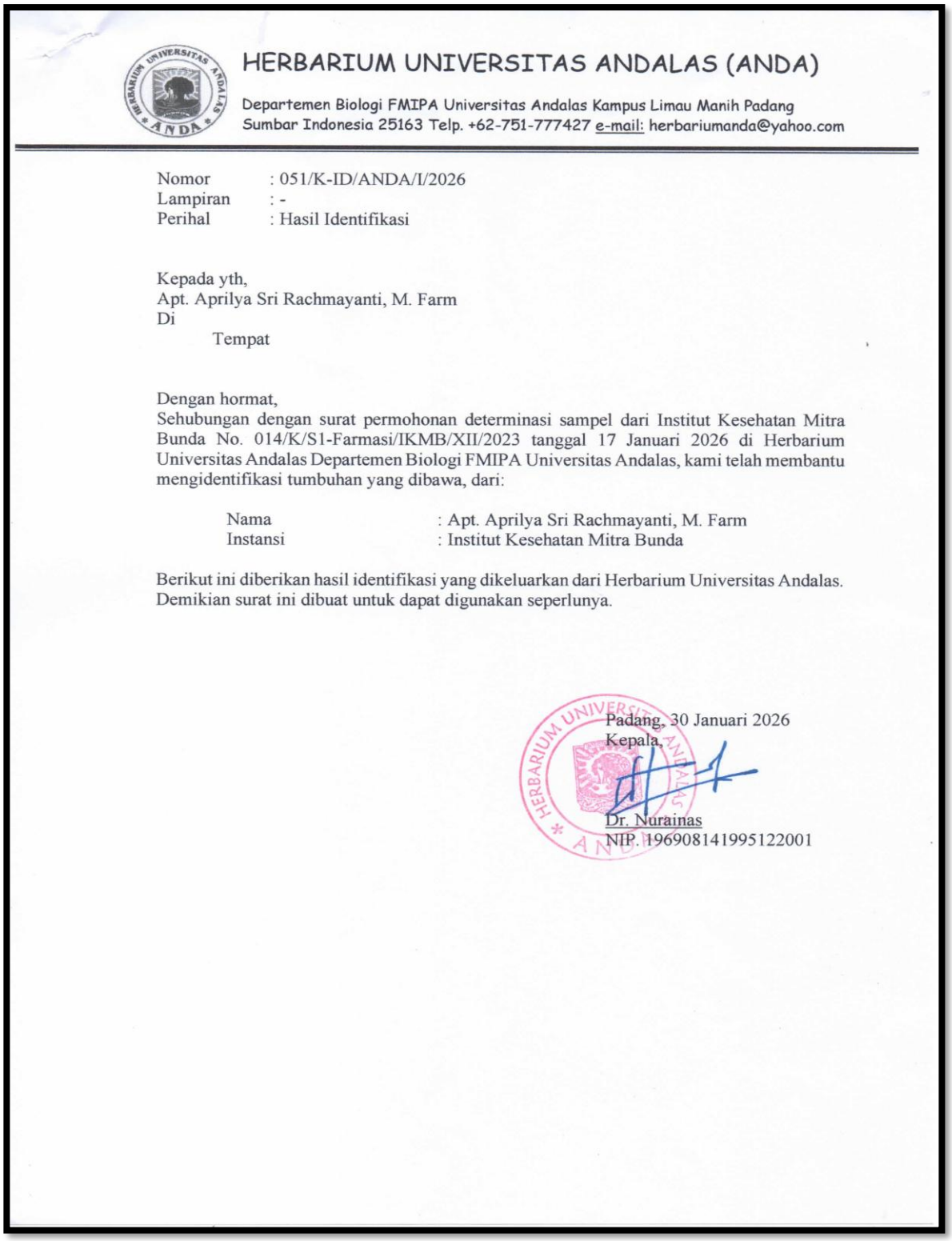
LAMPIRAN

Lampiran 1. Determinasi Daun Sawo



HERBARIUM UNIVERSITAS ANDALAS (ANDA)

Departemen Biologi FMIPA Universitas Andalas Kampus Limau Manih Padang
Sumbar Indonesia 25163 Telp. +62-751-777427 e-mail: herbariumanda@yahoo.com

Nomor : 051/K-ID/ANDA/I/2026
Lampiran : -
Perihal : Hasil Identifikasi

Kepada yth,
Apt. Aprilya Sri Rachmayanti, M. Farm
Di
Tempat

Dengan hormat,
Sehubungan dengan surat permohonan determinasi sampel dari Institut Kesehatan Mitra Bunda No. 014/K/S1-Farmasi/IKMB/XII/2023 tanggal 17 Januari 2026 di Herbarium Universitas Andalas Departemen Biologi FMIPA Universitas Andalas, kami telah membantu mengidentifikasi tumbuhan yang dibawa, dari:

Nama : Apt. Aprilya Sri Rachmayanti, M. Farm
Instansi : Institut Kesehatan Mitra Bunda

Berikut ini diberikan hasil identifikasi yang dikeluarkan dari Herbarium Universitas Andalas. Demikian surat ini dibuat untuk dapat digunakan seperlunya.

Padang, 30 Januari 2026
Kepala,

Dr. Nurainas
NIP. 196908141995122001

HERBARIUM UNIVERSITAS ANDALAS (ANDA)
Departemen Biologi FMIPA Universitas Andalas Kampus Limau Manih Padang
Sumbar Indonesia 25163 Telp. +62-751-777427 e-mail: herbariumanda@yahoo.com

HASIL IDENTIFIKASI

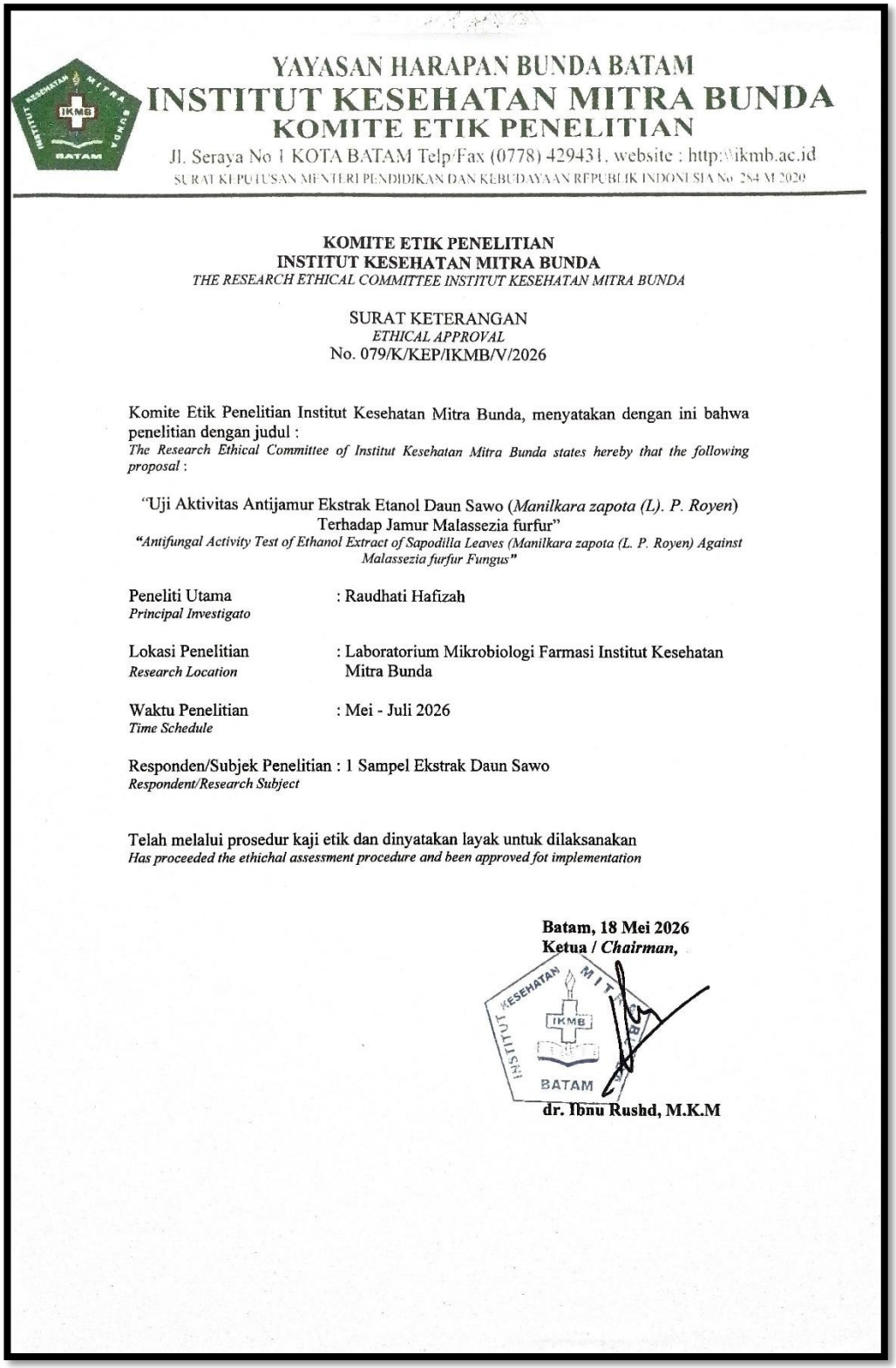
Nama : Apt. Aprilya Sri Rachmayanti, M. Farm
Instansi : Institut Kesehatan Mitra Bunda

No	Family	Spesies	Nama Koleksi
1.	Campanulaceae	*Hippobroma longiflora* (L.) G.Don.	IKMB. 22.70. Daun Kitolod
2.	Oxalidaceae	*Averrhoa bilimbi* L.	IKMB. 22.79. Daun dan Buah Belimbing Wuluh
3.	Convolvulaceae	*Ipomoea batatas* (L.) Lam.	IKMB. 22.45. Daun Ubi Jalar
4.	Convolvulaceae	*Ipomoea batatas* (L.) Lam.	IKMB. 22.46. Daun Ubi Jalar
5.	Malvaceae	*Heritiera littoralis* Aiton	IKMB. 22.37. Daun Dungun
6.	Acanthaceae	*Ruellia tuberosa* L.	IKMB. 22.28. Daun Kencana Ungu
7.	Euphorbiaceae	*Acalypha indica* L.	IKMB. 22.60. Daun Akar Kucing
8.	Malvaceae	*Abelmoschus esculentus* (L.) Moench	IKMB. 22.31. Daun Okra Merah
9.	Sapotaceae	*Manilkara zapota* (L.) P.Royen	IKMB. 22.35. Daun Sawo
10.	Lauraceae	*Persea americana* Mill.	IKMB. 22.30. Biji Alpukat
11.	Gnetaceae	*Gnetum gnemon* L.	IKMB. 22.50. Kulit Buah Melinjo
12.	Melastomataceae	*Melastoma malabathricum* L.	IKMB. 22.39. Daun Senggani
13.	Acanthaceae	*Acanthus ilicifolius* L.	IKMB. 22.81. Daun Jeruju

Padang, 30 Januari 2026
Kepala,

Dr. Nurainas
NIP. 196908141995122001

Lampiran 2. Surat Keterangan *Ethical Approve*



YAYASAN HARAPAN BUNDA BATAM
INSTITUT KESEHATAN MITRA BUNDA
KOMITE ETIK PENELITIAN
Jl. Seraya No 1 KOTA BATAM Telp/Fax (0778) 429431, website : http://ikmb.ac.id
SURAT KEPUTUSAN MENTERI PENDIDIKAN DAN KEBUDAYAAN REPUBLIK INDONESIA No. 284 M 2020

KOMITE ETIK PENELITIAN
INSTITUT KESEHATAN MITRA BUNDA
THE RESEARCH ETHICAL COMMITTEE INSTITUT KESEHATAN MITRA BUNDA

SURAT KETERANGAN
ETHICAL APPROVAL
No. 079/K/KEP/IKMB/V/2026

Komite Etik Penelitian Institut Kesehatan Mitra Bunda, menyatakan dengan ini bahwa penelitian dengan judul :
The Research Ethical Committee of Institut Kesehatan Mitra Bunda states hereby that the following proposal :

"Uji Aktivitas Antijamur Ekstrak Etanol Daun Sawo (*Manilkara zapota (L). P. Royen*) Terhadap Jamur Malassezia furfur"
"Antifungal Activity Test of Ethanol Extract of Sapodilla Leaves (Manilkara zapota (L. P. Royen) Against Malassezia furfur Fungus"

Peneliti Utama : Raudhati Hafizah
Principal Investigato

Lokasi Penelitian : Laboratorium Mikrobiologi Farmasi Institut Kesehatan Mitra Bunda
Research Location

Waktu Penelitian : Mei - Juli 2026
Time Schedule

Responden/Subjek Penelitian : 1 Sampel Ekstrak Daun Sawo
Respondent/Research Subject

Telah melalui prosedur kaji etik dan dinyatakan layak untuk dilaksanakan
Has proceeded the ethichal assessment procedure and been approved fot implementation

Batam, 18 Mei 2026
Ketua / *Chairman*,

dr. Ibnu Rushd, M.K.M

Lampiran 3. Sertifikat *Malassezia furfur*

thermoscientific

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

Certificate of Analysis

Product Name: M. furfur ATCC 14521 PK/5
Lot Number: 131558

Product Number: R4605025
Expiration Date: 2025-12-16
(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(3)

Passage: 3
Identification Profile: MicroSEQ®

Macroscopic Morphology: Medium, convex, slightly irregular, light tan, yeast-like in appearance on Dixon's agar at 30C.

Microscopic Morphology: No hyphae. Oval cells with conidia produced on a base at one pole.

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

Lampiran 4. Sertifikat Ketokonazol 30 µg

HIMEDIA

Certified : ISO 9001:2015, ISO 13485:2016 and WHO GMP

HiMedia Laboratories Private Limited
C-40, Road No.21Y, MIDC, Wagle Ind. Area,Thane(W) - 400604
Website : www.himedialabs.com, Email : info@himedialabs.com

Certificate of Analysis , Quality and Conformity

Material Code : SD275	Material Name : Ketoconazole KT 30 mcg	Lot No : 0000716539
AR No.: 40001614635	Date of Report : 2025-08-11	Exp. Date : 2026-11

TEST	SPECIFICATIONS	RESULTS
Appearance 1 Appearance	Filter paper discs of 6 mm diameter with printed "KT 30" on centre of each side of the disc.	Complies
Cultural response 1 Cultural response	Average diameter of zone of inhibition observed on Mueller Hinton Agar (M173) + 2% Glucose + 0.5 mcg/ml Methylene Blue Dye Medium after 18 - 48 hours of incubation at 35-37°C for standard cultures.	Complies
Candida albicans ATCC 90028 1 Zone of inhibition (mm)	32mm - 36mm	34mm
Candida parapsilosis ATCC 22019 1 Zone of inhibition (mm)	26mm - 32mm	30mm
Candida tropicalis ATCC 750 1 Zone of inhibition (mm)	26mm - 32mm	30mm
Candida krusei ATCC 6258 1 Zone of inhibition (mm)	19mm - 26mm	24mm

STATUS OF THE MATERIAL : APPROVED

This is to certify that this lot passes and it confirms to the above mentioned tests and specifications . The information given here is believed to be correct and accurate, however, both the information and products are offered without warranty for any particulars use, other than that specified in the current HiMedia manual or product sheets.

This document has been produced electronically and is valid

PAGE : 1/2

Lampiran 5. Sertifikat Media *Sabouraud Dextrose Agar*

HIMEDIA®

Certified : ISO 9001:2015, ISO 13485:2016 , WHO GMP

HiMedia Laboratories Private Limited
C-40, Road No.21Y, MIDC, Wagle Industrial Area,
Thane(W) - 400604 , Website : www.himedialabs.com,
Email : info@himedialabs.com

Certificate of Analysis, Quality and Conformity

Material Code : GM063	Material Name : Sabouraud Dextrose Agar, Granulated	Lot No : 0000634974
Report No.: 40001451050	Date of Release & Report : 2024-03-15	Expiry Date : 2029-02

Appearance
Cream to yellow homogeneous granular medium. Observed : Cream

Gelling
Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium
Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction
Reaction of 6.5% w/v aqueous solution at 25°C.

pH
pH Range :5.40-5.80 Observed : 5.77

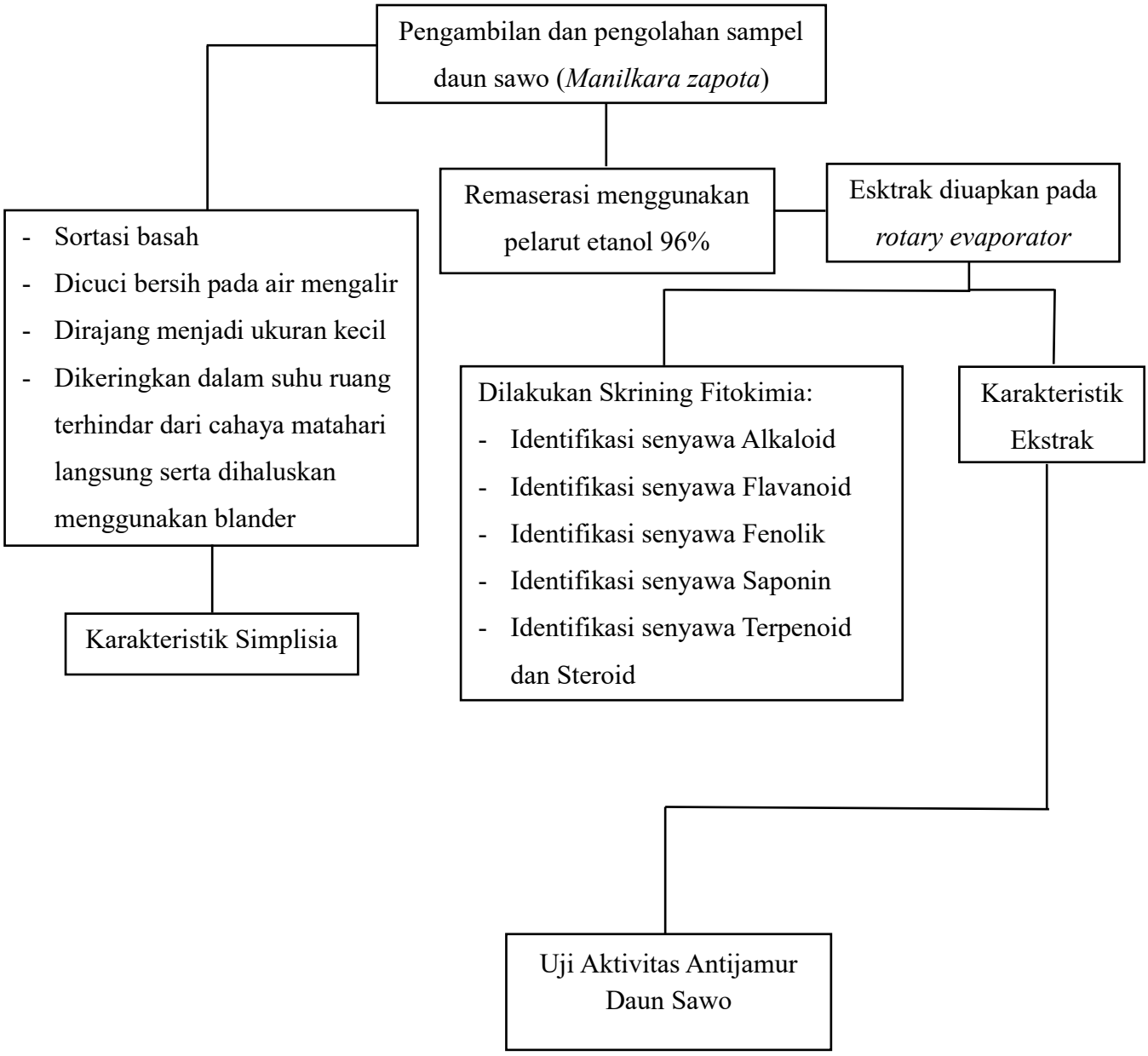
Cultural Response
Growth Promotion was carried out in accordance with the (USP/EP/BP/JP), after an incubation at 20-25 °C for 24-48 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar and fungus growth on Sabouraud Dextrose Agar

Organism	Inoculum (CFU)	Growth	Observed Lot value (CFU)	Recovery	Incubation temperature	Incubation period
Cultural Response						
Candida albicans ATCC 10231 (WDCM 00054)	82	Luxuriant (white colonies)	75	91%	25°C	48Hours
Aspergillus brasiliensis ATCC 16404 (WDCM 00053)	75	luxuriant	70	93%	25°C	5Days
Candida albicans ATCC 2091 (WDCM 00055)	83	luxuriant	74	89%	25°C	48Hours
Saccharomyces cerevisiae ATCC 9763 (WDCM 00058)	81	luxuriant	78	96%	25°C	48Hours
Escherichia coli ATCC 25922 (WDCM 00013)	81	luxuriant	76	93%	25°C	48Hours
Escherichia coli ATCC 8739 (WDCM 00012)	78	luxuriant	70	89%	25°C	48Hours
Escherichia coli NCTC 9002	81	luxuriant	74	91%	25°C	48Hours
Trichophyton rubrum ATCC 28191		luxuriant	-	-	25°C	5Days
Lactobacillus casei ATCC 334	84	luxuriant	76	90%	25°C	48Hours

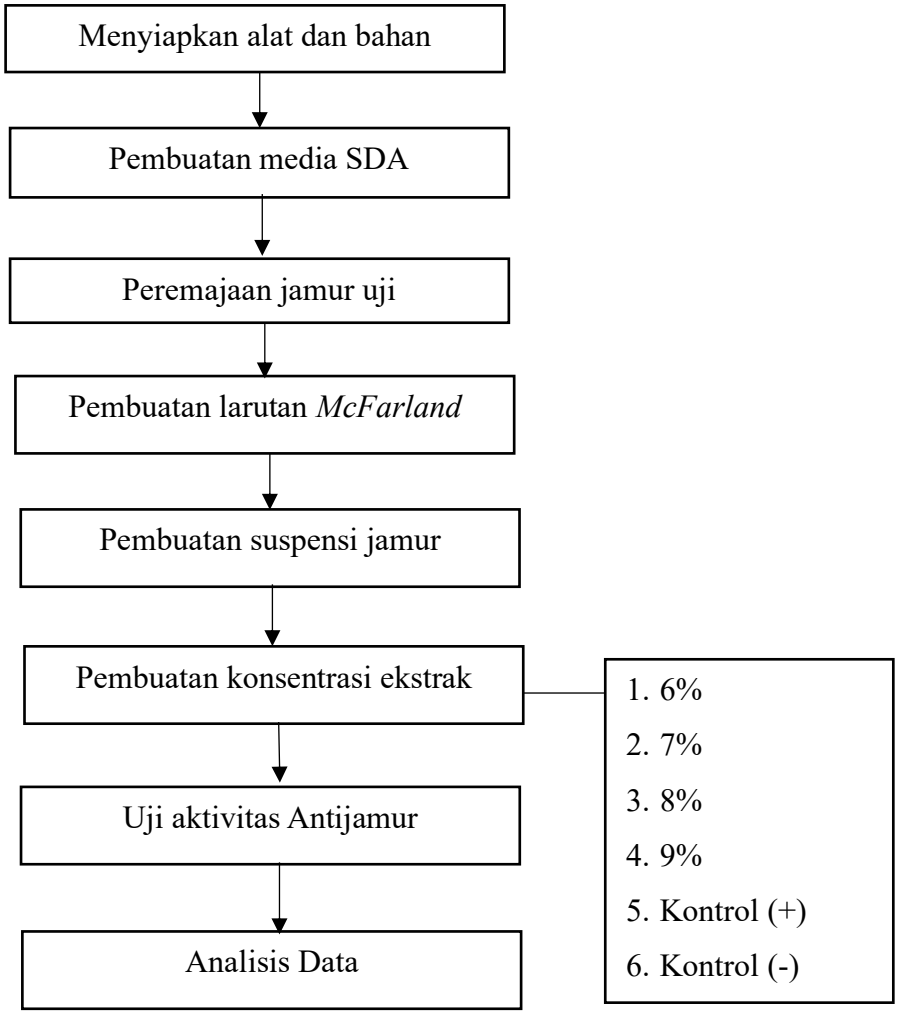
. ATCC is a registered trade mark of the American Type Culture Collection
. NCTC and National Collection of Type Culture are registered trade mark of the Health Protection Agency

Control Media :

Lampiran 6. Skema Alur Pembuatan Ekstrak



Lampiran 7. Skema Kerja Pengujian Aktivitas Antijamur



Lampiran 8. Pembuatan Ekstrak

		
Proses penimbangan serbuk simplisia sebanyak 500 g	Proses penuangan serbuk ke dalam toples	Proses penuangan pelarut etanol 96%
		
Proses maserasi 3×24	Proses pengadukan selama proses maserasi	Proses penyaringan hasil maserasi
		
Proses penguapan ekstrak menggunakan *rotary evaporator*	Proses pemekatan ekstrak menggunakan waterbath	Hasil ekstrak kental

Lampiran 9. Perhitungan Rendemen

Sampel	Berat simplisia	Berat ekstrak	Hasil
Daun sawo (*Manilkara zapota* (L.) P. Royen)	500 g	150,97 g	30%

$$\text{Rendemen (\%)} = \frac{\text{Bobot ekstrak yang diperoleh}}{\text{Bobot simplisisa yang ditimbang}} \times 100\%$$

$$\text{Rendemen (\%)} = \frac{150{,}97\ \text{g}}{500\ \text{g}} \times 100\% = 30\%$$

Lampiran 10. Perhitungan Penetapan Susut Pengeringan

Berat krus kosong (A)	Berat krus + ekstrak sebelum dipanaskan (B)	Berat krus + ekstrak setelah dipanaskan (C)
		

Berat krus kosong (A)	Berat krus + ekstrak sebelum dipanaskan (B)	Berat krus + ekstrak setelah dipanaskan (C)	Hasil Susut Pengeringan
43,18 g	45,18 g	45,08g	5%
		45,02 g	8%
		45,02 g	8%

$$\%\ \text{Susut Pengeringan} = \frac{(\text{B} - \text{A}) - (\text{C} - \text{A})}{(\text{B} - \text{A})} \times 100\%$$

$$1)\ \frac{(45{,}18\ g - 43{,}18\ g) - (45{,}08\ g - 43{,}18\ g)}{(45{,}18\ g - 43{,}18\ g)} \times 100\% = 5\%$$

$$2)\ \frac{(45{,}18\ \text{g} - 43{,}18\ \text{g}) - (45{,}02\ \text{g} - 43{,}18\ \text{g})}{(45{,}18\ \text{g} - 43{,}18\ \text{g})} \times 100\% = 8\%$$

Lampiran 11. Perhitungan Penetapan Kadar Abu Total

Berat krus kosong (A)	Berat krus + ekstrak sebelum dipanaskan (B)	Berat krus + ekstrak setelah dipanaskan (C)
		

Berat krus kosong (A)	Berat krus + ekstrak sebelum dipanaskan (B)	Berat krus + ekstrak setelah dipanaskan (C)	Hasil Kadar Abu Total
43,65 g	45,65 g	43,75 g	5%
		43,71 g	3%
		43,71 g	3%

$$\% \text{ Kadar Abu Total} = \frac{(\text{C} - \text{A})}{(\text{B} - \text{A})} \times 100\%$$

1) $\frac{(43{,}75\ g - 43{,}65\ g)}{(45{,}65\ g - 43{,}65\ g)} \times 100\% = 5\%$

2) $\frac{(43{,}71\ g - 43{,}65\ g)}{(45{,}65\ g - 43{,}65\ g)} \times 100\% = 3\%$

Lampiran 12. Perhitungan Penetapan Kadar Air

Berat krus kosong (A)	Berat krus + ekstrak sebelum dipanaskan (B)	Berat krus + ekstrak setelah dipanaskan (C)
		

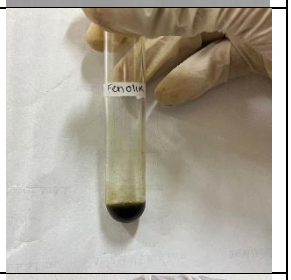
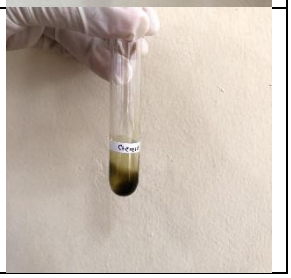
Berat cawan kosong (A)	Berat cawan + ekstrak sebelum dipanaskan (B)	Berat cawan + ekstrak setelah dipanaskan (C)	Hasil Kadar Air
28,32 g	30,32 g	30,23 g	4,5%
		30,16 g	8%
		30,16 g	8%

$$\% \text{ Kadar Air} = \frac{(\text{B} - \text{C})}{(\text{B} - \text{A})} \times 100\%$$

1) $\frac{(30{,}32\ g - 30{,}23\ g)}{(30{,}32\ g - 28{,}32\ g)} \times 100\% = 4{,}5\%$

2) $\frac{(30{,}32\ g - 30{,}16\ g)}{(30{,}32\ g - 28{,}32\ g)} \times 100\% = 8\%$

Lampiran 13. Skrining Fitokimia

No.	Pemeriksaan	Reagen	Hasil Uji	Keterangan	Gambar
1.	Alkaloid	Dragendroff	(+)	Terbentuk endapan merah bata	
2.	Flavonoid	Aquadest + HCl pekat + dan serbuk Mg	(+)	Perubahan warna jingga	
3.	Fenolik	$FeCl_3$ 1%	(+)	Perubahan warna menjadi hijau kehitaman	
4.	Saponin	Aquadest	(+)	Terbentuknya busa yang stabil	
5.	Terpenoid/Steroid	Asam asetat anhidrat + asam sulfat pekat	(+)	Perubahan warna menjadi hijau (steroid)	

Lampiran 14. Perhitungan Konsentrasi

Pembuatan larutan uji konsentrasi 6%, 7%, 8%, dan 9%

Diketahui :

1% (b/v) = 1 g/100 mL

1 g = 1.000 mg

1 mg = 1.000 µg

1 mL = 1.000 µL

1 disk = 10 µL

1. 6% setara dengan 60 mg/mL (dikonversikan)
   60 mg/mL x 5 mL = 300 mg
   Ditimbang 300 mg ekstrak dilarutkan dalam 5 mL DMSO 10%
   Kadar per disk :
   60 mg/mL = 60 µg/µL
   60 µg/µL x 10 µL = 600 µg/disk

2. 7% setara dengan 70 mg/mL (dikonversikan)
   70 mg/mL x 5 mL = 350 mg
   Ditimbang 350 mg ekstrak dilarutkan dalam 5 mL DMSO 10%
   Kadar per disk :
   70 mg/mL = 70 µg/µL
   70 µg/µL x 10 µL = 700 µg/disk

3. 8% setara dengan 80 mg/mL (dikonversikan)
   80 mg/mL x 5 mL = 400 mg
   Ditimbang 400 mg ekstrak dilarutkan dalam 5 mL DMSO 10%
   Kadar per disk :
   80 mg/mL = 80 µg/µL
   80 µg/µL x 10 µL = 800 µg/disk

4. 9% setara dengan 90 mg/mL (dikonversikan)

   90 mg/mL x 5 mL = 450 mg

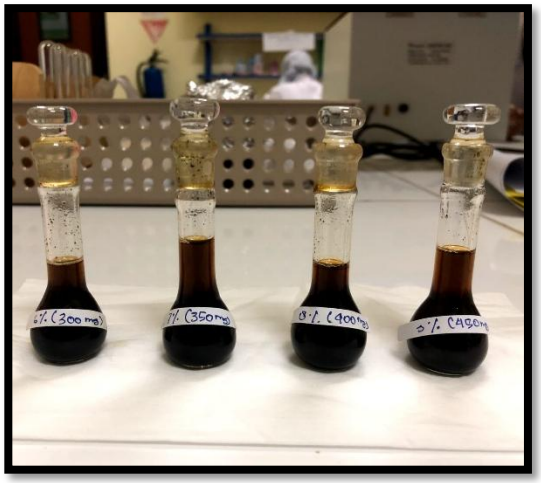
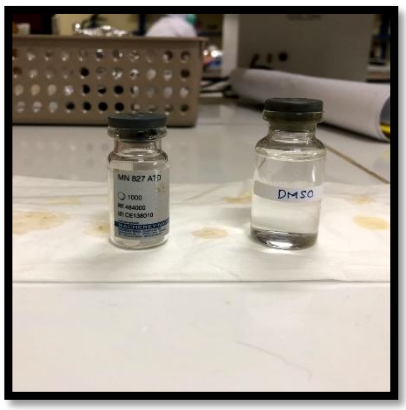
   Ditimbang 450 mg ekstrak dilarutkan dalam 5 mL DMSO 10%

   Kadar per disk :

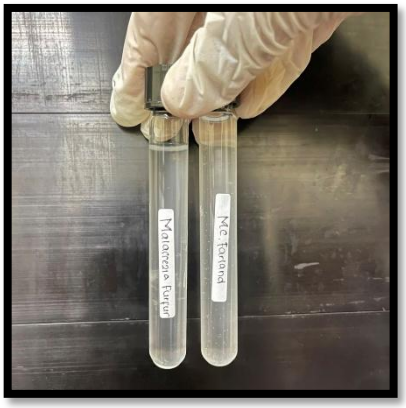
   90 mg/mL = 90 µg/µL

   90 µg/µL x 10 µL = 900 µg/disk

Lampiran 15. Pembuatan Larutan Uji

No.	Gambar	Keterangan
1.		Pembuatan larutan konsentrasi 6%, 7%, 8%, 9%
2.		Kontrol positif dan kontrol negatif

Lampiran 16. Uji Aktivitas Antijamur

No.	Gambar	Keterangan
1.		Hasil peremajaan jamur *Malassezia furfur*
2.		Hasil pembuatan suspensi dan Mcfarland
3.		• Proses penuangan media SDA ke dalam cawan petri. • Penambahan suspensi jamur *Malassezia furfur*. • Inokulasi menggunakan (*L-spreader*) pada media SDA.

Lampiran 17. Pengukuran dan Perhitungan Diameter Zona Hambat Antijamur

1. Pengukuran Cawan Petri Pertama

No	Daya Hambat (mm)									
	Ekstrak 6%		Ekstrak 7%		Ekstrak 8%		Ekstrak 9%		Kontrol (+)	
	V	H	V	H	V	H	V	H	V	H
1.	11,2	11,1	11,5	11,4	12,4	12,0	13,0	12,9	32,9	32,3
2.	10,9	11,0	11,2	11,6	12,0	12,1	12,8	12,8	32,2	32,2
3.	11,0	10,9	11,7	11,7	12,2	12,3	12,8	13,0	32,0	31,9
Rata-rata	**11,03**	**11,0**	**11,47**	**11,57**	**12,2**	**12,13**	**12,87**	**12,9**	**32,4**	**32,13**

- **Perhitungan Diameter Zona Hambat**

Ekstrak 6%	Ekstrak 7%	Ekstrak 8%	Ekstrak 9%
$\frac{(a-c)\ +\ (b-c)}{2}$	$\frac{(a-c)\ +\ (b-c)}{2}$	$\frac{(a-c)\ +\ (b-c)}{2}$	$\frac{(a-c)\ +\ (b-c)}{2}$
$\frac{(11{,}03-6)\ +\ (11{,}0-6)}{2}$	$\frac{(11{,}47-6)\ +\ (11{,}57-6)}{2}$	$\frac{(12{,}2-6)\ +\ (12{,}13-6)}{2}$	$\frac{(12{,}87-6)\ +\ (12{,}9-6)}{2}$
= 5,02 mm	= 5,52 mm	= 6,17 mm	= 6,88 mm

2. Pengukuran Cawan Petri Kedua

No	Daya Hambat (mm)									
	Ekstrak 6%		Ekstrak 7%		Ekstrak 8%		Ekstrak 9%		Kontrol (+)	
	V	H	V	H	V	H	V	H	V	H
1.	10,5	10,0	11,1	11,0	11,6	12,1	12,4	12,8	33,7	33,3
2.	10,8	10,3	11,3	11,2	11,7	12,0	12,2	13,0	33,3	33,2
3.	10,6	10,3	11,4	11,3	11,7	12,0	12,2	12,7	33,4	33,4
Rata-rata	**10,63**	**10,2**	**11,26**	**11,16**	**11,6**	**12,03**	**12,26**	**12,83**	**33,46**	**33,3**

- **Perhitungan Diameter Zona Hambat**

Ekstrak 6%	Ekstrak 7%	Ekstrak 8%	Ekstrak 9%
$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(10{,}63-6)\ +\ (10{,}2-6)}{2}$ = 4,42 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(11{,}26-6)\ +\ (11{,}16-6)}{2}$ = 5,21 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(11{,}6-6)\ +\ (12{,}03-6)}{2}$ = 5,82 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(12{,}26-6)\ +\ (12{,}83-6)}{2}$ = 6,55 mm

3. Pengukuran Cawan Petri Ketiga

No	Daya Hambat (mm)									
	Ekstrak 6%		Ekstrak 7%		Ekstrak 8%		Ekstrak 9%		Kontrol (+)	
	V	H	V	H	V	H	V	H	V	H
1.	10,5	10,2	11,3	11,4	11,8	12,5	12,4	12,0	32,4	34,4
2.	10,6	10,0	11,4	11,2	11,6	12,3	12,5	12,1	32,3	34,1
3.	10,5	10,1	11,2	11,2	11,3	12,1	12,5	12,0	32,8	34,0
Rata-rata	**10,53**	**10,1**	**11,3**	**11,26**	**11,56**	**12,3**	**12,46**	**12,03**	**32,5**	**34,13**

Keterangan:
V : Diameter Vertikal
H : Diameter Horizontal

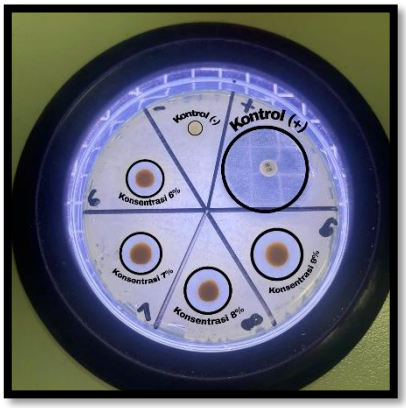
- **Perhitungan Diameter Zona Hambat**

Ekstrak 6%	Ekstrak 7%	Ekstrak 8%	Ekstrak 9%
$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(10{,}53-6)\ +\ (10{,}1-6)}{2}$ = 4,32 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(11{,}3-6)\ +\ (11{,}26-6)}{2}$ = 5,28 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(11{,}56-6)\ +\ (12{,}3-6)}{2}$ = 5,93 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(12{,}46-6)\ +\ (12{,}03-6)}{2}$ = 6,25 mm

4. Perhitungan Kontrol Positif

Cawan Pertama	Cawan Kedua	Cawan Ketiga
$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(32{,}4-6)\ +\ (32{,}13-6)}{2}$ = 26,27 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(33{,}46-6)\ +\ (33{,}3-6)}{2}$ = 27,38 mm	$\frac{(a-c)\ +\ (b-c)}{2}$ $\frac{(32{,}5-6)\ +\ (34{,}13-6)}{2}$ = 27,32 mm

Lampiran 18. Hasil Uji Aktivitas Antijamur Ekstrak Etanol Daun Sawo terhadap *Malassezia furfur*

No.	Pengulangan	Gambar
1.	Cawan petri I	
2.	Cawan petri II	
3.	Cawan petri III	

Lampiran 19. Diameter Zona Hambat Ekstrak Etanol Daun Sawo Terhadap Jamur *Malassezia furfur*

Perlakuan Jamur *Malassezia furfur*	**Daya Hambat (mm)**			**Rata-rata (mm)**	**Potensi Daya Hambat**
	I (mm)	II (mm)	III (mm)		
Konsentrasi 6%	5,02	4,42	4,32	4,58	Lemah
Konsentrasi 7%	5,52	5,21	5,28	5,33	Sedang
Konsentrasi 8%	6,17	5,82	5,93	5,97	Sedang
Konsentrasi 9%	6,88	6,55	6,25	6,56	Sedang
Kontrol (+) (Ketokonazol 30 µg)	26,27	27,38	27,32	26,99	Sangat kuat
Kontrol (-) (DMSO 10%)	-	-	-	-	Tidak ada

Lampiran 20. Analisis Uji Normalitas (*Shapiro-Wilk*)

Tests of Normality[b]

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kode_Perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
Diameter_Hambat_mm	konsentrasi 6%	.337	3	.	.855	3	.253
	konsentrasi 7%	.303	3	.	.909	3	.414
	konsentrasi 8%	.262	3	.	.956	3	.597
	konsentrasi 9%	.179	3	.	.999	3	.948
	kontrol +	.368	3	.	.790	3	.092

a. Lilliefors Significance Correction

b. There are no valid cases for Diameter_Hambat_mm when Kode_Perlakuan = 6.000. Statistics cannot be computed for this level.

1. Tingkat signifikansi α = 0,05
2. Syarat pengambilan keputusan:
   - Sig. > 0,05 maka data berdistribusi normal
   - Sig. < 0,05 maka data berdistribusi tidak normal
3. Berdasarkan hasil uji normalitas menggunakan *Shapiro-Wilk* menunjukkan nilai Sig. pada konsentrasi 6% = 0,253; 7% = 0,414; 8% = 0,597; 9% = 0,948; dan kontrol (+) = 0,092. Seluruh nilai tersebut lebih besar dari nilai *alpha* (Sig. > 0,05), sehingga data diameter zona hambat dinyatakan berdistribusi normal.

Lampiran 21. Analisis Uji Homogenitas (*Levene*)

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Diameter_Hambat_mm	Based on Mean	3.121	4	10	.066
	Based on Median	.337	4	10	.847
	Based on Median and with adjusted df	.337	4	3.969	.841
	Based on trimmed mean	2.691	4	10	.093

1. Tingkat signifikansi α = 0,05
2. Syarat pengambilan keputusan:
   - Sig. > 0,05 maka variasi sampel dinyatakan homogen
   - Sig. < 0,05 maka variasi sampel dinyatakan tidak homogen
3. Berdasarkan hasil uji homogenitas menggunakan *Test of Homogeneity of Variances* pada kolom *Levene Statistic Based on Mean* menunjukkan nilai Sig. sebesar 0,066. Nilai tersebut lebih besar dari α = 0,05 (0,066 > 0,05), sehingga variasi data diameter zona hambat dinyatakan homogen.

Lampiran 22. Analisis Data Anova (*One-way*)

ANOVA

Diameter_Hambat_mm

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1103.092	4	275.773	1996.041	<.001
Within Groups	1.382	10	.138		
Total	1104.474	14			

1. H_o: Tidak terdapat perbedaan signifikan diameter zona hambat antar kelompok konsentrasi

   H_a: Terdapat perbedaan signifikan diameter zona hambat antar kelompok konsentrasi
2. Tingkat signifikansi $\alpha = 0{,}05$
3. Syarat pengambilan keputusan:
   - Sig. > 0,05 maka H_o diterima, sehingga tidak terdapat perbedaan signifikan diameter zona hambat antar kelompok konsentrasi.
   - Sig. < 0,05 maka H_o ditolak, sehingga terdapat perbedaan signifikan diameter zona hambat antar kelompok konsentrasi.

Lampiran 23. Analisis Data Post Hoc (*Bonferroni*)

Multiple Comparisons

Dependent Variable: Diameter_Hambat_mm
Bonferroni

(I) Kode_Perlakuan	(J) Kode_Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
konsentrasi 6%	konsentrasi 7%	-.75000	.30349	.330	-1.8369	.3369
	konsentrasi 8%	-1.38667*	.30349	.010	-2.4736	-.2997
	konsentrasi 9%	-1.97333*	.30349	<.001	-3.0603	-.8864
	kontrol +	-22.40333*	.30349	<.001	-23.4903	-21.3164
konsentrasi 7%	konsentrasi 6%	.75000	.30349	.330	-.3369	1.8369
	konsentrasi 8%	-.63667	.30349	.623	-1.7236	.4503
	konsentrasi 9%	-1.22333*	.30349	.024	-2.3103	-.1364
	kontrol +	-21.65333*	.30349	<.001	-22.7403	-20.5664
konsentrasi 8%	konsentrasi 6%	1.38667*	.30349	.010	.2997	2.4736
	konsentrasi 7%	.63667	.30349	.623	-.4503	1.7236
	konsentrasi 9%	-.58667	.30349	.820	-1.6736	.5003
	kontrol +	-21.01667*	.30349	<.001	-22.1036	-19.9297
konsentrasi 9%	konsentrasi 6%	1.97333*	.30349	<.001	.8864	3.0603
	konsentrasi 7%	1.22333*	.30349	.024	.1364	2.3103
	konsentrasi 8%	.58667	.30349	.820	-.5003	1.6736
	kontrol +	-20.43000*	.30349	<.001	-21.5169	-19.3431
kontrol +	konsentrasi 6%	22.40333*	.30349	<.001	21.3164	23.4903
	konsentrasi 7%	21.65333*	.30349	<.001	20.5664	22.7403
	konsentrasi 8%	21.01667*	.30349	<.001	19.9297	22.1036
	konsentrasi 9%	20.43000*	.30349	<.001	19.3431	21.5169

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

1. H_0: Tidak terdapat perbedaan rata-rata zona hambat yang signifikan antar pasangan kelompok

   H_a: Terdapat perbedaan rata-rata zona hambat yang signifikan antar pasangan kelompok
2. Tingkat signifikansi $\alpha = 0{,}05$
3. Syarat pengambilan keputusan:
   - Sig. > 0,05 maka H_0 diterima, pasangan kelompok tersebut tidak berbeda signifikan
   - Sig. <0,05 maka H_0 ditolak, pasangan kelompok tersebut berbeda signifikan
4. Berdasarkan hasil uji *Post Hoc Bonferroni* menunjukkan bahwa terdapat pasangan kelompok yang berbeda signifikan dan tidak berbeda signifikan. Dapat disimpulkan bahwa H_a diterima, artinya ekstrak etanol daun sawo memiliki aktivitas antijamur yang berbeda secara signifikan antar kelompok konsentrasi, dengan efektivitas yang cenderung meningkat seiring dengan peningkatan konsentrasi.