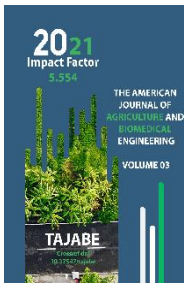
The American Journal of Agriculture and Boimedical Engineering
(ISSN – 2689-1018)
Published: May 31, 2021| **Pages:** 45-48
Doi: https://doi.org/10.37547/tajabe/Volume03Issue05-09

IMPACT FACTOR
2021: 5. 554

OCLC - 1121105746



Journal Website: http://theamericanjournals.com/index,php/tajabe

Sucking Pest Fruit Crops - Brown Fruit Mite (Bryobia Redikorzevi Reck)

Rano Dalabayevna Muminova
Tashkent State Agrarian University, Uzbekistan

Muyassar Ismailovna Tadjiyeva
Tashkent State Agrarian University, Uzbekistan

ABSTRACT

It damages the apple tree, sweet cherry, peach, plum, cherry plum, pear and almond. Hibernates in the egg phase on the bark of shoots and branches, in forks. Hatching of larvae is observed at the end of the blooming of the apple tree. The released larvae feed on budding buds, young leaves. Then go to the shoots, branches. Similar transitions are observed in protononym and deutonymph, which turns into an adult. The development of the tick from larva to adult female is 30 days.

KEYWORDS

Female, generation, drug, sprayer, acaracid.

INTRODUCTION

Belongs to the order acariform ticks (Acariformes), the family of brown ticks (Bryobiidae berlese). The brown tick reproduces parthenogenetically. The female lays eggs on the upper side of the leaves. Develops in 5 generations [1,2].

The American Journal of Agriculture and Boimedical Engineering
(ISSN – 2689-1018)
Published: May 31, 2021| **Pages:** 45-48
Doi: https://doi.org/10.37547/tajabe/Volume03Issue05-09

IMPACT FACTOR
2021: 5. 554

OCLC - 1121105746

The brown fruit mite damages trees of all fruit crops, but the main food plant is the apple tree. The body of the female is broadly oval, 0.5-0.6 mm long, the male has a more elongated-oval shape; the integument of the body is reddish-brown, weakly chitinized; legs are thin and long. Eggs, red and shiny, overwinter on the bark, mainly at the base of the fruit and on the underside of the skeletal branches.

The larvae of the brown fruit mite are orange-red, hatch at the beginning of bud opening and crawl onto the blossoming buds, and later onto young leaves. For molting, they return to the bark of the branches, where they gather in already noticeable groups. Females of the spring generation appear after the apple tree blossoms and after 3-4 days begin to lay eggs.

Fecundity of females is from 25 to 49 eggs, which they lay on the upper side of the leaf. The development of a generation of brown fruit mites lasts about a month, sometimes longer. In July-August, the tick develops in the 3-4th generations. In total, in the southern regions, the brown fruit mite develops in 4-5 generations. Under unfavorable conditions, females of the 2-3rd generations already lay hibernating eggs and the increase in the number of ticks stops.

The brown fruit mite avoids direct sunlight and colonizes the lower and middle parts of the tree crowns more. On leaves damaged by a brown fruit mite, unlike their other species, there are no cobwebs.

Brown fruit mite (Bryobia redikorzevi Reck.)

Importance: By settling on leaves, brown fruit mites suck juices out of them. In damaged leaves, the water balance is disturbed, the amount of chlorophyll decreases, and the process of photosynthesis is suspended. The plant is weakened. Fruits on trees heavily populated with mites develop small. For a tree, ticks are dangerous during all periods of development - both during the period of active growth and during the formation of the crop.

The mass reproduction of brown fruit mites in many cases is associated with the inept selection and repeated use of organophosphorus and other drugs that cause the death of predatory enemies of ticks. In some cases, an increase in the number of ticks is associated with an increase in their fertility under the influence of the stimulating effect of certain drugs on the pest's body and the emergence of drug-resistant populations. The brown fruit mite is not able to form populations resistant to acaricides, therefore,

The American Journal of Agriculture and Boimedical Engineering
(ISSN – 2689-1018)
Published: May 31, 2021| **Pages:** 45-48
Doi: https://doi.org/10.37547/tajabe/Volume03Issue05-09

IMPACT FACTOR
2021: 5. 554

OCLC - 1121105746

it is displaced by hawthorn and red fruit mites, which form populations resistant to chemicals.

Control measures: It is important to prevent the increased reproduction of the tick in the next season. Carrying out all measures for the rapid growth and development of the plant (fertilization, correct agricultural techniques, etc.), harvesting and destruction of plant residues [3].

Clearing boles from old dead bark and whitewashing them with a lime solution in autumn destroy hawthorn, red and brown fruit mites in their wintering places. A significant part of wintering pests is destroyed by spraying before bud break. The treatment prevents mass reproduction of ticks in the spring, the most harmful period. This treatment does not exclude the repeated use of chemicals, but allows you to postpone spraying to a later period. Hatching larvae of red and brown fruit mites from overwintered eggs and released oviparous females of hawthorn mites from wintering sites are destroyed by processing during the period of bud opening or separation of buds. In case of a delay in processing, spraying can be carried out at the end of flowering. But by this period, some of the hawthorn mite females have already managed to lay eggs. Treatments during bud break and before or immediately after flowering are also effective against gall mites. During this period, they leave the Gauls for resettlement. With a significant population of leaves and their damage during the summer period, treatment against other pests and diseases should be combined to kill ticks. Since some species of mites easily form populations resistant to acaricides, during chemical treatments it is necessary to provide for the alternate use of the recommended acaricides. This helps to delay the emergence of populations of mites that are resistant to chemicals.

A good effect in the fight against mites is given by the use of sulfur preparations: spraying with a wetting powder of colloidal sulfur at a dose of 6 kg / ha or spraying 0.50 according to Bohme with a lime-sulfur broth (ISO). In the presence of 2-5% of the populated plants and 10% of the colonization of the leaf plate, the following acaricides and insectoacaricides are recommended to control the brown fruit mite: Amitrats, Propargit, Bifenthrin, Bromopropylate and Hexythiazox [2,3].

With a strong development of the pest, the treatment should be repeated after 4-5 days. To obtain high efficiency from processing and to reduce the frequency of chemical intervention, it is necessary to timely identify the foci of colonization, to carry out processing at the initial stage of colonization by pests [2].

REFERENCES

1. Kimsanbaev Kh.Kh., Zuev V.I., Boltaev B.S., Suleymanov B.A., Mavlyanova R.F., Kadyrkhodzhayev A.K. Protect Solanaceous Vegetables and Potatoes from Pests and Diseases (A Guide for Farmers) - Tashkent: 2013.
2. Kamilov Sh.G., Anorbaev A.R., Boltaev B.S., Nuraliev Kh.H. "Measures to combat pests of agricultural crops" Tashkent-2016
3. Pests of crops and forest plantations. // The team of authors / Ed. V.P. Vasilyeva. In 3 t. Kiev: Harvest, 1973.
4. Муродов Б.Э., Яхёев Ж.Н. Карантинный вредители

Published: May 31, 2021| **Pages:** 45-48
Doi: https://doi.org/10.37547/tajabe/Volume03Issue05-09

IMPACT FACTOR
2021: 5. 554

OCLC - 1121105746

внутреннего карантина Республики Узбекистан // Образование и наука в России и за зарубежом. – 2017. – № 3 (32). –С. 32-36.

5. Murodov B.E., Yakhyoyev J.N. Quarantine Pests Of Internal Quarantine Of The Republic Of Uzbekistan // Education and science in Russia and abroad. 2017 | Pages: 32-36.