generations depleted the paramutagenic action of $\underline{R}^{st}$. The seed used in grading aleurone pigmentation ranged from 1 (coloress) to 7 (self-colored). There is no evidence from the results obtained, summarized in the accompanying table, that continued heterozygosity for a paramutable $\underline{R}^{r}$ reduces the paramutagenicity of $\underline{R}^{st}$.

Male parent in testcross	No. plants tested	Mean aleurone color score
$\underline{R}^{r}$ $\underline{R}^{r}$ - stock	7	6.43
$\underline{R}^{r}$ $\underline{R}^{st}$ - F1	3	4.47
$\underline{R}^{r}$ $\underline{R}^{st}$ - Bx 1 to $\underline{R}^{r}$ $\underline{R}^{r}$	7	4.08
$\underline{R}^{r}$ $\underline{R}^{st}$ - Bx 2 to $\underline{R}^{r}$ $\underline{R}^{r}$	8	3.40
$\underline{R}^{r}$ $\underline{R}^{st}$ - Bx 3 to $\underline{R}^{r}$ $\underline{R}^{r}$	16	3.59

R. A. Brink
D. F. Brown

6. An unstable R allele from Bolivia.

A highly unstable R allele has been isolated from a colored aleurone strain of maize originally collected in Bolivia (Bolivia 724). The allele simulates $\underline{R}^{mb}$ in that coarse patches of pigment are normally observed in the aleurone following backcross to W22 A C r b pl stocks. Unlike $\underline{R}^{mb}$, however, aleurone pigmentation varies in intensity within patches. Likewise ears vary in frequency of kernels with the spotted pattern. The allele mutates with a relatively high frequency (approximately one per 100 kernels) to a form which produces dilute aleurone pigment uniformly distributed over the kernel. Apparently concomitant with the mutation of spotted to dilute aleurone is alteration of a plant color component at the R locus, since all 12 dilute kernels grown so far have produced mature plants with intensely pigmented leaves and stalks. Plants grown from sib spotted aleurone kernels were uniformly green.

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