QUALITY EVALUATION OF FUFU FLOUR PRODUCED FROM STORED CASSAVA ROOTS

OMOSULI, S.V.

Department of Food Science and Technology, Rufus Giwa Polytechnic, PMB 1019, Owo, Ondo State, Nigeria.
E-mail: tessieuptown@yahoo.ca

Abstract - Freshly harvested cassava roots with stem attached were stored on the floor of a well-ventilated storeroom for periods ranging from 2 to 7days. Samples were drawn at 2, 4 and 7 days respectively and used to produce fufu flour using standard method. Fufu flour was also produced from freshly harvested cassava roots, which serves as control. The proximate composition, physicochemical and pasting properties of the fufu flour and sensory quality of the reconstituted fufu were evaluated. The moisture content of the fufu flour decreased with storage period of the roots from 8.5% to 7.00%. An increase in the protein (0.66-0.92%), ash (1.50-2.00%), fibre (2.49-3.00%) and carbohydrate (83.35-84.98%) was observed. The quantity of fufu flour produced from stored cassava roots decreased with storage from 20.07%-16.08%. There was a corresponding increase in the water absorption capacity and swelling index from 220.00-290.00% and 1.50-6.00ml/g respectively. However, storage and processing brought about a reduction in the HCN (562.50-437.50mg/kg). Fufu produced from the 7days stored root had the least final viscosity (3938.00RVU) and peak time (5.13minutes). There were no significant difference in almost all the sensory attributes evaluated. However, fufu produced from roots stored for 2days and the control sample were significantly different from other in term of colour and aroma. This study showed that cassava roots could be stored on stem for 7 days and used in producing fufuflour which will be good in quality for human consumption.

Keywords - Cassava, Fufu, Chemical, Stored, Roots, Quality