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LAMPIRAN

Lampiran 1. Jumlah Bakteri Coliform

Univariate Analysis of Variance – JUMLAH BAKTERI COLIFORM

Notes

Output Created		20-JUL-2020 09:46:28
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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Log_Coliform BY Lokasi /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Lokasi(DUNCAN LSD) /EMMEANS=TABLES(Lokasi) /PRINT=HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Lokasi.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.09

Between-Subjects Factors

		Value Label	N
Lokasi	1	P1	9
	2	P2	9
	3	P3	9

Descriptive Statistics

Dependent Variable: Log_Coliform

Lokasi	Mean	Std. Deviation	N
P1	1.8575	.03351	9
P2	2.3728	.03572	9
P3	3.2041	.00000	9
Total	2.4782	.56599	27

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

Dependent Variable: Log_Coliform

F	df1	df2	Sig.
6.615	2	24	.005

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

a. Design: Intercept + Lokasi

Tests of Between-Subjects Effects

Dependent Variable: Log_Coliform

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.310[a]	2	4.155	5196.351	.000
Intercept	165.813	1	165.813	207376.404	.000
Lokasi	8.310	2	4.155	5196.351	.000
Error	.019	24	.001		
Total	174.142	27			
Corrected Total	8.329	26			

a. R Squared = .998 (Adjusted R Squared = .998)

Estimated Marginal Means

Lokasi

Dependent Variable: Log_Coliform

Lokasi	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
P1	1.858	.009	1.838	1.877
P2	2.373	.009	2.353	2.392
P3	3.204	.009	3.185	3.224

Post Hoc Tests

Lokasi

Multiple Comparisons

Dependent Variable: Log_Coliform

	(I) Lokasi	(J) Lokasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	P1	P2	-.5153*	.01333	.000	-.5428	-.4878
		P3	-1.3466*	.01333	.000	-1.3741	-1.3191
	P2	P1	.5153*	.01333	.000	.4878	.5428
		P3	-.8313*	.01333	.000	-.8588	-.8038
	P3	P1	1.3466*	.01333	.000	1.3191	1.3741
		P2	.8313*	.01333	.000	.8038	.8588

Based on observed means.

The error term is Mean Square(Error) = .001.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Log_Coliform

	Lokasi	N	Subset		
			1	2	3
Duncan[a,b]	P1	9	1.8575		
	P2	9		2.3728	
	P3	9			3.2041
	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) = .001.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 2. Jumlah Bakteri Coliform Fekal

Univariate Analysis of Variance – JUMLAH BAKTERI COLIFORM FEKAL

Notes

Output Created		20-JUL-2020 09:49:05
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	Split File	<none>
	N of Rows in Working Data File	27
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Log_Fekal BY Lokasi /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Lokasi(DUNCAN LSD) /EMMEANS=TABLES(Lokasi) /PRINT=HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Lokasi.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

Between-Subjects Factors

		Value Label	N
Lokasi	1	P1	9
	2	P2	9
	3	P3	9

Descriptive Statistics

Dependent Variable: Log_Fekal

Lokasi	Mean	Std. Deviation	N
P1	1.4110	.01651	9
P2	2.6994	.04946	9
P3	3.2041	.00000	9
Total	2.4382	.76993	27

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

Dependent Variable: Log_Fekal

F	df1	df2	Sig.
37.885	2	24	.000

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

a. Design: Intercept + Lokasi

Tests of Between-Subjects Effects

Dependent Variable: Log_Fekal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	15.391[a]	2	7.695	8489.836	.000
Intercept	160.506	1	160.506	177077.426	.000
Lokasi	15.391	2	7.695	8489.836	.000
Error	.022	24	.001		
Total	175.918	27			
Corrected Total	15.412	26			

a. R Squared = .999 (Adjusted R Squared = .998)

Estimated Marginal Means

Lokasi

Dependent Variable: Log_Fekal

Lokasi	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
P1	1.411	.010	1.390	1.432
P2	2.699	.010	2.679	2.720
P3	3.204	.010	3.183	3.225

Post Hoc Tests

Lokasi

Multiple Comparisons

Dependent Variable: Log_Fekal

	(I) Lokasi	(J) Lokasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	P1	P2	-1.2885*	.01419	.000	-1.3177	-1.2592
		P3	-1.7932*	.01419	.000	-1.8224	-1.7639
	P2	P1	1.2885*	.01419	.000	1.2592	1.3177
		P3	-.5047*	.01419	.000	-.5340	-.4754
	P3	P1	1.7932*	.01419	.000	1.7639	1.8224
		P2	.5047*	.01419	.000	.4754	.5340

Based on observed means.

The error term is Mean Square(Error) = .001.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Log_Fekal

	Lokasi	N	Subset		
			1	2	3
Duncan[a,b]	P1	9	1.4110		
	P2	9		2.6994	
	P3	9			3.2041
	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) = .001.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 3. Kepadatan Bakteri Coliform

Univariate Analysis of Variance – KEPADATAN BAKTERI COLIFORM

Notes

Output Created		20-JUL-2020 09:50:42
Comments		
Input	Data	C:\Users\ok\Documents\Skripsi Andhini\Kepadatan Coliform.sav
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	27
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Log_KepadatanColiform BY Lokasi /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Lokasi(DUNCAN LSD) /EMMEANS=TABLES(Lokasi) /PRINT=HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Lokasi.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

Between-Subjects Factors

		Value Label	N
Lokasi	1	P1	9
	2	P2	9
	3	P3	9

Descriptive Statistics

Dependent Variable: Log_KepadatanColiform

Lokasi	Mean	Std. Deviation	N
P1	3.3862	.03557	9
P2	3.8957	.03572	9
P3	4.7270	.00000	9
Total	4.0030	.56383	27

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

Dependent Variable: Log_KepadatanColiform

F	df1	df2	Sig.
8.753	2	24	.001

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

a. Design: Intercept + Lokasi

Tests of Between-Subjects Effects

Dependent Variable: Log_KepadatanColiform

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.245[a]	2	4.123	4866.590	.000
Intercept	432.638	1	432.638	510708.046	.000
Lokasi	8.245	2	4.123	4866.590	.000
Error	.020	24	.001		
Total	440.904	27			
Corrected Total	8.266	26			

a. R Squared = .998 (Adjusted R Squared = .997)

Estimated Marginal Means

Lokasi

Dependent Variable: Log_KepadatanColiform

Lokasi	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
P1	3.386	.010	3.366	3.406
P2	3.896	.010	3.876	3.916
P3	4.727	.010	4.707	4.747

Post Hoc Tests

Lokasi

Multiple Comparisons

Dependent Variable: Log_KepadatanColiform

	(I) Lokasi	(J) Lokasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	P1	P2	-.5095*	.01372	.000	-.5378	-.4812
		P3	-1.3408*	.01372	.000	-1.3691	-1.3125
	P2	P1	.5095*	.01372	.000	.4812	.5378
		P3	-.8313*	.01372	.000	-.8596	-.8030
	P3	P1	1.3408*	.01372	.000	1.3125	1.3691
		P2	.8313*	.01372	.000	.8030	.8596

Based on observed means.

The error term is Mean Square(Error) = .001.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Log_KepadatanColiform

	Lokasi	N	Subset		
			1	2	3
Duncan[a,b]	P1	9	3.3862		
	P2	9		3.8957	
	P3	9			4.7270
	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) = .001.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 4. Kepadatan Bakteri Coliform Fekal

Univariate Analysis of Variance – KEPADATAN BAKTERI COLIFORM FEKAL

Notes

Output Created		20-JUL-2020 09:54:19
Comments		
Input	Data	C:\Users\ok\Documents\Skripsi Andhini\Kepadatan Coliform Fekal.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	27
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Log_KepadatanFekal BY Lokasi /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Lokasi(DUNCAN LSD) /EMMEANS=TABLES(Lokasi) /PRINT=HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Lokasi.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

Between-Subjects Factors

		Value Label	N
Lokasi	1	P1	9
	2	P2	9
	3	P3	9

Descriptive Statistics

Dependent Variable: Log_KepadatanFekal

Lokasi	Mean	Std. Deviation	N
P1	2.9337	.01651	9
P2	4.2223	.04947	9
P3	4.7270	.00000	9
Total	3.9610	.77001	27

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

Dependent Variable: Log_KepadatanFekal

F	df1	df2	Sig.
37.789	2	24	.000

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

a. Design: Intercept + Lokasi

Tests of Between-Subjects Effects

Dependent Variable: Log_KepadatanFekal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	15.394[a]	2	7.697	8490.727	.000
Intercept	423.613	1	423.613	467294.897	.000
Lokasi	15.394	2	7.697	8490.727	.000
Error	.022	24	.001		
Total	439.029	27			
Corrected Total	15.416	26			

a. R Squared = .999 (Adjusted R Squared = .998)

Estimated Marginal Means

Lokasi

Dependent Variable: Log_KepadatanFekal

Lokasi	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
P1	2.934	.010	2.913	2.954
P2	4.222	.010	4.202	4.243
P3	4.727	.010	4.706	4.748

Post Hoc Tests

Lokasi

Multiple Comparisons

Dependent Variable: Log_KepadatanFekal

	(I) Lokasi	(J) Lokasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	P1	P2	-1.2886*	.01419	.000	-1.3179	-1.2593
		P3	-1.7933*	.01419	.000	-1.8226	-1.7640
	P2	P1	1.2886*	.01419	.000	1.2593	1.3179
		P3	-.5047*	.01419	.000	-.5340	-.4754
	P3	P1	1.7933*	.01419	.000	1.7640	1.8226
		P2	.5047*	.01419	.000	.4754	.5340

Based on observed means.

The error term is Mean Square(Error) = .001.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Log_KepadatanFekal

	Lokasi	N	Subset		
			1	2	3
Duncan[a,b]	P1	9	2.9337		
	P2	9		4.2223	
	P3	9			4.7270
	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) = .001.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = .05.

Lampiran 5. Zona Hambat Bakteri Coliform

Univariate Analysis of Variance – ZONA HAMBAT BAKTERI COLIFORM

Notes

Output Created		20-JUL-2020 09:56:28
Comments		
Input	Data	C:\Users\ok\Documents\Skripsi Andhini\Zona Hambat.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	108
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Diameter BY Lokasi Antibiotik /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Lokasi Antibiotik(DUNCAN LSD) /EMMEANS=TABLES(Lokasi) /EMMEANS=TABLES(Antibiotik) /PRINT=HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Lokasi Antibiotik.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.10

Between-Subjects Factors

		Value Label	N
Lokasi	1.00	P1	36
	2.00	P2	36
	3.00	P3	36
Antibiotik	1.00	Amoxicillin	27
	2.00	Tetrasiklin	27
	3.00	Kloramfenikol	27
	4.00	Siprofloksasin	27

Descriptive Statistics

Dependent Variable: Diameter

Lokasi	Antibiotik	Mean	Std. Deviation	N
P1	Amoxicillin	.0000	.00000	9
	Tetrasiklin	17.1111	.92796	9
	Kloramfenikol	23.5556	1.50923	9
	Siprofloksasin	26.4444	1.87824	9
	Total	16.7778	10.47749	36
P2	Amoxicillin	.0000	.00000	9
	Tetrasiklin	17.3333	1.32288	9
	Kloramfenikol	22.8889	.92796	9
	Siprofloksasin	27.4444	1.33333	9
	Total	16.9167	10.59751	36
P3	Amoxicillin	.0000	.00000	9
	Tetrasiklin	16.4444	1.01379	9
	Kloramfenikol	22.2222	1.56347	9
	Siprofloksasin	25.5556	.88192	9
	Total	16.0556	10.01412	36
Total	Amoxicillin	.0000	.00000	27
	Tetrasiklin	16.9630	1.12597	27
	Kloramfenikol	22.8889	1.42325	27
	Siprofloksasin	26.4815	1.57798	27
	Total	16.5833	10.27575	108

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

Dependent Variable: Diameter

F	df1	df2	Sig.
3.162	11	96	.001

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

a. Design: Intercept + Lokasi + Antibiotik

Tests of Between-Subjects Effects

Dependent Variable: Diameter

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11163.269[a]	5	2232.654	1687.125	.000
Intercept	29700.750	1	29700.750	22443.645	.000
Lokasi	15.389	2	7.694	5.814	.004
Antibiotik	11147.880	3	3715.960	2807.999	.000
Error	134.981	102	1.323		
Total	40999.000	108			
Corrected Total	11298.250	107			

a. R Squared = .988 (Adjusted R Squared = .987)

Estimated Marginal Means

1. Lokasi

Dependent Variable: Diameter

Lokasi	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
P1	16.778	.192	16.397	17.158
P2	16.917	.192	16.536	17.297
P3	16.056	.192	15.675	16.436

2. Antibiotik

Dependent Variable: Diameter

Antibiotik	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Amoxicillin	2.116E-15	.221	-.439	.439
Tetrasiklin	16.963	.221	16.524	17.402
Kloramfenikol	22.889	.221	22.450	23.328
Siprofloksasin	26.481	.221	26.042	26.921

Post Hoc Tests

Lokasi

Multiple Comparisons

Dependent Variable: Diameter

	(I) Lokasi	(J) Lokasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	P1	P2	-.1389	.27114	.610	-.6767	.3989
		P3	.7222*	.27114	.009	.1844	1.2600
	P2	P1	.1389	.27114	.610	-.3989	.6767
		P3	.8611*	.27114	.002	.3233	1.3989
	P3	P1	-.7222*	.27114	.009	-1.2600	-.1844
		P2	-.8611*	.27114	.002	-1.3989	-.3233

Based on observed means.

The error term is Mean Square(Error) = 1.323.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Diameter

	Lokasi	N	Subset 1	Subset 2
Duncan[a,b]	P3	36	16.0556	
	P1	36		16.7778
	P2	36		16.9167
	Sig.		1.000	.610

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1.323.

a. Uses Harmonic Mean Sample Size = 36.000.

b. Alpha = .05.

Antibiotik

Multiple Comparisons

Dependent Variable: Diameter

	(I) Antibiotik	(J) Antibiotik	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Amoxicillin	Tetrasiklin	-16.9630*	.31309	.000	-17.5840	-16.3419
		Kloramfenikol	-22.8889*	.31309	.000	-23.5099	-22.2679
		Siprofloksasin	-26.4815*	.31309	.000	-27.1025	-25.8605
	Tetrasiklin	Amoxicillin	16.9630*	.31309	.000	16.3419	17.5840
		Kloramfenikol	-5.9259*	.31309	.000	-6.5469	-5.3049
		Siprofloksasin	-9.5185*	.31309	.000	-10.1395	-8.8975
	Kloramfenikol	Amoxicillin	22.8889*	.31309	.000	22.2679	23.5099
		Tetrasiklin	5.9259*	.31309	.000	5.3049	6.5469
		Siprofloksasin	-3.5926*	.31309	.000	-4.2136	-2.9716
	Siprofloksasin	Amoxicillin	26.4815*	.31309	.000	25.8605	27.1025
		Tetrasiklin	9.5185*	.31309	.000	8.8975	10.1395
		Kloramfenikol	3.5926*	.31309	.000	2.9716	4.2136

Based on observed means.

The error term is Mean Square(Error) = 1.323.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Diameter

	Antibiotik	N	Subset 1	2	3	4
Duncan[a,b]	Amoxicillin	27	.0000			
	Tetrasiklin	27		16.9630		
	Kloramfenikol	27			22.8889	
	Siprofloksasin	27				26.4815
	Sig.		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) = 1.323.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

Lampiran 6. Zona Hambat Bakteri Coliform Fekal

Univariate Analysis of Variance – ZONA HAMBAT BAKTERI COLIFORM FEKAL

Notes

Output Created		20-JUL-2020 09:59:22
Comments		
Input	Data	C:\Users\ok\Documents\Skripsi Andhini\Zona Hambat Fekal.sav
	Active Dataset	DataSet6
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	111
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Diameter BY Lokasi Antibiotik /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Lokasi Antibiotik(DUNCAN LSD) /EMMEANS=TABLES(Lokasi) /EMMEANS=TABLES(Antibiotik) /PRINT=HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Lokasi Antibiotik.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

Between-Subjects Factors

		Value Label	N
Lokasi	1.00	P1	36
	2.00	P2	36
	3.00	P3	36
Antibiotik	1.00	Amoxicillin	27
	2.00	Tetrasiklin	27
	3.00	Kloramfenikol	27
	4.00	Siprofloksasin	27

Descriptive Statistics

Dependent Variable: Diameter

Lokasi	Antibiotik	Mean	Std. Deviation	N
P1	Amoxicillin	.0000	.00000	9
	Tetrasiklin	17.7778	.97183	9
	Kloramfenikol	24.5556	1.50923	9
	Siprofloksasin	25.6667	2.00000	9
	Total	17.0000	10.49354	36
P2	Amoxicillin	.0000	.00000	9
	Tetrasiklin	18.3333	1.32288	9
	Kloramfenikol	23.8889	.92796	9
	Siprofloksasin	26.5556	1.33333	9
	Total	17.1944	10.55548	36
P3	Amoxicillin	.0000	.00000	9
	Tetrasiklin	17.4444	1.01379	9
	Kloramfenikol	19.3333	.50000	9
	Siprofloksasin	25.4444	1.13039	9
	Total	15.5556	9.61975	36
Total	Amoxicillin	.0000	.00000	27
	Tetrasiklin	17.8519	1.13353	27
	Kloramfenikol	22.5926	2.57591	27
	Siprofloksasin	25.8889	1.55250	27
	Total	16.5833	10.16235	108

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

Dependent Variable: Diameter

F	df1	df2	Sig.
6.705	11	96	.000

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

a. Design: Intercept + Lokasi + Antibiotik

Tests of Between-Subjects Effects

Dependent Variable: Diameter

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	10839.380[a]	5	2167.876	1048.622	.000
Intercept	29700.750	1	29700.750	14366.535	.000
Lokasi	57.722	2	28.861	13.960	.000
Antibiotik	10781.657	3	3593.886	1738.397	.000
Error	210.870	102	2.067		
Total	40751.000	108			
Corrected Total	11050.250	107			

a. R Squared = .981 (Adjusted R Squared = .980)

Estimated Marginal Means

1. Lokasi

Dependent Variable: Diameter

Lokasi	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
P1	17.000	.240	16.525	17.475
P2	17.194	.240	16.719	17.670
P3	15.556	.240	15.080	16.031

2. Antibiotik

Dependent Variable: Diameter

Antibiotik	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Amoxicillin	2.090E-15	.277	-.549	.549
Tetrasiklin	17.852	.277	17.303	18.401
Kloramfenikol	22.593	.277	22.044	23.141
Siprofloksasin	25.889	.277	25.340	26.438

Post Hoc Tests

Lokasi

Multiple Comparisons

Dependent Variable: Diameter

	(I) Lokasi	(J) Lokasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	P1	P2	-.1944	.33890	.567	-.8667	.4778
		P3	1.4444*	.33890	.000	.7722	2.1167
	P2	P1	.1944	.33890	.567	-.4778	.8667
		P3	1.6389*	.33890	.000	.9667	2.3111
	P3	P1	-1.4444*	.33890	.000	-2.1167	-.7722
		P2	-1.6389*	.33890	.000	-2.3111	-.9667

Based on observed means.

The error term is Mean Square(Error) = 2.067.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Diameter

	Lokasi	N	Subset 1	Subset 2
Duncan[a,b]	P3	36	15.5556	
	P1	36		17.0000
	P2	36		17.1944
	Sig.		1.000	.567

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 2.067.

a. Uses Harmonic Mean Sample Size = 36.000.

b. Alpha = .05.

Antibiotik

Multiple Comparisons

Dependent Variable: Diameter

	(I) Antibiotik	(J) Antibiotik	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Amoxicillin	Tetrasiklin	-17.8519*	.39133	.000	-18.6280	-17.0757
		Kloramfenikol	-22.5926*	.39133	.000	-23.3688	-21.8164
		Siprofloksasin	-25.8889*	.39133	.000	-26.6651	-25.1127
	Tetrasiklin	Amoxicillin	17.8519*	.39133	.000	17.0757	18.6280
		Kloramfenikol	-4.7407*	.39133	.000	-5.5169	-3.9645
		Siprofloksasin	-8.0370*	.39133	.000	-8.8132	-7.2608
	Kloramfenikol	Amoxicillin	22.5926*	.39133	.000	21.8164	23.3688
		Tetrasiklin	4.7407*	.39133	.000	3.9645	5.5169
		Siprofloksasin	-3.2963*	.39133	.000	-4.0725	-2.5201
	Siprofloksasin	Amoxicillin	25.8889*	.39133	.000	25.1127	26.6651
		Tetrasiklin	8.0370*	.39133	.000	7.2608	8.8132
		Kloramfenikol	3.2963*	.39133	.000	2.5201	4.0725

Based on observed means.

The error term is Mean Square(Error) = 2.067.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Diameter

	Antibiotik	N	Subset 1	Subset 2	Subset 3	Subset 4
Duncan[a,b]	Amoxicillin	27	.0000			
	Tetrasiklin	27		17.8519		
	Kloramfenikol	27			22.5926	
	Siprofloksasin	27				25.8889
	Sig.		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) = 2.067.

a. Uses Harmonic Mean Sample Size = 27.000.

b. Alpha = .05.

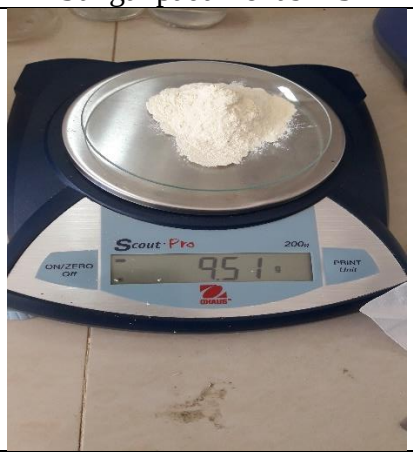
Lampiran 7. Hasil Uji Sensitivitas Bakteri Coliform Terhadap Antibiotik

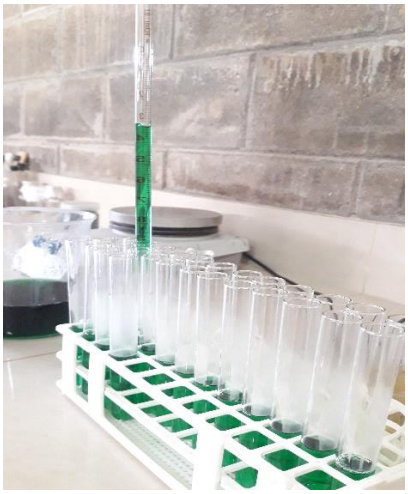
No.	**Lokasi**	**Ulangan**	**Diameter Zona Hambat (mm)**			
			Amoxcillin	Tetrasiklin	Kloramfenikol	Siprofloksasin
1.	P1	1	0	17	23	26
		2	0	18	25	29
		3	0	16	21	24
		4	0	17	23	26
		5	0	19	23	26
		6	0	17	25	28
		7	0	17	23	24
		8	0	16	26	29
		9	0	17	23	26
	Rata-Rata		0	17,11	23,55	26,44
2.	P2	1	0	18	23	28
		2	0	16	22	26
		3	0	15	22	26
		4	0	19	25	30
		5	0	18	23	28
		6	0	18	23	28
		7	0	16	22	26
		8	0	18	23	28
		9	0	18	23	27
	Rata-Rata		0	17,33	22,89	27,44
3.	P3	1	0	15	22	26
		2	0	16	24	26
		3	0	16	22	26
		4	0	16	20	26
		5	0	17	20	24
		6	0	16	24	26
		7	0	16	24	24
		8	0	18	22	26
		9	0	18	22	26
	Rata-Rata		0	16,44	22,22	25,56

Lampiran 8. Hasil Uji Sensitivitas Bakteri Coliform Fekal Terhadap Antibiotik

No.	Lokasi	Ulangan	Diameter Zona Hambat (mm)			
			Amoxcillin	Tetrasiklin	Kloramfenikol	Siprofloksasin
1.	P1	1	0	18	24	28
		2	0	19	26	27
		3	0	17	22	24
		4	0	17	24	24
		5	0	19	24	24
		6	0	18	26	28
		7	0	18	24	24
		8	0	16	27	28
		9	0	18	24	24
	Rata-Rata		0	17,78	24,56	25,67
2.	P2	1	0	19	24	27
		2	0	17	23	25
		3	0	16	23	25
		4	0	20	26	29
		5	0	19	24	27
		6	0	19	24	27
		7	0	17	23	25
		8	0	19	24	27
		9	0	19	24	27
	Rata-Rata		0	18,33	23,89	26,56
3.	P3	1	0	16	19	26
		2	0	17	20	26
		3	0	17	19	26
		4	0	17	19	26
		5	0	18	19	24
		6	0	17	20	26
		7	0	17	20	23
		8	0	19	19	26
		9	0	19	19	26
	Rata-Rata		0	17,44	19,33	25,44

Lampiran 8. Dokumentasi Penelitian

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Gambar 1. Pengambilan Sampel Air Sungai pada Lokasi P1</td><td>Gambar 2. Pengambilan Sampel Air pada Lokasi P2</td></tr>
<tr><td>  </td><td> 
</td></tr>
<tr><td>Gambar 3. Pengambilan Sampel Air Sungai pada Lokasi P3</td><td>Gambar 4. Sampel Air Sungai</td></tr>
<tr><td> 
</td><td>  </td></tr>
</table>

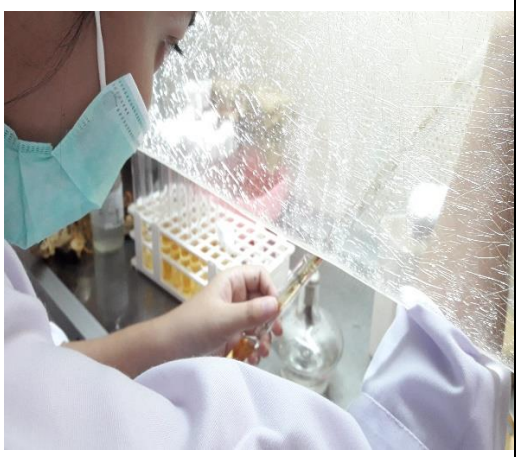
Gambar 5. Proses Penimbangan Media	Gambar 6. Proses Pemanasan Media
	
Gambar 7. Proses Memasukkan Media dalam Tabung Reaksi	Gambar 8. Proses Memasukkan Media dalam Tabung Reaksi
	
Gambar 9. Sterilisasi Media	Gambar 10. Sterilisasi Media dan Alat
	
Gambar 11. Media Steril	Gambar 12. Media Steril dalam Tabung Reaksi

Gambar 13. Proses UV sebelum Penanaman Sampel

Gambar 14. Proses Pengenceran Sampel

Gambar 15. Proses Pengenceran Sampel pada Pengencer BPW

Gambar 16. Proses Homogen Pengencer BPW dengan Vortex



Gambar 17. Proses Pengenceran Sampel dalam Pengencer ke Media untuk Uji Pendugaan

Gambar 18. Hasil Pengenceran Sampel

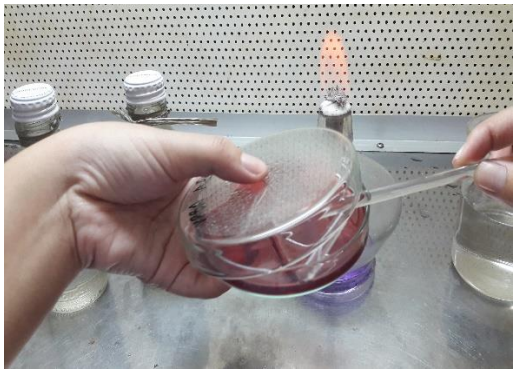
Gambar 19. Proses Penuangan Media Padat ke Cawan Petri

Gambar 20. Proses Penuangan Media Padat ke Cawan Petri

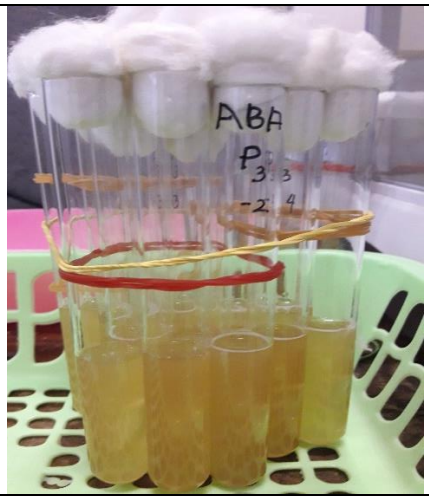
Gambar 21. Proses Pengambilan Sampel

Gambar 22. Proses Inokulasi Sampel

Gambar 23. Proses Inokulasi Sampel dengan Teknik Spread Plate



Gambar 24. Proses Inokulasi Sampel dengan Teknik Spread Plate

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Gambar 25. Inkubasi Sampel dalam Inkubator</td><td>Gambar 26. Hasil Sampel Uji Pendugaan</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Gambar 27. Media Penegasan dengan Hasil Negatif</td><td>Gambar 28. Media Penegasan dengan Hasil Positif</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Gambar 29. Proses UV Uji Penegasan Media Positif</td><td>Gambar 30. Persiapan Uji Penegasan</td></tr>
</table>

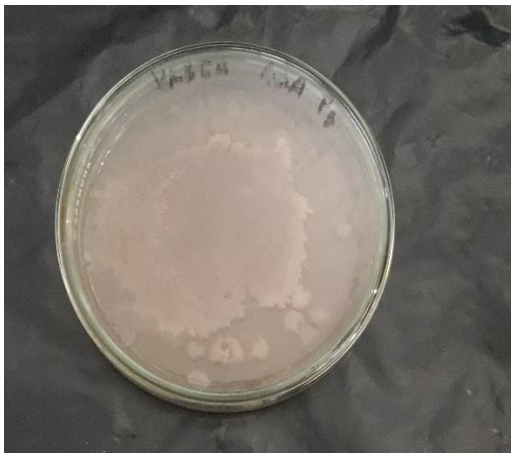
Gambar 31. Uji Penegasan

Gambar 32. Uji Penegasan

Gambar 33. Proses Uji Penegasan

Gambar 34. Proses Uji Penegasan

Gambar 35. Hasil Uji Pendahuluan pada media padat

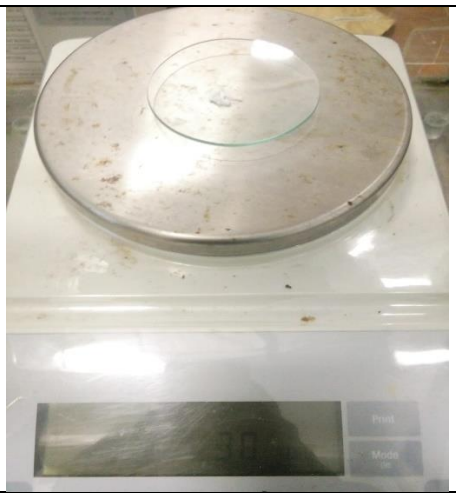


Gambar 36. Gambar Hasil Uji Pendahuluan pada media padat

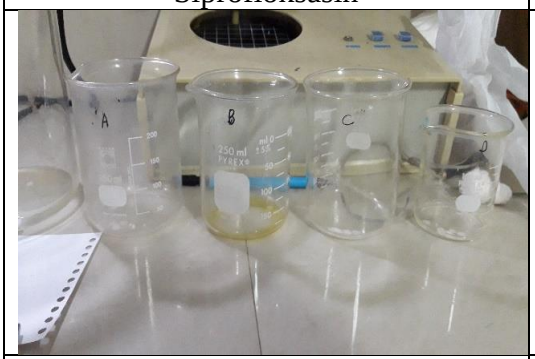
Gambar 37. Penimbangan Antibiotik Kloramfenikol

Gambar 38. Penimbangan Antibiotik Tetrasiklin

Gambar 39. Penimbangan Antibiotik Siprofloksasin



Gambar 40. Penimbangan Antibiotik Amoxicillin



Gambar 41. Proses Perendaman Disk Antibiotik ke Larutan Antibiotik

Gambar 42. Proses Persiapan Pemasangan Disk Antibiotik

Gambar 43. Proses Pengambilan Bakteri

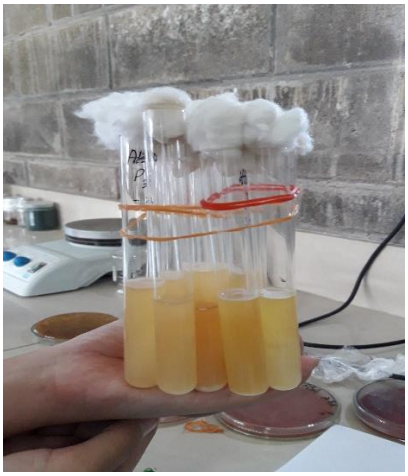
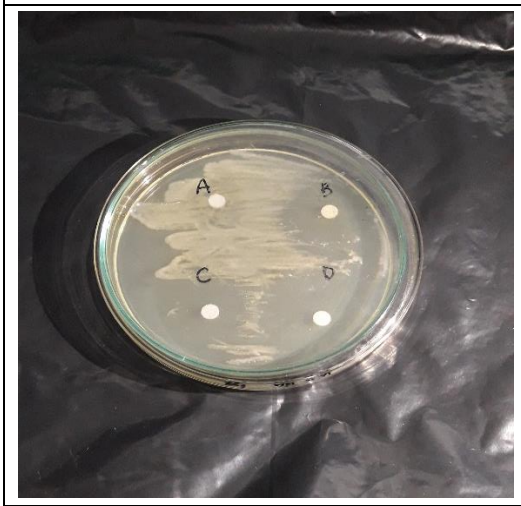
Gambar 44. Proses Inokulasi Bakteri ke Media Mueller Hinton Agar

Gambar 45. Inkubasi Sampel dalam Inkubator

Gambar 46. Sampel yang akan dianalisa hasilnya

Gambar 47. Hasil Uji Penegasan Coliform Positif

Gambar 48. Hasil Uji Penegasan Coliform Negatif

	
Gambar 49. Hasil Uji Penegasan Coliform Fekal Positif	Gambar 50. Hasil Uji Penegasan Coliform Fekal Positif
	
Gambar 51. Hasil Uji Sensitivitas Antibiotik terhadap Bakteri Coliform	Gambar 52. Hasil Uji Sensivitas Bakteri Coliform Fekal

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Kampus Pusat: Jl. Dukuh Menanggal XII-4 Surabaya 60234 Telp. (031) 8281181
http://www.unipasby.ac.id

BERITA ACARA BIMBINGAN SKRIPSI

1.	NAMA	:	Andhini Putri Rahmawati
2.	NIM	:	162500024
3.	PROGRAM STUDI	:	Biologi
4.	JUDUL	:	Potensi Cemaran Bakteri Coliform, Coliform Fekal dan Resistensinya terhadap Antibiotik di Sungai Kalimas
5.	TANGGAL PENGAJUAN	:	19 September 2019
6.	PEMBIMBING	:	Dra. Diah Karunia Binawati, M.Si.
7.	PERIODE	:	2019-2020
8.	BERLAKU SEMESTER	:	Genap
9.	PELAKSANAAN KONSULTASI BIMBINGAN	:	

NO.	TANGGAL	URAIAN KETERANGAN	PARAF
1.	19 September 2019	Konsultasi Judul	
2.	8 Oktober 2019	Bimbingan Bab I Latar Belakang	
3.	31 Oktober 2019	Bimbingan Bab II Tinjauan Pustaka	
4.	12 November 2019	Bimbingan Bab II Tinjauan Pustaka	
5.	16 Desember 2019	Bimbingan Bab III Kerangka Konsep dan Hipotesis	
6.	16 Januari 2020	Bimbingan Bab IV Materi dan Metodologi Penelitian	
7.	20 Januari 2020	Bimbingan Bab IV Materi dan Metodologi Penelitian	
8.	31 Maret 2020	Penelitian	
9.	11 Juni 2020	Penelitian	
10.	14 Juli 2020	Bimbingan Bab V Hasil Penelitian, Bab VI Pembahasan, Bab VII Kesimpulan dan Saran	
11.	24 Juli 2020	Bimbingan Bab V Hasil Penelitian, Bab VI Pembahasan, Bab VII Kesimpulan dan Saran	

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http://www.unipasby.ac.id

10. TANGGAL SELESAI : 29 Juli 2020

Surabaya, 10 Agustus 2020

Mengetahui	Pembimbing
Dekan	
Dra. Diah Karunia Binawati, M.Si.	Dra. Diah Karunia Binawati, M.Si.

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http://www.unipasby.ac.id

PERBAIKAN / REVISI UJIAN SKRIPSI

NAMA MAHASISWA	:	Andhini Putri Rahmawati
NIM	:	162500024
JUDUL SKRIPSI	:	Potensi Cemaran Bakteri Coliform, Coliform Fekal, dan Resistensinya terhadap Antibiotik di Sungai Kalimas
DOSEN PEMBIMBING	:	Dra. Diah Karunia Binawati, M.Si.

Materi Perbaikan/ Revisi Proposal	Tanda Tangan Dosen Penguji
1. Abstrak	
2. Bab IV Materi dan Metodologi Penelitian	
3. Bab V Hasil Penelitian	
4. Bab VII Kesimpulan dan Saran	

Surabaya, 10 Agustus 2020

Pembimbing

Dra. Diah Karunia Binawati, M.Si.