

УДК: 63.632,7

**Developmental bioecology, dynamics, harmfulness of the tomato moth
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Introduction. The demand of today's market economy, the producer, like all industries, especially the new agrotechnical methods applied to agricultural crops, in addition to increasing the quality and quantity of the crop, is evaluated according to the level of additional profit remaining. This requirement is a very important field, especially in the application of measures to control harmful factors of agricultural crops, and in applying new technology to them.

Therefore, in order to increase the amount of yield obtained from the planted tomato plant, first of all, it is necessary to carry out measures to control pests that damage a certain part of the crop and reduce the quality indicators of the obtained part, and to take measures to fully preserve the product. In this case, it is necessary to identify the pests that cause damage to the plant in different phases, and properly organize measures to control them.

Methods of the experiment.

Taking measures to control pests in tomato fields was carried out based on the methods of Sh.T.Khujaev [2004], and dynamics with the help of the method of B.P.Adashkevich [1983]. Conducting scientific research and dispersion analysis of the results, mathematical statistical processing was carried out based on the method of B.A.Dospekhov [1986].

Results of the experiment: Despite the appearance of the tomato moth pest in the area in recent years, it was not found that it causes some damage to the planted tomato plant, for many years, no accurate information on the development of this species was obtained and no scientific proposals were developed. Due to the fact that the number of the pest was a little less, or because it was a species that had not been met before, its descendants scattered in the field were not fully taken into account. The level of damage caused by the pest, i.e. leaf gnawing, was considered as damage caused by other species.

In spite of such circumstances, it is known that in some years, the tomato moth appears from early spring, causes great damage to some early greened or transplanted tomato seedlings, and reduces the quantity and quality of productivity and as a result it was necessary to carry out special scientific researches and observation works in this regard.

In order to carry out high-quality and timely measures against the tomato moth, which is multiplying in tomato fields, it was first necessary to fully determine the bioecology of the development of the pest, to obtain the required information, and to organize countermeasures based on previously developed methods.

For this, this year, to determine the occurrence of tomato moth in the fields from early spring, to take into account the characteristics of bioecological development, observations were made to identify the tomato moth in the fields, starting from the greening of tomato seedlings in the fields, and the development of seedlings in the fields where the seedlings were planted. Taking into account that the pest is a species that has spread in recent years, observation work was carried out in various regions of our republic, that is, in the south and north.

The favorable weather in the spring months of this year, i.e. the rise in temperature in March, the average temperature of 13-15°C in April, created favorable conditions for the development of the tomato moth. As a result, in the tomato seedlings released in the field in the third ten days of March, the pest generations began to appear from the second ten days of April.

THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

VOLUME-3, ISSUE-3

We can see that the number of tomato moth butterflies that flew to the field and laid eggs publicly reached its maximum number in the first ten days of May. This development continued until the third ten days of May, when the graduation qualification period ended.

As it can be seen, it was taken into account that the development dynamics of the tomato moth was higher in the southern districts than in the northern districts of our republic.

In order to determine the development of the tomato moth depending on the stages of the tomato plant and the temperature of the environment, which are the main elements of abiotic factors, the relative humidity of the air, the pupae of the tomato moth that have overwintered were brought to the entomological garden in Nukus district and installed, and from the moment the butterfly flies out, the eggs cases of laying, hatching of worms and appearance of eggs, worms, and pupae of the first and second generations were taken into account.

As can be seen from the obtained data, butterflies from tomato moth pupae collected from the field this year in the conditions of Nukus district fly to the third ten days of April, and their egg-laying is observed in the first ten days of May. It was found that the worms of the pest appeared in the fields on ten days and caused damage. In the second ten days, these worms turned into pupae, butterflies of the second generation flew out of them, and in the third ten days, it was taken into account that these worms turned into pupae.

The obtained data revealed that in the northern districts of our republic, the offspring of the tomato moth, which emerged from the pupae from the third ten days of April, gave generation three times until the end of May.

Therefore, it is clear that it is necessary to carry out the proposed countermeasures starting from the overwintering of tomato moth generations. The reason was that the time of reproduction of pest worms coincides with the phase of true aphid formation of tomatoes grown from grains and transplanted from seedlings.

In order to determine the degree of damage caused by tomato moth worms to the leaves of tomato seedlings that have appeared in the field during the experimental work, five tomato fields planted from grains and transplanted from seedlings in the second ten days of April were planted from the first ten days of April to the last ten days. The places where the leaves of these plants were damaged by the tomato moth in May were taken into account.

As it can be seen from these data, it was taken into account that when tomatoes were planted from grains in the first half of April, enough laeves appeared and the tomato moth started to cause damage from the first ten days of May. In the fields sown and planted in the second ten days of April, in the beginning of May, when 2-4 true leaves were released, it was considered that the worms of the pest caused a certain amount of damage until the end of the month. It was taken into account that pests appeared in the fields planted in the third ten days of April by the end of May and caused damage by gnawing on the leaves.

The above information shows that this year the number of tomato moth worms increased publicly at the end of April and in May, and there was an opportunity to lay eggs in the tomato field, it was found that the pests selected the fields where there were enough true leaves at the beginning of April. The reason was that the pistil butterflies of the tomato moth, which flew out in April, laid eggs in 15-20 days and the larvae hatched, and in May, the number increased even more, and the third generation larvae multiplied in the plants at the end of the month and caused damage. In such tomato fields, it was found that tomato moth worms have a high chance of

causing damage, and by the middle of the growing season, the number of future generations of the pest has increased.

Conclusion. In Karakalpakstan, spring came early in this year. The tomato sprouts prepared in advance are released to the fields from the second ten days of April, and from the first ten days, they are planted from the grains in the fields, at the beginning of May there were appeared the phases of creating leaves, budding and flowering phases at the second and third ten days, the appearance of fruits in the fields with the most optimal conditions, created an opportunity for the first generation of the tomato moth pest from the village to fully feed and multiply in these places. As a result, it was found that the pest's offspring, which multiplied in the field since early spring, reached their maximum number by the end of May and spread to many fields and caused damage.

Literature

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