unfused nucleoli in the spore nuclei, three nucleoli were seen in each of two of the spore nuclei and only one in each of the other two. This distribution implies that non-disjunction occurred at division I. The pollen quartets in which a 3 : 1 distribution of nucleoli was observed comprise 2.42 percent of the total examined and can be taken to represent the percentage numerical non-disjunction of quadrivalents formed by chromosome 6. This value derived from the cytological data is close to the value obtained by Welch (1942) for chromosome 2 from genetical evidence. (See Welch, G. 1942 Linkage in autotetraploid maize. Ph.D. thesis, Cornell University.)

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1. Two recessive genes necessary for white seedlings.

Several different genes for white seedlings in maize are known. These are caused by monogenic recessives. Ten different rows segregating white seedlings were grown in 1962. Nine of these showed a monogenic segregation. It is not certain which genetic white seedling this is. Counts for these nine rows were: Green 690, white 228, compared with an expected ratio of 688.5 to 229.5, almost a perfect ratio. The other row showed a definite dihybrid ratio of 299 green : 20 white, almost a perfect 15:1 ratio. Here apparently two genes must be homozygous recessive to produce white seedlings. Seed is limited because of a drought in 1962 that killed all plants before pollen shedding. Reserve seed will be planted and plants selfed. Approximately 1/4 should be segregating for the two genes for white seedling, while another 1/4 should give monogenic ratios of 3:1. Has anyone observed a similar occurrence?

W. Ralph Singleton

2. Mutation CI to c:

In 1959 a plant which was B $A_1$ $A_2$ Pr Y Pl CI Sh Bz Wx R Og was radiated at the rate of 94 r/day for the period 29 to 15 days before the pollen was collected for pollination onto a stock which was $A_1$ $A_2$ pr y C sh bz wx R og. Among the resulting 12,000 seeds was one with a purple flinty endosperm. This was grown in 1960 and produced a plant which was B $A_1$ Pl Og. Pollen examination indicated 97.5% good pollen. The resulting ear had a full seed set and segregated +/y +/pr C/c +/sh +/bz +/wx. The colorless seeds were linked to the