

an increase of 0.17% and 0.10% respectively.

TABLE I

Effect of butylated hydroxytoluene (BHT) on the mean life span of *Drosophila melanogaster*.

	males		females	
	<u>m.l.s.</u>	<u>p.c.i.</u>	<u>m.l.s.</u>	<u>p.c.i.</u>
Control	44.55		43.12	
BHT (0.01%)	46.97	0.05	43.33	0.00
BHT (0.001%)	52.12	0.17	47.42	0.10

m.l.s.: mean life span in days

p.c.i.: per cent increase

References: Dimmich, R.D., Hollis, D.P., and Heckley, J., 1961, *Nature* 192: 776-777. Harman, D., 1956, *J. Gerontol.* 11: 298-300. Harman, D., 1962, *Rad. Res.* 16: 753-763. Harman, D., 1968, *J. Gerontol.* 23: 476-482. Hempelmann, L.H. and Hoffmann, J.G., 1953, *Ann. Rev. Nuclear Sci.* 3: 369-389. Lion, M.B., Kirby-Smith, J. and Randolph, M.L., 1961, *Nature* 192: 34-36. Miyagawa, I., Gordy, W., Watabe, N. and Wilbur, K., 1958, *Proc. Natl. Acad. Sci. U.S.A.*, 44: 613-617. Stein, G. and Weiss, J., 1948, *Nature* 161: 650.

Barnett, B.M. and E.R. Muñoz. Comisión Nacional de Energía Atómica, Buenos Aires, Argentina. Effect of low temperature on inseminated females.

In the course of an investigation on the effect of radioprotectors at the genetical level and the influence of low temperatures, some data was collected on the viability of sperm in inseminated females exposed to 0°C during various periods of time. The general procedure was as

follows: four day old Canton S wild type males and females were mass mated for two days; the flies were then put in cold storage without etherizing. After the treatment the males were discarded and the females put in vials in groups of ten. Nine daily broods were made and when the progeny were counted, males and females were scored separately. The length of exposure to 0°C varied between 1 hour and 16 hours. When similar results were obtained, the data of the successive treatments was pooled, thus group I includes the controls and 1, 1.5 and 2 hr treatments. Group II includes treatments from 2.5 to 10 hr and group III includes treatments from 12 to 16 hr. The reduction in the number of offspring in the successive broods can be seen in Table I, where broods 1, 5 and 9 were taken as representative of the general pattern.

When the total progeny is considered, the reduction in number of offspring as a function of length of exposure to 0°C leads to a somewhat different grouping, as can be seen in Table II.

TABLE I

Brood	offspring/female (average)		
	Group I	Group II	Group III
1st	8.5	2.4	1.7
5th	1.6	1.4	0.7
9th	1.0	0.8	0.6

TABLE II

Treatment	Average Offspring/female	Total progeny	No. treated females
Controls & 1 hr	31.3	5794	189
1.5 to 5.5 hr	20.3	21052	1107
6 to 9 hr	14.4	6540	493
10 to 16 hr	9.0	4457	551

The viability of the females was quite unaffected by the cold storage and no alterations were found in the male/female proportions of the progeny in any of the treatments.