

5. Relation of multiple chromosome associations at diakinesis to knob number.

Previous studies (S. E. Zvingilas, MGCNL 35 and 36) indicated that the knob and centromere associations of non-homologous chromosomes observed at pachytene persist through metaphase.

Additional investigations were carried on with diakinesis cells of plants which arose from a backcross of the 12 knob heterozygote to the knobless parent. These results support the previous conclusion; there is a positive correlation between the number of chromosomes in multiple association at diakinesis and the number of knobs present (Table 1).

Table 1.

No. of knobs	Ave. no. of assoc. bivalents at diakinesis
1	1.46
2	1.75
3	1.48
4	1.94
5	2.15
6	2.38
7	3.12
8	3.15

Sylvia E. Zvingilas

IOWA STATE UNIVERSITY
Ames, Iowa
Department of Genetics

1. Allele studies involving \underline{Cl}_2 , \underline{Cl}_3 and \underline{Cl}_4 .

Dr. Everett in 1949 (Proc. Nat. Acad. Sci. 35: 628-634) described two dominant suppressors of the \underline{cl}_1 locus, \underline{Cl}_2 and \underline{Cl}_3 , which partially or completely suppressed the albino phenotype of this mutant. Since the discovery of the two original suppressors, we have found a third one which has been designated \underline{Cl}_4 . This suppressor was found in a stock in which a gene for albinism was segregating, designated \underline{cl}_p . This gene was found to be allelic to \underline{cl}_1 . The action of the suppressors, \underline{Cl}_2 , \underline{Cl}_3 and \underline{Cl}_4 is summarized in Table I.