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Charles M. Brown
Award for Distinguished Service to Oat Improvement



Dr. Charles M. Brown, Professor of Agronomy at the University of Illinois, has had a major impact on oat improvement. As a plant breeder and geneticist, Dr. Brown has made many significant contributions in oat breeding and research.

Dr. Brown was born in South Carolina where he was raised on a farm. He attended Clemson University and was awarded the B. S. degree in Agronomy in 1950. He then moved to the University of Wisconsin where he earned the M. S. and Ph. D. degrees in Agronomy under the direction of Hazel Shands. In 1954 he became the oat breeder at the University of Illinois where he has led an extraordinarily strong program in oat breeding and research for 35 years.

Dr. Brown has developed many improved oat varieties. These varieties have provided significant improvements over previously grown varieties in yield, oil and protein content, lodging resistance, barley yellow dwarf resistance (BYDV), and crown rust resistance. The widespread commercial production of these varieties demonstrates the significance and economic impact of Dr. Brown's contributions to oat improvement. In 1989, 49 % of the oat acreage planted in the United States to produce certified seed was planted to varieties developed by Dr. Brown. One of these varieties, Ogle, has been especially outstanding for high yield, BYDV resistance and very wide adaptation. Ogle has been grown commercially from New York to Nebraska and from the southern cornbelt to Canada. Ogle has been the highest yielding variety in many areas for over ten years.

Another testimony to Dr. Brown's success as an oat breeder is the fact that one or more of his varieties have been included as checks in both the Uniform Early and the Uniform Midseason Oat Nurseries every year since 1970. Further, many varieties and germplasm lines from his program have been used extensively as parents by other oat breeders in the United States and around the world.

Dr. Brown has authored or co-authored numerous publications and several book chapters. In addition to variety and germplasm development, his major accomplishments include developing efficient, effective procedures for screening germplasm for resistance to BYDV; developing a modified system of single seed descent for rapid generation advancement; demonstrating maternal inheritance of oil content; and describing the pollen tube growth, fertilization, and early kernel development of *Avena sativa* and interspecific crosses with other *Avena* species. Dr. Brown and his colleague Dr. Henry Jedlinski also conducted research on the inheritance of BYDV and on cross protection in oat by different strains of BYDV.

In addition to his work on oat, Dr. Brown has conducted a research and breeding program on wheat. He has served as associate head of the University of Illinois Department of Agronomy for over 20 years and has been acting head of the Department of Agronomy on three separate occasions. His administrative ability has also been demonstrated in his service on numerous campus committees, such as chairman of the variety review committee. Dr. Brown has been involved in many committees and activities of the American Oat Workers and other professional organizations, served as chairman of the executive committee of the American Oat Workers, and has been a member of delegations informing members of the House and Senate about oat production and oat research priorities.

Dr. Brown has received a number of awards including; designation as a Fellow of the American Society of Agronomy and the Crop Science Society of America; recipient of the 1987 Paul A. Funk Recognition Award from the University of Illinois College of Agriculture; and recognition as an Honorary Life Member of the Illinois Crop Improvement Association and the Illinois Seed Dealers Association.