

## LAMPIRAN A

### HASIL UJI STANDARISASI SIMPLISIA

#### Hasil Susut Pengeringan

| Replikasi | Hasil susut pengeringan |
|-----------|-------------------------|
| 1         | 9,35 %                  |
| 2         | 9,98 %                  |
| 3         | 9,20 %                  |

$$\text{Rata-rata : } \frac{9,35\% + 9,38\% + 9,20\%}{3} = 9,31\%$$

#### Hasil Perhitungan Penetapan Kadar Abu

| No | W (krus kosong)<br>(gram) | W (bahan)<br>(gram) | W (krus + abu)<br>(gram) | % Kadar Abu | Rata-rata |
|----|---------------------------|---------------------|--------------------------|-------------|-----------|
| 1  | 19,2036                   | 2,0010              | 19,2611                  | 2,87        | 2,62 %    |
| 2  | 19,2020                   | 2,0022              | 19,2435                  | 2,07        |           |
| 3  | 19,2017                   | 2,0056              | 19,2602                  | 2,92        |           |

$$\begin{aligned} \text{I. Kadar abu : } & \frac{(\text{berat kurs + serbuk}) - \text{berat kurs kosong}}{\text{berat serbuk}} \times 100 \% \\ & : \frac{19,2611 - 19,2036}{2,0010} \times 100 \% = 2,87 \% \end{aligned}$$

$$\begin{aligned} \text{II. Kadar abu : } & \frac{(\text{berat kurs + serbuk}) - \text{berat kurs kosong}}{\text{berat serbuk}} \times 100 \% \\ & : \frac{19,2435 - 19,2020}{2,0022} \times 100 \% = 2,07 \% \end{aligned}$$

III. Kadar abu :  $\frac{(\text{berat kurs} + \text{serbuk}) - \text{berat kurs kosong}}{\text{berat serbuk}} \times 100 \%$

$$: \frac{19,2602 - 19,2017}{2,0056} \times 100 \% = 2,92 \%$$

$$\text{Rata-rata kadar abu} = \frac{2,87 \% + 2,07 \% + 2,92 \%}{3} = 2,62 \%$$

#### Hasil Perhitungan Randemen Ekstrak

$$\frac{\text{berat ekstrak kental}}{\text{berat serbuk}} \times 100\%$$

$$\frac{218,1501}{300,0014} \times 100 \% = 72,72 \%$$

#### Hasil Perhitungan Kadar Sari Larut Etanol

| No | Berat cawan<br>+ekstrak setelah<br>diuapkan | Berat cawan<br>kosong | Berat<br>ekstrak |
|----|---------------------------------------------|-----------------------|------------------|
| 1  | 72,0211                                     | 70,9800               | 5,1402           |
| 2  | 70,1276                                     | 69,1472               | 5,0018           |
| 3  | 62,4783                                     | 61,3580               | 5,1311           |

I. Kadar sari larut etanol =

$$\frac{(\text{berat cawan} + \text{ekstrak}) - (\text{berat cawan kosong})}{\text{berat ekstrak}} \times 100 \%$$

$$= \frac{72,0211 - 70,9800}{5,1402} \times 100 \% = 20,25 \%$$

II. Kadar sari larut etanol

$$= \frac{(\text{berat cawan} + \text{ekstrak}) - (\text{berat cawan kosong})}{\text{berat ekstrak}} \times 100\%$$

$$= \frac{70,1276 - 69,1472}{5,0018} \times 100 \% = 19,60 \%$$

### III. Kadar sari larut etanol

$$= \frac{(\text{berat cawan} + \text{ekstrak}) - (\text{berat cawan kosong})}{\text{berat ekstrak}} \times 100 \%$$
$$= \frac{62,4783 - 61,3580}{5,1311} \times 100 \% = 21,03 \%$$

### Rata-rata kadar sari larut etanol =

$$\frac{20,25 \% + 19,60 \% + 21,03 \%}{3} = 20,29 \%$$



## LAMPIRAN B

### RANGKUMAN RUMUS ANAVA

Rumus anava rambang lurus digunakan untuk beda antar perlakuan yang lebih dari 2, dimana tiap kelompok dihitung dengan harga  $n$ ,  $\sum x$ ,  $\sum x^2$ , kemudian dihitung nilai=

$$N = \text{jumlah subyek seluruhnya} = n_1 + n_2 + n_3 + n_4 + n_5$$

$$J = J_i = \text{Jumlah data total} = \sum x_1 + \sum x_2 + \sum x_3 + \sum x_4 + \sum x_5$$

$$\sum Y^2_{ij} = \text{Jumlah kuadrat data total} = \sum x_1^2 + \sum x_2^2 + \sum x_3^2 + \sum x_4^2 + \sum x_5^2$$

$$J^2_i = \text{jumlah kuadrat dari } J = J_i = (\sum x_1 + \sum x_2 + \sum x_3 + \sum x_4 + \sum x_5)^2$$

$$JKT = \text{jumlah kuadrat total} = \sum Y^2_{ij} - J^2 / N$$

$$JKPy = \text{jumlah kuadrat perlakuan} = \sum J^2_i - J^2 / N$$

$$JKEy = \text{jumlah kuadrat dalam} = JKT - JKPy$$

$$dbT = \text{derajat bebas total} = N - 1$$

$$dbPy = \text{derajat bebas perlakuan} = a - 1$$

$$dbEy = \text{derajat bebas dalam} = dbT - dbPy$$

$$RJKPy = \text{rata-rata jumlah kuadrat perlakuan} = JKPy / dbPy$$

$$RJKEy = \text{rata-rata jumlah kuadrat dalam} = JKEy / dbEy$$

$$F_{hitung} = RJKPy / RJKEy$$

Ket :  $N$  = jumlah subyek dalam perlakuan

$a$  = jumlah perlakuan

Dari hasil pengolahan data tersebut akan diperoleh harga  $F$  hitung yang kemudian akan dibandingkan dengan harga  $F$  tabel.

Kriteria pengujian :

- Bila  $F_{hitung} < F_{tabel}$  , maka terdapat perbedaan yang tidak bermakna
- Bila  $F_{hitung} > F_{tabel}$  , maka terdapat perbedaan yang bermakna

Untuk mengetahui adanya perbedaan efek perlakuan antar pasangan kelompok perlakuan terhadap kadar glukosa darah, maka dilakukan uji HSD 5 % dan 1 %

|                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------|
| $\text{HSD } 5 \% = \frac{q(0,05; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)}$ |
| $\text{HSD } 1 \% = \frac{q(0,01; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)}$ |



## LAMPIRAN C

### PERHITUNGAN ANAVA KADAR GLUKOSA DARAH PUASA TIKUS PUTIH PADA BERBAGAI WAKTU PENGAMATAN

Perhitungan Anava Kadar Glukosa Darah Puasa Tikus Putih (0  
menit)

| Hewan            | Konsentrasi |                |                |                |        | Jumlah |
|------------------|-------------|----------------|----------------|----------------|--------|--------|
|                  | K           | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P      |        |
| 1                | 67          | 53             | 61             | 55             | 62     |        |
| 2                | 66          | 69             | 59             | 67             | 63     |        |
| 3                | 63          | 60             | 66             | 68             | 65     |        |
| 4                | 62          | 59             | 71             | 64             | 67     |        |
| 5                | 64          | 69             | 57             | 58             | 62     |        |
| N                | 5           | 5              | 5              | 5              | 5      | 25     |
| Rata-rata        | 64,4        | 62             | 62,8           | 62,4           | 63,8   | 315,4  |
| Ji               | 322         | 310            | 314            | 312            | 319    | 1577   |
| Ji <sup>2</sup>  | 103684      | 96100          | 98596          | 97344          | 101761 | 497486 |
| Y <sub>2ij</sub> | 20754       | 19412          | 19848          | 19598          | 20371  | 99983  |

$$JK_{tot} = \sum Y^2_{ij} - \frac{J^2}{N}$$

$$= 99983 - \frac{(1577)^2}{25}$$

$$= 99983 - 99477,16$$

$$= 505,84$$

$$JK_{Py} = \frac{\sum J^2_i}{n} - \frac{J^2}{N} = \frac{497486}{5} - \frac{(1577)^2}{25} = 20,04$$

$$JK(Ey) = JK_{tot} - JK(Py)$$

$$= 505,84 - 20,04 = 485,8$$

$$RJK(Py) = \frac{JK(Py)}{dbPy}$$

$$= \frac{20,04}{4} = 5,01$$

$$RJK(Ey) = \frac{JK(Ey)}{dbEy}$$

$$\frac{485,8}{20} = 24,29$$

$$F_{hitung} = \frac{RJK(Py)}{RJK(Ey)}$$

$$= \frac{5,01}{24,29} = 0,21$$

F<sub>tabel</sub> (0,05) = 2,87

#### Perhitungan Anava Kadar Glukosa Darah Tikus Putih (30 menit)

| Hewan            | Konsentrasi |                |                |                |        | Jumlah  |
|------------------|-------------|----------------|----------------|----------------|--------|---------|
|                  | K           | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P      |         |
| 1                | 132         | 120            | 113            | 100            | 87     |         |
| 2                | 134         | 119            | 114            | 109            | 88     |         |
| 3                | 121         | 131            | 116            | 105            | 91     |         |
| 4                | 136         | 112            | 118            | 99             | 95     |         |
| 5                | 111         | 117            | 111            | 95             | 90     |         |
| N                | 5           | 5              | 5              | 5              | 5      | 25      |
| Rata-rata        | 126,8       | 119,8          | 114,4          | 101,6          | 90,2   | 552,8   |
| Ji               | 634         | 599            | 572            | 508            | 451    | 2764    |
| Ji <sup>2</sup>  | 401956      | 358801         | 327184         | 258064         | 203401 | 1549406 |
| Y <sub>2ij</sub> | 80838       | 71955          | 65466          | 51732          | 40719  | 310710  |

$$JK_{tot} = \sum Y_{ij}^2 - \frac{J^2}{N}$$

$$= 310710 - \frac{(2764)^2}{25}$$

$$= 310710 - 305587,84$$

$$= 5122,16$$

$$JK_{Py} = \frac{\sum J^2 i}{n} - \frac{J^2}{N} = \frac{1549406}{5} - \frac{(2764)^2}{25} = 4293,36$$

$$\begin{aligned} JK(Ey) &= JK_{tot} - JK(Py) \\ &= 5122,16 - 4293,36 \\ &= 828,8 \end{aligned}$$

$$\begin{aligned} RJK(Py) &= \frac{JK(Py)}{dbPy} \\ &= \frac{4293,36}{4} = 1073,34 \end{aligned}$$

$$\begin{aligned} RJK(Ey) &= \frac{JK(Ey)}{dbEy} \\ &= \frac{828,8}{20} = 41,44 \end{aligned}$$

$$\begin{aligned} F_{hitung} &= \frac{RJK(Py)}{RJK(Ey)} \\ &= \frac{1073,34}{41,44} = 25,90 \end{aligned}$$

$$F_{tabel}(0,05) = 2,87$$

**Perhitungan Anava Kadar Glukosa Darah Tikus Putih (60 menit)**

| Hewan           | Konsentrasi |                |                |                |        | Jumlah  |
|-----------------|-------------|----------------|----------------|----------------|--------|---------|
|                 | K           | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P      |         |
| 1               | 128         | 112            | 104            | 92             | 72     |         |
| 2               | 121         | 114            | 105            | 96             | 74     |         |
| 3               | 114         | 115            | 107            | 95             | 75     |         |
| 4               | 122         | 100            | 103            | 92             | 73     |         |
| 5               | 102         | 110            | 101            | 87             | 70     |         |
| N               | 5           | 5              | 5              | 5              | 5      | 25      |
| Rata-rata       | 117,4       | 110,2          | 104            | 92,4           | 72,8   | 496,8   |
| Ji              | 587         | 551            | 520            | 462            | 364    | 2484    |
| Ji <sup>2</sup> | 344569      | 303601         | 270400         | 213344         | 132496 | 1264510 |
| Y2ij            | 69309       | 60865          | 54100          | 42738          | 26514  | 253526  |

$$\begin{aligned}
 JK_{tot} &= \sum Y_{ij}^2 - \frac{J^2}{N} \\
 &= 253526 - \frac{(2484)^2}{25} \\
 &= 253526 - 246810,24 \\
 &= 6715,76
 \end{aligned}$$

$$JK_{Py} = \frac{\sum J^2 i}{n} - \frac{J^2}{N} = \frac{1264510}{5} - \frac{(2484)^2}{25} = 6091,76$$

$$\begin{aligned}
 JK(Ey) &= JK_{tot} - JK(Py) \\
 &= 6715,76 - 6091,76 \\
 &= 624
 \end{aligned}$$

$$\begin{aligned}
 RJK(Py) &= \frac{JK(Py)}{dbPy} \\
 &= \frac{6091,76}{4} = 1522,94
 \end{aligned}$$

$$RJK(Ey) = \frac{JK(Ey)}{dbEy}$$

$$= \frac{624}{20} = 31,2$$

$$F_{hitung} = \frac{RJK(Py)}{RJK(Ey)}$$

$$= \frac{1522,94}{31,2} = 48,81$$

$$F_{tabel}(0,05) = 2,87$$

#### Perhitungan Anava Kadar Glukosa Darah Tikus Putih (120 menit)

| Hewan                         | Konsentrasi |                |                |                |        | Jumlah |
|-------------------------------|-------------|----------------|----------------|----------------|--------|--------|
|                               | K           | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P      |        |
| 1                             | 115         | 92             | 93             | 87             | 67     |        |
| 2                             | 101         | 84             | 90             | 84             | 63     |        |
| 3                             | 100         | 83             | 80             | 80             | 64     |        |
| 4                             | 113         | 90             | 94             | 78             | 65     |        |
| 5                             | 91          | 92             | 89             | 75             | 68     |        |
| N                             | 5           | 5              | 5              | 5              | 5      | 25     |
| Rata-rata                     | 104         | 88,2           | 89,2           | 80,8           | 65,4   | 427,6  |
| Ji                            | 520         | 441            | 446            | 404            | 327    | 2138   |
| Ji <sup>2</sup>               | 270400      | 194481         | 198916         | 163216         | 106920 | 933942 |
| ΣY <sup>2</sup> <sub>ij</sub> | 54476       | 38973          | 39906          | 32734          | 21403  | 187492 |

$$JKT = \sum Y^2_{ij} - \frac{J^2}{N}$$

$$= 187492 - \frac{(2138)^2}{25}$$

$$= 187492 - 182841,76 = 4650,24$$

$$JKPy = \sum \frac{J^2_i}{n} - \frac{J^2}{N} = \frac{933942}{5} - \frac{(2138)^2}{25} = 3946,64$$

$$JK(Ey) = JK_{tot} - JK(Py)$$

$$= 4650,24 - 3946,64$$

$$= 703,6$$

$$RJK(Py) = \frac{JK (Py)}{dbPy} = \frac{3946,64}{4} = 986,66$$

$$RJK(Ey) = \frac{JK (Ey)}{dbEy} = \frac{703,6}{20} = 35,18$$

$$F_{hitung} = \frac{RJK (Py)}{RJK (Ey)} = \frac{986,66}{35,18} = 28,05$$

F<sub>tabel</sub> (0,05) = 2,87

#### Perhitungan Anava Kadar Glukosa Darah Tikus Putih (180 menit)

| Hewan                         | Konsentrasi |                |                |                |       | Jumlah |
|-------------------------------|-------------|----------------|----------------|----------------|-------|--------|
|                               | K           | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P     |        |
| 1                             | 98          | 81             | 85             | 74             | 58    |        |
| 2                             | 89          | 70             | 77             | 76             | 59    |        |
| 3                             | 87          | 72             | 69             | 75             | 62    |        |
| 4                             | 95          | 76             | 81             | 74             | 60    |        |
| 5                             | 87          | 83             | 73             | 72             | 63    |        |
| N                             | 5           | 5              | 5              | 5              | 5     | 25     |
| Rata-rata                     | 91,2        | 76,4           | 77             | 74,2           | 60,4  | 379,2  |
| Ji                            | 456         | 382            | 385            | 371            | 302   | 1896   |
| Ji <sup>2</sup>               | 207936      | 145924         | 148225         | 137641         | 91204 | 730930 |
| ΣY <sup>2</sup> <sub>ij</sub> | 41688       | 29310          | 29805          | 27537          | 18258 | 146598 |

$$\begin{aligned}
 JK_{tot} &= \sum Y^2_{ij} - \frac{J^2}{N} \\
 &= 146598 - \frac{(1896)^2}{25} \\
 &= 146598 - 143792,64 \\
 &= 2805,36
 \end{aligned}$$

$$JK_{Py} = \frac{\sum J^2 i}{n} - \frac{J^2}{N} = \frac{730930}{5} - \frac{(1896)^2}{25} = 2393,36$$

$$\begin{aligned} JK(Ey) &= JK_{tot} - JK(Py) \\ &= 2805,36 - 2393,36 \\ &= 412 \end{aligned}$$

$$\begin{aligned} RJK(Py) &= \frac{JK(Py)}{dbPy} \\ &= \frac{2393,36}{4} = 598,34 \end{aligned}$$

$$\begin{aligned} RJK(Ey) &= \frac{JK(Ey)}{dbEy} \\ &= \frac{412}{20} = 20,6 \end{aligned}$$

$$\begin{aligned} F_{hitung} &= \frac{RJK(Py)}{RJK(Ey)} \\ &= \frac{598,34}{29,05} = 20,6 \end{aligned}$$

$$F_{tabel}(0,05) = 2,87$$

## LAMPIRAN D

### PERHITUNGAN UJI HSD PADA BERBAGAI WAKTU PENGAMATAN

#### Perhitungan uji HSD pada menit ke-30

| Perlakuan      | Mean  | K     | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P    |
|----------------|-------|-------|----------------|----------------|----------------|------|
|                |       | 126,8 | 119,8          | 114,4          | 101,6          | 90,2 |
| K              | 126,8 | -     | 7,0            | 12,4           | 25,2           | 36,6 |
| E <sub>1</sub> | 119,8 |       | -              | 5,4            | 18,2           | 29,6 |
| E <sub>2</sub> | 114,4 |       |                | -              | 12,8           | 24,2 |
| E <sub>3</sub> | 101,6 |       |                |                | -              | 11,4 |
| P              | 90,2  |       |                |                |                | -    |

Diketahui = p = 5

db/dk = 20

$$\begin{aligned}
 \text{HSD } 5 \% &= \frac{q(0,05; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)} \\
 &= 4,23 \sqrt{\frac{41,44}{5}} \\
 &= 12,18
 \end{aligned}$$

$$\begin{aligned}
 \text{HSD } 1 \% &= \frac{q(0,01; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)} \\
 &= 5,29 \sqrt{\frac{41,44}{5}} \\
 &= 15,23
 \end{aligned}$$

**Perhitungan uji HSD pada menit ke-60**

| Perlakuan      | Mean  | K     | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P    |
|----------------|-------|-------|----------------|----------------|----------------|------|
|                |       | 117,4 | 110,2          | 104            | 92,4           | 72,8 |
| K              | 117,4 | -     | 7,2            | 13,4           | 25             | 44,6 |
| E <sub>1</sub> | 110,2 |       | -              | 6,2            | 17,8           | 37,4 |
| E <sub>2</sub> | 104   |       |                | -              | 11,6           | 31,2 |
| E <sub>3</sub> | 92,4  |       |                |                | -              | 19,6 |
| P              | 72,8  |       |                |                |                | -    |

Diketahui = p = 5

db/dk = 20

$$\begin{aligned}
 \text{HSD } 5\% &= \frac{q(0,05; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{n} \right)} \\
 &= 4,23 \sqrt{\frac{31,2}{5}} \\
 &= 10,57
 \end{aligned}$$

$$\begin{aligned}
 \text{HSD } 1\% &= \frac{q(0,01; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)} \\
 &= 5,29 \sqrt{\frac{31,2}{5}} \\
 &= 13,21
 \end{aligned}$$

**Perhitungan uji HSD pada menit ke-120**

| Perlakuan      | Mean | K   | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P    |
|----------------|------|-----|----------------|----------------|----------------|------|
|                |      | 104 | 88,2           | 89,2           | 80,8           | 65,4 |
| K              | 104  | -   | 15,8           | 14,8           | 23,2           | 38,6 |
| E <sub>1</sub> | 88,2 |     | -              | 1,0            | 7,4            | 22,8 |
| E <sub>2</sub> | 89,2 |     |                | -              | 8,4            | 23,8 |
| E <sub>3</sub> | 80,8 |     |                |                | -              | 15,4 |
| P              | 65,4 |     |                |                |                | -    |

Diketahui = p = 5

db/dk = 20

$$\text{HSD } 5 \% = \frac{q (0,05 ; P, db / dk )}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)}$$

$$= 4,23 \sqrt{\frac{35,18}{5}}$$

$$= 11,22$$

$$\text{HSD } 1 \% = \frac{q (0,01 ; P, db / dk )}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)}$$

$$= 5,29 \sqrt{\frac{35,18}{5}}$$

$$= 14,03$$

**Perhitungan uji HSD pada menit ke-180 menit**

| Perlakuan      | Mean | K    | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> | P    |
|----------------|------|------|----------------|----------------|----------------|------|
|                |      | 91,2 | 76,4           | 77             | 74,2           | 60,4 |
| K              | 91,2 | -    | 14,8           | 14,2           | 17             | 30,8 |
| E <sub>1</sub> | 76,4 |      | -              | 0,6            | 2,2            | 16   |
| E <sub>2</sub> | 77   |      |                | -              | 2,8            | 16,6 |
| E <sub>3</sub> | 74,2 |      |                |                | -              | 13,8 |
| P              | 60,4 |      |                |                |                | -    |

Diketahui = p = 5

db/dk = 20

$$\text{HSD } 5 \% = \frac{q (0,05 ; P, db / dk )}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)}$$

$$= 4,23 \sqrt{\frac{20,6}{5}}$$

$$= 8,59$$

$$\begin{aligned}
 \text{HSD } 1 \% &= \frac{q(0,01; P, db / dk)}{\sqrt{2}} \sqrt{RJK \left( \frac{1}{nA} + \frac{1}{nB} \right)} \\
 &= 5,29 \sqrt{\frac{20,6}{5}} \\
 &= 10,74
 \end{aligned}$$

**% Penurunan Harga Rata-Rata Kadar Glukosa Darah Kelompok Perlakuan pada menit 180 terhadap menit 30**

| No | E <sub>1</sub> | E <sub>2</sub> | E <sub>3</sub> |
|----|----------------|----------------|----------------|
| 1  | 36,23          | 32,69          | 26,97          |

Contoh perhitungan % penurunan rata-rata kadar glukosa darah berdasarkan rumus :

$$\% \text{ penurunan kadar glukosa darah : } \frac{G_0 - G}{G_0} \times 100 \%$$

Untuk ekstrak 1,0 g/kgBB dengan harga rata-rata pada menit ke 30 adalah 119,8 dan harga rata-rata kadar gula darah pada menit ke 180 adalah 76,4 maka harga % penurunannya =

$$\frac{119,8 - 76,4}{119,8} \times 100 \% = 36,23 \%$$

**Koefisien korelasi penurunan kadar glukosa darah pada berbagai dosis ekstrak**

| X              | Y          | XY          | X <sup>2</sup>   | Y <sup>2</sup> |
|----------------|------------|-------------|------------------|----------------|
| 1,0            | 36,23      | 36,23       | 1                | 1312,61        |
| 1,5            | 32,69      | 49,04       | 2,25             | 1068,64        |
| 2,0            | 26,97      | 53,94       | 4                | 727,38         |
| N=4,5          | Yrata-rata | $\sum XY =$ | $\sum X^2 = 7,3$ | $\sum Y^2 =$   |
| X =            | = 31,96    | 139,21      |                  | 3108,63        |
| 4,5/3= 1,5     | $\sum Y =$ |             |                  |                |
| $\sum X = 4,5$ | 95,89      |             |                  |                |

$r = -0,9908 < r_{\text{tabel}}(0,05) = 0,997$ , maka tidak ada korelasi yang linear

keterangan: x : dosis ekstrak daun jambu mete

y : % penurunan rata-rata kadar glukosa darah

**TABEL UJI F**

| 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 14   | 16   | 20   | 24   | 30   | 40   | 50   | 75   | 100  | 200  | 500  | ∞    |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 4.99 | 3.63 | 3.24 | 3.01 | 2.85 | 2.74 | 2.66 | 2.59 | 2.54 | 2.49 | 2.45 | 2.42 | 2.37 | 2.33 | 2.28 | 2.24 | 2.20 | 2.16 | 2.13 | 2.09 | 2.07 | 2.04 | 2.02 | 2.01 |
| 8.53 | 6.23 | 5.29 | 4.77 | 4.44 | 4.20 | 4.03 | 3.89 | 3.78 | 3.69 | 3.61 | 3.55 | 3.45 | 3.37 | 3.25 | 3.18 | 3.10 | 3.01 | 2.96 | 2.89 | 2.86 | 2.80 | 2.77 | 2.75 |
| 4.45 | 3.59 | 3.20 | 2.96 | 2.81 | 2.70 | 2.62 | 2.55 | 2.50 | 2.45 | 2.41 | 2.38 | 2.33 | 2.29 | 2.23 | 2.19 | 2.15 | 2.11 | 2.08 | 2.04 | 2.02 | 1.99 | 1.97 | 1.96 |
| 8.40 | 6.11 | 5.18 | 4.67 | 4.34 | 4.10 | 3.93 | 3.79 | 3.68 | 3.59 | 3.52 | 3.45 | 3.35 | 3.27 | 3.16 | 3.08 | 3.00 | 2.92 | 2.86 | 2.79 | 2.76 | 2.70 | 2.67 | 2.65 |
| 4.41 | 3.55 | 3.16 | 2.93 | 2.77 | 2.66 | 2.58 | 2.51 | 2.46 | 2.41 | 2.37 | 2.34 | 2.29 | 2.25 | 2.19 | 2.15 | 2.11 | 2.07 | 2.04 | 2.00 | 1.98 | 1.95 | 1.93 | 1.92 |
| 8.28 | 6.01 | 5.09 | 4.58 | 4.25 | 4.01 | 3.85 | 3.71 | 3.60 | 3.51 | 3.44 | 3.37 | 3.27 | 3.19 | 3.07 | 3.00 | 2.91 | 2.83 | 2.78 | 2.71 | 2.68 | 2.62 | 2.59 | 2.57 |
| 4.38 | 3.52 | 3.13 | 2.90 | 2.74 | 2.63 | 2.55 | 2.48 | 2.43 | 2.38 | 2.34 | 2.31 | 2.26 | 2.21 | 2.15 | 2.11 | 2.07 | 2.02 | 2.00 | 1.96 | 1.94 | 1.91 | 1.90 | 1.88 |
| 8.18 | 5.93 | 5.01 | 4.50 | 4.17 | 3.94 | 3.77 | 3.63 | 3.52 | 3.43 | 3.36 | 3.30 | 3.19 | 3.12 | 3.00 | 2.92 | 2.84 | 2.76 | 2.70 | 2.63 | 2.60 | 2.54 | 2.51 | 2.49 |
| 4.35 | 3.49 | 3.10 | 2.87 | 2.71 | 2.60 | 2.52 | 2.45 | 2.40 | 2.35 | 2.31 | 2.28 | 2.23 | 2.18 | 2.12 | 2.08 | 2.04 | 1.99 | 1.96 | 1.92 | 1.90 | 1.87 | 1.85 | 1.84 |
| 8.10 | 5.85 | 4.94 | 4.43 | 4.10 | 3.87 | 3.71 | 3.56 | 3.45 | 3.37 | 3.30 | 3.23 | 3.13 | 3.05 | 2.94 | 2.86 | 2.77 | 2.69 | 2.63 | 2.56 | 2.53 | 2.47 | 2.44 | 2.42 |
| 4.32 | 3.47 | 3.07 | 2.84 | 2.68 | 2.57 | 2.49 | 2.42 | 2.37 | 2.32 | 2.28 | 2.25 | 2.20 | 2.15 | 2.09 | 2.05 | 2.00 | 1.96 | 1.93 | 1.90 | 1.87 | 1.84 | 1.82 | 1.81 |
| 8.02 | 5.78 | 4.87 | 4.37 | 4.04 | 3.81 | 3.65 | 3.51 | 3.40 | 3.31 | 3.24 | 3.17 | 3.07 | 2.99 | 2.88 | 2.80 | 2.72 | 2.63 | 2.58 | 2.51 | 2.47 | 2.42 | 2.38 | 2.36 |
| 4.30 | 3.44 | 3.05 | 2.82 | 2.66 | 2.55 | 2.47 | 2.40 | 2.35 | 2.30 | 2.26 | 2.23 | 2.18 | 2.13 | 2.07 | 2.03 | 1.98 | 1.93 | 1.91 | 1.87 | 1.84 | 1.81 | 1.80 | 1.78 |
| 7.94 | 5.72 | 4.82 | 4.31 | 3.99 | 3.76 | 3.59 | 3.45 | 3.35 | 3.26 | 3.18 | 3.12 | 3.02 | 2.94 | 2.83 | 2.75 | 2.67 | 2.58 | 2.53 | 2.46 | 2.42 | 2.37 | 2.33 | 2.31 |
| 4.28 | 3.42 | 3.03 | 2.80 | 2.64 | 2.53 | 2.45 | 2.38 | 2.32 | 2.28 | 2.24 | 2.20 | 2.14 | 2.10 | 2.04 | 2.00 | 1.96 | 1.91 | 1.88 | 1.84 | 1.82 | 1.79 | 1.77 | 1.76 |
| 7.86 | 5.66 | 4.76 | 4.26 | 3.94 | 3.71 | 3.54 | 3.41 | 3.30 | 3.21 | 3.14 | 3.07 | 2.97 | 2.89 | 2.78 | 2.70 | 2.62 | 2.53 | 2.48 | 2.41 | 2.37 | 2.32 | 2.28 | 2.26 |
| 4.26 | 3.40 | 3.01 | 2.78 | 2.62 | 2.51 | 2.43 | 2.36 | 2.30 | 2.26 | 2.22 | 2.18 | 2.13 | 2.09 | 2.02 | 1.98 | 1.94 | 1.89 | 1.86 | 1.82 | 1.80 | 1.76 | 1.74 | 1.73 |
| 7.82 | 5.61 | 4.72 | 4.22 | 3.90 | 3.67 | 3.50 | 3.36 | 3.25 | 3.17 | 3.09 | 3.03 | 2.93 |      |      |      |      |      |      |      |      |      |      |      |

LAMPIRAN F  
TABEL UJI HSD (0,05)

| $\begin{matrix} k \\ d.k. \end{matrix}$ | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   |
|-----------------------------------------|------|------|------|------|------|------|------|------|------|------|
| 5                                       | 3.64 | 4.60 | 5.22 | 5.67 | 6.03 | 6.33 | 6.58 | 6.80 | 6.99 | 7.17 |
| 6                                       | 3.46 | 4.34 | 4.90 | 5.30 | 5.63 | 5.90 | 6.12 | 6.32 | 6.49 | 6.65 |
| 7                                       | 3.34 | 4.16 | 4.68 | 5.06 | 5.36 | 5.61 | 5.82 | 6.00 | 6.16 | 6.30 |
| 8                                       | 3.26 | 4.01 | 4.53 | 4.89 | 5.17 | 5.40 | 5.60 | 5.77 | 5.92 | 6.05 |
| 9                                       | 3.20 | 3.95 | 4.41 | 4.76 | 5.02 | 5.24 | 5.43 | 5.59 | 5.74 | 5.87 |
| 10                                      | 3.15 | 3.88 | 4.33 | 4.65 | 4.91 | 5.12 | 5.30 | 5.46 | 5.60 | 5.72 |
| 11                                      | 3.11 | 3.82 | 4.26 | 4.57 | 4.82 | 5.03 | 5.20 | 5.35 | 5.49 | 5.61 |
| 12                                      | 3.08 | 3.77 | 4.20 | 4.51 | 4.75 | 4.95 | 5.12 | 5.27 | 5.39 | 5.51 |
| 13                                      | 3.06 | 3.73 | 4.15 | 4.45 | 4.69 | 4.88 | 5.05 | 5.19 | 5.32 | 5.43 |
| 14                                      | 3.03 | 3.70 | 4.11 | 4.41 | 4.64 | 4.83 | 4.99 | 5.13 | 5.25 | 5.36 |
| 15                                      | 3.01 | 3.67 | 4.08 | 4.37 | 4.59 | 4.78 | 4.94 | 5.08 | 5.20 | 5.31 |
| 16                                      | 3.00 | 3.65 | 4.05 | 4.33 | 4.56 | 4.74 | 4.90 | 5.03 | 5.15 | 5.26 |
| 17                                      | 2.98 | 3.63 | 4.02 | 4.30 | 4.52 | 4.71 | 4.86 | 4.99 | 5.11 | 5.21 |
| 18                                      | 2.97 | 3.61 | 4.00 | 4.28 | 4.49 | 4.67 | 4.82 | 4.96 | 5.07 | 5.17 |
| 19                                      | 2.96 | 3.59 | 3.98 | 4.25 | 4.47 | 4.65 | 4.79 | 4.92 | 5.04 | 5.14 |
| 20                                      | 2.95 | 3.58 | 3.96 | 4.23 | 4.45 | 4.62 | 4.77 | 4.90 | 5.01 | 5.11 |
| 24                                      | 2.92 | 3.53 | 3.90 | 4.17 | 4.37 | 4.54 | 4.68 | 4.81 | 4.92 | 5.01 |
| 30                                      | 2.89 | 3.49 | 3.85 | 4.10 | 4.30 | 4.46 | 4.60 | 4.72 | 4.82 | 4.92 |
| 40                                      | 2.86 | 3.44 | 3.79 | 4.04 | 4.23 | 4.39 | 4.52 | 4.63 | 4.73 | 4.82 |
| 60                                      | 2.83 | 3.40 | 3.74 | 3.98 | 4.16 | 4.31 | 4.44 | 4.55 | 4.65 | 4.73 |
| 120                                     | 2.80 | 3.36 | 3.68 | 3.92 | 4.10 | 4.24 | 4.36 | 4.47 | 4.56 | 4.64 |
| $\infty$                                | 2.77 | 3.31 | 3.63 | 3.86 | 4.03 | 4.17 | 4.29 | 4.39 | 4.47 | 4.55 |

Catatan kaki: Dari *Annals of mathematical statistics*. Diulang cetak sesuai penerbit, The Institute of Mathematical Statistics.

Sumber : Scheffler (1987)

LAMPIRAN G

TABEL UJI HSD 1%

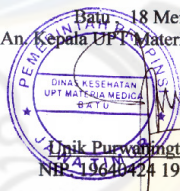
| $\begin{matrix} k \\ \text{d.k.} \end{matrix}$ | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10    | 11    |
|------------------------------------------------|------|------|------|------|------|------|------|------|-------|-------|
| 5                                              | 5.70 | 6.98 | 7.80 | 8.42 | 8.91 | 9.32 | 9.67 | 9.97 | 10.24 | 10.48 |
| 6                                              | 5.24 | 6.33 | 7.03 | 7.56 | 7.97 | 8.32 | 8.61 | 8.87 | 9.10  | 9.30  |
| 7                                              | 4.95 | 5.92 | 6.54 | 7.01 | 7.37 | 7.68 | 7.94 | 8.17 | 8.37  | 8.55  |
| 8                                              | 4.75 | 5.64 | 6.20 | 6.62 | 6.96 | 7.24 | 7.47 | 7.68 | 7.86  | 8.03  |
| 9                                              | 4.60 | 5.43 | 5.96 | 6.35 | 6.66 | 6.91 | 7.13 | 7.33 | 7.49  | 7.65  |
| 10                                             | 4.48 | 5.27 | 5.77 | 6.14 | 6.43 | 6.67 | 6.87 | 7.05 | 7.21  | 7.36  |
| 11                                             | 4.39 | 5.15 | 5.62 | 5.97 | 6.25 | 6.48 | 6.67 | 6.84 | 6.99  | 7.13  |
| 12                                             | 4.32 | 5.05 | 5.50 | 5.84 | 6.10 | 6.32 | 6.51 | 6.67 | 6.81  | 6.94  |
| 13                                             | 4.26 | 4.96 | 5.40 | 5.73 | 5.98 | 6.19 | 6.37 | 6.53 | 6.67  | 6.79  |
| 14                                             | 4.21 | 4.89 | 5.32 | 5.63 | 5.88 | 6.08 | 6.26 | 6.41 | 6.54  | 6.66  |
| 15                                             | 4.17 | 4.84 | 5.25 | 5.56 | 5.80 | 5.99 | 6.16 | 6.31 | 6.44  | 6.55  |
| 16                                             | 4.13 | 4.79 | 5.19 | 5.49 | 5.72 | 5.92 | 6.08 | 6.22 | 6.35  | 6.46  |
| 17                                             | 4.10 | 4.74 | 5.14 | 5.43 | 5.66 | 5.85 | 6.01 | 6.15 | 6.27  | 6.38  |
| 18                                             | 4.07 | 4.70 | 5.09 | 5.38 | 5.60 | 5.79 | 5.94 | 6.08 | 6.20  | 6.31  |
| 19                                             | 4.05 | 4.67 | 5.05 | 5.33 | 5.55 | 5.73 | 5.89 | 6.02 | 6.14  | 6.25  |
| 20                                             | 4.02 | 4.64 | 5.02 | 5.29 | 5.51 | 5.69 | 5.84 | 5.97 | 6.09  | 6.19  |
| 24                                             | 3.96 | 4.55 | 4.91 | 5.17 | 5.37 | 5.54 | 5.69 | 5.81 | 5.92  | 6.02  |
| 30                                             | 3.89 | 4.45 | 4.80 | 5.05 | 5.24 | 5.40 | 5.54 | 5.65 | 5.76  | 5.85  |
| 40                                             | 3.82 | 4.37 | 4.70 | 4.93 | 5.11 | 5.26 | 5.39 | 5.50 | 5.60  | 5.67  |
| 60                                             | 3.76 | 4.28 | 4.59 | 4.82 | 4.99 | 5.13 | 5.25 | 5.36 | 5.45  | 5.53  |
| 120                                            | 3.70 | 4.20 | 4.50 | 4.71 | 4.87 | 5.01 | 5.12 | 5.21 | 5.30  | 5.38  |
| $\infty$                                       | 3.64 | 4.12 | 4.40 | 4.60 | 4.76 | 4.88 | 4.99 | 5.08 | 5.16  | 5.23  |

LAMPIRAN H  
TABEL KORELASI (r)

| DEGREES OF<br>FREEDOM (DF) | 5<br>PERCENT | 1<br>PERCENT | DEGREES OF<br>FREEDOM (DF) | 5<br>PERCENT | 1<br>PERCENT |
|----------------------------|--------------|--------------|----------------------------|--------------|--------------|
| 1                          | .997         | 1.000        | 24                         | .388         | .496         |
| 2                          | .950         | .990         | 25                         | .381         | .487         |
| 3                          | .878         | .959         | 26                         | .374         | .478         |
| 4                          | .811         | .917         | 27                         | .367         | .470         |
| 5                          | .754         | .874         | 28                         | .361         | .463         |
| 6                          | .707         | .834         | 29                         | .355         | .456         |
| 7                          | .666         | .798         | 30                         | .349         | .449         |
| 8                          | .632         | .765         | 35                         | .325         | .418         |
| 9                          | .602         | .735         | 40                         | .304         | .393         |
| 10                         | .576         | .708         | 48                         | .288         | .372         |
| 11                         | .553         | .684         | 50                         | .273         | .354         |
| 12                         | .532         | .661         | 60                         | .250         | .325         |
| 13                         | .514         | .641         | 70                         | .232         | .302         |
| 14                         | .497         | .623         | 80                         | .217         | .283         |
| 15                         | .482         | .606         | 90                         | .205         | .267         |
| 16                         | .468         | .590         | 100                        | .195         | .254         |
| 17                         | .456         | .575         | 125                        | .174         | .228         |
| 18                         | .444         | .561         | 150                        | .159         | .208         |
| 19                         | .433         | .549         | 200                        | .138         | .181         |
| 20                         | .423         | .537         | 300                        | .113         | .148         |
| 21                         | .413         | .526         | 400                        | .098         | .128         |
| 22                         | .404         | .515         | 500                        | .088         | .115         |
| 23                         | .396         | .505         | 1000                       | .062         | .081         |

Sumber : Soedigdo S., Soedigdo P., 1977

**LAMPIRAN I**  
**SURAT DETERMINASI TANAMAN**

|                                                                                                                                                                                                                                                               |                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                              | <b>DINAS KESEHATAN PROVINSI JAWA TIMUR</b><br><b>UPT MATERIA MEDICA</b><br>Jalan Lahor No.87 Telp. (0341) 593396 Batu (65313)<br><b>KOTA BATU</b>        |
| <hr/>                                                                                                                                                                                                                                                         |                                                                                                                                                          |
| Nomor                                                                                                                                                                                                                                                         | : 074 / 80 / 101.8 / 2009                                                                                                                                |
| Sifat                                                                                                                                                                                                                                                         | : Biasa                                                                                                                                                  |
| Perihal                                                                                                                                                                                                                                                       | : <u><b>Determinasi Tanaman Jambu Mete</b></u>                                                                                                           |
| <hr/>                                                                                                                                                                                                                                                         |                                                                                                                                                          |
| Memenuhi permohonan saudara                                                                                                                                                                                                                                   |                                                                                                                                                          |
| Nama                                                                                                                                                                                                                                                          | : Noviana Sylvia Christy                                                                                                                                 |
| NIM                                                                                                                                                                                                                                                           | : 2443005014                                                                                                                                             |
| Fakultas                                                                                                                                                                                                                                                      | : Fakultas Farmasi<br>Universitas Widya Mandala Surabaya                                                                                                 |
| <hr/>                                                                                                                                                                                                                                                         |                                                                                                                                                          |
| 1. Perihal determinasi tanaman Jambu mete                                                                                                                                                                                                                     |                                                                                                                                                          |
| Divisi                                                                                                                                                                                                                                                        | : Spermatophyta                                                                                                                                          |
| Sub divisi                                                                                                                                                                                                                                                    | : Angiospermae                                                                                                                                           |
| Kelas                                                                                                                                                                                                                                                         | : Dicotyledonae                                                                                                                                          |
| Bangsa                                                                                                                                                                                                                                                        | : Sapindales                                                                                                                                             |
| Suku                                                                                                                                                                                                                                                          | : Anacardiaceae                                                                                                                                          |
| Marga                                                                                                                                                                                                                                                         | : Anacardium                                                                                                                                             |
| Jenis                                                                                                                                                                                                                                                         | : <i>Anacardium occidentale L</i>                                                                                                                        |
| Sinonim                                                                                                                                                                                                                                                       | : Jambu mete, Jambu monyet (Indonesia), Jambu orang (Minangkabau); Jambu mere (Jawa), Jambu mede (Sunda), ; Jambu monyet (Madura), Jambu sereng (Bugis); |
| 2. Nama Simplisia                                                                                                                                                                                                                                             | : <i>Anacardii folium</i> / Daun Jambu mete                                                                                                              |
| 3. Kandungan Kimia                                                                                                                                                                                                                                            | : Tanin, anacardic acid, cardol, flavonid, saponin, zat samk, asam galat, ginkgol, minyak lemak, protein, katekin, sitosterin.                           |
| 4. Penggunaan                                                                                                                                                                                                                                                 | : Penelitian                                                                                                                                             |
| Demikian determinasi ini kami buat untuk dipergunakan sebagaimana mestinya.                                                                                                                                                                                   |                                                                                                                                                          |
| <p>Batu, 18 Mei 2009<br/>An. Kepala UPT Materia Medica Batu</p> <div style="text-align: center;"><br/><u>Unik Purwaningtyas, SKM</u><br/>NIP. 19640424 198702 2 002</div> |                                                                                                                                                          |