Evaluation of Technological Properties of Some Local Meat's Lactic Strains and Studying Their Potential Bacteriocinogenic

Rouissat Lineda
Tahri Mohammed University- Bechar, Algeria

Dahane Mohammed El Amine
Wilaya of Bechar. Environmental Direction, Bechar, Algeria

Abstract:

The use of lactic starters in food fermentation reorients microbial ecology in the product and permits to have the proceeds of the hygienic and stable sensory quality. The aim of this study is to evaluate the technological properties of some meat's lactic strains. We characterized the strains and their antagonistic against contamination's microorganisms and a characterization's test of bacteriocins. We have studied the technological properties of the best stains: the acidic ability, proteolytic and lipolytic, the research of nitrate reductase activity and the sensibility to antibiotics. Among the seventeen lactic strains studied, three strains belong to the genus Lactobacillus (S3E8, S1''E1, S4''E1) are more antagonistic against pathogenic bacteria; they are qualified performance. The research for lactic acid bacteria producers of bacteriocins by the well diffusion method, using with five reference strains Listeria monocytogenes ATCC 15313, Bacillus cereus ATCC 10876, Enterococcus feacalis ATCC 49452, Staphylococcus aureus ATCC 25923, Acinetobacter ATCC 19606 and two endogenous strains, Edwardsiella tardae and Staphylococcus sp gave negative results for all strains studied. Nine (9) strains: Lactobacillus (S4 '' E1, S1''E1 (k1), S11E6, S3E8), Enterococcus (S9E2, S5E5, S6E5, S2E9) and Pediococcus (S4E4) among seventeen (17) strains tested have shown a strong and large spectrum of inhibition against Fusaruim oxysporum albedinis. The result of technological properties indicates that all the three strains show a good performance to acidifying, proteolytic and lipolytic activities.