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FRUIT TREES PESTS AND PEST CONTROL

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ВРЕДИТЕЛИ ПЛОДОВЫХ ДЕРЕВЬЕВ И МЕТОДЫ БОРЬБЫ С НИМИ

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Abstract. Currently, pests cause great harm to fruit trees. 22 pests damaging fruit trees were identified and their species composition was determined. Some of them, under favorable conditions, multiply abundantly and damage the fruits, trunks, roots, branches and leaves of trees. In gardens, depending on the number of species, biological characteristics, harmfulness and nature of damage, the following activities can be carried out: 1) agrotechnical; 2) physical and mechanical; 3) biological methods. In recent years, much attention has been paid to the use of predominantly biological methods in pest control. Chemical methods of pest control have lost their effectiveness in recent years. This is due to the fact that in the course of the fight against this or that pest, hundreds and thousands of beneficial insects also disappear in nature. Not only that, but the birds that feed on them, etc., the animals are also poisoned, and their numbers are decreasing.

Аннотация. Большой вред плодовым деревьям наносят их вредители. Выявлено 22 вредителя, повреждающих плодовые деревья, и определен их видовой состав. Некоторые из них при благоприятных условиях обильно размножаются и повреждают плоды, стволы, корни, ветви и листья деревьев. В садах, в зависимости от количества видов, биологических особенностей, вредоносности и характера повреждений, можно проводить следующие мероприятия: 1) агротехнические; 2) физико-механические; 3) биологические методы. В последние годы большое внимание уделяется использованию в борьбе с вредителями преимущественно биологических методов. Химические методы борьбы с вредителями в последние годы утратили свою эффективность. Это связано с тем, что в ходе борьбы с тем или иным вредителем в природе также исчезают сотни и тысячи полезных насекомых, птиц и т. д. Количество животных также уменьшается.

Keywords: fruit trees, pests, pest control.

Ключевые слова: плодовые деревья, вредители, борьба с вредными организмами.

When it comes to getting high yields from fruit trees, it's basically protecting them from pests. All cultivated fruit plants suffer from various pests and diseases. Due to the impact of pests and diseases, the yield of fruit trees decreases from 30% in some cases to 90%. More than 300 species of fruit tree pests have been registered in Kyrgyzstan [1-10].

Biology and ecology of pests are studied on the basis of generally accepted methods.

22 pests that harm fruit trees have been identified: silk butterfly without mating (*Lymantria dispar* L.), apricot elephant nose (*Epirhynchites auratus* Scop.), Apricot plump (*Eurytoma samsonowi* Vassiliev, 1915), Apple green aphid (*Aphis pomi* De Geer, 1773), Apple devil butterfly



(*Cydia pomonella* (Linnaeus, 1758)), pouch witness (*Coleophora hemerobiella* (Scopoli, 1763)), acacia shield (*Parthenolecanium corni* (Bouché, 1844)), leaf moths (Tortricidae).

Some of which are considered the most dangerous: silk moth without mating (*Lymantria dispar* L.), leaf mealyworms (Tortricidae), apple-green aphid (*Aphis pomi* De Geer), Mealybug (*Coleophora hemerobiella* Scop.), apple blossoming spit beak (*Parthenolecanium corni* Bouche).

In the Batken region, the species composition of the main pests of fruit trees was 22 insect species (Insecta), which belong to 5 orders and 14 genera.

Species composition of fruit trees pests

Order: Lepidoptera

Family: Noctuidae

Subfamily: Hadeninae

Cosmia subtilis Staudinger, 1888

Family: Coleophoridae

Genus: *Coleophora* Hübner, 1822

C. hemerobiella (Scopoli, 1763)

C. lineolea (Haworth, 1828)

Family: Lasiocampidae

Subfamily: *Macromphaliinae*

Malacosoma parallela (Staudinger, 1887)

Family: Tortricidae

Archips rosana (Linnaeus, 1758)

Grapholita funebrana (Treitschke, 1835)

Laspeyresia pomonella (Linnaeus, 1758)

Family: Geometridae

Apocheima cinerarius (Erschoff, 1874)

Pterotocera armeniaca Djakonov, 1949

Erannis defoliaria (Clerck, 1759)

Family: Lymantriidae

Lymantria dispar Linnaeus, 1758

Family: Yponomeutidae

Yponomeuta padella Linnaeus, 1758

Family: Gelechiidae

Recurvaria nanella (Denis & Schiffermüller) 1775¹

Order: Hymenoptera

Family: Eurytomidae

Genus: *Eurytoma* Illiger, 1807

E. schreineri Schreiner, 1908

E. samsonowi Vassiliev, 1915

Order: Coleoptera

Family: Attelabidae

Rhynchites ferghanensis Nevskij, 1929

Family: Buprestidae

Chrysobothris affinis subsp. *nevskyi* Richter, 1944

Order: Homoptera

Family: Coccidae

Parthenolecanium corni Bouché, 1844

Sphaerolecanium prunastri Fonsc., 1873

Family: Aphididae

Aphis pomi De Geer, 1773

Order: Hemiptera

Family: Aradidae

Stephanitis pyri Fabricius, 1775

Mechanical destruction of pests on trees with the help of something or manually is a physico-mechanical method. In the fight against garden pests, berries that have fallen to the ground are collected and burned. Kerosene can be used to destroy silk moth eggs without mating. In the garden, harvesting can begin immediately after harvesting and be carried out until early spring. At the same time as indicated, they should scrape the eggs from the trees and bury them in deeply dug earth.

The method of protection from pests in the garden using living organisms is a biological method. The living organisms themselves are used in pest control, for example. parasitic and predatory entomophages, microbiological preparations, etc. This method is not dangerous for humans, animals and the environment.

The article discusses the pests of fruit trees and methods of control. Recently, the use of a biological pest control method has become the best way to preserve nature and get clean fruits and vegetables.

References:

1. Childers, N. F., Morris, J. R., & Sibbett, G. S. (1995). Modern fruit science. Orchard and small fruit culture. *Modern fruit science. Orchard and small fruit culture.*, (Ed. 10).
2. Benkevich, V. I. 1984. Massovye poyavleniya neparnogo shelkopryada v evropeiskoi chasti SSSR. Moscow. . (in Russian).
3. Kameneva, I. S., & Kameneva, I. (2019). Analiz sposobov zashchity rastenii v RF. *Novosti nauki v APK*, (3), 363-368. . (in Russian).
4. Vorontsov, V. V. (2013). Sadovye rasteniya ot A do Ya. Moscow. (in Russian).
5. Klyuge, N. Yu. (2000). *Sovremennaya sistematika nasekomykh*. St. Petersburg. (in Russian).
6. Kryzhanovskii, O. L. (2002). *Sostav i rasprostranenie entomofaun zemnogo shara*. Moscow. (in Russian).
7. Momunova, G. A. (2015). Bioekologicheskie osobennosti sortov abrikosa v usloviyakh Batkenskogo regiona. *Vestnik Oshskogo gosudarstvennogo universiteta*, (1), 119-124. (in Russian).
8. Momunova, G. A., Teshebaeva, Z. A., & Shamshiev, B. N. (2015). Osnovnye vrediteli abrikosa v usloviyakh Batkenskogo regiona i metody bor'by s nimi. *Nauka. Obrazovanie. Tekhnika*, (2 (52)), 218-226. (in Russian).
9. Momunova, G.A., & Miraly kyzy, A. (2019). Batken ɵryktɵrynyn gyldɵ zhana byshuu mɵnɵtynɵ abiotikalyyk faktorlorunun tiigizgen taasiri. *Izvestiya VUZov Kyrgyzstana*, (11), 42-48. (in Kyrgyz).
10. Momunova, G. A., Tukhtaev, T. M., Anara, M. K., Khalmurzaev, A. N., & Teshebaeva, Z. A. (2019, May). Developing an integrated plan of harvest protection as a tool of improving food supply security in Kyrgyzstan. In *IOP Conference Series: Earth and Environmental Science* (Vol. 274, No. 1, p. 012119). IOP Publishing. <https://doi.org/10.1088/1755-1315/274/1/012119>

Список литературы:

1. Childers N. F., Morris J. R., Sibbett G. S. Modern fruit science. Orchard and small fruit culture // Modern fruit science. Orchard and small fruit culture. 1995. №Ed. 10.
2. Бенкевич В. И. Массовые появления непарного шелкопряда в европейской части СССР. М.: Наука, 1984. 143 с.
3. Каменева И. С., Каменева И. Анализ способов защиты растений в РФ // Новости науки в АПК. 2019. №3. С. 363-368.
4. Воронцов В. В. Садовые растения от А до Я. М.: Фитон XXI, 2013. 367 с.
5. Клюге Н. Ю. Современная систематика насекомых. СПб.: Лань, 2000. 332 с.
6. Крыжановский О. Л. Состав и распространение энтомофаун земного шара. М.: Товарищество науч. изд. КМК, 2002. 237 с.
7. Момунова Г. А. Биоэкологические особенности сортов абрикоса в условиях Баткенского региона // Вестник Ошского государственного университета. 2015. №1. С. 119-124.
8. Момунова Г. А., Тешебаева З. А., Шамшиев Б. Н. Основные вредители абрикоса в условиях Баткенского региона и методы борьбы с ними // Наука. Образование. Техника. 2015. №2 (52). С. 218-226.
9. Момунова Г. А., Миралы кызы А. Баткен өрүктөрүнүн гүлдөө жана бышуу мөөнөтүнө абиотикалык факторлорунун тийгизген таасири // Известия ВУЗов Кыргызстана. 2019. № 11. С. 42-48.
10. Momunova G. A., Tukhtaev T. M., Anara M. K., Khalmurzaev A. N., Teshebaeva Z. A. Developing an integrated plan of harvest protection as a tool of improving food supply security in Kyrgyzstan // IOP Conference Series: Earth and Environmental Science. 2019. С. 012119. <https://doi.org/10.1088/1755-1315/274/1/012119>

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