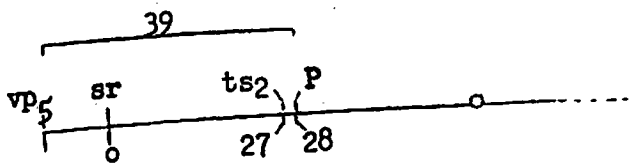
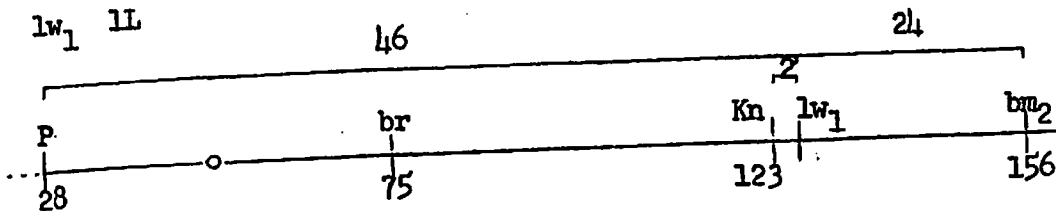


vp5 1S



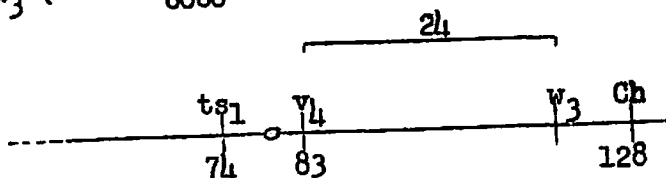
T1-9c	T1-9a	T1-3a
1S.48	1S.13	1S.15
26%	30%	34%

lw1 1L



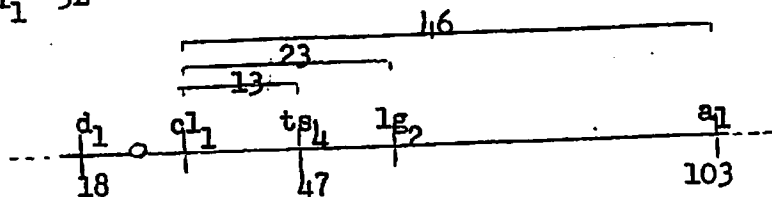
T1-4a
1L.51
24%

w3 (Pastel 8686) 2L



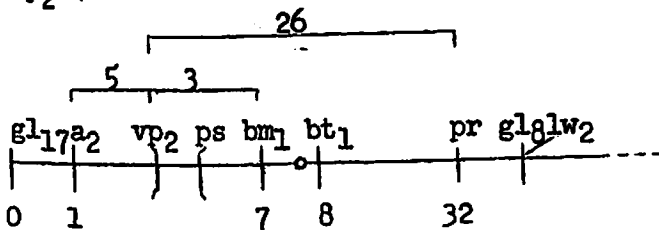
T2-4c	T2-9b
2L.81	2s.18
1.6%	27.7%

cl1 3L



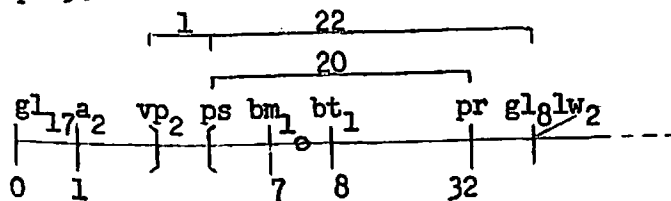
T3-9c
3L.09
5%

vp2 (Green Mosaic) 5S



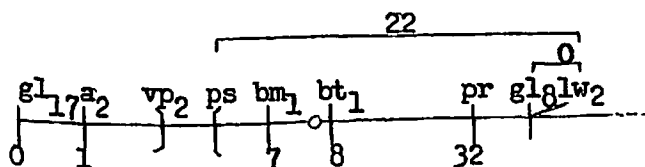
T4-5i	T5-9c	T4-5d
5S.15	5S.07	5L.22
1%	1%	4%

ps 5S

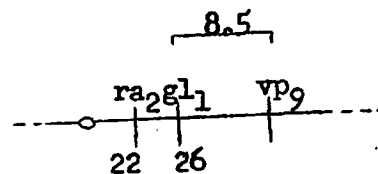


T5-9a
5L.69
39%

lw2 5L



vp9 7L



T7-9a
7L.63
21%

6. Close linkage of su_1 with a mutable locus.

Studies of an unstable chlorophyll character designated mutable luteus (l^m)* are in progress. Crosses of $l^m \times TB4$ -a had indicated that l^m was located in 4S distal to the break.

A preliminary analysis of F_2 linkage data showed very close linkage between the l^m and su_1 loci.

Summary table of F_2 linkage data: $\frac{Su_1 l^m}{su_1 L}$

Family	Phenotypic classification of F_2 progeny			
	$Su_1 L$	$Su_1 l^m$	$su_1 L$	$su_1 l^m$
58 046	1357	271	537	0
58 047	2247	478	815	0
58 048	3013	597	1234	0
58 049	3986	1173	1696	1
58 058	340	95	134	0
58 066	210	58	82	0
58 072	301	59	113	0
58 073	566	70	203	0
Total	12,020	2,801	4,814	1

19,6

There has been no indication of differential transmission of gametes carrying l^m . The reversion of l^m to L has been estimated to be about nine per cent in the female. It appears to be somewhat higher than this in the male.

The above data was not adjusted for estimated rate of reversion.

*(l^m previously reported by Rhoades and Dempsey - MCNL24)

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1. Compound structure of the kinetochore in maize.

For our understanding of the organization of the chromosomes at both the cytological and genetic levels it is necessary to know the structure and function of its components. The kinetochore is one of the chromosome's most important segments, not only because it leads the chromosome in its movements, but also because it shapes the pattern of the arms, interacts with other segments and influences the