

peptic ulcer disease using spot-on-lawn [15] and well-dilution methods [16]. Indicator cultures have been procured from Microbial Type Culture Collection, Chandigarh, Punjab, India, National Collection of Industrial Microorganisms, Pune, India, American Type Culture Collection and DSMZ, Germany. Growth requirements of indicator

deaminase activity. It was unable to hydrolyze gelatin, starch, esculin, casein, urea and tween 20, tween 40, tween 60 and tween 80. Based upon carbohydrate fermentation profile and other physiological and biochemical tests, strain was classified as *Pediococcus*.

Molecular characterization of LAB isolate

Preliminary biochemical identification was confirmed and validated by molecular characterization. For molecular typing 16SrRNA sequencing was done by MTCC, Chandigarh, India. The genotypic analysis confirmed the isolated strain BA28 as *Pediococcus acidilactici*. 16SrRNA sequence of *Pediococcus acidilactici* BA28 is shown in figure 3.

Conclusions

In the last two decades, a variety of antagonistic bacteriocins, mostly produced by lactic acid bacteria, have attracted the attention of food and pharmaceutical sector for their potential use as natural food biopreservatives, probiotic formula foods and health care products [1,29]. Most of the LAB bacteriocins show a relatively narrow inhibitory spectrum, while only few of them could inhibit diverse groups of Gram-positive and Gram-negative bacteria [29,30]. A highly potent anti-*Helicobacter pylori* bacteriocin producing isolate from faecal sample was characterized for its antimicrobial spectrum. Bacteriocin production trait of *P. acidilactici* BA28 isolate was studied by spot-on-lawn and agar well diffusion methods against important human pathogens causing bacterial vaginosis, gastrointestinal infections, nosocomial and skin diseases. Based on the results obtained in this study, *P. acidilactici* BA28 are strongly recommended for treatment of peptic ulcer and other sexually transmitted diseases in combination with antibiotic therapy that could check recurrence of the disease after termination of antibiotic treatment.

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