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Research Article

Toxicological Properties of Artificial Pyrethroid Cypermethrin

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Annotation:

The difference between artificial pyrethroid preparations from other chemical agents is that they selectively affect pests, and also cause rapid decay in the external environment, which is less toxic to hot dogs. One of the representatives of this group is the drug cypermethrin, which is produced in our own chemical industry, in particular at the Navoi electrochemical plant, and is used in veterinary practice.

Keywords: Pyrethroid Preparations; Cypermethrin; Artificial Pyrethroid; Drug; Ectopor; Ectomin; Berrickeyd; Cipervet.

In order to protect plants and animals from various pests in the veterinary practice of agricultural concentration of the Republic, chemical means i.e. artificial pyrethroids group preparations are widely used. Currently, about 75 percent of total pesticides are used in the use of these drugs.

Toxicology:

Cypermethrin (Ripcord, berrikeyd, tsimbush, arrivo) is the primary acting agent (Alpha-tsiano-3-phenoxybenzyl-3-(2,2-iquimethyl-cyclopropancarboxylate).

Bulgan, yellowish hue, viscous liquid with weak chemical HIDs. Well soluble in water 0,01 mg/l, and in raw mug organic solvents. In alkaline seal, threeraydi quickly toolizolysis, but resistant to acidic seal.

In veterinary practice, 25% li emulsion of a special cypermethrin for ingestion against ectoparasites of animals and poultry forms the basis of a concentration of cypermethrin; preparations such as ectopor, ectomin, berrickeyd, cipervet are produced.

Cypermethrin xar is a pyrethroid with a low and medium-toxic effect property for different types of animals, and its toxic indicators for rabbits are as follows: Lethal dose16=1275, Lethal dose50=1350, Lethal dose84=1425mg/kg (by the way of the causative agent) as well as its (Lethal dose 50) mid-lethal dose for other types of animals and poultry is from 300mg/kg to 2000mg/kg. Cypermethrin is a high-toxicity agent for bees and fish .

Causes of Poisoning:

In practice, it occurs as a result of poisoning of agricultural animals and poultry from the tsipermeter, falling into the water basin with concentration on the food of animals. Because when these cases

arise from a gross violation of the requirements specified for the storage, transportation and use of this drug, as well as from the use of the drug in high quantities, repeated use for a short period of time, as well as from the violation of the expiration dates after processing of food crops (that is, feeding animals in these places),

Clinical Symptoms:

From cypermethrin, the main clinical signs of utkir lesions of animals and poultry occur with a violation of the Central and vegetative nervous system. In the organism of injured animals there are cases of general malaise, loss of appetite, a large amount of salivary outflow from the mouth, compression of the bronchi, strong spasm of the mucosa and intestinal motility, deterioration of the head of movement, tremor, paralysis of the legs and coma. Death occurs within 24-72-hours after the pyrethroid enters the body.

In the blood of poisoned animals and poultry there is a decrease in the amount of hemoglobin, a decrease in the number of blood-shaped elements, as well as an increase in the amount of methemoglobin in the blood, a decrease in the activity of acetylcholinesterase ferment in blood by 35-40%.

Patanatomy:

The main pathologoanatomic changes in the body of animals and poultry that have died from pyrethroid poisoning: there is a violation of blood circulation in the head brain, as well as acute catarrhal inflammation of mucous membranes of internal organs, lungs and small intestines.

Diagnostics:

All data are summarized based on the collected case, that is, Anamnesis data on pesticides used in the farm, whether the animals were related to this poisonous agent, the results of the blood test obtained, the pathologic changes in the animals that died from poisoning, and also on the data of the chemical toxicological laboratory examination. Also in the diagnosis dress carried out a comparison (differential diagnosis) of the diagnosis of diseases of rabies, aueski, gout and botulism.

Treatment:

When carrying out treatment measures in animals infected with cypermethrin, we are required to pay attention to the fact that it has the property of suddenly affecting (politrop) it. When poisoning is observed, it is recommended to use the following means.

As an antidote (anti-poison agent), atropine is used in the amount of 2-5mg/kg between the muscles of the sulfate solution, 0.25 ml/kg between the veins of the vein and the chromomast, and 10 mg/kg between the muscles of ascorbic acid, which together gives a good cure of the collapse. These tools are recommended to be sent to a total of 6-12mart, with an interval of 3-5 hours, depending on the course of the poisoning. When such tools are used, treatment is achieved up to 70-75 percent of the total number of injured animals.

Profilactics:

Taking into account the lack of special therapeutic agents in the poisoning of animals and poultry from cypermethrin, the development of measures to identify and prevent the causes of the occurrence of poisoning has a practical significance. One of the main works is the installation of Veterinary Control in places, the most useful method of prevention of poisoning, when such drugs are used in veterinary practice for storage, transportation and concentration in agriculture, on the basis of the instructions on which the Shake is loaded.

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