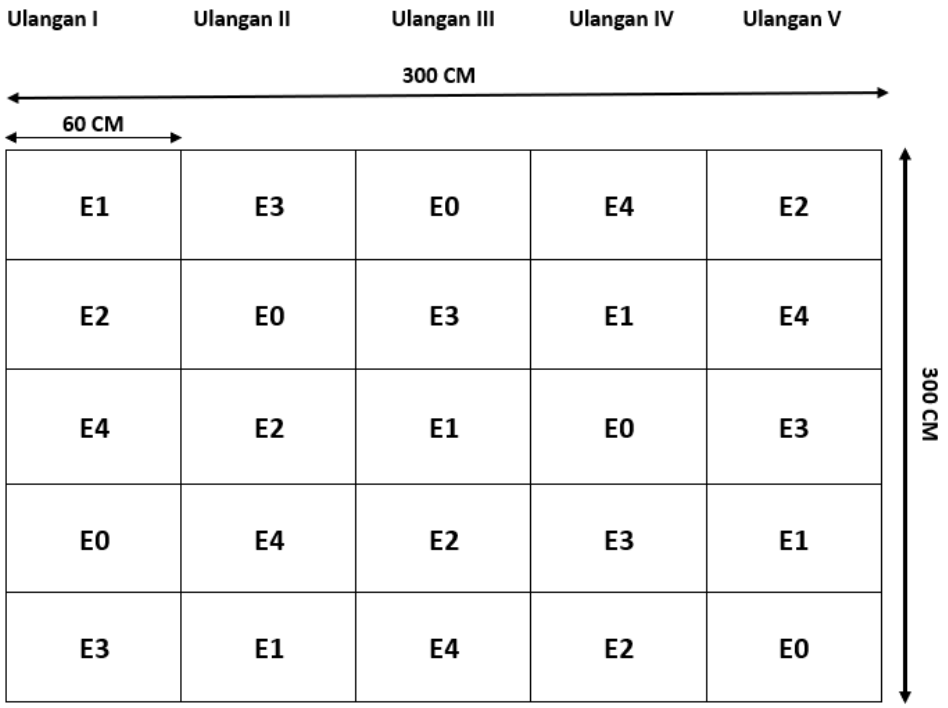
LAMPIRAN

Lampiran 1. Bagan Penelitian



Keterangan: Susunan E0-E4 di atas berdasarkan pengambilan dadu acak.

Lahan : 300 cm x 300 cm

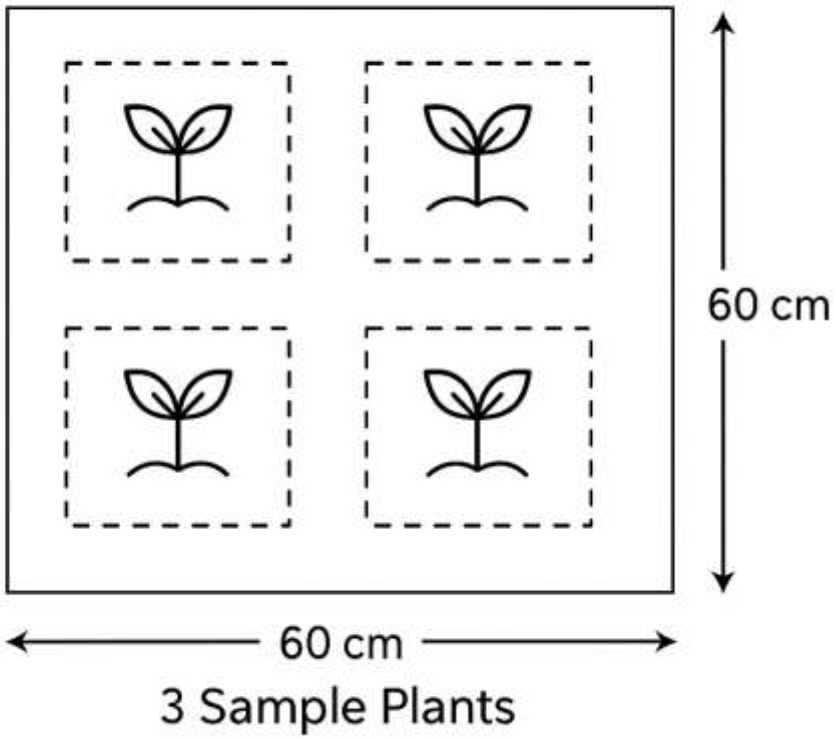
Ulangan (Blok) : Kolom vertikal (I, II, III, IV, V). Setiap blok berukuran 300 cm x 60 cm.

Plot : Kotak di dalam setiap ulangan. Setiap plot berisi 4 *polybag*.

Lampiran 2. Bagan Tanaman Sampel

Rancang Acak Layout and Sample Diagram

Level	Treatment
E0	Control (no treatment)
E1	100 ml/plot
E2	200 ml/plot
E3	300 ml/plot
E4	400 ml/plot



Lampiran 3. Deskripsi Bawang Merah Varietas Bima Brebes

Asal	: lokal Brebes
Umur	: - mulai berbunga 50 hari
Tinggi tanaman	: 34,5 cm (25-44 cm)
Kemampuan berbunga (alami)	: agak sukar
Banyak anakan	: 7 – 12 umbi per rumpun
Bentuk daun	: silindris berlubang
Warna daun	: hijau
Banyak daun	: 14 – 50 helai
Bentuk bunga	: seperti payung
Warna bunga	: putih
Banyak buah/tangkai	: 60 – 100 (83)
Banyak bunga/tangkai	: 120 – 160 (143)
Banyak tangkai bunga/rumpun	: 2-4
Bentuk biji	: bulat, gepeng, berkeriput
Warna biji	: hitam
Bentuk biji	: lonjong bercincin kecil pada leher cakram
Warna umbi	: merah muda
Produksi umbi	: 9,9 ton/ha umbi kering
Susut bobot umbi (basah-kering)	: 21,5%
Ketahanan terhadap penyakit	: cukup tahan terhadap busuk umbi (*Botrytis allii*)
Kepekaan terhadap penyakit	: peka terhadap busuk ujung daun (*Phytophtora porri*)
Keterangan	: baik untuk dataran rendah
Peneliti	: Hendro Sunarjono, Darliah dan Nasran Horizon Arbain

Lampiran 4. Rata-rata Tinggi Tanaman Bawang (cm) Umur 14Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	9,1	10,5	8,0	11,3	10,8	49,7	9,9
E1	12,3	10,2	9,8	11,6	11,4	55,3	11,1
E2	15,0	15,7	14,2	13,7	10,5	69,1	13,8
E3	9,6	8,6	9,1	9,4	11,0	47,7	9,5
E4	8,7	7,5	9,3	9,5	8,8	43,8	8,8
Grand Total	54,7	52,5	50,4	55,5	52,5	265,6	53,1

ANOVA

Dependent Variable: Tinggi_14hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	80,875[a]	8	10,109	5,365	,002
Intercept	2821,734	1	2821,734	1497,418	<,001
Kelompok	3,266	4	,816	,433	,783
Perlakuan	77,610	4	19,402	10,296	<,001
Error	30,150	16	1,884		
Total	2932,760	25			
Corrected Total	111,026	24			

a. R Squared = ,728 (Adjusted R Squared = ,593)

Tinggi_14hst

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2	Subset 3
E4	5	8,7600		
E3	5	9,5400	9,5400	
E0	5	9,9400	9,9400	
E1	5		11,0600	
E2	5			13,8200
Sig.		,216	,115	1,000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 1,884.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 5. Rata-rata Tinggi Tanaman Bawang (cm) Umur 28Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	19,7	19,3	13,8	16,7	19,1	88,6	17,7
E1	27,8	18,1	17,3	21,2	22,3	106,7	21,3
E2	22,8	31,5	20,1	28,6	21,3	124,3	24,9
E3	19,8	19,8	24,1	15,3	17,1	96,1	19,2
E4	16,3	18,4	16,3	16,3	19,8	87,1	17,4
Grand Total	106,4	107,1	91,6	98,1	99,6	502,8	100,6

ANOVA

Dependent Variable: Tinggi_28hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	221,905[a]	8	27,738	2,076	,102
Intercept	10112,314	1	10112,314	756,833	<,001
Kelompok	32,826	4	8,207	,614	,659
Perlakuan	189,078	4	47,270	3,538	,030
Error	213,782	16	13,361		
Total	10548,000	25			
Corrected Total	435,686	24			

a. R Squared = ,509 (Adjusted R Squared = ,264)

Tinggi_28hst

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2
E4	5	17,4200	
E0	5	17,7200	
E3	5	19,2200	
E1	5	21,3400	21,3400
E2	5		24,8600
Sig.		,137	,147

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 13,361.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 6. Rata-rata Tinggi Tanaman Bawang (cm) Umur 42Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	30,5	25,1	28,3	25,3	26,2	135,4	27,08
E1	32,2	34,3	29,4	33,5	27,9	157,3	31,46
E2	35,4	36,1	31,7	38,3	31,5	173,0	34,6
E3	30,1	35	36,4	30	31,4	162,9	32,58
E4	35,3	39	28,6	35,6	27,6	166,1	33,22
Grand Total	163,5	169,5	154,4	162,7	144,6	794,7	158,94

ANOVA

Dependent Variable: Tinggi_42hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	238,829[a]	8	29,854	3,369	,018
Intercept	25261,924	1	25261,924	2850,879	<,001
Kelompok	74,538	4	18,635	2,103	,128
Perlakuan	164,290	4	41,073	4,635	,011
Error	141,778	16	8,861		
Total	25642,530	25			
Corrected Total	380,606	24			

a. R Squared = ,627 (Adjusted R Squared = ,441)

Tinggi_42hst

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2
E0	5	27,0800	
E1	5		31,4600
E3	5		32,5800
E4	5		33,2200
E2	5		34,6000
Sig.		1,000	,143

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 8,861.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 7. Rata-rata Tinggi Tanaman Bawang (cm) Umur 56Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	42,8	34,7	40,7	41,9	39,3	199,4	39,88
E1	37,6	40,9	36,6	43,1	33,5	191,7	38,34
E2	42,7	38,3	47,4	45,1	38,7	212,2	42,44
E3	38,3	40,8	41,1	42,6	40,3	203,1	40,62
E4	43,6	40,6	38,7	36,9	37,5	197,3	39,46
Grand Total	205	195,3	204,5	209,6	189,3	1.003,7	200,74

ANOVA

Dependent Variable: Tinggi_56hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	100,701[a]	8	12,588	1,395	,271
Intercept	40296,548	1	40296,548	4466,179	<,001
Kelompok	54,250	4	13,563	1,503	,248
Perlakuan	46,450	4	11,613	1,287	,316
Error	144,362	16	9,023		
Total	40541,610	25			
Corrected Total	245,062	24			

a. R Squared = ,411 (Adjusted R Squared = ,116)

Tinggi_56hst

Duncan[a,b]

Perlakuan	N	Subset 1
E1	5	38,3400
E4	5	39,4600
E0	5	39,8800
E3	5	40,6200
E2	5	42,4400
Sig.		,068

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 9,023.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 8. Rata-rata Jumlah Daun Tanaman Bawang Umur 14Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	7,3	8,3	7	9	10,7	42,3	8,46
E1	9	10	8,3	9	8,7	45	9
E2	9,3	8	10,3	8,3	9,3	45,2	9,04
E3	7,3	10	10,7	9	9,3	46,3	9,26
E4	7,3	9,3	10,3	7,7	9	43,6	8,72
Grand Total	40,2	45,6	46,6	43	47	222,4	44,48

Tests of Between-Subjects Effects

Dependent Variable: Daun_14hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8,447[a]	8	1,056	,857	,570
Intercept	1978,470	1	1978,470	1605,054	<,001
Perlakuan	1,926	4	,481	,391	,812
Kelompok	6,522	4	1,630	1,323	,304
Error	19,722	16	1,233		
Total	2006,640	25			
Corrected Total	28,170	24			

a. R Squared = ,300 (Adjusted R Squared = -,050)

Daun_14hst

Duncan[a,b]

Perlakuan	N	Subset 1
E0	5	8,4600
E4	5	8,7200
E1	5	9,0000
E2	5	9,0400
E3	5	9,2600
Sig.		,318

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 1,233.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 9. Rata-rata Jumlah Daun Tanaman Bawang Umur 28Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	10,7	11,3	10,3	12,7	14,7	59,7	11,94
E1	11	13	11,7	12,3	12	60	12
E2	12,3	10,7	14	13,7	15	65,7	13,14
E3	17,3	13,3	14	18	12,3	74,9	14,98
E4	15,7	11,7	12,3	14,3	11,3	65,3	13,06
Grand Total	67	60	62,3	71	65,3	325,6	65,12

Tests of Between-Subjects Effects

Dependent Variable: Daun_28hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	44,783[a]	8	5,598	1,749	,162
Intercept	4240,614	1	4240,614	1324,612	<,001
Perlakuan	30,322	4	7,580	2,368	,096
Kelompok	14,462	4	3,615	1,129	,378
Error	51,222	16	3,201		
Total	4336,620	25			
Corrected Total	96,006	24			

a. R Squared = ,466 (Adjusted R Squared = ,200)

Daun_28hst

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2
E0	5	11,9400	
E1	5	12,0000	
E4	5	13,0600	13,0600
E2	5	13,1400	13,1400
E3	5		14,9800
Sig.		,344	,126

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 3,201.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 10. Rata-rata Jumlah Daun Tanaman Bawang Umur 42Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	26,3	19	25	25,3	23,7	119,3	23,86
E1	22,3	22	23,3	27,3	24,3	119,2	23,84
E2	30,3	13,7	25	23	23,3	115,3	23,06
E3	21,3	21	25,3	25,7	17,3	110,6	22,12
E4	20,3	23,3	20,7	23,7	21	109	21,8
Grand Total	120,5	99	119,3	125	109,6	573,4	114,68

Tests of Between-Subjects Effects

Dependent Variable: Daun_42hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	104,891[a]	8	13,111	1,261	,329
Intercept	13151,502	1	13151,502	1264,367	<,001
Perlakuan	18,214	4	4,553	,438	,780
Kelompok	86,678	4	21,669	2,083	,131
Error	166,426	16	10,402		
Total	13422,820	25			
Corrected Total	271,318	24			

a. R Squared = ,387 (Adjusted R Squared = ,080)

Daun_42hst

Duncan[a,b]

Perlakuan	N	Subset 1
E4	5	21,8000
E3	5	22,1200
E2	5	23,0600
E1	5	23,8400
E0	5	23,8600
Sig.		,375

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 10,402.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 11. Rata-rata Jumlah Daun Tanaman Bawang Umur 56Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	30,3	36,3	34,7	32,3	35,7	169,3	33,86
E1	28	39,7	32,7	39,7	30,7	170,8	34,16
E2	41,3	35,3	40,3	34,3	33,7	184,9	36,98
E3	39,3	38,3	33	34,3	35	179,9	35,98
E4	36,3	35	38,3	37,7	34,3	181,6	36,32
Grand Total	175,2	184,6	179	178,3	169,4	886,5	177,3

Tests of Between-Subjects Effects

Dependent Variable: Daun_56hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	62,652[a]	8	7,831	,611	,756
Intercept	31435,290	1	31435,290	2454,109	<,001
Perlakuan	37,852	4	9,463	,739	,579
Kelompok	24,800	4	6,200	,484	,747
Error	204,948	16	12,809		
Total	31702,890	25			
Corrected Total	267,600	24			

a. R Squared = ,234 (Adjusted R Squared = -,149)

Daun_56hst

Duncan[a,b]

Perlakuan	N	Subset 1
E0	5	33,8600
E1	5	34,1600
E3	5	35,9800
E4	5	36,3200
E2	5	36,9800
Sig.		,230

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 12,809.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 12. Rata-rata Jumlah Anakan Tanaman Bawang/plot Umur 14Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	2	2	2	1,7	2	9,7	1,94
E1	2	2	2	2	2	10	2
E2	1,3	2	1,3	2	2	8,6	1,72
E3	2	2	2	1,3	2	9,3	1,86
E4	1,7	1,7	2	2	2	9,4	1,88
Grand Total	9	9,7	9,3	9	10	47	9,4

ANOVA

Dependent Variable: Anakan_14hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	,376[a]	8	,047	,749	,650
Intercept	88,360	1	88,360	1408,127	<,001
Kelompok	,156	4	,039	,622	,654
Perlakuan	,220	4	,055	,876	,500
Error	1,004	16	,063		
Total	89,740	25			
Corrected Total	1,380	24			

a. R Squared = ,272 (Adjusted R Squared = -,091)

Anakan_14hst

Duncan[a,b]

Perlakuan	N	Subset 1
E2	5	1,7200
E3	5	1,8600
E4	5	1,8800
E0	5	1,9400
E1	5	2,0000
Sig.		,129

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = ,063.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 13. Rata-rata Jumlah Anakan Tanaman Bawang/plot Umur 28Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	3	3	3	3,3	3	15,3	3,06
E1	2,7	3	3	2,7	3	14,4	2,88
E2	2,7	2,7	2,7	3	3,3	14,4	2,88
E3	2,3	3	2,3	2,3	3	12,9	2,58
E4	3	3	2,7	3	3	14,7	2,94
Grand Total	13,7	14,7	13,7	14,3	15,3	71,7	14,34

ANOVA

Dependent Variable: Anakan_28hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1,001[a]	8	,125	2,656	,046
Intercept	205,636	1	205,636	4365,936	<,001
Kelompok	,374	4	,094	1,987	,145
Perlakuan	,626	4	,157	3,325	,037
Error	,754	16	,047		
Total	207,390	25			
Corrected Total	1,754	24			

a. R Squared = ,570 (Adjusted R Squared = ,356)

Anakan_28hst

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2
E3	5	2,5800	
E1	5	2,8800	2,8800
E2	5	2,8800	2,8800
E4	5		2,9400
E0	5		3,0600
Sig.		,054	,245

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = ,047.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 14. Rata-rata Jumlah Anakan Tanaman Bawang/plot Umur 42Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	4	4,3	7,3	6	7,3	28,9	5,78
E1	9,3	7,7	9,7	7,7	7	41,4	8,28
E2	8,7	5,3	6,3	8,3	8	36,6	7,32
E3	7,3	6	5,7	5	7,3	31,3	6,26
E4	4,3	7,3	6,3	5,3	7,3	30,5	6,1
Grand Total	33,6	30,6	35,3	32,3	36,9	168,7	33,74

ANOVA

Dependent Variable: Anakan_42hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	26,221[a]	8	3,278	1,754	,161
Intercept	1138,388	1	1138,388	609,138	<,001
Kelompok	4,874	4	1,219	,652	,634
Perlakuan	21,346	4	5,337	2,856	,058
Error	29,902	16	1,869		
Total	1194,510	25			
Corrected Total	56,122	24			

a. R Squared = ,467 (Adjusted R Squared = ,201)

Anakan_42hst

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2
E0	5	5,7800	
E4	5	6,1000	
E3	5	6,2600	
E2	5	7,3200	7,3200
E1	5		8,2800
Sig.		,120	,283

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 1,869.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 15. Rata-rata Jumlah Anakan Tanaman Bawang/plot Umur 56Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	7	6	10	9	10,7	42,7	8,54
E1	10,7	9,3	11	10,7	7	48,7	9,74
E2	11	7,3	8	10	9	45,3	9,06
E3	8,3	7,3	7,3	7,7	9	39,6	7,92
E4	6,3	9	8,7	7,3	9,7	41	8,2
Grand Total	43,3	38,9	45	44,7	45,4	217,3	43,46

ANOVA

Dependent Variable: Anakan_56hst

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	16,173[a]	8	2,022	,812	,602
Intercept	1888,772	1	1888,772	758,817	<,001
Kelompok	5,698	4	1,425	,572	,687
Perlakuan	10,474	4	2,619	1,052	,412
Error	39,826	16	2,489		
Total	1944,770	25			
Corrected Total	55,998	24			

a. R Squared = ,289 (Adjusted R Squared = -,067)

Anakan_56hst

Duncan[a,b]

Perlakuan	N	Subset 1
E3	5	7,9200
E4	5	8,2000
E0	5	8,5400
E2	5	9,0600
E1	5	9,7400
Sig.		,118

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 2,489.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 16. Bobot Basah Umbi (gram)/plot Umur 65Hst

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	158	159	161	159	159	796	159,2
E1	164	167	168	167	170	836	167,2
E2	154	160	154	158	155	781	156,2
E3	155	157	160	155	156	783	156,6
E4	158	154	156	158	160	786	157,2
TOTAL	3982						

Tests of Between-Subjects Effects

Dependent Variable: Bobot_Basah

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	433,680[a]	8	54,210	11,510	<,001
Intercept	634252,960	1	634252,960	134660,926	<,001
Kelompok	15,040	4	3,760	,798	,544
Perlakuan	418,640	4	104,660	22,221	<,001
Error	75,360	16	4,710		
Total	634762,000	25			
Corrected Total	509,040	24			

a. R Squared = ,852 (Adjusted R Squared = ,778)

Bobot_Basah

Duncan[a,b]

Perlakuan	N	Subset 1	Subset 2
E2	5	156,2000	
E3	5	156,6000	
E4	5	157,2000	
E0	5	159,2000	
E1	5		167,2000
Sig.		,060	1,000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 4,710.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 17. Bobot Kering (gram)/Plot Umur 65HST

Perlakuan	Ulangan					Jumlah	Rata-rata
	I	II	III	IV	V		
E0	109	110	111	111	110	551	110,2
E1	129	130	132	130	135	656	131,2
E2	111	112	116	115	110	564	112,8
E3	110	115	116	113	116	570	114
E4	114	118	116	113	118	579	115,8
TOTAL	2920						

Tests of Between-Subjects Effects

Dependent Variable: Bobot_Kering

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1679,120[a]	8	209,890	1,022	,459
Intercept	265019,040	1	265019,040	1290,478	<,001
Kelompok	1153,360	4	288,340	1,404	,277
Perlakuan	525,760	4	131,440	,640	,642
Error	3285,840	16	205,365		
Total	269984,000	25			
Corrected Total	4964,960	24			

a. R Squared = ,338 (Adjusted R Squared = ,007)

Bobot_Kering

Duncan[a,b]

Perlakuan	N	Subset 1
E0	5	95,0000
E3	5	101,4000
E1	5	103,8000
E2	5	106,6000
E4	5	108,0000
Sig.		,213

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 205,365.

a. Uses Harmonic Mean Sample Size = 5,000.

b. Alpha = 0,05.

Lampiran 18. Dokumentasi Penelitian

Dokumentasi Bibit Bawang Merah Var. Bima Brebes

Dok. Media tanam

Dokumentasi Pupuk Ekoenzim

Dok. Persiapan Media Tanam

Dok. Persiapan Benih

Dok. Penanaman dan pemindahan plot

Dok. Pengamatan Parameter Penelitian

Dok. Penyiraman

Dok. Pengamatan Terakhir 56HST

Dok. Tanaman Siap Panen 65HST

Dok. Panen

Dok. Pengamatan Bobot Basah dan Proses Pengeringan

Dok. Hasil Panen Setelah Pengeringan dan Penyiangan