CONFERENCE ON CLIMATIC ADAPTABILITY OF CEREALS

(held at Braunschweig–Gliesmarode, Germany, 22th April 1954)

The "Foundation for Co-ordination of Culture and Research of Breadgrains" (COCOBRO-Wageningen) is an "object association" in which representatives of agricultural practice and plant breeding, of cereals trade, of millers and bakers, of agricultural institutes and of the Netherlands Ministry of Agriculture have joined. Among other things, a special research team is engaged in the study of the climatic resistance of cereals. From a free and friendly co-operation of the COCOBRO with various institutes and breeding establishments in Western Europa arose the need to interest a wider circle for these problems and to try to form a European research team.

The COCOBRO invited 36 research workers and plant breeders from the Netherlands, Belgium, Switzerland, Austria, Denmark and both parts of Germany. Representatives of France, England, Italy and Sweden, who had also been invited, could not participate on account of special reasons.

The conference had been introduced by an extensive working paper on:

I Trials on time of sowing.
II The problem of cold resistance with cereals.
III Low temperature requirement and development in different climates.
IV Influence of day-length in wheat and barley.
V The course of vernalization of 6 winter wheat varieties sown November in the open.

Prof. A. DUMON, Louvain/Belgium was appointed chairman. After the greetings expressed by the president of the Biologische Bundesanstalt, Prof. Dr H. RICHTER, who had placed at the meeting's disposal the conference room of the new Institute of Virus Research and who had taken the trouble of preparing the local accomodations, Dr Ir W. FEEKES, as the chairman of the Research Team on Climatic Resistance, commented upon the communication.

The height, the reliability and the structure of the yield of cereal varieties in different climatic regions is dependent on the time of sowing determined by a satisfaction of the low temperature requirement, by the response to light periodicity, by the cold resistance, the speed of development, the resistance of drought, heat, moisture and to all fungous diseases and insect pests the occurrence of which also depend upon the weather. The biological problems bearing upon this subject are so extensive and so difficult to survey in their mutual relations, that co-operation in this field should not limit itself to an occasional exchange of investigation results. It requires a joint planning of the work in advance, together with a co-ordination of working aims and methods.

1 *International tests on time of sowing with different species and varieties* should aim at:
   a learning the response of species and varieties in the field in different climatic regions (in order to characterise the progress of growth it is necessary to establish a simple, standardized method of describing the developmental morphology);
   b giving a biological characterization of the climatic regions and course of the weather in a year ("Climate meter") with the aid of a standard assortment.
2 *Climatic descriptions of the different growth regions of cereals* with the aid of the data of the meteorological Institutions.
3 *Development and co-ordination of test and selection methods,*
   a to establish the cold resistance and the winterhardiness resp., making allowance for the jarovisation status and periodicity;
   b to determine the "summer" resistance (drought, heat, moisture).
4 *Provision of standard assortments* for the benefit of all the testing and breeding work.

In order to start on this preliminary limited working programme, the members of a "Committee for the Research on Climatical Adaptability of Cereals" (Secretary: COCOBRO, Emmapark 31, Wageningen, Netherlands) have been appointed.

Prof. Dr J. C. DROST, Wageningen and Prof. E. LAROSE, Gembloux, will be asked to consider the form of organisation most suitable for this European working party.