

## 7. LAMPIRAN

### 7.1. Foto Tepung Jali dan *Flakes* Jali

Waktu	Tepung	<i>Flakes</i>
0		
6		
12		

18



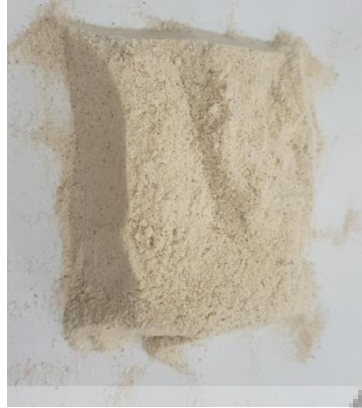
24



30



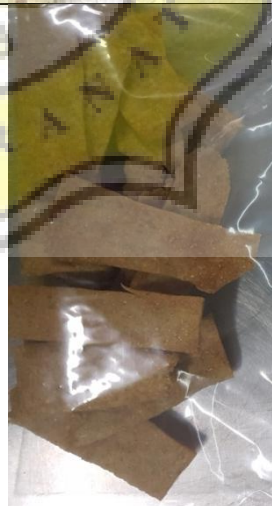
36



42

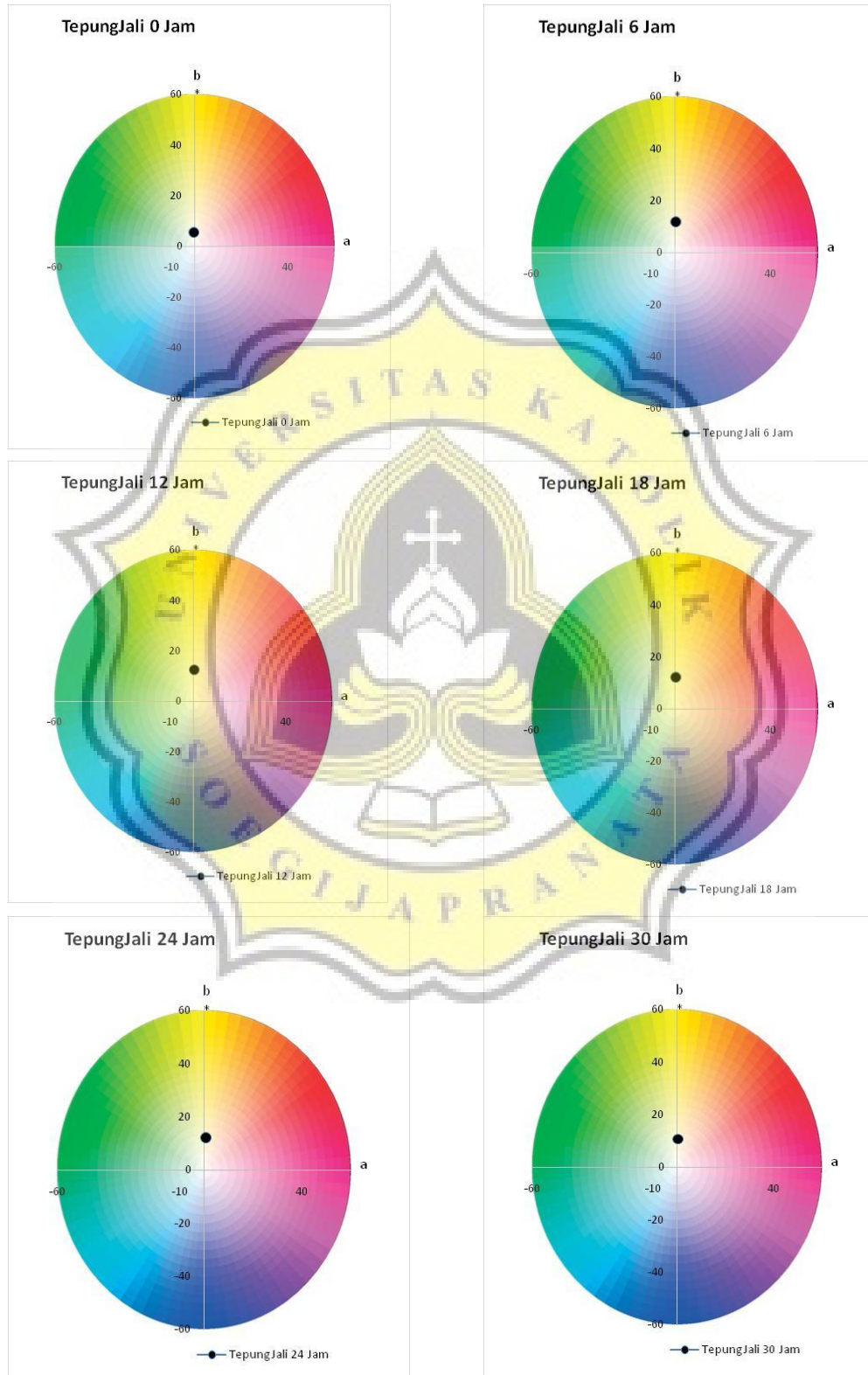


48

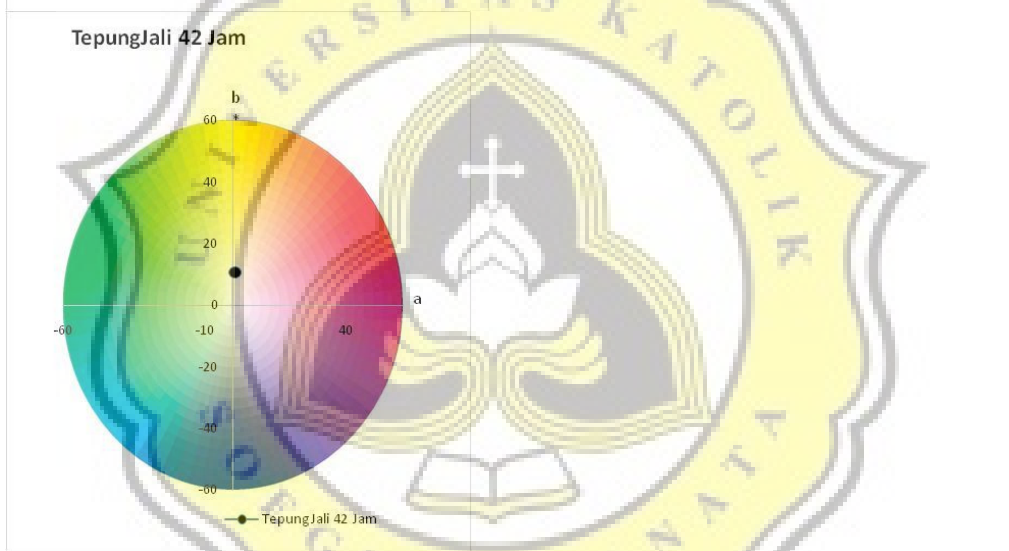
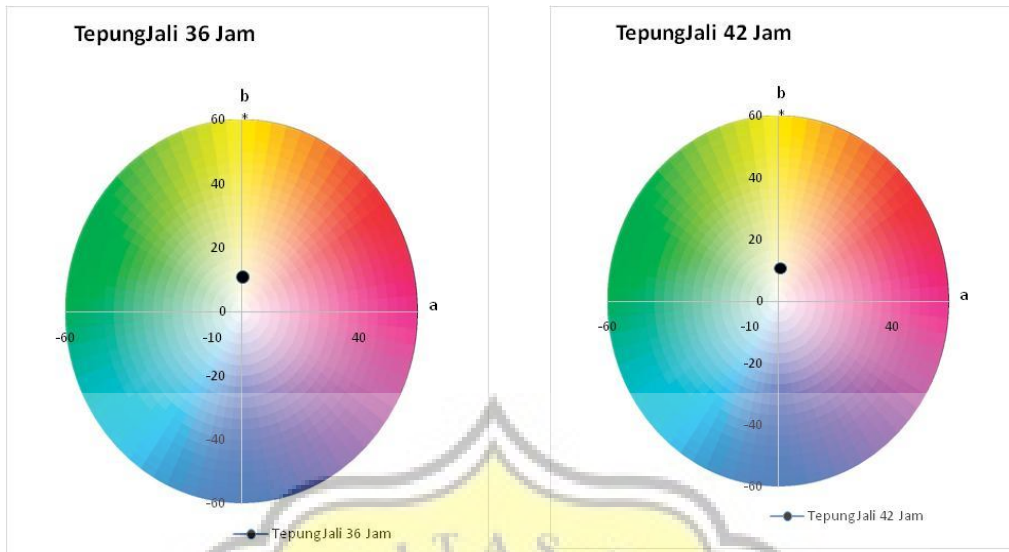


## 7.2. Grafik CIE $L^*a^*b^*$ Color Space

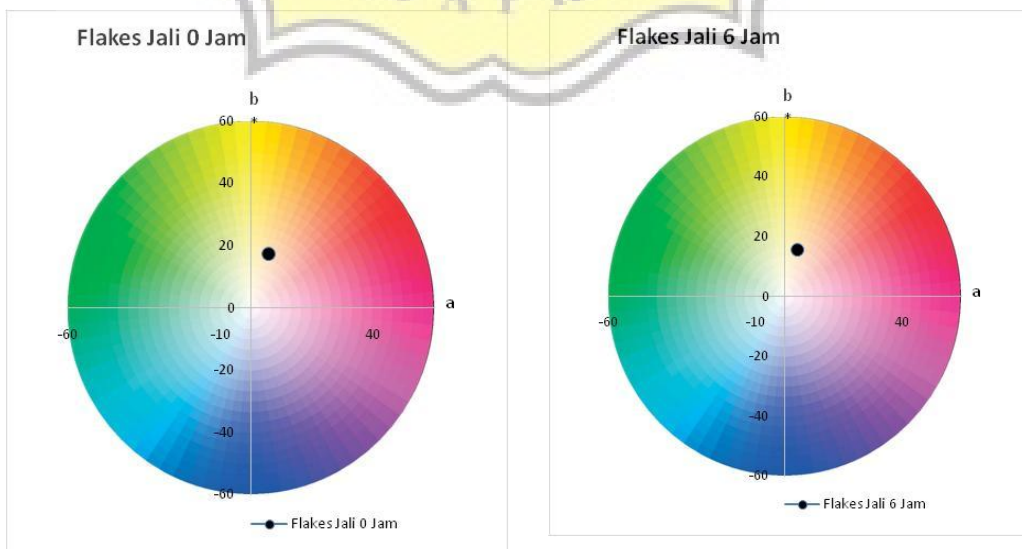
### 7.2.1. Grafik CIE $L^*a^*b^*$ Color Space Warna Tepung Jali

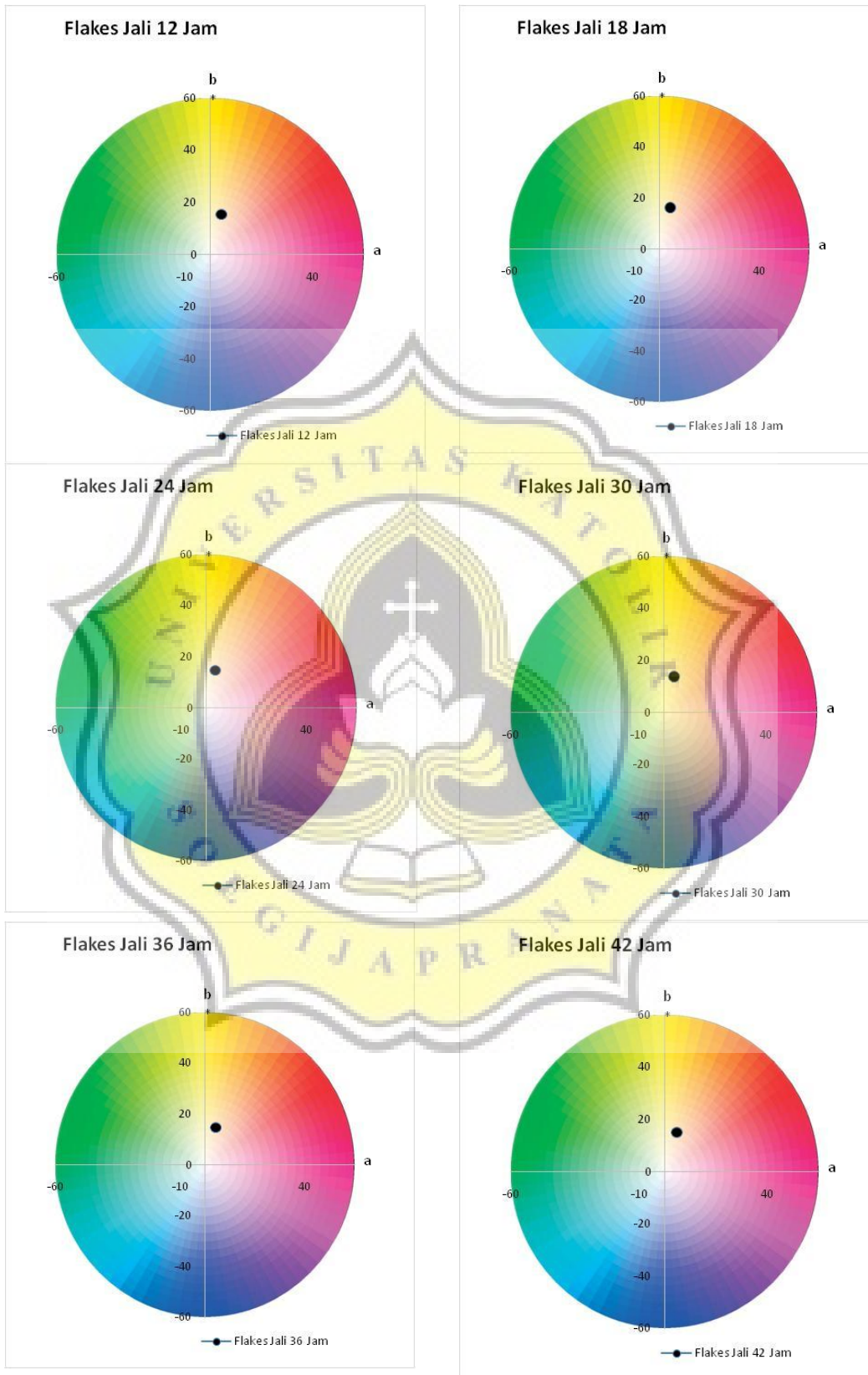


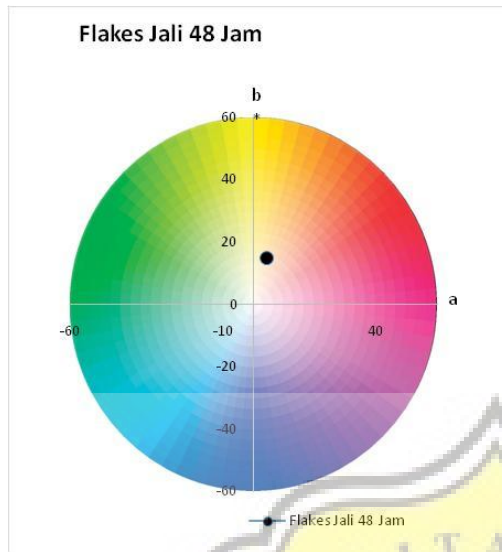




**7.2.2. Grafik CIE  $L^*a^*b^*$  Color Space Warna Flakes Jali**







**7.3. Grafik Perhitungan  $D_{eff}$**

Waktu	Batch	Grafik
0	1	<p> <math>y = -0.004x + 0.101</math>  <math>R^2 = 0.977</math> </p>
	2	<p> <math>y = -0.004x + 0.094</math>  <math>R^2 = 0.978</math> </p>
6	1	<p> <math>y = -0.011x - 0.345</math>  <math>R^2 = 0.867</math> </p>
	2	<p> <math>y = -0.013x + 0.362</math>  <math>R^2 = 0.967</math> </p>



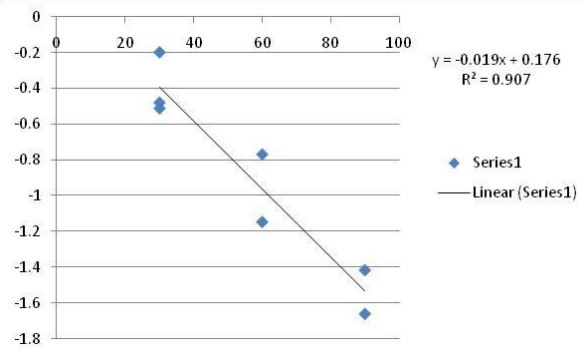
<p>12</p>	<p>1</p>	<p><math>y = -0.011x + 0.159</math> <math>R^2 = 0.860</math></p> <p>◆ Series1 — Linear (Series1)</p>	
	<p>2</p>	<p><math>y = -0.012x + 0.405</math> <math>R^2 = 0.968</math></p> <p>◆ Series1 — Linear (Series1)</p>	
<p>18</p>	<p>1</p>	<p><math>y = -0.009x + 0.011</math> <math>R^2 = 0.97</math></p> <p>◆ Series1 — Linear (Series1)</p>	
	<p>2</p>	<p><math>y = -0.009x + 0.021</math> <math>R^2 = 0.880</math></p> <p>◆ Series1 — Linear (Series1)</p>	

<p>24</p> <p>1</p>	<p><math>y = -0.010x + 0.171</math> <math>R^2 = 0.824</math></p> <p>◆ Series1 — Linear (Series1)</p>	
<p>2</p>	<p><math>y = -0.008x + 0.110</math> <math>R^2 = 0.982</math></p> <p>◆ Series1 — Linear (Series1)</p>	
<p>30</p> <p>1</p>	<p><math>y = -0.011x + 0.302</math> <math>R^2 = 0.934</math></p> <p>◆ Series1 — Linear (Series1)</p>	
<p>2</p>	<p><math>y = -0.006x - 0.542</math> <math>R^2 = 0.812</math></p> <p>◆ Series1 — Linear (Series1)</p>	

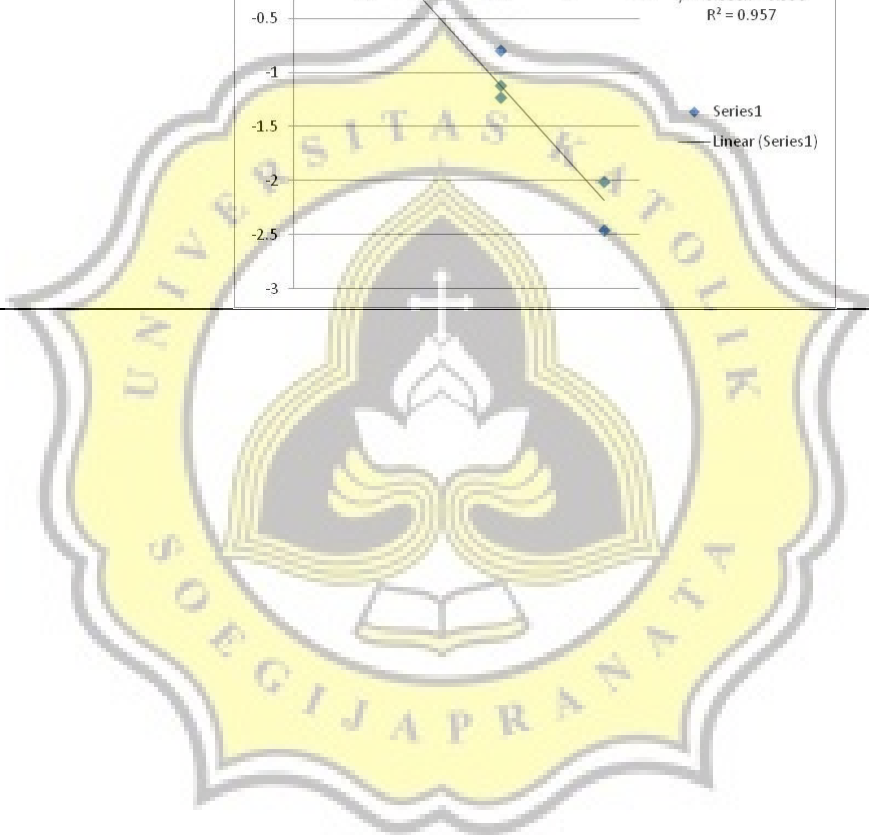
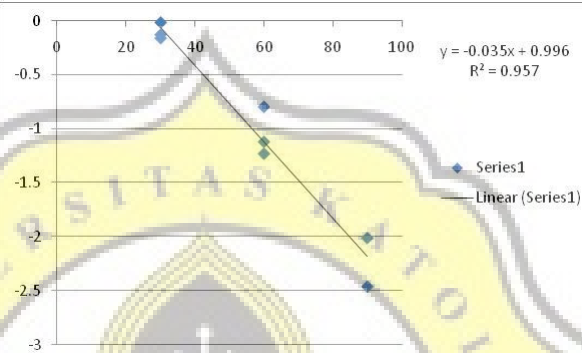
<p>36</p>	<p>1</p>	<p><math>y = -0.009x + 0.230</math> <math>R^2 = 0.943</math></p> <p>◆ Series1 — Linear (Series1)</p>	
	<p>2</p>	<p><math>y = -0.010x + 0.356</math> <math>R^2 = 0.969</math></p> <p>◆ Series1 — Linear (Series1)</p>	
<p>42</p>	<p>1</p>	<p><math>y = -0.032x + 0.818</math> <math>R^2 = 0.932</math></p> <p>◆ Series1 — Linear (Series1)</p>	
	<p>2</p>	<p><math>y = -0.020x - 0.272</math> <math>R^2 = 0.962</math></p> <p>◆ Series1 — Linear (Series1)</p>	

48

1



2



## 7.4. Hasil Uji Statistika

### 7.4.1. Tes Normalitas dengan Uji *Shapiro-Wilk*

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
KALOG	.110	54	.098	.964	54	.107
KadarAir	.144	54	.007	.938	54	.008
KadarTotalPati	.109	54	.161	.940	54	.009
KadarAmilosa	.185	54	.000	.879	54	.000
KadarAmilopektin	.096	54	.200 <sup>*</sup>	.942	54	.011

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pH	.166	48	.002	.875	48	.000
brixGula	.077	48	.200 <sup>*</sup>	.951	48	.045

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LFlakes	.107	80	.025	.957	80	.009
aFlakes	.105	80	.029	.970	80	.055
bFlakes	.116	80	.010	.950	80	.004
LTepung	.096	80	.063	.978	80	.171
aTepung	.087	80	.200 <sup>*</sup>	.965	80	.029
bTepung	.092	80	.088	.962	80	.019

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
HardnessB1	.078	45	.200 <sup>*</sup>	.970	45	.289
hardnessb2log	.091	45	.200 <sup>*</sup>	.950	45	.050

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.



### 7.4.2. Uji Anova dan uji Duncan

#### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
HardnessB1	Between Groups	551974.692	8	68996.837	363.935	.000
	Within Groups	6825.090	36	189.586		
	Total	558799.782	44			
hardnessb2log	Between Groups	.725	8	.091	463.359	.000
	Within Groups	.007	36	.000		
	Total	.732	44			

#### HardnessB1

##### Duncan

Lama Fermentasi	N	Subset for alpha = 0.05								
		1	2	3	4	5	6	7	8	9
48 jam	5	4.2883E2								
42 jam	5		4.9321E2							
36 jam	5			5.3729E2						
30 jam	5				5.7267E2					
24 jam	5					6.0607E2				
18 jam	5						6.4772E2			
12 jam	5							6.9771E2		
6 jam	5								7.3501E2	
0 jam	5									7.9037E2
Sig.		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

#### hardnessb2log

##### Duncan

Lama Fermentasi	N	Subset for alpha = 0.05								
		1	2	3	4	5	6	7	8	9
48 jam	5	2.4440								
42 jam	5		2.4735							
36 jam	5			2.5396						
30 jam	5				2.5729					
24 jam	5					2.6256				
18 jam	5						2.6735			
12 jam	5							2.7261		
6 jam	5								2.7678	
0 jam	5									2.8404
Sig.		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
aFlakes	Between Groups	24.465	8	3.058	6.065	.000
	Within Groups	40.843	81	.504		
	Total	65.307	89			
LTepung	Between Groups	1428.319	8	178.540	752.973	.000
	Within Groups	19.206	81	.237		
	Total	1447.525	89			

## aFlakes

Duncan

Lama Fermentasi	N	Subset for alpha = 0.05		
		1	2	3
24 jam	10	3.7850		
30 jam	10	4.1700	4.1700	
48 jam	10	4.3790	4.3790	
36 jam	10		4.4740	
12 jam	10		4.5020	
18 jam	10		4.5120	
6 jam	10		4.5340	
42 jam	10		4.8050	
0 jam	10			5.8200
Sig.		.080	.088	1.000

Means for groups in homogeneous subsets are displayed.

## LTepung

Duncan

Lama Fermentasi	N	Subset for alpha = 0.05						
		1	2	3	4	5	6	7
48 jam	10	80.7580						
42 jam	10		81.4920					
36 jam	10			82.1830				
30 jam	10			82.4550				
24 jam	10			82.4700				
18 jam	10				83.3800			
12 jam	10					84.1210		
6 jam	10						84.7570	
0 jam	10							94.8190
Sig.		1.000	1.000	.219	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

## ANOVA

KALOG

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.234	8	.029	3.670	.002
Within Groups	.359	45	.008		
Total	.593	53			

## KALOG

Duncan

Lama Fermentasi	N	Subset for alpha = 0.05	
		1	2
48 jam	6	.6286	
12 jam	6	.6330	
24 jam	6	.6470	
18 jam	6	.6614	
36 jam	6	.6725	
30 jam	6	.6794	
42 jam	6	.6887	
6 jam	6	.7184	
0 jam	6		.8578
Sig.		.143	1.000

Means for groups in homogeneous subsets are displayed.

## 7.4.3. Uji Kruskal-Wallis dan Uji Man-Whitney

## Kruskal-Wallis Test

Test Statistics<sup>a,b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Chi-Square	48.736	35.672	45.840	46.311	46.344
df	8	8	8	7	7
Asymp. Sig.	.000	.000	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: LamaFermentasi

1-2

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	11.000	4.000	13.000
Wilcoxon W	32.000	25.000	34.000
Z	-1.121	-2.242	-.801
Asymp. Sig. (2-tailed)	.262	.025	.423
Exact Sig. [2*(1-tailed Sig.)]	.310 <sup>a</sup>	.026 <sup>a</sup>	.485 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-3

**Test Statistics<sup>b</sup>**

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	2.500	4.000	7.000
Wilcoxon W	23.500	25.000	28.000
Z	-2.486	-2.246	-1.761
Asymp. Sig. (2-tailed)	.013	.025	.078
Exact Sig. [2*(1-tailed Sig.)]	.009 <sup>a</sup>	.026 <sup>a</sup>	.093 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-4

**Test Statistics<sup>b</sup>**

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	1.000	2.000	2.000
Wilcoxon W	22.000	23.000	23.000
Z	-2.722	-2.562	-2.562
Asymp. Sig. (2-tailed)	.006	.010	.010
Exact Sig. [2*(1-tailed Sig.)]	.004 <sup>a</sup>	.009 <sup>a</sup>	.009 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-5

**Test Statistics<sup>b</sup>**

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	.000	3.000	.000
Wilcoxon W	21.000	24.000	21.000
Z	-2.882	-2.402	-2.882
Asymp. Sig. (2-tailed)	.004	.016	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.015 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-6

**Test Statistics<sup>b</sup>**

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	.000	2.000	.000
Wilcoxon W	21.000	23.000	21.000
Z	-2.887	-2.562	-2.882
Asymp. Sig. (2-tailed)	.004	.010	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.009 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-7

**Test Statistics<sup>b</sup>**

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	.000	1.000	.000
Wilcoxon W	21.000	22.000	21.000
Z	-2.882	-2.722	-2.882
Asymp. Sig. (2-tailed)	.004	.006	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.004 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882
Asymp. Sig. (2-tailed)	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

1-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin
Mann-Whitney U	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882
Asymp. Sig. (2-tailed)	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

2-3

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	8.000	14.000	8.000	.000	.000
Wilcoxon W	29.000	35.000	29.000	21.000	21.000
Z	-1.601	-.642	-1.601	-2.892	-2.913
Asymp. Sig. (2-tailed)	.109	.521	.109	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.132 <sup>a</sup>	.589 <sup>a</sup>	.132 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

2-4

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	4.000	12.000	4.000	.000	.000
Wilcoxon W	25.000	33.000	25.000	21.000	21.000
Z	-2.242	-.961	-2.242	-2.887	-2.903
Asymp. Sig. (2-tailed)	.025	.337	.025	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.026 <sup>a</sup>	.384 <sup>a</sup>	.026 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

2-5

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	9.000	.000	.000	.000
Wilcoxon W	21.000	30.000	21.000	21.000	21.000
Z	-2.882	-1.441	-2.882	-2.892	-2.913
Asymp. Sig. (2-tailed)	.004	.150	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.180 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

2-6

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	9.000	.000	.000	.000
Wilcoxon W	21.000	30.000	21.000	21.000	21.000
Z	-2.887	-1.441	-2.882	-2.887	-2.908
Asymp. Sig. (2-tailed)	.004	.150	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.180 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi



2-7

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	5.000	.000	.000	.000
Wilcoxon W	21.000	26.000	21.000	21.000	21.000
Z	-2.882	-2.082	-2.882	-2.887	-2.903
Asymp. Sig. (2-tailed)	.004	.037	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.041 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

2-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882	-2.892	-2.913
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

2-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882	-2.887	-2.903
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

3-4

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	11.000	16.000	11.000	.000	.000
Wilcoxon W	32.000	37.000	32.000	21.000	21.000
Z	-1.121	-.321	-1.121	-2.898	-2.913
Asymp. Sig. (2-tailed)	.262	.748	.262	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.310 <sup>a</sup>	.818 <sup>a</sup>	.310 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

3-5

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	2.000	7.000	2.000	.000	.000
Wilcoxon W	23.000	28.000	23.000	21.000	21.000
Z	-2.562	-1.764	-2.562	-2.903	-2.923
Asymp. Sig. (2-tailed)	.010	.078	.010	.004	.003
Exact Sig. [2*(1-tailed Sig.)]	.009 <sup>a</sup>	.093 <sup>a</sup>	.009 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

3-6

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	8.000	.000	.000	.000
Wilcoxon W	21.000	29.000	21.000	21.000	21.000
Z	-2.887	-1.604	-2.882	-2.898	-2.918
Asymp. Sig. (2-tailed)	.004	.109	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.132 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

3-7

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	6.000	.000	.000	.000
Wilcoxon W	21.000	27.000	21.000	21.000	21.000
Z	-2.882	-1.925	-2.882	-2.898	-2.913
Asymp. Sig. (2-tailed)	.004	.054	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.065 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

3-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.887	-2.882	-2.903	-2.923
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.003
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

3-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.887	-2.882	-2.898	-2.913
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

4-5

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	10.000	15.000	8.000	.000	.000
Wilcoxon W	31.000	36.000	29.000	21.000	21.000
Z	-1.281	-.480	-1.601	-2.898	-2.913
Asymp. Sig. (2-tailed)	.200	.631	.109	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.240 <sup>a</sup>	.699 <sup>a</sup>	.132 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

4-6

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	14.000	.000	.000	.000
Wilcoxon W	21.000	35.000	21.000	21.000	21.000
Z	-2.887	-.641	-2.882	-2.892	-2.908
Asymp. Sig. (2-tailed)	.004	.522	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.589 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

4-7

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	12.000	.000	.000	.000
Wilcoxon W	21.000	33.000	21.000	21.000	21.000
Z	-2.882	-.961	-2.882	-2.892	-2.903
Asymp. Sig. (2-tailed)	.004	.337	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.394 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

4-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882	-2.898	-2.913
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

4-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882	-2.892	-2.903
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

5-6

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	2.000	14.500	2.000	.000	.000
Wilcoxon W	23.000	35.500	23.000	21.000	21.000
Z	-2.567	-.561	-2.562	-2.898	-2.918
Asymp. Sig. (2-tailed)	.010	.575	.010	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.009 <sup>a</sup>	.589 <sup>a</sup>	.009 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

5-7

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	9.000	.000	.000	.000
Wilcoxon W	21.000	30.000	21.000	21.000	21.000
Z	-2.882	-1.441	-2.882	-2.898	-2.913
Asymp. Sig. (2-tailed)	.004	.150	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.180 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

5-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882	-2.903	-2.923
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.003
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

5-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	.000	.000	.000
Wilcoxon W	21.000	21.000	21.000	21.000	21.000
Z	-2.882	-2.882	-2.882	-2.898	-2.913
Asymp. Sig. (2-tailed)	.004	.004	.004	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

6-7

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	4.000	10.000	9.000	.000	.000
Wilcoxon W	25.000	31.000	30.000	21.000	21.000
Z	-2.246	-1.281	-1.441	-2.892	-2.908
Asymp. Sig. (2-tailed)	.025	.200	.150	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.026 <sup>a</sup>	.240 <sup>a</sup>	.180 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

6-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	1.000	3.000	8.000	.000	.000
Wilcoxon W	22.000	24.000	29.000	21.000	21.000
Z	-2.727	-2.402	-1.601	-2.898	-2.918
Asymp. Sig. (2-tailed)	.006	.016	.109	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.004 <sup>a</sup>	.015 <sup>a</sup>	.132 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

6-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	.000	7.000	.000	.000
Wilcoxon W	21.000	21.000	28.000	21.000	21.000
Z	-2.887	-2.882	-1.761	-2.892	-2.908
Asymp. Sig. (2-tailed)	.004	.004	.078	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.002 <sup>a</sup>	.093 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

7-8

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	9.000	9.000	15.000	.000	.000
Wilcoxon W	30.000	30.000	36.000	21.000	21.000
Z	-1.441	-1.441	-.480	-2.898	-2.913
Asymp. Sig. (2-tailed)	.150	.150	.631	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.180 <sup>a</sup>	.180 <sup>a</sup>	.699 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

7-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	.000	9.000	13.000	.000	.000
Wilcoxon W	21.000	30.000	34.000	21.000	21.000
Z	-2.882	-1.441	-.801	-2.892	-2.903
Asymp. Sig. (2-tailed)	.004	.150	.423	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.180 <sup>a</sup>	.485 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

8-9

Test Statistics<sup>b</sup>

	KadarTotal Pati	KadarAmilosa	Kadar Amilopektin	pH	brixGula
Mann-Whitney U	4.000	10.000	9.000	.000	.000
Wilcoxon W	25.000	31.000	30.000	21.000	21.000
Z	-2.242	-1.281	-1.441	-2.898	-2.913
Asymp. Sig. (2-tailed)	.025	.200	.150	.004	.004
Exact Sig. [2*(1-tailed Sig.)]	.026 <sup>a</sup>	.240 <sup>a</sup>	.180 <sup>a</sup>	.002 <sup>a</sup>	.002 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermentasi

## Kruskal-Wallis

Test Statistics<sup>a,b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Chi-Square	82.059	27.687	71.355	69.603
df	8	8	8	8
Asymp. Sig.	.000	.001	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: LamaFermen

1-2

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	16.000	.000	.000
Wilcoxon W	55.000	71.000	55.000	55.000
Z	-3.780	-2.570	-3.786	-3.782
Asymp. Sig. (2-tailed)	.000	.010	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.009 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

1-3

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	20.000	.000	.000
Wilcoxon W	55.000	75.000	55.000	55.000
Z	-3.780	-2.268	-3.787	-3.780
Asymp. Sig. (2-tailed)	.000	.023	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.023 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

1-4

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	28.000	.000	.000
Wilcoxon W	55.000	83.000	55.000	55.000
Z	-3.780	-1.664	-3.787	-3.781
Asymp. Sig. (2-tailed)	.000	.096	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.105 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

1-5

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	9.500	.000	.000
Wilcoxon W	55.000	64.500	55.000	55.000
Z	-3.780	-3.063	-3.787	-3.780
Asymp. Sig. (2-tailed)	.000	.002	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.001 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen



1-6

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	1.000	.000	.000
Wilcoxon W	55.000	56.000	55.000	55.000
Z	-3.780	-3.704	-3.787	-3.780
Asymp. Sig. (2-tailed)	.000	.000	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

1-7

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	13.000	.000	.000
Wilcoxon W	55.000	68.000	55.000	55.000
Z	-3.780	-2.797	-3.787	-3.780
Asymp. Sig. (2-tailed)	.000	.005	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.004 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

1-8

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	8.500	.000	.000
Wilcoxon W	55.000	63.500	55.000	55.000
Z	-3.780	-3.138	-3.788	-3.782
Asymp. Sig. (2-tailed)	.000	.002	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.001 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

1-9

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	6.500	.000	.000
Wilcoxon W	55.000	61.500	55.000	55.000
Z	-3.780	-3.290	-3.785	-3.780
Asymp. Sig. (2-tailed)	.000	.001	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-3

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	18.000	41.500	39.500	24.000
Wilcoxon W	73.000	96.500	94.500	79.000
Z	-2.419	-.643	-.795	-1.967
Asymp. Sig. (2-tailed)	.016	.520	.427	.049
Exact Sig. [2*(1-tailed Sig.)]	.015 <sup>a</sup>	.529 <sup>a</sup>	.436 <sup>a</sup>	.052 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-4

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	11.500	43.000	13.500	30.000
Wilcoxon W	66.500	98.000	68.500	85.000
Z	-2.911	-.529	-2.766	-1.514
Asymp. Sig. (2-tailed)	.004	.597	.006	.130
Exact Sig. [2*(1-tailed Sig.)]	.002 <sup>a</sup>	.631 <sup>a</sup>	.004 <sup>a</sup>	.143 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-5

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	2.000	29.000	2.000	28.000
Wilcoxon W	57.000	84.000	57.000	83.000
Z	-3.628	-1.587	-3.630	-1.664
Asymp. Sig. (2-tailed)	.000	.112	.000	.096
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.123 <sup>a</sup>	.000 <sup>a</sup>	.105 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-6

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	15.000	29.000	.000
Wilcoxon W	55.000	70.000	84.000	55.000
Z	-3.780	-2.646	-1.590	-3.782
Asymp. Sig. (2-tailed)	.000	.008	.112	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.007 <sup>a</sup>	.123 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-7

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	1.000	38.000	31.500	.000
Wilcoxon W	56.000	93.000	86.500	55.000
Z	-3.704	-.907	-1.401	-3.782
Asymp. Sig. (2-tailed)	.000	.364	.161	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.393 <sup>a</sup>	.165 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-8

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	31.500	.000	.000
Wilcoxon W	55.000	86.500	55.000	55.000
Z	-3.780	-1.399	-3.782	-3.785
Asymp. Sig. (2-tailed)	.000	.162	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.165 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

2-9

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	28.000	.000	30.000
Wilcoxon W	55.000	83.000	55.000	85.000
Z	-3.780	-1.663	-3.780	-1.513
Asymp. Sig. (2-tailed)	.000	.096	.000	.130
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.105 <sup>a</sup>	.000 <sup>a</sup>	.143 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

3-4

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	29.000	34.000	28.000	30.000
Wilcoxon W	84.000	89.000	83.000	85.000
Z	-1.587	-1.209	-1.666	-1.512
Asymp. Sig. (2-tailed)	.112	.226	.096	.130
Exact Sig. [2*(1-tailed Sig.)]	.123 <sup>a</sup>	.247 <sup>a</sup>	.105 <sup>a</sup>	.143 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

3-5

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	5.500	42.000	9.000	32.500
Wilcoxon W	60.500	97.000	64.000	87.500
Z	-3.365	-.605	-3.102	-1.323
Asymp. Sig. (2-tailed)	.001	.545	.002	.186
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.579 <sup>a</sup>	.001 <sup>a</sup>	.190 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

3-6

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	26.000	36.000	.000
Wilcoxon W	55.000	81.000	91.000	55.000
Z	-3.780	-1.814	-1.060	-3.780
Asymp. Sig. (2-tailed)	.000	.070	.289	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.075 <sup>a</sup>	.315 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

3-7

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	45.000	40.000	.000
Wilcoxon W	55.000	100.000	95.000	55.000
Z	-3.780	-.378	-.756	-3.780
Asymp. Sig. (2-tailed)	.000	.705	.449	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.739 <sup>a</sup>	.481 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

3-8

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	45.000	2.000	.000
Wilcoxon W	55.000	100.000	57.000	55.000
Z	-3.780	-.378	-3.633	-3.780
Asymp. Sig. (2-tailed)	.000	.705	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.739 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

3-9

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	41.000	4.000	13.000
Wilcoxon W	55.000	96.000	56.000	68.000
Z	-3.780	-.680	-3.705	-2.797
Asymp. Sig. (2-tailed)	.000	.496	.000	.005
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.529 <sup>a</sup>	.000 <sup>a</sup>	.004 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

4-5

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	13.000	23.000	10.500	45.000
Wilcoxon W	68.000	78.000	65.500	100.000
Z	-2.797	-2.041	-2.989	-.378
Asymp. Sig. (2-tailed)	.005	.041	.003	.705
Exact Sig. [2*(1-tailed Sig.)]	.004 <sup>a</sup>	.043 <sup>a</sup>	.002 <sup>a</sup>	.739 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

4-6

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	2.000	10.000	30.500	.000
Wilcoxon W	57.000	65.000	85.500	55.000
Z	-3.628	-3.024	-1.477	-3.781
Asymp. Sig. (2-tailed)	.000	.002	.140	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.002 <sup>a</sup>	.143 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

4-7

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	5.000	29.000	24.000	1.000
Wilcoxon W	60.000	84.000	79.000	56.000
Z	-3.402	-1.587	-1.968	-3.705
Asymp. Sig. (2-tailed)	.001	.112	.049	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.123 <sup>a</sup>	.052 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

4-8

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	30.000	1.000	.000
Wilcoxon W	55.000	85.000	56.000	55.000
Z	-3.780	-1.512	-3.712	-3.784
Asymp. Sig. (2-tailed)	.000	.131	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.143 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

4-9

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	23.000	.000	18.000
Wilcoxon W	55.000	78.000	55.000	73.000
Z	-3.780	-2.043	-3.781	-2.423
Asymp. Sig. (2-tailed)	.000	.041	.000	.015
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.043 <sup>a</sup>	.000 <sup>a</sup>	.015 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

5-6

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	17.000	34.000	5.000	.000
Wilcoxon W	72.000	89.000	60.000	55.000
Z	-2.495	-1.209	-3.404	-3.780
Asymp. Sig. (2-tailed)	.013	.226	.001	.000
Exact Sig. [2*(1-tailed Sig.)]	.011 <sup>a</sup>	.247 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

5-7

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	17.000	45.000	2.500	2.500
Wilcoxon W	72.000	100.000	57.500	57.500
Z	-2.495	-.378	-3.595	-3.592
Asymp. Sig. (2-tailed)	.013	.705	.000	.000
Exact Sig. [2*(1-tailed Sig.)]	.011 <sup>a</sup>	.739 <sup>a</sup>	.000 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

5-8

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	41.000	23.500	.000
Wilcoxon W	55.000	96.000	78.500	55.000
Z	-3.780	-.680	-2.009	-3.782
Asymp. Sig. (2-tailed)	.000	.496	.045	.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.529 <sup>a</sup>	.043 <sup>a</sup>	.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

5-9

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	47.000	13.500	17.000
Wilcoxon W	55.000	102.000	68.500	72.000
Z	-3.780	-.227	-2.764	-2.495
Asymp. Sig. (2-tailed)	.000	.821	.006	.013
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.853 <sup>a</sup>	.004 <sup>a</sup>	.011 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

6-7

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	27.000	28.500	49.000	27.500
Wilcoxon W	82.000	83.500	104.000	82.500
Z	-1.739	-1.626	-.076	-1.701
Asymp. Sig. (2-tailed)	.082	.104	.940	.089
Exact Sig. [2*(1-tailed Sig.)]	.089 <sup>a</sup>	.105 <sup>a</sup>	.971 <sup>a</sup>	.089 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

6-8

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	23.000	.000	50.000
Wilcoxon W	55.000	78.000	55.000	105.000
Z	-3.780	-2.041	-3.784	.000
Asymp. Sig. (2-tailed)	.000	.041	.000	1.000
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.043 <sup>a</sup>	.000 <sup>a</sup>	1.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

6-9

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	27.000	.000	15.000
Wilcoxon W	55.000	82.000	55.000	70.000
Z	-3.780	-1.739	-3.781	-2.646
Asymp. Sig. (2-tailed)	.000	.082	.000	.008
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.089 <sup>a</sup>	.000 <sup>a</sup>	.007 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

7-8

Test Statistics<sup>b</sup>

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	8.000	44.000	.000	26.000
Wilcoxon W	63.000	99.000	55.000	81.000
Z	-3.175	-.454	-3.784	-1.816
Asymp. Sig. (2-tailed)	.001	.650	.000	.069
Exact Sig. [2*(1-tailed Sig.)]	.001 <sup>a</sup>	.684 <sup>a</sup>	.000 <sup>a</sup>	.075 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen



7-9

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	.000	48.000	.000	24.000
Wilcoxon W	55.000	103.000	55.000	79.000
Z	-3.780	-.151	-3.781	-1.965
Asymp. Sig. (2-tailed)	.000	.880	.000	.049
Exact Sig. [2*(1-tailed Sig.)]	.000 <sup>a</sup>	.912 <sup>a</sup>	.000 <sup>a</sup>	.052 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen

8-9

**Test Statistics<sup>b</sup>**

	LFlakes	bFlakes	aTepung	bTepung
Mann-Whitney U	9.000	43.000	29.500	17.000
Wilcoxon W	64.000	98.000	84.500	72.000
Z	-3.099	-.529	-1.554	-2.496
Asymp. Sig. (2-tailed)	.002	.597	.120	.013
Exact Sig. [2*(1-tailed Sig.)]	.001 <sup>a</sup>	.631 <sup>a</sup>	.123 <sup>a</sup>	.011 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: LamaFermen



## 7. 5. Hasil Plagscan

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The main content of the document is as follows:

### 1. PENDAHULUAN

#### 1.1. Latar Belakang

Jali (*Coix lachryma-jobi* L) adalah salah satu biji-bijian yang tumbuh di Indonesia (Savitri, 2010 dalam Muliawati, 2015). Biji Jali ini memiliki kandungan nutrisi yang tinggi. Namun masih banyak masyarakat Indonesia yang tidak mengenal biji jali ini. Selain kurang dikenal oleh masyarakat Indonesia, pemanfaatan jali juga masih sangat minimal. Biasanya jali diolah dalam bentuk bubur atau dijadikan sebuah minuman.

Salah satu upaya dalam pemanfaatan jali adalah pembuatan *flakes* dari tepung jali. *Flakes* adalah salah satu jenis sereal yang biasanya dijual di pasaran dan terbuat dari jagung (Hildayanti, 2012). *Flakes* ini biasanya disantap dengan mencampurkan susu cair. *Flakes* jali ini dapat menjadi alternatif menu sarapan di pagi hari. Produk *flakes* ini dipilih karena cara penyajiannya yang mudah dan cepat sehingga sesuai dengan *life style* masyarakat sekarang ini yang inginnya serba cepat dan instan.

Dalam pembuatan *flakes* ini telah dilakukan penelitian awal. Pembuatan *flakes* dilakukan

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- Match Rate:** 9,85% (handwritten in a box)
- Nama:** Marcia Aristya Dewana
- Alamat email:** laji10055@student.unika.ac.id
- Fak. / Prodi:** TP / TP
- NIM:** 14.11.0055
- berupa (TESIS, TUGAS AKHIR, PROPOSAL, SKRIPSI, SUMMARY, LAPORAN KERJA PRAKTEK):** TUGAS AKHIR
- dengan judul:** Pengaruh Fermentasi Ragi Tape Terhadap Kualitas Fisik Flakes Jali
- Semarang, Petugas:** Rita (signature)
- Yang Menyerahkan:** Marcia (signature), Marcia A.P.
- Dosen Pembimbing:** Novita Ika Putri, S.TP, MS. (signature)

**NB. Laporan hasil scan terlampir**

**TERPUSTAKAAN**