THE SEARCH AND PROPERTIES OF LACTIC ACID BACTERIA PERSPECTIVE FOR BIOTECHNOLOGY

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Search of biologically active Lactobacillus strains prospective for functional milk food production was the aim of the research.
The study involved the lactic acid bacteria isolated from biological material of healthy human and non-dairy lactic products. Using modern methodological approaches, the strains of lactic acid bacteria such as *Lactobacillus casei* 302, *Lactobacillus acidophilus* 35 and *Streptococcus thermophilus* 21 having high level of biological activity were selected. High biological potential of selected cultures of lactic acid bacteria, which could provide stability for the technological process of production and essential characteristics of bacterial preparations and fermented their products, was set.

*In vitro* the experiments demonstrated that selected strains had valuable production properties, namely the ability to reduce level of cholesterol and lactose during development in milk, were resistant to virulent bacteriophages and aggressive compounds of the gastrointestinal tract, and high adhesive and antagonistic activities as well.

**Key words:** *Lactobacillus casei*, election, adhesive activities, cholesterol.

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