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## RESEARCH ARTICLE

### Organoleptic and Palatability Test of Ration Wafers on Goats (Capra Aegagrus Hircus)

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#### ARTICLE INFO

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#### ABSTRACT

This study aims to determine the organoleptic and palatability tests of ration wafers as alternative feed for goats. Organoleptic tests were carried out by panelists on the parameters of color, aroma, texture, and the presence of fungi, while palatability tests were carried out by observing feed consumption by goats in each treatment. The research design used a Completely Randomized Design (CRD) with 3 (three) different wafer formulation treatments and 3 (three) replications. The results of the study showed thatThe results of the organoleptic test of the provision of goat ration wafers did not have a significant effect ( $P>0.05$ ) on the color, texture, aroma/smell and presence of fungi in this study, but had a significant effect ( $P<0.05$ ) on the palatability level of goat ration wafers in increasing the consumption of ration wafers in the research goats.

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## INTRODUCTION

One of the problems faced by farmers in developing goat farming is the availability of feed, especially in the dry season, where it is difficult to obtain fresh grass or straw. Thus, a solution is needed to overcome the feed problem. One of the breakthrough efforts that is currently being widely developed is by using fermentation technology (Muchi and Martawidjaja, 2003). Fermentation is a process that utilizes the ability of microorganisms to produce primary metabolites and secondary metabolites in a controlled environment. With fermentation techniques, abundant green feed during the rainy season can be fermented as a feed supply (stock), especially if green feed is reduced in the dry season. Fermented feed is able to provide better nutritional intake than ordinary greens. In addition, the production costs are much smaller and more practical. According to several studies, providing fermented feed to livestock has many advantages, including: increasing appetite so that fattening is faster, improving the digestive process, being more resistant to disease, increasing milk production, reducing the smell of feces and urine, feces become less because the feed is digested properly and several farmers have proven that cases of worms have decreased since using fermented feed (Yunilas. 2009). According to



Edriani (2011), the technology that can be used to reduce crude fiber content and increase protein digestibility is fermentation.

The benefits of straw as animal feed, straw has a major weakness in its power cerna and low nutritional value. The low digestibility is caused by tinhigh content of lignocellulose, lignin and silica, while the nutritional value is low especiallya due to the small amountaenergy, protein, mineral and vitamin content (Sarnklong et al., 2010; Yanuartono et al., 2017). However, these weaknesses can be anticipated through various treatment methods to increase its nutritional value. Rice straw can be improved in quality through various technologies. One of the simple, cheap and feasible technologies/methods for processing straw as animal feed is fermentation. The results of studies using the rice straw fermentation method generally show an increase in the quality of its nutritional value(Indarjulianto et al., 2019).YesFermented hemp can increase the crude protein content by 4.88% from 4.01% to 9.09%, and reduce crude fiber by 6.32% from 24.76% to 18.44% (Basuni et al., 2010). The same thing was also stated by Syamsu, (2006), who stated that the fermentation process of rice straw was carried out to increase its nutritional value, causing it to be palatable or preferred by livestock.

ToAnother obstacle in the field of feed is the management of feed provision which is felt to be ineffective and inefficient. Where so far the provision of feed, especially for ruminant livestock, is still separated between greens as a source of fiber and concentrate feed as a source of protein and energy which results in inefficient allocation of time and energy which then has implications for increasing production costs. In addition, goats have a high selectivity nature so that feed ingredients that are less preferred or have low palatability will be consumed in small amounts so that a lot of feed ingredients are wasted or feed utilization becomes inefficient. To reduce the opportunity for livestock to choose certain feed ingredients, this can be done by changing the form of feed, one of which is into ration wafers.

PeGiving wafer rations to goats will reduce selective ration intake by livestock and help livestock to absorb the nutrients contained in the feed, because each wafer of goat rations contains all the necessary nutrients. Making feed in the form of wafers will increase the density of the ration, so that feed distribution is easier, because it is not easily destroyed, other advantages are, extending the storage period, and reducing the amount of wasted feed. Wafer-shaped feed can be given to goats because goats are livestock that easily adapt to the feed given (Kadir, 2014). The quality of good goat feed wafers can be seen from the organoleptic test, this test is a measurement of quality using the five senses. The assessments carried out include the appearance of color, aroma, and texture of the feed (Budijanto et al., 2010).

Utilization of rice straw as goat feed, which can increase its nutritional value and reduce its crude fiber which is a weakness of rice straw for livestock feed, namely with fermentation technology and in its processing so that goats are efficient in consuming feed, available during the dry season and durable stored as feed stock, namely made into ration wafers, which increase its nutritional value, cause palatability or are liked by livestock, which can be seen from the aroma, color and texture (organoleptic test) which is expected to increase productivity in raising goats and other studies that have been carried out for fermented livestock feed from rice straw, so we are interested in conducting research on goats that are given ration wafers from fermented rice straw



with the title "Organoleptic and Palatability Test of Wafer Ration on Goats(Capra aegagrus hircus)".

## LITERATUR REVIEW

### Importance of Ration Wafers in Goat Nutrition

Ration wafers are compressed feed blocks that combine roughage, concentrate, vitamins, and minerals into a single, easy-to-handle form. They offer several advantages, including reduced feed wastage, longer shelf life, and ease of storage and transport. For goats, which are known for their selective feeding behavior, the sensory attributes of these wafers are critical for ensuring consistent consumption.

### Organoleptic Properties of Ration Wafers

Organoleptic properties refer to the sensory qualities of the feed, including:

- Color: Should be natural and appealing to the animal, typically greenish if rich in forage.
- Odor: Fresh, natural smell without any moldy or off-putting odors.
- Texture: Moderate hardness to encourage chewing without causing tooth damage.
- Taste: Balanced to reduce rejection and improve voluntary intake.

Studies have shown that goats are particularly sensitive to these attributes, as they often use smell and taste to assess feed quality.

### Palatability Testing in Goats

Palatability testing involves assessing the willingness of goats to consume the wafers when given a choice. It typically includes metrics such as:

- Initial Acceptance Rate
- Voluntary Feed Intake (VFI)
- Feed Conversion Ratio (FCR)
- Residual Feed Analysis

Factors affecting palatability include the physical form, nutrient composition, presence of anti-nutritional factors, and the use of flavor enhancers.

### Factors Influencing Organoleptic and Palatability Characteristics

Several factors influence the organoleptic and palatability properties of ration wafers for goats, including:

- Ingredient Composition: The choice of roughage, grains, and binders.
- Processing Techniques: Compression pressure, moisture content, and drying methods.
- Additives and Flavoring Agents: Use of molasses or essential oils to enhance appeal.



## METHODOLOGY

### A. Time and Place

This research will be conducted for one month, namely during March 2025, located in the goat pen belonging to Mr. Wijiyanto in SP 3 Wadio Village, Nabire Regency.

### B. Tools and materials

1. Tool
  2. Large plastic for fermentation
  3. Plastic Tray
  4. Plastic Bucket
  5. Machete
  6. Scales
  7. Measuring cup
  8. Wafer Printing Container
  9. Wooden pounding tool for compacting wafers
  10. Vacuum packaging plastic
  11. String of raffia
  12. Wok
  13. Stove
  14. Stirring Spoon
2. Material
  1. 9 male Kacang goats, aged 1.2-1.5 years with a body weight of  $\pm 20$ -25 kg
  2. Rice straw
  3. EM-4
  4. Rice Bran
  5. Corn Milling
  6. Fish meal
  7. Minerals/Premixes
  8. Brown sugar
  9. Clean Well Water

### C. Research methods.

This study used an experimental method with a completely randomized design (CRD), consisting of 3 treatments and 3 replications, so that there were 9 experimental units. to provide an overview of statistical analysis of organoleptic tests or the quality of goat ration wafers with different levels, from: texture, color, aroma, mushrooms and to provide an overview of the test/level of palatability of ration wafers, where the provision of ration wafers by cafeteria feeding, to provide an opportunity for livestock to choose their own wafers to be consumed with the assumption that ration wafers that have high palatability will be consumed more.

Wafer feeding treatmentThe goat rations in this study consisted of 3 treatments, namely:  
P0: 100 grams of goat ration wafers without fermented rice straw  
P1: 100 grams of goat ration wafers + 3% fermented rice straw  
P2: 100 grams of goat ration wafers + 5% fermented rice straw.

Each treatment was repeated 3 times, so that 9 experimental units were obtained.



## C. Research Implementation.

### 1. Preparation Stage.

#### 1) Preparation of Goat Pen and Research Goats

The research goat pen that will be used in this study is the goat pen owned by Mr. Wijianto, in Wadio Village SP 3, Nabire Regency. The research goats that will be used in this study are Mr. Wijianto's goat pen, in Wadio Village SP 3, Nabire Regency. g used, are 9 healthy goats, Kacang goat type with male gender, age ranges from 1.2-1.5 years with body weight ranges from 20-25 kg. Goats are placed in individual cages in the form of a stage and equipped with a feed trough for the goat's feed and drink. In the feed trough, there will be 3 partitions for the ration wafer according to the treatments P0, P1 and P2

Before the cages are used for research, all research cages are first sprayed with a disinfectant solution, cleaned of pests to break the chain of harmful microorganisms.

#### 2) Preparation of Rations/Making Goat Ration Wafers

The formulation or preparation of ration wafers is made using the trial and error method, based on the nutritional needs of goats according to Haryanto and Djajanegara (1992).

Table 1. Nutritional Content of Feed Ingredients in Goat Ration Wafers

Feed Ingredients	Nutritional Content
Fermented Rice Straw	Dry matter: 91.59% Organic matter: 74.38% Crude fiber: 19.73% Crude protein: 8.50% Crude fat: 2.85%
Rice Bran	Dry matter: 86% Crude fiber: 10% Crude protein: 12.50% ME : 2.73 kcal/kg TDN : 70% Calcium : 0.05% Phosphorus: 1.55%
Corn Milling	Dry ingredients: 75 – 90 % Crude fiber: 2.0% Crude protein: 8.9% Crude fat: 3.5% Gross energy: 3370-3918 Kcal/kg Niacin: 26.3 mg/kg TDN : 82% Calcium: 0.02% Phosphorus: 3000 IU/kg Pantothenic Acid: 3.9 mg/kg Riboflavin: 1.3 mg/kg Thiamine: 3.6 mg/kg
Fish meal	Crude Protein : 45 % Crude Fiber : 3 % Ash : 30 % Fat : 12 %

	Calcium/Ca : 2.5-7.0% Phosphorus/P : 1.6-4.7%
Mineral	Calcium: 225 gr Phosphor: 90 gr Ferrum (Fe): 20 gr Copper (Cu): 0.3 gr Manganese (Mn): 2 gr Iodine (I) : 0.09 gr Magnesium: 9 mg Zinc (Zn): 9 gr Sodium (Zn) : 30 gr
Salt	Potassium Iodate ( KIO <sub>3</sub> ) : 30 ppm
Brown sugar	Energy: 386 Kcal Protein: 3.0 grams Carbohydrates: 74.08 gr Fat: 10 grams Calcium: 76.06 mg Phosphor: 37 mg iron: 37 mg
EM-4	<i>Lactobacillus casei</i> : 1.5 X 10 <sup>6</sup> cpu/ml <i>Saccharomyces cereviceae</i> : 1.5 X 10 <sup>6</sup> cpu/ml <i>Rhodopseudomonas palustris</i> : 1.5 X 10 <sup>6</sup> cpu/ml

Source: NRC (1988 and 1994), SNI (1996), Medion (2010), N. Suningsih (2019), PT. Songgo Langit Persada (2018).

Table 2. Composition of SWafer Ration Composition for Goat Livestock

No	Feed Ingredients	Amount
1	Rice Bran	37
2	Corn Milling	31
3	Fish meal	25
4	Top mix/mineral	1
5	Salt	1
6	Brown sugar	4.5
7	EM-4	0.5
<b>Total</b>		<b>100</b>
<b>Nutritional Content</b>		
Crude Protein		<b>14%</b>

Source: Research Ration Preparation (2025).

### 3) Making Goat Ration Wafers

The procedure for making goat ration wafers consists of 2 stages, namely:

- 1) Making Rice Straw Fermentation.
- 2) Making Goat Ration Wafers.



Ad. 1) Making Fermented Rice Straw.

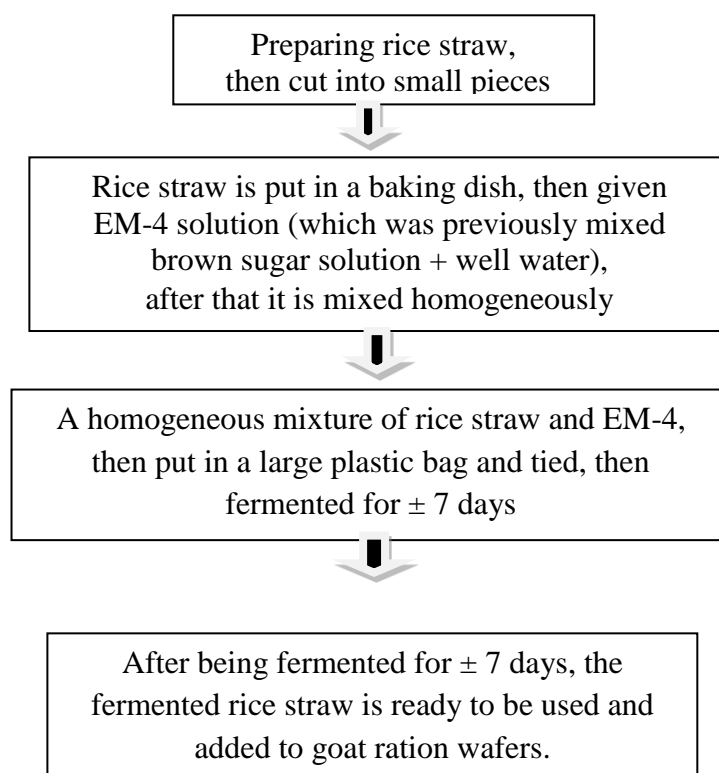
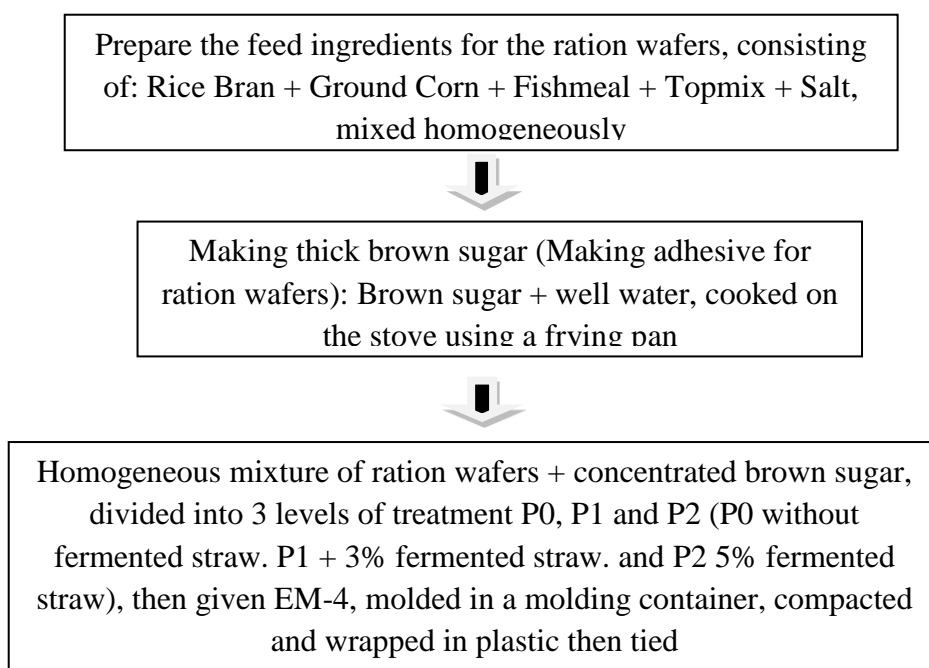


Figure 1. Flowchart for making rice straw fermentation.  
(Source: Rice Straw Fermentation Research, 2025).

Ad 2) Making Goat Ration Wafers.





Goat ration wafers with 3 different treatment levels are ready to be given to research goats.

Figure 2. Flowchart for making goat ration wafers.  
(Source: Research on Making Goat Ration Wafers, 2025).

## 2. Treatment/Research Testing Stage

The treatment stage in this study consists of 2 tests, namely:

### 1) Organoleptic Testing (Testing the Quality of Ration Wafers Based on Observations from Panelists).

Testing of the quality of ration wafers is based on testing by panelists consisting of livestock farmers around Mr. Wijianto's research pen located in Wadio SP3 Village, Nabire Regency. Where the panelists will each provide an assessment through direct testing through their five senses, namely: texture, color, aroma and direct fungus on the 3 (three) treatments P0, P1 and P2 goat ration wafers with different levels.

The panelists will be given an organoleptic test questionnaire on the quality of the ration wafers, after the panelists have tested them using their five senses, namely: texture, color, aroma and mushrooms, then the panelists will fill out the questionnaire that has been distributed.

### 2) Palatability Testing (Testing Level of Livestock Preference for Wafer Rations in Goat Livestock).

The provision of ration wafer treatment to goats according to the treatment in this study, namely P0, P1 and P2, where the provision is given using a cafeteria feeding system, namely by providing all 3 types of ration wafers with different levels to goats with the aim of giving the goats the opportunity to choose the ration wafers themselves to eat with the assumption that ration wafers that have high palatability will be eaten more.

## D. Observation Variables.

The variables observed in this study are:

### 1. Organoleptic Test.

Organoleptic testing is a test of the physical quality of goat ration wafers, including: Texture, Color, Aroma and Mushrooms.

Table 3. Organoleptic Testing Guide for Goat Ration Wafers Based on Different Levels

Assessment Indicators	Score	Criteria	Panelist Assessment Results
Texture	1	Not Lumpy and Moist	
	2	Slightly Lumpy and A Little Damp	
	3	Clumping and Not Damp	
Color	1	Dark Chocolate	





	2	Plain Chocolate	
	3	Fawn	
	1	Very Rotten and Stinging	
Aroma	2	Slightly Stinging Acid	
	3	Sour Fragrance Like Arak	
Presence of Fungi	1	At All Observation Points	
	2	A Little On The Surface	
	3	There isn't any	

Source: Primary Research Data Processing (2025).

## 2. Palatability of Goat Ration Wafers.

The level of palatability or test of the level of preference of goats for goat ration wafers, which is known by calculating the difference between the amount of goat ration wafers given and the remaining goat ration wafers consumed by the goats during the study. Each goat was given three types of ration wafer treatments with different levels of fermented rice straw administration with a cafeteria feeding system.

### F. Data Analysis.

The data obtained from each observation of this study were processed using Microsoft Excel and analyzed using Analysis of Variance (ANOVA). If there is a difference in influence between treatments, then it is continued with Duncan's Multiple Area Test (Steel and Torrie, 1993).

## RESULT AND DISCUSSION

### A. Organoleptic Test of Goat Ration Wafer Color.

Data from the results of organoleptic test analysis on the color of the research goat ration wafers can be seen in table 4 below.

Table 4. Average Organoleptic Test of Ration Wafer Color.

TREATMENT	TEST			AMOUNT	AVERAGE
	1	2	3		
P0	2.4	2.4	2.5	7.3	2.4
P1	2.4	2.5	2.5	7.4	2.5
P2	2.6	2.5	2.6	7.7	2.6

Source: Primary Research Data Processing (2025).



The results of the analysis of variance (ANOVA) showed that the different treatments between P0, P1 and P2 did not have a significant effect ( $P>0.05$ ) on the color of the wafers of the research goat rations.

Based on the results of organoleptic tests on the color of goat ration wafers, from the observations of the panelists, there was no real difference in the color of the goat ration wafers in the study. Table 6 above shows that there is no significant difference in the average value of the analysis results for treatments P0, P1 and P2 with average values of 2.4, 2.5 and 2.6 respectively.

Based on the results of organoleptic test observations on goat ration wafers in this study, there was no significant difference, this indicates that, goat ration wafers, both show almost the same color in each treatment, but numerically, between treatments P0, P1 and P2 have different average color score values, namely: 2.4, 2.5 and 2.6, the difference in the average color value is an indication of a different color, where treatment P0 with an average score value: 2.4, shows a normal brown color with a score = 2, compared to treatment P1 with a yellowish brown color with a score = 3 and treatment P2 with the same yellowish brown color as P1 with a score = 3. Of the three treatments, the results of the organoleptic test, observations of the color from the panelists, the highest score is in treatment P2 with a color score = 3 with an average color score value of: 2.6, meaning that, the color of the goat ration wafer shows the color with the highest score of 3, is the treatment of giving ration wafers added with 5% fermented rice straw.

Different colors between treatments P0, P1 and P2 goat ration wafers, from the color of P0 with a score = 2, which is a normal brown color, treatment P1 with a score = 3, which is a yellowish brown color and treatment P2 with a score = 3, which is a yellowish brown color, this indicates that the treatment of giving different goat ration wafers produces different colors between treatments P0, P1 and P2. The color change in the goat ration wafer is thought to follow the treatment of this study, namely where the P0 treatment was given ration wafers alone without the addition of fermented rice straw, while for Treatments P1 and P2, it is a ration wafer treatment that is added with 3% and 5% fermented rice straw. The resulting color is different between treatments numerically showing different numbers, this is thought to be that the treatment that was added with fermented rice straw has a yellowish brown color following the color of fermented rice straw, which is yellowish, so that the color produced from the two treatments, namely P1 and P2 is a yellowish brown color while the P0 treatment has a normal brown color, following the color of the ingredients of the ration wafer, which is a normal brown color.

### B. Organoleptic Test of Goat Ration Wafer Texture.

Data from the results of the organoleptic test analysis of the texture of the goat ration wafers in the research can be seen in table 5 below.

Table 5. Average Organoleptic Test of Ration Wafer Texture.

TREATMENT	TEST			AMOUNT	AVERAGE
	1	2	3		
P0	2.4	2.4	2.5	7.3	2.43



P1	2.4	2.5	2.5	7.4	2.47
P2	2.6	2.5	2.6	7.7	2.57

Source: Primary Research Data Processing (2025).

The results of the analysis of variance (ANOVA) showed that the different treatments between P0, P1 and P2 did not have a significant effect ( $P > 0.05$ ) on the texture of the wafers in the research goat rations.

The results of organoleptic test observations on the texture of goat ration wafers showed no significant effect between treatments, but between treatments P0, P1 and P2 the average score values were different, namely P0 with an average score value: 2.43, P1 average score value: 2.47 and P2 average score value: 2.57. This difference in score is in accordance with the results of organoleptic test observations, where there is a numerical difference in texture from the average texture value between treatments P0, P1 and P2.

Based on the results of organoleptic test observations on the texture of goat ration wafers, treatment P2 showed a score = 3, the highest score for texture in this research treatment, where the texture is lumpy and not moist, meaning the texture is compact or unified and not moist, while for the texture P0, it showed a score = 2, namely the texture is slightly lumpy and slightly moist and for the results of organoleptic test observations P1, it showed a score = 3, the same as in treatment P2, namely the texture is lumpy and not moist, the difference in texture numerically in this treatment, this shows the characteristics of the pattern of giving ration wafers alone and ration wafers added with 3% and 5% fermented rice straw, where for treatment P0, namely the treatment of ration wafers alone without giving fermented rice straw, the texture is slightly lumpy and slightly moist, this is suspected even though in the process of making the ration it is given concentrated brown sugar as an adhesive for the ration wafer, the adhesive power is not yet maximal, as maximal as the adhesive power of treatments P1 and P2, where in addition to giving ration wafers, fermented rice straw is also given in each treatment P1 and P2, with the presence of Fermented rice straw helps to stick the ration wafers and straw because the fermented rice straw binds the ration ingredients and is not moist so that the ration wafers that are added with fermented rice straw result in clumps and are not moist.

### C. Organoleptic Test of Aroma/Smell of Research Goat Ration Wafers.

Data from the results of organoleptic test analysis on the aroma/smell of research goat ration wafers can be seen in table 6 below.

Table 6. Average Organoleptic Test for Aroma/Smell of Ration Wafers.

TREATMENT	TEST			AMOUNT	AVERAGE
	1	2	3		
P0	2.6	2.5	2.6	7.7	2.56
P1	2.7	2.6	2.5	7.8	2.60
P2	2.6	2.6	2.7	7.9	2.63



Source: Primary Research Data Processing (2025).

The results of the analysis of variance (ANOVA) showed that the different treatments between P0, P1 and P2 did not have a significant effect ( $P > 0.05$ ) on the aroma/smell of the goat ration wafers in the study.

The results of organoleptic test observations on the aroma/smell of goat ration wafers showed no real effect between treatments, this is shown, where the P0 treatment has an average value of 2.56, the P1 treatment has an average value of 2.60 and the P2 treatment has an average value of 2.63 which is not too different, and from the three treatments of goat ration wafers, the results of organoleptic observations also showed the same score, namely 3 from all treatments, both P0, P1 and P2, this is thought to be because the ingredients of the ration wafers use natural ingredients that do not have a pungent aroma, although in the preparation of this ration wafer using fish flour, but in the manufacture of ration wafers for all treatments in this study were given EM-4, so that the aroma produced is the same as the aroma of EM-4, namely a sour fragrance, like arak, the provision of EM-4 in the manufacture of ration wafers in addition to being intended to increase the nutritional value of the feed ingredients of the goat ration wafer ration, is also to improve the goat's digestive system and also to preserve the ration wafer goats that are made to last longer or be preserved when stored before being given to research goats.

#### D. Organoleptic Test of the Presence of Fungus in Goat Ration Wafers Research.

Data from the results of organoleptic test analysis on the presence of fungi in goat ration wafers for research can be seen in table 7 below.

Table 7. Average Organoleptic Test for the Presence of Fungus in Ration Wafers.

TREATMENT	TEST			AMOUNT	AVERAGE
	1	2	3		
P0	2.6	2.6	2.6	7.8	2.60
P1	2.6	2.6	2.7	7.9	2.63
P2	2.6	2.6	2.7	7.9	2.63

Primary Data Processing Sources for Research (2025).

The results of the analysis of variance (ANOVA) showed that the different treatments between P0, P1 and P2 had no significant effect ( $P > 0.05$ ) on the presence of fungi in the goat ration wafers in the study.

The results of organoleptic test observations on the presence of fungi on goat ration wafers showed no significant effect between treatments, where treatment P0 had an average value of: 2.60, treatment P1 had an average value of: 2.63 and treatment P2 had the same average value as P1, namely: 2.63. The results of organoleptic test observations,



treatment P0 had a score = 2, which is a little fungus on the surface, while for treatments P1 and P2, which had the same average value, had the same score, namely 3, there was no fungus on the goat ration wafers. The difference in scores between treatments P0 and P1, P2, This is suspected because the goat ration wafers in treatment P0 which were only given ration wafers without fermented rice straw, are made of natural materials that are easily damaged, but because of the presence of EM-4, it can still inhibit the growth of fungi, so that there is only a little fungus on the surface of the goat ration wafer, while for P1 and P2 which have the same score, namely: 3, there is no fungus on the ration wafer, this is suspected, in addition to EM-4 which is added in the process of making goat ration wafers, fermented rice straw is also added which is also in the fermentation process using EM-4, so that the ration wafer is more durable or there is no fungus on the ration wafer.

### E. Palatability Level of Goat Ration Wafer Research.

The palatability of goat ration wafers can be determined by calculating the difference between the amount of feed given and the remaining feed consumed by the goats during the study with the cafeteria feeding system. Each livestock was given 3 (three) types of ration wafers so that the livestock could freely choose the three types of ration wafers.

Data from the analysis of the average consumption of goat ration wafers in the research can be seen in table 8 below.

Table 8. Average Consumption of Goat Ration Wafers.

Treatment	Repeat (gr/tail)			Total	Average
	1	2	3		
P0	0.700	0.800	0.700	2,200	0.733
P1	0.800	0.900	0.800	2,500	0.833
P2	0.900	0.900	0.900	2,700	0.900

Source: Primary Research Data Processing (2025).

The results of the analysis of variance (ANOVA) showed that the different treatments between P0, P1 and P2 showed significantly different results ( $P < 0.05$ ) on the palatability of the goat ration wafers in the study.

Of the three treatments P0, P1 and P2, the average value of each ration consumption was: 0.733 gr/head, 0.833 gr/head and 0.900 gr/head. The highest average value of goat ration consumption in the study was in treatment P2, followed by P1 and finally by P0. High consumption of ration wafers was in treatment P2, this is thought to be because the wafer ration provision system is a cafeteria feeding system, where each livestock is given 3 (three) types of ration wafers so that the livestock can freely choose the three types of ration wafers, also The high palatability or level of preference of goats for the three types of ration wafers they consume, is influenced by, among other things, the aroma or smell, color of the ration wafer, texture and presence of fungus or what is called the organoleptic test of the ration wafer in this study, where according to Tillman et al.,



(1998), which states that the palatability of feed is influenced by several factors including the taste, shape and smell of the feed itself, followed by Wallace and Newbold (1992), stated that the amount of feed consumption is influenced by several factors, namely palatability, fiber digestibility, feed flow rate, protein status, physical and chemical properties of feed, production, live weight and development of the digestive tract. According to Parakkasi (1999), Palatability is a description of the nature of feed ingredients (physical and chemical) which is reflected by its organoleptic such as appearance, smell, taste (bland, salty, sweet, bitter), texture and temperature so as to stimulate and attract livestock to consume it.

The cafeteria feeding system, in this case research goats, is ruminant livestock, where olfactory stimulation (smell/aroma) is very important for ruminant livestock to find and choose food. Likewise, taste stimulation (taste) will determine whether the feed will be consumed by livestock or not (M. Daud, 2017), this is in line with the results of organoleptic tests on the three treatments of ration wafer administration which have scores between 2 to 3 in treatments P0, P1 and P3. The significantly different consumption of ration wafers in this study, shows that the research goats consumed more ration wafers on the ration wafers they liked and ate more than the wafers they didn't like, this can be seen from the amount of ration consumed by the research goats minus the remaining ration wafers they consumed, which can be seen from the average value of goat ration wafer consumption in this study, where the highest consumption of ration wafers was in treatment P2, then P1 and finally in treatment P0.

## CONCLUSION

From the results of the research that has been conducted, the following conclusions can be drawn:

1. The results of the organoleptic test of the provision of goat ration wafers did not have a significant effect ( $P > 0.05$ ) on Color, Texture, Aroma/Smell and the Presence of Fungus in this study.
2. The palatability level of goat ration wafers had a significant effect ( $P < 0.05$ ) on the consumption of goat ration wafers in the study.

The suggestions given from the results of this study are as follows:

1. It is recommended to give ration wafers to goats, namely ration wafers that have added 5% fermented rice straw.
2. It is necessary to conduct a proximate test on goat ration wafers.
3. There is further research, on different aspects, for example on livestock performance and other aspects.

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