

LAMPIRAN-LAMPIRAN



Lampiran 1 : Perhitungan dosis pestisida yang digunakan.

Perhitungan dosis pestisida dilakukan berdasarkan dosis anjuran dibagi jumlah tanaman/ha yaitu 160.000 tanaman/ha. Masing-masing pestisida menggunakan tiga dosis yang berbeda.

A. Insektisida (Furadan 3G)

Dosis anjuran 20 kg/ha

1. Dosis 13 kg/ha

$$\frac{13 \times 1000}{160.000} = 0,081 \text{ gr/tanaman}$$

2. Dosis 20 kg/ha

$$\frac{20 \times 1000}{160.000} = 0,125 \text{ gr/tanaman}$$

3. Dosis 27 kg/ha

$$\frac{27 \times 1000}{160.000} = 0,169 \text{ gr/tanaman}$$

B. Herbisida (Goal 2E)

Dosis anjuran 1,25 lt/ha

1. 0,85 lt/ha

$$\frac{0,85 \times 1000}{160.000} = 0,005 \text{ ml/tanaman}$$

2. 1,25 lt/ha

$$\frac{1,25 \times 1000}{160.000} = 0,008 \text{ ml/tanaman}$$

3. 1,65 lt/ha

$$\frac{1,65 \times 1000}{160.000} = 0,011 \text{ ml/tanaman}$$

Lampiran 2 : Sidik ragam pengaruh pestisida yang berbeda terhadap jumlah bintil akar setiap batang.

| Perlakuan | Jumlah bintil akar | | | Total | Rataan |
|----------------|--------------------|-------|-------|-------|--------|
| | u_1 | u_2 | u_3 | | |
| K | 250 | 443 | 324 | 1017 | 339 |
| I ₁ | 350 | 366 | 137 | 853 | 284 |
| I ₂ | 95 | 287 | 263 | 645 | 215 |
| I ₃ | 361 | 124 | 151 | 636 | 212 |
| H ₁ | 179 | 287 | 111 | 577 | 192 |
| H ₂ | 148 | 138 | 223 | 509 | 170 |
| H ₃ | 195 | 140 | 123 | 458 | 153 |
| Total | | | | 4695 | |

Perhitungan :

$$1. FK = \frac{(4695)^2}{21} = 1049667,857$$

$$2. JKT = (250^2 + \dots + 123^2) - FK$$

$$= 1258173 - 1049667,857 = 208505,143$$

$$3. JKP = \left(\frac{1017^2}{3} + \dots + \frac{458^2}{3} \right) - FK = \frac{3384193}{3} - FK =$$

$$= 1128064,3 - 1049667,857 = 78396,47$$

$$4. JKG = JKT - JKP = 208505,143 - 78396,48 = 130108,663$$

Daftar sidik ragam jumlah bintil akar setiap batang.

| SK | db | JK | KT | FHit | Ftab | |
|-----------|----|-----------|----------|--------------------|------|------|
| | | | | | 5% | 1% |
| Perlakuan | 6 | 78396,48 | 13066,08 | 1,41 ^{ns} | 2,8 | 4,46 |
| Galat | 14 | 130108,66 | 9293,48 | | | |
| Total | 20 | 208505,14 | | | | |

ns = non significant

Lampiran 3 : Sidik ragam pengaruh pestisida yang berbeda terhadap persentase bintil akar efektif setiap batang.

| Perlakuan | Persentase bin. akar ef. | | | Total | Rataan |
|----------------|--------------------------|-------|-------|--------|--------|
| | u_1 | u_2 | u_3 | | |
| K | 76,0 | 69,8 | 69,8 | 215,6 | 71,9 |
| I ₁ | 63,0 | 82,5 | 52,6 | 198,1 | 66,0 |
| I ₂ | 41,0 | 69,1 | 80,9 | 191,1 | 63,7 |
| I ₃ | 84,0 | 45,9 | 50,0 | 179,9 | 59,9 |
| H ₁ | 54,6 | 65,3 | 56,9 | 176,8 | 58,9 |
| H ₂ | 45,9 | 47,9 | 78,5 | 172,3 | 57,4 |
| H ₃ | 56,5 | 54,5 | 57,8 | 168,8 | 56,3 |
| Total | | | | 1302,6 | |

Hasil Transformasi arc sin \sqrt{x}

| Perlakuan | Jumlah bintil efektif | | | Total | Rataan |
|----------------|-----------------------|-------|-------|--------|--------|
| | u_1 | u_2 | u_3 | | |
| K | 9,72 | 9,35 | 9,35 | 28,42 | 9,47 |
| I ₁ | 8,94 | 10,08 | 8,25 | 27,27 | 9,09 |
| I ₂ | 7,43 | 9,31 | 9,99 | 26,73 | 8,91 |
| I ₃ | 10,17 | 7,77 | 8,07 | 26,01 | 8,67 |
| H ₁ | 8,39 | 9,08 | 8,54 | 26,01 | 8,67 |
| H ₂ | 7,77 | 7,92 | 9,86 | 25,55 | 8,52 |
| H ₃ | 8,52 | 8,38 | 8,60 | 25,50 | 8,50 |
| Total | | | | 185,49 | |

Perhitungan :

$$1. FK = \frac{(185,49)^2}{21} = 1638,41$$

$$2. JKT = (9,72^2 + \dots + 8,60^2) - FK = 1652,39 - 1638,41 = 13,98$$

$$3. JKP = \frac{(28,42^2 + \dots + 25,50^2)}{3} - FK = \frac{4921,9349}{3} - FK = 1640,64 - 1638,41 = 2,23$$

$$4. JKG = JKT - JKP = 13,98 - 2,23 = 11,75$$

Daftar sidik ragam persentase bintil akar efektif.

| SK | db | JK | KT | FHit | Ftab | |
|-----------|----|-------|------|--------------------|------|------|
| | | | | | 5% | 1% |
| Perlakuan | 6 | 2,23 | 0,37 | 0,44 ^{ns} | 2,8 | 4,46 |
| Galat | 14 | 11,75 | 0,83 | | | |
| Total | 20 | 13,98 | | | | |

ns = non significant

Lampiran 4 : Sidik ragam pengaruh pestisida yang berbeda terhadap berat basah bintil akar efektif dan non efektif.

| Perlakuan | Berat basah bintil akar (gr) | | | Total | Rataan |
|-----------|------------------------------|-------|-------|-------|--------|
| | u_1 | u_2 | u_3 | | |
| K1 | 1,07 | 1,83 | 1,40 | 4,30 | 1,43 |
| I1 | 0,73 | 1,87 | 0,72 | 3,32 | 1,11 |
| I2 | 0,97 | 0,59 | 1,44 | 3,00 | 1,00 |
| I3 | 1,16 | 0,60 | 1,02 | 2,78 | 0,93 |
| H1 | 0,88 | 1,31 | 0,34 | 2,53 | 0,84 |
| H2 | 0,68 | 0,85 | 0,68 | 2,21 | 0,74 |
| H3 | 0,61 | 0,39 | 0,28 | 1,28 | 0,43 |
| Total | | | | 19,42 | |

Perhitungan :

$$1. FK = \frac{(19,42)^2}{21} = 17,96$$

$$2. JKT = (1,07^2 + \dots + 0,28^2) - FK = 21,97 - 17,96 = 4,01$$

$$3. JKP = \frac{(4,30^2 + \dots + 1,28^2)}{3} - FK$$

$$= \frac{59,1642}{3} - FK = 19,72 - 17,96 = 1,76$$

$$4. JKG = JKT - JKP = 4,01 - 1,76 = 2,25$$

Daftar sidik ragam berat basah bintil akar efektif dan non efektif.

| SK | db | JK | KT | FHit | Ftab | |
|-----------|----|------|------|-------------------|------|------|
| | | | | | 5% | 1% |
| Perlakuan | 6 | 1,76 | 0,29 | 1,8 ^{ns} | 2,85 | 4,46 |
| Galat | 14 | 2,25 | 0,16 | | | |
| Total | 20 | 4,01 | | | | |

* = non significant

Lampiran 5 : Sidik ragam pengaruh pestisida yang berbeda terhadap berat kering bintil akar efektif dan non efektif.

| Perlakuan | Berat kering bintil akar (gr) | | | Total | Rataan |
|----------------|-------------------------------|-------|-------|-------|--------|
| | u_1 | u_2 | u_3 | | |
| K | 0,29 | 0,35 | 0,31 | 0,95 | 0,32 |
| I ₁ | 0,22 | 0,34 | 0,09 | 0,65 | 0,22 |
| I ₂ | 0,22 | 0,16 | 0,16 | 0,54 | 0,18 |
| I ₃ | 0,03 | 0,12 | 0,27 | 0,42 | 0,14 |
| H ₁ | 0,21 | 0,05 | 0,14 | 0,40 | 0,13 |
| H ₂ | 0,09 | 0,14 | 0,07 | 0,30 | 0,10 |
| H ₃ | 0,15 | 0,03 | 0,09 | 0,27 | 0,09 |
| Total | | | | 3,53 | |

Perhitungan :

$$1. FK = \frac{(3,53)^2}{21} = \frac{12,4609}{21} = 0,59$$

$$2. JKT = (0,29^2 + \dots + 0,09^2) - FK = 0,7929 - 0,59 = 0,2029$$

$$3. JKP = \frac{(0,95^2 + \dots + 0,27^2)}{3} - FK = \frac{2,1159}{3} - FK = 0,7053 - 0,59 = 0,1153$$

$$4. JKG = JKT - JKP = 0,2029 - 0,1153 = 0,0876$$

Daftar sidik ragam berat kering bintil akar efektif dan non efektif.

| SK | db | JK | KT | FHit | Ftab | |
|-----------|----|--------|-------|-------|------|------|
| | | | | | 5% | 1% |
| Perlakuan | 6 | 0,1153 | 0,019 | 3,17* | 2,8 | 4,46 |
| Galat | 14 | 0,0876 | 0,006 | | | |
| Total | 20 | 0,2029 | | | | |

* : berbeda nyata

Lampiran 6 : Perhitungan Uji beda wilayah ganda duncan untuk berat kering bintil akar (gr).

$$W = Q_{(14, 0,05)} \times \sqrt{KTG}$$

$$S_y = \sqrt{\frac{0,006}{3}} = 0,04$$

| | Jarak perlakuan yang dibandingkan | |
|---------------------|-----------------------------------|------|
| | 2 | 3 |
| Q (5%) | 3,03 | 3,18 |
| W _D (5%) | 0,12 | 0,13 |

Uji beda wilayah ganda duncan untuk berat kering bintil akar (gr).

| Rata \bar{z}_i | 0,32 | 0,22 | 0,18 | 0,14 | 0,13 | 0,10 | 0,09 |
|------------------|-------|-------|------|------|------|------|------|
| 0,32 | - | | | | | | |
| 0,22 | 0,10* | - | | | | | |
| 0,18 | 0,14* | 0,04 | - | | | | |
| 0,14 | 0,18* | 0,08 | 0,04 | - | | | |
| 0,13 | 0,19* | 0,09* | 0,05 | 0,01 | - | | |
| 0,10 | 0,22* | 0,12* | 0,08 | 0,04 | 0,03 | - | |
| 0,09 | 0,23* | 0,13* | 0,09 | 0,05 | 0,04 | 0,01 | - |

* = berbeda nyata taraf 5%

Lampiran 7 : Sidik ragam pengaruh pestisida yang berbeda terhadap berat kering tanaman kacang tanah (*Arachis hypogaea. L*)

| Perlakuan | Berat kering tanaman (gr) | | | Total | Rataan |
|----------------|---------------------------|-------|-------|--------|--------|
| | u_1 | u_2 | u_3 | | |
| K | 25,39 | 22,45 | 27,55 | 75,39 | 25,13 |
| I ₁ | 22,42 | 29,87 | 21,24 | 73,53 | 24,51 |
| I ₂ | 22,91 | 23,47 | 18,82 | 65,20 | 21,70 |
| I ₃ | 21,39 | 20,03 | 18,39 | 59,81 | 19,90 |
| H ₁ | 12,49 | 17,44 | 22,67 | 52,60 | 17,50 |
| H ₂ | 13,56 | 20,14 | 16,38 | 50,08 | 16,69 |
| H ₃ | 21,05 | 12,42 | 15,66 | 49,13 | 16,38 |
| Total | | | | 425,75 | |

Perhitungan :

- JK = $\frac{(425,74)^2}{21} = 8631,17$
- JKT = $(25,39^2 + \dots + 15,66^2) - FK = 9054,9692 - 8631,17 = 423,7992$
- JKP = $\frac{(75,39^2 + \dots + 49,13^2)}{3} - FK = \frac{26607,1124}{3} - FK = 8869,04 - 8631,17 = 237,87$
- JKG = JKT - JKP = $423,7992 - 237,87 = 185,93$

Daftar sidik ragam berat kering tanaman

| SK | db | JK | KT | FHit | Ftab | |
|-----------|----|--------|-------|-------|------|------|
| | | | | | 5% | 1% |
| Perlakuan | 6 | 237,87 | 39,65 | 2,99* | 2,85 | 4,46 |
| Galat | 14 | 185,90 | 13,28 | | | |
| Total | 20 | 423,80 | | | | |

* = berbeda nyata

Lampiran 8 : Perhitungan uji beda wilayah ganda duncan untuk berat kering (gr) tanaman kacang tanah (*Arachis hypogaea. L.*)

$$W_D = Q_{(14, 0,05)} \times \sqrt{\frac{KTG}{3}}$$

$$S_Y = \sqrt{\frac{13,28}{3}} = 2,10$$

| | Jarak perlakuan yang dibandingkan | |
|---------|-----------------------------------|------|
| | 2 | 3 |
| Q (5%) | 3,03 | 3,18 |
| WD (5%) | 6,36 | 6,68 |

Uji beda wilayah ganda duncan antar perlakuan pestisida yang berbeda terhadap berat kering tanaman.

| Rata 2 | 25,13 | 24,51 | 21,7 | 19,9 | 17,5 | 16,69 | 16,38 |
|--------|-------|-------|------|------|------|-------|-------|
| 25,13 | - | | | | | | |
| 24,51 | 0,62 | - | | | | | |
| 21,70 | 3,42 | 2,81 | - | | | | |
| 19,90 | 5,23* | 4,61* | 1,80 | - | | | |
| 17,50 | 7,63* | 7,01* | 4,20 | 2,40 | - | | |
| 16,69 | 8,44* | 7,82* | 5,01 | 3,21 | 0,81 | - | |
| 16,38 | 8,75* | 8,13* | 5,32 | 3,52 | 1,12 | 0,30 | - |

* = berbeda nyata

Lampiran 9 : Sidik ragam pengaruh pestisida yang berbeda terhadap tinggi tanaman Kacang tanah (*Arachis hypogaea. L.*)

| Perlakuan | Tinggi tanaman (cm) | | | Total | Rataan |
|----------------|---------------------|----------------|----------------|--------|--------|
| | u ₁ | u ₂ | u ₃ | | |
| K | 62,0 | 55,0 | 51,0 | 168,0 | 56,0 |
| I ₁ | 61,0 | 50,0 | 53,0 | 164,0 | 54,7 |
| I ₂ | 53,5 | 50,0 | 50,5 | 154,0 | 51,3 |
| I ₃ | 50,0 | 48,5 | 50,0 | 148,5 | 49,5 |
| H ₁ | 48,0 | 48,5 | 47,0 | 143,5 | 47,8 |
| H ₂ | 47,5 | 43,0 | 47,5 | 138,0 | 46,0 |
| H ₃ | 45,0 | 50,0 | 42,5 | 137,5 | 45,8 |
| Total | | | | 1053,5 | |

Perhitungan :

$$1. FK = \frac{(1053,5)^2}{21} = 52850,58$$

$$2. JKT = (62^2 + \dots + 42,5^2) - FK = 53322,75 - 52850,58 \\ = 472,17$$

$$3. JKP = \frac{(168^2 + \dots + 137,5^2)}{3} - FK = \frac{159430,75}{3} - FK = \\ = 53143,58 - 52850,58 = 293$$

$$4. JKG = JKT - JKP = 472,17 - 293 = 179,17$$

Daftar sidik ragam tinggi tanaman

| SK | db | JK | KT | FHit | Ftab | |
|-----------|----|--------|-------|------|------|------|
| | | | | | 5% | 1% |
| Perlakuan | 6 | 293,00 | 48,80 | 3,8* | 2,85 | 4,46 |
| Galat | 14 | 179,17 | 12,80 | | | |
| Total | 20 | 472,17 | | | | |

* : berbeda nyata

Lampiran 10 : Perhitungan uji beda wilayah ganda duncan untuk tinggi (cm) tanaman Kacang tanah (*Arachis hypogaea. L.*)

$$W_D = Q (14, 0,05) \times \sqrt{\frac{KTG}{u}}$$

$$S_Y = \sqrt{\frac{12,8}{3}} = 2,07$$

| | Jarak Perlakuan yang dibandingkan | |
|---------------------|-----------------------------------|------|
| | 2 | 3 |
| Q (5%) | 3,03 | 3,18 |
| W _D (5%) | 6,27 | 6,58 |

Uji beda wilayah ganda duncan antar perlakuan pestisida yang berbeda terhadap tinggi tanaman.

| Rata 2 | 56,0 | 54,7 | 51,3 | 49,5 | 47,8 | 46,0 | 45,8 |
|--------|-------|------|------|------|------|------|------|
| 56,0 | - | | | | | | |
| 54,7 | 1,3 | - | | | | | |
| 51,3 | 4,7* | 3,4 | - | | | | |
| 49,5 | 6,5* | 5,2* | 1,8 | - | | | |
| 47,8 | 8,2* | 6,9* | 3,5 | 1,7 | - | | |
| 46,0 | 10,0* | 8,7* | 5,3 | 3,5 | 1,8 | - | |
| 45,8 | 10,2* | 8,9* | 5,5 | 3,7 | 2,0 | 0,2 | - |

* = berbeda nyata

