Alteration of some biological properties of Lactobacillus under the action of RNAse

Kolpakov A., Kupriyanova-Ashina F., Gorskaya E. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The influence of RNAse from Bacillus intermedius on the growth of the industrial strain Lactobacillus plantarum 8R-A3 was studied. It was shown that the stimulating effect of the enzyme depended on its dose and manifested itself in decreasing the growth lag phase. At the same time the growth stimulating dose of RNAse increased the Lactobacillus adhesion to the epithelial cells and promoted secretion of proteinases from Lactobacillus to the culture medium. The possible use of RNAse as a stimulant of the growth of industrial strains was demonstrated which is advantageous for colonization of the biological surfaces.