

**Lampiran 1. Perhitungan ANAVA Tunggal untuk Mengetahui Pengaruh Pemberian Ekstrak Jahe Merah (*Zingiber officinale* Rosc) terhadap Jumlah Sel Nekrosis pada Jaringan Glomerulus Ginjal Tikus Putih (*Rattus norvegicus*) Terpapar *Allethrin*.**

| Perlakuan   | Jumlah Nekrosis Sel Glomerulus (%) |       |       |       | Total  | Rata-rata |
|-------------|------------------------------------|-------|-------|-------|--------|-----------|
|             | Ulangan                            |       |       |       |        |           |
|             | 1                                  | 2     | 3     | 4     |        |           |
| Kontrol (+) | 22,91                              | 27,24 | 27,98 | 22,09 | 100,22 | 25,05     |
| Dosis I     | 22,15                              | 23,33 | 25,11 | 25,27 | 95,86  | 23,97     |
| Dosis II    | 20,27                              | 22,86 | 17,75 | 19,04 | 79,92  | 19,98     |
| Dosis III   | 13,17                              | 14,14 | 10,98 | 13,35 | 51,64  | 12,91     |
| Dosis IV    | 13,20                              | 9,50  | 12,27 | 11,92 | 46,89  | 11,72     |
| Dosis V     | 7,14                               | 8,30  | 8,17  | 6,28  | 29,89  | 7,47      |
| Kontrol (-) | 4,57                               | 4,64  | 5,32  | 4,89  | 19,42  | 4,86      |
| Total       |                                    |       |       |       | 423,84 |           |

$$X = \frac{423,84}{28} = 15,14$$

$$FK = \frac{423,84^2}{28} = 6415,73$$

JK Total Percobaan

$$\begin{aligned}
 &= 22,91^2 + 27,24^2 + \dots + 4,89^2 - FK \\
 &= 8002,7538 - 6415,76 \\
 &= 1587,0273
 \end{aligned}$$

$$JK \text{ Perlakuan} = \frac{100,22^2 + 95,86^2 + \dots + 19,42^2}{4} - FK$$

$$\begin{aligned}
 &= 7939,08 - 6415,76 \\
 &= 1523,35015
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ Galat} &= JK \text{ Total} - JK \text{ Perlakuan} \\
 &= 1587,0273 - 1523,35015 \\
 &= 63,67765
 \end{aligned}$$

## ANAVA

| SK        | Db | JK         | KT       | F hitung | F tabel 1% |
|-----------|----|------------|----------|----------|------------|
| Perlakuan | 6  | 1523,35015 | 253,8917 | 83,729   | 3,81       |
| Galat     | 21 | 63,67765   | 3,0323   |          |            |
| Total     | 27 | 1587,0278  |          |          |            |

$$\begin{aligned}
 \text{Uji BNT } 0,01 &= 2,831 \times \frac{\sqrt{2 \times \text{KT Galat}}}{\text{Ulangan}} \\
 &= 2,831 \times \frac{\sqrt{2 \times 3,0323}}{4} \\
 &= 2,831 \times \frac{\sqrt{6,0646}}{4} \\
 &= 2,831 \times \sqrt{1,51615} \\
 &= 2,831 \times 1,231 \\
 &= 3,49
 \end{aligned}$$

Notasi BNT (Beda Nyata Terkecil 1%)

| Perlakuan | Rata-rata Jumlah Sel Nekrosis % | Notasi BNT |
|-----------|---------------------------------|------------|
| K (-)     | 4,86                            | a          |
| P5        | 7,47                            | a          |
| P4        | 11,72                           | b          |
| P3        | 12,91                           | b          |
| P2        | 19,98                           | c          |
| P1        | 23,97                           | d          |
| K (+)     | 25,05                           | d          |

## Kesimpulan

Berdasarkan perhitungan ANAVA tunggal dapat diketahui hasil perhitungan yang didapatkan  $F_{hitung} (83,729) \geq F_{tabel} 1\% (3,81) \rightarrow H_0$  ditolak. Ada pengaruh pemberian ekstrak jahe merah (*Zingiber officinale* Rosc) terhadap jumlah sel nekrosis pada jaringan glomerulus tikus putih (*Rattus norvegicus*) terpapar *allethrin*.

**Lampiran 2. Perhitungan ANAVA Tunggal untuk Mengetahui Pengaruh Pemberian Ekstrak Jahe Merah (*Zingiber officinale* Rosc) terhadap Jumlah Nekrosis Sel Tubulus pada Tikus Putih (*Rattus norvegicus*) Terpapar *Allethrin*.**

| Perlakuan   | Jumlah Nekrosis Sel Tubulus (%) |       |       |       | Total  | Rata-rata |
|-------------|---------------------------------|-------|-------|-------|--------|-----------|
|             | Ulangan                         |       |       |       |        |           |
|             | 1                               | 2     | 3     | 4     |        |           |
| Kontrol (+) | 21,10                           | 18,22 | 18,09 | 18,60 | 76,01  | 19,00     |
| Dosis I     | 17,19                           | 17,49 | 18,43 | 16,39 | 69,50  | 17,37     |
| Dosis II    | 13,31                           | 14,52 | 15,08 | 14,06 | 56,97  | 14,24     |
| Dosis III   | 10,87                           | 11,68 | 10,56 | 11,11 | 44,22  | 11,10     |
| Dosis IV    | 9,38                            | 8,51  | 9,36  | 8,78  | 36,03  | 9,01      |
| Dosis V     | 5,84                            | 6,17  | 6,82  | 7,32  | 26,15  | 6,54      |
| Kontrol (-) | 3,99                            | 4,36  | 4,00  | 4,03  | 16,38  | 4,10      |
| Total       |                                 |       |       |       | 325,26 |           |

$$X = \frac{325,26}{28} = 11,62$$

$$FK = \frac{325,26^2}{28} = \frac{105794,0676}{28} = 3778,36$$

$$\begin{aligned}
 JK \text{ Total percobaan} &= 21,10^2 + 18,22^2 + 18,09^2 + \dots + 4,03^2 - FK \\
 &= 445,21 + 331,97 + 327,25 + \dots + 16,24 - FK \\
 &= 4529,2236 - FK \\
 &= 4529,2236 - 3778,36 \\
 &= 750,8636
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ Perlakuan} &= \frac{76,01^2 + 69,50^2 + 56,97^2 + \dots + 16,38^2}{4} - FK \\
 &= \frac{18058,4497}{4} - 3778,36 \\
 &= 736,25
 \end{aligned}$$

$$JK \text{ galat} = JK \text{ Total} - Jk \text{ Perlakuan}$$

$$= 750,8636 - 736,25$$

$$= 14,6136$$

ANOVA

| SK        | Db | JK      | KT       | Fhitung | Ftabel 1 % |
|-----------|----|---------|----------|---------|------------|
| Perlakuan | 6  | 736,25  | 122,7083 | 204,51  | 3,81       |
| Galat     | 21 | 14,6136 | 0,6      |         |            |
| Total     | 27 |         |          |         |            |

Uji BNT

$$BNT \ 0,01 = 2,831 \times \frac{\sqrt{2 \text{ KT Galat}}}{\text{Ulangan}}$$

$$= 2,831 \times \frac{\sqrt{2 \times 0,6}}{4}$$

$$= 2,831 \times \frac{\sqrt{1,2}}{4}$$

$$= 2,831 \times \sqrt{0,3}$$

$$= 2,831 \times 0,5477$$

$$= 1,55$$

Tabel 1. Notasi BNT (Beda Nyata Terkecil 1%)

| Perlakuan | Rata-rata | Notasi BNT |
|-----------|-----------|------------|
| K (-)     | 4,10      | a          |
| P5        | 6,54      | b          |
| P4        | 9,01      | c          |
| P3        | 11,10     | d          |
| P2        | 14,24     | e          |
| P1        | 17,37     | f          |
| K (+)     | 19,00     | g          |

### **Kesimpulan**

Berdasarkan perhitungan ANAVA tunggal dapat diketahui hasil perhitungan yang didapatkan  $F_{hitung} (204,51) \geq F_{tabel} 1\% (3,81) \rightarrow H_0$  ditolak. Ada pengaruh sangat nyata pemberian ekstrak jahe merah (*Zingiber officinale* Rosc) terhadap jumlah sel nekrosis pada jaringan tubulus ginjal tikus (*Rattus norvegicus*) terpapar *allethrin*.