



EFFECT OF PROCESSING METHODS ON THE NUTRITIVE QUALITY OF UGBA (PENTACLETHRA MACROPHYLLA BENTH)

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“Ugba an indigenous Nigerian fermented food condiment is rich in protein, dietary fibre and minerals. Traditional processing method reduces the level of nutrients and minerals in the processed Ugba after long boiling. This study was therefore undertaken to determine the effects of processing methods on nutritional composition of Ugba. The control sample (C1) was compared with the samples processed with Potash (Ps), Unripe Paw Paw (Pw1), Dry ashed Plantain peels (Pp2), Dry ashed Palm waste (Ag1) and Oil palm waste Og1. The isolation of microorganisms and determination of viable counts were achieved by culture methods. Mineral composition and Proximate analyses of raw and processed samples were determined using standard methods. The shelf life study of Ugba, was also done using different preservation treatments which include Sun drying, Oven drying, Refrigeration and Freezing. Organoleptic evaluation test was carried out for the processed samples using a 9-point Hedonic scale analysis on a 27- member panel. The data was statistically analysed using one way analysis of variance (ANOVA). The microorganisms isolated from Ugba sample were noted as to ascertain the organisms involved in fermentation. They include *Bacillus subtilis*, *Bacillus licheniformis*, *Micrococcus varians*, *Enterobacter asburiae* and *Escherichia coli*

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Aguilar, N., Albanell, E., Minarro, B., Guamis, B. and Capellas, M. (2015). Effect of tiger nut-derived products in gluten-free batter and bread. *Food Science and Technology International*, 21: 323-331.

Batawy, O. and Khalil, O. (2018). Manufacture and properties of low-fat bio yoghurt containing probiotic strains and maltodextrin as prebiotic. *Journal of Probiotics and Health*, 6(1): 1-9.

[6th Annual Congress on Applied Microbiology and Beneficial Microbes](#)

[Okonkwo Ifeyinwa Felicia, EFFECT OF PROCESSING METHODS ON THE NUTRITIVE QUALITY OF UGBA \(PENTACLETHRA MACROPHYLLA BENTH\) ,Applied Microbe 2020, 6th Annual Congress on Applied Microbiology and Beneficial Microbes, August 10-11, 2020,pp1](#)

