

---

Abstract No. 28

PaperTitle **Sensory Analysis and Consumer Acceptance of Probiotic Mageu Products**

Main Author **Nyanzi Richard Mr**

Presentor **Nyanzi Richard Mr**

*Tshwane University of Technology Department of Biotechnology & Food Technology Pretoria SOUTH AFRICA  
ricardas62@hotmail.com*

Co-Authors

**ABSTRACT**

Mageu is a non-alcoholic fermented maize beverage enjoyed by a large part of the population in Southern Africa. In an earlier part of this study, probiotic mageu products were developed by fermenting maize porridge with probiotic *Lactobacillus* cultures. The species used could affect the taste of the mageu and make it less acceptable to the consumer. Such products would need to be evaluated for their sensory acceptability. The aim of this study, therefore, was to compare the sensory characteristics and consumer acceptability of maize porridge fermented with a range of probiotic lactobacilli and the traditional mageu starter organism.

A trained sensory panel subjected the products to quantitative descriptive analysis (QDA) and quantified the relevant sensory attributes. The products were also subsequently subjected to consumer acceptance testing. Results included a lexicon of thirteen (13) descriptors for mageu that was developed by the trained panel. Six of the 13 descriptors significantly discriminated between the experimental mageu products. The control product, fermented by *Lactobacillus delbrueckii* subsp. *lactis* C09, was most favoured by the panel, while the products fermented by *Lb. acidophilus* PRO and *Lb. rhamnosus* LRB, were judged to be most similar to the control. The ANOVA results of consumer acceptance data revealed that the preference for the above products did not differ significantly ( $p>0.05$ ) from the control. In conclusion, the probiotic products fermented by *Lb. acidophilus* PRO and *Lb. rhamnosus* LRB, were considered to be the best options to recommend for commercialization of probiotic mageu.