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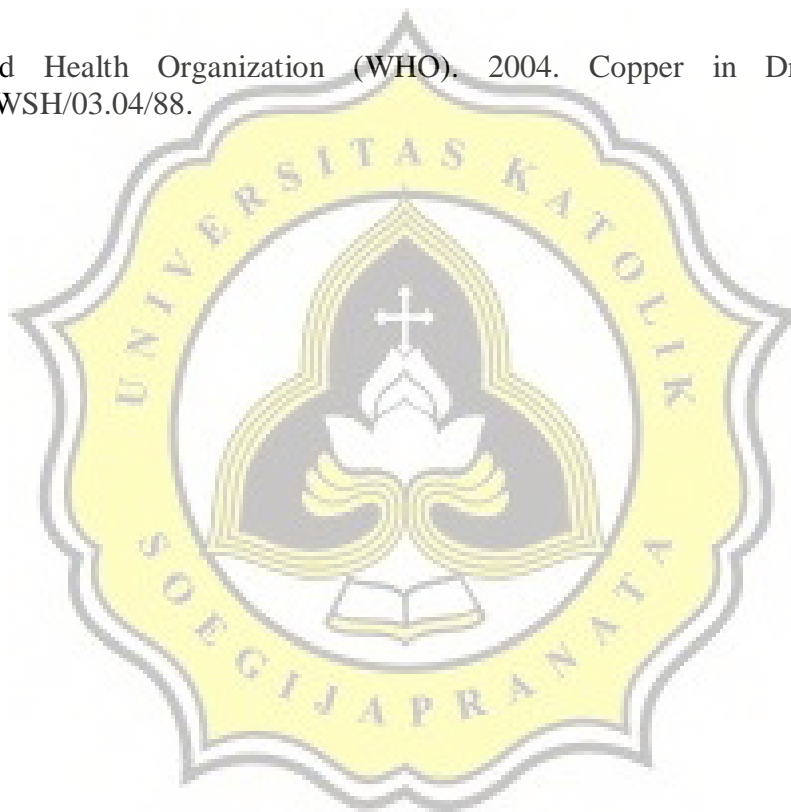
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7. LAMPIRAN

Lampiran 1. Hasil Normalitas Data

1.1. Tabel Normalitas Data Penyerapan Pektin Kulit Jeruk terhadap Logam Cd

Tests of Normality

Jenis_Pektin	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Cd_Fraksi_Tidak_Larut	Pektin Fresh	.137	9	.200*	.948	9	.667
	Pektin Oven 5 Jam	.149	9	.200*	.951	9	.700
	Pektin Oven 10 Jam	.217	9	.200*	.867	9	.114
	Pektin Komersial	.129	9	.200*	.985	9	.985
Cd_Fraksi_Larut	Pektin Fresh	.190	9	.200*	.934	9	.515
	Pektin Oven 5 Jam	.179	9	.200*	.933	9	.507
	Pektin Oven 10 Jam	.230	9	.185	.868	9	.116
	Pektin Komersial	.208	9	.200*	.916	9	.356
Total_Cu	Pektin Fresh	.124	9	.200*	.979	9	.958
	Pektin Oven 5 Jam	.230	9	.187	.924	9	.426
	Pektin Oven 10 Jam	.204	9	.200*	.943	9	.614
	Pektin Komersial	.159	9	.200*	.948	9	.671

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

a. Lilliefors Significance Correction

Tests of Normality

Waktu_Kontak	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Cd_Fraksi_Tidak_Larut	30 menit	.121	12	.200*	.967	12	.881
	60 menit	.225	12	.094	.904	12	.177
	90 menit	.132	12	.200*	.949	12	.624
Cd_Fraksi_Larut	30 menit	.195	12	.200*	.906	12	.188
	60 menit	.106	12	.200*	.967	12	.875
	90 menit	.145	12	.200*	.980	12	.984
Total_Cu	30 menit	.225	12	.093	.939	12	.489
	60 menit	.119	12	.200*	.970	12	.908
	90 menit	.132	12	.200*	.951	12	.658

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

a. Lilliefors Significance Correction

1.2. Tabel Normalitas Data Penyerapan Pektin Kulit Jeruk terhadap Logam Cu

Tests of Normality

Jenis Pektin		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Cu_Fraksi_Tidak_Larut	Pektin Fresh	.256	9	.092	.879	9	.152
	Pektin Oven 5 Jam	.173	9	.200*	.933	9	.506
	Pektin Oven 10 Jam	.111	9	.200*	.983	9	.978
	Pektin Komersial	.190	9	.200*	.913	9	.334
Cu_Fraksi_Larut	Pektin Fresh	.125	9	.200*	.979	9	.957
	Pektin Oven 5 Jam	.139	9	.200*	.932	9	.505
	Pektin Oven 10 Jam	.239	9	.146	.876	9	.144
	Pektin Komersial	.255	9	.095	.865	9	.109
Total_Cu	Pektin Fresh	.210	9	.200*	.900	9	.251
	Pektin Oven 5 Jam	.152	9	.200*	.963	9	.828
	Pektin Oven 10 Jam	.202	9	.200*	.915	9	.349
	Pektin Komersial	.116	9	.200*	.971	9	.902

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

a. Lilliefors Significance Correction

Tests of Normality

Waktu Kontak		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Cu_Fraksi_Tidak_Larut	30 menit	.128	12	.200*	.962	12	.809
	60 menit	.143	12	.200*	.964	12	.835
	90 menit	.099	12	.200*	.974	12	.950
Cu_Fraksi_Larut	30 menit	.194	12	.200*	.912	12	.229
	60 menit	.157	12	.200*	.927	12	.349
	90 menit	.144	12	.200*	.934	12	.425
Total_Cu	30 menit	.169	12	.200*	.953	12	.684
	60 menit	.214	12	.136	.938	12	.469
	90 menit	.151	12	.200*	.963	12	.822

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

a. Lilliefors Significance Correction

Lampiran 2. Tabel Deskriptif Statistik

2.1. Tabel Deskriptif Statistik Penyerapan Cd

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cd_Fraksi_Tidak_Larut	36	80.86	231.28	142.2736	40.07168
Cd_Fraksi_Larut	36	20.69	103.82	69.2347	20.24669
Total_Cd	36	153.21	300.93	211.5086	33.88896
Valid N (listwise)	36				

2.2. Tabel Deskriptif Statistik Penyerapan Cu

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cu_Fraksi_Tidak_Larut	36	27.47	125.36	70.5225	25.26078
Cu_Fraksi_Larut	36	10.19	71.61	33.0364	15.83096
Total_Cu	36	58.91	158.26	103.5592	25.54894
Valid N (listwise)	36				

Lampiran 3. Hasil Uji Beda

3.1. Hasil Uji Beda Penyerapan Cd

3.1.1. Hasil Uji Beda Penyerapan Cd Fraksi Tidak Larut Antar Waktu Kontak

Cd_Fraksi_Tidak_Larut

Duncan^a

Waktu_Kontak	N	Subset for alpha = .05	
		1	2
30 menit	12	122.0242	
60 menit	12	137.3800	137.3800
90 menit	12		167.4167
Sig.		.307	.051

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12.000.

3.1.2. Hasil Uji Beda Penyerapan Cd Fraksi Tidak Larut Antar Jenis Pektin

Cd_Fraksi_Tidak_Larut

Duncan^a

Jenis_Pektin	N	Subset for alpha = .05		
		1	2	3
Pektin Fresh	9	97.2222		
Pektin Oven 10 Jam	9		134.0056	
Pektin Komersial	9		156.5033	156.5033
Pektin Oven 5 Jam	9			181.3633
Sig.		1.000	.076	.051

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.000.

3.1.3. Hasil Uji Beda Penyerapan Cd Fraksi Larut Antar Waktu Kontak

Cd_Fraksi_LarutDuncan^a

Waktu_Kontak	N	Subset for alpha = .05	
		1	2
90 menit	12	58.9033	
60 menit	12	68.2825	68.2825
30 menit	12		80.5183
Sig.		.228	.118

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12.000.

3.1.4. Hasil Uji Beda Penyerapan Cd Fraksi Larut Antar Jenis Pektin**Cd_Fraksi_Larut**Duncan^a

Jenis_Pektin	N	Subset for alpha = .05	
		1	2
Pektin Komersial	9	46.1567	
Pektin Oven 5 Jam	9		68.3800
Pektin Oven 10 Jam	9		79.2500
Pektin Fresh	9		83.1522
Sig.		1.000	.051

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.000.

3.1.5. Hasil Uji Beda Penyerapan Cd Fraksi Larut dan Tidak Larut Antar Waktu Kontak**Total_Cd**Duncan^a

Waktu_Kontak	N	Subset for alpha = .05
		1
30 menit	12	202.5425
60 menit	12	205.6625
90 menit	12	226.3208
Sig.		.105

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12.000.

3.1.6. Hasil Uji Beda Penyerapan Cd Fraksi Larut dan Tidak Larut Antar Jenis Pektin

Total_Cd

Duncan^a

Jenis Pektin	N	Subset for alpha = .05		
		1	2	3
Pektin Fresh	9	180.3767		
Pektin Komersial	9	202.6600	202.6600	
Pektin Oven 10 Jam	9		213.2544	
Pektin Oven 5 Jam	9			249.7433
Sig.		.052	.345	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.000.

3.2. Hasil Uji Beda Penyerapan Cu

3.2.1. Hasil Uji Beda Penyerapan Cu Fraksi Tidak Larut Antar Waktu Kontak

Cu_Fraksi_Tidak_Larut

Duncan^a

Waktu_Kontak	N	Subset for alpha = .05	
		1	2
30 menit	12	52.9008	
60 menit	12	67.4283	
90 menit	12		91.2383
Sig.		.086	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12.000.

3.2.2. Hasil Uji Beda Penyerapan Cu Fraksi Tidak Larut Antar Jenis Pektin

Cu_Fraksi_Tidak_Larut

Duncan^a

Jenis Pektin	N	Subset for alpha = .05		
		1	2	3
Pektin Komersial	9	45.2644		
Pektin Oven 10 Jam	9		65.4078	
Pektin Fresh	9		83.6244	83.6244
Pektin Oven 5 Jam	9			87.7933
Sig.		1.000	.056	.653

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.000.

3.2.3. Hasil Uji Beda Penyerapan Cu Fraksi Larut Antar Waktu Kontak

Cu_Fraksi_Larut

Duncan^a

Waktu_Kontak	N	Subset for alpha = .05	
		1	2
90 menit	12	22.6017	
60 menit	12	31.9117	
30 menit	12		44.5958
Sig.		.096	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12.000.

3.2.4. Hasil Uji Beda Penyerapan Cu Fraksi Larut Antar Jenis Pektin

Cu_Fraksi_Larut

Duncan^a

Jenis_Pektin	N	Subset for alpha = .05	
		1	2
Pektin Fresh	9	18.9744	
Pektin Komersial	9	26.2078	
Pektin Oven 10 Jam	9		43.4189
Pektin Oven 5 Jam	9		43.5444
Sig.		.210	.982

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.000.

3.2.5. Hasil Uji Beda Penyerapan Cu Fraksi Larut dan Tidak Larut Antar Waktu Kontak

Total_Cu

Duncan^a

Waktu_Kontak	N	Subset for alpha = .05
		1
30 menit	12	97.4983
60 menit	12	99.3400
90 menit	12	113.8392
Sig.		.142

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12.000.

3.2.6. Hasil Uji Beda Penyerapan Cu Fraksi Larut dan Tidak Larut Antar Jenis Pektin

Total_Cu

Duncan^a

Jenis Pektin	N	Subset for alpha = .05		
		1	2	3
Pektin Komersial	9	71.4711		
Pektin Fresh	9		102.6000	
Pektin Oven 10 Jam	9		108.8267	
Pektin Oven 5 Jam	9			131.3389
Sig.		1.000	.356	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.000.

Lampiran 4. Tabel ANOVA dengan 12 Kombinasi Perlakuan

4.1. Tabel ANOVA Penyerapan Cd

4.1.1. Tabel ANOVA Penyerapan Cd oleh Fraksi Tidak Larut

Descriptives

Fraksi_Tidak_Larut

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol 30 menit	3	91.8033	10.41838	6.01505	65.9226	117.6840	80.88	101.63
Kontrol 60 menit	3	91.8133	10.21498	5.89762	66.4379	117.1887	80.86	101.08
Kontrol 90 menit	3	108.0500	9.98738	5.76621	83.2400	132.8600	96.97	116.36
Oven 5 Jam 30 menit	3	148.3333	19.19851	11.08427	100.6416	196.0251	126.24	160.96
Oven 5 Jam 60 menit	3	176.5933	13.95613	8.05757	141.9244	211.2623	162.97	190.86
Oven 5 Jam 90 menit	3	219.1633	18.19556	10.50521	173.9631	264.3636	198.24	231.28
Oven 10 Jam 30 menit	3	113.5067	15.83365	9.14156	74.1737	152.8396	98.35	129.94
Oven 10 Jam 60 menit	3	114.0367	6.89771	3.98240	96.9018	131.1715	107.03	120.82
Oven 10 Jam 90 menit	3	174.4733	8.72682	5.03843	152.7947	196.1520	168.59	184.50
Komersial 30 menit	3	134.4533	10.02685	5.78900	109.5453	159.3614	124.03	144.03
Komersial 60 menit	3	167.0767	6.22460	3.59377	151.6139	182.5394	160.12	172.12
Komersial 90 menit	3	167.9800	17.15721	9.90572	125.3591	210.6009	153.90	187.09
Total	36	142.2736	40.07168	6.67861	128.7153	155.8319	80.86	231.28

Fraksi_Tidak_Larut

Duncan^a

Variasi	N	Subset for alpha = .05					
		1	2	3	4	5	6
Kontrol 30 menit	3	91.8033					
Kontrol 60 menit	3	91.8133					
Kontrol 90 menit	3	108.0500					
Oven 10 Jam 30 menit	3	113.5067	113.5067				
Oven 10 Jam 60 menit	3	114.0367	114.0367				
Komersial 30 menit	3		134.4533	134.4533			
Oven 5 Jam 30 menit	3			148.3333	148.3333		
Komersial 60 menit	3				167.0767	167.0767	
Komersial 90 menit	3				167.9800	167.9800	
Oven 10 Jam 90 menit	3					174.4733	
Oven 5 Jam 60 menit	3					176.5933	
Oven 5 Jam 90 menit	3						219.1633
Sig.		.070	.072	.202	.091	.420	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4.1.2. Tabel ANOVA Penyerapan Cd oleh Fraksi Larut

Descriptives

Fraksi Larut	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol 30 menit	3	87.0933	6.43082	3.71284	71.1183	103.0684	81.97	94.31
Kontrol 60 menit	3	77.2000	5.01130	2.89327	64.7512	89.6488	72.34	82.35
Kontrol 90 menit	3	85.1633	11.23669	6.48751	57.2498	113.0768	74.73	97.06
Oven 5 Jam 30 menit	3	79.7800	15.84478	9.14799	40.4194	119.1406	63.01	94.50
Oven 5 Jam 60 menit	3	67.3167	20.52866	11.85223	16.3207	118.3127	50.80	90.30
Oven 5 Jam 90 menit	3	58.0433	11.44364	6.60699	29.6158	86.4709	46.77	69.65
Oven 10 Jam 30 menit	3	99.0000	6.21163	3.58628	83.5695	114.4305	91.99	103.82
Oven 10 Jam 60 menit	3	75.9900	11.63068	6.71498	47.0978	104.8822	65.61	88.56
Oven 10 Jam 90 menit	3	62.7600	2.00067	1.15509	57.7900	67.7300	60.79	64.79
Komersial 30 menit	3	56.2000	3.97581	2.29544	46.3235	66.0765	51.79	59.51
Komersial 60 menit	3	52.6233	9.47494	5.47036	29.0863	76.1604	43.33	62.27
Komersial 90 menit	3	29.6467	9.99597	5.77118	4.8153	54.4780	20.69	40.43
Total	36	69.2347	20.24669	3.37445	62.3842	76.0852	20.69	103.82

Fraksi_Larut

Duncan^a

Variasi	N	Subset for alpha = .05						
		1	2	3	4	5	6	7
Komersial 90 menit	3	29.6467						
Komersial 60 menit	3		52.6233					
Komersial 30 menit	3		56.2000	56.2000				
Oven 5 Jam 90 menit	3		58.0433	58.0433	58.0433			
Oven 10 Jam 90 menit	3		62.7600	62.7600	62.7600	62.7600		
Oven 5 Jam 60 menit	3		67.3167	67.3167	67.3167	67.3167	67.3167	
Oven 10 Jam 60 menit	3			75.9900	75.9900	75.9900	75.9900	
Kontrol 60 menit	3				77.2000	77.2000	77.2000	
Oven 5 Jam 30 menit	3					79.7800	79.7800	79.7800
Kontrol 90 menit	3						85.1633	85.1633
Kontrol 30 menit	3						87.0933	87.0933
Oven 10 Jam 30 menit	3							99.0000
Sig.		1.000	.145	.052	.060	.093	.056	.054

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4.2. Tabel ANOVA Penyerapan Cu

4.2.1. Tabel ANOVA Penyerapan Cu oleh Fraksi Tidak Larut

Descriptives

Fraksi Tidak Larut

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol 30 menit	3	73.3267	6.50775	3.75725	57.1605	89.4928	67.01	80.01
Kontrol 60 menit	3	73.9667	3.87446	2.23692	64.3420	83.5914	69.74	77.35
Kontrol 90 menit	3	103.5800	8.75272	5.05339	81.8370	125.3230	95.94	113.13
Oven 5 Jam 30 menit	3	55.1933	9.71665	5.60991	31.0558	79.3308	48.06	66.26
Oven 5 Jam 60 menit	3	94.4300	6.19000	3.57380	79.0532	109.8068	88.24	100.62
Oven 5 Jam 90 menit	3	113.7567	13.10046	7.56355	81.2133	146.3000	99.55	125.36
Oven 10 Jam 30 menit	3	48.3200	10.30098	5.94727	22.7310	73.9090	37.08	57.31
Oven 10 Jam 60 menit	3	64.8933	3.23568	1.86812	56.8555	72.9312	61.34	67.67
Oven 10 Jam 90 menit	3	83.0100	6.01209	3.47108	68.0751	97.9449	76.79	88.79
Komersial 30 menit	3	34.7633	6.61045	3.81654	18.3421	51.1846	29.90	42.29
Komersial 60 menit	3	36.4233	8.47859	4.89512	15.3613	57.4853	27.47	44.33
Komersial 90 menit	3	64.6067	6.50124	3.75349	48.4567	80.7566	58.18	71.18
Total	36	70.5225	25.26078	4.21013	61.9755	79.0695	27.47	125.36

Fraksi Tidak Larut

Duncan^a

Variasi	N	Subset for alpha = .05							
		1	2	3	4	5	6	7	8
Komersial 30 menit	3	34.7633							
Komersial 60 menit	3	36.4233							
Oven 10 Jam 30 menit	3	48.3200	48.3200						
Oven 5 Jam 30 menit	3		55.1933						
Komersial 90 menit	3			64.6067	64.6067				
Oven 10 Jam 60 menit	3			64.8933	64.8933				
Kontrol 30 menit	3				73.3267	73.3267			
Kontrol 60 menit	3				73.9667	73.9667			
Oven 10 Jam 90 menit	3					83.0100	83.0100		
Oven 5 Jam 60 menit	3						94.4300	94.4300	
Kontrol 90 menit	3							103.5800	103.5800
Oven 5 Jam 90 menit	3								113.7567
Sig.		.057	.297	.168	.197	.168	.089	.169	.128

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

4.2.2. Tabel ANOVA Penyerapan Cu oleh Fraksi Larut

Descriptives

Fraksi_Larut									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Kontrol 30 menit	3	22.3333	3.00294	1.73375	14.8736	29.7930	19.41	25.41	
Kontrol 60 menit	3	17.3900	1.47309	.85049	13.7306	21.0494	15.79	18.69	
Kontrol 90 menit	3	17.2000	5.83578	3.36929	2.7031	31.6969	11.31	22.98	
Oven 5 Jam 30 menit	3	56.7467	2.83500	1.63679	49.7041	63.7892	53.91	59.58	
Oven 5 Jam 60 menit	3	44.9433	2.64372	1.52635	38.3760	51.5107	41.98	47.06	
Oven 5 Jam 90 menit	3	28.9433	3.58826	2.07168	20.0296	37.8571	25.90	32.90	
Oven 10 Jam 30 menit	3	65.4100	6.30238	3.63868	49.7540	81.0660	59.01	71.61	
Oven 10 Jam 60 menit	3	34.0433	7.11554	4.10816	16.3673	51.7193	28.51	42.07	
Oven 10 Jam 90 menit	3	30.8033	5.82266	3.36171	16.3391	45.2676	24.17	35.07	
Komersial 30 menit	3	33.8933	3.46206	1.99882	25.2931	42.4936	30.61	37.51	
Komersial 60 menit	3	31.2700	2.74895	1.58710	24.4412	38.0988	28.44	33.93	
Komersial 90 menit	3	13.4600	3.30041	1.90549	5.2613	21.6587	10.19	16.79	
Total	36	33.0364	15.83096	2.63849	27.6800	38.3928	10.19	71.61	

Fraksi_Larut

Duncan ^a								
Variasi	N	Subset for alpha = .05						
		1	2	3	4	5	6	7
Komersial 90 menit	3	13.4600						
Kontrol 90 menit	3	17.2000	17.2000					
Kontrol 60 menit	3	17.3900	17.3900					
Kontrol 30 menit	3		22.3333	22.3333				
Oven 5 Jam 90 menit	3			28.9433				
Oven 10 Jam 90 menit	3				28.9433			
Komersial 60 menit	3				31.2700			
Komersial 30 menit	3				33.8933			
Oven 10 Jam 60 menit	3				34.0433			
Oven 5 Jam 60 menit	3					44.9433		
Oven 5 Jam 30 menit	3						56.7467	
Oven 10 Jam 30 menit	3							65.4100
Sig.		.308	.185	.075	.211	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.