



THE EFFECT OF MOCAF FLOUR SUBSTITUTION ON THE QUALITY OF SOFT ROLL BREAD WITH THE TAIWANESE BREAD METHOD

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ABSTRACT:

Improving a country's self-sufficiency in food production is an important challenge. This study aims to explore the potential of utilizing local resources, such as cassava, as a substitute for imported wheat flour by maximizing its use through the production of Modified Cassava Flour (mocaf). Mocaf possesses similar characteristics to wheat flour, including color, fiber content, and strong water-binding capacity. The experimental method was employed to determine the optimal formula using mocaf at 10%, 20%, and 30% substitution levels. Organoleptic tests were conducted with expert panelists to evaluate various aspects. The results showed that the formula with 10% mocaf exhibited superiority in many aspects such as crust color, porosity, aroma and chewiness. Similarly, the formula containing 20% mocaf excelled in terms of crust texture and bread crunchiness. Regarding volume expansion during the baking process, overall taste perception, and crumb texture attributes; both 10% and 20% substitution levels yielded comparable results. Furthermore, both percentages (10% and 30%) demonstrated similar scores for internal crumb color aspect evaluation. In conclusion, enabling soft roll bread prepared using Taiwanese bread method with a substitution level of 10% mocaf attained the highest rating across almost all evaluated aspects, making it the best formulation for producing soft roll bread using Taiwanese bread method.

Keywords: Soft Roll Bread, Taiwanese Bread, Mocaf

INTRODUCTION

Bread is food made from material main flour flour, yeast, salt, and water. As well as materials other additives such as, sugar, fat, milk and so forth (Syarbini, 2016). Along with the development of the past processed bread era only consists from dough main course, now processed bread already Lots experience development from addition material until type the resulting bread dough (Cauvain & Young, 2007). A number of the types of bread that are known and loved by the people of Indonesia are white bread, sweet bread, *soft roll* bread, and *lean dough type bread* (Cahyana & Artanti, 2015).

Soft roll bread is kind of bread with dough that has characteristics color brown bread crust golden, thin bread crust, very soft texture, has somewhat taste sweet, fine breadcrumbs as well as small and uniform bread pores (Olakanmi et al., 2023). The principle of bread with dough *soft roll*, using sugar, fat and eggs with same percentage i.e. 14% calculated based on the total flour used (Cauvain & Young, 2007). The type of soft roll bread used in study This are dinner rolls.

Taiwanese bread method is Bread making process method with add *pre-gelatinization starch* or *Boiled Dough* at start stirring with objective For get results bakery products with color more *crumbs* Soft and has maximum product volume (Fu, 2008) Where method This use three type dough in processing that is *pre-dough*, *sponge dough*, and *dough*. However, method This seldom used bakery industry though produce more bread Good compared method conventional in the bakery world.

Basic ingredients of bread are flour wheat Where need flour Indonesian state flour obtained with method import because incompatibility climate and geography of our country for produce wheat. Required suber food vegetable that can utilize for replace role flour wheat specifically in bread processing. In case This is soft roll bread. One type tubers that can grow with well in our country is Cassava or cassava (*Manihot esculenta Crantz*) is material

food main third in Indonesia after rice and corn (Afifah, 2023). matter This because cassava No need treatment special moment planting like material tree other. According to data at the BPS (Central Statistics Agency) the number productivity cassava or cassava based on weight per area land in Indonesia in 2013 productivity the cassava as much as 224.60 quintals / ha produced fresh cassava as much as 23 million tons and in 2015 as many as 229.51 quintals / ha where produce amount fresh cassava as much as 21 million tons so it is very suitable its use For replace role wheat seen from facet productivity in our country.

Mocaf or also called mocaf (*Modified Casava Flour*) is product flour from cassava or cassava (*Manihot esculenta Crantz*) processed use principle modification cassava cells in a manner fermentation (Githunguri et al., 2017) mocaf own similar characteristics with flour wheat Good from facet color, texture and power absorb almost water similar. So that flour mocaf projected can become material substitution in use flour flour. Flour mocaf own difference content basic nutrition from flour flour. The difference is flour mocaf No contain gluten substance, substance that only found in flour flour. Plus, flour mocaf own little protein (1.2 grams) in comparison flour flour. However, flour mocaf richer in carbohydrates compared to with flour flour.

Soft roll bread with method *Taiwanese bread* chosen because a number of reason namely, soft roll bread is quite popular among society and own enough characteristics stand out Good from side texture and taste (Zhang, 2003) Zhang, Hua-Xiao. Plus *soft roll* bread made use method *Taiwanese bread* that will maximize volume and more flavor gentle compared method other bakery although There is treatment substitution flour mocaf in processing.

See potency from study above, researcher thesis This focus on research with use substitution flour mocaf in *soft roll* bakery products with method *Taiwanese bread*

analyzed on power accept consumer. Study this is also relevant with productivity and consumption wheat and cassava in Indonesia. In order reduce use flour flour and raise use material food local specifically cassava in form flour mocaf. So based the description above on research thesis This will analyze Power accept consumer substitution flour mocaf on *soft roll bread* with method *Taiwanese bread*.

RESEARCH METHODS

Study making *soft rolls* with method *Taiwanese bread* substitution flour mocaf done in the laboratory *Pastry Culinary Study Program*, Faculty of Engineering, Jakarta State University with method experiment, in analyze *soft roll bread* results with use method Substituted *Taiwanese bread* use flour mocaf (*Modified Cassava Flour*) for each dough as much as 10%, 20%, and 30%. Then next by organoleptic test against 5 panelists expert that is lecturer Culinary Study Program, Faculty of Engineering, Jakarta State University.

On research This used method making *Taiwanese bread* bread using three types dough namely, *pre dough/boiled dough*, *Sponge dough*, and *dough*. because method This use three type different dough then each has difference in the process of processing, on the dough *pre dough/boiled dough* Dough This made with method mix boiling water and flour with ratio 1:2 inside later *mixers* closed use plastic and stored at 5 °C for 1 day (Yamauchi et al., 2014). Dough

This use flour as much as 10% of the total flour used.

Then dough next thing to do made in method *Taiwanese bread* is *Spongedough* or dough baboon is the same dough big flour and water, all baker's yeast and mineral salts as well substance emulsifier mixed become baboon (Ikhrum & Cahyana, n.d.). Fermented baboons for 3-6 hours, then mixed with material other (Syukur et al., 2009). *Sponges* function as loaf of bread. Before dough made especially formerly made *sponges* as step early (Mann et al., 2009). *Sponges* more dense and more cold compared *ferments*. The sponge is left alone few hours and even last night. In general, sponges consist from flour and liquid yeast. Mixture flour and liquid almost same (Jago, 1889)

RESULTS AND DISCUSSION

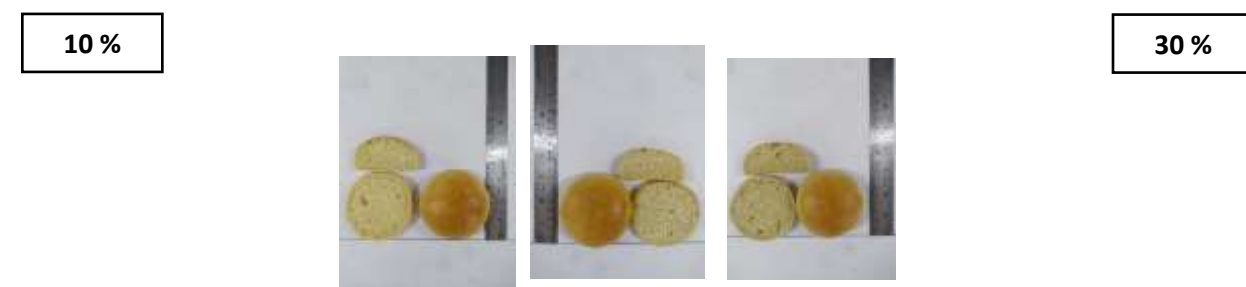
After through the experimental process for determine the best formula *soft roll bread* with method *Taiwanese bread* substitution flour mocaf (Tsai & Liu, 2022). Furthermore, product will organoleptic test was carried out to a number of aspect aspect external (volume, roasting average, color skin, character skin, and crust of bread) and internal aspects (crumbs or pores, color part in taste, aroma, texture crumb and quality mastication). To panelists expert that is lecturer in the Culinary Study Program, Faculty of Engineering, Jakarta State University. Get it results as following.

Table 2. Formula Soft Roll method *Taiwanese bread* Substitution Flour Mocaf

Material	Trial 4					
	Substitution flour mocaf					
	10%		20%		30%	
	Grams	%	Grams	%	Grams	%
<i>Pre-dough</i>						
Flour Wheat	50	10	50	10	50	10
Hot water	100	200	50	20	50	20
<i>Sponge Dough</i>						
Flour Wheat	270	54	240	48	210	42
Flour Mocaf	30	6	60	12	90	18

Instant Yeast	10	2	10	2	10	2
Sugar	10	2	10	2	10	2
Cold Water	180	60	180	60	180	60
dough						
Flour Wheat	180	36	160	32	140	28
Flour Mocaf	20	4	40	8	60	12
Bread Improver	1	0.2	1	0.2	1	0.2
Sugar	60	12	60	12	60	12
Powdered Milk	30	6	30	6	30	6
Salt	7.5	1.5	7.5	1.5	7.5	1.5
Egg	70	14	70	14	70	14
Margarine	70	14	70	14	70	14
Cold Water	20	4	20	4	20	4

Figure 4. *Soft Roll* Results method *Taiwanese bread* Substitution Flour Mocaf



1. Volume

Table 3. The Average Value of the Volume Aspect

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	n	%	n	%
Big Bread Volume	5	3	60	3	60	1	20
Medium Bread Volume	4	2	40	2	40	1	20
Very Large Bread Volume	3	0	0	0	0	1	20
Small Bread Volume	2	0	0	0	0	2	40
Very Small Bread Volume	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average			4.6		4.6		3.2

Based on the data validation test results performed to 5 panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect that volume on treatment 10% substitution. Three panelists (60%) chose the volume of *soft roll bread* large and two panelists (40%) stated the volume of *soft roll*

bread medium. On treatment 20% substitution. Three panelists (60%) chose the volume of *soft roll bread* large and two panelists (40%) stated the volume of *soft roll* bread medium. On treatment 30% substitution. One Panelist (20%) chose a very large volume of soft roll bread, one Panelists (20%) chose the volume of *soft roll* bread big, one Panelists (20%) chose the volume

of *soft roll* bread medium, and two panelists (40%) chose the volume of *soft roll* bread small. Can concluded *soft roll* results with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% and 20 % have average

the highest 4.6 is in the range large volume category approach medium.

1. Baking Average

Table 4. Average Aspect Value of Roasting Average

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	n	%	n	%
Even Bake Color	5	3	60	3	60	1	20
Slightly Even Baking Color	4	2	40	2	40	4	80
Very Even Baking Color	3	0	0	0	0	0	0
Uneven Baking Color	2	0	0	0	0	0	0
Very Uneven Baking Color	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		4.6		4.6		4.2	

Validation test data obtained of five panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the flat aspect of roasting that on treatment 10% substitution. Three panelists (60%) chose the average color of *soft roll* bread baking was average and two panelists (40%) stated flat color *soft roll* toasting bread rather flat. On treatment 20% substitution. Three panelists (60%) chose the average color of toasting *soft roll* bread was average and two panelists (40%) stated that the average color of toasting *soft roll* bread was

average rather flat. On treatment 30% substitution. One panelist (20%) chose the average *soft roll* bread toasting, four Panelists (80%) chose the average *soft roll* bread toasting rather flat. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% and 20 % have average the highest 4.6 is in the range category the color of the average roasting is close to rather flat.

2. Skin Color

Table 5. Average Value of Skin Color Aspect

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	n	%	n	%
Chocolate Golden	5	5	100	4	80	2	40
Light Brown	4	0	0	1	20	3	60
Chocolate	3	0	0	0	0	0	0
Dark Brown	2	0	0	0	0	0	0
Chocolate Yellowish	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		5		4.8		4.4	

Five panelists tested expert will give results the result of *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect color skin that on treatment 10% substitution. Five panelists (100%) voted color *soft roll* skin chocolate golden. On treatment 20% substitution. Four panelists (80%) chose color *soft roll* skin chocolate golden and one panelists (20%) stated color *soft roll* skin chocolate young. On treatment 30% substitution. Two Panelists (40%) voted color

3. Character Skin

Aspect Evaluation	Score	Aspect Average Value Character Skin					
		Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	n	%	n	%
Character Skin Gentle	5	4	80	4	80	0	0
Character Fairly Soft Skin	4	0	0	1	20	5	100
Character Very Soft Skin	3	1	20	0	0	0	0
Character Not Soft Skin	2	0	0	0	0	0	0
Character Very Not Soft Skin	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		4.6		4.8		4	

Aspect character skin validation test is carried out to five panelists expert and earn the result of *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect skin character that on treatment 10% substitution. One panelist (20%) chose character *soft roll* bread skin is very soft, and four panelists (80%) chose character *soft roll* skin bread t soft. On treatment 20% substitution. Four panelists

soft roll skin chocolate golden, and three Panelists (60%) voted color *soft roll* skin chocolate young. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% have average the highest 5 is in range category color skin chocolate golden.

(80%) chose character *soft roll* skin soft and one panelists (20%) stated character *soft roll* skin rather soft. On treatment 30% substitution. Five Panelists (100%) voted character *soft roll* skin rather soft. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 20% have average the highest of 4.8 is in the range category character skin gentle approach rather soft.

4. Bread Crust

Table 7. Average Bread Crust Aspect Value							
Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		N	%	n	%	n	%
Thin Bread Crust	5	4	80	5	100	2	40
Very Thin Bread Crust	4	1	20	0	0	2	40
Slightly Thick Bread Crust	3	0	0	0	0	1	20
Thick Bread Crust	2	0	0	0	0	0	0
Very Thick Bread Crust	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100

Average	4.8	5	4.2
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Validation test next thing to do to five panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect bread crust that on treatment 10% substitution. One panelist (20%) chose the *soft roll* bread crust is very thin, and four panelists (80%) chose thin *soft roll* bread crust. On treatment 20% substitution. Five panelists (100%) voted crust thin *soft roll* skin. On treatment 30% substitution. Two Panelists (40%) voted The

soft roll bread crust is very thin, two Panelists (40%) voted for thin *soft roll* crust, and two Panelists (20%) voted The *soft roll* bread crust is very thin thick. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 20% have average the highest 5 is in range category thin bread crust.

5. Pores

Table 8. Average Value of Pores Aspect

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		N	%	n	%	n	%
Small Pores	5	2	40	1	20	0	0
Very Small Pores	4	1	20	0	0	0	0
Moderate Pores	3	2	40	4	80	5	100
Large Pores	2	0	0	0	0	0	0
Very Large Pores	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		4		3.4		3	

After That done validation carried out to five panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect pores that on treatment substitution 10%. One panelist (20%) chose the pores of *soft roll* bread are very small, two panelists (40%) chose *soft roll* bread pores small and 2 panelists (40%) chose *soft roll* bread pores medium. On treatment 20% substitution. One panelist (80%) chose *soft roll* bread pores small, and four

panelists (80%) chose *soft roll* bread pores medium. On treatment 30% substitution. Five Panelists (100%) voted pores *soft rolls* medium. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% have average the highest 4 is in range category pores currently approach small.

6. Inner Color

Table 9. The Average Value of the Inner Color Aspect

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf		
		10 %	20 %	30%

	n	%	n	%	n	%	
White	5	1	20	0	0	1	20
Beige	4	3	60	3	60	2	40
Yellowish White	3	0	0	2	40	2	40
Light yellow	2	1	20	0	0	0	0
Yellow	1	0	0	0	0	0	0
Amount (N)	5	100	5	100	5	100	100
Average		3.8		3.6		3.8	

Based on the data validation test results performed to 5 panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect color part in that on treatment 10% substitution. One panelist (20%) stated color part in *soft roll* bread white, three panelists (60%) chose color part in *soft roll* bread beige, and one panelists (20%) stated color part in *soft roll* bread yellow young. On treatment 20% substitution. Three panelists (60%) chose color part in *soft roll* bread beige, and two panelists (40%) stated color part in *soft roll* bread

white yellowish. On treatment 30% substitution. 1 Panelist (20%) voted color part in *soft roll* bread white, two panelists (40%) voted color part in *soft roll* bread beige. and two Panelists (40%) voted color part in *soft roll* bread white yellowish. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% and 30 % have average the highest of 3.8 is in the range category color part in beige approach white yellowish.

7. Mocaf flavor

Table 10. The Average Value of the Taste Aspect

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	n	%	n	%
Really Doesn't Feel Mocaf	5	0	0	0	0	0	0
Doesn't feel Mocaf	4	4	80	4	80	1	20
Feels a bit Mocaf	3	1	20	1	20	3	60
Feels Mocaf	2	0	0	0	0	1	20
Very Mocaf Feels	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average			3.8		3.8		3

Based on the data validation test results performed to 5 panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aspect of taste that on treatment 10% substitution. 4 panelists (80%) stated the taste of *soft roll* bread No feels mocaf, and 1 panelist (20%) chose the taste of *soft roll* bread rather feels mocaf. On treatment 20% substitution. 4 panelists (80%) stated the taste of *soft roll* bread No feels mocaf, and 1 panelist

(20%) chose the taste of *soft roll* bread rather feels mocaf. On treatment 30% substitution. 1 Panelists (20%) chose the *soft roll* bread flavor No feels mocaf, 3 Panelists (60%) chose the taste of *soft roll* bread rather feels mocaf. and 1 panelist (20%) chose the taste of *soft roll* bread feels mocaf. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% and 20 % have average the highest of 3.8 is in the range No feels mocaf approach rather feels mocaf.

8. The smell of Mocaf

Table 11. Average Value of Aroma Aspect

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	n	%	n	%
Very Flavorless Mocaf	5	1	20	0	0	0	0
Not Flavorful Mocaf	4	3	60	3	60	1	20
Slightly Flavorful Mocaf	3	1	20	2	40	3	60
flavorful Mocaf	2	0	0	0	0	1	20
Very Flavorful Mocaf	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		4		3.6		3	

Results of validation tests performed to five panelists expert next. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. On the aroma aspect that on the treatment 10% substitution. One panelists (20%) stated the aroma of *soft roll* bread No flavorful mocaf, three panelists (60%) chose the aroma of *soft roll* bread No flavorful mocaf, and one panelists (20%) said *the soft roll* bread smelled a bit flavorful mocaf. On treatment 20% substitution. Three panelists (60%) stated the aroma of *soft roll* bread No flavorful mocaf, and two panelists

(40%) chose the aroma of *soft roll* bread rather flavorful mocaf. On treatment 30% substitution. One panelist (20%) chose the aroma of *soft roll* bread No flavorful mocaf, three panelists (60%) chose the aroma of *soft roll* bread rather flavorful mocaf, and one Panelists (20%) chose the aroma of *soft roll* bread flavorful mocaf. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% have average the highest 4 is in range No flavorful mocaf.

9. Texture crumb

Aspect Average Value Texture Crumb

Aspect Evaluation	Score	Substitution Taiwanese Soft Roll Method Mocaf					
		10 %		20 %		30%	
		n	%	N	%	n	%
Texture Fine	5	0	0	0	0	0	0
Very Smooth Texture	4	5	100	5	100	2	40
Slightly Smooth Texture	3	0	0	0	0	3	60
Not Smooth Texture	2	0	0	0	0	0	0
Very Unsmooth Texture	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		5		5		3.8	

Validation test performed furthermore i.e. in aspect texture crumb to 5 panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. on texture crumb that on

treatment 10% substitution. Five panelists (100%) stated texture very fine *soft roll* bread crumbs. On treatment 20% substitution. Five panelists (100%) stated texture very fine *soft roll* bread crumbs. On treatment 30%

substitution. Two Panelists (40%) voted texture very fine *soft roll* breadcrumbs, and three Panelists (60%) voted texture *soft roll* breadcrumbs rather smooth. Can concluded results *soft rolls* with method *Taiwanese bread*

with substitution flour mocaf with percentage of 10% and 20% have average the highest 5 is in the very smooth range.

10. Quality Mastication

Aspect Evaluation		Substitution Taiwanese Soft Roll Method Mocaf					
Score		10 %		20 %		30%	
		n	%	n	%	n	%
The texture of the bread is very non-sticky	5	2	40	0	0	0	0
Non Sticky Bread Texture	4	3	60	4	80	3	60
Slightly Sticky Bread Texture	3	0	0	1	20	2	40
Sticky Bread Texture	2	0	0	0	0	0	0
Very Sticky Bread Texture	1	0	0	0	0	0	0
Amount (N)		5	100	5	100	5	100
Average		4.4		3.8		3.6	

Based on the data validation test results performed to 5 panelists expert. *soft roll* bread with method *Taiwanese bread* with substitution flour mocaf with percentage of 10%, 20% and 30%. on quality mastication that on treatment 10% substitution. Two panelists (40%) stated quality the chewing of *soft roll* bread is not very good sticky, and three Panelists (60%) voted quality *soft roll* chewing No sticky. On treatment 20% substitution. Four panelists (80%) stated quality *soft roll* chewing No sticky. And one panelists (20%) stated quality mastication *soft roll* bread rather sticky. On treatment 30% substitution. Three panelists (60%) chose quality *soft roll* chewing No sticky, and two Panelists (40%) voted quality *soft roll* chewing rather sticky. Can concluded results *soft rolls* with method *Taiwanese bread* with substitution flour mocaf with percentage of 10% have average the highest 4.4 is in the range No sticky very close not sticky.

On the aspect external aspect First ie volumes, product that has mark highest is product with percentage flour mocaf 10% and 20% with an average of 4.6 which is in the category big approach medium. Then flat aspect roasting, product that has mark highest is product with percentage flour mocaf 10% and

20% with an average of 4.6 which is in the category the color of the average roasting is close to rather flat. Aspect color skin, product that has mark highest is product with percentage flour mocaf 10% with the highest average of 5 which is in the range chocolate golden. Next aspect character skin, product that has mark highest is product with percentage flour mocaf 20% with an average of 4.8 entered into the category soft bread crust. Finally on the aspect external that is aspect bread crust, product that has mark highest is product with percentage flour mocaf 20% where the average is obtained of 5 entered into the category thin bread crust.

Next on the internal aspect of *soft roll* bread method *Taiwanese Bread* substitution flour mocaf. The first aspect is pores, product with percentage of 10% is product best with yields an average of 4 that includes into the category pore currently approach small. Aspect color part in, product with percentage of 10% and 30% is product best with resulting in an average of 3.8 incoming into the category beige approach white yellowish. Aspects of the taste of mocaf on bread, most preferred product percentage of 10% and 20% with an average of 3.8 entered into the mocaf flavor range No feels approach rather feels mocaf. Furthermore

aspect of mocaf aroma, percentage the best product is 10% with an average of 4 that is included into the category No scented mocaf. Then aspect texture crumb, product with percentage of 10% and 20% have mark highest with an average of 5 entries into the range character crumb soft. Final aspect quality mastication, product with the percentage of 10% has the best average with a rating of 4.4 which is included into the category No sticky very close not sticky. With thereby can concluded that product with 10% substitution is recommended percentage For utilization flour local flour mocaf For reduce use flour import flour flour.

CONCLUSION

Based on organoleptic test results of *soft roll* bread method *Taiwanese Bread* substitution flour mocaf on internal and external aspects carried out to panelists expert namely the Lecturer in the Catering Study Program at the State University of Jakarta for product with percentage substitution 10%, 20%, and 30% produce. Product *soft roll* bread method *Taiwanese Bread* substitution flour mocaf with percentage of 10 % is best Because superior from Lots aspect. because use with percentage This No too change characteristic typical of bread *soft roll* with method *Taiwanese bread*.

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