



MARKET ACCEPTABILITY OF BANANA VINEGAR IN ISABEL, LEYTE

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ABSTRACT

Vinegar is one of the oldest fermented products, which serves multiple roles as a food additive, preservative, antioxidant, and antibacterial agent. In the Philippines, banana vinegar is a unique variety traditionally made from fermented banana extracts. Though less common than coconut or sugarcane vinegar, it offers a mildly sweet, tangy flavor that complements Filipino dishes. Its limited availability, especially in banana-rich areas, presents potential for market expansion. This study examined the market acceptability of banana vinegar in Isabel, Leyte, focusing on consumer demographics, awareness, preferences, and willingness to purchase. It also identified reasons for purchasing or not purchasing and collected suggestions for improving its appeal. A descriptive survey method was used, involving 388 randomly selected respondents from 24 barangays, calculated through Slovin's formula. Data were analyzed using frequency, percentage, and weighted mean. Results showed most respondents were middle-aged women with small families, mainly high school graduates and housewives with monthly incomes below ₱10,957. Awareness of banana vinegar was low at 19.3%, yet 90.72% expressed willingness to buy it due to its favorable taste. Limited availability discouraged 9.28% from purchasing. The study recommends increasing the supply of banana vinegar in local stores and markets in Isabel, Leyte.

Keywords: *acceptability, attributes, banana vinegar, fermentation, market, preference*

INTRODUCTION

Vinegar is one of man's oldest products of fermentation and a food additive that contains essential nutrients (Amper et al., 2018). Vinegar works effectively to preserve food and is a curing drink (Kulkarni, 2015). According to Marcus (2019), the flavor of vinegar comes from acetic acid, an antibacterial component, which generally gets deeper as it ages. In addition, due to its many useful qualities and variety of uses, vinegar is a highly valued fermented food product (Coelho et al., 2017). Consequently, vinegar can be utilized as a salad dressing, in the production of beneficial medicines, in food preservation, as a source of antioxidants, or as an antibacterial agent (Byarugaba-Bazirake et al., 2014).

The common vinegar available in the market is either made from coconut or has a commercial flavor; coconut vinegar has a low acidity, a musty flavor, and a distinctive aftertaste. Banana vinegar is a unique variety traditionally made from fermented banana extracts. Though it is less common, it offers a mildly sweet, tangy flavor that complements Filipino dishes. Its limited availability, especially in banana-rich areas, presents potential for market expansion. The abundance of Saba and Cardaba varieties in non-traditional banana-producing areas like Leyte has led to their use in innovative food products, like banana vinegar, which can help reduce food waste from overripe fruit (Visayas State University, 2025).

Because of the sugar in bananas, the vinegar-making process from fruit to ethanol to acetic acid is very quick here, turning it into vinegar in just a few weeks. Brown or even blackened bananas are best for making vinegar, because they are very sweet and have already started to ferment (Hunt, 2022). Banana has natural liquid and contains a large amount of acid, and it is a good alternative source of vinegar (Uson, 2019). Every day, fruits that were overripe before consumption are thrown away as garbage, which prompted the creation of secure biosynthesized preservatives like vinegar, among other considerations. The banana vinegar products were simply made from overripe bananas that underwent the following steps: washing, peeling, mashing, and mixing with brown sugar before being placed in a sterilized glass container, covered, and stored at room temperature. After six days, the mixture was stirred, more sugar was added, and the process was repeated every two days until day 14. On day 15, the liquid was strained and refrigerated. These processes were traditional than others.

Banana vinegar is superior since the fruit used is high in dietary fiber and vitamins. It also has much potassium, which lowers the risk of stroke and high blood pressure, and boosts energy and stress (Asejo et al., 2019). It is a natural vinegar with a fruity flavor and is not too sweet or cloying (Bondad, 2020). This vinegar is a substitute for commercial vinegar products since it is cheaper and abundant, not just in the locality but all over the Philippines (Amper et al., 2018).

Despite the established nutritional value, functional properties, and diverse uses of vinegar, limited studies have explored consumer perception and market acceptability of banana vinegar, particularly in local contexts such as Isabel, Leyte. While literature

highlights its nutritional benefits, cost-effectiveness, and potential to reduce food waste, little is known about consumer awareness, preferences, and willingness to adopt banana vinegar as an alternative to coconut or commercial vinegar. This gap underscores the need to assess its market potential to support product development, local entrepreneurship, and sustainable food innovation.

By investigating market acceptability of banana vinegar, the study gives awareness of the product's potential alternative to vinegar or can be substituted when shortage of coconut vinegar in the market. It is beneficial for the human body when consumed and environmentally friendly since waste is being conserved, especially in using overripe or almost rotten bananas. Also, this could inform the growing consumer trend seeking natural, local, and sustainable food products. The study findings are beneficial to the government to implement programs, strengthen the small-scale processing business, encourage entrepreneurs to produce more value-added products, and convince people to prioritize local products.

Research Questions

There is no alternative vinegar that can be seen in the market of Isabel Leyte. This product is sometimes available in Manila, which can be ordered online through shopee or lazada stores. More importantly, a volume of overripe bananas in fruit stalls is not consumed anymore and is just thrown away in the trash. Banana is one of the most abundant commodities in the province, and this prospective waste urged the necessity to turn them into a value-added product, particularly banana vinegar. Development of banana vinegar ensures market supply for food security.

Specifically, this study answered the following questions:

1. What is the demographic profile of the respondents in terms of the following:
 - 1.1 age;
 - 1.2 gender;
 - 1.3 address;
 - 1.4 family size;
 - 1.5 educational attainment;
 - 1.6 occupation; and
 - 1.7 monthly income.
2. Are the respondents aware of banana vinegar?
3. Which of the following attributes of banana vinegar is perceived as important by the respondents?
 - 3.1 taste;
 - 3.2 aroma;
 - 3.3 color/appearance; or
 - 3.4 overall acceptability
4. What are the suggestions to improve the banana vinegar?
5. What are the determinants of respondents' product purchases in terms of:
 - 5.1 willingness to buy banana vinegar; and

- 5.2 reasons for buying or not buying banana vinegar
6. Based on the findings of the study, what are the strategies to employ for the improvement of the acceptability of banana vinegar in the market?

METHODOLOGY

The study took place in Isabel, Leyte, a first-class municipality made up of 24 barangays. Using simple random sampling, the study ensured each household had an equal chance of selection. Based on the 2021 Commission on Population data, Isabel has 12,949 households, each a potential consumer of the product. From this population, a sample of 388 respondents was determined using Slovin's formula with a 5% margin of error. The respondents were household members chosen to represent their families, providing insights into how banana vinegar might be accepted and used in their daily consumption.

Before starting the pilot test and actual survey, the researcher sought formal approval from the Student Research Committee adviser, panel members, chairman, the Agribusiness Management department head, and the college dean of VSU-Isabel. A courtesy copy was also submitted to the Mayor's office. After approval, letters were sent to barangay captains across Isabel's 24 barangays to coordinate the data collection. Each respondent was informed of the study's purpose and guided in answering the survey. On average, participants completed the questionnaire within 5 to 10 minutes. To help them provide informed answers, a sample of banana vinegar was offered for tasting. This allowed respondents to experience the product before giving feedback. Completed questionnaires were immediately collected, and if a respondent declined to participate, another willing household member from the same area was chosen as a replacement.

Survey questionnaires were distributed to selected households to assess market acceptability of banana vinegar in the municipality. The study used a researcher-made questionnaire divided into five parts, translated into Cebuano for better understanding. Part I covered respondents' demographics such as age, gender, education, income, and family size. Part II asked about their awareness and prior use of banana vinegar. Part III focused on product attributes—taste, aroma, appearance, and overall acceptability—rated on a 1 to 5 scale, along with suggestions for improvement. Part IV explored reasons for buying or not buying and willingness to purchase. Part V gathered strategies to boost market acceptance. The questionnaire was validated by the adviser, SRC members, and a statistician.

Pilot testing was conducted in Barangay Marvel with 30 respondents to check the questionnaire's validity and reliability. Their answers were excluded from the final survey. Using Cronbach's Alpha, the test yielded a reliability score of 0.741, which is considered acceptable, ensuring the instrument's readiness for actual data collection.

After the questionnaires were collected, the data were tallied and tabulated for analysis. The study used descriptive statistics—frequency, percentage, and weighted mean—to interpret the results. Frequency counts summarized the number of responses for each

question, particularly in describing respondents' demographic profile. Percentages were applied to show proportions across categories, including awareness of banana vinegar, preferred product attributes, reasons for purchase or non-purchase, and suggested strategies for market acceptance. Weighted mean was used to measure the importance of specific product attributes and overall acceptability. Rankings were also applied, from highest (5) to lowest (1), to determine which attributes respondents valued most. These methods ensured a clear and systematic interpretation of consumer views toward banana vinegar.

The scope of the study was limited to respondents' demographics, awareness, usage, attributes rating (taste, aroma, and appearance), and suggestions for improvement. It also examined the determinants of purchase, including reasons for buying or not buying, and willingness to purchase. The survey relied on a descriptive approach and was carried out over five days, from May 8 to May 12, 2023, ensuring timely data collection from the target population.

RESULTS

Demographic Profile of the Respondents

Out of 388 respondents, most (43.6%) were aged 25–44, while only 1.5% were below 14. Adults in this age group likely consume more vinegar as they cook and preserve food, whereas younger respondents rarely use it since vinegar is acidic and less suitable for children's diets. Most respondents were women (67.8%), while men made up 32.2%. Women participated more actively, likely because they are often in charge of cooking and household food preparation. Their frequent use of vinegar in daily meals, preference for affordable options, and curiosity in trying alternatives made them key respondents. Brgy. Matlang recorded the largest share of potential consumers (12.4%) due to its bigger population, while Brgy. Can-andan had the smallest (1.0%), reflecting its fewer households among the barangays. Most respondents (73.2%) had small households of 1–5 members, making them more capable of buying banana vinegar. In contrast, larger families (1.3%) often limit condiment purchases due to tighter budgets and priorities. This reflects general household spending patterns, where vinegar is commonly bought in affordable, smaller packaging sizes. Most respondents (29.9%) reached high school, reflecting access to nearby schools. Only a few (0.3%) had no formal education or relied on ALS programs. While many gained basic education, opportunities for higher studies were limited compared to similar research where most respondents attained university-level education. Nearly half of the respondents (44.6%) were housewives, reflecting their central role in household food preparation and budgeting. Their focus on affordable, healthy options makes them likely consumers of banana vinegar. In contrast, retirees formed the smallest group (0.8%), showing limited representation in the study sample. Most respondents (70.6%) belonged to low-income households earning below ₱10,957 monthly, often without stable jobs. Only a few (0.5%) earned ₱43,828 and above, typically employed in industrial plants or government. Income differences influenced purchasing

capacity, highlighting affordability as a key factor in banana vinegar's market acceptability.

Table No. 1
Demographic profile of the respondents of banana vinegar in Isabel, Leyte

DEMOGRAPHIC CHARACTERISTICS	CATEGORY	FREQUENCY (f)	PERCENTAGE (%)
Age-Range	14 Below	6	1.5
	15-24	57	14.7
	24-44	169	43.6
	45-64	122	31.4
	65 above	34	8.8
	Total	388	100.0
Gender	Women	263	67.8
	Men	125	32.2
	Total	388	100.0
Address	Anislag	5	1.3
	Antipolo	6	1.5
	Apale	17	4.4
	Bantigue	18	4.6
	Bilwang	25	6.4
	Binog	6	1.5
	Can-andan	4	1.0
	Cangag	7	1.8
	Consolacion	7	1.8
	Honan	9	2.3
	Libertad	44	11.3
	Mahayag	18	4.6
	Marvel	30	7.7
	Matlang	48	12.4
	Monte Alegre	8	2.1
	Putingbato	7	1.8
	San Francisco	9	2.3
	San Roque	11	2.8
	Sta Cruz	14	36.0
	Sto Nino	39	10.1
	Sta Rosario	11	2.8
	Tabunok	18	4.6
	Tolingon	15	3.9
Tubod	12	3.1	
	Total	388	100.0
Family Size	1-5	284	73.2
	6-10	99	25.5
	11-15	5	1.3

	Total	388	100.0
Educational Attainment	Elementary Level	11	2.8
	Elementary Graduate	101	26.0
	High-school Level	116	29.9
	High-school Graduate	59	15.2
	College Level	55	14.2
	College Graduate	44	11.3
	ALS	1	0.3
	No Education	1	0.3
		Total	388
Occupation	Student	31	8.0
	Unemployed	57	14.7
	Employed	124	32.0
	Housewife	173	44.6
	Retired	3	0.8
		Total	388
Monthly Income	No answer	19	4.9
	below 10,957	274	70.6
	10,957-21,914	79	20.4
	21,915-43,828	14	3.6
	43,828 above	2	5.0
		Total	388

Awareness of the Respondents of Banana Vinegar

The results in Table 2 reveal that a large majority of respondents (80.7%) were not aware of banana vinegar, while only 19.3% had some knowledge of the product. Lack of awareness may be attributed to several factors, such as limited exposure to online markets, not actively searching for alternatives to traditional vinegar, or being too preoccupied with daily responsibilities to notice new products. Many were also unfamiliar with the potential health benefits of banana vinegar or the fact that ripe bananas can be processed into vinegar. This shows a clear gap in consumer knowledge and market visibility.

Table No. 2
Awareness of the respondents on banana vinegar in Isabel, Leyte

AWARENESS RESPONSE	FREQUENCY (f)	PERCENTAGE (%)
Yes	75	19.3
No	313	80.7
Total	388	100.0

Attributes Importance Rating

Using a 5-point Likert scale, in Table 3 highlights the importance respondents placed on banana vinegar's attributes—taste, aroma, appearance, and overall acceptability. Nearly all participants (99.7%) expressed acceptance of the product, with taste emerging as the most valued factor (98.7%). Overall acceptability received the highest weighted mean of 5.00, showing strong approval, while appearance, though still important, ranked lowest with a weighted mean of 4.32. Using a Likert Scale from 1 (very unimportant) to 5 (very important), responses were ranked accordingly. These results suggest that banana vinegar is highly acceptable to consumers, provided it delivers good taste, which remains the key deciding attribute.

Table No. 3
Attributes important rating weighted mean and ranking of the respondents of banana vinegar in Isabel, Leyte

ATTRIBUTES	WEIGHTED RATING	WEIGHTED RANKING	DESCRIPTION/ INTERPRETATION
Taste	4.98	2	Very Important
Aroma	4.84	3	Very Important
Appearance/ Color	4.32	4	Very Important
Overall Acceptability	5.00	1	Very Important

Suggestions for the Improvement of Banana Vinegar Product

In Table 4 reveals that nearly all respondents (99.7%) had no suggestions for improving banana vinegar, while only a few (0.3%) recommended enhancing its shelf life. Most respondents explained that they lacked ideas for improvement because they had not tried the product or were unfamiliar with its regular use. However, one participant emphasized the importance of placing an expiration date or extending shelf life, noting that product quality is vital to consumer health and safety. These findings suggest that while general feedback was limited, shelf stability and clear labeling could help strengthen consumer confidence in banana vinegar.

Table No. 4
Suggestions for the improvement of banana vinegar by respondents in Isabel, Leyte

SUGGESTED IMPROVEMENTS IN BANANA VINEGAR	FREQUENCY (f)	PERCENTAGE (%)
No Suggestion	387	99.7
Extend Product's shelf life	1	0.3
Total	388	100.0

Respondents' Willingness to Buy Banana Vinegar

In Table 5 shows that a vast majority of respondents (90.7%) expressed willingness to purchase banana vinegar once it becomes available, while only 9.3% said otherwise. Many were motivated by curiosity to try its taste, potential health benefits, and its appeal as an organic product. Cross-tabulation identified which demographics showed stronger purchase intention.

Table No. 5
Willingness of the respondents to buy banana vinegar in Isabel, Leyte

WILLINGNESS	FREQUENCY (f)	PERCENTAGE (%)
Yes	352	90.7
No	36	9.3
Total	388	100.0

Reasons for Buying Banana Vinegar

In Table 6 reveals that most respondents (64.5%) were motivated to buy banana vinegar because of its good taste, making flavor the strongest driver of acceptance. A smaller share (20.7%), particularly from low-income households, valued its affordability, while 14.8% emphasized product availability in the market. These findings highlight that consumers prioritize taste when deciding to purchase, with price and accessibility serving as secondary factors.

Table No. 6
Reasons of the respondent for buying banana vinegar in Isabel, Leyte

REASONS FOR BUYING	FREQUENCY (f)	PERCENTAGE (%)
Availability in the market	52	14.8
Good taste	227	64.5
Low price	73	20.7
Total	352	100.0

Reasons for Not Buying Banana Vinegar

In Table 7 shows that most respondents (58.3%) chose not to buy banana vinegar mainly because it was unavailable in the market. Another 41.7% cited its taste, finding it less pleasant than coconut vinegar. Overall, only 36 respondents reported reasons for not purchasing. The lack of market presence and unfamiliar flavor made many hesitant to try it.

Table No. 7
Reasons of the respondents for not buying banana vinegar in Isabel, Leyte

REASONS FOR NOT BUYING	FREQUENCY (f)	PERCENTAGE (%)
Unavailability	21	58.3
Unpleasant taste	15	41.7
Total	36	100.0

Recommendations to Increase Market Acceptability of Banana Vinegar

In Table 8 indicates that a majority of respondents (57.36%) recommended that sellers offer free tastings of banana vinegar, particularly to those unfamiliar with the product. Sampling allows potential buyers to experience its unique flavor, creating a positive impression and encouraging purchase. In contrast, only a small portion (0.5%) suggested improving packaging to attract consumers. Attractive packaging that highlights health benefits can increase trust and appeal.

Table No. 8
Recommendations of the respondents to increase market acceptability of banana vinegar to consumers in Isabel, Leyte

SUGGESTION	*FREQUENCY (f)	PERCENTAGE (%)
Offering good packaging	3	0.5
Offering discounts to the customers	100	16.7
Offering good quality banana vinegar	144	24.1
Offering free taste in the market	343	57.4
Promoting products by online shop	8	1.3

**Multiple Response*

DISCUSSION

Demographic Profile of Respondents

The demographic profile showed that most respondents were adults aged 25–44, predominantly women, with small families (1–5 members), and a majority having reached high school level. Many were housewives with low monthly incomes below ₱10,957. These results are consistent with previous studies. Similar to study of Latiff et al. (2017) found that vinegar consumers are often within the 25–34 age range, with women showing higher participation in vinegar-related studies. Additionally, Mohktar, S. et al. (2017) emphasized the influence of gender and occupation, noting that women, particularly housewives, are active vinegar users as they are usually in charge of food preparation. The findings also reflect in The Vinegar Institute (2019), which highlighted the role of household size in vinegar purchasing behavior. Overall, both the current study and earlier

literature confirm that age, gender, education, and income significantly shape vinegar consumption patterns, with women and lower-income households playing a key role in acceptability and usage.

Awareness of the Respondents of Banana Vinegar

The findings revealed that many respondents were not aware of banana vinegar, while only a few knew of it. This low level of awareness reflects a gap in consumer knowledge, likely influenced by limited exposure to new products, lack of information on health benefits, and reliance on more familiar vinegar varieties. Smith (2017) emphasized that many consumers are unaware of vinegar's chemical composition, particularly its acetic acid content, which often leads to doubts about safety and quality. Similarly, the lack of knowledge about banana vinegar suggests that unfamiliarity can hinder consumer acceptance. Both the study's results and Smith's observation highlight that awareness is crucial in shaping perceptions of food products. Without proper information, consumers may overlook potential benefits or remain skeptical about new varieties. Therefore, strengthening promotion, education, and market visibility is essential to address misconceptions and improve recognition of banana vinegar as a safe and valuable alternative.

Attributes Importance Rating

The findings showed that almost all respondents considered banana vinegar highly acceptable, with taste ranked as the most important attribute, followed by aroma, overall acceptability, and appearance. This indicates that consumers prioritize flavor quality when deciding on vinegar use. The results align with Bondad (2020), who reported that taste and aroma strongly influence the acceptability of both banana and sugarcane vinegar. Also, Hunt (2022) and StudyMoose (2016) described banana vinegar as fruity, mildly sweet, and aromatic, making it appealing across different dishes. Byarugaba-Bazirake et al. (2014) also emphasized that aroma plays a role in consumer approval of fermented banana vinegar. Together, these findings and past studies confirm that sensory qualities—especially taste—are the key determinants of vinegar's market acceptability.

Suggestions for the Improvement of Banana Vinegar Product

The study revealed that almost all respondents did not provide suggestions for improving banana vinegar, while only one respondent recommended extending its shelf life. This limited feedback may be attributed to respondents' unfamiliarity with the product, as many had not previously consumed or purchased it. However, the single suggestion on shelf life reflects consumer concern for product safety and quality. This aligns with Abdalkrim et al. (2013), who emphasized that proper packaging is crucial in protecting food products, extending shelf life, and ensuring consumer satisfaction. Similarly, Boonsupa et al. (2020) highlighted that fruit vinegar development should focus not only on flavor but also on stability and preservation to enhance consumer trust. Thus, while respondents offered few direct suggestions, literature indicates that improvements in packaging and product

protection remain essential to boosting consumer confidence and acceptability of banana vinegar.

Respondents' Willingness to Buy Banana Vinegar

Majority of respondents expressed willingness to purchase banana vinegar once it becomes available, while only few said otherwise. Their willingness was largely influenced by curiosity, interest in its unique taste, perceived health benefits, and the appeal of its organic nature. Some respondents specifically linked banana vinegar to weight management and blood sugar regulation. This supports Jared (2023) view that organic vinegar products are valued for promoting healthy metabolism and wellness. The alignment between these findings suggests that consumers are increasingly motivated by health-conscious choices when deciding to try new products. With such a high percentage expressing purchase intention, banana vinegar shows strong market potential. However, to maximize this interest, effective promotion should emphasize its nutritional value, organic qualities, and role in supporting healthier lifestyles.

Reasons for Buying Banana Vinegar

The results here indicate that taste was the primary reason motivating more than half of respondents to buy banana vinegar, making flavor the most important factor in consumer acceptance. Affordability influenced some of them, particularly those from low-income households, while small proportion highlighted product availability as a key reason. These findings suggest that while cost and accessibility matter, consumers are more strongly driven by the product's sensory qualities. This aligns with Rancho Gordo (n.d.), who described banana vinegar as fruity, tropical, and pleasantly acidic without being overly sweet—characteristics that match the taste preferences of many consumers. The alignment between consumer responses and his description emphasizes the role of flavor in shaping buying decisions. With 352 respondents expressing favorable reasons for purchase, the findings demonstrate that banana vinegar has strong potential in the market, especially if producers highlight its distinctive taste while ensuring affordability and wider availability.

Reasons for Not Buying Banana Vinegar

More than half of the respondents did not buy banana vinegar due to its unavailability in the market, while some cited its taste, which they found less pleasant compared to coconut vinegar. Although Rancho Gordo (n.d.) described banana vinegar as fruity, tropical, and pleasantly acidic, consumer perceptions differed, with some showing reluctance to try a less familiar flavor. This reflects how both product accessibility and sensory experience influence purchasing behavior. Harrar (2021) further explained that excessive vinegar intake may cause discomfort, even though it remains safe when consumed moderately in food or diluted drinks. This perspective helps explain part of consumer hesitation, as health-related concerns can affect willingness to try new vinegar varieties. Together, these results suggest that limited availability, taste preferences, and potential health perceptions play significant roles in buyer reluctance. Addressing these

issues through wider distribution, taste testing, and health education could help improve acceptance of banana vinegar in the market.

Recommendation Strategies to Increase Market Acceptability of Banana Vinegar

More than half of the respondents recommended free tastings of banana vinegar to increase market acceptability. This strategy directly addresses low awareness by allowing consumers to personally experience its flavor, which is the strongest driver of purchase decisions. Trinidad (2018) similarly emphasized that free sampling, when supported by the Food and Drug Administration (FDA), can be distributed in supermarkets, hospital canteens, fruit stands, and fast-food outlets to raise awareness and encourage trial. Visual promotion, such as posters, can further reinforce product visibility.

On the other hand, only a small portion of respondents suggested improving packaging, though this remains important for long-term market appeal. Transparency Market Research (2018) highlighted that attractive and informative packaging builds consumer trust by communicating nutritional value and health benefits. Likewise, Trinidad (2018) suggested that packaging banana vinegar in bottles enhances credibility and professionalism.

These findings suggest that while free sampling is the most immediate and impactful strategy to boost acceptability, packaging innovations and informative labeling should complement it to strengthen consumer confidence and widen market reach. Together, these approaches can help position banana vinegar as both a flavorful and health-oriented product in Isabel and beyond.

Conclusions

The demographic data show that most respondents—women in middle adulthood, with small households, high school education, and mainly housewives—provided valuable insights on the acceptability of banana vinegar in Isabel. They offered important information on awareness, interest, and willingness to purchase the product once it becomes available.

The results revealed that although many respondents were initially unaware of banana vinegar, they expressed a readiness to buy it when offered in the market. Their lack of prior experience was largely due to its unavailability locally. When given a sample to taste, respondents responded positively, appreciating the flavor and showing willingness to purchase.

Respondents suggested offering free tastings as an effective strategy to introduce the product, attract potential buyers, and gather feedback. The researcher also recommends measures to increase both demand and supply, ensuring wider availability in Isabel, Leyte. These steps can help establish banana vinegar as a well-recognized and accepted local product.

Recommendations

Although banana vinegar was found to be acceptable among consumers, it is currently unavailable in the Isabel market. To increase its acceptability, strategies should focus on boosting both supply and demand. Based on the study's findings, several actions are recommended. First, local sellers could enter agreements with suppliers offering competitive prices, with discounts for bulk purchases, and distribute the product to small stores willing to sell it. Second, placing the vinegar in visible locations within stores can attract the attention of potential buyers. Third, promoting the product through social media campaigns and strategically placed posters can increase awareness and interest among consumers. Fourth, government agencies such as the Department of Agriculture and the Department of Trade and Industry can provide training and workshops to help farmers and vendors process overripe bananas into vinegar, creating a value-added product. Lastly, financial assistance from the government can support vendors in establishing micro-businesses, increasing their income while promoting an environmentally friendly approach. Implementing these measures can help improve the market presence and acceptance of banana vinegar in Isabel, Leyte.

Compliance with Ethical Standards

Participation in this research was entirely voluntary. Respondents had the right to withdraw at any time or choose not to answer specific questions, even after signing the consent form.

Before taking part, respondents were provided with a consent form approved by the Ethics Review Committee, ensuring they had all the information needed to make an informed decision. The form explained the purpose of the study, the tasks required, the estimated time to complete the survey, and whether participation involved any compensation. It also detailed potential risks, benefits to participants or society, and contact information for further questions.

The researcher guaranteed strict confidentiality throughout the study. Once the consent form was signed, both researcher and respondent entered a confidential agreement, ensuring that personal information and responses were protected. No data were shared outside the research team without explicit permission from the participant, providing full assurance that their identity and answers would remain private and secure.

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