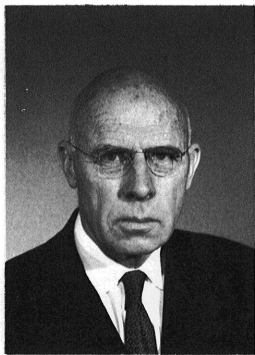


Karl Herman Fernow, 1893–1983

Edward D. Jones, William F. Mai, and Leon J. Tyler



Karl Herman Fernow, Professor Emeritus of Plant Pathology, died on March 30, 1983, at the age of 89, ending a 71-year association with Cornell University.

Dr. Fernow was born in Washington, D.C., on October 12, 1893. He enrolled in the College of Agriculture at Cornell in 1912 and received a Bachelor of Science degree in 1916. During his undergraduate

years he was active in athletics, winning three letters in varsity crew. In addition, he was a great lover of music and an able musician. He was a member of the University Orchestra from his freshman year until 1931; his specialty was the cello, which he continued playing for many years as a member of string ensembles.

Dr. Fernow became interested in potato diseases while working as a Special Field Assistant in Steuben Co., New York, during the summers of 1919 to 1922. In 1922, he was appointed an inspector in the seed potato certification program, a joint effort between the Department of Plant Pathology and the New York Seed Potato Association. He became an instructor the following year, and after completing his Ph.D. degree in 1925, was appointed an assistant professor. He spent his entire career at Cornell, being appointed an associate professor of plant pathology in 1947, a full professor in 1957, and emeritus professor in 1961.

Dr. Fernow was a pioneer in the field of seed potato certification and potato diseases. His doctoral thesis, entitled "The interspecific transmission of mosaic diseases," was published as Cornell Memoir 96 at a time when very little was known about plant viruses. When he joined the faculty, he was placed in charge of the seed potato certification program, a position that he held until his retirement in 1961. Over his long career he lectured on virus diseases of potato to two generations of potato growers and 4-H club members, prepared field demonstrations and exhibits on potato diseases, and published many bulletins and articles. He taught a short course about plant diseases to winter course students from 1925 until it was discontinued in 1942.

In 1932–1933, he spent a sabbatical leave studying potato diseases in Germany and in 1948–1949, worked for the Colombian government on inspection, potato diseases, and related problems. As head of the potato certification program, Dr. Fernow instituted

numerous innovative ideas to improve the fledgling program. He conceived the idea of growing representative samples of seed lots in a southern winter test so that disease content and other factors pertinent to seed productivity could be obtained before the next growing season. This procedure is used today throughout North America by most seed potato certifying agencies. He was one of the first agricultural scientists to use tuber indexing as a method of detecting and controlling seedborne pathogens.

For many years Dr. Fernow worked on potato spindle tuber, a disease first identified by Dr. Fernow and another scientist working independently. By using the tomato challenge bioassay, which he developed, he established that mild strains of the causal agent gave cross-protection to severe strains on inoculated tomato plants. Other early researchers worked briefly on spindle tuber but turned to other disease problems because of conflicting and inconsistent data. Dr. Fernow, however, continued with great persistence and tenacity, conducting greenhouse and field experiments with this disease until well past his 86th birthday.

Dr. Fernow was a widely recognized authority on potato diseases, especially those caused by viruses. He made outstanding contributions to the identification and control of this broad group of plant pathogens. His keen powers of observation, accurate diagnoses, and sound judgment in making recommendations for disease control were well known throughout the country. He authored numerous papers and abstracts in scientific journals, particularly the *American Potato Journal* and *Phytopathology*, as well as many extension bulletins. He was also recognized as a leader in the development of sound seed certification policies and procedures.

A quiet, modest man with a dry sense of humor and a master of the one-liner, he was always succinct and direct. He established a potato inspection service of unimpeachable reputation, and his sincerity and integrity were never questioned by the people he served.

Dr. Fernow was elected an Honorary Life Member of the Potato Association of America in 1955. He was also a member of the American Phytopathological Society, American Association for the Advancement of Science, Sigma Xi, Gamma Alpha, Scorpion, Sphinx Head, Mandolin Club, and Helios.

Dr. Fernow was married in 1923 to Lucy Kephart, a native Ithacan. He is survived by two children, David and Mary Elizabeth, and eight grandchildren. He was preceded in death by his wife, Lucy, and his son, Leonard. Dr. Fernow will long be remembered by his family, friends, and colleagues and will be missed by all who knew him.