



The Use of Duren Seed Flour in the Making of Pancakes

Nisa Rahmaniyah Utami*, Muhamad Fachry Irvani

Program Studi D3 Management Perhotelan, Sekolah Tinggi Pariwisata Bogor, Indonesia

Correspondence: E-mail: nisarahmaniyah@yahoo.com

ABSTRACTS

Pancake is a dish that has a sweet and savory taste from butter dough baked in a frying pan and is round and flat. Wheat flour is one of the basic ingredients in making pancakes so as to reduce dependence on wheat flour, namely by optimizing local ingredients that are still lacking in utilization, namely durian seeds and durian seeds. to be used as flour in the manufacture of a food. therefore the author replaces wheat flour with durian seed flour in making pancakes. This study uses a questionnaire method with a preference test from the panelists, many samples studied amounted to 3 expert panelists, 30 consumer panelists. The author is looking for a good formulation to be applied to pancake products before being distributed to the panelists. The author finds out the results of the study by looking for the mean, median, mode, and standard deviation data. The results obtained by taking the average value of 4 (four) aspects, namely color, aroma, texture, and taste. The results of this study indicate that the use of durian seed flour in making pancakes can be said to be successful with the results of the preference test which are dominated by liking.

ARTICLE INFO

Article History:

Received 30 Maret 2021

Revised 10 Apr 2021

Accepted 11 Apr 2021

Available online 11 Apr 2021

Keyword:

Innovation,

Pancakes,

Durian seed Flour.

1. INTRODUCTION

Culinary is a mixed hobby commonly referred to as culinary tourism whose purpose is to eat and travel (tour, travel). However, usually the word culinary refers to the food rather than the road. Culinary is a part of life that is closely related to daily food consumption because everyone needs food. Starting from simple food to high-class food. All of this requires quality and nutritious processing. In "Culinary Tourism" itself proves that all things related to cooking and culinary get special attention among the community (Fajri R, 2014) Currently the culinary world is very developed in developing culinary products or for individuals who want to make a new touch , to create satisfaction for the connoisseurs and various culinary dishes have turned into trends in the development of the culinary world. One part of the culinary field is pastry which has become a trend in the development of the culinary world. Pastry is a part of the kitchen that produces mainly various types of bread, cakes, and desserts.

Dessert products are very popular with the public, especially young people. This product can generally be enjoyed on various occasions or not limited to certain events. As the development of dessert is no longer only eaten as a dessert but can also be consumed as a snack (snack). This is evidenced by the number of restaurants and cafes that provide dessert as a complementary menu, which is a dessert. As a dessert dessert should be refreshing. At first the dessert was served from fresh fruits without processing. Dessert usually has a sweet and refreshing taste, sometimes there is a salty taste or a combination. Desserts are generally divided into 2 groups, namely: hot desserts and cold desserts (Hamidah, 2016). Cold desserts are served cold, including the utensils that must be cold, including puddings, fruits, and mousses. While hot desserts are served in hot or warm temperatures, included in this group such as apple pie, and cake, pancakes (Hamidah, 2016). One of the most popular hot dessert products is pancakes. Pancake in Dutch is *pannenkoek*.

Pancake is a dish that has a sweet and savory taste from butter dough baked in a frying pan and is round and flat. Butter dough is a liquid dough consisting of flour, eggs, milk and developer which is stirred so that it is emulsified and cooked by baking technique (Amarilia.H, 2012). Pancakes with good quality standards are pancakes with perfect blooming power. Milk or fla made from fruit pancakes can be a source of antioxidants for the body. Apart from being a delicious snack, pancakes also contain quite low calories if you use half a serving of butter and replace cow's milk with soy milk, the fiber contained in wheat flour is an added value of this product (Amarilia, H. 2011:11).

Pancakes can be served while they are still warm or after they are cold. These cakes are eaten with the addition of butter and maple syrup, jam, or honey (Yaputra Kevin, 2015). Pancakes are generally made from wheat flour, thereby increasing the use of wheat flour in the community. Wheat flour is one of the basic ingredients in cake making that has been widely developed and consumed by the public, for the needs of flour in Indonesia, it is still widely obtained by importing raw materials in large quantities. The Culinary Institute of America (2011) in Djoni Wibowo (2012). So as to reduce people's dependence on imported products on wheat flour, namely by optimizing local ingredients. For this reason, one of the ingredients that is an alternative to wheat flour that has not been utilized is flour from durian seeds. Durian (*Durio zibethinus murr*) is one of the most popular fruits in Indonesia. The part of the durian fruit that is usually consumed is the flesh. The percentage of the weight of this part is low at only 20-35%. This means that the skin (60-75%) and seeds (5-15%) of durian have not been fully utilized (Wahyono, 2009; Anwar and Afrisanti, 2011). Generally, the skin and seeds become waste, only a small part of which is used as animal feed and many are

thrown away, even though durian seeds can be used as a food ingredient. Durian seeds contain nutritional components, namely 2-3% protein, 45-47% carbohydrates, 1% fat, 1-2% ash, and 48-51% water (Djaeni and Prasetyaningrum, 2010). Durian seeds are rich in carbohydrate content which is quite high compared to the carbohydrate content of cassava 36.8% or sweet potato 35.4% (Mahmud, 2009; Luky Prasetyo, 2018).

List of Foodstuff Composition, 2012 It can be compared that durian seed flour contains more nutrients, one of which is protein and carbohydrates so that the presence of durian seed flour can increase the nutrition in pancake products on the content value. Durian seed flour, although high in protein, does not contain gluten, so it does not have the property to trap gas in dough fermentation. And the higher the protein content in wheat flour, the higher the gluten content and able to absorb and trap more water (Water Holding Capacity) so that the dough is able to store more CO₂ gas. And this durian seed flour can be used as an alternative solution to replace wheat flour, given the large amount of flour imports in Indonesia (Lubis, 2010). From these circumstances, the author is interested in making a processed food using durian seed flour, namely making pancakes instead of using wheat flour. 6 Starting from the interest above, the author made a study with the title: "Use of Duren Seed Flour in Making Pancakes"

Problem Formulation Based on the background that the author has stated above, the authors formulate the problem as follows: 1. Can durian seed flour be used in making pancakes?; 2. How to determine the formulation of durian seed flour pancakes?; 3. What is the level of people's preference for pancakes using durian seed flour, in terms of color, aroma, texture and taste?

2. LITERATURE REVIEW

2.1. Definition of Innovation

According to (West & Far Ancok, 2012 in Winata, W. & Wijaya, A. 2019) Innovation is the intentional introduction and application of new ideas, processes, products, and procedures to the units that implement them, which are designed to provide benefits to individuals, groups, organizations and society at large. Innovation as an "object" also has the meaning of a new product or practice available for application, generally in a commercial context. Usually, varying degrees of novelty can be distinguished, depending on the context. An innovation can be new to a company, new to markets, countries or regions, and globally. Meanwhile, innovation as an "activity" is a process of creating innovation.

2.2. Definition of Pancakes

According to (Bette Kroening 2003 in Yaputra Kevin, 2015). Pancake in Dutch is pannenkoek. Pancakes are pancakes made from flour, eggs, sugar and milk. They call it "Alita Dolcia" (meaning: sweet food). The ingredients are mixed with water to form a thick dough which is fried on a flat pan that is smeared with a little oil. Once cooked, the pancakes can be served while they are still warm or after they have cooled. This cake is eaten with added butter and maple syrup, jam, or honey.

2.3. History of Pancakes

The history of pancakes in its journey, culinary manuscripts, such as the Oxford Companion to Food written by Alan Davidson, mentions that pancakes are a popular food in Europe. Namely known in this vast land since around 1430 in the Middle Ages. In mainland Europe, originally pancakes were better known as the food of Eastern Europeans, such as Mardi Gras. Because, they make pancakes as 14 traditional foods on Shrove Tuesday or Pancake Tuesday, the day before the Easter fast. During its development, pancakes were also adopted in various countries under various names. As in Germany, pancakes are made in a denser form and made from potatoes called *pfannkuchen*. In France, there are thin and crispy pancakes called *crepes*.

2.4. Durian Seed Flour

The content of durian seed flour is very good for consumption because of its high protein content compared to flour in general. This durian seed flour can be used as an alternative solution to replace wheat flour, considering the large amount of flour imports in Indonesia.

3. METHODS

The methodology used by the author in this study is an experiment with a Completely Randomized Design (CRD) consisting of 4 treatments, through a series of trials to find a standard pancake recipe using durian seed flour. The trial of making pancakes using durian seed flour was carried out repeatedly to produce a standard pancake recipe that looks perfect, has a good taste.

4. TIME AND PLACE

The research time is from August 2020 to September 2020. This trial was carried out several times until a standard recipe was obtained. The trial process was carried out in the kitchen of the researcher's house located in Kp. Kali Pure rt.02/rw.01 No.142 Kencana Village, Bogor City, West Java.

5. RESULTS AND DISCUSSION

Discussion of Data Processing Results The following is the conclusion of the product calculation "Use of Durian Seed Flour in Making Pancakes", with the formula 60% 80% 100% Taste Strongly Dislike Dislike Like Very Like. The following is the conclusion of the calculation of the product of making pancakes using durian seed flour.

In the manufacture of pancake products with the addition of durian seed flour, it was concluded that the results were in the form of questionnaire data to the panelists, totaling 3 panelists in the expert category using four aspects, including: color, aroma, texture and taste in 3 experimental formulations. The total for the color aspect in the 3 formulations of 96 trials got a score of 3.6 with the conclusion tending to Like, the total for the aroma aspect in the 3 experimental formulations getting a score of 3.4 with the conclusion tending to Quite Like the total for the taste aspect in the 3 experimental formulations getting a score of 3.3 with the conclusion tending to Quite Like, and, the total for the texture aspect in the 3 experimental

formulations got a score of 3.3 with the conclusion that it tended to be quite like. Based on the results of the questionnaire research on pancake products with durian seed flour, a total of 41.34 results were obtained which were in the category tended to quite like, with the lowest indicator for questionnaire questions was the taste aspect with a score of 2.33. Meanwhile, the highest score is in the color aspect with a score of 4.33. The results showed that the researchers were interested in the experimental formulation of pancakes with durian seed flour. From the experimental formulation P2 in the manufacture of pancakes which added durian seed flour from the panelist data that had been taken the panelists liked the P2 formulation product. Judging from the 3 aspects between P2, P3 and P4 listed in the data table above.

Table 1. Conclusion of Expert Panelist Questionnaire Results on Products Using Durian Seed Flour in Making Pancakes

Test	Dimensions	Mean	Median	Modus	Standard Deviation
P2	Color	4	4	4	.000
	Scent	4	4	4	.000
	Flavor	4	4	4	.000
	Texture	4	4	4	.000
P3	Color	2.67	3	3	.577
	Scent	3.67	3	3	1.155
	Flavor	3.67	3	3	1.155
	Texture	3.33	3	3	.577
P4	Color	4.33	5	5	1.155
	Scent	2.67	3	3	.577
	Flavor	2.33	2	2	.479
	Texture	2.67	3	3	.577
Sum		41.34	41	41	6.252
Average		3.44	3.41	3.41	.521

Source: Writer, 2020

In the manufacture of pancake products with the addition of durian seed flour, it was concluded that the results were in the form of questionnaire data to the panelists, totaling 30 panelists in the consumer category using four aspects, including: color, aroma, texture and taste in 3 experimental formulations. The total for the color aspect in the 3 experimental formulations got a score of 3.5 with the conclusion tending to Like, the total for the aroma aspect in the 3 experimental formulations getting a score of 3.8 with the conclusion tending to Like, the total for the taste aspect in the 3 experimental formulations getting a score of 3.2 with the conclusion tending to be 98 Quite Like, and the total for the texture aspect in the 3 experimental formulations got a score of 3.6 with the conclusion tending to like. Based on the results of the questionnaire research on pancake products with durian seed flour, a total of 42.98 results were obtained which were in the Like category, with the lowest indicator for questionnaire questions being the taste aspect with a score of 2.33. Meanwhile, the highest score is in the aroma aspect with a score of 4.77. The results showed that the researchers were interested in the experimental formulation of pancakes with durian seed flour. From the experimental formulation P2 in the manufacture of pancakes which added durian seed flour

from the panelist data that had been taken the panelists liked the P2 formulation product. Judging from the 3 aspects between P2, P3 and P4 listed in the data table above.

Table 2. Conclusion of Consumer Panelist Questionnaire Results on Products Using Durian Seed Flour in Making Pancakes

Test	Dimensions	Mean	Median	Modus	Standard Deviation
P2	Color	3.67	4	4	.547
	Scent	4.77	4	4	.504
	Flavor	3.77	4	4	.568
	Texture	3.93	4	4	.521
P3	Color	3.67	4	4	.547
	Scent	3.80	4	4	.484
	Flavor	3.70	4	4	.651
	Texture	3.97	4	4	.490
P4	Color	3.43	3	3	.679
	Scent	2.87	3	3	.730
	Flavor	2.33	2	2	.479
	Texture	3.07	3	3	.740
Sum		42.98	43	43	6.94
Average		3.58	3.58	3.58	.578

Source: Writer, 2020

The author is looking for a good formulation to be applied to pancake products before being distributed to the panelists. The author finds out the results of the study by looking for the mean, median, mode, and standard deviation data. The results obtained by taking the average value of 4 (four) aspects, namely color, aroma, texture, and taste. The results of this study indicate that the use of durian seed flour in making pancakes can be said to be successful with the results of the preference test which are dominated by liking.

6. CONCLUSION

Based on the results of research and data calculations, the following conclusions can be drawn: the experimental results of durian seed flour in making pancakes turned out that durian seed flour can be used as an additional ingredient for making pancakes. Based on the experimental test results of 3 pancake-making formulas using different durian seed flours, namely (20% durian seed flour and 80% wheat flour), (40% durian seed flour and 60% wheat flour), and (100% durian flour). durian seeds) it was concluded that the formulation used by the author in processing pancakes made from additional durian seed flour got good results and for the basic ingredients of durian seed flour had a lack of taste and texture. Judging from the mean, median, mode and standard deviation values that have been obtained from the results of calculations and questionnaires distributed to expert panelists and consumers. For expert panelists, it can be concluded that the overall pancake product value in terms of Color, Aroma, Taste and Texture is 41.34 with an average value of 3.44 and for the most preferred value, P2 (20% durian seed flour and 80% wheat flour) with a total value 16 with an average

value of 4, while for panelists of 100 consumers it can be concluded that the overall pancake product value is 42.98 with an average value of 3.58 and the most preferred value is P2 (20% durian seed flour and 80% wheat flour) with a value of a total of 16.14 with an average score of 4.03. That pancake product made from a mixture of durian seed flour was accepted with a value dominated by the likes category from the aspect of Color, Aroma and Texture. However, there is still a dislike for taste, from pancakes made from durian seed flour.

8. REFERENCES

- Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Astini, Fitria (2019) *Pembuatan Bekatul Cake In Jar Sebagai Alternatif Dessert Sehat*. D3 thesis, Universitas Negeri Yogyakarta.
- Agusman, (2013). *Pengujian Organoleptik*. Teknologi Pangan. Universitas Muhammadiyah Semarang.
- Delvia Risa Malini. (2016). *Pemanfaatan Tepung Biji Durian sebagai Bahan Pengisi Bakso Daging Sapi*. Tesis. Sekolah pascasarjana. Institut Pertanian Bogor. Bogor
- Direktorat Gizi Depkes RI. (2009). *Daftar Komposisi Zat Gizi Pangan Indonesia*. Departemen Kesehatan RI. Jakarta
- Efendi, R. (2016). *Penambahan Tepung Biji Durian (Durio Zibethinus Murr) Dalam Pembuatan Roti Tawar* (Doctoral dissertation, Riau University).
- Efendi, R. (2016). *Penambahan Tepung Biji Durian (Durio Zibethinus Murr) Dalam Pembuatan Roti Tawar* (Doctoral dissertation, Riau University).
- Hasanatun, Hasanatun (2019) *Hubungan Status Gizi Dan Pengetahuan Gizi Seimbang Dengan Kebugaran Jasmani Pada Atlet Pencak Silat Pagar Nusa Gresik*. undergraduate thesis, Universitas Muhammadiyah Gresik.
- Kevin, Yaputra. (2015). *Uji Kesukaan Pancake Dengan Tepung Maizena*. Binus University
- Kurnia, P. (2017). *Uji Mutu Organoleptik*. Universitas Muhammadiyah Semarang
- Nur, Mukhamad Husain and Susanti, Siti and Bintoro, V. Priyo (2016) *Profil Warna, Distribusi Ukuran Partikel, pH, dan Kadar Air Tepung Biji Durian dengan Suhu Pengeringan yang Berbeda (Color Profiles, Particle Size Distribution, pH, and Moisture Content of Durian Seed Flour with Different Drying Temperature)*. Undergraduate thesis, Fakultas Peternakan & Pertanian Undip.
- Putri, F. (2015). *Pengaruh Massa Tepung Maizena Dan Plasticizer (SORBITOL) Terhadap Kualitas Plastik Biodegradable Dari Tepung Biji Durian* (Doctoral dissertation, Politeknik Negeri Sriwijaya).
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet.
- Utomo, P. A. (2015). *Eksperimen Pembuatan Pancake Komposit Tepung Ubi Jalar Ungu Dengan penambahan Sari Bit*. (Doctoral dissertation, universitas negeri semarang).

Verawati, B., & Yanto, N. (2019). Substitusi Tepung Terigu Dengan Tepung Biji Durian Pada Biskuit Sebagai Makanan Tambahan Balita Underweight [Substitution of Wheat Flour with Durian Seed Flour in Biscuits as a Food Supplement of Under Five Children with Underweight]. *Media Gizi Indonesia*, 14(1), 106-114.