Abstract

“Otiru” is a condiment produced from fermented underutilized African Yam bean seeds (AYB) (Sphenostylis stenocarpa). AYB seeds is one of the most important tuberous legumes of tropical Africa. It is cultivated as a secondary crop with yam in Ghana and Nigeria. The seed and tubers are the two major organs of immense economic importance as food for Africans. This underutilized crop has huge potential for food security in Africa. It was observed that AYB is well balanced in essential amino acids. Otiru was produced by natural fermentation of the seeds. It was soaked in water overnight then boiled for 2 hour and dehulled to remove the antinuritional factors and fermented naturally for 24 hours, 48 hours and 72 hours. It was observed that AYB fermented for 72 hour has the highest protein content of 34% compare to the raw (27%) and there was reduction in the antinutritional factors of the seeds at different time of fermentation. It was also discovered that “otiru” was preferred to the common “iru” produced from African Locus bean seeds which is very difficult to produced. Condiment is one of the major income generating business by most market women in Nigeria and the condiment production is limited
because of the long cooking time of 12 hours prior to fermentation. Unlike African yam bean seeds which can be cooked for 2 hours after soaking. Women are the major group that will be involve in the value-chain production of “otiru”, the female farmer will plant the seeds, harvest, while the market women group will be involved in the processing and production of “otiru” which can then be packaged in wet fermented, dry or milled form for marketing purpose for improving food security by solving the problem of Protein-Energy Malnutrition and helping to contribute to wealth creation in the country

**Keywords:** African yam bean seeds, otiru, value chain