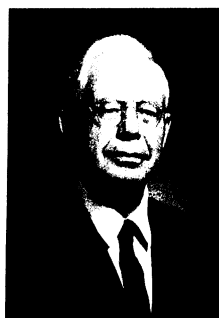


John Charles Walker, 1893 to 1994

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John Charles Walker, Professor Emeritus of the Department of Plant Pathology, University of Wisconsin-Madison, died of pneumonia in Sun City, AZ, on 25 November 1994 at the age of 101. Professor Walker was born on 6 July 1893 in Racine, WI. He was preceded in death by his first wife, Edna Dixon Walker, in 1966, his second wife, Marian Dixon Walker, in 1982, and his son, John William Walker, in 1938. He is survived by many nieces and nephews.

Dr. Walker earned his B.S., M.S., and Ph.D. degrees from the University of Wisconsin-Madison. He served as a scientific assistant in the U.S. Department of Agriculture from 1917 to 1919 and as an assistant, associate, and full professor of Plant Pathology at the University of Wisconsin-Madison until his retirement in 1964. From 1919 to 1944, he was jointly employed by the U.S. Department of Agriculture as a pathologist. In 1952, Dr. Walker was a visiting professor at the Instituto Biologico in Sao Paulo, Brazil.

In 1919, Dr. Walker joined the Department of Plant Pathology at the University of Wisconsin-Madison and began exploring genetic resistance to plant disease while working with cabbage, a major crop in the state that had a severe disease problem. He was the first scientist to demonstrate the chemical nature of disease resistance in plants. This pioneering research in disease resistance in plants had a strong impact on world agriculture. As a result of his research, the cabbage industry was saved by the development of a yellows-resistant cultivar, Wisconsin Hollander No. 8. Later, Dr. Walker's research solved the blackleg disease that hit the cabbage industry. The disease was transmitted from one crop to another through seed. Dr. Walker quickly controlled this problem by showing that if cabbage seed was produced in the Pacific Northwest instead of in Wisconsin, it was disease-free. This was a prime factor in the shift of the cabbage seed industry from Northern Europe to the United States.

During the 1940s, Dr. Walker was credited with saving the cucumber industry in Wisconsin by discovering the source of resistance to the spot rot that killed the plants during early spring. During the same decade, he restored the state's canning-beet industry by developing an inexpensive treatment to cure the boron deficiency he identified in the crop. In studying environmental factors that cause disease, Dr. Walker went on to develop disease-resistant cultivars of onion, cabbage, bean, and pea, as well as beet and cucumber. Modified versions of some of the disease-resistant vegetables he developed are still on the market today.

Dr. Walker also guided the development of Wisconsin's potato seed foundation and certification program—a model program that cleaned up Wisconsin's disease problems. Dr. Walker tutored 75 graduate students in their degree programs before his retirement in 1964; many went on to prominent careers in agriculture, ap-

plying his methods around the world. Dr. Walker authored or coauthored 450 technical publications and authored two textbooks, *Plant Pathology* and *Diseases of Vegetable Crops*. These have been cornerstone texts in the field of plant pathology.

From 1919 to 1960, Dr. Walker was involved with teaching the course "Introductory Plant Pathology—Diseases of Plants." He also assisted in teaching "Principles and Methods in Plant Pathology" as well as "Diseases of Garden Crops" and "Diseases of Vegetable Crops." Throughout his career, Dr. Walker was invited to present papers at international congresses, and in 1953, he was a guest lecturer at the Agricultural Institute of Sao Paulo, Brazil.

In 1959, the Racine, Wisconsin Chamber of Commerce presented a check to the president of the Wisconsin Alumni Research Foundation to establish the J. C. Walker Lectureship in the Department of Plant Pathology at the University of Wisconsin. Earnings from the fund are used to bring guest lecturers to the department who are distinguished in the field of plant pathology. This lectureship was established in honor of Dr. Walker's development of disease-resistant crops that had saved a \$17-million-a-year industry in Wisconsin.

In 1960, Dr. Walker received an Honorary Doctor of Science degree from the University of Göttingen, Germany. In 1961, he was honored by the gift of a range of greenhouses presented by the National Kraut Packers Association in recognition of his contributions to the cabbage growers and kraut packers. In 1978, Dr. Walker received a \$50,000 Wolf Foundation Prize in Agriculture and was cited for making "significant and lasting contributions to the advance of world agriculture." The prize committee wrote that "he may be judged among history's greatest three or four plant pathologists."

Dr. Walker was a Life Member of the American Association for the Advancement of Science, a member of the National Academy of Sciences, and a recipient of the Merit Award of the Botanical Society of America. He was named an honorary member of the Indian Phytopathological Society and was elected Fellow of and given the Award of Distinction by the American Phytopathological Society. When he completed his B.S. degree at the University of Wisconsin, he was awarded the Science Medal of the University for an outstanding baccalaureate thesis.

Dr. Walker has been honored by the British Association of Applied Biologists, the Vegetable Growers of America, the American Seed Trade Association, the National Manufacturers of Processing Equipment, the National Kraut Packers Association, the National Pickle Packers Association, and the U.S. Food Processors Association through the Forty-Niners organization. In 1972, the Department of Plant Pathology at the University of Minnesota, St. Paul, presented Dr. Walker with their prestigious E. C. Stakman Award.

Professor John Charles Walker will be remembered as a scientist, teacher, author, and internationally eminent researcher and as one who was distinguished for his practical scientific knowledge, which he applied to breeding disease-resistant vegetables for the benefit of humanity.