

THE DYNAMICS OF THE OCCURRENCE AND EVOLUTION OF THE ATTACK OF SOME PATHOGENIC AGENTS ON MELONS IN THE PEDOCLIMATIC CONDITIONS OF THE NORTH – EASTERN BĂRĂGAN IN 2016

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Abstract

The purpose of this study was following up the dynamics of the occurrence and evolution of the attack of some pathogens on melons, as well as identifying the cultivars most resistant to the attack of the specific pathogenic agents. Among these pathogenic agents, we mention different species of fungi, such as: blight (*Pseudoperonospora cubensis*), fusarium wilt (*Fusarium oxysporum* f.sp. *melonis*) and mildew (*Sphaerotheca fuliginea*). It was also followed up the dynamics of the occurrence of the attack of some phytopathogenic viruses, such as cucumber mosaic virus (*Cucumber Mosaic Virus* – C.M.V.). An experiment with 5 study variants was created for this study. Those variants consisted in 4 hybrids and a variety of melons, such as: V1 - PORTOGALIA F1, V2 - JUCAR F1, V3 – ANANAS F1, V4 – ANANAS and V5 – RAYMOND F1. The study followed up the behavior of these variants in conditions of “0” phytosanitary treatments, in order to determine their resistance to the attack of Curcubitaceae blight (*Pseudoperonospora cubensis*) and to the attack of Curcubitaceae mildew (*Sphaerotheca fuliginea*). The experiment was placed in randomised blocks, the 5 variants being placed in 4 repetitions, 20 experimental parcels in total. Among the monitored pathogenic agents, the greatest attacks were produced by *Pseudoperonospora cubensis* fungus, which produces Curcubitaceae’s blight. Also, attacks of *Fusarium oxysporum* f.sp. *melonis* fungus occurred, producing the fusariosis of the melons. The observations on the occurrence of the symptoms produced by the attack of those two species of fungi had been done on the dates of July 10th and July 26th, 2016. For this, 15 leaves had been analyzed for each and every experimental parcel. Following to the observations, there had been observed significant differences in what concerns the degree of attack (G.A.%) of the blight, *Pseudoperonospora cubensis* and of the fusariosis, *Fusarium oxysporum* f.sp. *melonis*. The most sensitive cultivar proved to be Ananas variety, after which next was Ananas F1 hybrid. The other hybrids had a good behavior at the attack of these two species of fungi. Also, the productions of the hybrids: Portugalia F1, Jucar F1 and Raymond F1 were superior to Ananas variety and to Ananas F1 hybrid.

Key words: blight, *Pseudoperonospora cubensis*, Ananas F1
