# L A M P I R A N

## Lampiran 1. Surat Ethical Clearance

9/28/21, 11:09 AM KEPK-RSDM

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

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

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

**Nomor : 886 / IX / HREC / 2021**

*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 ANTIHIPERGLIKEMIK KOMBINASI EKSTRAK ETANOL DAUN MELINJO (Gnetum gnemon L.) DAN GLIBENKLAMID TERHADAP MENCIT JANTAN PUTIH (Mus musculus L.) YANG DIINDUKSI ALOKSAN**

*Principal investigator* : Novianita Nur Cahyani
Peneliti Utama 24185521A

*Location of research* : Universitas Setia Budi Surakarta
Lokasi Tempat Penelitian

*Is ethically approved*
Dinyatakan layak etik

Issued on : 28 September 2021

*Chairman*
Ketua

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

https://komisi-etika.rsmoewardi.com/kepk/ethicalclearance/24185521A-1243 1/1

Lampiran 2. Surat keterangan kebenaran hewan uji

**"ABIMANYU FARM"**

√ Mencit putih jantan √ Tikus Wistar √ Swis Webster √ Cacing
√ Mencit Balb/C √ Kelinci New Zaeland

Ngampon RT 04 / RW 04. Majosongo 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 | : Novianita Nur Cahyani |
| NIM | : 24185521A |
| Institusi | : Universitas Setia Budi Surakarta |

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, 08 Desember 2021
Hormat kami

Sigit Pramono
"ABIMANYU FARM"

## Lampiran 3. Surat determinasi tanaman melinjo

**KEMENTERIAN KESEHATAN REPUBLIK INDONESIA**
**BADAN PENELITIAN DAN PENGEMBANGAN KESEHATAN**
BALAI BESAR PENELITIAN DAN PENGEMBANGAN
TANAMAN OBAT DAN OBAT TRADISIONAL
Jalan Lawu No.11 Tawamangu, Karanganyar, Jawa Tengah 57792
Telepon (0271) 697 010 Faksimile (0271) 697 451
Laman b2p2toot.litbang.kemkes.go.id Surat Elektronik b2p2toot@litbang.kemkes.go.id

Nomor : KM.04.02/2/2680/2021 21 November 2021
Lampiran : -
Hal : Keterangan Determinasi

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

Merujuk surat Saudara nomor: 473/H6-04/10.09.2021 tanggal 10 September 2021 hal permohonan determinasi, dengan ini kami sampaikan bahwa hasil determinasi sampel tanaman sebagai berikut:

| | |
|---|---|
| Nama Pemohon | : Novianita Nur Cahyani |
| Nama Sampel | : Melinjo |
| Sampel | : Segar |
| Spesies | : *Gnetum gnemon* L. |
| Sinonim | : *Gnetum gnemon* var. *brunonianum* (Griff.) Markgr.; *Gnetum gnemon* var. *griffithii* (Parl.) Markgr. |
| Familia | : Gnetaceae |
| Penanggung Jawab | : Isna Jati Asiyah, M.Sc. |

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

Atas perhatian Saudara, kami sampaikan terima kasih.

Kepala Balai Besar Penelitian
dan Pengembangan Tanaman Obat
dan Obat Tradisional
Tawangmangu,

**Akhmad Saikhu, S.K.M., M.Sc.PH.**
NIP 196805251992031004

Tembusan :
-

Dokumen ini ditandatangani secara elektronik melalui Aplikasi TNDE menggunakan sertifikat elektronik yang diterbitkan oleh BSrE. (1/1)

## Lampiran 4. Surat senyawa murni aloksan

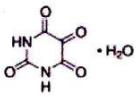
SIGMA-ALDRICH®

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

Product Name:
Alloxan monohydrate - 98%



| | |
|---|---|
| **Product Number:** | **A7413** |
| **Batch Number:** | **BCCD1306** |
| Brand: | ALDRICH |
| CAS Number: | 2244-11-3 |
| Formula: | C4H2N2O4 · H2O |
| Formula Weight: | 160,08 g/mol |
| Storage Temperature: | Store at 2 - 8 °C |
| Quality Release Date: | 07 APR 2020 |

| Test | Specification | Result |
|---|---|---|
| Appearance (Colour) | White to Yellow and Faint Beige to Beige | Yellow |
| Appearance (Form) | Powder or Crystals | Powder |
| Purity (TLC) | ≥ 98.0 % | 100.0 % |
| Solubility (Colour) | Colorless to Faint Yellow | Faint Yellow |
| Solubility (Turbidity) 50 MG/ML IN WATER | Clear to Slightly Hazy | Slightly Hazy |
| Carbon Content | 29.3 - 30.7 % | 29.6 % |
| Nitrogen Content | 17.1 - 17.9 % | 17.5 % |
| 1H NMR Spectrum | Conforms to Structure | Conforms |

Dr.Reinhold Schwenninger
Quality Assurance
Buchs,Switzerland CH

**Lampiran 5. Pembuatan ekstrak daun melinjo**

Sortasi basah

Pencucian daun melinjo

Perajangan

Proses pengeringan

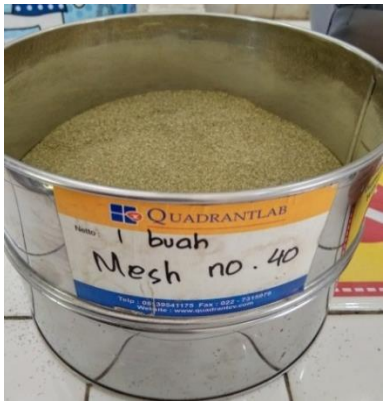
Serbuk daun melinjo


Proses pengayakan

Proses maserasi

Ekstrak etanol daun melinjo

**Lampiran 6. Gambar alat-alat penelitian**




Ayakan mesh nomor 40

*Rotary evaporator*

Botol maserasi

*Sterling-Bidwell*

Neraca analitik

*Moisture balance*

**Lampiran 7. Hasil perhitungan presentase rendemen bobot kering terhadap bobot basah daun melinjo**

| Berat basah (kg) | Berat kering (kg) | Rendemen (%) |
|---|---|---|
| 13,37 | 2,96 | 22,14% |

Rendemen serbuk (%) $= \frac{Berat\ kering}{Berat\ basah} \times 100\%$

$= \frac{2{,}96\ kg}{13{,}37\ kg} \times 100\%$

$= 22{,}14\%$

**Lampiran 8. Hasil perhitungan presentase rendemen bobot serbuk terhadap bobot kering daun melinjo**

| Berat kering (kg) | Berat serbuk (kg) | Rendemen (%) |
|---|---|---|
| 2,96 | 1,24 | 41,9 |

Rendemen serbuk (%) $= \frac{Berat\ serbuk}{Berat\ kering} \times 100\%$

$= \frac{1{,}24\ kg}{2{,}96\ kg} \times 100\%$

$= 41{,}9\%$

**Lampiran 9. Hasil perhitungan persentase rendemen ekstrak terhadap bobot serbuk daun melinjo**

| Berat serbuk (g) | Berat ekstrak (g) | Rendemen (%) |
|---|---|---|
| 700 | 120 | 17,14 |

Bobot wadah tanpa tutup + ekstrak = 339 gram

Bobot wadah kosong tanpa tutup = 219 gram

Bobot ekstrak = 120 gram

Rendemen ekstrak (%) $= \frac{Berat\ ekstrak\ kental}{Berat\ serbuk} \times 100\%$

$= \frac{120\ g}{700\ g} \times 100\%$

$= 17{,}14\%$

**Lampiran 10. Hasil perhitungan persentase rendemen kadar air serbuk daun melinjo**

| Bobot serbuk (g) | Volume terbaca (mL) | Kadar (%) |
|---|---|---|
| 10,0198 | 1 | 9,98 |
| 10,0284 | 1 | 9,97 |
| 10,0235 | 0,9 | 8,98 |
| Rata-rata ± SD | | 9,64 ± 0,58 |

Kadar I (%) $= \frac{Volume\ terbaca\ (ml)}{Berat\ serbuk\ (g)} \times 100\%$

$= \frac{1}{10,0198} \times 100\%$

$= 9,9802\%$

Kadar II (%) $= \frac{Volume\ terbaca\ (ml)}{Berat\ serbuk\ (g)} \times 100\%$

$= \frac{1}{10,0284} \times 100\%$

$= 9,9716\%$

Kadar III (%) $= \frac{Volume\ terbaca\ (ml)}{Berat\ serbuk\ (g)} \times 100\%$

$= \frac{0,9}{10,0235} \times 100\%$

$= 8,9788\%$

Rata-rata kadar air serbuk = Kadar air I + Kadar air II + Kadar air III

$= \frac{9,9802\% + 9,9716\% + 8,9788\%}{3}$

$= 9,6435\%$

**Lampiran 11. Hasil perhitungan presentase rendemen susut pengeringan serbuk daun melinjo**

| Berat sampel (g) | Waktu | Susut pengeringan (%) |
|---|---|---|
| 2,02 | 06:39 | 5,4 |
| 2,01 | 06:00 | 5,5 |
| 2,03 | 05:57 | 5,9 |
| | **Rata-rata±SD** | **5,6±0,26** |

Presentase rata-rata penetapan susut pengeringan serbuk daun melinjo :

$= \frac{\text{Kadar I + Kadar II + Kadar III}}{3}$

$= \frac{5,4\% + 5,5\% + 5,9\ \%}{3}$

$= 5,6\%$

**Lampiran 12. Hasil uji bebas etanol daun melinjo**

| Jenis uji | Gambar | Interpretasi hasil |
|---|---|---|
| Uji bebas etanol |  | Ekstrak + $CH_3COOH$ + $H_2SO_4$ pekat (dipanaskan) → tidak tercium bau khas ester atau etil asetat (-) |

**Lampiran 13. Hasil skrining fitokimia (uji tabung)**

| Senyawa | Gambar | Hasil identifikasi |
|---|---|---|
| Flavonoid |  | Warna jingga pada lapisan amil alkohol (+) |
| Alkaloid |   | Mayer (endapan putih) (-) |

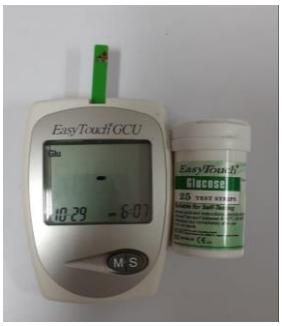
| | | |
|---|---|---|
| |  | Bouchardat (endapan coklat)<br>(+) |
| |  | Dragendorff (jingga)<br>(+) |
| Tanin |  | Hijau kehitaman<br>(+) |
| Saponin |  | Buih stabil<br>(+) |

**Lampiran 14. Perlakuan hewan uji**

Induksi aloksan secara i.p

Sediaan uji

Pemberian sediaan secara p.o




Glukometer *Easy Touch* & Strip test

Pengambilan darah mencit

Pengukuran kadar glukosa darah

**Lampiran 15. Rata-rata berat badan**

| Kelompok | $T_0$ (gram) | $T_1$ (gram) | $T_2$ (gram) | $T_3$ (gram) |
|---|---|---|---|---|
| **Kontrol hiperglikemik (CMC Na 0,5%)** | 27 | 24 | 23 | 22 |
| | 26 | 25 | 24 | 22 |
| | 25 | 23 | 22 | 21 |
| | 25 | 24 | 23 | 20 |
| | 26 | 23 | 22 | 19 |
| **Kontrol obat (glibenklamid)** | 26 | 22 | 25 | 27 |
| | 28 | 24 | 26 | 29 |
| | 26 | 21 | 23 | 26 |
| | 28 | 24 | 27 | 30 |
| | 27 | 22 | 24 | 27 |
| **Ekstrak etanol daun melinjo (EEDM) dosis tunggal** | 24 | 20 | 23 | 27 |
| | 26 | 22 | 24 | 26 |
| | 24 | 21 | 22 | 25 |
| | 25 | 21 | 23 | 24 |
| | 28 | 24 | 26 | 29 |
| **Kombinasi EEDM : glibenklamid (½: ½)** | 28 | 23 | 25 | 28 |
| | 26 | 22 | 24 | 27 |
| | 27 | 22 | 25 | 28 |
| | 24 | 20 | 26 | 26 |
| | 27 | 23 | 25 | 26 |
| **Kombinasi EEDM : glibenklamid (¾ : ½)** | 25 | 22 | 23 | 25 |
| | 26 | 22 | 24 | 27 |
| | 26 | 23 | 25 | 27 |
| | 25 | 21 | 23 | mati |
| | 27 | 23 | 26 | 29 |
| **Kombinasi EEDM : glibenklamid (1 : ½)** | 27 | 23 | 26 | mati |
| | 25 | 21 | 24 | 26 |
| | 26 | 22 | 25 | 27 |
| | 25 | 22 | 24 | 26 |
| | 28 | 24 | 27 | 30 |

**Lampiran 16. Hasil uji statistik Normalitas Shapiro-Wilk Rata-rata Berat Badan**

**Tests of Normality**

| | | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|---|
| | kelompok | Statistic | df | Sig. | Statistic | df | Sig. |
| T0 | kontrol hiperglikemik | .231 | 5 | .200* | .881 | 5 | .314 |
| | kontrol obat | .241 | 5 | .200* | .821 | 5 | .119 |
| | ekstrak daun melinjo dosis tunggal | .201 | 5 | .200* | .881 | 5 | .314 |
| | kombinasi 1/2:1/2 | .254 | 5 | .200* | .914 | 5 | .492 |
| | kombinasi 3/4:1/2 | .231 | 5 | .200* | .881 | 5 | .314 |
| | kombinasi 1:1/2 | .221 | 5 | .200* | .902 | 5 | .421 |
| T1 | kontrol hiperglikemik | .231 | 5 | .200* | .881 | 5 | .314 |
| | kontrol obat | .273 | 5 | .200* | .852 | 5 | .201 |
| | ekstrak daun melinjo dosis tunggal | .254 | 5 | .200* | .914 | 5 | .492 |
| | kombinasi 1/2:1/2 | .300 | 5 | .161 | .833 | 5 | .146 |
| | kombinasi 3/4:1/2 | .231 | 5 | .200* | .881 | 5 | .314 |
| | kombinasi 1:1/2 | .237 | 5 | .200* | .961 | 5 | .814 |
| T2 | kontrol hiperglikemik | .231 | 5 | .200* | .881 | 5 | .314 |
| | kontrol obat | .136 | 5 | .200* | .987 | 5 | .967 |
| | ekstrak daun melinjo dosis tunggal | .254 | 5 | .200* | .914 | 5 | .492 |
| | kombinasi 1/2:1/2 | .300 | 5 | .161 | .883 | 5 | .325 |
| | kombinasi 3/4:1/2 | .221 | 5 | .200* | .902 | 5 | .421 |
| | kombinasi 1:1/2 | .221 | 5 | .200* | .902 | 5 | .421 |
| T3 | kontrol hiperglikemik | .221 | 5 | .200* | .902 | 5 | .421 |
| | kontrol obat | .287 | 5 | .200* | .914 | 5 | .490 |
| | ekstrak daun melinjo dosis tunggal | .141 | 5 | .200* | .979 | 5 | .928 |
| | kombinasi 1/2:1/2 | .241 | 5 | .200* | .821 | 5 | .119 |
| | kombinasi 3/4:1/2 | .410 | 5 | .006 | .660 | 5 | .004 |
| | kombinasi 1:1/2 | .434 | 5 | .003 | .673 | 5 | .005 |

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Dari data output di atas maka dapat disimpulkan bahwa dari semua kelompok nilai sig. pada $T_0$, $T_1$, dan $T_2$ >0,05 (H0 diterima). Untuk sig. pada $T_3$ kelompok kombinasi ¾ : ½ dan kombinasi 1 : ½ <0,05 (H0 ditolak) yang berarti berat badan tidak terdistribusi normal karena terdapat hewan uji yang mati akibat mengalami hipoglikemik.

**Lampiran 17. Hasil uji statistik One Way Anova Rata-rata Berat Badan**

**Test of Homogeneity of Variances**

| | | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| T0 | Based on Mean | .885 | 5 | 24 | .506 |
| | Based on Median | .440 | 5 | 24 | .816 |
| | Based on Median and with adjusted df | .440 | 5 | 15.385 | .814 |
| | Based on trimmed mean | .809 | 5 | 24 | .554 |
| T1 | Based on Mean | .596 | 5 | 24 | .703 |
| | Based on Median | .213 | 5 | 24 | .953 |
| | Based on Median and with adjusted df | .213 | 5 | 18.367 | .952 |
| | Based on trimmed mean | .576 | 5 | 24 | .718 |
| T2 | Based on Mean | 1.135 | 5 | 24 | .369 |
| | Based on Median | .716 | 5 | 24 | .618 |
| | Based on Median and with adjusted df | .716 | 5 | 16.889 | .620 |
| | Based on trimmed mean | 1.089 | 5 | 24 | .392 |
| T3 | Based on Mean | 4.029 | 5 | 24 | .009 |
| | Based on Median | .789 | 5 | 24 | .568 |
| | Based on Median and with adjusted df | .789 | 5 | 8.212 | .585 |
| | Based on trimmed mean | 2.993 | 5 | 24 | .031 |

Dari data output di atas maka dapat disimpulkan bahwa dari semua kelompok nilai sig. pada $T_0$, $T_1$, dan $T_2$ >0,05 (H0 diterima) yang berarti berat badan terdistribusi homogen. Untuk sig. pada $T_3$ <0,05 (H0 ditolak) yang berarti berat badan tidak terdistribusi homogen karena kelompok kombinasi ¾ : ½ dan kombinasi 1 : ½ terdapat hewan uji yang mati akibat mengalami hipoglikemik.

Nilai sig. normalitas dan homogenitas pada $T_0$, $T_1$, dan $T_2$ >0,05 (H0 diterima) maka analisis dilanjutkan dengan *tukey*. nilai sig. normalitas dan homogenitas pada $T_3$ <0,05 (H0 ditolak) maka analisis dilanjutkan dengan *kruskal wallis*.

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| T0 | Between Groups | 7.900 | 5 | 1.580 | 1.030 | .422 |
| | Within Groups | 36.800 | 24 | 1.533 | | |
| | Total | 44.700 | 29 | | | |
| T1 | Between Groups | 20.300 | 5 | 4.060 | 2.619 | .050 |
| | Within Groups | 37.200 | 24 | 1.550 | | |
| | Total | 57.500 | 29 | | | |
| T2 | Between Groups | 17.367 | 5 | 3.473 | 2.004 | .114 |
| | Within Groups | 41.600 | 24 | 1.733 | | |
| | Total | 58.967 | 29 | | | |
| T3 | Between Groups | 237.767 | 5 | 47.553 | .924 | .483 |
| | Within Groups | 1235.600 | 24 | 51.483 | | |
| | Total | 1473.367 | 29 | | | |

Pada uji ANOVA nilai $T_1$ berada pada nilai sig 0,05 menunjukkan bahwa terdapat perbedaan dengan $T_0$, $T_2$, dan $T_3$ yang berarti terjadi penurunan berat badan setelah diinduksi aloksan karena kadar gula darah yang meningkat.

## Lampiran 18. Hasil Uji Statistika One Way Anova Tukey

**T0**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 1 |
|---|---|---|
| ekstrak daun melinjo dosis tunggal | 5 | 25.40 |
| kontrol hiperglikemik | 5 | 25.80 |
| kombinasi 3/4:1/2 | 5 | 25.80 |
| kombinasi 1:1/2 | 5 | 26.20 |
| kombinasi 1/2:1/2 | 5 | 26.40 |
| kontrol obat | 5 | 27.00 |
| Sig. | | .349 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**T1**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 1 |
|---|---|---|
| ekstrak daun melinjo dosis tunggal | 5 | 21.60 |
| kombinasi 1/2:1/2 | 5 | 22.00 |
| kombinasi 3/4:1/2 | 5 | 22.20 |
| kombinasi 1:1/2 | 5 | 22.40 |
| kontrol obat | 5 | 22.60 |
| kontrol hiperglikemik | 5 | 23.80 |
| Sig. | | .067 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**T2**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 1 |
|---|---|---|
| kontrol hiperglikemik | 5 | 22.80 |
| ekstrak daun melinjo dosis tunggal | 5 | 23.60 |
| kombinasi 3/4:1/2 | 5 | 24.20 |
| kontrol obat | 5 | 25.00 |
| kombinasi 1/2:1/2 | 5 | 25.00 |
| kombinasi 1:1/2 | 5 | 25.20 |
| Sig. | | .057 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**Lampiran 19. Hasil Uji Statistika One Way Anova Kruskal Wallis $T_3$**

**Test Statistics[a,b]**

| | T3 |
|---|---|
| Kruskal-Wallis H | 10.965 |
| df | 5 |
| Asymp. Sig. | .052 |

a. Kruskal Wallis Test
b. Grouping Variable: kelompok

Pada uji Kruskal Wallis nilai sig. >0,05 berarti tidak terdapat perbedaan berat badan yang signifikan dari setiap perlakuan. Hal ini dimungkinkan karena pada $T_3$ terdapat hewan uji yang mati akibat hipoglikemik dan pada kontrol hiperglikemik berat badan hewan uji mengalami penurunan berturut-turut.

**Lampiran 20. Perhitungan dosis**

1. **Perhitungan dosis aloksan**

   Larutan stok aloksan dibuat konsentrasi 1%

   Dosis aloksan = $\frac{20\ g}{1000\ g}$ × 150 mg = 3 mg/20 g BB mencit

   Larutan stok 1% = 1 g/100 mL
   = 1000 mg/ 100 mL

   Volume pemberian = 3 mg/1000 mg x 100 mL
   = 0,3 mL/20 g BB mencit

   **Jadi,** dalam 1 mL larutan mengandung 10 mg. Volume pemberian aloksan untuk mencit dengan berat 20 g yaitu sebanyak 0,3 mL

| Kelompok | BB mencit (g) | Dosis | Volume pemberian (mL) |
|---|---|---|---|
| 1 | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{1000\ mg}$ x 100 mL = 0,405 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| 2 | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |

| | | | |
|---|---|---|---|
| | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{1000\ mg}$ x 100 mL = 0,42 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{1000\ mg}$ x 100 mL = 0,42 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{1000\ mg}$ x 100 mL = 0,405 mL |
| 3 | 24 | $\frac{24\ g}{20\ g}$ x 3 mg = 3,6 mg | $\frac{3,6\ mg}{1000\ mg}$ x 100 mL = 0,36 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 3 mg = 3,6 mg | $\frac{3,6\ mg}{1000\ mg}$ x 100 mL = 0,36 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{1000\ mg}$ x 100 mL = 0,42 mL |
| 4 | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{1000\ mg}$ x 100 mL = 0,42 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{1000\ mg}$ x 100 mL = 0,405 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 3 mg = 3,6 mg | $\frac{3,6\ mg}{1000\ mg}$ x 100 mL = 0,36 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{1000\ mg}$ x 100 mL = 0,405mL |
| 5 | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{1000\ mg}$ x 100 mL = 0,405 mL |
| 6 | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{1000\ mg}$ x 100 mL = 0,405 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{1000\ mg}$ x 100 mL = 0,39 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{3,75\ mg}{1000\ mg}$ x 100 mL = 0,375mL |

| | | | |
|---|---|---|---|
| | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{1000\ mg}$ x 100 mL = 0,42 mL |

**2. Perhitungan dosis CMC Na 0,5%**

Larutan stok CMC Na dibuat konsentrasi 0,5%

Larutan stok 0,5% = 0,5 g/100 mL

= 500 mg/100 mL

Jadi, dalam 1 mL larutan mengandung 5 mg CMC. Volume pemberian CMC Na untuk mencit dengan berat 20 g yaitu sebanyak 3 mL.

**3. Perhitungan dosis glibenklamid 0,65 mg/kg BB mencit**

- Larutan stok glibenklamid dibuat konsentrasi 0,005%

  Cara pembuatan = menggerus 5 tablet glibenklamid kemudian ditimbang dan dibagi 5 sama rata, setelah itu diambil 1 dari 5 bagian tersebut dan menimbang CMC Na 0,5% (500 mg). CMC Na 500 mg dimasukkan ke dalam mortir hangat kemudian ditambahkan 30 mL akuades panas sedikit demi sedikit aduk ad homogen dan mengembang. Setelah CMC Na mengembang kemudian glibenklamid dimasukkan lalu tambahkan akuades hingga 100 mL diaduk ad homogen.

  Larutan stok 0,005% = 5 mg/100 mL

  = 0,05 mg/mL

- Dosis untuk mencit 20 g = 0,65 mg/kg BB mencit

  = 0,65 mg/1000 g BB mencit

  $= \frac{20\ g}{1000\ g} \times 0,65\ mg$

  = 0,013 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g

  $= \frac{0,013\ mg}{5\ mg} \times 100\ \%$

  = 0,26 mL/20 g BB mencit

| Kontrol obat (glibenklamid) | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis** | **Volume pemberian** |
| $T_0$ | 26 | $\frac{26\ g}{20\ g}$ x 0,013 mg = 0,017 mg | $\frac{0,017\ mg}{5\ mg}$ x 100 mL = 0,338 mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 0,013 mg = 0,018 mg | $\frac{0,018\ mg}{5\ mg}$ x 100 mL = 0,364 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,013 mg = 0,017 mg | $\frac{0,017\ mg}{5\ mg}$ x 100 mL = 0,338 mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 0,013 mg = 0,018 mg | $\frac{0,018\ mg}{5\ mg}$ x 100 mL = 0,364 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,013 mg = 0,0176mg | $\frac{0,0176\ mg}{5\ mg}$x 100 mL = 0,351mL |
| $T_1$ | 22 | $\frac{22\ g}{20\ g}$ x 0,013 mg = 0,014 mg | $\frac{0,014\ mg}{5\ mg}$ x 100 mL = 0,286 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,013 mg = 0,016 mg | $\frac{0,016\ mg}{5\ mg}$ x 100 mL = 0,312 mL |
| | 21 | $\frac{21\ g}{20\ g}$ x 0,013 mg = 0,0137mg | $\frac{0,0137\ mg}{5\ mg}$x 100 mL = 0,273mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,013 mg = 0,016 mg | $\frac{0,016\ mg}{5\ mg}$ x 100 mL = 0,312mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 0,013 mg = 0,014 mg | $\frac{0,014\ mg}{5\ mg}$ x 100 mL = 0,286 mL |
| $T_2$ | 25 | $\frac{25\ g}{20\ g}$ x 0,013 mg = 0,016 mg | $\frac{0,016\ mg}{5\ mg}$ x 100 mL = 0,325 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,013 mg = 0,017 mg | $\frac{0,017\ mg}{5\ mg}$ x 100 mL = 0,338 mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 0,013 mg = 0,015 mg | $\frac{0,015\ mg}{5\ mg}$ x 100 mL = 0,299 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,013 mg = 0,0176mg | $\frac{0,0176\ mg}{5\ mg}$x 100 mL = 0,351mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,013 mg = 0,016 mg | $\frac{0,016\ mg}{5\ mg}$ x 100 mL = 0,312 mL |
| $T_3$ | 27 | $\frac{27\ g}{20\ g}$ x 0,013 mg = 0,0176mg | $\frac{0,0176\ mg}{5\ mg}$x 100 mL = 0,351mL |
| | 29 | $\frac{29\ g}{20\ g}$ x 0,013 mg = 0,019 mg | $\frac{0,019\ mg}{5\ mg}$ x 100 mL = 0,377 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,013 mg = 0,017 mg | $\frac{0,017\ mg}{5\ mg}$ x 100 mL = 0,338 mL |
| | 30 | $\frac{30\ g}{20\ g}$ x 0,013 mg = 0,020 mg | $\frac{0,020\ mg}{5\ mg}$ x 100 mL = 0,39 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,013 mg = 0,0176mg | $\frac{0,0176\ mg}{5\ mg}$x 100 mL = 0,351mL |

**4. Perhitungan dosis tunggal ekstrak etanol daun melinjo 300 mg/kg BB mencit**

- Larutan stok ekstrak etanol daun melinjo dibuat konsentrasi 2%

  Larutan stok 2% = 2 g/100 mL
  = 2000 mg/100 mL
  = 20 mg/1 mL

  Jadi, dalam 1 mL larutan tersebut mengandung 20 mg ekstrak etanol daun melinjo.

- Dosis untuk mencit 20 g = 300 mg/kg BB mencit
  = 300 mg/1000 g BB mencit
  = 20 g/1000 g x 300 mg
  $= \frac{20\ g}{1000\ g} \times 300\ mg$
  = 6 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g
  $= \frac{6\ mg}{2000\ mg} \times 100\%$
  = 0,3 mL/20 g BB mencit

| Ekstrak etanol daun melinjo dosis tunggal | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis** | **Volume pemberian** |
| $T_0$ | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 6 mg = 7,5 mg | $\frac{7,5\ mg}{2000\ mg}$ x 100 mL = 0,375mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 6 mg = 8,4 mg | $\frac{8,4\ mg}{2000\ mg}$ x 100 mL = 0,42 mL |
| $T_1$ | 20 | $\frac{20\ g}{20\ g}$ x 6 mg = 6 mg | $\frac{6\ mg}{2000\ mg}$ x 100 mL = 0,3 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 6 mg = 6,6 mg | $\frac{6,6\ mg}{2000\ mg}$ x 100 mL = 0,33mL |
| | 21 | $\frac{21\ g}{20\ g}$ x 6 mg = 6,3 mg | $\frac{6,3\ mg}{2000\ mg}$ x 100 mL = 0,315mL |

| | | | |
|---|---|---|---|
| | 21 | $\frac{21\ g}{20\ g}$ x 6 mg = 6,3 mg | $\frac{6,3\ mg}{2000\ mg}$ x 100 mL = 0,315mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| $T_2$ | 23 | $\frac{23\ g}{20\ g}$ x 6 mg = 6,9 mg | $\frac{6.9\ mg}{2000\ mg}$ x 100 mL = 0,345mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 6 mg = 6,6 mg | $\frac{6,6\ mg}{2000\ mg}$ x 100 mL = 0,33mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 6 mg = 0,69 mg | $\frac{0,69\ mg}{2000\ mg}$ x 100 mL = 0,345mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39 mL |
| $T_3$ | 27 | $\frac{27\ g}{20\ g}$ x 6 mg = 8,1 mg | $\frac{8,1\ mg}{2000\ mg}$ x 100 mL = 0,405mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 6 mg = 7,5 mg | $\frac{7,5\ mg}{2000\ mg}$ x 100 mL = 0,375mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| | 29 | $\frac{29\ g}{20\ g}$ x 6 mg = 0,87 mg | $\frac{0,87\ mg}{2000\ mg}$ x 100 mL = 0,435mL |

**5. Perhitungan dosis kombinasi ekstrak daun melinjo : glibenklamid (½ : ½ ) (150 : 0,325 mg/kg BB mencit)**

- Ekstrak daun melinjo 1/2 dosis (150 mg/kg BB mencit)

  Larutan stok 2% = 2 g/100 mL

  = 2000 mg/100 mL

  = 20 mg/1 mL

  Dosis untuk mencit 20 g = 150 mg/kg BB mencit

  = 150 mg/1000 g BB mencit

  $= \frac{20\ g}{1000\ g} \times 150\ mg$

  = 3 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g

  $= \frac{3\ mg}{2000\ mg} \times 100\%$

  = 0,15 mL/20 g BB mencit

- Dosis glibenklamid 1/2 dosis (0,325 mg/kg BB mencit)

  Larutan stok 0,005% = 5 mg/100 mL

  = 0,05 mg/1 mL

  Dosis untuk mencit 20 g = 0,325 mg/kg BB mencit

  = 0,325 mg/1000 g BB mencit

  $= \frac{20\ g}{1000\ g} \times 0{,}325\ mg$

  = 0,0065 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g

  $= \frac{0{,}0065\ mg}{5\ mg} \times 100\%$

  = 0,13 mL/20 g BB mencit

| **Kombinasi ekstrak : glibenklamid (½ : ½ )** | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis ekstrak daun melinjo (150 mg/kgBB mencit)** | **Volume ekstrak daun melinjo (150 mg/kgBB mencit)** |
| $T_0$ | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4{,}2\ mg}{2000\ mg}$ x 100 mL = 0,21 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3{,}9\ mg}{2000\ mg}$ x 100 mL = 0,195 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4{,}05\ mg}{2000\ mg}$ x 100 mL = 0,20mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 3 mg = 3,6 mg | $\frac{3{,}6\ mg}{2000\ mg}$ x 100 mL = 0,18mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4{,}05\ mg}{2000\ mg}$ x 100 mL = 0,20mL |
| $T_1$ | 23 | $\frac{23\ g}{20\ g}$ x 3 mg = 3,45 mg | $\frac{3{,}45\ mg}{2000\ mg}$ x 100 mL = 0,17 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 3 mg = 3,3 mg | $\frac{3{,}3\ mg}{2000\ mg}$ x 100 mL = 0,165 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 3 mg = 3,3 mg | $\frac{3{,}3\ mg}{2000\ mg}$ x 100 mL = 0,165 mL |
| | 20 | $\frac{20\ g}{20\ g}$ x 3 mg = 3 mg | $\frac{3\ mg}{2000\ mg}$ x 100 mL = 0,15 mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 3 mg = 3,45 mg | $\frac{3{,}45\ mg}{2000\ mg}$ x 100 mL = 0,17 mL |
| $T_2$ | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{mg}{2000\ mg}$ x 100 mL = 0,19 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 3 mg = 3,6 mg | $\frac{3{,}6\ mg}{2000\ mg}$ x 100 mL = 0,18mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{mg}{2000\ mg}$ x 100 mL = 0,19 mL |

| | | | |
|---|---|---|---|
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{2000\ mg}$ x 100 mL = 0,195 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 3 mg = 3,75 mg | $\frac{mg}{2000\ mg}$ x 100 mL = 0,19 mL |
| $T_3$ | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{2000\ mg}$ x 100 mL = 0,21 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 3 mg = 4,05 mg | $\frac{4,05\ mg}{2000\ mg}$ x 100 mL = 0,20mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{2000\ mg}$ x 100 mL = 0,195 mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 3 mg = 4,2 mg | $\frac{4,2\ mg}{2000\ mg}$ x 100 mL = 0,21 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 3 mg = 3,9 mg | $\frac{3,9\ mg}{2000\ mg}$ x 100 mL = 0,195 mL |

| **Kombinasi ekstrak : glibenklamid (½ : ½ )** | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis glibenklamid 0,325 mg/kg BB mencit** | **Volume glibenklamid 0,325 mg/kg BB mencit** |
| $T_0$ | 28 | $\frac{28\ g}{20\ g}$ x 0,0065mg = 0,0091mg | $\frac{0,0091\ mg}{5\ mg}$ x 100 mL = 0,18 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,169mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065 mg = 0,0088mg | $\frac{0,0088\ mg}{5\ mg}$ x 100 mL = 0,176mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,0065 mg = 0,0078mg | $\frac{0,0078\ mg}{5\ mg}$ x 100 mL = 0,156mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065 mg = 0,0088mg | $\frac{0,0088\ mg}{5\ mg}$ x 100mL = 0,176mL |
| $T_1$ | 23 | $\frac{23\ g}{20\ g}$ x 0,0065 mg = 0,0075mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 0,0065 mg = 0,007 mg | $\frac{0,007\ mg}{5\ mg}$ x 100 mL = 0,14 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 0,0065 mg = 0,007 mg | $\frac{0,007\ mg}{5\ mg}$ x 100 mL = 0,14 mL |
| | 20 | $\frac{20\ g}{20\ g}$ x 0,0065 mg = 0,0065mg | $\frac{0,0065\ mg}{5\ mg}$ x 100 mL = 0,13 mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 0,0065 mg = 0,0075mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| $T_2$ | 25 | $\frac{25\ g}{20\ g}$ x 0,0065 mg = 0,008 mg | $\frac{mg}{5\ mg}$ x 100 mL = 0,16 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,0065 mg = 0,0078mg | $\frac{0,0078\ mg}{5\ mg}$ x 100 mL = 0,156mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065 mg = 0,008 mg | $\frac{mg}{5\ mg}$ x 100 mL = 0,16 mL |

| | | | |
|---|---|---|---|
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100mL = 0,169mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065 mg = 0,008 mg | $\frac{mg}{5\ mg}$ x 100 mL = 0,16 mL |
| $T_3$ | 28 | $\frac{28\ g}{20\ g}$x0,0065mg = 0,0091mg | $\frac{0,0091\ mg}{5\ mg}$ x 100 mL = 0,18 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065 mg = 0,0088mg | $\frac{0,0088\ mg}{5\ mg}$ x 100mL = 0,176mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100mL = 0,169mL |
| | 28 | $\frac{28\ g}{20\ g}$x0,0065mg = 0,0091mg | $\frac{0,0091\ mg}{5\ mg}$ x 100 mL = 0,18 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100mL = 0,169mL |

**6. Perhitungan dosis kombinasi ekstrak daun melinjo : glibenklamid (¾ : ½) (225 : 0,325 mg/kg BB mencit)**

- Ekstrak daun melinjo 3/4 dosis (225 mg/kg BB mencit)

  Larutan stok 2% = 2 g/100 mL
  = 2000 mg/100 mL
  = 20 mg/1 mL

  Dosis untuk mencit 20 g = 225 mg/kg BB mencit
  = 225 mg/1000 g BB mencit
  $= \frac{20\ g}{1000} \times 225\ mg$
  = 4,5 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g
  $= \frac{4,5\ mg}{2000\ mg} \times 100\%$
  = 0,225 mL/20 g BB mencit

- Dosis glibenklamid 1/2 dosis (0,325 mg/kg BB mencit)

  Larutan stok 0,005% = 5 mg/100 mL
  = 0,05 mg/1 mL

  Dosis untuk mencit 20 g = 0,325 mg/kg BB mencit
  = 0,325 mg/1000 g BB mencit
  $= \frac{20\ g}{1000\ g} \times 0,325\ mg$

= 0,0065 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g

$$= \frac{0{,}0065\ mg}{5\ mg} \times 100\%$$

= 0,13 mL/20 g BB mencit

| **Kombinasi ekstrak : glibenklamid (¾ : ½)** | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis ekstrak daun melinjo (225 mg/kgBB mencit)** | **Volume ekstrak daun melinjo (225 mg/kgBB mencit)** |
| $T_0$ | 25 | $\frac{25\ g}{20\ g}$ x 4,5 mg = 5,625 mg | $\frac{5{,}625\ mg}{2000\ mg}$ x 100 mL = 0,28 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 4,5 mg = 5,85 mg | $\frac{5{,}85\ mg}{2000\ mg}$ x 100 mL = 0,29 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 4,5 mg = 5,85 mg | $\frac{5{,}85\ mg}{2000\ mg}$ x 100 mL = 0,29 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 4,5 mg = 5,625 mg | $\frac{5{,}625\ mg}{2000\ mg}$ x 100 mL = 0,28 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 4,5 mg = 6,075 mg | $\frac{6{,}075\ mg}{2000\ mg}$ x 100 mL = 0,30 mL |
| $T_1$ | 22 | $\frac{22\ g}{20\ g}$ x 4,5 mg = 4,95 mg | $\frac{4{,}95\ mg}{2000\ mg}$ x 100 mL = 0,25 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 4,5 mg = 4,95 mg | $\frac{4{,}95\ mg}{2000\ mg}$ x 100 mL = 0,25 mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 4,5 mg = 5,175 mg | $\frac{5{,}175\ mg}{2000\ mg}$ x 100 mL = 0,26 mL |
| | 21 | $\frac{21\ g}{20\ g}$ x 4,5 mg = 4,725 mg | $\frac{4{,}725\ mg}{2000\ mg}$ x 100 mL = 0,24 mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 4,5 mg = 5,175 mg | $\frac{5{,}175\ mg}{2000\ mg}$ x 100 mL = 0,26 mL |
| $T_2$ | 23 | $\frac{23\ g}{20\ g}$ x 4,5 mg = 5,175 mg | $\frac{5{,}175\ mg}{2000\ mg}$ x 100 mL = 0,26 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 4,5 mg = 5,4 mg | $\frac{5{,}4\ mg}{2000\ mg}$ x 100 mL = 0,27 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 4,5 mg = 5,625 mg | $\frac{5{,}625\ mg}{2000\ mg}$ x 100 mL = 0,28 mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 4,5 mg = 5,175 mg | $\frac{5{,}175\ mg}{2000\ mg}$ x 100 mL = 0,26 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 4,5 mg = 5,85 mg | $\frac{5{,}85\ mg}{2000\ mg}$ x 100 mL = 0,29 mL |
| $T_3$ | 25 | $\frac{25\ g}{20\ g}$ x 4,5 mg = 5,625 mg | $\frac{5{,}625\ mg}{2000\ mg}$ x 100 mL = 0,28 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 4,5 mg = 6,075 mg | $\frac{6{,}075\ mg}{2000\ mg}$ x 100 mL = 0,30 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 4,5 mg = 6,075 mg | $\frac{6{,}075\ mg}{2000\ mg}$ x 100 mL = 0,30 mL |

| | | | |
|---|---|---|---|
| | Mati | - | - |
| | 29 | $\frac{29\ g}{20\ g}$ x 4,5 mg = 6,525 mg | $\frac{6,38\ mg}{2000\ mg}$ x 100 mL = 0,33 mL |

| **Kombinasi ekstrak : glibenklamid (¾ : ½)** | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis glibenklamid 0,325 mg/kg BB mencit** | **Volume glibenklamid 0,325 mg/kg BB mencit** |
| $T_0$ | 25 | $\frac{25\ g}{20\ g}$ x 0,0065mg = 0,0081 mg | $\frac{0,0081mg}{5\ mg}$ x100mL = 0,1625mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,169mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,169mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065mg = 0,0081 mg | $\frac{0,0081mg}{5\ mg}$ x100mL = 0,1625mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065mg = 0,0088 mg | $\frac{0,0088mg}{5\ mg}$ x100mL = 0,1755mL |
| $T_1$ | 22 | $\frac{22\ g}{20\ g}$ x 0,0065mg = 0,0072 mg | $\frac{0,0072\ mg}{5\ mg}$ x 100 mL = 0,143mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 0,0065mg = 0,0072 mg | $\frac{0,0072\ mg}{5\ mg}$ x 100 mL = 0,143mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 0,0065mg = 0,0075 mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| | 21 | $\frac{21\ g}{20\ g}$ x 0,0065mg = 0,0068 mg | $\frac{0,0068mg}{5\ mg}$ x100mL = 0,1365mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 0,0065mg = 0,0075 mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| $T_2$ | 23 | $\frac{23\ g}{20\ g}$ x 0,0065mg = 0,0075 mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,0065mg = 0,0078 mg | $\frac{0,0078\ mg}{5\ mg}$ x 100 mL = 0,156mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065mg = 0,0081 mg | $\frac{0,0081mg}{5\ mg}$ x100mL = 0,1625mL |
| | 23 | $\frac{23\ g}{20\ g}$ x 0,0065mg = 0,0075 mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065mg = 0,0085mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,169mL |
| $T_3$ | 25 | $\frac{25\ g}{20\ g}$ x 0,0065mg = 0,0081 mg | $\frac{0,0081mg}{5\ mg}$ x100mL = 0,1625mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065mg = 0,0088mg | $\frac{0,0088mg}{5\ mg}$ x100mL = 0,1755mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065mg = 0,0088mg | $\frac{0,0088mg}{5\ mg}$ x100mL = 0,1755mL |
| | Mati | - | - |
| | 29 | $\frac{29\ g}{20\ g}$ x 0,0065mg = 0,0094 mg | $\frac{0,0094mg}{5\ mg}$ x100mL = 0,1885mL |

**7. Perhitungan dosis kombinasi ekstrak daun melinjo : glibenklamid (1 : ½ ) (300 : 0,325 mg/kg BB mencit**

- Ekstrak daun melinjo 1 dosis (300 mg/kg BB mencit)

  Larutan stok 2% = 2 g/100 mL
  = 2000 mg/100 mL
  = 20 mg/1 mL

  Dosis untuk mencit 20 g = 300 mg/kg BB mencit
  = 300 mg/1000 g BB mencit
  $= \frac{20\ g}{1000\ g} \times 300\ mg$
  = 6 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g
  $= \frac{6\ mg}{2000\ mg} \times 100\%$
  = 0,3 mL/20 g BB mencit

- Dosis glibenklamid 1/2 dosis (0,325 mg/kg BB mencit)

  Larutan stok 0,005% = 5 mg/100 mL
  = 0,05 mg/1 mL

  Dosis untuk mencit 20 g = 0,325 mg/kg BB mencit
  = 0,325 mg/1000 g BB mencit
  $= \frac{20\ g}{1000\ g} \times 0{,}325\ mg$
  = 0,0065 mg/20 g BB mencit

- Volume pemberian untuk mencit 20 g
  $= \frac{0{,}0065\ mg}{5\ mg} \times 100\%$
  = 0,13 mL/20 g BB mencit

| Kombinasi ekstrak : glibenklamid (1 : ½) | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis ekstrak daun melinjo (300 mg/kgBB mencit)** | **Volume ekstrak daun melinjo (300 mg/kgBB mencit)** |
| $T_0$ | 27 | $\frac{27\ g}{20\ g}$ x 6 mg = 8,1 mg | $\frac{8,1\ mg}{2000\ mg}$ x 100 mL = 0,405 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 6 mg = 7,5 mg | $\frac{7,5\ mg}{2000\ mg}$ x 100 mL = 0,275 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 6 mg = 7,5 mg | $\frac{7,5\ mg}{2000\ mg}$ x 100 mL = 0,275 mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 6 mg = 8,4 mg | $\frac{8,4\ mg}{2000\ mg}$ x 100 mL = 0,42 mL |
| $T_1$ | 23 | $\frac{23\ g}{20\ g}$ x 6 mg = 6,9 mg | $\frac{6,9\ mg}{2000\ mg}$ x 100 mL = 0,345 mL |
| | 21 | $\frac{21\ g}{20\ g}$ x 6 mg = 6,3 mg | $\frac{6,3\ mg}{2000\ mg}$ x 100 mL = 0,315 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 6 mg = 6,6 mg | $\frac{6,6\ mg}{2000\ mg}$ x 100 mL = 0,33 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 6 mg = 6,6 mg | $\frac{6,6\ mg}{2000\ mg}$ x 100 mL = 0,33 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| $T_2$ | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 6 mg = 7,5 mg | $\frac{7,5\ mg}{2000\ mg}$ x 100 mL = 0,275 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 6 mg = 7,2 mg | $\frac{7,2\ mg}{2000\ mg}$ x 100 mL = 0,36 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 6 mg = 8,1 mg | $\frac{8,1\ mg}{2000\ mg}$ x 100 mL = 0,405 mL |
| $T_3$ | mati | - | - |
| | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 6 mg = 8,1 mg | $\frac{8,1\ mg}{2000\ mg}$ x 100 mL = 0,405 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 6 mg = 7,8 mg | $\frac{7,8\ mg}{2000\ mg}$ x 100 mL = 0,39 mL |
| | 30 | $\frac{30\ g}{20\ g}$ x 6 mg = 9 mg | $\frac{9\ mg}{2000\ mg}$ x 100 mL = 0,45 mL |

| Kombinasi ekstrak : glibenklamid (1 : ½) | | | |
|---|---|---|---|
| **Perlakuan** | **BB mencit (g)** | **Dosis glibenklamid 0,325 mg/kg BB mencit** | **Volume glibenklamid 0,325 mg/kg BB mencit** |
| $T_0$ | 27 | $\frac{27\ g}{20\ g}$ x 0,0065 mg = 0,0088 mg | $\frac{0,0088\ mg}{5\ mg}$ x 100 mL = 0,18 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065 mg = 0,0081 mg | $\frac{0,0081\ mg}{5\ mg}$ x 100 mL = 0,16 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065 mg = 0,0085 mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,17 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065 mg = 0,0081 mg | $\frac{0,0081\ mg}{5\ mg}$ x 100 mL = 0,16 mL |
| | 28 | $\frac{28\ g}{20\ g}$ x 0,0065 mg = 0,0091 mg | $\frac{0,0091\ mg}{5\ mg}$ x 100 mL = 0,182mL |
| $T_1$ | 23 | $\frac{23\ g}{20\ g}$ x 0,0065 mg = 0,0075 mg | $\frac{0,0075\ mg}{5\ mg}$ x 100 mL = 0,15 mL |
| | 21 | $\frac{21\ g}{20\ g}$ x 0,0065 mg = 0,0068 mg | $\frac{0,0068\ mg}{5\ mg}$ x 100 mL = 0,14 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 0,0065 mg = 0,0072 mg | $\frac{0,0072\ mg}{5\ mg}$ x100mL = 0,143 mL |
| | 22 | $\frac{22\ g}{20\ g}$ x 0,0065 mg = 0,0072 mg | $\frac{0,0072\ mg}{5\ mg}$ x100mL = 0,143 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,0065 mg = 0,0078 mg | $\frac{0,0078\ mg}{5\ mg}$ x 100mL = 0,156 mL |
| $T_2$ | 26 | $\frac{26\ g}{20\ g}$ x 0,0065 mg = 0,0085 mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,17 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,0065 mg = 0,0078 mg | $\frac{0,0078\ mg}{5\ mg}$ x 100mL = 0,156 mL |
| | 25 | $\frac{25\ g}{20\ g}$ x 0,0065 mg = 0,0081 mg | $\frac{0,0081\ mg}{5\ mg}$ x 100 mL = 0,16 mL |
| | 24 | $\frac{24\ g}{20\ g}$ x 0,0065 mg = 0,0078 mg | $\frac{0,0078\ mg}{5\ mg}$ x 100mL = 0,156 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065 mg = 0,0088 mg | $\frac{0,0088\ mg}{5\ mg}$ x 100 mL = 0,18 mL |
| $T_3$ | mati | - | - |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065 mg = 0,0085 mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,17 mL |
| | 27 | $\frac{27\ g}{20\ g}$ x 0,0065 mg = 0,0088 mg | $\frac{0,0088\ mg}{5\ mg}$ x 100 mL = 0,18 mL |
| | 26 | $\frac{26\ g}{20\ g}$ x 0,0065 mg = 0,0085 mg | $\frac{0,0085\ mg}{5\ mg}$ x 100 mL = 0,17 mL |
| | 30 | $\frac{30\ g}{20\ g}$ x 0,0065 mg = 0,0098 mg | $\frac{0,0098\ mg}{5\ mg}$ x100mL = 0,195 mL |

**Lampiran 21. Hasil pengukuran kadar glukosa darah mencit**

| Kelompok | T0 | T1 | T2 | T3 |
|---|---|---|---|---|
| Kontrol hiperglikemik (CMC Na 0,5%) | 114 | 201 | 217 | 220 |
| | 108 | 194 | 199 | 213 |
| | 104 | 205 | 210 | 214 |
| | 98 | 198 | 205 | 213 |
| | 108 | 196 | 201 | 217 |
| Rata-rata ± SD | 106,40±5,90 | 198,80±4,32 | 206,40±7,27 | 215,40±3,05 |
| Kontrol obat (Glibenklamid 1 tab/100 mL) | 109 | 192 | 159 | 96 |
| | 112 | 203 | 156 | 101 |
| | 114 | 203 | 143 | 95 |
| | 110 | 215 | 145 | 93 |
| | 114 | 207 | 157 | 106 |
| Rata-rata ± SD | 111,80 ± 2,28 | 204,00 ± 8,31 | 152,00 ± 7,42 | 98,20 ± 5,26 |
| Ekstrak etanol daun melinjo (EEDM) tunggal | 92 | 201 | 150 | 89 |
| | 91 | 196 | 149 | 86 |
| | 97 | 207 | 153 | 92 |
| | 101 | 211 | 157 | 101 |
| | 104 | 216 | 162 | 112 |
| Rata-rata ± SD | 97 ± 5,61 | 206,2 ± 7,92 | 154,2 ± 5,36 | 96 ± 10,56 |
| Kombinasi EEDM:glibenklamid (1/2:1/2) | 106 | 210 | 158 | 96 |
| | 107 | 216 | 160 | 102 |
| | 104 | 209 | 153 | 91 |
| | 95 | 198 | 147 | 80 |
| | 99 | 206 | 147 | 85 |
| Rata-rata ± SD | 102,2 ± 5,07 | 207,8 ± 6,58 | 153 ± 6,04 | 90,8 ± 8,70 |
| Kombinasi EEDM:glibenklamid (3/4:1/2) | 108 | 203 | 138 | 59 |
| | 100 | 199 | 132 | 52 |
| | 121 | 219 | 151 | 72 |
| | 99 | 195 | 132 | - |
| | 117 | 211 | 147 | 66 |
| Rata-rata ± SD | 109 ± 9,87 | 205,4 ± 9,63 | 140 ± 8,69 | 62,25 ± 8,66 |
| Kombinasi EEDM:glibenklamid (1:1/2) | 92 | 188 | 123 | - |
| | 107 | 211 | 139 | 58 |
| | 111 | 217 | 145 | 64 |
| | 97 | 192 | 123 | 47 |
| | 103 | 195 | 136 | 53 |
| Rata-rata ± SD | 102 ± 7,62 | 200,6 ± 12,66 | 133,2 ± 9,86 | 55,5 ± 7,23 |

**Lampiran 22. Hasil uji statistik Normalitas Shapiro-Wilk Kadar Glukosa Darah**

**Tests of Normality**

| | | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|---|
| | kelompok | Statistic | df | Sig. | Statistic | df | Sig. |
| T0 | kontrol hiperglikemik | .207 | 5 | .200* | .967 | 5 | .853 |
| | kontrol obat | .233 | 5 | .200* | .884 | 5 | .329 |
| | ekstrak tunggal | .214 | 5 | .200* | .928 | 5 | .582 |
| | kombinasi 1/2:1/2 | .239 | 5 | .200* | .909 | 5 | .460 |
| | kombinasi 3/4:1/2 | .219 | 5 | .200* | .899 | 5 | .405 |
| | kombinasi 1:1/2 | .152 | 5 | .200* | .975 | 5 | .908 |
| T1 | kontrol hiperglikemik | .173 | 5 | .200* | .970 | 5 | .875 |
| | kontrol obat | .252 | 5 | .200* | .957 | 5 | .787 |
| | ekstrak tunggal | .144 | 5 | .200* | .984 | 5 | .953 |
| | kombinasi 1/2:1/2 | .192 | 5 | .200* | .967 | 5 | .858 |
| | kombinasi 3/4:1/2 | .198 | 5 | .200* | .957 | 5 | .787 |
| | kombinasi 1:1/2 | .271 | 5 | .200* | .888 | 5 | .347 |
| T2 | kontrol hiperglikemik | .209 | 5 | .200* | .902 | 5 | .421 |
| | kontrol obat | .305 | 5 | .144 | .832 | 5 | .144 |
| | ekstrak tunggal | .189 | 5 | .200* | .929 | 5 | .593 |
| | kombinasi 1/2:1/2 | .240 | 5 | .200* | .874 | 5 | .282 |
| | kombinasi 3/4:1/2 | .221 | 5 | .200* | .874 | 5 | .284 |
| | kombinasi 1:1/2 | .250 | 5 | .200* | .879 | 5 | .304 |
| T3 | kontrol hiperglikemik | .259 | 5 | .200* | .947 | 5 | .714 |
| | kontrol obat | .262 | 5 | .200* | .919 | 5 | .521 |
| | ekstrak tunggal | .248 | 5 | .200* | .913 | 5 | .485 |
| | kombinasi 1/2:1/2 | .147 | 5 | .200* | .986 | 5 | .963 |
| | kombinasi 3/4:1/2 | .330 | 5 | .078 | .789 | 5 | .066 |
| | kombinasi 1:1/2 | .340 | 5 | .059 | .779 | 5 | .054 |

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Dari data output di atas maka dapat disimpulkan bahwa nilai sig. pada $T_0$, $T_1$, $T_2$, $T_3$, $T_4$, dan $T_5 > 0{,}05$ ($H_0$ diterima) maka dapat disimpulkan bahwa data tersebut terdistribusi normal sehingga dapat dilanjutkan dengan pengujian One-Way ANOVA.

**Lampiran 23. Hasil uji statistik One Way Anova Kadar Glukosa Darah**

**Test of Homogeneity of Variances**

| | | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| T0 | Based on Mean | 2.347 | 5 | 24 | .072 |
| | Based on Median | 1.580 | 5 | 24 | .204 |
| | Based on Median and with adjusted df | 1.580 | 5 | 18.390 | .215 |
| | Based on trimmed mean | 2.296 | 5 | 24 | .077 |
| T1 | Based on Mean | 1.967 | 5 | 24 | .120 |
| | Based on Median | .757 | 5 | 24 | .589 |
| | Based on Median and with adjusted df | .757 | 5 | 15.414 | .594 |
| | Based on trimmed mean | 1.907 | 5 | 24 | .130 |
| T2 | Based on Mean | 1.292 | 5 | 24 | .300 |
| | Based on Median | .392 | 5 | 24 | .849 |
| | Based on Median and with adjusted df | .392 | 5 | 19.420 | .848 |
| | Based on trimmed mean | 1.271 | 5 | 24 | .309 |
| T3 | Based on Mean | 2.341 | 5 | 24 | .073 |
| | Based on Median | .929 | 5 | 24 | .480 |
| | Based on Median and with adjusted df | .929 | 5 | 9.541 | .503 |
| | Based on trimmed mean | 1.822 | 5 | 24 | .147 |

Nilai probabilitas dari output pada semua waktu pengukuran kadar glukosa darah ($T_0$-$T_5$) di atas memiliki nilai sig. >0,05, maka $H_0$ diterima sehingga analisis dapat dilanjutkan dengan *uji post hoc*.

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| T0 | Between Groups | 723.067 | 5 | 144.613 | 3.434 | .018 |
| | Within Groups | 1010.800 | 24 | 42.117 | | |
| | Total | 1733.867 | 29 | | | |
| T1 | Between Groups | 298.000 | 5 | 59.600 | .801 | .560 |
| | Within Groups | 1786.800 | 24 | 74.450 | | |
| | Total | 2084.800 | 29 | | | |
| T2 | Between Groups | 17116.800 | 5 | 3423.360 | 57.681 | .000 |
| | Within Groups | 1424.400 | 24 | 59.350 | | |
| | Total | 18541.200 | 29 | | | |
| T3 | Between Groups | 94210.167 | 5 | 18842.033 | 65.854 | .000 |
| | Within Groups | 6866.800 | 24 | 286.117 | | |
| | Total | 101076.967 | 29 | | | |

Pada uji ANOVA nilai $T_0$ <0,05 menunjukkan bahwa terdapat perbedaan dengan $T_1$ karena pada $T_1$ mencit telah diinduksi aloksan dan berhasil mengalami hiperglikemik. $T_2$-$T_3$ memiliki nilai sig <0,05 yang berarti terdapat perbedaan dengan $T_1$ karena pada hari ke-7 dan hari ke-14 setelah pemberian sediaan uji adalah masa dimana hewan uji diberi bahan alam ekstrak daun melinjo dan mengalami penurunan kadar glukosa darah.

**T0**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| ekstrak tunggal | 5 | 97.00 | |
| kombinasi 1:1/2 | 5 | 102.00 | 102.00 |
| kombinasi 1/2:1/2 | 5 | 102.20 | 102.20 |
| kontrol hiperglikemik | 5 | 106.40 | 106.40 |
| kombinasi 3/4:1/2 | 5 | 109.00 | 109.00 |
| kontrol obat | 5 | | 111.80 |
| Sig. | | .071 | .200 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**T1**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 |
|---|---|---|
| | | 1 |
| kontrol hiperglikemik | 5 | 198.80 |
| kombinasi 1:1/2 | 5 | 200.60 |
| kontrol obat | 5 | 204.00 |
| kombinasi 3/4:1/2 | 5 | 205.40 |
| ekstrak tunggal | 5 | 206.20 |
| kombinasi 1/2:1/2 | 5 | 207.80 |
| Sig. | | .576 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**T2**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| kombinasi 1:1/2 | 5 | 133.20 | | |
| kombinasi 3/4:1/2 | 5 | 140.00 | 140.00 | |
| kontrol obat | 5 | | 152.00 | |
| kombinasi 1/2:1/2 | 5 | | 153.00 | |
| ekstrak tunggal | 5 | | 154.20 | |
| kontrol hiperglikemik | 5 | | | 207.20 |
| Sig. | | .729 | .073 | 1.000 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**T3**

Tukey HSD[a]

| kelompok | N | Subset for alpha = 0.05 | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| kombinasi 1:1/2 | 5 | 44.40 | | |
| kombinasi 3/4:1/2 | 5 | 49.80 | | |
| kombinasi 1/2:1/2 | 5 | | 90.80 | |
| ekstrak tunggal | 5 | | 96.00 | |
| kontrol obat | 5 | | 98.20 | |
| kontrol hiperglikemik | 5 | | | 214.60 |
| Sig. | | .996 | .981 | 1.000 |

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

**Lampiran 24. Hasil persentase penurunan kadar glukosa darah mencit**

| Kelompok | % Penurunan kadar glukosa darah | | | |
|---|---|---|---|---|
| | T1-T2 (ΔT1) | T1-T3 (ΔT2) | % ΔT1 | % ΔT2 |
| Kontrol hiperglikemik (CMC Na 0,5%) | -16 | -19 | -7,96 | -9,45 |
| | -5 | -19 | -2,58 | -9,79 |
| | -5 | -9 | -2,44 | -4,39 |
| | -7 | -15 | -3,54 | -7,58 |
| | -5 | -21 | -2,55 | -10,71 |
| Rata-rata ± SD | -7,60 ± 4,77 | -16,60 ± 4,77 | -3,81 ± 2,36 | -8,39 ± 2,51 |
| Kontrol obat (Glibenklamid 1 tab/100 mL) | 33 | 96 | 17,19 | 50,00 |
| | 47 | 102 | 23,15 | 50,25 |
| | 60 | 108 | 29,56 | 53,20 |
| | 70 | 122 | 32,56 | 56,74 |
| | 50 | 101 | 24,15 | 48,79 |
| Rata-rata ± SD | 52,00 ± 13,95 | 105,80 ± 10,01 | 25,32 ± 5,97 | 51,80 ± 3,21 |
| Ekstrak etanol daun melinjo (EEDM) tunggal | 51 | 112 | 25,37 | 55,72 |
| | 47 | 110 | 23,98 | 56,12 |
| | 54 | 115 | 27,09 | 55,56 |
| | 54 | 110 | 25,59 | 52,13 |
| | 54 | 104 | 25 | 47,15 |
| Rata-rata ± SD | 52 ± 3,08 | 110,2 ± 4,02 | 25,21 ± 0,79 | 53,54 ± 3,41 |
| Kombinasi EEDKM:glibenklamid (1/2:1/2) | 52 | 114 | 24,76 | 54,29 |
| | 56 | 114 | 25,93 | 52,78 |
| | 56 | 118 | 26,79 | 56,46 |
| | 51 | 118 | 25,76 | 59,60 |
| | 59 | 121 | 28,64 | 58,74 |
| Rata-rata ± SD | 54,8 ± 3,27 | 117 ± 3 | 26,38 ± 1,46 | 56,37 ± 2,88 |
| Kombinasi EEDM:glibenklamid (3/4:1/2) | 65 | 144 | 32,02 | 70,94 |
| | 67 | 147 | 33,67 | 73,87 |
| | 68 | 147 | 31,05 | 67,12 |
| | 63 | - | 32,31 | - |
| | 64 | 145 | 30,33 | 68,72 |
| Rata-rata ± SD | 65,40 ± 2,07 | 145,75 ± 1,50 | 31,88 ± 1,27 | 70,17 ± 2,92 |
| Kombinasi EEDM:glibenklamid (1:1/2) | 65 | - | 34,57 | - |
| | 72 | 153 | 34,12 | 72,51 |
| | 72 | 153 | 33,18 | 70,51 |
| | 69 | 145 | 35,94 | 75,52 |
| | 59 | 142 | 30,26 | 72,82 |
| Rata-rata ± SD | 67,40 ± 5,50 | 148,25 ± 5,62 | 33,61 ± 2,12 | 72,84 ± 2,06 |