CZU: 573.6:663.1

THE USE OF MICROBIAL BIOPREPARATIONS IN MODERN BIOTECHNOLOGIES

Coscodan Mihail
Institute of Microbiology and Biotechnology, Chisinau, Republic of Moldova
E-email: mikhail_koshkodan@mail.ru

The creation of new local biopreparations that are the basis of local bacterial, capable of presenwing that are of perspective, than tran theit use with imported properties, which are of interest and practical for the country. Mixed microbial biopreparations are created from strains of agronomie microorganisms and their improvement aims to direct the processes that occur in the soil with scientific and practical applications.

Preparations obtained with microorganisms and biologilly active substances that differ especially when applied on microorganisms and biologically active substances under conditions of combination with different ecological-physiological bacteria that differ especially in their application on different agro-climatic zones in the composition of preparations with severalcomponents can be created from symbiotic associative andrhizosphere microorganisms. Biopreparations create weth a complex action, at the same time complex action, at the same time taking into account the properties to decide many problems of biological protection of plants and increase the amount of production (vegetable, fruit, herbs, animal feed), but also improvement.

Most often the bacterial preparations are created to increase the productivity of agricultural plant, that are used microorganisms to the following families, species classes, *Rhezobiaceae,* as well as the genera *Azotobacter, Bacillus, Pseudomonas, Agrobacterium, Azospirillum*, Such, non-harardous organic preparations that are created on the basis of microorganisms isolated from natural objects (agricultural plants).

Concurrent microorganisms are of major importance, as the spermosphere (phyloplane) of plants, contribute to the correlations of plants, which mave up the compladed ecological nattern for plants of plants from the necessary microorganisms, harmful and neutral. In the rhizosphere area with bacteria, actinomicetes, fungi, algae, nematodes. In the rhizosphere we find many negative bacteriogram ot these bacteria) that protect plans from phytopathogens, which stimulate growth and increase plant productivity. Except with free azotrophs and in associations, species (*Azotobacter, Bacillus, Klebsiellas, Azospirillum*) play an important role in the association and in nitrogen-fixing symbiotic communities, partly in the formation of nodules of berry plants with the combined use of several *Rhizobium* and *Bradrhhizobium* strains. The second, third and fourth components of microbial preparations, which contain bacteria, rhizobacteria, mycorhizal fungi, as well as biologically active substances have a practical importance have a practical importance in their use in modern biotechnologies.

***Acknowledgments*:** The results obtained within research project 11.817.04.11A supported financially by NARD.

Keywords: biopreparat, microorganism, active substance.