

5. The improvement of sweet corn and pop corn.

In recent years considerable attention has been paid to research on sweet corn and pop corn and to their special improvement, as the demand of the food-producing industry and of the population has been increasing constantly. Within the scope of the improvement program the improvement of these forms is carried out with special regard to this nutritive value for human consumption.

Sweet corn is grown with special regard to its food value, for canning, etc. A whole series of prospective types has been obtained, especially yellow corn types.

Pop corn is grown with regard to its popping expansion, the fineness of its hulls, and with regard to the general taste qualities of its flakes. Hitherto the improvement work has been carried out primarily with white corn types. Also in this group a number of prospective forms has been obtained.

This improvement program is being pursued in co-ordination with other growing stations, whose work, done in their development centres, is concerned with industrial production.

M. Pastorek

6. A catalogue of factors and genes in maize.

On the basis of the study of the pertinent literature and of theoretical studies, a catalogue of factors and genes of maize is being compiled. In this catalogue the following indices are collected: the international symbols of factors (genes); the original English name; the translation (or explanation) of the original name; the author (who first described a certain type) and the year it was described; chromosome and locus in which a certain gene is found. Besides this there is a compilation of the characteristics of the effects of the various factors and of their genes, their construction, etc. As far as possible also photographic material and other documentation material is being collected in those cases where it is possible to record the activity photographically or schematically.

The purpose of these theoretical and literary studies is the collection and systematization of the results of the present studies of genes and factors of maize, and the adaptation of the results of these studies for the needs of our theoretical and applied research work carried out with maize, and also for the needs of practical growing with various aims.

L. Říman