Absence of the near-colorless, green class of mutants in the heterozygotes involving either paramutagenic or non-paramutagenic Rsc mutants indicates that mutation of Rst to Rsc alters an R component essential for the near-colorless, green phenotype, or alters the pairing relationships of the R components in such a way that a crossover necessary for the isolation of such mutants cannot occur.

The recovery of near-colorless mutants from the heterozygous combinations involving the paramutagenic Rsc mutants, but not from the heterozygous combinations involving the non-paramutagenic Rsc mutants is additional evidence for a close association between the near-colorless phenotype and paramutagenic action.

R. B. Ashman

4. A new dominant mutant.

A dominant mutant, clumped tassel (Ct), has been recovered from inbred M14. This mutant gives a compact, shortened tassel, some dwarfing of the plant and modified ear morphology. The homozygous Ct Ct is not easily recovered. Classification is fair in most backgrounds. Preliminary linkage tests indicate Ct is located on chromosome 8.

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1. Further studies on disjunction at anaphase I of the chromosomes of a trivalent configuration.

In 21 chromosome maize plants carrying a normal chromosome 2, a 2^T chromosome and a T^2 chromosome a genetic test of frequency of nondisjunction at anaphase I of the 2^T and T^2 chromosomes is readily available. From plants carrying recessive ws lg and gl only on the T^2 chromosome the test gives frequency of nondisjunction following crossing over; from plants in which only the 2^T chromosome carries dominant alleles the test gives frequency of nondisjunction regardless of chiasma formation. Results of the former type of test have been published (Genetics 49:69-80, 1964). Data have recently been accumulated from the latter type of test with the expectation that differences might be attributable to the pattern of distribution of univalents. From a total of 922 plants it now appears that the frequency of nondisjunction from the second type of test is very much higher (average 38%) than that found in the first (19%). Even if all the univalents were distributed nondisjunctively at first anaphase,