## Matthew Bowie Moore, 1905-1985

E. E. Banttari and R. J. Zeyen



Matthew B. Moore, "Matt," Professor Emeritus, Department of Plant Pathology, University of Minnesota, died July 10, 1985, in St. Paul, MN after prolonged illness.

Matt was born on April 11, 1905, in St. Paul and lived most of his early life on a small fruit farm that was eventually incorporated into the city limits of St. Paul. He attended Mechanic Arts High School in St. Paul and transferred to the School of Agriculture at the University of Minnesota where he completed his

high school education in 1924. He received a B.S. degree in plant pathology in 1929 and an M.S. degree in 1934 from the University of Minnesota. While completing the B.S. and M.S. programs, he worked as a laboratory assistant and as a U.S. Department of Agriculture technician on cereal rusts, and in 1931-1932 was on leave from Minnesota as an instructor in the Department of Botany at Lousiana State University. In 1932, he joined the faculty of the Department of Plant Pathology at Minnesota as an instructor and held that position until his retirement in 1973. He spent the summer of 1958 as an invited lecturer at New Mexico Highlands University, Las Vegas, New Mexico, and in both 1960 and 1962 he was on leave as a consultant to the Alaska Agricultural Experiment Station, at Palmer, on cereal, timothy, and alfalfa diseases. After retirement in 1979, he was an invited instructor of cereal diseases for CIMMYT trainees in Obregon, Mexico.

Matt was an avid naturalist, knew crop production systems well, and was an astute observer of a vast array of natural phenomena. Often fields and woodlands were his classroom and field trips with him were particularly stimulating. Freeways were avoided if reasonable routes "down the back roads" were available and there were frequent stops to observe and discuss plants and their diseases. Matt was also very innovative with equipment and gadgets used in research, developing smut inoculators, multiple rust inoculators, and devising or modifying planters and harvesters. Many of his creations are still in use today.

Matt taught Introductory Plant Pathology from 1942 to 1973, and literally thousands of Minnesota students got their initial exposure to plant pathology through the expert teaching of Matt Moore. His introductory course was a "Minnesota Tradition" legendary for its excellence, with facts and principles clearly stated in lectures, and with laboratories and independent student projects that stressed "hands on experience" with plants and disease agents.

It was common to find Matt and several students looking at cultures of pathogens or discussing their discoveries long after scheduled class periods were over. Matt stimulated and challenged students, opened new worlds for them, encouraged those who had the spark of scientific curiosity, and through this process touched the lives of many. Former students and colleagues often dropped in to visit Matt and to discuss plant pathology with him.

Oat development with emphasis on oat crown rust resistance was Matt Moore's main research activity. In research, as in all aspects of his life, conventional wisdom never held sway over Matt's own observations and intuition. In 1953, while the barberry eradication program (initiated by Dr. Stakman at Minnesota to remove the alternate host of stem rust of wheat and thus eliminate the pathogen's sexual cycle) was being completed on the Great Plains, Matt was busy planting a buckthorn nursery (the alternate host of crown rust of oats) on the St. Paul campus. Needless to say, his "buckthorn nursery" did not meet with universal acceptance. Nevertheless, Matt had seen crown rust of oats overcome resistance gene after resistance gene and he wanted to find durablegeneralized resistance to most, if not all, races of the oat crown rust fungus. Matt correctly figured that the geographic isolation of the St. Paul test plots would significantly reduce any threat that buckthorn-generated races of crown rust would pose to commercial fields. He needed the buckthorn nursery for maximum sexual recombination of the oat crown rust pathogen to screen oat parental material for generealized resistance. As he pursued the objective of finding generalized resistance, breeders and pathologists from other states and nations sent oat selections to him for screening; among these were some that had moderate resistance to all races of crown rust.

Throughout the years of selecting for generalized resistance to oat crown rust Matt Moore worked cooperatively with several oat breeders in the Department of Agronomy and Plant Genetics at Minnesota, and played a major role in the development of 17 oat cultivars released by the Minnesota Agricultural Experiment Station. In 1979, the cultivar "Moore," which has solid generalized resistance to more than 54 races of oat crown rust, was released in honor of Matt's contributions to oat breeding and development in Minnesota.

Matt Moore touched many lives in his long and useful career and is remembered by former students and colleagues throughout the world, not only for his teaching and research contributions but also for his unique character and integrity. His contributions were many and of real and lasting value, and he was among the strongest supporters of the Department of Plant Pathology at Minnesota. He is survived by his wife Dorothy and son Douglas.