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LAMPIRAN

Lampiran 1. Pengaruh Pertumbuhan Tinggi Bandotan (Minggu ke 1-7) yang dikendalikan dengan ekstrak akar alang-alang

No	Tanggal	Jenis larutan	konsentrasi (%)	Ulangan (cm)			
				U ₁	U ₂	U ₃	U ₄
1	16-08-2021	Larutan Akar Kering	15%	9	10,3	8.8	11
			20%	10.2	10.5	9	13
			25%	12.2	8.5	9.3	9.5
			30%	9	13	11	10
			35%	10	9	10	11
		Larutan Akar Basah	15%	10	13	8.5	10.9
			20%	10.5	13.6	9	9.4
			25%	9.2	11	10	11
			30%	9	8	10	11
			35%	8	8	8	7
				Kontrol	-	13	15.5
2	23-08-2021	Larutan Akar Kering	15%	9.7	12.1	10.2	12.4
			20%	10.7	10.9	9.6	13.4
			25%	12.7	8.9	9.7	10.2
			30%	10.5	13.5	11.5	10.5
			35%	10.5	9.5	10.5	11.5
		Larutan Akar Basah	15%	10.6	13.5	9	11.5
			20%	10.8	13.9	9.3	9.7
			25%	9.6	11.5	10.3	11.6
			30%	9.5	8.5	10.4	11.5
			35%	9.1	8.6	9.2	8.2
				Kontrol	-	13.5	15.9
3	30-08-2021	Larutan Akar Kering	15%	12.1	13.5	12.5	13.6
			20%	11.3	11.5	9.9	13.9
			25%	13.2	10.1	10.4	10.6
			30%	10.8	13.7	11.8	10.6
			35%	10.6	9.7	10.7	11.6
		Larutan Akar Basah	15%	11	14	9.5	12
			20%	11	14.2	9.6	10
			25%	10.3	12.2	10.5	11.9
			30%	10	9.1	10.9	11.9
			35%	9.3	9.2	9.5	8.7
				Kontrol	-	13.8	16.5
4	6-9-2021	Larutan Akar Kering	15%	13.5	14.4	14.1	15.1

			20%	11.7	12.1	10.5	14.3
			25%	13.5	10.3	10.8	11.5
			30%	11	13.9	12	10.8
			35%	10.7	9.9	10.9	12
		Larutan Akar Basah	15%	11.3	14.3	9.8	12.3
			20%	11.5	10.2	12.4	11.5
			25%	10.5	12.6	10.7	12.4
			30%	10.4	9.4	11.3	12.2
			35%	9.6	9.5	9.8	9.2
		Kontrol	-	15.3	17	14.4	15.5
5	13-09-2021	Larutan Akar Kering	15%	14.4	15	14.8	15.7
			20%	13.1	15	10.9	14.9
			25%	13.9	10.6	12.5	14.6
			30%	11.2	14	12.2	11
			35%	10.7	10	11	12.1
		Larutan Akar Basah	15%	11.5	14.5	10	12.6
			20%	12.2	11.2	10.2	12.2
			25%	10.7	13.2	11	12.5
			30%	10.7	9.7	11.6	12.5
			35%	9.8	9.8	9.2	9.6
		Kontrol	-	17.4	18.2	16.1	17.2
6	20-09-2021	Larutan Akar Kering	15%	14.9	15.5	15.6	16.2
			20%	13.9	15.4	11.6	15.3
			25%	14.9	10.9	12.9	14.9
			30%	11.4	14.2	12.4	11.2
			35%	10.8	10.1	11.1	12.1
		Larutan Akar Basah	15%	11.8	14.7	10.3	12.9
			20%	11.9	15.2	10.4	12.4
			25%	10.8	13.5	11.2	12.6
			30%	10.9	9.8	11.7	12.6
			35%	9.9	9.8	9.3	9.8
		Kontrol	-	19,4	19.4	18.6	19.8
7	27-09-2021	Larutan Akar Kering	15%	15.6	16.3	17.3	17.6
			20%	14.5	16.5	12.8	16.5
			25%	15.6	11.9	13.7	15.4
			30%	11.4	14.2	12.4	11.2
			35%	10.8	10.1	11.1	12.1
		Larutan Akar Basah	15%	12	14.9	10.5	13
			20%	12	15.3	10.4	12.5

			25%	10.9	13.6	11.5	12.6
			30%	11	9.8	11.7	12.7
			35%	10	9.9	9.3	9.8
		Kontrol	-	20	20	19.5	20.3

Lampiran 2. Pengaruh Pertumbuhan Jumlah Daun Tanaman Bandotan

(Minggu ke 1-7) yang dikendalikan dengan ekstrak akar alang-alang

No	Tanggal	Jenis larutan	konsentrasi (%)	Ulangan (cm)			
				U ₁	U ₂	U ₃	U ₄
1	16-08-2021	Larutan Akar Kering	15%	9	6	9	10
			20%	7	8	6	9
			25%	8	7	8	6
			30%	8	7	7	8
			35%	8	8	7	8
		Larutan Akar Basah	15%	10	7	7	8
			20%	8	9	12	8
			25%	7	6	9	9
			30%	6	8	9	7
			35%	6	6	7	7
		Kontrol	-	9	8	12	14
2	23-08-2021	Larutan Akar Kering	15%	9	8	9	10
			20%	9	10	10	11
			25%	9	10	8	7
			30%	8	8	8	9
			35%	12	10	11	11
		Larutan Akar	15%	13	8	9	8

		Basah					
			20%	8	9	12	9
			25%	9	8	10	10
			30%	8	10	11	9
			35%	8	8	10	8
		Kontrol	-	10	9	12	14
3	30-08-2021	Larutan Akar Kering	15%	13	12	14	12
			20%	12	14	13	13
			25%	13	10	11	12
			30%	13	14	13	14
			35%	13	11	11	12
		Larutan Akar Basah	15%	15	10	11	10
			20%	10	10	13	11
			25%	11	10	11	13
			30%	10	11	12	10
			35%	9	9	10	10
		Kontrol	-	11	10	14	14
4	6-9-2021	Larutan Akar Kering	15%	14	14	14	15
			20%	14	15	15	14
			25%	16	14	15	14
			30%	14	15	15	14
			35%	13	12	12	12
		Larutan Akar Basah	15%	17	12	12	12
			20%	12	12	14	12
			25%	12	12	13	14
			30%	11	11	12	12
			35%	10	10	12	11

		Kontrol	-	13	13	16	16
5	13-09-2021	Larutan Akar Kering	15%	15	16	16	16
			20%	15	16	15	16
			25%	17	15	16	15
			30%	15	15	15	14
			35%	13	13	12	12
		Larutan Akar Basah	15%	18	13	14	13
			20%	13	14	15	15
			25%	13	13	14	14
			30%	11	12	13	12
			35%	11	11	12	11
		Kontrol	-	15	15	17	18
6	20-09-2021	Larutan Akar Kering	15%	16	17	17	18
			20%	16	16	17	17
			25%	19	16	17	17
			30%	15	15	15	14
			35%	14	13	12	13
		Larutan Akar Basah	15%	19	14	14	14
			20%	14	14	15	15
			25%	14	13	15	14
			30%	12	12	13	12
			35%	11	12	12	11
		Kontrol	-	17	17	19	20
7	27-09-2021	Larutan Akar Kering	15%	17	17	17	18
			20%	16	17	17	17
			25%	19	16	18	17

			30%	15	15	15	15
			35%	14	13	13	13
		Larutan Akar Basah	15%	19	14	15	14
			20%	15	14	15	15
			25%	14	13	15	14
			30%	12	12	13	12
			35%	11	12	12	11
		Kontrol	-	19	19	22	21

Lampiran 3 . Uji Statistik di SPSS Dalam Menghitung Pengaruh Ekstrak Akar Alang-alang Terhadap Pertumbuhan Tinggi batang Tanaman Bandotan

Tinggi batang tanaman

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Tinggi Tinggi batang tanaman
N		70
Normal Parameters ^{a,b}	Mean	11.5136
	Std. Deviation	1.59810
Most Extreme Differences	Absolute	.102
	Positive	.102
	Negative	-.061
Test Statistic		.102
Asymp. Sig. (2-tailed)		.066 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Jenis Larutan	1.00	Larutan Akar Kering	35
	2.00	Larutan Akar Basah	35
Konsentrasi	1.00	15%	14
	2.00	20%	14
	3.00	25%	14
	4.00	30%	14
	5.00	35%	14

Levene's Test of Equality of Error Variances^a

Dependent Variable: Tinggi Tinggi batang tanaman

F	df1	df2	Sig.
6.739	9	60	.000

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

a. Design: Intercept + Jenis_Larutan + Konsentrasi + Jenis_Larutan * Konsentrasi

Tests of Between-Subjects Effects

Dependent Variable: Tinggi Tinggi batang tanaman

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	88.556 ^a	9	9.840	6.734	.000
Intercept	9279.363	1	9279.363	6351.041	.000
Jenis_Larutan	25.925	1	25.925	17.744	.000
Konsentrasi	59.151	4	14.788	10.121	.000
Jenis_Larutan * Konsentrasi	3.480	4	.870	.595	.667
Error	87.665	60	1.461		
Total	9455.584	70			
Corrected Total	176.221	69			

a. R Squared = .503 (Adjusted R Squared = .428)

Post Hoc Tests Konsentrasi

Multiple Comparisons

Dependent Variable: Tinggi Tinggi batang tanaman

Tukey HSD

(I) Konsentrasi	(J) Konsentrasi	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
15%	20%	.6250	.45686	.650	-.6599	1.9099
	25%	1.0321	.45686	.173	-.2528	2.3171
	30%	1.4679*	.45686	.017	.1829	2.7528
	35%	2.7357*	.45686	.000	1.4508	4.0206
20%	15%	-.6250	.45686	.650	-1.9099	.6599
	25%	.4071	.45686	.899	-.8778	1.6921
	30%	.8429	.45686	.358	-.4421	2.1278
	35%	2.1107*	.45686	.000	.8258	3.3956
25%	15%	-1.0321	.45686	.173	-2.3171	.2528
	20%	-.4071	.45686	.899	-1.6921	.8778
	30%	.4357	.45686	.874	-.8492	1.7206
	35%	1.7036*	.45686	.004	.4187	2.9885
30%	15%	-1.4679*	.45686	.017	-2.7528	-.1829
	20%	-.8429	.45686	.358	-2.1278	.4421
	25%	-.4357	.45686	.874	-1.7206	.8492
	35%	1.2679	.45686	.055	-.0171	2.5528
35%	15%	-2.7357*	.45686	.000	-4.0206	-1.4508
	20%	-2.1107*	.45686	.000	-3.3956	-.8258
	25%	-1.7036*	.45686	.004	-2.9885	-.4187
	30%	-1.2679	.45686	.055	-2.5528	.0171

Based on observed means.

The error term is Mean Square(Error) = 1.461.

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

Homogeneous Subsets

Tinggi Tinggi batang tanaman

Tukey HSD^{a,b}

Konsentrasi	N	Subset		
		1	2	3
35%	14	9.9500		
30%	14	11.2179	11.2179	
25%	14		11.6536	11.6536
20%	14		12.0607	12.0607
15%	14			12.6857
Sig.		.055	.358	.173

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1.461.

a. Uses Harmonic Mean Sample Size = 14.000.

b. Alpha = ,05.

Lampiran 4. Uji Statistik di SPSS Dalam Menghitung Pengaruh Ekstrak Akar Alang-alang Terhadap Pertumbuhan Jumlah Daun Tanaman Bandotan

Jumlah Daun

One-Sample Kolmogorov-Smirnov Test

		Jumlah Daun
N		70
Normal Parameters ^{a,b}	Mean	12.16
	Std. Deviation	2.908
Most Extreme Differences	Absolute	.091
	Positive	.091
	Negative	-.079
Test Statistic		.091
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

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

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Jenis Larutan	1.00	Larutan Akar Kering	35
	2.00	Larutan Akar Basah	35
Konsentrasi	1.00	15%	14
	2.00	20%	14
	3.00	25%	14
	4.00	30%	14
	5.00	35%	14

Levene's Test of Equality of Error Variances^a

Dependent Variable: Jumlah Daun

F	df1	df2	Sig.
2.104	9	60	.043

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

a. Design: Intercept + Jenis_Larutan + Konsentrasi + Jenis_Larutan * Konsentrasi

Tests of Between-Subjects Effects

Dependent Variable: Jumlah Daun

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	82.897 ^a	9	9.211	1.104	.374
Intercept	10351.808	1	10351.808	1241.192	.000
Jenis_Larutan	34.651	1	34.651	4.155	.046
Konsentrasi	46.518	4	11.629	1.394	.247
Jenis_Larutan * Konsentrasi	1.729	4	.432	.052	.995
Error	500.413	60	8.340		
Total	10935.118	70			
Corrected Total	583.310	69			

a. R Squared = .142 (Adjusted R Squared = .013)

Lampiran 5. Gambar Hasil Pengamatan Dalam Penelitian



Gambar 1. Tanaman bandotan 1 hari setelah ditanam



Gambar 2. Tanaman bandotan 7 hari setelah ditanam



Gambar 3. Tumbuhan Alang-alang



Gambar 4. Akar alang-alang



Gambar 5. Akar alang-alang setelah dibersihkan dan disortir



Gambar 6. Akar alang-alang dijemur untuk larutan bubuk



Gambar 7. Akar Alang segar diblender



Gambar 8. Akar alang-alang kering diblender



Gambar 9. Bubuk akar alang-alang setelah diblender



Gambar 10. Stok Larutan Bubuk akar alang-alang



Gambar 11. Stok larutan segar akar alang-alang



Gambar 12. 200 ml sampel pada konsentrasi 20 %



Gambar 13. Konsentrasi 20 % setelah ditambah pelarut air 800



Gambar 14. Pembersihan dan pengemburan