

Sensory Acceptability and Characterization of Durian Rind Tart

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Abstract: *This study explored the development and evaluation of an alternative flour derived from durian (Durio zibethinus) rind, with the goal of using it as a primary ingredient in tart formulations. Specifically, it assessed the phytochemical composition of durian rind and its incorporation into three tart formulations evaluated for sensory acceptability in terms of appearance, aroma, taste, texture, and overall appeal. The research also analyzed the nutritional and physicochemical properties of the most preferred formulation. The study employed a descriptive and mixed-methods design, with laboratory and sensory evaluation conducted at Surigao del Norte State University's Food Technology Innovation Center. Data were gathered from 120 respondents, including food experts and consumers, and were analyzed using frequency counts, percentages, means, standard deviations, MANOVA for repeated measures, Bonferroni tests, and ANOVA with Scheffé's post hoc analysis. Results revealed that durian rind contains beneficial phytochemicals, and among the three formulations, Formulation B consistently received the highest ratings across all sensory attributes. Significant differences were observed among formulations. Nutritional and physicochemical analyses further supported the viability of Formulation B as a moderately healthy and stable tart product, highlighting its potential for commercial and sustainable food applications.*

Keywords: *Durian rind flour, sensory evaluation, tart formulation, phytochemical analysis, sustainable food product*

