

THE INSECTICIDAL EFFECT OF THE ALPHA-SHAKTI PREPARATION AGAINST SHEEP'S FLAMES

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*The article describes the information on the insecticidal properties of the drug Alpha-shakti, the minimum and effective concentrations of its aqueous emulsion against ectoparasites of wool-eating sheep - *Bovicola ovis* in laboratory conditions. **Keywords:** aphid, bovicolosis, parasite, pyrethroid, drug, insects, nymph, larva, imago, insecticide.*

Relevance of the topic. Today, more than 600 breeds of sheep and many subspecies are bred in the world. They are divided into breeds that give meat, wool, leather, and various mixed types of products depending on their productivity. The following are the countries where sheep are raised in the world: China (700 million heads), India (850 million heads) and Pakistan (120 million heads). The number of sheep and goats in our republic (as of July 1, 2024) is 26 million 670 thousand, of which 3 million 650 are on farms.

It consists in the study of the epizootology of sheep bavicolosis, the development and implementation of modern methods for their treatment and prevention. Today, on the basis of a series of such reforms implemented in the Republic of Uzbekistan, the field of veterinary medicine is rapidly developing in our country, and a lot of scientific and practical work is being carried out in this field. However, as a result of the outbreak of bavicolosis among sheep in recent years, it has led to a decrease in their meat and wool productivity. Therefore, it is important to study the epizootology of the insects that live as parasites in the body of sheep and the parasitic and transmissible diseases they cause, as well as to create new effective methods and means of combating them.

The purpose of the research is to develop and put into practice new pyrethroid drugs against wool eaters of sheep in private and farms.

Research materials and methods. Modern recommendations and methodological manuals of parasitological, entomological, epizootological, microscopic examination, ecological-faunistic and veterinary parasitology sciences were used in the research.

Research results. New pyrethroids and phyto-based insecticides are widely used in the fight against arachnoentomoses of sheep. Taking this into account, we studied the parasitotoxic effect of new synthetic pyrethroid drugs, whose toxicological properties are well studied and do not have carcinogenic, mutagenic, embryotoxic properties, in laboratory and production conditions. In particular, the aqueous emulsion and powder forms of the new Alpha-shakti pyrethroid drug in various concentrations are used in laboratory and production conditions. conditions were studied. In this case, aqueous emulsions of the drug Alpha-shakti with different concentrations were prepared and tested against sheep wool-eaters (*bovicola ovis*) in laboratory conditions. For the first time, an aqueous emulsion of 0,008, 0,01, 0,015. A water emulsion of the experimental preparation was sprayed on the filter paper using a spray dispenser, and 30 copies of freshly picked woolworms were released on the surface of this treated filter paper. in order to determine the concentration, the following test-experimental works were carried out:

Experiment 1: filter paper was placed in 3 Petri dishes, and the surface of each filter paper was treated with 3,8 ml of 0,008 % aqueous emulsion of Alpha-shakti drug. On the surface of this medicated filter paper, 30 freshly picked larvae were released, and after 10 minutes, they were placed in clean Petri dishes and kept in the optimal conditions, that is, in a thermostat at a temperature of +35 °C, every 1, 3, 6, 24-hour follow-up;

Experiment 2: Experiments were carried out as mentioned above, only 0,01 percent aqueous emulsion of Alpha-shakti drug was tested;

Experiment 3: Experiments were carried out as mentioned above, only 0,015% aqueous emulsion of Alpha-shakti drug was tested;

Experiment 4: Experiments were carried out as mentioned above, only 0,02% aqueous emulsion of Alpha-shakti drug was tested;

Experiment 5: Experiments were carried out as mentioned above, only 0,025% aqueous emulsion of Alpha-shakti drug was tested;

Experiment 6: Experiments were carried out as mentioned above, only 0,03 percent aqueous emulsion of Alpha-shakti drug was tested;

Experiment 7: Experiments were carried out as mentioned above, only 0,035% aqueous emulsion of Alpha-shakti drug was tested;

Control group 8: The same experimental work was carried out as mentioned above, only treated with clean water. The results of the experiment were determined after 24 hours, and the number of dead and surviving wool eaters was calculated.

As a result, the drug's O'K0 (non-lethal concentration), O'K50 (50 % lethal concentration) and O'K100 (100 % lethal concentration) indicators of the drug were determined.

Each concentration was repeated 3 times. The effectiveness of the drug was also determined depending on the speed and quantity of beavers dying. In this,

- 0 percent of wool eaters in experimental group 1;
- 30 percent of wool eaters in experimental group 2;
- 60 percent of the fur eaters in the 3rd experimental group;
- 80 percent of the fur eaters in the 4th experimental group;
- 100 percent of wool eaters in experimental group 5;
- 100 percent of wool eaters in experimental group 6;
- 100 percent of the wool eaters in the 7th experimental group died;
- 8-100% of the wool eaters in the control group were found to be alive (Table).

Table - Experience of studying the insecticidal effect of aqueous emulsions of Alpha-shakti drug in laboratory conditions

| N.o | Drug concentration (s.e., percent) | Number of insects (copy) | Number of fleas dead after 24 hours (copy) | Success (percentage) |
|-----|------------------------------------|--------------------------|--|----------------------|
| 1 | 0,008 | 30 | - | 0 |
| 2 | 0,01 | 30 | 9 | 30 |
| 3 | 0,015 | 30 | 18 | 60 |
| 4 | 0,02 | 30 | 24 | 80 |
| 5 | 0,025 | 30 | 30 | 100 |
| 6 | 0,03 | 30 | 30 | 100 |
| 7 | 0,035 | 30 | 30 | 100 |
| 8 | Control | 30 | 0 | 0 |

Xulosalar. The minimal and 100 percent effective 0,025 and 0,03 percent aqueous emulsions of the drug Alpha-shakti (India) were found to be 100 percent insecticidal in laboratory conditions against *Bovicola ovis*, the causative agent of sheep bovicolosis.

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