

HYGIENIC BASIS FOR THE DEGREE OF RESISTANCE OF SELLER INSECTICIDE IN THE ENVIRONMENT

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ANNOTATION

Most chemicals are highly resistant to the environment and retain their toxic properties under natural conditions. Some pesticides have carcinogenic, mutagenic, and gonadotoxic properties. Therefore, when studying the toxicity of pesticides, it is important to assess their gonadotoxic, carcinogenic, and mutagenic effects. Pesticides with such properties are prohibited for use in agriculture. In some parts of the world, the use of toxic chemicals with these properties continues. At the national level, the annual damage from agricultural pests is 45 billion farmers. Therefore, agricultural technology requires the implementation of complex measures.

Keywords: insecticide, sanitary and toxicological, permissible concentrations, migration, hygienic regulation.

RELEVANCE

Agricultural chemicalization is attracting the attention of scientists and the general public around the world. Today, the level of pesticide pollution in the environment remains high, as modern agricultural products cannot be imagined without pesticides [1]. Agriculture used a lot of pesticides on the one hand to increase crop yields and economic efficiency as well as to achieve the new biologically active substances into the environment to the leads in this case to protect the environment leads to big problems. More than 100 chemical compounds used in agriculture are known in our republic [2].

The problem of the use of chemicals in the national economy In order to improve environmental protection measures, hygienists and sanitary doctors pay great attention to the further development of the theoretical and practical hygienic basis for the use of pesticides [9].

The problem of the use of chemicals in the national economy is of concern not only to agricultural workers, chemists, medical workers, but also to the general public. This is also known from the scientific research of many scientists [4]. The rapid development of the chemical, pharmaceutical, and machine-building industries is exacerbating the high negative impact on public health [9, 10, and 11].

This issue is becoming a general hygienic, comprehensive, multifaceted problem.

Large amounts of chemicals are used to protect agricultural crops. All of this, together and separately, is aimed at the destruction of living organisms [3].

In order to prevent the negative impact of pesticides on the environment, human health, their food, environment, atmospheric air, working air, soil, water bodies, norms and regulations, the factors influencing these conditions, the state of their preservation in nature detection is the basis for preventing the adverse effects of pesticides [5].

Today, the main way to protect plants from pests and diseases is to use chemicals. Grain crops have a special place among agricultural crops. Along with cotton, wheat is the national pride of the republic and is widely consumed by the population. Therefore, protection of cereal plants from pests and diseases is ensured by the abundance of products derived from this plant. As mentioned above, in our republic, the use of any chemical in the national economy is not allowed until it is thoroughly tested from a toxicological and hygienic point of view. Insecticides have a special place among pesticides in the fight against agricultural pests. Among insecticides, artificial pyrethroids play a major role [6]. Synthetic pyrethroids are less toxic in warm-blooded animals. But they are characterized by high durability in the environment. This feature puts them at risk of accumulating in the soil and entering the human body through the food chain. Given the high efficacy of synthetic pyrethroids as an insecticide, it requires the development of more effective drugs belonging to this class. As a result of such research, a new promising Seller 20% k.s. insecticide was developed. Seller demanded an examination of the hygienic properties of the drug in order to address the possibility of using the insecticide in agricultural grain fields and to develop its hygienic norms and hygienic regulations. [7]

THE PURPOSE OF THE STUDY

It consists of scientific substantiation of the development of safe hygienic norms and regulations of Seller insecticide for the human body and the environment (soil, water, air) and for the hygienic evaluation of agricultural (food) products grown in hot climates.

MATERIALS AND RESEARCH METHODS

The object of inspection is the drug Seller 20% ks, developed by Euro Team Uzbekistan - Germany.

Emprik: C₂₂H₁₉CL₂NO₃

Molecular weight: 416.3

Aggregate state: fine-grained white powder with a faint chemical odor.

Seller insecticide was detected by thin-layer chromatography in environmental objects.

Results of the study of the level of environmental resistance of Seller insecticide

The grain fields were divided into 7 experimental sections (6 experiments, 1 control). The first experimental section was 0.01; second experimental section 0.02; third experimental section 0.04; fourth experimental section 0.05; sixth experimental section 0.1; the seventh experimental section was treated with a celery insecticide in an active dose of 0.2 kg / ha . The results of the inspections showed that the air in the workplaces was polluted with the drug, which treated the wheat fields with celery insecticide (Table 3). When analyzing the figures in the table, the residue of the drug was 0.05 to 0.01 mg / m³ during insecticide treatment in the workplace when the insecticide was used in the amount of 0.01 kg / ha . With the increase in the use of the drug Seller (0.02; 0.04; 0.05; 0.1; 0.2 kg), the increase in the level of air pollution in the workplace (0.1; 0.2; 0.3; 0) , 5; 0.6mg / m³ 0 was observed.

Amount of Seller in atmospheric air (P = 36)

Nº	Amount used, kg/ha	Sampling time, day	The amount of insecticide is mg/m ³
1	0.01	Used hours After 2 hours 2- hours 3- hours	0.04 0.02 0,01 0
2	0.02	Used hours After 2 hours 2- hours 3- hours	0.05 0.03 0.01 0
3	0.04	Used hours After 2 hours 2- hours 3- hours	0.06 0.04 0.01 0
4	0.05	Used hours After 2 hours 2- hours 3- hours	0.07 0.05 0.02 0
5	0.1	Used hours After 2 hours 2- hours 3- hours	0.08 0.06 0.02 0,01
6	0.2	Used hours After 2 hours 2- hours 3- hours	0.09 0.07 0.03 0.01

CONCLUSION

Based on the above, before allowing the use of synthetic pyrethroids in the national economy, it is necessary to study them in detail, both biologically and in the environment. It should be noted that the environmental status of pyrethroids should be studied taking into account the soil climatic conditions of the area. The high efficiency of pesticides belonging to the class of synthetic pyrethroids in the national economy is known from the scientific data of our and foreign scientists. When celery insecticide is used in agriculture, it pollutes the air with a chemical. The level of air pollution lasts up to three days. Therefore, it is advisable to develop specific measures to protect Seller from atmospheric air pollution when used in agriculture.

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