THE INFLUENCE OF SOME ABIOTIC FACTORS ON THE DEVELOPMENT OF THE MOST IMPORTANT PHYTOPATHOGENIC FUNGI

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Abstract

The intensity of action of each factor that provides plants with favorable conditions for growth and development is designated as optimum for a specific function of the plant. If the intensity of that factor deviates from the optimum, its effect on the plants becomes unfavorable. High temperatures in the course of 2022 have a favorable effect on the intensity of slow-growing, growth and development of phytopathogenic fungi: *Aspergillus spp., Ustilago maydis, Alternaria helianthi, Fusarium oxysporum*. The low temperatures that lasted for a relatively long time until mid-May in 2022 have the greatest favorable effect on the intensity of slow-growing, growth and development of phytopathogenic fungi: *Pythium spp., Fusarium nivale, Pseudocercosporella herpotrichoides, Sclerotinia sclerotiorum, Mycosphaerella fragariae*. Increased moisture intensity has a positive effect on the intensity of slow-growing, the speed of development and the course of diseases of phytopathogenic fungi: *Phytophthora infestans, Sclerophthora macrospora, Pythium spp., Monilia laxa, M. fructigena, Botrytis cinerea, Venturia inequalis*. During the year 2022. due to the reduced intensity of moisture, a significantly lower presence of the aforementioned phytopathogenic fungi was recorded. In the course of 2022, in addition to the influence of low and high temperatures, the lack of air humidity and precipitation has the greatest importance in the weak spread of phytopathogenic fungi. A very reduced level of moisture in combination with low and high temperatures caused greater losses in the yields of cultivated crops during 2022. The yields of cultivated crops during 2022 are very low, so there were absolutely favorable conditions for the development of phytopathogenic fungi and if there had been a high degree of infection, there would not have been yield losses of this magnitude