

well as for the perhaps more important study of the permanence of inheritance of this presumed cytoplasmic characteristic. It may be that the relative loss of expression of *wsp* when *ML4* and *SK2* genotypes are introduced is due to a permanent modification of the *wsp* cytoplasm, back to normality. The question of non-uniformity of expression in F_1 is also of importance.

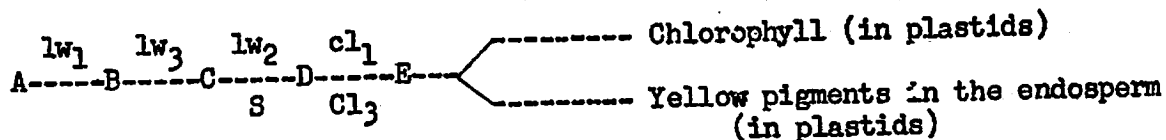
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1. Some speculation on the action of lemon-white alleles.

The lemon-white mutants in maize have attracted some attention because of their pleiotropic effect and the detection of suppressors for one of the two effects. The important features of these mutants are as follows: All the natural mutants (at least four cases involving different chromosomes) show a simultaneous effect on both characters. The suppressor effects are specific for the individual mutants.

One can interpret the pleiotropic effect on the basis of interruption at different steps in a chain reaction which subsequently bifurcates to give rise to different end products.



The influence of suppressors on only one of the two effects could be due to a difference in their quantitative action and competition for the substrate at the point of bifurcation.

S. H. Tulpule

2. Pachytene chromosomes treated with paradichlorobenzene.

Pretreatment of root tips with paradichlorobenzene gives well spread metaphase plates with shortened chromosomes. The effect on chromosome length was investigated by a study of its action on maize chromosomes at pachytene. The pretreatment consisted of immersing the cut ends of suitable spikes in a saturated aqueous solution of paradichlorobenzene for a definite period and then fixing them in acetic-alcohol. Preliminary results show that: (1) The treatment does not result in any marked increase in the frequency of well spread pachytene configurations. (2) The cells show globules of various sizes resembling the nucleolus in their staining reaction with carmine.