many of the characters sought for will be found. After being fixed in the selfed lines they may be kept constant for study, or recombined to produce hybrid seed corn at will. If advantage is taken of the genetic method and the information we already have concerning inheritance in corn to work out the mode of inheritance of the desirable characters, the progress to the desired practical goal will surely be more certain, and it is possible will be faster than if purely empirical methods are followed. It presents an attractive and fertile field of research in which the contributions should be of great scientific and economic importance.

3. THE INFLUENCE OF TEMPERATURE UPON THE METABOLISM AND EXPRESSION OF DISEASE RESISTANCE IN SELFED LINES OF CORN

James G. Dickson and James R. Holbert

The future development of field crops is largely concerned with the study of genetic entities in response to their environment. The agronomist, the geneticist, the physiologist, and the plant pathologist, in other words, those most closely associated with the improvement of crop plants, must accept the fact that environment does influence plant development. Therefore, while each experimenter is approaching the problem from a slightly different angle, all are concerned with the expression of correlated genetic factors under a constantly varying environmental complex.

The pathologist of today, for example, whether studying a new disease, restudying a disease long known, developing control measures, or specifically selecting disease-resistant strains, must first chart the range over which environment influences disease development and, second, define the nature of this influence in terms of parasite, host plant, and disease. This problem varies with the different diseases. The simplest type, by far, is where the rather cosmopolitan parasite

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