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LAMPIRAN

Lampiran 1. Data Hasil Penelitian pH Minuman Fungsional

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	6.11	6.12	6.14	5.23	5.18	5.24	5.15	5.18	5.10
Daun Nangka	6.14	6.15	6.12	4.91	4.84	4.93	4.75	4.83	4.82
Daun Kelor	5.92	5.92	5.91	4.33	4.27	4.24	3.26	3.28	3.30
Daun Jambu Biji	6.21	6.19	6.18	4.97	5.00	4.98	4.94	4.90	4.93
Daun Singkong	6.05	6.07	6.04	3.59	3.67	3.68	2.80	2.78	2.80

Lampiran 2. Nilai Rata-Rata Data Hasil Penelitian pH Minuman Fungsional

Jenis Daun	Jenis Fermentasi		
	Kontrol	Spontan	*L. plantarum*
Daun Salam	6.12	5.22	5.14
Daun Nangka	6.14	4.89	4.80
Daun Kelor	5.92	4.28	3.28
Daun Jambu Biji	6.19	4.98	4.92
Daun Singkong	6.05	3.65	2.79

Lampiran 3. Hasil Uji Anova pH Minuman Fungsional

Tests of Between-Subjects Effects

Dependent Variable: pH

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	1143.418[a]	15	76.228	3174.691	.000
Jenis Fermentasi	27.607	2	13.803	574.875	.000
Jenis Daun	14.305	4	3.576	148.940	.000
Jenis Fermentasi * Jenis Daun	4.826	8	.603	25.123	.000
Error	.720	30	.024		
Total	1144.138	45			

a. R Squared = .999 (Adjusted R Squared = .999)

Lampiran 4. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Nilai pH Minuman Fungsional

pH

Duncan[a,b]

Jenis Fermentasi	N	Subset		
		1	2	3
L.plantarum	15	4.1880		
Spontan	15		4.6040	
Kontrol	15			6.0180
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) = .024.

a. Uses Harmonic Mean Sample Size = 15.000.

b. Alpha = .05.

Lampiran 5. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Nilai pH Minuman Fungsional

pH

Duncan[a,b]

jenisdaun	N	Subset			
		1	2	3	4
Daun Singkong	9	4.0533			
Daun Kelor	9		4.4922		
Daun Nangka	9			5.2767	
Daun Jambu Biji	9			5.3667	5.3667
Daun salam	9				5.4944
Sig.		1.000	1.000	.227	.090

ɔs in homogeneous subsets are displayed.
rved means.
is Mean Square (Error) = .024.
ıic Mean Sample Size = 9.000.

Lampiran 6. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Nilai pH Minuman Fungsional

pH

Duncan[a]

Fermentasi x Daun	N	Subset for alpha = 0.05								
		1	2	3	4	5	6	7	8	9
LS	3	2.79333								
LK	3		3.28000							
SS				3.64667						
SK	3				4.28000					
LN	3					4.80000				
SN	3					4.89333	4.89333			
LJ	3					4.92333	4.92333			
SJ	3					4.98333	4.98333	4.98333		
LDS	3						5.14333	5.14333		
SDS	3							5.21667		
KS	3								5.72000	
KK	3								5.91667	5.91667
KDS	3									6.12333
KN	3									6.13667
KJ	3									6.19333
Sig.		1.000	1.000	1.000	1.000	.196	.079	.090	.131	.053

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
KK : Kontrol Daun Kelor
KJ : Kontrol Daun Jambu Biji
KS : Kontrol Daun Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

LDS : *L. plantarum* Daun Salam
LN : *L. plantarum* Daun Nangka
LK : *L. plantarum* Daun Kelor
LJ : *L. plantarum* Daun Jambu bIJI
Daun Singkong

Lampiran 7. Data Hasil Penelitian Total Asam Minuman Fungsional

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	0.216	0.216	0.216	0.144	0.144	0.144	0.144	0.144	0.144
Daun Nangka	0.108	0.108	0.108	0.144	0.144	0.144	0.18	0.144	0.18
Daun Kelor	0.144	0.144	0.144	0.36	0.36	0.36	0.684	0.72	0.72
Daun Jambu Biji	0.252	0.252	0.252	0.18	0.18	0.18	0.216	0.216	0.216
Daun Singkong	0.144	0.144	0.18	0.431	0.36	0.324	0.72	0.72	0.72

Lampiran 8. Contoh Perhitungan Total Asam Minuman Fungsional

Asam laktat = $\frac{Volume\ NaOH \times N\ NaOH \times 90}{Volume\ sampel} \times fp \times 100\%$

= $\frac{0{,}6 \times 0{,}1 \times 90}{10 \times 1000} \times 4 \times 100\%$

= $\frac{5{,}4}{10.000} \times 4 \times 100\%$

= 0,216%

Lampiran 9. Nilai Rata-Rata Data Hasil Penelitian Total Asam Minuman Fungsional

Jenis Daun	Jenis Fermentasi		
	Kontrol	**Spontan**	***L. plantarum***
Daun Salam	0.22	0.14	0.14
Daun Nangka	0.11	0.14	0.17
Daun Kelor	0.14	0.36	0.71
Daun Jambu Biji	0.25	0.18	0.22
Daun Singkong	0.16	0.37	0.72

Lampiran 10. Hasil Uji Anova Total Asam Minuman Fungsional

Tests of Between-Subjects Effects

Dependent Variable: Total_Asam

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	4.872[a]	15	.325	1127.800	.000
Jenis Fermentasi	.369	2	.184	639.900	.000
Jenis Daun	.625	4	.156	542.850	.000
Jenis Fermentasi *	.627	8	.078	272.025	.000
	.009	30	.000		
	4.881	45			

(Adjusted R Squared = .997)

Lampiran 11. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Nilai Total Asam Minuman Fungsional

Total_Asam				
Duncan[a,b]				
Jenis_Fermentasi	N	Subset		
		1	2	3
Kontrol	15	.17520		
Spontan	15		.24000	
L. plantarum	15			.39120
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) = .000.				
a. Uses Harmonic Mean Sample Size = 15.000.				
b. Alpha = .05.				

Lampiran 12. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Nilai Total Asam Minuman Fungsional

Total_Asam					
Duncan[a,b]					
Jenis_Daun	N	Subset			
		1	2	3	4
Daun Nangka	9	.14000			
Daun Salam	9		.16800		
Daun Jambu Biji	9			.21600	
Daun Kelor	9				.40400
Daun Singkong	9				.41600
Sig.		1.000	1.000	1.000	.144
ɔs in homogeneous subsets are displayed. ved means. s Mean Square (Error) = .000.					
ıic Mean Sample Size = 9.000.					

Lampiran 13. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Nilai Total Asam Minuman Fungsional

Total Asam								
Duncan[a]								
Fermentasi x Daun	N	Subset for alpha = 0.05						
		1	2	3	4	5	6	7
KN	3	.10800						
KK	3		.14400					
SDS	3		.14400					
SN	3		.14400					
LDS	3		.14400					
KS	3		.15600	.15600				
LN	3		.16800	.16800				
SJ	3			.18000				
KDS	3				.21600			
LJ	3				.21600			
KJ	3					.25200		
SK	3						.36000	
SS	3						.37200	
LK	3							.70800
LS	3							.72000
Sig.		1.000	.137	.111	1.000	1.000	.393	.393
Means for groups in homogeneous subsets are displayed.								
a. Uses Harmonic Mean Sample Size = 3.000.								

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
Kelor
Jambu Biji
Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

Daun Salam
Daun Nangka
Daun Kelor

LJ : *L. plantarum* Daun Jambu BIJI
LS : *L. plantarum* Daun Singkong

Lampiran 14. Data Hasil Penelitian Total Gula Minuman Fungsional

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	4	4.1	4.1	3.6	3.7	3.7	3.5	3.5	3.4
Daun Nangka	4.5	4.2	4.8	3.8	3.8	3.8	3.7	3.6	3.8
Daun Kelor	4.6	4.6	4.6	4.1	4	4	3.9	3.7	3.8
Daun Jambu Biji	4.2	4.2	4.5	4.1	4	4.2	3.6	3.8	3.7
Daun Singkong	4.2	4.6	4.4	4.2	4.4	4.3	3.7	3.8	3.8

Lampiran 15. Nilai Rata-Rata Data Hasil Penelitian Total Gula Minuman Fungsional

Jenis Daun	Jenis Fermentasi		
	Kontrol	Spontan	*L. plantarum*
Daun Salam	4.07	3.67	3.47
Daun Nangka	4.50	3.80	3.70
Daun Kelor	4.60	4.03	3.80
Daun Jambu Biji	4.30	4.10	3.70
Daun Singkong	4.40	4.30	3.80

Lampiran 16. Hasil Uji Anova Total Gula Minuman Fungsional

Tests of Between-Subjects Effects

Dependent Variable: Total_Gula

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	730.583[a]	15	48.706	3271.269	.000
Jenis_Fermentasi	3.496	2	1.748	117.418	.000
Jenis_Daun	1.077	4	.269	18.082	.000
Jenis_Fermentasi * Jenis_Daun	.399	8	.050	3.351	.007
Error	.447	30	.015		
Total	731.030	45			

a. R Squared = .999 (Adjusted R Squared = .999)

Lampiran 17. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Nilai Total Gula Minuman Fungsional

Total_Gula				
Duncan[a,b]				
Jenis_Fermentasi	N	Subset		
		1	2	3
L. plantarum	15	3.693		
Spontan	15		3.980	
Kontrol	15			4.373
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) = .015.				
a. Uses Harmonic Mean Sample Size = 15.000.				
b. Alpha = .05.				

Lampiran 18. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Nilai Total Gula Minuman Fungsional

Total_Gula					
Duncan[a,b]					
Jenis_Daun	N	Subset			
		1	2	3	4
Daun Salam	9	3.733			
Daun Nangka	9		4.000		
Daun Jambu Biji	9		4.033	4.033	
Daun Kelor	9			4.144	4.144
Daun Singkong	9				4.167
Sig.		1.000	.567	.063	.702
Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square (Error) = .015.					
a. Uses Harmonic Mean Sample Size = 9.000.					
b. Alpha = .05.					

Lampiran 19. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Nilai Total Gula Minuman Fungsional

Total_Gula

Duncan[a]

FermentasixDaun	N	Subset for alpha = 0.05					
		1	2	3	4	5	6
LDS	3	3.467					
SDS	3	3.667	3.667				
LN	3		3.700				
LJ	3		3.700				
SN	3		3.800				
LK	3		3.800				
LS	3		3.800				
SK	3			4.033			
KDS	3			4.067			
SJ	3			4.100	4.100		
KJ	3				4.300	4.300	
SS	3				4.300	4.300	
KS	3					4.400	4.400
KN	3					4.500	4.500
KK	3						4.600
Sig.		.054	.249	.534	.066	.075	.066

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
KK : Kontrol Daun Kelor
Jambu Biji
Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

Daun Salam
Daun Nangka
Daun Kelor
Daun Jambu Biji
Daun Singkong

Lampiran 20. Data Hasil Penelitian Total Padatan Terlarut Minuman Fungsional

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	3360	3340	3394	3480	3514	3514	5229	5167	5187
Daun Nangka	3394	3380	3394	4643	4643	4595	6619	6643	6643
Daun Kelor	2899	2890	2840	5854	5812	5708	8688	8531	8625
Daun Jambu Biji	3380	3320	3347	3254	3247	3213	4786	4976	5062
Daun Singkong	2962	2975	2996	3520	3514	3500	5625	5833	5937

Lampiran 21. Nilai Rata-Rata Data Hasil Penelitian Total Padatan Terlarut Minuman Fungsional

Jenis Daun	Jenis Fermentasi		
	Kontrol	Spontan	*L. plantarum*
Daun Salam	3365	3503	5194
Daun Nangka	3389	4627	6635
Daun Kelor	2876	5791	8615
Daun Jambu Biji	3349	3238	4941
Daun Singkong	2978	3511	5798

Lampiran 22. Hasil Uji Anova Total Padatan Terlarut Minuman Fungsional

Tests of Between-Subjects Effects

Dependent Variable: Total Padatan Terlarut

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	1033349567.667[a]	15	68889971.178	16395.694	.000
Jenis_Fermentasi	72919413.333	2	36459706.667	8677.347	.000
Jenis_Daun	23039102.356	4	5759775.589	1370.817	.000
Jenis_Fermentasi * Jenis_Daun	17724707.778	8	2215588.472	527.306	.000
Error	126051.333	30	4201.711		
Total	1033475619.000	45			

a. R Squared = 1.000 (Adjusted R Squared = 1.000)

Lampiran 23. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Nilai Total Padatan Terlarut Minuman Fungsional

Total Padatan Terlarut				
Duncan[a,b]				
Jenis_Fermentasi	N	Subset		
		1	2	3
Kontrol	15	3191.40		
Spontan	15		4134.07	
L. plantarum	15			6236.73
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) = 4201.711.				
a. Uses Harmonic Mean Sample Size = 15.000.				
b. Alpha = 0.05.				

Lampiran 24. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Nilai Total Padatan Terlarut Minuman Fungsional

Total Padatan Terlarut						
Duncan[a,b]						
Jenis_Daun	N	Subset				
		1	2	3	4	5
Daun Jambu Biji	9	3842.78				
Daun Salam	9		4020.56			
Daun Singkong	9			4095.78		
Daun Nangka	9				4883.78	
Daun Kelor	9					5760.78
Sig.		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) = 4201.711.						
a. Uses Harmonic Mean Sample Size = 9.000.						
b. Alpha = 0.05.						

Lampiran 25. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Nilai Total Padatan Terlarut Minuman Fungsional

Total Padatan Terlarut

Duncan[a]

Fermentasi x Daun	N	Subset for alpha = 0.05									
		1	2	3	4	5	6	7	8	9	10
KK	3	2876.33									
KS	3	2977.67									
SJ	3		3238.00								
KJ	3			3349.00							
KDS	3			3364.67							
KN	3			3389.33							
SDS	3				3502.67						
SS	3				3511.33						
SN	3					4627.00					
LJ	3						4941.33				
LDS	3							5194.33			
SK	3								5791.33		
LS	3								5798.33		
LN	3									6635.00	
LK	3										8614.67
Sig.		.065	1.000	.479	.871	1.000	1.000	1.000	.896	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
KK : Kontrol Daun Kelor
KJ : Kontrol Daun Jambu Biji
KS : Kontrol Daun Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

LDS : *L. plantarum* Daun Salam
LN : *L. plantarum* Daun Nangka
LK : *L. plantarum* Daun Kelor
[illegible] Daun Jambu Biji
Daun Singkong

Lampiran 26. Data Hasil Penelitian Aktivitas Antioksidan Minuman Fungsional

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	91.53	84.55	89.63	74.29	78.31	72.38	80.53	84.87	79.15
Daun Nangka	91.96	91.53	92.91	90.05	91.01	92.06	92.70	91.53	93.12
Daun Kelor	91.01	90.58	92.49	78.73	76.19	80.63	65.93	69.95	67.51
Daun Jambu Biji	37.99	33.54	35.77	53.97	55.34	50.90	60.85	57.88	61.06
Daun Singkong	77.04	76.19	76.72	73.76	78.84	82.01	89.74	87.30	87.09

Lampiran 27. Contoh Perhitungan Aktivitas Antioksidan Minuman Fungsional

% Inhibisi = $\frac{A\ blanko - A\ sampel}{A\ blanko} \times 100$

% Inhibisi = $\frac{0{,}945 - 0{,}080}{0{,}945} \times 100$

= $91{,}53\%$

Lampiran 28. Nilai Rata-Rata Data Hasil Penelitian Aktivitas Antioksidan Minuman Fungsional

Jenis Daun	Jenis Fermentasi		
	Kontrol	**Spontan**	***L. plantarum***
Daun Salam	88.75	74.99	81.52
Daun Nangka	92.13	91.04	92.45
Daun Kelor	91.36	78.52	67.80
Daun Jambu Biji	35.77	53.40	59.93
Daun Singkong	76.65	78.20	88.04

Lampiran 29. Hasil Uji Anova Aktivitas Antioksidan Minuman Fungsional

Tests of Between-Subjects Effects

Dependent Variable: Antioksidan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	276032.218[a]	15	18402.148	3617.348	.000
Jenis_Fermentasi	56.265	2	28.133	5.530	.009
Jenis_Daun	9078.881	4	2269.720	446.164	.000
[illegible]	2225.311	8	278.164	54.679	.000
	152.616	30	5.087		
	276184.834	45			

(Adjusted R Squared = .999)

Lampiran 30. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Aktivitas Antioksidan Minuman Fungsional

Aktivitas Antioksidan			
Duncan[a,b]			
Jenis_Fermentasi	N	Subset	
		1	2
Spontan	15	75.2313	
Kontrol	15	76.8960	76.8960
L. plantarum	15		77.9473
Sig.		.052	.212
Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square (Error) = 5.087.			
a. Uses Harmonic Mean Sample Size = 15.000.			
b. Alpha = .05.			

Lampiran 31. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Aktivitas Antioksidan Minuman Fungsional

Aktivitas Antioksidan					
Duncan[a,b]					
Jenis_Daun	N	Subset			
		1	2	3	4
Daun Jambu Biji	9	49.7000			
Daun Kelor	9		79.2244		
Daun Singkong	9		80.9656	80.9656	
Daun Salam	9			81.6933	
Daun Nangka	9				91.8744
Sig.		1.000	.112	.499	1.000
ɔs in homogeneous subsets are displayed. ved means. s Mean Square (Error) = 5.087.					
ıic Mean Sample Size = 9.000.					

Lampiran 32. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Aktivitas Antioksidan Minuman Fungsional

Antioksidan									
Duncan[a]									
Fermentasi x Daun	N	Subset for alpha = 0.05							
		1	2	3	4	5	6	7	8
KJ	3	35.7667							
SJ	3		53.4033						
LJ	3			59.9300					
LK	3				67.7967				
SDS	3					74.9933			
KS	3					76.6500			
SS	3					78.2033	78.2033		
SK	3					78.5167	78.5167		
LDS	3						81.5167		
LS	3							88.0433	
KDS	3							88.5700	88.5700
SN	3							91.0400	91.0400
KK	3							91.3600	91.3600
KN	3							92.1333	92.1333
LN	3								92.4500
Sig.		1.000	1.000	1.000	1.000	.089	.098	.054	.067
Means for groups in homogeneous subsets are displayed.									
a. Uses Harmonic Mean Sample Size = 3.000.									

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
KK : Kontrol Daun Kelor
KJ : Kontrol Daun Jambu Biji
KS : Kontrol Daun Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

LDS : *L. plantarum* Daun Salam
LN : *L. plantarum* Daun Nangka
LK : *L. plantarum* Daun Kelor
LJ : *L. plantarum* Daun Jambu Biji
LS : *L. plantarum* Daun Singkong

Lampiran 33. Data Hasil Penelitian Aktivitas Antibakteri Minuman Fungsional pada Bakteri E. coli

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	1.1	0.5	1	0	0	0	1.6	1.1	0.7
Daun Nangka	0	0	0	2.6	3.95	2.7	0	0	0
Daun Kelor	0	0	0	0	0	0	0	0	0
Daun Jambu Biji	4.8	2.8	3.75	2.6	3.35	3.95	4.7	4.6	3.15
Daun Singkong	1.6	2.15	1.65	0	0	0	0	0	0

Lampiran 34. Nilai Rata-Rata Data Hasil Penelitian Aktivitas Antibakteri Minuman Fungsional pada Bakteri *E. coli*

Jenis Daun	Jenis Fermentasi		
	Kontrol	Spontan	*L. plantarum*
Daun Salam	0.87	0.00	1.13
Daun Nangka	0.00	3.08	0.00
Daun Kelor	0.00	0.00	0.00
Daun Jambu Biji	3.78	3.30	4.15
Daun Singkong	1.80	0.00	0.00

Lampiran 35. Hasil Uji Anova Aktivitas Antibakteri Minuman Fungsional terhadap Bakteri *E. coli*

Tests of Between-Subjects Effects

Dependent Variable: *E. coli*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	172.256[a]	15	11.484	52.907	.000
Jenis_Fermentasi	.279	2	.140	.643	.533
Jenis_Daun	76.864	4	19.216	88.531	.000
Jenis_Fermentasi * Jenis_Daun	27.278	8	3.410	15.709	.000
Error	6.512	30	.217		
Total	178.767	45			

(Adjusted R Squared = .945)

Lampiran 36. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Aktivitas Antibakteri Minuman Fungsional pada Bakteri *E. coli*

E.coli		
Duncan[a,b]		
Jenis_Fermentasi	N	Subset
		1
L. plantarum	15	1.11667
Spontan	15	1.27667
Kontrol	15	1.29000
Sig.		.345
Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square (Error) = .217.		
a. Uses Harmonic Mean Sample Size = 15.000.		
b. Alpha = .05.		

Lampiran 37. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Aktivitas Antibakteri Minuman Fungsional pada Bakteri *E. coli*

E.coli					
Duncan[a,b]					
Jenis_Daun	N	Subset			
		1	2	3	4
Daun Kelor	9	.00000			
Daun Singkong	9		.60000		
Daun Salam	9		.68889	.68889	
Daun Nangka	9			1.10556	
Daun Jambu Biji	9				3.74444
		1.000	.689	.067	1.000
ɔs in homogeneous subsets are displayed.					
ved means.					
s Mean Square (Error) = .217.					
ıic Mean Sample Size = 9.000.					

Lampiran 38. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Aktivitas Antibakteri Minuman Fungsional pada Bakteri *E. coli*

E.coli						
Duncan[a]						
FermentasixDaun	N	Subset for alpha = 0.05				
		1	2	3	4	5
KN	3	.00000				
KK	3	.00000				
SDS	3	.00000				
SK	3	.00000				
SS	3	.00000				
LK	3	.00000				
LS	3	.00000				
LN	3	.23333				
KDS	3	.86667	.86667			
LDS	3		1.20000	1.20000		
KS	3			1.80000		
SN	3				3.08333	
SJ	3				3.30000	
KJ	3				3.78333	3.78333
LJ	3					4.15000
Sig.		.059	.388	.125	.091	.343
Means for groups in homogeneous subsets are displayed.						
a. Uses Harmonic Mean Sample Size = 3.000.						

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
KK : Kontrol Daun Kelor
KJ : Kontrol Daun Jambu Biji
[illegible] Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

Daun Salam
Daun Nangka
Daun Kelor
Daun Jambu Biji
Daun Singkong

Lampiran 39. Data Hasil Penelitian Aktivitas Antibakteri Minuman Fungsional terhadap Bakteri *S. aureus*

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	0	0	0	2.65	3.4	3.9	2.7	2.5	3.4
Daun Nangka	0	0	0	2.45	3.25	2.15	0	0	0
Daun Kelor	0	0	0	0	0	0	2.8	1.9	1.2
Daun Jambu Biji	2.6	1.95	2.6	1.45	1.65	1.85	5.05	4.1	4.95
Daun Singkong	0	0	0	1.8	10.4	4.5	2.65	1.55	2.25

Lampiran 40. Nilai Rata-Rata Data Hasil Penelitian Aktivitas Antibakteri Minuman Fungsional pada Bakteri *S. aureus*

Jenis Daun	Jenis Fermentasi		
	Kontrol	Spontan	*L. plantarum*
Daun Salam	0.00	3.32	2.87
Daun Nangka	0.00	2.62	0.00
Daun Kelor	0.00	0.00	1.97
Daun Jambu Biji	2.38	1.65	4.70
Daun Singkong	0.00	5.57	2.15

Lampiran 41. Hasil Uji Anova Aktivitas Antibakteri Minuman Fungsional terhadap Bakteri *S. aureus*

Tests of Between-Subjects Effects					
Dependent Variable: *S.aureus*					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	288.108[a]	15	19.207	13.281	.000
Jenis_Fermentasi	40.912	2	20.456	14.145	.000
Jenis_Daun	36.617	4	9.154	6.330	.001
Jenis_Fermentasi * Jenis_Daun	62.429	8	7.804	5.396	.000
Error	43.385	30	1.446		
	331.492	45			
(Adjusted R Squared = .804)					

Lampiran 42. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Aktivitas Antibakteri Minuman Fungsional pada Bakteri *S. aureus*

S.aureus			
Duncan[a,b]			
Jenis_Fermentasi	N	Subset	
		1	2
Kontrol	15	.47667	
L. plantarum	15		2.33667
Spontan	15		2.63000
Sig.		1.000	.509
Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square(Error) = 1.446.			
a. Uses Harmonic Mean Sample Size = 15.000.			
b. Alpha = .05.			

Lampiran 43. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Aktivitas Antibakteri Minuman Fungsional pada Bakteri *S. aureus*

S.aureus			
Duncan[a,b]			
Jenis_Daun	N	Subset	
		1	2
Daun Kelor	9	.65556	
Daun Nangka	9	.87222	
Daun Salam	9		2.06111
Daun Singkong	9		2.57222
Daun Jambu	9		2.91111
Sig.		.705	.167
ns for groups in homogeneous subsets are layed. ed on observed means. error term is Mean Square (Error) = 1.446.			
ses Harmonic Mean Sample Size = 9.000.			
pha = .05.			

Lampiran 44. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Aktivitas Antibakteri Minuman Fungsional pada Bakteri *S. aureus*

S.aureus					
Duncan[a]					
FermentasixDaun	N	Subset for alpha = 0.05			
		1	2	3	4
KDS	3	.00000			
KN	3	.00000			
KK	3	.00000			
KS	3	.00000			
SK	3	.00000			
LN	3	.00000			
SJ	3	1.65000	1.65000		
LK	3	1.96667	1.96667		
LS	3	2.15000	2.15000		
KJ	3		2.38333		
SN	3		2.61667	2.61667	
LDS	3		2.86667	2.86667	
SDS	3		3.31667	3.31667	
LJ	3			4.70000	4.70000
SS	3				5.56667
Sig.		.069	.150	.060	.384
Means for groups in homogeneous subsets are displayed.					
a. Uses Harmonic Mean Sample Size = 3.000.					

Keterangan :

KDS : Kontrol Daun Salam
KN : Kontrol Daun Nangka
KK : Kontrol Daun Kelor
Jambu Biji
Singkong

Daun Salam
Daun Nangka
Daun Kelor
Daun Jambu Biji
Daun Singkong

SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

Lampiran 45. Data Hasil Penelitian Intensitas Warna Minuman Fungsional

Jenis Daun	Jenis Fermentasi								
	Kontrol			Spontan			*L. plantarum*		
	U1	U2	U3	U1	U2	U3	U1	U2	U3
Daun Salam	22.5	22.4	22.6	21.2	22.8	21.8	27.2	27.4	27.9
Daun Nangka	30	30.2	29.6	32.8	31.9	31.4	27.2	27.7	28.7
Daun Kelor	30.2	29.3	30.3	31.5	31.4	31.6	29.7	30.1	30.7
Daun Jambu Biji	31.3	30.5	31.8	31.7	31	31.9	31.2	33.6	32.4
Daun Singkong	37	36.8	37.1	36.1	36.1	36	35	35.3	34.1

Lampiran 46. Nilai Rata-Rata Data Hasil Penelitian Intensitas Warna Minuman Fungsional

Jenis Daun	Jenis Fermentasi		
	Kontrol	Spontan	*L. plantarum*
Daun Salam	22.5	21.9	27.5
Daun Nangka	29.9	32.0	27.9
Daun Kelor	29.9	31.5	30.2
Daun Jambu Biji	31.2	31.5	32.4
Daun Singkong	37.0	36.1	34.8

Lampiran 47. Hasil Uji Anova Intensitas Warna Minuman Fungsional

Tests of Between-Subjects Effects

Dependent Variable: Intensitas_Warna

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	42409.420[a]	15	2827.295	8397.905	.000
Jenis_Fermentasi	2.274	2	1.137	3.377	.048
Jenis_Daun	665.349	4	166.337	494.071	.000
Jenis_Fermentasi * Jenis_Daun	93.775	8	11.722	34.817	.000
Error	10.100	30	.337		
Total	42419.520	45			

a. R Squared = 1.000 (Adjusted R Squared = 1.000)

Lampiran 48. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Fermentasi terhadap Intensitas Warna Minuman Fungsional

Intensitas_Warna			
Duncan[a,b]			
Jenis_Fermentasi	N	Subset	
		1	2
Kontrol	15	30.10667	
L. plantarum	15		30.54667
Spontan	15		30.61333
Sig.		1.000	.755
Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square (Error) = .337.			
a. Uses Harmonic Mean Sample Size = 15.000.			
b. Alpha = .05.			

Lampiran 49. Hasil Uji Lanjut Duncan dari Perlakuan Jenis Daun terhadap Intensitas Warna Minuman Fungsional

Intensitas_Warna						
Duncan[a,b]						
Jenis_Daun	N	Subset				
		1	2	3	4	5
Daun Salam	9	23.97778				
Daun Nangka	9		29.94444			
Daun Kelor	9			30.53333		
Daun Jambu Biji	9				31.71111	
Daun Singkong	9					35.94444
Sig.		1.000	1.000	1.000	1.000	1.000
Means for groups in homogeneous subsets are displayed.						
ıeans.						
ın Square (Error) = .337.						
ean Sample Size = 9.000.						

Lampiran 50. Hasil Uji Lanjut Duncan dari Interaksi Jenis Fermentasi terhadap Intensitas Warna Minuman Fungsional

Intensitas_Warna

Duncan[a]

Fermentasi x Daun	N	Subset for alpha = 0.05						
		1	2	3	4	5	6	7
SDS	3	21.93333						
KDS	3	22.50000						
LDS	3		27.50000					
LN	3		27.86667					
KK	3			29.93333				
KN	3			29.93333				
LK	3			30.16667				
KJ	3				31.20000			
SK	3				31.50000	31.50000		
SJ	3				31.53333	31.53333		
SN	3				32.03333	32.03333		
LJ	3					32.40000		
LS	3						34.80000	
SS	3							36.06667
KS	3							36.96667
Sig.		.241	.445	.647	.117	.091	1.000	.067

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Keterangan :

KDS : Kontrol Daun Salam
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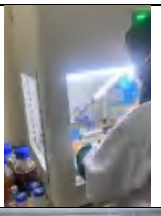
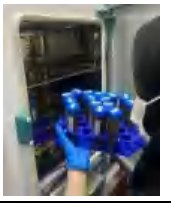
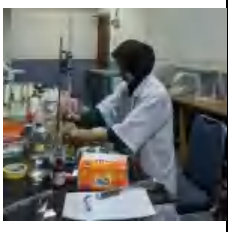
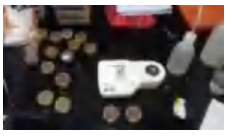
Kelor
Jambu Biji
Singkong

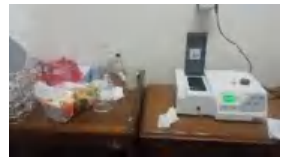
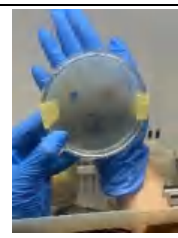
SDS : Spontan Daun Salam
SN : Spontan Daun Nangka
SK : Spontan Daun Kelor
SJ : Spontan Daun Jambu Biji
SS : Spontan Daun Singkong

Daun Salam
Daun Nangka
Daun Kelor

LJ : *L. plantarum* Daun Jambu Biji
LS : *L. plantarum* Daun Singkong

Lampiran 51. Dokumentasi Penelitian

Peremajaan BAL dan inkubasi			
Pembuata Minuman Fungsional dan pasteurisasi			 
Pembuatan Starter dan Fermentasi Minuman Fungsional			
Uji pH dan Total Padatan Terlarut			
Uji Total Asam			
			

Uji Aktivitas Antioksidan			
Uji Aktivitas Antibakteri			
Uji Intensitas Warna			
Pengamatan Deskriptif			

Lampiran 52. Daftar Riwayat Hidup

CURRICULUM VITAE

A. Data Pribadi

1. Nama : Adila Oktavia
2. Tempat, tgl. Lahir : Puawang, 10 Juli 2002
3. Alamat : Puawang
4. Kewarganegaraan : Warga Negara Indonesia

B. Riwayat Pendidikan

a. Tamat SD tahun 2014 di SDN 37 Puawang
b. Tamat SMP tahun 2017 di SMPN 3 Majene
c. Tamat SMA tahun 2020 di SMAN 2 Majene

C. Pekerjaan dan Riwayat Pekerjaan

- Jenis pekerjaan : Mahasiswa
- NIP atau identitas lain (NIK) : 7605085007020004
- Pangkat/Jabatan : -

D. Karya Ilmiah yang telah dipublikasi

Oktavia, A et al. 2024. Exploring the Utilization of Fungi in Indonesian Traditional Foods: A review. In BIO Web of Conferences 96: p. 01025. EDP Sciences; https://doi.org/10.1051/bioconf/20249601025.

E. Makalah pada Seminar/Konferensi Ilmiah Nasional dan Internasional

1. Oktavia, A et al 2023. Exploring the Utilization of Fungi in Indonesian Traditional Foods: A review. The 2nd Unhas International Conference on Agricultural Technology, 25-26 Oct 2023, Makassar, Indonesia.
2. Oktavia, A et al 2023. Exploring the Potential of Lactic Acid Bacteria in Food Bioremediation: A review. The 2nd International Conference Environment and Sustainable Development, 28-29 Oct 2023, Makassar, Indonesia.