The data from the experiment indicate that the percent of productivity (Fig. 1) obtained through the 0-2 day brood is similar in the three groups, but a decline starts in the treated groups in the second brood. A parallel decrease in productivity persist throughout the next two broods. If this reduction is due to the lowered fecundity or fertility or both, it is not known. The productivity after 12-14 days shows a striking increase above the control values in the two injected groups.

The Chi^2 test gives no significant difference at a 0.05 level among the data from the two concentrations of actinomycin D (x^2_{10-100}= 3.02311, x^2_{100-10}= 2.89570). The 0-12 days after treatment broods show a significant difference among the control and both treated groups (X^2_{0-10}= 33.06639, x^2_{0-100}= 30.44042); hence the two concentrations of actinomycin D proved to have the same effect on productivity.

A regression study was done plotting the productivity of both injected groups against each other.

The equation derived from the rectilineal graph: $y = 0.1685+1.0118x$ ($r=0.9786$) shows that the group to which the lower concentration was injected is 1.0118 times more productive than the second (0.100 mg/ml) injected group; however, this difference is not significant at a 0.05 level.

These results would indicate that actinomycin D is effectively absorbed by the cells inducing a physiological effect more noticeable in the 2-4 and in the 12-14 day brood. The sex ratio was not significantly altered after the injection of actinomycin D.

References; Félix, R. and V. M. Salceda. 1964, D.I.S. 39:135. Félix, R. and Rosario Rodríguez. 1967, D.I.S. 43:180.

Schalet, A. University of Connecticut Storrs, Conn. Three Y suppressed phenotypes associated with X chromosomes carrying $In(1)B^{M1}$.

Except for the brief mention of a bobbed allele (Muller and Schalet, DIS 31:144) the phenotypes described below apparently have not been previously reported as being associated with chromosomes carrying B^{M1}. A number of B^{M1} chromosomes, some of which carried no other known rearrangements, have been examined genetically and all of them show the following characteristics:

bobbed - In stocks homozygous for B^{M1}: the bb allele usually produces a normal phenotype, but upon outcrossing to produce B^{M1}/O males or females heterozygous for B^{M1} and a strong bb allele, the typical bb phenotype appears.

pod foot - In stocks homozygous for B^{M1}: females and B^{M1}/Y males have normal terminal tarsi. Upon outcrossing to produce B^{M1}/O, $B^{M1}/Dp(1:f)18$, B^{M1}/y^+Y^L or $B^{M1}/sc.Y^L$ males, terminal tarsus is swollen in one or more legs of many flies. Appearance of mutant phenotype seems to be temperature dependent. For $B^{M1}/Dp(1:f)18$ males, at 25 degrees - 51/181 (28%) show a swollen taraus, and at 18 degrees - 91/122 (75%) show a swollen tarsus. At both temperatures and for all of the above genotypes the swelling is less severe than for pdf/Y or pdf/O males. For B^{M1}/pdf females, only a small number of individuals that eclose early show a weak pdf phenotype. pdf/+ females are all normal.

In stocks homozygous for B^{M1}: the prescutal lobe appears normal in females and B^{M1}/Y males. Upon outcrossing to produce B^{M1}/O males, the prescutal lobe, as viewed from above, often appears more angular because the portion at the base of the humeral bristles seems to project outward giving a shoulder-like appearance to the entire lobe. The same phenotype is shown by $B^{M1}/Dp(1:f)18$, B^{M1}/y^+Y^L and $B^{M1}/sc.Y^L$ males.