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Argentina. Sex-linked Recessive Lethal Test  
with LSD in *Drosophila melanogaster* sperm.

Many papers were lately published about the harmful effects of LSD on chromosomes of different cellular systems, with contradictory results.

Bearing in mind possible genetic implications we started an extensive study in *Drosophila melanogaster*. The experiments were designed to test recessive and dominant lethality and translocation frequency at different stages of gametogenesis. Our first results correspond to sex-linked recessive lethals tests in sperm. The experimental procedure was as follows: six days old Canton S males were injected intraabdominally with a 0.1 mg/ml solution of d-Lysergic Acid Diethylamide (0.4  $\mu$ l per fly) and mass mated to 6 days old "Basc" virgin females. Half of the males were put in vials with females immediately after the treatment, the other half after a 24 hours interval. In both cases the males were left with the females for one day and then discarded. The females, kept for 12 days, were transferred three times to avoid crowding. Standard recessive lethal tests were done with the F1 females. All lethals scored were retested. The results obtained can be seen in the table.

	No. chrom. tested	% steriles	No. lethals	% lethals
Males mated immediately after treat.	4573	0.91	14	0.30
Males mated 24 hours after treat.	4216	0.61	4	0.09

The data presented here show an increase in the frequency of mutations in the progeny of the males mated immediately after treatment. It is interesting to note that in the other case the frequencies observed do not differ from the ones found in the controls. This might be due to differential sensitivity to the drug as in the first case a larger proportion of cells treated as mature sperm are recovered.

It has been a general procedure, when working with chemical induction of mutations, to wait 24 hours before crossing the treated males. These results (as well as lately published results with irradiated males) point to the convenience of revising such practice.

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Puff loci in the salivary gland chromo-  
somes of *D. melanogaster*.

This list of 181 puff loci in the salivary gland chromosomes of *D. melanogaster* is based on my own observations (Ashburner 1967, 1968a) and those of Becker (1959). It is more complete than those of Lindsley and Grell (1968) and includes all loci which have been observed to puff during the

third larval instar and the 12 hour "prepupal" period. Not all of the puffs have been observed in any single stock, for whilst the basic puffing patterns of different stocks of *D. melanogaster* are essentially similar, genetic variation in puffing activity is found (Ashburner 1968b). Puff loci marked with a single asterisk (\*) are puffs known to be developmentally specific -- that is, they are active only at specific periods in development. Puffs marked with a double asterisk (\*\*) are those which have been experimentally induced by temperature shock, during recovery from anoxia or by in vitro treatment of the salivary glands in various media. Unmarked puffs have only been observed sporadically either during normal development or after experimental treatment. The map locations are based on the revised salivary gland chromosome maps of C. B. and P. N. Bridges. This list of puffs is doubtless incomplete and more detailed surveys of limited chromosome regions will discover many small puffs not listed. These puffs will be recognized either by slight variations in the staining intensity of individual bands or by discrete sites of incorporation of tritiated uridine.