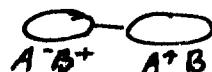


8 JUN 1945

Test for distinctness of genotypes in an apparent prototroph strain which occasionally segregates out mutants by an ultra-violet killing test. If the prototroph is an extra-cellular association,

  $A^-B^+$   $A^+B^-$  then an irradiation killing 99% of the cells would

leave, for the most part, ~~+ +~~ survivors which were mutants — some, e.g., in only 1% of the cases would both members of a pair mutant.

If the associations were heterocaryotic, i.e., the various genes were in the field of action of a single lethal hit, there should be no increase in the proportion of mutants. The above figures must be modified. Since killing here would be on an *or hit basis* (all members of the association requiring to be killed). This will mean even smaller % not mutants)

Does  $l^+$  kill off  $\underline{lc}^+$  nuclei or make them  $lc^-$ . 6/8/46

$lc^+$  nuclei - also  $y^+$  do  $y^+$  lost?

and  ~~$l^- y^-$~~  +  $l^+ y^+$

and  ~~$l^- y^- x^+$~~  +  ~~$l^+ y^+ x^-$~~

X Bros. A.  
Put A.

33757-  
4540

+

37401

Is the wild type allele of 4540 lost???

See.