Innovation of Making Salem Fish (Scomber Japonicas L) Cheese Cake and White Sweet Potato Leaf Extract (Ipomoea Batatas L)

Inovasi Pembuatan Kue Keju Ikan Salem *(Scomber Japonicas L)* dan Sari Daun Ubi Jalar *(Scomber Japonicas L)*

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Abstract

Cheese cake (Indonesian: "kue keju") is a cake that is usually eaten as a dessert. As a product development innovation, this cheese cake experiment was added with salmon and sweet potato leaves. The objectives of this study are: 1) To find out how the public's acceptance of cheese cake with the addition of salmon and white sweet potato leaf extract. 2) Knowing the composition of the ingredients of the cheese cake with the addition of salmon and white sweet potato leaf extract which the panelists liked the most. 3) Knowing the characteristics of cheese cake with the addition of salmon and white sweet potato leaf extract. The methods used in this research are library, documentation, experimental, organoleptic, and hedonic methods. The results showed that the cheese cake product with the addition of salmon and white sweet potato leaf extract as much as 20% was the most preferred product by the panelists. The composition of the ingredients used in the manufacture of cheese cake products with the addition of salmon fish and the best sweet potato leaf extract as much as 2 includes 2250 g full fat cream cheese, 450 salmon fish, 450 g sweet potato leaf extract, 225 g heavy cream, 790 g caster sugar, 45 g. g corn extract, 15 g vanilla extract, 2 g salt, 7.5 g lemon zest, 450 g eggs, 170 g eggs yolk, 112 g milk, 30 g lemon juice, 300 g flour, 200 g butter. Characteristics of cheese cake with the addition of salmon and the best white sweet potato leaf extract as much as 20% have sensory characteristics, namely a creamy sweet and savory taste, a little sour like yogurt, a typical cheese cake aroma, no fish aroma and soft texture leaves, green color.

Keywords: Cheese Cake, Innovation, Salem Fish, Sugarcane Juice, Sweet Potato Leaves

Abstrak

Cheese cake (bahasa Indonesia: "kue keju") merupakan kue yang biasanya dimakan sebagai hidangan penutup. Sebagai inovasi pengembangan produk, maka pada ekperimen *cheese cake* ini ditambahkan dengan ikan salem dan daun ubi jalar. Tujuan penelitian ini yaitu: 1) Mengetahui bagaimana daya terima masyarakat terhadap *cheese cake* dengan penambahan ikan salem dan sari daun ubi jalar putih. 2) Mengetahui kompoisi bahan dari *cheese cake* dengan penambahan ikan salem dan sari daun ubi jalar putih yang paling disukai oleh panelis. 3) Mengetahui karakteristik *cheese cake* dengan penambahan ikan salem dan sari daun ubi jalar putih. Metode yang digunakan dalam penelitian ini yaitu metode keperpustakaan, dokumentasi, eksperimen, organoleptik, dan hedonik. Hasil penelitian menunjukan produk *cheese cake* dengan penambahan ikan salem dan sari daun ubi jalar putih sebanyak 20% merupakan produk yang paling disukai oleh panelis. Komposisi bahan yang digunakan dalam pembuatan produk *cheese cake* dengan penambahan ikan salem dan sari daun ubi jalar terbaik sebanyak 2 meliputi 2250 g *cream cheese full fat*, 450 ikan salem, 450 gr sari daun ubi jalar 225 g *heavy cream*, 790 g *caster sugar*, 45 g c*ornstract*, 15 g *vanilla extract*, 2 g garam, 7.5 g *lemon zest*, 450 g *eggs*, 170 g *eggs yolk*, 112 g *milk*, 30 g *lemon juice*, 300 g tepung terigu, 200 g *butter*. Karakteristik *cheese cake* dengan penambahan ikan salem dan sari daun ubi jalar putih terbaik sebanyak 20% memiliki karakteristik sensori yaitu rasa creamy manis gurih, sedikit asam sperti *yogurt*, aroma khas *cheese cake*, tidak terdap aroma ikan dan daun tekstur lembut, warna hijau.

Kata Kunci: Daun Ubi Jalar, Ikan Salem, Inovasi, Kue Keju, Sari Daun Ubi Jalar

1.   INTRODUCTION

Indonesia is a rich country in flora and fauna. This is because Indonesia is located in the tropics which consists of several islands and has high biodiversity. One of them is the leaves of white sweet potato (ipomoea batatas l) and salmon. White sweet potato leaves (Ipomoea batatas l) are one of the vegetables that are important for consumption because they contain minerals, dietary fiber, and antioxidants that are beneficial to human health (Juajun, 2012)[10]. Vegetables that are easily found daily in food, both processed and raw, one of the local vegetables that are often consumed by the community is yam leaves or often referred to as white sweet potato leaves. [5].

Cheese cake is a dessert that is in great demand by the public, generally cheese cake uses a variety of flavors or additional ingredients such as biscuits, jam and various fresh fruit. The cheesecake maker can be supplemented with local ingredients such as fish and vegetables. Salem is one of the saltwater fish that has affordable prices, and is easy to find in traditional and modern markets. Making cheese cake would be better if added with fish and vegetables in order to increase the nutritional value of cheese cake products.

The making of cheese cake with the addition of local ingredients has been developed by researchers so that there are many variations of cheese cake. The results of the research on silken tofu-based cheese cake [8], breadfruit cheese cake , brown rice cheese cake [21], sweet potato cheese cake [11], the use of local ingredients in cheese cake making Previously it was still limited sukun [9], including the use of salmon and sweet potato leaves used in the manufacture of cheese cake, thus, it is necessary to conduct research on cheese cake with the addition of salmon and white sweet potato leaves.

Based on the background described, the author wants to innovate cheese cake products with the addition of salmon and white sweet potato leaves. Later this product is expected to be one of the innovations for various variations of cheese cake so that it has more value even though it uses local ingredients so that it can help local farmers and fishermen producing salmon and white sweet potato leaves in order to improve the regional economy so that they can produce current products that are in demand. the general public but have high taste and competitiveness.

2.   MATERIALS AND METHOD

The experiment of making salmon cheese cake and white sweet potato leaves was carried out at the Laboratory of the Culinary Arts Study Program, Ibu Kartini's Academy of Social Welfare, Jalan Sultan Agung, No. 77, Semarang. This research uses the method of literature, experiment, hedonic test and documentation.

This researcher uses the library method to develop a theoretical framework from various reference books and research journals related to salmon cake and white sweet potato leaves extract. The experimental method was repeated three times, to get a good recipe for salmon cheese cake and white sweet potato leaves extract. The percentage comparison of addition of salmon fish and sweet potato leaves extract code 345 10% sweet potato leaves extract and 20% salmon fish, code 397 20% sweet potato leaves extract and 20% salmon fish and code 567 30% white sweet potato leaves extract and 20% Salem fish.

The analysis used in this study is descriptive analysis by describing in detail the results of experiments conducted by researchers in making salmon cheese cake and white sweet potato leaves extract.

The ingredients used in making salmon cheese cake and white sweet potato leaves extract must comply with the specified specifications, as shown in Table 1. and the manufacturing process can be seen in Figure 1.

Table 1. Specifications And Ingredients For Salmon Cheese Cake And Sweet Potato Leaves extract

Dient	Characteristics	Amount
Makerel pasifik	no bad smell	20%
sweet potato leaves extract	green, not withered, there are no foreign animals	10%, 20%,30%
Cream cheese	white in color with a creamy texture, has a slightly sour taste with a diacetyl flavor	2250 g
Flour	White color, soft smIngreeooth texture, no lumps and no musty smell	300 g
Whip cream	White color, soft and smooth texture	225 g
Sugar	Sweet taste, Small crystal granules	790 g
Cornstarch	White color, soft and smooth texture	45 g
Vanilla	Bland taste, pale white color, and soft texture	15 g
Salt	Salty taste, granular, white	22 g

Dient	Characteristics	Amount
Milk powder	Sweet taste, powder form, not lumpy	112 g
Lemon peel	Yellow in color, sour taste	7.5 g
lemon water	Pale white in color, sour taste in liquid form	30 g
sugarcane juice	Clear color	100 gr
Egg yolk	It is yellow in color, has a soft texture and does not smell bad	170 g
Butter	The color is yellow, typical of margarine and has a soft textu	200 g

Sumber : Data Primer Penulis (2022)

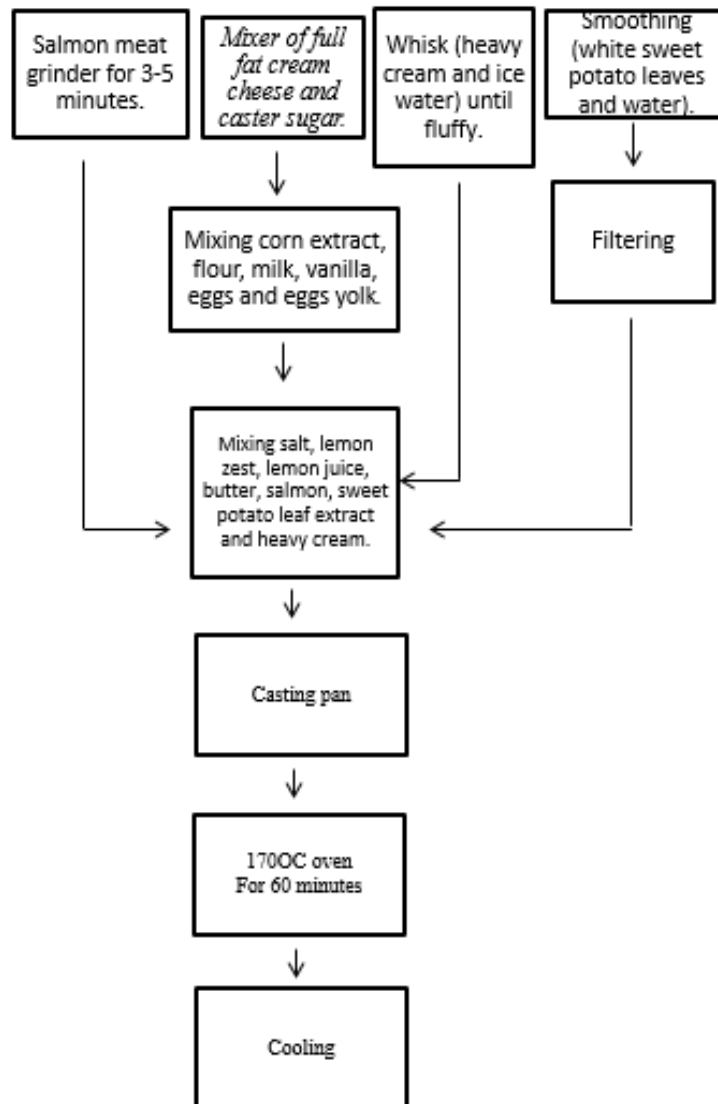**Figure 1.** Flowchart of the Cheese Cake Making Process
Source: Author's Primary Data (2022)

3. RESULTS AND DISCUSSION
3.1. The Best Formulation of Salmon Cheese Cake and Sweet Potato Leaves Extract

Based on three experiments of salmon cheese cake and sweet potato leaves extract, the product with the formulation 397 with the addition of 20% salmon and 20% sweet potato leaves extract. Based on the experimental results for 3 times of salmon cheese cake and sweet potato leaves extract, observations were

made to evaluate the sensory characteristics of salmon cheese cake and sweet potato leaves extract. The results of observations can be seen in Figure 2.

The results of the third experiment of making cheese cake, with Salem Fish (Scomber japonicas L) and Sweet Potato Leaves extract (Ipomoea batatas L) are as follows:

cheese cake, salem fish (Scomber japonicas L) and sweet potato leaves extract (Ipomoea batatas L) as much as 10%, 20%, and 30% have the same result, namely the shape with a taste that is from a sweet combination of white sugar and whip cream. While the color produced from the three 10% formulas produces a green color, the 20% formula produces a green color, the 30% formula produces a slightly dark green color. Cheese cake of Salem Fish (Scomber japonicas L) and Sweet Potato Leaf extract (Ipomoea batatas L) as much as 10%, 20%, produces a distinctive aroma of cheese cake without the aroma of fish or sweet potato leaves extract. The aroma produced in the 30% sample produces an aroma typical cheese cake there is a slight aroma of leaves. Cheese cake of Salem Fish (Scomber japonicas L) and Sweet Potato Leaf extract (Ipomoea batatas L) with 10%, produced the same soft and creamy texture in 20% sample and 30% sample. The results of 10%, 20%, and 30% flour in experiment can be seen in Figure 2.
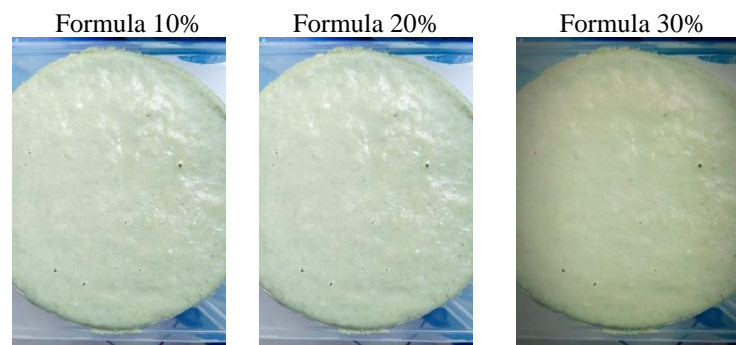
Formula 10%   Formula 20%   Formula 30%

Figure 2. Product Cheese Cake Experiment
Source: Author's Primary Data (2022)

3.2. Analysis of Community Acceptance of Cheese Cake with the Addition of Salem Fish (Scomber Japonicas L) and Sweet Potato Leaves Extract (Ipomoea batatas L)

Public acceptance of cheese cake with the addition of salmon (Scomber japonicas l) and sweet potato leaves extract (ipomoea batatas l) was carried out using a hedonic test. This test was used to assess the level of preference for the sensory characteristics of making cheese cake with the addition of salmon fish (Scomber japonicas l) and sweet potato leaves extract (ipomoea batatas l). Sensory characteristics assessed in the form of color, taste, texture, shape and aroma. The average value of the panelists' preference for making cheese cake with the addition of salmon fish (Scomber japonicas l) and sweet potato leaves extract (ipomoea batatas l) as alternative drinks can be seen in Figure 3.

Based on the Figure 3, for sensory characteristics in the form of taste, it can be concluded that the panelists liked the product formula 397 with a mean value of 4.2 (Like). Sensory characteristics in the form of the aroma of making cheese cake with the addition of salmon fish (Scomber japonicas l) and sweet potato leaves extract (ipomoea batatas l) it can be concluded that the panelists liked the product formula 345 with an average value of 4 (Like). The reason the panelists prefer this product is because it has a cheese cake aroma, there is no fishy aroma from salmon and sweet potato leaves extract. Sensory characteristics in the form of making cheese cake with the addition of salmon fish (scomber japonicas l) and sweet potato leaves extract (ipomoea batatas l) can be concluded that panelists liked the product formula 397 with an average value of 4 (Likes). The reason the panelists prefer this product is because of the soft texture of the cheese cake. Sensory characteristics such as the color of cheese cake making with the addition of salmon fish (Scomber japonicas l) and sweet potato leaves extract (ipomoea batatas l) as cheese cake products, it can be concluded that the panelists liked the formula 567 product with an average value of 4.3 (likes). The reason the panelists prefer this product is because the green color of the sweet potato leaves extract is attractive.
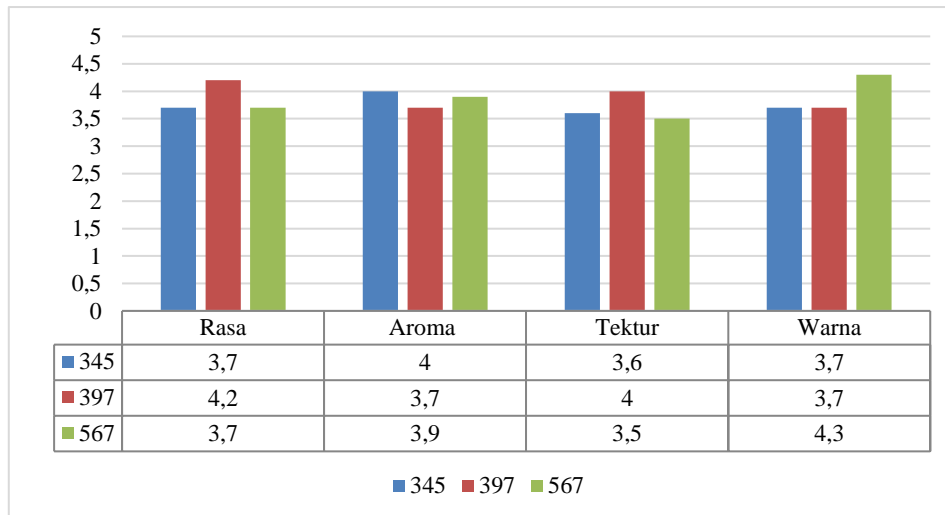
Figure 3. Average Value of Panelists' Preference Level for Cheese Cake Making with the Addition of Salmon (Scomber japonicas L) and Sweet Potato Leaves extract (Ipomoea batatas L)
Source: author's primary data 2022

It can be concluded that the panelists prefer the product. The panelists prefer the product because of the savory and creamy aroma and texture. The results of the overall research analysis of the product, the panelists chose cheese cake with the addition of salmon fish (Scomber japonicas l) and sweet potato leaves (ipomoea batatas l) extract 397 most liked.

4. CONCLUSION

1. Cheese cake products with the addition of salmon (Scomber japonicas) and white sweet potato leaf extract (Ipomoea batatas I) as much as 20% were the most preferred products by the panelists
2. The composition of the ingredients used in the manufacture of cheese cake products with the addition of salmon (scomber japonicas) and the best white sweet potato leaf extract (ipomoea batatas l) includes 2250 g full fat cream cheese, 450 g salmon, 450 sweet potato leaf extract. , 225 g heavy cream, 790 g caster sugar, 45 g corn extract, 15 g vanilla extract, 22 g salt, 7.5 g lemon zest, 450 g eggs, 170 g eggs yolk, 112 g milk, 30 g lemon juice, 300 g flour flour, 200 g butter.
3. Characteristics of cheese cake with the addition of salmon (scomber japonicas) and the best white sweet potato (ipomoea batatas l) leaf extract as much as 20% has sensory characteristics, namely creamy sweet savory taste, slightly sour like yogurt, typical cheese cake aroma, no aroma fish and leaves soft texture, green color.

REFERENCES

[1]   Ananto, D. S. (2010). *Rahasia membuat Cheese Cake* . Jakarta: Demedia Pustaka.
[2]   Anggun C. N., T. S. (2016). KANDUNGAN KIMIA DARI SISIK BEBERAPA JENIS IKAN LAUT. *Jurnal LPPM Bidang Sains dan Teknologi*, Volume 3 Nomor 1.
[3]   Asmendri, M. S. (2020). Penelitian Kepustakaan (Library Reseach) dalam Pnelitian Pendidikan IPA. *Jurnal Penelitian Bidang IPA dan Pendidikan IPA*, 41-53.
[4]   Feryana, I. W. (2014). Permunian Minyak Ikan Makerel Hasil Samping Penepungan Dengan Netralisasi Alkali. *Feryana et al*, Volume 17 Nomer 3.
[5]   Gardjito. (2013). *Pangan Nusantara.* . Jakarta: Kencana.
[6]   Geary, G. (2017). The cheesecake bible. Wiley.: United Kingdom.
[7]   Gisslen, W. (2016). *Professional baking (7th).* United Kingdom: Wiley.
[8]   Gusnadi, J. (2020). Daya Terima Konsumen Pada Pada Inovasi Produk Unbaked Cheese Cake Berbasis Tahu Sutera. *hospitality 49*, Vol.9 No.1.
[9]   Hakim, M. A. (2016). Inovasi Pembuatan Cheese Cake Dengan Menggunakan Tepung Sukun Sebagai Bahan Pangan Lokal. *Thesis*.
[10]   Juajun, O. V. (2012). Effect of cooking on the oxalate content of selected Thai vegetables. Food and Nutrition Sciences (3) . 1631-1635.
[11]   Kumala Rat, S. P. (2021). Teknik Boga. *Cheese Cake Dengan Substitusi Ubi Jalar (Ipomea Batatas) Sebagai Dessert Kekiniaan Mega Adistya K5. Cheese Cake Dengan Substitusi Ubi Jalar (Ipomea Batatas) Sebagai Dessert Kekiniaan* .

[12] Liyah, C. (2020, Febuari 12). *kan Makarel, Makerel, Mackarel Atau Mackerel; Klasifikasi, Morfologi, Habitat Dll*. Retrieved from Melekperikanan: https://www.melekperikanan.com/2020/02/ikan-mackerel.html

[13] Rengga Eko Pradipta, S. S. (2015). Identifikasi Dan Prevelensi Cacing Pada Saluran Pencrnaan Ikan Salam Scomber japonicus) Di Pangkalan Pendaratan Ikan Muara Angke, Jakarta. *Jurnal Ilmiah Perikanan dan Kelautan*, Vol. 7 No. 1.

[14] Saputri, S. A. (2020). Pemanfaatan Tepung Ikan Salem Pada Spicy Salem Fish Pie Untuk Mendukung Masyarakat Makan Ikan .

[15] Sita. (2018). Aktivitas Antioksidan, Karakteristik Fisikomia dan Sensori Cheese cake ubi jalar kuning (Ipomea batatas L).

[16] Siyoto, s. d. (2015). *Dasar Metodologi Penelitian* . Yogyakarta : Literasi Media Pusblishing .

[17] Soebardy, M. s. (2020). *Kapita Selekta Metodologi Penelitian.* Pasuruan : Qiara Media.

[18] Sugiyono. (2014). Metode Penelitian Pendidikan Pendekatan Kuantitatif.

[19] Sujarweni, V. W. (2020). *Metodologi Penelitian.* Yogyakarta: PUSTAKA BARUPRESS.

[20] Trianto. (2013). *Desain Pengembangan Pembelajaran Tematik Bagi Anak Usia Dini.* Jakarta: Kencana .

[21] Waffa, M. N. (2016). Analisis Daya Terima Konsumen Pada Inovasi Produk Cheese Cake Menggunakan Beras Merah. *Thesis*.