



COMPARISON OF THE NUTRITIONAL PROPERTIES OF ROASTED NIXTAMALIZED AND NON-NIXTAMALIZED IPB VAR 6 CORN AS COFFEE SUBSTITUTE

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ABSTRACT

Coffee is a widely consumed beverage known for its stimulating and cognitive effects. However, the undesirable effects attributed to its consumption have led to an increased interest in coffee substitutes. Coffee substitutes made from roasted plant materials are gaining popularity due to their distinct flavor profiles and potential health benefits. This study compared the nutritional properties of roasted nixtamalized and non-nixtamalized IPB var 6 corn, a corn variety known for its higher protein quality, tryptophan, and lysine content, as a coffee substitute. Twelve treatments were analyzed to evaluate the effects of nixtamalization on the proximate and mineral content of corn. Based on the results obtained from this study, significantly higher moisture, ash and iron content was obtained from nixtamalized treatments. Although significantly higher crude fiber, crude fat, zinc, and potassium content were observed from non-nixtamalized treatments. The differences in the roasting time and temperature in terms of the nutritional properties of the roasted IPB var 6 corn treatments were also determined. At increased roasting temperature and time, the ash, and mineral content were observed to be higher. While varying effects of different roasting time and temperature to the moisture, crude fat, crude protein, and crude fiber were also observed. The non-nixtamalized roasted at 240°C for 45 min obtained the highest crude fiber, zinc, and potassium content. While Treatment 12 (nixtamalized; 240°C for 45 min) obtained the highest ash, moisture, nitrogen free extract, and iron content.
