

4. Other mutations produced by the blotching system.

In the course of classifying ears for blotching, a number of mutations affecting other aleurone and endosperm characters have been encountered. These include mutations from Su to su on Chromosome 4, from Pr to pr on Chromosome 5, Y to y on Chromosome 6 and R to r on Chromosome 10. The mutations show up as sectors in the seed and, depending upon the time of origin, affect various fractions of the seed.

At the R locus, 42 mutations to r were found in 13,033 seeds. At the Su locus in the same population 19 mutations from Su to su were counted in 23,654 seeds. Mutations affect a definite fraction of the kernel -- $1/2$, $1/4$, $1/8$ etc. In this study mutations occurring so late in development as to affect less than $1/32$ of the seed were not counted.

Paul C. Mangelsdorf