

LAMPIRAN



Lampiran 01 Hasil Analisis Data Statistik Deskriptif

Tabel 1.1 Intensitas Serangan Penyakit

Report							
Intensitas Serangan							
Perlakuan	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	% of Total N
Kontrol	48.4000	5	7.63544	3.41467	37.00	56.00	14.3%
A1 Dosis 10 gram	4.4000	5	.89443	.40000	4.00	6.00	14.3%
A2 Dosis 20 gram	3.6000	5	2.07364	.92736	.00	5.00	14.3%
A3 Dosis 30 gram	1.6000	5	.89443	.40000	.00	2.00	14.3%
B1 Dosis 10 gram	6.6000	5	3.20936	1.43527	2.00	11.00	14.3%
B2 Dosis 20 gram	6.4000	5	1.34164	.60000	5.00	8.00	14.3%
B3 Dosis 30 gram	4.4000	5	.89443	.40000	4.00	6.00	14.3%
Total	10.7714	35	15.95414	2.69674	.00	56.00	100.0%

Tabel 1.2 Pertumbuhan Tinggi Tanaman Cabai Merah

Report							
Tinggi Tanaman							
Perlakuan	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	% of Total N
Kontrol	25.6000	5	1.81659	.81240	24.00	28.00	14.3%
A1 Dosis 10 gram	26.2000	5	.83666	.37417	25.00	27.00	14.3%
A2 Dosis 20 gram	26.2000	5	.83666	.37417	25.00	27.00	14.3%
A3 Dosis 30 gram	27.6000	5	1.14018	.50990	26.00	29.00	14.3%
B1 Dosis 10 gram	26.2000	5	.83666	.37417	25.00	27.00	14.3%
B2 Dosis 20 gram	27.4000	5	1.14018	.50990	26.00	29.00	14.3%
B3 Dosis 30 gram	31.8000	5	15.78607	7.05975	24.00	60.00	14.3%
Total	27.2857	35	5.84894	.98865	24.00	60.00	100.0%

Tabel 1.3 Jumlah Daun Tanaman Cabai Merah

Report							
Jumlah Daun							
Perlakuan	Mean	N	Std. Deviation	Std. Error of Mean	Minimum	Maximum	% of Total N
Kontrol	10.4000	5	1.14018	.50990	9.00	12.00	14.3%
A1 Dosis 10 gram	11.2000	5	1.30384	.58310	9.00	12.00	14.3%
A2 Dosis 20 gram	22.4000	5	6.94982	3.10805	17.00	33.00	14.3%
A3 Dosis 30 gram	35.8000	5	5.54076	2.47790	29.00	44.00	14.3%
B1 Dosis 10 gram	11.4000	5	.54772	.24495	11.00	12.00	14.3%
B2 Dosis 20 gram	12.2000	5	7.22496	3.23110	8.00	25.00	14.3%
B3 Dosis 30 gram	32.2000	5	4.81664	2.15407	27.00	40.00	14.3%
Total	19.3714	35	11.06155	1.86974	8.00	44.00	100.0%

Lampiran 02. Uji Normalitas

Tabel 2.1 Intensitas Serangan Penyakit

Tests of Normality							
Perlakuan		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
IntensitasSerangan	Kontrol	.473	5	.001	.552	5	.000
	A1 Dosis 10 Gram	.300	5	.161	.833	5	.146
	A2 Dosis 20 Gram	.180	5	.200 [*]	.952	5	.754
	A3 Dosis 30 Gram	.180	5	.200 [*]	.952	5	.754
	B1 Dosis 10 Gram	.246	5	.200 [*]	.956	5	.777
	B2 Dosis 20 Gram	.367	5	.026	.684	5	.006
	B3 Dosis 30 Gram	.224	5	.200 [*]	.842	5	.171

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

a. Lilliefors Significance Correction

Tabel 2.2 Pertumbuhan Tinggi Tanaman Cabai Merah

Tests of Normality							
Perlakuan		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
TinggiTanaman	Kontrol	.473	5	.001	.552	5	.000
	A1 Dosis 10 gram	.300	5	.161	.883	5	.325
	A2 Dosis 20 gram	.246	5	.200 [*]	.956	5	.777
	A3 Dosis 30 gram	.246	5	.200 [*]	.956	5	.777
	B1 Dosis 10 gram	.231	5	.200 [*]	.881	5	.314
	B2 Dosis 20 gram	.246	5	.200 [*]	.956	5	.777
	B3 Dosis 30 gram	.237	5	.200 [*]	.961	5	.814

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

a. Lilliefors Significance Correction

Tabel 2.3 Jumlah Daun Tanaman Cabai Merah

Tests of Normality							
Perlakuan		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Jumlah Daun	Kontrol	.439	5	.002	.626	5	.001
	A1 Dosis 10 gram	.304	5	.149	.817	5	.111
	A2 Dosis 20 gram	.264	5	.200 [*]	.786	5	.062
	A3 Dosis 30 gram	.317	5	.111	.808	5	.094
	B1 Dosis 10 gram	.348	5	.047	.779	5	.054
	B2 Dosis 20 gram	.348	5	.047	.779	5	.054
	B3 Dosis 30 gram	.186	5	.200 [*]	.943	5	.687

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

a. Lilliefors Significance Correction

Lampiran 03. Uji Homogenitas

Tabel 3.1 Intensitas Serangan Penyakit

Test of Homogeneity of Variances

IntensitasSerangan

Levene Statistic	df1	df2	Sig.
1.362	6	28	.264

Tabel 3.2 Pertumbuhan Tinggi Tanaman Cabai Merah

Test of Homogeneity of Variances

Tinggi Tanaman

Levene Statistic	df1	df2	Sig.
.902	6	28	.507

Tabel 3.3 Jumlah Daun Tanaman Cabai Merah

Test of Homogeneity of Variances

Jumlah Daun

Levene Statistic	df1	df2	Sig.
2.261	6	28	.066

Lampiran 04. Uji Hipotesis

Tabel 4.1 Intensitas Serangan Penyakit

Ranks

	Perlakuan	N	Mean Rank
Intensitas Penyakit	Kontrol	5	33.00
	A1 Dosis 10 Gram	5	12.60
	A2 Dosis 20 Gram	5	11.60
	A3 Dosis 30 Gram	5	6.70
	B1 Dosis 10 Gram	5	23.30
	B2 Dosis 20 Gram	5	19.40
	B3 Dosis 30 Gram	5	19.40
	Total	35	

Test Statistics^{a,b}

	Intensitas Penyakit
Chi-Square	22.132
df	6
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable:
Perlakuan

Tabel 4.2 Pertumbuhan Tinggi Tanaman Cabai Merah

Ranks

	Perlakuan	N	Mean Rank
Tinggi Tanaman	Kontrol	5	3.00
	A1 Dosis 10 Gram	5	15.80
	A2 Dosis 20 Gram	5	15.80
	A3 Dosis 30 Gram	5	26.20
	B1 Dosis 10 Gram	5	15.80
	B2 Dosis 20 Gram	5	24.70
	B3 Dosis 30 Gram	5	24.70
	Total	35	

Test Statistics^{a,b}

	Tinggi Tanaman
Chi-Square	19.909
df	6
Asymp. Sig.	.003

a. Kruskal Wallis Test

b. Grouping Variable:
Perlakuan

Tabel 4.3 Jumlah Daun Tanaman Cabai Merah

Ranks

Perlakuan		N	Mean Rank
Jumlah Daun	Kontrol	5	3.00
	A1 Dosis 10 Gram	5	10.50
	A2 Dosis 20 Gram	5	20.10
	A3 Dosis 30 Gram	5	31.40
	B1 Dosis 10 Gram	5	10.50
	B2 Dosis 20 Gram	5	21.80
	B3 Dosis 30 Gram	5	28.70
	Total	35	

Test Statistics^{a,b}

	Jumlah Daun
Chi-Square	31.212
df	6
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable:
Perlakuan

Lampiran 05. Uji Lanjut *Mann-Whitney*

Tabel 5.1 Hasil Uji *Mann-Whitney* Intensitas Serangan

Ranks

Perlakuan		N	Mean Rank	Sum of Ranks
Intensitas Penyakit	Kontrol	5	8.00	40.00
	A1 Dosis 10 Gram	5	3.00	15.00
	Total	10		

Test Statistics^a

	Intensitas Penyakit
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.627
Asymp. Sig. (2-tailed)	.009
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Intensitas Penyakit Kontrol	5	8.00	40.00
A2 Dosis 20 Gram	5	3.00	15.00
Total	10		

Test Statistics^a

	Intensitas Penyakit
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.635
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Intensitas Penyakit Kontrol	5	8.00	40.00
A3 Dosis 30 Gram	5	3.00	15.00
Total	10		

Test Statistics^a

	Intensitas Penyakit
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.668
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Intensitas Penyakit Kontrol	5	8.00	40.00
B1 Dosis 10 Gram	5	3.00	15.00
Total	10		

Test Statistics^a

	Intensitas Penyakit
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.635
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Intensitas Penyakit Kontrol	5	8.00	40.00
B2 Dosis 20 Gram	5	3.00	15.00
Total	10		

Test Statistics^a

	Intensitas Penyakit
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.643
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Intensitas Penyakit Kontrol	5	8.00	40.00
B3 Dosis 30 Gram	5	3.00	15.00
Total	10		

Test Statistics^a

	Intensitas Penyakit
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.643
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Tabel 5.2 Hasil Uji *Mann-Whitney* Tinggi Tanaman Cabai Merah

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Tinggi Tanaman Kontrol	5	3.00	15.00
A1 Dosis 10 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Tinggi Tanaman
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.712
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Tinggi Tanaman Kontrol	5	3.00	15.00
A2 Dosis 20 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Tinggi Tanaman
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.712
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Tinggi Tanaman Kontrol	5	3.00	15.00
A3 Dosis 30 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Tinggi Tanaman
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.703
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Tinggi Tanaman Kontrol	5	3.00	15.00
B1 Dosis 10 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Tinggi Tanaman
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.712
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Tinggi Tanaman Kontrol	5	3.00	15.00
B2 Dosis 20 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Tinggi Tanaman
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.703
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Tinggi Tanaman Kontrol	5	3.00	15.00
B3 Dosis 30 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Tinggi Tanaman
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.703
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Tabel 5.3 Hasil Uji *Mann-Whitney* Jumlah Daun Tanaman Cabai Merah

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Jumlah Daun Kontrol	5	3.00	15.00
A1 Dosis 10 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Jumlah Daun
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.677
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Jumlah Daun Kontrol	5	3.00	15.00
A2 Dosis 20 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Jumlah Daun
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.660
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Jumlah Daun Kontrol	5	3.00	15.00
A3 Dosis 30 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Jumlah Daun
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.643
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Jumlah Daun Kontrol	5	3.00	15.00
B1 Dosis 10 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Jumlah Daun
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.677
Asymp. Sig. (2-tailed)	.007
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Jumlah Daun Kontrol	5	3.00	15.00
B2 Dosis 20 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Jumlah Daun
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.652
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Ranks

Perlakuan	N	Mean Rank	Sum of Ranks
Jumlah Daun Kontrol	5	3.00	15.00
B3 Dosis 30 Gram	5	8.00	40.00
Total	10		

Test Statistics^a

	Jumlah Daun
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.643
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Perlakuan

b. Not corrected for ties.

Lampiran 06. Dokumentasi Penelitian

Tabel 6.1 Kegiatan Penelitian



Tanaman cabai yang terserang penyakit layu *Fusarium*



Persiapan Media Tanam



Pengaplikasian biofungisida



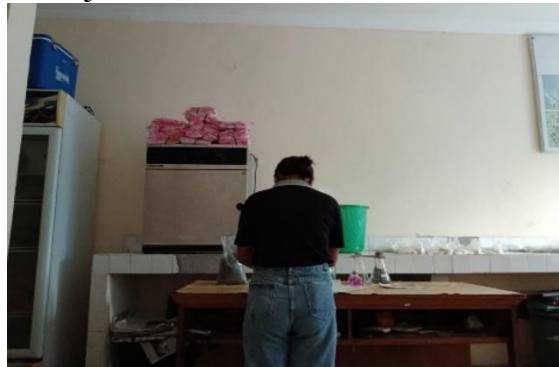
Pemindahan bibit tanaman cabai



Isolat jamur *F. oxysporum*



Isolat jamur *T. harzianum*



Isolat jamur *T. koningii*

Proses Penimbangan Biofugisida



Pengukuran Tinggi Tanaman



Tabel 6.2 Keparahan Intensitas Serangan Penyakit Layu *Fusarium*



Kontrol



A1(Dosis 10 gram)



A2(Dosis 20 gram)



A3(Dosis 30 gram)



B1(Dosis 10 gram)

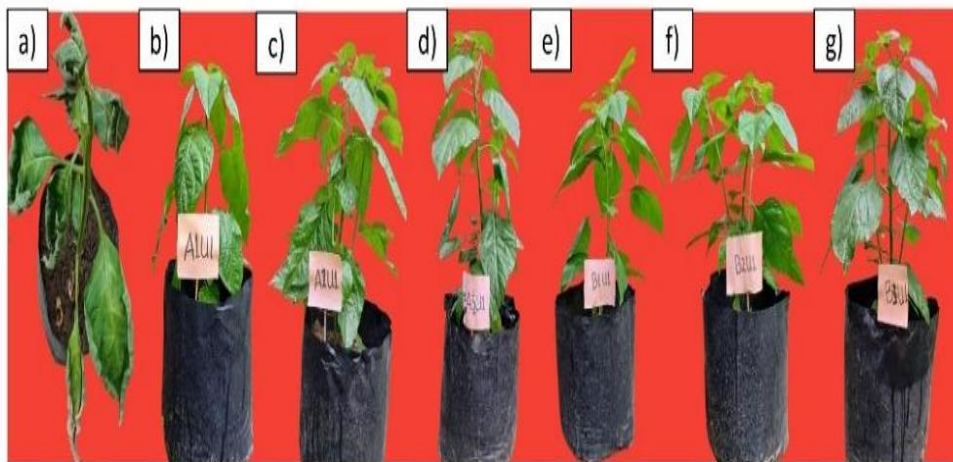


B2(Dosis 20 gram)



B3(Dosis 30 gram)

6.3 Pertumbuhan Vegetatif Tanaman Cabai Merah



RIWAYAT HIDUP

Yuliana Ivantri Sadin lahir di Manggarai, Flores pada tanggal 07 Juli 2002. Penulis lahir dari pasangan suami istri, almarhum (Bapak Yosep Sadin) dan Ibu Theresia



Erna Mutiara. Penulis berkebangsaan Indonesia dan beragama katolik. Kini penulis beralamat di jalan Bisma Barat No.19a, Lingkungan Banjar Tegal, Singaraja-Buleleng, Provinsi Bali. Penulis menyelesaikan pendidikan dasar di SD Inpres Barang dan lulus pada tahun 2015. Kemudian penulis melanjutkan di SMP Negeri 5 Cibal dan

lulus pada tahun 2018. Pada tahun 2021, penulis lulus dari SMA Negeri 1 Cibal jurusan IPA dan melanjutkan ke Program Studi Biologi di Universitas Pendidikan Ganesha, mulai tahun 2021 sampai dengan penulisan skripsi ini, penulis masih terdaftar sebagai mahasiswa Program Studi S1 Biologi di Universitas Pendidikan Ganesha. Penulis telah menyelesaikan skripsi yang berjudul " Efektivitas Biofungisida Jamur *Trichoderma harzianum* dan *Trichoderma koningii* Terhadap Penyakit Layu *Fusarium* dan Pertumbuhan Vegetatif Pada Tanaman Cabai Merah (*Capsicum annum* L)".

