Proceedings of International Conference on Educational Discoveries and Humanities
Hosted online from Plano, Texas, USA.
Date: 1st December - 2024
ISSN: 2835-3196 **Website:** econferenceseries.com

DETERMINATION OF THE THERAPEUTIC EFFECT OF "Sypra EC" 25% PREPARATIONS AGAINST BOVICOLOSIS OF GOATS.

Pulotov F. S.
Scientific Supervisor

Boltaev D. M.
Doctoral Student
Veterinary Scientific Research Institute

Аннотация:
В этой статье описаны данные о власоедов, одного из самых распространенных эктопаразитов коз в последние годы.

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

Keywords: bovicola, bovicolosis, wool eaters, parasite, insect, nymph, larva, imago, insecticide.

Relevance of the topic. Goats are distinguished from other types of livestock by the fact that they do not require a lot of costs for raising and breeding, rapid reproduction and high level of fertility, the nutritional value of meat and dairy products, the necessity of wool, tweed and leather products for industry, their value, and the high demand for them. However, the sharp increase of wool-eating ectoparasites among goats is a serious obstacle in the development of animal husbandry. Goats infested with lice eaters are very restless, become very nervous, their wool falls out, their skin becomes inflamed, they lose weight, their immunity decreases, as a result, the goats lag behind in growth and development, and the productivity of older goats decreases.

Currently, in all countries, it is an urgent problem to determine the epizootology of these ectoparasites, to develop modern treatment and prevention methods.

The purpose of the study. Bovicola caprae, the causative agent of bovicolosis disease common among goats, is a study of the epizootic situation of goat wool eaters.

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

Territorial epizootology of goat bovicolosis is carried out by the method of stationary and route inspections. Stationary inspections are carried out at specially selected livestock farms or certain stations of pastures, and route inspections are carried out once a month at various sheep and goat farms.

Inpatient examinations are usually performed in 7-10 days. Bovicola and other ectoparasites found in different goat herds were collected and examined from 10-15 goats of different ages (up to 6 months and older) in all months and seasons of the year.

Weather conditions were taken into account during the inspections (air temperature, humidity determined by Assman psychrometer, clouds, rain, snow, light, etc.).

The results of the studies obtained. Currently, new pyrethroids and phyto-based insecticides are widely used in the fight against ectoparasites of goats. Taking this into account, we studied the parasiticidal effect of new synthetic pyrethroid drugs, which have well-studied toxicological properties and do not have carcinogenic, mutagenic, or embryotoxic properties, in laboratory and production conditions. In particular, aqueous emulsion and powder forms of Sypra EC" 25% drug in different concentrations were tested against goat bovicola using laboratory and production conditions. Different concentrations of the new Sypra EC 25% pyrethroid preparation, namely 0.009, 0.01, 0.02, 0.025, 0.03, 0.035, 0.04, 0.05, 0.06, 0, 07, 0.08, 0.09, 0.1, 0.2, Aqueous emulsion of 0.3, 0.4 percent was prepared, and a filter paper placed in a Petri dish was sprayed from the aqueous emulsion of the drug in the experiment using a spray dispenser, and 30 copies of newly collected insects were released on the surface of this medicated filter paper. In order to determine the effective (100 percent) concentration, experimental work was 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 0.009% aqueous emulsion of Sypra EC 25%

preparation. Insects from 30 freshly picked copies were released on the surface of this treated filter paper, and after 10 minutes, they were taken into clean Petri dishes and kept under optimal conditions, that is, in a thermostat at a temperature of +35 0C, and observations were made every 1, 3, 6, 24 hours;

Experiment 2: The same experiments were carried out as mentioned above, only 0.01% aqueous emulsion of Sypra EC" 25% preparation was tested;

Experiment 3: The same experiment was carried out as mentioned above, only 0.015% aqueous emulsion of Sypra EC" 25% preparation was tested;

Experiment 4: Experiments were carried out as described above, only 0.02% aqueous emulsion of Sypra EC" 25% preparation was tested;

Experiment 5: Experiments were carried out as described above, only 0.025% aqueous emulsion of Sypra EC" 25% preparation was tested;

Experiment 6: Experiments were carried out as mentioned above, only 0.03% aqueous emulsion of Sypra EC" 25% preparation was tested;

Experiment 7: Experiments were carried out as described above, only 0.035% aqueous emulsion of Sypra EC" 25% preparation was tested;

Control group 8: The same experiments were carried out as mentioned above, only treated with clean water. Results of the experiment After 24 hours, the number of dead and alive insects was determined and the efficiency index (percentage) was calculated.

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

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

30 percent of insects in experimental group 1;

40 percent of insects in experimental group 2;

50 percent of insects in experimental group 3;

80 percent of insects in experimental group 4;

90 percent of insects in experimental group 5;

of insects in experimental group 6 - 100 percent;

100% of the insects in experimental group 7 died;

-100% of the insects in the 8th control group were found to be alive

ISSN: 2835-3196 **Website:** econferenceseries.com

Experience of studying the insecticidal effect of aqueous emulsions of the drug "Sypra EC" 25% in laboratory conditions Table 3

T.r.	Drug concentration (s.e., percent)	Medicated number of insects (copy)	Number of dead insects after 24 hours (copy)	Efficiency (percentage)
1	0,009	30	9	30
2	0,01	30	12	40
3	0,015	30	15	50
4	0,02	30	24	80
5	0,025	30	27	90
6	0,03	30	30	100
7	0,035	30	30	100
	Control (treated with clean water)	30	0	0

Therefore, the minimal and 100% effective 0.03% and 0.035% aqueous emulsions of the drug "Sypra EC" 25% were found to be 100% insecticidally effective against bovicolas in laboratory conditions.

The same experimental work was repeated in laboratory conditions with different concentrations of Sypra EC" 25% powder form 3 times and the same insecticidal effect was obtained against bovicolas.

Thus, in laboratory conditions, it was found that 0.3 and 0.4 percent powder forms of "Sypra EC" 25% drug have 100% insecticidal effect in laboratory conditions.

The results of the test-experiment conducted in the conditions of the livestock farms were conducted in the production conditions, that is, in the goats of the livestock farms belonging to the Nurabad district of the Samarkand region. Experimental tests were conducted directly on goats and sheep with different concentrations of the "Sypra EC" 25% preparation, which was the most economical minimum and 100% insecticidal in laboratory conditions:

The experience of studying the insecticidal effect of powder forms of the drug "Sypra EC" 25% in laboratory conditions Table 4.

T.p.	Drug concentration (powder form, percentage)	Medicated number of bovicolas (copy)	Number of bovicolas dead 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
	Control (treated with pure chalk powder)	30	0	0

Summary

1. 75 goats belonging to "Khudoykulov F.I." (resident of "Boshkuduq" village U. Boboev), Nurabad district, Samarkand region, were found to be infected with Bovicola caprae ectoparasite. Against these ectoparasites, 2 times (with an interval of 12 days) 200-500 g/head were sprayed with 0.3% powder form of Sypra EC" 25% drug, disinfected and desaccharized. Experiments were monitored, and as a result, after the 2nd treatment, the insecticide extension and intensity was 100 percent.

2. 75 goats owned by "Khudoykulov F.I." (resident of "Boshkuduq" village U. Boboev), Nurabad district, Samarkand region were examined and found to be infected with Bovicola caprae, Linognathidae caprae ectoparasites. They were disinfected with 0.03% aqueous emulsion of Sypra EC" 25% drug 2 times (with an interval of 10 days) using special equipment at the rate of 2-3 liters/head using special automax equipment. The experiments were followed up, and after the 2nd application, the insecticidal efficiency was 100 percent.

List of used literature

1. Абуладзе К.И. Паразитология и инвазионные болезни сельскохозяйственных животных // – М.: Агропромиздат, 1990. – С. 451-453.

2. Агринский Н.И. Насекомые и клещи, вредящие сельскохозяйственным животным / – Москва, изд. сельхозлитературы, 1962.-С. 285.

3. Акбаев М.Ш., Василевич Ф.И., Никольская О.В. Морфологические особенности власоедов рода Bovicola и меры борьбы с бовиколёзом крупного рогатого скота // Сб.науч.трудов МГАВМ и «Актуальные вопросы инфекционных и инвазионных болезней животных», - Москва, 1995. -С. 26-29.
4. Шагако Н.М., Криворучко Е.Б. Жизнеспособность имагинальных стадий бовикол во внешней среде // Сб. трудов конф. «Ветеринарно-санитарные аспекты качества и безопасности сельскохозяйственной продукции». - Воронеж, 26–27 ноября 2015. - С. 246–247.
5. Саитов В.Р., Володин А.Е., Мироненко А.И. Эффективность бутокса, себацила и неоцидола при линогнатозе и бовиколезе крупного рогатого скота // Сб. науч. трудов «Аграрные проблемы горного Алтая». – М., 2006. — Вып. 2. — С. 122–126.
6. Куртеков В.А. Биологическое обоснование средств и методов борьбы с псороптозом, гематопинозом и бовиколезом крупного рогатого скота // В.А. Куртеков: автореф. дис.канд. вет. наук. - Тюмень: Ризограф, - 2005.- С.11-13.