



ARATILES: BIRDS' FRUIT NO MORE



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Rationale

Muntingia calabura L. (commonly known as **Sarisa**); the Aratiles may have been one of the fruit trees that were brought from South America by the Spanish galleons during the Spanish colonial period in the Philippines.

The fruit is very rich in Vitamin C, calcium, phosphorus and iron. Moreover, according to a report, the nutritive value and medicine properties of aratiles fruit per very 100g of the aratiles was reported that contain approximately:

- ❖ moisture 77.8 g
- ❖ protein 0.32 g
- ❖ fat 1.56g
- ❖ fiber 4.6 g
- ❖ calcium 124 mg
- ❖ phosphorus 84 mg
- ❖ iron 1.18 mg
- ❖ carotene 0.019 mg
- ❖ thiamine 0.065 mg
- ❖ riboflavin 0.037 mg
- ❖ niacin 0.554 mg, and
- ❖ ascorbic acid is 80.5mg

The energy value was 380 kj/100g (Morton 1987).

Despite these promising benefits from the Aratiles, it is still greatly ignored by people. Everywhere, you can see its un-harvested fruits just falling on the ground and left to rot.

Objectives of the Study

This study aims to develop a cheaper jelly. Specifically it aims to:

- Develop a jelly from Aratiles (*Muntingia calabura*) fruit; and
- Determine the acceptability of Aratiles jelly.

Research Methodology

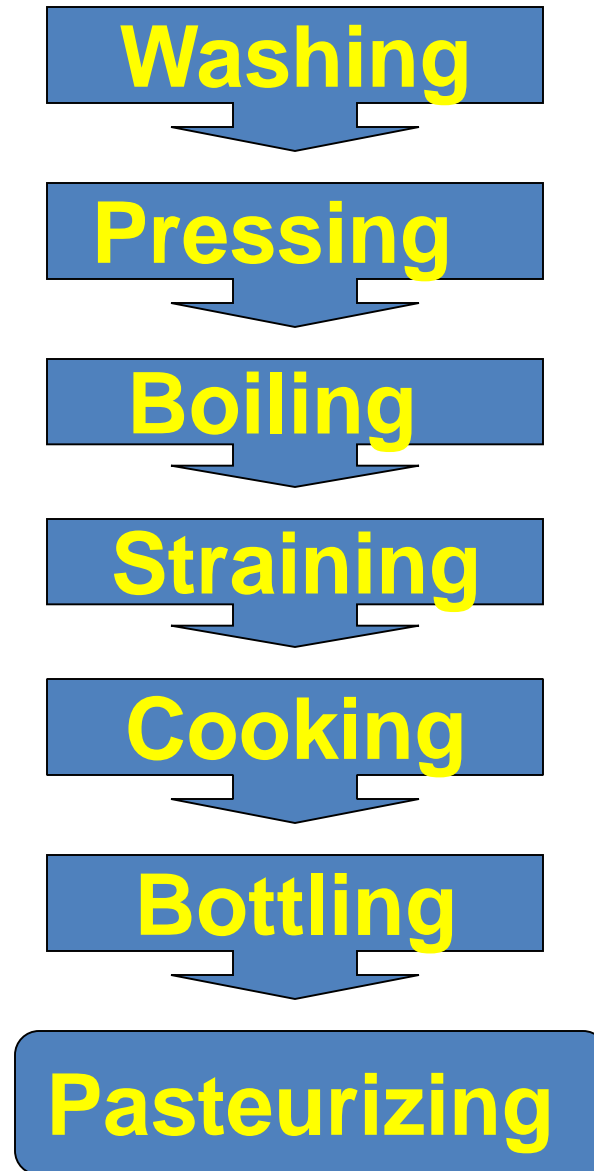
Ingredients

The standard recipes of jelly are the following:

Measurement	Ingredient
1kg.	Aratiles fruit, ripe
1 kg.	Brown sugar, refined
1 cup	Calamansi juice

Procedures

The schematic procedures of making Aratiles jelly



Methods

This study used mean samples for the overall acceptability of Aratiles jelly. Furthermore, the study used the 9 and 5 Point Hedonic Scales to determine and to describe the degree of likeness or dislike of the developed Aratiles products as jelly.

Table 1. Acceptability of Aratiles Jelly according to Age of the Respondents

Age bracket	Mean	Descriptive Equivalent
Below 20	8.0	Liked Very Much
20-30	8.0	Liked Very Much

Table 2. Acceptability of Aratiles Jelly according to Gender of the Respondents

Gender	Mean	Descriptive Equivalent
Male	8.0	Liked Very Much
Female	8.0	Liked Very Much

Table 3. Sensory Evaluation of the Aratiles Jelly according to Age of the Respondents

Sensory Evaluation	Age			
	Below 20		20 – 30	
	Mean	Descriptive Equivalent	Mean	Descriptive Equivalent
Consistency	4.56	Very Good	4.65	Very Good
Color	3.45	Good	3.42	Good
Aroma	3.0	Good	3.0	Good
Texture	4.42	Very Good	4.15	Very Good
Flavor	4.75	Very Good	4.27	Very Good

Table 4. Sensory Evaluation of the Aratiles Jelly according to Gender of the Respondents

Sensory Evaluation	Gender			
	Male		Female	
	Mean	Descriptive Equivalent	Mean	Descriptive Equivalent
Consistency	4.4	Very good	4.42	Very good
Color	3.6	Good	4.08	Very good
Aroma	4.4	Very good	3.95	Good
Texture	4.2	Very good	4.15	Very good
Flavor	4.4	Very good	4.11	Very good

Table 5. Summary of Sensory Evaluation of the Aratiles Jelly

Organoleptic sensory	Mean Evaluation	Description
Consistency	4.52	Very good
Color	4.08	Very good
Aroma	4.04	Very good
Texture	4.2	Very good
Flavor	4.38	Very good

Table 6. Over-all Acceptability of the Aratiles Jelly

	Mean	Description
Overall acceptability	7.5	Like very much

Summary

The research was conducted to create a standardized recipe for jelly (Aratiles) product. The respondents determined the acceptability of the product using sensory evaluation specifically its consistency, color, aroma, texture, and flavor. Moreover, overall acceptability of the product was also evaluated.

The data gathered from the sensory evaluations were analyzed using the mean in accordance of the objectives of this study. The results of the study are as follows:

✓ Majority of the respondents are aged below 20 (30 = 60%) and there are more female (45 = 90%) than male respondents.

✓ The product is evaluated by the respondents as “Liked Very Much” with mean score of 8.0 when grouped according to their age and gender.

✓ Furthermore, the over-all sensory evaluation of the product is “Very Good” for both age groups and genders based from the summary of data with mean scores ranging from 4.08 to 4.75.

Thus, the overall acceptability of the product is “Liked Very Much” by the respondents with mean score of 7.5 which suggests that the Aratiles Jelly is accepted by the respondents based from the sensory evaluation (consistency, color, aroma, texture and flavor) done.

Conclusion

Based from the findings of the study, the conclusion of developed standard recipe for Aratiles jelly is acceptable to the respondents wherein they evaluated it as “Liked Very Much” regardless of what age group they belong and their gender. Hence, the result of the sensory evaluation suggests that commercialization of the product is feasible.

Recommendation

From the initial sensory evaluation of the Aratiles-based product, the following recommendations are made:

1. In all the Aratiles-based products, a second set of evaluation should be done involving more evaluators with varied age and gender for purposes of validity and consistency of evaluation.
2. Future researches on Aratiles-based products should include the shelf-life, the Cost and Return Analysis (ROI) which are very important input for commercialization purposes.

Thanks for Listening!

