

EFFECT OF FERMENTATION ON THE CHEMICAL COMPOSITION OF PAWPAW (CARICA PAPAYA) SEEDS

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ABSTRACT

Pawpaw seed is a rich source of phytochemicals with great preservative potentials. However, it is an underutilised seed due to lack of awareness of its use by consumers. As a result, this research was aimed at evaluating the effects of fermentation on the chemical composition of fermented pawpaw (Carica papaya) seed. The traditional method of fermenting locust bean by (Afolabi and Ofobrukmeta, 2011 and Dakare 2011) was adopted with some modifications, pre-dried dehulled, pawpaw seed kernels were boiled, incubated and allowed to ferment for 72 h and dried. Analysis was carried out to determine the chemical composition using AOAC (2005). The chemical composition of TEYPS-Tsolo Elongated Yellow papaya seed, which is the variety used for this study contained; 6.41%, ash; 22.32%, protein; 40.29%, fat; 5.47%, fibre; 9.66, moisture content; 15.85%, carbohydrate; 4.69mg/100g, calcium; 5.95mg/100g, iron; 22.52 mg/100g, sodium and 15.51mg/100g, potassium. The fermented sample had the nutritional and chemical composition of; 7.46%, ash; 24.50%, protein; 42.60%, fat; 6.77%, fibre; 7.67%, moisture content; 11.00%, carbohydrate; 7.18mg/100g, calcium; 4.33mg/100g, iron; 28.78mg/100g, sodium; 18.38mg/, potassium. The result showed that fermentation greatly improved the nutritional value of the seed.

KEYWORDS

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