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Lampiran 1. Data Penelitian

A. Data Rendemen

Tabel 1. Data Rendemen VCO Metode Enzimatis

Perlakuan	Volume (ml)	massa jenis (g/ml)	Berat VCO (g)	Berat Santan (g)	Rendemen (%)
K1	10	0,883	8,83	88,3	10
K2	12	0,883	10,596	88,3	12
K3	10	0,883	8,83	88,3	10
A1 (10%)	34	0,883	30.022	88,3	34
A2 (10%)	26	0,883	22.958	88,3	26
A3(10%)	24	0,883	21.192	88,3	24
B1(20%)	37	0,883	32.671	88,3	37
B2(20%)	30	0,883	26,49	88,3	30
B3(20%)	33	0,883	29.139	88,3	33
C1(25%)	30	0,883	26,49	88,3	30
C2(25%)	27	0,883	23.841	88,3	27
C3(25%)	36	0,883	31.788	88,3	36

Tabel 2. Analisis Data Uji ANOVA Satu Arah Untuk Rendemen

Descriptives

Rendemen (%)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol (K)	3	10.67	1.155	.667	7.80	13.54	10	12
A (10%)	3	28.00	5.292	3.055	14.86	41.14	24	34
B (20%)	3	33.33	3.512	2.028	24.61	42.06	30	37
C (25%)	3	31.00	4.583	2.646	19.62	42.38	27	36
Total	12	25.75	9.901	2.858	19.46	32.04	10	37

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.[a]
Rendemen (%)	Based on Mean	1.833	3	8	.219
	Based on Median	.528	3	8	.676
	Based on Median and with adjusted df	.528	3	5.095	.682
	Based on trimmed mean	1.703	3	8	.243

a. Confidence Interval: 0%

ANOVA

Rendemen (%)

	Sum of Squares	df	Mean Square	F	Sig.[a]
Between Groups	952.917	3	317.639	20.275	<,001
Within Groups	125.333	8	15.667		
Total	1078.250	11			

a. Confidence Interval: 95%

Multiple Comparisons

Dependent Variable: Rendemen (%)

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Kontrol (K)	A (10%)	-17.333*	3.232	.003	-27.68	-6.98
	B (20%)	-22.667*	3.232	<,001	-33.02	-12.32
	C (25%)	-20.333*	3.232	.001	-30.68	-9.98
A (10%)	Kontrol (K)	17.333*	3.232	.003	6.98	27.68
	B (20%)	-5.333	3.232	.406	-15.68	5.02
	C (25%)	-3.000	3.232	.791	-13.35	7.35
B (20%)	Kontrol (K)	22.667*	3.232	<,001	12.32	33.02
	A (10%)	5.333	3.232	.406	-5.02	15.68
	C (25%)	2.333	3.232	.886	-8.02	12.68
C (25%)	Kontrol (K)	20.333*	3.232	.001	9.98	30.68
	A (10%)	3.000	3.232	.791	-7.35	13.35
	B (20%)	-2.333	3.232	.886	-12.68	8.02

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Rendemen (%)

Tukey HSD[a]

Perlakuan	N	Subset for alpha = 0.05 1	2
Kontrol (K)	3	10.67	
A (10%)	3		28.00
C (25%)	3		31.00
B (20%)	3		33.33
Sig.		1.000	.406

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

B. Data Kadar Air

Tabel 3. Data Kadar Air VCO Metode Enzimatis

Perlakuan	Cawan Kosong (gr)	Cawan + VCO Sebelum (m1) (gr)	Cawan + VCO Sesudah (m2) (gr)	Kadar Air (%)
K1	43,75	48,75	48,74	0,020512821
K2	46,71	51,71	51,69	0,038677238
K3	42,12	47,12	47,11	0,021222411
A1 (10%)	43,76	48,76	48,75	0,020508614
A2 (10%)	46,74	51,74	51,71	0,057982219
A3(10%)	42,14	47,14	47,12	0,042426814
B1(20%)	40,29	45,29	45,27	0,044159859
B2(20%)	43,78	48,78	48,76	0,04100041
B3(20%)	46,74	51,74	51,73	0,019327406
C1(25%)	42,13	47,13	47,12	0,021217908
C2(25%)	40,29	45,29	45,28	0,022079929
C3(25%)	40,29	45,29	45,28	0,022079929

Tabel 4. Analisis Data Uji ANOVA Satu Arah Untuk Kadar Air

Descriptives

Kadar Air (%)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol (K)	3	.0268033	.01029162	.00594187	.0012375	.0523691	.02051	.03868
A (10%)	3	.0403100	.01882972	.01087134	-.0064656	.0870856	.02051	.05799
B (20%)	3	.0348267	.01351261	.00780151	.0012595	.0683939	.01933	.04415
C (25%)	3	.0217933	.00049652	.00028667	.0205599	.0230268	.02122	.02208
Total	12	.0309333	.01313446	.00379159	.0225881	.0392786	.01933	.05799

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.[a]
Kadar Air (%)	Based on Mean	2.837	3	8	.106
	Based on Median	.857	3	8	.502
	Based on Median and with adjusted df	.857	3	5.895	.513
	Based on trimmed mean	2.647	3	8	.120

a. Confidence Interval: 0%

Multiple Comparisons

Dependent Variable: Kadar Air (%)

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol (K)	A (10%)	-.01350667	.01035465	.585	-.0466659	.0196526
	B (20%)	-.00802333	.01035465	.864	-.0411826	.0251359
	C (25%)	.00501000	.01035465	.961	-.0281492	.0381692
A (10%)	Kontrol (K)	.01350667	.01035465	.585	-.0196526	.0466659
	B (20%)	.00548333	.01035465	.949	-.0276759	.0386426
	C (25%)	.01851667	.01035465	.345	-.0146426	.0516759
B (20%)	Kontrol (K)	.00802333	.01035465	.864	-.0251359	.0411826
	A (10%)	-.00548333	.01035465	.949	-.0386426	.0276759
	C (25%)	.01303333	.01035465	.611	-.0201259	.0461926
C (25%)	Kontrol (K)	-.00501000	.01035465	.961	-.0381692	.0281492
	A (10%)	-.01851667	.01035465	.345	-.0516759	.0146426
	B (20%)	-.01303333	.01035465	.611	-.0461926	.0201259

Homogeneous Subsets

Kadar Air (%)

Tukey HSD[a]

Perlakuan	N	Subset for alpha = 0.05
		1
C (25%)	3	.0217933
Kontrol (K)	3	.0268033
B (20%)	3	.0348267
A (10%)	3	.0403100
Sig.		.345

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

C. Data Asam Lemak Bebas

Tabel 5. Data Asam Lemak Bebas Asam Lemak Bebas VCO Metode Enzimatis

Perlakuan	V	N	m	V*N*200	m*10	ALB
K1	2,5	0,1	7,5	1,875	75	0,025
K2	2,3	0,1	7,5	1,725	75	0,023
K3	2	0,1	7,5	1,5	75	0,02
A1	3,9	0,1	7,5	2,925	75	0,039
A2	4,5	0,1	7,5	3,375	75	0,045
A3	4,2	0,1	7,5	3,15	75	0,042
B2	4,6	0,1	7,5	3,45	75	0,046
B2	4,6	0,1	7,5	3,45	75	0,046
B3	5,9	0,1	7,5	4,425	75	0,059
C1	5,2	0,1	7,5	3,9	75	0,052
C2	4,5	0,1	7,5	3,375	75	0,045
C3	5,2	0,1	7,5	3,9	75	0,052

Tabel 6. Analisis Data Uji ANOVA Satu Arah Untuk Asam Lemak Bebas

Descriptives

Asam Lemak Bebas (%)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol (K)	3	.0226667	.00251661	.00145297	.0164151	.0289183	.02000	.02500
A (10%)	3	.0420000	.00300000	.00173205	.0345476	.0494524	.03900	.04500
B (20%)	3	.0503333	.00750555	.00433333	.0316885	.0689782	.04600	.05900
C (25%)	3	.0496667	.00404145	.00233333	.0396271	.0597062	.04500	.05200
Total	12	.0411667	.01233497	.00356080	.0333294	.0490039	.02000	.05900

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.[a]
Asam Lemak Bebas (%)	Based on Mean	3.193	3	8	.084
	Based on Median	.221	3	8	.879
	Based on Median and with adjusted df	.221	3	3.522	.877
	Based on trimmed mean	2.664	3	8	.119

a. Confidence Interval: 0%

ANOVA

Asam Lemak Bebas (%)

	Sum of Squares	df	Mean Square	F	Sig.[a]
Between Groups	.001	3	.000	22.692	<,001
Within Groups	.000	8	.000		
Total	.002	11			

a. Confidence Interval: 95%

Multiple Comparisons

Dependent Variable: Asam Lemak Bebas (%)

Tukey HSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Kontrol (K)	A (10%)	-.01933333*	.00382971	.004	-.0315974	-.0070693
	B (20%)	-.02766667*	.00382971	<,001	-.0399307	-.0154026
	C (25%)	-.02700000*	.00382971	<,001	-.0392641	-.0147359
A (10%)	Kontrol (K)	.01933333*	.00382971	.004	.0070693	.0315974
	B (20%)	-.00833333	.00382971	.209	-.0205974	.0039307
	C (25%)	-.00766667	.00382971	.263	-.0199307	.0045974
B (20%)	Kontrol (K)	.02766667*	.00382971	<,001	.0154026	.0399307
	A (10%)	.00833333	.00382971	.209	-.0039307	.0205974
	C (25%)	.00066667	.00382971	.998	-.0115974	.0129307
C (25%)	Kontrol (K)	.02700000*	.00382971	<,001	.0147359	.0392641
	A (10%)	.00766667	.00382971	.263	-.0045974	.0199307
	B (20%)	-.00066667	.00382971	.998	-.0129307	.0115974

*. The mean difference is significant at the 0.05 level.

Homogenous Subsets

Asam Lemak Bebas (%)

Tukey HSD[a]

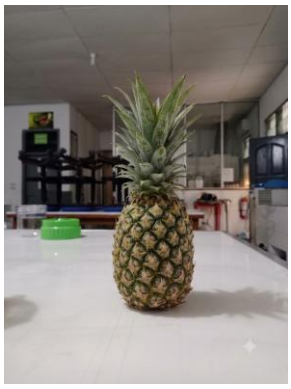
Perlakuan	N	Subset for alpha = 0.05 1	2
Kontrol (K)	3	.0226667	
A (10%)	3		.0420000
C (25%)	3		.0496667
B (20%)	3		.0503333
Sig.		1.000	.209

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 2. Dokumentasi Penelitian

Gambar 1. Buah pepaya



Gambar 2. Buah nanas

Gambar 3. Kelapa parut

Gambar 4. Ekstrak nanas

Gambar 5. Ekstrak pepaya

Gambar 6. Pemisahan santan dan air

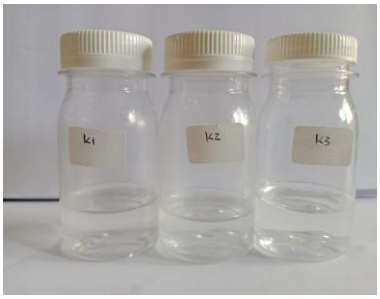
Gambar 7. Krim santan

Gambar 8. Pengukuran santan pembuatan VCO

Gambar 9. Penambahan ekstrak enzim

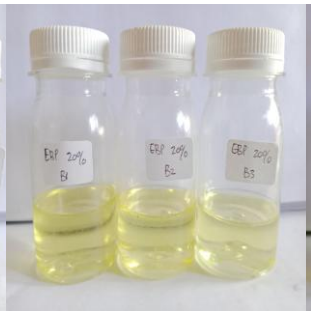
Gambar 10. Fermentasi enzimatis VCO

Gambar 11. Pemisahan VCO

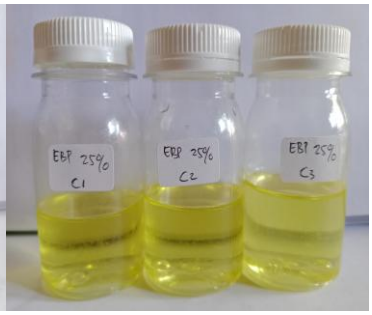


Gambar 12. Hasil VCO tanpa penambahan enzim (Kontrol)

Gambar 13. Hasil VCO enzim 10%



Gambar 14. Hasil VCO enzim 20%

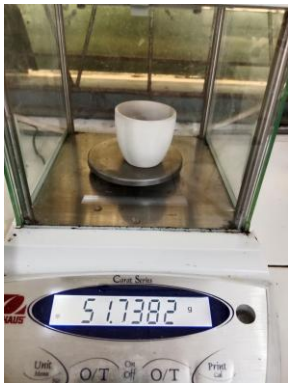


Gambar 15. Hasil VCO enzim 25%

Gambar 16. Cawan + VCO sebelum

Gambar 17. VCO di oven

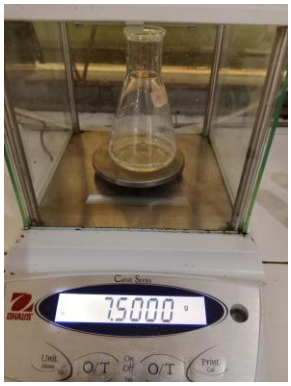
Gambar 18. Di dinginkan dalam Desikator



Gambar 19. Cawan + VCO sesudah

Gambar 20. Proses penimbangan NaOH

Gambar 21. Larutan NaOH 0,1 N



Gambar 22. Penimbangan VCO

Gambar 23. Uji Asam Lemak Bebas

Gambar 24. ALB tanpa penambahan enzim (Kontrol)

Gambar 25. ALB enzim 10%

Gambar 26. ALB enzim 20%

Gambar 27. ALB enzim 25%