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Technological And Probiotic Effects Of Lactobacilli Isolated From Honeys

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Abstract

In recent years, there has been renewed interest in lactic acid bacteria, particularly the genus *Lactobacillus*, due to their usefulness in biotechnology. The aim of the present study was to evaluate the probiotic characteristics and technological aptitudes of six strains of *Lactobacillus plantarum* isolated from different Algerian honeys. The classification of these bacteria as belonging to the *Lactobacillus* genus was essentially based on macroscopic observation, the catalase test and Gram staining. A number of parameters linked to the technological aptitudes of the strains studied were evaluated, notably: acidifying power, texturizing power, aromatizing power, proteolytic activity, lipolytic activity, and exo-polysaccharide production. The probiotic effects of the strains studied and their antibacterial power were also determined. The results showed that some of the *Lactobacillus plantarum* strains studied had significant acidifying and coagulating properties. Their probiotic abilities were also remarkable. The results of the present study deserve to be confirmed for a possible use of these bacteria in the agri-food industry, in particular milk processing.

Key words: *Lactobacillus plantarum*, technological skills, probiotic effects, honey.

