SPECIES COMPOSITION OF THE MAJOR PESTS OF MEDICINAL ROSEHIP (*ROSA SPP.)*

Ro'ziqulov Davlatbek Nazaraliyevich
katta o'qituvchi
https://orcid.org/0000-0002-5689-4563
Rustamova Shaxnoza Ahmad qizi
Student of Tashkent state agrarian university
konf.zara@gmail.com
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Annotatsiya. Ushbu maqolada dorivor namatakning asosiy zararkunandalari tur-tarkibi, tarqalishi hamda bioekologiyasini o'rganish asosida ularga qarshi zamonaviy kurash choralari qo'llash haqida malumotlar keltirilgan.

Kalit so'zlar: Namatak, zararkunanda, bioekologiya, qarshi kurash choralari.

Аннотация.В данной статье представлена информация о применении современных мер борьбы против основных вредителей шиповника лекарственного на основе изучения их видового состава, распространения и биоэкологии.

Ключевые слова: Шиповник, вредитель, биоэкология, меры борьбы.

Abstract. This article presents information on the application of modern control measures against the main pests of medicinal rosehip based on the study of their species composition, distribution, and bioecology.

Key words: Rosehip, pest, bioecology, control measures.

Introduction. In Uzbekistan, a number of large-scale measures are being implemented to meet the growing demand of the population for medicinal plants. Agrotechnical pest management practices are aimed at creating favorable conditions for the healthy growth and development of agricultural crops while preventing the mass reproduction of harmful organisms. These measures create unfavorable conditions for the development and spread of pests. In general, all agrotechnical practices are intended to prevent pest population growth. However, in some cases, agrotechnical methods alone are insufficient to completely eliminate pests. The rapid multiplication and harmfulness of pests depend on several factors, including the availability of suitable host plants and favorable climatic conditions necessary for their development.

Improving pest management strategies against insect pests of medicinal plants can significantly reduce yield losses and help preserve crop productivity. Despite considerable achievements in the field of crop protection, a substantial proportion of agricultural production is still lost each year due to insect pests and

diseases. One of the most important pests affecting medicinal plants is the rose hip fruit fly, Rhagoletis alternata (Fall.), which belongs to the family Tephritidae. This species is recognized as the principal pest of rosehip (Rosa spp.), causing significant damage to fruits and consequently reducing both yield and quality.

Picture 1. *Rhagoletis alternata* Fall.

Integrated pest management (IPM) is considered the most effective approach for controlling the rose hip fruit fly (Rhagoletis alternata). Therefore, the use of recommended microbiological preparations against this pest is considered appropriate and environmentally safe.

The pink leafroller (Celypha rosaceana) is another economically important pest of rosehip. Its wingspan ranges from 15 to 22 mm, and the forewings vary in color from light yellowish to dark brown. The larvae roll the leaves into tubular structures and feed inside them, causing significant damage to the foliage. Preventive measures against the pink leafroller include pruning and removing infested branches as well as collecting and destroying rolled leaves containing larvae. If control measures are delayed, the larvae begin feeding on leaves and flower buds, resulting in more severe damage. The application of highly toxic insecticides is not recommended after the flowering period of rosehip or during the summer season. Instead, biological insecticides such as *Lepidocide*, *Bitoxybacillin*, and *Fitoverm* are recommended. In addition, the use of insect growth regulators (IGRs) at the beginning of adult moth emergence provides effective suppression of pest development and population growth.

The rose sawfly (*Arge ochropus)* is another serious pest that attacks both cultivated roses and rosehip plants. This insect can develop on a wide range of fruit and ornamental plants but is particularly known for damaging flower buds.

The larvae are the most destructive stage, feeding intensively on leaves and young plant tissues. Adult insects measure approximately 7–10 mm in length and have a shiny body. The pupa is about 10 mm long and 5 mm wide. A single female is capable of laying up to 70 eggs during its lifetime. The rose sawfly causes significant and nearly equal damage to both rosehip (Rosa spp.) and cultivated roses, making it one of the major pests requiring timely monitoring and integrated management.

Conclusion. Effective pest management requires the timely implementation of integrated control measures, including organizational, agronomic, and plant protection practices. Agrotechnical measures should be carried out promptly and to a high standard to minimize pest infestation and ensure healthy crop development. In addition, regular monitoring and timely application of appropriate control measures in cultivated fields are essential. Particular attention should be given to eliminating areas where pests are likely to accumulate and removing weed species that serve as permanent reservoirs or alternative hosts for these pests. The integration of these preventive and control strategies plays a crucial role in reducing pest populations, protecting medicinal plant crops, and improving both yield and product quality..

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