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1. Anthocyanin suppressors in the aleurone.

In each of the Mexican varieties, Maiz Chapalote (mc) and Zapalote chico (zc), a suppressor of aleurone anthocyanin has been found. Both are allelic to the standard C^I allele that is present in stocks distributed by the Maize Cooperative, and each is given an allelic designation, $C^I(mc)$ and $C^I(zc)$. In tests of their color suppressing potency, each is distinguishable.

Using a W-22 color converted stock as female parent and the suppressor stocks as male, the potency of each of the alleles in suppressing color can be graded on a scale where 1 = colorless and 10 = full color.

C^I expressed the highest potency with a grade of 4.2; $C^I(mc) = 6.2$ and $C^I(zc) = 7.0$.

Results of similar tests utilizing the color suppressor stocks as female parents, though showing a greater overall suppression of color, correlate with the ratings observed when the suppressor alleles are transmitted by the male parents.

In additional tests using other color lines to test the potency of each of the alleles, the three alleles were ranked in a similar manner; $C^I(zc)$ always shows the least capacity to suppress color.

The expression of these alleles is in some ways similar to the color suppression reported by Mouli and Notani (MGCNL 41).

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2. Mutation and En transposition.

En (Enhancer) has been identified at $a_1^{m(pale\ and\ purple)}$ an allele at the a_1 locus. This unstable allele mutates at a high rate to purple as well as to stable colorless and pale types, which fall into a graded series. A large number of the stable derivatives have been tested and each was found to contain En but at a site apart from the original allele, although on the same chromosome and therefore linked with a_1 (MGCNL 39: 102-103). Utilizing 2-point tests, En has been located in both distal and proximal positions with regard to the original site. Thus for this allele, mutation (in this case to $a_1^{m(nr)}$ -non-responding to En) appears to be coincident with En transposition.

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