

## III. REPORTS FROM COOPERATORS

ALABAMA POLYTECHNIC INSTITUTE  
Auburn, Alabama  
Department of Botany and Plant Pathology

1. Production of linkage testers and translocation stocks adapted to the South.

A program has been initiated to incorporate certain linkage testers and translocations into lines which are adapted to the South. Linkage testers have been selected to mark each of the ten chromosomes and translocations have been selected to mark each arm of every chromosome. Most of this material was obtained from Dr. C. R. Burnham. The lines which are being used are Alabama 17, a white, early midseason line and Alabama 18, a yellow, late midseason line.

2. Relative maturity of certain inbreds compared with Alabama lines.

<u>Inbred</u>	<u>First pollen</u>
W23	6/30
A188	7/3
W22	7/6
Ab20	7/8 - early Alabama line
CC5	7/9
KYS	7/15
Ab12	7/15 - late midseason Alabama line
Ab2	7/19 - late Alabama line

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BEAR HYBRID CORN COMPANY  
Decatur, Illinois

High seed set and low seed set selections from the elongate-produced tetraploid "synthetic A" were crossed in reciprocal combinations so that the direct effect of the pollen parent could be studied. The results are shown on the next page.

The high by high crosses show a significantly higher seed set than do the low by low crosses. The reciprocal crosses between the two levels of seed set gave the same average and are intermediate to the high by high and low by low.