

9. Mutation of C^i .

In hand-pollinated $C^i/C^i \times c$, 9,402 gametes gave no mutations. In $C^i/C^i \times C$, 11,970 gave three variegated colored kernels. The constitution of such mutant derivatives will have a bearing upon the structure of C^i (see above). Three previously found colored kernels, obtained from $C^i/C^i \times C$ in an undetermined total in 1953, were also variegated. Of the latter three, one failed to germinate, one appeared to carry normal, unchanged C^i , and one was deficient for Yg. The last case has since been tested and appears to carry a terminal deficiency, with the break distal to C^i . Presumably the variegation in the original kernel was due to a breakage-fusion-bridge cycle, with loss of C^i in sectors. The three new cases will be tested in 1956, and a large-scale mutation test is intended, to determine the constitution of mutants obtained from C^i .