

6. DAFTAR PUSTAKA

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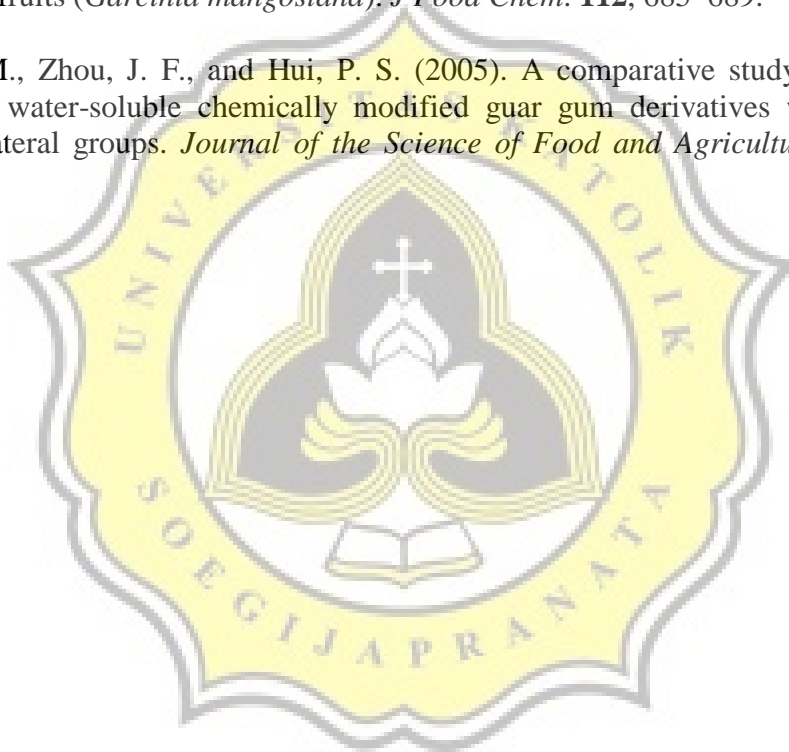
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7. LAMPIRAN

Lampiran 1. Aktivitas Antioksidan Kulit Buah Manggis Segar dan Tepung Kulit Manggis

Tests of Normality							
	perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
antioksidan	kulit manggis segar	.319	6	.056	.700	6	.006
	kulit manggis segar + blanching	.252	6	.200*	.859	6	.187
	kulit manggis segar + natrium	.313	6	.067	.730	6	.013
	kulit manggis segar + natrium + blanching	.236	6	.200*	.921	6	.512
	tepung kulit manggis natrium + blanching dehumidifier	.319	6	.056	.713	6	.008
	tepung kulit manggis sido muncul	.189	6	.200*	.956	6	.786
	tepung kulit manggis mastin	.315	6	.063	.697	6	.006
	tepung kulit manggis natrium + blanching freeze dry	.302	6	.094	.775	6	.035
	tepung kulit manggis blanching freeze dry	.314	6	.065	.772	6	.033
	tepung kulit manggis natrium freeze dry	.277	6	.166	.801	6	.060

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

a. Lilliefors Significance Correction

ANOVA

antioksidan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6536.940	9	726.327	1610.781	.000
Within Groups	22.546	50	.451		
Total	6559.486	59			

antioksidan

Duncan

perlakuan	N	Subset for alpha = 0.05					
		1	2	3	4	5	6
tepung kulit manggis mastin	6	64.97450					
tepung kulit manggis sido muncul	6		70.84133				
tepung kulit manggis natrium + blanching freeze dry	6			89.48617			
tepung kulit manggis natrium freeze dry	6				91.49267		
tepung kulit manggis blanching freeze dry	6				91.88483		
tepung kulit manggis natrium + blanching dehumidifier	6					93.96000	
kulit manggis segar	6					94.21817	
kulit manggis segar + natrium	6					94.61617	
kulit manggis segar + blanching	6					94.65467	
kulit manggis segar + natrium + blanching	6						96.59617
Sig.		1.000	1.000	1.000	.317	.108	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Lampiran 2. Uji Fisik (Tekstur, Volume Pengembangan, dan Warna)

Tests of Normality

	perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
hardness	0% (kontrol)	.234	6	.200*	.917	6	.481
	kulit manggis 10%	.259	6	.200*	.923	6	.531
	kulit manggis 10% + 0,1 guar gum	.198	6	.200*	.948	6	.725
	kulit manggis 10% + 0,2 guar gum	.202	6	.200*	.936	6	.624

cohesiveness	kulit manggis 10% + 0,3 guar gum	.230	6	.200*	.956	6	.792
	0% (kontrol)	.124	6	.200*	.988	6	.985
	kulit manggis 10%	.198	6	.200*	.894	6	.337
	kulit manggis 10% + 0,1 guar gum	.176	6	.200*	.977	6	.937
	kulit manggis 10% + 0,2 guar gum	.153	6	.200*	.983	6	.965
	kulit manggis 10% + 0,3 guar gum	.134	6	.200*	.976	6	.930
	0% (kontrol)	.272	6	.187	.890	6	.316
	kulit manggis 10%	.284	6	.140	.900	6	.372
	kulit manggis 10% + 0,1 guar gum	.157	6	.200*	.955	6	.779
springiness	kulit manggis 10% + 0,2 guar gum	.223	6	.200*	.885	6	.291
	kulit manggis 10% + 0,3 guar gum	.190	6	.200*	.962	6	.836
	0% (kontrol)	.264	6	.200*	.837	6	.122
	kulit manggis 10%	.275	6	.174	.879	6	.264
	kulit manggis 10% + 0,1 guar gum	.217	6	.200*	.858	6	.183
guminess	kulit manggis 10% + 0,2 guar gum	.281	6	.152	.869	6	.223
	kulit manggis 10% + 0,3 guar gum	.335	6	.034	.736	6	.014
	0% (kontrol)	.264	6	.200*	.888	6	.308
	kulit manggis 10%	.251	6	.200*	.927	6	.554
	kulit manggis 10% + 0,1 guar gum	.376	6	.008	.726	6	.011
chewiness	kulit manggis 10% + 0,2 guar gum	.215	6	.200*	.941	6	.671
	kulit manggis 10% + 0,3 guar gum	.241	6	.200*	.927	6	.560
	0% (kontrol)	.307	6	.079	.825	6	.098
	kulit manggis 10%	.227	6	.200*	.932	6	.593
adhesiveness	kulit manggis 10% + 0,1 guar gum	.303	6	.089	.801	6	.059
	kulit manggis 10% + 0,2 guar gum	.215	6	.200*	.886	6	.296

L	volume_pengembangan	kulit manggis 10% + 0,3 guar gum	.211	6	.200*	.904	6	.397		
		0% (kontrol)	.141	6	.200*	.963	6	.844		
		kulit manggis 10%	.249	6	.200*	.933	6	.601		
		kulit manggis 10% + 0,1 guar gum	.322	6	.051	.873	6	.239		
		kulit manggis 10% + 0,2 guar gum	.303	6	.089	.894	6	.339		
		kulit manggis 10% + 0,3 guar gum	.169	6	.200*	.920	6	.504		
		0% (kontrol)	.270	6	.196	.839	6	.129		
		kulit manggis 10%	.269	6	.200*	.894	6	.340		
		kulit manggis 10% + 0,1 guar gum	.218	6	.200*	.941	6	.665		
		kulit manggis 10% + 0,2 guar gum	.180	6	.200*	.928	6	.563		
		kulit manggis 10% + 0,3 guar gum	.257	6	.200*	.885	6	.291		
		0% (kontrol)	.199	6	.200*	.924	6	.537		
		kulit manggis 10%	.256	6	.200*	.861	6	.192		
		kulit manggis 10% + 0,1 guar gum	.201	6	.200*	.933	6	.605		
		kulit manggis 10% + 0,2 guar gum	.187	6	.200*	.946	6	.712		
		kulit manggis 10% + 0,3 guar gum	.198	6	.200*	.925	6	.542		
		0% (kontrol)	.296	6	.109	.878	6	.262		
		kulit manggis 10%	.217	6	.200*	.970	6	.895		
		a	b	kulit manggis 10% + 0,1 guar gum	.230	6	.200*	.920	6	.503
				kulit manggis 10% + 0,2 guar gum	.276	6	.170	.919	6	.495
kulit manggis 10% + 0,3 guar gum	.178			6	.200*	.933	6	.607		

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

a. Lilliefors Significance Correction

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
L Between Groups	1840.718	4	460.179	328.959	.000

	Within Groups	34.972	25	1.399		
	Total	1875.690	29			
	Between Groups	21.499	4	5.375	77.968	.000
a	Within Groups	1.723	25	.069		
	Total	23.222	29			
	Between Groups	56.805	4	14.201	63.818	.000
b	Within Groups	5.563	25	.223		
	Total	62.368	29			

L

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
kulit manggis 10%	6	67.0022		
kulit manggis 10% + 0,3 guar gum	6		68.4500	
kulit manggis 10% + 0,2 guar gum	6		68.6978	
kulit manggis 10% + 0,1 guar gum	6		69.0167	
0% (kontrol)	6			87.7983
Sig.		1.000	.442	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

a

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	2.9889		
kulit manggis 10%	6		4.9550	
kulit manggis 10% + 0,2 guar gum	6		5.0228	5.0228
kulit manggis 10% + 0,1 guar gum	6		5.0272	5.0272
kulit manggis 10% + 0,3 guar gum	6			5.3211
Sig.		1.000	.658	.073

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

b

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	16.2100		
kulit manggis 10%	6		19.0194	
kulit manggis 10% + 0,2 guar gum	6			19.6844
kulit manggis 10% + 0,3 guar gum	6			19.7189
kulit manggis 10% + 0,1 guar gum	6			19.8650
Sig.		1.000	1.000	.538

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

ANOVA

volume_pengembangan_akhir

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	92.457	4	23.114	8.696	.000
Within Groups	66.450	25	2.658		
Total	158.907	29			

volume_pengembangan_akhir

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
tepung kbm 10%	6	44.91667		
tepung kbm 10% + 0,3 guar gum	6	46.83333	46.83333	
tepung kbm 10% + 0,2 guar gum	6		47.70000	
tepung kbm 10% + 0,1 guar gum	6		47.86667	
0% (kontrol)	6			50.35000
Sig.		.052	.310	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
hardness	Between Groups	1717.083	4	429.271	4.579	.007
	Within Groups	2343.499	25	93.740		
	Total	4060.582	29			
cohesiveness	Between Groups	.013	4	.003	21.350	.000
	Within Groups	.004	25	.000		
	Total	.017	29			
springiness	Between Groups	.709	4	.177	8.668	.000
	Within Groups	.511	25	.020		
	Total	1.220	29			
guminess	Between Groups	173.862	4	43.466	22.409	.000
	Within Groups	48.491	25	1.940		
	Total	222.353	29			
chewiness	Between Groups	.149	4	.037	36.346	.000
	Within Groups	.026	25	.001		
	Total	.174	29			
adhesiveness	Between Groups	.003	4	.001	187.138	.000
	Within Groups	.000	25	.000		
	Total	.003	29			

hardness

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	121.61283		
tepung kbm 10% + 0,1 guar gum	6	124.18408	124.18408	
tepung kbm 10% + 0,2 guar gum	6	133.23448	133.23448	133.23448
tepung kbm 10% + 0,3 guar gum	6		135.94880	135.94880
tepung kbm 10%	6			142.08954
Sig.		.059	.056	.146

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

cohesiveness

Duncan

perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
0% (kontrol)	6	.09632			
tepung kbm 10% + 0,1 guar gum	6		.11176		
tepung kbm 10% + 0,2 guar gum	6			.12837	
tepung kbm 10% + 0,3 guar gum	6			.14186	.14186
tepung kbm 10%	6				.15477
Sig.		1.000	1.000	.070	.082

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

springiness

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	2.09660		
tepung kbm 10% + 0,1 guar gum	6	2.20058		
tepung kbm 10% + 0,2 guar gum	6	2.22645	2.22645	
tepung kbm 10% + 0,3 guar gum	6		2.39245	2.39245
tepung kbm 10%	6			2.53126
Sig.		.149	.055	.105

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

guminess

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
tepung kbm 10% + 0,1 guar gum	6	12.69823	
0% (kontrol)	6	13.76590	

tepung kbm 10% + 0,2 guar gum	6	14.11410	
tepung kbm 10% + 0,3 guar gum	6		18.31307
tepung kbm 10%	6		18.38034
Sig.		.107	.934

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

chewiness

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	.29421		
tepung kbm 10% + 0,1 guar gum	6	.32149		
tepung kbm 10% + 0,2 guar gum	6		.39787	
tepung kbm 10% + 0,3 guar gum	6			.45917
tepung kbm 10%	6			.46817
Sig.		.152	1.000	.630

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

adhesiveness

Duncan

perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
tepung kbm 10% + 0,3 guar gum	6	-.01663			
tepung kbm 10% + 0,2 guar gum	6		-.01274		
tepung kbm 10% + 0,1 guar gum	6			-.01027	
tepung kbm 10%	6			-.00849	
0% (kontrol)	6				.01057
Sig.		1.000	1.000	.114	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Lampiran 3. Aktivitas Antioksidan

Tests of Normality

	perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
antioksidan	0% (kontrol)	.152	6	.200 [*]	.986	6	.978
	tepung kbm 10%	.214	6	.200 [*]	.915	6	.473
	tepung kbm 10% + 0,1 guar gum	.242	6	.200 [*]	.929	6	.571
	tepung kbm 10% + 0,2 guar gum	.185	6	.200 [*]	.977	6	.937
	tepung kbm 10% + 0,3 guar gum	.221	6	.200 [*]	.946	6	.711

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

a. Lilliefors Significance Correction

ANOVA

antioksidan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	37886.036	4	9471.509	12970.711	.000
Within Groups	18.256	25	.730		
Total	37904.292	29			

antioksidan

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	1.5937		
tepung kbm 10%	6		88.6561	
tepung kbm 10% + 0,1 guar gum	6			90.4531
tepung kbm 10% + 0,2 guar gum	6			91.0124
tepung kbm 10% + 0,3 guar gum	6			91.4920
Sig.		1.000	1.000	.056

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Lampiran 4. Kadar Air, Kadar Protein, Kadar Lemak, Kadar Abu, dan Kadar Karbohidrat

		Tests of Normality					
perlakuan		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
kadar_air	0% (kontrol)	.281	6	.150	.844	6	.140
	tepung kulit manggis 10%	.197	6	.200 [*]	.929	6	.572
	tepung kulit manggis 10% + 0,1% guar gum	.213	6	.200 [*]	.942	6	.673
kadar lemak	0% (kontrol)	.229	6	.200 [*]	.922	6	.523
	tepung kulit manggis 10%	.323	6	.051	.812	6	.075
	tepung kulit manggis 10% + 0,1% guar gum	.281	6	.150	.924	6	.533
kadar_protein	0% (kontrol)	.183	6	.200 [*]	.964	6	.847
	tepung kulit manggis 10%	.278	6	.161	.925	6	.539
	tepung kulit manggis 10% + 0,1% guar gum	.259	6	.200 [*]	.828	6	.104
kadar_abu	0% (kontrol)	.259	6	.200 [*]	.866	6	.211
	tepung kulit manggis 10%	.288	6	.131	.826	6	.100
	tepung kulit manggis 10% + 0,1% guar gum	.225	6	.200 [*]	.910	6	.434
kadar_karbohidrat	0% (kontrol)	.135	6	.200 [*]	.975	6	.927
	tepung kulit manggis 10%	.199	6	.200 [*]	.962	6	.834
	tepung kulit manggis 10% + 0,1% guar gum	.224	6	.200 [*]	.888	6	.308

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

a. Lilliefors Significance Correction

ANOVA

Kadar_air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.712	2	5.356	13.584	.000
Within Groups	5.914	15	.394		
Total	16.626	17			

kadar_air

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
0% (kontrol)	6	32.72690		
tepung kulit manggis 10%	6		33.71880	
tepung kulit manggis 10% + 0,1% guar gum	6			34.61572
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

ANOVA

protein

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.815	2	.407	2.118	.155
Within Groups	2.884	15	.192		
Total	3.699	17			

protein

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
tepung kulit manggis 10%	6	6.78317	
tepung kulit manggis 10% + 0,1% guar gum	6	7.05150	
0% (kontrol)	6	7.30417	
Sig.			.069

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

ANOVA

kadar lemak

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.130	2	.565	9.653	.002
Within Groups	.878	15	.059		
Total	2.008	17			

kadar lemak

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
0% (kontrol)	6	3.2292	
tepung kulit manggis 10%	6	3.5098	
tepung kulit manggis 10% + 0,1 guar gum	6		3.8422
Sig.		.063	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

ANOVA

kadar_abu

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.022	2	.011	5.008	.022
Within Groups	.032	15	.002		
Total	.054	17			

kadar_abu

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
0% (kontrol)	6	.40783	
tepung kulit manggis 10%	6	.43250	
tepung kulit manggis 10% + 0,1% guar gum	6		.49050
Sig.		.372	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

ANOVA

karohidrat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.873	2	7.937	13.670	.000
Within Groups	8.709	15	.581		
Total	24.582	17			

karohidrat

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
tepung kulit manggis 10% + 0,1% guar gum	6	54.05833	
tepung kulit manggis 10%	6		55.49800
0% (kontrol)	6		56.33183
Sig.		1.000	.077

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Lampiran 5. Hasil Uji Sensori Hedonik Rating I Bolu Kukus Substitusi Tepung Kulit Manggis

Uji Kruskal Wallis

Test Statistics^{a,b}

	Aroma	Warna	Tekstur	Rasa	Overall
Chi-Square	4.950	14.677	55.803	38.904	58.095
df	4	4	4	4	4
Asymp. Sig.	.293	.005	.000	.000	.000
Monte Carlo Sig.	.288 ^c	.004 ^c	.000 ^c	.000 ^c	.000 ^c
95% Confidence Interval	Lower Bound	.279	.003	.000	.000
	Upper Bound	.296	.006	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Sampel

c. Based on 10000 sampled tables with starting seed 2000000.

Uji Mann-Whitney

Kontrol vs KBM 5%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	798.000	657.500	420.500	586.000	587.000
Wilcoxon W	1701.000	1560.500	1323.500	1489.000	1490.000
Z	-.775	-2.121	-4.356	-2.783	-2.787
Asymp. Sig. (2-tailed)	.439	.034	.000	.005	.005

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 334431365.

Kontrol vs KBM 10%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	794.500	661.500	415.000	584.000	548.500
Wilcoxon W	1697.500	1564.500	1318.000	1487.000	1451.500
Z	-.800	-2.073	-4.403	-2.789	-3.136
Asymp. Sig. (2-tailed)	.424	.038	.000	.005	.002

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 299883525.

Kontrol vs KBM 15%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	834.000	562.000	259.500	380.000	261.500
Wilcoxon W	1737.000	1465.000	1162.500	1283.000	1164.500
Z	-.440	-2.978	-5.765	-4.619	-5.736
Asymp. Sig. (2-tailed)	.660	.003	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1502173562.

Kontrol vs KBM 20%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	828.000	553.500	243.000	382.000	262.000
Wilcoxon W	1731.000	1456.500	1146.000	1285.000	1165.000
Z	-.498	-3.063	-5.918	-4.606	-5.716
Asymp. Sig. (2-tailed)	.619	.002	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 303130861.

5% vs 10%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	649.000	808.500	871.500	849.000	820.500
Wilcoxon W	1552.000	1711.500	1774.500	1752.000	1723.500
Z	-2.141	-.680	-.099	-.312	-.573
Asymp. Sig. (2-tailed)	.032	.497	.921	.755	.567

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 2000000.

5% vs 15%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	715.000	779.000	531.500	538.000	433.500
Wilcoxon W	1618.000	1682.000	1434.500	1441.000	1336.500
Z	-1.539	-.945	-3.224	-3.203	-4.119
Asymp. Sig. (2-tailed)	.124	.345	.001	.001	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 334431365.

5% vs 20%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	858.500	743.500	569.500	525.000	442.000
Wilcoxon W	1761.500	1646.500	1472.500	1428.000	1345.000
Z	-.218	-1.268	-2.900	-3.299	-4.043
Asymp. Sig. (2-tailed)	.827	.205	.004	.001	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 221623949.

10% vs 15%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	825.000	685.500	540.000	554.000	444.500
Wilcoxon W	1728.000	1588.500	1443.000	1457.000	1347.500
Z	-.522	-1.824	-3.144	-3.035	-4.013
Asymp. Sig. (2-tailed)	.602	.068	.002	.002	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1535910591.

10% vs 20%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	715.000	654.000	579.000	533.000	462.500
Wilcoxon W	1618.000	1557.000	1482.000	1436.000	1365.500
Z	-1.530	-2.104	-2.814	-3.205	-3.849
Asymp. Sig. (2-tailed)	.126	.035	.005	.001	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 79654295.

15% vs 20%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	763.500	839.000	811.000	794.500	854.500
Wilcoxon W	1666.500	1742.000	1714.000	1697.500	1757.500
Z	-1.087	-.394	-.653	-.805	-.256
Asymp. Sig. (2-tailed)	.277	.694	.514	.421	.798

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1585587178.

Lampiran 6. Hasil Uji Sensori Hedonik Ranking I Bolu Kukus Substitusi Tepung Kulit Manggis

Uji Kruskal Wallis

	aroma	warna	tekstur	rasa	overall
Chi-Square	4.692	19.715	64.098	38.222	82.628
df	4	4	4	4	4
Asymp. Sig.	.320	.001	.000	.000	.000
Monte Carlo Sig. Sig.	.320(a)	.001(a)	.000(a)	.000(a)	.000(a)

95% Confidence Interval	Lower Bound	.310	.000	.000	.000	.000
	Upper Bound	.329	.001	.000	.000	.000

a Based on 10000 sampled tables with starting seed 2000000.

b Kruskal Wallis Test

c Grouping Variable: jenissampel

Uji Mann-Whitney

Kontrol vs 5%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	795.000	532.500	374.000	568.000	563.000
Wilcoxon W	1698.000	1435.500	1277.000	1471.000	1466.000
Z	-.796	-3.217	-4.730	-2.905	-3.007
Asymp. Sig. (2-tailed)	.426	.001	.000	.004	.003

a Based on 10000 sampled tables with starting seed 334431365.

b Grouping Variable: jenissampel

Kontrol vs 10%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	789.000	640.500	397.500	555.500	448.500
Wilcoxon W	1692.000	1543.500	1300.500	1458.500	1351.500
Z	-.852	-2.234	-4.527	-3.020	-4.048
Asymp. Sig. (2-tailed)	.394	.025	.000	.003	.000

a Based on 10000 sampled tables with starting seed 221623949.

b Grouping Variable: jenissampel

Kontrol vs 15%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	877.500	567.500	262.000	418.500	203.000
Wilcoxon W	1780.500	1470.500	1165.000	1321.500	1106.000
Z	-.041	-2.910	-5.770	-4.263	-6.258
Asymp. Sig. (2-tailed)	.967	.004	.000	.000	.000

a Based on 10000 sampled tables with starting seed 1535910591.

b Grouping Variable: jenissampel

Kontrol vs 20%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	838.500	485.500	226.500	390.000	171.500
Wilcoxon W	1741.500	1388.500	1129.500	1293.000	1074.500
Z	-.400	-3.657	-6.070	-4.556	-6.526

Asymp. Sig. (2-tailed)	.689	.000	.000	.000	.000
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a Based on 10000 sampled tables with starting seed 79654295.

b Grouping Variable: jenissampel

5% vs 10%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	633.000	737.000	868.500	861.000	701.500
Wilcoxon W	1536.000	1640.000	1771.500	1764.000	1604.500
Z	-2.286	-1.336	-.126	-.194	-1.681
Asymp. Sig. (2-tailed)	.022	.182	.900	.846	.093

a Based on 10000 sampled tables with starting seed 79654295.

b Grouping Variable: jenissampel

5% vs 15%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	766.000	878.000	505.000	551.500	343.500
Wilcoxon W	1669.000	1781.000	1408.000	1454.500	1246.500
Z	-1.062	-.037	-3.462	-3.039	-4.940
Asymp. Sig. (2-tailed)	.288	.971	.001	.002	.000

a Based on 10000 sampled tables with starting seed 1585587178.

b Grouping Variable: jenissampel

5% vs 20%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	830.000	769.500	470.500	499.500	316.000
Wilcoxon W	1733.000	1672.500	1373.500	1402.500	1219.000
Z	-.476	-1.039	-3.786	-3.503	-5.201
Asymp. Sig. (2-tailed)	.634	.299	.000	.000	.000

a Based on 10000 sampled tables with starting seed 1585587178.

b Grouping Variable: jenissampel

10% vs 15%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	761.500	678.000	483.500	564.500	326.000
Wilcoxon W	1664.500	1581.000	1386.500	1467.500	1229.000
Z	-1.105	-1.879	-3.655	-2.918	-5.122
Asymp. Sig. (2-tailed)	.269	.060	.000	.004	.000

a Based on 10000 sampled tables with starting seed 1507486128.

b Grouping Variable: jenissampel

10% vs 20%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	714.500	611.500	446.500	516.000	320.000
Wilcoxon W	1617.500	1514.500	1349.500	1419.000	1223.000
Z	-1.531	-2.487	-4.003	-3.356	-5.180
Asymp. Sig. (2-tailed)	.126	.013	.000	.001	.000

a Based on 10000 sampled tables with starting seed 1421288173.

b Grouping Variable: jenissampel

15% vs 20%

Test Statistics(b)

	aroma	warna	tekstur	rasa	overall
Mann-Whitney U	831.000	779.500	849.500	736.500	872.500
Wilcoxon W	1734.000	1682.500	1752.500	1639.500	1775.500
Z	-.466	-.940	-.305	-1.352	-.091
Asymp. Sig. (2-tailed)	.641	.347	.761	.177	.928

a Based on 10000 sampled tables with starting seed 272886377.

b Grouping Variable: jenissampel

Lampiran 7. Hasil Uji Sensori Hedonik Rating II Bolu Kukus Substitusi Tepung Kulit
Manggis dan Penambahan *Guar Gum*

Uji Kruskal Wallis

Test Statistics^{a,b}

	Aroma	Warna	Tekstur	Rasa	Overall
Chi-Square	33.756	26.474	42.632	60.997	77.546
df	4	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000	.000
Sig.	.000 ^c	.000 ^c	.000 ^c	.000 ^c	.000 ^c
Monte Carlo					
Sig.	Lower Bound	.000	.000	.000	.000
95% Confidence Interval	Upper Bound	.000	.000	.000	.000
	Bound	.000	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Sampel

c. Based on 10000 sampled tables with starting seed 2000000.

Uji Mann-Whitney

Kontrol vs 10%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	830.000	610.000	547.000	661.000	568.000
Wilcoxon W	2105.000	1885.000	1822.000	1936.000	1843.000
Z	-3.026	-4.580	-5.070	-4.344	-5.114
Asymp. Sig. (2-tailed)	.002	.000	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 334431365.

Kontrol vs 10%+GG 0,1%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	584.000	787.000	609.000	401.000	376.500
Wilcoxon W	1859.000	2062.000	1884.000	1676.000	1651.500
Z	-4.746	-3.356	-4.644	-6.120	-6.389
Asymp. Sig. (2-tailed)	.000	.001	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 221623949.

Kontrol vs 10%+GG 0,2%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	581.000	745.000	583.500	425.000	331.000
Wilcoxon W	1856.000	2020.000	1858.500	1700.000	1606.000
Z	-4.756	-3.647	-4.821	-5.953	-6.683
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1585587178.

Kontrol vs 10%+GG 0,3%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	608.500	831.000	444.500	340.000	256.500
Wilcoxon W	1883.500	2106.000	1719.500	1615.000	1531.500
Z	-4.571	-3.044	-5.771	-6.523	-7.181
Asymp. Sig. (2-tailed)	.000	.002	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1310155034.

10% vs *GG* 0,1%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1006.000	989.500	1092.500	945.000	876.500
Wilcoxon W	2281.000	2264.500	2367.500	2220.000	2151.500
Z	-1.734	-1.865	-1.114	-2.175	-2.702
Asymp. Sig. (2-tailed)	.083	.062	.265	.030	.007

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1451419960.

10% vs *GG* 0,2%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	971.000	1042.500	1098.500	954.500	801.000
Wilcoxon W	2246.000	2317.500	2373.500	2229.500	2076.000
Z	-1.974	-1.485	-1.074	-2.102	-3.230
Asymp. Sig. (2-tailed)	.048	.138	.283	.036	.001

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1507486128.

10% vs *GG* 0,3%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1024.500	929.500	1248.000	800.500	654.500
Wilcoxon W	2299.500	2204.500	2523.000	2075.500	1929.500
Z	-1.600	-2.293	-.014	-3.182	-4.264
Asymp. Sig. (2-tailed)	.110	.022	.989	.001	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1421288173.

GG 0,1% vs *GG* 0,2%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1209.000	1187.500	1240.500	1248.500	1120.500
Wilcoxon W	2484.000	2462.500	2515.500	2523.500	2395.500
Z	-.291	-.451	-.068	-.011	-.924

Asymp. Sig. (2-tailed)	.771	.652	.946	.991	.356
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a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 272886377.

GG 0,1% vs GG 0,3%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1231.500	1195.000	1066.000	1060.500	984.500
Wilcoxon W	2506.500	2470.000	2341.000	2335.500	2259.500
Z	-.132	-.397	-1.312	-1.346	-1.900
Asymp. Sig. (2-tailed)	.895	.691	.189	.178	.057

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1090229469.

GG 0,2% vs GG 0,3%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1190.000	1131.500	1064.500	1070.500	1136.500
Wilcoxon W	2465.000	2406.500	2339.500	2345.500	2411.500
Z	-.425	-.854	-1.327	-1.272	-.807
Asymp. Sig. (2-tailed)	.671	.393	.185	.203	.420

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 205597102.

Lampiran 8. Hasil Uji Sensori Hedonik Ranking II Bolu Kukus Substitusi Tepung Kulit Manggis dan Penambahan *Guar Gum*

Uji Kruskal Wallis

	Aroma	Warna	Tekstur	Rasa	Overall
Chi-Square	39.222	31.693	45.019	80.178	85.815
df	4	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000	.000
Sig.	.000 ^c	.000 ^c	.000 ^c	.000 ^c	.000 ^c
Monte Carlo Sig. 95% Confidence Interval	Lower Bound	.000	.000	.000	.000
	Bound	.000	.000	.000	.000

Upper Bound	.000	.000	.000	.000	.000
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- Kruskal Wallis Test
- Grouping Variable: Sampel
- Based on 10000 sampled tables with starting seed 2000000.

Uji Mann-Whitney

Kontrol vs 10%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	703.500	579.500	508.000	436.000	456.000
Wilcoxon W	1978.500	1854.500	1783.000	1711.000	1731.000
Z	-3.905	-4.749	-5.307	-5.903	-5.740
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

- Grouping Variable: Sampel
- Based on 10000 sampled tables with starting seed 334431365.

Kontrol vs 10%+GG 0,1%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	501.000	722.500	544.500	314.500	452.000
Wilcoxon W	1776.000	1997.500	1819.500	1589.500	1727.000
Z	-5.297	-3.754	-5.029	-6.722	-5.762
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

- Grouping Variable: Sampel
- Based on 10000 sampled tables with starting seed 221623949.

Kontrol vs 10%+GG 0,2%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	514.500	611.500	547.000	296.000	272.000
Wilcoxon W	1789.500	1886.500	1822.000	1571.000	1547.000
Z	-5.216	-4.537	-5.028	-6.856	-6.978
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

- Grouping Variable: Sampel
- Based on 10000 sampled tables with starting seed 1535910591.

Kontrol vs 10%+GG 0,3%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	581.000	786.500	450.500	203.500	220.000
Wilcoxon W	1856.000	2061.500	1725.500	1478.500	1495.000
Z	-4.747	-3.309	-5.678	-7.485	-7.359
Asymp. Sig. (2-tailed)	.000	.001	.000	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 79654295.

10% vs GG 0,1%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1079.500	969.000	1075.500	989.000	1075.000
Wilcoxon W	2354.500	2244.000	2350.500	2264.000	2350.000
Z	-1.203	-1.991	-1.232	-1.847	-1.242
Asymp. Sig. (2-tailed)	.229	.046	.218	.065	.214

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1310155034.

10% vs GG 0,2%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1019.000	1159.000	1134.000	956.500	759.000
Wilcoxon W	2294.000	2434.000	2409.000	2231.500	2034.000
Z	-1.631	-.645	-.819	-2.084	-3.480
Asymp. Sig. (2-tailed)	.103	.519	.413	.037	.001

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1585587178.

10% vs GG 0,3%

Test Statistics^a

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1155.000	942.500	1232.500	740.500	622.000
Wilcoxon W	2430.000	2217.500	2507.500	2015.500	1897.000
Z	-.670	-2.174	-.124	-3.605	-4.454
Asymp. Sig. (2-tailed)	.503	.030	.901	.000	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1451419960.

GG 0,1% vs *GG* 0,2%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1165.500	1103.500	1186.500	1246.000	909.000
Wilcoxon W	2440.500	2378.500	2461.500	2521.000	2184.000
Z	-.599	-1.036	-.449	-.028	-2.420
Asymp. Sig. (2-tailed)	.549	.300	.654	.977	.016

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1507486128.

GG 0,1% vs *GG* 0,3%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1185.000	1200.000	1082.500	1049.500	718.000
Wilcoxon W	2460.000	2475.000	2357.500	2324.500	1993.000
Z	-.461	-.354	-1.188	-1.433	-3.777
Asymp. Sig. (2-tailed)	.645	.724	.235	.152	.000

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 1421288173.

GG 0,2% vs *GG* 0,3%

	Aroma	Warna	Tekstur	Rasa	Overall
Mann-Whitney U	1101.000	1044.000	1149.500	1006.500	1040.000
Wilcoxon W	2376.000	2319.000	2424.500	2281.500	2315.000
Z	-1.053	-1.453	-.711	-1.732	-1.508
Asymp. Sig. (2-tailed)	.292	.146	.477	.083	.132

a. Grouping Variable: Sampel

b. Based on 10000 sampled tables with starting seed 272886377.

Lampiran 9. *Worksheet* Uji Sensori Hedonik Rating dan Ranking

***Worksheet* Uji Ranking dan Rating Hedonik I**

Tanggal uji :

Jenis sampel : Bolu Kukus Kulit Manggis

Identifikasi sampel**Kode**

Bolu kukus dengan substitusi tepung kulit manggis 0% (kontrol)	A
Bolu kukus dengan substitusi tepung kulit manggis 5%	B
Bolu kukus dengan substitusi tepung kulit manggis 10%	C
Bolu kukus dengan substitusi tepung kulit manggis 15%	D
Bolu kukus dengan substitusi tepung kulit manggis 20%	E

Kode kombinasi urutan penyajian :

ABCDE = 1	BACED = 6
ABCED = 2	BCADE = 7
ACBDE = 3	CABDE = 8
ACBED = 4	CABED = 9
BACDE = 5	CBADE = 10

Penyajian :

<i>Booth</i>	Panelis	Kode sampel <small>Urutan penyajian</small>
I	#1, 11, 21, 31, 41	742 421 226 286 522 ¹
II	#2, 12, 22, 32, 42	618 471 218 397 745 ²
III	#3, 13, 23, 33, 43	461 477 478 535 957 ³
IV	#4, 14, 24, 34, 44	674 132 228 442 225 ⁴
V	#5, 15, 25, 35, 45	444 171 151 859 878 ⁵
I	#6, 16, 26, 36, 46	392 311 659 772 935 ⁶
II	#7, 17, 27, 37, 47	447 834 117 658 161 ⁷
III	#8, 18, 28, 38, 48	754 654 176 883 855 ⁸
IV	#9, 19, 29, 39, 49	195 637 751 586 948 ⁹
V	#10, 20, 30, 40, 50	513 964 593 137 574 ¹⁰

Rekap kode sampel :

Sampel A	742 618 461 674 171 311 117 654 637 593
Sampel B	421 471 478 228 444 392 447 176 751 964
Sampel C	226 218 477 132 151 659 834 754 195 513
Sampel D	286 745 535 225 859 935 658 883 948 137
Sampel E	522 397 957 442 878 772 161 855 586 574

Worksheet Uji Ranking dan Rating Hedonik II

Tanggal uji :

Jenis sampel : Bolu Kukus Kulit Manggis

Identifikasi sampel

Kode

Bolu kukus dengan substitusi tepung kulit manggis 0% (kontrol)

A

Bolu kukus dengan substitusi tepung kulit manggis 10%

B

Bolu kukus dengan substitusi tepung kulit manggis 10%

C

dan penambahan *guar gum* 0,1% C

Bolu kukus dengan substitusi tepung kulit manggis 10%

D

dan penambahan *guar gum* 0,2%

Bolu kukus dengan substitusi tepung kulit manggis 10%

E

dan penambahan *guar gum* 0,3%

Kode kombinasi urutan penyajian :

ABCDE = 1

BACED = 6

ABCED = 2

BCADE = 7

ACBDE = 3

CABDE = 8

ACBED = 4

CABED = 9

BACDE = 5

CBADE = 10

Penyajian :

Booth	Panelis	Kode sampel ^{Urutan penyajian}
I	#1, 11, 21, 31, 41	742 421 226 286 522 ¹
II	#2, 12, 22, 32, 42	618 471 218 397 745 ²
III	#3, 13, 23, 33, 43	461 477 478 535 957 ³
IV	#4, 14, 24, 34, 44	674 132 228 442 225 ⁴
V	#5, 15, 25, 35, 45	444 171 151 859 878 ⁵
I	#6, 16, 26, 36, 46	392 311 659 772 935 ⁶
II	#7, 17, 27, 37, 47	447 834 117 658 161 ⁷
III	#8, 18, 28, 38, 48	754 654 176 883 855 ⁸
IV	#9, 19, 29, 39, 49	195 637 751 586 948 ⁹
V	#10, 20, 30, 40, 50	513 964 593 137 574 ¹⁰

Rekap kode sampel :

Sampel A	742 618 461 674 171 311 117 654 637 593
Sampel B	421 471 478 228 444 392 447 176 751 964
Sampel C	226 218 477 132 151 659 834 754 195 513
Sampel D	286 745 535 225 859 935 658 883 948 137
Sampel E	522 397 957 442 878 772 161 855 586 574

Lampiran 10. Lampiran *Scoresheet* Uji Sensori Hedonik Rating dan Ranking

UJI RATING DAN RANKING HEDONIK

Nama : _____ Tanggal : _____
 Umur : _____
 No Hp : _____
 Jurusan/Fakultas : _____
 Produk : Bolu Kukus Kulit Manggis
 Atribut : Aroma

Instruksi : _____

Hiruplah udara bebas/segar sebelum menguji sampel

Di hadapan Anda terdapat 5 sampel bolu kukus kulit manggis, silahkan cium dan bandingkan aroma sampel secara berturutan dari kiri ke kanan. Setelah mencium dan membandingkan aroma semua sampel, anda boleh mengulang sesering yang anda perlukan. Untuk rating, berilah penilaian aroma sampel dari yang paling anda sukai (rating = 1) hingga sampel yang paling tidak anda sukai (rating= 5) dimana nilai rating tersebut boleh sama antara kelima sampel. Sedangkan ranking, berilah penilaian dan urutkan aroma sampel dari yang paling anda sukai (ranking = 1) hingga sampel yang paling tidak anda sukai (ranking= 5) dimana nilai ranking tersebut tidak boleh sama antara kelima sampel tersebut.

Kode Sampel	Rating (boleh dobel)	Ranking (jangan ada yang dobel)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Terima kasih

Keterangan Nilai Ranking dan Rating :

- 1 : paling suka
- 2 : suka
- 3 : agak suka
- 4 : tidak suka
- 5 : paling tidak suka

UJI RATING DAN RANKING HEDONIK

Nama : _____ Tanggal : _____
 Produk : Bolu Kukus Kulit Manggis
 Atribut : Warna

Instruksi:

Di hadapan Anda terdapat 5 sampel bolu kukus kulit manggis, silahkan amati dan bandingkan warna sampel secara berturut-turut dari kiri ke kanan. Setelah mengamati dan membandingkan warna semua sampel, anda boleh mengulang sesering yang anda perlukan. Untuk rating, berilah penilaian warna sampel dari yang paling anda sukai (rating = 1) hingga sampel yang paling tidak anda sukai (rating= 5) dimana nilai rating tersebut boleh sama antara kelima sampel. Sedangkan ranking, berilah penilaian dan urutkan warna sampel dari yang paling anda sukai (ranking = 1) hingga sampel yang paling tidak anda sukai (ranking= 5) dimana nilai ranking tersebut tidak boleh sama antara kelima sampel tersebut.

Kode Sampel	Rating (boleh dobel)	Ranking (jangan ada yang dobel)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Terima kasih

UJI RATING DAN RANKING HEDONIK

Nama : _____ Tanggal : _____
 Produk : Bolu Kukus Kulit Manggis
 Atribut : Tekstur

Instruksi:

Berkumur-kumurlah dengan air dulu sebelum menguji sampel

Di hadapan Anda terdapat 5 sampel bolu kukus, silahkan cicipi dan bandingkan tekstur sampel secara berturut-turut dari kiri ke kanan dengan cara mengigit lalu mengunyah sampel. Setelah mengamati dan membandingkan tekstur semua sampel, anda boleh mengulang sesering yang anda perlukan. Untuk rating, berilah penilaian tekstur sampel dari yang paling anda sukai (rating = 1) hingga sampel yang paling tidak anda sukai (rating= 5) dimana nilai tersebut boleh sama antara kelima sampel. Sedangkan ranking, berilah penilaian dan urutkan tesktur sampel dari yang paling anda sukai (ranking = 1) hingga sampel yang paling tidak anda sukai (ranking= 5) dimana nilai ranking tersebut tidak boleh sama antara kelima sampel.

Kode Sampel	Rating (boleh dobel)	Ranking (jangan ada yang dobel)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

UJI RATING DAN RANKING HEDONIK

Nama : _____ Tanggal : _____
 No Hp : _____
 Produk : Bolu Kukus Kulit Manggis
 Atribut : Rasa
 Instruksi :

Berkumur-kumurlah dengan air dulu sebelum menguji sampel

Di hadapan Anda terdapat 5 sampel bolu kukus kulit manggis, silahkan cicipi dan bandingkan rasa sampel secara berturutan dari kiri ke kanan. Setelah mencoba rasa semua sampel, anda boleh mengulang sesering yang anda perlukan. Untuk rating, berilah penilaian rasa sampel dari yang paling anda sukai (rating = 1) hingga sampel yang paling tidak anda sukai (rating= 5) dimana nilai rating tersebut boleh sama antara kelima sampel. Sedangkan ranking, berilah penilaian dan urutkan rasa sampel dari yang paling anda sukai (ranking = 1) hingga sampel yang paling tidak anda sukai (ranking= 5) dimana nilai ranking tersebut tidak boleh sama antara kelima sampel.

Kode Sampel	Rating (boleh dobel)	Ranking (jangan ada yang dobel)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Terima kasih

UJI RATING DAN RANKING HEDONIK

Nama : _____ Tanggal : _____
 Produk : Bolu Kukus Kulit Manggis
 Atribut : *Overall*
 Instruksi :

Berkumur-kumurlah dengan air dulu sebelum menguji sampel

Di hadapan Anda terdapat 5 sampel bolu kukus kulit manggis, silahkan amati dan bandingkan secara keseluruhan / *overall* sampel berturutan dari kiri ke kanan. Setelah mengamati dan membandingkan keseluruhan / *overall* semua sampel, anda boleh mengulang sesering yang anda perlukan. Untuk rating, berilah penilaian *overall* sampel dari yang paling anda sukai (rating = 1) hingga sampel yang paling tidak anda sukai (rating= 5) dimana nilai rating tersebut boleh sama antara kelima sampel. Sedangkan ranking, berilah penilaian dan urutkan *overall* sampel dari yang paling anda sukai (ranking = 1) hingga sampel yang paling tidak anda sukai (ranking= 5) dimana nilai ranking tersebut tidak boleh sama antara kelima sampel.

Kode Sampel	Rating (boleh dobel)	Ranking (jangan ada yang dobel)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____