

Fresh Food Towards Improving Product Safety in Lahat Regency

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Accepted: 7 Jun 2025 Published: 30 Sep 2025 Abstrak: Penelitian ini mengkaji dampak kemudahan perizinan distribusi pangan segar, termasuk kemudahan prosedur perizinan distribusi dan pengemasan (jenis dan label kemasan), terhadap peningkatan keamanan dan mutu produk di Kabupaten Lahat. Metode penelitian menggunakan survei dan analisis data dari produsen pangan segar, regulator, dan konsumen di Kabupaten Lahat. Data dikumpulkan melalui kuesioner untuk memahami proses perizinan distribusi, persepsi keamanan dan mutu produk, serta dampak kemudahan yang diberikan. Penelitian ini juga menggunakan uji hedonik untuk mengetahui mutu pangan segar nabati yang meliputi penilaian warna, tekstur, aroma dan uji Likert yang meliputi penilaian keseragaman ukuran, kemasan, dan kenampakan keseluruhan serta melakukan uji cemaran kimia berupa uji residu pestisida dan uji cemaran fisik pada sampel PSAT PDUK UMKM beras, biji kopi, dan rempah lada untuk mengetahui keamanan pangan segar nabati. Hasil kemudahan pengurusan perizinan distribusi pangan segar untuk meningkatkan keamanan dan mutu produk di Kabupaten Lahat bagi UMKM pangan segar berjalan lebih baik dibandingkan tahun-tahun sebelumnya. Hal ini dapat dilihat dari adanya peningkatan pengurusan izin edar PSAT-PDUK pada periode Maret sampai dengan Juli 2024 sebanyak 15 (lima belas) nomor izin edar PSAT-PDUK yang telah terbit dari 2 (dua) nomor izin edar PSAT PDUK yang diterbitkan oleh Dinas Ketahanan Pangan Kabupaten Lahat sejak tahun 2022 sampai dengan tahun 2023, sehingga dapat diartikan bahwa pelaku usaha sangat membutuhkan pendampingan khusus dari petugas yang memahami proses pengurusan izin edar serta model pendekatan pendampingan yang efektif dan efisien.

Kata Kunci: Izin edar; keamanan produk pangan; pangan segar.

Abstract: This study examines the impact of facilitating fresh food distribution permits, including facilitating distribution permit procedures and packaging (packaging types and labels), on improving product safety and quality in Lahat Regency. The research method used surveys and data analysis from fresh food producers, regulators, and consumers in Lahat Regency. Data were collected through questionnaires to understand the distribution licensing process, perceptions of product safety and quality, and the impact of the facilitation provided. This study also used a hedonic test to determine the quality of fresh plant-based food including assessments of color, texture, aroma and a Likert test including assessments of uniformity of size, packaging and overall appearance as well as conducting chemical contamination tests in the form of pesticide residue tests and physical contamination tests on PSAT PDUK UMKM samples for rice, coffee

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beans and pepper spices to determine the safety of fresh plant-based food. The results of facilitating the processing of fresh food distribution permits to improve product safety and quality in Lahat Regency for UMKM's fresh food have been running better than in previous years. This can be seen from the increase in processing of PSAT-PDUK distribution permits in the period from March to July 2024 as many as 15 (fifteen) PSAT-PDUK distribution permit numbers that have been issued from 2 (two) PSAT PDUK distribution permit numbers issued by the Lahat Regency Food Security Service from 2022 to 2023, so it can be interpreted that business actors really need special assistance from officers who understand the distribution permit processing process and an effective and efficient mentoring approach model

Keyword: Distribution permit; food product safety; fresh food

1. Introduction

Food is one of the most fundamental human needs because it impacts human existence and survival. To meet these needs, food must be high-quality, safe, diverse, nutritious, affordable, and not conflict with religions, beliefs, and cultures. This ensures that everyone can live a healthy, active, and productive life in a sustainable manner. Lahat Regency is classified as a rich potential region, especially natural resources, including agricultural potential. In 2022, Lahat Regency had a harvested area of 14,355 hectares of food crops, while rice production was 42,811 tons of rice. Coffee and rubber are quite prominent plantation commodities in Lahat Regency. In 2022, the largest coffee plantation area was 54,440 hectares, with coffee production of 22,800 tons. Spices and biopharmaceutical plants also have potential economic value in Lahat Regency, including pepper, cinnamon, candlenut, nutmeg, cloves, ginger, cardamon, galangal, turmeric, galangal, ginger, and javanese ginger.

The abundant of natural resources potential in Lahat Regency, which are fresh food such as rice, coffee beans and pepper spices, provides a great opportunity for the development of the UMKM sector in Lahat Regency so that many business actors who cultivate these fresh foods make it a primary resource that supports the local economy and strengthens food security in Lahat Regency.

Fresh Food of Plant Origin (PSAT) is food of plant origin that can be consumed directly and/or that can be used as raw material for processed food that undergoes minimal processing including washing, peeling, cooling,

freezing, cutting, drying, salting, mixing, grinding, blanching, boiling and/or other processes without the addition of food additives except coating with other permitted auxiliary materials to extend shelf life, for example rice commodities, grains, fruits, vegetables, spices (in whole form to powder that are processed without food additives), except for all kinds of flour (mocaf flour, rice flour, banana flour, etc.).

The government ensures food safety by establishing norms, standards, procedures, and criteria for food safety. One of the government's efforts to ensure food safety is through a licensing mechanism for fresh food products distributed in retail packaging by businesses (Mirawati and Nugroho, 2021). Lahat Regency has agricultural potential, particularly for fresh food products such as rice, coffee, and spices sold and distributed in retail packaging. Therefore, to ensure the safety of these products, a fresh food distribution permit is required. The type of permit for micro and small businesses is the distribution permit for Fresh Food of Plant Origin, Domestically Produced by Small Businesses (PSAT-PDUK).

The government has established the implementation of the regulations, but in reality the implementation is not running well because there are still many PSAT circulating in Lahat Regency, both in PSAT business actors in the market and micro and small businesses in the sub-districts that do not include the PSAT-PDUK Distribution Permit Number when selling their products, even though the inclusion of the PSAT-PDUK Distribution Permit Number can provide certainty and legal protection for producers, sellers, buyers, and for the product itself. This is reinforced by data from the Lahat Regency Food Security Service (2023) as the OKKPD (Regional Food Security Competent Authority) of the Regency which is a Government Institution authorized to regulate Fresh Food of Plant Origin, The results of the PSAT-PDUK registration verification in the form of a Technical Data Attachment for the Distribution Permit for Fresh Food of Plant Origin Domestically Produced Small Businesses (PSAT-PDUK) in the form of approval of the PSAT-PDUK Registration Number to PSAT business actors in Lahat Regency which has been issued by the Lahat Regency Food

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Security Service from existing data shows that from 2022 to 2023 there were only 2 (two) PSAT-PDUK distribution permit numbers issued. This shows that the awareness of PSAT-PDUK Business Actors in Lahat Regency to manage and include the PSAT-PDUK Distribution Permit Number is still low.

Another problem that arises when more and more people consume PSAT products, the product is only packaged using ordinary plastic or in sack packaging, so this is less attractive and does not provide a sense of security to potential consumers who will buy it, this has been done in previous research by Primadia., (2009) [1]. that the use of plastic sack packaging produces rice with rice that is relatively less preferred by panelists when compared to super bag packaging (pitcher plants) and high density polypropylene, thus choosing the right type of packaging is very influential in maintaining the quality of rice during storage. In addition, other problems in terms of packaging are not yet using food labels (product informations).

Many PSAT Business Actors in Lahat Regency do not understand the procedures for PSAT-PDUK Registration and product packaging, so Business Actor Assistance is carried out in Lahat Regency. This Assistance activity was also carried out by Yarnis (2022), who stated that Assistance for MSMEs in processing frozen food distribution permits and perceptions of distribution permits for small and medium micro pempek businesses in Palembang City is one of the answers to the problem of BPOM distribution permits for frozen packaged pempek which must be immediately accelerated to overcome problems while still paying attention to product safety and quality aspects [13].

Facilitation of business actors in managing PSAT-PDUK distribution permits in the form of registration procedures and product packaging in Lahat Regency is expected to be one of the solutions to the problem of PSAT-PDUK distribution permits and packaging for PSAT Business Actors in order to improve and guarantee safe products in Lahat Regency.

2. Research Method

a. Methods

The strategy used in this research is to use an associative research strategy which is used to identify the extent of the influence of the distribution permit facilitation and packaging facilitation variables (packaging and labelling) [12].

Facilitating Procedures for Managing Distribution Permits and NIB

- 1. By a lecture method during outreach to PSAT business actors to immediately take care of distribution permits;
- 2. By communication via telephone and leaflet;
- 3. Business actors are visited directly and guided by using leaflet;
- 4. Business actors are visited and accompanied by DKP officers and guided by the Whatsapp Group "SI PENGIDAR PSAT LAHAT" (Lahat PSAT Distribution Permit Management System) and accompanied by field agricultural extension workers.

Packaging Facilitation includes the type of packaging and packaging labels. The method used in this study is a survey and interview method, where researchers distributed questionnaires for data collection. The approach used in this study is a semi-quantitative approach. Quantitative research is defined as a research method based on the philosophy of positivism, used to research a specific population or sample, data collection using research instruments, quantitative/statistical data analysis, with the aim of testing predetermined hypotheses [12].

b. Data Types and Sources

- The type of research used in this study is associative (correlational)
 research which focuses on evaluating the relationship or association
 between two or more variables. Associative research places more
 emphasis on measuring the extent to which two variables are related to
 each other.
- 2. Data Sources

a. Primary Data

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b. Secondary Data

c. Data Collection Technique

1. The type of data used in this study is primary data.

The primary data collection technique was obtained directly through filling out questionnaires with PSAT business actors in Lahat Regency. To obtain data and information from PSAT Business Actors, researchers collected data using direct contact methods during the Data Collection of PSAT Business Actors in the market and micro and small businesses of rice, coffee beans and pepper spices in the Districts in Lahat Regency totaling 30 fresh food business actors. There were 21 fresh rice food business actors, 5 fresh coffee bean business actors and 4 pepper spice business actors. Data collection was carried out by interviewing respondents face to face directly between researchers and respondents through questionnaires that had been distributed.

The questionnaires distributed were also based on certain considerations, namely PSAT Business Actors who already have a fairly large business that continuously processes their products, PSAT products that are packaged in retail packaging not in front of buyers, PSAT products that are not used further as raw materials for industrial food processing whose final products require registration/other distribution permits and PSAT products that have a shelf life of more than 7 days.

Data collection was also carried out by conducting a hedonic test, namely the level of preference for fresh rice, coffee beans and pepper spices in terms of color, texture and aroma, as well as conducting a Likert test, namely the level of interest in the uniformity of size, packaging and overall appearance. Data collection for the hedonic test and Likert test was carried out on 20 panelists to assess the product and provide their responses regarding their preferences and interest in fresh food products.

Food safety data collected includes physical and chemical contamination of fresh rice, coffee beans and pepper spices by conducting tests using Pesticide Test Cards (Pesticide Test Kit Tools).

2. The type of data used in this study is secondary data.

Secondary data is collected by studying laws and regulations related to books, journals, research reports and written legal opinions, sources in the field, all of which are related to the discussion regarding the procedures for registration, packaging and facilitation of PSAT PDUK distribution permit processing for PSAT business actors in order to increase safe and quality products in Lahat Regency.

d. Data Analysis

Data processing carried out in this study was carried out by using the SPSS (Statistical Program For Social Science) version 22.0 with the aim of obtaining accurate calculation results and making data processing easier, so that it is faster and more precise.

To process quantitative data, it can be done by presenting it in the form of a frequency distribution table and statistical calculations, then the data is analyzed univariantly and bivariantly by computerization.

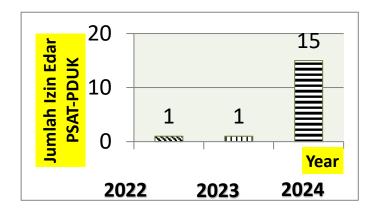
3. Results and Discussion

Respondents of the Facilitation of Fresh Food Distribution Permit Management for Improving Product Safety and Quality in Lahat Regency consisted of 30 (thirty) people with varying characteristics including location, gender, age, and education. Figure 4.2. explains the results of research on facilitating the processing of fresh food distribution permits to improve product safety and quality in Lahat Regency for UMKM's fresh food has been running better than in previous years. This can be seen from the increase in processing of PSAT-PDUK distribution permits in the period from March to July 2024 as many as 15 (fifteen) PSAT-PDUK distribution permit numbers that have been issued, while data according to the Lahat Regency Food Security Service (2023), the attachment of technical data for PSAT PDUK distribution permits in the form of approval of PSAT PDUK Registration Numbers to PSAT business actors in Lahat Regency which has

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been issued by the Lahat Regency Food Security Service shows that from 2022 to 2023 there were only 2 (two) PSAT PDUK distribution permit numbers issued.



Picture 1. PSAT-PDUK distribution permits that have been registered in Lahat Regency from 2022 to 2024

The problems faced in managing distribution permits are really need to be addressed through a series of policies and programs in a planned, synergistic and sustainable manner through a Strategic Plan which is a series of basic programs and activities, to be implemented by all components of the organization in order to achieve the goal, one of which is improving product safety and quality in Lahat Regency.

Based on the problems experienced by UMKM in Lahat Regency in terms of managing PSAT-PDUK distribution permits, researchers need to provide assistance in managing PSAT-PDUK food distribution permits for fresh food micro, small and medium enterprises in Lahat Regency in this case in the form of Facilitation of Fresh Food Distribution Permit Management including Facilitation of Procedures for Managing Distribution Permits and NIB as well as Packaging Facilitation (Types of packaging and Packaging Labels) is one of the answers to the problem of PSAT-PDUK distribution permits which must be immediately accelerated to overcome the problem, so that it can improve product safety and quality in Lahat Regency [10].

Research Results Respondents stated that they were willing to take care of PSAT-PDUK distribution permits by 50.0%, respondents who

answered that they were not willing to take care of PSAT-PDUK distribution permits because they did not know how to take care of them were 93.3%, respondents who wanted to find further information about managing distribution permits were 50.0%, the reason respondents still wanted to get a more complete explanation about managing PSAT distribution permits was 50.0% and for convenience in managing distribution permits by means of business actors being visited and accompanied by DKP officers and guided by the Whatsapp Group "SI PENGIDAR PSAT LAHAT" (Lahat PSAT Distribution Permit Management System) and accompanied by Field Agricultural Extension Workers, respondents answered 100.0%.

The Relationship Between Distribution Permit Facilitation and PSAT Product Safety in Lahat Regency

Table 1. The Relationship between Distribution Permit Facilitation Variables and PSAT Product Safety in Lahat Regency

| ANOVA | | | | | | | | |
|-----------------|----------------|------------|-----------------|---------|-------|--|--|--|
| Model | Sum of | df | Mean of Squares | F | Sig | | | |
| | Squares | | | | | | | |
| 1 Regression | 568.182 | 1 | 568.182 | 251.786 | .000b | | | |
| | 63.185 | 28 | 2.257 | | | | | |
| Residual | | | | | | | | |
| Total | 631.367 | ' 29 | | | | | | |
| Coefficients | | | | | | | | |
| Model | Unstandardized | | Standardized | t | Sig | | | |
| | Coefficients | | Coefficient | | _ | | | |
| | В | Std. Error | Beta | | | | | |
| 1 | -39.567 | 4.735 | | -8.357 | .000 | | | |
| (Konstanta) | | | | | | | | |
| Fasilitasi Izin | 2.273 | .143 | .949 | 15.868 | .000 | | | |
| Edar | | | | | | | | |

Based on Table 1, it is known that the distribution permit facilitation variable on the safety and quality of PSAT products in Lahat Regency from the statistical test results obtained a Sig value of 0.000, so it can be said that if the Sig value is smaller than 0.05, so statistically there is a significant influence between the distribution permit facilitation variable on the safety

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and quality of PSAT products in Lahat Regency, then continued with t count which is 15.868 while t table is 2.048 so it can be said that t count is greater than t table so statistically there is a significant influence between the distribution permit facilitation variable on the safety and quality of PSAT products in Lahat Regency.

This result is in line with the research conducted by Yarnis (2022), [2]. which stated that assistance to UMKM in processing frozen food distribution permits and perceptions of distribution permits for small and medium micro pempek businesses in Palembang City is one of the answers to the problem of BPOM distribution permits for frozen packaged pempek which must be immediately accelerated to overcome the problem while still paying attention to aspects of product safety and quality.

The existence of a significant relationship between the distribution permit facilitation variable on the safety and quality of PSAT products in Lahat Regency in the form of PSAT-PDUK distribution permit facilitation including assistance in processing PSAT-PDUK distribution permits and assistance in making packaging (types of packaging and product labeling) by the Lahat Regency Food Security Service to business actors with a better distribution permit processing method such as Business Actors being visited and accompanied by DKP Officers and guided by the Whatsapp Group "SI PENGIDAR PSAT LAHAT" (Lahat PSAT Distribution Permit Management System) is also in line with research conducted stating that it is necessary for officers to collaborate in coaching aimed at helping entrepreneurs establish partnerships with the POM agency in facilitating the resolution of industrial food management licensing issues from the Health Service and product testing at the POM Agency regarding product halalness and product rights legality issues from the Ministry of Human Rights, which greatly influence the development of their businesses.

The Relationship between Packaging (Type of Packaging and Labeling) and the Safety and Quality of PSAT Products in Lahat Regency

Table 2. The Relationship between Packaging Variables (Type of Packaging and Labeling) and PSAT Product Safety in Lahat Regency.

| | ANOVA | | | | | | | | |
|--------------|------------|-----------------------------|------|----------------|-------|---------|-------|--|--|
| Model | Sum of Squ | ares | df | Mean of Square | es | F | Sig | | |
| 1 | 5 | 84.906 | 1 | 584.9 | 06 3 | 352.502 | .000b | | |
| Regresi | | | | | | | | | |
| Residual | | 46.460 | 28 | 1.6 | 59 | | | | |
| Total | 6 | 31.367 | 29 | | | | | | |
| Coefficients | | | | | | | | | |
| Model | Unstanda | Instandardized Coefficients | | s Standard | lized | t | Sig | | |
| | | | | Coeffic | ient | | | | |
| | В | St | d. | Beta | L | | | | |
| | | Erı | ror | | | | | | |
| 1 | 9.37 | | 1.40 | 084 | | 6.657 | .00 | | |
| (Constant) | 2 | | | | | | 0 | | |
| Packaging | 1.02 | |). |)54 | .963 | 18.775 | .00 | | |
| (Type of | 1 | | | | | 4 | 0 | | |
| Packaging | | | | | | | | | |
| and | | | | | | | | | |
| Labeling) | | | | | | | | | |

From Table 2, it is known that the packaging variables (type of packaging and labeling) on the safety and quality of PSAT products in Lahat Regency from the results of statistical tests obtained a Sig value of 0.000, it can be seen that if the Sig value is smaller than 0.05 so that statistically there is a significant influence between the packaging variables (type of packaging and labeling) on the safety and quality of PSAT products in Lahat Regency, then continued with t count which is 18.775 while t table is 2.048 so it can be concluded that t count is greater than t table so statistically there is a significant influence between the packaging variables (type of packaging and labeling) on the safety and quality of PSAT products in Lahat Regency.

These results align with research conducted by Walton Erick Prayogo et al. (2024), which states that poor product packaging capabilities will

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impact market demand. UMKM's products must be attractively presented to ensure they are marketed widely, not just within the surrounding area. Therefore, UMKM must consider specific strategies to increase product sales value, one of which is improving product packaging [3].

Furthermore, the purpose of packaging extends beyond product appearance to maintaining product durability and ensuring it is safe, durable, and attractive to consumers. Businesses must be sensitive to the raw materials used in their products, and product durability should be a top priority for MSMEs. Products with good durability will have a broader market reach, thereby increasing the selling value of MSME products [14].

In accordance with Ministerial Regulation No. 53 of 2018 concerning the Safety and Quality of PSAT, PSAT sold in packaged form must be labeled and registered with the OKKP. Proper labeling provides accurate product information so that the public can avoid unsuitable and unsafe products that can cause adverse health impacts, avoid expired products, and avoid products that are not halal for Muslims

The Relationship Between Business Actor Support and Acceptance of the Importance of Distribution Permits for PSAT Actors and PSAT Product Safety in Lahat Regency

Table 3. The Relationship between Business Actor Support Variables and the Acceptance of the Importance of Distribution Permits for PSAT Actors and the Safety and Quality of PSAT Products in Lahat Regency

| ANOVA | | | | | | | | |
|-----------------------------------|----------------|--------------|--------------|---------|-------|--|--|--|
| Model | Sum of Squares | df | Mean of | F | Sig | | | |
| | | | Squares | | | | | |
| 1 Regresi | 615.144 | 1 | 615.144 | 1061.70 | .000b | | | |
| Residual | | 28 | .579 | 6 | | | | |
| Total | 631.367 | 29 | | | | | | |
| | Coefficients | | | | | | | |
| Model | Unstand | ardized | Standardized | d t | Sig | | | |
| | Coeffic | Coefficients | | | | | | |
| | В | Std. | Beta | | | | | |
| | | Error | | | | | | |
| 1 | 13.272 | .694 | | 19.1 | .000 | | | |
| (Constant) | | | | 19 | | | | |
| Business Actor Support with Acc | | .021 | .98 | 7 32.5 | .000 | | | |
| of the Importance of Distribution | i Permits | | | 84 | | | | |
| | | | | | | | | |

Based on Table 3, it is known that the variable of business actor support with the acceptance of the importance of distribution permits for PSAT actors on the safety and quality of PSAT products in Lahat Regency from the results of statistical tests obtained a Sig value of 0.000, it can be seen that if the Sig value is smaller than 0.05 so that statistically there is a significant influence between the variable of business actor support with the acceptance of the importance of distribution permits for PSAT actors on the safety and quality of PSAT products in Lahat Regency, then continued with t count which is 32,584 while t table is 2.048 so it can be said that if t count is greater than t table so statistically there is a significant influence between the variable of business actor support with the acceptance of the importance of distribution permits for PSAT actors on the safety and quality of PSAT products in Lahat Regency.

This research is in line with research conducted by (Pritanova et al., 2020 in Yarnis, 2022) [2]. that obtained research results of 20.7% of business actors did not want to register their products to have a distribution permit because the reason for MSME actors is the complicated process and while the BPOM MD distribution permit is considered very strict in its implementation, making business actors give up before applying for a distribution permit.

The results of the research conducted found that there is a significant influence or relationship between the support of PSAT business actors towards the importance of PSAT-PDUK distribution permits so that the fresh food products produced are of high quality and safe for consumption for a long period of time without health problems (disease) but there are still UMKM actors who do not support the importance of distribution permits in the production of fresh food packaged in retail form. This is influenced by the lack of trust of actors in their assistants, the lack of ability of UMKM actors to follow regulatory and technological developments and business actors think that the complicated and long process of processing distribution permits so that there is a lack of awareness, desire and support

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from business actors towards accepting the importance of distribution permits, according to research conducted by (Patma et al., 2021) [4]. micro, small and medium business actors are currently less active in processing MD distribution permits but business actors should be active in collaborating and coordinating with regional or central BPOM to make all programs related to the issuance of distribution permit certificates a success, especially UMKM actors in Indonesia are very ready and able to compete in entering the free and legal market era in facing all the challenges of innovative UMKM through business incubator.

Hedonic Test on Color, Texture and Aroma of Rice, Coffee Beans, Pepper Spices

1. Rice

The data obtained from the results of the hedonic test were analyzed based on the level of preference for fresh rice food in terms of color, texture and aroma based on the observations of 20 (twenty) panelists who preferred the color, texture and aroma of rice samples X1.362, X2.362, X3.362. The assessment criteria for the hedonic test of good rice color are clean white, shiny without yellow or black spots.

The results of the panelists' assessment of the color of rice from the panelists' observations preferred the whiter color of the X1.362 rice sample compared to the slightly brownish white color of the X1.214 rice sample, color plays an important role in determining food quality visually. Color (degree of whiteness) is a component of the physical quality of rice that can first be sensed by consumers (Primadia., 2009).[1] During storage, the degree of whiteness of food continues to decrease, due to chemical reactions between starch and protein which will reduce the brightness of the white color [5].

The criteria for assessing the hedonic test for good rice texture are hard, dense, intact, not many broken pieces, not dusty or starchy. Data from the panelists' assessment of rice texture from the panelists' observations indicated that they preferred the texture of the X2.362 rice sample, which

was harder, denser, and more intact when touched, compared to the texture of the X2.214 rice sample, which was slightly softer. Texture is a sensation of pressure that can be observed by sight and felt when bitten, chewed, swallowed, or touched with the fingers [6].

The assessment criteria for the hedonic test of rice aroma are the distinctive aroma of fresh rice, no musty or rancid smell. The panelists' assessment data on the aroma of rice from the panelists' observations showed that they preferred the aroma of the X3.362 rice sample, which had a stronger aroma of rice, compared to the aroma of the X3.214 rice sample, which had a less strong aroma.

Aroma is one indicator that influences panelists preference for a product. Aroma is a crucial factor in assessing the deliciousness and suitability of a food [5].

The data obtained from the results of the Likert test were analyzed based on the level of interest or disinterest in fresh rice food regarding the uniformity of size, packaging and overall appearance. The results of the panelists' assessment of the uniformity of rice size from the panelists' observations showed that they were more interested in the X10.319 rice sample which was physically more uniform than X10.287.

Physically, good rice grain uniformity occurs when the grains have a relatively uniform shape, length, and size. This is important because it affects food quality, especially in terms of doneness. Rice with a uniform size will cook evenly when cooked, resulting in a consistent texture and better flavor. Furthermore, uniform size also reflects good rice processing quality, such as during milling or polishing.

The panelists' assessment of rice packaging based on the panelists' observations showed that they were more interested in the X11.319 rice sample, which was visually more attractive in terms of the type of packaging and the inclusion of labeling on the product packaging compared to the X11.287 rice sample.

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The type of packaging used in the X11.319 rice sample is using Polypropylene (PP) plastic packaging and the packaging is labeled by including the product name, net weight or net content, name and address of the producer, date, month and year of expiration and PSAT-PDUK distribution permit number so that it is more attractive compared to the X11.287 rice sample which uses PolyEtylene (PE) plastic packaging and the packaging does not use labeling. The Polypropylene (PP) type of packaging has the advantage of being a type of lightweight plastic raw material, a density of 0.90 to 0.92 g/m2, has the highest hardness and brittleness. Polypropylene plastic is a good type of plastic as a barrier to water vapor in the product because it has low water vapor permeability [5]. Proper packaging can maintain the quality and nutritional value of food ingredients in addition to increasing the shelf life of food ingredients [7].

The panelists' assessment of the overall appearance of the rice from the panelists' observations was more interested in the X12.319 rice sample which was visually more attractive, overall acceptance (general acceptance) both in terms of uniformity of size, packaging, color and texture of the product and the overall visual appearance was also related to product safety in terms of the absence of physical contamination in the rice so that it was safe for consumption and did not harm human health.

2. Coffee Beans

The data obtained from the hedonic test results were analyzed based on the level of preference for fresh coffee bean food in terms of color, texture and aroma, showing that the panelists' assessment results showed that they preferred the color, texture and aroma of coffee bean samples X4.517, X5.517, X6.517.

The assessment criteria for the hedonic test of good coffee bean color are shiny brown, uniform and no white spots. The panelists' assessment data on the color of coffee beans from the panelists' observations showed that they preferred the color of the X4.517 coffee bean sample which was more brown and had a uniform and even color compared to the color of

the X4.463 coffee bean sample which was slightly brown and less uniform and uneven. The color of the green coffee bean can be influenced by the quality of the coffee, the better the quality of the coffee, the better the preference for coffee. The change in the color of the green coffee bean from grayish green to brown is caused by the Maillard oxidation reaction which is also better known as the caramelization reaction which causes browning in coffee beans involving compounds with carbonyl groups (reducing sugars) and amino groups [1].

The assessment criteria for the hedonic test of coffee bean texture are dry, hard, and not brittle or cracked. The panelists' assessment of the texture of coffee beans based on the panelists' observations showed that they preferred the texture of the X5.517 coffee bean sample which was drier, harder, and denser to the touch compared to the texture of the X5.463 coffee bean sample which was slightly softer. The texture of good coffee beans usually has a drier and denser content, this texture can be influenced by the level of dryness of the coffee beans.

The assessment criteria for the hedonic test of coffee bean aroma are the distinctive aroma of fresh coffee, no burnt or musty smell. The panelists' assessment of the aroma of coffee beans based on the panelists' observations showed that they preferred the aroma of the X6.517 coffee bean sample which was stronger than the aroma of the X6.463 coffee bean sample which had a slightly less strong aroma.

Differences in preference for the aroma of green coffee beans can be influenced by the quality of the coffee. Good-quality coffee beans retain their chemical compounds, resulting in a better aroma. A fragrant aroma is preferred by coffee consumers [8]. The fragrant aroma of coffee is caused by the oxidation process which causes the bonds of aromatic compounds to break. When the bonds of aromatic compounds are broken, they will move easily, thus creating an aroma that can be smelled by the sense of smell [9]. The results of the panelists' assessment of the uniformity of size, packaging and overall appearance of the coffee beans from the panelists'

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observations showed that they were more interested in the coffee bean samples X13.539, X14.539, X15.539. Physically, uniformity in coffee bean size is important, as coffee beans have a relatively uniform size and shape. This is important to ensure a consistent roasting process, as beans of different sizes will require different times to roast evenly. Uniform coffee beans allow for more consistent heat distribution during roasting, resulting in a balanced and optimal flavor. Furthermore, uniform size also helps during grinding, ensuring a consistent grind that will affect extraction when brewing coffee.

The type of packaging used in the X14.539 coffee bean sample is Polypropylene (PP) plastic packaging and the packaging is labeled by listing the product name, net weight or net content, name and address of the producing party, date, month and year of expiration and PSAT-PDUK distribution permit number so that it is more attractive compared to the X14.475 coffee bean sample which uses PolyEtylene (PE) plastic packaging and the packaging is not labeled.

The panelists' assessment data on the overall appearance of coffee beans from the panelists' observations showed that they were more interested in the X15.539 coffee bean sample which was visually more attractive in terms of overall acceptance (general acceptance) in terms of uniformity of size, packaging, color and texture of the product compared to the X15.475 coffee bean sample which was visually considered less attractive. The overall appearance of the coffee beans must also be free from contamination/physical hazards so that it is safe for consumption and does not endanger human health.

3. Pepper Spice

The results of the hedonic test were analyzed based on the level of preference for fresh pepper spice food in terms of color, texture and aroma, showing that the panelists' assessment results showed that they preferred the color, texture and aroma of pepper spice samples X7.871, X8.871,

X9.871. The assessment criteria for the hedonic test of good pepper color are clean, bright, and uniform white pepper without spots or dullness.

The panelists' assessment of the color of the pepper spices from the panelists' observations preferred the color of the X7.871 pepper spice sample which was brighter white and had a uniform and even color compared to the color of the X7.652 pepper spice sample which was slightly browner and less uniform and uneven. The original color of white pepper is brownish gray to ivory white without adding bleach. The processing process after being picked, white pepper is processed by soaking the peppercorns in salt water to remove the outer skin, leaving only the bright colored inner peppercorns. The assessment criteria for the hedonic test of pepper spice texture are hard, not easily crushed when pressed, not moist or clumpy.

The panelists' assessment data on the texture of pepper spices from the panelists' observations showed that they preferred the texture of the X8.871 pepper spice sample which was round, harder, not brittle, and smooth compared to the texture of the X8.652 pepper spice sample which was slightly softer and less smooth. The soaking of white pepper in water serves to separate the outer shell, leaving only the light-colored inner peppercorns, this process is what makes white pepper have a smooth texture.

The assessment criteria for the hedonic test of pepper spice aroma are that it has a strong, distinctive spicy aroma, does not smell musty or rancid.

The panelists' assessment of the aroma of pepper spices from the panelists' observations preferred the aroma of the pepper spice sample X9.871 which was stronger than the aroma of the pepper spice sample X9.652 which was less pungent. White pepper has a distinctive and strong aroma, which makes it very popular in various dishes, this aroma is maintained throughout the processing process, especially during soaking and drying.

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The results of the panelists' assessment of the uniformity of size, packaging and overall appearance of the pepper spices from the panelists' observations showed that they were more interested in the pepper spice samples X16.852, X17.852, X18.852.

Physically, good peppercorn size uniformity is achieved when the peppercorns have a relatively uniform diameter and shape. Uniform peppercorns produce consistent grinding results, which impact the flavor and aroma of dishes. Furthermore, uniform peppercorn size reflects proper processing, from cleaning and drying to packaging. Uniform size also facilitates even flavor distribution when used as a seasoning.

The type of packaging used in the X17.852 pepper spice sample is Polypropylene (PP) plastic packaging and the packaging is labeled by including the product name, net weight or net content, name and address of the producing party, date, month and year of expiration and PSAT-PDUK distribution permit number so that it is more attractive compared to the X17.679 pepper spice sample which uses PolyEtylene (PE) plastic packaging and the packaging is not labeled [11].

The overall appearance of pepper spices from the panelists' observations was more interested in the X18.852 pepper spice sample which was visually more attractive in terms of overall acceptance (general acceptance) both in terms of uniformity of size, packaging, color and texture of the product compared to the X18.679 pepper spice sample which was visually considered less attractive, the overall appearance of the pepper spices must also be free from contamination/physical hazards so that it is safe for consumption and does not endanger human health.

4. Conclusion

From the general research results, it can be concluded that the facilitation of fresh food distribution permit processing towards improving product safety in Lahat Regency for fresh food MSMEs has been running better than before. This can be seen from the increase in PSAT-PDUK distribution permit processing in the period from March to July 2024 as

many as 15 PSAT-PDUK distribution permit numbers that have been issued. The PSAT-PDUK registration procedure has a significant impact on product safety in Lahat Regency. The PSAT-PDUK registration procedure through the "SI PENGIDAR PSAT LAHAT" mentoring method effectively increases the awareness of business actors in understanding the distribution permit processing process. The type of packaging and labeling of PSAT products has a significant impact on product safety in Lahat Regency. Distribution permit facilitation with the "SI PENGIDAR PSAT LAHAT" mentoring method which includes registration and packaging procedures, and is accompanied by officers from the Food Security Service and Agricultural Extension, is an effective solution in managing PSAT-PDUK distribution permits.

5. Reference

- [1]Primadia, A.D. 2009. Pengaruh Peubah Proses Dekafinasi Kopi dalam Reaktor Kolom Tunggal terhadap Mutu Kopi. Institut Pertanian Bogor. Bogor.
- [2]Yarnis. 2022. Analisis Kebijakan Pendampingan Pengurusan Izin Edar Pangan Beku dan Persepsi Izin Edar Pada
- [3]Yulianti Mawar Dwi dan Resmi Mustarichie. 2018. Tata Cara Registrasi Untuk Pangan Olahan Industri Rumah Tangga (PIRT) dan Makanan Dalam Negeri (MD) Dalam Rangka Peningkatan Produk Yang Aman dan Bermutu di Bandung Jawa Barat. Jurnal Farmaka Supl emen 15(3): 57-64.
- [4]Patma, T.S., Muslim, S dan Kecil, U. 2021. Pemberdayaan UMKM Melalui Legalitas Usaha. September, 246-249.
- [5]Verayani, Ade., Idealistuti dan Nabila Ratna Komala. 2019. Pengaruh Jenis Kemasan Plastik dan Waktu Penyimpanan Terhadap Pengamatan Visual Kue Lapis Tapioka. Program Studi Teknologi Pangan Fakultas Pertanian Universitas Muhammadiyah Palembang. Palembang.
- [6]Qamariah Nurul., Rezi Handayani dan Ahmad Irza Mahendra. 2022. Uji Hedonik dan Daya Simpan Sediaan Salep Ekstrak Etanol Umbi Hati Tanah. Program Studi D-III Farmasi Fakultas Ilmu Kesehatan Universitas Muhammadiyah Palangkaraya. Kalimantan Tengah.
- [7]Suyitno, T. 1996. Pengemasan dan Pelabelan Produk Pangan disampaikan pada Kursus Singkat Keamanan Pangan. Pusat Antar Universitas Pangan dan Gizi Universitas Gadjah Mada. Yogyakarta.
- [8]Sulistyaningtyas, Ayu Rahmawati, Erma Prihastanti dan Endah Dwi Hastuti. 2017. Performa Green Bean Kopi Robusta (Coffea robusta Lindl.Ex De Will) setelah Perendaman Limbah Tahu dengan Jenis dan Konsentrasi yang Berbeda. Buletin Anatomi dan Fisiologi 2(2): 148-152.

DOI: 10.22373/biotik.v13i2.29117

Home page: www.jurnal.ar-raniry.ac.id/index.php/biotik/index

- [9]Ummah Fitri Khoiru., Djoko Kristanto dan Sunarti. 2020. Pengaruh Jenjang Pendidikan, Latar Belakang Pendidikan, Skala Usaha dan Umur Usaha Terhadap Penggunaan Informasi Akuntansi Pada Pelaku UMKM di Kecamatan Boyolali. Program Studi Akuntansi Fakultas Ekonomi Universitas Slamet Riyadi Surakarta. Surakarta.
- [10]Mirawati Netra dan Apriyanto Dwi Nugroho. 2021. Pedoman Penerbitan Registrasi Pangan Segar Asal Tumbuhan Produksi Dalam Negeri Usaha Kecil (PSAT-PDUK). Badan Ketahanan Pangan Kementerian Pertanian. Jakarta.
- [11]Moelrine Afhi Fadhlika., Rinaldi Syarif. 2023. Pengaruh Pengetahuan Kewirausahaan, Karakteristik Kewirausahaan dan Kompetensi Kewirausahaan Terhadap Keberhasilan UMKM Desa Bojong Kulur. Jurnal Ikraith Ekonomika 6(1):127-137.
- [12]Sugiyono. 2019. Metode Penelitian Kuantitatif, Kualitatif dan RND. Alfabeta. Bandung.
- [13]Peraturan Pemerintah Nomor 5 Tahun 2021. 2021. Penyelenggaraan Perizinan Berusaha Berbasis Resiko. 2021. Lembaran Negara Republik Indonesia Tahun 2021 Nomor 15. Jakarta.
- [14] Nugroho Apriyanto Dwi, Tuty Anna Samosir dan Eni Nurkhayani. 2021. Pedoman Pengawasan Keamanan Pangan Segar Asal Tumbuhan (PSAT). Badan Ketahanan Pangan Kementerian Pertanian. Jakarta.