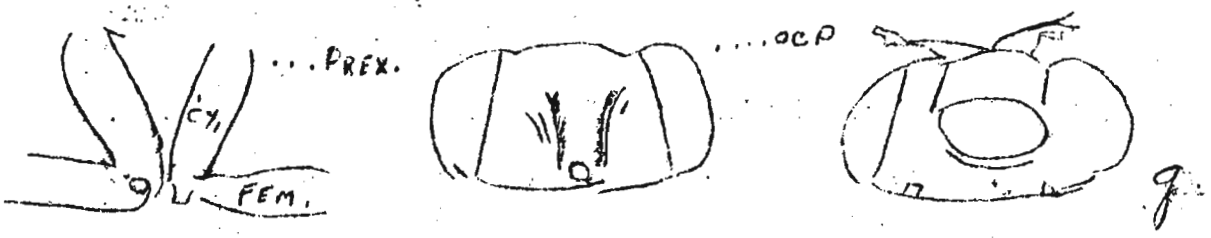
that flies having deletions, often display the appearance of the same bristles, probably due to a similar cause of hyperploidy for sc and ac. The study of several deletions has shown each of them to exert a characteristic influence either on prex or on ocp and g. Having compared eleven different deletions, the author was able to distinguish easily some of them according to those characters, when examing groups of flies. Such a circumstance may be utilized in working on deletions. Praecoxales are also to be observed in Hw and in h flies.



Serebrovsky, A. S. Interaction between the genes divers and yellow and scute.

V. V. Sakharov, by whom the divers mutation in D. melanogaster was found, detected the appearance of a new character in y div flies, viz. a strong upcurling of wings, more pronounced than in flies Cy. That phenomenon was studied by the author in combinations of div with other allelomorphs of yellow. In y^3 div (yellow body, black bristles) the wings get curved as strongly as in y^1 div. In y^3 div the wings are seen to curve somewhat less, but still very strongly. In y^N div (gray body, yellow bristles) (see Neuhaus DIS-4) the wings are either flat or slightly curved as in some y^+ div. Thus the degree of the wing curving is parallel to the body color ($y = y^3\ y^{3P}\ y^N$), showing no connection with the color of bristles. At the same time some allelomorphs of scute and achaete were investigated. The sc^3 div flies are of a very poor viability, the same being the cause of the failure in obtaining sc^{10} div. In sc^3 div, sc^6 div and sc^8 div the wings were found to be flat.

Shapiro, N. The frequency of the somatic mosaic occurrence in males and females.

The writer has observed the frequency of the mosaic occurrence in the stock h ss/+ after X-raying heterozygous larvae. The latter were treated at the age from 3 to 48 hours from the moment of egg laying. The dose of irradiation was 1000r. The results are summarized in a table.

	Number of flies	Number of mosaics: hairy	spineless	Total
♀♀	1420	3	6	9
♂♂	1132	3	5	8

From the above given data it may be seen that the frequency of the mosaic occurrence for autosomal genes is alike both in males and females.

Surrarrer, T. C. Time of pupae case coloration. In obtaining pupae cases of known age of a vermilion mottled eyed mutant strain at 27°C the pupae cases do not undergo any noticeable darkening during the first hour after pupation.

Waletzky, E. A haploid mosaic of D. melanogaster. In a cross between W +/+ wp pP x wp pP ♂ a single female was found in which thorax, abdomen and the right side of the head were W +/+ wp pP. The left side of the head was smaller than the right side. The left eye was peach in color and approximately two-thirds the size of the normal, red, right eye. The left posterior ocellus was peach and approximately half the size of the normal, right posterior ocellus. The arista and all macrochaetae and microchaetae on the left side of the head, were not more than half the size of those present on the right side of the head.

Whittinghill, M. Salivary studies on translocation. Salivary analyses (and supplementary tests as to the localizations of several mutants on the salivary map) have been obtained in a series of Y-2 translocations (found and first used by Dobzhansky: Biol. Zbl. 50:671-685, 1930; also Z.i.A.V. 60:235-286, 1932) and in T(2,3)Moiré (formerly Me[lx]).

Three of the translocations, T(Y;2)A, B and C, were indistinguishable from each other in the salivaries, though differentiated genetically by crossing-over relations with thick (Dobzhansky) and by a position effect with rolled (see below). In each of these three translocations the break in the second chromosome was found to be just before band 41A1 of Bridges' 1935 map. Synapsis in 2R was greatly interfered with, especially near the region of the break.

Translocation D was found to be a complex rearrangement involving the third chromosome also and is, therefore, here designated as T(Y;2;3)D. Six(or more) breaks were found in the second and third chromosomes as follows: before 30A1, before heaviest band of 34C, undetermined breaks (or break) proximal to 41D, before 61F1, before or after 62A5 (which is the last of four similar light bands), and in 78F. The new arrangement of chromosomes was found to be as follows: Proximal part of Y; 29F to 2L tip. - Distal part of Y; 30A1 to 34C; 78F through spindle attachment to 3R tip. - 3L tip to 61E2; deficiency of 61F1 to 62A4 or 5; 62A5 or 6 to 78F; 34C to spindle attachment; unanalysed rearrangement in 41A to C; 41D1 to 2R tip.