

Elvin Charles Stakman, 1885–1979

Elvin Charles Stakman was Professor and Head of Plant Pathology at the University of Minnesota from 1913 to 1953. He was born on a farm near Algoma, Wisconsin, but grew up in Brownton, Minnesota. He was renowned as a great teacher and leader of research, best known for his development of the concept of physiologic specialization and its significance in biology and in the breeding of disease-resistant cultivars of crops. His initial efforts were with the rusts and smuts. He actively promoted international cooperation in plant pathology and related fields, beginning in Mexico.



He taught high school in Red Wing, Mankato, and Argyle, Minnesota, after graduation from the University of Minnesota and then entered graduate school to earn his M.A. degree in 1910. His advisor for the doctorate was E. M. Freeman, the tenth president of The American Phytopathological Society. On July 1, 1913, when he was 28 years old, Stakman was made head of the Section of Plant Pathology and Agricultural Botany. The department name was changed later, but he was head until he retired in 1953.

In 1918, Stakman was instrumental in starting the campaign to eradicate barberry bushes, the alternate host to the black stem rust fungus. He enlisted support from both national and state departments of agriculture, as well as business tycoons in railroad, milling, farm equipment industries, and bankers to accomplish this goal. By 1954, more than 450 million barberry bushes had been destroyed. In 1941, the Rockefeller

September 2007



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Foundation asked Stakman, Paul Mangelsdorf at Harvard University, and Richard Bradfield at Cornell University to survey the agricultural scene in Mexico and advise them whether to undertake an agricultural research program there. Stakman was involved in the subsequent organization of this program, which was eminently successful and fostered agricultural research by other international groups. Norman Borlaug, a University of Minnesota graduate, was awarded the Nobel Prize for Peace for his work in Mexico and elsewhere in the development of the Green Revolution and the development of dwarf cultivars of disease-resistant wheats.

Stakman published more than 300 papers and several books. Some of the topics dealt with science in education and have become classics. His publication record could easily have been greater if he had agreed to be listed as a co-author of his students' theses.

His many honors included honorary doctorates from six institutions and election to the National Academy of Sciences. He was president of The American Phytopathological Society in 1922 and president of AAAS in 1949. He was a member of a national commission of UNESCO (1950–1956) and the Advisory Committee on Biology and Medicine of the Atomic Energy Commission (1948–1954) and held various offices of the National Research Council in 1931–1934, 1937–1938, 1947–1948, and 1950–1958. He was accorded the title of “Statesman of Science” by the Cosmos Club of Washington, DC. Stakman Hall of Plant Pathology on the St. Paul Campus of the University of Minnesota is named after him.

Stakman totally committed himself to plant pathology, the University of Minnesota, and the graduate program. A 12- to 16-hour day was normal, and students would find him available in the building at almost any time of day or night, when he was in town. He was greatly interested in students and made himself readily available for counsel.

Although offered positions as president of several colleges and universities, he chose to remain at Minnesota. His great love was teaching, and he inspired many to achieve, often beyond their own expectations. Stakman made plant pathology exciting to graduate students. Every visiting scientist from outside the state was introduced to each graduate student. Stakman knew what each student was doing in research and could talk to each one on the progress and aims of that thesis research. He promoted and participated strongly in a Thursday night, non-credit seminar, during which faculty and students could meet and discuss science research here and elsewhere to broaden their education as well as to learn to deal with ideas on an equal footing with other students and faculty. Both plant pathology and science in general were explored and discussed at length. It was an intellectual experience always to be remembered.

Prepared by Thor Kommedahl