Abstract

Lactobacillus is the most prominent members of bacterial species with probiotic properties. *L. acidophilus* is a nonpathogenic member of GIT microflora; it is widely used in fermented dairy products. Aim of the study to detect the effect of the *L. acidophilus* on some diarrhea causing bacterial strains which was performed through standard plate count of tested bacteria after mixing with supernatant of *L. acidophilus*, well & agar plugs diffusion method and antibiotic susceptibility test with and without lactobacilli which found *L. acidophilus* has inhibitory effect on tested bacteria.

**Key words**: Lactobacillus, *L. acidophilus*, probiotic, diarrhea causing bacterial strains