

#### 4. Linkage tests on $c_2$ .

This new aleurone factor has not yet been located. A self of  $c_2 \pm/bz_1$  gave 64 colored to 67 bronze-and-colorless, suggesting close linkage, but  $c_2$  is independent of  $wx$  in a large test (1309 individuals). The following linkage tests have been carried out:  $wx$  1-9c, 52% with  $wx$  in 657 individuals;  $bz_2$ , 9:3:4 in 346;  $lg_1$ , more than 50% in 285;  $A$ , 308 colored to 281 colorless, consistent with about 30% recombination;  $wx$  3-9c, 53% with  $wx$  in 393;  $su$ , 48% in 363;  $Pr$ , 9:3:4 in 279;  $Y$ , more than 50% in 339;  $gl_1$ , more than 50% in 731;  $wx$ , 50% in 1309;  $R$ , 9:7 ratio in 1061. Chromosome 3 is the most likely-looking at the moment; if so, probably far out on the long arm.

E. H. Coe, Jr.

#### 5. Spontaneous mutation of $CI$ .

An additional population of about 1.5 million gametes in the cross  $CI CI \times CC$  has been examined for mutants. Only one possible case turned up. Judging from the previously-reported population, this case has a 50-50 chance of being valid. Obviously the mutation rate is low.

E. H. Coe, Jr.

#### 6. Subject index to Newsletters.

An attempt to index the Newsletters by subject is in progress. Volumes remaining to be scanned before the index is ready to assemble are Nos. 1 through 3 (not on hand here--they will be checked elsewhere), 31, 32, this issue, and any subsequent ones which come out before the rest of the job is finished. In the meantime, any cooperator wishing a moderately thorough list of vol. 4-30 references (for example: linkage notes for a given chromosome; mutability factors or mutable loci; carotinoids; centromere linkage) will be sent it on request.

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#### 7. Effect of external agents on the frequency of crossing over.

In the last Newsletter (MNL 32:100) it was reported that in a preliminary trial, treatment with a .001 M solution of the chelating compound (EDPA) gave a significant increase in the frequency of crossing over between the members of a complex  $a$   $a$   $sh_2$  segment on chromosome 3. In order to check the validity of this result and also to try some other agents, a large scale experiment using the same cross ( $a$   $a$   $sh/a^m$   $Sh \times a^s$   $sh$ ) and the same technique (leaf feeding) but with two additional agents (ribonuclease and desoxyribonuclease) was conducted.