Legend: p.e., position effect found; x, no effect; -, not tested satisfactorily.

The position effect of T(Y;2)B with rolled was found by Mrs. V. Curry, others by the writer.

Breakages in other regions of the second chromosome showed no position effects in the following series of matings: T(Y;2)J with wt, sm, hy, a, px; T(Y;2)E with j, lm, el, rd, pu, an, cru, rh, ck, hk, bri; T(Y;2;3)I with en, upw, chl; T(Y;2;3)D with Mz, Sk, cl, pi, Sp, spd, gt^4, tkv, d, tkd, J, ab.

After the cytological discovery of a deficiency around the locus of roughoid in T(Y;2;3)D, matings were made with all mutants in this vicinity to find out whether the deficient material might not be present somewhere else in the nucleus and, if not, what other loci it might include. It was found that this is a true deficiency and that the loci of anarista, roughoid and veinlet (but not Roughened) are included within its limits, 61F1 to 62A4 or 5.

Zimmer, K.G. and N.W. Timofeeff-Ressovsky. Production of mutations by neutrons in D. melanogaster.

A statistically significant increase of the rate of sex-linked mutations in D. melanogaster (ClB-method) was obtained by irradiation with neutrons (0, 96% ± 0, 20, as compared with 0, 19% ± 0, 07 in the controls) from an "artificial source (Philips, Eindhoven). Against all other radiations (X-rays produced by the neutron-apparatus) the flies were protected, so that the whole difference in the mutation rates (0, 77% ± 0, 24) is due to protons secondarily induced within the flies by neutrons. Dosage-work (determination of neutron-irradiation-dosages in r-units, equivalent to those of X-rays), as well as further irradiation-experiments are in progress, and will allow an exact comparison of the effectivity of equivalent dosages of neutrons and X-rays. The last question is of interest in connection with the problem of the influence upon the effectiveness of the total dosage of the time-and space-distribution of ionization along the path of the secondary electron or particle.

Technical Notes

Bridges, C. B. Concentration of moldex in culture media.

A concentration of 1.0% of a 10% alcoholic solution of moldex (Moldex-A from Glycol Products Co., 148 Lafayette St., New York, N. Y.) was used at Pasadena for some months in culture media (DIS-6:62) for several species of Drosophila. It was found to control mold perfectly, but was reported by several workers to give fewer fertile cultures, lowered productivity and smaller flies - presumably through hindering growth of live yeast. For the past year a concentration of 0.7% of the solution (0.07% of the chemical) has

been used. This is adequate to keep molds from appearing and seems not to give bad effects on the flies.

Bridges, C. B. On the seeding of culture with yeast.

On some five occasions the method of seeding the surfaces of culture bottles by spraying with very thin yeast suspension (see DIS-6;66) has been hopefully put into practice and then abandoned in favor of seeding with one, or better two fat drops of thick yeast suspension. Always the failures of pair cultures to produce offspring became so large as to seriously hinder the experimental breeding. The main advantage of the spraying was the suppression of mold growth - and this is now better accomplished by moldex.

Bridges, C. B. On distinguishing larvae for salivary preparations.

The notes by Beadle (Am. Nat.71: 277; DIS-6:24), Hoover (DIS-6:24) and Brehme DIS-8: -) show how the distinction between the yellow of normal malphigian tubules and the colorless or paler tubules associated with certain light eye-colors (notably w and lt but also cm, g^2 p^p and ca) and the brown color of the mouth parts of yellow larvae, can be used to select larvae of the type desired for salivary preparations. A survey of our balancers shows that a few of them are especially useful for general use in balancing any mutant whose salivaries might need investigation. For chromosome I, these are: Cl, y Hw (carrying y and g^2) dl-49, m^2 g^4 (carrying g^4, already recommended by Hoover) and dl-49, w lz^s. For chromosome II, the best is Cy, al^2 lt^3 L^4 sp^2 (carrying lt^3 of Beadle) and for chromosome III, the best is Payne, Dfd ca. These balancers are the best of the ClB, dl-49, Cy and Payne varieties, and should be kept on hand and favored in stock making.

For second and third chromosome aberrations, use can be made of the dominant eye-color p^G which has pale tubules (perhaps p^G/p^p are better). First cross to $T(Y;2;3)p^G$, pick out the $T(2;3)p^G$ aberration ♂♂ and cross to p^p ♀♀, using the normal yellow tubuled larvae.

A second and third chromosome method needing no distinguishing of larvae, except the easy one of femaleness, has been the use (by Schultz and myself) of T(Y;2;3)I. Cross the female bearing the aberration to ♂ males carrying T(Y;2;3)I, pick out sons carrying the aberration (all are T(Y;2;3)I and cross to any standard female. All daughters are heterozygotes for the aberration.

Buzzati-Traverso, A. Method for making salivary gland chromosomes permanent smearing.

I found very convenient for making permanent salivary gland chromosome smears the following method: (1) Dissect as usual the larva and leave the salivary gland in normal aceto carmine till well stained; (2) pass the gland to the slide and take off all the aceto carmine which might