During 1962 an asynaptic monosomic was isolated from the X_1 following irradiation of the pollen with 1000r. The loss of pmr and the dominant alleles of zn and br disclosed that chromosome 1 from the pollen parent was absent in the microsporocytes of the X_1 monosomic. Both asynapsis and regular first division association have previously been reported in monosomics not identified in regard to the missing chromosome (J. of Hered. 1929, 1956). Thus both monosomic carrying the normal allele of the recessive as in chromosome 1 as well as asynaptic homozygotes exhibit irregular association. The above observation suggests a dosage relationship of a gene or genes in chromosome 1 with normal, orderly first division association of the complement.

R. L. Baker
D. T. Morgan, Jr.

UNIVERSITY OF MINNESOTA
St. Paul 1, Minnesota

1. All-arms tester set of interchanges.

The first few backcrosses to the A188 inbred were made here, the subsequent ones up to 8 and 10 backcrosses by M. T. Jenkins. For those with fewer than this number, the additional backcrosses are being made here.

Homozygous stocks are being established after the 8 to 10 backcrosses. These are then being checked for chromosome identification by cytological examination at diakinesis in crosses with the chromosome identification set. To date, 1-9b, 2-1b, 3-1h(5156), and 5-7e are apparently correctly identified. The stock originally designated as 5-10(6061) is now a 2-10 stock. The others in the series will be checked.

C. R. Burnhan

2. Sporocytes from crosses needed to check and identify the chromosomes in the multiple interchange stocks were collected, but cytological examination is still in progress.

3. A severe hailstorm almost eliminated early plantings, but later material in about the 2-leaf stage showed little permanent damage.

C. R. Burnham
Paul Yagyu