

## LAMPIRAN

### Lampiran 1. Pesetujuan Kode Etik Hewan

|                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                    |                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                       | <b>KOMISI ETIK PENELITIAN KESEHATAN<br/>UNIVERSITAS BHAKTI KENCANA</b><br>Jl. Soekarno - Hatta 754, Bandung<br>Telp : 022-7830 760 / 022-7830-768<br>Email : komisi.etik@bku.ac.id |  |
| <b>KOMISI ETIK PENELITIAN KESEHATAN</b><br><i>HEALTH RESEARCH ETHICS COMMITTEE</i><br><b>UNIVERSITAS BHAKTI KENCANA</b><br><i>BHAKTI KENCANA UNIVERSITY</i>                                                                                                                                                                                                                            |                                                                                                                                                                                    |                                                                                     |
| <b>KETERANGAN LAYAK ETIK</b><br><i>DESCRIPTION OF ETHICAL APPROVAL</i><br><b>"ETHICAL APPROVAL"</b><br>222/09/KEPK/UBK/VII/2025                                                                                                                                                                                                                                                        |                                                                                                                                                                                    |                                                                                     |
| Protokol penelitian yang diusulkan oleh :<br><i>The research protocol proposed by :</i>                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                    |                                                                                     |
| Peneliti Utama<br><i>Principal In Investigator</i>                                                                                                                                                                                                                                                                                                                                     | : Vina Restu Fauzi                                                                                                                                                                 |                                                                                     |
| Nama institusi<br><i>Name of institution</i>                                                                                                                                                                                                                                                                                                                                           | : Universitas Bhakti Kencana                                                                                                                                                       |                                                                                     |
| Dengan judul<br><i>Title</i>                                                                                                                                                                                                                                                                                                                                                           | :                                                                                                                                                                                  |                                                                                     |
| <b>Antidiabetes Kombinasi Ekstrak Etanol Daun Binahong (<i>Anredera cordifolia</i>) dan Daun Sambung Nyawa (<i>Gynura procumbens</i>) Pada Model Tikus Resistensi Insulin</b>                                                                                                                                                                                                          |                                                                                                                                                                                    |                                                                                     |
| <i>Antidiabetic Effect of Ethanol Extract Combination of Binahong Leaves (<i>Anredera cordifolia</i>) and Sambung Nyawa Leaves (<i>Gynura procumbens</i>) on Insulin Resistance Rat Model</i>                                                                                                                                                                                          |                                                                                                                                                                                    |                                                                                     |
| Dinyatakan layak etik sesuai (tujuh) standar WHO 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, dan 4) Risiko, 5) Bujukan atau eksploitasi, 6) Kerahasiaan atau Privacy, 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan oleh terpenuhinya indikator setiap standar.                         |                                                                                                                                                                                    |                                                                                     |
| <i>Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011standards, 1) Social Value, 2) Scientific Value, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and Informed Consent, referring to the 2016 CIOMS guidelines. This is as indicated by the fulfillment of the indicators of each standards.</i> |                                                                                                                                                                                    |                                                                                     |
| Pernyataan Laik Etik ini berlaku selama kurun waktu 16 Juli 2025 sampai dengan tanggal 16 Juli 2026.                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                    |                                                                                     |
| <i>This declaration of ethics applies during the period 16th July 2025 until 16th July 2026.</i>                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                    |                                                                                     |
| <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">             16 Juli 2025<br/>             Professor and Chairperson<br/> <b>R. Netv Rustikayanti, S.Kp., M.Kep</b><br/>             NIK. 02019010336           </div> </div>             |                                                                                                                                                                                    |                                                                                     |

**Lampiran 2.** Hasil Determinasi Tanaman *Anredera cordifolia* dan *Gynura procumbens*

**HERBARIUM JATINANGOR**  
**LABORATORIUM TAKSONOMI TUMBUHAN**  
**JURUSAN BIOLOGI FMIPA UNPAD**  
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**LEMBAR IDENTIFIKASI TUMBUHAN**  
 No.86/HB/02/2025.

Herbarium Jatinangor, Laboratorium Taksonomi Tumbuhan, Jurusan Biologi FMIPA UNPAD, dengan ini menerangkan bahwa:

Nama : Vina Restu Fauzi  
 NIM/NIDN : 211FF03092  
 Instansi : Universitas Bhakti Kencana.  
 Lokasi : Bandung.

Telah melakukan identifikasi tumbuhan, dengan No. Koleksi : -  
 Tanggal Koleksi : 15 Februari 2025

Hasil Identifikasi  
 Nama Ilmiah : *Anredera cordifolia* (Ten.) Steenis  
 Sinonim : *Boussingaultia cordata* Spreng.  
 Nama Lokal : Binahong  
 Suku/Famili : Basellaceae

Klasifikasi (Hirarki Taksonomi)  
 Kingdom : Plantae  
 Divisi : Magnoliophyta  
 Class : Magnoliopsida  
 Ordo : Caryophyllales  
 Famili : Basellaceae  
 Genus : *Anredera*  
 Species : *Anredera cordifolia* (Ten.) Steenis

Referensi:

Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*.  
 Columbia University Press. New York  
 The Plant List. *Website Dunia Tumbuhan*. <http://www.theplantlist.org/tpl1.1/record/kew-158489>.  
 Backer, C. A. and Bakhuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV.  
 Groningen.

Jatinangor, 17 Februari 2025.

Identifikator,

LABORATORIUM TAKSONOMI TUMBUHAN  
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Drs. Joko Kusmoro, M.P.  
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Herbarium Jatinangor, Laboratorium Taksonomi Tumbuhan, Jurusan Biologi FMIPA UNPAD, dengan ini menerangkan bahwa:

Nama : Vina Restu Fauzi  
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 Lokasi : Bandung.

Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -  
 Tanggal Koleksi : 15 Februari 2025

Hasil Identifikasi

Nama Ilmiah : *Gynura procumbens* [Lour.] Merr.  
 Sinonim : *Gynura procumbens* [Blume] Miq.  
 Nama Lokal : Sambung nyawa  
 Suku/Famili : Asteraceae

Klasifikasi (Hirarki Taksonomi)

Kingdom : Plantae  
 Divisi : Magnoliophyta  
 Class : Magnoliopsida  
 Ordo : Asterales  
 Famili : Asteraceae  
 Genus : *Gynura*  
 Species : *Gynura procumbens* [Lour.] Merr.

Referensi:

Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*.  
 Columbia University Press. New York  
 The Plant List. *Website Dunia Tumbuhan*. <http://www.theplantlist.org/tpl1.1/record/kew-158489>.  
 Backer, C. A. and Bakhuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV. Groningen.

Jatinangor, 17 Februari 2025.

Identifikator,

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Drs. Joko Kusmoro, M.P.

NIP. 19600801 199101 1 001

**Lampiran 3. Perhitungan Dalam Penelitian**

| Kegiatan                              | Perhitungan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Perhitungan larutan Na-CMC 0,5%       | 1. Dibuat sebanyak 100 ml, maka<br>2. Berat yang ditimbang = 0,5 gram<br>3. Volume untuk melarutkan = 100 ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Perhitungan Fruktosa 60%              | 1. Dibuat sebanyak 100 ml, maka<br>2. Berat yang ditimbang = 60 gram<br>3. Volume untuk melarutkan = 100 ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Dosis pemberian Metformin             | 1. Dosis manusia 500 mg / hari<br>2. Dosis tikus<br>$500 \text{ mg} \times 0,018 = 9 \text{ mg} / 200 \text{ gram Bb tikus}$<br>3. Volume pemberian = 2,5<br>$= \frac{9 \text{ mg}}{500 \text{ mg}} \times 140 \text{ ml}$<br>$= 2,52 \text{ ml} \approx 2,5 \text{ ml}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Perhitungan dosis larutan uji ekstrak | Dosis = 100mg/KgBB, 200mg/KgBB, dan 400mg/KgBB<br>1. Kelompok uji 100 mg/KgBB<br>Bb standar tikus = 200 gram (0,2 kg)<br>Volume yang diberikan = 2 ml/200 gram Bb<br>Jumlah ekstrak yang dibutuhkan<br>$= 100\text{mg/KgBB} \times 0,2 \text{ kg} = 20\text{mg}$<br>Pembuatan lar.stock $= \frac{20 \text{ mg}}{2}$<br>$= 10 \text{ mg/mL} \times 100\text{mL}$<br>$= 1.000\text{mg}/100\text{mL}$<br>2. Kelompok uji 200mg/kgBB<br>Bb standar tikus = 200 gram (0,2 kg)<br>Volume yang diberikan = 2 ml/200 gram Bb<br>Jumlah ekstrak yang dibutuhkan<br>$= 200\text{mg/KgBB} \times 0,2 \text{ kg} = 40\text{mg}$<br>Pembuatan lar.stock $= \frac{40 \text{ mg}}{2}$<br>$= 20 \text{ mg/mL} \times 100\text{mL}$<br>$= 2.000\text{mg}/100\text{mL}$<br>3. Kelompok uji 400 mg/KgBB<br>Bb standar tikus = 200 gram (0,2 kg)<br>Volume yang diberikan = 2 ml/200 gram Bb<br>Jumlah ekstrak yang dibutuhkan<br>$= 400\text{mg/KgBB} \times 0,2 \text{ kg} = 80\text{mg}$<br>Pembuatan lar.stock $= \frac{80 \text{ mg}}{2}$<br>$= 20 \text{ mg/mL} \times 100\text{mL}$<br>$= 4.000\text{mg}/100\text{mL}$ |

**Lampiran 4. Dokumentasi Karakterisasi Simplisia**  
**1. Dokumentasi Karakterisasi Ekstrak Binahong**

|                                                                                                           |                                                                                                                      |                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
|  <p>Susut Pengerinan</p> |  <p>Kadar Sari Larut Air</p>        |  <p>Kadar Sari Larut Etanol</p> |
|  <p>Kadar Abu Total</p> |  <p>Kadar Abu Tidak Larut Asam</p> |                                                                                                                    |

Perhitungan :

1. Kadar sari larut air

$$\text{Sari larut air} = \frac{34,70 \text{ gram} - 34,42 \text{ gram}}{5 \text{ gram}} \times \frac{100 \text{ mL}}{20 \text{ mL}} \times 100\% = 28,0\%$$

2. Kadar sari larut etanol

$$\text{Sari larut etanol} = \frac{57,30 \text{ gram} - 57,05 \text{ gram}}{5 \text{ gram}} \times \frac{100 \text{ mL}}{20 \text{ mL}} \times 100\% = 25,0\%$$

3. Kadar abu total

$$\text{Kadar abu total} = \frac{65,51 \text{ gram} - 65,34 \text{ gram}}{2 \text{ gram}} \times 100\% = 8,5\%$$

4. Kadar abu tidak larut asam

$$\text{Kadar abu total} = \frac{65,35 \text{ gram} - 65,34 \text{ gram}}{2 \text{ gram}} \times 100\% = 0,5\%$$

### 1. Dokumentasi Karakterisasi Ekstrak Sambung Nyawa

|                                                                                                            |                                                                                                                      |                                                                                                                    |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
|  <p>Susut Pengeringan</p> |  <p>Kadar Sari Larut Air</p>        |  <p>Kadar Sari Larut Etanol</p> |
|  <p>Kadar Abu Total</p>  |  <p>Kadar Abu Tidak Larut Asam</p> |                                                                                                                    |

Perhitungan :

1. Kadar sari larut air

$$\text{Sari larut air} = \frac{76,80 \text{ gram} - 76,70 \text{ gram}}{5 \text{ gram}} \times \frac{100 \text{ mL}}{20 \text{ mL}} \times 100\% = 10,0\%$$

2. Kadar sari larut etanol

$$\text{Sari larut etanol} = \frac{80,99 \text{ gram} - 80,92 \text{ gram}}{5 \text{ gram}} \times \frac{100 \text{ mL}}{20 \text{ mL}} \times 100\% = 7,0\%$$

3. Kadar abu total

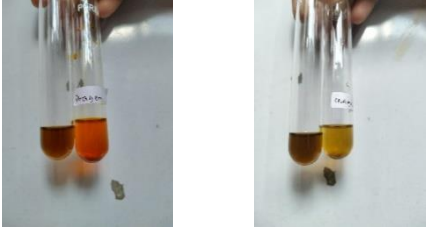
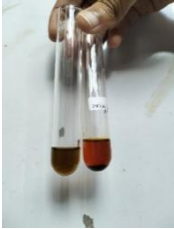
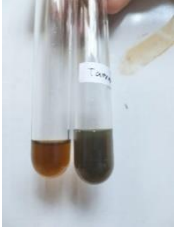
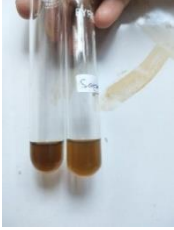
$$\text{Kadar abu total} = \frac{68,57 \text{ gram} - 68,43 \text{ gram}}{2 \text{ gram}} \times 100\% = 7,0\%$$

4. Kadar abu tidak larut asam

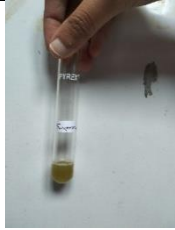
$$\text{Kadar abu tidak larut asam} = \frac{68,45 \text{ gram} - 68,43}{2 \text{ gram}} \times 100\% = 1\%$$

### Lampiran 5. Dokumentasi Skrining Fitokimia

#### 1. Dokumentasi Skrining Ekstrak Sambung Nyawa

|                                                                                                                                                                                                                                           |                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|  <p>Dragendorff (+)      Mayer (+)</p>  <p>Wagner (+)<br/>Alkaloid</p> |  <p>Flavonoid (+)</p>   |
|  <p>Tanin (+)</p>                                                                                                                                      |  <p>Saponin (-)</p>   |
|  <p>Steroid (+)</p>                                                                                                                                    |  <p>Terpenoid (-)</p> |

## 2. Dokumentasi Skrining Ekstrak Binahong

|                                                                                                                                                                                                                                          |                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|  <p>Dragendorff (+)      Mayer (+)</p>  <p>Wagner (+)<br/>Alkaloid</p> |  <p>Flavonoid (+)</p>   |
|  <p>Tanin (+)</p>                                                                                                                                     |  <p>Saponin (+)</p>   |
|  <p>Steroid (+)</p>                                                                                                                                   |  <p>Terpenoid (-)</p> |



**Lampiran 6. Perlakuan Terhadap Hewan Uji**

## Lampiran 7. Hasil Statistik Pengukuran Kadar Gula Darah

### 1. Normalitas dan Homogenitas

|     |            |      |   |      |   |      |
|-----|------------|------|---|------|---|------|
| T0  | Normal     | ,190 | 4 | ,976 | 4 | ,878 |
|     | Induksi    | ,258 | 4 | ,910 | 4 | ,484 |
|     | Pembanding | ,174 | 4 | ,996 | 4 | ,985 |
|     | Uji 100    | ,275 | 4 | ,840 | 4 | ,194 |
|     | Uji 200    | ,299 | 4 | ,845 | 4 | ,212 |
|     | Uji 400    | ,230 | 4 | ,945 | 4 | ,684 |
| T14 | Normal     | ,254 | 4 | ,960 | 4 | ,777 |
|     | Induksi    | ,309 | 4 | ,901 | 4 | ,437 |
|     | Pembanding | ,273 | 4 | ,869 | 4 | ,295 |
|     | Uji 100    | ,295 | 4 | ,853 | 4 | ,237 |
|     | Uji 200    | ,262 | 4 | ,908 | 4 | ,470 |
|     | Uji 400    | ,208 | 4 | ,954 | 4 | ,743 |
| T28 | Normal     | ,287 | 4 | ,914 | 4 | ,504 |
|     | Induksi    | ,190 | 4 | ,961 | 4 | ,788 |
|     | Pembanding | ,240 | 4 | ,917 | 4 | ,520 |
|     | Uji 100    | ,262 | 4 | ,871 | 4 | ,303 |
|     | Uji 200    | ,170 | 4 | ,992 | 4 | ,969 |
|     | Uji 400    | ,253 | 4 | ,915 | 4 | ,512 |
| T35 | Normal     | ,219 | 4 | ,955 | 4 | ,745 |
|     | Induksi    | ,238 | 4 | ,946 | 4 | ,691 |
|     | Pembanding | ,162 | 4 | ,989 | 4 | ,952 |
|     | Uji 100    | ,299 | 4 | ,903 | 4 | ,448 |
|     | Uji 200    | ,229 | 4 | ,932 | 4 | ,605 |
|     | Uji 400    | ,202 | 4 | ,987 | 4 | ,943 |

#### Levene's Test of Equality of Error Variances<sup>a</sup>

|     | F     | df1 | df2 | Sig. |
|-----|-------|-----|-----|------|
| T0  | 1,318 | 5   | 18  | ,301 |
| T14 | ,995  | 5   | 18  | ,449 |
| T28 | 2,141 | 5   | 18  | ,107 |
| T35 | 1,209 | 5   | 18  | ,345 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Kelompok  
Within Subjects Design: waktu

### 2. Kenaikan H0, H14, H28, H35

| Kelompok   | Source | Type III Sum of Squares | df       | Mean Square | F        | Sig.    | Partial Eta Squared |
|------------|--------|-------------------------|----------|-------------|----------|---------|---------------------|
| Normal     | waktu  | Sphericity Assumed      | 17,655   | 3           | 5,885    | 1,382   | ,310                |
|            |        | Greenhouse-Geisser      | 17,655   | 2,499       | 7,066    | 1,382   | ,316                |
|            |        | Huynh-Feldt             | 17,655   | 3,000       | 5,885    | 1,382   | ,310                |
|            |        | Lower-bound             | 17,655   | 1,000       | 17,655   | 1,382   | ,325                |
| Induksi    | waktu  | Sphericity Assumed      | 5051,500 | 3           | 1683,833 | 84,117  | ,000                |
|            |        | Greenhouse-Geisser      | 5051,500 | 2,370       | 2131,643 | 84,117  | ,000                |
|            |        | Huynh-Feldt             | 5051,500 | 3,000       | 1683,833 | 84,117  | ,000                |
|            |        | Lower-bound             | 5051,500 | 1,000       | 5051,500 | 84,117  | ,003                |
| Pembanding | waktu  | Sphericity Assumed      | 1646,297 | 3           | 548,766  | 219,744 | ,000                |
|            |        | Greenhouse-Geisser      | 1646,297 | 2,020       | 814,934  | 219,744 | ,000                |
|            |        | Huynh-Feldt             | 1646,297 | 3,000       | 548,766  | 219,744 | ,000                |
|            |        | Lower-bound             | 1646,297 | 1,000       | 1646,297 | 219,744 | ,001                |
| Uji 100    | waktu  | Sphericity Assumed      | 1458,522 | 3           | 486,174  | 288,388 | ,000                |
|            |        | Greenhouse-Geisser      | 1458,522 | 1,545       | 943,985  | 288,388 | ,000                |
|            |        | Huynh-Feldt             | 1458,522 | 2,873       | 507,634  | 288,388 | ,000                |
|            |        | Lower-bound             | 1458,522 | 1,000       | 1458,522 | 288,388 | ,000                |
| Uji 200    | waktu  | Sphericity Assumed      | 1430,792 | 3           | 476,931  | 205,420 | ,000                |
|            |        | Greenhouse-Geisser      | 1430,792 | 2,171       | 659,187  | 205,420 | ,000                |
|            |        | Huynh-Feldt             | 1430,792 | 3,000       | 476,931  | 205,420 | ,000                |
|            |        | Lower-bound             | 1430,792 | 1,000       | 1430,792 | 205,420 | ,001                |
| Uji 400    | waktu  | Sphericity Assumed      | 1833,337 | 3           | 611,112  | 246,575 | ,000                |
|            |        | Greenhouse-Geisser      | 1833,337 | 1,999       | 917,089  | 246,575 | ,000                |
|            |        | Huynh-Feldt             | 1833,337 | 3,000       | 611,112  | 246,575 | ,000                |
|            |        | Lower-bound             | 1833,337 | 1,000       | 1833,337 | 246,575 | ,001                |

## Lampiran 8. Hasil Statistik Pengukuran KTTI

### 1. Normalitas dan Homogenitas

| Tests of Normality |            |                                 |    |      |              |    |      |
|--------------------|------------|---------------------------------|----|------|--------------|----|------|
|                    |            | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|                    |            | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Nilai_KTTI         | Normal     | ,237                            | 4  | ..   | ,939         | 4  | ,650 |
|                    | Induksi    | ,237                            | 4  | ..   | ,939         | 4  | ,650 |
|                    | Pembanding | ,285                            | 4  | ..   | ,935         | 4  | ,625 |
|                    | Uji 100    | ,155                            | 4  | ..   | ,998         | 4  | ,995 |
|                    | Uji 200    | ,293                            | 4  | ..   | ,918         | 4  | ,528 |
|                    | Uji 400    | ,215                            | 4  | ..   | ,946         | 4  | ,689 |

a. Lilliefors Significance Correction

a. Lilliefors Significance Correction

| Test of Homogeneity of Variances |     |     |      |
|----------------------------------|-----|-----|------|
| Nilai_KTTI                       |     |     |      |
| Levene Statistic                 | df1 | df2 | Sig. |
| 5,495                            | 5   | 18  | ,003 |

### 2. Kruskal Wallis

| Test Statistics <sup>a,b</sup> |            |
|--------------------------------|------------|
|                                | Nilai_KTTI |
| Chi-Square                     | 21,514     |
| df                             | 5          |
| Asymp. Sig.                    | ,001       |

a. Kruskal Wallis Test

b. Grouping Variable:  
Kelompok

### 3. Games howell

|              |            |            |           |        |      |         |         |
|--------------|------------|------------|-----------|--------|------|---------|---------|
| Games-Howell | Normal     | Induksi    | 1,46750*  | ,05677 | ,000 | 1,1699  | 1,7651  |
|              |            | Pembanding | ,01500    | ,01990 | ,966 | -,0642  | ,0942   |
|              |            | Uji 100    | ,34750*   | ,02496 | ,000 | ,2428   | ,4522   |
|              |            | Uji 200    | ,20250*   | ,02704 | ,005 | ,0859   | ,3191   |
|              |            | Uji 400    | ,06250    | ,01909 | ,108 | -,0135  | ,1385   |
|              | Induksi    | Normal     | -1,46750* | ,05677 | ,000 | -1,7651 | -1,1699 |
|              |            | Pembanding | -1,45250* | ,05692 | ,000 | -1,7490 | -1,1560 |
|              |            | Uji 100    | -1,12000* | ,05888 | ,000 | -1,4055 | -,8345  |
|              |            | Uji 200    | -1,26500* | ,05979 | ,000 | -1,5471 | -,9829  |
|              |            | Uji 400    | -1,40500* | ,05664 | ,000 | -1,7035 | -1,1065 |
|              | Pembanding | Normal     | -,01500   | ,01990 | ,966 | -,0942  | ,0642   |
|              |            | Induksi    | 1,45250*  | ,05692 | ,000 | 1,1560  | 1,7490  |
|              |            | Uji 100    | ,33250*   | ,02529 | ,000 | ,2274   | ,4376   |
|              |            | Uji 200    | ,18750*   | ,02735 | ,007 | ,0708   | ,3042   |
|              |            | Uji 400    | ,04750    | ,01953 | ,276 | -,0304  | ,1254   |
|              | Uji 100    | Normal     | -,34750*  | ,02496 | ,000 | -,4522  | -,2428  |
|              |            | Induksi    | 1,12000*  | ,05888 | ,000 | ,8345   | 1,4055  |
|              |            | Pembanding | -,33250*  | ,02529 | ,000 | -,4376  | -,2274  |
|              |            | Uji 200    | -,14500*  | ,03122 | ,026 | -,2698  | -,0202  |
|              |            | Uji 400    | -,28500*  | ,02466 | ,001 | -,3895  | -,1805  |

|         |            |                      |        |      |        |        |
|---------|------------|----------------------|--------|------|--------|--------|
| Uji 200 | Normal     | -,20250 <sup>*</sup> | ,02704 | ,005 | -,3191 | -,0859 |
|         | Induksi    | 1,26500 <sup>*</sup> | ,05979 | ,000 | ,9829  | 1,5471 |
|         | Pembanding | -,18750 <sup>*</sup> | ,02735 | ,007 | -,3042 | -,0708 |
|         | Uji 100    | ,14500 <sup>*</sup>  | ,03122 | ,026 | ,0202  | ,2698  |
|         | Uji 400    | -,14000 <sup>*</sup> | ,02677 | ,025 | -,2567 | -,0233 |
| Uji 400 | Normal     | -,06250              | ,01909 | ,108 | -,1385 | ,0135  |
|         | Induksi    | 1,40500 <sup>*</sup> | ,05664 | ,000 | 1,1065 | 1,7035 |
|         | Pembanding | -,04750              | ,01953 | ,276 | -,1254 | ,0304  |
|         | Uji 100    | ,28500 <sup>*</sup>  | ,02466 | ,001 | ,1805  | ,3895  |
|         | Uji 200    | ,14000 <sup>*</sup>  | ,02677 | ,025 | ,0233  | ,2567  |

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

## Lampiran 9. Hasil Statistik Hitung sel Histologi Pankreas

### 1. Normalitas dan Homogenitas

| Tests of Normality |                                 |    |                   |              |    |      |
|--------------------|---------------------------------|----|-------------------|--------------|----|------|
| Kelompok           | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|                    | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| Sel_Beta Normal    | ,257                            | 5  | ,200 <sup>*</sup> | ,878         | 5  | ,298 |
| Induksi            | ,186                            | 5  | ,200 <sup>*</sup> | ,946         | 5  | ,705 |
| Pembanding         | ,293                            | 5  | ,186              | ,847         | 5  | ,186 |
| Uji 100            | ,341                            | 5  | ,059              | ,845         | 5  | ,179 |
| Uji 200            | ,136                            | 5  | ,200 <sup>*</sup> | ,993         | 5  | ,990 |
| Uji 400            | ,228                            | 5  | ,200 <sup>*</sup> | ,914         | 5  | ,492 |
| Sel_Alfa Normal    | ,330                            | 5  | ,079              | ,851         | 5  | ,199 |
| Induksi            | ,212                            | 5  | ,200 <sup>*</sup> | ,897         | 5  | ,395 |
| Pembanding         | ,152                            | 5  | ,200 <sup>*</sup> | ,985         | 5  | ,960 |
| Uji 100            | ,232                            | 5  | ,200 <sup>*</sup> | ,885         | 5  | ,334 |
| Uji 200            | ,220                            | 5  | ,200 <sup>*</sup> | ,956         | 5  | ,777 |
| Uji 400            | ,224                            | 5  | ,200 <sup>*</sup> | ,912         | 5  | ,482 |

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

| Test of Homogeneity of Variances |                  |     |     |      |
|----------------------------------|------------------|-----|-----|------|
|                                  | Levene Statistic | df1 | df2 | Sig. |
| Sel_Beta                         | 1,525            | 5   | 24  | ,219 |
| Sel_Alfa                         | ,943             | 5   | 24  | ,471 |

### 2. ANOVA

| ANOVA    |                |                |    |             |        |      |
|----------|----------------|----------------|----|-------------|--------|------|
|          |                | Sum of Squares | df | Mean Square | F      | Sig. |
| Sel_Beta | Between Groups | 36124,567      | 5  | 7224,913    | 24,677 | ,000 |
|          | Within Groups  | 7026,800       | 24 | 292,783     |        |      |
|          | Total          | 43151,367      | 29 |             |        |      |
| Sel_Alfa | Between Groups | 1521,767       | 5  | 304,353     | 12,190 | ,000 |
|          | Within Groups  | 599,200        | 24 | 24,967      |        |      |
|          | Total          | 2120,967       | 29 |             |        |      |

## 3. Pos Hos Test

## Multiple Comparisons

| Dependent Variable |           | (I) Kelompok | (J) Kelompok | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval |             |
|--------------------|-----------|--------------|--------------|-----------------------|------------|-------|-------------------------|-------------|
|                    |           |              |              |                       |            |       | Lower Bound             | Upper Bound |
| Sel_Beta           | Tukey HSD | Normal       | Induksi      | 84,00000*             | 10,82189   | ,000  | 50,5395                 | 117,4605    |
|                    |           |              | Pembanding   | 1,40000               | 10,82189   | 1,000 | -32,0605                | 34,8605     |
|                    |           |              | Uji 100      | 33,20000              | 10,82189   | ,053  | -,2605                  | 66,6605     |
|                    |           |              | Uji 200      | -7,00000              | 10,82189   | ,986  | -40,4605                | 26,4605     |
|                    |           |              | Uji 400      | -20,20000             | 10,82189   | ,445  | -53,6605                | 13,2605     |
|                    |           | Induksi      | Normal       | -84,00000*            | 10,82189   | ,000  | -117,4605               | -50,5395    |
|                    |           |              | Pembanding   | -82,60000*            | 10,82189   | ,000  | -116,0605               | -49,1395    |
|                    |           |              | Uji 100      | -50,80000*            | 10,82189   | ,001  | -84,2605                | -17,3395    |
|                    |           |              | Uji 200      | -91,00000*            | 10,82189   | ,000  | -124,4605               | -57,5395    |
|                    |           |              | Uji 400      | -104,20000*           | 10,82189   | ,000  | -137,6605               | -70,7395    |
|                    |           | Pembanding   | Normal       | -1,40000              | 10,82189   | 1,000 | -34,8605                | 32,0605     |
|                    |           |              | Induksi      | 82,60000*             | 10,82189   | ,000  | 49,1395                 | 116,0605    |
|                    |           |              | Uji 100      | 31,80000              | 10,82189   | ,069  | -1,6605                 | 65,2605     |
|                    |           |              | Uji 200      | -8,40000              | 10,82189   | ,969  | -41,8605                | 25,0605     |
|                    |           |              | Uji 400      | -21,60000             | 10,82189   | ,373  | -55,0605                | 11,8605     |
|                    |           | Uji 100      | Normal       | -33,20000             | 10,82189   | ,053  | -66,6605                | ,2605       |
|                    |           |              | Induksi      | 50,80000*             | 10,82189   | ,001  | 17,3395                 | 84,2605     |
|                    |           |              | Pembanding   | -31,80000             | 10,82189   | ,069  | -65,2605                | 1,6605      |
|                    |           |              | Uji 200      | -40,20000*            | 10,82189   | ,012  | -73,6605                | -6,7395     |
|                    |           |              | Uji 400      | -53,40000*            | 10,82189   | ,001  | -86,8605                | -19,9395    |
|                    |           | Uji 200      | Normal       | 7,00000               | 10,82189   | ,986  | -26,4605                | 40,4605     |
|                    |           |              | Induksi      | 91,00000*             | 10,82189   | ,000  | 57,5395                 | 124,4605    |
|                    |           |              | Pembanding   | 8,40000               | 10,82189   | ,969  | -25,0605                | 41,8605     |
|                    |           |              | Uji 100      | 40,20000*             | 10,82189   | ,012  | 6,7395                  | 73,6605     |
|                    |           |              | Uji 400      | -13,20000             | 10,82189   | ,823  | -46,6605                | 20,2605     |
|                    |           | Uji 400      | Normal       | 20,20000              | 10,82189   | ,445  | -13,2605                | 53,6605     |
|                    |           |              | Induksi      | 104,20000*            | 10,82189   | ,000  | 70,7395                 | 137,6605    |
|                    |           |              | Pembanding   | 21,60000              | 10,82189   | ,373  | -11,8605                | 55,0605     |
|                    |           |              | Uji 100      | 53,40000*             | 10,82189   | ,001  | 19,9395                 | 86,8605     |
|                    |           |              | Uji 200      | 13,20000              | 10,82189   | ,823  | -20,2605                | 46,6605     |
| Sel_Alfa           | Tukey HSD | Normal       | Induksi      | -10,40000*            | 3,16017    | ,032  | -20,1710                | -,6290      |
|                    |           |              | Pembanding   | 9,60000               | 3,16017    | ,056  | -,1710                  | 19,3710     |
|                    |           |              | Uji 100      | 6,40000               | 3,16017    | ,358  | -3,3710                 | 16,1710     |
|                    |           |              | Uji 200      | 5,20000               | 3,16017    | ,578  | -4,5710                 | 14,9710     |
|                    |           |              | Uji 400      | 10,60000*             | 3,16017    | ,028  | ,8290                   | 20,3710     |
|                    |           | Induksi      | Normal       | 10,40000*             | 3,16017    | ,032  | ,6290                   | 20,1710     |
|                    |           |              | Pembanding   | 20,00000*             | 3,16017    | ,000  | 10,2290                 | 29,7710     |
|                    |           |              | Uji 100      | 16,80000*             | 3,16017    | ,000  | 7,0290                  | 26,5710     |
|                    |           |              | Uji 200      | 15,60000*             | 3,16017    | ,001  | 5,8290                  | 25,3710     |
|                    |           |              | Uji 400      | 21,00000*             | 3,16017    | ,000  | 11,2290                 | 30,7710     |
|                    |           | Pembanding   | Normal       | -9,60000              | 3,16017    | ,056  | -19,3710                | ,1710       |
|                    |           |              | Induksi      | -20,00000*            | 3,16017    | ,000  | -29,7710                | -10,2290    |
|                    |           |              | Uji 100      | -3,20000              | 3,16017    | ,909  | -12,9710                | 6,5710      |
|                    |           |              | Uji 200      | -4,40000              | 3,16017    | ,731  | -14,1710                | 5,3710      |
|                    |           |              | Uji 400      | 1,00000               | 3,16017    | 1,000 | -8,7710                 | 10,7710     |
|                    |           | Uji 100      | Normal       | -6,40000              | 3,16017    | ,358  | -16,1710                | 3,3710      |
|                    |           |              | Induksi      | -16,80000*            | 3,16017    | ,000  | -26,5710                | -7,0290     |
|                    |           |              | Pembanding   | 3,20000               | 3,16017    | ,909  | -6,5710                 | 12,9710     |
|                    |           |              | Uji 200      | -1,20000              | 3,16017    | ,999  | -10,9710                | 8,5710      |
|                    |           |              | Uji 400      | 4,20000               | 3,16017    | ,766  | -5,5710                 | 13,9710     |
|                    |           | Uji 200      | Normal       | -5,20000              | 3,16017    | ,578  | -14,9710                | 4,5710      |
|                    |           |              | Induksi      | -15,60000*            | 3,16017    | ,001  | -25,3710                | -5,8290     |
|                    |           |              | Pembanding   | 4,40000               | 3,16017    | ,731  | -5,3710                 | 14,1710     |
|                    |           |              | Uji 100      | 1,20000               | 3,16017    | ,999  | -8,5710                 | 10,9710     |
|                    |           |              | Uji 400      | 5,40000               | 3,16017    | ,539  | -4,3710                 | 15,1710     |
|                    |           | Uji 400      | Normal       | -10,60000*            | 3,16017    | ,028  | -20,3710                | -,8290      |
|                    |           |              | Induksi      | -21,00000*            | 3,16017    | ,000  | -30,7710                | -11,2290    |
|                    |           |              | Pembanding   | -1,00000              | 3,16017    | 1,000 | -10,7710                | 8,7710      |
|                    |           |              | Uji 100      | -4,20000              | 3,16017    | ,766  | -13,9710                | 5,5710      |
|                    |           |              | Uji 200      | -5,40000              | 3,16017    | ,539  | -15,1710                | 4,3710      |

### Lampiran 10. Hasil turnitin

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### Lampiran 11. Kartu bimbingan

| No | Tanggal       | Dosen Pembimbing              | Topik                                    | Disetujui | Aksi                                                                                                                                                                        |
|----|---------------|-------------------------------|------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2  | 29 Mei 2025   | Dr.appt ELIS SUSILAWATI, M.Si | nilai KTTI                               | ✓         |       |
| 2  | 29 Mei 2025   | Dr apt YANI MULYANI, M.Si     | nilai KTTI                               | ✓         |       |
| 3  | 4 Juni 2025   | Dr apt YANI MULYANI, M.Si     | data kgd                                 | ✓         |       |
| 3  | 12 Juni 2025  | Dr apt YANI MULYANI, M.Si     | kemajuan 2                               | ✓         |       |
| 3  | 13 Juni 2025  | Dr.appt ELIS SUSILAWATI, M.Si | kemajuan 2                               | ✓         |       |
| 4  | 24 Juni 2025  | Dr.appt ELIS SUSILAWATI, M.Si | menampilkan babi-bab5                    | ✓         |       |
| 5  | 5 Mei 2025    | Dr.appt ELIS SUSILAWATI, M.Si | kemajuan 1                               | ✓         |       |
| 5  | 24 Juni 2025  | Dr apt YANI MULYANI, M.Si     | pembahasan data                          | ✓         |       |
| 6  | 7 Juli 2025   | Dr apt YANI MULYANI, M.Si     | kemajuan 1                               | ✓         |       |
| 6  | 20 Juni 2025  | Dr.appt ELIS SUSILAWATI, M.Si | menampilkan hasil revisi                 | ✓         |       |
| 7  | 2 Juli 2025   | Dr apt YANI MULYANI, M.Si     | menampilkan babi-5                       | ✓         |       |
| 7  | 7 Juli 2025   | Dr.appt ELIS SUSILAWATI, M.Si | memasukkan hasil revisi ke gdrive        | ✓         |       |
| 8  | 9 Juli 2025   | Dr apt YANI MULYANI, M.Si     | acc skripsi                              | ✓         |       |
| 8  | 9 Juli 2025   | Dr.appt ELIS SUSILAWATI, M.Si | memasukkan hasil akhir revisi ke gdrive  | ✓         |     |
| 9  | 2 Mei 2025    | Dr apt YANI MULYANI, M.Si     | menampilkan data mentah hasil penelitian | ✓         |   |
| 9  | 10 April 2025 | Dr.appt ELIS SUSILAWATI, M.Si | diskusi perhitungan dosis untuk KTTI     | ✓         |   |

**Lampiran 12.** Daftar riwayat hidup**DAFTAR RIWAYAT HIDUP**

Nama : Vina Restu Fauzi

Tempat Tanggal Lahir : Subang, 28 November 2003

Jenis kelamin : Perempuan

Anak ke- : Anak Tunggal

Agama : Islam

Nama ayah : Agus Soleh

Nama ibu : Ida Setiawati

Alamat : Kp. Gandasoli, Rt14/Rw04, kec. Tanjungsang, kab. Subang

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| <b>Riwayat Pendidikan</b>  | <b>Tahun</b> |
|----------------------------|--------------|
| SDN Kota Baru 1 Bekasi     | 2009-2010    |
| SDN Tegal Tangkolo II      | 2010-2015    |
| SMPN 2 Tanjungsang         | 2015-2018    |
| SMAN 1 Tanjungsang         | 2018-2021    |
| Universitas Bhakti Kencana | 2021-2025    |