International Journal of Food Properties

Volume 7, Issue 2, 2004

Dr. L. O. Sanni^{a*}, S. B. Kosoko^a, A. A. Adebowale^a & R. J. Adeoye^a

The Influence of Palm Oil and Chemical Modification on the Pasting and Sensory Properties of *Fufu* Flour

Abstract

The effect of the addition of palm oil (0.1–2.5 m³/100 kg fufu) and chemicals [citric acid/sodium hydroxide (NaOH, food grade)] on the pasting and sensory properties of dried fufu flour were investigated. There was significant effect of addition of palm oil, citric acid, or NaOH to wet fufu on the pasting characteristic of dried fufu flour. The pasting characteristics of the samples only show a significant difference at the cooling stage where the viscosity after 20 min holding at 50°C are 480 BU for fufu sample with 0.1 M citric acid, fufu sample with distilled water. Fufu sample with 0.06 M NaOH and fufu sample with 0.1 M citric acid is more stable followed by fufu sample with 0.05 M citric acid. There were significant differences (P < 0.05) in the sensory qualities for taste, color, odor, texture, and overall acceptability of fufu with and without addition of palm oil. Sensory evaluation shows that fufu sample containing 0.1 and 0.5% palm oil to be the most acceptable in the overall general acceptability (P < 0.05). The sensory qualities of fufu samples modified with acid also vary with the panelists preferring both samples made from wet slurry and fufu samples with 0.05 M citric acid. There exist a negative correlation between sensory texture and peak viscosity or starch stability, while a positive correlation exists between sensory texture and setback value for the *fufu* samples P = 0.05 or 0.1.