

# LAMPIRAN

## Lampiran 1. Surat keterangan kelaikan etik

9/16/2020

KEPK-RSDM

**HEALTH RESEARCH ETHICS COMMITTEE**  
**KOMISI ETIK PENELITIAN KESEHATAN**

**Dr. Moewardi General Hospital**  
**RSUD Dr. Moewardi**

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**ETHICAL CLEARANCE**  
**KELAIKAN ETIK**

**Nomor : 1.055 / IX / HREC / 2020**

The Health Research Ethics Committee Dr. Moewardi  
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

after reviewing the proposal design, herewith to certify.  
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

That the research proposal with topic :  
Bahwa usulan penelitian dengan judul

**Uji Aktivitas Antidiabetes Resistensi Insulin Ekstrak Wortel (Daucus carota L.) Pada Mencit**

Principal investigator  
Peneliti Utama : Yohanes Nugroho Dwi Saputro  
23175084A

Location of research  
Lokasi Tempat Penelitian : Tempel Gatak Sukoharjo

Is ethically approved  
Dinyatakan layak etik

Issued on : 16 September 2020

Chairman  
Ketua

Dr. Wahyu Dwi Atmoko., Sp.F  
19770224 201001 1 004

rsudmoewardi-rnm/komisi-etika/kep/ethicalclearance/23175084A-1502

## Lampiran 2. Surat keterangan hewan uji

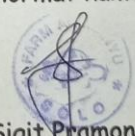
**"ABIMANYU FARM"**  
 ✓ Mencit putih jantan ✓ Tikus Wistar ✓ Swis Webster ✓ Cacing  
 ✓ Mencit Balb/C ✓ Kelinci New Zealand  
 Ngampon RT 04 / RW 04. Mojosongo Kec. Jebres Surakarta. Phone 085 629 994 33 / Lab USB Ska

Yang bertanda tangan di bawah ini:  
 Nama : Sigit Pramono

Selaku pengelola Abimanyu Farm, menerangkan bahwa hewan uji yang digunakan untuk penelitian, oleh:  
 Nama : Yohanes Nugroho Dwi Saputro  
 NIM : 23175084A  
 Institusi : Universitas Setia Budi

Merupakan hewan uji dengan spesifikasi sebagai berikut:  
 Jenis hewan : Mencit Swiss  
 Umur : 2-3 bulan  
 Jumlah : 30 ekor  
 Jenis kelamin : Jantan  
 Keterangan : Sehat  
 Asal-usul : Unit Pengembangan Hewan Percobaan UGM Yogyakarta

Yang pengembangan dan pengelolaannya disesuaikan standar baku penelitian. Demikian surat keterangan ini dibuat untuk digunakan sebagaimana mestinya.

Surakarta, 16 November 2020  
 Hormat kami  
  
 Sigit Pramono  
 "ABIMANYU FARM"

### Lampiran 3. Surat determinasi tanaman wortel



**KEMENTERIAN KESEHATAN REPUBLIK INDONESIA**  
**BADAN PENELITIAN DAN PENGEMBANGAN KESEHATAN**

BALAI BESAR PENELITIAN DAN PENGEMBANGAN  
 TANAMAN OBAT DAN OBAT TRADISIONAL  
 Jalan Lawu No. 11 Tawangmangu, Karanganyar, Jawa Tengah 57792  
 Telepon (0271) 697 010 Faksimile (0271) 697 451

Laman b2p2toot.litbang.kemkes.go.id Surat Elektronik b2p2to2t@litbang.kemkes.go.id

Nomor : YK.01.03/2/1877/2020  
 Hal : Keterangan Determinasi

22 September 2020

Yth. Dekan Fakultas Farmasi  
 Universitas Setia Budi  
 Jalan Let. Jend. Sutoyo  
 Solo 57127

Merujuk surat Saudara nomor: 023/H6 – 04/13.08.2020 tanggal 13 Agustus 2020  
 hal permohonan determinasi, dengan ini kami sampaikan bahwa hasil determinasi  
 sampel tanaman sebagai berikut:

|                  |                                                                                           |
|------------------|-------------------------------------------------------------------------------------------|
| Nama Pemohon     | : Yohanes Nugroho Dwi Saputro                                                             |
| Nama Sampel      | : Wortel                                                                                  |
| Sampel           | : Tanaman Segar                                                                           |
| Spesies          | : <i>Daucus carota</i> L.                                                                 |
| Sinonim          | : <i>Caucalis carota</i> (L.) Crantz.; <i>Carota sylvestris</i><br>(Mill.) Lobel ex Rupr. |
| Familia          | : Apiaceae                                                                                |
| Penanggung Jawab | : Anshary Maruzy, S.Si.                                                                   |

Hasil determinasi tersebut hanya mencakup sampel tanaman yang telah  
 dikirimkan ke B2P2TOOT.

Atas perhatian Saudara, kami sampaikan terima kasih.

Kepala Balai Besar Litbang  
 Tanaman Obat dan Obat Tradisional,



Akhmad Saikhu, MSc.PH.  
 NIP 196805251992031004

#### Lampiran 4. Wortel dan pembuatan ekstrak



Wortel yang telah dicuci dan disortasi.



Proses perajangan.



Hasil perajangan.



Proses pengeringan.



Wortel kering



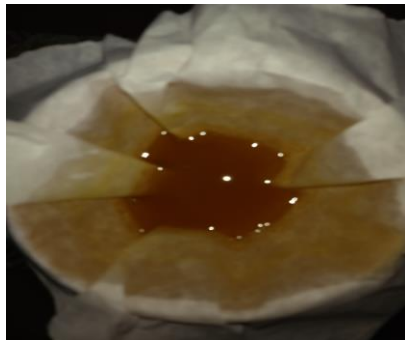
Pembuatan ke serbuk.



Serbuk wortel.



Botol maserasi, dan etanol.



Penyaringan hasil maserasi dengan kertas saring



Hasil yang ditampung akan di evaporasi



Proses evaporasi



Ekstrak wortel ditimbang

**Lampiran 5. Gambar hasil uji bebas etanol ekstrak wortel**



**Lampiran 6. Hasil perhitungan presentase rendemen bobot kering terhadap bobot basah wortel**

| <b>Bobot basah (kg)</b> | <b>Bobot kering (kg)</b> | <b>Rendemen (%)</b> |
|-------------------------|--------------------------|---------------------|
| 7,5                     | 1,6                      | 21,33               |

Perhitungan persentase rendemen bobot kering wortel kering

$$\begin{aligned}
 \text{Rendemen (\%)} &= \frac{\text{Bobot kering (kg)}}{\text{Bobot basah (kg)}} \times 100\% \\
 &= \frac{1,6 \text{ kg}}{7,5 \text{ kg}} \times 100\% \\
 &= 21,33\%
 \end{aligned}$$

**Lampiran 7. Hasil perhitungan presentase rendemen bobot serbuk terhadap bobot kering wortel**

| <b>Bobot kering (kg)</b> | <b>Bobot serbuk (kg)</b> | <b>Rendemen (%)</b> |
|--------------------------|--------------------------|---------------------|
| 1,6                      | 1,4                      | 87,5                |

Perhitungan persentase rendemen bobot serbuk wortel

$$\begin{aligned}
 \text{Rendemen (\%)} &= \frac{\text{Bobot serbuk (kg)}}{\text{Bobot kering (kg)}} \times 100\% \\
 &= \frac{1,4 \text{ kg}}{1,6 \text{ kg}} \times 100\% \\
 &= 87,50\%
 \end{aligned}$$

### Lampiran 8. Hasil perhitungan persentase rendemen ekstrak wortel

| Bobot serbuk kering (g) | Bobot ekstrak (g) | Rendemen (%) |
|-------------------------|-------------------|--------------|
| 900                     | 310               | 34,45        |

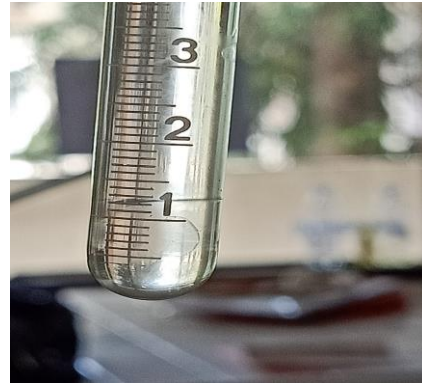
Perhitungan persentase rendemen ekstrak wortel

$$\begin{aligned}
 \text{Rendemen (\%)} &= \frac{\text{Bobot ekstrak (g)}}{\text{Berat serbuk kering (kg)}} \times 100\% \\
 &= \frac{310 \text{ g}}{900 \text{ g}} \times 100\% \\
 &= 34,45\%
 \end{aligned}$$

**Lampiran 9. Gambar hasil uji penetapan kadar air ekstrak dan serbuk wortel.**



Rangkaian alat *Sterling-Bidwell*



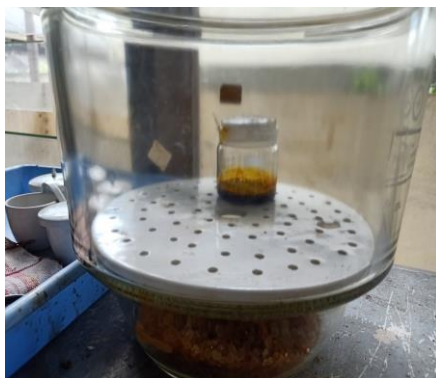
Perolehan volume air (replikasi 1)



Perolehan volume air (replikasi 2)



Perolehan volume air (replikasi 3)



Susut pengeringan ekstrak



Susut pengeringan ekstrak

**Lampiran 10. Hasil perhitungan persentase kadar air ekstrak dan serbuk wortel**

| No.              | Bobot serbuk (g) | Volume terbaca (ml) | Kadar air (%) |
|------------------|------------------|---------------------|---------------|
| 1                | 20,125           | 1,2                 | 5,96          |
| 2                | 20,157           | 1,5                 | 7,44          |
| 3                | 20,097           | 1,4                 | 6,96          |
| <b>Rata-rata</b> |                  |                     | <b>6,78</b>   |

Perhitungan persentase kadar air serbuk wortel :

$$\begin{aligned}
 \text{Rendemen replikasi 1(\%)} &= \frac{\text{Volume terbaca (ml)}}{\text{Bobot serbuk (g)}} \times 100\% \\
 &= \frac{1,2 \text{ ml}}{20,125 \text{ g}} \times 100\% \\
 &= 5,96\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Rendemen replikasi 2(\%)} &= \frac{\text{Volume terbaca (ml)}}{\text{Bobot serbuk (g)}} \times 100\% \\
 &= \frac{1,5 \text{ ml}}{20,157 \text{ g}} \times 100\% \\
 &= 7,44\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Rendemen replikasi 3(\%)} &= \frac{\text{Volume terbaca (ml)}}{\text{Bobot serbuk (g)}} \times 100\% \\
 &= \frac{1,4 \text{ ml}}{20,097 \text{ g}} \times 100\% \\
 &= 6,96\%
 \end{aligned}$$

**Rata rata persentase kadar air serbuk**

$$\begin{aligned}
 \text{Rata – rata kadar air (\%)} &= \frac{\text{replikasi 1} + \text{replikasi 2} + \text{replikasi 3 (\%)}}{3} \\
 &= \frac{5,96\% + 7,44\% + 6,96\%}{3} \\
 &= 6,78\%
 \end{aligned}$$

| No.              | Berat ekstrak awal (g) | Berat ekstrak akhir (g) | Persen kadar air (%) |
|------------------|------------------------|-------------------------|----------------------|
| 1                | 10,724                 | 9,875                   | 7,91                 |
| 2                | 10,344                 | 9,472                   | 8,43                 |
| 3                | 10,461                 | 9,673                   | 7,53                 |
| <b>Rata-rata</b> |                        |                         | <b>7,95</b>          |

Perhitungan presentase kadar air ekstrak wortel :

$$\begin{aligned}
 \text{Kadar air 1 (\%)} &= \frac{(\text{Bobot awal} - \text{bobot akhir})}{\text{Bobot awal}} \times 100\% \\
 &= \frac{(10,724 \text{ g} - 9,875 \text{ g})}{10,724 \text{ g}} \times 100\% \\
 &= 7,91\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Kadar air 2 (\%)} &= \frac{(\text{Bobot awal} - \text{bobot akhir})}{\text{Bobot awal}} \times 100\% \\
 &= \frac{(10,344 \text{ g} - 9,472 \text{ g})}{10,344 \text{ g}} \times 100\% \\
 &= 8,43\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Kadar air 3 (\%)} &= \frac{(\text{Bobot awal} - \text{bobot akhir})}{\text{Bobot awal}} \times 100\% \\
 &= \frac{(10,461 \text{ g} - 9,673 \text{ g})}{10,461 \text{ g}} \times 100\% \\
 &= 7,53\%
 \end{aligned}$$

**Rata-rata presentase kadar air ekstrak wortel**

$$\begin{aligned}
 \text{Rata - rata kadar air (\%)} &= \frac{\text{replikasi 1} + \text{replikasi 2} + \text{replikasi 3 (\%)}}{3} \\
 &= \frac{7,91\% + 8,43\% + 7,53\%}{3} \\
 &= 7,95\%
 \end{aligned}$$

**Lampiran 11. Gambar hasil uji kandungan senyawa kimia ekstrak wortel dengan uji tabung**

**Senyawa : Flavonoid**

**Pustaka :** Warna merah/kuning/jingga pada lapisan amil alkohol

**Keterangan :** (+)

**Senyawa : Alkaloid**

**Pustaka:** dragendorff: endapan merah jingga, coklat, coklat muda.

**Keterangan :** (+)



**Pustaka :** Mayer: endapan putih

**Keterangan :** (+)

**Senyawa : Tanin**

**Pustaka :** Terbentuk warna hijau kehitaman

**Keterangan :** (+)

**Senyawa : Alkaloid**

**Pustaka :** Wagner terbentuk endapan coklat

**Keterangan :** (-)

**Senyawa : Saponin**



**Pustaka :** Terbentuk buih yang stabil

**Keterangan :** (+)

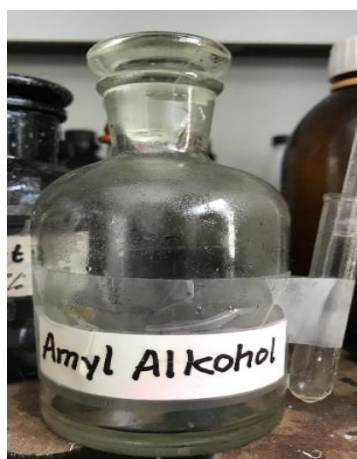
**Lampiran 12. Gambar bahan-bahan yang digunakan untuk identifikasi kandungan senyawa kimia wortel**



Larutan kloroform



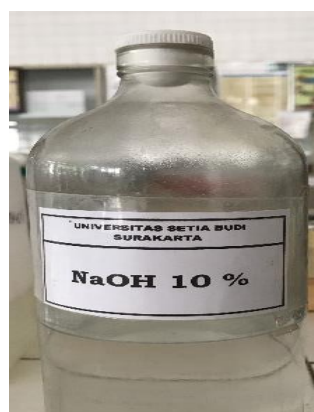
Serbuk magnesium



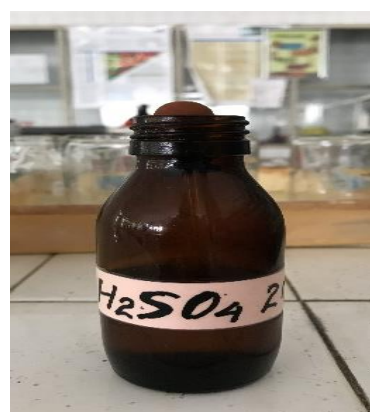
Larutan Amil alcohol



Larutan HCl pekat



Larutan NaOH



Larutan H<sub>2</sub>SO<sub>4</sub> 2N

Larutan FeCl<sub>3</sub>

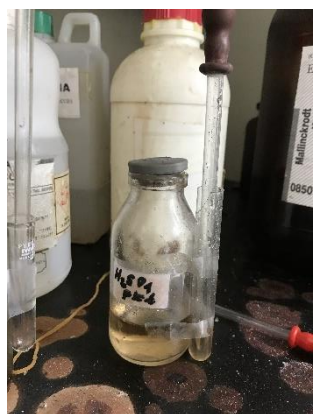
Pereaksi dragendorff



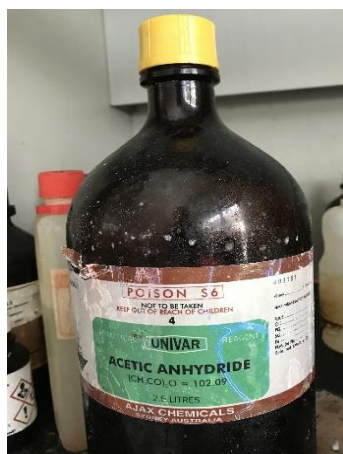
Larutan HCl 2N



Pereaksi mayer

Larutan H<sub>2</sub>SO<sub>4</sub> pekat

Larutan methanol



Larutan anhidra asetat



Larutan n-heksan



Larutan etil asetat

### Lampiran 13. Perhitungan dosis dan volume pemberian orientasi dosis

#### a. Fruktosa

$$\begin{aligned}\text{Fruktosa} &= 2500 \text{ mg} / 50 \text{ mL} \\ &= 250 \text{ mg} / 5 \text{ mL} \\ &= 50 \text{ mg/mL}\end{aligned}$$

Larutan fruktosa sebagai penginduksi diabetes dibuat dengan cara menimbang sebanyak 2,5 g fruktosa kemudian dilarutkan ke dalam 50 mL larutan aquadest, dosis tersebut digunakan sebagai air minum mencit 1 hari. Fruktosa 50,4 mg/20 g BB mencit selama 30 hari diberikan hanya satu kali sehari.

#### b. Metformin

Dosis terapi metformin sekali pemakaian untuk manusia dengan bobot 70 kg adalah 500 mg. Faktor konversi dari manusia (70 kg) ke mencit (25 gram) yakni 0,0026, maka :

$$\begin{aligned}\text{Dosis mencit} &= 0,0026 \times 500 \text{ mg} \\ &= 1,3 \text{ mg (mencit 20 g)} \rightarrow \text{konversi bobot 25 g} \\ \text{Konversi bobot} &= 1,3 \text{ mg} \times 25 / 20 \\ &= 1,625 \text{ mg} \\ \text{Larutan stok 0,25\%} &= 0,25 \text{ g} / 100 \text{ ml} \\ &= 250 \text{ mg} / 100 \text{ ml} \\ &= 2,5 \text{ mg} / \text{ml}\end{aligned}$$

Tersedia di pasaran tablet metformin 500 mg.

1 tab digerus, ditimbang beratnya  $\rightarrow$  550 mg  $\sim$  kandungannya 500 mg metformin

$$\begin{aligned}1 \text{ mencit diberi} &= \frac{25 \text{ mg}}{20 \text{ mg}} \times 1,3 \text{ mg} = 1,625 \text{ mg} \\ \text{VP} &= \frac{1,625 \text{ mg}}{2,5 \text{ mg}} \times 1 \text{ ml} = 0,65 \text{ ml (untuk mencit 25 g)}\end{aligned}$$

#### c. Ekstrak wortel

$$\% \text{ Rendemen} = \frac{310 \text{ g}}{900 \text{ g}} \times 100\% = 34,45\%$$

**Variasi dosis ekstrak wortel : % Rendemen x Dosis**

- (1) Dosis 13 g/kg BB mencit = 260 mg/ 20 g BB mencit

$$\frac{260 \text{ mg}}{20 \text{ g}} \times 25 \text{ g} = 0,325 \text{ g}$$

Maka,  $\frac{34,45}{100} \times 0,325 = 0,111 \text{ g} \rightarrow$  untuk mencit dengan bobot 25 g

- (2) Dosis 26 g/kg BB mencit = 520 mg/ 20 g BB mencit

$$\frac{520 \text{ mg}}{20 \text{ g}} \times 25 \text{ g} = 0,650 \text{ g}$$

Maka,  $\frac{34,45}{100} \times 0,650 = 0,223 \text{ g} \rightarrow$  untuk mencit dengan bobot 25 g

- (3) Dosis 52 g/kg BB mencit = 1040 mg/ 20 g BB mencit

$$\frac{1040 \text{ mg}}{20 \text{ g}} \times 25 \text{ g} = 1,3 \text{ g}$$

Maka,  $\frac{34,45}{100} \times 1,3 = 0,447 \text{ g} \rightarrow$  untuk mencit dengan bobot 25 g

Volume pemberian maksimal oral pada mencit adalah 1 ml. Konsentrasi dibuat 50%

**Volume pemberian ekstrak wortel 50%:**

- (1) Dosis 13 g/kg BB mencit

$$\frac{0,111 \text{ g}}{50 \text{ g}} \times 100 \text{ ml} = 0,222 \text{ ml} \times 5 \text{ mencit} = 1,11 \text{ ml}$$

- (2) Dosis 26 g/kg BB mencit

$$\frac{0,223 \text{ g}}{50 \text{ g}} \times 100 \text{ ml} = 0,446 \text{ ml} \times 5 \text{ mencit} = 2,23 \text{ ml}$$

- (3) Dosis 52 g/kg BB mencit

$$\frac{0,447 \text{ g}}{50 \text{ g}} \times 100 \text{ ml} = 0,894 \text{ ml} \times 5 \text{ mencit} = 4,47 \text{ ml}$$

Maka kebutuhan larutan ekstrak wortel selama sehari

**sehari  $\rightarrow 1,11 \text{ ml} + 2,23 \text{ ml} + 4,47 \text{ ml} = 7,81 \text{ ml}$**

Sehingga kebutuhan harian per-oral  $\rightarrow$  50 g ekstrak dalam 100 ml CMC Na 0,5%

#### Lampiran 14. Perhitungan dosis dan volume pemberian seharusnya

##### Variasi dosis ekstrak wortel :

##### % Rendemen ekstrak x % Rendemen pengeringan x Dosis

(1) Dosis 13 g/kg BB mencit = 260 mg/ 20 g BB mencit

$$\frac{260 \text{ mg}}{20 \text{ g}} \times 25 \text{ g} = 0,325 \text{ g}$$

Maka,  $\frac{325 \text{ mg}}{25 \text{ mg}} \times 34,45\% \times 21,33\% = 0,95 \text{ mg} \rightarrow$  untuk mencit dengan bobot 25 g

(2) Dosis 26 g/kg BB mencit = 520 mg/ 20 g BB mencit

$$\frac{520 \text{ mg}}{20 \text{ g}} \times 25 \text{ g} = 0,650 \text{ g}$$

Maka,  $\frac{650 \text{ mg}}{25 \text{ mg}} \times 34,45\% \times 21,33\% = 1,91 \text{ mg} \rightarrow$  untuk mencit dengan bobot 25 g

(3) Dosis 52 g/kg BB mencit = 1040 mg/ 20 g BB mencit

$$\frac{1040 \text{ mg}}{20 \text{ g}} \times 25 \text{ g} = 1,3 \text{ g}$$

Maka,  $\frac{1300 \text{ mg}}{25 \text{ mg}} \times 34,45\% \times 21,33\% = 3,82 \text{ mg} \rightarrow$  untuk mencit dengan bobot 25 g

Volume pemberian maksimal oral pada mencit adalah 1 ml. Konsentrasi dibuat 50%

##### Volume pemberian ekstrak wortel 50%:

(1) Dosis 13 g/kg BB mencit

$$\frac{0,00095 \text{ g}}{50 \text{ g}} \times 100 = 0,0019 \text{ ml} \times 5 \text{ ekor} = 0,0095 \text{ ml}$$

(2) Dosis 26 g/kg BB mencit

$$\frac{0,00191 \text{ g}}{50 \text{ g}} \times 100 = 0,00382 \text{ ml} \times 5 \text{ ekor} = 0,0191 \text{ ml}$$

(3) Dosis 52 g/kg BB mencit

$$\frac{0,00382 \text{ g}}{50 \text{ g}} \times 100 = 0,00764 \text{ ml} \times 5 \text{ ekor} = 0,0382 \text{ ml}$$

Maka kebutuhan larutan ekstrak wortel selama sehari

**sehari  $\rightarrow 0,0095 \text{ ml} + 0,0191 \text{ ml} + 0,0382 \text{ ml} = 0,0668 \text{ ml}$**

Sehingga kebutuhan harian per-oral  $\rightarrow$  50 g ekstrak dalam 100 ml CMC Na 0,5%

### Lampiran 15. Gambar hewan uji dan perlakuan



Hewan uji mencit dioral



Alat yang digunakan (*Easy Touch*<sup>®</sup>)



Pembuatan sediaan



Alat yang digunakan



Pengecekan pada mencit



Pakan dan minum mencit

**Lampiran 16. Data hasil pengukuran kadar gula darah mencit**

**a. Data hasil pengukuran kadar gula darah mencit T<sub>0</sub> (hari ke-0)**

| HARI KE-0                                    |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 95            | 91,40         | 5,12835 | 91,40±5,12       |
|                                              | 2      | 89            |               |         |                  |
|                                              | 3      | 84            |               |         |                  |
|                                              | 4      | 92            |               |         |                  |
|                                              | 5      | 97            |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 84            | 86,00         | 7,61577 | 86,00±7,61       |
|                                              | 2      | 83            |               |         |                  |
|                                              | 3      | 79            |               |         |                  |
|                                              | 4      | 85            |               |         |                  |
|                                              | 5      | 99            |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 87            | 86,40         | 6,61816 | 86,40±6,61       |
|                                              | 2      | 76            |               |         |                  |
|                                              | 3      | 93            |               |         |                  |
|                                              | 4      | 91            |               |         |                  |
|                                              | 5      | 85            |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 86            | 88,20         | 3,70135 | 88,20±3,70       |
|                                              | 2      | 93            |               |         |                  |
|                                              | 3      | 84            |               |         |                  |
|                                              | 4      | 91            |               |         |                  |
|                                              | 5      | 87            |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 87            | 85,20         | 8,228   | 85,20±8,22       |
|                                              | 2      | 96            |               |         |                  |
|                                              | 3      | 86            |               |         |                  |
|                                              | 4      | 84            |               |         |                  |
|                                              | 5      | 73            |               |         |                  |

**b. Data hasil pengukuran kadar gula darah mencit T<sub>1</sub> (hari ke-31)**

| HARI KE-31                                   |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 195           | 195,40        | 3,04959 | 195,40±3,04      |
|                                              | 2      | 198           |               |         |                  |
|                                              | 3      | 199           |               |         |                  |
|                                              | 4      | 192           |               |         |                  |
|                                              | 5      | 193           |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 195           | 194,20        | 3,11448 | 194,20±3,11      |
|                                              | 2      | 191           |               |         |                  |
|                                              | 3      | 192           |               |         |                  |
|                                              | 4      | 194           |               |         |                  |
|                                              | 5      | 199           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 197           | 196,80        | 1,92354 | 196,80±1,92      |
|                                              | 2      | 199           |               |         |                  |
|                                              | 3      | 196           |               |         |                  |
|                                              | 4      | 198           |               |         |                  |
|                                              | 5      | 194           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 199           | 195,60        | 3,43511 | 195,60±3,43      |
|                                              | 2      | 197           |               |         |                  |
|                                              | 3      | 190           |               |         |                  |
|                                              | 4      | 195           |               |         |                  |
|                                              | 5      | 197           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 195           | 193,80        | 1,64317 | 193,80±1,64      |
|                                              | 2      | 193           |               |         |                  |
|                                              | 3      | 192           |               |         |                  |
|                                              | 4      | 193           |               |         |                  |
|                                              | 5      | 196           |               |         |                  |

**c. Data hasil pengukuran kadar gula darah mencit T<sub>2</sub> (hari ke-39)**

| HARI KE-39                                   |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 176           | 179,00        | 2,73861 | 179,00±2,73      |
|                                              | 2      | 180           |               |         |                  |
|                                              | 3      | 183           |               |         |                  |
|                                              | 4      | 179           |               |         |                  |
|                                              | 5      | 177           |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 103           | 105,40        | 3,20936 | 105,40±3,20      |
|                                              | 2      | 107           |               |         |                  |
|                                              | 3      | 110           |               |         |                  |
|                                              | 4      | 102           |               |         |                  |
|                                              | 5      | 105           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 150           | 146,40        | 3,04959 | 146,40±3,04      |
|                                              | 2      | 143           |               |         |                  |
|                                              | 3      | 146           |               |         |                  |
|                                              | 4      | 144           |               |         |                  |
|                                              | 5      | 149           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 133           | 128,80        | 2,68328 | 128,80±2,68      |
|                                              | 2      | 126           |               |         |                  |
|                                              | 3      | 129           |               |         |                  |
|                                              | 4      | 127           |               |         |                  |
|                                              | 5      | 129           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 143           | 144,80        | 1,78885 | 144,80±1,78      |
|                                              | 2      | 145           |               |         |                  |
|                                              | 3      | 147           |               |         |                  |
|                                              | 4      | 143           |               |         |                  |
|                                              | 5      | 146           |               |         |                  |

**d. Data hasil pengukuran kadar gula darah mencit T<sub>3</sub> (hari ke-46)**

| HARI KE 46                                   |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 180           | 179,60        | 4,27785 | 179,60±4,27      |
|                                              | 2      | 174           |               |         |                  |
|                                              | 3      | 182           |               |         |                  |
|                                              | 4      | 185           |               |         |                  |
|                                              | 5      | 177           |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 111           | 105,40        | 4,39318 | 105,40±4,39      |
|                                              | 2      | 102           |               |         |                  |
|                                              | 3      | 109           |               |         |                  |
|                                              | 4      | 104           |               |         |                  |
|                                              | 5      | 101           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 147           | 146,20        | 2,58844 | 146,20±2,58      |
|                                              | 2      | 149           |               |         |                  |
|                                              | 3      | 148           |               |         |                  |
|                                              | 4      | 143           |               |         |                  |
|                                              | 5      | 144           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 137           | 128,80        | 5,4037  | 128,60±5,40      |
|                                              | 2      | 125           |               |         |                  |
|                                              | 3      | 129           |               |         |                  |
|                                              | 4      | 123           |               |         |                  |
|                                              | 5      | 130           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 149           | 147,80        | 1,78885 | 147,80±1,78      |
|                                              | 2      | 150           |               |         |                  |
|                                              | 3      | 146           |               |         |                  |
|                                              | 4      | 148           |               |         |                  |
|                                              | 5      | 146           |               |         |                  |

### Lampiran 17. Hasil uji statistik Normalitas Shapiro-Wilk Kadar Glukosa Darah

| Tests of Normality |                                 |    |       |              |    |      |
|--------------------|---------------------------------|----|-------|--------------|----|------|
|                    | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|                    | Statistic                       | df | Sig.  | Statistic    | Df | Sig. |
| t0                 | ,133                            | 25 | ,200* | ,970         | 25 | ,638 |
| t1                 | ,111                            | 25 | ,200* | ,947         | 25 | ,214 |
| t2                 | ,156                            | 25 | ,118  | ,923         | 25 | ,061 |
| t3                 | ,169                            | 25 | ,065  | ,934         | 25 | ,109 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Dari data output diatas maka dapat disimpulkan bahwa nilai sig. dari masing-masing kelompok  $> 0,05$  ( $H_0$  diterima) maka dapat disimpulkan bahwa data terserbut terdistribusi normal sehingga dapat dilanjutkan dengan pengujian Anova.

### Lampiran 18. Hasil uji statistik Oneway Anova Kadar Glukosa Darah

| Test of Homogeneity of Variances |                                      |                  |     |        |      |
|----------------------------------|--------------------------------------|------------------|-----|--------|------|
|                                  |                                      | Levene Statistic | df1 | df2    | Sig. |
| t0                               | Based on Mean                        | ,287             | 4   | 20     | ,883 |
|                                  | Based on Median                      | ,196             | 4   | 20     | ,938 |
|                                  | Based on Median and with adjusted df | ,196             | 4   | 14,257 | ,937 |
|                                  | Based on trimmed mean                | ,254             | 4   | 20     | ,904 |
| t1                               | Based on Mean                        | ,729             | 4   | 20     | ,583 |
|                                  | Based on Median                      | ,424             | 4   | 20     | ,789 |
|                                  | Based on Median and with adjusted df | ,424             | 4   | 13,033 | ,788 |
|                                  | Based on trimmed mean                | ,695             | 4   | 20     | ,604 |
| t2                               | Based on Mean                        | ,478             | 4   | 20     | ,751 |
|                                  | Based on Median                      | ,372             | 4   | 20     | ,826 |
|                                  | Based on Median and with adjusted df | ,372             | 4   | 17,582 | ,825 |
|                                  | Based on trimmed mean                | ,464             | 4   | 20     | ,761 |
| t3                               | Based on Mean                        | 1,385            | 4   | 20     | ,275 |
|                                  | Based on Median                      | ,935             | 4   | 20     | ,464 |
|                                  | Based on Median and with adjusted df | ,935             | 4   | 13,869 | ,472 |
|                                  | Based on trimmed mean                | 1,398            | 4   | 20     | ,271 |

Nilai probabilitas dari output pada semua waktu pengukuran kadar gula darah ( $T_0$ - $T_3$ ) diatas memiliki nilai sig.  $>0,05$ , maka  $H_0$  diterima atau data ke-4 kelompok pada masing-masing perlakuan dan waktu pengukuran kadar gula darah itu memiliki varians yang sama sehingga analisis dapat dilanjutkan dengan *uji post hoc*. Pada uji ANOVA menunjukkan bahwa  $T_2$  dan  $T_3$  memiliki nilai sig  $<0,05$  yang berarti terdapat perbedaan karena pada hari ke-39 dan 46 adalah masa dimana hewan uji telah diinduksi oleh bahan alam ekstrak wortel dan tidak menunjukkan perbedaan dengan  $T_0$  dan  $T_1$

**ANOVA**

|    |                | Sum of Squares | df | Mean Square | F       | Sig. |
|----|----------------|----------------|----|-------------|---------|------|
| t0 | Between Groups | 122,160        | 4  | 30,540      | ,729    | ,583 |
|    | Within Groups  | 838,000        | 20 | 41,900      |         |      |
|    | Total          | 960,160        | 24 |             |         |      |
| t1 | Between Groups | 28,560         | 4  | 7,140       | ,960    | ,451 |
|    | Within Groups  | 148,800        | 20 | 7,440       |         |      |
|    | Total          | 177,360        | 24 |             |         |      |
| t2 | Between Groups | 14518,640      | 4  | 3629,660    | 483,955 | ,000 |
|    | Within Groups  | 150,000        | 20 | 7,500       |         |      |
|    | Total          | 14668,640      | 24 |             |         |      |
| t3 | Between Groups | 14889,360      | 4  | 3722,340    | 242,656 | ,000 |
|    | Within Groups  | 306,800        | 20 | 15,340      |         |      |
|    | Total          | 15196,160      | 24 |             |         |      |

## Multiple Comparisons

|           |     | (I)      | (J)                        | Mean       |       |      | 95% Confidence |       |
|-----------|-----|----------|----------------------------|------------|-------|------|----------------|-------|
| Dependent |     | Kelompok | Kelompok                   | Difference | Std.  |      | Interval       |       |
| Variable  |     | _Perlaku | Kelompok_Perlak            | (I-J)      | Error | Sig. | Lower          | Upper |
|           |     | an       | uan                        |            |       |      | Bound          | Bound |
| T0        | LSD | Kontrol  | Kontrol Positif            | 5,400      | 4,094 | ,202 | -3,14          | 13,94 |
|           |     |          | Negatif                    |            |       |      |                |       |
|           |     |          | Ekstrak dosis 4,44 g/kgBB  | 5,000      | 4,094 | ,236 | -3,54          | 13,54 |
|           |     |          | Ekstrak dosis 8,92 g/kgBB  | 3,200      | 4,094 | ,444 | -5,34          | 11,74 |
|           |     |          | Ekstrak dosis 17,88 g/kgBB | 6,200      | 4,094 | ,146 | -2,34          | 14,74 |
|           |     | Kontrol  | Kontrol Negatif            | -5,400     | 4,094 | ,202 | -13,94         | 3,14  |
|           |     |          | Positif                    |            |       |      |                |       |
|           |     |          | Ekstrak dosis 4,44 g/kgBB  | -,400      | 4,094 | ,923 | -8,94          | 8,14  |
|           |     |          | Ekstrak dosis 8,92 g/kgBB  | -2,200     | 4,094 | ,597 | -10,74         | 6,34  |
|           |     |          | Ekstrak dosis 17,88 g/kgBB | ,800       | 4,094 | ,847 | -7,74          | 9,34  |
|           |     | Ekstrak  | Kontrol Negatif            | -5,000     | 4,094 | ,236 | -13,54         | 3,54  |
|           |     |          | Positif                    |            |       |      |                |       |
|           |     |          | Ekstrak dosis 4,44 g/kgBB  | -,400      | 4,094 | ,923 | -8,14          | 8,94  |
|           |     |          | Ekstrak dosis 8,92 g/kgBB  | -1,800     | 4,094 | ,665 | -10,34         | 6,74  |
|           |     |          | Ekstrak dosis 17,88 g/kgBB | 1,200      | 4,094 | ,772 | -7,34          | 9,74  |
|           |     | Ekstrak  | Kontrol Negatif            | -3,200     | 4,094 | ,444 | -11,74         | 5,34  |
|           |     |          | Positif                    |            |       |      |                |       |
|           |     |          | Ekstrak dosis 8,92 g/kgBB  | 2,200      | 4,094 | ,597 | -6,34          | 10,74 |
|           |     |          | Ekstrak dosis 4,44 g/kgBB  | 1,800      | 4,094 | ,665 | -6,74          | 10,34 |
|           |     |          | Ekstrak dosis 17,88 g/kgBB | 3,000      | 4,094 | ,472 | -5,54          | 11,54 |
|           |     | Ekstrak  | Kontrol Negatif            | -6,200     | 4,094 | ,146 | -14,74         | 2,34  |
|           |     |          | Positif                    |            |       |      |                |       |
|           |     |          | Ekstrak dosis 17,88 g/kgBB | -,800      | 4,094 | ,847 | -9,34          | 7,74  |
|           |     |          | Ekstrak dosis 4,44 g/kgBB  | -1,200     | 4,094 | ,772 | -9,74          | 7,34  |
|           |     |          | Ekstrak dosis 8,92 g/kgBB  | -3,000     | 4,094 | ,472 | -11,54         | 5,54  |

|    |     |                                     |                               |         |       |      |       |       |
|----|-----|-------------------------------------|-------------------------------|---------|-------|------|-------|-------|
| T1 | LSD | Kontrol<br>Negatif                  | Kontrol Positif               | 1,200   | 1,725 | ,495 | -2,40 | 4,80  |
|    |     |                                     | Ekstrak dosis<br>4,44 g/kgBB  | -1,400  | 1,725 | ,427 | -5,00 | 2,20  |
|    |     |                                     | Ekstrak dosis<br>8,92 g/kgBB  | -,200   | 1,725 | ,909 | -3,80 | 3,40  |
|    |     |                                     | Ekstrak dosis<br>17,88 g/kgBB | 1,600   | 1,725 | ,365 | -2,00 | 5,20  |
|    |     | Kontrol<br>Positif                  | Kontrol Negatif               | -1,200  | 1,725 | ,495 | -4,80 | 2,40  |
|    |     |                                     | Ekstrak dosis<br>4,44 g/kgBB  | -2,600  | 1,725 | ,147 | -6,20 | 1,00  |
|    |     |                                     | Ekstrak dosis<br>8,92 g/kgBB  | -1,400  | 1,725 | ,427 | -5,00 | 2,20  |
|    |     |                                     | Ekstrak dosis<br>17,88 g/kgBB | ,400    | 1,725 | ,819 | -3,20 | 4,00  |
|    |     | Ekstrak<br>dosis<br>4,44<br>g/kgBB  | Kontrol Negatif               | 1,400   | 1,725 | ,427 | -2,20 | 5,00  |
|    |     |                                     | Kontrol Positif               | 2,600   | 1,725 | ,147 | -1,00 | 6,20  |
|    |     |                                     | Ekstrak dosis<br>8,92 g/kgBB  | 1,200   | 1,725 | ,495 | -2,40 | 4,80  |
|    |     |                                     | Ekstrak dosis<br>17,88 g/kgBB | 3,000   | 1,725 | ,097 | -,60  | 6,60  |
|    |     | Ekstrak<br>dosis<br>8,92<br>g/kgBB  | Kontrol Negatif               | ,200    | 1,725 | ,909 | -3,40 | 3,80  |
|    |     |                                     | Kontrol Positif               | 1,400   | 1,725 | ,427 | -2,20 | 5,00  |
|    |     |                                     | Ekstrak dosis<br>4,44 g/kgBB  | -1,200  | 1,725 | ,495 | -4,80 | 2,40  |
|    |     |                                     | Ekstrak dosis<br>17,88 g/kgBB | 1,800   | 1,725 | ,309 | -1,80 | 5,40  |
|    |     | Ekstrak<br>dosis<br>17,88<br>g/kgBB | Kontrol Negatif               | -1,600  | 1,725 | ,365 | -5,20 | 2,00  |
|    |     |                                     | Kontrol Positif               | -,400   | 1,725 | ,819 | -4,00 | 3,20  |
|    |     |                                     | Ekstrak dosis<br>4,44 g/kgBB  | -3,000  | 1,725 | ,097 | -6,60 | ,60   |
|    |     |                                     | Ekstrak dosis<br>8,92 g/kgBB  | -1,800  | 1,725 | ,309 | -5,40 | 1,80  |
| T2 | LSD | Kontrol<br>Negatif                  | Kontrol Positif               | 73,600* | 1,732 | ,000 | 69,99 | 77,21 |
|    |     |                                     | Ekstrak dosis<br>4,44 g/kgBB  | 32,600* | 1,732 | ,000 | 28,99 | 36,21 |
|    |     |                                     | Ekstrak dosis<br>8,92 g/kgBB  | 50,200* | 1,732 | ,000 | 46,59 | 53,81 |

|    |     |                    |                               |          |       |      |        |        |
|----|-----|--------------------|-------------------------------|----------|-------|------|--------|--------|
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | 34,200*  | 1,732 | ,000 | 30,59  | 37,81  |
|    |     |                    | Kontrol Negatif               | -73,600* | 1,732 | ,000 | -77,21 | -69,99 |
|    |     | Positif            | Ekstrak dosis<br>4,44 g/kgBB  | -41,000* | 1,732 | ,000 | -44,61 | -37,39 |
|    |     |                    | Ekstrak dosis<br>8,92 g/kgBB  | -23,400* | 1,732 | ,000 | -27,01 | -19,79 |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | -39,400* | 1,732 | ,000 | -43,01 | -35,79 |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | -32,600* | 1,732 | ,000 | -36,21 | -28,99 |
|    |     | 4,44<br>g/kgBB     | Kontrol Positif               | 41,000*  | 1,732 | ,000 | 37,39  | 44,61  |
|    |     |                    | Ekstrak dosis<br>8,92 g/kgBB  | 17,600*  | 1,732 | ,000 | 13,99  | 21,21  |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | 1,600    | 1,732 | ,367 | -2,01  | 5,21   |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | -50,200* | 1,732 | ,000 | -53,81 | -46,59 |
|    |     | 8,92<br>g/kgBB     | Kontrol Positif               | 23,400*  | 1,732 | ,000 | 19,79  | 27,01  |
|    |     |                    | Ekstrak dosis<br>4,44 g/kgBB  | -17,600* | 1,732 | ,000 | -21,21 | -13,99 |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | -16,000* | 1,732 | ,000 | -19,61 | -12,39 |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | -34,200* | 1,732 | ,000 | -37,81 | -30,59 |
|    |     | 17,88<br>g/kgBB    | Kontrol Positif               | 39,400*  | 1,732 | ,000 | 35,79  | 43,01  |
|    |     |                    | Ekstrak dosis<br>4,44 g/kgBB  | -1,600   | 1,732 | ,367 | -5,21  | 2,01   |
|    |     |                    | Ekstrak dosis<br>8,92 g/kgBB  | 16,000*  | 1,732 | ,000 | 12,39  | 19,61  |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | 16,000*  | 1,732 | ,000 | 12,39  | 19,61  |
| T3 | LSD | Kontrol<br>Negatif | Kontrol Positif               | 74,200*  | 2,477 | ,000 | 69,03  | 79,37  |
|    |     |                    | Ekstrak dosis<br>4,44 g/kgBB  | 33,400*  | 2,477 | ,000 | 28,23  | 38,57  |
|    |     |                    | Ekstrak dosis<br>8,92 g/kgBB  | 50,800*  | 2,477 | ,000 | 45,63  | 55,97  |
|    |     |                    | Ekstrak dosis<br>17,88 g/kgBB | 31,800*  | 2,477 | ,000 | 26,63  | 36,97  |
|    |     | Kontrol<br>Positif | Kontrol Negatif               | -74,200* | 2,477 | ,000 | -79,37 | -69,03 |
|    |     |                    | Ekstrak dosis<br>4,44 g/kgBB  | -40,800* | 2,477 | ,000 | -45,97 | -35,63 |

|                                     |                               |          |       |      |        |        |
|-------------------------------------|-------------------------------|----------|-------|------|--------|--------|
| Ekstrak<br>dosis<br>4,44<br>g/kgBB  | Ekstrak dosis<br>8,92 g/kgBB  | -23,400* | 2,477 | ,000 | -28,57 | -18,23 |
|                                     | Ekstrak dosis<br>17,88 g/kgBB | -42,400* | 2,477 | ,000 | -47,57 | -37,23 |
|                                     | Kontrol Negatif               | -33,400* | 2,477 | ,000 | -38,57 | -28,23 |
|                                     | Kontrol Positif               | 40,800*  | 2,477 | ,000 | 35,63  | 45,97  |
|                                     | Ekstrak dosis<br>8,92 g/kgBB  | 17,400*  | 2,477 | ,000 | 12,23  | 22,57  |
|                                     | Ekstrak dosis<br>17,88 g/kgBB | -1,600   | 2,477 | ,526 | -6,77  | 3,57   |
|                                     | Kontrol Negatif               | -50,800* | 2,477 | ,000 | -55,97 | -45,63 |
|                                     | Kontrol Positif               | 23,400*  | 2,477 | ,000 | 18,23  | 28,57  |
|                                     | Ekstrak dosis<br>4,44 g/kgBB  | -17,400* | 2,477 | ,000 | -22,57 | -12,23 |
|                                     | Ekstrak dosis<br>17,88 g/kgBB | -19,000* | 2,477 | ,000 | -24,17 | -13,83 |
| Ekstrak<br>dosis<br>17,88<br>g/kgBB | Kontrol Negatif               | -31,800* | 2,477 | ,000 | -36,97 | -26,63 |
|                                     | Kontrol Positif               | 42,400*  | 2,477 | ,000 | 37,23  | 47,57  |
|                                     | Ekstrak dosis<br>4,44 g/kgBB  | 1,600    | 2,477 | ,526 | -3,57  | 6,77   |
|                                     | Ekstrak dosis<br>8,92 g/kgBB  | 19,000*  | 2,477 | ,000 | 13,83  | 24,17  |

\*. The mean difference is significant at the 0.05 level.

Kesimpulannya adalah pada T2 dan T3 bagian kontrol positif dengan perbandingan dari ke 4 data memiliki nilai sig <0,05 maka dapat dinyatakan bahwa ada perbedaan yang signifikan, sedangkan pada dosis ekstrak 4,44 g/kgBB dengan 8,92 g/kgBB memiliki khasiat yang sama melihat pada bintang di *Mean Difference*.

**T0**

|                     |                            | Subset for alpha<br>= 0.05 |       |
|---------------------|----------------------------|----------------------------|-------|
|                     | Kelompok Perlakuan         | N                          | 1     |
| Duncan <sup>a</sup> | Ekstrak dosis 17,88 g/kgBB | 5                          | 85,20 |
|                     | Kontrol Positif            | 5                          | 86,00 |
|                     | Ekstrak dosis 4,44 g/kgBB  | 5                          | 86,40 |
|                     | Ekstrak dosis 8,92 g/kgBB  | 5                          | 88,20 |
|                     | Kontrol Negatif            | 5                          | 91,40 |
|                     | Sig.                       |                            | ,188  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**T1**

|                     |                            | Subset for alpha<br>= 0.05 |        |
|---------------------|----------------------------|----------------------------|--------|
|                     | Kelompok Perlakuan         | N                          | 1      |
| Duncan <sup>a</sup> | Ekstrak dosis 17,88 g/kgBB | 5                          | 193,80 |
|                     | Kontrol Positif            | 5                          | 194,20 |
|                     | Kontrol Negatif            | 5                          | 195,40 |
|                     | Ekstrak dosis 8,92 g/kgBB  | 5                          | 195,60 |
|                     | Ekstrak dosis 4,44 g/kgBB  | 5                          | 196,80 |
|                     | Sig.                       |                            | ,133   |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**T2**

|                     |                            |   | Subset for alpha = 0.05 |        |        |        |
|---------------------|----------------------------|---|-------------------------|--------|--------|--------|
|                     | Kelompok Perlakuan         | N | 1                       | 2      | 3      | 4      |
| Duncan <sup>a</sup> | Kontrol Positif            | 5 | 105,40                  |        |        |        |
|                     | Ekstrak dosis 8,92 g/kgBB  | 5 |                         | 128,80 |        |        |
|                     | Ekstrak dosis 17,88 g/kgBB | 5 |                         |        | 144,80 |        |
|                     | Ekstrak dosis 4,44 g/kgBB  | 5 |                         |        | 146,40 |        |
|                     | Kontrol Negatif            | 5 |                         |        |        | 179,00 |
|                     | Sig.                       |   | 1,000                   | 1,000  | ,367   | 1,000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

|                     |                            | T3 |                         |        |        |        |
|---------------------|----------------------------|----|-------------------------|--------|--------|--------|
|                     |                            | N  | Subset for alpha = 0.05 |        |        |        |
| Kelompok Perlakuan  |                            |    | 1                       | 2      | 3      | 4      |
| Duncan <sup>a</sup> | Kontrol Positif            | 5  | 105,40                  |        |        |        |
|                     | Ekstrak dosis 8,92 g/kgBB  | 5  |                         | 128,80 |        |        |
|                     | Ekstrak dosis 4,44 g/kgBB  | 5  |                         |        | 146,20 |        |
|                     | Ekstrak dosis 17,88 g/kgBB | 5  |                         |        | 147,80 |        |
|                     | Kontrol Negatif            | 5  |                         |        |        | 179,60 |
|                     | Sig.                       |    | 1,000                   | 1,000  | ,526   | 1,000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**Lampiran 19. Data hasil Tes Toleransi Insulin**

| TTI MENIT 30                                 |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 148           | 149,60        | 1,51658 | 149,60±1,51      |
|                                              | 2      | 149           |               |         |                  |
|                                              | 3      | 152           |               |         |                  |
|                                              | 4      | 150           |               |         |                  |
|                                              | 5      | 149           |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 149           | 149,20        | 2,94958 | 149,20±2,94      |
|                                              | 2      | 154           |               |         |                  |
|                                              | 3      | 146           |               |         |                  |
|                                              | 4      | 149           |               |         |                  |
|                                              | 5      | 148           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/<br>kgBB   | 1      | 151           | 149,80        | 3,56371 | 149,80±3,56      |
|                                              | 2      | 152           |               |         |                  |
|                                              | 3      | 144           |               |         |                  |
|                                              | 4      | 149           |               |         |                  |
|                                              | 5      | 153           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/<br>kgBB   | 1      | 149           | 149,40        | 3,64692 | 149,40±3,64      |
|                                              | 2      | 147           |               |         |                  |
|                                              | 3      | 152           |               |         |                  |
|                                              | 4      | 154           |               |         |                  |
|                                              | 5      | 145           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 147           | 149,00        | 3,53553 | 149,00±3,53      |
|                                              | 2      | 155           |               |         |                  |
|                                              | 3      | 146           |               |         |                  |
|                                              | 4      | 149           |               |         |                  |
|                                              | 5      | 148           |               |         |                  |

| TTI MENIT 60                                 |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 104           | 99,80         | 5,44977 | 99,80±5,44       |
|                                              | 2      | 107           |               |         |                  |
|                                              | 3      | 97            |               |         |                  |
|                                              | 4      | 94            |               |         |                  |
|                                              | 5      | 97            |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 99            | 99,60         | 1,67332 | 99,60±1,67       |
|                                              | 2      | 100           |               |         |                  |
|                                              | 3      | 97            |               |         |                  |
|                                              | 4      | 101           |               |         |                  |
|                                              | 5      | 101           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 97            | 99,40         | 2,60768 | 99,40±2,60       |
|                                              | 2      | 101           |               |         |                  |
|                                              | 3      | 103           |               |         |                  |
|                                              | 4      | 99            |               |         |                  |
|                                              | 5      | 97            |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 102           | 99,60         | 2,60768 | 99,60±2,60       |
|                                              | 2      | 102           |               |         |                  |
|                                              | 3      | 96            |               |         |                  |
|                                              | 4      | 98            |               |         |                  |
|                                              | 5      | 100           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 94            | 99,60         | 4,44972 | 99,60±4,44       |
|                                              | 2      | 97            |               |         |                  |
|                                              | 3      | 99            |               |         |                  |
|                                              | 4      | 103           |               |         |                  |
|                                              | 5      | 105           |               |         |                  |

| TTI MENIT 90                                 |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 84            | 86,20         | 1,92354 | 86,20±1,92       |
|                                              | 2      | 86            |               |         |                  |
|                                              | 3      | 89            |               |         |                  |
|                                              | 4      | 85            |               |         |                  |
|                                              | 5      | 87            |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 83            | 86,00         | 3,31662 | 86,00±3,31       |
|                                              | 2      | 82            |               |         |                  |
|                                              | 3      | 89            |               |         |                  |
|                                              | 4      | 87            |               |         |                  |
|                                              | 5      | 89            |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 89            | 86,00         | 3,24037 | 86,00±3,24       |
|                                              | 2      | 84            |               |         |                  |
|                                              | 3      | 83            |               |         |                  |
|                                              | 4      | 84            |               |         |                  |
|                                              | 5      | 90            |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 87            | 86,20         | 2,48998 | 86,20±2,49       |
|                                              | 2      | 84            |               |         |                  |
|                                              | 3      | 90            |               |         |                  |
|                                              | 4      | 86            |               |         |                  |
|                                              | 5      | 84            |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 86            | 86,20         | 1,92354 | 86,20±1,92       |
|                                              | 2      | 87            |               |         |                  |
|                                              | 3      | 85            |               |         |                  |
|                                              | 4      | 84            |               |         |                  |
|                                              | 5      | 89            |               |         |                  |

| TTI MENIT 120                                |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 103           | 100,60        | 5,02991 | 100,60±5,02      |
|                                              | 2      | 107           |               |         |                  |
|                                              | 3      | 102           |               |         |                  |
|                                              | 4      | 96            |               |         |                  |
|                                              | 5      | 95            |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 103           | 100,40        | 1,81659 | 100,40±1,81      |
|                                              | 2      | 100           |               |         |                  |
|                                              | 3      | 98            |               |         |                  |
|                                              | 4      | 100           |               |         |                  |
|                                              | 5      | 101           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 105           | 100,60        | 3,36155 | 100,60±3,36      |
|                                              | 2      | 97            |               |         |                  |
|                                              | 3      | 98            |               |         |                  |
|                                              | 4      | 103           |               |         |                  |
|                                              | 5      | 100           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 102           | 100,40        | 3,04959 | 100,40±3,04      |
|                                              | 2      | 101           |               |         |                  |
|                                              | 3      | 96            |               |         |                  |
|                                              | 4      | 99            |               |         |                  |
|                                              | 5      | 104           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 104           | 100,60        | 2,96648 | 100,60±2,96      |
|                                              | 2      | 98            |               |         |                  |
|                                              | 3      | 102           |               |         |                  |
|                                              | 4      | 97            |               |         |                  |
|                                              | 5      | 102           |               |         |                  |

| TTI MENIT 150                                |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 116           | 112,40        | 2,70185 | 112,40±2,70      |
|                                              | 2      | 114           |               |         |                  |
|                                              | 3      | 112           |               |         |                  |
|                                              | 4      | 109           |               |         |                  |
|                                              | 5      | 111           |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 114           | 112,40        | 4,03733 | 112,40±4,03      |
|                                              | 2      | 118           |               |         |                  |
|                                              | 3      | 108           |               |         |                  |
|                                              | 4      | 109           |               |         |                  |
|                                              | 5      | 113           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 117           | 112,80        | 2,86356 | 112,80±2,86      |
|                                              | 2      | 113           |               |         |                  |
|                                              | 3      | 109           |               |         |                  |
|                                              | 4      | 113           |               |         |                  |
|                                              | 5      | 112           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 120           | 112,60        | 4,44972 | 112,60±4,44      |
|                                              | 2      | 112           |               |         |                  |
|                                              | 3      | 111           |               |         |                  |
|                                              | 4      | 108           |               |         |                  |
|                                              | 5      | 112           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 109           | 112,60        | 2,07364 | 112,60±2,07      |
|                                              | 2      | 114           |               |         |                  |
|                                              | 3      | 113           |               |         |                  |
|                                              | 4      | 113           |               |         |                  |
|                                              | 5      | 114           |               |         |                  |

| TTI MENIT 180                               |        |               |               |         |                  |
|---------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                    | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)      | 1      | 136           | 133,80        | 2,58844 | 133,80±2,58      |
|                                             | 2      | 137           |               |         |                  |
|                                             | 3      | 133           |               |         |                  |
|                                             | 4      | 132           |               |         |                  |
|                                             | 5      | 131           |               |         |                  |
| Kontrol<br>positif<br>(Metformin)           | 1      | 132           | 133,20        | 1,30384 | 133,20±1,30      |
|                                             | 2      | 134           |               |         |                  |
|                                             | 3      | 132           |               |         |                  |
|                                             | 4      | 135           |               |         |                  |
|                                             | 5      | 133           |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB | 1      | 137           | 133,40        | 3,91152 | 133,40±3,91      |
|                                             | 2      | 138           |               |         |                  |
|                                             | 3      | 131           |               |         |                  |
|                                             | 4      | 129           |               |         |                  |
|                                             | 5      | 132           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/<br>kgBB  | 1      | 131           | 133,20        | 2,77489 | 133,20±2,77      |
|                                             | 2      | 137           |               |         |                  |
|                                             | 3      | 134           |               |         |                  |
|                                             | 4      | 134           |               |         |                  |
|                                             | 5      | 130           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/<br>kgBB | 1      | 137           | 133,60        | 2,88097 | 133,60±2,88      |
|                                             | 2      | 130           |               |         |                  |
|                                             | 3      | 133           |               |         |                  |
|                                             | 4      | 132           |               |         |                  |
|                                             | 5      | 136           |               |         |                  |

## Lampiran 20. Hasil uji statistik Normalitas Shapiro-Wilk Tes Toleransi Insulin

| Tests of Normality |                                 |    |       |              |    |      |
|--------------------|---------------------------------|----|-------|--------------|----|------|
|                    | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|                    | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| TTI_Menit30        | ,195                            | 25 | ,015  | ,963         | 25 | ,471 |
| TTI_Menit60        | ,143                            | 25 | ,197  | ,969         | 25 | ,609 |
| TTI_Menit90        | ,169                            | 25 | ,062  | ,925         | 25 | ,065 |
| TTI_Menit120       | ,123                            | 25 | ,200* | ,974         | 25 | ,744 |
| TTI_Menit150       | ,159                            | 25 | ,104  | ,943         | 25 | ,174 |
| TTI_Menit180       | ,151                            | 25 | ,143  | ,943         | 25 | ,170 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Dari data output diatas maka dapat disimpulkan bahwa nilai sig. dari masing-masing kelompok  $> 0,05$  ( $H_0$  diterima) maka dapat disimpulkan bahwa data tersebut terdistribusi normal sehingga dapat dilanjutkan dengan pengujian Anova.

## Lampiran 21. Hasil uji statistik Oneway Anova Tes Toleransi Insulin

### Test of Homogeneity of Variances

|              |                                      | Levene Statistic | df1 | df2    | Sig. |
|--------------|--------------------------------------|------------------|-----|--------|------|
| TTI_Menit30  | Based on Mean                        | ,712             | 4   | 20     | ,594 |
|              | Based on Median                      | ,470             | 4   | 20     | ,757 |
|              | Based on Median and with adjusted df | ,470             | 4   | 16,467 | ,757 |
|              | Based on trimmed mean                | ,684             | 4   | 20     | ,611 |
| TTI_Menit60  | Based on Mean                        | 3,741            | 4   | 20     | ,020 |
|              | Based on Median                      | 1,075            | 4   | 20     | ,395 |
|              | Based on Median and with adjusted df | 1,075            | 4   | 8,790  | ,424 |
|              | Based on trimmed mean                | 3,636            | 4   | 20     | ,022 |
| TTI_Menit90  | Based on Mean                        | 1,964            | 4   | 20     | ,139 |
|              | Based on Median                      | ,462             | 4   | 20     | ,763 |
|              | Based on Median and with adjusted df | ,462             | 4   | 12,479 | ,763 |
|              | Based on trimmed mean                | 1,863            | 4   | 20     | ,157 |
| TTI_Menit120 | Based on Mean                        | 2,198            | 4   | 20     | ,106 |
|              | Based on Median                      | ,932             | 4   | 20     | ,465 |
|              | Based on Median and with adjusted df | ,932             | 4   | 14,992 | ,472 |
|              | Based on trimmed mean                | 2,207            | 4   | 20     | ,105 |
| TTI_Menit150 | Based on Mean                        | ,641             | 4   | 20     | ,640 |
|              | Based on Median                      | ,461             | 4   | 20     | ,764 |
|              | Based on Median and with adjusted df | ,461             | 4   | 14,210 | ,763 |
|              | Based on trimmed mean                | ,623             | 4   | 20     | ,652 |
| TTI_Menit180 | Based on Mean                        | 2,429            | 4   | 20     | ,081 |
|              | Based on Median                      | ,809             | 4   | 20     | ,534 |
|              | Based on Median and with adjusted df | ,809             | 4   | 14,438 | ,539 |
|              | Based on trimmed mean                | 2,434            | 4   | 20     | ,081 |

Nilai probabilitas dari output pada semua waktu pengukuran menit 30 hingga 180 diatas memiliki nilai sig. >0,05, maka  $H_0$  diterima atau data ke-6 kelompok itu memiliki varians yang sama sehingga analisis dapat dilanjutkan dengan *uji post hoc*.

**ANOVA**

|              |                | Sum of Squares | df | Mean Square | F    | Sig.  |
|--------------|----------------|----------------|----|-------------|------|-------|
| TTI_Menit30  | Between Groups | 2,000          | 4  | ,500        | ,051 | ,995  |
|              | Within Groups  | 198,000        | 20 | 9,900       |      |       |
|              | Total          | 200,000        | 24 |             |      |       |
| TTI_Menit60  | Between Groups | ,400           | 4  | ,100        | ,008 | 1,000 |
|              | Within Groups  | 263,600        | 20 | 13,180      |      |       |
|              | Total          | 264,000        | 24 |             |      |       |
| TTI_Menit90  | Between Groups | ,240           | 4  | ,060        | ,009 | 1,000 |
|              | Within Groups  | 140,400        | 20 | 7,020       |      |       |
|              | Total          | 140,640        | 24 |             |      |       |
| TTI_Menit120 | Between Groups | ,240           | 4  | ,060        | ,005 | 1,000 |
|              | Within Groups  | 232,000        | 20 | 11,600      |      |       |
|              | Total          | 232,240        | 24 |             |      |       |
| TTI_Menit150 | Between Groups | ,560           | 4  | ,140        | ,013 | 1,000 |
|              | Within Groups  | 223,600        | 20 | 11,180      |      |       |
|              | Total          | 224,160        | 24 |             |      |       |
| TTI_Menit180 | Between Groups | 1,360          | 4  | ,340        | ,043 | ,996  |
|              | Within Groups  | 158,800        | 20 | 7,940       |      |       |
|              | Total          | 160,160        | 24 |             |      |       |

**TTI\_Menit30**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok Perlakuan                            | N | 1                          |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 149,00                     |
| Kontrol Positif                               | 5 | 149,20                     |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 149,40                     |
| Kontrol Negatif                               | 5 | 149,60                     |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 149,80                     |
| Sig.                                          |   | ,994                       |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**TTI\_Menit60**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                            | N | 1                          |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 99,40                      |
| Kontrol Positif                               | 5 | 99,60                      |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 99,60                      |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 99,60                      |
| Kontrol Negatif                               | 5 | 99,80                      |
| Sig.                                          |   | 1,000                      |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**TTI\_Menit90**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                            | N | 1                          |
| Kontrol Positif                               | 5 | 86,00                      |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 86,00                      |
| Kontrol Negatif                               | 5 | 86,20                      |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 86,20                      |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 86,20                      |
| Sig.                                          |   | 1,000                      |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**TTI\_Menit120**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                            | N | 1                          |
| Kontrol Positif                               | 5 | 100,40                     |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 100,40                     |
| Kontrol Negatif                               | 5 | 100,60                     |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 100,60                     |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 100,60                     |
| Sig.                                          |   | 1,000                      |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**TTI\_Menit150**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                            | N | 1                          |
| Kontrol Negatif                               | 5 | 112,40                     |
| Kontrol Positif                               | 5 | 112,40                     |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 112,60                     |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 112,60                     |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 112,80                     |
| Sig.                                          |   | 1,000                      |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**TTI\_Menit180**Tukey HSD<sup>a</sup>

|                                                 |   | Subset for alpha<br>= 0.05 |
|-------------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                              | N | 1                          |
| Kontrol Positif                                 | 5 | 133,20                     |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit    | 5 | 133,20                     |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit    | 5 | 133,40                     |
| Ekstrak wortel dosis 0, 447<br>g/ 25 gBB mencit | 5 | 133,60                     |
| Kontrol Negatif                                 | 5 | 133,80                     |
| Sig.                                            |   | ,997                       |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**Lampiran 22. Data hasil Tes Kadar Lipid Mencit**

| KADAR LIPID AWAL                             |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 47            | 43,40         | 3,04959 | 43,40±3,04       |
|                                              | 2      | 40            |               |         |                  |
|                                              | 3      | 41            |               |         |                  |
|                                              | 4      | 43            |               |         |                  |
|                                              | 5      | 46            |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 39            | 43,80         | 3,70135 | 43,80±3,70       |
|                                              | 2      | 45            |               |         |                  |
|                                              | 3      | 42            |               |         |                  |
|                                              | 4      | 44            |               |         |                  |
|                                              | 5      | 49            |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 48            | 42,60         | 4,61519 | 42,60±4,61       |
|                                              | 2      | 43            |               |         |                  |
|                                              | 3      | 37            |               |         |                  |
|                                              | 4      | 46            |               |         |                  |
|                                              | 5      | 39            |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 37            | 42,80         | 4,65833 | 42,80±4,65       |
|                                              | 2      | 44            |               |         |                  |
|                                              | 3      | 48            |               |         |                  |
|                                              | 4      | 39            |               |         |                  |
|                                              | 5      | 46            |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 46            | 43,20         | 3,70135 | 43,20±3,70       |
|                                              | 2      | 41            |               |         |                  |
|                                              | 3      | 47            |               |         |                  |
|                                              | 4      | 44            |               |         |                  |
|                                              | 5      | 38            |               |         |                  |

| KADAR LIPID AKHIR                            |        |               |               |         |                  |
|----------------------------------------------|--------|---------------|---------------|---------|------------------|
| Kelompok                                     | Mencit | To<br>(mg/dL) | Rata-<br>rata | SD      | Rata-<br>rata±SD |
| Kontrol<br>negatif<br>(CMC Na<br>0,5%)       | 1      | 101           | 101,60        | 3,84708 | 101,60±3,84      |
|                                              | 2      | 105           |               |         |                  |
|                                              | 3      | 97            |               |         |                  |
|                                              | 4      | 106           |               |         |                  |
|                                              | 5      | 99            |               |         |                  |
| Kontrol<br>positif<br>(Metformin)            | 1      | 107           | 101,20        | 4,32435 | 101,20±4,32      |
|                                              | 2      | 96            |               |         |                  |
|                                              | 3      | 104           |               |         |                  |
|                                              | 4      | 100           |               |         |                  |
|                                              | 5      | 99            |               |         |                  |
| Ekstrak<br>wortel dosis<br>4,44 g/ kg<br>BB  | 1      | 97            | 101,40        | 3,84708 | 101,40±3,84      |
|                                              | 2      | 99            |               |         |                  |
|                                              | 3      | 101           |               |         |                  |
|                                              | 4      | 103           |               |         |                  |
|                                              | 5      | 107           |               |         |                  |
| Ekstrak<br>wortel dosis<br>8,92 g/ kg<br>BB  | 1      | 104           | 101,80        | 6,14003 | 101,80±6,14      |
|                                              | 2      | 98            |               |         |                  |
|                                              | 3      | 107           |               |         |                  |
|                                              | 4      | 93            |               |         |                  |
|                                              | 5      | 107           |               |         |                  |
| Ekstrak<br>wortel dosis<br>17,88 g/ kg<br>BB | 1      | 95            | 101,80        | 5,06952 | 101,80±5,06      |
|                                              | 2      | 98            |               |         |                  |
|                                              | 3      | 104           |               |         |                  |
|                                              | 4      | 105           |               |         |                  |
|                                              | 5      | 107           |               |         |                  |

### Lampiran 23. Hasil uji statistik Normalitas Shapiro-Wilk Kadar Lipid

| Tests of Normality |                                 |    |       |              |    |      |
|--------------------|---------------------------------|----|-------|--------------|----|------|
|                    | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|                    | Statistic                       | df | Sig.  | Statistic    | Df | Sig. |
| Kadar_Awal         | ,140                            | 25 | ,200* | ,945         | 25 | ,189 |
| Kadar_Akhir        | ,154                            | 25 | ,130  | ,926         | 25 | ,071 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Dari data output diatas maka dapat disimpulkan bahwa nilai sig. dari masing-masing kelompok  $> 0,05$  ( $H_0$  diterima) maka dapat disimpulkan bahwa data tersebut terdistribusi normal sehingga dapat dilanjutkan dengan pengujian Anova.

## Lampiran 24. Hasil uji statistik Oneway Anova Kadar Lipid

### Test of Homogeneity of Variances

|             |                                      | Levene Statistic | df1 | df2    | Sig. |
|-------------|--------------------------------------|------------------|-----|--------|------|
| Kadar_Awal  | Based on Mean                        | ,551             | 4   | 20     | ,701 |
|             | Based on Median                      | ,321             | 4   | 20     | ,860 |
|             | Based on Median and with adjusted df | ,321             | 4   | 18,122 | ,860 |
|             | Based on trimmed mean                | ,542             | 4   | 20     | ,707 |
| Kadar_Akhir | Based on Mean                        | ,978             | 4   | 20     | ,441 |
|             | Based on Median                      | ,278             | 4   | 20     | ,889 |
|             | Based on Median and with adjusted df | ,278             | 4   | 15,574 | ,888 |
|             | Based on trimmed mean                | ,908             | 4   | 20     | ,478 |

Nilai probabilitas dari output pada semua waktu pengukuran kadar awal hingga kadar akhir diatas memiliki nilai sig.  $>0,05$ , maka  $H_0$  diterima atau data ke-2 kelompok itu memiliki varians yang sama sehingga analisis dapat dilanjutkan dengan *uji post hoc*.

### ANOVA

|             |                | Sum of Squares | df | Mean Square | F    | Sig.  |
|-------------|----------------|----------------|----|-------------|------|-------|
| Kadar_Awal  | Between Groups | 4,560          | 4  | 1,140       | ,072 | ,990  |
|             | Within Groups  | 318,800        | 20 | 15,940      |      |       |
|             | Total          | 323,360        | 24 |             |      |       |
| Kadar_Akhir | Between Groups | 1,360          | 4  | ,340        | ,015 | 1,000 |
|             | Within Groups  | 446,800        | 20 | 22,340      |      |       |
|             | Total          | 448,160        | 24 |             |      |       |

**Kadar\_Awal**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                            | N | 1                          |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 42,60                      |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 42,80                      |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 43,20                      |
| Kontrol Negatif                               | 5 | 43,40                      |
| Kontrol Positif                               | 5 | 43,80                      |
| Sig.                                          |   | ,989                       |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

**Kadar\_Akhir**Tukey HSD<sup>a</sup>

|                                               |   | Subset for alpha<br>= 0.05 |
|-----------------------------------------------|---|----------------------------|
| Kelompok_Perlakuan                            | N | 1                          |
| Kontrol Positif                               | 5 | 101,20                     |
| Ekstrak wortel dosis 4,44 g/<br>kg BB mencit  | 5 | 101,40                     |
| Kontrol Negatif                               | 5 | 101,60                     |
| Ekstrak wortel dosis 8,92 g/<br>kg BB mencit  | 5 | 101,80                     |
| Ekstrak wortel dosis 17,88 g/<br>kg BB mencit | 5 | 101,80                     |
| Sig.                                          |   | 1,000                      |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.