

## عنوان مقاله:

A Study of the Characteristics of Lactobacillus plantarum isolated from Iranian traditional pickled products

## محل انتشار:

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## خلاصه مقاله:

There is a worldwide trend for fortified and fermented foods containing live beneficial probiotic bacteria. The aim of this study was to quantify the antibacterial effect of lactic acid bacteria isolated from various Iranian traditional pickled products. Levels of lactic acid bacteria in both brine and solid materials of pickled products were assessed by conventional pour plating technique on MRS media. Antibacterial effects of Lactobacillus plantarum isolated from pickled products were examined against Salmonella typhi using spot and well-test techniques. None of the marketed industrial pickled products contained viable bacteria. The lactic acid bacteria isolated from all traditional pickled products was confirmed to be L. plantarum. The number of lactic acid bacteria in the brine as well as solid material of Iranian traditional pickled products was  $1 \times 10^5$  to  $2.05 \times 10^7$  CFU.ml<sup>-1</sup> and  $8.2 \times 10^3$  to  $6.5 \times 10^6$  CFU.g<sup>-1</sup> respectively. All the isolates identified as L. plantarum by conventional biochemical tests were confirmed by PCR, using the species specific 16s rRNA primer. The Lb. plantarum-specific primers (Lbpl1 and Lbpl2) set was the internal segments of a Lb. plantarum-specific probe tested for identification. All traditional pickled products contained viable lactic acid bacteria in both brine and solid materials while none of the industrial marketed products contained viable bacteria. Traditional pickled products could be considered as good candidates for probiotic foods with beneficiary effect on consumer health.

## کلمات کلیدی:

L. plantarum, probiotic, Antibacterial effect quantification, pickled products, PCR

## لینک ثابت مقاله در پایگاه سیویلیکا:

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