

**FORMULATION OPTIMIZATION AND SENSORY ACCEPTABILITY OF
MABOLO (*Diospyros blancoi*) JAM WITH SUGAR PALM
SYRUP AS SWEETENER**

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ABSTRACT

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This study was conducted to develop formulation and determine the acceptability of mabolo (*Diospyros blancoi*) jam using sugar palm syrup as sweetener. Specifically, it aimed to determine the physico-chemical, sensory properties, microbial content, and consumers acceptability of mabolo jam using sugar palm syrup as sweetener; and calculate the production cost of each produced mabolo jam using sugar palm syrup as sweetener.

Mabolo jam was produced in four treatments: Treatment 0 using 1 K Mabolo flesh + 1 L cane syrup (65°Brix), Treatment 1 using 1 K Mabolo flesh + 1 L sugar palm syrup (65°Brix), Treatment 2 using 1 K Mabolo flesh + 1.25 L sugar palm syrup with (65°Brix), and Treatment 3 using 1 K Mabolo flesh + 1.5 L sugar palm syrup with (65°Brix).

The sugar palm syrup that was used in this study was produced by boiling the sugar palm sap until it becomes a heavy syrup (65°Brix). The formulations of the jam per treatment vary with the amount of sugar palm syrup but has the same amount of mabolo flesh. After the analyses, it shows that the treatment 3 was described by the evaluators as moderately acceptable in terms of the overall attributes.

Based from the results of the consumer acceptability test for mabolo jam with sugar palm syrup as sweetener, treatment 3 was rated as moderately acceptable. As for the microbial analysis, there were no growth observed for the total plate count, yeast and molds since it had undergone heat treatments. The mabolo jam costs Php 77.68/ 120 ml.

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