Effect of Roasting Temperature on the Quality and Acceptability of Dakuwa- A Nigerian Cereal/Groundnut Snack


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Abstract

The effect of roasting temperature on the quality of dakuwa was studied with a view to ascertaining the best temperature at which to roast the maize grains and groundnut for the production of dakuwa. Maize grains and groundnut were germinated for 72 hours after which they were dried and roasted at 120, 130, 140 and 150°C. The groundnut was decoated after which both maize and groundnut were milled separately. After milling, the maize flour and groundnut paste were mixed together in equal ratio. To this mixture, 10% and 5% respectively of table sugar and granulated red pepper were added. The mixture was then milled and moulded into balls. The dakuwa produced were analysed for proximate composition, mineral content, microbial count and organoleptic properties using standard methods. Results of proximate composition and mineral content showed significant (p<0.05) variations in moisture (3.2-5.9%), protein (16.5-19.1%) and iron (0.00-0.03mg/100g) contents. The total microbial count, colour and overall acceptability also differed significantly (p<0.05). The sample roasted at 140°C had the best results.

Keywords: Dakuwa, roasting, proximate composition, mineral, sensory.

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Received: 2012/05/22

Accepted: 2014/09/04

DOI: http://dx.doi.org/10.4314/njtr.v9i2.2