

14. A possible homozygous viable deficiency in the long arm of chromosome 1.

The bz_2 locus which has been described and located cytologically on the long arm of chromosome #1 (Newsletter 28, 29) has shown linkage with an_1 . The data listed below indicate that bz_2 is located between an_1 and gs :

Cross: $an\ Bz\ gs/An\ bz\ Gs$ x $an\ bz\ gs$
(bz seeds only)

<u>Parentals</u>	<u>Region 1</u>	<u>Region 2</u>	<u>Doubles</u>	<u>Total</u>
21	3	2	0	26

The distance between bz_2 and an_1 has become important because of discovery that one of the radiation-induced anther-ear mutants (an_{6923}) found by Anderson has an associated bronze aleurone effect. A cross of an_{6923} with a bz_2 tester gave all bronze seeds indicating that the two bz characters are allelic. The allelism of an_1 with an_{6923} has not yet been determined but might reasonably be expected. If so then an_{6923} probably represents a rather sizable deficiency which is homozygous viable and which includes at least two previously established loci.

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