## 6. Progress report on the big ring.

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A ring of eight was observed in 3 plants out of 17 progeny from the cross of the F1 of permanent rings of six  $(2-4b+2-3d \times 2-4b+4-8a) \times a$  standard normal. As predicted on pages 55 and 56 of the 1955 Maize News Letter, two rings of four were observed in the F1 plants.

At the present time it appears to be possible by an extension of the method to produce combinations of big rings at will, once the component rings of six are available. After the permanent rings of six have been produced by a crossover in the differential segment of the F<sub>1</sub> of a cross between two translocations with breaks on a common chromosome, the larger rings are produced by the segregation of translocated chromosomes from crosses between the component smaller rings.

L. Inman

## 7. Striate-asynaptic stock.

The striate-asynaptic stock, originally under Emerson's #28-569 and carried along for several years at Minnesota, has been examined cytologically. Pollen sterile plants had 10 II and normal pairing. Seed-set on these plants was normal. This stock is apparently carrying a male sterile and does not contain the <u>as</u> gene.

O. F. Miller

## 8. Location of mag.

The following data confirm last year's results (News Letter 1956). This gene is in chromosome 5 as shown by the following  $F_2$  data:

Pr Na <sub>2</sub>	Pr na <sub>2</sub>	pr Na <sub>2</sub>	pr na <sub>2</sub>	(-) Aleur. Na <sub>2</sub> (-) Aleur. na <sub>2</sub>	total
90 180	10 27	12 36	7 32	28 cm d 28 cm	119 275
segregatir	ng c and	r. p = 2	27.45% I2		

Gertrud Joachim C. R. Burnhem

## 9. Crossing over in reciprocal crosses.

In chromosome 2, the  $\underline{fl} - \underline{v}_4$  region showed much higher recombination in the  $\overline{\sigma}$ , the other regions only slightly higher.