

# Physical and chemical struggle measures against parasitic nematodes that cause diseases in crops in The Province of Surxondary (In the case of southern districts)

**Mamanazarova Maqsuda O'razaliyevn**

Assistant of the Institute of Agrotechnologies and Innovative Development of Termiz

Email: [mamanazarovamaqsuda071@gmail.com](mailto:mamanazarovamaqsuda071@gmail.com)

**Annotation:** Various methods and tools are used to protect agricultural crops from nematodes. It is important to determine the composition of species of nematodes in the fight against them, to know their biology, ecology and many other specific features. The following methods are used in the fight against parasitic nematodes

**Key words:** Nematode, taxonomy, melon, watermelon, parasite, field plants, fight against.

(Matthew 24:14; 28:19, 20) An increase in the world's population can also lead to an increase in the demand for quality food products, and a variety of vegetables, vegetable crops, and fruit plants are used to meet the demand for food for the population.

Crops are grown abundantly in many countries around the world, including China, Turkey, India, the United States, Iran, Egypt, Spain, Ukraine, Bulgaria, and Central Asia [6,221 b]. Crops are grown on farms and in private areas of the republic. Each year, an average of more than 60,000 acres [60,000 ha] of land are planted, of which 60-65% are tarpaulins and 35-38% are poultry [3. 8-9 b]. The fruits of these crops, along with their delicious, juicy, and sweet tomatoes, contain sucrose glucose fructose vitamins and organic acids from substances that are useful to the human body. But in these crops, various pests are found in large quantities and cause great harm. One such pest is parasitic nematodes, which today infect almost all plant species more than 2,000 species of parasitic nematodes, causing the annual death of up to 10% of the yield of world plants. The resulting rise in sea levels from the meltwater could spell disaster for hundreds of millions of people [5. 3 b]. Among them, rooted quadruple nematodes of the *Meloidogyne* breed cause very serious damage to plants that are very common. The resulting embryo was allowed to develop in nutrients and then inserted into her womb, where it implanted. Therefore, the scientific basis of the fight against pests and the prevention of damage to parasitic nematodes of these plants and the development of a set of economically economical and environmentally friendly methods and tools determines the complexity of the topic.

**Purpose of the study: Development** of measures to combat parasitic nematodes in melons

**Research methods:** The Methods of Mashrut, Berman, and Saynhors, widely used in the preparation of anal-vulvar plastics and phytoelementology, were used to detect commonly accepted quadruple nematodes.

**Results and their novelty:** During the research, 30 species of parasite nematodes were studied in melon crops in the province of Surxondary and measures were developed to combat them.

**Action:** In the climatic climate of Surkhandarya region, parasite nematodes that fly in crops can affect plants, resulting in a decrease in crop yields and the death of a plant if severely damaged. To address shortcomings in this regard, practical recommendations will initially be developed to open and combat the species content, ecology, level of damage, and laws governing natural management of parasite nematodes that are destroying agricultural crops. These practical recommendations are used in agriculture.

**Level of implementation: Proposals** developed during the research process can be used in agriculture. It can also be used in the teaching process in higher education institutions.

**Area of application:** Higher education institutions and agriculture

### Physical resistance measures

The methods of physical struggle against nematodes include processing by heating soil, seed, seedling, germination and plant material, influencing electricity, radioactive irradiation, ultrasound, osmotic pressure, and exposure to ultraviolet light.

The soil can also be processed using steam, which is thoroughly driven for cleaning, softening, and ventilating plant residues and roots before processing.

The effectiveness of the method of decontamination of soil from phytoelements is guaranteed by thoroughly controlling the heating of the soil. For this purpose, a separate soil thermometer is installed and inspected in areas that need to be processed.

When the temperature is evaporated for 30 to 60 minutes at 100 degrees Fahrenheit [ $-100^{\circ}\text{C}$ ], the quadruple and many other types of phytopathizing are destroyed.

In the fight against all types of phytopathosis nematodes, the creation of innovative innovative methods that are ecologically clean is considered one of the most complex issues facing scientists. From this point of view, b.f.d., professor

In 1977, Khurramov became the first in the world of science to develop a method of solyazation and published it in the scientific press in 1978.

In the context of Israel, Professor Katan also created a method of solyazation in 1978, unaware of the work of Sh. Hurramov.

This method works well in hot autumn countries, including the Middle East. Plowing drying of areas where phytooparazite nematodes are common takes place in one of the months of June, July, and August. Damaged areas are plowed at a depth of 45-50 cm and left in the heat for two weeks. Then samples are taken from the soil, inspected. If the pan has a dent in it, the pan has a dent in it, and the pan has a dent in it. At this time, the soil hartorate is left in a light equal to 48-50 degrees Celsius. As a result, the biological efficiency of the solyazation method in Surxondary is 95-98%.—Sh.Hurramov 1989.

Phytoelements can also be destroyed by freezing the soil during the winter solstice. During freezing of the soil leads to the death of nematodes at the root of the plants that were trapped in the field. [4. 158-159 b]

### Chemical anti-chemical measures

The method of chemical resistance is one that is very expensive in agricultural production and causes great environmental damage. Therefore, the use of this method has been greatly investigated and restricted in the years to follow. Nevertheless, it is used to combat quadruple nematodes, that is, when a dense population of parasites is observed in strongly damaged and separate cultivated areas and phytoelementosis stoves are displayed.

Currently, the following nematocides can be used against quadruple nematodes in vegetables, vegetables, melons, technical, subtropical fruit plants: vidat, ghetofos, dazomet, DD(50x), ipam-40, carbotion and tiazon, and so on.

These nematocides can be used in greenhouse plantings, nurseries and not very large areas. Before soiling the nematocides, the ground is plowed, the cuts in it are crushed and the remains of the plant are harvested. When plowed, the area is stored for 7 to 10 days at a temperature of 12-140 C. Because during this period, the larvae of quadruple phytonmatodes form into the soil. When wet soil is overturned at a depth of 10-15cm, its temperature should be 12-15 degrees. The effect of nematocides gives an effective effect on the soil when it is wet and heated. In open fields, nematocides should be dissolved 30 days before planting in spring and autumn. The pills should be soiled early in the morning and irrigated at least 20 l/m<sup>2</sup>.

Vidat, 10% g. (US firm Dyupon). In areas where vegetables, cotton, and subtropical fruits are planted, 50 kg of soil is sprinkled at a depth of 5cm on the surface of the soil and then irrigated, at a rate of 50 kg against quadruple nematode.

Ceervorova, 7.5% (Russia). Vegetables and vegetable crops are watered at a rate of 80 kg [80 kg] at a

depth of 15 inches [15 cm] in the soil. 30-45 days, the soil cannot be manually processed.

Ipam-40.40% (Hungary). For vegetable and melon crops, 1,000, 40 days before planting at an hectare of 1, they are placed at a depth of 15 cm in the soil.

Tiazon is released in 85% poroshok, with a score of 1,000 to 1,500 kg/hectares against quadruple phytonmatodes in vegetables, vegetables, legumes, and cotton crops, and is less watered by pouring into a depth of 15 inches [15 cm] in the soil 30 days before planting in spring and autumn.

From the furrow, 10%. In areas where vegetables, machinery, and subtropical fruits are planted, 30 days before planting at a rate of 40 kg against all parasitic nematodes, the surface of the soil is sprinkled at a depth of 15 to 20 cm and then irrigated.

All nematitsids have a toxic effect on plants and the environment. Therefore, it is necessary to use them only in strict compliance with the recommended methodological guidelines. Therefore, it is necessary to use them only through the recommended usage guide. It is desirable to use nematitsids only with the help of embossed instruments and machines. The duration of the effect strength of nematitis will depend on the temperature, humidity of the soil and the preservation of organic matter in it. The use of these preparations in soil solids does not give a good result.

In conclusion, the rate at which parasitic nematodes occur in plants varies. Various methods and means of combating plants are used to protect plants from nematodes.

Replacement planting in the fight against parasite nematodes, plowing the earth, using vegetables for less damaged people, such as onions, garlic onions, turnips, cabbage, shivit and other plants, processing by heating ground processing, soil, seedlings, seedlings, nipples and plant materials, and the use of chemical preparations only in cases of high levels of damage can lead to a decrease in parasite nematodes and a significant increase in yields arrival was determined.

### The Bible's Viewpoint

1. Resolution of the President of the Republic of Uzbekistan no. PQ-4643 of March 18, 2020 "On measures to further improve the system of managing agricultural and food sectors".
2. Resolution of the Cabinet of Ministers No 148 of March 29, 2004 "On measures to improve the structure and efficiency of plant protection structure".
3. 3.Филиппьев И. Н Свободноживущие морские нематоды окрестностей Севастополя // Тр. Особей, зоол. Лаб. и Севастополь, биол. Ст Российской, АН- М. 1918 1921 350с
4. Хуррамов.Ш.Х. Эшназаров.К.Э, Хуррамов А.Ш. Фитогельминтология (Ўқув қўлланма) // - Термиз, -2021. "Surxon-Nashr",178bc. 151-152 ed.
5. 5.Хуррамов Ш.Х. О природной очаговости паразитических нематод растений южного Узбекистана //Матер. IX конф,Укр.Об-ва паразитол.Киев, "Наука Думка " 1980 ч.5.с.103-104
6. Salah. E., Rachid.L, Badr.H, Azzam. S. Diversity and distribution of plant-parasitic nematodes associated with watermelon, in northwest Morocco. 2021 j.Phytopathology and Plant Protection In press 65; 5-6p