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1. Recombination in the  $a_1sh_2$  region.

Backcross data on recombination rate in three different genetical backgrounds, having in common the "Texas" male sterile cytoplasm, are reported for  $a_1 sh_2$  markers in coupling in the following table:

Genetical background	No. of ears	Total no. of seeds	$A_1sh_2$ seeds	$a_1Sh_2$ seeds	% of recombination
A158	36	21386	9	14	0.107
W22	33	9632	3	4	0.072
WF9	31	12215	8	6	0.114
Totals	100	43233	20	24	0.101

The crossover value is clearly lower than that previously reported (0.27%). However, it is undecided whether this is due to different environmental conditions (including the T type cytoplasm) or to a difference in nuclear genotypes, although the latter interpretation appears less likely because of the uniform behavior of the different backgrounds of the inbred lines used. It is interesting that this value is of the same order of magnitude as at least one intracistron recombination rate:  $wx^{90}/wx^C$  produces, according to our data, about 1%  $wx$  pollen grains, mainly as a result of the recombination process.

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2. Effect of storage on x-rayed pollen.

By applying Everett's technique it has been possible to prolong the pollen life-span and to study the effect of storage on x-rayed pollen (1750 roentgen in about 7').

The data appearing in the following table are roughly in agreement with those obtained with storage of dry irradiated seeds: