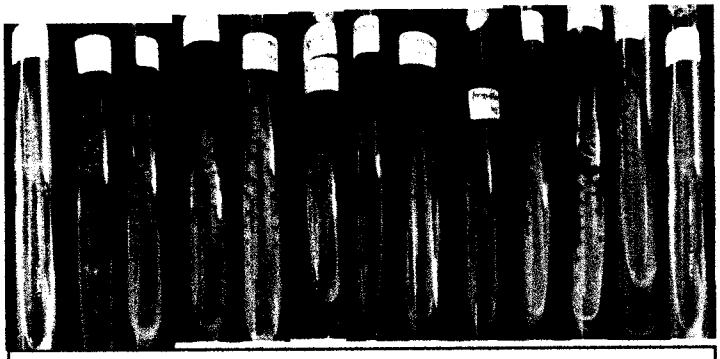
LAMPIRAN 1

Bahan dan alat yang digunakan dalam penelitian

Bahan

Berbagai media pertumbuhan mikroba

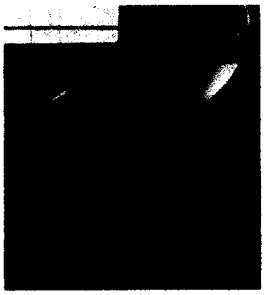


kultur murni mikroba

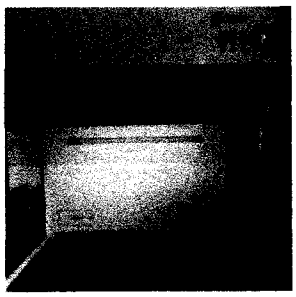
Larutan molase

Pupuk NPK 0,5 gram

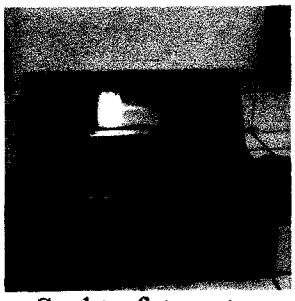
Alat



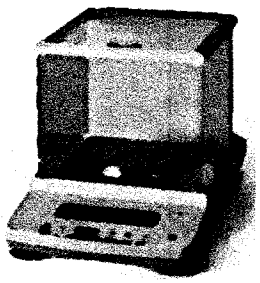
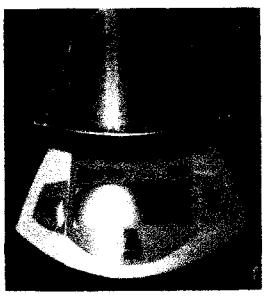
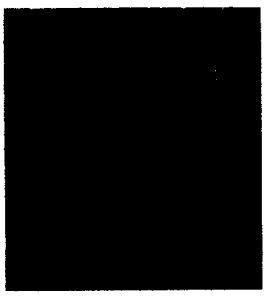
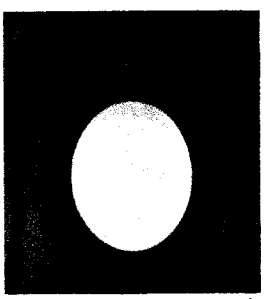
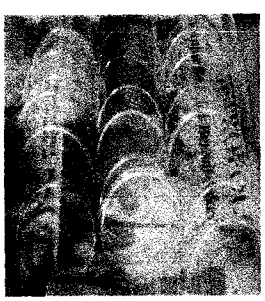
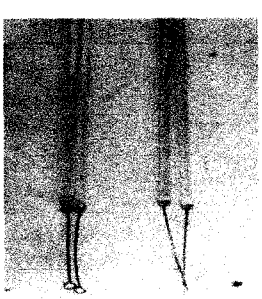
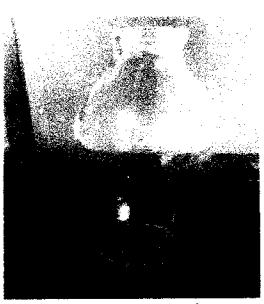
Autoclave (OSK 6500, ALP Co. Ltd

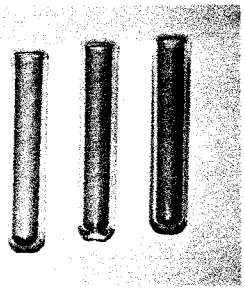
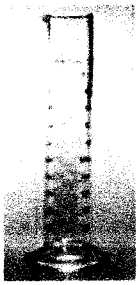
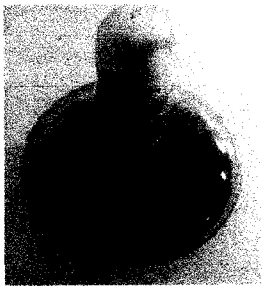
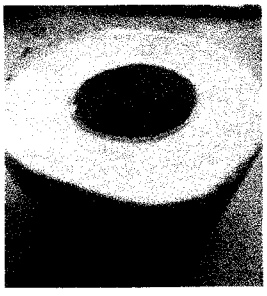
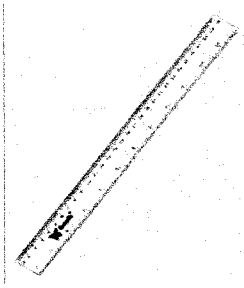
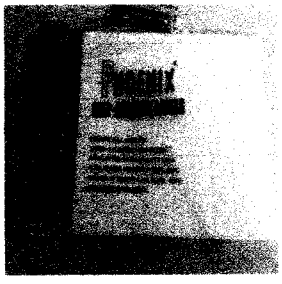
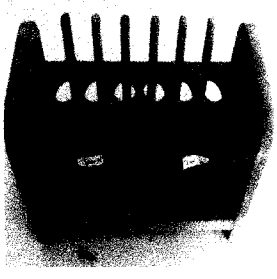


Laminar Air Flow (ESCO)



Spektrofotometer (Milton Roy Company)

 Timbangan analitik (Shimidzu)	 Timbangan digital (Ohaus)	 Shaker (GFL)
 Alat vortex (Barnstead)	 Colony counter (Galaxy 230)	 Kompor listrik
 Gelas Beaker 500 ml (Duran)	 Labu Erlenmeyer 500 (Duran)	 Cawan Petri (Pyrex)
 Jarum ose	 Pipet ukur (Pyrex)	 Botol kultur 250 dan 500 ml

 Tabung reaksi steril	 Tabung kuvet (Pyrex)	 Gelas ukur 100 ml (pyrex)
 Bunsen	 Kapas	 Kertas tisu
 calipers	 Penggaris	 Jerigen
	 Kertas label	 Rak tabung reaksi

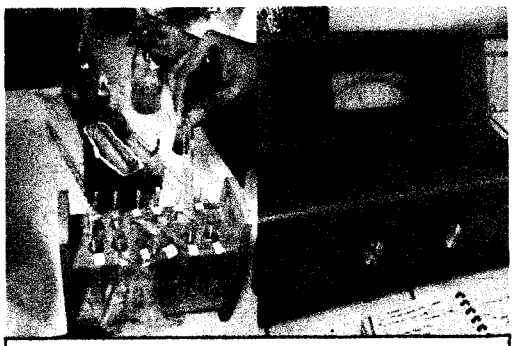
LAMPIRAN 2

Dokumentasi kegiatan penelitian

- **Pembuatan biofertilizer**

Isolat mikroba

Media *broth* siap diinokulasikan mikroba *biofertilizer*

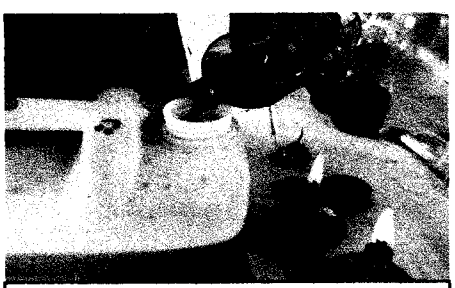


Pengukuran OD

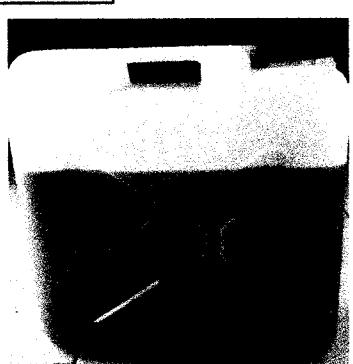
Penghitungan metode TPC

Pemindahan F2 ke F3

Konsorsium mikroba *biofertilizer* pada media molase 3% (F3)



Pencampuran 13 mikroba. (F3) ke (F4)

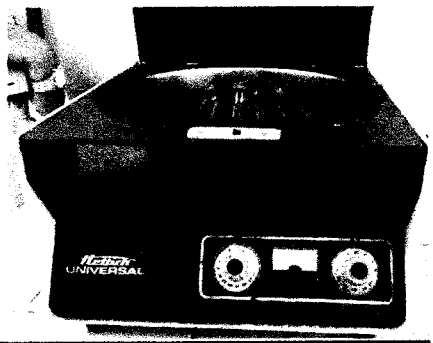


Biofertilizer siap pakai

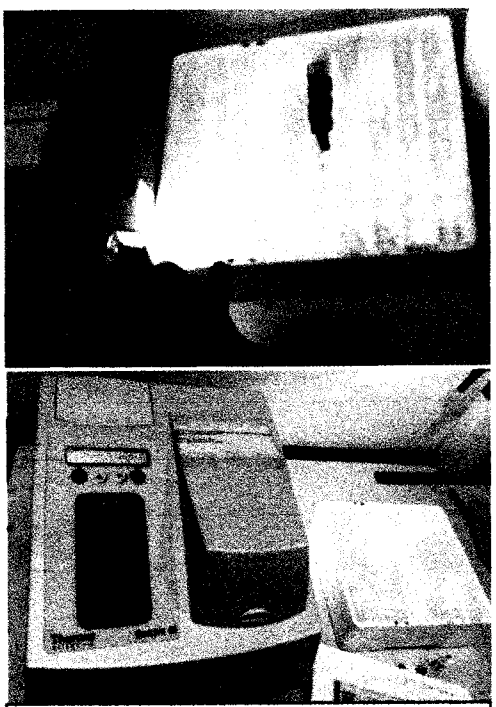
- **Analisis Kadar Klorofil Daun**

Daun 1 g digerus dalam pelarut alkohol 95%

Ekstrak klorofil daun bibit akasia

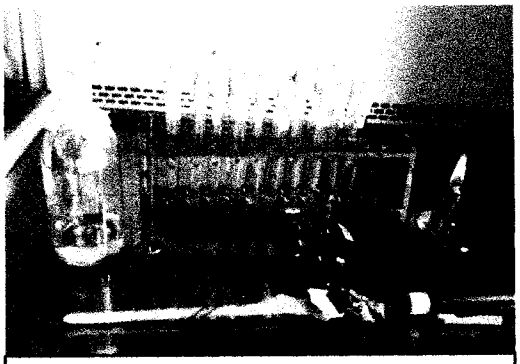


Ekstrak klorofil disentrifugasi

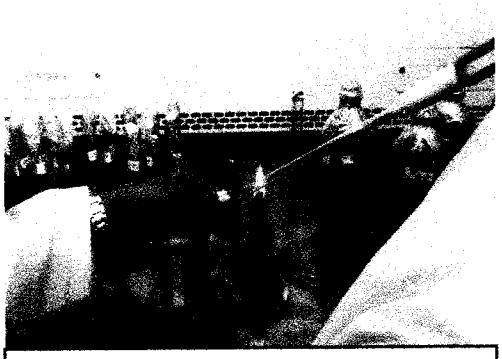


Analisis kadar klorofil daun menggunakanspektrofotometer dengan λ = 649 dan 655 nm

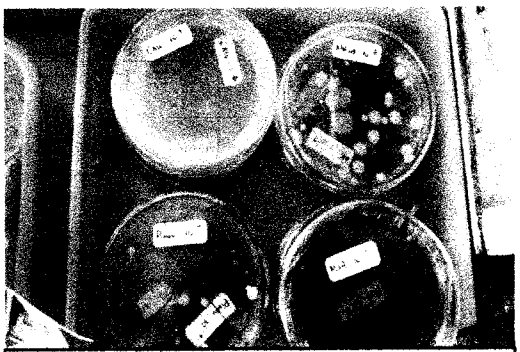
- **Analisis biofertilizer**



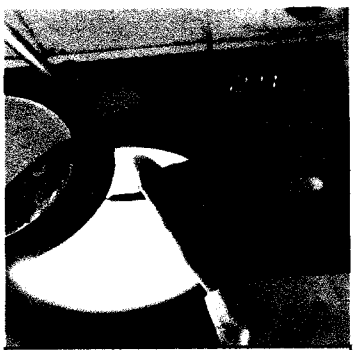
Persiapan pengenceran



Pengenceran *biofertilizer*



Isolasi mikroba *biofertilizer* di berbagai media



Penghitungan metode TPC

Penghitungan metode MPN

- **Pertumbuhan bibit akasia**

bibit akasia bulan ke- 0, berumur 1 bulan

bibit akasia bulan ke- 3, berumur 4 bulan

Pemberian *biofertilizer* dan pupuk NPK sesuai aturan yang telah ditentukan dalam penelitian

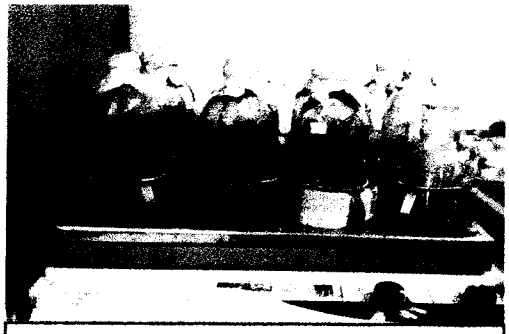
Pengukuran tinggi tanaman

Pengukuran diameter batang

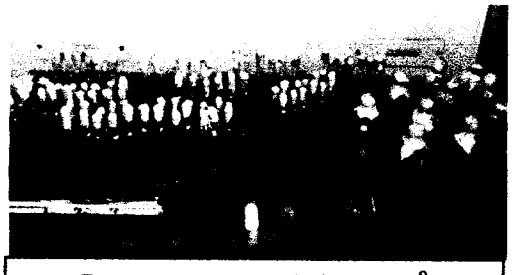
- **Analisis tanah**

Sampel tanah ditimbang 10g

Pengenceran sampel 10^{-1}

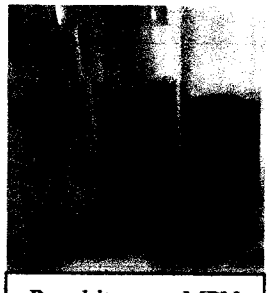


Menshaker agar sampel homogen



Pengenceran sampel hingga 10^{-9}

Isolasi mikroba sampel di berbagai media



Penghitungan MPN

Isolasi mikroba tanah

Penghitungan TPC

LAMPIRAN 3

Data Mentah Pertumbuhan Semai Akasia (*Acacia mangium*)

Minggu ke-2 (8 Februari 2015)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_2$	$B_{60}f_2$	$B_{80}f_2$
Tinggi tanaman (cm)	I	8,7	9,1	8,9	9,9	11,9	12,9	10,2	8,8	11,3	12,6	13,6
	II	9,4	8,8	10,1	9,9	12,8	12,7	9,1	9,2	11	12,7	12,9
	III	8	8,3	9,1	9,8	12,1	13,1	8,6	9,4	10,9	12,9	12,3
	IV	9	10,3	9,5	10,1	11,5	12,8	9,5	10,2	11,8	12,6	13,1
Diameter batang (cm)	I	0,1	0,16	0,1	0,1	0,1	0,17	0,17	0,1	0,15	0,15	0,2
	II	0,15	0,11	0,15	0,12	0,15	0,2	0,15	0,11	0,17	0,17	0,17
	III	0,15	0,14	0,17	0,1	0,2	0,15	0,15	0,15	0,12	0,16	0,17
	IV	0,15	0,15	0,12	0,15	0,11	0,16	0,12	0,15	0,15	0,15	0,15
Jumlah anak daun (helai)	I	7	5	6	6	7	7	7	5	6	7	7
	II	6	6	6	6	5	7	7	6	6	6	7
	III	6	7	7	6	7	6	6	6	6	7	8
	IV	5	7	6	5	7	8	6	6	6	8	6

Minggu ke-4 (22 Februari 2015)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_2$	$B_{60}f_2$	$B_{80}f_2$
Tinggi tanaman (cm)	I	11,6	14,3	13,1	14,4	17	18,4	14,6	13,4	15,6	18,1	17,7
	II	12,3	14,3	14,1	14,6	18,8	18,3	13,3	13,4	15,4	18,2	17,3
	III	11,7	13,7	13,2	14,5	17,7	18,6	13,3	13,9	15,8	18,3	16,7
	IV	12,3	15,3	13,6	14,8	16,8	19,2	14	14,6	16,3	18,4	17,5
Diameter batang (cm)	I	0,13	0,21	0,14	0,14	0,17	0,22	0,21	0,14	0,19	0,18	0,23
	II	0,18	0,16	0,18	0,15	0,18	0,24	0,21	0,14	0,2	0,2	0,2
	III	0,17	0,15	0,2	0,14	0,24	0,21	0,2	0,18	0,15	0,2	0,19
	IV	0,18	0,16	0,15	0,18	0,16	0,19	0,16	0,19	0,18	0,18	0,17
Jumlah anak daun (helai)	I	8	10	9	9	9	12	10	8	9	11	10
	II	8	9	8	9	10	11	9	8	8	10	10
	III	8	11	9	8	10	10	8	9	10	11	10
	IV	7	9	8	8	10	13	10	8	9	12	9

Minggu ke-6 (8 Maret 2015)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_2$	$B_{60}f_2$	$B_{80}f_2$
Tinggi tanaman (cm)	I	14,6	20,2	17,8	19,2	23,4	25	19,1	17,5	20,2	23,4	22,1
	II	15,1	20,3	18,3	20,1	24,7	25,3	18,3	17,9	20,1	23,1	21,4
	III	15,2	19,9	17,7	19,5	23,4	25,1	18,5	18,3	20,8	23,4	21,5
	IV	15,2	21,1	17,6	19,7	23,3	25,7	18,7	18,8	20,4	23,8	21,9
Diameter batang (cm)	I	0,17	0,25	0,17	0,18	0,2	0,28	0,25	0,18	0,22	0,23	0,25
	II	0,21	0,19	0,21	0,18	0,22	0,28	0,23	0,17	0,25	0,25	0,24
	III	0,19	0,2	0,23	0,19	0,29	0,27	0,22	0,2	0,23	0,24	0,21
	IV	0,22	0,2	0,19	0,22	0,19	0,25	0,2	0,22	0,22	0,25	0,2
Jumlah anak daun (helai)	I	11	15	12	12	15	17	14	10	13	15	13
	II	10	13	10	13	14	18	14	12	11	13	12
	III	12	16	12	11	14	15	13	12	14	15	14
	IV	10	14	10	12	16	18	13	10	11	15	11

Minggu ke-8 (22 Maret 2015)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_2$	$B_{60}f_2$	$B_{80}f_2$
Tinggi tanaman (cm)	I	18,4	27	23,2	25	29,5	33,2	24,7	21,9	25,2	28,4	27,1
	II	18,9	27,5	23,7	25,9	30,7	33,4	23,9	22,3	25,1	28,1	26
	III	19	26,9	22,9	25,3	29,6	33,3	24,1	22,7	25,8	28,6	26,5
	IV	18,9	28,3	23	25,5	29,3	33,5	24,3	23,2	25,4	28,8	26,7
Diameter batang (cm)	I	0,21	0,29	0,21	0,22	0,24	0,34	0,29	0,22	0,25	0,26	0,28
	II	0,24	0,23	0,25	0,22	0,26	0,32	0,25	0,19	0,27	0,27	0,26
	III	0,23	0,24	0,27	0,23	0,33	0,31	0,26	0,24	0,25	0,26	0,23
	IV	0,25	0,24	0,23	0,26	0,23	0,29	0,22	0,24	0,24	0,27	0,22
Jumlah anak daun (helai)	I	13	21	16	16	19	23	17	14	15	19	17
	II	14	18	12	15	20	26	18	15	15	17	16
	III	14	20	16	14	20	22	17	14	16	18	16
	IV	14	19	14	16	20	25	17	13	14	19	15

Minggu ke-10 (05 April 2015)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_2$	$B_{60}f_2$	$B_{80}f_2$
Tinggi tanaman (cm)	I	22,3	38	28,6	31	35,7	41,2	30,3	26,3	30,2	33,4	32,1
	II	22,9	38,5	29,1	31,9	36,9	41,4	29,9	26,7	30,1	33,1	30,6
	III	23	37,8	28,3	30,8	36	41,6	30,1	27,1	30,8	33,8	31,5
	IV	22,7	39,4	28,4	31,5	35,9	41,3	30,3	27,6	30,4	33,8	31,5
Diameter batang (cm)	I	0,25	0,35	0,25	0,26	0,28	0,4	0,33	0,26	0,27	0,28	0,3
	II	0,28	0,3	0,29	0,26	0,3	0,36	0,27	0,21	0,29	0,29	0,28
	III	0,27	0,31	0,31	0,27	0,37	0,35	0,3	0,28	0,27	0,28	0,25
	IV	0,29	0,3	0,27	0,3	0,27	0,33	0,24	0,26	0,26	0,29	0,24
Jumlah anak daun (helai)	I	15	30	20	20	23	31	20	18	17	23	21
	II	18	24	14	17	26	32	22	17	19	21	20
	III	16	26	20	16	26	30	21	16	18	22	18
	IV	18	28	18	20	24	33	19	15	18	22	19

Minggu ke-12 (19 April 2015)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_2$	$B_{60}f_2$	$B_{80}f_2$
Tinggi tanaman (cm)	I	26,3	42,3	34	36,8	41	48,9	35,9	30,7	35,2	38,4	37,1
	II	26,9	42,6	34,5	37,7	42,8	48,8	35,9	31,1	35,1	38,1	35,2
	III	27	41,5	33,3	36,8	42	49,7	36,1	31,5	35,8	39	36,5
	IV	26,5	43,6	33,8	37,5	41,9	48,7	36,3	32	35,4	38,8	36,3
Diameter batang (cm)	I	0,29	0,37	0,29	0,3	0,32	0,46	0,37	0,3	0,29	0,3	0,32
	II	0,32	0,32	0,33	0,3	0,34	0,4	0,29	0,23	0,31	0,31	0,3
	III	0,31	0,33	0,35	0,31	0,41	0,39	0,34	0,32	0,29	0,3	0,27
	IV	0,33	0,32	0,31	0,34	0,31	0,37	0,26	0,28	0,28	0,31	0,26
Jumlah anak daun (helai)	I	17	33	24	24	27	39	22	22	19	27	25
	II	22	26	16	19	31	38	26	19	23	25	24
	III	18	28	24	18	31	38	25	18	20	26	20
	IV	22	31	22	24	28	41	21	17	22	26	23

LAMPIRAN 4
Data Mentah Kadar Klorofil Daun Akasia (*Acacia mangium*)

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_1$	$B_{60}f_2$	$B_{80}f_2$
Kadar klorofil bulan ke - 1	I	45,37	48,93	44,68	48,09	48,02	46,41	47,06	45,39	48,37	46,28	47,36
	II	46,02	47,62	46,04	48,17	47,21	46,62	47,82	44,59	48,01	47,18	47,61
	III	45,58	47,95	46,17	47,93	47,36	46,93	48,86	44,42	49,37	46,37	47,65
	IV	45,52	47,24	45,46	48,02	47,68	46,9	49,52	46,33	47,86	46,98	47,87

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_1$	$B_{60}f_2$	$B_{80}f_2$
Kadar klorofil bulan ke - 2	I	46,38	53,37	45,98	50,22	51,1	52,29	48,86	47,21	49,63	50,81	50,85
	II	46,79	52,71	47,24	50,4	51,21	52,97	49,72	45,96	49,31	48,08	49,91
	III	46,93	52,85	47,41	50,71	51,17	50,93	50,16	45,61	50,07	48,46	49,54
	IV	46,9	52,79	47,26	50,25	51,01	52,48	50,75	47,13	49,16	49,03	50,07

Parameter	Pengulangan ke -	Perlakuan										
		1	2	3	4	5	6	7	8	9	10	11
		K-	K+f_1	$B_{20}f_1$	$B_{40}f_1$	$B_{60}f_1$	$B_{80}f_1$	K+f_2	$B_{20}f_2$	$B_{40}f_1$	$B_{60}f_2$	$B_{80}f_2$
Kadar klorofil bulan ke - 3	I	47,86	60,53	48,98	52.73	55,87	57,89	50,42	48,18	51,78	54,28	53,68
	II	47,21	61,91	49,9	52,26	54,12	57,87	51,17	48,46	50,23	51,90	53,21
	III	47,65	60,64	49,44	53,01	55,38	56,99	51,62	48,49	51,89	52,04	52,26
	IV	47,76	59,97	48,59	53,23	56,33	57,94	52,12	49,23	50,89	52,23	53,76

LAMPIRAN 5

- Rata-rata tinggi bibit akasia pada berbagai perlakuan dan pada minggu ke-2, 4, 6, 8, 10, dan 12.

Perlakuan	Rata-rata tinggi tanaman (cm)					
	Minggu ke-2	Minggu ke-4	Minggu ke-6	Minggu ke-8	Minggu ke-10	Minggu ke-12
K-	8.78 ± 0.59	11.98 ± 0.38	15.03 ± 0.29	18.8 ± 0.27	22.73 ± 0.31	26.68 ± 0.33
K+F1	9.13 ± 0.85	14.4 ± 0.66	20.38 ± 0.51	27.43 ± 0.64	38.43 ± 0.71	42.5 ± 0,87
B20F1	9.4 ± 0.53	13.5 ± 0.45	17.85 ± 0.31	23.2 ± 0.36	28.6 ± 0.36	33.9 ± 0,5
B40F1	9.93 ± 0.13	14.58 ± 0.17	19.63 ± 0.38	25.43 ± 0.38	31.3 ± 0.5	37.2 ± 0.47
B60F1	12.08 ± 0.54	17.58 ± 0.9	23.7 ± 0.67	29.78 ± 0.63	36.13 ± 0.53	41.93 ± 0.74
B80F1	12.88 ± 0.17	**18.63 ± 0.4**	**25.28 ± 0.31**	**33.35 ± 0.13**	**41.38 ± 0.17**	**49.03 ± 0.46**
K+F2	9.35 ± 0.68	13.8 ± 0.63	18.65 ± 0.34	24.25 ± 0.34	30.15 ± 0.19	36.05 ± 0.19
B20F2	9.4 ± 0.59	13.83 ± 0.57	18.13 ± 0.56	22.53 ± 0.56	26.93 ± 0.56	31.33 ± 0.56
B40F2	11.25 ± 0.4	15.78 ± 0.39	20.38 ± 0.31	25.38 ± 0.31	30.38 ± 0.31	35.38 ± 0.31
B60F2	12.7 ± 0.14	18.25 ± 0.13	23.43 ± 0.29	28.48 ± 0.3	33.53 ± 0.34	38.58 ± 0.4
B80F2	**12.98 ± 0.54**	17.3 ± 0.43	21.73 ± 0.33	26.58 ± 0.46	31.43 ± 0.62	36.28 ± 0.79

Keterangan : K- : tanpa perlakuan; K+ : pemberian pupuk NPK (0.5g/tanaman) ;B20, B40, B60, B80 : perlakuan *biofertilizer* 20, 40, 60, dan 80 ml/tanaman; F1 : pemberian 1x1 minggu; F2 : pemberian 1x2 minggu.

- Rata-rata diameter batang semai akasia pada berbagai perlakuan dan pada minggu ke-2, 4, 6, 8, 10, dan 12.

Perlakuan	Rata-rata diameter batang (cm)					
	Minggu ke-2	Minggu ke-4	Minggu ke-6	Minggu ke-8	Minggu ke-10	Minggu ke-12
K-	0.137 ± 0.02	0.165 ± 0.02	0.198 ± 0.02	0.233 ± 0.02	0.273 ± 0.02	0.31 ± 0.02
K+F1	0.14 ± 0.02	0.17 ± 0.03	0.21 ± 0.03	0.25 ± 0.03	0.315 ± 0.02	0.34 ± 0.02
B20F1	0.135 ± 0.03	0.168 ± 0.03	0.2 ± 0.26	0.24 ± 0.03	0.28 ± 0.03	0.32 ± 0.03
B40F1	0.118 ± 0.02	0.153 ± 0.02	0.193 ± 0.02	0.233 ± 0.02	0.273 ± 0.02	0.31 ± 0.02
B60F1	0.14 ± 0.04	0.188 ± 0.04	0.23 ± 0.05	0.265 ± 0.05	0.305 ± 0.05	0.34 ± 0.05
B80F1	0.17 ± 0.02	**0.215 ± 0.02**	**0.27 ± 0.01**	**0.315 ± 0.02**	**0.36 ± 0.03**	**0.4 ± 0.04**
K+F2	0.148 ± 0.02	0.195 ± 0.02	0.23 ± 0.02	0.255 ± 0.03	0.285 ± 0.04	0.32 ± 0.05
B20F2	0.128 ± 0.03	0.163± 0.03	0.193 ± 0.02	0.223 ± 0.02	0.253 ± 0.03	0.28 ± 0.04
B40F2	0.148 ± 0.02	0.18 ± 0.02	0.23 ± 0.01	0.253 ± 0.01	0.273 ± 0.01	0.29 ± 0.01
B60F2	0.158 ± 0.01	0.19 ± 0.01	0.243 ± 0.01	0.265 ± 0.01	0.285 ± 0.01	0.31 ± 0.01
B80F2	**0.173 ± 0.02**	0.198 ± 0.02	0.225 ± 0.02	0.248 ± 0.03	0.268 ± 0.03	0.29 ± 0.03

Keterangan : K- : tanpa perlakuan; K+ : pemberian pupuk NPK (0.5g/tanaman) ;B20, B40, B60, B80 : perlakuan *biofertilizer* 20, 40, 60, dan 80 ml/tanaman; F1 : pemberian 1x1 minggu; F2 : pemberian 1x2 minggu.

- Rata-rata jumlah daun semai akasia pada berbagai perlakuan dan pada minggu ke-2, 4, 6, 8, 10, dan 12 setelah perlakuan.

Perlakuan	Rata-rata jumlah daun (helai)					
	Minggu ke-2	Minggu ke-4	Minggu ke-6	Minggu ke-8	Minggu ke-10	Minggu ke-12
K-	6 ± 0.82	7.75 ± 0.5	10.75 ± 0.96	13.75 ± 0.5	16.75 ± 1.5	19.75 ± 2.63
K+F1	6.25 ± 0.96	9.75 ± 0.96	14.5 ± 1.29	19.5 ± 1.29	27 ± 2.58	29.5 ± 3.11
B20F1	6.25 ± 0.5	8.5 ± 0.58	11 ± 1.15	14.5 ± 1.91	18 ± 2.83	21.5 ± 3.79
B40F1	5.75 ± 0.5	8.5 ± 0.58	12 ± 0.82	15.25 ± 0.96	18.25 ± 2.06	21.25 ± 3.20
B60F1	6.5 ± 1	9.75 ± 0.5	14.75 ± 0.96	19.75 ± 0.5	24.75 ± 1.5	29.25 ± 2.06
B80F1	**7 ± 0.82**	**11.5 ± 1.29**	**17 ± 1.41**	**24 ± 1.83**	**31.5 ± 1.29**	**39 ± 1.41**
K+F2	6.5 ± 0.58	9.25 ± 0.96	13.5 ± 0.58	17.25 ± 0.5	20.5 ± 1.29	23.5 ± 2.38
B20F2	5.75 ± 0.5	8.25 ± 0.5	11 ± 1.15	14 ± 0.82	16.5 ± 1.29	19 ± 2.16
B40F2	6 ± 0.00	9 ± 0.82	12.25 ± 1.5	15 ± 0.82	18 ± 0.82	21 ± 1.83
B60F2	**7 ± 0.82**	11 ± 0.82	14.5 ± 1	18.25 ± 0.96	22 ± 0.82	26 ± 0.82
B80F2	**7 ± 0.82**	9.75 ± 0.5	12.5 ± 1.29	16 ± 0.82	19.5 ± 1.29	23 ± 2.16

Keterangan : K- : tanpa perlakuan; K+ : pemberian pupuk NPK (0.5g/tanaman) ;B20, B40, B60, B80 : perlakuan *biofertilizer* 20, 40, 60, dan 80 ml/tanaman; F1 : pemberian 1x1 minggu; F2 : pemberian 1x2 minggu.

Tabel 4.7 Rata-rata kadar klorofil daun semai akasia pada berbagai perlakuan dan pada bulan ke-1, 2, dan 3.

Perlakuan	Rata-rata kadar klorofil (mg/L)		
	Bulan ke-1	Bulan ke-2	Bulan ke-3
K-	45.62 ± 0.28	36.75 ± 0.25	47.62±0.29
K+f1	**47.94 ± 0.72**	**52.93 ± 0.3**	**60.76±0.819**
B20f1	45.59 ± 0.68	46.97 ± 0.67	49.23±0.57
B40f1	48.05 ± 0.1	50.4 ± 0.22	52.81±0.42
B60f1	47.6 ± 0.36	51.12 ± 0.08	55.43±0.95
B80f1	46.72 ± 0.25	52.17 ± 0.87	57.67±0.46
K+f2	48.32 ± 1. 1	49.87 ± 0.8	51.33±0.72
B20f2	45.18 ± 0.87	46.48 ± 0.81	48.59±0.45
B40f2	48.4 ± 0.68	49.54 ± 0.4	51.2±0.79
B60f2	46.7 ± 0.45	49.1 ± 1.21	52.61±1.12
B80f2	47.62 ± 0.21	50.09 ± 0.55	53.23±0.69

Keterangan : K- : tanpa perlakuan; K+ : pemberian pupuk NPK (0.5 g/tanaman); B20, B40, B60, B80 : perlakuan *biofertilizer* 20, 40, 60, dan 80 ml/tanaman; F1 : pemberian 1x1 minggu; F2 : pemberian 1x2 minggu

LAMPIRAN 6

Peraturan Menteri Pertanian tentang Pupuk Hayati

PERATURAN MENTERI PERTANIAN
NOMOR : 70/Permentan/SR.140/10/2011
TANGGAL : 25 Oktober 2011

PARAMETER	STANDAR MUTU MENURUT JENIS BAHAN PEMBAWA			METODE PENGUJIAN
	Tepung /Serbuk	Granul/Pelet	Cair	
Total sel hidup*)				
a. Bakteri	≥ 107 cfu/g berat kering contoh	≥ 107 cfu/g berat kering contoh	≥ 107 cfu/ml	TPC**)
b. Aktinomisetes.	≥ 106 cfu/g berat kering contoh	≥ 105 cfu/g berat kering contoh	≥ 106 cfu/ml	TPC**)
c. Fungi	≥ 105 cfu/g berat kering contoh	≥ 104 cfu/g berat kering contoh	≥ 104 cfu/ml	TPC**)
Contoh : 1. *Rhizobium* sp + *Bacillus* sp 2. *Azospirillum* sp + *Pseudomonas* sp 3. *Azotobacter* + *Saccharomyces* sp + *Bacillus* 4. *Streptomyces* + *Trichoderma* + *Bacillus*				
Fungsional a. Penambat N b. Pelarut P c. Penghasil fitohormon d. Perombak bahan organik	 Positif Positif >0,0 Positif	 Positif Positif >0,0 Positif	 Positif Positif >0,0 Positif	 Media bebas N Media Pikovskaya Spektrofotometri atau HPLC Media agar CMC/Avicel atau media agar Guaicol/Indulin
Patogenisitas	Negatif			
Kontaminan *E. coli* *Salmonella* sp	 Maks 103 MPN/g atau MPN/ml Maks 103 MPN/g atau MPN/ml			 MPN-durham dan uji lanjut pada media E. coli MPN-durham dan uji lanjut pada media Salmonella
Logam berat***) - Pb - Cd - Hg - As	 ≤ 50 ppm ≤ 2 ppm ≤ 1 ppm	 ≤ 50 ppm ≤ 2 ppm ≤ 1 ppm	 ≤ 50 ppm ≤ 2 ppm ≤ 1 ppm ≤ 10 ppm	 SNI 2803 – 2010
Kadar air (%)****)	≤ 35	≤ 20	-	ADBB
pH	5,0 – 8,0	5,0 – 8,0	3,0 – 8,0	pH H2O – pH meter

*) Minimal mengandung dua jenis mikroba
**) TPC dilakukan pada media spesifik untuk mikroba tersebut, TPC = *Total Plate Count*
***) Khusus untuk pupuk hayati dengan dosis ≥ 50 kg per ha
****) Kadar air atas dasar berat basah; MPN = *Most Probable Number*

LAMPIRAN 7

Tabel MPN (*Most Probable Number*) Mc. Grady

MPN DETERMINATION FROM MULTIPLE TUBE TEST					
NUMBER OF TUBES GIVING POSITIVE REACTION OUT OF			MPN INDEX	95 PERCENT CONFIDENCE LIMITS	
3 of 10 mL each	3 of 1 mL each	3 of 0.1 mL each	Per 100 mL	LOWER	UPPER
0	0	1	3	<0.5	9
0	1	0	3	<0.5	13
1	0	0	4	<0.5	20
1	0	1	7	1	21
1	1	0	7	1	23
1	1	1	11	3	36
1	2	0	11	3	36
2	0	0	9	1	36
2	0	1	14	3	37
2	1	0	15	3	44
2	1	1	20	7	89
2	2	0	21	4	47
2	2	1	28	10	150
3	0	0	23	4	120
3	0	1	39	7	130
3	0	2	64	15	380
3	1	0	43	7	210
3	1	1	75	14	230
3	1	2	120	30	380
3	2	0	93	15	380
3	2	1	150	30	440
3	2	2	210	35	470
3	3	0	240	36	1300
3	3	1	460	71	2400
3	3	2	1100	150	4800

From standart methods for the examination of water and wastewater, twelfth edition. (New York The American Public Health Association, INC., p.608)

LAMPIRAN 8

Analisis Statistik Data Hasil Pertumbuhan Semai Akasia (*Acacia mangium*)

7.1 Uji normalitas

One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		Tinggitanaman	Diameterbatang	Jumlahdaun	Kadarklorofil
N		48	48	48	48
Normal Parameters[a,b]	Mean	36.2917	.3188	24.3750	52.3413
	Std. Deviation	6.23831	.04087	6.01638	3.96512
Most Extreme Differences	Absolute	.098	.175	.144	.112
	Positive	.098	.175	.144	.112
	Negative	-.091	-.116	-.089	-.098
Kolmogorov-Smirnov Z		.682	1.215	.994	.778
Asymp. Sig. (2-tailed)		.740	.105	.276	.580

a. Test distribution is Normal.

b. Calculated from data.

7.2 Hasil Uji Homogenitas dan *Two Way Anova*

7.2.1 Pengaruh Dosis Terhadap :

- **Tinggi Tanaman**

Between-Subjects Factors

		Value Label	N
Dosis	1	K-	8
	2	K+	8
	3	B20	8
	4	B40	8
	5	B60	8
	6	B80	8

Descriptive Statistics

Dependent Variable: Tinggitanaman

Dosis	Mean	Std. Deviation	N
K-	26.6750	.30589	8
K+	39.2750	3.49643	8
B20	32.6125	1.46037	8
B40	36.2875	1.04258	8
B60	40.2500	1.87312	8
B80	42.6500	6.84147	8
Total	36.2917	6.23831	48

Hasil uji homogenitas tinggi semai akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Tinggitanaman

F	df1	df2	Sig.
173.144	5	42	.000

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

a. Design: Intercept + Dosis

Hasil uji *Brown Forsythe* pengaruh pemberian dosis *Biofertilizer* terhadap tinggi bibit akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Tinggitanaman

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	24.930	5	12.872	.000

a. Asymptotically F distributed.

Hasil uji *Gomes Howell* pengaruh pemberian dosis *Biofertilizer* terhadap tinggi bibit akasia (*Acacia mangium*)

Dependent Variable: Tinggitanaman

Games-Howell

(I) Dosis	(J) Dosis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
K-	K+	-12.60000*	1.24090	.000	-17.2816	-7.9184
	B20	-5.93750*	.52752	.000	-7.8900	-3.9850
	B40	-9.61250*	.38414	.000	-11.0075	-8.2175
	B60	-13.57500*	.67102	.000	-16.0804	-11.0696

	B80	-15.97500*	2.42124	.003	-25.1395	-6.8105
	K-	12.60000*	1.24090	.000	7.9184	17.2816
	B20	6.66250*	1.33967	.006	1.9458	11.3792
K+	B40	2.98750	1.28996	.286	-1.6916	7.6666
	B60	-.97500	1.40239	.979	-5.7812	3.8312
	B80	-3.37500	2.71640	.808	-12.7331	5.9831
	K-	5.93750*	.52752	.000	3.9850	7.8900
	K+	-6.66250*	1.33967	.006	-11.3792	-1.9458
B20	B40	-3.67500*	.63439	.001	-5.7873	-1.5627
	B60	-7.63750*	.83974	.000	-10.4152	-4.8598
	B80	-10.03750*	2.47332	.032	-19.1845	-.8905
	K-	9.61250*	.38414	.000	8.2175	11.0075
	K+	-2.98750	1.28996	.286	-7.6666	1.6916
B40	B20	3.67500*	.63439	.001	1.5627	5.7873
	B60	-3.96250*	.75792	.003	-6.5491	-1.3759
	B80	-6.36250	2.44675	.000	-15.5148	2.7898
	K-	13.57500*	.67102	.000	11.0696	16.0804
	K+	.97500	1.40239	.979	-3.8312	5.7812
B60	B20	7.63750*	.83974	.000	4.8598	10.4152
	B40	3.96250*	.75792	.003	1.3759	6.5491
	B80	-2.40000	2.50784	.920	-11.5504	6.7504
	K-	15.97500*	2.42124	.003	6.8105	25.1395
	K+	3.37500	2.71640	.808	-5.9831	12.7331
B80	B20	10.03750*	2.47332	.032	.8905	19.1845
	B40	6.36250	2.44675	.000	-2.7898	15.5148
	B60	2.40000	2.50784	.920	-6.7504	11.5504

*. The mean difference is significant at the 0.05 level.

	K-	K+	B20	B40	B60	B80
K-		S	S	S	S	S
K+			S	TS	TS	TS
B20				S	S	S
B40					S	S
B60						TS
B80						

K-	a
K+	cd
B20	b
B40	c
B60	d
B80	d

Diameter Batang

Descriptive Statistics

Dependent Variable: Diameterbatang

Dosis	Mean	Std. Deviation	N
K-	.3125	.01581	8
K+	.3250	.03742	8
B20	.3013	.03643	8
B40	.3025	.01832	8
B60	.3250	.03665	8
B80	.3463	.07009	8
Total	.3188	.04087	48

Hasil uji homogenitas diameter batang semai akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Diameterbatang

F	df1	df2	Sig.
4.715	5	42	.002

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

a. Design: Intercept + Dosis

Hasil uji *Brown Forsythe* pengaruh pemberian dosis *Biofertilizer* terhadap diameter batang semai akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Diameterbatang

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	1.449	5	21.481	.248

a. Asymptotically F distributed.

- **Jumlah Daun**

Descriptive Statistics

Dependent Variable: Jumlahdaun

Dosis	Mean	Std. Deviation	N
K-	19.7500	2.43487	8
K+	26.5000	4.10575	8
B20	20.2500	3.15096	8
B40	21.1250	2.41646	8
B60	27.6250	2.26385	8
B80	31.0000	8.71780	8
Total	24.3750	6.01638	48

Hasil uji homogenitas jumlah daun semai akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Jumlahdaun

F	df1	df2	Sig.
21.478	5	42	.000

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

a. Design: Intercept + Dosis

Hasil uji *Brown Forsythe* pengaruh pemberian dosis *Biofertilizer* terhadap jumlah daun bibit akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Jumlahdaun

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	8.658	5	16.031	.000

a. Asymptotically F distributed.

Hasil uji *Gomes Howell* pengaruh pemberian dosis *Biofertilizer* terhadap jumlah daun semai akasia (*Acacia mangium*)

Dependent Variable: Jumlahdaun
Games-Howell

(I) Dosis	(J) Dosis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
K-	K+	-6.75000*	1.68767	.018	-12.4704	-1.0296
	B20	-.50000	1.40789	.999	-5.1599	4.1599
	B40	-1.37500	1.21284	.859	-5.3531	2.6031
	B60	-7.87500*	1.17546	.000	-11.7333	-4.0167
	B80	-11.25000	3.20017	.009	-22.9111	.4111
K+	K-	6.75000*	1.68767	.018	1.0296	12.4704
	B20	6.25000*	1.82981	.042	.1908	12.3092
	B40	5.37500	1.68436	.069	-.3388	11.0888
	B60	-1.12500	1.65764	.981	-6.7880	4.5380
	B80	-4.50000	3.40693	.769	-16.3430	7.3430
B20	K-	.50000	1.40789	.999	-4.1599	5.1599
	K+	-6.25000*	1.82981	.042	-12.3092	-.1908
	B40	-.87500	1.40392	.987	-5.5241	3.7741
	B60	-7.37500*	1.37175	.001	-11.9401	-2.8099
	B80	-10.75000	3.27736	.000	-22.4519	.9519
B40	K-	1.37500	1.21284	.859	-2.6031	5.3531

	K+	-5.37500	1.68436	.069	-11.0888	.3388
	B20	.87500	1.40392	.987	-3.7741	5.5241
	B60	-6.50000*	1.17070	.001	-10.3421	-2.6579
	B80	-9.87500	3.19842	.006	-21.5357	1.7857
	K-	7.87500*	1.17546	.000	4.0167	11.7333
	K+	1.12500	1.65764	.981	-4.5380	6.7880
B60	B20	7.37500*	1.37175	.001	2.8099	11.9401
	B40	6.50000*	1.17070	.001	2.6579	10.3421
	B80	-3.37500	3.18443	.884	-15.0325	8.2825
	K-	11.25000	3.20017	.009	-.4111	22.9111
	K+	4.50000	3.40693	.769	-7.3430	16.3430
B80	B20	10.75000	3.27736	.000	-.9519	22.4519
	B40	9.87500	3.19842	.006	-1.7857	21.5357
	B60	3.37500	3.18443	.884	-8.2825	15.0325

*. The mean difference is significant at the 0.05 level.

	K-	K+	B20	B40	B60	B80
K-		S	TS	TS	S	S
K+			S	TS	TS	TS
B20				TS	S	S
B40					S	S
B60						TS
B80						

K-	a
K+	bc
B20	a
B40	ab
B60	c
B80	c

- **Kadar Klorofil Daun**

Descriptive Statistics

Dependent Variable: Kadarklorofil

Dosis	Mean	Std. Deviation	N
K-	47.6200	.26522	8
K+	56.0475	5.09097	8
B20	48.9088	.58340	8
B40	52.0025	1.03916	8
B60	54.0188	1.78504	8
B80	55.4500	2.43675	8
Total	52.3413	3.96512	48

Hasil uji homogenitas kadar klorofil daun semai akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Kadarklorofil

F	df1	df2	Sig.
68.394	5	42	.000

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

a. Design: Intercept + Dosis

Hasil uji *Brown Forsythe* pengaruh pemberian dosis *Biofertilizer* terhadap kadar klorofil daun bibit akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Kadarklorofil

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	15.872	5	13.004	.000

a. Asymptotically F distributed.

Hasil uji *Gomes Howell* pengaruh pemberian dosis *Biofertilizer* terhadap kadar klorofil daun bibit akasia (*Acacia mangium*)

Dependent Variable: Kadarklorofil

Games-Howell

(I) Dosis	(J) Dosis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
K-	K+	-8.42750*	1.80237	.018	-15.2467	-1.6083
	B20	-1.28875*	.22658	.002	-2.0794	-.4981
	B40	-4.38250*	.37918	.000	-5.7720	-2.9930
	B60	-6.39875*	.63804	.000	-8.7869	-4.0106

	B80	-7.83000*	.86661	.000	-11.0918	-4.5682
	K-	8.42750*	1.80237	.018	1.6083	15.2467
	B20	7.13875*	1.81171	.040	.3246	13.9529
K+	B40	4.04500	1.83704	.034	-2.7619	10.8519
	B60	2.02875	1.90736	.884	-4.8001	8.8576
	B80	.59750	1.99549	1.000	-6.3269	7.5219
	K-	1.28875*	.22658	.002	.4981	2.0794
	K+	-7.13875*	1.81171	.040	-13.9529	-.3246
B20	B40	-3.09375*	.42134	.000	-4.5303	-1.6572
	B60	-5.11000*	.66396	.000	-7.5014	-2.7186
	B80	-6.54125*	.88587	.001	-9.7992	-3.2833
	K-	4.38250*	.37918	.000	2.9930	5.7720
	K+	-4.04500	1.83704	.034	-10.8519	2.7619
B40	B20	3.09375*	.42134	.000	1.6572	4.5303
	B60	-2.01625	.73026	.137	-4.4964	.4639
	B80	-3.44750*	.93659	.039	-6.7379	-.1571
	K-	6.39875*	.63804	.000	4.0106	8.7869
	K+	-2.02875	1.90736	.884	-8.8576	4.8001
B60	B20	5.11000*	.66396	.000	2.7186	7.5014
	B40	2.01625	.73026	.137	-.4639	4.4964
	B80	-1.43125	1.06795	.759	-4.9798	2.1173
	K-	7.83000*	.86661	.000	4.5682	11.0918
	K+	-.59750	1.99549	1.000	-7.5219	6.3269
B80	B20	6.54125*	.88587	.001	3.2833	9.7992
	B40	3.44750*	.93659	.039	.1571	6.7379
	B60	1.43125	1.06795	.759	-2.1173	4.9798

*. The mean difference is significant at the 0.05 level.

	K-	K+	B20	B40	B60	B80
K-		S	S	S	S	S
K+			S	S	TS	TS
B20				S	S	S
B40					TS	S
B60						TS
B80						

K-	a
K+	d
B20	c
B40	c
B60	cd
B80	d

7.2.2 Pengaruh Frekuensi terhadap :

- **Tinggi tanaman**

Between-Subjects Factors

		Value Label	N
Frekuensi	1	F1	24
	2	F2	24

Descriptive Statistics

Dependent Variable: Tinggitanaman

Frekuensi	Mean	Std. Deviation	N
F1	38.5375	7.25605	24
F2	34.0458	4.04335	24
Total	36.2917	6.23831	48

Hasil uji homogenitas tinggi bibit akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Tinggitanaman

F	df1	df2	Sig.
7.881	1	46	.007

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

a. Design: Intercept + Frekuensi

Hasil uji *Brown Forsythe* pengaruh frekuensi pemberian *Biofertilizer* terhadap tinggi tanaman bibit akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Tinggitanaman

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	7.018	1	36.028	.012

a. Asymptotically F distributed.

Hasil uji *Independent T Test* untuk mengetahui beda nyata

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Tinggi tanaman	Equal variances assumed	7,881	.007	2,649	46	.011	4,49167	1,69557	1,07866	7,90467

	Equal variances not assumed			2,649	36,028	.012	4,49167	1,69557	1,05298	7,93035

- **Diameter Batang**

Descriptive Statistics

Dependent Variable: Diameterbatang

Frekuensi	Mean	Std. Deviation	N
F1	.3383	.04219	24
F2	.2992	.02888	24
Total	.3188	.04087	48

Hasil uji homogenitas diameter batang bibit akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Diameterbatang

F	df1	df2	Sig.
2.742	1	46	.105

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

a. Design: Intercept + Frekuensi

Hasil uji *Two Way Anova* pengaruh frekuensi pemberian *Biofertilizer* terhadap diameter batang bibit akasia (*Acacia mangium*)

Tests of Between-Subjects Effects

Dependent Variable: Diameterbatang

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.018[a]	1	.018	14.086	.000
Intercept	4.877	1	4.877	3731.681	.000
Frekuensi	.018	1	.018	14.086	.000
Error	.060	46	.001		
Total	4.955	48			
Corrected Total	.079	47			

a. R Squared = .234 (Adjusted R Squared = .218)

Hasil uji *Independent T Test* untuk mengetahui beda nyata

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Diameter Batang	Equal variances assumed	2.742	.105	3.753	46	.000	.03917	.01044	.01816	.06017
	Equal variances not assumed			3.753	40.676	.001	.03917	.01044	.01809	.06025

- **Jumlah daun**

Descriptive Statistics

Dependent Variable: Jumlahdaun

Frekuensi	Mean	Std. Deviation	N
F1	26.7083	7.29788	24
F2	22.0417	3.05713	24
Total	24.3750	6.01638	48

Hasil uji homogenitas jumlah daun bibit akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Jumlahdaun

F	df1	df2	Sig.
14.794	1	46	.000

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

a. Design: Intercept + Frekuensi

Hasil uji *Brown Forsythe* pengaruh frekuensi pemberian *Biofertilizer* terhadap jumlah daun bibit akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Jumlahdaun

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	8.349	1	30.831	.007

a. Asymptotically F distributed.

Hasil uji *Independent T Test* untuk mengetahui beda nyata

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Jumlah Daun	Equal variances assumed	14.794	.000	2.889	46	.006	4.66667	1.61510	1.41564	7.91769
	Equal variances not assumed			2.889	30.831	.007	4.66667	1.61510	1.37192	7.96141

- **Kadar Klorofil Daun**

Descriptive Statistics

Dependent Variable: Kadarklorofil

Frekuensi	Mean	Std. Deviation	N
F1	53.9192	4.71607	24
F2	50.7633	2.16575	24
Total	52.3413	3.96512	48

Hasil uji homogenitas jumlah daun bibit akasia

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Kadarklorofil

F	df1	df2	Sig.
17.977	1	46	.000

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

a. Design: Intercept + Frekuensi

Hasil uji *Brown Forsythe* pengaruh frekuensi pemberian *Biofertilizer* terhadap kadar klorofil daun bibit akasia (*Acacia mangium*)

Robust Tests of Equality of Means

Kadarklorofil

	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	8.875	1	32.288	.005

a. Asymptotically F distributed.

Hasil uji *Independent T Test* untuk mengetahui beda nyata

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Kadar Klorofil	Equal variances assumed	18.0	.000	2.98	46	.005	3.15583	1.05932	1.0235	5.2881
	Equal variances not assumed			2.98	32.3	.005	3.15583	1.05932	.99883	5,3128

7.2.3 Pengaruh Kombinasi terhadap :

- **Tinggi Tanaman**

Between-Subjects Factors

		Value Label	N
Kombinasi	1	K-F1	4
	2	K+F1	4
	3	B20F1	4
	4	B40F1	4
	5	B60F1	4
	6	B80F1	4
	7	K-F2	4
	8	K+F2	4
	9	B20F2	4
	10	B40F2	4
	11	B60F2	4
	12	B80F2	4

Descriptive Statistics

Dependent Variable: Tinggitanaman

Kombinasi	Mean	Std. Deviation	N
K-F1	26.6750	.33040	4
K+F1	42.5000	.86795	4
B20F1	33.9000	.49666	4
B40F1	37.2000	.46904	4
B60F1	41.9250	.73655	4
B80F1	49.0250	.45735	4
K-F2	26.6750	.33040	4
K+F2	36.0500	.19149	4
B20F2	31.3250	.55603	4
B40F2	35.3750	.30957	4
B60F2	38.5750	.40311	4
B80F2	36.2750	.79320	4
Total	36.2917	6.23831	48

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Tinggitanaman

F	df1	df2	Sig.
.777	11	36	.660

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

a. Design: Intercept + Kombinasi

Hasil uji *Two Way Anova* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap tinggi semai akasia (*Acacia mangium*)

Tests of Between-Subjects Effects

Dependent Variable: Tinggitanaman

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1818.807[a]	11	165.346	579.597	.000
Intercept	63220.083	1	63220.083	221608.861	.000
Kombinasi	1818.807	11	165.346	579.597	.000
Error	10.270	36	.285		
Total	65049.160	48			
Corrected Total	1829.077	47			

a. R Squared = .994 (Adjusted R Squared = .993)

Hasil uji *Duncan* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap tinggi semai akasia (*Acacia mangium*)

Duncan[a,b]

Kombinasi	N	Subset								
		1	2	3	4	5	6	7	8	9
K-F1	4	26,6750								
B20F2	4		31,3250							
B20F1	4			33,9000						
B40F2	4				35,3750					
K+F2	4				36,0500	36,0500				
B80F2	4					36,2750				
B40F1	4						37,2000			
B60F2	4							38,5750		
B60F1	4								41,9250	
K+F1	4								42,5000	
B80F1	4									49,0250
Sig.		1,000	1,000	1,000	,091	,566	1,000	1,000	,148	1,000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = ,301.

a. Uses Harmonic Mean Sample Size = 4,000.

b. Alpha = 0,05.

- **Diameter Batang**

Descriptive Statistics

Dependent Variable: Diameterbatang

Kombinasi	Mean	Std. Deviation	N
K-F1	.3125	.01708	4
K+F1	.3350	.02380	4
B20F1	.3200	.02582	4
B40F1	.3125	.01893	4
B60F1	.3450	.04509	4
B80F1	.4050	.03873	4
K-F2	.3125	.01708	4
K+F2	.3150	.04933	4
B20F2	.2825	.03862	4
B40F2	.2925	.01258	4
B60F2	.3050	.00577	4
B80F2	.2875	.02754	4
Total	.3188	.04087	48

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Diameterbatang

F	df1	df2	Sig.
1.985	11	36	.060

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

a. Design: Intercept + Kombinasi

Hasil uji *Two Way Anova* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap diameter batang semai akasia (*Acacia mangium*)

Tests of Between-Subjects Effects

Dependent Variable: Diameterbatang

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.047[a]	11	.004	4.821	.000
Intercept	4.877	1	4.877	5529.685	.000
Kombinasi	.047	11	.004	4.821	.000
Error	.032	36	.001		
Total	4.955	48			
Corrected Total	.079	47			

a. R Squared = .596 (Adjusted R Squared = .472)

Hasil uji *Duncan* pengaruh kombinasi dosis dan frekuensi pemberian *biofertilizer* terhadap diameter batang semai akasia (*Acacia mangium*)

Duncan[a,b]

Kombinasi	N	Subset			
		1	2	3	4
B20F2	4	,2825			
B80F2	4	,2875	,2875		
B40F2	4	,2925	,2925		
B60F2	4	,3050	,3050	,3050	
K-F1	4	,3125	,3125	,3125	
B40F1	4	,3125	,3125	,3125	
K+F2	4	,3150	,3150	,3150	
B20F1	4	,3200	,3200	,3200	
K+F1	4		,3350	,3350	
B60F1	4			,3450	
B80F1	4				,4050
Sig.		,145	,066	,117	1,000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = ,001.

a. Uses Harmonic Mean Sample Size = 4,000.

b. Alpha = 0,05.

- **Jumlah Daun**

Descriptive Statistics

Dependent Variable: Jumlahdaun

Kombinasi	Mean	Std. Deviation	N
K-F1	19.7500	2.62996	4
K+F1	29.5000	3.10913	4
B20F1	21.5000	3.78594	4
B40F1	21.2500	3.20156	4
B60F1	29.2500	2.06155	4
B80F1	39.0000	1.41421	4
K-F2	19.7500	2.62996	4
K+F2	23.5000	2.38048	4
B20F2	19.0000	2.16025	4
B40F2	21.0000	1.82574	4
B60F2	26.0000	.81650	4
B80F2	23.0000	2.16025	4
Total	24.3750	6.01638	48

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Jumlahdaun

F	df1	df2	Sig.
2.059	11	36	.051

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

a. Design: Intercept + Kombinasi

Hasil uji *Two Way Anova* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap jumlah daun semai akasia (*Acacia mangium*)

Tests of Between-Subjects Effects

Dependent Variable: Jumlahdaun

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1481.250[a]	11	134.659	22.035	.000
Intercept	28518.750	1	28518.750	4666.705	.000

Kombinasi	1481.250	11	134.659	22.035	.000
Error	220.000	36	6.111		
Total	30220.000	48			
Corrected Total	1701.250	47			

a. R Squared = .871 (Adjusted R Squared = .831)

Hasil uji *Duncan* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap jumlah daun semai akasia (*Acacia mangium*)

Duncan[a,b]

Kombinasi	N	Subset				
		1	2	3	4	5
B20F2	4	19,0000				
K-F1	4	19,7500	19,7500			
B40F2	4	21,0000	21,0000			
B40F1	4	21,2500	21,2500			
B20F1	4	21,5000	21,5000			
B80F2	4		23,0000	23,0000		
K+F2	4		23,5000	23,5000		
B60F2	4			26,0000	26,0000	
B60F1	4				29,2500	
K+F1	4				29,5000	
B80F1	4					39,0000
Sig.		,209	,065	,111	,064	1,000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 6,038.

a. Uses Harmonic Mean Sample Size = 4,000.

b. Alpha = 0,05.

- **Kadar Klorofil Daun**

Descriptive Statistics

Dependent Variable: Kadarklorofil

Kombinasi	Mean	Std. Deviation	N
K-F1	47.6200	.28647	4
K+F1	60.7625	.81932	4
B20F1	49.2275	.56718	4
B40F1	52.8075	.41844	4
B60F1	55.4250	.95256	4
B80F1	57.6725	.45595	4
K-F2	47.6200	.28647	4
K+F2	51.3325	.72154	4
B20F2	48.5900	.44892	4
B40F2	51.1975	.78517	4
B60F2	52.6125	1.11986	4
B80F2	53.2275	.68912	4
Total	52.3413	3.96512	48

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Kadarklorofil

F	df1	df2	Sig.
1.234	11	36	.301

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

a. Design: Intercept + Kombinasi

Hasil uji *Two Way Anova* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap kadar klorofil semai akasia (*Acacia mangium*)

Tests of Between-Subjects Effects

Dependent Variable: Kadarklorofil

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	722.396[a]	11	65.672	142.893	.000
Intercept	131501.110	1	131501.110	286125.966	.000
Kombinasi	722.396	11	65.672	142.893	.000
Error	16.545	36	.460		
Total	132240.051	48			
Corrected Total	738.942	47			

a. R Squared = .978 (Adjusted R Squared = .971)

Hasil uji *Duncan* pengaruh kombinasi dosis dan frekuensi pemberian *Biofertilizer* terhadap kadar klorofil daun semai akasia (*Acacia mangium*)

Duncan[a,b]

Kombinasi	N	Subset						
		1	2	3	4	5	6	7
K-F1	4	47,6200						
B20F2	4	48,5900	48,5900					
B20F1	4		49,2275					
B40F2	4			51,1975				
K+F2	4			51,3325				
B60F2	4				52,6125			
B40F1	4				52,8075			
B80F2	4				53,2275			
B60F1	4					55,4250		
B80F1	4						57,6725	
K+F1	4							60,7625
Sig.		,059	,208	,788	,252	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = ,494.

a. Uses Harmonic Mean Sample Size = 4,000.

b. Alpha = 0,05.