

P.31 - Efficacy of biological preparations against root knot disease on cucumber plants

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The experiment to investigate how mycelial and conidial preparations (based on predacious fungus Arthrobotrys oligospora) effect root knot disease on cucumber plants (Cucumis sativus) was carried out under greenhouse conditions. The Theheight of plants, number of leaves, ovaries and yield of cucumber were measured regularly. At the end of the experiment the development of and effect on the root system by galls was estimated. The nematode invasion significantly influenced the morphological parameters of the plants. The yield production in the treatments with fungi at the beginning of registration was smaller compared with the control group without root-knot nematode and chemical standard (acarin). The formation of cucumber fruits was not detected in the control with nematode. By the following registration of cucumber biomass positive results gave mycelial preparation compared with conidial preparation. Estimation of the efficacy of biological preparations based on predacious fungus Arthrobotrys oligospora against root knot disease on cucumber plants has shown the increase of morphological parameters of plants such as height, number of leaves, ovaries compared with control with M.incognita. Average biomass of fruits also increased in these variants compared to the control with nematode. Root system affection by root knot nematode disease was decreased in treatment with fungal preparation. In all cases the mycelial preparation was more efficient than conidial.