

LAMPIRAN 1.

HASIL ANALISA ANOVA SATU ARAH Kerang *sp.* UNTUK LOGAM Cd BERDASARKAN FREKUENSI PENCUCIAN

Oneway

Descriptives

CD

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Cuci 0	5	9.2060635	1.7994239	.8047268	6.9717836	11.4403434
Cuci 1	5	8.1644030	1.0267747	.4591876	6.8894938	9.4393122
Cuci 2	5	5.5640283	1.2756223	.5704756	3.9801341	7.1479226
Cuci 3	5	4.1101142	.9545147	.4268720	2.9249276	5.2953008
Total	20	6.7611523	2.3991344	.5364628	5.6383228	7.8839817

Descriptives

CD

	Minimum	Maximum
Cuci 0	7.00041	11.19388
Cuci 1	6.99559	9.88433
Cuci 2	4.50400	7.47804
Cuci 3	3.45677	5.65512
Total	3.45677	11.19388

Test of Homogeneity of Variances

CD

Levene Statistic	df1	df2	Sig.
2.167	3	16	.132

ANOVA

CD

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	82.039	3	27.346	16.014	.000
Within Groups	27.322	16	1.708		
Total	109.361	19			

Post Hoc Tests

Homogeneous Subsets

CD

Duncan^a

CUCI	N	Subset for alpha = .05	
		1	2
Cuci 3	5	4.1101142	
Cuci 2	5	5.5640283	
Cuci 1	5		8.1644030
Cuci 0	5		9.2060635
Sig.		.098	.226

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

LAMPIRAN 2

HASIL ANALISA ANOVA SATU ARAH UNTUK LOGAM Fe Kerang
sp. BERDASARKAN FREKUENSI PENCUCIAN

Oneway

Descriptives

FE

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Cuci 0	5	187.70419	45.6497696	20.415198	131.0225101	244.3858609
Cuci 1	5	118.89652	34.7971348	15.561752	75.6901708	162.1028697
Cuci 2	5	108.55372	35.0198375	15.661347	65.0708492	152.0365921
Cuci 3	5	114.08893	25.8215923	11.547767	82.0271917	146.1506747
Total	20	132.31084	46.7217797	10.447308	110.4443739	154.1773059

Descriptives

FE

	Minimum	Maximum
Cuci 0	115.5930	241.5459
Cuci 1	74.02735	155.0122
Cuci 2	56.65183	139.1525
Cuci 3	75.69782	142.3701
Total	56.65183	241.5459

Test of Homogeneity of Variances

FE

Levene Statistic	df1	df2	Sig.
.292	3	16	.830

ANOVA

FE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20724.027	3	6908.009	5.326	.010
Within Groups	20751.543	16	1296.971		
Total	41475.569	19			

Post Hoc Tests

Homogeneous Subsets

FE

Duncan^a

CUCI	N	Subset for alpha = .05	
		1	2
Cuci 2	5	108.55372	
Cuci 3	5	114.08893	
Cuci 1	5	118.89652	
Cuci 0	5		187.70419
Sig.		.673	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

LAMPIRAN 3

HASIL ANALISA ANOVA SATU ARAH UNTUK LOGAM Zn Kerang
sp. BERDASARKAN FREKUENSI PENCUCIAN

Oneway

Descriptives

ZN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Cuci 0	5	34.814657	5.3422378	2.3891214	28.1813928	41.4479214
Cuci 1	5	24.683907	9.1486842	4.0914159	13.3243157	36.0434992
Cuci 2	5	24.408514	8.5345995	3.8167889	13.8114088	35.0056186
Cuci 3	5	18.562984	5.1864208	2.3194378	12.1231919	25.0027754
Total	20	25.617515	8.9775767	2.0074472	21.4158802	29.8191507

Descriptives

ZN

	Minimum	Maximum
Cuci 0	27.77942	40.15742
Cuci 1	12.95479	34.79027
Cuci 2	14.68421	35.23419
Cuci 3	11.35467	24.38484
Total	11.35467	40.15742

Test of Homogeneity of Variances

ZN

Levene Statistic	df1	df2	Sig.
1.384	3	16	.284

LAMPIRAN 4

HASIL ANALISA ANOVA SATU ARAH UNTUK LOGAM Cd Kerang
sp. BERDASARKAN PERLAKUAN PERENDAMAN

CD

Oneway

Descriptives

CD

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	5	4.2710107	1.0955191	.4899310	2.9107442	5.6312773
2	5	5.0404493	1.4200545	.6350677	3.2772187	6.8036798
3	5	5.5708091	1.0724158	.4795989	4.2392290	6.9023891
4	5	6.3408547	.9226068	.4126023	5.1952871	7.4864224
Total	20	5.3057810	1.3035543	.2914836	4.6956988	5.9158631

Descriptives

CD

	Minimum	Maximum
1	3.24587	6.01561
2	3.88727	7.13402
3	4.02103	7.04357
4	5.27399	7.32476
Total	3.24587	7.32476

Test of Homogeneity of Variances

CD

Levene Statistic	df1	df2	Sig.
.684	3	16	.575

ANOVA

CD

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.414	3	3.805	2.917	.066
Within Groups	20.872	16	1.304		
Total	32.286	19			

Post Hoc Tests

Homogeneous Subsets

CD

Duncan^a

RENDAM	N	Subset for alpha = .05	
		1	2
1	5	4.2710107	
2	5	5.0404493	5.0404493
3	5	5.5708091	5.5708091
4	5		6.3408547
Sig.		.106	.106

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

LAMPIRAN 5

HASIL ANALISA ANOVA SATU ARAH UNTUK LOGAM Fe Kerang
sp. BERDASARKAN PERLAKUAN PERENDAMAN

Oneway

Descriptives

FE

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	5	87.597843	22.3534890	9.9967842	59.8423201	115.3533651
2	5	95.082401	31.0648017	13.892602	56.5103549	133.6544467
3	5	111.78631	27.1461473	12.140126	78.0799119	145.4926996
4	5	143.75103	42.6780561	19.086207	90.7592286	196.7428401
Total	20	109.55440	36.5784827	8.1791974	92.4351390	126.6736527

Descriptives

FE

	Minimum	Maximum
1	58.40398	116.1416
2	51.64062	125.3958
3	77.52383	146.0589
4	90.17832	186.9965
Total	51.64062	186.9965

Test of Homogeneity of Variances

FE

Levene Statistic	df1	df2	Sig.
1.704	3	16	.206

ANOVA

FE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9329.602	3	3109.867	3.092	.057
Within Groups	16092.121	16	1005.758		
Total	25421.723	19			

Post Hoc Tests

Homogeneous Subsets

FE

Duncan^a

RENDAM	N	Subset for alpha = .05	
		1	2
1	5	87.597843	
2	5	95.082401	
3	5	111.78631	111.78631
4	5		143.75103
Sig.		.270	.131

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

LAMPIRAN 6

HASIL ANALISA ANOVA SATU ARAH UNTUK LOGAM Zn
Kerang *sp.* BERDASARKAN PERLAKUAN PERENDAMAN

Oneway

Descriptives

ZN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1	5	19.025355	2.5616651	1.1456114	15.8446278	22.2060824
2	5	22.709630	5.1932503	2.3224921	16.2613578	29.1579017
3	5	28.125968	9.9591736	4.4538778	15.7600209	40.4919155
4	5	30.980363	12.2088451	5.4598721	15.8213283	46.1393984
Total	20	25.210329	9.0570727	2.0252230	20.9714886	29.4491696

Descriptives

ZN

	Minimum	Maximum
1	14.60661	20.89931
2	17.59809	30.73367
3	17.44286	43.81768
4	21.09598	45.71564
Total	14.60661	45.71564

Test of Homogeneity of Variances

ZN

Levene Statistic	df1	df2	Sig.
5.889	3	16	.007

ANOVA

ZN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	431.508	3	143.836	2.042	.149
Within Groups	1127.073	16	70.442		
Total	1558.581	19			

Post Hoc Tests

Homogeneous Subsets

ZN

Duncan^a

RENDAM	N	Subset for alpha = .05
		1
1	5	19.025355
2	5	22.709630
3	5	28.125968
4	5	30.980363
Sig.		.053

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

LAMPIRAN 7

HASIL ANALISA ANOVA DUA ARAH KANDUNGAN LOGAM Cd PADA PEREBUSAN Kerang *sp.*

Univariate Analysis of Variance

Between-Subjects Factors

		N
AIR	1	10
	2	10
	3	10
	4	10
REBUS	1	20
	2	20

Descriptive Statistics

Dependent Variable: CD

AIR	REBUS	Mean	Std. Deviation	N
1	1	7.0013978	2.1210777	5
	2	3.2510698	1.7205268	5
	Total	5.1262338	2.6874013	10
2	1	3.7497466	.8012506	5
	2	2.2529603	.5389830	5
	Total	3.0013535	1.0182198	10
3	1	4.2127623	.8367267	5
	2	2.7339577	1.0960951	5
	Total	3.4733600	1.2052340	10
4	1	3.2265439	.9313591	5
	2	3.0191099	1.7275094	5
	Total	3.1228269	1.3129460	10
Total	1	4.5476127	1.9113106	20
	2	2.8142744	1.3082144	20
	Total	3.6809436	1.8395285	40

Levene's Test of Equality of Error Variances^a

Dependent Variable: CD

F	df1	df2	Sig.
2.158	7	32	.065

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

a. Design: Intercept+AIR+REBUS+AIR * REBUS

Tests of Between-Subjects Effects

Dependent Variable: CD

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	75.391 ^a	7	10.770	6.091	.000
Intercept	541.974	1	541.974	306.526	.000
AIR	29.053	3	9.684	5.477	.004
REBUS	30.045	1	30.045	16.992	.000
AIR * REBUS	16.293	3	5.431	3.072	.042
Error	56.580	32	1.768		
Total	673.945	40			
Corrected Total	131.971	39			

a. R Squared = .571 (Adjusted R Squared = .477)

Estimated Marginal Means

1. Grand Mean

Dependent Variable: CD

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
3.681	.210	3.253	4.109

2. AIR

Dependent Variable: CD

AIR	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	5.126	.420	4.270	5.983
2	3.001	.420	2.145	3.858
3	3.473	.420	2.617	4.330
4	3.123	.420	2.266	3.979

3. REBUS

Dependent Variable: CD

REBUS	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	4.548	.297	3.942	5.153
2	2.814	.297	2.209	3.420

4. AIR * REBUS

Dependent Variable: CD

AIR	REBUS	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	7.001	.595	5.790	8.213
	2	3.251	.595	2.040	4.462
2	1	3.750	.595	2.538	4.961
	2	2.253	.595	1.042	3.464
3	1	4.213	.595	3.001	5.424
	2	2.734	.595	1.523	3.945
4	1	3.227	.595	2.015	4.438
	2	3.019	.595	1.808	4.230

Post Hoc Tests

AIR

Homogeneous Subsets

CD

Duncan^{a,b}

AIR	N	Subset	
		1	2
2	10	3.0013535	
4	10	3.1228269	
3	10	3.4733600	
1	10		5.1262338
Sig.		.461	1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 1.768.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = .05.

LAMPIRAN 8

HASIL ANALISA ANOVA DUA ARAH KANDUNGAN LOGAM Fe
PADA PEREBUSAN Kerang *sp.*

Univariate Analysis of Variance

Between-Subjects Factors

		N
AIR	1	10
	2	10
	3	10
	4	10
REBUS	1	20
	2	20

Descriptive Statistics

Dependent Variable: FE

AIR	REBUS	Mean	Std. Deviation	N
1	1	188.61152	78.9374029	5
	2	87.110148	35.6608431	5
	Total	137.86083	78.7171860	10
2	1	88.451686	38.1506299	5
	2	70.695186	54.7208329	5
	Total	79.573436	45.4454419	10
3	1	119.10405	33.6793066	5
	2	96.518063	43.1237900	5
	Total	107.81106	38.3712057	10
4	1	90.244971	35.8404659	5
	2	58.075726	58.4964695	5
	Total	74.160349	48.7768782	10
Total	1	121.60306	62.1184290	20
	2	78.099781	47.3349248	20
	Total	99.851419	58.7938473	40

Levene's Test of Equality of Error Variances^a

Dependent Variable: FE

F	df1	df2	Sig.
.854	7	32	.552

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

a. Design: Intercept+AIR+REBUS+AIR * REBUS

Tests of Between-Subjects Effects

Dependent Variable: FE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	56200.013 ^a	7	8028.573	3.268	.010
Intercept	398812.234	1	398812.234	162.342	.000
AIR	25792.991	3	8597.664	3.500	.027
REBUS	18925.350	1	18925.350	7.704	.009
AIR * REBUS	11481.672	3	3827.224	1.558	.219
Error	78611.929	32	2456.623		
Total	533624.177	40			
Corrected Total	134811.943	39			

a. R Squared = .417 (Adjusted R Squared = .289)

Estimated Marginal Means

1. Grand Mean

Dependent Variable: FE

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
99.851	7.837	83.888	115.814

2. AIR

Dependent Variable: FE

AIR	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	137.861	15.674	105.935	169.787
2	79.573	15.674	47.647	111.500
3	107.811	15.674	75.885	139.737
4	74.160	15.674	42.234	106.086

3. REBUS

Dependent Variable: FE

REBUS	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	121.603	11.083	99.028	144.178
2	78.100	11.083	55.525	100.675

4. AIR * REBUS

Dependent Variable: FE

AIR	REBUS	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	188.612	22.166	143.461	233.762
	2	87.110	22.166	41.960	132.260
2	1	88.452	22.166	43.301	133.602
	2	70.695	22.166	25.545	115.846
3	1	119.104	22.166	73.954	164.254
	2	96.518	22.166	51.368	141.668
4	1	90.245	22.166	45.095	135.395
	2	58.076	22.166	12.925	103.226

Post Hoc Tests

AIR

Homogeneous Subsets

FE

Duncan^{a,b}

AIR	N	Subset	
		1	2
4	10	74.160349	
2	10	79.573436	
3	10	107.81106	107.81106
1	10		137.86083
Sig.		.161	.185

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 2456.623.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = .05.

LAMPIRAN 9

HASIL ANALISA ANOVA DUA ARAH KANDUNGAN LOGAM Zn PADA PEREBUSAN Kerang *sp.*

Univariate Analysis of Variance

Warnings

Post hoc tests are not performed for REBUS because there are fewer than three groups.

Between-Subjects Factors

		N
AIR	1	10
	2	10
	3	10
	4	10
REBUS	1	20
	2	20

Descriptive Statistics

Dependent Variable: ZN

AIR	REBUS	Mean	Std. Deviation	N
1	1	50.147066	24.4616624	5
	2	21.802820	5.3025385	5
	Total	35.974943	22.3965525	10
2	1	23.766414	4.5709300	5
	2	23.330807	4.1071667	5
	Total	23.548610	4.1031595	10
3	1	30.875151	14.3485141	5
	2	24.874405	6.3294193	5
	Total	27.874778	10.9229017	10
4	1	24.827015	5.5051068	5
	2	26.148281	9.5333214	5
	Total	25.487648	7.3720646	10
Total	1	32.403911	17.2713200	20
	2	24.039078	6.3119395	20
	Total	28.221495	13.5157522	40

Levene's Test of Equality of Error Variances^a

Dependent Variable: ZN

F	df1	df2	Sig.
6.115	7	32	.000

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

a. Design: Intercept+AIR+REBUS+AIR * REBUS

Tests of Between-Subjects Effects

Dependent Variable: ZN

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2998.811 ^a	7	428.402	3.323	.009
Intercept	31858.111	1	31858.111	247.110	.000
AIR	895.459	3	298.486	2.315	.094
REBUS	699.704	1	699.704	5.427	.026
AIR * REBUS	1403.647	3	467.882	3.629	.023
Error	4125.536	32	128.923		
Total	38982.458	40			
Corrected Total	7124.347	39			

a. R Squared = .421 (Adjusted R Squared = .294)

Estimated Marginal Means

1. Grand Mean

Dependent Variable: ZN

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
28.221	1.795	24.565	31.878

2. AIR

Dependent Variable: ZN

AIR	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	35.975	3.591	28.661	43.289
2	23.549	3.591	16.235	30.862
3	27.875	3.591	20.561	35.189
4	25.488	3.591	18.174	32.801

3. REBUS

Dependent Variable: ZN

REBUS	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	32.404	2.539	27.232	37.576
2	24.039	2.539	18.867	29.211

4. AIR * REBUS

Dependent Variable: ZN

AIR	REBUS	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	50.147	5.078	39.804	60.490
	2	21.803	5.078	11.460	32.146
2	1	23.766	5.078	13.423	34.110
	2	23.331	5.078	12.988	33.674
3	1	30.875	5.078	20.532	41.218
	2	24.874	5.078	14.531	35.218
4	1	24.827	5.078	14.484	35.170
	2	26.148	5.078	15.805	36.492

Post Hoc Tests

AIR

Homogeneous Subsets

ZN

Duncan^{a,b}

AIR	N	Subset	
		1	2
2	10	23.548610	
4	10	25.487648	25.487648
3	10	27.874778	27.874778
1	10		35.974943
Sig.		.429	.058

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 128.923.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = .05.