

Optimizing Conditions for the Production of Jackfruit Rind Candy: A Comprehensive Study

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Abstract

Candy is a confectionary product that is widely used for the impression of all ages of consumers in the world. Nowadays, candy is a major multibillion dollars confectionary industry with a wide range of qualities. Normally, jackfruit rind is disposed of as waste. But it can be used for by-product utilization in the food industry. This study is aimed at optimizing the optimum temperature, time period, and sugar content for producing the best candy using ripe jackfruit rind pulp. Twelve (12) candy samples were prepared for the experiment using different conditions. Physiochemical properties and packaging quality were assessed throughout a one-month storage period and sensory attributes were determined in end of storage. Results showed that soft candies had higher moisture than hard candies. There were no considerable changes in pH and brix candies during the storage period. Packaging quality revealed significant differences. Microbial results were showed that T11 had zero total plate count and yeast and mold counts. Based on sensory evaluation, the T11 treatment had the highest mean score for overall acceptability.

Keywords: Candy, Cooking temperature, Jackfruit rind, Natural pectin, Processing time, Sugar level