

NOTES AND NEWS

Research items

Effect of ether on gene changes. S. Gershenson - In 1930 a large experiment with *D.mel.* was carried out with an aim of producing gene-mutations by means of etherization. Apricot larvae 2 and 4 days old were submitted to a sub-lethal dose of ether vapor (40-48 minutes in an atmosphere saturated with ether vapor at 16°C). Many variations were recorded in the flies which developed from the treated larvae (mostly bristle characters). 1200 x-chromosomes from 96 males studied (ClB method) gave a negative result (2 lethals) (U).

A case of ClB reinversion. S. Gershenson - In 1931 a $sc^1 t v sl B$ *D.melanogaster* male was obtained from a female of the structure $ClB/sc^5 v$. Study of the chromosome showed that it not only lost its lethal action, but also was reinverted, the new breaks being probably precisely in the same points as the breaks of the ClB inversion. Two explanations are possible: either the lethal action of the ClB chromosome is due to a position effect, or the reinversion occurred simultaneously with a double crossing-over in the left non-inverted part of the ClB chromosome (which must then have carried the lethal). Contamination excluded. A semi-lethal was present in the reinverted chromosome, located near sl (U)

Distribution of x-chromosome lethals. S. Gershenson - In 1931 a study of the distribution of x-ray lethals in the $sc^8 wa$ In X of *D.melanogaster* was carried out (in collaboration with N.I. Shapiro and E.J. Borissenko). The following picture was obtained (51 lethal located) (U):

