



CHANGING CATALASE ACTIVITY IN *DROSOPHILA MELANOGASTER* ABERRATIONS CAUSED BY THE ELECTROMAGNETIC RADIATION WAVES

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Nowadays, in this age of technological progress, there has been significant interest in the impact on the organism of electromagnetic waves (EMW), which are emitted by household appliances. There is a view that the impact of these waves on living organisms can be significant mechanical and thermal changes in the tissues and cells. The long-term effects of EMW on the live system, in some organisms is adapting to the effects, although the majority of organisms at the genetic and physiological level, there are violations that lead to various diseases, because the development of malignant and leukaemia.

We have been ordered to study the effect of electromagnetic waves on the enzyme system *Drosophila melanogaster*. To this end was irradiated several different genotypes drosophila. The experience using flies wild-type : C-S and Odessa N; And two mutant line, and vg and cn. At flies influenced EMW with a frequency of 1800 MHz, and modulation frequency of 50 Hz. Muhi obluchalici within one day, five years and ten days.

In conducting research, we have seen a change in phenotype irradiated flies, which were evident in the reduction of the F1 progeny, as well as increasing per fatality at the time of exposure. The dead after exposure flies was as follows : for C-S



- 47.5%; Odessa for the N - 37.5%; For vg-75%; For cn - 67.5%. Studied catalase activity of flies *Drosophila melanogaster* before and after exposure. There has been a change in the activity of this enzyme for all genotypes studied. Thus, the C-S Akat. to the exposure of 1.75 mol / mgu. after daily exposure $A_{kat.} = 2.63$ mol / mgu. Definitions conducted on elektrokalorimetre with wavelength 410 nm. at the standard method (Korolyuk MA, 1988).

Experimental data have shown that the effects of electromagnetic waves on flies *Drosophila melanogaster* rising interest rates, changes in the phenotype and descendants change catalase activity.

ИЗМЕНЕНИЕ КАТАЛАЗНОЙ АКТИВНОСТИ *DROSOPHILA MELANOGASTER*, ВЫЗВАННОЕ ЭЛЕКТРОМАГНИТНЫМИ ВОЛНАМИ

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При воздействии на мух *Drosophila melanogaster* ЭМВ с частотой 1800 МГц отмечается повышения процента летальности, изменения в фенотипе потомков F_1 и изменение активности каталазы.