International Journal of Innovation and Research in Educational Sciences
Volume 4, Issue 1, ISSN (Online): 2349–5219

Acceptability of Persian Conch (Strombuspersicus) Kroepeck[1]

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Date of publication (dd/mm/yyyy): 11/02/2017

***Abstract*—This study was conducted to determine the quality attributes and acceptability of Persian Conch Kroepeck sample at ESSU Guiuan Campus. The product testing was done by 12 Food Technology Instructors of this campus and other Food producers in Guiuan who have the training and expertise in this line of work. They evaluated the quality characteristics of the Kroepeck preparations in terms of color, aroma, taste, texture, and crispness through the use of organoleptic test. Ninety (90) respondents evaluated the acceptability of different Kroepeck formulations made from Persian Conch using the Hedonic Rating Scale in Terms of their preferences.**

Results on quality characteristics of the different kroepeck preparations revealed that Treatment 1 (100% Spider Conch Kroepeck) and treatment 3 (100% Persian Conch/ Busikad Kroepeck) were rated as "Very good", in terms of color, aroma, taste, texture and crispness. While Treatment 2 (50% Spider Conch and 50% Persian Conch/ Busikad Kroepeck) was rated "Very good" in terms of crispness and "Good" in terms of color, aroma, taste, and texture. Results showed that the three kropeck preparations were of good quality.

Based on the findings of this study, the researchers made the following recommendations: 1) further study on the shelf life as well as on the packaging of Koepeck products for commercialization purposes; 2) study on production and marketing of Kroepeck products; however, refinement on some of the quality attributes of the product may be emphasized; 3) submit the same Kroepeck products used in the evaluation for laboratory analysis and microbial examination; 4) the research product may be considered in the selection of food items produced in the municipality of Guiuan in line with its one-town-one-product program of the local government; and 5) conduct follow-up study on the utilization of shells from Persian Conch to make sure that the shells will not add environmental pollution.

***Keywords* — Persian Conch, Strombuspersicus, Persian Conch Kroepeck, Kroepeck, Spider Conch Kroepeck**

I. INTRODUCTION

One of the research priorities of ESSU Guiuan Campus, which is implemented by the Entrepreneurial Management research unit, is product development. Its focus is on value-added products that could be promoted and produced in Guiuan, utilizing the abundant raw ingredients available in the community like sea foods and other similar products. This may eventually provide livelihood for the Guiuan rural folks to improve their economic life.

Junk foods are popular crunchy food snacks which delight everyone at any age because of its distinct quality and taste. However, medical experts do not encourage eating these kinds of food, especially the children because most junk foods do not have sufficient levels of essential vitamins and minerals, do a poor job of boosting immunity, increasing long term energy, and assisting cell growth and development [4]. Hence, it is the desire of the authors to develop an enhanced recipe and naturally processed Kroepeck product using Persian Conch and other natural ingredients, which is affordable and nutritious that can be patronized by children and adults.

The desire of the authors to conduct the study was also motivated by a comparative study of Pagatpatan, Morante, Lagramada, and Lacaba (2008), on Kroepeck treated with Fish, Squid, and Spider Conch. Spider Conch Kroepeck treatment came out to be the preferred product by the evaluators [3]. However, when the research product was presented in the Regional Research and Development Forum in Naval Institute of Technology, Biliran, the panel members recommended the use of other similar marine resources because using Spider Conch in mass production of Kroepeck will add pressure and exploitation of the said marine product, which is getting expensive nowadays. The production cost in kroepeck making will eventually get high. This present study is anchored on the above-mentioned considerations.

According to the observation of BFAR in Guiuan, this kind of marine product, Persian Conch (Strombuspersicus) is abundant not only in Guiuan but throughout the coastal areas in Samar [1].

This Conch specie is still unexploited. It is cheap because there is over an supply of it in the area and it is not a popular marine seafood. They are easily found and due to its maturity size which does not grow more than 35 to 46 millimeters, the consumers prefer to use bigger Conch for food consumption but not as flavoring in processing food products. Should there be mass production of this kroepeck for commercialization; supply of the said marine resource can be sustained because Persian conch produces year round.

Persian Conch (Strombuspersicus) may be a good flavoring in kroepeck making because it is creamier than the bigger conchs. It may be considered an appropriate size for processing as they are still ground to the desired size.

Since Guiuan, Eastern Samar has the abundant supply of the said marine resource; the researchers were encouraged to conduct a study on determining the acceptability of Kroepeck using Persian Conch (Strombuspersicus) locally known as Busikad.

II. METHODOLOGY

During the different phases of operation in the conduct of the study, the following ingredients were used in this study:

ground rice, salt, lime, seasoning, powder pepper, cooking oil, Persian conch/Busikad (Strombuspersicus).

The utensils used were rice grinder, measuring spoons, blender, knives, mixer, weighing scales, steamer, basins, aluminum trays, ladle, measuring cups, plastic sealer, stove, pastry brusher, pie plate, chopping board, casserole/kettle, and plastic bags. These tools and utensils were gathered and cleaned in the kitchen of the HRRM laboratory room of the campus before the experimentation was started. The researchers also used cooking outfit.

All ingredients were measured. The Persian Conch (Strombuspersicus) was sliced thinly before it was ground. The rice was ground also. After which all the ingredients were combined, stirred, added with water and blended thoroughly. Each mixture was steamed by putting two tablespoons of the mixture in the baking pan plate at a time, to have a uniform and desired thickness. Then it was steamed for one minute and was sliced into desired sizes. They were placed in the trays and were dried under the heat of the sun for one and a half days. After thorough drying, the Kroepeck were deep-fried in hot cooking oil ready for the sensory evaluation. The product was compared with the other products. Hence, the researchers also prepared a Spider conch Kroepeck and a combination of Spider conch and Persian conch. The following treatments were used: Treatment 1 – 100% Spider conch Kroepeck, Treatment 2 – 50% Spider conch and 50% Persian conch Kroepeck, Treatment 3 -100% Persian conch Kroepeck.

To obtain a reliable result in the evaluation of the Kroepeck samples, sensory evaluation (organolyptictest) and acceptability test were used, together with the Score sheets using the Hedonic rating scale for the panelists.

The organolyptic test was made to determine the quality attributes and the acceptability of the Kroepeck samples. The products were presented to the taste panel. The panel consists oftwelve(12) members who evaluated the Kroepeck samples based on color, aroma, taste, texture and crispness. One hundred percent of the panel members were instructors major in food technology and other food producers in Guiuan, Eastern Samar. Coded samples for each treatment in two replications were presented to them. The kroepeck samples were tested using a five-point rating scale based on the variables considered.

There were ninety (90) respondents used in the consumer testing who were randomly chosen from the housewives, college, high school and elementary pupils in ESSU Guiuan and in Taytay Integrated School. The two schools were chosen because the representative samples of the respondents can already be obtained (Table 1). The respondents also used score sheet with the 9-point Hedonic rating scale. The same sensory evaluation procedures were done to the consumer respondents.

The data were analyzed with the use of appropriate measurement scale and statistical tool, the quality attributes which include odor, aroma, taste, texture, and crispness were evaluated with the use of a sensory system scaled from 1-5. The same tool was used in the acceptability analysis using the 9-point Hedonic Rating Scale on the following criteria: color, aroma, taste, texture, crispness, and general acceptability [2]. The data were tabulated and the mean preferences and percentages were determined. The analysis of variance (ANOVA) in the complete randomized design (CRD) was used to determine the significant differences in the evaluation of the Kroepeck treatment.

III. Results and Discussion

A. Organolyptic Tests of Kroepeck Products

The acceptability of the three kroepeck products in terms of quality characteristics was rated by the food technology instructors using organolyptic test.

The result of the evaluation on quality characteristics of the different kroepeck preparations is presented in table 1. It shows that Treatment 1 (100% Spider Conch Kroepeck) and treatment 3 (100% Persian Conch/Busikad kroepeck) were rated as “very good”, in terms of color, aroma, taste, texture and crispness. While Treatment 2 (50% Spider Conch and 50% Persian Conch/Busikad kroepeck) was rated “very good” in terms of crispness, and “good” in terms of color, aroma, taste and texture.

a.1 Color of Kroepeck Products.

Table 2 presents the data on the mean scores on the color of kroepeck products. Results showed that treatment 3 obtained the highest mean score of 4.65. This was followed by treatment 1 with a mean value of 4.45, and Treatment 2 got the lowest mean score of 3.55.

The grand mean generated was 4.22, which means “very good” in qualitative description. This means that the three (3) kroepeck products were having attractive color in which its bright color is evenly distributed and pleasing to the eyes of the evaluators.

Table 1 Mean Scores on the Quality Characteristics of *Kroepeck*

Quality Attributes	Product	Replication		Mean	Quality Description
		1	2		
Color	1	4.4	4.5	4.45	Very Good
	2	3.5	3.6	3.55	Good
	3	4.6	4.7	4.65	Very Good
Aroma	1	4.1	4.3	4.20	Very Good
	2	3.3	3.5	3.40	Good
	3	4.4	4.5	4.45	Very Good
Taste	1	4.2	4.3	4.25	Very Good
	2	3.4	3.7	3.55	Good
	3	4.7	4.8	4.75	Very Good
Texture	1	3.9	4.1	4.00	Very Good
	2	3.8	3.9	3.85	Good
	3	4.2	4.5	4.35	Very Good
Crispness	1	4.3	4.0	4.15	Very Good
	2	4.2	4.3	4.25	Very Good
	3	4.2	4.5	4.35	Very Good

Table 2 Mean Scores on Color of Kroepeck

Treatment	Replication		Treatment Total	Treatment Mean
	1	2		
1	4.4	4.5	8.9	4.45[b]
2	3.5	3.6	7.1	3.55[c]
3	4.6	4.7	9.3	4.65[a]
Grand Total	12.5	12.8	25.3	
Grand Mean				**4.22**

**Treatment values with common letters means not significant at 0.05 LSD*

Table 3 Mean Scores for Aroma of Kroepeck

Treatment	Replication		Treatment Total	Treatment Mean*
	1	2		
1	4.1	4.3	8.4	4.20[b]
2	3.3	3.5	6.8	3.40[c]
3	4.4	4.5	8.9	4.45[a]
Grand Total	**11.8**	**12.3**	**24.1**	
Grand Mean				**4.02**

**Mean values followed by common letters are not significantly different with each other at LSD. 05 level of significance*

Table 4 Mean Score for Taste of *kroepeck* Products

Treatment	Replication		Treatment Total	Treatment Mean*
	1	2		
1	4.2	4.3	8.5	4.25[b]
2	3.4	3.7	7.1	3.55[c]
3	4.7	4.8	9.5	4.75[a]
Grand Total	12.3	12.8	25.1	
Grand Mean				**4.18**

**Mean values followed by common letters are not significantly different with each other at LSD. 05 level of significance*

a.2 Aroma of the Kroepeck Product

The data on the mean scores on the aroma of kroepeck products as rated by food technology instructors and other experts is presented in table 3.

The result showed that treatment 3 got the highest mean score of 4.45. This was followed by treatment 1 with a mean score of 4.20, and the lowest mean score of 3.40 was obtained by treatment 2. The grand mean generated was 4.02, which means "very good" in the qualitative description. This means that the three kroepeck products were pleased to smell by the evaluators. This implies that it has the kroepeck fragrant.

a.3 Taste of Kroepeck Products

Table 4 presents the data on the taste of kroepeck products as rated by the food technology instructors and other food producers.

It reflects that Treatment 3 obtained the highest mean score of 4.75. This was followed by treatment 1 with mean score of 4.25 and treatment 2 obtained the lowest mean score of 3.55.

a.4 Texture of Kroepeck Products

Texture of Kroepeck is presented in Table 5.

Table 5 Mean Scores for Texture of Kroepeck

Treatment	Replication		Treatment Total	Treatment Mean*
	1	2		
1	3.9	4.1	8.0	4.00[b]
2	3.8	3.9	7.7	3.85[c]
3	4.2	4.5	8.9	4.45[a]
Grand Total	11.9	12.5	24.6	
Grand Mean				**4.07**

**Mean values followed by common letters are not significantly different with each other at LSD 0.05 level of significance*

It showed that treatment 3 obtained the highest mean score of 4.45 and treatment 2 got the lowest mean score of 3.85. The grand mean computed was 4.07 which was described as "very good" by the respondents.

This means that the three *Kroepeck* products had a smooth feel on the tongue with fairly fine, without stickiness' and grains texture.

a.5 Crispness of Kroepeck

The crispness of *kroepeck* products as rated by food technology instructors is presented in table 6.

Result revealed that treatment 3 got the highest mean score of 4.35. This was followed by treatment 2 with a mean value of 4.25. The lowest mean score of 4.15 was obtained by Treatment 1.The grand mean value computed was 4.25 which means "very good" in the qualitative description.

Table 6 Mean Score for Crispness of Kroepeck

Treatment	Replication		Treatment Total	Treatment Mean*
	1	2		
1	4.3	4.0	8.3	4.15[b]
2	4.2	4.3	8.5	4.25[c]
3	4.2	4.5	8.7	4.35[a]
Grand Total	12.7	12.8	25.5	
Grand Mean				**4.25**

**Mean values followed by common letters are not significantly different with each other at LSD. 05 level of significance.*

Result showed that the Kroepeck products were having a crispy bite, firm and brittle.

B. Differences in the Quality Characteristics of Kroepeck

The study also looked into determining the differences of the three kroepeck products in terms of color, aroma, taste, texture and crispness. The analysis of variance was used to analyze the data.

b.1 Color of Kroepeck

The analysis of variance on color of kroepeck is presented in Table 7.

Result indicated that there was a significant difference on the color of the three kroepeck products. The computed F value was 97.86, which was greater than the tabular F value at 1% level. Hence, the null hypothesis which stated that there is no significant difference on the quality characteristics of the three kroepeck products in terms of color is rejected.

This finding indicated that the three Kroepeck products differ significantly in their color.

Since there was a significant difference among the different treatments, the Least Significant Difference (LSD) test was computed to determine which treatment means differ with each other. Results showed that treatment 3 differ significantly with treatments 1 and 2 while treatment 1 differs significantly with treatment 2.

This finding implied that although all kroepeck products have very good color, treatment 3 has a superior color quality over treatment 1 and 2, while treatment 1 was having a better color with that of treatment 2.

b.2 Aroma of Kroepeck

The analysis of variance on aroma of kroepeck is presented in table 8.

It can be reflected in this table that there was a significant difference on the aroma of the three kroepeck products. The computed F value of 60.50 exceeded the tabular F value at.01 level of significance. Hence, the null hypothesis which stated that there is no significant difference on the quality characteristics of the different kroepeck products in terms of aroma is rejected.

This means that the aroma of Kroepeck products differ significantly with each other. Further test (LSD test) showed that treatment 3 differ significantly with treatment 1 and 2, while treatment 1 differ significantly with treatment 2. This indicated that although all the three kroepeck products have very good aroma as rated by the respondents, it was treatment 3 which had a superior quality in terms of aroma over treatment 1 and 2, and treatment 1 was better in aroma than treatment 2.

b.3 Taste of Kroepeck

The analysis of variance on taste of *kroepeck* is presented in Table 9.

As reflected in table 9, the result of the analysis showed that there was a significant difference among the different treatments. The computed F value of 36.50 was greater than the tabular F value of 30.82 set at .05 level ofsignificance. So the null hypothesis which stated that there is no significant difference on the quality characteristics of *Kroepeck* products in terms of taste is rejected.

Results showed that the kroepeck products differ significantly in their taste. Further test (LSD test) showed that treatment 3 differ significantly with treatment 1 and 2, while treatment 1 differ significantly with treatment 2.

Table 8 Analysis of Variance on Aroma of Kroepeck

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value	Tabular Value	
					5%	1%
Treatment	2	1.21	0.605	**60.50****	9.55	30.82
Error	3	0.04	0.01			
Total	5	1.25				

***highly significant*

Table 9 Analysis of Variance on Taste of *Kroepeck*

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value	Tabular Value	
					5%	1%
Treatment	2	1.46	0.73	**36.50****	9.55	30.82
Error	3	0.05	0.02			
Total	5	1.51				

***highly significant*

Table 10 Analysis of Variance on Texture of Kroepeck

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value	Tabular Value	
					5%	1%
Treatment	2	0.26	0.13	**0.65**^{NS}	9.55	30.82
Error	3	0.07	0.02			
Total	5	0.33				

NS=not significant

Table 11 Analysis of Variance on Crispness of Kroepeck

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value	Tabular Value	
					5%	1%
Treatment	2	0.04	0.02	**0.67**^{NS}	9.55	30.82
Error	3	0.09	0.03			
Total	5	0.13				

NS=not significant

b.4 Texture of Kroepeck

The analysis of variance on texture of kroepeck is presented in table 10.

It can be seen in table 10 that the result of the analysis showed that there was no significant difference among the different treatments. The computed F value was lesser than the tabular F value of 9.55 set at .05level of significance. Hence, the null hypothesis which stated that there is no significant difference in the quality characteristics in terms of texture among the different treatments is accepted.

The finding indicated that the three *kroepeck* preparations had similar and common quality characteristics in terms of texture. This result implies that the different *kroepeck* products have similar textures.

b.5 Crispness of Kroepeck

Table 11 shows the result of the analysis on the crispness of the kroepeck product.

Results revealed that there was no significant difference among the different treatments, since the computed F value of 0.67 was lesser than the tabular F value of 9.55 set at .05 level of significance. So the null hypothesis is accepted.

Result indicated that the different kroepeck preparations did not differ significantly with each other in their quality characteristics in term of crispness. This suggests that these Kroepeck products have the same crispness, and conforms to the standard crispness of kroepeck preparation.

C. Consumers' Acceptability of the Kroepeck Products

Table 12 reflects the acceptability preference of the ninety (90) consumers. The responses were based on the Hedonic Rating Scale.

It was manifested that treatment 1 (100% Spider Conch Kroepeck) acceptability, 15 or 16.67 percent of the consumers rated "like extremely", 53 or 58.89 percent rated "like very much", 17 or 18.89 percent rated "like moderately", 4 or 4.44 had rated "like slightly" and 1 or 1.11 percent had rated "neither like or dislike".

In treatment 2 (50% Spider Conch and 50% Persian Conch Kroepeck) acceptability, 3 or 3.33 percent of the consumers had rated "like extremely", 22 or 24.44

percent had rated "like very much", 35 or 38.89 percent had rated "like moderately", 24 or 26.67 percent had rated "like slightly", and 6 or 6.67 had rated "neither like or dislike" the product.

For treatment 3 (100% Persian Conch/Busikad) acceptability, 14 or 15.56 percent of the consumers had rated "like extremely", 54 or 60.00 percent had rated "like very much", 14 or 15.56 percent had rated "like moderately", And 8 or 8.88 percent had rated "like slightly" no one rated other descriptive ratings below this rating scale.

Results revealed that, more consumers preferred treatment 3 which was 100% Persian Conch/*Busikad* Kroepeck, over other treatments since many of them had rated "like very" much on the product.

Table 12 Consumers' Acceptability Preference Responses on Kroepeck Products

Product	Preference Response	Frequency	Percentage
1 (100% Spider Conch *Kroepeck*)	Like Extremely	15	16.67
	Like Very Much	53	58.89
	Like Moderately	17	18.89
	Like Slightly	4	4.44
	Neither Like Nor Dislike	1	1.11
	Dislike Slightly	0	0
	Dislike Moderately	0	0
	Dislike Very Much	0	0
	Dislike Extremely	0	0
	Total	**90**	**100**
2 (50% Spider Conch 50% Persian Conch *Kroepeck)*	Like Extremely	3	3.33
	Like Very Much	22	24.44
	Like Moderately	35	38.89
	Like Slightly	24	26.67
	Neither Nor Dislike	6	6.67
	Dislike Slightly	0	0
	Dislike Moderately	0	0
	Dislike Very Much	0	0
	Dislike Extremely	0	0
	Total	**90**	**100**
3 Persian Conch Busikad *Kroepeck*	Like Extremely	14	15.56
	Like Very Much	54	60.00
	Like Moderately	14	15.56
	Like Slightly	8	8.89
	Neither Nor Dislike	0	0
	Dislike Slightly	0	0
	Dislike Moderately	0	0
	Dislike Very Much	0	0
	Dislike Extremely	0	0
	Total	**90**	**100**

D. Mean Scores Acceptability of Consumers

The data on mean scores acceptability of Kroepeck products by the ninety (90) consumer respondents is presented in table 13.

It shows that treatment 3 got the highest mean score of 7.51, this was followed by Treatment 1, which obtained a mean score of 7.18, and Treatment 2 got the lowest mean score of 6.90. This means that many of the consumers preferred treatment 3 than other treatments.

The analysis of variance on the acceptability test of the Kroepeck products as rated by consumers is reflected in table 14.

Table 13. Mean Scores of Acceptability of Kroepeck

Treatment	Replication		Treatment Total	Treatment Mean*
	1	2		
1	6.50	7.86	14.36	7.18[a]
2	6.89	6.91	13.80	6.90[a]
3	7.80	7.22	15.02	7.51[a]
Grand Total	21.19	21.99	43.18	
Grand Mean				**7.20**

**Mean values followed by common letters are not significantly different with each other at LSD .05 level of significance*

Table 14 Analysis of Variance on Crispness of Kroepeck

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value	Tabular Value	
					5%	1%
Treatment	2	0.375	0.19	0.528 NS	9.55	30.82
Error	3	1.095	0.36			
Total	5	1.47				

NS=not significant

It can be gleaned from this table that there is no significant difference among the different treatments. This claim is based on the fact that the computed F value of 0.528 is lesser than the tabular F value of 9.55 set at .05 level of significance. This means that the different treatments did not differ significantly in its acceptability by the consumers. Hence, the null hypothesis, which stated that there is no significant difference on the acceptability of the different treatments in terms of consumers' preference is accepted.

The findings connote that the Kroepeck products did not differ in their acceptability by the consumers.

E. Yield Study

The average cooking yield of Persian Conch Kroepeck for a single recipe was four packs, each contains 50 grams that can be sold at Php30.00 per pack. The cost of materials in the preparation of the Persian Conch Kroepeck was computed based on the current wholesome prices at the time of the study.

F. Cost-Profit Analysis

The net profit of each product was obtained based on the presented computation.

Product 1

Sales based from the Current Market Price of Php30.00 for othersimilar product [Php 30.00 x 4 (maximum yield)] . . . . . .**Php 120.00**

Less: Direct Cost of Main ingredients (Spider Conch) . . . .**Php 88.20**
Gross Profit . . . . . .**Php 31.80**
Less: Labor cost, Selling & Packaging expenses at an estimated 30% . . . . . **Php 26.40**
Net Profit . . . . . **Php 5.40**

Product 2

Sales based from the Current Market Price of Php 5.00for othersimilar product [Php 30.00 x 4 (maximum yield)] . . . .**Php 120.00**
Less: Direct Cost of Main ingredients (50% Spider Conch & 50% Persian Conch . . . . . **Php 70.70**
Gross Profit . . . . . **Php 49.30**
Less: Labor cost, Selling & Packaging expenses at an estimated 30% . . . . . **Php 21.00**
Net Profit . . . . . **Php 28.30**

Product 3

Sales based from the Current Market Price of Php 30.00 for other similar product [Php 30.00 x 4 (maximum yield)] . .. . . **Php 120.00**
Less: Direct Cost of Main ingredients (100% Persian Conch). . . . . **Php 53.20**
Gross Profit . . . . . **Php 66.80**
Less: Labor cost, Selling & Packaging expenses at an estimated 30% . . . . . **Php 15.96**
Net Profit . . . . . .**Php 50.84**

The cost and profit obtained for each product were valued to determine which obtained the highest net profit based on the cost of production.

Table 15 reflects the rank of profit cost of the different kroepeck preparations. It shows that Product 3 (Persian Conch) got the highest profit of Php 50.84. The second in rank was obtained by Product 2 (50% Persian Conch & 50% Spider Conch) with a profit of Php. 28.30, and Product 1 got the lowest profit of Php. 5.40 only.

This means that the three Kroepeck preparations differ with each other in terms of their profit. It further indicated that the utilization of Persian Conch in kroepeck preparation was less expensive than the mixture of Persian and Spider Conchs and 100% Spider Conch Kroepeck.

IV. Conclusion

Based on the findings of the study, the following conclusions are drawn: 1) the three Kroepeck preparations were all described by food technology instructors and other food producers as having "very good" quality in terms of color, aroma, taste, texture and crispness; 2) the three Kroepeck preparations showed a highly significant difference among the different products. 100% Spider Conch, 50% Spider Conch and 50% Persian Conch, and 100% Persian Conch Kroepeck differ significantly in their color. In other words, the findings showed that the color of the Kroepeck made from Persian Conch was generally observed to be "very good" than that of 100% Spider Conch and 50% Persian & Spider Conch Kroepeck. There was a significant difference on the aroma of the three different Kroepeck preparations. It showed that the Persian Conch Kroepeck had the superior aroma than the 100% Spider Conch, 50% Spider Conch and 50% Persian Conch Kroepecks. Taste of the three Kroepeck preparations showed a highly significant difference among the different products. This means that the three Kroepeck preparations differ significantly with each other in their tastes and that the Persian Conch Kroepeck had superior quality in terms of taste than that of Spider Conch Kroepeck. This tastes better than 50% Spider Conch and 50% Persian Conch Kroepeck. The texture of the three different Kroepeck preparations indicated that there was no significant difference among them. As to the crispness of the three Kroepeck preparations there was no significant difference among them having "very good" qualitative description given by the food technology instructors and other food producers. 3) acceptability preference of the 90 respondents was based on the Hedonic Rating scale. Spider Conch Kroepeck was rated 58.89 per cent or 53 by the respondents as "like very much" and 60.00 percent or 54 rated Persian Conch Busikad Kroepeck also described as "very good". They almost have the same number of respondents which

indicate that both have the same acceptability preference of the respondents. 4) the analysis of variance of the acceptability test of the three Kroepeck preparations as rated by the respondents showed no significant difference among the different products. 5) of the three Kroepeck preparations, Product 3 (Persian Conch Kroepeck) got the hghest net profit of Php 50.84 while Product 2 (50% Spider Conch and 50% Persian Conch) had a net profit of Php 28.30 and product 1 (Spider Conch Kroepeck) having the lowest net profit of Php 5.40 only.

V. RECOMMENDATION

The recommendations of the study are as follows: 1. further study is recommended on the shelf life as well as on the packaging of Kroepeck products for commercialization purposes. 2. Study on production and marketing may be made on the Kroepeck products. However, refinement on some of the quality attributes of the product may be given also emphasis. 3. The same Kroepeck products used in the evaluation should be submitted for laboratory analysis and microbial examination. 4. The research product should be considered in the selection of food items produced in Guiuan in line with its one-town-one product of the local government in the same town. 5. Follow-up study may be conducted on the utilization of shells from Persian Conch to make sure that the shells will not add environmental pollution.

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