

6. Applications and implications.

The best utilization of the plants of such hybrids after the grain is harvested is being considered. Leaf silage is much appreciated by oxen. The solids of the stalk juice (more than 70% consists of fermentable sugars) can be utilized as raw material for industrial purposes.

A genetic investigation of the kinds of sugars in the stalk juice of different inbreds is being considered as well as a study of the genetical and physiological interaction of these sugars with protein formation in the kernel. Correlations between high refractometrical readings, high percentages of grain protein and high yields of grain are interpreted as:

- a) The genetical and physiological interactions of different functions that determine heterosis.
- b) Selection for plant survival permits an extension of the period for protein formation, as well as carbohydrate accumulation in the stalk.

An extensive paper on these studies is being prepared for publication.

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