

S. Restoring tendencies in Minn. A344 and Kansas 55W.

Information up through the BC5 recovery generation indicates that restoring tendencies of A344 and K55W can be easily and simply eliminated by removing a single, dominant gene. Procedure has been to outcross these lines to sources of the recessive "F" gene, and backcross until reaching the BC6 generation, while holding heterozygosity at the "F" locus by means of testcrosses.

Infrequent and haphazard occurrence of extremely weak partials, in addition to the expected fertiles, in these test cross progenies, has not been investigated, but is assumed to result from changing complementary relationships at other loci during the recovery segregations.

No ordinary or obvious morphological or genetic characters have so far been found to be closely linked to the restorer locus.