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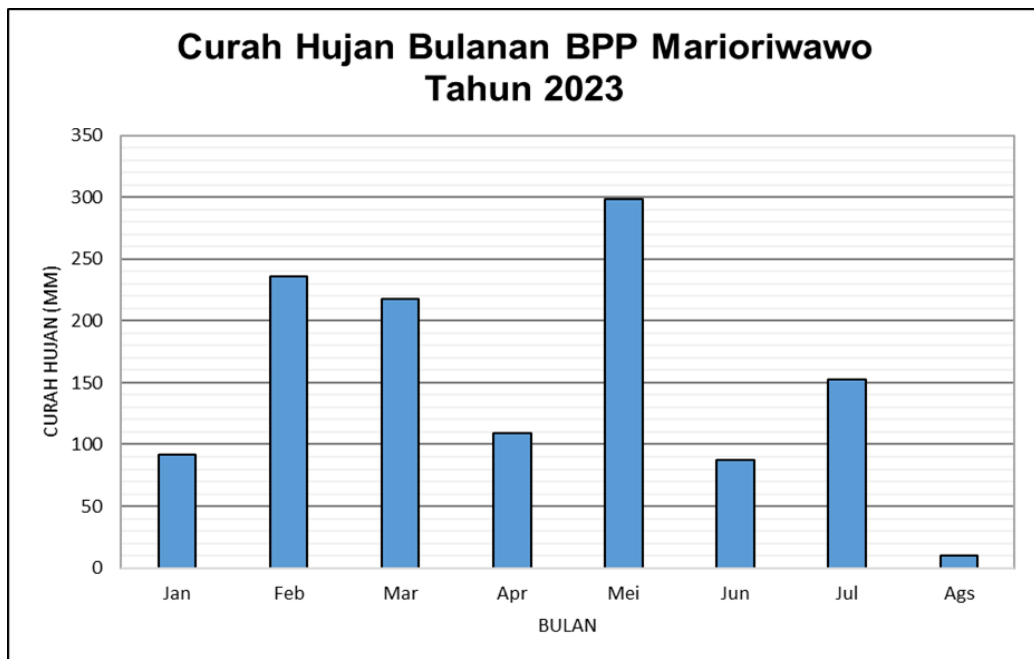
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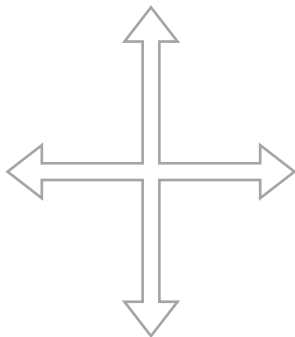


LAMPIRAN



Gambar Lampiran 1. Data curah hujan bulanan BPP Marioriwawo Tahun 2023



Kelompok			U
I	II	III	
b1m1	b1m1	b2m3	
b1m0	b1m3	b2m0	
b1m2	b1m2	b2m1	
b1m3	b1m0	b2m2	
b0m3	b2m0	b0m2	
b0m2	b2m2	b0m3	
b0m0	b2m1	b0m0	
b0m1	b2m3	b0m1	
b2m1	b0m1	b1m1	
b2m2	b0m3	b1m0	
b2m3	b0m0	b1m3	
b2m0	b0m2	b1m2	

Keterangan :

b₀ = Biochar sekam padi

b₁ = Biochar tempurung kelapa

b₂ = Biochar tongkol jagung

m₀ = Tanpa pemberian Actinomycetes

m₁ = Actinomycetes 30 mL L⁻¹

60 mL L⁻¹

90 mL L⁻¹

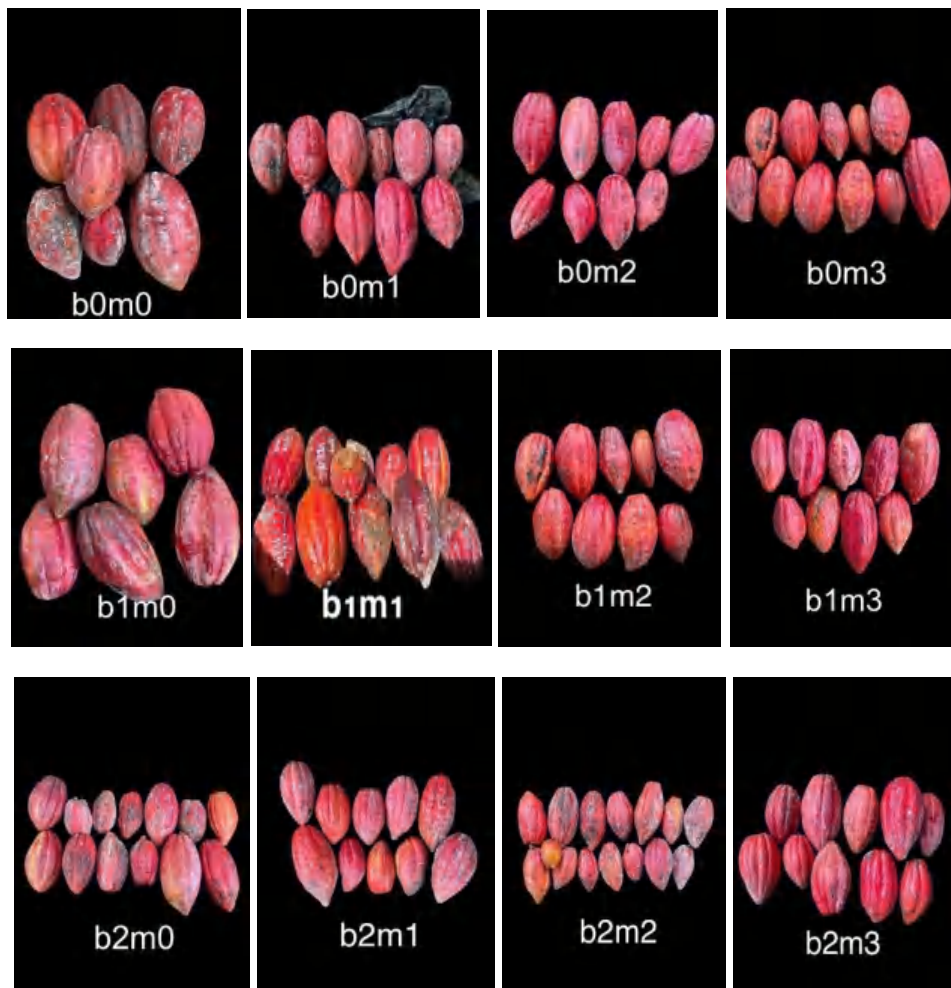


Denah percobaan di lapangan.



Gambar Lampiran 3. Proses Pelaksanaan Penelitian (a) Pemangkasan, (b) Pemilihan Tanaman, (c) Pembuatan Piringan, (d) Aplikasi Perlakuan (e) Pengamatan Fisiologis, (f) Pengamatan Klorofil daun, (g) Pemanenan (h) Pengeringan, (i) Penimbangan.





Gambar Lampiran 4. Buah kakao setelah dipanen pada berbagai kombinasi perlakuan





Gambar Lampiran 5. Stomata daun kakao pada berbagai kombinasi perlakuan



Tabel Lampiran 1. Hasil Analisis *Biochar*

Perlakuan	Bahan Organik				NHO ₃ : HClO ₄	
	Walkley & Black C (%)	Kjeldahl N (%)	C/N	CTK	P	K
Biochar Sekam Padi	17.79	0.78	23	52.15	0.05	0.11
Biochar Tempurung Kelapa	15.41	2.45	6	43.25	0.13	0.84
Biochar Tongkol Jagung	20.09	3.05	7	56.35	0.18	0.83

Sumber : Laboratorium Kimia dan Kesuburan Tanah Universitas Hasanuddin, 2023.

Tabel Lampiran 2. Hasil Analisis Tanah Sebelum Perlakuan

Perlakuan	pH	Bahan Organik			Bray Olsen P ₂ O ₅	Nilai Tukar Kation (cmol(+) kg ⁻¹)	
		walkley & Black C (%)	Kjeldahl N (%)	C/N		K	CTK
Komposit	6.25	1.79	0.12	15	10.39	0.33	21.66

Sumber : Laboratorium Kimia dan Kesuburan Tanah Universitas Hasanuddin, 2023.



Tabel Lampiran 3. Hasil Analisis Tanah setelah Perlakuan

Perlakuan	pH	Bahan Organik			Bray Olsen P ₂ O ₅	Nilai Tukar Kation (cmol (+) kg ⁻¹)	
		walkley & Black C (%)	Kjeldahl N (%)	C/N		K	KTK
Biochar Sekam Padi + Tanpa Actinomyces	6.28	2.34	0.10	24	9.68	0.29	16.42
Biochar Sekam Padi + Actinomyces 30 mL L ⁻¹	6.33	2.61	0.11	23	12.79	0.30	20.76
Biochar Sekam Padi + Actinomyces 60 mL L ⁻¹	6.29	2.63	0.17	15	11.71	0.27	21.27
Biochar Sekam Padi + Actinomyces 90 mL L ⁻¹	6.42	2.81	0.18	16	10.86	0.33	22.48
Biochar Tempurung Kelapa + Tanpa Actinomyces	6.48	2.45	0.20	12	11.06	0.18	22.07
Biochar Tempurung Kelapa + Actinomyces 30 mL L ⁻¹	6.62	2.87	0.22	13	12.99	0.36	20.60
Biochar Tempurung Kelapa + Actinomyces 60 mL L ⁻¹	6.55	2.99	0.24	13	15.54	0.41	23.35
Biochar Tempurung Kelapa + Actinomyces 90 mL L ⁻¹	6.69	3.18	0.24	13	14.72	0.46	24.19
Biochar Tongkol Jagung + Tanpa Actinomyces	6.57	2.77	0.26	11	12.75	0.32	21.75
Biochar Tongkol Jagung + Actinomyces 30 mL L ⁻¹	6.68	2.86	0.28	10	14.95	0.42	23.76
Biochar Tongkol Jagung + Actinomyces 60 mL L ⁻¹	6.62	3.20	0.31	10	16.87	0.36	25.90
Biochar Tongkol Jagung + Actinomyces 90 mL L ⁻¹	6.74	3.24	0.28	12	15.38	0.38	24.37

Sumber : Laboratorium Kimia dan Kesuburan Tanah Universitas Hasanuddin, 2023.



Tabel Lampiran 4a. Rata-Rata Kerapatan Stomata (stomata. mm⁻²)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	400.85	439.92	429.72	1270.49	423.50
b0m1	434.82	366.88	428.03	1229.72	409.91
b0m2	411.04	370.28	416.14	1197.45	399.15
b0m3	467.09	338.00	383.86	1188.96	396.32
Sub Total	1713.80	1515.07	1657.75	4886.62	
b1m0	373.67	416.14	390.66	1180.47	393.49
b1m1	399.15	404.25	380.47	1183.86	394.62
b1m2	400.85	409.34	458.60	1268.79	422.93
b1m3	438.22	431.42	424.63	1294.27	431.42
Sub Total	1611.89	1661.15	1654.35	4927.39	
b2m0	354.99	339.70	426.33	1121.02	373.67
b2m1	450.11	383.86	409.34	1243.31	414.44
b2m2	475.58	402.55	490.87	1369.00	456.33
b2m3	360.08	400.85	438.22	1199.15	399.72
Sub Total	1640.76	1526.96	1764.76	4932.48	
Total	4966.45	4703.18	5076.86	14746.50	409.62

Tabel Lampiran 4b. Sidik Ragam Kerapatan Stomata

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	6142.54	3071.27	1.88 ^{tn}	6.94	18.00
B (PU)	2	105.30	52.65	0.03 ^{tn}	6.94	18.00
Galat (B)	4	6535.37	1633.84			
M (AP)	3	4014.89	1338.30	1.33 ^{tn}	3.16	5.09
B x M	6	11517.20	1919.53	1.91 ^{tn}	2.66	4.01
Galat (M)	18	18054.49	1003.03			
Total	35	46369.79				

KK (B) = 9.87 %



pengaruh nyata.

Tabel Lampiran 5a. Rata-Rata Luas Buka-an Stomata (μm^2)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	60.71	55.33	56.52	172.56	57.52
b0m1	70.13	70.13	61.75	202.01	67.34
b0m2	76.50	63.61	64.89	205.00	68.33
b0m3	45.96	53.38	56.52	155.86	51.95
Sub Total	253.29	242.45	239.69	735.43	
b1m0	66.99	53.38	55.47	175.84	58.61
b1m1	75.36	72.22	52.33	199.91	66.64
b1m2	76.41	71.55	75.36	223.32	74.44
b1m3	70.13	71.03	70.57	211.73	70.58
Sub Total	288.88	268.18	253.74	810.80	
b2m0	59.24	64.89	58.61	182.75	60.92
b2m1	70.94	70.13	76.64	217.71	72.57
b2m2	76.22	80.36	82.69	239.27	79.76
b2m3	76.17	84.55	88.39	249.11	83.04
Sub Total	282.57	299.93	306.33	888.83	
Total	824.74	810.56	799.75	2435.05	67.64

Tabel Lampiran 5b. Sidik Ragam Luas Buka-an Stomata

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	26.18	13.09	0.23 ^{tn}	6.94	18.00
B (PU)	2	980.62	490.31	8.48 *	6.94	18.00
Galat (B)	4	231.27	57.82			
M (AP)	3	1074.00	358.00	11.80 **	3.16	5.09
B x M	6	764.68	127.45	4.20 **	2.66	4.01
Galat (M)	18	546.26	30.35			
Total	35	3623.01				

 $\sqrt{V(D)} = 11.24\%$


ruh nyata
 ruh sangat nyata
 pengaruh nyata.

Tabel Lampiran 6a. Rata-Rata Klorofil a ($\mu\text{mol m}^{-2}$)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	255.60	243.41	262.78	761.79	253.93
b0m1	253.84	258.55	248.84	761.23	253.74
b0m2	285.99	286.73	305.11	877.83	292.61
b0m3	302.48	288.09	297.70	888.27	296.09
Sub Total	1097.91	1076.78	1114.43	3289.12	
b1m0	237.71	288.37	273.50	799.58	266.53
b1m1	271.39	270.74	278.70	820.83	273.61
b1m2	271.43	276.61	350.31	898.36	299.45
b1m3	298.12	299.22	270.79	868.13	289.38
Sub Total	1078.65	1134.94	1173.31	3386.90	
b2m0	289.24	253.83	278.59	821.66	273.89
b2m1	312.73	296.12	293.16	902.00	300.67
b2m2	312.46	298.00	306.47	916.92	305.64
b2m3	272.78	366.99	329.95	969.73	323.24
Sub Total	1187.21	1214.93	1208.17	3610.32	
Total	3363.77	3426.66	3495.91	10286.34	285.73

Tabel Lampiran 6b. Sidik Ragam Klorofil a

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	728.04	364.02	2.12 ^{tn}	6.94	18.00
B (PU)	2	4517.78	2258.89	13.14 *	6.94	18.00
Galat (B)	4	687.79	171.95			
M (AP)	3	9095.87	3031.96	5.21 **	3.16	5.09
B x M	6	1606.05	267.67	0.46 ^{tn}	2.66	4.01
Galat (M)	18	10465.76	581.43			
Total	35	27101.29				



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Tabel Lampiran 7a. Rata-Rata Klorofil b ($\mu\text{mol m}^{-2}$)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	100.58	101.35	104.89	306.82	102.27
b0m1	125.70	105.06	121.08	351.84	117.28
b0m2	121.91	140.77	121.58	384.26	128.09
b0m3	131.40	134.02	130.00	395.42	131.81
Sub Total	479.59	481.20	477.55	1438.34	
b1m0	118.74	124.94	117.24	360.92	120.31
b1m1	144.27	122.16	137.53	403.96	134.65
b1m2	122.78	112.47	120.43	355.68	118.56
b1m3	112.08	132.94	145.55	390.57	130.19
Sub Total	497.87	492.51	520.75	1511.13	
b2m0	121.96	123.27	115.04	360.27	120.09
b2m1	134.78	125.63	130.60	391.01	130.34
b2m2	136.45	136.92	142.33	415.70	138.57
b2m3	134.42	124.56	152.89	411.86	137.29
Sub Total	527.61	510.38	540.86	1578.85	
Total	1505.07	1484.08	1539.16	4528.31	125.79

Tabel Lampiran 7b. Sidik Ragam Klorofil b

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	128.78	64.39	2.52 ^{tn}	6.94	18.00
B (PU)	2	822.96	411.48	16.10 *	6.94	18.00
Galat (B)	4	102.21	25.55			
M (AP)	3	1769.97	589.99	6.25 **	3.16	5.09
B x M	6	994.51	165.75	1.75 ^{tn}	2.66	4.01
Galat (M)	18	1700.21	94.46			
Total	35	5518.64				



Tabel Lampiran 8a. Rata-Rata Klorofil Total ($\mu\text{mol m}^{-2}$)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	334.21	327.59	357.01	1018.81	339.60
b0m1	339.71	355.62	385.61	1080.94	360.31
b0m2	391.12	361.59	425.33	1178.04	392.68
b0m3	321.76	370.67	403.86	1096.29	365.43
Sub Total	1386.80	1415.47	1571.81	4374.08	
b1m0	389.17	396.66	406.09	1191.92	397.31
b1m1	418.17	404.52	424.49	1247.18	415.73
b1m2	398.24	417.99	400.76	1216.99	405.66
b1m3	408.03	444.23	388.25	1240.51	413.50
Sub Total	1613.62	1663.40	1619.59	4896.61	
b2m0	399.31	411.74	399.53	1210.58	403.53
b2m1	449.62	405.10	400.76	1255.48	418.49
b2m2	454.47	455.57	468.08	1378.11	459.37
b2m3	421.04	407.86	440.34	1269.24	423.08
Sub Total	1724.44	1680.27	1708.71	5113.41	
Total	4724.85	4759.14	4900.11	14384.10	399.56

Tabel Lampiran 8b. Sidik Ragam Klorofil Total

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	1437.80	718.90	0.69 ^{tn}	6.94	18.00
B (PU)	2	24073.42	12036.71	11.63 *	6.94	18.00
Galat (B)	4	4139.90	1034.98			
M (AP)	3	6905.67	2301.89	7.10 **	3.16	5.09
B x M	6	3071.12	511.85	1.58 ^{tn}	2.66	4.01
Galat (M)	18	5838.43	324.36			
Total	35	45466.34				



Tabel Lampiran 9a. Rata-Rata Jumlah Dompok Bunga Terbentuk (Dompok)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	86.33	62.67	65.67	214.67	71.56
b0m1	95.00	90.33	100.00	285.33	95.11
b0m2	136.00	136.00	111.67	383.67	127.89
b0m3	127.33	91.67	106.67	325.67	108.56
Sub Total	444.66	380.67	384.01	1209.34	
b1m0	100.00	76.00	95.67	271.67	90.56
b1m1	115.00	91.00	101.33	307.33	102.44
b1m2	155.33	110.00	126.67	392.00	130.67
b1m3	160.00	116.00	127.00	403.00	134.33
Sub Total	530.33	393.00	450.67	1374.00	
b2m0	84.33	114.00	93.00	291.33	97.11
b2m1	126.33	100.00	127.00	353.33	117.78
b2m2	104.67	134.67	119.67	359.01	119.67
b2m3	156.67	132.00	121.33	410.00	136.67
Sub Total	472.01	480.67	461.00	1413.68	
Total	1447.00	1254.34	1295.68	3997.02	111.03

Tabel Lampiran 9b. Sidik Ragam Jumlah Dompok Bunga Terbentuk

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	1714.51	857.25	2.52 ^{tn}	6.94	18.00
B (PU)	2	1956.78	978.39	2.88 ^{tn}	6.94	18.00
Galat (B)	4	1360.38	340.10			
M (AP)	3	9968.09	3322.70	19.27 ^{**}	3.16	5.09
B x M	6	1559.31	259.88	1.51 ^{tn}	2.66	4.01
Galat (M)	18	3103.52	172.42			
Total	35	19662.58				



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Tabel Lampiran 10a. Rata-Rata Persentase Dompok Bunga Gugur (%)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	66.80	66.49	66.50	199.78	66.59
b0m1	67.02	72.70	68.67	208.38	69.46
bom2	41.42	43.14	52.54	137.09	45.70
b0m3	51.31	70.54	65.94	187.79	62.60
Sub Total	226.55	252.86	253.64	733.04	
b1m0	56.33	77.19	61.32	194.85	64.95
b1m1	45.80	54.58	69.74	170.11	56.70
b1m2	31.33	51.82	47.89	131.04	43.68
b1m3	32.92	46.26	47.51	126.69	42.23
Sub Total	166.38	229.85	226.46	622.69	
b2m0	66.01	46.49	57.35	169.85	56.62
b2m1	40.63	50.67	38.32	129.62	43.21
b2m2	42.67	38.86	39.27	120.81	40.27
b2m3	28.94	30.05	38.19	97.17	32.39
Sub Total	178.25	166.07	173.13	517.45	
Total	571.18	648.79	653.22	1873.19	52.03

Tabel Lampiran 10b. Sidik Ragam Persentase Dompok Bunga Gugur

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	354.86	177.43	1.69 ^{tn}	6.94	18.00
B (PU)	2	1937.08	968.54	9.22 *	6.94	18.00
Galat (B)	4	420.29	105.07			
M (AP)	3	2260.13	753.38	18.07 **	3.16	5.09
B x M	6	737.89	122.98	2.95 *	2.66	4.01
Galat (M)	18	750.41	41.69			
Total	35	6460.66				



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Tabel Lampiran 11a. Rata-Rata Jumlah Pentil Kakao Terbentuk (pentil)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	26.00	17.67	16.33	60.00	20.00
b0m1	33.67	22.00	22.33	78.00	26.00
bom2	21.67	27.00	18.00	66.67	22.22
b0m3	27.67	24.00	24.67	76.34	25.45
Sub Total	109.01	90.67	81.33	281.00	
b1m0	27.33	33.33	35.00	95.66	31.89
b1m1	29.00	23.00	23.33	75.33	25.11
b1m2	36.67	37.33	41.00	115.00	38.33
b1m3	21.00	23.67	32.67	77.34	25.78
Sub Total	114.00	117.33	132.00	363.33	
b2m0	27.00	13.00	20.67	60.67	20.22
b2m1	31.33	26.33	20.00	77.66	25.89
b2m2	45.33	49.67	34.33	129.33	43.11
b2m3	36.33	31.00	28.00	95.33	31.78
Sub Total	139.99	120.00	103.00	362.99	
Total	363.00	328.00	316.33	1007.32	27.98

Tabel Lampiran 11b. Sidik Ragam Jumlah Pentil Kakao Terbentuk

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	98.31	49.15	0.90 ^{tn}	6.94	18.00
B (PU)	2	374.99	187.49	3.44 ^{tn}	6.94	18.00
Galat (B)	4	218.11	54.53			
M (AP)	3	578.17	192.72	10.21 ^{**}	3.16	5.09
B x M	6	698.67	116.45	6.17 ^{**}	2.66	4.01
Galat (M)	18	339.77	18.88			
Total	35	2308.02				



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Tabel Lampiran 12a. Rata-Rata Persentase Pentil Kakao Gugur (%)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	19.23	45.28	51.03	115.54	38.51
b0m1	16.83	30.30	23.88	71.02	23.67
bom2	16.92	19.75	35.19	71.86	23.95
b0m3	22.89	22.22	27.02	72.13	24.04
Sub Total	75.87	117.56	137.12	330.56	
b1m0	40.25	17.00	15.24	72.49	24.16
b1m1	21.84	28.99	18.57	69.40	23.13
b1m2	11.82	17.86	11.38	41.06	13.69
b1m3	23.81	22.53	15.30	61.65	20.55
Sub Total	97.71	86.38	60.50	244.59	
b2m0	22.22	51.28	40.32	113.83	37.94
b2m1	24.47	16.46	23.33	64.26	21.42
b2m2	11.03	13.42	13.59	38.05	12.68
b2m3	17.43	16.13	14.29	47.85	15.95
Sub Total	75.16	97.29	91.54	263.98	
Total	248.74	301.23	289.16	839.13	23.31

Tabel Lampiran 12b. Sidik Ragam Persentase Pentil Kakao Gugur

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	125.94	62.97	0.41 ^{tn}	6.94	18.00
B (PU)	2	338.85	169.43	1.11 ^{tn}	6.94	18.00
Galat (B)	4	611.30	152.82			
M (AP)	3	1417.39	472.46	7.55 ^{**}	3.16	5.09
B x M	6	398.04	66.34	1.06 ^{tn}	2.66	4.01
Galat (M)	18	1126.82	62.60			
Total	35	4018.33				

KK (B) = 53.04 %



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Tabel Lampiran 12c. Rata-Rata Persentase Pentil Kakao Gugur Setelah Transformasi log x

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	4.44	6.77	7.18	18.39	6.13
b0m1	4.16	5.55	4.94	14.65	4.88
bom2	4.17	4.50	5.97	14.65	4.88
b0m3	4.84	4.77	5.25	14.85	4.95
Sub Total	17.62	21.58	23.34	62.54	
b1m0	6.38	4.18	3.97	14.53	4.84
b1m1	4.73	5.43	4.37	14.52	4.84
b1m2	3.51	4.28	3.45	11.24	3.75
b1m3	4.93	4.80	3.98	13.71	4.57
Sub Total	19.55	18.70	15.76	54.00	
b2m0	4.77	7.20	6.39	18.35	6.12
b2m1	5.00	4.12	4.88	14.00	4.67
b2m2	3.40	3.73	3.75	10.88	3.63
b2m3	4.23	4.08	3.85	12.16	4.05
Sub Total	17.39	19.12	18.87	55.39	
Total	54.56	59.40	57.96	171.93	4.78

Tabel Lampiran 12d. Sidik Ragam Persentase Pentil Kakao Gugur Setelah Transformasi log x

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	1.03	0.52	0.36 ^{tn}	6.94	18.00
B (PU)	2	3.49	1.75	1.23 ^{tn}	6.94	18.00
Galat (B)	4	5.68	1.42			
M (AP)	3	12.50	4.17	7.99 ^{**}	3.16	5.09
B x M	6	3.95	0.66	1.26 ^{tn}	2.66	4.01
Galat (M)	18	9.39	0.52			
		36.05				



Tabel Lampiran 13.a Rata-rata Jumlah Buah Bertahan (buah)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	21.00	9.67	8.00	38.66	12.89
b0m1	28.00	15.33	17.00	60.33	20.11
b0m2	18.00	21.67	11.67	51.33	17.11
b0m3	21.34	18.67	18.00	58.01	19.34
Sub Total	88.34	65.33	54.66	208.34	
b1m0	16.33	27.66	29.67	73.66	24.55
b1m1	22.67	16.33	19.00	58.00	19.33
b1m2	32.34	30.66	36.33	99.33	33.11
b1m3	16.00	18.34	27.67	62.01	20.67
Sub Total	87.33	93.00	112.67	293.00	
b2m0	21.00	6.33	12.33	39.67	13.22
b2m1	23.66	22.00	15.33	61.00	20.33
b2m2	40.33	43.00	29.66	113.00	37.67
b2m3	30.00	26.00	24.00	80.00	26.67
Sub Total	114.99	97.34	81.33	293.66	
Total	290.66	255.67	248.66	794.99	22.08

Tabel Lampiran 13.b Sidik Ragam Jumlah Buah Bertahan

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	84.39	42.20	0.57 ^{tn}	6.94	18.00
B (PU)	2	401.31	200.66	2.73 ^{tn}	6.94	18.00
Galat (B)	4	293.85	73.46			
M (AP)	3	753.23	251.08	12.66 ^{**}	3.16	5.09
B x M	6	655.63	109.27	5.51 ^{**}	2.66	4.01
Galat (M)	18	356.86	19.83			
Total	35	2545.28				

KK (B) = 38.81 %



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Tabel Lampiran 13.c Rata-rata Jumlah Buah Bertahan Setelah Transformasi $\sqrt{x}$

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	4.58	3.11	2.83	10.52	3.51
b0m1	5.29	3.92	4.12	13.33	4.44
b0m2	4.24	4.65	3.42	12.31	4.10
b0m3	4.62	4.32	4.24	13.18	4.39
Sub Total	18.74	16.00	14.61	49.35	
b1m0	4.04	5.26	5.45	14.75	4.92
b1m1	4.76	4.04	4.36	13.16	4.39
b1m2	5.69	5.54	6.03	17.25	5.75
b1m3	4.00	4.28	5.26	13.54	4.51
Sub Total	18.49	19.12	21.09	58.70	
b2m0	4.58	2.52	3.51	10.61	3.54
b2m1	4.86	4.69	3.92	13.47	4.49
b2m2	6.35	6.56	5.45	18.35	6.12
b2m3	5.48	5.10	4.90	15.47	5.16
Sub Total	21.27	18.86	17.77	57.91	
Total	58.50	53.98	53.48	165.96	4.61

Tabel Lampiran 13.d Sidik Ragam Jumlah Buah Panen Setelah Transformasi $\sqrt{x}$

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	1.27	0.64	0.74 ^{tn}	6.94	18.00
B (PU)	2	4.49	2.24	2.60 ^{tn}	6.94	18.00
Galat (B)	4	3.46	0.86			
M (AP)	3	8.41	2.80	10.17 ^{**}	3.16	5.09
B x M	6	7.33	1.22	4.43 ^{**}	2.66	4.01
Galat (M)	18	4.96	0.28			
Total	35	29.92				

KK (B) = 20.17 %



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Tabel Lampiran 14.a Rata-rata Jumlah Buah Panen (buah)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	10.67	11.33	11.33	33.33	11.11
b0m1	11.33	12.67	12.67	36.66	12.22
bom2	19.67	12.33	12.00	44.00	14.67
b0m3	10.00	14.67	14.33	39.00	13.00
Sub Total	51.67	51.00	50.33	153.00	
b1m0	10.00	15.67	11.67	37.33	12.44
b1m1	11.00	14.67	11.00	36.67	12.22
b1m2	13.33	12.67	17.67	43.66	14.55
b1m3	11.67	15.00	12.67	39.33	13.11
Sub Total	46.00	58.00	53.00	157.00	
b2m0	11.67	3.67	9.33	24.67	8.22
b2m1	8.00	12.00	11.33	31.33	10.44
b2m2	19.67	24.00	9.67	53.34	17.78
b2m3	19.00	11.67	15.33	46.00	15.33
Sub Total	58.34	51.34	45.67	155.34	
Total	156.00	160.34	149.00	465.34	12.93

Tabel Lampiran 14b. Sidik Ragam Jumlah Buah Panen Sebelum Transformasi

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	5.45	2.73	0.33 ^{tn}	6.94	18.00
B (PU)	2	0.67	0.34	0.04 ^{tn}	6.94	18.00
Galat (B)	4	33.09	8.27			
M (AP)	3	138.85	46.28	3.49 *	3.16	5.09
B x M	6	64.06	10.68	0.81 ^{tn}	2.66	4.01
Galat (M)	18	238.60	13.26			
Total	35	480.73				



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Tabel Lampiran 14c. Rata-rata Jumlah Buah Panen Setelah Transformasi $\sqrt{x}$

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	3.27	3.37	3.37	10.00	3.33
b0m1	3.37	3.56	3.56	10.48	3.49
bom2	4.44	3.51	3.46	11.41	3.80
b0m3	3.16	3.83	3.79	10.78	3.59
Sub Total	14.23	14.27	14.18	42.67	
b1m0	3.16	3.96	3.42	10.54	3.51
b1m1	3.32	3.83	3.32	10.46	3.49
b1m2	3.65	3.56	4.20	11.41	3.80
b1m3	3.42	3.87	3.56	10.85	3.62
Sub Total	13.55	15.22	14.49	43.26	
b2m0	3.42	1.92	3.06	8.39	2.80
b2m1	2.83	3.46	3.37	9.66	3.22
b2m2	4.44	4.90	3.11	12.44	4.15
b2m3	4.36	3.42	3.92	11.69	3.90
Sub Total	15.04	13.69	13.45	42.18	
Total	42.81	43.18	42.12	128.11	3.56

Tabel Lampiran 14d. Sidik Ragam Jumlah Buah Panen Setelah Transformasi $\sqrt{x}$

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	0.05	0.02	0.15 ^{tn}	6.94	18.00
B (PU)	2	0.05	0.02	0.15 ^{tn}	6.94	18.00
Galat (B)	4	0.67	0.17			
M (AP)	3	2.65	0.88	3.39 *	3.16	5.09
B x M	6	1.34	0.22	0.86 ^{tn}	2.66	4.01
Galat (M)	18	4.68	0.26			
Total	35	9.44				

KK (B) = 11.51 %



ruh nyata.
pengaruh nyata

Tabel Lampiran 15a. Rata-rata Jumlah Biji per Buah (biji)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	23.53	21.38	23.90	68.81	22.94
b0m1	23.58	22.61	21.67	67.86	22.62
b0m2	22.80	24.46	23.50	70.76	23.59
b0m3	23.24	24.52	23.80	71.56	23.85
Sub Total	93.15	92.98	92.87	278.99	
b1m0	22.35	23.57	24.93	70.85	23.62
b1m1	23.17	24.16	23.24	70.57	23.52
b1m2	23.67	23.44	22.96	70.07	23.36
b1m3	25.83	24.45	22.25	72.53	24.18
Sub Total	95.02	95.62	93.37	284.01	
b2m0	24.95	24.45	23.92	73.33	24.44
b2m1	24.92	26.68	21.69	73.28	24.43
b2m2	24.94	24.58	23.52	73.04	24.35
b2m3	24.87	25.84	23.79	74.50	24.83
Sub Total	99.68	101.55	92.92	294.15	
Total	287.85	290.15	279.15	857.15	23.81

Tabel Lampiran 15b. Sidik Ragam Jumlah Biji per Buah

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	5.60	2.80	2.07 ^{tn}	6.94	18.00
B (PU)	2	9.93	4.97	3.68 ^{tn}	6.94	18.00
Galat (B)	4	5.40	1.35			
M (AP)	3	3.01	1.00	0.75 ^{tn}	3.16	5.09
B x M	6	1.48	0.25	0.18 ^{tn}	2.66	4.01
Galat (M)	18	24.00	1.33			
Total	35	49.42				



pengaruh nyata.

Tabel Lampiran 16a. Rata-rata Bobot 100 Biji Kering (gram)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	148.32	145.06	153.88	447.25	149.08
b0m1	147.28	153.87	163.63	464.78	154.93
bom2	153.30	161.68	171.91	486.89	162.30
b0m3	141.75	151.53	155.63	448.91	149.64
Sub Total	590.65	612.14	645.04	1847.83	
b1m0	143.62	151.40	161.15	456.17	152.06
b1m1	159.24	167.35	165.85	492.44	164.15
b1m2	156.17	163.53	174.00	493.70	164.57
b1m3	167.85	163.16	168.67	499.67	166.56
Sub Total	626.88	645.43	669.67	1941.98	
b2m0	154.25	157.10	161.57	472.92	157.64
b2m1	173.08	166.40	168.27	507.75	169.25
b2m2	174.21	167.09	169.35	510.66	170.22
b2m3	172.29	166.94	175.81	515.04	171.68
Sub Total	673.83	657.54	675.01	2006.37	
Total	1891.36	1915.11	1989.72	5796.18	161.01

Tabel Lampiran 16b. Sidik Ragam Bobot 100 Biji Kering

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	439.04	219.52	4.10 ^{tn}	6.94	18.00
B (PU)	2	1059.68	529.84	9.90 *	6.94	18.00
Galat (B)	4	214.10	53.52			
M (AP)	3	837.03	279.01	17.66 **	3.16	5.09
B x M	6	268.23	44.71	2.83 *	2.66	4.01
Galat (M)	18	284.35	15.80			
Total	35	3102.43				



Tabel Lampiran 17a. Rata-rata Produksi per Pohon (gram/pohon)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	372.19	351.50	416.81	1140.49	380.16
b0m1	393.46	440.74	449.13	1283.33	427.78
b0m2	687.51	487.80	484.79	1660.09	553.36
b0m3	329.45	544.90	530.89	1405.24	468.41
Sub Total	1782.60	1824.94	1881.62	5489.16	
b1m0	321.01	559.06	468.62	1348.69	449.56
b1m1	405.84	593.05	423.90	1422.79	474.26
b1m2	492.84	485.52	705.81	1684.17	561.39
b1m3	505.78	598.42	475.28	1579.47	526.49
Sub Total	1725.47	2236.05	2073.62	6035.13	
b2m0	449.07	140.98	360.70	950.75	316.92
b2m1	345.00	532.68	413.58	1291.26	430.42
b2m2	854.66	985.63	385.01	2225.30	741.77
b2m3	814.16	503.29	641.38	1958.83	652.94
Sub Total	2462.90	2162.58	1800.67	6426.15	
Total	5970.96	6223.56	5755.91	17950.43	498.62

Tabel Lampiran 17b. Sidik Ragam Produksi per Pohon

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	9132.01	4566.00	0.23 ^{tn}	6.94	18.00
B (PU)	2	36914.59	18457.30	0.91 ^{tn}	6.94	18.00
Galat (B)	4	81101.71	20275.43			
M (AP)	3	301826.31	100608.77	4.82 *	3.16	5.09
B x M	6	115098.94	19183.16	0.92 ^{tn}	2.66	4.01
Galat (M)	18	375979.60	20887.76			
Total	35	920053.16				



ruh nyata
pengaruh nyata.

Tabel Lampiran 17c. Rata-rata Produksi per Pohon Setelah Transformasi Log x

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	2.57	2.55	2.62	7.74	2.58
b0m1	2.59	2.64	2.65	7.89	2.63
b0m2	2.84	2.69	2.69	8.21	2.74
b0m3	2.52	2.74	2.73	7.98	2.66
Sub Total	10.52	10.61	10.68	31.82	
b1m0	2.51	2.75	2.67	7.92	2.64
b1m1	2.61	2.77	2.63	8.01	2.67
b1m2	2.69	2.69	2.85	8.23	2.74
b1m3	2.70	2.78	2.68	8.16	2.72
Sub Total	10.51	10.98	10.82	32.32	
b2m0	2.65	2.15	2.56	7.36	2.45
b2m1	2.54	2.73	2.62	7.88	2.63
b2m2	2.93	2.99	2.59	8.51	2.84
b2m3	2.91	2.70	2.81	8.42	2.81
Sub Total	11.03	10.57	10.57	32.17	
Total	32.06	32.17	32.07	96.31	2.68

Tabel Lampiran 17d. Sidik Ragam Produksi per Pohon setelah Transformasi Log x

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	0.0006	0.0003	0.02 ^{tn}	6.94	18.00
B (PU)	2	0.0110	0.0055	0.33 ^{tn}	6.94	18.00
Galat (B)	4	0.0675	0.0169			
M (AP)	3	0.2440	0.0813	4.43 [*]	3.16	5.09
B x M	6	0.0994	0.0166	0.90 ^{tn}	2.66	4.01
Galat (M)	18	0.3304	0.0184			
Total	35	0.75				

KK (B) = 4.85 %



ruh nyata
pengaruh nyata.

Tabel Lampiran 18a. Rata-rata Produksi per Hektar (kg/ha)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	413.50	390.51	463.07	1267.09	422.36
b0m1	437.13	489.67	498.99	1425.78	475.26
b0m2	763.82	541.95	538.60	1844.36	614.79
b0m3	366.01	605.38	589.82	1561.22	520.41
Sub Total	1980.47	2027.51	2090.48	6098.45	
b1m0	356.65	621.11	520.64	1498.40	499.47
b1m1	450.89	658.88	470.96	1580.72	526.91
b1m2	547.54	539.42	784.16	1871.12	623.71
b1m3	561.92	664.84	528.03	1754.79	584.93
Sub Total	1916.99	2484.25	2303.79	6705.03	
b2m0	498.91	156.63	400.74	1056.29	352.10
b2m1	383.30	591.80	459.49	1434.59	478.20
b2m2	949.53	1095.03	427.75	2472.31	824.10
b2m3	904.54	559.15	712.57	2176.26	725.42
Sub Total	2736.28	2402.62	2000.55	7139.45	
Total	6633.74	6914.38	6394.81	19942.93	553.97

Tabel Lampiran 18b. Sidik Ragam Produksi per Hektar

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	11271.83	5635.91	0.23 ^{tn}	6.94	18.00
B (PU)	2	45564.46	22782.23	0.91 ^{tn}	6.94	18.00
Galat (B)	4	100105.54	25026.39			
M (AP)	3	372550.55	124183.52	4.82 *	3.16	5.09
B x M	6	142069.04	23678.17	0.92 ^{tn}	2.66	4.01
Galat (M)	18	464079.52	25782.20			
Total	35	1135640.94				



ruh nyata
pengaruh nyata.

Tabel Lampiran 18c. Rata-rata Produksi per Hektar Setelah Transformasi Log x

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
b0m0	2.62	2.59	2.67	7.87	2.62
b0m1	2.64	2.69	2.70	8.03	2.68
b0m2	2.88	2.73	2.73	8.35	2.78
b0m3	2.56	2.78	2.77	8.12	2.71
Sub Total	10.70	10.80	10.87	32.37	
b1m0	2.55	2.79	2.72	8.06	2.69
b1m1	2.65	2.82	2.67	8.15	2.72
b1m2	2.74	2.73	2.89	8.36	2.79
b1m3	2.75	2.82	2.72	8.30	2.77
Sub Total	10.69	11.17	11.01	32.87	
b2m0	2.70	2.19	2.60	7.50	2.50
b2m1	2.58	2.77	2.66	8.02	2.67
b2m2	2.98	3.04	2.63	8.65	2.88
b2m3	2.96	2.75	2.85	8.56	2.85
Sub Total	11.22	10.75	10.75	32.72	
Total	32.61	32.72	32.62	97.95	2.72

Tabel Lampiran 18d. Sidik Ragam Produksi per Hektar setelah Transformasi Log x

SK	DB	JK	KT	F. Hitung	F. Tabel	
					0.05	0.01
Kelompok	2	0.00	0.00	0.02 ^{tn}	6.94	18.00
B (PU)	2	0.01	0.01	0.33 ^{tn}	6.94	18.00
Galat (B)	4	0.07	0.02			
M (AP)	3	0.24	0.08	4.43 *	3.16	5.09
B x M	6	0.10	0.02	0.90 ^{tn}	2.66	4.01
Galat (M)	18	0.33	0.02			
Total	35	0.75				

KK (B) = 4.77 %

KK(M) = 4.98 %



ruh nyata
pengaruh nyata.

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3. SMAN 7 Bulukumba lulus tahun 2017
4. Politeknik Pembangunan Pertanian Gowa lulus tahun 2021

C. Karya Ilmiah yang telah dan akan dipublikasikan

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