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INFLUENCE OF THE BUNT FUNGUS *SPORISORIUM ANDROPOGONIS* (OPIZ) VÁNKY. ON THE STATE OF COENOPOPULATION OF *BOTHRIOCHLOA ISCHAEMUM* (L.) KENG. (POACEAE) IN THE MOUNTAIN CRIMEA

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The investigation was carried out in the vicinity of Nautsniy in Bakhchisaray region of Crimea on the top of one of the spurs on Sel-Buhra mountain top (658.2 m above the sea level, the Crimean Mountains) on one homogeneous test area, 100 m². The natural vegetation of the limestone Mountains of Sel-Buhra is represented with pubescent oak and juniper sparse wood, where *B. ischaemum* forms rather large and multiple curtains. The spread and the intensity of lesions of *B. ischaemum* coenopopulation by the bunt fungus *S. andropogonis* was studied, as well as the associated pair of fungus-plant, which is annually produced, was found.

The comparative analysis of phenological spectrum of *B. ischaemum* with phases of sporophores *S. andropogonis*, showed that spores are formed during the period of

flowering and ripening of the fruit of the host plant, with the maximum *B. ischaemum* lesion occurring in July. For more than three years of research (2016), it was revealed that the largest lesion of *B. ischaemum* takes place in May, which coincides with the period of mass flowering of the host plant. The defeat of the fungus *Sporisorium andropogonis* is systemic in nature. Diffusive mycelium of the fungus, overwintering in the feeding plant, generates generics for the end of the infection cycle of *S. andropogonis* and its further distribution in the population of *B. ischaemum*.

Analysis of chromatograms when detecting phosphotungstic acid on glycosides and other secondary metabolites (terpenoids) showed a rather poor composition of the organs studied with respect to these compounds (the presence of not more than 2–3 components). The analysis of phenolic compounds of *B. ischaemum* by TLC revealed that a component with a blue-violet fluorescence (presumably substituted phenolcarbon and cinnamic acids) and yellow fluorescence (flavonoids and their glycosides) is formed under the influence of *S. andropogonis* bunt fungus.

Keywords: *Sporisorium andropogonis* bunt fungus, *Bothriochloa ischaemum* host plant, the spread and intensity of lesions, phenological spectrum, phenolic compounds.

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