

## LAMPIRAN 1

### LEMBAR KUESIONER KECAP

Nama :  
Usia :  
Tanggal Pengujian :

Di hadapan Saudara telah tersedia satu gelas air putih dan 3 jenis produk kecap manis. Saudara diminta untuk memberikan penilaian kecap tersebut dengan mengisi kolom di bawah ini dengan kode sampel kecap yang sesuai dengan pendapat Anda. Sebelum memulai penilaian dan selesai melakukan sekali penilaian, silahkan Anda minum air putih di hadapan Anda untuk penetralan

#### A. KESUKAAN

Parameter	127	247	325	432	536	637	715	817	965
Sangat suka									
Suka									
Agak suka									
Tidak suka									
Sangat tidak suka									

#### B. RASA

Parameter	127	247	325	432	536	637	715	817	965
Rasa sampel									

Penilaian :

1. Sangat dapat diterima
2. Dapat diterima
3. Tidak dapat diterima
4. Sangat dapat diterima

### C. BAU

Parameter	127	247	325	432	536	637	715	817	965
Bau sampel									

Penilaian :

1. Sangat dapat diterima
2. Dapat diterima
3. Tidak dapat diterima
4. Sangat dapat diterima

### D. WARNA

Parameter	127	247	325	432	536	637	715	817	965
Warna sampel									

Penilaian :

1. Sangat dapat diterima
2. Dapat diterima
3. Tidak dapat diterima
4. Sangat dapat diterima

### E. KEKENTALAN

Parameter	127	247	325	432	536	637	715	817	965
Kekentalan Rasa sampel									

Penilaian :

1. Sangat dapat diterima
2. Dapat diterima
3. Tidak dapat diterima
4. Sangat dapat diterima

Terima kasih atas partisipasi Anda

AMPIRAN 2

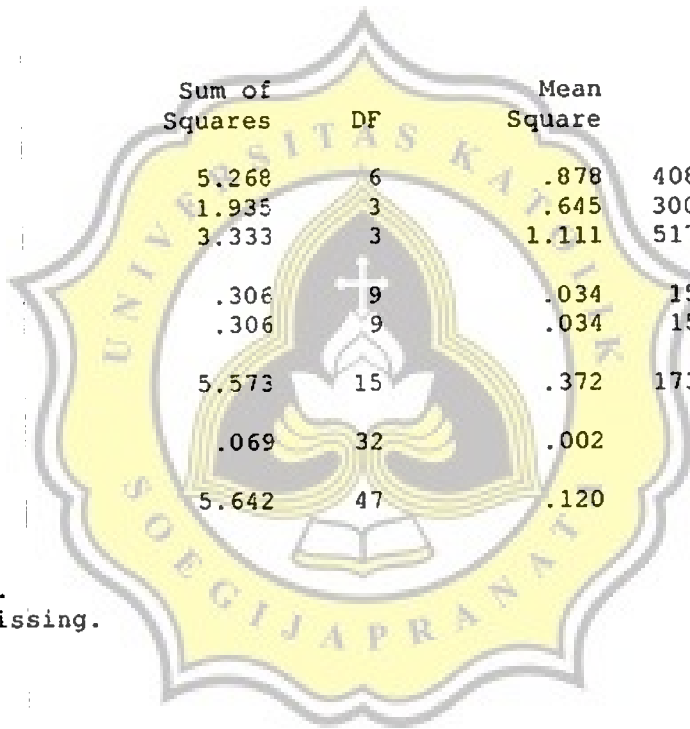
HASIL ANALISIS ANOVA DUA ARAH PENURUNAN KANDUNGAN HCN KORO BENGUK PADA BERBAGAI VARIASI WAKTU PEREBUSAN DAN PERLAKUAN

\*\*\* ANALYSIS OF VARIANCE \*\*\*

by HCN  
PERLAKUAN  
WAKTU

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	5.268	6	.878	408.820	.000
PERLAK	1.935	3	.645	300.314	.000
WAKTU	3.333	3	1.111	517.325	.000
-Way Interactions	.306	9	.034	15.817	.000
PERLAK WAKTU	.306	9	.034	15.817	.000
Explained	5.573	15	.372	173.018	.000
Residual	.069	32	.002		
Total	5.642	47	.120		

8 cases were processed.  
cases (.0 pct) were missing.



LAMPIRAN 3

HASIL ANOVA SATU ARAH PENURUNAN KANDUNGAN HCN KORO BENGUK PADA BERBAGAI VARIASI PERLAKUAN

--- ONEWAY ---

Variable HCN  
By Variable PERLAKUAN

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	1.9348	.6449	7.6543	.0003
Within Groups	44	3.7074	.0843		
Total	47	5.6422			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int for Mean
Grp 1	12	1.9278	.3300	.0953	1.7182 TO 2.1375
Grp 2	12	1.4834	.1466	.0423	1.3902 TO 1.5765
Grp 3	12	1.9312	.3426	.0989	1.7135 TO 2.1489
Grp 4	12	1.9759	.2988	.0863	1.7860 TO 2.1657
Total	48	1.8296	.3465	.0500	1.7290 TO 1.9302

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
7.9140	3	44	.000

LAMPIRAN 4

HASIL ANOVA SATU ARAH PENURUNAN KANDUNGAN HCN KORO  
BENGUK PADA BERBAGAI VARIASI WAKTU PEREBUSAN

----- O N E W A Y -----

Variable HCN  
By Variable WAKTU

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	3.3329	1.1110	21.1684	.0000
Within Groups	44	2.3092	.0525		
Total	47	5.6422			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 1	12	2.1623	.2955	.0853	1.9746 TO	2.3501
Grp 2	12	1.9937	.2819	.0814	1.8146 TO	2.1728
Grp 3	12	1.6721	.1740	.0502	1.5616 TO	1.7826
Grp 4	12	1.4901	.1133	.0327	1.4181 TO	1.5621
Total	48	1.8296	.3465	.0500	1.7290 TO	1.9302

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
4.4209	3	44	.008

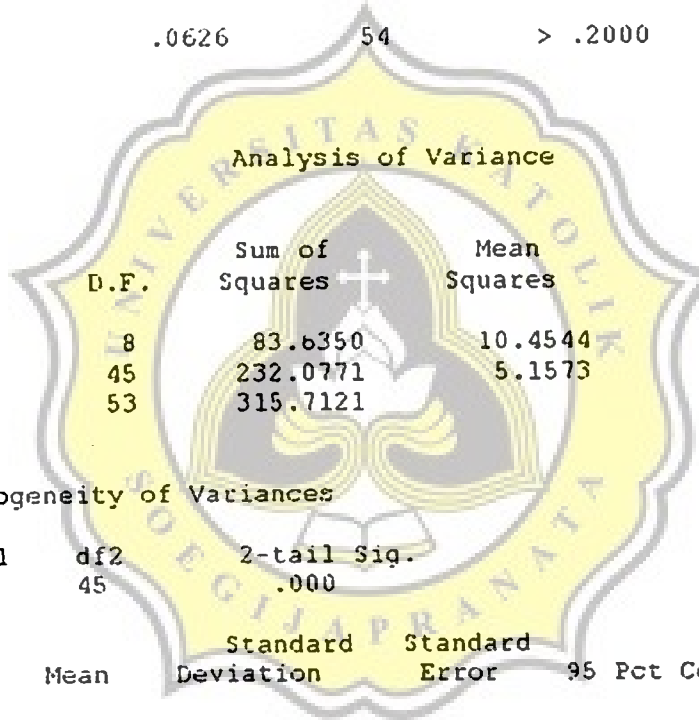
LAMPIRAN 5

HASIL ANOVA SATU ARAH KANDUNGAN PROTEIN KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN BAKU

Valid cases: 54.0 Missing cases: .0 Percent missing: .0

Mean	4.3761	Std Err	.3321	Min	.1751	Skewness	.2065
Median	4.2900	Variance	5.9568	Max	10.3309	S E Skew	.3246
5% Trim	4.3143	Std Dev	2.4407	Range	10.1558	Kurtosis	-.3102
95% CI for Mean	(3.7099, 5.0423)		IQR	3.3269	S E Kurt	.6389	

Hi-Res Chart	Statistic	df	Significance
K-S (Lilliefors)	.0626	54	> .2000



Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	83.6350	10.4544	2.0271	.0646
Within Groups	45	232.0771	5.1573		
Total	53	315.7121			

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
6.8129	8	45	.000

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int for Mean
Grp 1	6	6.0118	3.3875	1.3829	2.4569 TO 9.5667
Grp 2	6	2.1012	1.6086	.6567	.4131 TO 3.7893
Grp 3	6	4.7110	2.3511	.9598	2.2438 TO 7.1783
Grp 4	6	4.0023	.7868	.3220	3.1745 TO 4.8300
Grp 5	6	3.0059	2.1457	.8760	.7541 TO 5.2576
Grp 6	6	5.8658	1.8658	1.2017	.4906 TO 7.1269
Grp 7	6	5.5448	.9633	.3933	4.5339 TO 6.5558
Grp 8	6	3.7647	3.1377	1.2809	.4719 TO 7.0574
Grp 9	6	4.3775	3.0630	1.2505	1.1631 TO 7.5919
Total	54	4.3761	2.4407	.3321	3.7099 TO 5.0423

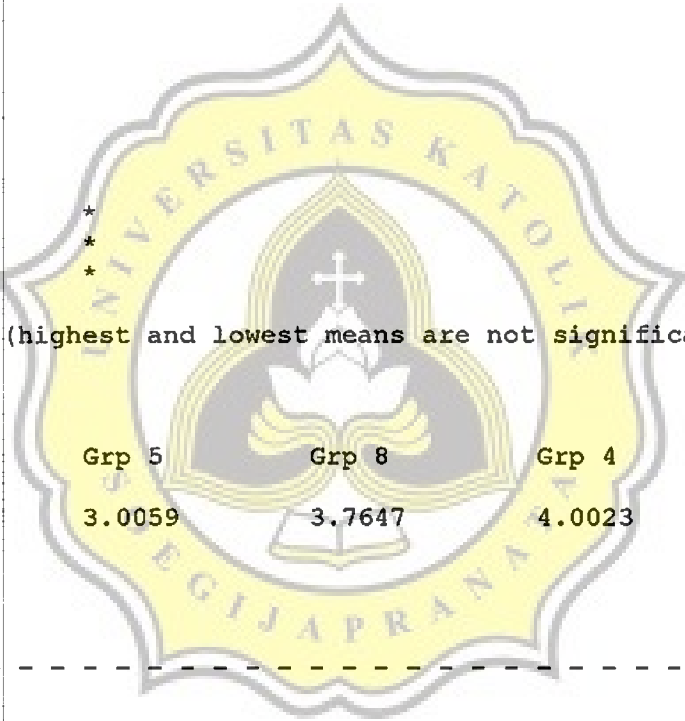
Multiple Range Tests: Duncan test with significance level .05  
 The difference between two means is significant if  
 $MEAN(J) - MEAN(I) \geq 1.6058 * RANGE * \sqrt{1/N(I) + 1/N(J)}$   
 with the following value(s) for RANGE:

Step	2	3	4	5	6	7	8	9
RANGE	2.85	3.00	3.09	3.16	3.22	3.26	3.30	3.33

(\*) Indicates significant differences which are shown in the lower triangle

G G G G G G G G G  
 r r r r r r r r r  
 P P P P P P P P P  
 2 5 8 4 9 3 7 6 1

Mean	PERLAK
2.1012	Grp 2
3.0059	Grp 5
3.7647	Grp 8
4.0023	Grp 4
4.3775	Grp 9
4.7110	Grp 3
5.5448	Grp 7
5.8658	Grp 6
6.0118	Grp 1



Homogeneous Subsets (highest and lowest means are not significantly different)

Subset 1

Group	Grp 2	Grp 5	Grp 8	Grp 4	Grp 9
Mean	2.1012	3.0059	3.7647	4.0023	4.3775
Group	Grp 3				
Mean	4.7110				

Subset 2

Group	Grp 5	Grp 8	Grp 4	Grp 9	Grp 3
Mean	3.0059	3.7647	4.0023	4.3775	4.7110
Group	Grp 7	Grp 6	Grp 1		
Mean	5.5448	5.8658	6.0118		

LAMPIRAN 6

HASIL ANOVA SATU ARAH KANDUNGAN GARAM KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN BAKU

Valid cases: 27.0 Missing cases: .0 Percent missing: .0

Mean	4.5283	Std Err	.0622	Min	4.0014	Skewness	.2935
Median	4.5045	Variance	.1044	Max	5.1948	S E Skew	.4479
5% Trim	4.5214	Std Dev	.3232	Range	1.1934	Kurtosis	-.7225
95% CI for Mean	(4.4005, 4.6562)			IOR	.5031	S E Kurt	.8721

	Statistic	df	Significance
Shapiro-Wilks	.9700	27	.6166
K-S (Lilliefors)	.1017	27	> .2000

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	1.6355	.2044	3.4083	.0146
Within Groups	18	1.0797	.0600		
Total	26	2.7152			

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
.7383	8	18	.658

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int for Mean
Grp 1	3	4.3641	.4024	.2323	3.3644 TO 5.3638
Grp 2	3	4.9023	.2925	.1689	4.1757 TO 5.6289
Grp 3	3	4.3329	.2126	.1228	3.8046 TO 4.8612
Grp 4	3	4.5942	.3054	.1763	3.8355 TO 5.3529
Grp 5	3	4.9296	.1737	.1003	4.4982 TO 5.3610
Grp 6	3	4.2393	.1172	.0677	3.9482 TO 4.5304
Grp 7	3	4.4343	.1999	.1154	3.9376 TO 4.9310
Grp 8	3	4.2822	.2030	.1172	3.7779 TO 4.7865
Grp 9	3	4.6761	.1697	.0980	4.2546 TO 5.0976
Total	27	4.5283	.3232	.0622	4.4005 TO 4.6562



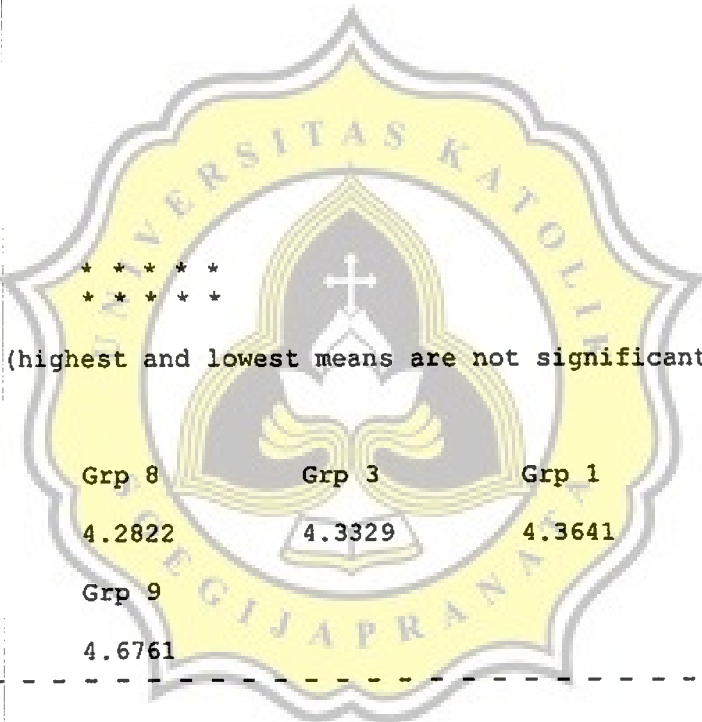
Multiple Range Tests: Duncan test with significance level .05  
 The difference between two means is significant if  
 $MEAN(J) - MEAN(I) \geq .1732 * RANGE * \sqrt{1/N(I) + 1/N(J)}$   
 with the following value(s) for RANGE:

Step	2	3	4	5	6	7	8	9
RANGE	2.97	3.11	3.22	3.27	3.32	3.36	3.38	3.40

(\*) Indicates significant differences which are shown in the lower triangle

G G G G G G G G G  
 r r r r r r r r r  
 P P P P P P P P P  
 6 8 3 1 7 4 9 2 5

Mean	PERLAK
4.2393	Grp 6
4.2822	Grp 8
4.3329	Grp 3
4.3641	Grp 1
4.4343	Grp 7
4.5942	Grp 4
4.6761	Grp 9
4.9023	Grp 2
4.9296	Grp 5



Homogeneous Subsets (highest and lowest means are not significantly different)

Subset 1

Group	Grp 6	Grp 8	Grp 3	Grp 1	Grp 7
Mean	4.2393	4.2822	4.3329	4.3641	4.4343
Group	Grp 4	Grp 9			
Mean	4.5942	4.6761			

Subset 2

Group	Grp 4	Grp 9	Grp 2	Grp 5
Mean	4.5942	4.6761	4.9023	4.9296

LAMPIRAN 7

HASIL ANOVA SATU ARAH NON PARAMETRIK UJI ORGANOLEPTIK  
(KESUKAAN) KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN  
BAKU

Valid cases: 225,0 Missing cases: ,0 Percent missing: ,0

Mean	2,5333	Std Err	,0670	Min	1,0000	Skewness	0,3745
Median	2,0000	Variance	1,0089	Max	5,0000	S E Skew	0,1622
5 Trim	2,4975	Std Dev	1,0045	Range	4,0000	Kurtosis	-0,2553
95 CI for Mean	(2,4014; 2,6653)	IQR"			1,0000	S E Kurt	0,3231

	Statistic	df	Significance
K-S (Lilliefors)	,2178	225	,0

Uji Normalitas Data Kesukaan Panelis terhadap Kecap (Non-parametrik)

	N	Mean	Std Dev	Minimum	Maximum
KESUKAAN	225	2,53333	1,00445	1,00	5,00
PERLAKUAN	225	5,00000	2,58775	1,00	9,00

--- Kruskal-Wallis 1-Way Anova

Chi-Square	D.F.	Corrected for ties Significance	Chi-Square	D.F.	Significance
10,8984	8	,2075	11,9691	8	0,1526

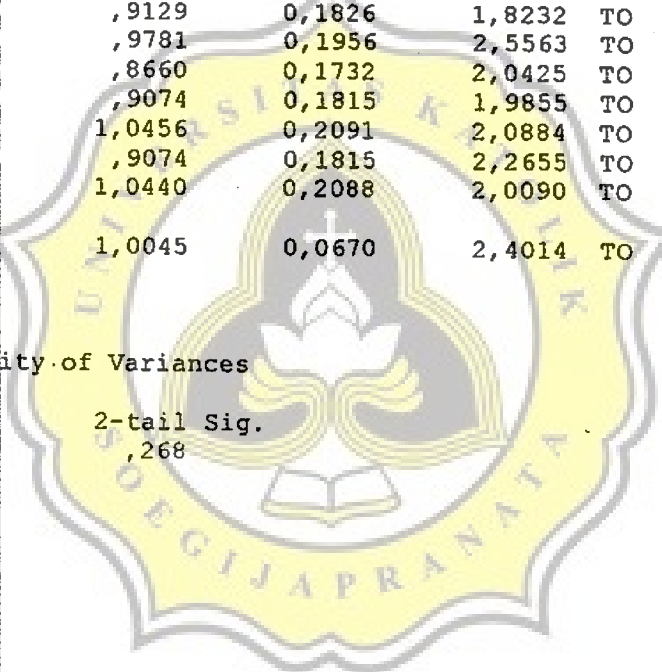
Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	14,7200	1,8400	1,8811	0,0642
Within Groups	216	211,2800	0,9781		
Total	224	226,0000			

Group	Standard Count	Standard Mean	Deviation	Error	95 Pct Conf Int	for Mean
Grp 1	25	2,3200	,8524	0,175	1,9681	TO 2,6719
Grp 2	25	2,9600	1,3064	0,2613	2,4207	TO 3,4993
Grp 3	25	2,2000	,9129	0,1826	1,8232	TO 2,5768
Grp 4	25	2,9600	,9781	0,1956	2,5563	TO 3,3637
Grp 5	25	2,4000	,8660	0,1732	2,0425	TO 2,7575
Grp 6	25	2,3600	,9074	0,1815	1,9855	TO 2,7345
Grp 7	25	2,5200	1,0456	0,2091	2,0884	TO 2,9516
Grp 8	25	2,6400	,9074	0,1815	2,2655	TO 3,0145
Grp 9	25	2,4400	1,0440	0,2088	2,0090	TO 2,871
Total	225	2,5333	1,0045	0,0670	2,4014	TO 2,6653

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
1,2562	8	216	,268



LAMPIRAN 8

HASIL ANOVA SATU ARAH NON PARAMETRIK UJI ORGANOLEPTIK (RASA) KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN BAKU

Valid cases: 225,0 Missing cases: ,0 Percent missing: ,0

Mean	2,0889	Std Err:	,0455	Min	1,0000	Skewness	,6536
Median	2,0000	Variance	,4653	Max	4,0000	S E Skew	,1622
5 Trim	2,0543	Std Dev	,6821	Range	3,0000	Kurtosis	1,0405
95 CI for Mean	(1,9993; 2,1785)			IQR	,0000	S E Kurt	,3231

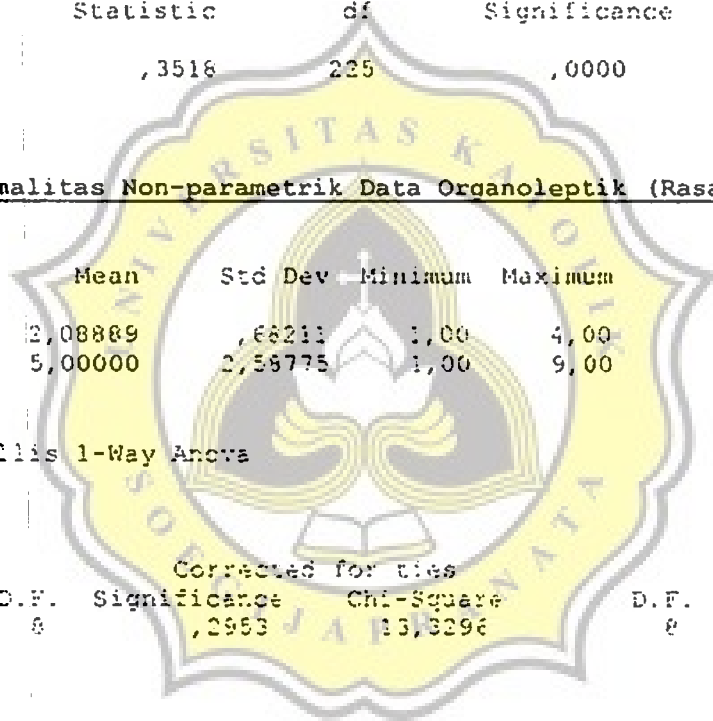
	Statistic	df	Significance
K-S (Lilliefors)	,3516	225	,0000

Uji Normalitas Non-parametrik Data Organoleptik (Rasa)

	N	Mean	Std Dev	Minimum	Maximum
RASA	225	2,08889	,68211	1,00	4,00
PERLAKUAN	225	5,00000	2,58775	1,00	9,00

--- Kruskal-Wallis 1-Way Anova

	Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
	9,5865	8	,2953	13,3296	8	,1010



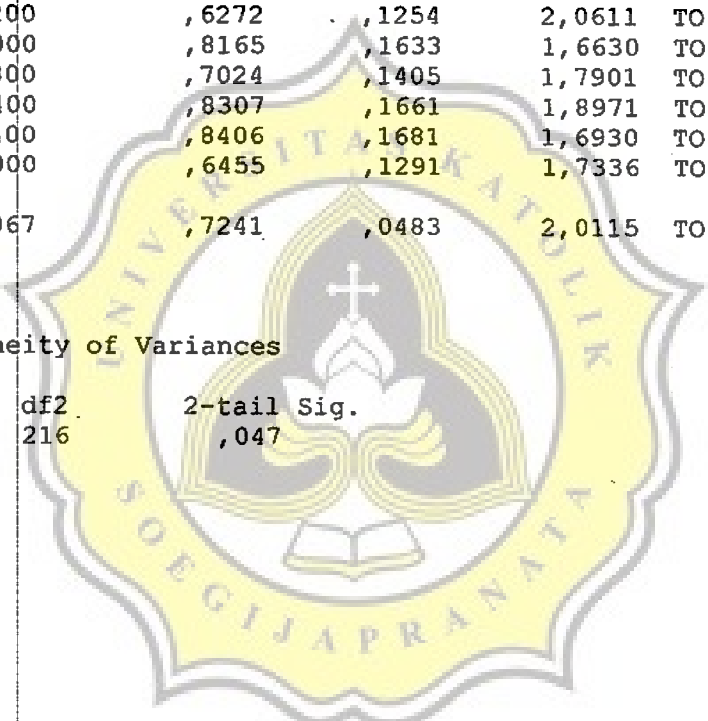
Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	7,9200	,9900	1,9525	,0538
Within Groups	216	109,5200	,5070		
Total	224	117,4400			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Group 1	25	1,9200	,6403	,1281	1,6557 TO	2,1843
Group 2	25	2,4800	,8226	,1645	2,1404 TO	2,8196
Group 3	25	1,8800	,3317	,0663	1,7431 TO	2,0169
Group 4	25	2,3200	,6272	,1254	2,0611 TO	2,5789
Group 5	25	2,0000	,8165	,1633	1,6630 TO	2,3370
Group 6	25	2,0800	,7024	,1405	1,7901 TO	2,3699
Group 7	25	2,2400	,8307	,1661	1,8971 TO	2,5829
Group 8	25	2,0400	,8406	,1681	1,6930 TO	2,3870
Group 9	25	2,0000	,6455	,1291	1,7336 TO	2,2664
Total	225	2,1067	,7241	,0483	2,0115 TO	2,2018

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
2,0020	8	216	,047



LAMPIRAN 9

HASIL ANOVA SATU ARAH NON PARAMETRIK UJI ORGANOLEPTIK (BAU) KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN BAKU

Valid cases:	225,0	Missing cases:	,0	Percent missing:	0		
Mean	2,1733	Std Err	,0492	Min	1	Skewness	1,1673
Median	2,0000	Variance	,5457	Max	4	S E Skew	0,1622
Q Trim	2,1370	Std Dev	,7387	Range	3	Kurtosis	1,5338
"95% CI for Mean (2,	0763; 2,2704)	IQR"	0	S E Kurt	0,3231		

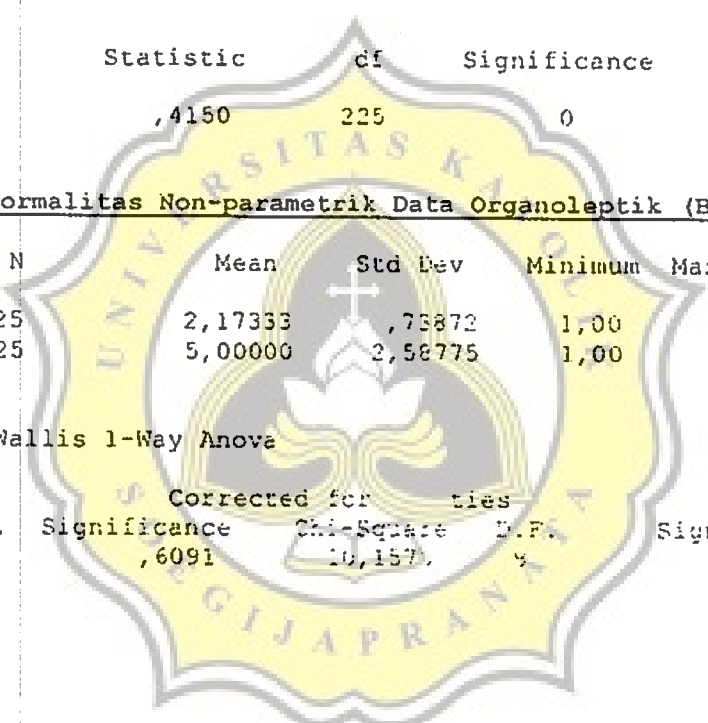
	Statistic	df	Significance
K-S (Lilliefors)	,4150	225	0

Uji Normalitas Non-parametrik Data Organoleptik (Bau)

	N	Mean	Std Dev	Minimum	Maximum
BAU	225	2,17333	,73872	1,00	4,00
PERLAK	225	5,00000	2,58775	1,00	9,00

- - - - - Kruskal-Wallis 1-Way Anova

Chi-Square	D.F.	Significance	Corrected for ties	Chi-Square	D.F.	Significance
6,3405	8	,6091		10,157	8	0,2542



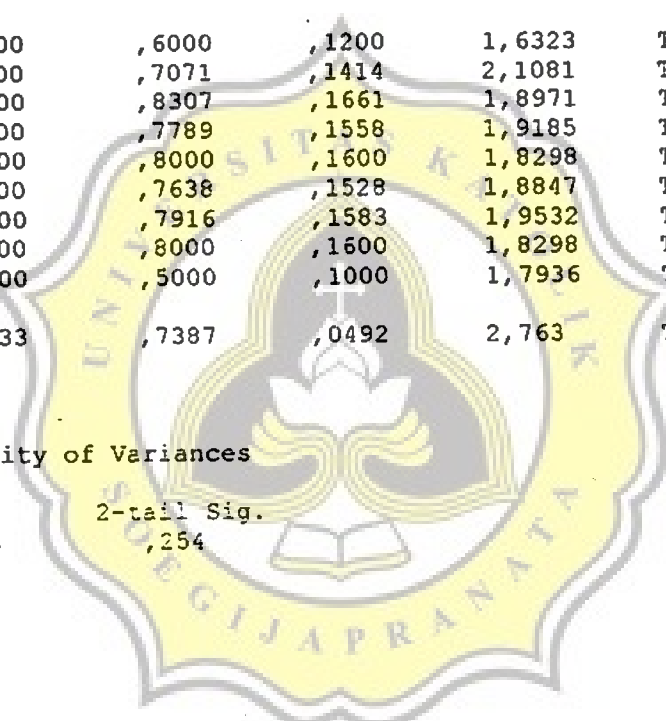
Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	4,7200	0,591	0,0844	0,3751
Within Groups	216	117,5200	0,5441		
Total	224	122,2400			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
rp 1	25	1,8800	,6000	,1200	1,6323	TO 2,1277
rp 2	25	2,4000	,7071	,1414	2,1081	TO 2,6919
rp 3	25	2,2400	,8307	,1661	1,8971	TO 2,5829
rp 4	25	2,2400	,7789	,1558	1,9185	TO 2,5615
rp 5	25	2,1600	,8000	,1600	1,8298	TO 2,4902
rp 6	25	2,2000	,7638	,1528	1,8847	TO 2,5153
rp 7	25	2,2800	,7916	,1583	1,9532	TO 2,6068
rp 8	25	2,1600	,8000	,1600	1,8298	TO 2,4902
rp 9	25	2,0000	,5000	,1000	1,7936	TO 2,2064
Total	225	2,1733	,7387	,0492	2,763	TO 2,2704

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
1,2826	8	216	,254



**HASIL ANOVA SATU ARAH NON PARAMETRIK UJI ORGANOLEPTIK (WARNA) KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN BAKU**

Valid cases: 225,0 Missing cases: ,0 Percent missing: ,0

Mean	2,1067	Std Err	,0483	Min	1,0000	Skewness	,9035
Median	2,0000	Variance	,5243	Max	4,0000	S E Skew	,1622
Trim	2,0630	Std Dev	,7241	Range	3,0000	Kurtosis	1,2678
5% CI for Mean	(2,0115; 2,2018)	IQR	,0000	S E Kurt	,3231		

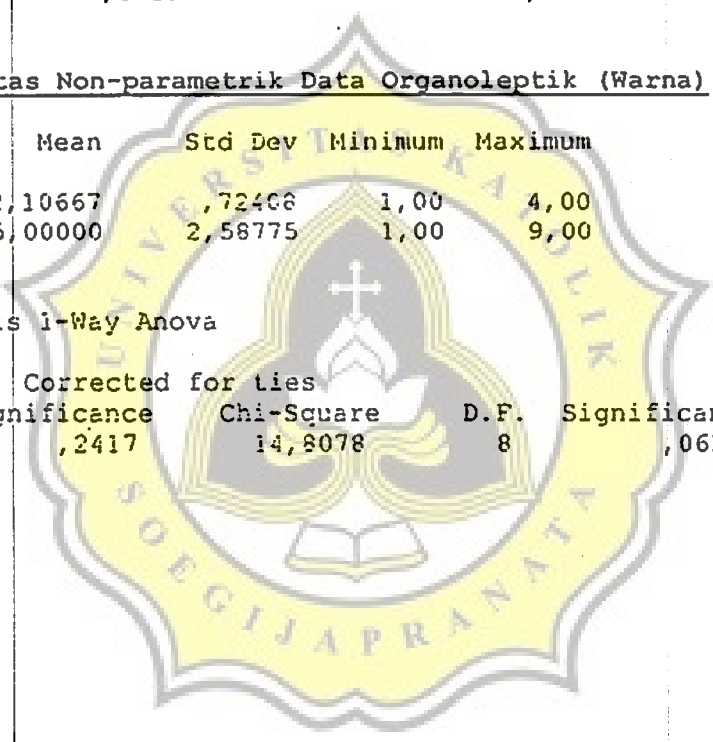
K-S (Lilliefors)	Statistic	df	Significance
	,3719	225	,0000

Uji Normalitas Non-parametrik Data Organoleptik (Warna)

	N	Mean	Std Dev	Minimum	Maximum
WARNA	225	2,10667	,72406	1,00	4,00
PERLAK	225	5,00000	2,58775	1,00	9,00

--- Kruskal-Wallis 1-Way Anova

		Corrected for ties			
Chi-Square	D.F.	Significance	Chi-Square	D.F.	Significance
10,3438	8	,2417	14,8078	8	,0630





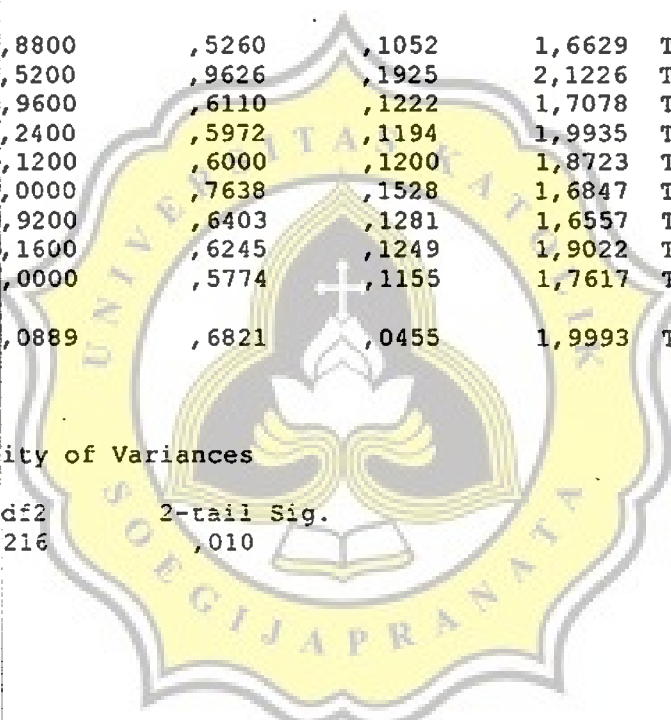
Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	7,9822	,9978	2,2394	,0258
Within Groups	216	96,2400	,4456		
Total	224	104,2222			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 1	25	1,8800	,5260	,1052	1,6629 TO	2,0971
Grp 2	25	2,5200	,9626	,1925	2,1226 TO	2,9174
Grp 3	25	1,9600	,6110	,1222	1,7078 TO	2,2122
Grp 4	25	2,2400	,5972	,1194	1,9935 TO	2,4865
Grp 5	25	2,1200	,6000	,1200	1,8723 TO	2,3677
Grp 6	25	2,0000	,7638	,1528	1,6847 TO	2,3153
Grp 7	25	1,9200	,6403	,1281	1,6557 TO	2,1843
Grp 8	25	2,1600	,6245	,1249	1,9022 TO	2,4178
Grp 9	25	2,0000	,5774	,1155	1,7617 TO	2,2383
Total	225	2,0889	,6821	,0455	1,9993 TO	2,1785

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
2,5873	8	216	,010



**HASIL ANOVA SATU ARAH NON PARAMETRIK UJI ORGANOLEPTIK (KEKENTALAN) KECAP DENGAN BERBAGAI VARIASI KOMPOSISI BAHAN BAKU**

Valid cases: 225,0 Missing cases: 0,0 Percent missing: 0,0

Mean	1,8978	Std Err	,0380	Min	,0380	Skewness	1,0000
Median	2,0000	Variance	,3243	Max	4,0000	S E Skew	,1623
Trim	1,8815	Std Dev	,5695	Range	4,0000	Kurtosis	,6506
S E CI for Mean	(1,8230; 1,9726)	IC80		S E Kurt	,3231		

K-S (Lilliefors) Statistic .3221  
df 225  
Significance .0000

**Uji Normalitas Non-parametrik Organoleptik (kekentalan)**

N	225	Mean	1,89778	Std Dev	1,00000	Maximum	4,00
ERLAK	225	Mean	2,00000	Std Dev	1,00000	Maximum	4,00

--- Kruskal-Wallis 1-Way ANOVA

Chi-Square 6,5054  
D.F. 2  
Significance .01262



Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	4,5689	,5711	1,8120	,0761
Within Groups	216	68,0800	,3152		
Total	224	72,6489			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Group 1	25	1,6800	,5568	,1114	1,4502 TO	1,9098
Group 2	25	2,1600	,8000	,1600	1,8298 TO	2,4902
Group 3	25	2,0000	,5774	,1155	1,7617 TO	2,2383
Group 4	25	1,9600	,5385	,1077	1,7377 TO	2,1823
Group 5	25	1,9200	,5715	,1143	1,6841 TO	2,1559
Group 6	25	1,8400	,4726	,0945	1,6449 TO	2,0351
Group 7	25	1,9200	,4933	,0987	1,7164 TO	2,1236
Group 8	25	1,6800	,4761	,0952	1,4835 TO	1,8765
Group 9	25	1,9200	,4933	,0987	1,7164 TO	2,1236
Total	225	1,8978	,5695	,0380	1,8230 TO	1,9726

Levene Test for Homogeneity of Variances

Statistic	df1	df2	2-tail Sig.
2,0225	8	216	,045

