

(Foundation stock of inbred WF9-21MS and background information were kindly supplied by Dr. W. J. Mumm, Crow Hybrid Corn Co., Milford, Illinois, U.S.A.)

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1. Inheritance of blotched leaf.

Blotched leaf (bl) was first reported by R. A. Emerson (Cornell University Agr. Exp. Sta. Memoir 70:1-16, 1923). N. W. Simmonds presented data (MNL 24:26-27, 1950) showing linkage of a similar character, which he called blotched-3 (bl₃), with some undetermined "anthocyanin locus" he thought likely to be the R factor.

A blotched leaf character was observed in some breeding material at this station. In linkage tests with a series of translocations obtained from Dr. C. R. Burnham, a linkage of $21.3 \pm 2.64\%$ recombination was obtained between the character and T2-9c (2S.49 and 9S.33). Unfortunately the cross with the other interchange marking the short arm of chromosome 2 failed. However, two other interchanges involving the short arm of chromosome 9, T6-9 and T9-10b, showed no linkage with blotched leaf. The T1-8a culture was segregating for the B factor and this factor gave a recombination value of $22.97 \pm 4.89\%$ with blotched leaf.

There was considerable variation in expression of the blotched leaf character. It seems likely that Emerson's blotched leaf and Simmond's blotched leaf-3 were the same and that Simmond's "anthocyanin locus" was "B" and not "R". These data would locate "blotched leaf" on the short arm of chromosome 2.

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1. Amylose breeding progress.

In our 1952 MNL report (Newsletter 26, page 5) the ae gene was reported and its influence on increasing amylose at the expense of amylopectin was noted.

Progress of the hybrid development program and studies of the ae influence in various endosperm combinations were reported in the Agronomy Journal, 50:595-609, 1958.