

This indicates a value of 18-19% recombination as based on Immer's Tables. Backcross data should be available next year.

Ellen Dempsey

5. A possible convertor at the Pl locus.

In a family of 36 dark purple plants, presumed to be homozygous B Pl, a single lighter-pigmented plant appeared. This exceptional plant was self-pollinated and also crossed as male parent with dark purple individuals from the same line and from a second, not closely related line. All the progeny (350) from these crosses were light-colored. Nor was there any segregation of dark purple color in the next generation when the  $F_1$ 's were selfed or backcrossed to dark purple.

This behavior parallels that described for conversion at the B locus. Except for anther color, however, these plants resemble sun reds in phenotype. Linkage tests are being made to determine whether the Pl locus or B are involved in this case.

Crosses with other lines and other genotypes have produced interesting results. The progeny from a cross with a line homozygous B Pl obtained from the Co-op were all dark purple. A line homozygous b pl also gave dark purple  $F_1$ 's whereas the progeny from a cross with b Pl were all sun red. Two lines of sun red plants (B pl) gave opposite results; one yielded only dark purple plants whereas the other produced only sun reds.

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