Barley Genetics III

Proceedings of the Third International Barley Genetics Symposium

Garching 1975

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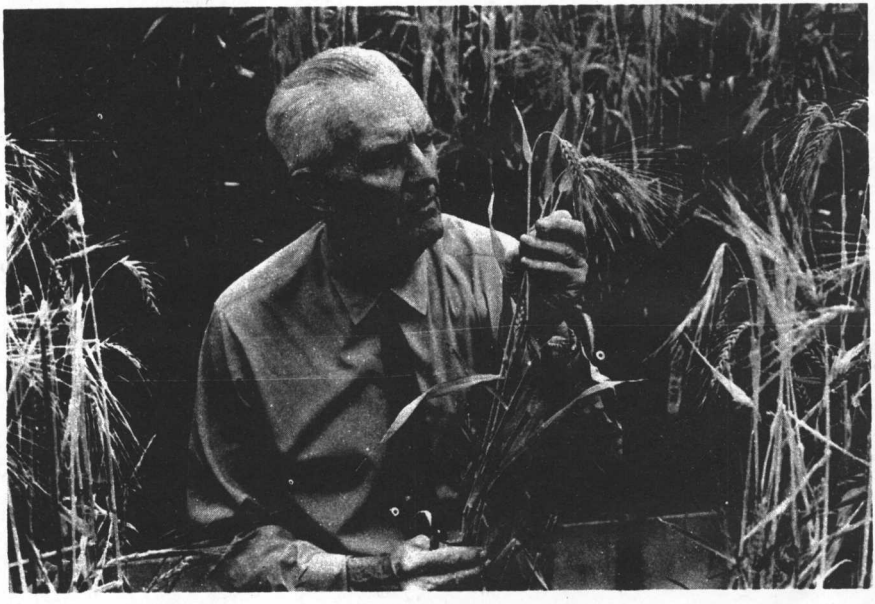
This Volume
is dedicated to
GUSTAV A. WIEBE



GUSTAV A. WIEBE (1899–1975)

Gustav A. Wiebe

These proceedings of the Third International Barley Genetics Symposium are dedicated to our friend and colleague Dr. Gustav A. Wiebe.

Dr. G. A. (Gus) Wiebe died of cancer in Washington, D.C., on August 28, 1975. He was born in 1899 in Brainard, Kansas, but moved with his parents to near Aberdeen, Idaho, at the age of 3 years. He began working as a youth on the Aberdeen Agricultural Experiment Station, where he later spent many summers conducting his studies on barley genetics. He earned his B.S. degree from the University of Idaho in 1922 and M.S. and Ph.D. degrees from the University of California in 1925 and 1933, respectively.

He joined the United States Department of Agriculture in 1917 and was in Idaho and at the University of California at Davis until 1936 when he transferred to the Washington area. He was leader of the Barley Investigations from 1944 until he retired in 1969.

Gus Wiebe loved his research on barley and was a world authority on barley breeding and genetics. He had travelled in many South American countries and in Ethiopia where he collected species and land races of *Hordeum*. During his long career he visited most of the institutions and individuals interested in barley improvement. He was a dedicated scientist who stimulated, encouraged, and gave ideas to many individuals for initiating and developing new techniques and procedures in their research.

He was on the organizing committee for the 1st International Barley Genetics Symposium in the Netherlands in 1963; was president of the 2nd International Barley Genetics Symposium in Pullman, Washington, in 1969; and gave the opening address at the 3rd International Barley Genetics Symposium in Munich, Germany, 1975. He was responsible for organizing the American Barley Research Workers' Conference and served as the secretary of that conference from its beginning in 1951 until he retired in 1969.

Dr. Wiebe received many honors. He was a Fellow of the American Association for the Advancement of Science and the American Society of Agronomy. He received the Superior Service Award in 1961 and the Distinguished Service Award in 1969 from the United States Department of Agriculture. In 1969 the University of Idaho conferred on him an honorary D.Sc. degree.

Those of us who had the privilege of knowing and associating with Gus Wiebe will miss him very much because of his knowledge of barley and keen sense of humor. We are most fortunate that in spite of his poor health he was able to prepare and present the opening paper of the 3rd International Barley Genetics Symposium. The title of the paper was, "The Challenge Facing Barley Breeders Today". In that paper the describes many of his ideas and thoughts. The challenges which he presented should be carefully studied and considered. The challenges are difficult, but he did give some guidelines for their solution.

John G. Moseman

Introduction

Barley is of great interest to geneticists and plant breeders. The genetics of barley has been more intensively studied than that of most other higher organisms and as a crop it has been under cultivation for almost 10,000 years. Barley is one of the most important plants contributing towards world food production.

A considerable amount of new information concerning barley genetics and its applications in improving breeding techniques has been acquired since the Second International Genetics Symposium held at Pullman, Washington, USA, in 1969. The proceedings of the Third International Barley Genetics Symposium demonstrate this recent progress. The Third International Barley Genetics Symposium was held at Garching near Munich from July 7 to 12, 1975. It was sponsored by the Ministry of Research and Technology of the Federal Republic of Germany via the Gesellschaft für Strahlen- und Umweltforschung mbH., München, BRD (Organisation for Radiation and Environmental Research) and supported by donations from many firms and associations.

One of the prerequisites for successful meetings of this type is to hold it at a relatively isolated place. For this reason the Local Organizing Committee decided to have the Symposium not in Munich itself, but nearby in Garching. The participants were accomodated at three sites, namely in an hotel in Munich and in various hotels in Erding and Freising, with buses provided back and forth. Garching is approximately in the centre of a triangle formed by these three locations. Consequently, although possible, it was not very easy for the participants to escape the lectures and discussions in Garching for the various temptations of the fascinating city of Munich, with its combined contrasts and reconciled extremes.

Another philosophy of the Local Organizing Committee was that about 25 percent of the time available should be left for discussion and that there should be enough time for various social activities. The renewal of old friendships and the creation of new contacts among the participants were regarded as important as the papers themselves. The latter can be read in detail in the present volume.

A total of 182 participants from 36 nations registered for the Symposium and for some sessions as many as 250 were present. The number of lectures given was 93. The number of full papers printed in the present proceedings is 95. In addition 39 abstracts are to be found here. Most of the full papers are published more completely than they were presented orally.

The Symposium program consisted of 9 sections which are to be found under "Contents" of the proceedings. The volume also includes reports from various Committees.

As in the previous two proceedings the information in the present volume will be valuable not only for barley geneticists but also for plant breeders and geneticists in general. It is also hoped that newcomers will learn to love barley and barley genetics.

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March 1, 1976

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