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THE MOST COMMON DISEASES OF CUCUMBERS IN TASHKENT REGION IN GREENHOUSE AND FIELD CONDITIONS AND EFFECTIVE MEASURES AGAINST THEM

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ABSTRACT

This article provides information on diseases that have recently arisen in all regions of the Tashkent region, among farmers, farms, greenhouses and agro clusters as well as among the population of cucumbers grown on agricultural land. The article describes such information as pathogenic microorganisms, disease symptoms, prevalence, degree of damage, , bioecological properties.

KEYWORDS: ***Cucumber, disease, fungus, fusarium, peronosporosis, spread of the disease, symptoms of the disease.***

INTRODUCTION

The urgency of the problem. Among melons, the cucumber plant is of great importance in the life of our population. One of the main tasks is to protect the population from these diseases, including harmful microorganisms, in order to meet the demand of the population for these products throughout the year. In the course of our scientific research, we also developed effective measures to combat the main diseases of cucumber by studying the types of diseases and the bioecological characteristics of their pathogens, taking into account the importance of studying the diseases that occur in cucumbers.

The main diseases of cucumber plants are caused by various microorganisms, ie fungi, bacteria, viruses. The prevalence of diseases found in cucumber plants can vary in different soils.

The most common disease in cucumber plants is fake flour-dew disease. The disease is caused by the fungus Pseudoperonospora cubensis.

Peronosporosis in cucumber plants has been proven to occur in all parts of the world. In Kashmir, India, peronosporosis is one of the 4 major diseases of cucumber, along with flour-dew, anthracnose, and alternariosis caused by Alternaria alternata [3]. Usually P. cubensis is not stored in the soil and can overwinter with oospores only in some regions [5].

In such cases, oospores can grow in moist soil in the field and damage the leaves of cucumber grass. Sporangia of the pathogen are formed on the affected leaves and spread to two other fields within the field, ensuring the development of secondary and subsequent generations of the disease. Sporangia are formed 4-5 days after injury; they spread through the field with wind, raindrops, workers clothes, and work tools. The presence of 15 ° C temperature and drop moisture in the field for 6-12 hours creates optimal conditions for the formation of sporangia [5].

Sporangia fall on the upper side of leaves in early spring and grow in the presence of a drop of moisture at least 2 hours, a temperature of 5-30 ° C, for which the optimum is 15-20 ° C. In this case, zoospores emerge from the sporangia and damage the leaves [4].

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Fusarium wilt disease in cucumbers also causes great economic damage, especially in greenhouse conditions. Its causative agent is Fusarium oxysporum f. sp.cucumerinum is a type of fungus. Fusarium Oxysporum is a soil fungus that causes dangerous wilt and root rot and stem rot diseases in many crop species and infects cucumber plants at all stages of development.

Strains of the fungus Fusarium oxysporum live in the roots of cucumber plants and in various other organic materials in the form of saprophytes, that is, it is proven to occur in the soil both phytopathogenic and saprophytic populations [5].

The pathogen rots cucumber seeds and sprouting grasses in the soil and weeds growing on the soil surface; especially between 3-4 weeks from the date of planting the seedlings pose a great risk. Grasses are especially damaged at temperatures of 18-20 ° C.

Leaves infected with the fungus turn yellow and then rot, the crop becomes very sparse. The roots and rhizomes of deciduous plants turn dark brown, the bark rots; they lag behind in growth and first some shoots, then the whole plant withers and dries up. Sometimes a healthy-looking plant will wither overnight. With the mature plant, one or two stalks wither, and then the whole plant withers.

PROBLEM SOLUTIONS AND SUGGESTIONS

Agrotechnical measures should not increase the number of crop bushes in greenhouses, ensure good wind flow between crops, weed control; it is recommended to heat the seeds for 8 hours at 40 ° C and treat them with a fungicide at least 2 months before sowing the seeds. Planting of resistant varieties in open fields and greenhouses; application of balanced fertilizers to the fields; introduction of crop rotation; taking seeds only from healthy plants and treating them with effective fungicides Vitavax 200 FF; it is recommended to remove plant debris from the field and discard it.

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