

LAMPIRAN

Lampiran 1. Kuesioner Uji Kesukaan Produk *Edible film candy*

Identitas Responden

Nama :
Umur :
Jenis Kelamin : Perempuan

Di Hadapan Anda, Disajikan Sebuah Produk. Berikut Penilaian Anda Terhadap Produk Tersebut Dengan Ketentuan Sebagai Berikut.

1. Pada Kolom Spesifikasi Berikan Penilaian Anda Dengan Cara Memasukan Nomor (Lihat Keterangan) Dari Produk Yang Disajikan.
2. Silahkan Berkumur/Minum Terlebih Dahulu Sebelum Dan Setelah Memberikan Penilaian Pada Produk.

| Uji | Spesifikasi | | | | | |
|---------|-------------|------|-------|------------|-------------|-------|
| | Sangat Suka | Suka | Biasa | Tidak Suka | Sangat Suka | Tidak |
| Warna | | | | | | |
| Aroma | | | | | | |
| Rasa | | | | | | |
| Tekstur | | | | | | |

Keterangan

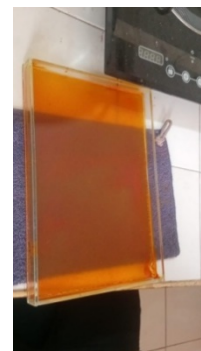
Sangat Suka : 1
Suka : 2
Biasa : 3
Tidak Suka : 4
Sangat Tidak Suka : 5

Komentar :

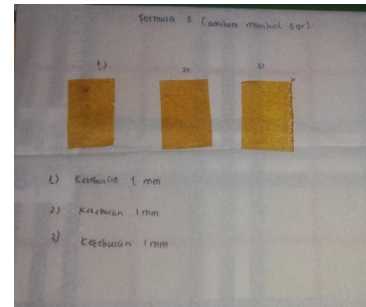
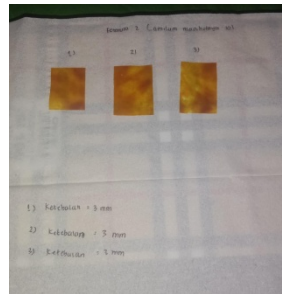
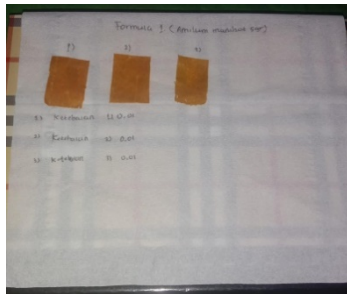
Lampiran 2. Penimbangan Bahan



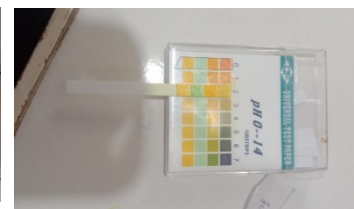
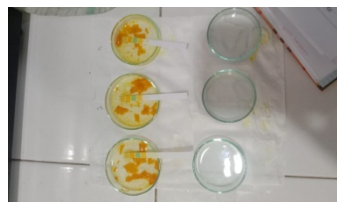
Lampiran 3. Alat dan bahan penelitian

Lampiran 4. Proses pengeringan *edible film candy*

Lampiran 5. Uji Ketebalan



Lampiran 6. Uji pH



Lampiran 7. Ekstrak Kental Jahe, kunyit dan rosella



Lampiran 8. Sertifikat

1. Sertifikat Amilum Manihot

Intelligent Materials Pvt. Ltd.
www.nanoshel.com, sales@nanoshel.com



Certificate of Analysis

Tapioca Starch Powder

Stock No: NS6130-12-000918 , CAS: 65996-62-5

| | | |
|---------------------|---|------------------------------|
| Product Name | : | Tapioca Starch Powder |
| Stock No | : | NS6130-12-000918 |
| CAS | : | 65996-62-5 |
| Assay | : | 99.9% |

Note 1: Values are given in % unless otherwise specified.

Note 2: All figures above are weight for weight as determined by ICP



NANOSHEL LLC (In Collaboration)
3422 Old Capitol Trial Suit 1305, Wilmington DE - 19808 USA
(001) 302 652-3464, + 91 9779-880077

2. Sertifikat Nipagin (Metil Paraben)



Certificate of Analysis

Inhibitors • Screening Libraries • Proteins

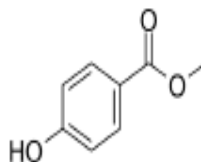
Methyl Paraben

| | |
|----------------|---|
| Cat. No.: | HY-N0349 |
| CAS No.: | 99-76-3 |
| Batch No.: | 33250 |
| Chemical Name: | Benzolic acid, 4-hydroxy-, methyl ester |

PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------|--|-------|----------|
| Molecular Formula: | C ₉ H ₈ O ₃ | | |
| Molecular Weight: | 152.15 | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |

Chemical Structure:



ANALYTICAL DATA

| | |
|------------------------------|---|
| Appearance: | White to off-white (Solid) |
| ¹ H NMR Spectrum: | Consistent with structure |
| Purity (HPLC): | 99.71% |
| Conclusion: | The product has been tested and complies with the given specifications. |

3. Sertifikat HPMC

Ashland

Page 1 of 2

Certificate of Analysis

| | | | | Customer Order: 714001461# Ordered Quantity: 20.000 BX Shipped From: ALE BE ANWERP KRSS W3P CLD |
|--|-------|----------------|----------------|---|
| | | | | Order Number: 8277543/003010 Delivery: 851898380/000010 Date Shipped: December 17, 2021 Sold To Number: 692867 |
| WENECOL K100M BOX 16KG Description: K100M HPMC Type 2802 100000 mPa.s Hydroxypropylmethyl Cellulose Ashland Material Number: 821904 Customer Material Number: 110087622 | | | | |
| Characteristics | Unit | Specification | Method | Batch |
| | | | | 0002314427 |
| Date of Manufacture | | | | October 11, 2021 |
| Test date | | | | October 19, 2024 |
| Loss on drying | % | 0.0 - 5.0 | DGC RES 01.01b | 1.5 |
| Viscosity 2% solution, dry | mPa.s | 75000 - 140000 | DGC RES 01.02 | 112000 |
| Sulfate Ash/Res. On Ign. | % | 0.0 - 1.5 | DGC RES 01.06a | 1.1 |
| pH of solution | | 5.0 - 8.0 | DGC RES 01.03 | 6.9 |
| Hydroxypropoxyl content | % | 7.0 - 12.0 | DGC RES 01.05b | 8.6 |
| Methoxyl content | % | 20.0 - 24.0 | DGC RES 01.05b | 23.0 |
| Quantity Ordered | | | | 20.000 BX |

Notes:

10 - pass

The Certified range data below are based on intermittent testing:

Propylene Chlorohydrins, ppm: <=0.1

Heavy metals, (as Pb), ppm: <=20

As, ppm: <=3

Cd, ppm: <=1

Hg, ppm: <=1

Pb, ppm: <=2

The above product is compliant with the monograph requirements for hydroxypropylmethylcellulose in the current editions of the FCC, the JXCFA:190 464 and the 96/97/EC: E 464. This product has been manufactured in accordance with current Good Manufacturing Practices in 21CFR Part 110.

Best if used within 3 years of date of manufacture. Our products have a retesting interval, which is assigned to assure that the product can still satisfy the original specifications to which these products are sold.

4. Sertifikat Nipasol



Alpha Chemika
ISO 9001 Quality System certified Organization
House Of Unlimited Chemicals



EURO TECH

ALPHA CHEMIKA, 102, 1st Floor, B Wing, Savgan Heights, RTO Road, Four Bungalow, Andheri (W), Mumbai 400 053, Maharashtra (India)
Tel: +91 22 65218147 • +91 22 26317055 • +91 22 26330745 • TeleFax : 91-22-26317055 • Mobile : +91 9820 385757 • +91 9769 472001
Skype ID : tanmay1977 • Email: info@alphachemika.co.in / sales@alphachemika.co.in

CERTIFICATE OF ANALYSIS

Name Of Item : PROPYL-P-HYDROXY BENZOATE **Formula :** C₁₀H₁₂O₃
(Propyl Paraben)

M.W. : 180.21 **Batch No. :**

CAS NO. : 94-13-3 **Cat. No. :** AL3848 05000

Date Of Mfg. : **Date of Analysis :**

| Type Of Test | Standard | Observed |
|-----------------------------|--------------------------|--------------------------|
| Description | White crystalline powder | White crystalline powder |
| Assay | 99.5 - 100.5% | 99.60% |
| Impurities reacting acid | Passes test | Passes test |
| Lead (Pb) | ≤0.001% | 0.0008% |
| Copper (Cu) | ≤0.0025% | ≤0.0025% |
| Zinc (Zn) | ≤0.0025% | 0.002% |
| Arsenic (As) | ≤0.0003% | 0.0002% |
| Loss on drying at 60°C/2hrs | ≤0.5% | 0.4% |
| Sulphated ash | ≤0.05% | 0.048% |

Results : The above product complies with LR grade

Registered Under Small Scale Industries Maharashtra (India)

5. Sertifikat Etanol



CERTIFICATE OF ANALYSIS

No : 1108/OAAA/IA/0089/20IV01
 Subject : Solvent AH
 NUSA KIMIA INDO
 Date Received : 08-02-2022
 Date Of Testing : 08-02-2022
 Tester for : FULL ANALYSIS
 Description Of Sample : 1 BOTTLE 1 LT
 LOT . No : 11/C101/BPM.0/C011, MANUF.05.10.2022/08.02.2025

This sample was analysed in our QA Analytical laboratory and the following results were obtained

| NO | PARAMETER | DIMENTIO N | TEST METHOD | RESULT | SPECIFICATION |
|----|-------------------|---------------|-----------------|---------|---------------|
| 1 | purity | % v/v | Alcoholmeter 20 | 96.2 | Min 96.6 |
| 2 | permanganate | ppm | °C | 31 | Min 20 |
| | Test Time 20 °C | - | ASTM D-1363 | - | - |
| 3 | Aldehyde | ppm | - | nd | Max. 4 |
| 4 | Methanol | ppm | Gas Chrom | nd | Max. 8 |
| 5 | Acidity as Acetic | ppm | Gas Chrom | 5 | Max 20 |
| 6 | Acid | ppm | ASTM D-1613 | 1 | Max 20 |
| | Residue After | - | ASTM D - 1353 | - | - |
| 7 | Evaporation | - | - | 0,80729 | Max 0.810 |
| | Specific Grafity | - | ASTM D-891 | - | - |
| 8 | at 20/20 °C | ppm | - | nd | Max. 5 |
| 9 | n-propanol | ppm | Gas Chrom | nd | Max. 5 |
| 10 | Iso Amyl Alcohol | ppm | Gas Chrom | nd | Max. 5 |
| 11 | Iso butanol | - | Gas Chrom | Clear | Clear |
| 12 | Appearance | ppm | VISUAL | nd | Max. 5 |
| | N-buthanol | | Gas Chrom | | |

6. Sertifikat Rosella Simplisia



Kemenkes
RS Sardjito

📍 Jl. Kesehatan No. 1 Sekip Yogyakarta
☎ +62-274-587333
🌐 <http://www.sardjito.co.id>

Kepada
Alfina Damayanti
Prodi S1 Farmasi, Fakultas Kesehatan & Teknologi, Universitas Aisyiyah Palembang
Jalan Kol. H. Burlian No. 32 A, Karya Baru, Kec. Alang-Alang Lebar, Kota Palembang, Sumatera Selatan 30960

LAPORAN HASIL UJI

Nomor : TL.02.04/D.XI.6/12452.482/2025
Nomor permohonan : PE/V/2025/50
Tanggal terbit : 28 Mei 2025
Halaman : 1 dari 2

IDENTITAS SAMPEL

Nama sampel : Jahe Merah
Merek : -
Bentuk sampel : Tanaman Utuh Segar
Keterangan sampel : -

Tanggal Penerimaan : 22 Mei 2025
Tanggal Pelaksanaan : 23 Mei 2025
Jenis Pengujian : Fisika/Kimia/Mikrobiologi
Hasil Pengujian : Terlampir

7. Sertifikat Jahe Merah Simplisia



Kemenkes
RS Sardjito

Jl. Kesehatan No. 1 Sekip Yogyakarta
☎ +62-274-587333
🌐 <http://www.sardjito.co.id>

Kepada
Alfina Damayanti
Prodi S1 Farmasi, Fakultas Kesehatan & Teknologi, Universitas Aisyiyah Palembang
Jalan Kol. H. Burlian No. 32 A, Karya Baru, Kec. Alang-Alang Lebar, Kota Palembang, Sumatera Selatan 30959

LAPORAN HASIL UJI

Nomor : TL.02.04/D.XI.6/12452.481/2025
Nomor permohonan : PE/V/2025/49
Tanggal terbit : 28 Mei 2025
Halaman : 1 dari 2

IDENTITAS SAMPEL

Nama sampel : Rosella
Merek : -
Bentuk sampel : Tanaman Utuh Segar
Keterangan sampel : -

Tanggal Penerimaan : 22 Mei 2025
Tanggal Pelaksanaan : 23 Mei 2025
Jenis Pengujian : Fisika/Kimia/Mikrobiologi
Hasil Pengujian : Terlampir

8. Sertifikat Kunyit Simplisia



Kemenkes
RS Sardjito

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☎ +62-274-587333
🌐 <http://www.sardjito.co.id>

Kepada
Alfina Damayanti
Prodi S1 Farmasi, Fakultas Kesehatan & Teknologi, Universitas Aisyiyah Palembang
Jalan Kol. H. Burlian No. 32 A, Karya Baru, Kec. Alang-Alang Lebar, Kota Palembang, Sumatera Selatan 30961

LAPORAN HASIL UJI

Nomor : TL.02.04/D.XI.6/12452.483/2025
Nomor permohonan : PE/V/2025/51
Tanggal terbit : 28 Mei 2025
Halaman : 1 dari 2

IDENTITAS SAMPEL

Nama sampel : Kunyit
Merek : -
Bentuk sampel : Tanaman Utuh Segar
Keterangan sampel : -

Tanggal Penerimaan : 22 Mei 2025
Tanggal Pelaksanaan : 23 Mei 2025
Jenis Pengujian : Fisika/Kimia/Mikrobiologi
Hasil Pengujian : Terlampir

Lampiran 9. Analisis Data

UJI KESERAGAMAN BOBOT FORMULA 1 DAN 2

Test Statistics^b

| | UJI_ keseragaman bobot 1 2 |
|-----------------------------------|----------------------------------|
| Mann-Whitney U | 3.000 |
| Wilcoxon W | 9.000 |
| Z | -.655 |
| Asymp. Sig. (2-tailed) | .513 |
| Exact Sig. [2*(1-tailed Sig.)] | .700 ^a |

a. Not corrected for ties.

b. Grouping Variable: Formulasi_1_2

UJI KESERAGAMAN BOBOT FORMULA 3 DAN 4

Test Statistics^b

| | uji_ keseragaman bobot 3 4 |
|-----------------------------------|----------------------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -1.964 |
| Asymp. Sig. (2-tailed) | .050 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: formulasi_3_4

UJI KETEBALAN FORMULA 1 dan 2

Test Statistics^b

| | KETEBALAN_ 1_2 |
|-----------------------------------|-------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -2.236 |
| Asymp. Sig. (2-tailed) | .025 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: Formulasi_1_2

UJI KETEBALAN FORMULA 3 dan 4

Test Statistics^b

| | ketebalan_ 3_4 |
|-----------------------------------|-------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -2.236 |
| Asymp. Sig. (2-tailed) | .025 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: formulasi_3_4

UJI LIPATAN FORMULA 1 DAN 2

Test Statistics^b

| | LIPATAN_1_2 |
|-----------------------------------|-------------------|
| Mann-Whitney U | 2.000 |
| Wilcoxon W | 8.000 |
| Z | -1.091 |
| Asymp. Sig. (2-tailed) | .275 |
| Exact Sig. [2*(1-tailed Sig.)] | .400 ^a |

a. Not corrected for ties.

b. Grouping Variable: Formulasi_1_2

UJI LIPATAN FORMULA 3 DAN 4

Test Statistics^b

| | LIPATAN_3_4 |
|-----------------------------------|-------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -1.964 |
| Asymp. Sig. (2-tailed) | .050 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: formulasi_3_4

pH FORMULA 1 DAN 2

Test Statistics^b

| | PH_1_2 |
|--------------------------------|-------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -2.236 |
| Asymp. Sig. (2-tailed) | .025 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: Formulasi_1_2

pH FORMULA 3 DAN 4

Test Statistics^b

| | PH_3_4 |
|--------------------------------|-------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -2.236 |
| Asymp. Sig. (2-tailed) | .025 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: formulasi_3_4

DISINTEGRASI FORMULA 1 DAN 2

Test Statistics^b

| | DISINTEGRA SI_1_2 |
|--------------------------------|----------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -2.236 |
| Asymp. Sig. (2-tailed) | .025 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: Formulasi_1_2

DISINTEGRASI FORMULA 3 DAN 4


Test Statistics^b

| | DISINTEGRA SI_3_4 |
|-----------------------------------|----------------------|
| Mann-Whitney U | .000 |
| Wilcoxon W | 6.000 |
| Z | -2.236 |
| Asymp. Sig. (2-tailed) | .025 |
| Exact Sig. [2*(1-tailed Sig.)] | .100 ^a |

a. Not corrected for ties.

b. Grouping Variable: formulasi_3_4

Lampiran 10. Surat Perizinan Lab

| | | | |
|---|--|---------------|---------|
|  | SURAT | No Dokumen | Form-A1 |
| | PERMOHONAN IZIN PENELITIAN PROGRAM STUDI S-1 FARMASI UNIVERSITAS AISYIYAH PALEMBANG | Berlaku Sejak | |
| | | Revisi | 000 |

Hal : Permohonan Izin Penelitian

| | |
|---|------------------|
| 1 | Skripsi |
| 2 | PKM/LKTI |
| 3 | Penelitian Dosen |
| 4 | Luar |

Kepada Yth
Kabag Laboratorium Terpadu
Universitas 'Aisyiyah Palembang

Assalamualaikum Wr. Wb.

Sehubungan dengan penelitian kami dalam bidang Teknologi Farmasi dengan:
Judul Penelitian : pengaruh polimer terhadap karakteristik edible film candy
habal untuk mengangkan (dismenorea)

Nama Pembimbing : 1. Intan Trisakti, M. Farm
2. Art. Onny Indriani, M. Farm

| No | Nama | NIM/NIP/NIK | No. HP |
|----|------------------|--------------|--------------|
| 1 | Alfina Damayanti | 219820103002 | 081708508291 |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |

Bermaksud mengajukan izin penelitian di Laboratorium^{*)}: Farmasetika Dasar / Teknologi Farmasi / Kimia Farmasi / Biologi Farmasi / Farmakologi / Mikrobiologi / Komputasi
Prodi S1 Farmasi Universitas 'Aisyiyah Palembang.

Penelitian tersebut akan kami laksanakan selama: 3 bulan,

yang terhitung dari : 6 05 2025 s.d 6 08 2025

Sebagai bahan pertimbangan, bersama ini dilampirkan lembar pengesahan proposal penelitian.
Demikian permohonan kami, atas perhatiannya diucapkan terima kasih.

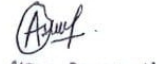
Palembang,

Mengetahui,
Dosen Pembimbing

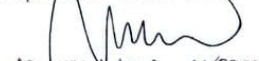
Intan Trisakti, M. Farm
Menyetujui,
Kabag Laboratorium Terpadu

Meni Damayanti, M. Farm


Pemohon


Alfina Damayanti

Kaprosi S1 Farmasi


Art. Onny Indriani, M. Farm

Lampiran 11. Lembar Bimbingan Skripsi



















UNISA
UNIVERSITAS Negeri Palembang

FAKULTAS KESEHATAN DAN TEKNOLOGI (FKesT)
PROGRAM STUDI :
SI FARMASI


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FORMULIR BIMBINGAN SKRIPSI

Nama : Alfina Damayanti
NIM : 214820103002
Nama Pembimbing : 1. Intan Trisakti, M.Farm
2. apt Onny Indriani, M.Farm
Judul Skripsi : Pengaruh Amilum Manihot Terhadap Karakteristik Fisik Edible Film Candy Herbal Untuk Meringankan Dismenorhea

| No. | Tanggal Konsultasi | Keterangan | Paraf Pembimbing |
|-----|-----------------------|---------------------------------|---|
| 1 | 5 - Agustus - 2025 | Bimbingan revisi skripsi |  |
| 2 | 9 - Agustus - 2025 | Bimbingan skripsi |  |
| 3 | 10 - Agustus - 2025 | Bimbingan skripsi |  |
| 4 | 13 - Agustus - 2025 | Bimbingan skripsi |  |
| 5 | 15 - Agustus - 2025 | Bimbingan skripsi |  |
| 6 | 21 - Agustus - 2025 | Bimbingan skripsi |  |
| 7 | 25 - Agustus - 2025 | Bimbingan ppt skripsi |  |
| 8 | 10 - September - 2025 | Bimbingan untuk data spss |  |
| 9 | 9 - September - 2025 | Bimbingan untuk data spss |  |
| 10 | 11 - September - 2025 | bimbingan skripsi |  |
| 11 | 14 - September - 2025 | bimbingan skripsi dan data spss |  |
| 12 | 16 - September - 2025 | bimbingan skripsi dan data spss |  |
| 13 | 17 - September - 2025 | bimbingan data spss |  |
| 14 | 18 - September - 2025 | bimbingan data |  |
| 15 | 20 - September - 2025 | bimbingan dan ACC data spss |  |
| 16 | 21 - September - 2025 | ACC skripsi |  |
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Lampiran 12. Lembar Pernyataan Revisi Skripsi



**FAKULTAS ILMU KESEHATAN DAN TEKNOLOGI
'AISYIYAH PALEMBANG
PROGRAM STUDI SI FARMASI**

Jl. Kol. H. Burhan -Lr. M. Husin No. 907 RT. 12/RW. 04 Kel. Karya Baru
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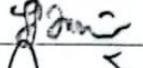



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

**FORMULIR
PERNYATAAN SELESAI REVISI NASKAH SKRIPSI*)
(S-06)**

Yang bertandatangan dibawah ini, tim penguji Skripsi 1/ Skripsi 2*):

Nama Mahasiswa : Alfina Damayanti
NIM : 214820103002
Judul Penelitian : Pengaruh Amilum Manihot Terhadap Karakteristik Fisik *Edible Film Candy* Herbal Untuk Meringankan *Dismenorea*
Pembimbing 1 : Intan Trisakti, M.Farm
Pembimbing 2 : apt. Onny Indriani, M.Farm
Tanggal Ujian : 27 - Agustus - 2025

Menerangkan bahwa naskah Proposal/ Skripsi*) telah selesai direvisi oleh tim penguji.

| Nama | Tanda Tangan | Tanggal |
|--------------------------------------|---|---------------|
| 1. Intan Trisakti, M.Farm |  | 26/09 2025 |
| 2. apt. Onny Indriani, M.Farm |  | 02/10 2025 |
| 3. apt. Galih Pratiwi, M.Pharm, Sci. |  | 17/09 2025 |
| 4. Yudi Arna, S.Si., M.Kes |  | 02/10 2025 |

*) : Coret yang tidak perlu.