

TOXIC EFFECT OF ESFENVALERATE PIRETROIDS THE RABBITS ACTIVITY

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Abstract: *In this article an irrelevant effect, of esfenvalerate pyrethroid the rabbits reproductive activity and in removing of it a treatment efficacy of «Gamavit» and «Mexidol» are elucidated by experiments.*

Keywords: *pesticide, reproductive, pyrethroid, esfenvalerate, gamavit, mexidol, ml/kg, mg/kg.*

Introduction.

To produce food- stuff is today's main problem, standing in front of humanity. Today the size of the population is rising, up to 200-250 thousand inoneday and 70 million in a year. According to information of UNO the size of the population rose 8 milliard in 2020 all over the world and will become 9 milliard in 2050.

Rapid growth of the population leads to needs for food-stuff, especially for stock-breeding. One of the solutions of satisfying such needs for food-stuff, is to organize, producing's processes taking as a basis innovation technologies.

But, in realization of these tasks there are about 8,5 thousand urges of diseases, more than 10 thousand insects and mites, 2 thousand types of weed and more than, 1,5 thousand nematodes which prevent. On the whole, there are more than 100 thousands typs which are dangerous, 400 types among them are really harmful for organisms. Using pesticides, namely pyrethroid preparations in systematic struggle against these pests is effective and correct today.

Esfenvalerate belongs to to the group of pyrethroid and it is one of the preparations, which has property, effecting insects. But this preparation is xsenobiotics and it has harmful effects for animals, birds organism. Accordingly, it is actual and important to study the property, of esfenvalerate, which effects rabbits reproductive activity.

The aim of research: To study effect, while long using esfenvalerate insecticide which belongs to to the group of synthetic pyrethroid with the aim of prophylaxis the rabbits reproductive activity.

The object and methods of research

12 rabbits which are 6-7 months, (9 males and 3 does) in the farm "Andaksay gold grapes garden" in Kattakurgan region were used in experiments. Rabbits against the ectoparasites, with the aim of preventing an irrelevant effect of esfenvalerate, preparations "Gamavit" which forms organism's immunity and "Mexidol" which is against oxidation and which protects diaphragm from damaging are used and their treatment efficacy was marked.

The rabbits under the experiment were separated in 3 similar groups-3 does and 1 male. Before 1 week of rabbits unification? The preparations "Gamavit", which forms organism's immunity one time in one week in quantity of 0,1 ml/kg and "Mexidol" which is against oxidation and which protects diaphragm from damaging every 10 days one time in quantity 10 mg/kg were sent into the muscle. After one week, these rabbits were processed from outside with water emulsion with esfenvalerat's offered concentration against

ectoparasites such processing were realized every 7 days by one time, until the rabbits had born.

The second group of rabbits with the aim of prophylaxis from outside by one time every week were processed only with esfenvalerat's water emulsion. These rabbits were not fed with medical means. The third group of rabbits became the group under observation. All rabbits in every group were fed equally.

The methods, developed and offered by I.V.Sanotskiy, V.N.Fomenko and others; O.N.Yelizarova, N.I.Javoronkov, A.A.Dinerman, S.O.Zaugolnikov were used in marking an irrelevant effect of the preparation of esfenvalerat's water emulsion rabbits reproductive activity.

The results and analysis of research.

All rabbits in every group were mate naturally and none pathological violations in the period rabbit's pregnancy were observed. The pregnancy lasted 30-31 days/ after these period the rabbits bore. The quantity and quality indicators of bunnies are taken in the next table.

The indicators rabbit's reproductive activity in observation group

1-table

№ Rabbit does	Duration of the pregnancy days	The quantity of bunnies			The remaining of genus, after days	
		Total	Including		20	30
			alive	dead		
1	31	6	6	-	5	5
2	30	5	5	-	5	5
3	31	4	4	-	4	4
Total		15	15	-	14	14

During the week indicators of effect of esfenvalerat's water emulsion in 1:1000 correlation from outside rabbit's reproductive activity under experiment

2-table

№ Rabbit does	Duration of the pregnancy days	The quantity of bunnies			The remaining of genus, after days	
		Total	Including		20	30
			alive	Dead		
4	31	7	6	1	4	4
5	30	5	5	-	5	4
6	31	5	4	1	3	3
Total		17	15	2	12	11

During the week the effect of esfenvalerat's water emulsion in 1:1000 correlation from outside, the indicators of rabbit's reproductive activity under experiment which are treated with preparations "Gamavit" and "Mexidol"

3-table

№ Rabbit does	Duration of the pregnancy days	The quantity of bunnies			The remaining of genus, after days	
		Total	Including		20	30
			alive	Dead		
7	30	4	4	-	4	4
8	30	3	3	-	3	3

9	31	6	6	-	5	5
Total		13	13	-	12	12

According to these information, the rabbits which are processed from outside with esfenvalerat's water emulsion in 1:1000 correlation, which received 10 ml/kg each of them during the pregnancy bore more than the rabbits which are treated with pyrethroid, "Gamavit" and "Mexidol" under the control. But the rabbits, which are processed with pyrethroid and which aren't treated, bore 2 dead foetus. Besides it, after this case, 30 days later another 3 rabbits died. This case shows that there are an irrelevant effects of esfenvalerate the rabbits reproductive activity. That's why during the pregnancy it shouldn't be used. This preparation with the aim of chemical prophylactic proceccing.

It became clear, the information in the third table showed, during the pregnancy of does using of preparations «Gamavit» and «Mecsidol» together wish esfenvalerate for processing is effective, Also, these preparations don't effect negatively subsequent growth and development of born rabbits.

Conclusion.

1. Using esfenvalerate phyretroids with the aim of chemical prophylactic processing against parasites (mite, flea, louse) signs of poisoning were not observed. Just the irrelevant effects foetus were revealed. The irrelevant effects are principally dead born rabbits and death in subsequent development.

2.The rabbits, which are treated with «Gamavit» which forms natural immunity and «Mexidol » which is against oxidation, which protects diaphragm from damaging, together wish piretroids didn't bear dead rabbits and the rabbits didn't bear dead rabbits and the rabbits didn't die in subsequent development.

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