

COSTING OF GUAVA JAM

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INTRODUCTION:

100kg of guava fruits costing ₦50.00 were received from Crops Research Institute, Bunsu through Mr. Holloway, S.R.O. The fruits were washed and weighed. The seeds were removed from the fruits and the pulp pulverised in a conrising mill and blended in a Colloid Mill. The pulp was weighed and processed into jam in batches.

METHOD:

A weighed amount of sugar was added to the prepared fruit to bring the level of sugar to 45%. The preparation was boiled till the percentage of soluble solids rose to 60%. A weighed amount of pectin was added to the jam. The boiling was continued till the percentage of soluble solids reached 68.5%. A weighed amount of citric acid was added to the jam to bring the pH to 3.0. The jam was preserved by the addition of 300 p.p.m. of sorbic acid and filled hot into sterilized jars.

Costing analysis of the product was carried out to determine the sole price of a bottle of guava jam. However, the product was sold at the gross cost per bottle to members of staff to recover the cost of the materials. The money realised was paid into the Research Income Fund. Enough sample valued at the sale price were given to C.R.I. Bunsu, through Mr. Holloway to cover the cost of the 100kg of guava fruits. A few samples were given to selected staff for sensory evaluation.

COSTING ANALYSIS

<u>Production Cost</u>	<u>Qty Used</u>	<u>Unit Cost(per kg)</u>	<u>Total Cost</u>
1. Guava fruits	100kg	ø0.50	ø50.00
ii. Sugar	40.0kg	ø1.60	ø64.00
iii. Pectin	1.0kg	ø18.96	ø18.96
iv. Citric acid	0.5kg	ø8.06	ø4.03
v. Sorbic acid	0.015kg	ø11.66	ø0.18
iv. Jam bottles	100	ø0.60	ø60.00
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			ø197.17

<u>Overhead Cost</u>	<u>Unit Cost</u>
1. Labour	
a) S.T.A. (4 man hrs)	ø4.00
b) T.A. (4 man hrs)	ø2.50
2. Utilities	ø2.00
3. Depreciation	ø1.20

Batch Cost Analysis

<u>Production Cost</u>	<u>Qty Used</u>	<u>Value</u>
1. Prepared guava	7.0 kg	ø3.50
2. Sugar	6.5 kg	ø10.40
3. Pectin (1%)	0.12 kg	ø2.28
4. Citric acid	0.1kg	ø0.81
5. Sorbic acid (300 p.p.m.)	0,004 kg	ø0.05
Total		<hr/>
		ø17.03
6. Bottling	20	ø12.00

<u>Overhead</u>	<u>Value</u>
1. Labour	ø6.50
2. Utilities	ø2.00
3. Depreciation	ø1.20
Total	<hr/>
	ø9.70

. . . Gross cost (Prod. + overhead) = ~~₱26.73~~

Yield

Batch

Total wt. of material used = 12.62kg

Yield of product = 10.02kg

. . . Water loss during boiling = 2.6kg

. . . Yield of product

Value/kg = ₱2.67

Value of marketing product (0.5kg) = ₱1.34

Cost of bottle = ₱0.60

Total cost per bottle = ₱1.94

Profit - 25% Total Cost = ₱0.50

. . . Sale price = ₱2.48 = ~~₱2.50~~

Sales

Yield of Product/Batch = 10.02kg

Quantity filled into bottle = 0.5kg

No of bottle/batch = 20

Selling price to FRI staff = ₱2.00 per bottle

. . . Total value of product/batch = ₱40.00

No. of batches processed = 5

. . . Overall yield = ₱ 200.00

Amount given to CRI per Mr. Halloway to cover cost of guava

No. of bottles = 20

Sale price = ₱2.50

Equivalent in cash = ₱50.00

Amount paid into Research Income Fund = ₱ 138.00 (69 bottles)

No. of bottles given to selected staff including staff
working on the project for evaluation = 11

CONCLUSION

The sale price of guava jam is ₱ 2.50. However, this is subject to the price of materials at the time of production.