

Dessert box product: review finding and its potential development in Aceh

Maulinda^{1*}, HP Widayat², R Jaya³

¹Master program on Agroindustrial Technology Department, Syiah Kuala University

²Department of Agroindustrial Technology, Syiah Kuala University

³Assessment Institute for Agricultural Technology of Aceh

Corresponding Author: Maulinda maulindaunsyiah@gmail.com

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ABSTRACT

Nowadays, dessert boxes are a popular food and important product that has been recognized in a new market. One of the problems during production of the dessert box is the quality of the product, particularly: mouth-feel sensation and effect of the using local fruit. The objective of this research was to describe the state of the art about this topic and future research issues. The number of papers analyzed about 30 articles published from 2010–2020. The articles were obtained from scientific providers such as Science direct, EBSCO, Cross-Reff, Researchgate, DOAJ, Academia.Edu, and Google Scholar. In this research, we cluster substance research to two items such as state of the art dessert box and potential development in Aceh Province. The content analysis was used to describe the state of the arts and novelty. The results of the study show that it is critical for the dessert box producer to apply a new product based on local fruit in Aceh. Synthesis and determination of main topics of research in the future is undertaken at the end

INTRODUCTION

Regional potential is the ability of an area that allows it to be actual to be developed. Aceh Province is a province that has good potential for the cultivation of various types of plantation commodities, especially fruit trees. The Aceh government's attention to fruit trees has been carried out for a long time, especially in the Gayo highlands which is an economic area where the majority of the people's work comes from using natural products. When viewed from the topography of the area known as the mountainous region, the Gayo highlands are indeed very suitable for the development of fruit crops and have good prospects. The large size of the plantation land and the cold weather are very suitable for the cultivation of fruit crops such as avocados, pineapples and so on.

Fruits are one of the horticultural plant commodities that have good functions for the body because they contain lots of vitamins and minerals. Some fruits are called tropical fruits or fruits that can grow in tropical areas, including avocado, pineapple, star fruit, kedondong. Fruits are one of the very large potentials to be developed. In addition to being eaten fresh, it can also be processed into delicious and refreshing food. Fruits are also a major source of energy, vitamins, minerals, fiber and other nutrients. Like avocados and pineapples that have been developed in the Gayo highlands and have received national recognition for Gayo avocados.

The demand for fruit commodities both in the national market and exports has experienced very significant growth. Based on data from BPS RI in 2020, Indonesian fruit exports grew by 23.21% or reached a value of USD 430.4 million or equivalent to IDR 6.25 trillion. Avocado and pineapple plants have an economic role as well as food and industrial raw materials. Super avocado from Gayo is a butter avocado with thick yellow flesh coated in light green, without fiber with a distinctive fat taste and creamy on the tongue and has a large size.

THEORETICAL REVIEW

Dessert box

The first dessert product was made with fresh fruit without any processing. Desserts often weigh between 50 and 60 grams when served. Desserts are usually delicious and cold, sometimes savory, or a combination of both. Hot desserts and cold desserts are the two categories into which desserts are usually separated. Processed food products that are currently being developed further include dessert products. It is explained that dessert is a food that is generally served after the main menu or can be said to be a dessert. Currently, the type of dessert that is widely favored by consumers is the dessert box, this is because dessert products not only sell taste but also attractive and practical visualization. Desserts are known for their sweet taste, have a soft and delicious texture. Dessert products are generally made from basic cake ingredients with several layers given cream or melted sauce with various flavors and toppings such as chocolate, green tea, strawberry, avocado, tiramisu

and many more, which are arranged in a transparent box. explains that cake is all baked cake products with a sweet taste that contain sugar and fat.

As the era develops, dessert products are no longer consumed as desserts, but can also be consumed or enjoyed as snacks or treats at any time. The development of dessert products can be a potential business opportunity that is increasingly easy because it already has its own market segment in society, especially among teenagers, students and government officials. In this modern era, it offers many things that are instant and practical, including food, therefore many foods are sold ready to eat because many are busy working or other activities so they don't have time to make food. The tight competition in the food market does not stop trying to produce food that is no less interesting, of course with the hope of being able to compete in the food market. This dessert can last for several days if stored in the refrigerator, eaten cold it will taste more delicious. Dessert box business opportunities are very promising, because the culture of consumption and eating or snacking habits are loved by everyone, from children to adults, and also the raw materials for making them are easily available in supermarkets.

The potential of dessert boxes from pineapple and avocado

A business or company in facing competition needs a threat to the competition that arises in the industry, therefore a competitive advantage and competition are needed in capturing opportunities in order to survive. Many approaches can be applied to find ideas so that they become products that are worthy of being marketed. One is a dessert box with product ingredients sourced from pineapple and avocado. In pineapple fruit existence with various benefits and become an alternative for diabetics and users of a healthy lifestyle lifestyle to still be able to consume dessert boxes, as well as many benefits contained in pineapple for health. Pineapple fruit is included in the genus *Ananas* and has the Latin name *Ananas comosus* is a plant from the Bromeliaceae family is a tropical plant originating from South America. The pineapples that grow a lot in Indonesia are the Queen and Cayene pineapples.. Honey pineapple in the Queen pineapple type because the fruit is small, sweet, fragrant, and has reddish brown skin. Pineapple has a unique and fresh sweet taste, so it is widely consumed in the form of fresh fruit, fruit juice, and canned fruit. The main aroma components of pineapple are terpenes, ketones, aldehydes, and esters. Meanwhile, avocados are widely cultivated in Indonesia, especially in the Gayo highlands. Avocado fruit has a short shelf life and is easily damaged. The use of avocado fruit in Indonesia is still limited, generally consumed fresh or made into fruit juice drinks. The variety of nutritional content of fruits, especially fat, can help improve the preparation of other foods made from avocados. Avocados that have high fat content and thick flesh can be used as processed products. Avocados contain high solid fat, which is every 100 grams of avocado flesh contains 6-7 grams of fat. In addition, avocados have a distinctive aroma that many people like. Avocados have yellow flesh. The taste is not sweet but aromatic, and slightly fibrous and has a smooth texture. Therefore, both avocados and pineapples have many benefits and

economic potential to be developed by utilizing ingredients from pineapple and avocado as part of a dessert box product. Desserts are usually served at the end of the menu. There are various types and kinds of desserts with very attractive flavors and appearances. The following are various types of desserts that are several food classifications, including as can be seen in table 1 below.

Table 1 classification of dessert box food

No	items	classification of desserts
	Fruits (Fruits)	Fruit is the most frequently used ingredient in making desserts because of its flexible nature that can be combined with other ingredients. If you want to serve it fresh, dessert can be in the form of fruit slices that are arranged attractively. While for desserts made from processed fruit, it can be in the form of juice, fruit cocktail, punch or fruit salad complete with syrup as a dessert. In addition, fruit is also commonly used as a topping or garnish.
	Pudding	Pudding is one of the dessert dishes that has a sweet taste and is made from agar-agar. However, there is also a type of pudding whose main ingredients use starch and eggs which in Indonesian is known as podeng.
	Cake	Cake is one type of food served as a dessert but must pay attention to the portion and how it is served. Commonly served as a dessert is a type of cake with additional custard, syrup, sauce, fruit or ice cream as a complement (garnish).
	Choux Pastry	Choux paste is a type of pastry made from liquid dough that is shaped with the help of a type and baked at high temperatures until it expands perfectly. Usually choux paste is served with fillings such as butter cream or fla to add flavor.
	Pie	Pie is a type of dessert made from thinly sliced sugar dough and shaped like a bowl. Usually used as filling are pastry cream, fruit and sponge dough.

METHODOLOGY

Logical framework

Based on what has been done, several problems are known in the community. Among others: Lack of skills in processing and serving avocado-based food, Implementation of business management does not yet exist, Therefore, it is necessary to improve the ability to produce quality products while improving the family economy. Based on the analysis of the problems stated above, the following can be identified; Lack of knowledge about technology in product processing, this affects the quality of the products they process, Lack of knowledge in processing avocado and pineapple-based foods.

Method

In improving creativity and productivity, a method and skill are needed to find out the potential and findings, so a research concept needs to be designed. To achieve the goal maximally, several methods are applied, including: Bibliography review, which is sourced from articles obtained from scientific providers such as Science direct, EBSCO, Cross-Reff, Researchgate, DOAJ, Academia.Edu, and Google Scholar.

RESULTS AND DISCUSSION

Dessert box from avocado fruit products and its potential

Avocado (*Persea americana* Mill.) is a type of horticultural plant that is susceptible to mechanical and physiological damage and has a short shelf life. Avocado production in Indonesia is quite abundant. Aceh Province, especially the highlands, has a fairly high horticultural crop production and is increasing every year. One of them is avocado. Avocado has a fairly high potential to be processed into various local food products that have high economic value when processed into various products. Many pineapple and avocado products as superior in the Gayo highlands are sold fresh, of course at a low selling price. If not all are sold when the harvest is abundant, it will rot, so many farmers feel at a loss.

So far, the use of avocado as a food product is still lacking. Therefore, it is necessary to develop alternative avocado processing in order to have a wider market reach and secure abundant harvests. Processing avocado flesh aims to extend shelf life, ensure abundant results and as a product diversification, thus expanding its use and marketing. One alternative use is Velva.

Velva is a type of frozen dessert that has a texture similar to ice cream made from fruit puree, sugar and stabilizer. Velva has a lower fat content than ice cream because in its manufacture Velva does not use milk fat as a mixing ingredient, richer in natural fiber and vitamins than fruit as the main raw material. Another desert product is Unbaked Avocado Pie. In each type of dessert product there are different composition ingredients to get a special taste with a mixture of pineapple as the main product ingredient. Details of the type of dessert box can be seen in the table below

Table 2 variants of dessert box types

No	Dessert products	Dessert box variants
1	Velva cold dessert	Velva is a frozen dessert, a type of dessert made from sugar, citric acid, and stabilizers and contains low levels of fat. In making velva, one of the important components is the stabilizer.
2	avocado milk cheese dessert	Avocado milk cheese is a combination of avocado, milk and cheese that gives a unique taste and is suitable as a dessert. It can even last 2-3 days if you want to store it in the refrigerator.
3	Avocado Pudding Dessert	Creamy Avocado Pudding is a dairy-free variation of the traditional pudding. The dessert achieves its smooth mousse texture thanks to ripe avocados and, sometimes, bananas, which can provide a subtle natural sweetness. If you're not a fan of the distinct taste of avocado, chocolate avocado pudding recipes mask it with bittersweet cocoa powder or cocoa powder.

Dessert box from pineapple fruit products and its potential

Pineapple agribusiness in Aceh Province, especially in the Gayo highlands, still faces many obstacles. The significant price difference between farmers and consumers has recently been a problem in pineapple marketing channels. This has resulted in the profits received by farmers still being low. The increase in pineapple prices is not followed by an increase in pineapple prices at the farmer level. In addition, there are other traders and consumers who dominate but some have not provided great benefits to farmers. The profits obtained by farmers are not in accordance with the sacrifices that have been made during one year of pineapple farming. Long marketing channels with many marketing institutions involved can affect marketing efficiency. It is inefficient that the marketing system that occurs has not. This condition is caused by the lack of information available regarding the price of pineapple developments and its processing to reach higher prices.

The development of technology and information affects the work patterns of pineapple farmers, one of the creative ideas developed in the business sector is with dessert box products. In general, desserts have a sweet taste and are served cold or hot. The presence of dessert boxes in recent years has made the name of dessert famous with several brand choices such as Bittersweet by Najla, and The Dessert Story. Various brands of dessert boxes must be able to be creative and varied in order to compete with competitors. Among them are dessert products packaged from pineapple.

Table 3 variants of dessert box products made from pineapple

No	Product variants of dessert boxes	Composition
1	Cream Layer Pineapple Pudding	Pineapple pudding is processed with a layer of pudding that is combined with the right color to make it look more attractive. Like adding jelly layers, pineapple jam, and cream on the top of the pudding. In addition to fresh pineapple, you also need agar-agar powder, milk, sugar, and vanilla powder to make the pudding smell more fragrant.
2	Nastar Crumble Dessert Box	Nastar dessert box is a dessert box consisting of sponge cake, pineapple jam, and whipped cream. This dessert box also uses crumble topping and nastar cookies. It tastes sweet, sour, soft, and creamy.

Dessert box analysis

Table 4 SWOT analysis of the potential development of dessert boxes

No	Strengths	Weakness
1	Lack of fruit-based variants	Brand not yet known
2	Patent / IPR Registration	Lack of knowledge for certification
3	Fast service	It takes a long time to make
4	Pineapple raw materials are available	Foreign brand competition
5	Increasing number of dessert box lovers	Easy to imitate

Potential and Inhibiting Factors

Dessert box is an innovative dessert that makes many people interested in getting it. The more people want to try it, the more people will introduce dessert boxes starting from recipes to other recommendations. One of the advantages of selling a dessert box business is that it has a fairly long shelf life as long as the product is stored in a cold place such as a freezer or special refrigerator. Dessert boxes stored in the refrigerator can last at least 2-3 days. So the loss of food wasted due to spoiled food is also reduced. The purpose of dessert is to help digest food and freshen the mouth after eating heavy food. Desserts have benefits depending on the food chosen. Fruit is one of the choices of fresh and healthy desserts because it contains vitamins, minerals, and antioxidants.

Based on the analysis of the problems presented above, the following problems can be identified: (a) Lack of knowledge about technology in processing food products in the Gayo highlands, this affects the quality of the

products they process. (b) Lack of knowledge in processing food based on local avocado commodities. So far, they only know that avocados can only be consumed in the form of fruit juice, but after the training, it is hoped that knowledge will increase about food from local avocado commodities and ultimately the entrepreneurial spirit will develop. (c) Lack of ability in production management. Irregular and undirected production patterns will interfere with the development of this business. Irregular product supply will interfere with marketing. Limited tools, labor and abundant raw material supplies have not been able to meet market demand, so knowledge of production management is needed to facilitate the production of business ideas that will be developed later. (d) Weak financial management. Capital is an obstacle in developing a larger business. In addition, because it is classified as a family business, regular records have not been made in financial management. So partners need consultation and guidance on business credit and proper financial bookkeeping. (e) Lack of quality Human Resources. The relatively low level of education greatly affects the mindset and adoption of technology. Therefore, partners need comprehensive and continuous technology transfer and coaching.

CONCLUSIONS AND RECOMMENDATIONS

Dessert box made from pineapple and avocado with minimal product customization, Business opportunities to develop are still open with the level of tax revenue contribution to the country even though there are restrictions on circulation, this is an opportunity for fast food consumption. The value proposition according to consumer expectations lies in the lack of variation.

The limitation of this research lies in the lack of comprehensive analysis of the appropriate aspects for industries that will invest on a medium scale and require analysis. Further research can be carried out in the laboratory for the contents of the dessert box to obtain results and contents that can be tested according to the field of expertise.

FURTHER STUDY

Consumer Preference and Behavior : Investigate consumer preferences for dessert box flavors, textures, and customization options. Understanding customer expectations can help in developing product variations that meet market needs.

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