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ANTIMICROBIAL ACTIVITY AND PROPERTIES OF *ENTEROCOCCUS FAECİUM* STRAINS ISOLATED FROM PASTEURIZED MILK

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Bacteria of the genus *Enterococcus* are ubiquitous Gram-positive, catalase negative cocci that often occur in large numbers in vegetables, plant materials, and foods, especially those of animal origin such as dairy products. Enterococci have been used in many different applications as starters or adjunct cultures, and in foods they seems to have a major role in improving flavour development and quality of cheese. Additionally, enterococci harbour some useful Biotechnological traits, such as the production of bacteriocins with anti-Listeria activity. The role and the application of enterococci in food and health and more specifically in meat and dairy products has been reviewed recently *Enterococcus faecium* isolated from pasteurize milk, for isolation of Enterococci the diluted homogenates were plated on M-17 medium and azide agar medium was used aerobically. The plates were incubated at 37°C for 2-3 days. All isolates were examined as described by Harrigan and McCance (1967), Schillinger and Lücke (1987), Stiles and Holzapfel (1997). Carbohydrate fermentation tests were carried out using the API 50CHL kit according to the manufacturer's instruction (BioMerieux,France). Ribotyping was performed with a RiboPrinter Microbial Characterization System (Qualicon Inc., Wilmington, DE) and the standard EcoRI DNA preparation kit as described in the manufacturer's operations. Antagonistic activity screening was investigated by two methods. The agar spot test and well diffusion assay. The amount of produced lactic acid, hydrogen peroxide, proteolytic activity of the lactic acid bacteria was determined.

Keywords: *Enterococcus faecium,* pasteurize milk, antimicrobial activity

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