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Solid State Fermentation of Tamarind (Tamarindus indica) Seed to Produce Food Condiment

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Abstract : Studies were conducted on fermentation of tamarind seed for production of food condiment. Fermentation followed the conventional traditional method of fermented locust bean (iru) production and was carried out over a period of three days (72 hours). Samples were withdrawn and analysed for proximate composition, pH, titratable acidity, tannin content, phytic acid content and trypsin inhibitor activity using standard methods. Effects of fermentation on proximate composition, antinutritional factors and sensory properties of the seed were evaluated. All data were analysed using ANOVA and means separated using Duncan multiple range test. Microbiological analysis to identify and characterize the microflora responsible for the fermentation of the seed was also carried out. Fermentation had significant effect on the proximate composition on the fermented seeds. As fermentation progressed, there was significant reduction in the anti-nutrient contents. Organisms isolated from the fermenting tamarind seeds were identified as non-pathogenic and common with fermented legumes.

Keywords: condiment, fermentation, legume, tamarind seed

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