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Leading problems biotechnology research and development is to search and reception of means of struggle against pathogens, which are safe for humans and the environment. In connection with this, the creation of new biopreparations based on bacteria antagonists, and particularly bacteria of the genus *Bacillus*, is becoming of current interest. We have detected antagonistic activity of bacteria of the genus *Bacillus* in relation to some representatives of phytopathogenic fungi. The activity of bacteria of the genus *Bacillus* was mainly fungistatic, and in some cases fungicidal.

Keywords: antagonistic activity, bacteria of the genus *Bacillus*, phytopathogenic fungi.

Bacteria of the genus *Bacillus* one of the most diverse and widespread group of microorganisms, which ubiquitous in the environment. Bacteria of the genus *Bacillus* is a promising object to create biopreparations based on antagonistic strains, because of their ability to sporulate, they are highly resistant to environmental changes [3]. Moreover, microorganisms of this genus can exist in considerable range of temperature and uses as a source of carbon and energy diverse organic and inorganic compounds, that promotes their wide spread in nature (soil, air, water, foodstuffs, human and animals organism) [1].

Success of application of bacteria of the genus *Bacillus* is based on their high level of antagonistic activity in relation to pathogens of various diseases, because they synthesize a wide range of biologically active substances (BAS): antibiotics, enzymes, growth regulators, toxins and other compounds with antimicrobial and growth stimulating properties [4]. Probiotics based on bacterium *B. subtilis* are successfully applied to treat infections of various etiologies in medicine, they are harmless for macroorganism, and they have a wide range treatment-prophylactic effect and environmental safety. It is known about the use of preparations and fodder additives, which include bacteria of the genus of *Bacillus* as acting source, in veterinary science [2]. Revealed, that representatives of the genus *Bacillus* possess bactericidal and fungicidal activity and can be considered as promising biological agents to create antimicrobials [4]. In the protection of plants from pathogens was identified efficacy some strains of bacteria of the genus *Bacillus* as biofungicides.

We studied antagonistic activity of strains of bacteria of the genus *Bacillus* towards some representatives phytopathogenic fungi. It was detected antagonistic activity of bacteria *Bacillus subtilis* and *Bacillus cereus* toward *Fusarium oxysporum*. The activity of bacteria of the genus *Bacillus* was mainly fungistatic, and in some cases fungicidal. Obtained results can identify the most highly active antagonistic strains of bacteria of the genus *Bacillus* for further use them as effective biofungicides.

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