

The Main Pests Of Seed Orchards Of Surkhandarya Region

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Annotation: This thesis includes *Cydia pomonella* (Linnaeus, 1785), an apple orchard belonging to the family Tortricidae, which is widespread in orchards and harms them; The distribution, damage, and bioecological characteristics of the California shield *Diaspidiotus perniciosus* (Coms, 1881) and the purple shield *Parlotoria oleae* (Covee, 1880), which belong to the family Diaspididae, have been reported.

Key words: *Malus domestica* B., *Cydia pomonella*, *Grapholitha molesta*, *Parlotoria oleae*, *Diaspidiotus perniciosus*, biology, fruit, leaf, twig.

At the same time of global climate changes, rapid population growth, and the acceleration of the development process, a number of problems are increasing in food production industry, like in all other sectors. Apples are grown annually in the world on more than 5 million hectares. In 2017, the amount of apple production was 76 million tons. In 2017-2018, the total volume of apple production decreased by 2.6 million tons. In particular, 46% of the total apple production in Germany, 23% in Italy, and 8% in France are being affected by harmful organisms [6].

It is of great scientific and practical importance to improve the effective control of agricultural plants, including the provision of quality fruit products to the population in order to reduce the economic damage caused by harmful insects. In fields crops, more than 300 pests and over 100 diseases have been recorded, while in fruit orchards of our Republic, more than 260 pests and over 50 diseases have been documented [2,4].

Apple – *Malus domestica* B is an economically important crop and is cultivated all over the world. USA (4,8 mln. t), China (22,01 mln t), Russia, Iran, Turkey, France and Italy are the leading countries in apple production in the world. After grapes, apples are the most grown fruit in Uzbekistan. If the total global apple harvest is 60.2 million tons, Uzbekistan's portion of that harvest is 0.4 million tons [1].

In order to prepare a list of the main pests of seed and fruit orchards of Surkhandarya region, field research was conducted in 2020-2022 in quince and apple orchards of "Sayrob-Agro-Life" f/x located in "Navroz" MFY, in apple orchards of "Arslonbek Qurbonov" "Gilambob Bogi- Angor" located in Angor district, in apple orchards of "Jonchekka sarhadlari" located in Uzun district, in apple orchards of "Chaman-Sarvar ko'chatlari" located in Qumqurgon. In the Surkhandarya region, specific harmful pests of apples trees from seed trees were recorded and their biology and damage causing characteristics were fully analyzed. during our drictional observations in our orchards, we found dangerous rodent pests that cause significant economic damage. These pests include the apple worm (fruit eater) *Cydia pomonella* (Linnaeus, 1785) belonging to the family Tortricidae and the Oriental fruit moth, *Grapholitha (Laspeyresia) molesta* (Busck 1916), which is considered an internal quarantine object for our Republic. It was found that 15 types of sucking pests belonging to 2 classes, 8 families and various categories are present in the seasonal gardens of the Surkhandarya region. As a result of the research, it is known that 8 types of sucking pests, including apple aphid *Aphis pomi* (De Geer, 1773) red blood aphid *Eriosoma lanigerum* (Haus.1802), California shield *Diaspidiotus perniciosus* (Coms, 1881), purple shield *Parloteria oleae* (Covee 1880), apple mite *Stephanisis oschanini* (Vasiliev, 1935), pear mite *Stephanitis pyri* (Fabricius, 1775), red hawthorn mite *Amphytetranychus viennensis* Zacher, ordinary spider mite *Tetranychus urticae* (Koch, 1836) cause significant damage in seed orchards. *Cydia (Carpocapsa) pomonella* L, which is one of the main dominant species of pests that damage orchards, damages more than 30 types of fruit trees, especially apples, and is a pest of pears and quinces. Apple worm (fruit eater) damages about 50% of apple and pear harvest. Every year, due to its damage, a large part of young unripe fruits are lost. Fruits affected by the apple worm often rot and cannot be preserved. This worm sometimes damages apricots and plums. Apple worm feeds on the seeds and shells of fruits. Approximately 30-40 % of early- ripening apple varieties, 40-50 % of autumnal varieties, 80-90% of valuable late- ripening varieties of apple fruits are damaged by apple worm [3,4,5]. Generally, California shield insect is considered quite dangerous pest of over 270 species of plants, including trees such as apple, pear, cherry, plum, peach. Coccids stain fruits and reduce their quality. 20 or more spots were found in 50% of some apple

varieties affected by purple shields. It was found that 90% of the fruits have spots. Purple shield- *Parlatoria oleae* Colvée. And California shield *Diaspidiotus perniciosus* Coms. In apple orchards, it takes a high place in terms of the degree of damage, ie 34.5 % purple shields, 32.5% California shields, 11.4% apple comma shields, and the rest of the species are 6.9%. Among the fruit trees, it was studied that the California shield affected apple 12.8%, pear 10.1%, quince 10.9%, and the rest of the species had the least damage 8.6 %.

In conclusion, to eliminate the shortcomings in this regard, it is necessary to first of all reveal the degrees of damage to the bioecology of the species composition of the pests that cause damage to agricultural crops and the laws of natural growth, and on the basis of this, to develop practical methods to fight against them.

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