ABSTRACT TE133037

Lactobacillus brevis TISTR 860, *Pediococcus pentosaceus* TISTR 423 are used as starter cultures for Pla Som. These bacteria were used to prepare power inoculum. The growth of the starter cultures was determined. It was found that *L.bravis* TISTR 860 produced lactic acid rapidly in early stage of fermentation. Mid-log phase, late-log phase and stationary phase of *L.brevis* TISTR 860 were at 9, 18 and 21 h of cultivation time, respectively. The highest optical density was 1.46 (OD_{500}). *P.pentosaceus* TISTR 423 produced lactic acid in the final stage of cultivation. *P.pentosaceus* TISTR 423 had mid-log phase late-log phase and stationary phase at 9, 19 and 21 h of cultivation time, respectively. The highest optical density was 1.42

Cultures of *L.brevis* TISTR 860 *P.pentosaceus* TISTR 423 growth phases were used to prepare the powder inoculums. Powder inoculums were prepared by rice flour with harvested cells that had been centrifuged. The ratio cell:rice flour was 1:20. The initial viable cell counts in the powder inoculum were 7.7 x10 ^{3} and 8.67 x 10^3 CFU/g, respectively. When stored at 4°C for 20 days, the highest survival of *L.brevis* TISTR 860 and *P.pentosaceus* TISTR 423 in the powder inoculums were obtained using stationary phase cultures, with the resulting count of 7.7x10^3 CFU/g and 8.67x10^3 CFU/g respectively.

Bags of polypropyline or polyethylene laminate whth aluminium foil were used to store the powder inoculum of *L.brevis*, TISTR 860 *P.pentosaceus* TISTR 423 There was no difference in survival with the viable cell count of 4.3 x 10^3 CFU/g and 4.0 x 10^3 CFU/g respectively when stored at 4°C for 20 day

Comparison of Pla Som in powder inoculum, inoculum and no inoculum found that from acceptibility tested of Pla Som quality in colour, tester sour and preferable found that had Pla Som with culture than Pla Som produce without starter culture and Pla Som were significantly different at the level of (95%)

Utilize *L.levis* TISTR 860 and *P.pentosaceus* TISTR 423 Pla Som in powder content : protein 18.90%, ash 2.53%, lipid 0.76%, moisture 77.81% and crudefiber 0.05%