

8. Inheritance of Waseca stripe

This character is recessive and very similar to japonica (j_1) in chromosome 8, but it shows to some extent in the seedling stage. It was first found in 1947 in the corn breeding work at the Waseca station by Dr. E. L. Pinnell, where it arose from an F_2 of A347 x K230. It probably was an outcross of an F_1 to some source of white endosperm, because it also has white endosperm. Intercrosses showed it was not japonica or ij . Among the crosses of this stripe as female with different 'B' chromosome translocation testers, supplied by Dr. H. Roman, the one with translocation TB-10 threw Waseca stripe plants in F_1 , indicating this factor is in chromosome 10.

F_2 populations from a cross involving golden-1 and this stripe appear to confirm this linkage, although the numbers are small and striped plants were greatly deficient due to poor growing conditions. Further information on this topic will be sought next summer.

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