant pathology techniques as well as mycology, demonstrating the breadth and facility that characterized his career. As a plant pathologist he reported on Phyllosticta leaf spot of maple, the chemical control of oak wilt, Cylindrosporium of Spiraea, Myrothecium on gardenia, and Botryoplodia canker of oak, among other subjects. He had a strong interest in the general physiology of fungi, particularly as related to their fructification, and over the years he produced many publications on the effects of physical and chemical environment. In the 1960s he was called upon for advice concerning fungi in cattle feeds and the role of thermophilic fungi in the making of high-quality compost for the mushroom industry; funds made available because of the economic potential of these organisms supported research by himself, colleagues, and several of his students. This work, on fatty acids, enzymes, lipids, and on the effects of the physical environment on such functions as germination and longevity, comprised a major contribution to the understanding of the thermophilic fungi. He also had an abiding interest in the slime molds. Among his students were Samuel W. Braverman, Robert DuBois Bonner, Fields W. Cobb, Jr., Jorge P. Juliano, Khalil K. Al-Hassan, and James J. Deploey.

Leonard developed a number of courses and laboratory outlines for mycology courses. He taught basic and advanced systematic mycology courses, as well as field mycology, physiology of fungi, general botany, and general biology. His "Illustrated Genera of Wood Decay Fungi" (1960) served well a generation of mycologists and plant pathologists. He was curator of The Pennsylvania State University's mycological herbarium, which contains the large collection of the Polyporaceae of Lee Overholts.

Leonard enjoyed a long friendship with his mentor, Dr. James Sinden, who had founded The Pennsylvania State University's mushroom research program in the 1920s. He spent sabbatic leaves in 1962, 1969, and 1976 with Dr. Sinden at the E. Hauser Mushroom Laboratory in Gossau-Zurich, Switzerland.

As a matter of long-held principle, Leonard gave freely of himself to others. Besides service on numerous college and university committees, he served in the university senate and for over twenty years on the premedical committee of his college. He was concerned for the quality and breadth of premedical education, was proud of The Pennsylvania State University program, and recommended many students to medical schools. He had served on the community Shade Tree Commission and was active in his church. Most representative of this man was the activity he took up on retirement: he served as a teacher's aide at a local grade school and as a volunteer in the emergency room of the local hospital. In 1986, the State College School District named him its "Volunteer of the Year." He served on the membership committee of the Mycological Society of America (1955-1974) and as an associate editor of Phytopathology. He was a member of Gamma Sigma Delta, The Society of the Sigma Xi, and Xi Sigma Phi science fraternities, and served as faculty advisor to his social fraternity, Pi Kappa Phi.

In college, Leonard had been an outstanding half miler, and throughout his life enjoyed and encouraged physical exercise. He resumed his running after service in the Navy and exercised almost daily thereafter. His sons have ventured the opinion that Leonard Fergus died as he would have chosen, on the completion, on Christmas, of his daily run.