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EFFICIENCY OF SOME INSECTICIDES BASED ON THE ACTIVE SUBSTANCE LAMBDA-CYHALOTRIN 50 G/L, IN THE CONTROL OF APPLE TREE PESTS, IN THE CONDITIONS OF THE REPUBLIC OF MOLDOVA

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In the apple plantations of the Republic of Moldova, out of 7 species of tortricidae, the most common species in recent years is the reticulated tortrix which develops two generations a year. The larvae of this species damage blossoming buds, leaves, buds, flowers and fruits. Of the fruit pests, the most dangerous is the codling moth, which also develops two generations a year. The aim of the present studies was to investigate the biological efficacy of two doses of insecticide Samum EC, against apple pests. As a result of chemical treatments in the fourth variant, the number of larvae per 100 buds and per 100 leaf rosettes was 0.35 and 0.49 exemplary, respectively.

Accounts of fruit damage made it possible to establish that, in the fourth variant, both in the tree crown and among fallen fruits, the percentage of damaged reticulated tortrix was 0.47 and 0.59%, respectively, and damage to leaves and buds was 0.48 and 0.60%.

The level of reduction in damage to buds and leaves in the fourth variant was 92.92 and 88.49%, respectively, and is significantly higher than the third variant. In the third variant, the level of reduction in fruit damage is significantly lower, being at the standard level and inferior to the 4th variant.

It is well known that in the fight against codling moth larvae, the importance to correctly determine the beginning of the hatching of larvae and carry out chemical treatments at the optimal time. During the 2021 research period, pheromone traps were used.

Throughout the growing season, fruits were collected once at every five days and were analyzed for the presence of damaged codling moths. The last count was made the day before the start of the harvest, after which the total number of fallen fruits was counted, including those damaged by larvae of codling moth. Before harvesting, the number of damaged fruits in the harvested crop was taken into account. The main criterion for determining biological effectiveness is the level of reduction in fruit damage in comparison to the control variant.

The results of calculating the reduction in the number of damaged fruits in comparison with the control showed that, both in general and in the harvested harvest, the best results were obtained in the fourth variant (97.37 - 92.29%). The most effective insecticide in the control of reticulated tortrix and codling moth is Samum EC, with a consumption rate of 0.8 l/ha.

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