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LAMPIRAN

Lampiran 1. Analisis Keragaman Rendemen

Descriptives

rendemen

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1,5 N	8	10.3750	.79586	.28138	9.7096	11.0404	9.27	11.76
3 N	8	8.0375	.35483	.12545	7.7409	8.3341	7.45	8.44
4,5 N	8	1.8437	.78243	.27663	1.1896	2.4979	1.12	3.57
Total	24	6.7521	3.73326	.76205	5.1757	8.3285	1.12	11.76

ANOVA

rendemen

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	310.956	2	155.478	340.090	.000
Within Groups	9.601	21	.457		
Total	320.557	23			

rendemen

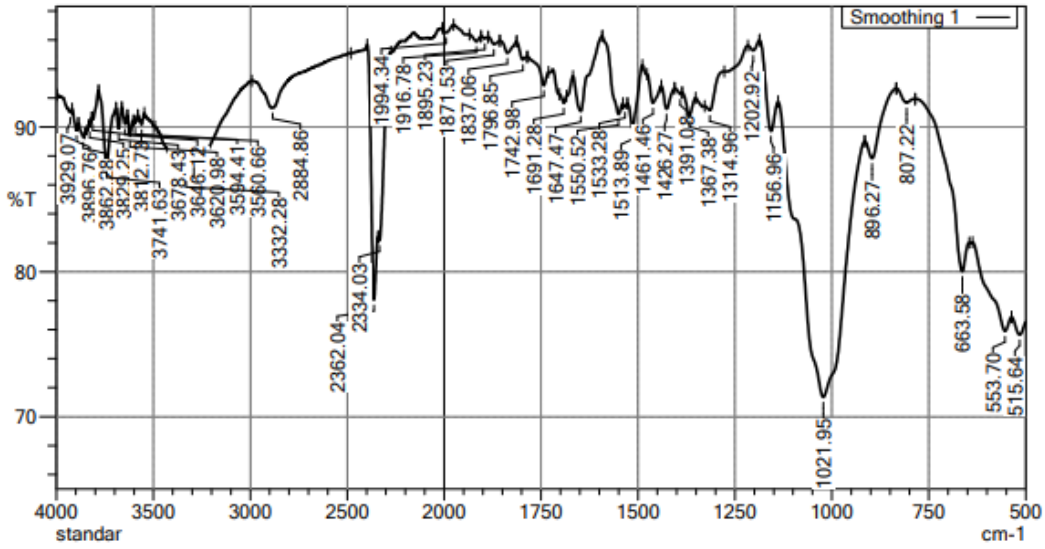
Tukey HSD

Penggunaan NaOH	N	Subset for alpha = 0.05		
		1	2	3
4,5 N	8	1.8437		
3 N	8		8.0375	
1,5 N	8			10.3750
Sig.		1.000	1.000	1.000

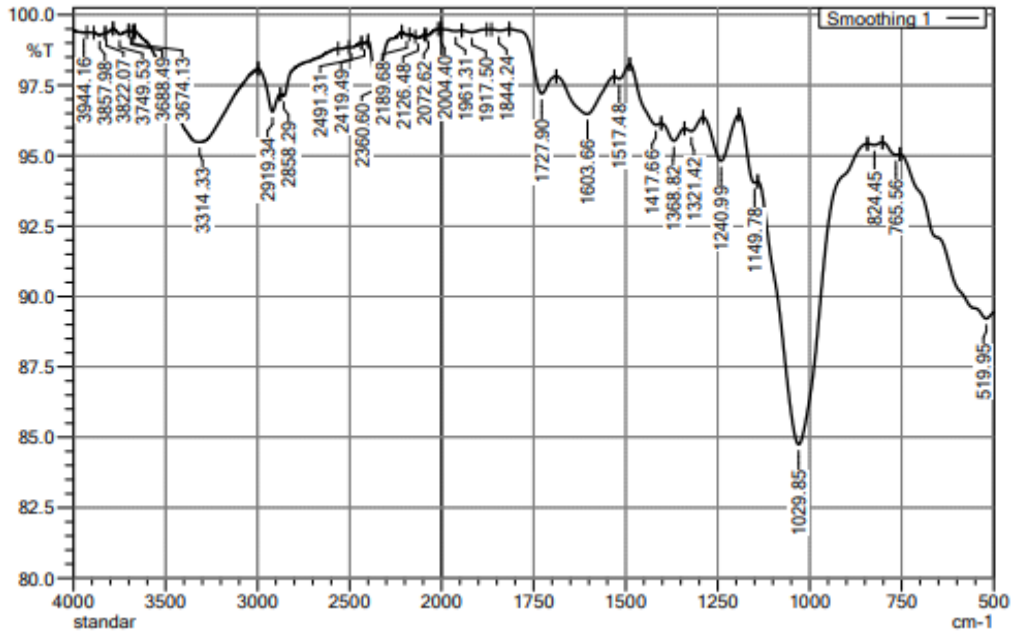
Means for groups in homogeneous subsets are displayed.

Lampiran 2. Gambar Spektra FTIR

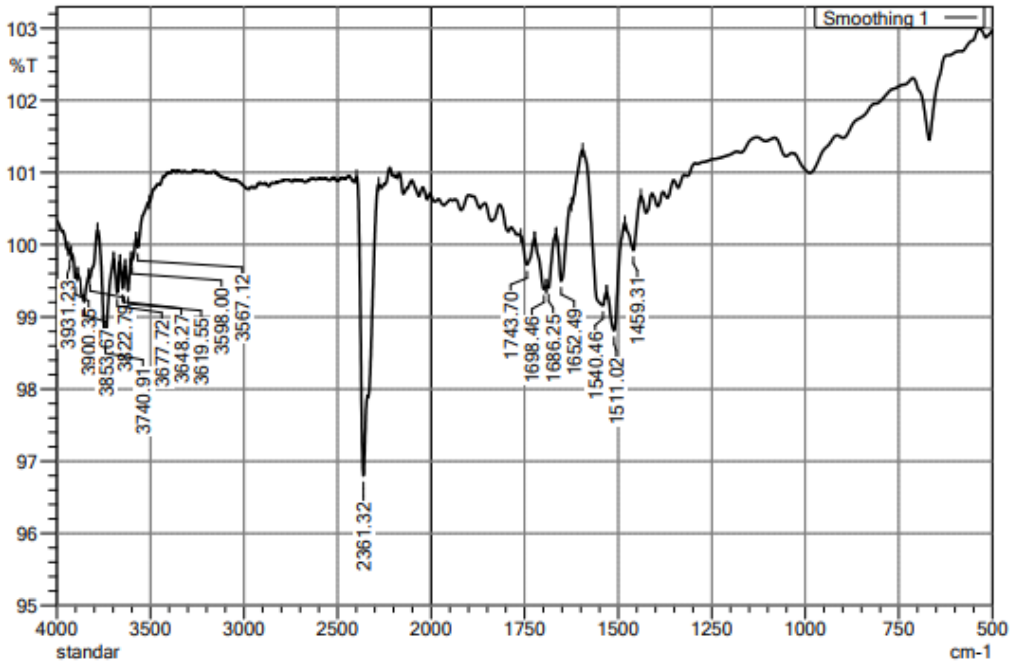
Selulosa komersil



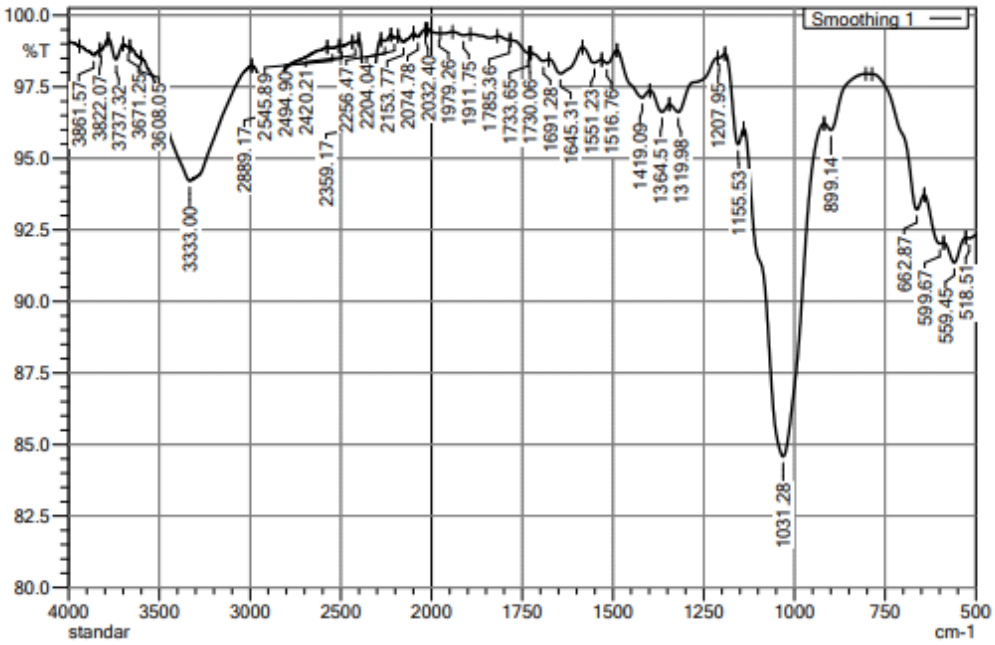
Selulosa tanpa perlakuan



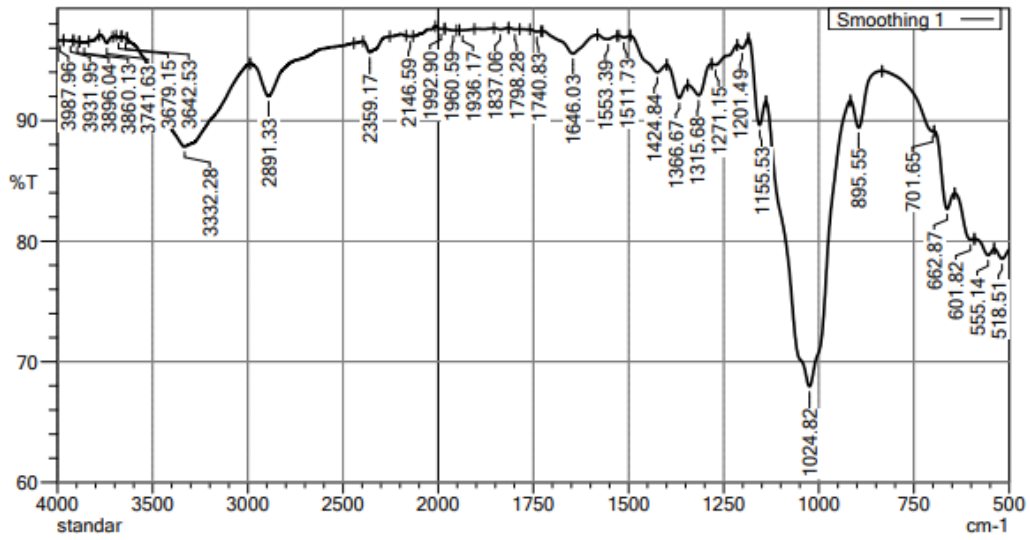
Selulosa perlakuan NaOH 1,5 N



Selulosa perlakuan NaOH 3 N



Selulosa perlakuan NaOH 4,5 N



Lampiran 3. Analisis Keragaman Nilai Sensori Kenampakan

Tests of Between-Subjects Effects

Dependent Variable:Kenampakan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	183.280[a]	33	5.554	1.798	.012
Intercept	5496.427	1	5496.427	1.780E3	.000
Perlakuan	92.907	4	23.227	7.520	.000
Panelis	90.373	29	3.116	1.009	.465
Error	358.293	116	3.089		
Total	6038.000	150			
Corrected Total	541.573	149			

a. R Squared = ,338 (Adjusted R Squared = ,150)

Multiple Comparisons

Kenampakan

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	Selulosa 10%	-.80	.454	.400	-2.06	.46
	Selulosa 15%	-1.80*	.454	.001	-3.06	-.54
	Selulosa 20%	-.53	.454	.765	-1.79	.72
	Selulosa 25%	.53	.454	.765	-.72	1.79
Selulosa 10%	Kontrol	.80	.454	.400	-.46	2.06
	Selulosa 15%	-1.00	.454	.186	-2.26	.26
	Selulosa 20%	.27	.454	.977	-.99	1.52
	Selulosa 25%	1.33*	.454	.032	.08	2.59
Selulosa 15%	Kontrol	1.80*	.454	.001	.54	3.06
	Selulosa 10%	1.00	.454	.186	-.26	2.26
	Selulosa 20%	1.27*	.454	.047	.01	2.52
	Selulosa 25%	2.33*	.454	.000	1.08	3.59
Selulosa 20%	Kontrol	.53	.454	.765	-.72	1.79
	Selulosa 10%	-.27	.454	.977	-1.52	.99
	Selulosa 15%	-1.27*	.454	.047	-2.52	.00
	Selulosa 25%	1.07	.454	.137	-.19	2.32
Selulosa 25%	Kontrol	-.53	.454	.765	-1.79	.72
	Selulosa 10%	-1.33*	.454	.032	-2.59	-.08
	Selulosa 15%	-2.33*	.454	.000	-3.59	-1.08
	Selulosa 20%	-1.07	.454	.137	-2.32	.19

Based on observed means.

The error term is Mean Square(Error) = 3,089.

*. The mean difference is significant at the 0,05 level.

Kenampakan

Tukey HSD

Perlakuan	N	Subset 1	Subset 2	Subset 3
Selulosa 25%	30	5.00		
Kontrol	30	5.53	5.53	
Selulosa 20%	30	6.07	6.07	
Selulosa 10%	30		6.33	6.33
Selulosa 15%	30			7.33
Sig.		.137	.400	.186

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 3,089.

Lampiran 4. Analisis Keragaman Nilai Sensori Bau

Tests of Between-Subjects Effects

Dependent Variable:Bau

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	42.747[a]	33	1.295	1.496	.061
Intercept	10718.827	1	10718.827	1.238E4	.000
Perlakuan	3.573	4	.893	1.032	.394
Panelis	39.173	29	1.351	1.560	.051
Error	100.427	116	.866		
Total	10862.000	150			
Corrected Total	143.173	149			

a. R Squared = ,299 (Adjusted R Squared = ,099)

Multiple Comparisons

Bau

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	Selulosa 10%	.07	.240	.999	-.60	.73
	Selulosa 15%	-.13	.240	.981	-.80	.53
	Selulosa 20%	.33	.240	.637	-.33	1.00
	Selulosa 25%	.13	.240	.981	-.53	.80
Selulosa 10%	Kontrol	-.07	.240	.999	-.73	.60
	Selulosa 15%	-.20	.240	.920	-.87	.47
	Selulosa 20%	.27	.240	.801	-.40	.93
	Selulosa 25%	.07	.240	.999	-.60	.73
Selulosa 15%	Kontrol	.13	.240	.981	-.53	.80
	Selulosa 10%	.20	.240	.920	-.47	.87
	Selulosa 20%	.47	.240	.301	-.20	1.13
	Selulosa 25%	.27	.240	.801	-.40	.93
Selulosa 20%	Kontrol	-.33	.240	.637	-1.00	.33
	Selulosa 10%	-.27	.240	.801	-.93	.40
	Selulosa 15%	-.47	.240	.301	-1.13	.20
	Selulosa 25%	-.20	.240	.920	-.87	.47
	Kontrol	-.13	.240	.981	-.80	.53

Selulosa 25%	Selulosa 10%	-.07	.240	.999	-.73	.60
	Selulosa 15%	-.27	.240	.801	-.93	.40
	Selulosa 20%	.20	.240	.920	-.47	.87

Based on observed means.
The error term is Mean Square(Error) = ,866.

Bau

Tukey HSD

Perlakuan	N	Subset 1
Selulosa 20%	30	8.20
Selulosa 25%	30	8.40
Selulosa 10%	30	8.47
Kontrol	30	8.53
Selulosa 15%	30	8.67
Sig.		.301

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = ,866.

Lampiran 5. Analisis keragaman Nilai Sensori Rasa

Tests of Between-Subjects Effects

Dependent Variable:Rasa

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.520[a]	33	.652	1.617	.033
Intercept	11545.707	1	11545.707	2.863E4	.000
Perlakuan	4.427	4	1.107	2.745	.032
Panelis	17.093	29	.589	1.462	.082
Error	46.773	116	.403		
Total	11614.000	150			
Corrected Total	68.293	149			

a. R Squared = ,315 (Adjusted R Squared = ,120)

Multiple Comparisons

Rasa

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	Selulosa 10%	-.27	.164	.484	-.72	.19
	Selulosa 15%	-.47*	.164	.041	-.92	-.01
	Selulosa 20%	-.47*	.164	.041	-.92	-.01
	Selulosa 25%	-.33	.164	.257	-.79	.12
Selulosa 10%	Kontrol	.27	.164	.484	-.19	.72
	Selulosa 15%	-.20	.164	.740	-.65	.25
	Selulosa 20%	-.20	.164	.740	-.65	.25
	Selulosa 25%	-.07	.164	.994	-.52	.39
Selulosa 15%	Kontrol	.47*	.164	.041	.01	.92
	Selulosa 10%	.20	.164	.740	-.25	.65
	Selulosa 20%	.00	.164	1.000	-.45	.45
	Selulosa 25%	.13	.164	.926	-.32	.59
Selulosa 20%	Kontrol	.47*	.164	.041	.01	.92
	Selulosa 10%	.20	.164	.740	-.25	.65
	Selulosa 15%	.00	.164	1.000	-.45	.45
	Selulosa 25%	.13	.164	.926	-.32	.59
Selulosa 25%	Kontrol	.33	.164	.257	-.12	.79
	Selulosa 10%	.07	.164	.994	-.39	.52
	Selulosa 15%	-.13	.164	.926	-.59	.32
	Selulosa 20%	-.13	.164	.926	-.59	.32

Based on observed means.

The error term is Mean Square(Error) = ,403.

*. The mean difference is significant at the 0,05 level.

Rasa

Tukey HSD

Perlakuan	N	Subset 1	Subset 2
Kontrol	30	8.47	
Selulosa 10%	30	8.73	8.73
Selulosa 25%	30	8.80	8.80
Selulosa 20%	30		8.93
Selulosa 15%	30		8.93
Sig.		.257	.740

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = ,403.

Lampiran 6. Analisis Keragaman Nilai Sensori Tekstur

Tests of Between-Subjects Effects

Dependent Variable:Tekstur

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	413.120[a]	33	12.519	8.835	.000
Intercept	5716.507	1	5716.507	4.034E3	.000
Perlakuan	378.027	4	94.507	66.694	.000
Panelis	35.093	29	1.210	.854	.680
Error	164.373	116	1.417		
Total	6294.000	150			
Corrected Total	577.493	149			

a. R Squared = ,715 (Adjusted R Squared = ,634)

Multiple Comparisons

Tekstur

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	Selulosa 10%	-.33	.307	.814	-1.19	.52
	Selulosa 15%	-2.00*	.307	.000	-2.85	-1.15
	Selulosa 20%	-3.20*	.307	.000	-4.05	-2.35
	Selulosa 25%	1.33*	.307	.000	.48	2.19
Selulosa 10%	Kontrol	.33	.307	.814	-.52	1.19
	Selulosa 15%	-1.67*	.307	.000	-2.52	-.81
	Selulosa 20%	-2.87*	.307	.000	-3.72	-2.01
	Selulosa 25%	1.67*	.307	.000	.81	2.52
Selulosa 15%	Kontrol	2.00*	.307	.000	1.15	2.85
	Selulosa 10%	1.67*	.307	.000	.81	2.52
	Selulosa 20%	-1.20*	.307	.001	-2.05	-.35
	Selulosa 25%	3.33*	.307	.000	2.48	4.19
Selulosa 20%	Kontrol	3.20*	.307	.000	2.35	4.05
	Selulosa 10%	2.87*	.307	.000	2.01	3.72
	Selulosa 15%	1.20*	.307	.001	.35	2.05
	Selulosa 25%	4.53*	.307	.000	3.68	5.39
Selulosa 25%	Kontrol	-1.33*	.307	.000	-2.19	-.48
	Selulosa 10%	-1.67*	.307	.000	-2.52	-.81
	Selulosa 15%	-3.33*	.307	.000	-4.19	-2.48
	Selulosa 20%	-4.53*	.307	.000	-5.39	-3.68

Based on observed means.

The error term is Mean Square(Error) = 1,417.

*. The mean difference is significant at the 0,05 level.

Tekstur

Tukey HSD

Perlakuan	N	Subset 1	2	3	4
Selulosa 25%	30	4.00			
Kontrol	30		5.33		
Selulosa 10%	30		5.67		
Selulosa 15%	30			7.33	
Selulosa 20%	30				8.53
Sig.		1.000	.814	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1,417.

Lampiran 7. Lembar Penilaian Sensori Bakso Ikan

SNI 7266:2014

Lampiran A
(normatif)
Lembar penilaian sensori bakso ikan

Tabel A.1 - Lembar penilaian sensori bakso ikan

Nama panelis : ..... Tanggal :.....

- Cantumkan kode contoh pada kolom yang tersedia sebelum melakukan pengujian.
- Berilah tanda √ pada nilai yang dipilih sesuai kode contoh yang diuji.

Spesifikasi	Nilai	Kode contoh				
		1	2	3	4	5
1. Kenampakan						
- Permukaan halus, tidak berongga, cerah	9					
- Permukaan kurang halus, sedikit berongga, kurang cerah	7					
- Permukaan kasar, berongga, kusam	5					
- Permukaan sedikit retakan, berongga agak banyak, kusam	3					
- Permukaan banyak retakan, banyak rongga, sangat kusam	1					
2. Bau						
- Spesifik produk	9					
- Spesifik produk kurang	7					
- Netral	5					
- Agak busuk, tengik	3					
- Busuk dan sangat tengik	1					
3. Rasa						
- Spesifik produk	9					
- Spesifik produk kurang	7					
- Hambar	5					
- Agak masam	3					
- Masam	1					
3. Tekstur						
- Padat, kompak, kenyal	9					
- Padat, kompak, agak kenyal	7					
- Tidak padat, tidak kompak, tidak kenyal	5					
- Mudah pecah	3					
- Sangat mudah pecah	1					

Lampiran 8. Analisis Keragaman Nilai Hardness

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Hardness1	Between Groups	108966.354	5	21793.271	225.496	.000
	Within Groups	579.875	6	96.646		
	Total	109546.229	11			
Cohesiveness	Between Groups	.208	5	.042	33.676	.000
	Within Groups	.007	6	.001		
	Total	.215	11			
Springiness	Between Groups	.317	5	.063	38.000	.000
	Within Groups	.010	6	.002		
	Total	.327	11			

Hardness1

Tukey HSD

		Subset for alpha = 0.05			
perlakuan	N	1	2	3	4
Perlakuan 2	2	158.750			
Perlakuan 1	2		215.000		
Perlakuan 3	2		251.500	251.500	
Perlakuan 4	2			274.250	
bakso pembanding	2				404.500
kontrol	2				419.750
Sig.		1.000	.067	.313	.651

Means for groups in homogeneous subsets are displayed.

Cohesiveness

Tukey HSD

perlakuan	N	Subset for alpha = 0.05	
		1	2
kontrol	2	.6100	
Perlakuan 1	2	.6500	
Perlakuan 4	2	.6650	
bakso pembanding	2		.8250
Perlakuan 2	2		.8950
Perlakuan 3	2		.9550
Sig.		.643	.067

Means for groups in homogeneous subsets are displayed.

Springiness

Tukey HSD

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
kontrol	2	2.250		
Perlakuan 1	2	2.300		
Perlakuan 4	2	2.300		
Perlakuan 2	2		2.500	
Perlakuan 3	2		2.550	2.550
bakso pembanding	2			2.700
Sig.		.812	.812	.069

Means for groups in homogeneous subsets are displayed.

Lampiran 9. Analisis Keragaman Nilai Kadar Air

ANOVA

Air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.027	4	1.007	1.451	.341
Within Groups	3.468	5	.694		
Total	7.495	9			

Air

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
selulosa 25%	2	74.9200
selulosa 15%	2	75.6050
Kontrol	2	75.7000
selulosa 20%	2	76.1750
selulosa 10%	2	76.8300
Sig.		.282

Means for groups in homogeneous subsets are displayed.

Lampiran 10. Analisis Keragaman Nilai Kadar Abu

ANOVA

Abu

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.023	4	.006	2.126	.215
Within Groups	.014	5	.003		
Total	.037	9			

Abu

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
selulosa 15%	2	.8250
Kontrol	2	.8300
selulosa 25%	2	.8900
selulosa 20%	2	.9000
selulosa 10%	2	.9550
Sig.		.232

Means for groups in homogeneous subsets are displayed.

Lampiran 11. Analisis Keragaman Nilai Kadar Lemak

ANOVA

Lemak

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.105	4	.026	1.615	.303
Within Groups	.081	5	.016		
Total	.186	9			

Lemak

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
selulosa 20%	2	.3400
selulosa 15%	2	.3950
selulosa 10%	2	.3950
selulosa 25%	2	.4200
Kontrol	2	.6350
Sig.		.276

Means for groups in homogeneous subsets are displayed.

Lampiran 12. Analisis Keragaman Nilai Kadar Protein

ANOVA

Protein

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.355	4	7.089	2.505	.171
Within Groups	14.151	5	2.830		
Total	42.506	9			

Protein

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05
		1
selulosa 20%	2	9.4700
selulosa 15%	2	9.9450
selulosa 25%	2	10.3900
Kontrol	2	13.1650
selulosa 10%	2	13.4650
Sig.		.259

Means for groups in homogeneous subsets are displayed.

Lampiran 13. Analisis Keragaman Nilai Kadar Serat

ANOVA

Serat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	327.552	4	81.888	326.156	.000
Within Groups	1.255	5	.251		
Total	328.807	9			

Serat

Tukey HSD

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
Kontrol	2	.0050			
selulosa 10%	2		11.4300		
selulosa 20%	2			13.7350	
selulosa 15%	2			14.0800	14.0800
selulosa 25%	2				16.0750
Sig.		1.000	1.000	.951	.051

Means for groups in homogeneous subsets are displayed.

Lampiran 14. Dokumentasi Kegiatan