

SUMMARY

In present research study, bacteria were isolated from meat samples (red meat) from different localities of Lahore. Bacteriocin are commonly found in meat products to enhance their shelf-life. Bacteria were isolated to check their antibacterial activity against food-borne pathogens. MRS agar medium was used to isolate lactic acid bacteria. The samples were spreaded on MRS agar plates and incubated for 72 hours at 37°C. Then bacterial strains were isolated and streaked on MRS agar plates. Antibacterial activity was performed to isolate bacteriocin producing bacteria. These strains were BSH 1b, BSH 3a, BIP 4a, BIP 3a, BIP 1b and BRR 3a. Identification was done by morphological and biochemical characterization and three of them were characterized molecularly. By result of Ribotyping strains were identified as BIP 4a was Lactobacillus curvatus, BIP 3a was Staphylococcus warneri and BIP 1b was Lactobacillus graminis. Optimum pH was 6.5 and optimum temperature was 37°C for isolated bacterial strains. Protein concentration measured was 0.07mg/ml for BSH 1b, 0.065mg/ml for BSH 3a, 0.057 mg/ml for BIP 4a, 0.062 mg/ml for BIP 1b, 0.065 mg/ml for BIP 3a and for BRR 3a 0.078 mg/ml respectively. Bacteriocin of all isolates except BIP 3a was found to be sensitive towards pepsin and bacteriocin from all isolates was resistant towards Rnase. Bacteriocin production of isolates was stable at pH 5.0 and 6.0 and at 40°C.