

1. Breeding for sugar in the stalk.

From 30,000 selfed plants on which sugar determinations had been made refractometrically, 800 ear progeny from plants with high sugar content were planted in 1952. Again selfed plants (approximately 8000 plants) were checked refractometrically for sugar content. There was a correlation between the average single ear determinations of 1951 and the average determinations of ear progenies in 1952.