Lampiaran 1. Data Hasil Pengamatan

Data 1. Pengaruh ekstrak daun dan batang bandotan dan umbi teki terhadap persentase perkecambahan, laju perkecambahan dan panjang hipokotil biji *Mimosa pudica*

Tabel 1.1 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap persentase kecambah biji *Mimosa pudica*

| Perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Jenis ekstrak | konsentrasi | I | II | III | | |
| | % | | (%) | | | |
| Daun dan batang bandotan | 0 | 44 | 68 | 60 | 172 | 57,3 |
| | 5 | 64 | 44 | 25 | 133 | 44,3 |
| | 10 | 60 | 40 | 28 | 128 | 42,7 |
| | 20 | 24 | 28 | 52 | 104 | 34,7 |
| | 30 | 48 | 48 | 32 | 128 | 42,7 |
| Umbi teki | 0 | 52 | 52 | 52 | 156 | 52 |
| | 5 | 48 | 40 | 60 | 148 | 49,3 |
| | 10 | 48 | 64 | 44 | 156 | 52 |
| | 20 | 40 | 44 | 60 | 144 | 48 |
| | 30 | 36 | 24 | 32 | 92 | 30,7 |
| Total | | 460 | 452 | 445 | 1361 | 45,3 |

Tabel 1.2 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap laju perkecambahan biji *Mimosa pudica*

| Perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Jenis Ekstrak | Konsentrasi | I | II | III | | |
| | % | | | | | |
| Daun dan batang bandotan | 0 | 6,4 | 6,4 | 6,5 | 19,1 | 6,4 |
| | 5 | 6,7 | 5,9 | 6,1 | 18,7 | 6,2 |
| | 10 | 6,1 | 6,8 | 4,3 | 16,7 | 5,5 |
| | 20 | 6,1 | 5,9 | 6,3 | 18,4 | 6,1 |
| | 30 | 6,6 | 6,8 | 6,3 | 19,7 | 6,6 |
| | 0 | 6,5 | 6,6 | 6,2 | 19,3 | 6,4 |
| Umbi teki | 5 | 6,4 | 6,03 | 6,3 | 18,8 | 6,3 |
| | 10 | 6,3 | 6,8 | 6,6 | 19,7 | 6,6 |
| | 20 | 6,1 | 6,9 | 7,06 | 20,05 | 6,9 |
| | 30 | 6,7 | 7,3 | 7,9 | 21,9 | 7,3 |
| Total | | 63,9 | 64,8 | 63,8 | 192,4 | 64,1 |

Tabel 1.7 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Mimosa pudica* pada hari ke-9

| Perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | % | | cm | | | |
| Daun dan batang Bandotan | 0 | 1,4 | 2,1 | 1,6 | 5,1 | 1,71 |
| | 5 | 2,1 | 1,3 | 0,6 | 4,06 | 1,35 |
| | 10 | 1,9 | 1,4 | 0,8 | 4,1 | 1,38 |
| | 20 | 0,8 | 0,9 | 1,6 | 3,2 | 1,07 |
| | 30 | 1,2 | 1,2 | 0,8 | 3,9 | 1,06 |
| Umbi Teki | 0 | 1,4 | 1,6 | 1,5 | 4,5 | 1,48 |
| | 5 | 1,1 | 1,3 | 1,9 | 4,4 | 1,45 |
| | 10 | 1,4 | 1,7 | 1,3 | 4,3 | 1,43 |
| | 20 | 1,2 | 1,2 | 1,8 | 4,2 | 1,39 |
| | 30 | 1,07 | 0,9 | 0,9 | 2,9 | 0,98 |
| Total | | 13,7 | 13,5 | 12,8 | 40,02 | 13,34 |

Data 2. Pengaruh ekstrak daun dan batang bandotan dan umbi teki terhadap presentase perkecambahan, laju perkecambahan dan panjang hipokotil biji *Ageratum conyzoides*

Tabel 2.1 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap persentase kecambah biji *Ageratum conyzoides*

| Perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | % | | | | | |
| Daun dan Batang Bandotan | 0 | 16 | 16 | 4 | 36 | 12 |
| | 5 | 20 | 8 | 8 | 36 | 12 |
| | 10 | 0 | 8 | 8 | 16 | 5,3 |
| | 20 | 4 | 4 | 16 | 24 | 8 |
| | 30 | 4 | 8 | 12 | 24 | 8 |
| Umbi Teki | 0 | 4 | 8 | 8 | 20 | 6,7 |
| | 5 | 4 | 0 | 4 | 8 | 2,7 |
| | 10 | 4 | 0 | 4 | 8 | 2,7 |
| | 20 | 0 | 0 | 8 | 8 | 2,7 |
| | 30 | 8 | 0 | 0 | 8 | 2,7 |
| Total | | 64 | 52 | 72 | 188 | 62,7 |

Tabel 2.2 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap laju perkecambahan biji *Ageratum conyzoides*

| perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | % | | | | | |
| Daun dan batang Bandotan | 0 | 7,5 | 7,7 | 7 | 22,2 | 7,9 |
| | 5 | 8,1 | 8 | 7,4 | 23,5 | 6,8 |
| | 10 | 0 | 8,3 | 8 | 14 | 4,7 |
| | 20 | 9 | 9 | 7,6 | 6,5 | 2,5 |
| | 30 | 8 | 9 | 7,8 | 13 | 4,3 |
| Umbi Teki | 0 | 9 | 7,5 | 7,4 | 12,3 | 4,1 |
| | 5 | 9 | 0 | 8 | 7 | 2,3 |
| | 10 | 9 | 0 | 8 | 7 | 2,3 |
| | 20 | 0 | 0 | 8,3 | 7 | 2,3 |
| | 30 | 8,3 | 0 | 0 | 7 | 2,3 |
| Total | | 67,9 | 49,5 | 69,7 | 119,5 | 38,7 |

Tabel 2.6 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Ageratum conyzoides* pada hari ke-9

| Perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | | | cm | | | |
| Daun dan batang Bandotan | 0 | 0,16 | 0,14 | 0,02 | 0,31 | 0,10 |
| | 5 | 0,10 | 0,08 | 0,05 | 0,24 | 0,07 |
| | 10 | 0 | 0,07 | 0,08 | 0,14 | 0,04 |
| | 20 | 0,04 | 0,02 | 0,17 | 0,24 | 0,07 |
| | 30 | 0,09 | 0,03 | 0,04 | 0,17 | 0,05 |
| Umbi Teki | 0 | 0,08 | 0,08 | 0,09 | 0,19 | 0,06 |
| | 5 | 0,01 | 0 | 0,02 | 0,02 | 0,06 |
| | 10 | 0,04 | 0 | 0,02 | 0,02 | 0,05 |
| | 20 | 0 | 0 | 0,05 | 0,01 | 0,04 |
| | 30 | 0,06 | 0 | 0 | 0,01 | 0,04 |
| Total | | 0,52 | 0,45 | 0,55 | 1,34 | 0,5 |

Data 3. Pengaruh ekstrak daun dan batang bandotan dan umbi teki terhadap presentase perkecambahan, laju perkecambahan dan panjang hipokotil biji *Leersia hexandra*

Tabel 3.1 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap persentase kecambah biji *Leersia hexandra*

| Perlakuan | | | Ulangan | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | % | | % | | | |
| Daun dan batang Bandotan | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 0 | 0 | 0 |
| | 10 | 0 | 0 | 0 | 0 | 0 |
| | 20 | 0 | 0 | 0 | 0 | 0 |
| | 30 | 0 | 0 | 0 | 0 | 0 |
| Umbi Teki | 0 | 16 | 12 | 4 | 32 | 10,7 |
| | 5 | 0 | 16 | 4 | 20 | 6,7 |
| | 10 | 16 | 4 | 0 | 12 | 4 |
| | 20 | 0 | 0 | 0 | 0 | 0 |
| | 30 | 4 | 16 | 0 | 8 | 2,7 |
| Total | | 36 | 48 | 8 | 72 | 24 |

Tabel 3.2 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap Laju perkecambahan biji *Leersia hexandra*

| Perlakuan | | Ulangan | | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | | | | | | |
| Daun dan batang Bandotan | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 0 | 0 | 0 |
| | 10 | 0 | 0 | 0 | 0 | 0 |
| | 20 | 0 | 0 | 0 | 0 | 0 |
| | 30 | 0 | 0 | 0 | 0 | 0 |
| Umbi Teki | 0 | 6,7 | 6,8 | 10,5 | 23,9 | 7,9 |
| | 5 | 0 | 8 | 8 | 16 | 5,3 |
| | 10 | 8,3 | 7,7 | 7 | 14 | 4,7 |
| | 20 | 0 | 0 | 0 | 0 | 0 |
| | 30 | 8 | 8,3 | 0 | 14 | 4,7 |
| Total | | 23,03 | 30,8 | 25,5 | 67,9 | 22,7 |

Tabel 3. 6 Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Leersia hexandra* pada hari ke-9

| Perlakuan | | | Ulangan | | Total | Rata-rata |
|---|---|---|---|---|---|---|
| Ekstrak | Konsentrasi | I | II | III | | |
| | | | cm | | | |
| Daun dan batang Bandotan | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 0 | 0 | 0 | 0 | 0 |
| | 10 | 0 | 0 | 0 | 0 | 0 |
| | 20 | 0 | 0 | 0 | 0 | 0 |
| | 30 | 0 | 0 | 0 | 0 | 0 |
| Umbi Teki | 0 | 0,11 | 0,14 | 0,12 | 0,22 | 0,07 |
| | 5 | 0 | 0,02 | 0,08 | 0,01 | 0,04 |
| | 10 | 0,09 | 0,08 | 0 | 0,12 | 0,04 |
| | 20 | 0 | 0 | 0 | 0 | 0 |
| | 30 | 0,08 | 0,09 | 0 | 0,07 | 0,02 |
| Total | | 0,216 | 0,322 | 0,02 | 0,432 | 0,14 |

Lampiran 2: Perhitungan statistik

1. Perhitungan statistik ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi teki terhadap persentase jumlah kecambah, laju perkecambahan, panjang hipokotil biji *Mimosa pudica*

1. 1 Pengaruh konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap persentase jumlah kecambah biji *Mimosa pudica*

1. Menghitung Faktor Koreksi (FK)

$$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$$

$$= \frac{(1357)^2}{30}$$

$$= 61381{,}63$$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots(Xn)^2 - FK$

$= 44^2 + 68^2 + 60^2 + \ldots\ldots\ldots + 32^2 - FK$

$= 66081 - 61381{,}63$

$= 4699{,}37$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots\ldots(Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$= \frac{(460^2) + (452^2) + (446^2)}{10} - 61381{,}63$

$= 61392{,}9 - 61381{,}63$

= 11,27

c. JK Perlakuan kombinasi = $\frac{(\Sigma 1)^2+(\Sigma 2)^2+ \ldots\ldots\ldots\ldots\ldots(\Sigma n)^2}{\Sigma \text{ ulangan}}$ - FK

= $\frac{172^2 + 133^2+ 128^2+.....+ 92^2}{3}$ - 61381,63

= 63544,33 - 61381,63

= 2162,7

d. JK Galat = JK Total - JK Perlakuan – JK Ulangan

= 4699,37- 2162,7-11,27

= 2525,4

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| Asal ekstrak | Konsentrasi ekstrak | | | | | Σ Asal ekstrak |
|---|---|---|---|---|---|---|
| | 0% | 5% | 10% | 20% | 30% | |
| *Ageratum* | 172 | 133 | 128 | 104 | 128 | 665 |
| *Cyperus* | 152 | 148 | 156 | 144 | 92 | 692 |
| ∑konsentrasi | 324 | 281 | 284 | 248 | 220 | 1357 |

e. JK Ekstrak

= $\frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}}$ - FK

= $\frac{665^2 + 692^2}{5 \times 3}$ - 61381,63

= 61405,93 - 61381,63

= 24,3

f. JK Konsentrasi

= $\frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}}$ - FK

= $\frac{324^2 + 281^2...+ 220^2}{2 \times 3}$ - 61381,63

= 62416,17 - 61381,63

= 1034,54

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

= 2162,7 - 24,3 - 1034,54

= 1103,86

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 2162,7 | 240,3 | 1,9031 | 2,40 |
| Konsentrasi | 4 | 1034,54 | 258,635 | 0,1924 | 4,36 |
| Ekstrak | 1 | 24,3 | 24,3 | 2,0483 | 2,87 |
| EK | 4 | 1103,86 | 220,772 | 1,7484 | 2,71 |
| Galat | 20 | 2525,4 | 126,27 | | |
| Total | 38 | 6850,8 | | | |

1.2 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap laju perkecambahan biji *Mimosa pudica*

1. JK galat Menghitung Faktor Koreksi (FK)

$$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$$

$$= \frac{(192{,}373)^2}{30}$$

$$= 1233{,}57$$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots (Xn)^2 - FK$

$= 6{,}158^2 + 6{,}423^2 + 6{,}532^2 + \ldots\ldots\ldots + 7{,}933^2 - FK$

$= 1243{,}29 - 1233{,}57$

$= 9{,}72$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots (Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$= \frac{(63{,}784^2) + (64{,}826^2) + (63{,}763^2)}{10} - 1233{,}57$

$= 1233{,}65 - 1233{,}57$

$= 0{,}08$

c. JK Perlakuan kombinasi $= \frac{(\Sigma 1)^2 + (\Sigma 2)^2 + \ldots\ldots\ldots\ldots (\Sigma n)^2}{\Sigma \text{ ulangan}} - FK$

$= \frac{19{,}11^2 + 18{,}690^2 + \ldots\ldots + 7{,}933^2}{3} - 1233{,}57$

$= 1239{,}08 - 1233{,}57$

$= 5{,}51$

d. JK Galat $= JK \text{ Total} - JK \text{ Perlakuan} - JK \text{ Ulangan}$

$= 9{,}72 - 5{,}51 - 0{,}08$

$= 4{,}13$

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| | Konsentrasi ekstrak | | | | | |
|---|---|---|---|---|---|---|
| Asal ekstrak | 0% | 5% | 10% | 20% | 30% | Σasal ekstrak |
| *Ageratum c* | 19,113 | 18,690 | 16,656 | 18,363 | 19,740 | 92,562 |
| *Cyperus* | 19,338 | 18,750 | 19,715 | 20,054 | 21,954 | 99,811 |
| ∑konsentrasi | 38,451 | 37,44 | 36,371 | 38,42 | 41,694 | 192,373 |

e. JK Asal ekstrak

$$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$$

$$= \frac{92{,}562^2 + 99{,}811^2}{5 \times 3} - 1233{,}57$$

$$= 1235{,}33 - 1233{,}57$$

$$= 1{,}76$$

f. JK konsentrasi Ekstrak umbi Teki

$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$

$= \frac{38{,}451^2 + 37{,}44^2 ... + 41{,}694^2}{2 \times 3} - 1233{,}57$

$= 1236{,}26 - 1233{,}57$

$= 2{,}69$

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

$= 5{,}51 - 1{,}76 - 2{,}69$

$= 1{,}06$

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 5,51 | 0,612 | 2,9636 | 2,40 |
| Konsentrasi | 4 | 2,69 | 0,6725 | 3,2566 | 2,87 |
| Ekstrak | 1 | 1,76 | 1,76 | 2,6171 | 4,36 |
| EK | 4 | 1,06 | 0,265 | 3,2566 | 2,87 |
| Galat | 20 | 4,13 | 0,2065 | | |
| Total | 38 | 15,15 | | | |

Uji BNT Konsentrasi = ta (db galat) x $\sqrt{\frac{2KTGalat}{Ulangan.faktor(2)}}$

$= 0{,}05\ (20) x \sqrt{\frac{2x22{,}995}{15}}$

$= 3{,}06$

1.3 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap Panjang hipokotil biji *Mimosa pudica* pada hari kesembilan

3. JK galat Menghitung Faktor Koreksi (FK)

$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$

$= \frac{(192{,}373)^2}{30}$

$= 1233{,}57$

4. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots(Xn)^2 - FK$

$= 6{,}158^2 + 6{,}423^2 + 6{,}532^2 + \ldots\ldots..+7{,}933^2 - FK$

$= 1243{,}29 - 1233{,}57$

$= 9{,}72$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots\ldots(Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$= \frac{(63{,}784^2) + (64{,}826^2) + (63{,}763^2)}{10} - 1233{,}57$

= 1233,65- 1233,57
= 0,08

c. JK Perlakuan kombinasi = $\frac{(\Sigma 1)^2+(\Sigma 2)^2+ \ldots\ldots\ldots\ldots\ldots(\Sigma n)^2}{\Sigma \text{ ulangan}}$ - FK

= $\frac{19{,}11^2 + 18{,}690^2+.....+ 7{,}933^2}{3}$ - 1233,57

= 1239,08 - 1233,57
= 5,51

d. JK Galat = JK Total - JK Perlakuan – JK Ulangan
= 9,72 - 5,51 – 0,08
= 4,13

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| | Konsentrasi ekstrak | | | | | |
|---|---|---|---|---|---|---|
| Asal ekstrak | 0% | 5% | 10% | 20% | 30% | Σasal ekstrak |
| *Ageratum c* | 19,113 | 18,690 | 16,656 | 18,363 | 19,740 | 92,562 |
| *Cyperus* | 19,338 | 18,750 | 19,715 | 20,054 | 21,954 | 99,811 |
| ∑konsentrasi | 38,451 | 37,44 | 36,371 | 38,42 | 41,694 | 192,373 |

e. JK Asal ekstrak

$$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$$

$$= \frac{92{,}562^2 + 99{,}811^2}{5 \times 3} - 1233{,}57$$

$$= 1235{,}33 - 1233{,}57$$

$$= 1{,}76$$

f. JK konsentrasi Ekstrak umbi Teki

$$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$$

$$= \frac{38{,}451^2 + 37{,}44^2 ... + 41{,}694^2}{2 \times 3} - 1233{,}57$$

$$= 1236{,}26 - 1233{,}57$$

$$= 2{,}69$$

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

$$= 5{,}51 - 1{,}76 - 2{,}69$$

$$= 1{,}06$$

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 5,51 | 0,612 | 2,9636 | 2,40 |
| Konsentrasi | 4 | 2,69 | 0,6725 | 3,2566 | 4,36 |
| Ekstrak | 1 | 1,76 | 1,76 | 2,6171 | 2,87 |
| EK | 4 | 1,06 | 0,265 | 3,2566 | 2,71 |
| Galat | 20 | 4,13 | 0,2065 | | |
| Total | 38 | 15,15 | | | |

2. Perhitungan statistik ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi teki terhadap persentase jumlah kecambah, laju perkecambahan, panjang hipokotil biji *Ageratum conyzoides*

2.1 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap persentase perkecambahan biji *Ageratum conyzoides*

1. JK galat Menghitung Faktor Koreksi (FK)

$$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$$

$$= \frac{(188)^2}{30}$$

$$= 1178{,}13$$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots (Xn)^2 - FK$

$= 16^2 + 16^2 + \ldots\ldots - FK$

$= 20323 - 1178{,}13$

$= 853{,}87$

b. JK Ulangan $= \dfrac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots (Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$= \dfrac{(64^2) + (52^2) + (72^2)}{10} - 1178.13$

$= \dfrac{11984}{10}$

$= 1198{,}4 - 1178{,}13$

$= 20{,}1$

c. JK Perlakuan kombinasi $= \dfrac{(\Sigma 1)^2 + (\Sigma 2)^2 + \ldots\ldots\ldots\ldots\ldots (\Sigma n)^2}{\Sigma \text{ ulangan}} - FK$

$= \dfrac{36^2 + 36^2 + .16^2 + 24^2 + 24^2 + 20^2 \ldots + 8^2}{3} - 1178{,}13$

$= \dfrac{4656}{3}$

$= 1552 - 1178{,}13$

$= 373, 97$

d. JK Galat $=$ JK Total - JK Perlakuan – JK Ulangan

$= 853{,}87 - 373{,}87 - 20{,}1$

$= 459{,}9$

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| Jenis ekstrak | Konsentrasi ekstrak | | | | | Σ jenis ekstrak |
|---|---|---|---|---|---|---|
| | 0% | 5% | 10% | 20% | 30% | |
| Bandotan | 36 | 36 | 16 | 24 | 24 | 132 |
| Teki | 20 | 8 | 8 | 8 | 8 | 52 |
| ∑konsentrasi | 56 | 44 | 24 | 32 | 32 | 188 |

e. JK jenis ekstrak

$= \dfrac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$

$= \dfrac{136^2 + 52^2}{5 \times 3} - 1178{,}13$

$= \dfrac{21200}{15}$

$= 1413{,}33 - 1178, 13 = 235{,}2$

f. JK konsentrasi Ekstrak

$= \dfrac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots (\Sigma \text{ konsentrasi } 5)^2}{} - FK$

taraf jenis gulma X ulangan

$= \frac{56^2 + 44^2 ... + 24^2 + 32^2 + 32^2}{2 \times 3} - 1178.13$

$= \frac{7696}{6}$

$= 1282,67 - 1178,13 = 104,54$

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

$= 373,87 - 235,2 - 104,54$

$= 34,13$

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 373,87 | 41,541 | 1,8065 | 2,40 |
| Konsentrasi | 4 | 104,54 | 235,2 | 1,1365 | 2,87 |
| Ekstrak | 1 | 235,2 | 26,135 | 10,2283* | 4,36 |
| EK | 4 | 34,13 | 8,5325 | 0,297 | 2,87 |
| Galat | 20 | 459,9 | 22,995 | | |
| Total | 38 | 1207,64 | | | |

| Jenis Ekstrak | Konsentrasi (%) | | | | | Jumlah | Rerata |
|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 20 | 30 | | |
| Bandotan | 12 | 12 | 5,3 | 8 | 8 | 45, 3 | 9,7 |
| Teki | 6.7 | 2.7 | 2,7 | 2,7 | 2,7 | 17,5 | 3,.5 |
| ∑konsentrasi | 18,7 | 19,7 | 8 | 10.7 | 10.7 | | |
| rerata | 9,35 | 7,35 | 4 | 5,35 | 5,35 | | |

Uji BNT Ekstrak = ta (db galat) x $\sqrt{\frac{2KTGalat}{Ulangan.faktor(1)}}$

$= 0,05\ (20) x \sqrt{\frac{2x22,995}{6}}$

$= 2,77$

2.2 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap laju perkecambahan biji *Ageratum conyzoides*

1. JK galat Menghitung Faktor Koreksi (FK)

$$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$$

$$= \frac{(119{,}478)^2}{30}$$

$$= 475{,}833$$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots(Xn)^2 - FK$

$= 7{,}5^2 + 7{,}66^2 + 7^2 + \ldots\ldots\ldots + 0^2 - FK$

$= 1530{,}81 - 475{,}833$

$= 1054{,}977$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots\ldots(Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$= \frac{(67{,}944^2) + (49{,}5^2) + (69{,}683^2)}{10} - 475{,}833$

$= 1192{,}236 - 475{,}833$

$= 716{,}403$

c. JK Perlakuan kombinasi $= \frac{(\Sigma 1)^2 + (\Sigma 2)^2 + \ldots\ldots\ldots\ldots\ldots(\Sigma n)^2}{\Sigma \text{ ulangan}} - FK$

$= \frac{19{,}11^2 + 18{,}690^2 + \ldots\ldots + 7{,}933^2}{3} - 475{,}833$

$= 583{,}227 - 475{,}833$

$= 107{,}394$

d. JK Galat $=$ JK Total - JK Perlakuan – JK Ulangan

$= 1054{,}977 - 107{,}394 - 716{,}403$

$= 9{,}153$

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| jenis ekstrak | Konsentrasi ekstrak | | | | | Σasal ekstrak |
|---|---|---|---|---|---|---|
| | 0% | 5% | 10% | 20% | 30% | |
| *Ageratum c* | 22,167 | 23,511 | 14 | 6,5 | 13 | 79,178 |
| *Cyperus* | 12,3 | 7 | 7 | 7 | 7 | 40,3 |
| ∑konsentrasi | 34,467 | 30,511 | 21 | 13,5 | 20 | 119,478 |

e. JK jenis ekstrak

$$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$$

$$= \frac{79{,}178^2 + 40{,}3^2}{5 \times 3} - 475{,}833$$

$= 526{,}216 - 475{,}833$

$= 50{,}383$

f. JK konsentrasi Ekstrak

$$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$$

$$= \frac{34{,}467^2 + 30{,}511^2 \ldots + 20^2}{2 \times 3} - 475{,}833$$

$$= 523{,}691 - 475{,}833$$

$$= 47{,}858$$

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

$$= 107{,}394 - 50{,}383 - 47{,}858$$

$$= 9{,}153$$

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 107,394 | 11,9327 | 1,032 | 2,40 |
| Konsentrasi | 4 | 47,858 | 11,9645 | $1{,}035^{tn}$ | 2,87 |
| Ekstrak | 1 | 50,383 | 50,383 | $4{,}358^{tn}$ | 4,36 |
| EK | 4 | 9,153 | 2,28825 | 0,158 | 2,87 |
| Galat | 20 | 231,2 | 11,56 | | |
| Total | 38 | 445,988 | | | |

| Jenis Ekstrak | Konsentrasi (%) | | | | | Jumlah | Rerata |
|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 20 | 30 | | |
| Daun dan batang Bandotan | 7,4 | 6,8 | 4,7 | 2,7 | 4,3 | 26,1 | 5,2 |
| Umbi Teki | 4,1 | 2,3 | 2,3 | 2,3 | 2,3 | 13,3 | 2,66 |
| ∑konsentrasi | 11,5 | 9,1 | 7 | 5 | 6,6 | | |
| rerata | 5,7 | 4,5 | 3,5 | 2,5 | 3,3 | | |

2.3 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap panjang hipokotil biji *Ageratum conyzoides*

1. JK galat Menghitung Faktor Koreksi (FK)

$$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$$

$$= \frac{(1{,}34)^2}{30}$$

$$= 0,\ 05985$$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots(Xn)^2 - FK$

$$= 0,\ 16^2 + 0,\ 136^2 + 0^2$$

$$= 0{,}14431 - 0{,}05985$$

$$= 0{,}08446$$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots\ldots(Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$$= \frac{(0{,}522^2) + (0{,}416^2) + (0{,}55^2)}{10}$$

$$= \frac{0{,}74804}{10}$$

$$= 0{,}07480$$

$$= 0{,}01495$$

c. JK Perlakuan kombinasi $= \frac{(\Sigma 1)^2 + (\Sigma 2)^2 + \ldots\ldots\ldots\ldots\ldots (\Sigma n)^2}{\Sigma \text{ ulangan}} - FK$

$$= \frac{0{,}314^2 + 0{,}236^2 + 0{,}144^2 + 0{,}236^2 + 0{,}012^2}{3}$$

$$= \frac{0{,}29308}{3}$$

$$= 0{,}09769 - 0{,}05985$$

$$= 0{,}03784$$

d. JK Galat = JK Total - JK Perlakuan – JK Ulangan

$$= 0{,}08446 - 0{,}03784 - 0{,}01495$$

$$= 0{,}03167$$

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| Jenis ekstrak | Konsentrasi ekstrak | | | | | Σjenis ekstrak |
|---|---|---|---|---|---|---|
| | 0% | 5% | 10% | 20% | 30% | |
| Bandotan | 0,314 | 0,236 | 0,144 | 0,236 | 0,166 | 0,03167 |
| Teki | 0,184 | 0,02 | 0,016 | 0,012 | 0,012 | 1,096 |
| ∑konsentrasi | 0,498 | 0,256 | 0,16 | 0,248 | 0,178 | 0,244 |

e. JK Jenis Ekstrak

$$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$$

$$= \frac{1{,}096^2 + 0{,}244^2}{5 \times 3} - 0{,}05985$$

$$= \frac{1{,}26075}{15}$$

$$= 0{,}08405$$

$$= 0{,}0242$$

f. JK konsentrasi Ekstrak umbi Teki

$$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots (\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$$

$$= \frac{0{,}498^2 + 0{,}256^2 \ldots + 0{,}16^2 + 0{,}248^2 + 0{,}178^2}{2 \times 3} - 0{,}05985$$

$$= \frac{0{,}43232}{6}$$

$$= 0{,}07205 - 0{,}05985$$

= 0,0122

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K
= 0,03784 – 0,0242– 0,0122
= 0,00144

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 0,03784 | 0,0042 | 2,8 | 2,40 |
| Konsentrasi | 4 | 0,0122 | 0,0030 | 2 | 4,36 |
| Ekstrak | 1 | 0,0242 | 0,0242 | 16,133* | 2,87 |
| EK | 4 | 0,00144 | 0,0004 | 0,266 | 2,87 |
| Galat | 20 | 0,03167 | 0,0015 | | |
| Total | 38 | 010735 | | | |

Keterangan*:* *=signifikan

| Jenis Ekstrak | Konsentrasi (%) | | | | | Jumlah | Rerata |
|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 20 | 30 | | |
| Bandotan | 0,10 | 0,07 | 0,04 | 0,08 | 0,06 | 0,35 | 0,07 |
| Umbi Teki | 0,06 | 0,07 | 0,05 | 0,04 | 0,04 | 0,26 | 0,05 |
| ∑konsentrasi | 0,16 | 0,14 | 0,09 | 0,12 | 0,1 | | |
| rerata | 0,08 | 0,07 | 0,05 | 0,06 | 0,05 | | |

Uji BNT Ekstrak = ta (db galat) x $\sqrt{\frac{2KTGalat}{Ulangan.faktor(1)}}$

= 0,05 (20)x $\sqrt{\frac{2x0,0015}{6}}$

= 0,022

3. Perhitungan statistik ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi teki terhadap persentase jumlah kecambah, laju perkecambahan, panjang hipokotil biji *Leersia hexandra*

3. 1 Pengaruh konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap persentase jumlah kecambah biji *Leersia hexandra*

1. Menghitung Faktor Koreksi (FK)

$$FK = \frac{\Sigma (\Sigma x)^2}{r.n}$$

$$= \frac{(72)^2}{30}$$

$$= \frac{5184}{30}$$

$$= 172,8$$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots (Xn)^2 - FK$

$= 16^2 + 12^2 + 4^2 + \ldots\ldots\ldots + 0^2 - FK$

$= 1232 - 172,8$

$= 1059,2$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots\ldots (Xn)^2}{\Sigma \text{ perlakuan}} - FK$

$= \frac{(36^2) + (48^2) + (8^2)}{10} - 172,8$

$= \frac{366,4}{10}$

$= 366,4 - 172,8$

$= 193,6$

c. JK Perlakuan kombinasi $= \frac{(\Sigma 1)^2 + (\Sigma 2)^2 + \ldots\ldots\ldots\ldots\ldots (\Sigma n)^2}{\Sigma \text{ ulangan}} - FK$

$= \frac{32^2 + 20^2 + 12^2 + \ldots\ldots + 8^2}{3} - 172,8$

$= \frac{1632}{3}$

$= 544 - 172,8$

$= 371,2$

d. JK Galat $= JK \text{ Total} - JK \text{ Perlakuan} - JK \text{ Ulangan}$

$= 1059,2 - 371,2 - 193,6$

$= 494,4$

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| Jenis ekstrak | Konsentrasi ekstrak | | | | | Σ Asal ekstrak |
|---|---|---|---|---|---|---|
| | 0% | 5% | 10% | 20% | 30% | |
| Bandotan | 0 | 0 | 0 | 0 | 0 | 0 |
| Teki | 32 | 20 | 12 | 0 | 8 | 72 |
| ∑konsentrasi | 32 | 20 | 12 | 0 | 8 | 1357 |

e. JK Jenis Ekstrak

$$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$$

$$= \frac{0^2 + 72^2}{5 \times 3} - 172,8$$

$$= 345,6 - 172,8$$

$$= 172,8$$

f. JK Konsentrasi

$$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$$

$$= \frac{32^2 + 20^2 \ldots + 12^2 + 0^2 + 8^2}{2 \times 3} - 172,8$$

$$= \frac{1632}{6}$$

$$= 272 - 172,8$$

$$= 99,2$$

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

= 371,2- 172,8 – 99,2

= 99,2

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 371,2 | 41,24 | 1,6683 | 2,40 |
| Konsentrasi | 4 | 99,2 | 24,8 | 1,0032 | 2,87 |
| Ekstrak | 1 | 172,8 | 172,8 | 6,9902* | 4,36 |
| EK | 4 | 99,2 | 24,8 | 0,8026 | 2,87 |
| Galat | 20 | 494,4 | 24,72 | | |
| Total | 38 | 1236,8 | | | |

| Jenis Ekstrak | Konsentrasi (%) | | | | | Jumlah | Rerata |
|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 20 | 30 | | |
| Bandotan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Umbi Teki | 10,7 | 6,7 | 4 | 0 | 2,7 | 24,1 | 4,8 |
| ∑konsentrasi | 10,7 | 6,7 | 4 | 0 | 2,7 | | |

| | | | | | |
|---|---|---|---|---|---|
| Rerata | 5,35 | 3,35 | 2 | 0 | 1,35 |

Uji BNT Ekstrak = ta (db galat) x $\sqrt{\frac{2KTGalat}{Ulangan.faktor(1)}}$

= 0,05 (20)x $\sqrt{\frac{2x24,72}{6}}$

= 2,87

1.2 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki terhadap laju perkecambahan biji *Leersia hexandra*

1. JK galat Menghitung Faktor Koreksi (FK)

FK $= \frac{\Sigma\,(\Sigma x)^2}{r.n}$

$= \frac{(67,97)^2}{30}$

$= \frac{4619,9209}{30}$

= 153,997

Menghitung Jumlah Kuadrat (JK)

a. JK Total = $(X1)^2 + (X2)^2 + \ldots\ldots\ldots (Xn)^2$ - FK

= $0^2 + 6,692^2 + 6,778^2 + \ldots\ldots\ldots +0^2$ - FK

= 639,635 – 153,997

= 485,638

b. JK Ulangan = $\frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots\ldots (Xn)^2}{\Sigma \text{ perlakuan}}$ - FK

= $\frac{(03,025^2) + (30,778^2) + (25,5^2)}{10}$ - 153,997

= $\frac{2127,686}{10}$ - 153,997

= 212,769

= 58,772

c. JK Perlakuan kombinasi = $\frac{(\Sigma 1)^2+(\Sigma 2)^2+ \ldots\ldots\ldots\ldots\ldots (\Sigma n)^2}{\Sigma \text{ ulangan}}$ - FK

= $\frac{23,97^2 + 16^2 + 14^2 + 0^2 + 14^2}{3}$ - 153,997

= $\frac{1222,561}{3}$

= 407,520 – 153,997

= 253,523

d. JK Galat = JK Total - JK Perlakuan – JK Ulangan

= 485,638 - 253,523 – 58,772

= 173,343

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| jenis ekstrak | Konsentrasi ekstrak | | | | | Σasal ekstrak |
|---|---|---|---|---|---|---|
| | 0% | 5% | 10% | 20% | 30% | |
| Bandotan | 0 | 0 | 0 | 0 | 0 | 0 |
| Teki | 23,97 | 16 | 14 | 0 | 14 | 67,97 |
| ∑konsentrasi | 23,97 | 16 | 14 | 0 | 14 | 67,97 |

e. JK Jenis ekstrak

$$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2 + (\Sigma \text{ jenis } 3)^2}{\text{taraf konsentrasi X ulangan}} - FK$$

$$= \frac{0^2 + 67{,}97^2}{5 \times 3} - 153{,}997$$

$$= \frac{4619{,}921}{15}$$

$$= 307{,}995 - 153{,}997$$

$$= 153{,}998$$

f. JK konsentrasi Ekstrak umbi Teki

$$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$$

$$= \frac{23{,}97^2 + 16^2 + 14^2 + 0^2 + 14^2}{2 \times 3} - 153{,}997$$

$$= \frac{1222{,}561}{6}$$

$$= 203{,}760 - 153{,}997$$

$$= 49{,}763$$

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

$$= 253{,}523 - 153{,}998 - 49{,}763$$

$$= 49{,}762$$

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 253,523 | 28,169 | 3,250 | 2,40 |
| Konsentrasi | 4 | 49,763 | 12,441 | 1,435 | 2,87 |
| Ekstrak | 1 | 153,998 | 153,998 | 17,768* | 4,36 |
| EK | 4 | 49,762 | 12,440 | 1,434 | 2,87 |
| Galat | 20 | 173,343 | 8,6672 | | |
| Total | 38 | 680,389 | | | |

| Jenis Ekstrak | Konsentrasi (%) | | | | | Jumlah | Rerata |
|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 20 | 30 | | |
| Bandotan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Umbi Teki | 7,9 | 5,3 | 4,7 | 0 | 4,7 | 22,6 | 4,52 |
| ∑konsentrasi | 7,9 | 5,3 | 4,7 | 0 | 4,7 | | |
| Rerata | 3,95 | 2,65 | 2,35 | 0 | 2,35 | | |

Uji BNT Ekstrak = ta (db galat) x $\sqrt{\frac{2KTGalat}{Ulangan.faktor(1)}}$

$= 0,05\ (20)x\sqrt{\frac{2x8,6672}{6}}$

$=1,699$

1.3 Pengaruh Konsentrasi dan ekstrak daun dan batang Bandotan (*Ageratum conyzoides*) dan umbi Teki panjang hipokotil biji *Leersia hexandra*

1. JK galat Menghitung Faktor Koreksi (FK)

FK $= \frac{\Sigma\ (\Sigma x)^2}{r.n}$

$= \frac{(0,558)^2}{30}$

$=0,0104$

2. Menghitung Jumlah Kuadrat (JK)

a. JK Total $= (X1)^2 + (X2)^2 + \ldots\ldots\ldots(Xn)^2 - FK$

$= 0,112^2 + 0,136^2 + 0,012^2 + \ldots\ldots..+0^2 - FK$

$= 0,0553 - 0,0104$

$= 0,0449$

b. JK Ulangan $= \frac{(X1)^2 + (X2)^2 + \ldots\ldots\ldots\ldots(Xn)^2}{\Sigma\ perlakuan} - FK$

$= \frac{(0,216^2) + (0,322^2) + (0,02^2)}{10} - 0,0104$

$= 0,0151 - 0,0104$

$= 0,0047$

c. JK Perlakuan kombinasi = $\frac{(\Sigma 1)^2+(\Sigma 2)^2+ \ldots\ldots\ldots\ldots\ldots(\Sigma n)^2}{\Sigma \text{ ulangan}}$ - FK

$= \frac{0{,}26^2 + 0{,}024^2+.....+ 0{,}098^2}{3} - 0{,}0104$

= 0,0363- 0,0104

= 0,0259

d. JK Galat = JK Total - JK Perlakuan – JK Ulangan

= 0,0449- 0,0259– 0,0047

= 0,0143

Daftar Dwi Kasta persentase jumlah kecambah antara factor I dan faktor II

| | Konsentrasi ekstrak | | | | | |
|---|---|---|---|---|---|---|
| Jenis ekstrak | 0% | 5% | 10% | 20% | 30% | Σasal ekstrak |
| *Ageratum c* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cyperus* | 0,26 | 0,024 | 0,176 | 0 | 0,098 | 0,558 |
| ∑konsentrasi | 0,26 | 0,024 | 0,176 | 0 | 0,098 | 0,558 |

e. JK jenis ekstrak

$= \frac{(\Sigma \text{ jenis } 1)^2 + (\Sigma \text{ jenis } 2)^2}{\text{taraf konsentrasi X ulangan}} - FK$

$= \frac{0^2 + 0{,}558^2}{5 \times 3} - 0{,}0104$

= 0,0208 - 0,0104

= 0,0104

f. JK konsentrasi Ekstrak umbi Teki

$= \frac{(\Sigma \text{ konsentrasi } 1)^2 + (\Sigma \text{ konsentrasi } 2)^2 + \ldots\ldots(\Sigma \text{ konsentrasi } 5)^2}{\text{taraf jenis gulma X ulangan}} - FK$

$= \frac{0{,}26^2 + 0{,}024^2...+ 0{,}098^2}{2 \times 3} - 0{,}0104$

= 0,0181 - 0,0104

= 0,0077

g. JK EK = JK Perlakuan Kombinasi-JK E-JK K

= 0,0259– 0,0104– 0,0077

= 0,0078

Analisis ragam:

| SK | db | JK | KT | F.hitung | F.tabel 5% |
|---|---|---|---|---|---|
| Perlakuan | 9 | 0,0259 | 0,0029 | 4,1428 | 2,40 |
| Konsentrasi | 4 | 0,0077 | 0,0019 | 2,714 | 2,87 |
| Ekstrak | 1 | 0,0104 | 0,0104 | 14,857* | 4,36 |
| EK | 4 | 0,0078 | 0,0016 | 2,286 | 2,87 |
| Galat | 20 | 0,0143 | 0,0007 | | |
| Total | 38 | 0,0661 | | | |

| Jenis Ekstrak | Konsentrasi (%) | | | | | Jumlah | Rerata |
|---|---|---|---|---|---|---|---|
| | 0 | 5 | 10 | 20 | 30 | | |
| Bandotan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Umbi Teki | 0,09 | 0,08 | 0,05 | 0 | 0,03 | 0,25 | 0,05 |
| ∑konsentrasi | 0,09 | 0,08 | 0,05 | 0 | 0,03 | | |
| Rerata | 0,05 | 0,04 | 0,02 | 0 | 0,02 | | |

Uji BNT Ekstrak = ta (db galat) x $\sqrt{\frac{2KTGalat}{Ulangan.faktor(1)}}$

= 0,05 (20)x $\sqrt{\frac{2x0,0007}{6}}$

=2,45

Lampiran 3. Data Analisis RAL dan Uji BNT 5%

1. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap presentase kecambah biji *Mimosa pudica*

Tests of Between-Subjects Effects

Dependent Variable: presentase

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 63133.667(a) | 10 | 6313.367 | 42.841 | .000 |
| ekstrak | 24.300 | 1 | 24.300 | .165 | .689 |
| konsentrasi | 1034.533 | 4 | 258.633 | 1.755 | .178 |
| ekstrak * konsentrasi | 693.200 | 4 | 173.300 | 1.176 | .351 |
| Error | 2947.333 | 20 | 147.367 | | |
| Total | 66081.000 | 30 | | | |

a R Squared = .955 (Adjusted R Squared = .933)

Multiple Comparisons

Dependent Variable: presentase

| | (I) konsentrasi | (J) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | 7.17 | 7.009 | .319 | -7.45 | 21.79 |
| | | 10% | 6.67 | 7.009 | .353 | -7.95 | 21.29 |
| | | 20% | 12.67 | 7.009 | .086 | -1.95 | 27.29 |
| | | 30% | 17.33(*) | 7.009 | .022 | 2.71 | 31.95 |
| | 5% | 0% | -7.17 | 7.009 | .319 | -21.79 | 7.45 |
| | | 10% | -.50 | 7.009 | .944 | -15.12 | 14.12 |
| | | 20% | 5.50 | 7.009 | .442 | -9.12 | 20.12 |
| | | 30% | 10.17 | 7.009 | .162 | -4.45 | 24.79 |
| | 10% | 0% | -6.67 | 7.009 | .353 | -21.29 | 7.95 |
| | | 5% | .50 | 7.009 | .944 | -14.12 | 15.12 |
| | | 20% | 6.00 | 7.009 | .402 | -8.62 | 20.62 |
| | | 30% | 10.67 | 7.009 | .144 | -3.95 | 25.29 |
| | 20% | 0% | -12.67 | 7.009 | .086 | -27.29 | 1.95 |
| | | 5% | -5.50 | 7.009 | .442 | -20.12 | 9.12 |
| | | 10% | -6.00 | 7.009 | .402 | -20.62 | 8.62 |
| | | 30% | 4.67 | 7.009 | .513 | -9.95 | 19.29 |
| | 30% | 0% | -17.33(*) | 7.009 | .022 | -31.95 | -2.71 |
| | | 5% | -10.17 | 7.009 | .162 | -24.79 | 4.45 |
| | | 10% | -10.67 | 7.009 | .144 | -25.29 | 3.95 |
| | | 20% | -4.67 | 7.009 | .513 | -19.29 | 9.95 |

Based on observed means.
* The mean difference is significant at the .05 level.

2.Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap laju perkecambahan biji *Mimosa pudica*

**Tests of Between-Subjects Effects**

Dependent Variable: LAJU

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 1239.085(a) | 10 | 123.909 | 589.650 | .000 |
| EKSTRAK | 1.752 | 1 | 1.752 | 8.335 | .009 |
| KONSENTRASI | 2.644 | 4 | .661 | 3.146 | .037 |
| EKSTRAK * KONSENTRASI | 1.111 | 4 | .278 | 1.321 | .296 |
| Error | 4.203 | 20 | .210 | | |
| Total | 1243.288 | 30 | | | |

a R Squared = .997 (Adjusted R Squared = .995)

Multiple Comparisons

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .16850 | .264663 | .532 | -.38358 | .72058 |
| | | 10% | .34667 | .264663 | .205 | -.20541 | .89874 |
| | | 20% | .00567 | .264663 | .983 | -.54641 | .55774 |
| | | 30% | -.54050 | .264663 | .055 | -1.09258 | .01158 |
| | 5% | 0% | -.16850 | .264663 | .532 | -.72058 | .38358 |
| | | 10% | .17817 | .264663 | .509 | -.37391 | .73024 |
| | | 20% | -.16283 | .264663 | .545 | -.71491 | .38924 |
| | | 30% | -.70900(*) | .264663 | .014 | -1.26108 | -.15692 |
| | 10% | 0% | -.34667 | .264663 | .205 | -.89874 | .20541 |
| | | 5% | -.17817 | .264663 | .509 | -.73024 | .37391 |
| | | 20% | -.34100 | .264663 | .212 | -.89308 | .21108 |
| | | 30% | -.88717(*) | .264663 | .003 | -1.43924 | -.33509 |
| | 20% | 0% | -.00567 | .264663 | .983 | -.55774 | .54641 |
| | | 5% | .16283 | .264663 | .545 | -.38924 | .71491 |
| | | 10% | .34100 | .264663 | .212 | -.21108 | .89308 |
| | | 30% | -.54617 | .264663 | .052 | -1.09824 | .00591 |
| | 30% | 0% | .54050 | .264663 | .055 | -.01158 | 1.09258 |
| | | 5% | .70900(*) | .264663 | .014 | .15692 | 1.26108 |
| | | 10% | .88717(*) | .264663 | .003 | .33509 | 1.43924 |
| | | 20% | | | | | |

115Dependent Variable: LAJU

Based on observed means.* The mean difference is significant at the .05 level.

3. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Mimosa pudica* pada hari ke-3

Tests of Between-Subjects Effects

Dependent Variable: HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 1.228(a) | 10 | .123 | 3.972 | .004 |
| EKSTRAK | .006 | 1 | .006 | .183 | .673 |
| KONSENTRASI | .201 | 4 | .050 | 1.622 | .208 |
| EKSTRAK * KONSENTRASI | .040 | 4 | .010 | .319 | .862 |
| Error | .618 | 20 | .031 | | |
| Total | 1.846 | 30 | | | |

a R Squared = .665 (Adjusted R Squared = .498)

Multiple Comparisons

Dependent Variable: HIPOKOTIL

| | (I) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .10267 | .101516 | .324 | -.10909 | .31443 |
| | | 10% | -.03567 | .101516 | .729 | -.24743 | .17609 |
| | | 20% | .17367 | .101516 | .103 | -.03809 | .38543 |
| | | 30% | .14633 | .101516 | .165 | -.06543 | .35809 |
| | 5% | 0% | -.10267 | .101516 | .324 | -.31443 | .10909 |
| | | 10% | -.13833 | .101516 | .188 | -.35009 | .07343 |
| | | 20% | .07100 | .101516 | .492 | -.14076 | .28276 |
| | | 30% | .04367 | .101516 | .672 | -.16809 | .25543 |
| | 10% | 0% | .03567 | .101516 | .729 | -.17609 | .24743 |
| | | 5% | .13833 | .101516 | .188 | -.07343 | .35009 |
| | | 20% | .20933 | .101516 | .052 | -.00243 | .42109 |
| | | 30% | .18200 | .101516 | .088 | -.02976 | .39376 |
| | 20% | 0% | -.17367 | .101516 | .103 | -.38543 | .03809 |
| | | 5% | -.07100 | .101516 | .492 | -.28276 | .14076 |
| | | 10% | -.20933 | .101516 | .052 | -.42109 | .00243 |
| | | 30% | -.02733 | .101516 | .790 | -.23909 | .18443 |
| | 30% | 0% | -.14633 | .101516 | .165 | -.35809 | .06543 |
| | | 5% | -.04367 | .101516 | .672 | -.25543 | .16809 |
| | | 10% | -.18200 | .101516 | .088 | -.39376 | .02976 |
| | | 20% | .02733 | .101516 | .790 | -.18443 | .23909 |

Based on observed means.

4. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Mimosa pudica* pada hari ke-5

Tests of Between-Subjects Effects

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 7.841(a) | 10 | .784 | 12.814 | .000 |
| EKSTRAK | .104 | 1 | .104 | 1.707 | .206 |
| KONSENTRASI | .625 | 4 | .156 | 2.554 | .071 |
| EKSTRAK * KONSENTRASI | .047 | 4 | .012 | .193 | .939 |
| Error | 1.224 | 20 | .061 | | |
| Total | 9.065 | 30 | | | |

a R Squared = .865 (Adjusted R Squared = .797)

Multiple Comparisons

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .12933 | .142821 | .376 | -.16859 | .42725 |
| | | 10% | .12733 | .142821 | .383 | -.17059 | .42525 |
| | | 20% | .25933 | .142821 | .084 | -.03859 | .55725 |
| | | 30% | .42600(*) | .142821 | .007 | .12808 | .72392 |
| | 5% | 0% | -.12933 | .142821 | .376 | -.42725 | .16859 |
| | | 10% | -.00200 | .142821 | .989 | -.29992 | .29592 |
| | | 20% | .13000 | .142821 | .374 | -.16792 | .42792 |
| | | 30% | .29667 | .142821 | .051 | -.00125 | .59459 |
| | 10% | 0% | -.12733 | .142821 | .383 | -.42525 | .17059 |
| | | 5% | .00200 | .142821 | .989 | -.29592 | .29992 |
| | | 20% | .13200 | .142821 | .366 | -.16592 | .42992 |
| | | 30% | .29867(*) | .142821 | .049 | .00075 | .59659 |
| | 20% | 0% | -.25933 | .142821 | .084 | -.55725 | .03859 |
| | | 5% | -.13000 | .142821 | .374 | -.42792 | .16792 |
| | | 10% | -.13200 | .142821 | .366 | -.42992 | .16592 |
| | | 30% | .16667 | .142821 | .257 | -.13125 | .46459 |
| | 30% | 0% | -.42600(*) | .142821 | .007 | -.72392 | -.12808 |
| | | 5% | -.29667 | .142821 | .051 | -.59459 | .00125 |
| | | 10% | -.29867(*) | .142821 | .049 | -.59659 | -.00075 |
| | | 20% | -.16667 | .142821 | .257 | -.46459 | .13125 |

Based on observed means.

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

5.Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Mimosa pudica* pada hari ke-7

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 21.573(a) | 10 | 2.157 | 17.570 | .000 |
| EKSTRAK | .242 | 1 | .242 | 1.973 | .175 |
| KONSENTRASI | 1.315 | 4 | .329 | 2.677 | .062 |
| EKSTRAK * KONSENTRASI | .131 | 4 | .033 | .267 | .896 |
| Error | 2.456 | 20 | .123 | | |
| Total | 24.028 | 30 | | | |

a R Squared = .898 (Adjusted R Squared = .847)

**Multiple Comparisons**

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .21733 | .202304 | .295 | -.20466 | .63933 |
| | | 10% | .07667 | .202304 | .709 | -.34533 | .49866 |
| | | 20% | .28867 | .202304 | .169 | -.13333 | .71066 |
| | | 30% | .60333(*) | .202304 | .007 | .18134 | 1.02533 |
| | 5% | 0% | -.21733 | .202304 | .295 | -.63933 | .20466 |
| | | 10% | -.14067 | .202304 | .495 | -.56266 | .28133 |
| | | 20% | .07133 | .202304 | .728 | -.35066 | .49333 |
| | | 30% | .38600 | .202304 | .071 | -.03600 | .80800 |
| | 10% | 0% | -.07667 | .202304 | .709 | -.49866 | .34533 |
| | | 5% | .14067 | .202304 | .495 | -.28133 | .56266 |
| | | 20% | .21200 | .202304 | .307 | -.21000 | .63400 |
| | | 30% | .52667(*) | .202304 | .017 | .10467 | .94866 |
| | 20% | 0% | -.28867 | .202304 | .169 | -.71066 | .13333 |
| | | 5% | -.07133 | .202304 | .728 | -.49333 | .35066 |
| | | 10% | -.21200 | .202304 | .307 | -.63400 | .21000 |
| | | 30% | .31467 | .202304 | .136 | -.10733 | .73666 |
| | 30% | 0% | -.60333(*) | .202304 | .007 | -1.02533 | -.18134 |
| | | 5% | -.38600 | .202304 | .071 | -.80800 | .03600 |
| | | 10% | -.52667(*) | .202304 | .017 | -.94866 | -.10467 |
| | | 20% | -.31467 | .202304 | .136 | -.73666 | .10733 |

Based on observed means.

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

6. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Mimosa pudica* pada hari ke-9

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 54.792(a) | 10 | 5.479 | 34.776 | .000 |
| EKSTRAK | .009 | 1 | .009 | .055 | .816 |
| KONSENTRASI | 1.129 | 4 | .282 | 1.791 | .170 |
| EKSTRAK * KONSENTRASI | .257 | 4 | .064 | .408 | .801 |
| Error | 3.151 | 20 | .158 | | |
| Total | 57.943 | 30 | | | |

a R Squared = .946 (Adjusted R Squared = .918)

**Multiple Comparisons**

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .19467 | .229169 | .406 | -.28337 | .67270 |
| | | 10% | .19267 | .229169 | .410 | -.28537 | .67070 |
| | | 20% | .36400 | .229169 | .128 | -.11404 | .84204 |
| | | 30% | .57800(*) | .229169 | .020 | .09996 | 1.05604 |
| | 5% | 0% | -.19467 | .229169 | .406 | -.67270 | .28337 |
| | | 10% | -.00200 | .229169 | .993 | -.48004 | .47604 |
| | | 20% | .16933 | .229169 | .469 | -.30870 | .64737 |
| | | 30% | .38333 | .229169 | .110 | -.09470 | .86137 |
| | 10% | 0% | -.19267 | .229169 | .410 | -.67070 | .28537 |
| | | 5% | .00200 | .229169 | .993 | -.47604 | .48004 |
| | | 20% | .17133 | .229169 | .463 | -.30670 | .64937 |
| | | 30% | .38533 | .229169 | .108 | -.09270 | .86337 |
| | 20% | 0% | -.36400 | .229169 | .128 | -.84204 | .11404 |
| | | 5% | -.16933 | .229169 | .469 | -.64737 | .30870 |
| | | 10% | -.17133 | .229169 | .463 | -.64937 | .30670 |
| | | 30% | .21400 | .229169 | .362 | -.26404 | .69204 |
| | 30% | 0% | -.57800(*) | .229169 | .020 | -1.05604 | -.09996 |
| | | 5% | -.38333 | .229169 | .110 | -.86137 | .09470 |
| | | 10% | -.38533 | .229169 | .108 | -.86337 | .09270 |
| | | 20% | | | | | |

Dependent Variable: P.HIPOKOTIL

Based on observed means.

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

7. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap persentase kecambah biji *Ageratum conyzoides*

Tests of Between-Subjects Effects

Dependent Variable: PRESENTASE

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 1552.000(a) | 10 | 155.200 | 6.467 | .000 |
| EKSTRAK | 235.200 | 1 | 235.200 | 9.800 | .005 |
| KONSENTRASI | 104.533 | 4 | 26.133 | 1.089 | .389 |
| EKSTRAK * KONSENTRASI | 34.133 | 4 | 8.533 | .356 | .837 |
| Error | 480.000 | 20 | 24.000 | | |
| Total | 2032.000 | 30 | | | |

a R Squared = .764 (Adjusted R Squared = .646)

**Multiple Comparisons**

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | 2.00 | 2.828 | .488 | -3.90 | 7.90 |
| | | 10% | 5.33 | 2.828 | .074 | -.57 | 11.23 |
| | | 20% | 4.00 | 2.828 | .173 | -1.90 | 9.90 |
| | | 30% | 4.00 | 2.828 | .173 | -1.90 | 9.90 |
| | 5% | 0% | -2.00 | 2.828 | .488 | -7.90 | 3.90 |
| | | 10% | 3.33 | 2.828 | .252 | -2.57 | 9.23 |
| | | 20% | 2.00 | 2.828 | .488 | -3.90 | 7.90 |
| | | 30% | 2.00 | 2.828 | .488 | -3.90 | 7.90 |
| | 10% | 0% | -5.33 | 2.828 | .074 | -11.23 | .57 |
| | | 5% | -3.33 | 2.828 | .252 | -9.23 | 2.57 |
| | | 20% | -1.33 | 2.828 | .642 | -7.23 | 4.57 |
| | | 30% | -1.33 | 2.828 | .642 | -7.23 | 4.57 |
| | 20% | 0% | -4.00 | 2.828 | .173 | -9.90 | 1.90 |
| | | 5% | -2.00 | 2.828 | .488 | -7.90 | 3.90 |
| | | 10% | 1.33 | 2.828 | .642 | -4.57 | 7.23 |
| | | 30% | .00 | 2.828 | 1.000 | -5.90 | 5.90 |
| | 30% | 0% | -4.00 | 2.828 | .173 | -9.90 | 1.90 |
| | | 5% | -2.00 | 2.828 | .488 | -7.90 | 3.90 |
| | | 10% | 1.33 | 2.828 | .642 | -4.57 | 7.23 |
| | | 20% | .00 | 2.828 | 1.000 | -5.90 | 5.90 |

Dependent Variable: PRESENTASE
Based on observed means.

8. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap laju perkecambahan biji *Ageratum conyzoides*

**Tests of Between-Subjects Effects**

Dependent Variable: LAJU

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 1292.367(a) | 10 | 129.237 | 10.840 | .000 |
| EKSTRAK | 48.121 | 1 | 48.121 | 4.036 | .058 |
| KONSENTRASI | 21.757 | 4 | 5.439 | .456 | .767 |
| EKSTRAK * KONSENTRASI | 55.272 | 4 | 13.818 | 1.159 | .358 |
| Error | 238.444 | 20 | 11.922 | | |
| Total | 1530.810 | 30 | | | |

a R Squared = .844 (Adjusted R Squared = .766)

**Multiple Comparisons**

Dependent Variable: LAJU

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .92600 | 1.993505 | .647 | -3.23238 | 5.08438 |
| | | 10% | 2.12233 | 1.993505 | .300 | -2.03604 | 6.28071 |
| | | 20% | 1.99733 | 1.993505 | .328 | -2.16104 | 6.15571 |
| | | 30% | 2.15567 | 1.993505 | .292 | -2.00271 | 6.31404 |
| | 5% | 0% | -.92600 | 1.993505 | .647 | -5.08438 | 3.23238 |
| | | 10% | 1.19633 | 1.993505 | .555 | -2.96204 | 5.35471 |
| | | 20% | 1.07133 | 1.993505 | .597 | -3.08704 | 5.22971 |
| | | 30% | 1.22967 | 1.993505 | .544 | -2.92871 | 5.38804 |
| | 10% | 0% | -2.12233 | 1.993505 | .300 | -6.28071 | 2.03604 |
| | | 5% | -1.19633 | 1.993505 | .555 | -5.35471 | 2.96204 |
| | | 20% | -.12500 | 1.993505 | .951 | -4.28338 | 4.03338 |
| | | 30% | .03333 | 1.993505 | .987 | -4.12504 | 4.19171 |
| | 20% | 0% | -1.99733 | 1.993505 | .328 | -6.15571 | 2.16104 |
| | | 5% | -1.07133 | 1.993505 | .597 | -5.22971 | 3.08704 |
| | | 10% | .12500 | 1.993505 | .951 | -4.03338 | 4.28338 |
| | | 30% | .15833 | 1.993505 | .937 | -4.00004 | 4.31671 |
| | 30% | 0% | -2.15567 | 1.993505 | .292 | -6.31404 | 2.00271 |
| | | 5% | -1.22967 | 1.993505 | .544 | -5.38804 | 2.92871 |
| | | 10% | -.03333 | 1.993505 | .987 | -4.19171 | 4.12504 |
| | | 20% | -.15833 | 1.993505 | .937 | -4.31671 | 4.00004 |

Based on observed means.

9. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Ageratum conyzoides* pada hari ke-5

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .128(a) | 10 | .013 | 2.825 | .023 |
| EKSTRAK | .005 | 1 | .005 | .995 | .330 |
| KONSENTRASI | .061 | 4 | .015 | 3.362 | .029 |
| EKSTRAK * KONSENTRASI | .040 | 4 | .010 | 2.181 | .108 |
| Error | .091 | 20 | .005 | | |
| Total | .219 | 30 | | | |

a R Squared = .586 (Adjusted R Squared = .378)

**Multiple Comparisons**

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .09667(*) | .038884 | .022 | .01556 | .17778 |
| | | 10% | .11667(*) | .038884 | .007 | .03556 | .19778 |
| | | 20% | .11533(*) | .038884 | .008 | .03422 | .19644 |
| | | 30% | .11600(*) | .038884 | .007 | .03489 | .19711 |
| | 5% | 0% | -.09667(*) | .038884 | .022 | -.17778 | -.01556 |
| | | 10% | .02000 | .038884 | .613 | -.06111 | .10111 |
| | | 20% | .01867 | .038884 | .636 | -.06244 | .09978 |
| | | 30% | .01933 | .038884 | .624 | -.06178 | .10044 |
| | 10% | 0% | -.11667(*) | .038884 | .007 | -.19778 | -.03556 |
| | | 5% | -.02000 | .038884 | .613 | -.10111 | .06111 |
| | | 20% | -.00133 | .038884 | .973 | -.08244 | .07978 |
| | | 30% | -.00067 | .038884 | .986 | -.08178 | .08044 |
| | 20% | 0% | -.11533(*) | .038884 | .008 | -.19644 | -.03422 |
| | | 5% | -.01867 | .038884 | .636 | -.09978 | .06244 |
| | | 10% | .00133 | .038884 | .973 | -.07978 | .08244 |
| | | 30% | .00067 | .038884 | .986 | -.08044 | .08178 |
| | 30% | 0% | -.11600(*) | .038884 | .007 | -.19711 | -.03489 |
| | | 5% | -.01933 | .038884 | .624 | -.10044 | .06178 |
| | | 10% | .00067 | .038884 | .986 | -.08044 | .08178 |
| | | 20% | | | | | |

Dependent Variable: P.HIPOKOTIL

Based on observed means.* The mean difference is significant at the .05 level.

10. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Ageratum conyzoides* pada hari ke-7

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .028(a) | 10 | .003 | 4.813 | .001 |
| EKSTRAK | .003 | 1 | .003 | 5.466 | .030 |
| KONSENTRASI | .007 | 4 | .002 | 2.911 | .048 |
| EKSTRAK * KONSENTRASI | .002 | 4 | .000 | .697 | .603 |
| Error | .012 | 20 | .001 | | |
| Total | .039 | 30 | | | |

a R Squared = .706 (Adjusted R Squared = .560)

**Multiple Comparisons**

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .01867 | .013887 | .194 | -.01030 | .04763 |
| | | 10% | .03667(*) | .013887 | .016 | .00770 | .06563 |
| | | 20% | .03400(*) | .013887 | .024 | .00503 | .06297 |
| | | 30% | .04067(*) | .013887 | .008 | .01170 | .06963 |
| | 5% | 0% | -.01867 | .013887 | .194 | -.04763 | .01030 |
| | | 10% | .01800 | .013887 | .210 | -.01097 | .04697 |
| | | 20% | .01533 | .013887 | .283 | -.01363 | .04430 |
| | | 30% | .02200 | .013887 | .129 | -.00697 | .05097 |
| | 10% | 0% | -.03667(*) | .013887 | .016 | -.06563 | -.00770 |
| | | 5% | -.01800 | .013887 | .210 | -.04697 | .01097 |
| | | 20% | -.00267 | .013887 | .850 | -.03163 | .02630 |
| | | 30% | .00400 | .013887 | .776 | -.02497 | .03297 |
| | 20% | 0% | -.03400(*) | .013887 | .024 | -.06297 | -.00503 |
| | | 5% | -.01533 | .013887 | .283 | -.04430 | .01363 |
| | | 10% | .00267 | .013887 | .850 | -.02630 | .03163 |
| | | 30% | .00667 | .013887 | .636 | -.02230 | .03563 |
| | 30% | 0% | -.04067(*) | .013887 | .008 | -.06963 | -.01170 |
| | | 5% | -.02200 | .013887 | .129 | -.05097 | .00697 |
| | | 10% | -.00400 | .013887 | .776 | -.03297 | .02497 |
| | | 20% | -.00667 | .013887 | .636 | -.03563 | .02230 |

Based on observed means.* The mean difference is significant at the .05 level.

11. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Ageratum conyzoides* pada hari ke-9

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .101(a) | 10 | .010 | 4.681 | .002 |
| EKSTRAK | .017 | 1 | .017 | 7.648 | .012 |
| KONSENTRASI | .009 | 4 | .002 | 1.057 | .403 |
| EKSTRAK * KONSENTRASI | .002 | 4 | .000 | .191 | .940 |
| Error | .043 | 20 | .002 | | |
| Total | .144 | 30 | | | |

a R Squared = .701 (Adjusted R Squared = .551)

**Multiple Comparisons**

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .03767 | .026833 | .176 | -.01831 | .09364 |
| | | 10% | .04900 | .026833 | .083 | -.00697 | .10497 |
| | | 20% | .03500 | .026833 | .207 | -.02097 | .09097 |
| | | 30% | .04533 | .026833 | .107 | -.01064 | .10131 |
| | 5% | 0% | -.03767 | .026833 | .176 | -.09364 | .01831 |
| | | 10% | .01133 | .026833 | .677 | -.04464 | .06731 |
| | | 20% | -.00267 | .026833 | .922 | -.05864 | .05331 |
| | | 30% | .00767 | .026833 | .778 | -.04831 | .06364 |
| | 10% | 0% | -.04900 | .026833 | .083 | -.10497 | .00697 |
| | | 5% | -.01133 | .026833 | .677 | -.06731 | .04464 |
| | | 20% | -.01400 | .026833 | .608 | -.06997 | .04197 |
| | | 30% | -.00367 | .026833 | .893 | -.05964 | .05231 |
| | 20% | 0% | -.03500 | .026833 | .207 | -.09097 | .02097 |
| | | 5% | .00267 | .026833 | .922 | -.05331 | .05864 |
| | | 10% | .01400 | .026833 | .608 | -.04197 | .06997 |
| | | 30% | .01033 | .026833 | .704 | -.04564 | .06631 |
| | 30% | 0% | -.04533 | .026833 | .107 | -.10131 | .01064 |
| | | 5% | -.00767 | .026833 | .778 | -.06364 | .04831 |
| | | 10% | .00367 | .026833 | .893 | -.05231 | .05964 |
| | | 20% | -.01033 | .026833 | .704 | -.06631 | .04564 |

Based on observed means.

12. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap persentase kecambah biji *Leersia hexandra*

**Tests of Between-Subjects Effects**

Dependent Variable: PRESENTASE

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 741.333(a) | 10 | 74.133 | 3.022 | .017 |
| EKSTRAK | 282.133 | 1 | 282.133 | 11.500 | .003 |
| KONSENTRASI | 88.533 | 4 | 22.133 | .902 | .481 |
| EKSTRAK * KONSENTRASI | 88.533 | 4 | 22.133 | .902 | .481 |
| Error | 490.667 | 20 | 24.533 | | |
| Total | 1232.000 | 30 | | | |

a R Squared = .602 (Adjusted R Squared = .403)

**Multiple Comparisons**

Dependent Variable: PRESENTASE

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | 2.00 | 2.860 | .492 | -3.97 | 7.97 |
| | | 10% | 2.00 | 2.860 | .492 | -3.97 | 7.97 |
| | | 20% | 5.33 | 2.860 | .077 | -.63 | 11.30 |
| | | 30% | 2.00 | 2.860 | .492 | -3.97 | 7.97 |
| | 5% | 0% | -2.00 | 2.860 | .492 | -7.97 | 3.97 |
| | | 10% | .00 | 2.860 | 1.000 | -5.97 | 5.97 |
| | | 20% | 3.33 | 2.860 | .257 | -2.63 | 9.30 |
| | | 30% | .00 | 2.860 | 1.000 | -5.97 | 5.97 |
| | 10% | 0% | -2.00 | 2.860 | .492 | -7.97 | 3.97 |
| | | 5% | .00 | 2.860 | 1.000 | -5.97 | 5.97 |
| | | 20% | 3.33 | 2.860 | .257 | -2.63 | 9.30 |
| | | 30% | .00 | 2.860 | 1.000 | -5.97 | 5.97 |
| | 20% | 0% | -5.33 | 2.860 | .077 | -11.30 | .63 |
| | | 5% | -3.33 | 2.860 | .257 | -9.30 | 2.63 |
| | | 10% | -3.33 | 2.860 | .257 | -9.30 | 2.63 |
| | | 30% | -3.33 | 2.860 | .257 | -9.30 | 2.63 |
| | 30% | 0% | -2.00 | 2.860 | .492 | -7.97 | 3.97 |
| | | 5% | .00 | 2.860 | 1.000 | -5.97 | 5.97 |
| | | 10% | .00 | 2.860 | 1.000 | -5.97 | 5.97 |
| | | 20% | 3.33 | 2.860 | .257 | -2.63 | 9.30 |

Based on observed means.

13. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap laju perkecambahan biji *Leersia hexandra*

**Tests of Between-Subjects Effects**

Dependent Variable: LAJU

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | 542.109(a) | 10 | 54.211 | 11.117 | .000 |
| EKSTRAK | 209.632 | 1 | 209.632 | 42.990 | .000 |
| KONSENTRASI | 61.422 | 4 | 15.356 | 3.149 | .037 |
| EKSTRAK * KONSENTRASI | 61.422 | 4 | 15.356 | 3.149 | .037 |
| Error | 97.526 | 20 | 4.876 | | |
| Total | 639.635 | 30 | | | |

a R Squared = .848 (Adjusted R Squared = .771)

**Multiple Comparisons**

Dependent Variable: LAJU

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | 1.32833 | 1.274922 | .310 | -1.33111 | 3.98777 |
| | | 10% | .16167 | 1.274922 | .900 | -2.49777 | 2.82111 |
| | | 20% | 3.99500(*) | 1.274922 | .005 | 1.33556 | 6.65444 |
| | | 30% | 1.27283 | 1.274922 | .330 | -1.38661 | 3.93227 |
| | 5% | 0% | -1.32833 | 1.274922 | .310 | -3.98777 | 1.33111 |
| | | 10% | -1.16667 | 1.274922 | .371 | -3.82611 | 1.49277 |
| | | 20% | 2.66667(*) | 1.274922 | .049 | .00723 | 5.32611 |
| | | 30% | -.05550 | 1.274922 | .966 | -2.71494 | 2.60394 |
| | 10% | 0% | -.16167 | 1.274922 | .900 | -2.82111 | 2.49777 |
| | | 5% | 1.16667 | 1.274922 | .371 | -1.49277 | 3.82611 |
| | | 20% | 3.83333(*) | 1.274922 | .007 | 1.17389 | 6.49277 |
| | | 30% | 1.11117 | 1.274922 | .394 | -1.54827 | 3.77061 |
| | 20% | 0% | -3.99500(*) | 1.274922 | .005 | -6.65444 | -1.33556 |
| | | 5% | -2.66667(*) | 1.274922 | .049 | -5.32611 | -.00723 |
| | | 10% | -3.83333(*) | 1.274922 | .007 | -6.49277 | -1.17389 |
| | | 30% | -2.72217(*) | 1.274922 | .045 | -5.38161 | -.06273 |
| | 30% | 0% | -1.27283 | 1.274922 | .330 | -3.93227 | 1.38661 |
| | | 5% | .05550 | 1.274922 | .966 | -2.60394 | 2.71494 |
| | | 10% | -1.11117 | 1.274922 | .394 | -3.77061 | 1.54827 |
| | | 20% | 2.72217(*) | 1.274922 | .045 | .06273 | 5.38161 |

Based on observed means.

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

14. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Leersia hexandra* pada hari ke-3

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .001(a) | 10 | .000 | 3.000 | .018 |
| EKSTRAK | .000 | 1 | .000 | 3.000 | .099 |
| KONSENTRASI | .000 | 4 | .000 | 3.000 | .043 |
| EKSTRAK * KONSENTRASI | .000 | 4 | .000 | 3.000 | .043 |
| Error | .001 | 20 | 4.00E-005 | | |
| Total | .002 | 30 | | | |

a R Squared = .600 (Adjusted R Squared = .400)

**Multiple Comparisons**

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .0100(*) | .00365 | .013 | .0024 | .0176 |
| | | 10% | .0100(*) | .00365 | .013 | .0024 | .0176 |
| | | 20% | .0100(*) | .00365 | .013 | .0024 | .0176 |
| | | 30% | .0100(*) | .00365 | .013 | .0024 | .0176 |
| | 5% | 0% | -.0100(*) | .00365 | .013 | -.0176 | -.0024 |
| | | 10% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 20% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 30% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | 10% | 0% | -.0100(*) | .00365 | .013 | -.0176 | -.0024 |
| | | 5% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 20% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 30% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | 20% | 0% | -.0100(*) | .00365 | .013 | -.0176 | -.0024 |
| | | 5% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 10% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 30% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | 30% | 0% | -.0100(*) | .00365 | .013 | -.0176 | -.0024 |
| | | 5% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 10% | .0000 | .00365 | 1.000 | -.0076 | .0076 |
| | | 20% | .0000 | .00365 | 1.000 | -.0076 | .0076 |

Based on observed means.

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

15. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Leersia hexandra* pada hari ke-5

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .004(a) | 10 | .000 | 4.994 | .001 |
| EKSTRAK | .000 | 1 | .000 | 4.994 | .037 |
| KONSENTRASI | .002 | 4 | .000 | 4.994 | .006 |
| EKSTRAK * KONSENTRASI | .002 | 4 | .000 | 4.994 | .006 |
| Error | .002 | 20 | 8.37E-005 | | |
| Total | .006 | 30 | | | |

a R Squared = .714 (Adjusted R Squared = .571)

**Multiple Comparisons**

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .01867(*) | .005283 | .002 | .00765 | .02969 |
| | | 10% | .01867(*) | .005283 | .002 | .00765 | .02969 |
| | | 20% | .01867(*) | .005283 | .002 | .00765 | .02969 |
| | | 30% | .01867(*) | .005283 | .002 | .00765 | .02969 |
| | 5% | 0% | -.01867(*) | .005283 | .002 | -.02969 | -.00765 |
| | | 10% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 20% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 30% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | 10% | 0% | -.01867(*) | .005283 | .002 | -.02969 | -.00765 |
| | | 5% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 20% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 30% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | 20% | 0% | -.01867(*) | .005283 | .002 | -.02969 | -.00765 |
| | | 5% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 10% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 30% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | 30% | 0% | -.01867(*) | .005283 | .002 | -.02969 | -.00765 |
| | | 5% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 10% | .00000 | .005283 | 1.000 | -.01102 | .01102 |
| | | 20% | .00000 | .005283 | 1.000 | -.01102 | .01102 |

Dependent Variable: P.HIPOKOTIL
Based on observed means.
* The mean difference is significant at the .05 level.

16. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Leersia hexandra* pada hari ke-7

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .025(a) | 10 | .003 | 2.329 | .052 |
| EKSTRAK | .003 | 1 | .003 | 2.625 | .121 |
| KONSENTRASI | .007 | 4 | .002 | 1.523 | .234 |
| EKSTRAK * KONSENTRASI | .007 | 4 | .002 | 1.656 | .200 |
| Error | .022 | 20 | .001 | | |
| Total | .047 | 30 | | | |

a R Squared = .538 (Adjusted R Squared = .307)

**Multiple Comparisons**

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .03533 | .018997 | .078 | -.00429 | .07496 |
| | | 10% | .02200 | .018997 | .260 | -.01763 | .06163 |
| | | 20% | .03733 | .018997 | .063 | -.00229 | .07696 |
| | | 30% | .00733 | .018997 | .704 | -.03229 | .04696 |
| | 5% | 0% | -.03533 | .018997 | .078 | -.07496 | .00429 |
| | | 10% | -.01333 | .018997 | .491 | -.05296 | .02629 |
| | | 20% | .00200 | .018997 | .917 | -.03763 | .04163 |
| | | 30% | -.02800 | .018997 | .156 | -.06763 | .01163 |
| | 10% | 0% | -.02200 | .018997 | .260 | -.06163 | .01763 |
| | | 5% | .01333 | .018997 | .491 | -.02629 | .05296 |
| | | 20% | .01533 | .018997 | .429 | -.02429 | .05496 |
| | | 30% | -.01467 | .018997 | .449 | -.05429 | .02496 |
| | 20% | 0% | -.03733 | .018997 | .063 | -.07696 | .00229 |
| | | 5% | -.00200 | .018997 | .917 | -.04163 | .03763 |
| | | 10% | -.01533 | .018997 | .429 | -.05496 | .02429 |
| | | 30% | -.03000 | .018997 | .130 | -.06963 | .00963 |
| | 30% | 0% | -.00733 | .018997 | .704 | -.04696 | .03229 |
| | | 5% | .02800 | .018997 | .156 | -.01163 | .06763 |
| | | 10% | .01467 | .018997 | .449 | -.02496 | .05429 |
| | | 20% | .03000 | .018997 | .130 | -.00963 | .06963 |

Based on observed means.

17. Pengaruh ekstrak daun dan batang bandotan (*Ageratum conyzoides*) dan umbi teki (*Cyperus rotundus*) terhadap panjang hipokotil biji *Leersia hexandra* pada hari ke-9

**Tests of Between-Subjects Effects**

Dependent Variable: P.HIPOKOTIL

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Model | .036(a) | 10 | .004 | 3.810 | .005 |
| EKSTRAK | .010 | 1 | .010 | 10.907 | .004 |
| KONSENTRASI | .008 | 4 | .002 | 2.035 | .128 |
| EKSTRAK * KONSENTRASI | .008 | 4 | .002 | 2.035 | .128 |
| Error | .019 | 20 | .001 | | |
| Total | .055 | 30 | | | |

a R Squared = .656 (Adjusted R Squared = .484)

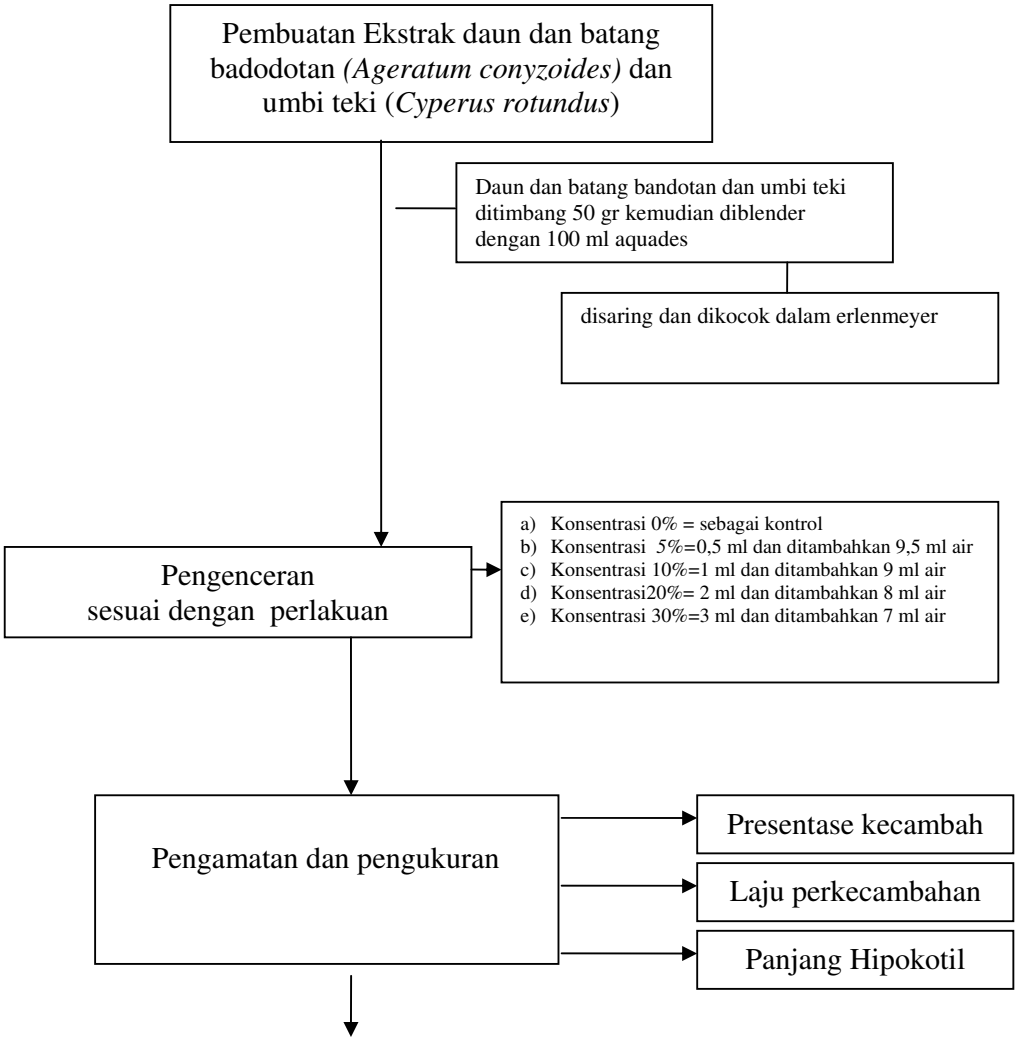
**Multiple Comparisons**

Dependent Variable: P.HIPOKOTIL

| | (i) konsentrasi | (j) konsentrasi | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | Lower Bound | Upper Bound | Lower Bound | Upper Bound | Lower Bound |
| LSD | 0% | 5% | .03933(*) | .017810 | .039 | .00218 | .07648 |
| | | 10% | .01400 | .017810 | .441 | -.02315 | .05115 |
| | | 20% | .04333(*) | .017810 | .024 | .00618 | .08048 |
| | | 30% | .02700 | .017810 | .145 | -.01015 | .06415 |
| | 5% | 0% | -.03933(*) | .017810 | .039 | -.07648 | -.00218 |
| | | 10% | -.02533 | .017810 | .170 | -.06248 | .01182 |
| | | 20% | .00400 | .017810 | .825 | -.03315 | .04115 |
| | | 30% | -.01233 | .017810 | .497 | -.04948 | .02482 |
| | 10% | 0% | -.01400 | .017810 | .441 | -.05115 | .02315 |
| | | 5% | .02533 | .017810 | .170 | -.01182 | .06248 |
| | | 20% | .02933 | .017810 | .115 | -.00782 | .06648 |
| | | 30% | .01300 | .017810 | .474 | -.02415 | .05015 |
| | 20% | 0% | -.04333(*) | .017810 | .024 | -.08048 | -.00618 |
| | | 5% | -.00400 | .017810 | .825 | -.04115 | .03315 |
| | | 10% | -.02933 | .017810 | .115 | -.06648 | .00782 |
| | | 30% | -.01633 | .017810 | .370 | -.05348 | .02082 |
| | 30% | 0% | -.02700 | .017810 | .145 | -.06415 | .01015 |
| | | 5% | .01233 | .017810 | .497 | -.02482 | .04948 |
| | | 10% | -.01300 | .017810 | .474 | -.05015 | .02415 |
| | | 20% | .01633 | .017810 | .370 | -.02082 | .05348 |

Based on observed means.

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


Pembuatan Ekstrak daun dan batang badodotan *(Ageratum conyzoides)* dan umbi teki (*Cyperus rotundus*)
Daun dan batang bandotan dan umbi teki ditimbang 50 gr kemudian diblender dengan 100 ml aquades
disaring dan dikocok dalam erlenmeyer
Pengenceran sesuai dengan perlakuan
a) Konsentrasi 0% = sebagai kontrol
b) Konsentrasi 5%=0,5 ml dan ditambahkan 9,5 ml air
c) Konsentrasi 10%=1 ml dan ditambahkan 9 ml air
d) Konsentrasi20%= 2 ml dan ditambahkan 8 ml air
e) Konsentrasi 30%=3 ml dan ditambahkan 7 ml air
Pengamatan dan pengukuran
Presentase kecambah
Laju perkecambahan
Panjang Hipokotil

Lampiran 5. Gambar Alat-alat dan Bahan-bahan

(a)

(b)

(c)


(d)

(e)

(f)

(g)


(h)

(i)

(j)

(k)

(l)

(m)

Gambar 1. alat-alat dan bahan- bahan penelitian (a) Erlenmenyer (b) Kulkas, (c) Cawan petri, (d) Beker glass, (e) Blender, (f) pinset, (g) biji *Leersia hexandra* , (h) Biji *Mimosa pudica,* (i) Biji *Ageratum conyzoides,* (j) Daun dan Batang *Ageratum conyzoides,* (k) Umbi *Cyperus rotundus,* (l) Ekstrak Daun dan Batang *Ageratum conyzoides,* (m) Ekstrak Umbi *Cyperus rotundus*

Lampiran 6. Gambar kerja Penelitian

(a)

(b)

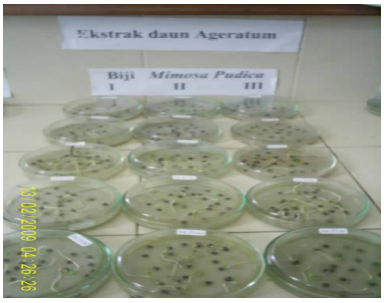
(c)

(d)

Gambar 2. Kerja penelitian (a) penanaman biji (b) pengukuran panjang hipokotil, (c) perhitungan persentase perkecambahan dan laju perkecambahan (d) pengambilan data

Lampiran 7. hasil penelitian

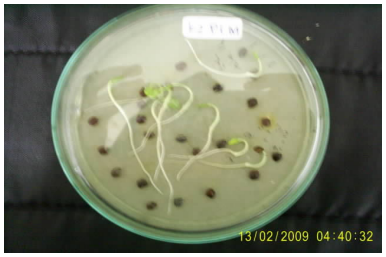
(rancangan penelitian)



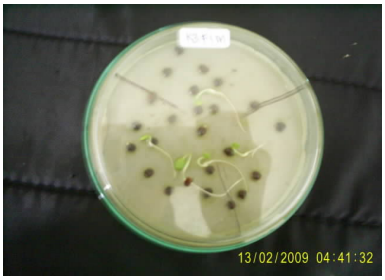

(pengaruh ekstrak ageratum)


(Konsentrasi 0%)

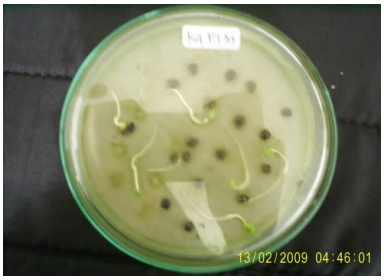

(Konsentrasi 5%)




(Konsentrasi 10%)




(Konsentrasi 20%)




(Konsentrasi 30%)


(Ekstrak Umbi Teki)


(Konsentrasi 0%)


(Konsentrasi 5%)


(Konsentrasi 10%)

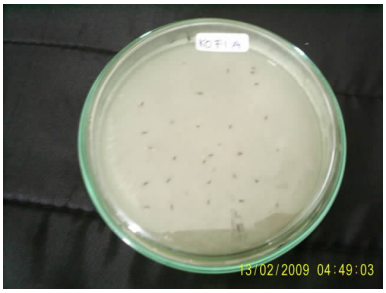

(Konsentrasi 20%)


(Konsentrasi 30%)

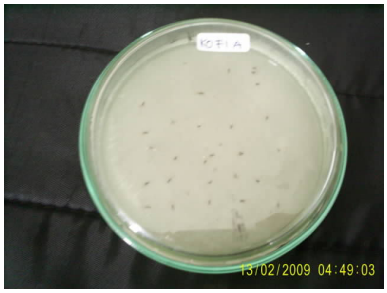

(Biji Bandotan Konsentrasi 0%)


(Biji Bandotan Konsentrasi 5%)


(Biji Bandotan Konsentrasi 10%)




(Biji Bandotan Konsentrasi 20%)




(Biji Bandotan Konsentrasi 30%)