



"GLOBAL G.A.P." THE INTERNATIONAL STANDARD DESCRIBES THE SPECIES COMPOSITION OF LEPIDOPTERA INSECTS FOUND IN THE AGROBIOCENOSIS OF APPLE ORCHARDS, AS WELL AS THE DOMINANT SPECIES AMONG THEM

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Annotation. In the article, the first generation of apple trees bears fruit, few in number, and its harm is not pronounced much. Severe damage to the apple tree during the development of 2-4 generations of fruiting occurred in the second decade of August, in the variety "white rosemary" the lesion decreased by 2.3% in the first decade of September. "G.It has been established that the varieties "dileshes " and " Starksimon " are strongly affected by the apple fruit pest. During the summer, the apple tree bears fruit for three generations in the Kibrai district of the Tashkent region and 2-3 generations in mountainous areas. The female butterfly is a prolific apple tree and lays from 30 to 120 eggs, depending on climatic conditions and the type of fruit tree.

Keywords: dominant, generative, vegetative, characteristic, organ, pest, specialized, systematic, biotic, abiotic, bioecological.

The climate of our country is characterized by the species composition and diversity of pests of apple orchards. They affect all generative and vegetative organs of the plant. Depending on the conditions of their habitat, they can be conditionally divided into a group of pests leading an open and secretive lifestyle.

According to the data given in the literature, in the conditions of our country, more than 300 species of harmful organisms live in orchards [1; 11-b.,4;320-323 b.].

To study the species composition of pests found in apple orchards, during 2023-2024, we conducted observations at apple bazaars of farms in horticultural areas of the Tashkent region.

Of the 3 types of pests identified in gardens in the Tashkent region as a result of observations and materials collected by us, the majority are insects and mites, affecting mainly apple trees. We justified the degree of occurrence in tabular form (see Table 1), although there were differences in the number of pests and the influence of various biotic and abiotic factors.

We also systematically analyzed the main pests found in apple orchards in table 1 above. As a result, 1 class, 1 genus and 3 species of the main pests found in 3 families that cause more severe damage than those they bear in terms of bioecological characteristics were systematically identified using the literature.

1- table.

Species composition and degree of occurrence of pests found in apple orchards (Tashkent region 2023-2024)

Nº	Class	Category	Family	View	Note
1.	Insecta	Lepidoptera or butterflies <i>Lepidoptera</i>	The TORTRICIDAE <i>Tortricidae</i>	- <i>Grapholita funebrana</i>	+
				<i>Laspeyresia (Cydia) pomonella L.</i>	+++
2			Coleophoridae <i>Coleophoridae</i>	<i>Coleophora hemorobiella Scop</i>	+++
3	Yponomeutidae <i>Yponomeutidae</i>	<i>Yponomeuta malinellus Zell.</i>	++		

Note: +++ – a lot, ++–a lot, +-a little, – did not occur.

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Laspeyresia (cydia) pomonella L. The dominant species among the pests found on the apple tree in the conditions of the Tashkent region. The fruits of all apple trees are at risk of damage by pests. We will consider most of these pests as individual representatives of pests specializing in apple trees

The species composition and biological characteristics of pests are studied by conducting systematic observation work on permanent sites throughout the entire period of their development. It was analyzed whether they were infected with parasites at all stages of pest development, such as eggs, worms or larvae, larvae and adult (imago) broods. However, the quantitative ratios of its individual phases were also taken into account to determine the phenological timing of the pest's development.

As a rule, it is more difficult to determine the optimal maturity of an apple. Sometimes it can be identified by its appearance. Fruits are easily torn from trees when the color of the peel turns yellow, and the density of the core also decreases. Each variety will have a corresponding taste and aroma.

Worms that fed on fruits gained almost 2 times more weight than those that developed and fed on branches. It is noted that worms that have developed on branches develop 4-5 days faster than on fruits.

Table 2

The degree of damage to apple varieties by apple fruiting (Kibraysky district, on average per 1 tree 2021-2023y.)

Varieties of apples	Estimated date	Every tree is infected	
		Branches %	Fruit %
White rosemary	01.VI	2,3	0
G. Dileshi	08.VIII	2,2	1,4
Stark -like	08.VIII	4,9	2,2
Control	08.VIII	75,4	85,3

Apple trees are affected by the larva of the apple frugivore throughout the summer. This feature is considered to be the most specific harm to fruit crops. The degree of damage by

this pest to various apple varieties is shown in Table 2. From the data obtained, it can be understood that during the development of the first generation, the fruits of the tree are not affected by this pest. In early August, the number of affected branches increased two to three times. The fruits have an increased degree of damage, which indicates an increase in the density of pests. In areas left untreated (control) 01.VI At that time, the fruits on the tree had not yet been damaged, but by the beginning of August, this figure had reached 85.3%.

Inspection of plantations using pheromone traps is the best way to identify a pest. They are suspended from the crown of trees at a height of 1.5–2 meters. The result is observed every 7-10 days.

A double examination is carried out in order to identify the fertility of the apple tree and identify areas of its distribution. First inspection: 10-15 days after flowering, the apple tree stems 5-10 cm when growing. The second inspection: just before the infected plants enter fruiting, that is, in mid-July.

Detection of apple fruit worms. At the first detection of the larvae of the apple frugivore, the affected young branches of the apple tree are examined. The affected branches differ in that 1-2 leaves at the ends wither and wither, and three parts curl. During the second examination, the fruits of the affected plants spilled on the ground are collected and examined, the tree is shaken and the fallen fruits are collected, and the larvae of fruit butterflies and worms are examined. Larvae found in fruits and seedlings are extracted and die by pouring boiling water over them, fixing them in alcohol, a decal on or weak saline solution and pasting the appropriate label and sending them to the "rare objects" section ScRI.

During the detection of larvae of apple fruit worms, other types of fruit worms that are not quarantined may occur on fruits. It uses a table of determinants of larvae of 10 species of fruit worms to determine the species composition. To identify trees of the same variety over a large area, one of every 10 trees is taken and 10% of the area is considered. In villages, 3 hectares occupy 25-50%, and from estates-50-100. The trees are viewed from two sides from corner to corner (diagonally).

In the studies, we observed the resistance of apple varieties to fruiting damage, as well as the seasonal intensity of the damage caused. The calculations obtained for 3 varieties of apples are shown in Table 3.3, from which the following are determined:

1. The first generation of apple trees is fertile, will be few in number, and its harm will not be strongly pronounced.
2. Severe damage to the apple tree during the development of 2-4 generations of fruiting occurred in the second decade of August, in the white rosemary variety, the lesion decreased by 2.3% in the first decade of September.
3. "G.It has been established that the varieties "dileshes " and " Starksimon " are strongly affected by the fruit pest of the apple tree.

During the summer, the apple tree bears fruit in three generations in the Kibray district of the Tashkent region and 2-3 generations in mountainous areas (see Table 3). The prolific gray overwinters in a thin cocoon during the worm stage in diapause. Most of them settle in secluded places: in crevices and cracks on tree trunks and thick branches, under overgrown bark, as well as in root it winters under organic deposits on the soil surface.

Wormy noise occurs in spring when the average daily air temperature exceeds +10 °C, that is, when the trees "wake up".



during the years of apple tree fertility depression, the effectiveness of Sagittarians increases, and vice versa, during the period of increased pest density, their importance is not felt.

Conclusion. Lepidoptera, found in apple orchards, belongs to class 1, 1 genus and 3 families, while 3 types of major pests cause severe damage. In mountainous areas, where it bears fruit twice, the break between the end of apple blossom and the oblique flight of butterflies can last up to 12-16 days, depending on the climatic conditions of the area. Fruitworm butterflies fly, mate and lay eggs only at night, at an air temperature of at least + 16 ° C, as well as in the absence of wind and rain. Most butterflies live in

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