

Microbial and chemical changes during preparation in the traditionally fermented soybean product Tungrymbai of ethnic tribes of Meghalaya

Author(s): [Thokchom, S](#) (Thokchom, Sharmila)¹; [Joshi, SR](#) (Joshi, S. R.)¹

Source: INDIAN JOURNAL OF TRADITIONAL KNOWLEDGE Volume: 11 Issue: 1

Pages: 139-142 Published: JAN 2012

Times Cited: 0 (from Web of Science)

Cited References: [22](#) [[view related records](#)] [Citation Map](#)

Abstract: In the present investigation, Tungrymbai, an ethnic fermented soybean food of the ethnic tribes of Meghalaya, India was analyzed for the proximate microbial and chemical changes occurring in the fermented product due to preparation method. Among the aerobic mesophilic forms, lactic acid bacteria (LAB), Enterobacteriaceae, spore formers, yeast and fungal counts; the microbial loads of spore forming bacteria count were not affected in the post-cooked Tungrymbai as compared to other counts. The pH and total titratable acidity were higher in the pre-cooked Tungrymbai while moisture content was higher in the post-cooked sample. The microbes that were prevalent in both the pre-cooked and post-cooked fermented samples were *Bacillus subtilis*, *Enterococcus durans*, *Vagococcus lutrae*, *Staphylococcus equorum* and *Saccharomyces* sp. However, probiotic bacteria like *Lactobacillus* were not detected in post-cooked samples indicating that the preparation method significantly altered the composition of lactic acid bacteria.

Accession Number: WOS:000301211400019

Document Type: Article

Language: English

Author Keywords: Traditionally fermented soybean; Tungrymbai; Pre-cooked; Post-cooked; Microbial; Chemical; LAB

KeyWords Plus: LACTIC-ACID BACTERIA; SP NOV.; FOOD; IDENTIFICATION; MICROFLORA; HAWAIJAR; STARTER; KINEMA

Reprint Address: Joshi, SR (reprint author), NE Hill Univ, Dept Biotechnol & Bioinformat, Microbiol Lab, Shillong 793022, Meghalaya, India.

Addresses:

1. NE Hill Univ, Dept Biotechnol & Bioinformat, Microbiol Lab, Shillong 793022, Meghalaya, India

E-mail Address: srjoshi2006@yahoo.co.in

Funding:

Funding Agency	Grant Number
Department of Biotechnology, Govt. of India	

[\[Show funding text\]](#)

Publisher: NATL INST SCIENCE COMMUNICATION-NISCAIR, DR K S KRISHNAN MARG, PUSA CAMPUS, NEW DELHI 110 012, INDIA

Web of Science Categories: Plant Sciences

Research Areas: Plant Sciences

IDS Number: 904PW

ISSN: 0972-5938