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Proximate composition of fermented Bambara nut (Voandzeia subterranean L. Thouars) using different species of *Rhizopus*

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B ambara nut is a cheap source of leguminous protein that could be used as a substitute for relatively expensive animal protein in region of high level of malnutrition. Processing methods such as soaking, cooking or fermentation can improve the quality of such protein. This research considered the effect of fermentation on proximate composition of Bambara nut using different species of organisms. The Bambara nut was obtained from a local market in Ogbomoso (8.133 °N, 4.250 °E), Nigeria. Different species of *Rhizopus* for the fermentation were obtained from Ladoke Akintola University of Technology, Ogbomoso. The proximate composition of the flour sample was consequently evaluated. In these, the levels of protein and ash contents increased with the usage of combination of *R. oligosporus*, *R. oryzae* and *R. nigrican* in the ranges of 18.77 and 27.83 and 3.68 to 5.74% compared with a range of 18.34 and 22.35 and 3.80 to 4.39 %, respectively for protein and ash contents when the combined organisms were used singly. Slight reductions were observed in the fat, carbohydrate, moisture and fibre contents of samples. However, there were more reductions with combined organisms compared with the singly used ones. The slight increases in the protein and ash contents with increase in fermentation period suggest that the selected fermentation has potentials of improving nutritional status of Bambara nut.

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Prevalence and multiple drug resistance of Shigella sonnei isolated from diarrheal stool of children

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Background: During fishing and transport, preservation and quality of fish products are important as well as storage to prevent the growth of pathogenic and toxin producing bacteria. *Staphylococcus aureus* is one of the most common causes of sea food-borne diseases worldwide due to contamination of food by preformed enterotoxins. The aim of this study was to compare the prevalence and contamination of *S. aureus* in marine and farmed shrimps in Tehran fishery center.

Methods: A total of 300 samples, including 150 marine, 150 farmed shrimps were selected during September 2013 to December 2014. Isolation and identification of *S. aureus* from isolated samples were carried out according to conventional methods and antibiotic susceptibility test was performed by modified Kirby-Bauer disc diffusion method.

Results: The results of this study showed that 30% of marine and 20% off armed shrimps were contaminated with *S. aureus*. The highest resistance was observed with penicillin and ampicillin, whereas 100% were sensitive to vancomycin, clindamycin, ciprofloxacin and rifampin.

Conclusions: Due to relatively high contamination of shrimp by *S. aureus* more attention should be given during processing and manufacturing.

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