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1. Dwarfs.

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- (a) The following four mutant dwarfs in chromosome 9 were found to be allelic to each other and to d3 d5588, d8004, d8054, d8201.
- (b) Anther-ear₂ (an₂) is an allele of d₁.
- (c) Five anther-ears (an₇₂₈₁, an₇₇₅₂, an₈₀₈₃, an₈₃₇₉, an₈₇₀₄) from different sources all proved allelic to an₁.

2. Frazzled (fz).

A recessive character which results in a splitting of the leaves along the veins. Plants are so distorted that many do not appear above soil surface. Plants have been kept alive three months at which time they are approximately one inch tall. In selfings of heterozygous $\underline{f}_{\underline{z}}$ 501 normal seedlings to 165 $\underline{f}_{\underline{z}}$ seedlings resulted. $\underline{f}_{\underline{z}}$ has shown close linkage with translocations 1-9c and 1-9a, but is not obviously linked with 1-4a. This would indicate $\underline{f}_{\underline{z}}$ to be in the short arm of chromosome 1.

	<u>n</u>	fz	n n	fz
wx T 1 - 9c	79	33	50	0
wx T 1 - 9a	41	25	21	0
su T 1 - 4a	168	41	36	8

Fred D. Pettem

3. The green mosaic allele of viviparous-2.

The green mosaic allele of <u>vp</u>-2 was found by Dr. Anderson in a stock derived from seed exposed to the Bikini atom bomb. Like <u>vp</u>-2 this mutant has a pale yellow endosperm and albino seedlings. But unlike <u>vp</u>-2, it shows back mutations to normal in both the endosperm and seedling, resulting in a pale yellow endosperm with patches of yellow and in white seedlings with a mosaic of green tissue. This allele has been difficult to study since it has the tendency to produce small viviparous seeds such as are typical of <u>vp</u>-2. However, it has been possible to get stocks that give a fair proportion of mosaic seedlings by selecting lines that are not strongly viviparous. Using such stocks, we have learned something about the inheritance of the green mosaic character.