

## I. MINUTES OF THE 1955 MEETING OF MAIZE GENETICISTS

Approximately 40 maize geneticists attending the A. I. B. S. meetings at Michigan State University met in conference on September 8, 1955. Dr. James Wright opened the meeting by outlining the agenda to be discussed.

Dr. E. B. Patterson reviewed briefly the transfer of Maize Genetics Cooperation genetic stocks from Cornell University to the University of Illinois, and reported on the present status of the program. The assembly, evaluation, maintenance and distribution of genetic stocks is currently being supported by funds from Research and Marketing, 9B3 (NC-7). Funds for closely-related research activities, including derivation of new tester combinations, linkage determinations of unplaced genes, and the search for new genes are provided by the University of Illinois. In order to improve the vigor and adaptability of the genetic stocks, crosses are being made to selected commercial inbred lines of the corn belt. In response to a question, it was pointed out that the maintenance of a standby collection of genetic stocks at Cornell University has now been discontinued.

Discussion was then directed to a consideration of future plans for preparation of the Maize News Letter. The group was reminded that various members of the Cornell University faculty had expressed a desire to relinquish the responsibility of preparing the MNL in the event some other university were willing to assume the job. It was also pointed out that the Coordination Committee after consideration of this matter had recommended that the MNL be moved to the location of the Maize Cooperation stocks, that is, the University of Illinois, contingent upon the willingness of Dr. M. M. Rhoades to accept the responsibility. Dr. Rhoades agreed to assume the editing task, whereupon it was moved, seconded and passed that beginning with the 1956 issue, the Maize News Letter will be prepared at the University of Illinois. Dr. R. A. Brink moved that the Committee express its gratitude to the University of Illinois for its willingness to assume publication of the News Letter. Seconded and passed.

The point was raised that on various occasions data in the News Letters have been cited without the permission of the authors. Dr. Sherret Chase emphasized that permission to cite should always be obtained, but Dr. Brink remarked that such permission has not always been sought. Dr. Brink further pointed out that journals often object to citing publications such as the Drosophila Information Service and the Maize News Letter because of the informal nature of their communications and the general lack of availability of copies. It was the general sentiment of the group that the chief value of the Newsletter derives from its informal communication of preliminary data and that it might best be continued in its present form, retaining the admonition on the cover against citing included data without express permission.

Dr. E. G. Anderson led a discussion of the placement of genes to chromosomes and emphasized the need for locating and mapping the large number of unplaced genes which have accumulated. He advised that the job be done in two steps, first, the placement of genes to chromosome and, second, their location in linkage groups. For the first of these steps, he suggested the

use of a selected series of reciprocal translocations marked with the gene *wx* as a screening method, and outlined the procedure involved. He suggested that the second step, chromosome mapping, could be carried out most efficiently after a considerable number of traits had been assigned to individual chromosomes. It was his opinion that chromosomal placement of the bulk of the new genes can be accomplished within the next two years. Dr. Anderson offered to make crosses of his translocation stocks with unplaced genes supplied by maize workers, with further testing to be done by the cooperators. Dr. E. R. Leng asked what procedure was proposed in publishing linkage data obtained through such a cooperative arrangement. Dr. Anderson indicated that cooperators using the technique might individually publish the results they obtained.

A discussion of chromosome mapping was directed by Dr. C. R. Burnham, who pointed out that the last attempt (1941) to assign individual responsibility for the mapping of each of the chromosomes met with varied success. Dr. Burnham asked for the views of the group concerning the effectiveness of this procedure. Dr. Anderson offered the opinion that many of the new traits are probably not worth mapping in detail unless they prove to be in poorly marked chromosome regions, but suggested they be kept in stock for the use of persons interested in specific chromosome segments. Dr. Rhoades urged to general approval that only good traits be saved. Dr. Laughnan then asked for a show of hands of those willing to participate by agreeing to map specific chromosomes. The following people volunteered to assume responsibility for individual chromosomes:

Chromosome 1S Brink; 1L Galinat  
" 2 Burnham  
" 3 Laughnan  
" 4 Mangelsdorf  
" 5 Burnham, Dempsey  
" 6 Kramer  
" 7 Morris  
" 8 Wright  
" 9S Coe; 9L Anderson  
" 10 Rhoades

The group agreed with Dr. Laughnan's observation that others should be welcomed and encouraged to help in these mapping studies. Dr. Coe asked what distribution should be made of new traits which were placed to chromosome, and Dr. Anderson suggested that stocks be sent both to the Maize Cooperative and to the person responsible for mapping the particular chromosome.

In regard to future publication arising from linkage studies, Dr. Wright stressed the need for a more complete description of genetic traits. It was proposed by Dr. Brink, and approved by the group, that Dr. Patterson take responsibility for assembling gene descriptions. As a first step, it was suggested that a tentative preliminary listing of genes with descriptions of such features as their expression, viability, and classifiability be circulated among maize geneticists for suggested additions and modifications.

Dr. Wright brought up the question of the membership of the Coordination Committee, and proposed that the current Committee members be continued, with the addition of Dr. Patterson as Secretary, ex officio. Dr. Rhoades moved the approval of these members. Seconded and Passed. The Committee members retained are as follows: Dr. Burnham (President), Dr. Laughnan, Dr. Anderson, Dr. Wright, and Dr. Eckhardt.

E. B. Patterson