

Sensory Evaluation and Alcohol Content Determination of (Uvaria Rufa) Susong-Kalabaw Fruit Wine

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Abstract

The innovation of wine and other beverages either strong or sweet tasting concoctions is becoming popular because of its multifarious purpose. To enumerate some, it serves as offering for religious activities, as an ingredient in cooking and aromatic flavoring for baked products and it is most widespread historically significant beverage other than water for thousands of years, it is a drink of Kings and Royal families. The production and research in wine-making continuously advances due to public demand and its role on special occasions. Using indigenous materials was already applied in wine making.

The study aimed to present a new version of wine using indigenous material which is susong-kalabaw fruit. The 5-Point Likert Scale evaluation was used in evaluating the level of acceptability using consumer and expert respondents.

Keywords: Susong-Kalabaw Fruit, wine, fermentation

Introduction

Wine is an alcoholic beverage extracted from fruit extracts and undergoes fermentation process. It can be a sweet wine, a dry wine or an appetizer wine. Wine is played a major role in the rise and fall of countless individuals, nation and civilization.

The study aimed to develop a new variety of wine using indigenous material which Uvaria Rufa or commonly known as “susong kalabaw”. It grows naturally in the Philippines, Laos, Thailand and New Guinea. The fruits which from May to August, are aggregates of round or oblong berries colored deep orange or a rich red. Each contains numerous seeds encased in translucent pulp.

Statement of the Problem

The study mainly aimed to produce another variety of wine using Susong-Kalabaw fruit as main ingredients.

Specifically, it sought to answer the following sub-problems.

1. How do the expert and consumer respondents assess the level of acceptability of Susong-Kalabaw Fruit Wine in terms of: aroma/bouquet, body of wine, clarity and flavor?
2. Is there significant difference on the assessment made by the two groups of respondents on the level of acceptability of Susong-Kalabas Fruit Wine base on the abovementioned variables?
3. What is the level of alcohol of Susong-Kalabaw Fruit Wine?

Method

The study utilized the descriptive method of research. Sources of data obtained from 30 respondents comprising of 20 consumers and 10 experts (wine connoisseurs and QA).

Data Gathering Instrument

The data gathering instrument used in this study was the questionnaire which examined the evaluation of the consumer and expert respondents of the acceptability of the product and determined if the two groups of respondents have the same perception on the acceptability of the product.

Results

Table 1 Summary of Evaluation on the Level of Acceptability of Susong-Kalabaw Fruit Wine

CRITERIA	Expert		Consumer		Composite Weighted Mean	
	WM	VI	WM	VI	WM	VI
1. Aroma/Bouquet It has a fruity aroma.	4.10	A	4.45	HA	4.23	LM
2. Body of Wine It has a smooth in the mouth feeling.	4.00	A	4.20	HA	4.10	LM
3. Clarity It is not cloudy nor dull.	3.60	A	4.05	A	3.83	LM
4. Flavor It has a sweet, pleasant flavor	4.00	A	4.25	HA	4.13	LVM
Overall Mean	3.93	A	4.24	HA	4.09	A

Table 1 sums up the evaluation of expert and consumer respondents on the level of acceptability of Susong-Kalabaw Fruit Wine.

These findings signify that Lion’s Heart Fruit Wine were Acceptable to the expert and consumer respondents in terms of clarity, body of wine, aroma/bouquet and flavor supported by the obtained overall mean value of 4.09.

Table 2 Results of Significance Difference on the Level of Acceptability of Susong-Kalabaw Fruit Wine

Criteria	Mean	Standard Deviation	Computed t-value	t-ratio	Decision
Expert	3.93	0.19	4.4386	Reject H ₀	Significant
Consumer	4.24	0.14			

It could be observed from the results of the statistical treatment, the computed t value of 4.4386 is greater than the critical value of 2.048 at five percent level of significant with 28 degrees of freedom resulted to the rejection of the null hypothesis and verbally as significant.

Since we failed to accept the null hypothesis, there is a strong indication that there is a significant difference between the assessment of the expert and consumer respondents on the level of acceptability of

Susong-Kalabaw Fruit Wine in terms of its clarity, body of wine, aroma/bouquet and flavor. As to the Alcohol Test administered by DOST-FNRI it has 14.5% alcohol content. The alcohol content shows that Susong-Kalabaw Fruit Wine is considered as dessert wine because it contains 14 to 21% alcohol and are sweeter and heavier than table wines.

Conclusions

1. Susong-Kalabaw Fruit Wine was acceptable to the two groups of respondents.
2. There is a significant difference between the assessment of the two groups of respondents on the level of acceptability of Susong-Kalabaw Fruit Wine.
3. As per alcohol test, it was found out that Susong-Kalabaw Fruit Wine is under the category of Dessert Wine.

Recommendations

1. Use the most accurate and proportional ingredients to improved its quality and to achieved a highly acceptable product.
2. Further ageing process should be done to improve the aroma, appearance and bouquet of the product.
3. Proper packaging with sealer should be done to avoid oxidation of the product.
4. Researchers may subject the product to proximate analysis.

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