Due to poor germination and dry weather, the conventional analysis yielded a total population of only 21,698. Of these 9 (41 x 10^{-5}) were apparently $\underline{\text{Wx}}$, $\underline{\text{ae}}$ seeds. Of the nine apparent recombinants, 8 were carrying the $\underline{\text{bz}}$ marker and 1 $\underline{\text{Bz}}$ indicating a location for $\underline{\text{H21}}$ distal to $\underline{\text{C}}$ contrary to earlier hypothesis.

Oliver Nelson

4. Location of miniature seed (mn) on chromosome 2.

Crosses were made between a series of translocation stocks in which waxy (\underline{wx}) was used as a marker for the chromosomal interchanges and a miniature seed (\underline{mn}) \underline{wx} stock. These F_1 plants were then selfed, and the miniature seeds checked with iodine solution for waxy endosperm.

Slightly lower than expected ratios (25%) of waxy were obtained with all translocations except T 2-9 b. Progenies involving T 2-9 b, which has break points on the short arm of chromosome 2 at .18 and on the long arm of chromosome 9 at .22, gave 1.2% waxy seeds. It is therefore apparent that miniature seed is located on Chromosome 2.

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1. Further studies on trivalent frequency in an array of maize chromosome 2-Tripsacum interchange chromosome constitutions.

An attempt was made to synthesize additional 21 chromosome constitutions combining the available primary and secondary maize chromosome 2-Tripsacum interchange chromosomes in various ways. A number of the plants derived repeated constitutions which have been reported earlier (Genetics 51: 23-40. 1965), and showed metaphase I trivalent frequencies very similar to those described before. Four previously unknown 21 chromosome constitutions were also derived. Metaphase I trivalent frequencies from microsporocyte samples of three of these four constitutions were approximately consistent with expectation from previous findings in that: 1. a constitution fitting into the general category