

13<sup>th</sup> International Conference on

# Microbial Interactions & Microbial Ecology

July 19-20, 2018 | Rome, Italy

## Phenotypic and genetic characterization of *Lactobacillus plantarum* strains isolated from Chinese Sourdough

Abdur Rehman\*

\*School of Food Science and Technology, Jiangnan University, Wuxi 214122, People's Republic of China

Sourdough has been used for centuries to leaven breads made with different flours. The quality of the product highly depends on the microbial composition and their characteristics. Therefore, selection of right strains for fermentation is a dire need of a successful fermentation. *Lactobacillus plantarum* is a plant-adapted bacterium that provides desirable technological and functional characteristics to sourdough breads including good aroma, texture and taste, apart from enhancing nutritional characteristics. A total of 165 strains of *Lactobacillus plantarum* isolated from Chinese sourdoughs were genotyped based on RAPD and RFLP and a total of 7 and 8 genotypes, respectively, were found. The ability of strains to metabolize different carbohydrates was also determined and a significant variation, in agreement with different genotypes, was noticed. A variation among strains for acidification, peptidase activity and quotient of fermentation was noticed, which explain the reason why different breads having the dominance of this species have variable quality characteristics. In the future, it is important to select strains based on desirable fermentation characteristics.

HafizJe145@gmail.com