7. Lampiran

Lampiran 1. Uji Statistik Fisik Minuman Instan Metode Ekstrusi & Ekstraksi

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
b_density	,139	24	,200*	,934	24	,121
k_pembasahan	,163	24	,101	,899	24	,020
k_larut	,176	24	,054	,873	24	,006
vis	,175	24	,056	,894	24	,016

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

a. Lilliefors Significance Correction

b_density

Duncan[a,b]

		Subset for alpha = .05		
perlakuan	N	1	2	3
MIA	6	,0635500		
MIK	5	,0659400		
MIB	7		,0723286	
MIL	6			,0767000
Sig.		,247	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,915.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

k_pembasahan

Duncan[a,b]

		Subset for alpha = .05		
perlakuan	N	1	2	3
MIL	6	10,738333		
MIK	5		13,716000	
MIB	7		14,122857	
MIA	6			17,551667
Sig.		1,000	,121	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,915.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

k_larut

Duncan[a,b]

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
MIA	6	3,907683			
MIK	5		4,702880		
MIB	7			5,991800	
MIL	6				8,884583
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,915.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

vis

Duncan[a,b]

perlakuan	N	Subset for alpha = .05		
		1	2	3
MIB	7	,6803		
MIL	6	,6953		
MIK	5		,8311	
MIA	6			,9291
Sig.		,623	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,915.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

vis

Duncan[a,b]

perlakuan	N	Subset for alpha = .05		
		1	2	3
ekstrak 70	7	,6803		
kontrol ekstrak	6	,6953		
kontrol ekstrudat	5		,8311	
ekstrudat 70	6			,9291
Sig.		,623	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,915.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Lampiran 2. Uji Statistik Kimia Minuman Instan Metode Ekstrusi & Ekstraksi

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
k_air	,095	24	,200*	,964	24	,532
k_abu	,103	24	,200*	,935	24	,125
k_prot	,117	24	,200*	,943	24	,188
k_lmk	,157	24	,130	,918	24	,054
k_serat	,153	24	,149	,936	24	,136
k_besi	,151	24	,164	,951	24	,286
karbo	,166	24	,086	,915	24	,045

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

a. Lilliefors Significance Correction

k_air

Duncan[a]

		Subset for alpha = .05		
perlakuan	N	1	2	3
MIK	6	2,980617		
MIL	6	2,991350		
MIA	6		3,327450	
MIB	6			3,648800
Sig.		,908	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

k_abu

Duncan[a]

		Subset for alpha = .05	
perlakuan	N	1	2
MIA	6	3,9572	
MIK	6		4,0280
MIB	6		4,0428
MIL	6		4,0637
Sig.		1,000	,092

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

k_prot

Duncan[a]

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
MIB	6	14,6621			
MIA	6		16,6002		
MIL	6			18,3951	
MIK	6				19,2917
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

k_lmk

Duncan[a]

perlakuan	N	Subset for alpha = .05		
		1	2	3
MIK	6	,8200		
MIA	6		,9083	
MIL	6		,9100	
MIB	6			,9950
Sig.		1,000	,921	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

k_serat

Duncan[a]

perlakuan	N	Subset for alpha = .05		
		1	2	3
MIB	6	,7417		
MIL	6	,7783		
MIK	6		,8717	
MIA	6			,9550
Sig.		,306	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

k_besi

Duncan[a]

perlakuan	N	Subset for alpha = .05	
		1	2
MIA	6	4,0840	
MIK	6	4,2595	
MIB	6		5,5244
MIL	6		5,8251
Sig.		,672	,470

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

karbo

Duncan[a]

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
MIK	6	63,6451			
MIA	6		66,3776		
MIL	6			69,1064	
MIB	6				71,9910
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Lampiran 3. Uji Statistik Sensoris Minuman Instan Metode Ekstrusi & Ekstraksi

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
warna	,181	200	,000	,857	200	,000
aroma	,172	200	,000	,856	200	,000
rasa	,176	200	,000	,856	200	,000
overall	,174	200	,000	,857	200	,000

a. Lilliefors Significance Correction

Test Statistics[a,b]

	warna	aroma	rasa	overall
Chi-Square	128,983	126,405	125,752	142,640
df	3	3	3	3
Asymp. Sig.	,000	,000	,000	,000

a. Kruskal Wallis Test

b. Grouping Variable: perlakuan

MIK vs MIA

Test Statistics[a]

	warna	aroma	rasa	overall
Mann-Whitney U	122,000	90,000	128,000	82,500
Wilcoxon W	1397,000	1365,000	1403,000	1357,500
Z	-8,198	-8,292	-8,069	-8,489
Asymp. Sig. (2-tailed)	,000	,000	,000	,000

a. Grouping Variable: perlakuan

MIL vs MIB

Test Statistics[a]

	warna	aroma	rasa	overall
Mann-Whitney U	224,000	215,000	195,500	114,500
Wilcoxon W	1499,000	1490,000	1470,500	1389,500
Z	-7,411	-7,398	-7,593	-8,266
Asymp. Sig. (2-tailed)	,000	,000	,000	,000

a. Grouping Variable: perlakuan

MIA vs MIB

Test Statistics[a]

	warna	aroma	rasa	overall
Mann-Whitney U	929,000	951,000	888,500	905,500
Wilcoxon W	2204,000	2226,000	2163,500	2180,500
Z	-2,457	-2,326	-2,789	-2,679
Asymp. Sig. (2-tailed)	,014	,020	,005	,007

a. Grouping Variable: perlakuan

MIK vs MIL

Test Statistics[a]

	warna	aroma	rasa	overall
Mann-Whitney U	424,500	974,000	904,000	551,500
Wilcoxon W	1699,500	2249,000	2179,000	1826,500
Z	-6,284	-2,147	-2,659	-5,435
Asymp. Sig. (2-tailed)	,000	,032	,008	,000

a. Grouping Variable: perlakuan

MIK vs MIB

Test Statistics[a]

	warna	aroma	rasa	overall
Mann-Whitney U	45,000	136,000	159,000	117,000
Wilcoxon W	1320,000	1411,000	1434,000	1392,000
Z	-8,745	-7,978	-7,821	-8,249
Asymp. Sig. (2-tailed)	,000	,000	,000	,000

a. Grouping Variable: perlakuan

MIL vs MIA

Test Statistics[a]

	warna	aroma	rasa	overall
Mann-Whitney U	416,500	159,000	142,000	88,500
Wilcoxon W	1691,500	1434,000	1417,000	1363,500
Z	-6,042	-7,813	-7,936	-8,448
Asymp. Sig. (2-tailed)	,000	,000	,000	,000

a. Grouping Variable: perlakuan

Lampiran 4. Uji Statistik Viskositas Selama Penyimpanan

Tests of Normality

	lama_simpan	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
subtitusi	minggu 0	,302	6	,094	,775	6	,035
	minggu 1	,304	6	,089	,818	6	,085
	minggu 2	,309	6	,075	,843	6	,139
	minggu 3	,254	6	,200*	,866	6	,212
	minggu 4	,167	6	,200*	,982	6	,960
	minggu 5	,293	6	,117	,822	6	,091
	minggu 6	,283	6	,143	,921	6	,514
	minggu 7	,172	6	,200*	,912	6	,452
	minggu 8	,217	6	,200*	,896	6	,352
	minggu 9	,303	6	,090	,832	6	,111
	minggu 10	,293	6	,117	,822	6	,091
	minggu 11	,251	6	,200*	,772	6	,033
	minggu 12	,223	6	,200*	,908	6	,421
kontrol	minggu 0	,214	6	,200*	,958	6	,804
	minggu 1	,230	6	,200*	,951	6	,752
	minggu 2	,262	6	,200*	,862	6	,195
	minggu 3	,293	6	,117	,915	6	,473
	minggu 4	,214	6	,200*	,951	6	,752
	minggu 5	,255	6	,200*	,867	6	,215
	minggu 6	,150	6	,200*	,979	6	,945
	minggu 7	,208	6	,200*	,908	6	,425
	minggu 8	,285	6	,138	,831	6	,110
	minggu 9	,267	6	,200*	,878	6	,261
	minggu 10	,293	6	,117	,822	6	,091
	minggu 11	,319	6	,056	,683	6	,004
	minggu 12	,293	6	,117	,822	6	,091

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

a. Lilliefors Significance Correction

subtitusi

Duncan

lama_simpan	N	Subset for alpha = .05 1	2	3	4	5
minggu 12	12	,307500				
minggu 11	12	,323333	,323333			
minggu 10	12	,329167	,329167	,329167		
minggu 9	12	,340000	,340000	,340000	,340000	
minggu 8	12		,343333	,343333	,343333	,343333
minggu 7	12		,345000	,345000	,345000	,345000
minggu 6	12		,350833	,350833	,350833	,350833
minggu 4	12			,362500	,362500	,362500
minggu 5	12			,364167	,364167	,364167
minggu 3	12				,367500	,367500

minggu 2	12				,372500	,372500
minggu 1	12					,378333
minggu 0	12					,378750
Sig.		,066	,139	,061	,087	,064

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 12,000.

kontrol

Duncan

		Subset for alpha = .05			
lama_simpan	N	1	2	3	4
minggu 10	6	,303333			
minggu 12	6	,303333			
minggu 11	6	,310000	,310000		
minggu 9	6	,317500	,317500	,317500	
minggu 8	6	,320000	,320000	,320000	,320000
minggu 7	6	,321667	,321667	,321667	,321667
minggu 6	6	,323333	,323333	,323333	,323333
minggu 4	6	,325000	,325000	,325000	,325000
minggu 5	6	,325000	,325000	,325000	,325000
minggu 3	6		,326667	,326667	,326667
minggu 2	6			,333333	,333333
minggu 1	6			,338333	,338333
minggu 0	6				,341667
Sig.		,062	,150	,073	,062

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 6,000.

Lampiran 5. Uji Statistik Kecepatan Larut Selama Penyimpanan

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	lama_simpan	Statistic	df	Sig.	Statistic	df	Sig.
kontrol	minggu 0	,319	6	,056	,683	6	,004
	minggu 1	,228	6	,200*	,934	6	,610
	minggu 2	,208	6	,200*	,878	6	,261
	minggu 3	,192	6	,200*	,910	6	,437
	minggu 4	,313	6	,068	,765	6	,028
	minggu 5	,269	6	,198	,895	6	,345
	minggu 6	,245	6	,200*	,845	6	,143
	minggu 7	,283	6	,146	,916	6	,476
	minggu 8	,305	6	,086	,841	6	,134
	minggu 9	,292	6	,119	,834	6	,115
	minggu 10	,310	6	,074	,833	6	,113
	minggu 11	,165	6	,200*	,951	6	,748
	minggu 12	,304	6	,089	,776	6	,035
subtitusi	minggu 0	,304	6	,087	,774	6	,034
	minggu 1	,268	6	,200*	,874	6	,243
	minggu 2	,205	6	,200*	,853	6	,165
	minggu 3	,273	6	,185	,816	6	,082
	minggu 4	,317	6	,060	,752	6	,021
	minggu 5	,306	6	,083	,816	6	,081
	minggu 6	,300	6	,098	,874	6	,243
	minggu 7	,305	6	,086	,841	6	,134
	minggu 8	,305	6	,086	,776	6	,035
	minggu 9	,306	6	,082	,775	6	,035
	minggu 10	,200	6	,200*	,954	6	,774
	minggu 11	,273	6	,182	,820	6	,089
	minggu 12	,319	6	,056	,683	6	,004

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

a. Lilliefors Significance Correction

subtitusi

Duncan

		Subset for alpha = .05						
lama_simpan	N	1	2	3	4	5	6	7
minggu 0	6	3,853333						
minggu 1	6		4,698333					
minggu 2	6			6,893333				
minggu 3	6			7,190000				
minggu 4	6				7,981667			
minggu 5	6				8,013333			
minggu 6	6				8,495000	8,495000		
minggu 7	6				8,508333	8,508333		

minggu 8	6				8,615000	8,615000		
minggu 9	6					8,763333		
minggu 10	6					8,853333		
minggu 11	6						9,533333	
minggu 12	6							10,500000
Sig.		1,000	1,000	,354	,079	,324	1,000	1,000

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 6,000.

kontrol

Duncan

		Subset for alpha = .05					
lama_simpan	N	1	2	3	4	5	6
minggu 0	6	4,790000					
minggu 1	6	5,065000					
minggu 2	6		6,236667				
minggu 3	6			7,545000			
minggu 4	6			7,566667			
minggu 5	6			7,630000			
minggu 6	6			7,741667			
minggu 7	6				8,506667		
minggu 8	6				8,508333		
minggu 9	6				8,526667		
minggu 10	6				9,118333	9,118333	
minggu 11	6					9,786667	
minggu 12	6						11,706667
Sig.		,419	1,000	,603	,103	,052	1,000

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 6,000.

Lampiran 6. Uji Statistik Kadar Air Selama Penyimpanan

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	lama_simpan	Statistic	df	Sig.	Statistic	df	Sig.
subtitusi	minggu 0	,203	6	,200*	,953	6	,767
	minggu 1	,321	6	,054	,743	6	,017
	minggu 2	,223	6	,200*	,965	6	,857
	minggu 3	,284	6	,141	,869	6	,224
	minggu 4	,257	6	,200*	,892	6	,326
	minggu 5	,290	6	,124	,797	6	,055
	minggu 6	,252	6	,200*	,925	6	,540
	minggu 7	,155	6	,200*	,977	6	,934
	minggu 8	,248	6	,200*	,829	6	,106
	minggu 9	,305	6	,084	,845	6	,144
	minggu 10	,240	6	,200*	,944	6	,694
	minggu 11	,171	6	,200*	,938	6	,645
	minggu 12	,266	6	,200*	,855	6	,172
kontrol	minggu 0	,304	6	,088	,822	6	,092
	minggu 1	,239	6	,200*	,907	6	,414
	minggu 2	,186	6	,200*	,961	6	,828
	minggu 3	,202	6	,200*	,924	6	,535
	minggu 4	,225	6	,200*	,890	6	,319
	minggu 5	,193	6	,200*	,952	6	,757
	minggu 6	,195	6	,200*	,924	6	,532
	minggu 7	,192	6	,200*	,915	6	,469
	minggu 8	,173	6	,200*	,982	6	,960
	minggu 9	,199	6	,200*	,906	6	,409
	minggu 10	,187	6	,200*	,963	6	,843
	minggu 11	,194	6	,200*	,929	6	,574
	minggu 12	,191	6	,200*	,967	6	,871

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

a. Lilliefors Significance Correction

kontrol

Duncan[a]

lama_simpan	N	Subset for alpha = .05								
		1	2	3	4	5	6	7	8	9
minggu 0	6	2,943317								
minggu 1	6	2,961633								
minggu 2	6		3,351900							
minggu 3	6			3,518983						
minggu 4	6				3,706933					
minggu 5	6				3,744350					
minggu 6	6				3,790500					
minggu 7	6					4,136817				
minggu 8	6					4,224783	4,224783			
minggu 9	6						4,343800			
minggu 10	6							4,483467		
minggu 11	6								4,672467	
minggu 12	6									5,056133
Sig.		,776	1,000	1,000	,224	,175	,068	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

subtitusi

Duncan[a]

lama_simpan	N	Subset for alpha = .05					
		1	2	3	4	5	6
minggu 0	6	3,230600					
minggu 1	6	3,335250					
minggu 2	6	3,400167					
minggu 3	6		3,793350				
minggu 4	6			4,296950			
minggu 6	6			4,389750	4,389750		
minggu 5	6			4,396333	4,396333		
minggu 7	6			4,456317	4,456317		
minggu 8	6				4,509017		
minggu 9	6					4,878450	
minggu 10	6					4,912250	
minggu 11	6					5,043850	
minggu 12	6						5,394550
Sig.		,061	1,000	,089	,205	,068	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Lampiran 7.Uji Statistik Aw Selama Penyimpanan

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	lama_simpan	Statistic	df	Sig.	Statistic	df	Sig.
subtitusi	minggu 0	,278	6	,161	,870	6	,225
	minggu 1	,191	6	,200*	,892	6	,328
	minggu 2	,307	6	,080	,762	6	,026
	minggu 3	,188	6	,200*	,903	6	,390
	minggu 4	,185	6	,200*	,974	6	,918
	minggu 5	,218	6	,200*	,904	6	,399
	minggu 6	,278	6	,163	,921	6	,510
	minggu 7	,171	6	,200*	,925	6	,540
	minggu 8	,223	6	,200*	,908	6	,421
	minggu 9	,282	6	,146	,817	6	,082
	minggu 10	,252	6	,200*	,836	6	,121
	minggu 11	,288	6	,132	,857	6	,180
	minggu 12	,170	6	,200*	,976	6	,932
kontrol	minggu 0	,208	6	,200*	,917	6	,484
	minggu 1	,182	6	,200*	,919	6	,495
	minggu 2	,185	6	,200*	,942	6	,675
	minggu 3	,309	6	,075	,802	6	,061
	minggu 4	,296	6	,109	,873	6	,236
	minggu 5	,248	6	,200*	,878	6	,262
	minggu 6	,267	6	,200*	,851	6	,160
	minggu 7	,291	6	,122	,780	6	,039
	minggu 8	,261	6	,200*	,911	6	,442
	minggu 9	,276	6	,172	,907	6	,414
	minggu 10	,272	6	,189	,898	6	,360
	minggu 11	,140	6	,200*	,973	6	,913
	minggu 12	,240	6	,200*	,895	6	,344

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

a. Lilliefors Significance Correction

subtitusi

Duncan[a]

lama_simpan	N	Subset for alpha = .05						
		1	2	3	4	5	6	7
minggu 0	6	,492833						
minggu 1	6		,512333					
minggu 2	6			,549167				
minggu 3	6			,556833				
minggu 4	6			,558667				
minggu 5	6				,576667			
minggu 6	6				,579333	,579333		
minggu 7	6				,581667	,581667		
minggu 8	6					,596333		
minggu 9	6						,617833	
minggu 10	6							,635667
minggu 11	6							,642333
minggu 12	6							,648833
Sig.		1,000	1,000	,278	,568	,052	1,000	,132

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

kontrol

lama_simpan	N	Subset for alpha = .05							
		1	2	3	4	5	6	7	8
minggu 0	6	,476833							
minggu 1	6		,517833						
minggu 2	6		,524833	,524833					
minggu 4	6		,537667	,537667	,537667				
minggu 3	6			,541167	,541167				
minggu 5	6				,548333				
minggu 6	6				,548833				
minggu 7	6				,556667	,556667			
minggu 8	6					,574833			
minggu 9	6						,598167		
minggu 10	6						,609167	,609167	
minggu 11	6							,621167	,621167
minggu 12	6								,640667
Sig.		1,000	,076	,144	,109	,086	,295	,254	,066

Duncan

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 6,000.

Lampiran 8. Uji Statistik TBA Selama Penyimpanan

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	lama_simpan	Statistic	df	Sig.	Statistic	df	Sig.
subtitusi	minggu 0	,279	6	,158	,759	6	,024
	minggu 1	,278	6	,163	,846	6	,146
	minggu 2	,199	6	,200*	,886	6	,297
	minggu 3	,196	6	,200*	,922	6	,521
	minggu 4	,250	6	,200*	,852	6	,162
	minggu 5	,230	6	,200*	,912	6	,449
	minggu 6	,216	6	,200*	,900	6	,374
	minggu 7	,185	6	,200*	,967	6	,871
	minggu 8	,150	6	,200*	,976	6	,929
	minggu 9	,303	6	,090	,827	6	,102
	minggu 10	,189	6	,200*	,885	6	,295
	minggu 11	,295	6	,112	,921	6	,509
	minggu 12	,237	6	,200*	,915	6	,472
kontrol	minggu 0	,284	6	,143	,819	6	,087
	minggu 1	,161	6	,200*	,971	6	,897
	minggu 2	,276	6	,172	,858	6	,183
	minggu 3	,180	6	,200*	,951	6	,750
	minggu 4	,192	6	,200*	,929	6	,571
	minggu 5	,203	6	,200*	,926	6	,549
	minggu 6	,280	6	,154	,880	6	,271
	minggu 7	,317	6	,059	,822	6	,092
	minggu 8	,199	6	,200*	,950	6	,736
	minggu 9	,180	6	,200*	,926	6	,551
	minggu 10	,263	6	,200*	,877	6	,257
	minggu 11	,258	6	,200*	,905	6	,403
	minggu 12	,277	6	,168	,885	6	,291

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

a. Lilliefors Significance Correction

subtitusi

Duncan[a]

lama_simp	N	Subset for alpha = .05										
		1	2	3	4	5	6	7	8	9	10	11
minggu 0	6	064617										
minggu 1	6	119083	119083									
minggu 2	6		204217									
minggu 3	6			347483								
minggu 4	6				517783							
minggu 5	6				580050							
minggu 7	6					908317						
minggu 6	6						371500					
minggu 8	6							115233				
minggu 9	6								706717			
minggu 10	6									685367		
minggu 11	6										902583	
minggu 12	6											190550
Sig.		,409	,198	1,000	,345	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

kontrol

Duncan[a]

lama_simpa	N	Subset for alpha = .05								
		1	2	3	4	5	6	7	8	9
minggu 0	6	,043680								
minggu 1	6	,103220								
minggu 2	6	,177840	,177840							
minggu 3	6		,289510	,289510						
minggu 4	6			,346190						
minggu 5	6				,618417					
minggu 6	6				,772600					
minggu 7	6					,164280				
minggu 8	6						,173730			
minggu 9	6							,708680		
minggu 10	6								,397680	
minggu 11	6									,981900
minggu 12	6									,080440
Sig.		,114	,164	,477	,056	1,000	1,000	1,000	1,000	,218

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Lampiran 9. Uji Statistik Mikrobiologi Kapang Selama Penyimpanan

Tests of Normality[b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t]

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	lama_simpan	Statistic	df	Sig.	Statistic	df	Sig.
kontrol	minggu 10	,492	6	,000	,496	6	,000
	minggu 11	,319	6	,056	,683	6	,004
	minggu 12	,319	6	,056	,683	6	,004
subtitusi	minggu 9	,492	6	,000	,496	6	,000
	minggu 10	,319	6	,056	,683	6	,004
	minggu 11	,319	6	,056	,683	6	,004
	minggu 12	,319	6	,056	,683	6	,004

a. Lilliefors Significance Correction

b. kontrol is constant when lama_simpan = minggu 0. It has been omitted.

c. kontrol is constant when lama_simpan = minggu 1. It has been omitted.

d. kontrol is constant when lama_simpan = minggu 2. It has been omitted.

e. kontrol is constant when lama_simpan = minggu 3. It has been omitted.

f. kontrol is constant when lama_simpan = minggu 4. It has been omitted.

g. kontrol is constant when lama_simpan = minggu 5. It has been omitted.

h. kontrol is constant when lama_simpan = minggu 6. It has been omitted.

i. kontrol is constant when lama_simpan = minggu 7. It has been omitted.

j. kontrol is constant when lama_simpan = minggu 8. It has been omitted.

k. kontrol is constant when lama_simpan = minggu 9. It has been omitted.

l. subtitusi is constant when lama_simpan = minggu 0. It has been omitted.

m. subtitusi is constant when lama_simpan = minggu 1. It has been omitted.

n. subtitusi is constant when lama_simpan = minggu 2. It has been omitted.

o. subtitusi is constant when lama_simpan = minggu 3. It has been omitted.

p. subtitusi is constant when lama_simpan = minggu 4. It has been omitted.

q. subtitusi is constant when lama_simpan = minggu 5. It has been omitted.

r. subtitusi is constant when lama_simpan = minggu 6. It has been omitted.

s. subtitusi is constant when lama_simpan = minggu 7. It has been omitted.

t. subtitusi is constant when lama_simpan = minggu 8. It has been omitted.

subtitusi

Duncan[a]

lama_simpan	N	Subset for alpha = .05			
		1	2	3	4
minggu 0	6	,0000			
minggu 1	6	,0000			
minggu 2	6	,0000			
minggu 3	6	,0000			
minggu 4	6	,0000			
minggu 5	6	,0000			
minggu 6	6	,0000			
minggu 7	6	,0000			
minggu 8	6	,0000			
minggu 9	6		2,0502		
minggu 10	6			2,1505	
minggu 11	6			2,1505	
minggu 12	6				2,3891
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

kontrol

Duncan[a]

lama_simpan	N	Subset for alpha = .05		
		1	2	3
minggu 0	6	,0000		
minggu 1	6	,0000		
minggu 2	6	,0000		
minggu 3	6	,0000		
minggu 4	6	,0000		
minggu 5	6	,0000		
minggu 6	6	,0000		
minggu 7	6	,0000		
minggu 8	6	,0000		
minggu 9	6	,0000		
minggu 10	6		2,0502	
minggu 11	6			2,1505
minggu 12	6			2,1505
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Lampiran 10. Uji Statistik Sensoris MIA Selama Penyimpanan

Test Statistics[a,b]

	warna	aroma
Chi-Square	323,585	218,836
df	12	12
Asymp. Sig.	,000	,000

a. Kruskal Wallis Test

b. Grouping Variable: lama_simpan

0 vs 1

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2363,000	2390,000
Wilcoxon W	4848,000	4875,000
Z	-,393	-,260
Asymp. Sig. (2-tailed)	,694	,795

a. Grouping Variable: lama_simpan

0 vs 2

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2286,500	1709,000
Wilcoxon W	4771,500	4194,000
Z	-,721	-3,184
Asymp. Sig. (2-tailed)	,471	,001

a. Grouping Variable: lama_simpan

0 vs 3

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2235,500	1734,500
Wilcoxon W	4720,500	4219,500
Z	-,960	-3,070
Asymp. Sig. (2-tailed)	,337	,002

a. Grouping Variable: lama_simpan

0 vs 4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1993,500	1384,500
Wilcoxon W	4478,500	3869,500
Z	-2,014	-4,552
Asymp. Sig. (2-tailed)	,044	,000

a. Grouping Variable: lama_simpan

0 vs 5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1114,000	1159,500
Wilcoxon W	3599,000	3644,500
Z	-5,852	-5,545
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs 6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	905,500	1054,500
Wilcoxon W	3390,500	3539,500
Z	-6,712	-6,001
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	962,500	978,500
Wilcoxon W	3447,500	3463,500
Z	-6,411	-6,306
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

Test Statistics[a]

	warna	aroma
Mann-Whitney U	543,000	628,000
Wilcoxon W	3028,000	3113,000
Z	-8,212	-7,782
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	798,500	855,000
Wilcoxon W	3283,500	3340,000
Z	-7,143	-6,818
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	735,500	845,000
Wilcoxon W	3220,500	3330,000
Z	-7,398	-6,839
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	475,000	800,000
Wilcoxon W	2960,000	3285,000
Z	-8,530	-7,032
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs11

0vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	483,000	679,500
Wilcoxon W	2968,000	3164,500
Z	-8,542	-7,557
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1vs 2

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2346,500	1691,000
Wilcoxon W	4831,500	4176,000
Z	-,457	-3,272
Asymp. Sig. (2-tailed)	,648	,001

a. Grouping Variable: lama_simpan

1vs 3

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2320,500	1746,500
Wilcoxon W	4805,500	4231,500
Z	-,580	-3,034
Asymp. Sig. (2-tailed)	,562	,002

a. Grouping Variable: lama_simpan

1vs 4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2061,500	1363,500
Wilcoxon W	4546,500	3848,500
Z	-1,720	-4,647
Asymp. Sig. (2-tailed)	,085	,000

a. Grouping Variable: lama_simpan

1vs 5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1171,000	1081,500
Wilcoxon W	3656,000	3566,500
Z	-5,628	-5,899
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	934,500	966,500
Wilcoxon W	3419,500	3451,500
Z	-6,626	-6,396
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	968,500	914,500
Wilcoxon W	3453,500	3399,500
Z	-6,417	-6,575
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	821,500	797,000
Wilcoxon W	3306,500	3282,000
Z	-7,070	-7,052
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	749,500	803,000
Wilcoxon W	3234,500	3288,000
Z	-7,366	-7,034
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	475,000	797,000
Wilcoxon W	2960,000	3282,000
Z	-8,553	-7,074
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	517,000	564,000
Wilcoxon W	3002,000	3049,000
Z	-8,326	-8,059
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	467,000	677,500
Wilcoxon W	2952,000	3162,500
Z	-8,611	-7,592
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2vs 3

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2407,500	2426,000
Wilcoxon W	4892,500	4911,000
Z	-,187	-,104
Asymp. Sig. (2-tailed)	,852	,918

a. Grouping Variable: lama_simpan

2vs 4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2202,000	1978,000
Wilcoxon W	4687,000	4463,000
Z	-1,081	-2,029
Asymp. Sig. (2-tailed)	,280	,042

a. Grouping Variable: lama_simpan

2vs 5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1324,500	1792,000
Wilcoxon W	3809,500	4277,000
Z	-4,872	-2,865
Asymp. Sig. (2-tailed)	,000	,004

a. Grouping Variable: lama_simpan

2 vs 6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1152,500	1638,000
Wilcoxon W	3637,500	4123,000
Z	-5,629	-3,539
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1182,000	1510,000
Wilcoxon W	3667,000	3995,000
Z	-5,455	-4,084
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1004,500	1284,000
Wilcoxon W	3489,500	3769,000
Z	-6,217	-5,039
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	946,000	1298,000
Wilcoxon W	3431,000	3783,000
Z	-6,468	-4,952
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	663,000	1211,000
Wilcoxon W	3148,000	3696,000
Z	-7,689	-5,311
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	696,500	980,000
Wilcoxon W	3181,500	3465,000
Z	-7,545	-6,339
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	624,000	1028,000
Wilcoxon W	3109,000	3513,000
Z	-7,901	-6,100
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3vs 4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2211,500	1991,500
Wilcoxon W	4696,500	4476,500
Z	-1,049	-1,965
Asymp. Sig. (2-tailed)	,294	,049

a. Grouping Variable: lama_simpan

3vs 5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1291,500	1784,500
Wilcoxon W	3776,500	4269,500
Z	-5,059	-2,879
Asymp. Sig. (2-tailed)	,000	,004

a. Grouping Variable: lama_simpan

3vs 6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1090,000	1639,000
Wilcoxon W	3575,000	4124,000
Z	-5,921	-3,508
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1126,500	1551,500
Wilcoxon W	3611,500	4036,500
Z	-5,710	-3,881
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	954,000	1348,000
Wilcoxon W	3439,000	3833,000
Z	-6,466	-4,736
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	889,500	1337,000
Wilcoxon W	3374,500	3822,000
Z	-6,736	-4,770
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	601,000	1256,000
Wilcoxon W	3086,000	3741,000
Z	-7,985	-5,122
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1271,500	2186,500
Wilcoxon W	3756,500	4671,500
Z	-5,197	-1,144
Asymp. Sig. (2-tailed)	,000	,252

a. Grouping Variable: lama_simpan

3 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	653,000	1045,500
Wilcoxon W	3138,000	3530,500
Z	-7,745	-6,030
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	583,000	1088,500
Wilcoxon W	3068,000	3573,500
Z	-8,104	-5,848
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

4vs 5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1483,500	2336,500
Wilcoxon W	3968,500	4821,500
Z	-4,212	-,492
Asymp. Sig. (2-tailed)	,000	,623

a. Grouping Variable: lama_simpan

4 vs 6

4 vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1262,000	2069,500
Wilcoxon W	3747,000	4554,500
Z	-5,175	-1,649
Asymp. Sig. (2-tailed)	,000	,099

a. Grouping Variable: lama_simpan

4 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1080,000	1800,500
Wilcoxon W	3495,000	4215,500
Z	-5,848	-2,684
Asymp. Sig. (2-tailed)	,000	,007

a. Grouping Variable: lama_simpan

4 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1018,000	1792,000
Wilcoxon W	3503,000	4277,000
Z	-6,217	-2,831
Asymp. Sig. (2-tailed)	,000	,005

a. Grouping Variable: lama_simpan

4 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	685,000	1648,000
Wilcoxon W	3170,000	4133,000
Z	-7,635	-3,451
Asymp. Sig. (2-tailed)	,000	,001

a. Grouping Variable: lama_simpan

4 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	683,500	1498,000
Wilcoxon W	3168,500	3983,000
Z	-7,619	-4,118
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

4 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	612,000	1460,500
Wilcoxon W	3097,000	3945,500
Z	-7,944	-4,272
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

5 vs 6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2294,500	2274,500
Wilcoxon W	4779,500	4759,500
Z	-,685	-,779
Asymp. Sig. (2-tailed)	,494	,436

a. Grouping Variable: lama_simpan

5 vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2197,500	2113,000
Wilcoxon W	4682,500	4598,000
Z	-1,103	-1,478
Asymp. Sig. (2-tailed)	,270	,139

a. Grouping Variable: lama_simpan

5 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2029,500	1822,000
Wilcoxon W	4514,500	4307,000
Z	-1,837	-2,745
Asymp. Sig. (2-tailed)	,066	,006

a. Grouping Variable: lama_simpan

5 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1960,500	1843,000
Wilcoxon W	4445,500	4328,000
Z	-2,141	-2,644
Asymp. Sig. (2-tailed)	,032	,008

a. Grouping Variable: lama_simpan

5 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1569,000	1712,500
Wilcoxon W	4054,000	4197,500
Z	-3,881	-3,200
Asymp. Sig. (2-tailed)	,000	,001

a. Grouping Variable: lama_simpan

5 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1503,000	1483,500
Wilcoxon W	3988,000	3968,500
Z	-4,180	-4,238
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

5 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1405,000	1496,000
Wilcoxon W	3890,000	3981,000
Z	-4,654	-4,149
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

6 vs 7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2306,500	2284,500
Wilcoxon W	4791,500	4769,500
Z	-,644	-,727
Asymp. Sig. (2-tailed)	,520	,467

a. Grouping Variable: lama_simpan

6 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2130,000	1984,000
Wilcoxon W	4615,000	4469,000
Z	-1,419	-2,043
Asymp. Sig. (2-tailed)	,156	,041

a. Grouping Variable: lama_simpan

6 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2053,500	2001,000
Wilcoxon W	4538,500	4486,000
Z	-1,769	-1,964
Asymp. Sig. (2-tailed)	,077	,050

a. Grouping Variable: lama_simpan

6 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1611,000	1857,000
Wilcoxon W	4096,000	4342,000
Z	-3,736	-2,585
Asymp. Sig. (2-tailed)	,000	,010

a. Grouping Variable: lama_simpan

6 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1485,000	1643,500
Wilcoxon W	3970,000	4128,500
Z	-4,298	-3,555
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

6 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1381,000	1637,500
Wilcoxon W	3866,000	4122,500
Z	-4,757	-3,553
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

7 vs 8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2272,500	2134,000
Wilcoxon W	4757,500	4619,000
Z	-,782	-1,390
Asymp. Sig. (2-tailed)	,434	,164

a. Grouping Variable: lama_simpan

7 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2208,000	2101,000
Wilcoxon W	4693,000	4586,000
Z	-1,072	-1,516
Asymp. Sig. (2-tailed)	,284	,129

a. Grouping Variable: lama_simpan

7 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1790,000	1895,500
Wilcoxon W	4275,000	4380,500
Z	-2,936	-2,399
Asymp. Sig. (2-tailed)	,003	,016

a. Grouping Variable: lama_simpan

7 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1657,000	1765,500
Wilcoxon W	4142,000	4250,500
Z	-3,541	-2,996
Asymp. Sig. (2-tailed)	,000	,003

a. Grouping Variable: lama_simpan

7 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1550,000	1669,000
Wilcoxon W	4035,000	4154,000
Z	-4,032	-3,390
Asymp. Sig. (2-tailed)	,000	,001

a. Grouping Variable: lama_simpan

8 vs 9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2388,500	2388,000
Wilcoxon W	4873,500	4873,000
Z	-,272	-,270
Asymp. Sig. (2-tailed)	,786	,787

a. Grouping Variable: lama_simpan

8 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1971,000	2154,000
Wilcoxon W	4456,000	4639,000
Z	-2,138	-1,287
Asymp. Sig. (2-tailed)	,032	,198

a. Grouping Variable: lama_simpan

8 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1855,000	2082,000
Wilcoxon W	4340,000	4567,000
Z	-2,673	-1,615
Asymp. Sig. (2-tailed)	,008	,106

a. Grouping Variable: lama_simpan

8 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1741,000	1934,000
Wilcoxon W	4226,000	4419,000
Z	-3,215	-2,255
Asymp. Sig. (2-tailed)	,001	,024

a. Grouping Variable: lama_simpan

9 vs 10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2022,000	2258,000
Wilcoxon W	4507,000	4743,000
Z	-1,917	-,842
Asymp. Sig. (2-tailed)	,055	,400

a. Grouping Variable: lama_simpan

9 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1891,000	2156,000
Wilcoxon W	4376,000	4641,000
Z	-2,519	-1,291
Asymp. Sig. (2-tailed)	,012	,197

a. Grouping Variable: lama_simpan

9 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1774,000	2057,000
Wilcoxon W	4259,000	4542,000
Z	-3,071	-1,735
Asymp. Sig. (2-tailed)	,002	,083

a. Grouping Variable: lama_simpan

10 vs 11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2301,000	2391,500
Wilcoxon W	4786,000	4876,500
Z	-,691	-,259
Asymp. Sig. (2-tailed)	,489	,796

a. Grouping Variable: lama_simpan

10 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2172,000	2271,500
Wilcoxon W	4657,000	4756,500
Z	-1,311	-,803
Asymp. Sig. (2-taile	,190	,422

a. Grouping Variable: lama_simpan

11 vs 12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2309,000	2294,500
Wilcoxon W	4794,000	4779,500
Z	-,680	-,693
Asymp. Sig. (2-tailed)	,497	,488

a. Grouping Variable: lama_simpan

Lampiran 11. Uji Statistik Sensoris MIK Selama Penyimpanan

Test Statistics[a,b]

	warna	aroma
Chi-Square	323,585	218,836
df	12	12
Asymp. Sig.	,000	,000

a. Kruskal Wallis Test

b. Grouping Variable: lama_simpan

0 vs 1

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2363,000	2390,000
Wilcoxon W	4848,000	4875,000
Z	-,393	-,260
Asymp. Sig. (2-tailed)	,694	,795

a. Grouping Variable: lama_simpan

0 vs 2

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2286,500	1709,000
Wilcoxon W	4771,500	4194,000
Z	-,721	-3,184
Asymp. Sig. (2-tailed)	,471	,001

a. Grouping Variable: lama_simpan

0 vs 3

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2235,500	1734,500
Wilcoxon W	4720,500	4219,500
Z	-,960	-3,070
Asymp. Sig. (2-tailed)	,337	,002

a. Grouping Variable: lama_simpan

0 vs4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1993,500	1384,500
Wilcoxon W	4478,500	3869,500
Z	-2,014	-4,552
Asymp. Sig. (2-tailed)	,044	,000

a. Grouping Variable: lama_simpan

0 vs5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1114,000	1159,500
Wilcoxon W	3599,000	3644,500
Z	-5,852	-5,545
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	905,500	1054,500
Wilcoxon W	3390,500	3539,500
Z	-6,712	-6,001
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	962,500	978,500
Wilcoxon W	3447,500	3463,500
Z	-6,411	-6,306
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	798,500	855,000
Wilcoxon W	3283,500	3340,000
Z	-7,143	-6,818
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	735,500	845,000
Wilcoxon W	3220,500	3330,000
Z	-7,398	-6,839
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	475,000	800,000
Wilcoxon W	2960,000	3285,000
Z	-8,530	-7,032
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

0 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	543,000	628,000
Wilcoxon W	3028,000	3113,000
Z	-8,212	-7,782
Asymp. Sig. (2-tailed	,000	,000

a. Grouping Variable: lama_simpan

0 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	483,000	679,500
Wilcoxon W	2968,000	3164,500
Z	-8,542	-7,557
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs 2

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2346,500	1691,000
Wilcoxon W	4831,500	4176,000
Z	-,457	-3,272
Asymp. Sig. (2-tailed)	,648	,001

a. Grouping Variable: lama_simpan

1 vs 3

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2320,500	1746,500
Wilcoxon W	4805,500	4231,500
Z	-,580	-3,034
Asymp. Sig. (2-tailed)	,562	,002

a. Grouping Variable: lama_simpan

1 vs4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2061,500	1363,500
Wilcoxon W	4546,500	3848,500
Z	-1,720	-4,647
Asymp. Sig. (2-tailed)	,085	,000

a. Grouping Variable: lama_simpan

1 vs5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1171,000	1081,500
Wilcoxon W	3656,000	3566,500
Z	-5,628	-5,899
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	934,500	966,500
Wilcoxon W	3419,500	3451,500
Z	-6,626	-6,396
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	968,500	914,500
Wilcoxon W	3453,500	3399,500
Z	-6,417	-6,575
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	821,500	797,000
Wilcoxon W	3306,500	3282,000
Z	-7,070	-7,052
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	749,500	803,000
Wilcoxon W	3234,500	3288,000
Z	-7,366	-7,034
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	475,000	797,000
Wilcoxon W	2960,000	3282,000
Z	-8,553	-7,074
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	517,000	564,000
Wilcoxon W	3002,000	3049,000
Z	-8,326	-8,059
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

1 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	467,000	677,500
Wilcoxon W	2952,000	3162,500
Z	-8,611	-7,592
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs 3

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2407,500	2426,000
Wilcoxon W	4892,500	4911,000
Z	-,187	-,104
Asymp. Sig. (2-tailed)	,852	,918

a. Grouping Variable: lama_simpan

2 vs4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2202,000	1978,000
Wilcoxon W	4687,000	4463,000
Z	-1,081	-2,029
Asymp. Sig. (2-tailed)	,280	,042

a. Grouping Variable: lama_simpan

2 vs5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1324,500	1792,000
Wilcoxon W	3809,500	4277,000
Z	-4,872	-2,865
Asymp. Sig. (2-taile	,000	,004

a. Grouping Variable: lama_simpan

2 vs6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1152,500	1638,000
Wilcoxon W	3637,500	4123,000
Z	-5,629	-3,539
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1182,000	1510,000
Wilcoxon W	3667,000	3995,000
Z	-5,455	-4,084
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1004,500	1284,000
Wilcoxon W	3489,500	3769,000
Z	-6,217	-5,039
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	946,000	1298,000
Wilcoxon W	3431,000	3783,000
Z	-6,468	-4,952
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	663,000	1211,000
Wilcoxon W	3148,000	3696,000
Z	-7,689	-5,311
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	696,500	980,000
Wilcoxon W	3181,500	3465,000
Z	-7,545	-6,339
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

2 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	624,000	1028,000
Wilcoxon W	3109,000	3513,000
Z	-7,901	-6,100
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs4

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2211,500	1991,500
Wilcoxon W	4696,500	4476,500
Z	-1,049	-1,965
Asymp. Sig. (2-tailed)	,294	,049

a. Grouping Variable: lama_simpan

3 vs5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1291,500	1784,500
Wilcoxon W	3776,500	4269,500
Z	-5,059	-2,879
Asymp. Sig. (2-tailed)	,000	,004

a. Grouping Variable: lama_simpan

3 vs6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1090,000	1639,000
Wilcoxon W	3575,000	4124,000
Z	-5,921	-3,508
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1126,500	1551,500
Wilcoxon W	3611,500	4036,500
Z	-5,710	-3,881
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	954,000	1348,000
Wilcoxon W	3439,000	3833,000
Z	-6,466	-4,736
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	889,500	1337,000
Wilcoxon W	3374,500	3822,000
Z	-6,736	-4,770
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	601,000	1256,000
Wilcoxon W	3086,000	3741,000
Z	-7,985	-5,122
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	653,000	1045,500
Wilcoxon W	3138,000	3530,500
Z	-7,745	-6,030
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

3 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	583,000	1088,500
Wilcoxon W	3068,000	3573,500
Z	-8,104	-5,848
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

4 vs5

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1483,500	2336,500
Wilcoxon W	3968,500	4821,500
Z	-4,212	-,492
Asymp. Sig. (2-tailed)	,000	,623

a. Grouping Variable: lama_simpan

4 vs6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1271,500	2186,500
Wilcoxon W	3756,500	4671,500
Z	-5,197	-1,144
Asymp. Sig. (2-tailed)	,000	,252

a. Grouping Variable: lama_simpan

4 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1262,000	2069,500
Wilcoxon W	3747,000	4554,500
Z	-5,175	-1,649
Asymp. Sig. (2-tailed)	,000	,099

a. Grouping Variable: lama_simpan

4 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1080,000	1800,500
Wilcoxon W	3495,000	4215,500
Z	-5,848	-2,684
Asymp. Sig. (2-tailed)	,000	,007

a. Grouping Variable: lama_simpan

4 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1018,000	1792,000
Wilcoxon W	3503,000	4277,000
Z	-6,217	-2,831
Asymp. Sig. (2-tailed)	,000	,005

a. Grouping Variable: lama_simpan

4 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	685,000	1648,000
Wilcoxon W	3170,000	4133,000
Z	-7,635	-3,451
Asymp. Sig. (2-tailed)	,000	,001

a. Grouping Variable: lama_simpan

4 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	683,500	1498,000
Wilcoxon W	3168,500	3983,000
Z	-7,619	-4,118
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

4 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	612,000	1460,500
Wilcoxon W	3097,000	3945,500
Z	-7,944	-4,272
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

5 vs6

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2294,500	2274,500
Wilcoxon W	4779,500	4759,500
Z	-,685	-,779
Asymp. Sig. (2-tailed)	,494	,436

a. Grouping Variable: lama_simpan

5 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2197,500	2113,000
Wilcoxon W	4682,500	4598,000
Z	-1,103	-1,478
Asymp. Sig. (2-tailed)	,270	,139

a. Grouping Variable: lama_simpan

5 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2029,500	1822,000
Wilcoxon W	4514,500	4307,000
Z	-1,837	-2,745
Asymp. Sig. (2-tailed)	,066	,006

a. Grouping Variable: lama_simpan

5 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1960,500	1843,000
Wilcoxon W	4445,500	4328,000
Z	-2,141	-2,644
Asymp. Sig. (2-tailed)	,032	,008

a. Grouping Variable: lama_simpan

5 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1569,000	1712,500
Wilcoxon W	4054,000	4197,500
Z	-3,881	-3,200
Asymp. Sig. (2-tailed)	,000	,001

a. Grouping Variable: lama_simpan

5 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1503,000	1483,500
Wilcoxon W	3988,000	3968,500
Z	-4,180	-4,238
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

5 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1405,000	1496,000
Wilcoxon W	3890,000	3981,000
Z	-4,654	-4,149
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

6 vs7

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2306,500	2284,500
Wilcoxon W	4791,500	4769,500
Z	-,644	-,727
Asymp. Sig. (2-tailed)	,520	,467

a. Grouping Variable: lama_simpan

6 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2130,000	1984,000
Wilcoxon W	4615,000	4469,000
Z	-1,419	-2,043
Asymp. Sig. (2-tailed)	,156	,041

a. Grouping Variable: lama_simpan

6 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2053,500	2001,000
Wilcoxon W	4538,500	4486,000
Z	-1,769	-1,964
Asymp. Sig. (2-tailed)	,077	,050

a. Grouping Variable: lama_simpan

6 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1611,000	1857,000
Wilcoxon W	4096,000	4342,000
Z	-3,736	-2,585
Asymp. Sig. (2-tailed)	,000	,010

a. Grouping Variable: lama_simpan

6 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1485,000	1643,500
Wilcoxon W	3970,000	4128,500
Z	-4,298	-3,555
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

6 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1381,000	1637,500
Wilcoxon W	3866,000	4122,500
Z	-4,757	-3,553
Asymp. Sig. (2-tailed)	,000	,000

a. Grouping Variable: lama_simpan

7 vs8

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2272,500	2134,000
Wilcoxon W	4757,500	4619,000
Z	-,782	-1,390
Asymp. Sig. (2-tailed)	,434	,164

a. Grouping Variable: lama_simpan

7 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2208,000	2101,000
Wilcoxon W	4693,000	4586,000
Z	-1,072	-1,516
Asymp. Sig. (2-tailed)	,284	,129

a. Grouping Variable: lama_simpan

7 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1790,000	1895,500
Wilcoxon W	4275,000	4380,500
Z	-2,936	-2,399
Asymp. Sig. (2-tailed)	,003	,016

a. Grouping Variable: lama_simpan

7 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1657,000	1765,500
Wilcoxon W	4142,000	4250,500
Z	-3,541	-2,996
Asymp. Sig. (2-tailed)	,000	,003

a. Grouping Variable: lama_simpan

7 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1550,000	1669,000
Wilcoxon W	4035,000	4154,000
Z	-4,032	-3,390
Asymp. Sig. (2-tailed)	,000	,001

a. Grouping Variable: lama_simpan

8 vs9

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2388,500	2388,000
Wilcoxon W	4873,500	4873,000
Z	-,272	-,270
Asymp. Sig. (2-tailed)	,786	,787

a. Grouping Variable: lama_simpan

8 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1971,000	2154,000
Wilcoxon W	4456,000	4639,000
Z	-2,138	-1,287
Asymp. Sig. (2-tailed)	,032	,198

a. Grouping Variable: lama_simpan

8 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1855,000	2082,000
Wilcoxon W	4340,000	4567,000
Z	-2,673	-1,615
Asymp. Sig. (2-tailed)	,008	,106

a. Grouping Variable: lama_simpan

8 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	1741,000	1934,000
Wilcoxon W	4226,000	4419,000
Z	-3,215	-2,255
Asymp. Sig. (2-tailed)	,001	,024

a. Grouping Variable: lama_simpan

9 vs10

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2022,000	2258,000
Wilcoxon W	4507,000	4743,000
Z	-1,917	-,842
Asymp. Sig. (2-tailed)	,055	,400

a. Grouping Variable: lama_simpan

9 vs 11

Test Statistics(a)

	warna	aroma
Mann-Whitney U	1891,000	2156,000
Wilcoxon W	4376,000	4641,000
Z	-2,519	-1,291
Asymp. Sig. (2-tailed)	,012	,197

a Grouping Variable: lama_simpan

9 vs 12

Test Statistics(a)

	warna	aroma
Mann-Whitney U	1774,000	2057,000
Wilcoxon W	4259,000	4542,000
Z	-3,071	-1,735
Asymp. Sig. (2-tailed)	,002	,083

a Grouping Variable: lama_simpan

10 vs11

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2301,000	2391,500
Wilcoxon W	4786,000	4876,500
Z	-,691	-,259
Asymp. Sig. (2-tailed)	,489	,796

a. Grouping Variable: lama_simpan

10 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2172,000	2271,500
Wilcoxon W	4657,000	4756,500
Z	-1,311	-,803
Asymp. Sig. (2-tailed)	,190	,422

a. Grouping Variable: lama_simpan

11 vs12

Test Statistics[a]

	warna	aroma
Mann-Whitney U	2309,000	2294,500
Wilcoxon W	4794,000	4779,500
Z	-,680	-,693
Asymp. Sig. (2-tailed)	,497	,488

a. Grouping Variable: lama_simpan

Lampiran 12. Perhitungan Konversi Lama Penyimpanan

$\Delta T = 40^0C - 25^0C = 15$

T1 = suhu penyimpanan 40^0C

T2 = suhu penyimpanan 25^0C

Ts = masa kadaluarsa pada suhu tertentu

Asumsi : 1 minggu = 7 hari

Hari 1 (Minggu 0)

Ts pada $T_2 = 2^{(15/10)}$ x 1 = 2,83 hari

Hari 7 (Minggu 1)

Ts pada $T_2 = 2^{(15/10)}$ x 7 = 19,80hari

Hari 14 (Minggu 2)

Ts pada $T_2 = 2^{(15/10)}$ x 14 = 39,60hari

Hari 21 (Minggu 3)

Ts pada $T_2 = 2^{(15/10)}$ x 21 = 59,40hari

Hari 28 (Minggu 4)

Ts pada $T_2 = 2^{(19/10)}$ x 28 = 79,20hari

Hari 35 (Minggu 5)

Ts pada $T_2 = 2^{(19/10)}$ x 35 = 98,99hari

Hari 42 (Minggu 6)

Ts pada $T_2 = 2^{(19/10)}$ x 42 = 118,79hari

Hari 49 (Minggu 7)

Ts pada $T_2 = 2^{(19/10)}$ x 49 = 138,59hari

Hari 56 (Minggu 8)

Ts pada $T_2 = 2^{(19/10)}$ x 56 = 158,39hari

Hari 63 (Minggu 9)

Ts pada $T_2 = 2^{(19/10)}$ x 63 = 178,19hari

Hari 70 (Minggu 10)

Ts pada $T_2 = 2^{(19/10)}$ x 70 = 197,99hari

Hari 77 (Minggu 11)

Ts pada $T_2 = 2^{(19/10)}$ x 77 = 217,79hari

Hari 84 (Minggu 12)

Ts pada $T_2 = 2^{(19/10)}$ x 84 = 237,59hari

Lampiran 13. Kuesioner Sensoris Minuman Instan

Uji Ranking Hedonik

Nama :
Tanggal:
Produk : Minuman Instan
Atribut : Rasa

Instruksi:
Sebelum mencicipi tiap sampel, berkumurlah dengan air putih terlebih dahulu.
Di hadapan anda terdapat 4 macam sampel minuman instant kacang hijau. Cicipilah rasa masing-masing sampel secara berurutan dari kiri ke kanan. Setelah mencicipi semua sampel, anda boleh mengulang sesering yang anda perlukan. Urutkan sampel dari sampel yang rasanya paling kurang anda sukai (=1) hingga sampel yang rasanya paling anda sukai (=4).

Kode sampel	Ranking (jangan sampai ada yang dobel)
.....	.....
.....	.....
.....	.....
.....	.....

Terima Kasih

Uji Ranking Hedonik

Nama : ...
Tanggal: ...
Produk : Minuman Instan
Atribut : Aroma

Instruksi:
Di hadapan anda terdapat 4 macam sampel minuman instan kacang hijau. Ciumlah aroma masing-masing sampel secara berurutan dari kiri ke kanan. Setelah mencium aroma semua sampel, anda boleh mengulang sesering yang anda perlukan. Urutkan sampel dari sampel yang aromanya paling kurang anda sukai (=1) hingga sampel yang aromanya paling anda sukai (=4).

Kode sampel	Ranking (jangan sampai ada yang dobel)
.....	.....
.....	.....
.....	.....
.....	.....

Terima Kasih

Uji Ranking Hedonik

Nama : ... Tanggal: ...
Produk : Minuman Instan
Atribut : Warna

Instruksi:
Di hadapan anda terdapat 4 macam sampel minuman instan kacang hijau. Amatilah warna masing-masing sampel secara berurutan dari kiri ke kanan. Setelah mengamati warna semua sampel, anda boleh mengulang sesering yang anda perlukan. Urutkan sampel dari sampel yang warnanya paling kurang anda sukai (=1) hingga sampel yang warnanya paling anda sukai (=4).

Kode sampel	Ranking (jangan sampai ada yang dobel)
.....	.....
.....	.....
.....	.....
.....	.....

Terima Kasih

Uji Ranking Hedonik

Nama : ... Tanggal: ...
Produk : Minuman Instan
Atribut : *Overall*

Instruksi:
Di hadapan anda terdapat 4 macam sampel minuman instan kacang hijau. Ciumlah aroma masing-masing sampel secara berurutan dari kiri ke kanan. Setelah mencium aroma semua sampel, anda boleh mengulang sesering yang anda perlukan. Urutkan sampel dari sampel yang aromanya paling kurang anda sukai (=1) hingga sampel yang aromanya paling anda sukai (=4).

Kode sampel	Ranking (jangan sampai ada yang dobel)
.....	.....
.....	.....
.....	.....
.....	.....

Terima Kasih

Lampiran 14. Kuesioner Sensoris Minuman Instan Selama Penyimpanan

Nama :

Tanggal:
Produk : Minuman instant
Atribut: Aroma

Instruksi :
Di hadapan Anda terdapat sampel minuman instan kacang hijau. Rasakan aroma dari sampel yang tersedia. Setelah menilai satu sampel, segera berikan penilaian Anda dengan tanda (×) pada kotak yang tersedia.

Keterangan Skor	Kode Sampel	
dapat diterima		
cukup dapat diterima		
kurang dapat diterima		
tidak dapat diterima		
sangat tidak dapat diterima		

Nama : Tanggal:
Produk : Minuman instant
Atribut: Warna

Instruksi :
Dihadapan Anda terdapat sampel minuman instan kacang hijau. Amati warna sampel yang tersedia. Setelah menilai satu sampel, segera berikan penilaian Anda dengan tanda (×) pada kotak yang tersedia.

Keterangan Skor	Kode Sampel	
dapat diterima		
cukup dapat diterima		
kurang dapat diterima		
tidak dapat diterima		
sangat tidak dapat diterima		

Lampiran 15. Hasil Uji Pendahuluan Penentuan Formulasi Minuman Instan Kacang Hijau

Panelis	Formulasi	Warna	Aroma	Rasa	Kekentalan	Overall
1	A	5	4	1	2	1
2		1	5	2	1	2
3		5	5	3	3	4
4		3	2	1	2	1
5		5	5	5	3	5
6		1	3	2	2	2
7		1	1	5	5	1
8		2	5	5	2	5
9		2	1	1	1	1
10		2	1	1	1	1
11		5	4	4	2	4
12		3	1	1	1	1
13		1	2	2	5	2
14		1	1	1	2	1
15		4	5	3	3	5
1	B	2	3	5	3	4
2		4	1	5	4	5
3		3	2	5	2	3
4		1	5	4	4	3
5		2	2	2	5	2
6		3	2	1	1	1
7		2	2	2	4	2
8		4	2	3	3	3
9		3	2	5	3	2
10		3	2	5	5	5
11		3	4	2	4	2
12		4	5	4	3	4
13		2	4	4	4	4
14		5	5	5	5	5
15		3	2	4	2	4
1	C	1	5	2	1	2
2		5	2	1	5	3
3		5	5	3	3	4
4		5	3	3	3	4
5		1	1	3	1	1
6		5	1	3	3	3
7		5	4	3	1	5
8		5	1	2	5	4
9		5	3	3	5	4
10		1	5	2	2	2
11		1	5	5	3	5
12		5	3	5	5	5

13		3	1	1	1	1
14		3	3	3	3	3
15		5	1	1	4	3
1	D	3	1	3	5	3
2		2	4	4	3	4
3		4	4	4	5	5
4		4	1	2	1	2
5		4	4	4	4	4
6		2	4	4	4	4
7		4	5	1	3	4
8		3	4	4	1	1
9		4	4	2	4	5
10		4	4	3	3	3
11		4	5	1	5	1
12		2	4	2	2	3
13		5	3	3	3	3
14		2	4	2	1	2
15		2	4	5	1	1
1	E	4	2	4	4	5
2		3	3	3	2	1
3		1	1	2	1	1
4		2	4	5	5	5
5		3	3	1	2	2
6		4	5	5	5	5
7		3	3	4	2	3
8		1	3	1	4	2
9		1	5	4	2	3
10		5	3	4	4	4
11		2	2	3	1	3
12		1	2	3	4	2
13		4	5	5	2	5
14		4	2	4	4	4
15		1	3	2	5	2

- A: minuman instan dengan perbandingan tepung ekstrudat : susu skim: gula halus: krimer 12:10: 9: 9
- B: minuman instan dengan perbandingan tepung ekstrudat : susu skim: gula halus: krimer 10:10: 10: 10
- C:minuman instan dengan perbandingan tepung ekstrudat : susu skim: gula halus: krimer 11:11: 9: 9
- D:minuman instan dengan perbandingan tepung ekstrudat : susu skim: gula halus: krimer 12:11: 8: 9
- E: minuman instan dengan perbandingan tepung ekstrudat : susu skim: gula halus: krimer 11:10: 9: 10

Lampiran 16. Hasil Uji Sensoris Pendahuluan Penentuan Perbandingan Kacang : Hijau Minuman Instan Kacang Hijau

Panelis	Perbandingan Kacang Hijau :Jagung	Warna	Aroma	Rasa	Kekentalan	Overall
1	A	1	1	1	1	1
2		1	1	1	1	1
3		1	1	1	1	1
4		1	1	1	1	4
5		1	1	1	1	1
6		1	1	1	1	1
7		1	2	1	1	1
8		3	3	3	3	3
9		1	1	1	1	4
10		1	2	1	1	2
11		1	2	1	1	2
12		1	3	1	1	1
13		1	1	1	1	3
14		1	3	2	1	1
15		1	1	1	1	3
1	B	3	4	2	2	2
2		6	3	3	3	5
3		2	3	2	2	3
4		2	2	2	2	2
5		3	2	4	3	3
6		3	2	4	3	2
7		3	3	3	3	3
8		1	2	1	1	2
9		3	3	3	3	2
10		3	1	2	2	1
11		3	1	2	2	1
12		4	1	2	3	3
13		2	3	2	2	1
14		2	1	6	3	5
15		2	3	2	2	1
1	C	5	4	3	4	4
2		5	4	5	5	4
3		4	4	3	4	4
4		5	5	4	4	3
5		5	5	3	5	5
6		5	5	3	5	5
7		4	4	4	4	5
8		5	6	5	5	3

9		4	4	5	4	3
10		5	4	4	4	6
11		5	4	4	4	6
12		6	5	6	6	4
13		6	4	4	4	4
14		6	5	5	6	4
15		6	4	4	4	4
1	D	4	4	3	3	3
2		4	5	4	4	4
3		3	4	4	4	3
4		6	4	5	5	6
5		6	6	6	6	6
6		6	6	6	6	6
7		5	6	5	5	3
8		6	5	6	6	6
9		6	5	4	5	5
10		6	6	5	6	5
11		6	6	5	6	5
12		3	6	4	5	2
13		4	5	6	5	6
14		3	6	3	5	2
15		4	5	6	5	6
1	E	4	4	3	3	3
2		3	6	6	6	6
3		4	5	3	4	3
4		4	6	6	6	5
5		4	4	5	4	4
6		4	4	5	4	4
7		6	5	6	6	6
8		4	4	4	4	4
9		5	6	6	6	6
10		4	5	6	5	4
11		4	5	6	5	4
12		2	2	3	2	6
13		5	4	5	4	5
14		5	4	4	4	5
15		5	6	5	6	5
1	F	3	3	3	3	4
2		2	2	2	2	2
3		2	3	3	3	2
4		3	3	3	3	1
5		2	3	2	2	2
6		2	3	2	2	2
7		2	1	2	2	1
8		2	1	2	2	1
9		2	2	2	2	1

10	2	3	3	3	3
11	2	3	3	3	3
12	2	2	3	2	6
13	3	2	3	3	2
14	4	2	1	2	6
15	3	2	3	3	2

Lampiran 17. Hasil Uji Sensoris Minuman Instan Kacang Hijau Metode Ekstrusi & Ekstraksi

Panelis	Perlakuan	Warna	Aroma	Rasa	Overall
1	A	3	3	4	3
2		3	4	3	3
3		1	3	2	2
4		4	3	4	4
5		4	3	4	4
6		4	1	4	4
7		3	4	4	3
8		4	4	4	4
9		3	4	4	4
10		1	3	4	4
11		2	3	3	3
12		3	3	4	3
13		3	3	3	3
14		2	3	4	4
15		4	3	3	3
16		3	4	4	4
17		3	4	3	3
18		3	4	4	4
19		3	4	4	4
20		4	4	3	4
21		3	3	3	3
22		4	3	3	4
23		3	4	4	4
24		4	4	4	4
25		4	4	4	4
26		3	4	4	4
27		3	4	4	4
28		4	4	4	4
29		4	3	4	4
30		3	4	3	3
31		2	3	2	2
32		4	4	4	4
33		4	3	4	4
34		3	4	4	4
35		4	4	4	4
36		3	4	4	4
37		4	4	3	4
38		4	4	4	4
39		3	4	3	4
40		3	4	4	4
41		3	4	4	4

42		3	4	4	3
43		3	4	4	3
44		4	4	4	4
45		3	3	3	3
46		2	3	3	2
47		3	3	2	3
48		3	4	4	4
49		2	2	1	3
50		3	3	3	3
1	B	1	1	1	1
2		1	1	1	1
3		2	4	4	4
4		1	1	2	1
5		1	1	1	1
6		1	1	2	1
7		1	1	2	1
8		2	2	1	1
9		1	2	2	2
10		4	2	1	1
11		1	1	1	1
12		1	2	2	1
13		1	1	1	1
14		1	2	2	2
15		2	2	1	1
16		1	2	1	1
17		1	2	1	1
18		2	2	2	2
19		2	2	2	2
20		1	1	1	1
21		1	1	2	2
22		1	1	1	1
23		1	2	1	1
24		1	1	1	1
25		2	2	2	2
26		2	2	2	2
27		1	1	1	1
28		1	1	1	1
29		1	1	1	1
30		1	1	2	1
31		1	1	1	1
32		2	1	1	1
33		1	1	1	1
34		1	2	1	1
35		1	2	1	1
36		1	1	1	1
37		1	1	1	1

38		1	2	1	1
39		1	2	2	1
40		1	2	2	2
41		1	1	2	1
42		1	1	1	2
43		2	1	2	1
44		1	1	2	1
45		1	1	1	1
46		1	1	1	1
47		1	1	1	1
48		1	1	1	1
49		1	3	4	4
50		1	2	2	1
1	C	4	4	3	4
2		4	3	4	4
3		3	2	3	3
4		3	4	3	3
5		3	4	3	3
6		3	3	3	3
7		4	3	3	4
8		3	3	3	3
9		4	3	3	3
10		2	4	3	3
11		3	4	4	4
12		4	4	3	4
13		4	4	4	4
14		3	1	3	3
15		3	4	4	4
16		4	3	3	3
17		4	3	4	4
18		4	3	3	3
19		4	3	3	3
20		3	3	4	3
21		4	4	4	4
22		3	4	4	2
23		4	3	3	3
24		3	3	3	3
25		3	3	3	3
26		4	3	1	3
27		4	3	3	3
28		3	3	2	3
29		3	4	3	3
30		4	3	4	4
31		4	4	4	4
32		3	3	3	3
33		3	4	3	3

34		4	3	3	3
35		3	3	3	3
36		4	3	3	3
37		2	3	4	3
38		3	3	3	3
39		4	3	4	3
40		4	3	3	3
41		4	3	1	3
42		4	3	3	4
43		4	3	3	3
44		3	3	3	3
45		4	4	4	4
46		4	4	4	4
47		4	4	4	4
48		4	3	3	3
49		3	1	3	1
50		4	4	4	4
1	D	2	2	2	2
2		2	2	2	2
3		4	1	1	1
4		2	2	1	2
5		2	2	2	2
6		2	2	1	2
7		2	2	1	2
8		1	1	2	2
9		2	1	1	1
10		3	1	2	2
11		3	2	3	2
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Lampiran 18. Hasil Uji Sensoris Minuman Instan Kacang Hijau Metode Ekstrusi Selama Penyimpanan

Sampel	Atribut	Panelis	Lama Penyimpanan (minggu)	0	1	2	3	4	5	6	7	8	9	10	11	12
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