

# COMPARATIVE EVALUATION OF PREPARATIONS BASED ON PROPUXUR AND DIAZINON IN THE INVASION OF DOGS AND CATS WITH TICKS *DERMACENTOR RETICULATUS*

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The article presents data on the effectiveness of new domestic antiparasitic collar «Profiline» (active ingredient propoxur) in comparison with the drug «Collar for domestic dogs HELP» (active ingredient diazinon) in the case of an experimental and mental invasion of dogs and cats with ticks *Dermacentor reticulatus*. Propocusur is a carbamate insecticide, which was first introduced in 1959. It is a white crystalline substance that is well soluble in ketones, lower in alcohols, halogenated hydrocarbons and aromatic hydrocarbons. It is easily broken down in alkaline solutions under heating, stable in neutral environments. According to the degree of toxicity for warm-blooded animals, propoxur belongs to moderately toxic compounds. Skin-resorptive and cumulative properties are poorly expressed. In the body, the active substance destroys to non-toxic products, which are excreted mainly in the urine, in the lactating animals – with milk. For the experiment, adult dogs and cats of both sexes and different breeds that had not been treated with insecticidal agents for at least 3 months before the start of the experiment were selected. Before the experiment, all animals were examined for the presence of pathogens ectoparasitic diseases. For each series of experiments, an appropriate number of animals (dogs, cats) from which were formed, according to the general rules of the analogues principle, two experimental and one control group with five animals in each group were selected. The therapeutic efficacy of the preparations was determined by counting ticks on the animal's fur. According to the results of the conducted research, it was found that the intensity of the invasion (EI) of dogs with ticks of the species *Dermacentor reticulatus* of the first and second experimental groups was 60 % on the second day of the study and 100 % of the control group. On the third day of the experiment, ticks were registered in two animals in the second experimental group, while the animals in the first experimental group were tick-free. From the fourth day on the fur of the dogs of the second experimental group did not mark the presence of ticks *Dermacentor reticulatus*. The decrease in the rate of ticks invasion in the control group dogs began to be noted only from the fifth day, but

the EI score remained at the same level throughout the experiment and accounted for 100 %, respectively. According to the results of the conducted research, it was found that the intensity of the invasion (EI) of cats by the ticks *Dermacentor reticulatus* in the first and second experimental groups was 40 % on the second day of the study and 100% in the control group. Starting from the third day of the experiment, the cats of both experimental groups did not indicate the presence of the *Dermacentor reticulatus* pathogen on the fur. The decrease in the rate of invasion by ticks in control group cats began to be observed from the fifth day, but the EI score remained high at 100 % until the end of the experimental study.

**Keywords:** DOGS, CATS, IXODID TICKS, *DERMACENTOR RETICULATUS*, ACARICIDES, PROPOXUR, DIAZINON, EXTENSEFFECTIVITY, PROFILINE, HELP.