

7. LAMPIRAN

Lampiran 1. Uji Normalitas

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Aktioksidan	.055	243	.072	.988	243	.042
Total Fenolik	.050	243	.200*	.988	243	.041
Warna L	.047	243	.200*	.991	243	.122
Warna a	.054	243	.088	.977	243	.001
Warna b	.049	243	.200*	.984	243	.008

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

a. Lilliefors Significance Correction

Uji Normalitas Data Normal Berdasarkan Suhu Pengeringan

	Suhu Pengeringan	Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Total Fenolik	45oC	.063	81	.200*	.968	81	.040
	50oC	.054	81	.200*	.972	81	.073
	55oC	.089	81	.169	.975	81	.113
Aktioksidan	45oC	.057	81	.200*	.988	81	.635
	50oC	.063	81	.200*	.984	81	.407
	55oC	.094	81	.074	.971	81	.061
Warna L	45oC	.069	81	.200*	.974	81	.098
	50oC	.056	81	.200*	.977	81	.162
	55oC	.068	81	.200*	.976	81	.125
Warna a	45oC	.072	81	.200*	.968	81	.041
	50oC	.082	81	.200*	.960	81	.014
	55oC	.062	81	.200*	.971	81	.065
Warna b	45oC	.082	81	.200*	.971	81	.067
	50oC	.076	81	.200*	.970	81	.054
	55oC	.083	81	.200*	.973	81	.085

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

a. Lilliefors Significance Correction

Uji Normalitas Data Normal Berdasarkan Waktu Penyeduhan

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Waktu Penyeduhan	Statistic	df	Sig.	Statistic	df	Sig.
Total Fenolik	0,5 Menit	.148	27	.136	.902	27	.015
	3 Menit	.142	27	.172	.969	27	.585
	6 Menit	.145	27	.150	.961	27	.395
	9 Menit	.144	27	.159	.975	27	.733
	12 Menit	.127	27	.200*	.929	27	.065
	15 Menit	.152	27	.111	.951	27	.229
	18 Menit	.157	27	.087	.937	27	.102
	21 Menit	.148	27	.131	.912	27	.025
	24 Menit	.139	27	.195	.946	27	.171
Aktioksidan	0,5 Menit	.099	27	.200*	.961	27	.392
	3 Menit	.101	27	.200*	.962	27	.401
	6 Menit	.139	27	.195	.901	27	.014
	9 Menit	.158	27	.083	.931	27	.073
	12 Menit	.148	27	.133	.946	27	.172
	15 Menit	.142	27	.170	.920	27	.040
	18 Menit	.148	27	.135	.955	27	.289
	21 Menit	.153	27	.103	.962	27	.415
	24 Menit	.093	27	.200*	.978	27	.809
Warna L	0,5 Menit	.157	27	.087	.901	27	.014

	3 Menit	.152	27	.113	.947	27	.184
	6 Menit	.108	27	.200*	.966	27	.501
	9 Menit	.142	27	.175	.937	27	.101
	12 Menit	.163	27	.064	.946	27	.167
	15 Menit	.158	27	.081	.944	27	.152
	18 Menit	.138	27	.200*	.956	27	.301
	21 Menit	.158	27	.080	.921	27	.042
	24 Menit	.121	27	.200*	.944	27	.154
Warna a	0,5 Menit	.131	27	.200*	.947	27	.179
	3 Menit	.157	27	.087	.902	27	.015
	6 Menit	.137	27	.200*	.963	27	.438
	9 Menit	.163	27	.064	.949	27	.198
	12 Menit	.147	27	.142	.949	27	.206
	15 Menit	.129	27	.200*	.958	27	.329
	18 Menit	.158	27	.083	.963	27	.436
	21 Menit	.163	27	.064	.940	27	.122
	24 Menit	.161	27	.069	.923	27	.046
Warna b	0,5 Menit	.147	27	.141	.920	27	.039
	3 Menit	.152	27	.112	.927	27	.059
	6 Menit	.111	27	.200*	.949	27	.197
	9 Menit	.156	27	.091	.898	27	.012
	12 Menit	.152	27	.110	.932	27	.078
	15 Menit	.149	27	.131	.953	27	.255
	18 Menit	.136	27	.200*	.938	27	.110
	21 Menit	.158	27	.083	.879	27	.005
	24 Menit	.156	27	.093	.933	27	.080

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

a. Lilliefors Significance Correction

Lampiran 2. Hasil Uji Homogenitas

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Total Fenolik	Based on Mean	.481	2	240	.619
	Based on Median	.454	2	240	.636
	Based on Median and with adjusted df	.454	2	235.904	.636
	Based on trimmed mean	.491	2	240	.613
Aktioksidan	Based on Mean	1.528	2	240	.219
	Based on Median	1.532	2	240	.218
	Based on Median and with adjusted df	1.532	2	233.311	.218
	Based on trimmed mean	1.531	2	240	.219
Warna L	Based on Mean	.091	2	240	.913
	Based on Median	.066	2	240	.936
	Based on Median and with adjusted df	.066	2	238.498	.936
	Based on trimmed mean	.088	2	240	.916
Warna a	Based on Mean	1.258	2	240	.286
	Based on Median	1.226	2	240	.295
	Based on Median and with adjusted df	1.226	2	236.848	.295
	Based on trimmed mean	1.230	2	240	.294
Warna b	Based on Mean	.019	2	240	.981
	Based on Median	.014	2	240	.986
	Based on Median and with adjusted df	.014	2	234.603	.986
	Based on trimmed mean	.014	2	240	.986

Lampiran 3. Hasil Uji *Duncan*

Total Fenolik

Total Fenolik

Duncan^{a,b}

Suhu Pengeringan	N	Subset	
		1	2
45oC	81	11.4901	
50oC	81	11.5548	
55oC	81		11.8084
Sig.		.235	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .119.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

Total Fenolik

Duncan^{a,b}

Waktu Penyeduhan	N	Subset					
		1	2	3	4	5	6
0,5 Menit	27	10.6326					
3 Menit	27		10.9696				
6 Menit	27			11.4222			
24 Menit	27			11.4244			
21 Menit	27			11.6041	11.6041		
9 Menit	27			11.6052	11.6052		
12 Menit	27				11.7370		
15 Menit	27					12.3837	
18 Menit	27						12.7811
Sig.		1.000	1.000	.076	.185	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .119.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

Antioksidan

Aktioksidan

Duncan^{a,b}

Suhu Pengeringan	N	Subset		
		1	2	3
45oC	81	61.8077		
50oC	81		66.3847	
55oC	81			70.8689
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 5.130.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

Aktioksidan

Duncan^{a,b}

Waktu Penyeduhan	N	Subset						
		1	2	3	4	5	6	7
0,5 Menit	2 7	51.25 33						
3 Menit	2 7		57.50 41					
6 Menit	2 7			63.031 9				
24 Menit	2 7			63.880 0				
9 Menit	2 7				66.54 74			
12 Menit	2 7					69.885 6		
21 Menit	2 7					70.761 1		
15 Menit	2 7						74.0785	
18 Menit	2 7							80.241 9
Sig.		1.000	1.000	.170	1.000	.157	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 5.130.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

Warna L**Warna L**Duncan^{a,b}

Suhu Pengeringan	N	Subset		
		1	2	3
55oC	81	13.5714		
50oC	81		13.8895	
45oC	81			14.4277
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .062.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

Warna LDuncan^{a,b}

Waktu Penyeduhan	N	Subset								
		1	2	3	4	5	6	7	8	9
24 Menit	2 7	11.84 67								
21 Menit	2 7		12.66 30							
18 Menit	2 7			13.17 52						
15 Menit	2 7				13.65 56					
12 Menit	2 7					14.02 26				
9 Menit	2 7						14.34 67			
6 Menit	2 7							14.70 70		
3 Menit	2 7								15.29 93	
0,5 Menit	2 7									15.94 96
Sig.		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .062.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

Warna a***Warna a**Duncan^{a,b}

Suhu Pengeringan	N	Subset		
		1	2	3
45oC	81	1.5684		
50oC	81		1.7214	
55oC	81			1.9977
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .034.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

Warna aDuncan^{a,b}

Waktu Penyeduhan	N	Subset								
		1	2	3	4	5	6	7	8	9
0,5 Menit	2 7	.537 0								
24 Menit	2 7		1.016 3							
3 Menit	2 7			1.21 30						
6 Menit	2 7				1.48 48					
9 Menit	2 7					1.73 11				
12 Menit	2 7						2.037 8			
21 Menit	2 7							2.14 26		
15 Menit	2 7								2.41 96	
18 Menit	2 7									3.28 00
Sig.		1.00 0	1.000	1.00 0	1.00 0	1.00 0	1.000	1.00 0	1.00 0	1.00 0

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .034.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

Warna b*

Warna b

Duncan^{a,b}

Suhu Pengeringan	N	Subset		
		1	2	3
45oC	8	4.929		
	1	5		
50oC	8		5.18	
	1		04	
55oC	8			5.501
	1			2
Sig.		1.000	1.000	1.000
			0	

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .094.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

Warna b

Duncan^{a,b}

Waktu Penyeduhan	N	Subset						
		1	2	3	4	5	6	7
0,5 Menit	27	2.253						
		0						
24 Menit	27		3.89					
			85					
3 Menit	27		3.96					
			33					
6 Menit	27			4.70				
				00				
9 Menit	27				5.39			
					04			
12 Menit	27					5.97		
						15		
21 Menit	27					5.98		
						30		
15 Menit	27						6.84	
							85	
18 Menit	27							7.82
								52
Sig.		1.000	.438	1.000	1.000	.891	1.000	1.000
				0	0		0	0

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .094.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

Lampiran 4. Analisis Two Way Anova

Total Fenolik

Tests of Between-Subjects Effects

Dependent Variable: Total Fenolik

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	100.928 ^a	26	3.882	32.539	.000
Intercept	32798.381	1	32798.381	274930.436	.000
X1	4.584	2	2.292	19.213	.000
X2	92.363	8	11.545	96.779	.000
X1 * X2	3.981	16	.249	2.086	.010
Error	25.768	216	.119		
Total	32925.077	243			
Corrected Total	126.697	242			

a. R Squared = .797 (Adjusted R Squared = .772)

Antioksidan

Tests of Between-Subjects Effects

Dependent Variable: Aktioksidan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	19967.797 ^a	26	767.992	149.709	.000
Intercept	1069885.128	1	1069885.128	208558.918	.000
X1	3325.408	2	1662.704	324.121	.000
X2	16415.492	8	2051.937	399.996	.000
X1 * X2	226.896	16	14.181	2.764	.000
Error	1108.057	216	5.130		
Total	1090960.982	243			
Corrected Total	21075.854	242			

a. R Squared = .947 (Adjusted R Squared = .941)

Warna L

Tests of Between-Subjects Effects

Dependent Variable: Warna L

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	391.926 ^a	26	15.074	242.667	.000
Intercept	47375.496	1	47375.496	762666.787	.000
X1	30.350	2	15.175	244.290	.000
X2	359.661	8	44.958	723.742	.000
X1 * X2	1.915	16	.120	1.927	.019
Error	13.418	216	.062		
Total	47780.839	243			
Corrected Total	405.343	242			

a. R Squared = .967 (Adjusted R Squared = .963)

Warna a***Tests of Between-Subjects Effects**

Dependent Variable: Warna a

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	154.718 ^a	26	5.951	172.987	.000
Intercept	754.830	1	754.830	21943.003	.000
X1	7.668	2	3.834	111.455	.000
X2	145.626	8	18.203	529.169	.000
X1 * X2	1.424	16	.089	2.587	.001
Error	7.430	216	.034		
Total	916.978	243			
Corrected Total	162.148	242			

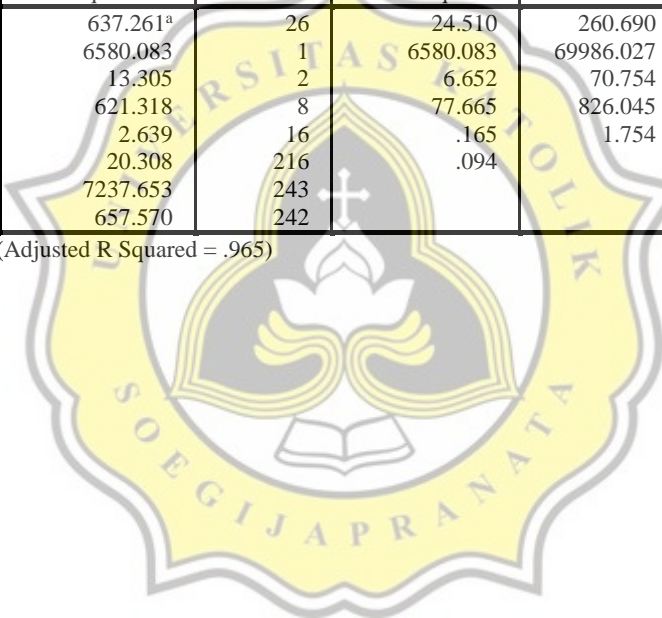
a. R Squared = .954 (Adjusted R Squared = .949)

Warna b***Tests of Between-Subjects Effects**

Dependent Variable: Warna b

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	637.261 ^a	26	24.510	260.690	.000
Intercept	6580.083	1	6580.083	69986.027	.000
X1	13.305	2	6.652	70.754	.000
X2	621.318	8	77.665	826.045	.000
X1 * X2	2.639	16	.165	1.754	.039
Error	20.308	216	.094		
Total	7237.653	243			
Corrected Total	657.570	242			

a. R Squared = .969 (Adjusted R Squared = .965)



Lampiran 5. Analisis Korelasi

		Correlations				
		Total Fenolik	Aktioksidan	Warna a	Warna b	Warna L
Total Fenolik	Pearson Correlation	1	.814**	.792**	.814**	-.474**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	243	243	243	243	243
Aktioksidan	Pearson Correlation	.814**	1	.879**	.903**	-.634**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	243	243	243	243	243
Warna a	Pearson Correlation	.792**	.879**	1	.933**	-.440**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	243	243	243	243	243
Warna b	Pearson Correlation	.814**	.903**	.933**	1	-.489**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	243	243	243	243	243
Warna L	Pearson Correlation	-.474**	-.634**	-.440**	-.489**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	243	243	243	243	243

** . Correlation is significant at the 0.01 level (2-tailed).



Lampiran 6. Proses Pembuatan Minuman Herbal Dauk Katuk



Daun katuk segar dipotong kecil-kecil



Perendaman daun katuk dengan CaCl_2 0,5%



Steam blanching 70°C selama 3 menit



Daun katuk kering



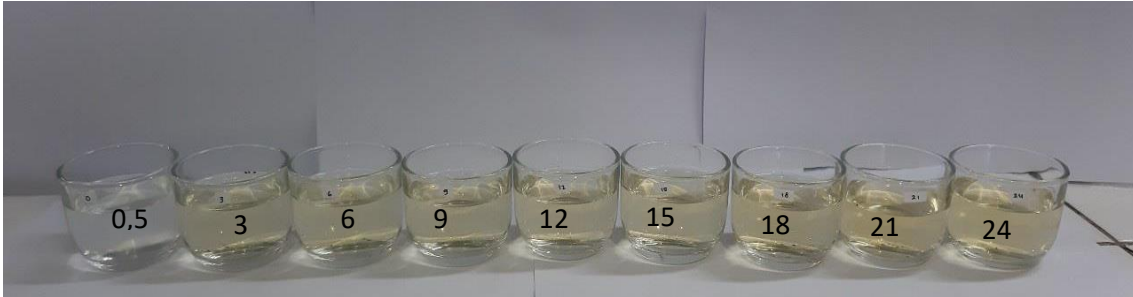
Pengeringan daun katuk dengan oven binder



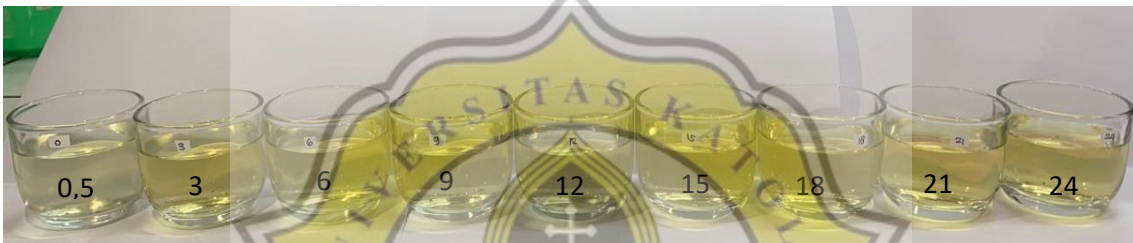
Daun katuk didinginkan selama 5 menit

Lampiran 7. Sampel Uji Warna L, a*, b*

Sampel Uji Warna L, a*, dan b* dengan suhu pengerigan 45°C pada waktu penyeduhan berbeda



Sampel Uji Warna L, a*, dan b* dengan suhu pengerigan 50°C pada waktu penyeduhan berbeda



Sampel Uji Warna L, a*, dan b* dengan suhu pengerigan 55°C pada waktu penyeduhan berbeda



Lampiran 8. Hasil Plagscan



6.32% PLAGIARISM
APPROXIMATELY

Report #13203011

20 PENDAHULUAN Latar Belakang Penelitian Semakin

berkembangnya zaman semakin tinggi pula kebutuhan masyarakat untuk hidup semakin sehat dan ini dilakukan dengan mengkonsumsi pangan fungsional. Pangan fungsional merupakan bahan alam yang secara ilmiah atau pun telah melalui proses mengandung sejumlah senyawa aktif yang bermanfaat bagi kesehatan tubuh, namun bukan obat. Obat memiliki fungsi kuratif terhadap penyakit, sedangkan pangan fungsional mencegah agar tubuh tidak terserang penyakit (Batubara & Pratiwi, 2018). Kriteria bahan pangan dapat digunakan sebagai pangan fungsional adalah bisa dikonsumsi selayaknya makanan atau minuman dengan karakteristik sensori (seperti warna, tekstur, dan rasa), serta tidak menimbulkan efek samping yang membahayakan tubuh dan tidak mempengaruhi metabolisme zat gizi lain jika dikonsumsi sesuai takaran yang dianjurkan (Dewi, dkk., 2017). Daun katuk merupakan salah satu jenis sayuran yang memiliki kandungan antioksidan total fenolik, sehingga memiliki