

Lampiran 1

Komposisi Media VW (Vacin dan Went) 1 Liter

No.	Bahan	Jumlah (mg/L)
1.	Makronutrien Trikalsium fosfat : $\text{Ca}_3(\text{PO}_4)_2$ Potasium nitrat : KNO_3 Potasium fosfat : KH_2PO_4 Amonium sulfat : $(\text{NH}_4)_2\text{SO}_4$ Magnesium sulfat : $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	200 525 250 500 250
2.	Mikronutrien Mangan sulfat : $\text{MnSO}_4 \cdot 2\text{H}_2\text{O}$	7,5
3.	Zat Besi Na ₂ EDTA FeSO ₄ · 7H ₂ O	1,492 1,112
4.	Vitamin Tiamin HCl Piridoksin HCl Asam nikotinat Glisin	1 25 25 100
5.	Sukrosa	30000
6.	Mio-inositol	100
7.	Agar	8000
8.	pH	5,6-5,8

Sumber: Sandra (2003)

Lampiran 2. Tabel ukuran biji (bobot 100 biji) dan komposisi kimia beberapa varietas/galur kedelai

Varietas/galur	Bobot 100 biji (g)	Warna kulit biji	Protein (% bk)	Lemak (% bk)	Potensi hasil (t/ha)	Tahun dilepas
Argomulyo ^{1, 2, 4}	18-19	Kuning	37-40,20	19,30-20,80	2	1998
Grobogan ¹	18	Kuning	43,90	18,40	3,40	2008
Panderman ¹	15-17	Kuning	36,90	17,70	2,40	2003
Burangrang ^{1, 2, 3}	14,90-17	Kuning	39-41,60	20	2,50	1999
Kedelai impor ^{2, 3}	14,80-15,80	Kuning	35-36,80	21,40-21,70	-	-
Bromo ^{2, 3}	14,40-15,80	Kuning	37,80-42,60	19,50	2,50	1998
Anjasmoro ¹	14,80-15,30	Kuning	41,80-42,10	17,20-18,60	2,30	2001
Detam-1 ¹	14,80	Hitam	45,40	13,10	3,50	2008
Detam-2 ¹	13,50	Hitam	45,60	14,80	3	2008
Tampomas ^{1, 2}	10,90-11	Kuning	34-41,20	18-19,60	1,90	1992
Cikuray ^{1, 2}	9,10-11	Hitam	35-42,40	17-19	1,70	1992
Wilis ^{1, 2, 3}	8,90-11	Kuning	37-40,50	18-8,80	1,60	1983
Kawi ^{1, 2}	10,10-10,50	Kuning	38,50-44,10	16,60-17,50	2	1998
Mallika ¹	9-10	Hitam	37	20	2,90	2007
Merapi ^{1, 4}	8-9,50	Hitam	41-42,60	7,50-13	1	1938
Krakatau ^{1, 2}	8-9,10	Kuning	36-44,30	16-17	1,90	1992

bk = basis kering.

Sumber: ¹Balitkabi (2008); ²Antarlina dkk. (2002); ³Arsyad, dkk (2002); ⁴Hardaningsih, dkk (2004)

Lampiran 3. Data Hasil Pengukuran tunas pada media P0 (kedelai 0 g/L)

Tabel 1. Hasil pengukuran tunas dalam media P0 umur 1 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	15	11.3	0.9	3	5
2	16	16.5	1.3	3	6
3	19	11.7	0.9	3	5.33
4	16	10.5	0.5	3	4.5
5	19	11.6	1.4	3	5.67
6	14	12.5	1.3	3	4.5
7	19	18.4	1.2	4	3.75
8	17	9.3	1	3	4
9	19	16.1	1.3	3	5.67
10	15	9.4	1.1	3	4.83
11	18	12.2	0.7	3	6
12	17	11.5	0.8	3	6.67
13	15	10	0.7	3	6
14	16	9.5	0.6	2	9
15	16	15.4	0.8	3	9
16	18	12.3	0.8	3	9
17	18.5	11.7	0.6	3	7.83
18	16	12.6	0.6	3	7
19	14	15.2	0.8	3	7.67
20	16	13.1	1.1	3	6.33
Rata-rata	16.68 ± 1.69	12.54 ± 2.55	0.92 ± 0.28	3 ± 0.32	6.19 ± 1.63

Tabel 2. Hasil pengukuran tunas dalam media P0 umur 1 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	8.9	0.7	0	0	0	0
2	9.5	0.8	0	0	0	0
3	7.9	0.5	0	0	0	0
4	9.4	0.4	0	0	0	0
5	7.1	0.6	0	0	0	0
6	7.2	0.6	0	0	0	0
7	14.5	1	0	0	0	0
8	6.9	0.6	0	0	0	0
9	10.4	0.9	0	0	0	0
10	6.4	0.6	0	0	0	0
11	9.3	0.5	0	0	0	0
12	7.7	0.5	0	0	0	0
13	7	0.5	0	0	0	0
14	6	0.4	0	0	0	0
15	11.6	0.5	0	0	0	0
16	11	0.6	0	0	0	0
17	9.2	0.4	0	0	0	0
18	9.9	0.3	0	0	0	0
19	12.6	0.5	0	0	0	0
20	8.8	0.8	0	0	0	0
Rata-rata	9.07 ± 2.19	0.59 ± 0.18	0	0	0	0

Tabel 3. Hasil pengukuran tunas dalam media P0 umur 2 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	18	28.8	2.2	4	7.5
2	18	15.2	0.7	3	9
3	22	21.2	1.8	3	11.67
4	17.5	20.7	1.3	4	7
5	20.0	17.3	1.3	3	9.33
6	18	15	1.5	2	9.5
7	24	17.6	0.9	4	9.25
8	27	27.9	1.2	4	12.25
9	22	15.2	0.9	4	7
10	23	14.9	1.2	3	9
11	18	13.4	0.8	3	6.67
12	21	28.3	1.6	4	6.25
13	21	11.4	0.7	3	10
14	18	15.7	1	4	9
15	28	25.9	1.4	4	9.625
16	22	18.9	1.5	4	8.5
17	27	24	1.6	4	8
18	23	12.1	0.7	3	10.33
19	20	16.9	1.4	3	8.33
20	23	29.4	2.1	4	8
Rata-rata	21.53 ± 3.23	19.49 ± 5.91	1.29 ± 0.44	3.5 ± 0.61	8.81 ± 1.56

Tabel 4. Hasil pengukuran tunas dalam media P0 umur 2 bulan

Ulangan	Berat basah daun (g)	Berat kering daun (g)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	24.4	1.7	0	0	0	0
2	13.1	0.6	0	0	0	0
3	14	1.1	0	0	0	0
4	12.5	0.7	0	0	0	0
5	9.6	0.7	0	0	0	0
6	7.1	0.7	0	0	0	0
7	16.1	0.6	0	0	0	0
8	24.4	1	0	0	0	0
9	12.8	0.8	0	0	0	0
10	11.3	0.8	0	0	0	0
11	9.1	0.5	0	0	0	0
12	23.5	1.3	0	0	0	0
13	8.7	0.5	0	0	0	0
14	13.5	0.6	0	0	0	0
15	22.8	1.1	0	0	0	0
16	14.7	1.1	0	0	0	0
17	16.5	0.8	0	0	0	0
18	8.8	0.5	0	0	0	0
19	12	0.8	0	0	0	0
20	21.5	1.4	0	0	0	0
Rata-rata	14.82 ± 5.62	0.87 ± 0.33	0	0	0	0

Tabel 5. Hasil pengukuran tunas dalam media P0 umur 3 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	23	50.3	2.1	2	10.5
2	33	31.7	1.6	2	18
3	29	41.8	1.5	5	9.6
4	21	44.2	1.5	2	12.5
5	30	30.1	1.4	3	12.33
6	34	46.1	1	3	20.33
7	24	44.8	2.8	3	8.33
8	38	54.7	3.1	3	21.67
9	33	40.3	1.9	4	14
10	26	35.2	2.1	3	13.33
11	28	57.1	2.2	4	13.75
12	35	40.6	2.3	4	15.75
13	23	44.4	2.6	5	13.33
14	23	36.1	2.3	6	9.83
15	39	30.5	1.5	5	13.4
16	21	49.7	2.5	3	10
17	30	53.4	1.7	3	12
18	33	51.9	1.6	5	13.2
19	23	25.8	1.8	4	11.75
20	30	41.3	2.4	6	10.33
Rata-rata	28.8 ± 5.62	42.5 ± 8.89	1.99 ± 0.53	3.75 ± 1.25	13.19 ± 3.49

Tabel 6. Hasil pengukuran tunas dalam media P0 umur 3 bulan

Ulangan	Berat basah daun (g)	Berat kering daun (g)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	31.1	1.2	0	0	0	0
2	20.6	1.1	0	0	0	0
3	33.5	0.9	0	0	0	0
4	29	1	0	0	0	0
5	22.6	0.9	0	0	0	0
6	36.1	0.8	0	0	0	0
7	31.5	2	0	0	0	0
8	41.7	2.2	0	0	0	0
9	33.5	1.4	0	0	0	0
10	30.5	1.4	0	0	0	0
11	41.1	1.8	0	0	0	0
12	32.8	1.8	0	0	0	0
13	31.1	1.5	0	0	0	0
14	26.4	1.5	0	0	0	0
15	25	1	0	0	0	0
16	26.2	0.9	0	0	0	0
17	39.7	1.3	0	0	0	0
18	48.6	1.5	0	0	0	0
19	18.6	1.4	0	0	0	0
20	29	1.5	0	0	0	0
Rata-rata	31.43 ± 7.47	1.36 ± 0.39	0	0	0	0

Tabel 7. Hasil pengukuran tunas dalam media P0 umur 4 bulan

Ulangan	Tinggi planlet (mm)	Berat basah planlet (mg)	Berat kering planlet (mg)	Jumlah daun	Panjang daun (mm)
1	37	34.6	2.1	4	14.75
2	30	70.2	4.5	4	12
3	40	64.1	4.1	4	18.25
4	35	37.2	1.8	4	15.25
5	41	77	4	8	17.63
6	49	90.1	5	4	21.25
7	35	43.2	2	5	13.8
8	33	37.6	2.3	3	15.33
9	43	50.5	3.4	4	17.75
10	32	35.7	2.4	4	13.5
11	39	73.2	3.9	6	16.83
12	37	54.9	3.1	6	12.5
13	48	37.9	2.5	4	18.25
14	33	48.4	2.6	5	14.2
15	40	97	4.8	7	14.29
16	50	54.9	2.8	5	17.2
17	45	47.2	2.2	4	15.5
18	37	34.5	2.1	5	12.4
19	35	51.1	2.3	4	14.5
20	29	24.5	1.3	3	12.33
Rata-rata	38.4 ± 6.13	53.19 ± 19.72	2.96 ± 1.08	4.65 ± 1.27	15.38 ± 2.46

Tabel 8. Hasil pengukuran tunas dalam media P0 umur 4 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	29.4	1.5	1	4	0.7	0.1
2	53.9	3.3	2	12	6.1	0.5
3	57.7	2.3	2	9.5	5.1	0.4
4	31.5	1.5	1	7	1.9	0.2
5	69.4	3.4	3	5.33	3.1	0.3
6	73.4	3.6	1	5	1.7	0.2
7	36.8	1.7	1	5	1.4	0.1
8	24.8	1.1	2	8.5	4.2	0.6
9	31.5	1.6	2	9.5	4.4	0.6
10	24.8	1.4	1	4	0.6	0.1
11	63.2	2.8	2	7.75	3.2	0.5
12	45.4	2.5	1	6	1.9	0.2
13	30	1.4	1	3	0.7	0.1
14	40.8	1.6	1	2	0.8	0.1
15	83.9	3.7	2	2	0.9	0.1
16	45	1.9	2	4.5	3.7	0.3
17	41.2	1.5	2	3.5	0.7	0.1
18	28.9	1.5	1	7	0.9	0.1
19	42.7	1.6	1	5	1.3	0.1
20	16.5	0.7	1	6	1.1	0.2
Rata-rata	43.54 ± 18.17	2.03 ± 0.88	1.5 ± 0.61	5.83 ± 2.64	2.22 ± 1.69	0.25 ± 0.18

Lampiran 4. Data Hasil Pengukuran tunas pada media P1 (kedelai 50 g/L)

Tabel 9. Hasil pengukuran tunas dalam media P1 umur 1 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	19	15.1	1.2	4	3.5
2	18	12.6	0.8	2	7
3	19	10.8	0.8	2	7.5
4	17	10.1	0.9	3	5
5	16	10.8	0.9	2	8.5
6	16	10.9	1.1	2	3.5
7	20	14.8	1.4	2	8
8	19	13.8	1.3	3	5.67
9	16	11.1	1	3	5
10	16	10.8	1.2	3	5
11	17	11.1	0.6	3	4.67
12	18	15.5	1.2	3	8
13	16	12.4	0.8	3	7.67
14	16	13.9	1.4	3	6
15	17	10.6	0.7	3	5.67
16	18	10.8	0.8	2	9
17	16	13.9	1.6	2	9
18	17	10.6	0.6	3	8
19	18	15.1	1.1	3	9
20	18	14.3	1	3	7.33
Rata-rata	17.35 ± 1.27	12.45 ± 1.89	1.02 ± 0.28	2.7 ± 0.57	6.65 ± 1.81

Tabel 10. Hasil pengukuran tunas dalam media P1 umur 1 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	8.8	0.7	0	0	0	0
2	9.7	0.7	0	0	0	0
3	8.6	0.6	0	0	0	0
4	3.8	0.4	0	0	0	0
5	4.7	0.2	0	0	0	0
6	8.5	0.8	0	0	0	0
7	10.9	1	0	0	0	0
8	4.7	0.3	0	0	0	0
9	6	0.5	0	0	0	0
10	5.5	0.5	0	0	0	0
11	3.7	0.4	0	0	0	0
12	11.7	0.8	0	0	0	0
13	8.3	0.4	0	0	0	0
14	8.7	1.1	0	0	0	0
15	7.7	0.5	0	0	0	0
16	6.9	0.4	0	0	0	0
17	7.7	0.9	0	0	0	0
18	8.6	0.4	0	0	0	0
19	12.2	0.7	0	0	0	0
20	9.9	0.5	0	0	0	0
Rata-rata	7.83 ± 2.49	0.59 ± 0.24	0	0	0	0

Tabel 11. Hasil pengukuran tunas dalam media P1 umur 2 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	20	20.3	1.4	2	9.5
2	23.5	27.9	1.6	4	10
3	23	28.7	2.1	3	11.33
4	25	18.1	0.6	3	10.33
5	26	26.4	2.1	5	8.6
6	24	31.1	1.6	5	8.6
7	29	29.6	1.7	4	9.625
8	28	28.6	1.8	4	9.75
9	22	19.8	1.3	3	10.33
10	25	28.7	2	4	8.625
11	22	27.3	1.6	5	8
12	21	33.4	1.6	4	9.75
13	19	32.2	2	4	8.25
14	19	19.1	1.1	3	9
15	27	22	1.5	5	9.4
16	24	30.8	2.5	5	6.4
17	22	31.6	2.1	3	9.67
18	24	19.2	1.3	4	7.75
19	24	18.2	1.4	5	7.2
20	26	24.7	2.2	6	8.33
Rata-rata	23.68 ± 2.77	25.89 ± 5.23	1.68 ± 0.44	4.05 ± 0.99	9.02 ± 1.18

Tabel 12. Hasil pengukuran tunas dalam media P1 umur 2 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	10.1	0.4	0	0	0	0
2	24	1.4	0	0	0	0
3	18.9	0.8	0	0	0	0
4	14.3	0.4	0	0	0	0
5	23.9	1.8	0	0	0	0
6	24	0.8	0	0	0	0
7	24.8	1.4	0	0	0	0
8	23.2	1.1	0	0	0	0
9	14.8	0.8	0	0	0	0
10	17.6	1.1	0	0	0	0
11	17.5	1.3	0	0	0	0
12	26.7	1.1	0	0	0	0
13	14	0.7	0	0	0	0
14	13.3	0.7	0	0	0	0
15	18.9	1.3	0	0	0	0
16	26.2	1.2	0	0	0	0
17	26.7	1.4	0	0	0	0
18	15.1	0.7	0	0	0	0
19	15.8	1.2	0	0	0	0
20	19.6	1.7	0	0	0	0
Rata-rata	19.47 ± 5.12	1.07 ± 0.39	0	0	0	0

Tabel 13. Hasil pengukuran tunas dalam media P1 umur 3 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	29	30.6	1.5	5	11
2	26	31.7	2.1	5	10.2
3	24	35.2	2.2	5	10.6
4	32	31.9	2.3	5	8.6
5	28	43.5	2.7	6	12.17
6	29	34.7	2.5	4	11.75
7	26	33.4	2.5	5	8.4
8	32	44.2	3.2	5	13.2
9	20	42.5	2.5	3	9.67
10	30	32.6	2.1	5	9.4
11	29	42.5	2.8	6	11.17
12	30	30.8	2.9	5	8.4
13	29	31.6	1.5	5	9
14	36	35.5	2.1	6	10.83
15	31	41.2	2.1	6	10
16	29	37.6	2.7	4	11
17	29	33.8	3.2	5	10.6
18	32	34.6	2.8	6	9.83
19	28	37.6	2.6	6	11.17
20	21	39.5	3.2	2	8.5
Rata-rata	28.5 ± 3.75	36.25 ± 4.53	2.48 ± 0.49	4.95 ± 1.05	10.27 ± 1.33

Tabel 14. Hasil pengukuran tunas dalam media P1 umur 3 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	25.6	1.1	0	0	0	0
2	23.7	1.2	0	0	0	0
3	29.3	1.6	0	0	0	0
4	22.2	1.7	0	0	0	0
5	33	1.8	0	0	0	0
6	26.3	1.4	0	0	0	0
7	22.8	1.2	0	0	0	0
8	37.6	2.5	0	0	0	0
9	24.7	1.3	0	0	0	0
10	27.8	1.5	0	0	0	0
11	36.3	2.1	0	0	0	0
12	19.2	1.8	0	0	0	0
13	19.7	1.1	0	0	0	0
14	25.7	1.4	0	0	0	0
15	28.5	1.2	0	0	0	0
16	30.9	1.9	0	0	0	0
17	28.5	2.1	0	0	0	0
18	31.7	2.6	0	0	0	0
19	30.2	1.5	0	0	0	0
20	18.9	1.1	0	0	0	0
Rata-rata	27.13 ± 5.29	1.61 ± 0.45	0	0	0	0

Tabel 15. Hasil pengukuran tunas dalam media P1 umur 4 bulan

Ulangan	Tinggi planlet (mm)	Berat basah planlet (g)	Berat kering planlet (g)	Jumlah daun	Panjang daun (mm)
1	35	31.1	3.6	7	8.86
2	30	27.2	2.9	8	8.38
4	27	34	3.6	7	8.29
5	40	45.9	4.9	7	12.71
6	29	23.7	3.5	7	9.86
7	24	24.4	2.6	7	7.43
8	30	38.6	4.6	8	9.25
9	37	47.5	4.5	10	10.2
10	39	50.6	5.5	8	11.25
11	31	36	3.3	6	11.67
13	43	61.2	7.3	10	9.8
15	32	47.3	4.5	8	11.63
17	31	32.9	2.3	8	8.38
18	35	69.5	6.5	8	9.75
19	40	53.5	4.6	9	9.78
20	27	30.1	3	6	8.5
21	29	23.8	2.2	8	6.75
22	43	68.4	6.4	8	10.63
23	34	49.6	4.8	8	12.38
24	39	54.7	5.8	9	11.44
Rata-rata	33.75 ± 5.59	42.5 ± 14.45	4.32 ± 1.46	7.85 ± 1.09	9.85 ± 1.65

Tabel 16. Hasil pengukuran tunas dalam media P1 umur 4 bulan

Ulangan	Berat basah daun (g)	Berat kering daun (g)	Jumlah akar	Panjang akar (mm)	Berat basah akar (g)	Berat kering akar (g)
1	27.2	2.8	2	3	0.7	0.2
2	21.8	2.2	2	2.5	1.3	0.2
3	29.4	2.9	2	2.5	0.8	0.1
4	35.2	3.4	3	7	4.6	0.8
5	20.6	2.3	2	2.5	0.9	0.1
6	18.4	1.7	3	4	2.5	0.2
7	33	3.3	2	5	2	0.8
8	40.5	3.5	5	4.4	3.4	0.3
9	41.4	3.7	3	3.33	1.6	0.5
10	29.2	2.7	2	3	1	0.1
11	54.8	6.3	3	3.33	1.8	0.5
12	41.5	3.5	2	3	0.4	0.1
13	28.2	1.5	2	1.5	0.3	0
14	61.9	5.4	1	6	1.4	0.2
15	47.8	3.7	1	3	0.5	0.1
16	24.4	2.5	3	1	0.2	0
17	21.4	1.7	1	3	0.5	0.1
18	58.8	5	2	2.5	1.8	0.3
19	44.7	3.6	2	1.5	0.5	0.1
20	49.8	4.8	3	1.33	1.2	0.2
Rata-rata	36.5 ± 13.29	3.33 ± 1.28	2.3 ± 0.92	3.17 ± 1.52	1.37 ± 1.11	0.25 ± 0.23

Lampiran 5. Data Hasil Pengukuran tunas pada media P2 (kedelai 100 g/L)

Tabel 17. Hasil pengukuran tunas dalam media P2 umur 1 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	20	13.4	1	3	5.17
2	20	13.6	1.3	3	6.67
3	21	17.5	1	3	5.33
4	17	16.2	1.1	4	3.5
5	21	12.9	1.1	2	7
6	18	12.8	1.1	3	6.33
7	19	12.8	1.6	4	3.75
8	24	10.8	1.1	2	5.75
9	18	12.6	1.2	3	6.67
10	19	10.5	1	3	7
11	16	10.5	1.4	4	7
12	16	11.5	0.7	3	8.33
13	19	15.1	1.4	3	6.67
14	16	16	1.3	3	7
15	17	15.1	1.5	3	8
16	16	11.2	1	3	7.33
17	22.5	17	1.5	3	9
18	18	11	1.4	2	9.5
19	19	13.7	1	3	8.33
20	22	16.9	1	4	7.5
Rata-rata	18.93 ± 2.33	13.56 ± 2.31	1.19 ± 0.23	3.05 ± 0.61	6.79 ± 1.55

Tabel 18. Hasil pengukuran tunas dalam media P2 umur 1 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	8.6	0.7	0	0	0	0
2	4.3	0.4	0	0	0	0
3	9.9	0.3	0	0	0	0
4	10.2	0.7	0	0	0	0
5	7.9	0.6	0	0	0	0
6	7.1	0.5	0	0	0	0
7	7	0.9	0	0	0	0
8	6.4	0.5	0	0	0	0
9	5.7	0.6	0	0	0	0
10	7.8	0.7	0	0	0	0
11	8.3	1.1	0	0	0	0
12	9.4	0.5	0	0	0	0
13	10.2	0.7	0	0	0	0
14	13.4	1	0	0	0	0
15	11.8	0.8	0	0	0	0
16	8.5	0.7	0	0	0	0
17	13.9	1.2	0	0	0	0
18	8.5	0.8	0	0	0	0
19	11.6	0.6	0	0	0	0
20	15.2	0.6	0	0	0	0
Rata-rata	9.29 ± 2.81	0.69 ± 0.23	0	0	0	0

Tabel 19. Hasil pengukuran tunas dalam media P2 umur 2 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	29	30.7	1.8	5	8.9
2	22	24.4	1.4	4	9
3	29	32.3	2.1	4	9.75
4	25	27.6	2.1	4	8
5	24	29.5	2.3	3	11.17
6	23	24.6	1.9	5	7.4
7	27	28.9	3	4	9.75
8	27	28.2	1.5	4	9.5
9	26	26.1	2	5	7
10	28	30	2.2	4	11.25
11	25	28.8	2.3	3	14.33
12	25	30.7	2.6	4	11.33
13	25	29.9	2.3	4	11.5
14	24	34.8	2.8	4	9.75
15	25	29.2	1.4	4	11.25
16	23	28.5	2.6	4	7.5
17	26	31.1	2.9	3	11
18	20	32.6	2.3	4	6
19	25	31.2	2.2	3	8.67
20	27	25.7	1.5	3	11.67
Rata-rata	25.25 ± 3.17	29.24 ± 13.84	2.16 ± 1.04	3.9 ± 3.29	9.74 ± 7.02

Tabel 20. Hasil pengukuran tunas dalam media P2 umur 2 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	25.8	1.3	0	0	0	0
2	20.1	1.1	0	0	0	0
3	29.1	1.8	0	0	0	0
4	24.4	1.7	0	0	0	0
5	23.7	1.2	0	0	0	0
6	21.3	1.4	0	0	0	0
7	25.5	2.4	0	0	0	0
8	18.6	1	0	0	0	0
9	19.9	1.2	0	0	0	0
10	24.8	0.9	0	0	0	0
11	21	1.2	0	0	0	0
12	27.3	1.7	0	0	0	0
13	26.1	1.6	0	0	0	0
14	21.1	1.9	0	0	0	0
15	23	1.1	0	0	0	0
16	18.8	1.4	0	0	0	0
17	20.7	1.6	0	0	0	0
18	21.7	1.4	0	0	0	0
19	21.6	1.3	0	0	0	0
20	18.6	0.7	0	0	0	0
Rata-rata	22.66 ± 10.98	1.39 ± 0.76	0	0	0	0

Tabel 21. Hasil pengukuran tunas dalam media P2 umur 3 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	21	30.3	2.6	3	7.33
2	18	21	1.4	2	9.5
3	21	19.8	1.8	2	10
4	17	24.2	2.4	4	7.5
5	26	29.8	2.5	4	8.25
6	20	21.7	1.5	4	7.5
7	20	30.8	1.8	4	9
8	20	21.6	2.5	3	7.33
9	21	23.1	2.2	4	8
10	23	24.7	1.7	4	7.5
11	23	25.1	2.2	3	8.67
12	22	23.1	1.6	3	8.33
13	17	19.6	1.8	3	7.67
14	18	30.9	3.5	3	7
15	27	27.7	2.5	6	9.17
16	29	24	1.5	5	7.8
17	18	23.2	1.9	4	7.25
18	17	23.6	2	4	6.5
19	20	28.7	2.5	7	6.71
20	18	26.7	2.5	4	6.75
Rata-rata	20.8 ± 3.41	24.98 ± 3.64	2.12 ± 0.52	3.8 ± 1.19	7.89 ± 0.97

Tabel 22. Hasil pengukuran tunas dalam media P2 umur 3 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	15	1.4	0	0	0	0
2	15.7	0.5	0	0	0	0
3	9.7	0.6	0	0	0	0
4	18.7	1.4	0	0	0	0
5	19	0.8	0	0	0	0
6	17.3	1	0	0	0	0
7	27.8	1.5	0	0	0	0
8	12.3	0.9	0	0	0	0
9	14.7	1.7	0	0	0	0
10	19	1	0	0	0	0
11	17.4	1.4	0	0	0	0
12	14.2	0.7	0	0	0	0
13	12.3	0.9	0	0	0	0
14	12.9	1.1	0	0	0	0
15	25.3	2	0	0	0	0
16	21.5	1.1	0	0	0	0
17	15.3	1.6	0	0	0	0
18	18.8	1.4	0	0	0	0
19	22.7	1.6	0	0	0	0
20	17.7	1.8	0	0	0	0
Rata-rata	17.37 ± 4.51	1.22 ± 0.42	0	0	0	0

Tabel 23. Hasil pengukuran tunas dalam media P2 umur 4 bulan

Ulangan	Tinggi planlet (mm)	Berat basah planlet (g)	Berat kering planlet (g)	Jumlah daun	Panjang daun (mm)
1	39	85.3	7.9	9	7.78
2	48	85.7	9.6	10	9.2
3	37	57.5	6.2	10	8.6
4	22	90.4	10.6	9	8.33
5	30	45.6	4	9	8
6	25	38	4	10	7.1
7	38	64.9	6.5	11	7.36
8	26	29.9	2.9	6	8.17
9	28	34.4	3.2	6	8.33
10	33	51.9	4.6	8	8.88
11	41	55.1	3.8	9	9.11
12	32	43	4.5	6	9.67
13	26	49.2	5.1	9	8.11
14	23	53.4	6.1	6	10.17
15	30	24.5	2.5	8	7.63
16	32	43.5	4.2	7	9.29
18	30	26.1	3	7	9.29
19	30	47.1	4.5	6	9.5
20	26	52.5	6.9	8	7.5
21	34	44.8	4.2	8	7.63
Rata-rata	31.5 ± 6.56	51.4 ± 18.65	5.22 ± 2.19	8.1 ± 1.59	8.48 ± 0.87

Tabel 24. Hasil pengukuran tunas dalam media P2 umur 4 bulan

Ulangan	Berat basah daun (g)	Berat kering daun (g)	Jumlah akar	Panjang akar (mm)	Berat basah akar (g)	Berat kering akar (g)
1	79.1	6.5	2	2	0.8	0.1
2	77.9	7.5	4	2.75	2.7	1
3	52.2	4.9	2	1.5	0.4	0.1
4	83.6	8.2	1	1	0.1	0
5	43.2	3.2	1	3	0.5	0.2
6	30.4	2.6	1	1	0.1	0
7	55.8	4.7	4	3.25	2.4	0.4
8	26.7	2.6	1	2	0.5	0
9	30	2.3	2	4	1.4	0.2
10	46.6	3.6	1	4	0.6	0.1
11	48.8	3.2	1	4	0.2	0
12	38.2	3.7	1	1	0.1	0
13	47.1	4.2	0	0	0	0
14	45.3	4.3	0	0	0	0
15	21.9	2	1	3	0.4	0.1
16	42.5	3.5	0	0	0	0
17	20.5	1.9	2	5.5	1.7	0.4
18	41.1	4	0	0	0	0
19	44.1	5.4	0	0	0	0
20	39.1	3.1	0	0	0	0
Rata-rata	45.71 ± 17.66	4.07 ± 1.74	1.2 ± 1.19	1.9 ± 1.71	0.59 ± 0.82	0.13 ± 0.24

Lampiran 6. Data Hasil Pengukuran tunas pada media P3 (kedelai 150 g/L)

Tabel 25. Hasil pengukuran tunas dalam media P3 umur 1 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	21	13.5	1.4	3	4.5
2	22	16.2	1.4	3	6
3	17	13.0	1.2	3	4.33
4	18	12.7	1.3	3	2.33
5	18	17.1	2.2	4	5.25
6	14	10.6	0.7	2	2.5
7	18	11.5	1.5	3	3.67
8	14	11.5	1.1	2	5.5
9	19	12.0	1.1	3	6
10	14	12.7	1.5	3	5.67
11	17	10.9	0.7	3	6.5
12	17	10.2	0.9	2	6.5
13	21	16.3	1.2	4	5.25
14	22	19.3	1.7	3	7.67
15	15	12.9	1.7	3	9
16	19	12.5	1.1	2	8.75
17	20	16.7	1.4	3	7.17
18	14	12.5	1.1	2	7.5
19	15	12.3	1.9	3	8.5
20	16	14.2	1.3	3	7
	17.55	13.43	1.32	2.85	5.9795
	2.723678	2.44951123	0.37360266	0.587143	1.897124

Tabel 26. Hasil pengukuran tunas dalam media P3 umur 1 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	8.4	0.8	0	0	0	0
2	9.4	0.8	0	0	0	0
3	9	0.8	0	0	0	0
4	7.5	0.6	0	0	0	0
5	10.3	1	0	0	0	0
6	7.8	0.5	0	0	0	0
7	7.8	0.8	0	0	0	0
8	6.2	0.4	0	0	0	0
9	4.8	0.3	0	0	0	0
10	8.6	0.8	0	0	0	0
11	8.3	0.5	0	0	0	0
12	6.7	0.3	0	0	0	0
13	13.1	0.9	0	0	0	0
14	15.7	1.2	0	0	0	0
15	10.7	1.2	0	0	0	0
16	7.3	0.5	0	0	0	0
17	12.5	0.6	0	0	0	0
18	8.2	0.5	0	0	0	0
19	10.4	1.2	0	0	0	0
20	12.5	0.9	0	0	0	0
Rata-rata	9.26 ± 2.64	0.73 ± 0.28	0	0	0	0

Tabel 27. Hasil pengukuran tunas dalam media P3 umur 2 bulan

Ulangan	Tinggi tunas (mm)	Berat basah tunas (mg)	Berat kering tunas (mg)	Jumlah daun	Panjang daun (mm)
1	18	17.2	1.5	5	7.4
2	18	17.5	1.8	3	6
3	20	27.2	3	5	9.8
4	26	31.9	2.6	5	8.4
5	28	40.9	2.5	6	8.83
6	19	22.8	1.8	4	8.5
7	19	21.8	1.4	4	7.75
8	20	18.9	1.7	5	5.4
9	25	28.9	2.1	5	7.8
10	27	31.3	2.1	5	9.2
11	26	32.1	2.3	5	8.4
12	25	22.2	2.1	4	9
13	28	31.8	2.5	5	8.6
14	29	39.6	3.1	5	10.8
15	23	31.7	2.3	5	11
16	18	30.6	2.8	4	6.75
17	23	23.6	1.7	5	9.4
18	25	30.3	2.5	6	9.17
19	24	22.8	1.9	6	8.17
20	27	26.9	2	5	9.4
Rata-rata	23.4 ± 3.78	27.5 ± 6.64	2.19 ± 0.48	4.85 ± 0.75	8.49 ± 1.4

Tabel 28. Hasil pengukuran tunas dalam media P3 umur 2 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	13.8	0.9	0	0	0	0
2	8.1	0.7	0	0	0	0
3	21.9	2.1	0	0	0	0
4	25.7	1.7	0	0	0	0
5	32.1	1.9	0	0	0	0
6	18	1.1	0	0	0	0
7	18.6	1	0	0	0	0
8	16.3	1.3	0	0	0	0
9	24.7	1.7	0	0	0	0
10	26.5	1.5	0	0	0	0
11	28.6	1.7	0	0	0	0
12	20.1	1.8	0	0	0	0
13	29.2	2	0	0	0	0
14	34.4	2.3	0	0	0	0
15	26.7	1.7	0	0	0	0
16	20.7	1.6	0	0	0	0
17	19.4	1.1	0	0	0	0
18	28.8	2.2	0	0	0	0
19	19.5	1.5	0	0	0	0
20	23.7	1.3	0	0	0	0
Rata-rata	22.84 ± 6.44	1.55 ± 0.44	0	0	0	0

Tabel 29. Hasil pengukuran tunas dalam media P3 umur 3 bulan

Ulangan	Tinggi planlet (mm)	Berat basah planlet (mg)	Berat kering planlet (mg)	Jumlah daun	Panjang daun (mm)
1	23	46.9	3.1	5	11.6
2	26	36.6	2.9	4	12.75
3	19	44.7	4.9	4	9.5
4	24	44.9	5.4	5	9.8
5	20	45.3	5.2	5	9.4
6	30	42.1	3	6	10.33
7	15	22.2	3.3	2	7
8	25	54.9	4.3	5	12
9	16	25.9	2.2	4	7
10	26	50.4	4.9	4	13
11	31	49.4	4.7	6	10.17
12	16	18.4	1.9	5	8
13	18	30.5	2.8	4	6.25
14	17	27.4	2.6	3	11.33
15	19	26.8	2.7	5	8
16	18	26.6	2.7	5	10.6
17	24	35	2.7	5	11.6
18	19	28	2.6	3	11
19	17	37.2	3.4	3	10.67
20	18	27.2	3	5	8.8
Rata-rata	21.05 ± 4.74	36.02 ± 10.68	3.42 ± 1.07	4.4 ± 1.05	9.94 ± 1.94

Tabel 30. Hasil pengukuran tunas dalam media P3 umur 3 bulan

Ulangan	Berat basah daun (mg)	Berat kering daun (mg)	Jumlah akar	Panjang akar (mm)	Berat basah akar (mg)	Berat kering akar (mg)
1	40.9	2.4	2	2.5	1.2	0.2
2	31.5	2.1	1	3	0.9	0.1
3	31.2	3.3	4	7	7.8	0.7
4	29.5	3.2	5	9.4	10.4	1.4
5	32.3	3.3	3	7.67	8.1	1.1
6	36.9	2.2	1	2	0.5	0.1
7	14.5	1.8	2	9.5	4.8	0.9
8	47	3.2	2	2	1	0.3
9	21.1	1.6	2	1.5	0.9	0.1
10	36.7	3	2	5.25	2.3	0.4
11	42	3.3	1	6	1.6	0.3
12	15.1	1.2	1	5	1.2	0.2
13	25	2.1	2	4.5	2.4	0.3
14	22.9	2	1	4.5	0.9	0.1
15	20	1.8	2	4	1.9	0.2
16	24.1	2.2	2	3	0.6	0.1
17	30.7	2	2	3	0.7	0.1
18	20.9	1.9	2	3	1.3	0.1
19	26.5	1.8	3	6.67	4.9	0.9
20	21.8	1.8	2	4	1.5	0.3
Rata-rata	28.53 ± 8.96	2.31 ± 0.66	2.1 ± 1.02	4.67 ± 2.38	2.75 ± 2.89	0.39 ± 0.38

Tabel 31. Hasil pengukuran tunas dalam media P3 umur 4 bulan

Ulangan	Tinggi planlet (mm)	Berat basah planlet (g)	Berat kering planlet (g)	Jumlah daun	Panjang daun (mm)
1	28	105.5	12.9	7	14.29
2	23	121.5	14.2	7	11.43
3	22	24.6	2.7	5	9.2
4	22	55.4	8.1	7	8.14
5	21	70.7	9.4	8	9.75
6	22	45.3	7.2	4	10.5
7	22	43.5	4.7	6	11
8	25	35.5	4.5	6	11.17
9	32	55.6	5.3	6	11.67
10	25	82.6	8.1	6	14.33
11	25	55.3	7.1	7	12.14
12	29	69.2	7.9	7	12.86
13	22	41.2	4.6	6	10.33
14	32	58.4	7.1	8	9.13
15	25	41.5	5.1	6	10
16	21	59.4	6.8	7	11
17	19	27.5	3.5	5	8.6
18	28	65.3	7	6	14.5
19	33	52.5	6	8	10.63
20	21	43.5	5.1	5	11.8
Rata-rata	24.85 ± 4.16	57.7 ± 24.03	6.87 ± 2.85	6.35 ± 1.09	11.12 ± 1.84

Tabel 32. Hasil pengukuran tunas dalam media P3 umur 4 bulan

Ulangan	Berat basah daun (g)	Berat kering daun (g)	Jumlah akar	Panjang akar (mm)	Berat basah akar (g)	Berat kering akar (g)
1	83.9	8.5	7	9.29	17.9	3.7
2	85.1	7.8	9	9	26.2	5.4
3	20.4	2	1	5	0.4	0.1
4	44.8	5.5	4	8	6.6	1.5
5	59.2	6.9	3	3.67	3.8	0.8
6	37.7	5	3	9	4.1	1.2
7	38.6	3.6	2	6	2.2	0.2
8	29.7	3	4	7.25	4.2	0.8
9	48.5	3.8	3	8	4.6	0.8
10	75.6	5.3	4	5.75	6.6	1.1
11	47.9	5.3	4	6.5	4.1	0.8
12	53.9	5.6	5	7	9.9	1.5
13	33.2	3.4	3	7	3.3	0.6
14	44.7	3.8	6	5.67	6	1.1
15	33.1	3.6	4	6	4.7	0.7
16	50.2	4.4	6	5.83	7.9	0.9
17	20.8	2.2	2	5	1.9	0.4
18	61.2	6.2	2	2	0.5	0.1
19	49.6	5	4	3.5	1.5	0.6
20	39.2	4.1	3	2	0.9	0.1
Rata-rata	47.87 ± 18.27	4.75 ± 1.72	3.95 ± 1.9	6.97 ± 2.13	5.87 ± 6.22	1.12 ± 1.28

Lampiran 7. Data hasil uji statistik parameter perkembangan pada minggu ke-16

1. Hasil uji statistik tinggi tunas

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for tinggi.tunas
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	5.57583
	Absolute	.124
Most Extreme Differences	Positive	.124
	Negative	-.056
Kolmogorov-Smirnov Z		1.110
Asymp. Sig. (2-tailed)		.170

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: tinggi.tunas

F	df1	df2	Sig.
1.217	3	76	.309

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

a. Design: Intercept + perlakuan

Oneway

ANOVA

tinggi.tunas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1906.650	3	635.550	19.666	.000
Within Groups	2456.100	76	32.317		
Total	4362.750	79			

Post Hoc Tests

tinggi.tunas

Duncan				
perlakuan	N	Subset for alpha = 0.05		
		1	2	3
P3 150 g/L	20	24.85		
P2 100 g/L	20		31.50	
P1 50 g/L	20		33.75	
P0 0 g/L	20			38.40
Sig.		1.000	.215	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

2. Hasil uji statistik berat basah tunas

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for beratbasah.tuna s
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	19.13960
	Absolute	.103
Most Extreme Differences	Positive	.103
	Negative	-.075
Kolmogorov-Smirnov Z		.921
Asymp. Sig. (2-tailed)		.364

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: beratbasah.tunas

F	df1	df2	Sig.
.588	3	76	.624

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

a. Design: Intercept + perlakuan

ANOVA

beratbasah.tunas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2437.710	3	812.570	2.134	.103
Within Groups	28939.606	76	380.784		
Total	31377.316	79			

beratbasah.tunas

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
P1 50 g/L	20	42.500	
P2 100 g/L	20	51.140	51.140
P0 0 g/L	20	53.190	53.190
P3 150 g/L	20		57.700
Sig.		.106	.322

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

3. Hasil uji statistik berat kering tunas

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for beratkering.tunas
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	1.97686
	Absolute	.099
Most Extreme Differences	Positive	.099
	Negative	-.078
Kolmogorov-Smirnov Z		.886
Asymp. Sig. (2-tailed)		.413

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: beratkering.tunas

F	df1	df2	Sig.
3.249	3	76	.026

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

a. Design: Intercept + perlakuan

Games-Howell Test

Multiple Comparisons						
Dependent Variable: beratkering.tunas						
Games-Howell						
(i) perlakuan	(j) perlakuan	Mean Difference (i-j)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
P0 0 g/L	P1 50 g/L	-1.360	.4052	.010	-2.453	-.267
	P2 100 g/L	-2.265*	.5473	.002	-3.751	-.759
	P3 150 g/L	-3.905*	.6816	.000	-5.784	-2.026
P1 50 g/L	P0 0 g/L	1.360	.4052	.010	.267	2.453
	P2 100 g/L	.895	.5898	.439	2.453	.700
	P3 150 g/L	-2.545*	.7162	.007	-4.499	-.591
P2 100 g/L	P0 0 g/L	2.265*	.5473	.002	.759	3.751
	P1 50 g/L	.895	.5898	.439	-.700	2.490
	P3 150 g/L	1.650	.8051	.190	3.819	.581
P3 150 g/L	P0 0 g/L	3.905*	.6816	.000	2.026	5.784
	P1 50 g/L	2.545*	.7162	.007	.591	4.499
	P2 100 g/L	1.650	.8051	.190	-5.119	3.819

Based on observed means.
The error term is Mean Square(Error) = 4.362.
*. The mean difference is significant at the .05 level.

Rekapitulasi hasil uji statistik rata-rata berat kering tunas dengan Uji Games-Howell:

	P0	P1	P2	P3
P0		S	S	S
P1	S		TS	S
P2	S	TS		TS
P3	S	S	TS	

Keterangan :

Perlakuan dengan pemberian serbuk biji kedelai: P0 = 0 g/L, P1 = 50 g/L, P2 = 100 g/L, P3 = 150 g/L.

4. Hasil uji statistik jumlah daun

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for jumlah.daun
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	1.25006
	Absolute	.077
Most Extreme Differences	Positive	.077
	Negative	-.061
Kolmogorov-Smirnov Z		.691
Asymp. Sig. (2-tailed)		.726

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: jumlah.daun

F	df1	df2	Sig.
1.845	3	76	.146

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

a. Design: Intercept + perlakuan

ANOVA

jumlah.daun

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	152.037	3	50.679	31.200	.000
Within Groups	123.450	76	1.624		
Total	275.487	79			

jumlah.daun

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
P0 0 g/L	20	4.65		
P3 150 g/L	20		6.35	
P1 50 g/L	20			7.85
P2 100 g/L	20			8.10
Sig.		1.000	1.000	.537

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

5. Hasil uji statistik panjang daun**NPar Tests****One-Sample Kolmogorov-Smirnov Test**

		Residual for panjang.daun
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	1.75995
	Absolute	.084
Most Extreme Differences	Positive	.084
	Negative	-.048
Kolmogorov-Smirnov Z		.754
Asymp. Sig. (2-tailed)		.620

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: panjang.daun

F	df1	df2	Sig.
4.672	3	76	.005

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

a. Design: Intercept + perlakuan

Games-Howell Test

Multiple Comparisons

Dependent Variable: panjang_daun
Games-Howell

ii perakuan	jj perlakuan	Mean Difference (i-j)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
P0 0 g/L	P1 50 g/L	5.5235*	.66179	.000	3.7390	7.3180
	P2 100 g/L	3.0900*	.50269	.000	5.2039	0.5021
	P3 150 g/L	4.2920*	.68583	.000	2.4028	6.1012
P1 50 g/L	P0 0 g/L	-5.5235*	.66179	.000	-7.3180	-3.7390
	P2 100 g/L	1.3645	.41062	.014	-.2288	2.5002
	P3 150 g/L	1.2755	.55174	.113	2.7505	-.2065
P2 100 g/L	P0 0 g/L	-3.0900*	.50269	.000	-0.5021	-5.2039
	P1 50 g/L	-1.3645	.41062	.014	-2.5002	-.2288
	P3 150 g/L	-2.6410*	.45385	.000	-3.8828	-1.3992
P3 150 g/L	P0 0 g/L	-4.2920*	.68583	.000	-6.1012	-2.4028
	P1 50 g/L	1.2755	.55174	.113	-.2065	2.7505
	P2 100 g/L	2.6410*	.45305	.000	1.3992	3.0020

Based on observed means.

The error term is Mean Square(Error) = 3.770.

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

Rekapitulasi hasil uji statistik rata-rata panjang daun dengan Uji Games-Howell:

	P0	P1	P2	P3
P0		S	S	S
P1	S		S	TS
P2	S	S		S
P3	S	TS	S	

Keterangan :

Perlakuan dengan pemberian serbuk biji kedelai: P0 = 0 g/L, P1 = 50 g/L, P2 = 100 g/L, P3 = 150 g/L.

6. Hasil uji statistik berat basah daun

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for beratbasah.dau n
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	16.64809
	Absolute	.107
Most Extreme Differences	Positive	.107
	Negative	-.064
Kolmogorov-Smirnov Z		.955
Asymp. Sig. (2-tailed)		.322

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: beratbasah.dau

F	df1	df2	Sig.
.330	3	76	.803

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

a. Design: Intercept + perlakuan

ANOVA

beratbasah.dau

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1457.577	3	485.859	1.686	.177
Within Groups	21895.543	76	288.099		
Total	23353.120	79			

beratbasah.daun

Duncan

Perlakuan	N	Subset for alpha = 0.05
		1
P1 50 g/L	20	36.500
P0 0 g/L	20	43.540
P2 100 g/L	20	45.705
P3 150 g/L	20	47.865
Sig.		.055

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

7. Hasil uji statistik berat kering daun**NPar Tests****One-Sample Kolmogorov-Smirnov Test**

		Residual for beratkering.dau n
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	1.41945
	Absolute	.117
Most Extreme Differences	Positive	.117
	Negative	-.049
Kolmogorov-Smirnov Z		1.046
Asymp. Sig. (2-tailed)		.224

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: beratkering.daun

F	df1	df2	Sig.
2.283	3	76	.086

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

a. Design: Intercept + perlakuan

ANOVA

beratkering.daun

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	81.425	3	27.142	12.959	.000
Within Groups	159.172	76	2.094		
Total	240.597	79			

beratkering.daun

Duncan

perlakuan	N	Subset for alpha = 0.05		
		1	2	3
P0 0 g/L	20	2.030		
P1 50 g/L	20		3.325	
P2 100 g/L	20		4.070	4.070
P3 150 g/L	20			4.750
Sig.		1.000	.108	.141

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

8. Hasil uji statistik jumlah akar

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for jumlah.akar
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	1.22913
	Absolute	.152
Most Extreme Differences	Positive	.152
	Negative	-.117
Kolmogorov-Smirnov Z		1.361
Asymp. Sig. (2-tailed)		.049

a. Test distribution is Normal.

b. Calculated from data.

Kruskal-Wallis Test

Test Statistics^{a,b}

	jumlah.akar
Chi-Square	36.548
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable:

perlakuan

Rekapitulasi hasil uji statistik rata-rata jumlah akar dengan Uji Mann-Whitney:

	P0	P1	P2	P3
P0		S	TS	S
P1	S		S	S
P2	TS	S		S
P3	S	S	S	

Keterangan :

Perlakuan dengan pemberian serbuk biji kedelai: P0 = 0 g/L, P1 = 50 g/L, P2 = 100 g/L, P3 = 150 g/L.

9. Hasil uji statistik panjang akar

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for panjang.akar
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	2.00601
	Absolute	.104
Most Extreme Differences	Positive	.104
	Negative	-.059
Kolmogorov-Smirnov Z		.926
Asymp. Sig. (2-tailed)		.358

a. Test distribution is Normal.

b. Calculated from data.

Levene's Test of Equality of Error Variances^a

Dependent Variable: panjang.akar

F	df1	df2	Sig.
2.309	3	76	.083

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

a. Design: Intercept + perlakuan

ANOVA

panjang.akar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	250.127	3	83.376	19.932	.000
Within Groups	317.903	76	4.183		
Total	568.030	79			

panjang.akar

Duncan

perlakuan	N	Subset for alpha = 0.05	
		1	2
P2 100 g/L	20	1.9000	
P1 50 g/L	20	3.1695	
P0 0 g/L	20		5.8290
P3 150 g/L	20		6.0730
Sig.		.053	.707

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

10. Hasil uji statistik berat basah akar

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for beratbasah.akar
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	3.23096
	Absolute	.201
Most Extreme Differences	Positive	.201
	Negative	-.192
Kolmogorov-Smirnov Z		1.796
Asymp. Sig. (2-tailed)		.003

a. Test distribution is Normal.

b. Calculated from data.

Kruskal-Wallis Test

Test Statistics^{a,b}

	beratbasah.akar
Chi-Square	34.411
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: perlakuan

Rekapitulasi hasil uji statistik rata-rata berat basah akar dengan Mann-Whitney :

	P0	P1	P2	P3
P0		TS	S	S
P1	TS		S	S
P2	S	S		S
P3	S	S	S	

Keterangan :

Perlakuan dengan pemberian serbuk biji kedelai: P0 = 0 g/L, P1 = 50 g/L, P2 = 100 g/L, P3 = 150 g/L.

11. Hasil uji statistik berat kering akar

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Residual for beratkering.akar
N		80
Normal Parameters ^{a,b}	Mean	.0000
	Std. Deviation	.65287
	Absolute	.251
Most Extreme Differences	Positive	.251
	Negative	-.225
Kolmogorov-Smirnov Z		2.247
Asymp. Sig. (2-tailed)		.000

a. Test distribution is Normal.

b. Calculated from data.

Kruskal-Wallis Test

Test Statistics^{a,b}

		beratkering.akar
Chi-Square		31.391
df		3
Asymp. Sig.		.000

a. Kruskal Wallis Test

b. Grouping Variable: perlakuan

Rekapitulasi hasil uji statistik rata-rata berat kering akar dengan uji Mann-Whitney :

	P0	P1	P2	P3
P0		TS	S	S
P1	TS		S	S
P2	S	S		S
P3	S	S	S	

Keterangan :

Perlakuan dengan pemberian serbuk biji kedelai: P0 = 0 g/L, P1 = 50 g/L, P2 = 100 g/L, P3 = 150 g/L.