USE OF DIFFERENT ACTIVE AGENTS IN THE FIGHT AGAINST IXODES TICKS

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ABSTRACT

According to literature and statistical studies, in 21 century greatly increased number of Ixodes ticks all over the world. Climatechange in future will alter the distribution of parasites and rise of tick-borne infections.

The most effective measure against Ixodes ticks is use of differentacaricidal agents. The purpose of the experiments was to establish the efficacy and safety of the most popular in Ukraine acaricidal agents, and, what was more important, to get enough information for second part of research, connected with serological identification of agents transmitted by ticks. Role of Ixodes ticks in transmission of pathogens studied by scientists from Europe, USA and Canada. Similar researches were not conducted in Ukraine. However, they are very important for understanding the likelihood of outbreaks of certain diseases.

Were collected ticks, determined their genus and selected medicines for research. In scientific work investigates the spread of Ixodes ticks in Kyiv,Kharkiv and Kyiv regionsof Ukraine.According to our scientific research, in this regions widespread such genus of ticks, like Ixodes and Dermacentor.Were selected two popular among customersacaricidal agents, with different active ingredients: fipronil and propoxur, the effect of which was determined onIxodes ticks.

For research were formed two experimental groups of ticks and placed them in special environment. Then there were placed different agents and recorded the time from the beginning of the experiment to ticks death. Besides, the control group of ticks was formed and placed in similar environment, but without affecting any medicines, and set the time of their death.

Experiment showed some differences in agents influence on Ixodes ticks. Fipronil had faster and aggressive acaricidal action. Propoxur was also effective, but time necessary for his actions was longer. Besides, he had strong deterrent effect, which was not typical for fipronil.