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TREATMENT AND CONTROL METHODS FOR MELON DISEASES AND PESTS

Abstract: *Melon, an unexpected guest at our table, is a favorite of all melons lovers. These false-origins berries may be traced back to Central Asia. In Africa and China, certain varieties can be found. Only cultivated melons are currently grown over the world, and wild varieties are extremely rare. In the fourteenth century, the culture was brought to the Volga region. Melons were ultimately grown in other, more northern locations, and in the Moscow region, melons were even tried to grow in greenhouses. Previously, she was only available in Egypt, India, and Iran. Then they met often in Transcaucasia. Melon flies have recently expanded their distribution into the northern states. In the Krasnodar Territory and the Rostov Region, the bug destroyed melons to the tune of 50% or more in certain years.*

Key words: *melon diseases, plant, pests, insects, eggs, leaves.*

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Introduction

Melon is one of the most popular and nutritious fruits on the planet. It is high in vitamin A, vitamin C, niacin, and potassium, among other nutrients. Melon, which belongs to the Cucurbitaceae family, comes in a wide range of sizes, colors, and flavors. Some of them are even classified as veggies rather than fruits. Melon, an unusual visitor at our table, is a favorite of all melons fans. The origins of this false-berry can be found in Central Asia. Some cultivars can be found in Africa and China. Only cultivated melons are grown now all across the world, and wild kinds are quite rare. The culture was introduced to the Volga area in the fifteenth century. Melons were eventually cultivated in other, more northern places, and even melons were attempted to grow in greenhouses in the Moscow region. This tasty fruit is harmed by both specialized and omnivorous insects.

Melon fly. Melon farms are plagued by Dacus cucurbitae, sometimes known as the melon fly. She was formerly exclusively available in Egypt, India, and Iran. Then, in Transcaucasia, they often met. Melon flies' range has now expanded to include the northern states. In certain years, the bug decimated melons to the tune of 50 percent or more in the Krasnodar Territory and the Rostov Region.

Flies that are still larvae overwinter at a depth of up to 15 cm. At the beginning of June, the first generation of flies begins to fly. Laying eggs is done in the pulp of the fruit. Numerous larvae grow inside the melon, piercing tunnels into the pulp. The fruit rapidly begins to deteriorate.

A thin web that intertwines leaves can be used to detect the presence of spider mites on melons. These pests can be found in various parts of the middle zone. Adult insects live in the shadows. They hide beneath

the web on the back of the sheet during the day. Young larvae and insects of varying ages coexist in such a compact colony.

Plant sap is the food source for these sucking bugs. Spots - signs of insect bites - can be seen on the stems and leaves. Leaves that have been infected become yellow, lose their form and fall off.

The mites stay on the plant after shedding their leaves and feast on the shoots, flowers, and ovaries. The plant will eventually perish. Before planting seeds, the soil is bleached to prevent contamination. When the first genuine leaves develop, melon sprouts are sprayed with "BI-58". "Fitoverm" can destroy small colonies.

Picture 1. Spider mites on melons

Picture 2. Melon fly

Melon pest control methods

1. Deep fall plowing of fields or bed digging are the most effective preventative measures.

2. In the summer, it's important to relax the row spacing and clear away weeds as soon as possible. Many pests prefer to spend the winter on the roots of weeds, while adults feed on nectar and grass pollen throughout the summer.

3. An infusion of onion peel (one hundred grams per pail of water) or a decoction of herbs (dandelion, celandine, wormwood, calendula) can be used as a preventative therapy.

4. To encourage quick plant growth and development, pre-treat seeds against illnesses before planting. Insect assaults are less damaging to strong plants. Set traps for butterflies in the summer.

5. Rotation of crops is followed. The melon can be restored to its original location in one or two years. Insecticides are applied at least twice every season, during the development of these leaves and the creation of shoots.

Melon illnesses and treatment options. There are a lot of melon infections in greenhouses and the open fields. Plants grown from them wither, provide poor yields, or just die. Seeds, plant leftovers, soil, and weeds are all sources of infection. To avoid illnesses and yield loss, it is also vital to treat the plants as soon as possible with suitable procedures.

Picture 3. Melon ascohitoz

Picture 4. White spot (septoriosis).

Melon ascohitoz. The most dangerous illness in the defeat of the melon's neck root is a fungus. Initially, pale patches with multiple points (pycnidia) develop, which grow in size and eventually cover the whole root neck. Crops are thinned and yields are reduced as a result of the illness.

Leaves, stems, and fruits can all be affected by the disease. The damaged fruit's tissues become mushy, dark, and then dry. The stem that is impacted

darkens and breaks. For two years, the fungus may be preserved on plant wastes.

An overabundance of air humidity and soil, as well as a low temperature, creates the sickness. Deep fall autumn plowing, adequate crop rotation, removal of plant residues, soil disinfection, cleaning of damaged plant parts, feeding with potash fertilizers, and treating plants with Bordeaux liquid are all examples of control strategies.

White spot (septoriosis). This fungal disease causes the plant to develop white spherical patches. After the fungus produces fruiting, the core regions of the patches darken. The illness thrives in moist, rainy conditions. In the soil, on seeds, and in-plant detritus, the infection can be kept for a long period. Control strategies include following crop rotation, plowing the soil deeply in the fall (25-30 cm), destroying unhealthy plant remnants, and spraying with 1% Bordeaux liquid.

Conclusions

Remove weeds surrounding the crop that might serve as overwintering habitats for stink bugs, and keep weeds under control throughout the year. Insecticidal soaps, kaolin clay, and the maintenance of natural enemies are among the organically recognized management measures. If subsequent infections with other pathogens are a concern, chemical treatments are not indicated for tomatoes that will be processed for paste or canning.

To limit disease build-up, rotate crops to a non-host for 2-3 years; avoid water stress on plants; shovel crop trash deep into the soil or remove and destroy after harvest.

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