OMICS International
conferenceseries.com
World Congress on
Beneficial Microbes:
Food, Pharma, Aqua & Beverages Industry
August 25-27, 2015 Valencia, Spain

Hilal Genc et al., Ferment Technol 2015, 3:2
http://dx.doi.org/10.4172/2167-7972.S1.003

Selection of potential probiotic lactic acid bacteria from fermented vegetable by *in vitro* tests

Hilal Genc and Merih Kıvanc
Anadolu University, Turkey

Background: Fermented vegetables and fruits are one of the most popular foods consumed throughout the world. Lactic acid bacteria are involved in the fruit and vegetable fermentation. LAB has been used to produce fermented food products. Probiotics are defined as live microorganisms which when administered in adequate amounts confer a health benefit on the host. Probiotic properties are highly strain-dependent. The use of lactic acid bacteria (LAB) as probiotics to enhance health and wellbeing has been proposed for many years. When selecting probiotics, different criteria have to be fulfilled.

Objectives: The present study aims to evaluate the probiotic potential of lactic acid bacteria (LAB) isolated from fermented vegetable. Six isolates to be used as probiotic starters for the improvement of the traditional fermentation process and the production of newly added value functional foods.

Methods: Screening of the strains at selecting factors high acidity and different concentrations of bile salts was first accomplished. In addition, susceptibility to antibiotics and haemolytic activity, production of hydrogen peroxide and spectrum of antimicrobial activity were determined. Exopolysaccharides production was investigated.

Conclusions: This work demonstrates 6 potential probiotic bacteria in vitro screening assays applied. Characterization and probiotic potentials of the LAB isolated from fermented vegetable were studied and further research needs to be done on their behaviors in food formulations as a probiotic.

Biography

Hilal Genc currently working as researcher in Anadolu University, Turkey

hilalgenc4@gmail.com

Notes: