

## LAMPIRAN

### Lampiran 1. Perhitungan

Perhitungan pengenceran dengan konsentrasi 20%, 30%, dan 40% rumus (b/v)

Keterangan : b (bobot)

v (volume)

a. Pembuatan larutan konsentrasi 20%

$$20/100 \times 10 = 2 \text{ gr}$$

Adapun cara pembuatan larutan dengan konsentrasi 20% diperlukan sebanyak 2 gr ekstrak daun cengkeh (*Syzygium aromaticum*) dengan menggunakan pelarut DMSO sebanyak 10 ml.

b. Pembuatan larutan konsentrasi 30%

$$30/100 \times 10 = 3 \text{ gr}$$

Adapun cara pembuatan larutan dengan konsentrasi 30% diperlukan sebanyak 3 gr ekstrak daun cengkeh (*Syzygium aromaticum*) dengan menggunakan pelarut DMSO sebanyak 10 ml.

c. Pembuatan larutan konsentrasi 40%

$$40/100 \times 10 = 4 \text{ gr}$$

Adapun cara pembuatan larutan dengan konsentrasi 40% diperlukan sebanyak 4 gr ekstrak daun cengkeh (*Syzygium aromaticum*) dengan menggunakan pelarut DMSO sebanyak 10 ml.

d. Perhitungan pengenceran ketokenazol 2%

1. Massa zat aktif (gram) = 4 gram

Adapun cara untuk membuat 10 ml larutan ketokenazol 2% dengan memerlukan 4 gram ketokenazol yang dilarutkan.000

## Lampiran 2. Surat Determinasi



KEMENTERIAN PENDIDIKAN TINGGI, SAINS,  
DAN TEKNOLOGI  
UNIVERSITAS TANJUNGPURA  
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM  
LABORATORIUM BIOLOGI  
Jalan Prof. Dr. H. Hadari Nawawi, Pontianak 78124  
Telp./Fax.: (0561) 577963 e-mail : info@fmipa.untan.ac.id

Lampiran 1

### Hasil Determinasi Tumbuhan

Nama Pengirim : Luis Anatasya  
Jenis Sampel : Tumbuhan  
Tanggal Terima : 17 Juni 2025

### Klasifikasi:

Kingdom : *Plantae*  
Divisi : *Tracheophyta*  
Kelas : *Magnoliopsida*  
Ordo : *Myrtales*  
Famili : *Myrtaceae*  
Genus : *Syzygium*  
Spesies : *Syzygium aromaticum* (L.) Merr. & L. M. Perry

### Nama Daerah : Cengkeh

### Deskripsi :

Cengkeh merupakan tanaman perdu yang memiliki batang pohon besar dan berkayu keras. Cengkeh mampu bertahan hidup sampai puluhan bahkan ratusan tahun. Tinggi tanaman ini mencapai 20-30 meter. Cengkeh memiliki daun tunggal yang berbentuk bulat telur sampai lancet memanjang, ujung runcing, pangkal meruncing, tepi rata, tulang daunnya menyirip, permukaan atas daun mengkilap, panjang daun 6-13,5 cm dengan lebar 2,5-5 cm, warna daunnya hijau atau coklat muda saat masih tua dan berubah menjadi hijau tua saat sudah tua. Tanaman cengkeh memiliki akar tunggang yang berbentuk seperti tombak (*fusiformis*) yang sangat kuat, sehingga mampu menahan pohon tetap tegak hingga puluhan tahun.

### Daftar Pustaka:

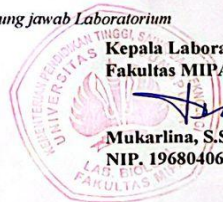
Backer, A and Van Den Brink, B., 1965, *Flora of Java (Spermatophytes Only)*, Volume I, N.V.P. The Netherlands, Noordhoff-Groningen.

Catalogue of life. dalam <https://www.catalogueoflife.org/>, diakses pada 22 Juni 2025.

Cronquist, A., 1981, *An Integrated System of Classification of Flowering Plants*, New York, Columbia University Press, 477.

Tjitrosoepomo, G., 2002, *Taksonomi Tumbuhan Spermatophyta*, Gadjah Mada University Press, Yogyakarta.

Catatan : Pengambilan sampel di luar tanggung jawab Laboratorium



Kepala Laboratorium Biologi  
Fakultas MIPA Universitas Tanjungpura

Mukarlina, S.Si., M.Si.  
NIP. 196804062000032001



KEMENTERIAN PENDIDIKAN TINGGI, SAINS,  
DAN TEKNOLOGI  
UNIVERSITAS TANJUNGPURA  
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM  
LABORATORIUM BIOLOGI

Jalan Prof. Dr. H. Hadari Nawawi, Pontianak 78124  
Telp./Fax.: (0561) 577963 e-mail : info@fmipa.untan.ac.id

Pontianak, 24 Juni 2025

Nomor : 158/A/LB/FMIPA/UNTAN/2025  
Lampiran : 1  
Perihal : Hasil Determinasi Tumbuhan

Kepada Yth:  
**Luis Anatasya**  
Di  
Tempat

Dengan hormat,

Bersama ini kami sampaikan data hasil determinasi tumbuhan, yang diterima pada:

Hari/ Tanggal : 17 Juni 2025  
Jumlah contoh : 1 sampel  
Jenis contoh : Tumbuhan  
Lokasi : Desa Benawai Agung, Kayong Utara  
Distribusi sampel : -

Demikian kami sampaikan, atas perhatiannya diucapkan terima kasih.

Kepala Laboratorium Biologi  
Fakultas MIPA Universitas Tanjungpura

  
Mukarlina, S.Si., M.Si.  
NIP. 196804062000032001

Tembusan:  
Yth. Dekan FMIPA UNTAN sebagai laporan

### Lampiran 3. Surat Fitokimia

|                                                                                                                                                                                               | <b>LABORATORIUM RISET DAN BIOTEKNOLOGI KIMIA</b><br><b>UNIVERSITAS TANJUNGPURA</b><br><b>FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM</b><br>Jalan Prof. Dr. Hadari Nawawi Pontianak 78124<br>Telp./Fax.: (0561)585343, e-mail: lab@chemistry.untan.ac.id                                                                                                                                                                                                                            |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------|------------------|---|-------------------|---|------------------------|---|----------------------|---|---------|---|-----------|---|---------|---|-------|---|--|
|                                                                                                                                                                                                                                                                                | <b>SERTIFIKAT ANALISIS</b><br><b>Certificate of Analysis</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Tanggal terbit</b><br><i>Date of Issued</i>                                                                                                                                                                                                                                 | <b>18 Juni 2025</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Nomor laporan</b><br><i>Lab. Reference</i>   |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Kepada</b><br><i>To client</i>                                                                                                                                                                                                                                              | <b>Luis Anatasya</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Nomor analisis</b><br><i>Analysis number</i> |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SLK-023</b>                                  |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Halaman</b><br><i>Pages</i>                  |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>1</b>                                        |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Yang bertanda tangan dibawah ini menerangkan bahwa pengujian / analisa di laboratorium :</b><br><i>The undersigned certifies that laboratory testing / analysis</i>                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Dari contoh</b><br><i>Of the sample(s)</i>                                                                                                                                                                                                                                  | <b>Ekstrak Cengkeh (Syzygium Aromaticum)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Daun</b><br><i>Taken from</i>                |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Diambil dari</b>                             |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Merk / Keterangan contoh</b><br><i>Marking / description of sample</i>                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Pengambil contoh</b><br><i>Sampler</i>       |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Tanggal terima</b><br><i>Received on</i>                                                                                                                                                                                                                                    | <b>13 Juni 2025</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Tanggal analisa</b><br><i>Date tested</i>    |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>17 Juni 2025</b>                             |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Dengan hasil pengujian contoh sebagai berikut :</b><br><i>the sample(s) give the following results</i>                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                                                                                                                | <table border="1"> <thead> <tr> <th>Parameter uji</th> <th>Kadar</th> </tr> </thead> <tbody> <tr> <td>Alkaloid (mayer)</td> <td>+</td> </tr> <tr> <td>Alkaloid (wagner)</td> <td>+</td> </tr> <tr> <td>Alkaloid (dragendroff)</td> <td>+</td> </tr> <tr> <td>Flavonoid (Mg + HCl)</td> <td>+</td> </tr> <tr> <td>Saponin</td> <td>+</td> </tr> <tr> <td>Terpenoid</td> <td>+</td> </tr> <tr> <td>Steroid</td> <td>+</td> </tr> <tr> <td>Tanin</td> <td>+</td> </tr> </tbody> </table> | Parameter uji                                   | Kadar | Alkaloid (mayer) | + | Alkaloid (wagner) | + | Alkaloid (dragendroff) | + | Flavonoid (Mg + HCl) | + | Saponin | + | Terpenoid | + | Steroid | + | Tanin | + |  |
| Parameter uji                                                                                                                                                                                                                                                                  | Kadar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Alkaloid (mayer)                                                                                                                                                                                                                                                               | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Alkaloid (wagner)                                                                                                                                                                                                                                                              | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Alkaloid (dragendroff)                                                                                                                                                                                                                                                         | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Flavonoid (Mg + HCl)                                                                                                                                                                                                                                                           | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Saponin                                                                                                                                                                                                                                                                        | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Terpenoid                                                                                                                                                                                                                                                                      | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Steroid                                                                                                                                                                                                                                                                        | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| Tanin                                                                                                                                                                                                                                                                          | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Catatan :</b> <ul style="list-style-type: none"> <li>(-) tidak mengandung metabolit sekunder, (+) mengandung metabolit sekunder</li> <li>Parameter uji sesuai dengan permintaan</li> <li>Laboratorium tidak bertanggung jawab terhadap proses pengambilan sampel</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Kepala Lab. Bioteknologi dan Riset</b><br><b>FMIPA Universitas Tanjungpura</b>                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
|                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |
| <b>Prof. Rudiyanasyah, S.Si, M.Si, Ph.D</b><br><b>NIP. 197201242000121001</b>                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                 |       |                  |   |                   |   |                        |   |                      |   |         |   |           |   |         |   |       |   |  |

## Lampiran 4. Media SDA (Sabouraud Dextrose Agar)



### Certificate of Analysis

1.05438.0500 SABOURAUD 4% dextrose agar for microbiology (According harm. EP/USP/JP)

Batch VM1078338

|                        | Spec. Values    | Batch Values    |
|------------------------|-----------------|-----------------|
| Appearance (clearness) | clear           | clear           |
| Appearance (color)     | yellowish-brown | yellowish-brown |
| pH-value (25 °C)       | 5.4 - 5.8       | 5.6             |

Typical composition (g/litre): Peptone from casein 5.0; Peptone from meat 5.0; D(+)Glucose 40.0; Agar-agar 15.0.

|                                                 | Spec. Values      | Batch Values |
|-------------------------------------------------|-------------------|--------------|
| Growth (Trichophyton mentagrophytes ATCC 18748) | fair to very good | moderately   |
| Growth (Trichophyton rubrum ATCC 28188)         | fair to good      | moderately   |
| Growth (Trichophyton ajelloi ATCC 28454)        | fair to good      | good         |
| Growth (Microsporum gallinae ATCC 12108)        | fair to very good | moderately   |
| Growth (Microsporum canis ATCC 36299)           | good to very good | good         |
| Growth (Geotrichum candidum DSM 1240)           | good to very good | very good    |
| Growth (Penicillium commune ATCC 10428)         | good to very good | good         |

Incubation: 7 days; 28°C

|                                                                                                     | Spec. Values | Batch Values |
|-----------------------------------------------------------------------------------------------------|--------------|--------------|
| Growth promotion test in accordance with the harmonised method of EP, USP and JP.                   |              |              |
| Inoculum on reference medium (Candida albicans ATCC 10231 (WDCM 00054))                             | 10 - 100     | 44           |
| Inoculum on reference medium (Aspergillus brasiliensis (formerly A. niger) ATCC 16404 (WDCM 00053)) | 10 - 100     | 13           |
| Colony count (Candida albicans ATCC 10231 (WDCM 00054))                                             |              | 35           |
| Colony count (Aspergillus brasiliensis (formerly A. niger) ATCC 16404 (WDCM 00053))                 |              | 7            |
| Recovery on test medium (Candida albicans ATCC 10231 (WDCM 00054))                                  | ≥ 70 %       | 80 %         |
| Recovery on test medium (Aspergillus brasiliensis (formerly A. niger) ATCC 16404 (WDCM 00053))      | ≥ 50 %       | 54 %         |

Incubation: C. albicans and A. brasiliensis up to 5 days at 20-25°C.

The information above is current at this time of publication and is subject to change without notice (except for customers holding a change control agreement with our company). The information format can be altered at any time and in any way if internal company matters or Standard Regulations so say so.

Date of release (DD.MM.YYYY) 26.02.2024  
Expiry date (DD.MM.YYYY) 31.01.2029

Merck KGaA  
Corporation with General Partners  
Frankfurter Straße 250

The life science business of Merck KGaA, Darmstadt,  
Germany operates as MilliporeSigma in the U.S. and  
Canada.

Page 1 of 2

## Lampiran 5. Jamur *Candida albicans*

**Thermo Fisher Scientific**  
 Microbiology  
 12076 Santa Fe Trail Drive  
 12230 Santa Fe Trail Drive  
 Lenexa, KS 66215  
 800.255.6730  
 800.447.5761 fax  
 www.thermofisher.com

**thermo**scientific

**Certificate of Analysis**

**Product Name:** C. albicans ATCC 14053 PK/5  
**Lot Number:** 705852

**Product Number:** R4601501  
**Expiration Date:** 2025-10-30  
 (YYYY-MM-DD)

This product has been manufactured, processed and packaged in accordance with Quality Systems Regulation, 21 CFR Part 820. Representative samples were tested per Remel Inc., a part of Thermo Fisher Scientific Quality Control specifications and were found to meet performance criteria for this product.

**Purity:**  
 Standardized aliquots of the rehydrated product are inoculated onto nonselective media and examined for pure growth following the appropriate incubation. Selective and Differential media are also tested where applicable.

**Viability And Quantification:**  
 Each organism is recovered from the preserved state within the required time frame and at an acceptable level. Passage number is stated as the current preserved state.

**Macroscopic And Microscopic Morphology:**  
 Colony morphology is consistent with documented referenced description. Traditional staining is performed.

**Characterization:**  
 Organism exhibits characteristic biochemical, enzymatic, genotypical and/or biochemical reactions. Automated and/or conventional testing was performed and results were within established limits. Antimicrobial testing performed where applicable. Results within expected ranges.

CFU/loop: >10(4)  
 Gram Reaction: Gram Positive Yeast

Passage: 3  
 Identification Profile: MicroSEQ® or Vitek® 2

Appearance: Preserved Gel Matrix suspended in inoculating loop  
 pH: N/A

thermo**scientific**

**Thermo Fisher Scientific**  
*Microbiology*  
12076 Santa Fe Trail Drive  
12230 Santa Fe Trail Drive  
Lenexa, KS 66215  
800.255.6730  
800.447.5761 fax  
[www.thermofisher.com](http://www.thermofisher.com)

## Certificate of Analysis

Signed



Quality Assurance Manager

The identity, purity, and authenticity of the Licensed Products are exclusively the responsibility of Remel Inc. and not ATCC.  
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Remel Inc. is licensed to use these trademarks and to sell products derived from ATCC® culture.

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## Lampiran 6. Surat Izin Penelitian



### POLITEKNIK 'AISYIYAH PONTIANAK

PROGRAM STUDI D.IV TEKNOLOGI LABORATORIUM MEDIS

Jl. Ampera No. 9 Telp (0561) 6655112, 6655114 / Fax. (0561) 6655115  
Website : [www.polita.ac.id](http://www.polita.ac.id) Email : [polita.pontianak@gmail.com](mailto:polita.pontianak@gmail.com)

Nomor : 01/II.3.AU/TLM/VI/2025

Pontianak, 30 Juni 2025

Lampiran : -

Perihal : Surat Keterangan

Bismillahirrahmanirrahim

Assalamu'alaikum Warahmatullahi Wabarokatuh

Teriring do'a dan salam selalu kita panjatkan kehadiran Allah Subahanahuwata'ala, semoga senantiasa mendapatkan bimbingan dan petunjuk-Nya di dalam menjalankan aktivitas sehari-hari. Amiin.

Dengan ini kami menerangkan bahwa :

Nama : Luis Anatasya

NIM : 21031055

Prodi : D4 Teknologi Laboratorium Medis

Judul Penelitian : Efektivitas Ekstrak Daun Cengkeh (*Syzygium aromaticum*) Dalam Menghambat Pertumbuhan *Candida albicans* Secara *In Vitro*

Sudah selesai melaksanakan penelitian di Laboratorium diploma IV Teknologi Laboratorium Politeknik 'Aisyiyah Pontianak.

Demikianlah Surat ini kami Sampaikan atas kerja samanya selama ini kami mengucapkan terima kasih

Billahitaufik Walhidayah

Wassalamu'alaikum Warohmatullahi Wabarokatuh

Kabag. Laboratorium TLM

Puspa Amajia, S.Tr., M.Si  
NIDN 11-0401-9501

### Lampiran 7. Dokumentasi penelitian



Dilakukan pencucian daun cengkeh



Pengeringan menggunakan matahari



Setelah di oven



Diblender sampai menjadi bubuk



Dilakukan maserasi



Timbang ekstrak



Diencerkan ekstraksi



Pembuatan control positif



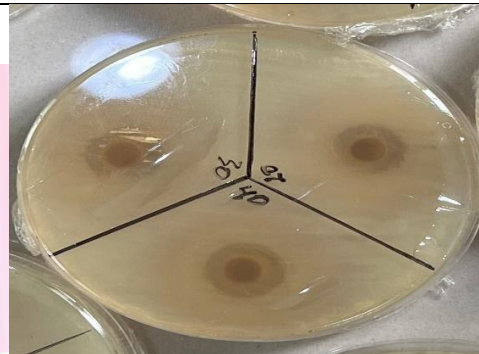
Pembuatan media SDA



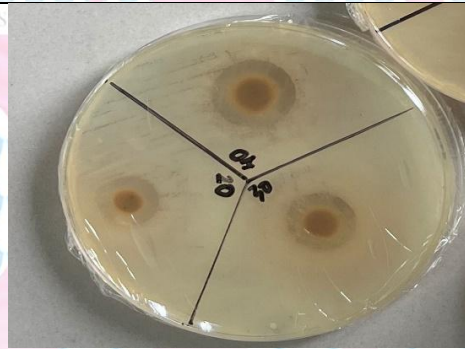
Penanaman jamur



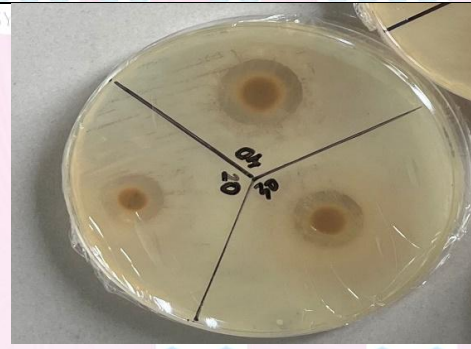
Penanaman cakram



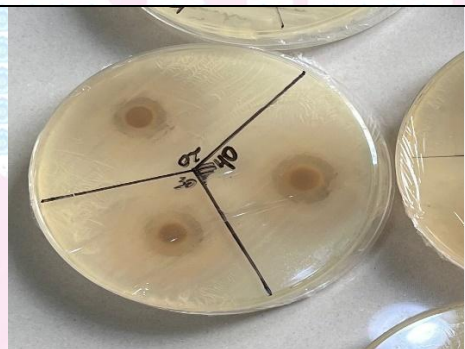
Hasil pengulangan 1 konsentrasi  
20% = 7mm, 30%=7mm, 40%=9mm



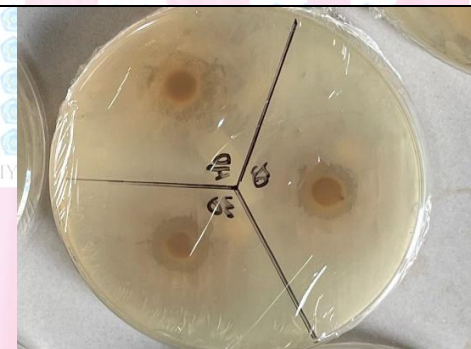
Hasil pengulangan 2 konsentrasi  
20%=5mm, 30%=8, 40%=9mm



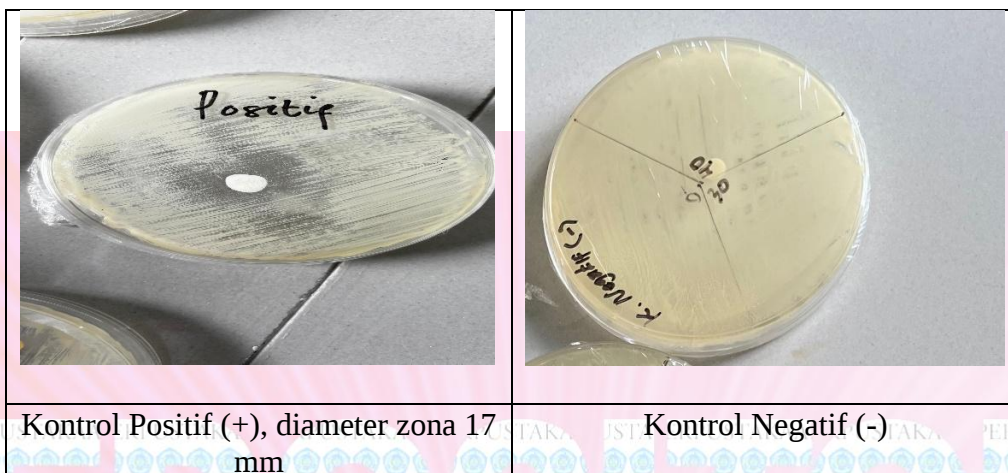
Hasil pengulangan 3 konsentrasi  
20%= 6mm, 30%= 7, 40%=8mm



Hasil pengulangan 4 konsentrasi  
20%=7mm, 30%=9mm,  
40%=10mm



Hasil pengulangan 5 konsentrasi  
20%=6mm, 30%=8mm, 40%=9mm



### Lampiran 8. Uji normalias

|               | Tests of Normality              |    |       |              |    |       |
|---------------|---------------------------------|----|-------|--------------|----|-------|
|               | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |       |
|               | Statistic                       | df | Sig.  | Statistic    | df | Sig.  |
| Konsentrasi20 | 0,231                           | 5  | ,200* | 0,881        | 5  | 0,314 |
| Konsentrasi30 | 0,231                           | 5  | ,200* | 0,881        | 5  | 0,314 |
| Konsentrasi40 | 0,3                             | 5  | 0,161 | 0,883        | 5  | 0,325 |

### Lampiran 9. Uji Homogenitas

#### Test of Homogeneity of Variances

|       |                                      | Levene Statistic | df1 | df2    | Sig. |
|-------|--------------------------------------|------------------|-----|--------|------|
| Hasil | Based on Mean                        | .426             | 2   | 12     | .663 |
|       | Based on Median                      | .222             | 2   | 12     | .804 |
|       | Based on Median and with adjusted df | .222             | 2   | 12.000 | .804 |
|       | Based on trimmed mean                | .451             | 2   | 12     | .648 |

**Lampiran 10. Uji One Way Anova**

**ANOVA**

|               |                | Sum of Squares | df | Mean Square | F | Sig. |
|---------------|----------------|----------------|----|-------------|---|------|
| Konsentrasi20 | Between Groups | 2,8            | 4  | 0,7         | . | .    |
|               | Within Groups  | 0              | 0  | .           |   |      |
|               | Total          | 2,8            | 4  |             |   |      |
| Konsentrasi30 | Between Groups | 2,8            | 4  | 0,7         | . | .    |
|               | Within Groups  | 0              | 0  | .           |   |      |
|               | Total          | 2,8            | 4  |             |   |      |
| Konsentrasi40 | Between Groups | 2              | 4  | 0,5         | . | .    |
|               | Within Groups  | 0              | 0  | .           |   |      |
|               | Total          | 2              | 4  |             |   |      |

### Lampiran 11. Uji *Pos Hoc* Tukey

#### Multiple Comparisons

Dependent Variable:

| (I) Kelompok |                       |                       | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval |             |
|--------------|-----------------------|-----------------------|-----------------------|------------|-------|-------------------------|-------------|
|              |                       |                       |                       |            |       | Lower Bound             | Upper Bound |
| Tukey HSD    | konsentrasi 20 persen | konsentrasi 30 persen | -1.600*               | 0,39       | 0,004 | -2,77                   | -0,43       |
|              |                       | konsentrasi 40 persen | -2.800*               | 0,39       | 0     | -3,97                   | -1,63       |
|              |                       | Positif               | -10.800*              | 0,39       | 0     | -11,97                  | -9,63       |
|              |                       | Negatif               | 0,2                   | 0,39       | 0,985 | -0,97                   | 1,37        |
|              | konsentrasi 30 persen | konsentrasi 20 persen | 1.600*                | 0,39       | 0,004 | 0,43                    | 2,77        |
|              |                       | konsentrasi 40 persen | -1.200*               | 0,39       | 0,042 | -2,37                   | -0,03       |
|              |                       | Positif               | -9.200*               | 0,39       | 0     | -10,37                  | -8,03       |
|              |                       | Negatif               | 1.800*                | 0,39       | 0,001 | 0,63                    | 2,97        |
|              | konsentrasi 40 persen | konsentrasi 20 persen | 2.800*                | 0,39       | 0     | 1,63                    | 3,97        |
|              |                       | konsentrasi 30 persen | 1.200*                | 0,39       | 0,042 | 0,03                    | 2,37        |
|              |                       | Positif               | -8.000*               | 0,39       | 0     | -9,17                   | -6,83       |
|              |                       | Negatif               | 3.000*                | 0,39       | 0     | 1,83                    | 4,17        |
|              | Positif               | konsentrasi 20 persen | 10.800*               | 0,39       | 0     | 9,63                    | 11,97       |
|              |                       | konsentrasi 30 persen | 9.200*                | 0,39       | 0     | 8,03                    | 10,37       |
|              |                       | konsentrasi 40 persen | 8.000*                | 0,39       | 0     | 6,83                    | 9,17        |
|              |                       | Negatif               | 11.000*               | 0,39       | 0     | 9,83                    | 12,17       |
|              | Negatif               | konsentrasi 20 persen | -0,2                  | 0,39       | 0,985 | -1,37                   | 0,97        |
|              |                       | konsentrasi 30 persen | -1.800*               | 0,39       | 0,001 | -2,97                   | -0,63       |
|              |                       | konsentrasi 40 persen | -3.000*               | 0,39       | 0     | -4,17                   | -1,83       |
|              |                       | Positif               | -11.000*              | 0,39       | 0     | -12,17                  | -9,83       |