

Thesis Title	Detection and Selection of Bacteriocin Producing Strains of <i>Lactobacillus</i> spp. From Various Sources.		
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ABSTRACT

Bacteriocins are antagonistic proteins that possess bactericidal activity against microorganisms of closely related species. Bacteriocin-producing lactic acid bacteria have been proven to be useful in improving the safety of food fermentation products. The purpose of this study is to screen and characterize bacteriocin from *Lactobacillus* spp. 38 Isolates of Lactobacilli were obtained from saliva, feces, drinking yoghurt and yoghurt. Preliminary screening of antagonistic activity by streak plate and cylinder plate method utilized 3 media i.e., BHI, MRS, Tomato juice, in order to select the best media which could provide growth rapidly as well as good antagonistic activity. Most of the isolates showed good antagonistic activity when tested on MRS agar. In addition, a number of *Lactobacillus* spp. supernatant from MRS broth showed inhibition against *B. subtilis* ATCC 6633, *E. coli*, *S. typhi* TISTR 292, *S. lutea* ATCC 9341, *S. aureus* ATCC 6538 and *Ps. aeruginosa*. Isolate No.37's bacteriocin was chosen for further characterization because it demonstrated promising results against indicator strains which included

Listeria monocytogenes. Its activity remained after the treatment with papain, and even after heating in boiling waterbath for 30 minutes. But it was sensitive to proteinase K and trypsin. The molecule was partially purified by cold acetone precipitation and the molecular weight of approximately 40 Kda was estimated by SDS-PAGE.