The effects of baobab pulp powder on the microflora involved in tempe fermentation

Prof. T. O. S. Popoola

Department of Microbiology, University of Agriculture, PMB 2240, Abeokuta, Ogun State, Nigeria.

Dr (Mrs) O. R. Afolabi

Department of Microbiology, University of Agriculture, PMB 2240, Abeokuta, Ogun State, Nigeria.

Abstract

Locally prepared tempe that underwent natural fermentation was characterized by the growth of Lactobacillus plantarum, Streptococcuslactis, Bacillus Salmonella Klebsiella sp., sp., sp., Lactococcuslactis, Rhizopus sp. and Staphylococcus sp., while fermentation carried out with the addition of varying levels of baobab pulp powder had mainly lactic acid bacteria(LAB) Lactobacillus plantarum, Lactobacillus fermentum, Lactobacillus acidophilus and Rhizopus sp.dominating. Increasing concentrations of baobab pulp powder led to an increase in the population of lactic acid bacteria(LAB) from 2.3 102 to3.3 104 while it reduced the population of inoculated Rhizopus from 102 to only six colonies on malt extract agar(MEA).