7. LAMPIRAN

7.1. Tabel Analisis Data SPSS

7.1.1. Analisis Data Brix

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Brix	.117	45	.141	.959	45	.108

a. Lilliefors Significance Correction

Lampiran 1. Uji Normalitas Data Brix

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Brix

F	df1	df2	Sig.
1.826	14	30	.082

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + *Mesh* + Suhu + *Mesh* * Suhu

Lampiran 2. Uji Homogenitas Data Brix

Tests of Between-Subjects Effects

Dependent Variable: Brix

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	100.772[a]	14	7.198	14.934	.000
Intercept	6320.198	1	6320.198	13112.443	.000
Mesh	12.477	4	3.119	6.471	.001
Suhu	71.244	2	35.622	73.905	.000
Mesh * Suhu	17.051	8	2.131	4.422	.001
Error	14.460	30	.482		
Total	6435.430	45			
Corrected Total	115.232	44			

a. R Squared = .875 (Adjusted R Squared = .816)

Lampiran 3. Interaksi Antar Variabel

Brix

Duncan[a,b]

Mesh	N	Subset 1	Subset 2	Subset 3
100 *mesh*	9	10.9667		
60 *mesh*	9		11.7000	
80 *mesh*	9		11.8222	11.8222
40 *mesh*	9		12.3000	12.3000
20 *mesh*	9			12.4667
Sig.		1.000	.092	.071

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .482.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 4. Uji Beda Ukuran *Mesh* dengan Brix

Brix

Duncan[a,b]

Suhu	N	Subset 1	Subset 2	Subset 3
40oC	15	10.4067		
55oC	15		11.6733	
70oC	15			13.4733
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) = .482.

a. Uses Harmonic Mean Sample Size = 15.000.

b. Alpha = .05.

Lampiran 5. Uji Beda Suhu Ekstraksi dengan Brix

Brix

Duncan[a,b]

*Mesh*_Suhu	N	Subset 1	Subset 2	Subset 3	Subset 4	Subset 5	Subset 6	Subset 7
100 *mesh*; 40oC	3	9.6333						
60 *mesh*; 40oC	3	9.9667	9.9667					
80 *mesh*; 40oC	3	10.0333	10.0333					
40 *mesh*; 40oC	3	10.7000	10.7000	10.7000				
100 *mesh*; 55oC	3	10.7333	10.7333	10.7333				
60 *mesh*; 55oC	3		11.1667	11.1667	11.1667			
80 *mesh*; 55oC	3			11.4333	11.4333	11.4333		
20 *mesh*; 40oC	3			11.7000	11.7000	11.7000		
40 *mesh*; 55oC	3			11.7667	11.7667	11.7667		
20 *mesh*; 70oC	3				12.4333	12.4333	12.4333	
100 *mesh*; 70oC	3					12.5333	12.5333	
20 *mesh*; 55oC	3						13.2667	13.2667
60 *mesh*; 70oC	3							13.9667
80 *mesh*; 70oC	3							14.0000
40 *mesh*; 70oC	3							14.4333
Sig.		.092	.066	.107	.053	.092	.175	.068

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .482.

a. Uses Harmonic Mean Sample Size = 3.000.

b. Alpha = .05.

Lampiran 6. Uji Beda Ukuran *Mesh* dan Suhu Ekstraksi dengan Brix

7.1.2. Analisis Data Rendemen

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Rendemen	.115	45	.160	.970	45	.292

a. Lilliefors Significance Correction

Lampiran 7. Uji Normalitas Data Rendemen

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Rendemen

F	df1	df2	Sig.
2.794	14	30	.009

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + *Mesh* + Suhu + *Mesh* * Suhu

Lampiran 8. Uji Homogenitas Data Rendemen

Tests of Between-Subjects Effects

Dependent Variable: Rendemen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	115.413[a]	14	8.244	7.173	.000
Intercept	3337.322	1	3337.322	2903.792	.000
Mesh	74.783	4	18.696	16.267	.000
Suhu	35.857	2	17.928	15.599	.000
Mesh * Suhu	4.773	8	.597	.519	.833
Error	34.479	30	1.149		
Total	3487.214	45			
Corrected Total	149.892	44			

a. R Squared = .770 (Adjusted R Squared = .663)

Lampiran 9. Interaksi Antar Variabel

Rendemen

Duncan[a,b]

Mesh	N	Subset 1	Subset 2	Subset 3
20 *mesh*	9	6.6778		
40 *mesh*	9	7.6556		
60 *mesh*	9		8.8367	
80 *mesh*	9		9.7833	9.7833
100 *mesh*	9			10.1056
Sig.		.062	.071	.529

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1.149.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 10. Uji Beda Ukuran *Mesh* dengan Rendemen

Rendemen

Duncan[a,b]

Suhu	N	Subset 1	Subset 2	Subset 3
70oC	15	7.6133		
40oC	15		8.4420	
55oC	15			9.7800
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) = 1.149.

a. Uses Harmonic Mean Sample Size = 15.000.

b. Alpha = .05.

Lampiran 11. Uji Beda Suhu Ekstraksi dengan Rendemen

Rendemen

Duncan[a,b]

*Mesh*_Suhu	N	Subset 1	Subset 2	Subset 3	Subset 4	Subset 5	Subset 6	Subset 7
20 *mesh*; 70oC	3	6.1000						
20 *mesh*; 40oC	3	6.8333	6.8333					
40 *mesh*; 70oC	3	6.8833	6.8833	6.8833				
40 *mesh*; 40oC	3	7.0333	7.0333	7.0333				
20 *mesh*; 55oC	3	7.1000	7.1000	7.1000	7.1000			
60 *mesh*; 70oC	3	7.3667	7.3667	7.3667	7.3667	7.3667		
80 *mesh*; 70oC	3		8.5667	8.5667	8.5667	8.5667	8.5667	
60 *mesh*; 40oC	3			8.8933	8.8933	8.8933	8.8933	
40 *mesh*; 55oC	3				9.0500	9.0500	9.0500	
100 *mesh*; 70oC	3					9.1500	9.1500	
80 *mesh*; 40oC	3						9.6500	9.6500
100 *mesh*; 40oC	3						9.8000	9.8000
60 *mesh*; 55oC	3						10.2500	10.2500
80 *mesh*; 55oC	3							11.1333
100 *mesh*; 55oC	3							11.3667
Sig.		.213	.090	.050	.053	.077	.104	.088

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1.149.

a. Uses Harmonic Mean Sample Size = 3.000.

b. Alpha = .05.

Lampiran 12. Uji Beda Ukuran *Mesh* dan Suhu Ekstraksi dengan Rendemen

7.1.3. Analisis Data Total Gula

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total_Gula	.081	45	.200*	.988	45	.928

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

a. Lilliefors Significance Correction

Lampiran 13. Uji Normalitas Data Total Gula

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Total_Gula

F	df1	df2	Sig.
1.996	14	30	.055

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Mesh + Suhu + Mesh * Suhu

Lampiran 14. Uji Homogenitas Data Total Gula

Tests of Between-Subjects Effects

Dependent Variable: Total_Gula

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11933.665[a]	14	852.405	4.543	.000
Intercept	457410.258	1	457410.258	2437.594	.000
Mesh	5909.170	4	1477.292	7.873	.000
Suhu	5241.076	2	2620.538	13.965	.000
Mesh * Suhu	783.420	8	97.927	.522	.830
Error	5629.447	30	187.648		
Total	474973.370	45			
Corrected Total	17563.112	44			

a. R Squared = .679 (Adjusted R Squared = .530)

Lampiran 15. Interaksi Antar Variabel

Total_Gula

Duncan[a,b]

Mesh	N	Subset		
		1	2	3
20 mesh	9	83.0111		
40 mesh	9	93.7333	93.7333	
60 mesh	9		102.1556	102.1556
100 mesh	9			110.3778
80 mesh	9			114.8222
Sig.		.107	.202	.072

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 187.648.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 16. Uji Beda Ukuran *Mesh* dengan Total Gula

Total_Gula

Duncan[a,b]

Suhu	N	Subset 1	Subset 2	Subset 3
40oC	15	86.8133		
70oC	15		102.5733	
55oC	15			113.0733
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) = 187.648.

a. Uses Harmonic Mean Sample Size = 15.000.

b. Alpha = .05.

Lampiran 17. Uji Beda Suhu Ekstraksi dengan Total Gula

Total_Gula

Duncan[a,b]

Mesh_Suhu	N	Subset 1	Subset 2	Subset 3	Subset 4	Subset 5	Subset 6
40 mesh; 40oC	3	75.0333					
20 mesh; 70oC	3	75.8333					
20 mesh; 40oC	3	79.1667	79.1667				
60 mesh; 40oC	3	88.6333	88.6333	88.6333			
20 mesh; 55oC	3	94.0333	94.0333	94.0333	94.0333		
100 mesh; 40oC	3	94.3333	94.3333	94.3333	94.3333		
80 mesh; 40oC	3	96.9000	96.9000	96.9000	96.9000	96.9000	
40 mesh; 70oC	3	99.6333	99.6333	99.6333	99.6333	99.6333	
60 mesh; 70oC	3		103.1000	103.1000	103.1000	103.1000	103.1000
40 mesh; 55oC	3			106.5333	106.5333	106.5333	106.5333
100 mesh; 70oC	3			114.4667	114.4667	114.4667	114.4667
60 mesh; 55oC	3			114.7333	114.7333	114.7333	114.7333
80 mesh; 70oC	3				119.8333	119.8333	119.8333
100 mesh; 55oC	3					122.3333	122.3333
80 mesh; 55oC	3						127.7333
Sig.		.066	.071	.053	.056	.058	.063

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 187.648.

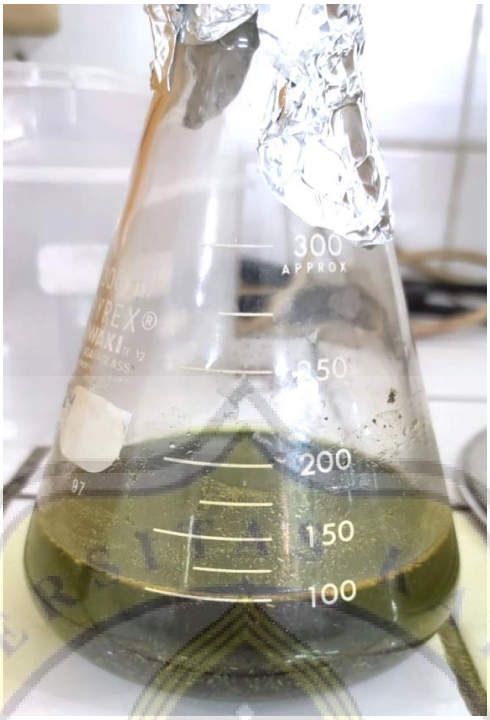
a. Uses Harmonic Mean Sample Size = 3.000.

b. Alpha = .05.

Lampiran 18. Uji Beda Ukuran Mesh dan Suhu Ekstraksi dengan Total Gula

7.2. Dokumentasi Penelitian

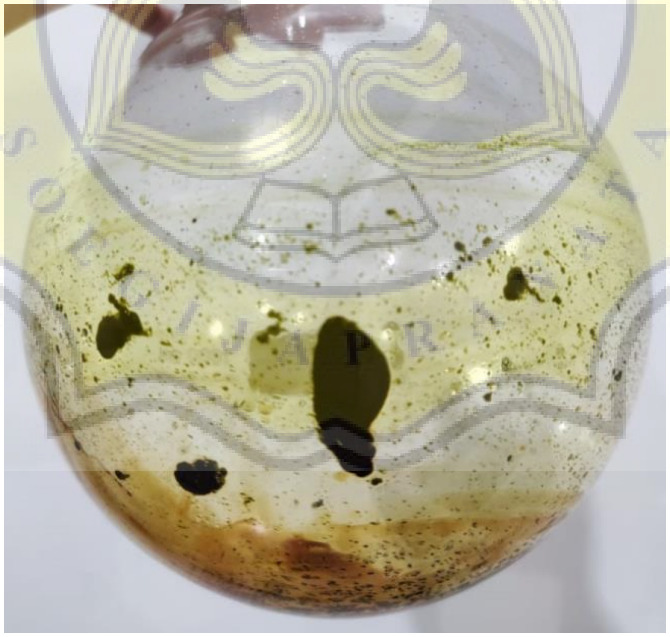
Lampiran 19. Daun Yakon yang Sudah Digiling Halus



Lampiran 20. Sebelum Proses Ekstraksi

Lampiran 21. Setelah Proses Ekstraksi

Lampiran 22. Setelah Proses Penyaringan



Lampiran 23. Ekstrak Pekat

PLAGIARISM CHECK.ORG

7.39% PLAGIARISM APPROXIMATELY

Report #14220073

1. BAB I. PENDAHULUAN 1.1. Latar BelakangBerdasarkan data dari Badan Pusat Statistik (BPS) tahun 2020, Indonesia masih melakukan impor gula selama lima tahun terakhir (Databoks, 2020). Impor gula tertinggi yang dilakukan oleh Indonesia yaitu pada tahun 2018 sebanyak 5 juta ton. Kementan masih terus berupaya untuk memenuhi kebutuhan gula konsumsi dalam negeri mengingat produksi gula di Indonesia masih berkisar 2,18 juta ton sementara kebutuhan gula konsumsi di Indonesia mencapai 2,8 juta ton per tahunnya (Kontan, 2021). 24 Selain itu, berdasarkan data dari International Diabetes Federation (2019), Indonesia menempati peringkat ke-7 dari 10 negara dengan jumlah penderita diabetes tertinggi pada tahun 2019. Sekitar 10% atau 1 dari 25 penduduk di Indonesia mengalami diabetes dan diperkirakan akan meningkat menjadi 16,7 juta orang per tahun 2045 (Kompas, 2020). Penggunaan pemanis buatan/sintetis sebagai bahan tambahan pangan juga menjadi salah satu faktor penyebab tingginya penderita diabetes di Indonesia (Infodatin, 2020). Pemanis sintetis