

Insecticidal Effect Of New Pyrethroids Against Goat Chickens

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Abstract

The article describes the information about the drive of bovicoliosis, one of the most prevalent ectoparasitic diseases among goats in recent years.

Maqolada keyingi yillarda echkilar orasida eng ko'p tarqalayotgan ektoparazitlardan junxo'rlar haqidagi ma'lumotlar bayon etilgan.

Keywords: bovicola, bovicolosis, withers, parasite, nymph, larva, adult, insects.

junxo'r, bovikolyoz, junxo'rlar, parazit, hashoratlar, nimfa, lichinka, imago, insektisid.

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Relevance of the topic. Currently, the countries where goats are kept the most in the world are: China (140 million heads), India (120.6 million heads) and Pakistan (47 million heads). In our republic (as of January 1, 2024), the number of sheep and goats is 23 million 326 thousand heads. Goats differ from other types of livestock in that they do not require much cost for feeding and breeding, they reproduce quickly and have a high level of fertility, their meat and dairy products are nutritious, their wool, tweed and leather products are necessary for industry, their high cost, and their high demand. Goat breeding is a convenient and profitable industry for private and subsidiary farms. Because every family living in the village can increase their income by raising and raising goats, consuming their milk and meat, making various products from goat hair and wool, and marketing them.

Various clothes and products are made from goat hair and wool. Goat milk and meat are widely used as food.

Research materials and methods. The aim of the study is to study the epizootology of goat bovicoliasis, develop and implement modern methods for their treatment and prevention. Today, based on a number of similar reforms being implemented in the Republic of Uzbekistan, the veterinary sector in our country is also rapidly developing, and a lot of scientific and practical work is being carried out in this area. However, the outbreak of bovicoliasis among goats in recent years has led to a decrease in their milk, meat and fat yields. Therefore, it is important to study the epizootology of insects that live parasitically (free-living) in the body of goats and the parasitic and transmissible diseases they cause, and to create new harmless methods and means of combating them.

Results of the research. It was found that diseases such as bovicoliasis, entomosis, and rhycephalosis are widespread among goats. The most widespread arachnotomosis diseases were observed mainly in the winter and spring months.

New imported and domestically produced pyrethroid and phyto-based insecticides are widely used in the fight against arachnoentomas of goats. Taking this into account, we studied the parasitocidal effect of new synthetic pyrethroid preparations, the toxicological properties of which are well studied and do not have carcinogenic, mutagenic, or embryotoxic properties, in laboratory and production conditions. In particular, the insecticidal properties of the new Supra EC pyrethroid preparation in various concentrations and in powder form were studied in laboratory and production conditions, and the insecticidal properties of the new "Cypra EC" 25% pyrethroid preparation against the causative agents of bovicoliasis of goats (insectivores) were studied in laboratory conditions. In this study, aqueous emulsions of the drug "Cypra" of various concentrations were prepared and tested in laboratory conditions against goat lice (*bovicola caprae*). For the first time, various concentrations of the new pyrethroid drug "Cypra" were prepared, namely 0.008, 0.01, 0.015, 0.02, 0.025, 0.03, 0.035, 0.04 percent aqueous emulsions were prepared, and the aqueous emulsion of the experimental drug was sprayed onto the filter paper placed in a Petri dish using a spray dispenser, and 30 freshly picked lice were released onto the surface of this treated filter paper, and as a result of the conducted test experiments, the following experimental work was carried out in order to determine the minimum and highly effective (100 percent) concentrations of these drugs:

Experiment 1: Filter paper was placed in 3 Petri dishes, and the surface of each filter paper was treated with 3.8 ml of a 0.008% aqueous emulsion of the drug "Cypra". 30 freshly collected woolly worms were released onto the surface of this treated filter paper, and after 10 minutes they were removed into clean Petri dishes, placed in optimal conditions, i.e. in a thermostat at a temperature of +35 0C, and observed every 1, 3, 6, 24 hours;

Experiment 2: The same experimental work was carried out as described above, only a 0.01% aqueous emulsion of the drug Cypra was tested;

Experiment 3: The same experimental work was carried out as described above, only a 0.015% aqueous emulsion of the drug Cypra was tested;

Experiment 4: The experimental work was carried out as described above, only a 0.02% aqueous emulsion of the Cypra preparation was tested;

Experiment 5: The experimental work was carried out as described above, only a 0.025% aqueous emulsion of the Cypra preparation was tested;

Experiment 6: The experimental work was carried out as described above, only a 0.03% aqueous emulsion of the Cypra preparation was tested;

Experiment 7: The experimental work was carried out as described above, only a 0.035% aqueous emulsion of the Cypra preparation was tested;

Control group 8: The experimental work was carried out as described above, only treated with clean water. The results of the experiment were determined after 24 hours by determining the number of dead and surviving woolly worms and calculating the effectiveness index (percentage).

As a result, the drug was determined to have the following indicators: OC0 (non-lethal concentration), OC50 (50% lethal concentration) and OC100 (100% lethal concentration).

Each concentration was repeated 3 times. The effectiveness of the drug was also determined depending on the rate and amount of death of the beetles. In this case,

- 0% of the beetles in the 1st experimental group died;
- 30% of the beetles in the 2nd experimental group died;
- 60% of the beetles in the 3rd experimental group died;
- 80% of the beetles in the 4th experimental group died;
- 100% of the beetles in the 5th experimental group died;
- 100% of the beetles in the 6th experimental group died;

100% of the beetles in the 7th experimental group died;
 -100% of the woolly mammoths in control group 8 were found to be alive (Table 1).

Experiments on the insecticidal effect of aqueous emulsions of the drug Cypra in laboratory conditions

Table 1.

№	Drug concentration (s.e., percent)	Number of treated insects (copies)	Number of woolly mammoths that died after 24 hours (copy)	Efficiency (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

Laboratoriya sharoitida alfa-shakti preparatining kukunli shakllarini insektitsid ta'sirini o'rganish tajribasi

Jadval 2.

№	Drug concentration (s.e., percent)	Number of treated insects (copies)	Number of woolly mammoths that died after 24 hours (copy)	Efficiency (percentage)
1	0,03	30	9	10
2	0,05	30	12	30
3	0,08	30	15	50
4	0,1	30	24	80
5	0,2	30	27	90
6	0,3	30	30	100
7	0,4	30	30	100

8	Control (treated with pure chalk powder)	30	0	0
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Thus, in laboratory conditions, it was determined that the 0.3 and 0.4 percent powdered forms of the alpha-shakti preparation provided 100 percent insecticidal efficacy in laboratory conditions against bovines.

The results of the tests and experiments conducted in livestock farms were carried out in production conditions, namely on goats in livestock farms of the Nurabad district of the Samarkand region. In this case, experimental tests were carried out directly on goats with different concentrations of the alpha-shakti preparation, which provided the most economical minimum and 100 percent insecticidal efficacy in laboratory conditions:

Insecticidal activity of new pyrethroids against goat lice

Table 3.

No	Farm name	Number of heads	Drug name and concentration, %	Parasite type	Form, dosage and method of administration	Efficiency (percentage)
1	"Andijon naslli echkilar" f/x	Goats, 26 heads	"Alpha-shakti", 0,3 %	B. caprae	powder, 100-300 g/head, dusted	100
2	"Nurota qorako'l naslchilik" f/x	Goats, 645 heads	"Alpha-shakti", 0,03 %	B. caprae, Linognathidae caprae	s.e., 1-3 l/head, spray	100
3	"Dami-ata" f/x	Goats, 375 heads	"Alpha-shakti", 0,03 %	B. caprae	s.e., 1-3 l/head, spray	100
4	"Chavandoz" f/x-	Goats, 90 heads	"Alpha-shakti", 0,3 %	B. caprae	powder, 100-300 g/head, dusted	100
5	"Xudoyqulov F.I" f/x	Goats, 60 heads	"Alpha-shakti", 0,03 %	B. caprae, Linognathidae	k.e., 1-3 l/head, spray	100

				athidae caprae		
6	Andijon nasli echkilari" f/x	Goats, 785 heads	"Alpha- shakti", 0,03 %	B.capra e, Ctenoce phalides caprae	s.e., 1-3 l/ head, spray	100

Thus, it was found in the experiments that the 0.03% aqueous emulsion and 0.3% powder form of Alpha Shakti have high insecticidal properties against *Bovicola caprae*, the causative agent of goat bovicosis.

Conclusion. Based on the above data, it was found that the 0.03% aqueous emulsion and 0.3% powder form of Alpha Shakti have 100% insecticidal and therapeutic properties against *Bovicola caprae*, the causative agent of goat bovicosis.

It was found that the 0.025 and 0.03% aqueous emulsions of Cypra, which are the most minimal and 100% effective, have 100% insecticidal efficacy in laboratory conditions against *Bovicola caprae*, the causative agent of goat bovicosis.

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