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LAMPIRAN

Lampiran 1. Hasil Determinasi

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

Kepada yth,
apt. Habibie Deswilyaz Ghiffari, M. Farm
Di
Tempat

Dengan hormat,
Sehubungan dengan surat permohonan determinasi sampel dari Institut Kesehatan Mitra Bunda No. 026/K/S1-Farm/IKMB/I/2026 tanggal 21 Januari 2026 di Herbarium Universitas Andalas Departemen Biologi FMIPA Universitas Andalas, kami telah membantu mengidentifikasi tumbuhan yang dibawa, dari:

Nama : apt. Habibie Deswilyaz Ghiffari, M. Farm
Instansi : Institut Kesehatan Mitra Bunda

Berikut ini diberikan hasil identifikasi yang dikeluarkan dari Herbarium Universitas Andalas.

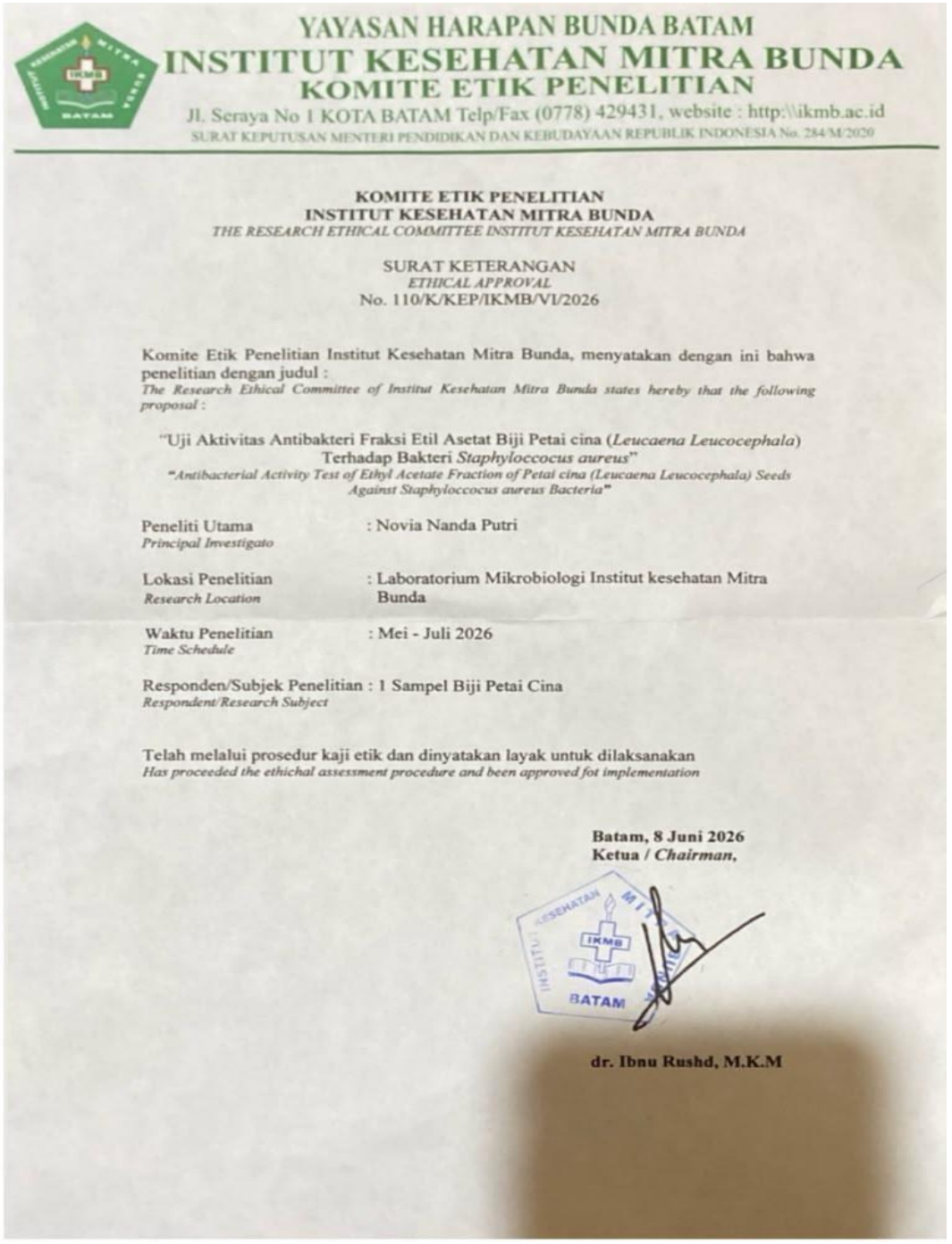
No	Family	Spesies	Nama Koleksi
1.	Fabaceae	*Leucaena leucocephala* (Lam.) de Wit	IKMB.22.26. Biji Petai Cina

Demikian surat ini dibuat untuk dapat digunakan seperlunya.

Padang, 30 Januari 2026
Kepala,

Dr. Nuraimas
NIP. 196908141995122001

Lampiran 2. *Ethical Clearance*



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. 110/K/KEP/IKMB/VI/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 Antibakteri Fraksi Etil Asetat Biji Petai cina (*Leucaena Leucocephala*) Terhadap Bakteri *Staphyloccocus aureus*"
"Antibacterial Activity Test of Ethyl Acetate Fraction of Petai cina (Leucaena Leucocephala) Seeds Against Staphyloccocus aureus Bacteria"

Peneliti Utama : Novia Nanda Putri
Principal Investigato

Lokasi Penelitian : Laboratorium Mikrobiologi Institut kesehatan Mitra Bunda
Research Location

Waktu Penelitian : Mei - Juli 2026
Time Schedule

Responden/Subjek Penelitian : 1 Sampel Biji Petai Cina
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, 8 Juni 2026
Ketua / *Chairman*,

dr. Ibnu Rushd, M.K.M

Lampiran 3. Lembar Revisi

YAYASAN HARAPAN BUNDA BATAM
INSTITUT KESEHATAN MITRA BUNDA
PROGRAM STUDI SARJANA FARMASI
Alamat : Jalan Seraya Nomor 1, Kota Batam Kode Pos 29453 Telp : (0778) 429431,
Fax : (0778) 429431, E-mail : institutkmb@gmail.com Website : http:\\mbp.ac.id
SURAT KEPUTUSAN Kemendikbud RI Nomor : 284/M/2020

LEMBAR PERSETUJUAN PERBAIKAN (REVISI) UJIAN SEMINAR PROPOSAL SKRIPSI

Naskah ujian proposal skripsi yang disusun oleh:

Nama	:	Novia Nanda Putri
NIM	:	61608100822112
Judul	:	Uji aktivitas antibakteri fraksi etil asetat biji petai cina *(laucaena Leucocephala)* terhadap bakteri *Staphylococcus aureus*
Tanggal Ujian Seminar Proposal Skripsi	:	13 April 2026

Telah dilakukan perbaikan sesuai dengan saran tim pembimbing dan tim penguji serta dinyatakan telah lulus untuk melanjutkan ke tahap selanjutnya (Penelitian).

No	Nama Dosen	Tanggal Revisi	Tanda Tangan
1	apt. Habibie Deswilyaz Ghiffari, M.Farm	17 April 2026	
2	apt. Ayu Amelia, M.farm	17 April 2026	
3	apt. Suci Fitriani Sammulia, M.Sc	24 April 2026	ACC BY WA
4	Dhia Suhailah., S.Farm, M.Farm	17/04/2026	
5	Rury Trisa Utami, M.Biomed	23/4-2026	

Catatan :
1. Batas waktu maksimum melakukan revisi 2 Minggu. Jika tidak selesai, mahasiswa **TIDAK** dapat melanjutkan ke tahap penelitian
2. Lembar revisi dilampirkan dalam naskah proposal skripsi yang telah dijilid (foto copy), dan aslinya dikumpulkan di Bagian Unit Tugas Akhir Program Studi Farmasi selanjutnya mahasiswa berhak menerima Bukti Lulus Ujian Seminar Proposal Skripsi.

Batam, 14 April 2026
Mengetahui,
KoordinatorTugas Akhir

Apt. Rastria Meilanda, S.Farm., M.Sc
NUPTK: 8835765666230330

Lampiran 4. Sertifikat *Mueller Hinton 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 : M173	**Material Name :** Mueller Hinton Agar	**Lot No** : 0000603601
Report No.: 40001385380	**Date of Release & Report :** 2023-08-17	**Expiry Date :** 2028-07

Appearance
Cream to yellow homogeneous free flowing powder. Observed : Light yellow

Gelling
Firm, comparable with 1.7% agar gel.

Colour and Clarity of prepared medium
Light amber coloured clear to slight opalscent gel froms in Petri plates.

Reaction
Reaction of 3.8% w/v aqueous solution at 25°C.

pH
pH Range :7.20-7.40 Observed : 7.39

Cultural Response
Cultural characteristics observed after incubation at 30-35°C for 18 -24 hours for bacterial cultures. For testing S.pnuemoniae : The medium was supplemented with 5% Sheep blood and incubated at 35°C for 16-18 hours at 5% CO2 For testing H.influenaze : Yeast extract & 2 vials /l of Haemophilus Growth Supplement (FD117 containing 15 mg/l of Haematin + 15 mg/l of NAD) and incubated at 35°C for 20-24 hours at 5% CO2

Antibiotic Sensitivity test
Various discs were tested for standard ATCC strains and zone of inhibition were measured after an incubation 30-35°C for 18 hours. (As per the latest CLSI Protocol M6 & Standards as per the current CLSI M100)

Thymine/Thymidine Content
The zones for these discs are indicative of the Thymine/Thymidine content of the medium.

Divalent Cation Content
* The zones for these discs are indicative of the Divalent Cation content of the medium

Organism	Inoculum (CFU)	Growth	Observed Lot value (CFU)	Recovery	Standard Zone	Zone of inhibition Observed
Escherichia coli ATCC 25922 (WDCM 00013)						
Growth promoting	87	luxuriant	71	81%	-	-
Amoxyclav AMC 30 mcg	-	-	-	-	18-24 mm	23mm
Ampicillin AMP 10 mcg	-	-	-	-	16-22 mm	21mm
Cefotaxime CTX 30 mcg	-	-	-	-	29-35 mm	34mm
Cefoxitin CX 30 mcg	-	-	-	-	23-29 mm	28mm
Cephalothin CEP 30mcg	-	-	-	-	15-21 mm	20mm

Lampiran 5. Sertifikat *Nutrient Broth*

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 : M002	Material Name : Nutrient Broth	Lot No : 0000718602
Report No.: 40001620425	Date of Release & Report : 2025-08-28	Expiry Date : 2030-07

Appearance
Cream to yellow homogeneous free flowing powder. Observed : Light yellow

Colour and Clarity of prepared medium
Light amber coloured clear solution in tubes

Reaction
Reaction of 1.3% w/v aqueous solution at 25°C.

pH
pH Range :7.20-7.60 Observed : 7.59

Cultural Response
Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth
Cultural Response		
Escherichia coli ATCC 25922 (WDCM 00013)	50-100	good-luxuriant
Pseudomonas aeruginosa ATCC 27853 (WDCM 00025)	50-100	good-luxuriant
Staphylococcus aureus ATCC 25923 (WDCM 00034)	50-100	good-luxuriant
Streptococcus pyogenes ATCC 19615	50-100	good-luxuriant
Salmonella enterica serovar Typhi ATCC 6539	50-100	good-luxuriant

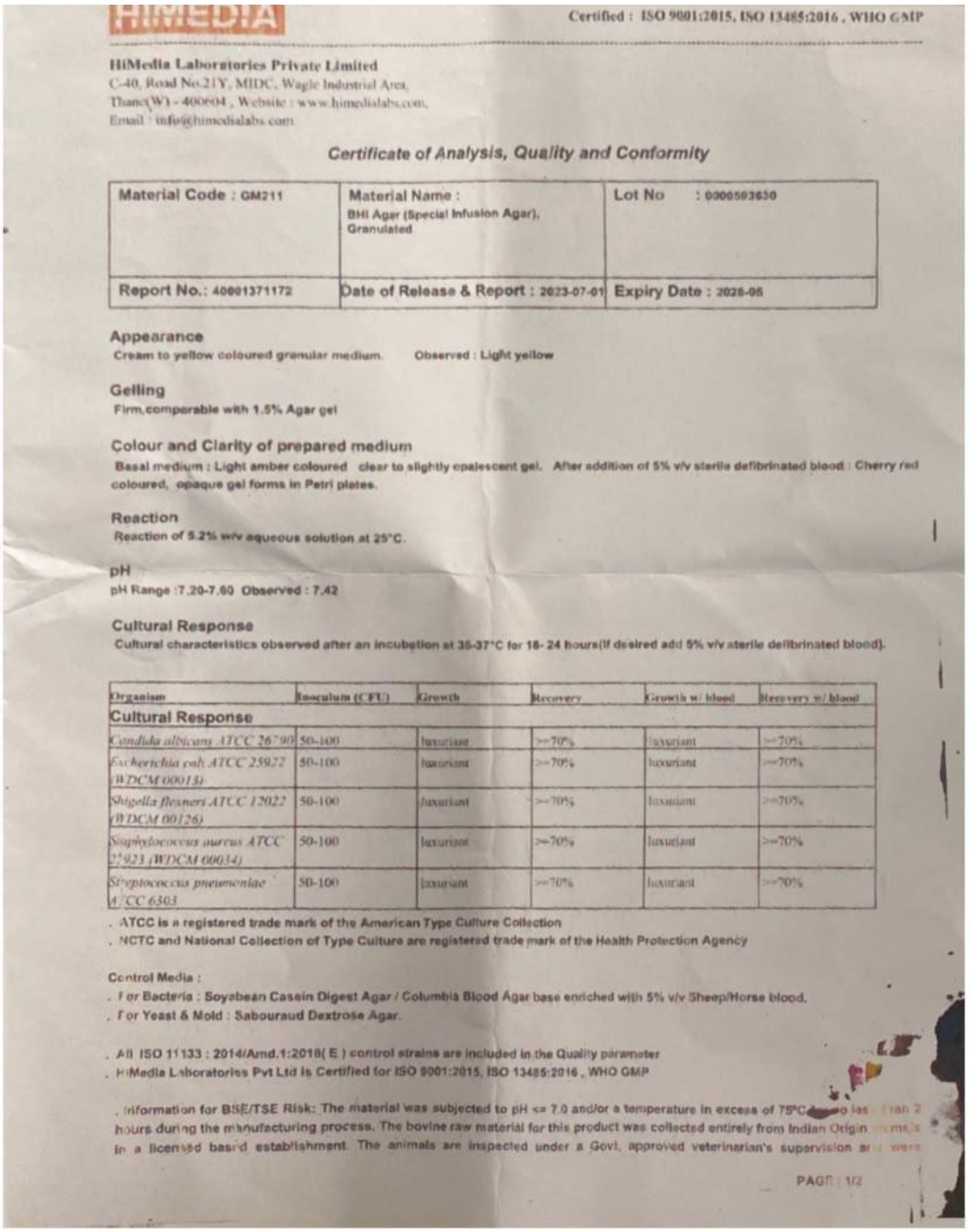
. ATCC is a registered trade mark of the American Type Culture Collection
. NCTC and National Collection of Type Culture are registered trade mark of the Health Protection Agency

. All ISO 11133 : 2014/Amd.2:2020 control strains are included in the Quality parameter
. HiMedia QC Microbiology Laboratory complies as per ISO/IEC 17025:2017

. Information for BSE/TSE Risk: The material was subjected to pH <= 7.0 and/or a temperature in excess of 75°C for no less than 2 hours during the manufacturing process. The bovine raw material for this product was collected entirely from Indian Origin animals in a licensed based establishment. The animals are inspected under a Govt. approved veterinarian's supervision and were apparently free from infectious and contagious diseases. BSE (Bovine Spongiform Encephalopathy)/ TSE (Transmissible Spongiform Encephalopathy) and dioxine are not known to exist in India. This material does not contain, nor is derived from the specific risks material as defined in The Maharashtra Animal Preservation Act Govt. of Maharashtra, India.

STATUS OF THE MATERIAL : APPROVED

Lampiran 6. Sertifikat *Brain Heart Infusion*



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 : GM211	Material Name : BHI Agar (Special Infusion Agar), Granulated	Lot No : 0000583630
Report No.: 40001371172	Date of Release & Report : 2023-07-01	Expiry Date : 2028-05

Appearance
Cream to yellow coloured granular medium. Observed : Light yellow

Gelling
Firm,comparable with 1.5% Agar gel

Colour and Clarity of prepared medium
Basal medium : Light amber coloured clear to slightly opalescent gel. After addition of 5% v/v sterile defibrinated blood : Cherry red coloured, opaque gel forms in Petri plates.

Reaction
Reaction of 5.2% w/v aqueous solution at 25°C.

pH
pH Range :7.20-7.60 Observed : 7.42

Cultural Response
Cultural characteristics observed after an incubation at 35-37°C for 18- 24 hours(If desired add 5% v/v sterile defibrinated blood).

Organism	Inoculum (CFU)	Growth	Recovery	Growth w/ blood	Recovery w/ blood
Cultural Response					
Candida albicans ATCC 26790	50-100	luxuriant	>=70%	luxuriant	>=70%
Escherichia coli ATCC 25922 (WDCM 00013)	50-100	luxuriant	>=70%	luxuriant	>=70%
Shigella flexneri ATCC 12022 (WDCM 00126)	50-100	luxuriant	>=70%	luxuriant	>=70%
Staphylococcus aureus ATCC 25923 (WDCM 00034)	50-100	luxuriant	>=70%	luxuriant	>=70%
Streptococcus pneumoniae ATCC 6303	50-100	luxuriant	>=70%	luxuriant	>=70%

. 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 :
. For Bacteria : Soyabean Casein Digest Agar / Columbia Blood Agar base enriched with 5% v/v Sheep/Horse blood.
. For Yeast & Mold : Sabouraud Dextrose Agar.

. All ISO 11133 : 2014/Amd.1:2018(E) control strains are included in the Quality parameter
. HiMedia Laboratories Pvt Ltd is Certified for ISO 9001:2015, ISO 13485:2016 , WHO GMP

. Information for BSE/TSE Risk: The material was subjected to pH <= 7.0 and/or a temperature in excess of 75°C for no less than 2 hours during the manufacturing process. The bovine raw material for this product was collected entirely from Indian Origin animals in a licensed based establishment. The animals are inspected under a Govt. approved veterinarian's supervision and were

PAGE : 1/2

Lampiran 7. Sertifikat DMSO

Certificate of Analysis

1.02952.2500 Dimethyl sulfoxide for analysis EMSURE® ACS
Batch K56925352

	Spec. Values		Batch Values	
Purity (GC)	≥ 99.9	%	99.9	%
Identity (IR)	conforms		conforms	
Appearance	clear		clear	
Color	≤ 10	Hazen	6	Hazen
Titrable acid	≤ 0.0002	meq/g	< 0.0001	meq/g
Density (d 20 °C/20 °C)	1.101 - 1.103		1.102	
Refractive index (n 20/D)	1.478 - 1.481		1.480	
Melting point	≥ 18.0	°C	18.4	°C
Heavy metals (as Pb)	≤ 0.0001	%	≤ 0.0001	%
Fe (Iron)	≤ 0.0001	%	≤ 0.0001	%
Related substances (GC)	conforms		conforms	
Readily carbonizable substances	conforms		conforms	
Evaporation residue	≤ 0.001	%	< 0.001	%
Water	≤ 0.1	%	< 0.1	%

Date of release (DD.MM.YYYY) 02.09.2025
Minimum shelf life (DD.MM.YYYY) 30.09.2028

Jeannette David
Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.

Merck KGaA
Corporation with General Partners
Frankfurter Straße 250
64293 Darmstadt, Germany

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

SALSA Version 1534237 59300120900701 Date 02.09.2025

Lampiran 8. Sertifikat *Ethyl Acetate*

PT. ANUGRAH VISI CEMERLANG

CERTIFICATE OF ANALYSIS

Product Name : Ethyl Acetate
Registration Number : V.411
ROA Number : EA / 26-03/ 03/ 26
Batch Number : F/AVC/26/115
Issued Date : Maret, 2026
Expire Date : Maret, 2027

NO	PROPERTY	UNIT	TEST METHOD	SPECS	RESULT
1	Appearance		Visual	Clear	Clear
2	Purity (Ethyl Acetat)	wt %	ASTM D3545	Min 99.7	99.93
3	Water Content	wt %	ASTM E1064	Max 0.03	0.007
4	Specific Gravity (20°C)		ASTM D4052	Report	0.901
5	Colour	Pt – Co	ASTM D1209	Max 10	0
6	Acidity (As Acetid Acid)	wt %	ASTM D1613	Max 0.005	0.0010

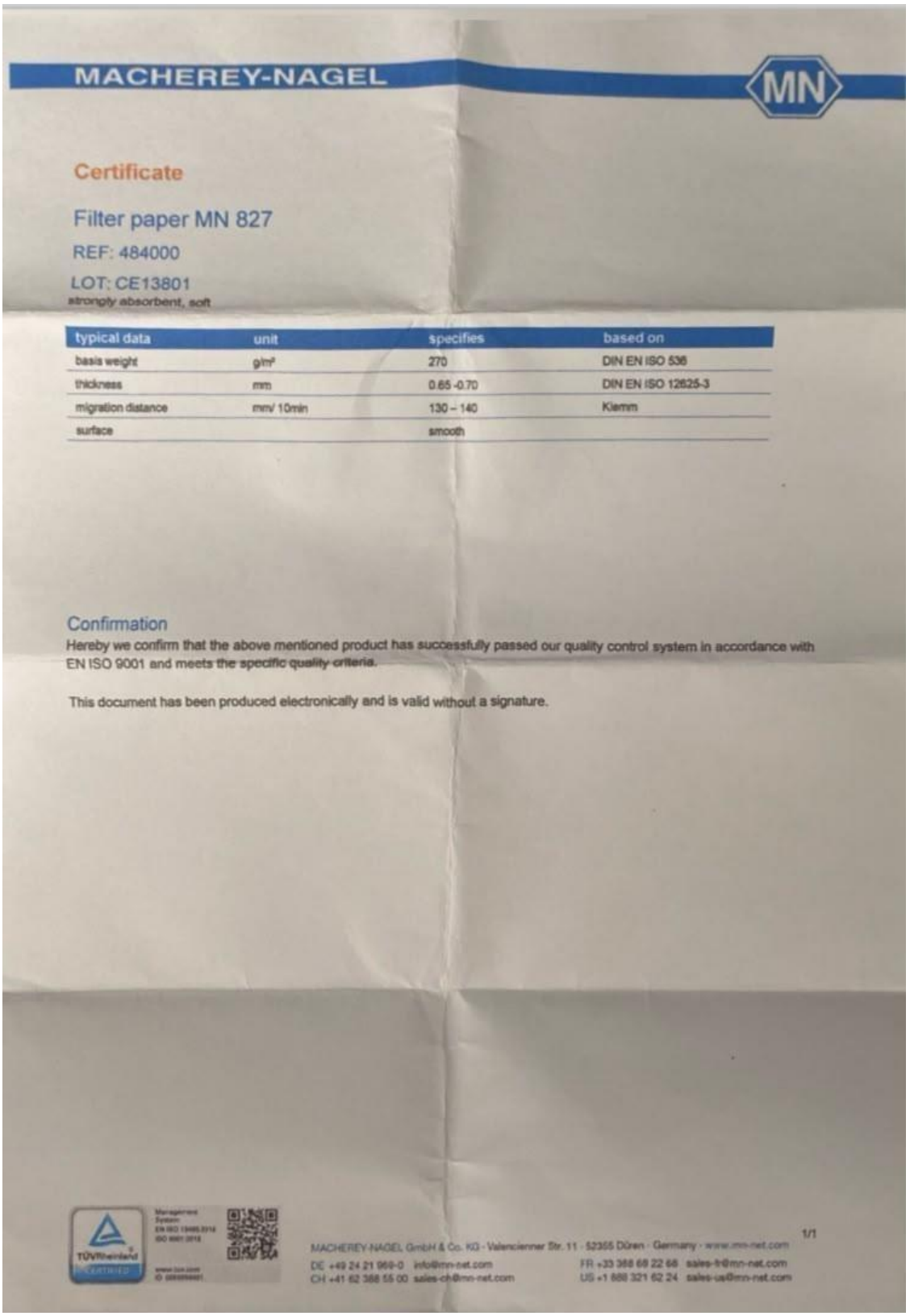
Note: Expiry date is only estimate. Actual expiry date will depend on storage, handling and containers used. If using recondition drums as containers, we do not recommend storing longer than 6 months.

PT. ANUGRAH VISI CEMERLANG

QC Departement,

JL. Perjuangan RT 03 / RW 03 No. 93
Kel. Teluk Pucung, Kec. Bekasi Utara, Bekasi Kota, JA-BAR 17121
Telp.: (62-21) 8888 1092 Fax.: (62-21) 888 765 66
Email: pt_avc@yahoo.co.id

Lampiran 9. Sertifikat *Paper Disk*



MACHEREY-NAGEL

MN

Certificate

Filter paper MN 827

REF: 484000

LOT: CE13801

strongly absorbent, soft

typical data	unit	specifies	based on
basis weight	g/m²	270	DIN EN ISO 536
thickness	mm	0.65 -0.70	DIN EN ISO 12625-3
migration distance	mm/ 10min	130 – 140	Klemm
surface		smooth	

Confirmation

Hereby we confirm that the above mentioned product has successfully passed our quality control system in accordance with EN ISO 9001 and meets the specific quality criteria.

This document has been produced electronically and is valid without a signature.

TÜVRheinland CERTIFIED

1/1

MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Germany · www.mn-net.com

DE +49 24 21 969-0 info@mn-net.com FR +33 368 69 22 68 sales-fr@mn-net.com

CH +41 62 388 55 00 sales-ch@mn-net.com US +1 888 321 62 24 sales-us@mn-net.com

Lampiran 10. Sertifikat *Amoxicillin Disk*

Liofilchem®

Certificate of Analysis

Page 1 of 1

Product	Batch	Expiration date
Amoxicillin AML 25 µg	070825025	2028.07.07

Ref.

9179 – 9179/1 – 9179/2

Antimicrobial Susceptibility Testing
Tested according to current CLSI methodology

Control strains	Medium	Inoculum	Incubation	Results Zone (mm)
Escherichia coli ATCC® 25922	Mueller Hinton II Agar	0.5 McFarland	35 ± 1°C, ambient 16-18 h	25
Staphylococcus aureus ATCC® 25923	Mueller Hinton II Agar	0.5 McFarland	35 ± 1°C, ambient 16-18 h	34
Streptococcus pneumoniae ATCC® 49619	Mueller Hinton II Agar with 5% Sheep Blood	0.5 McFarland	35 ± 1°C, 5% CO_2 20-24 h	38

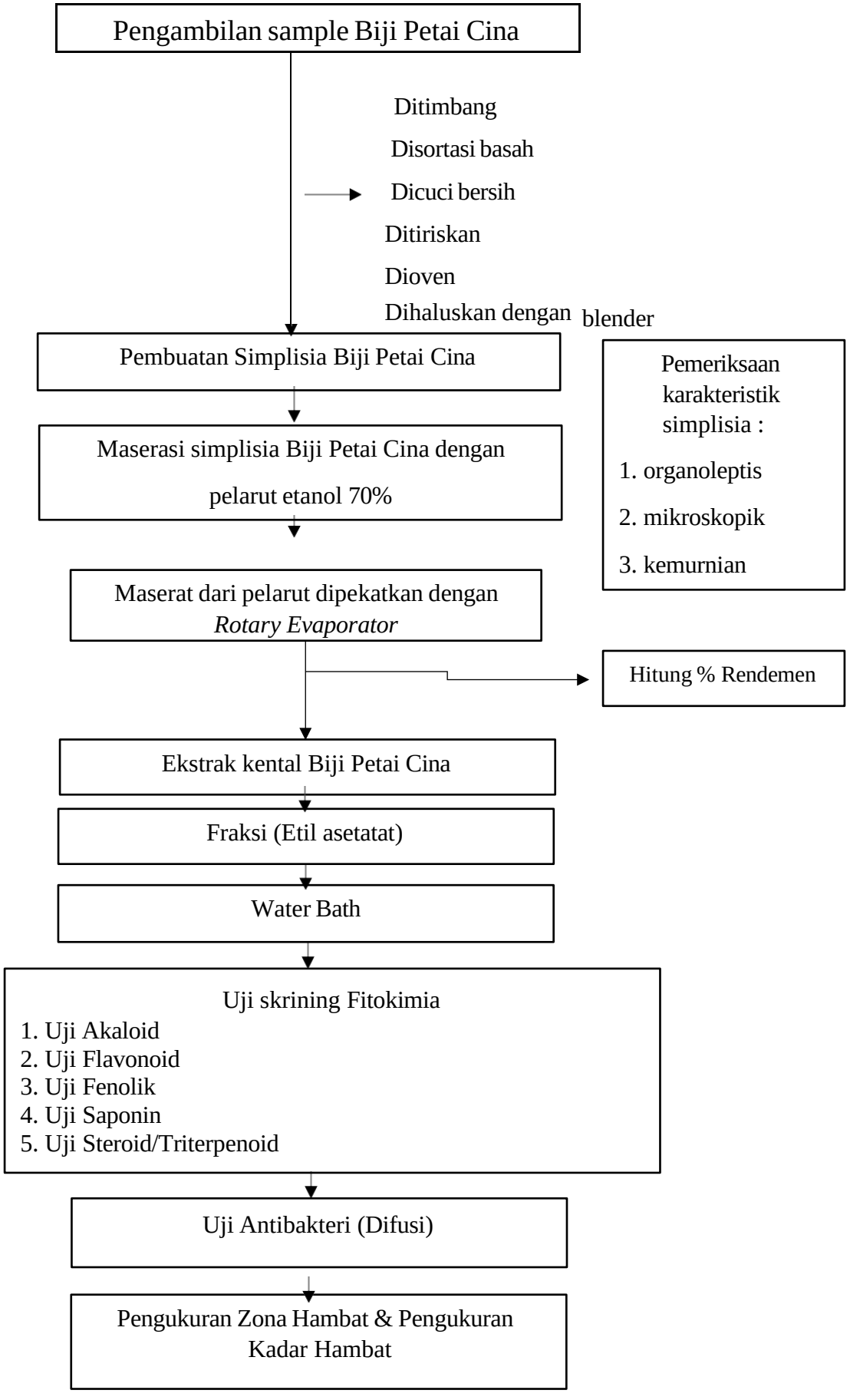
Batch Release

Approved

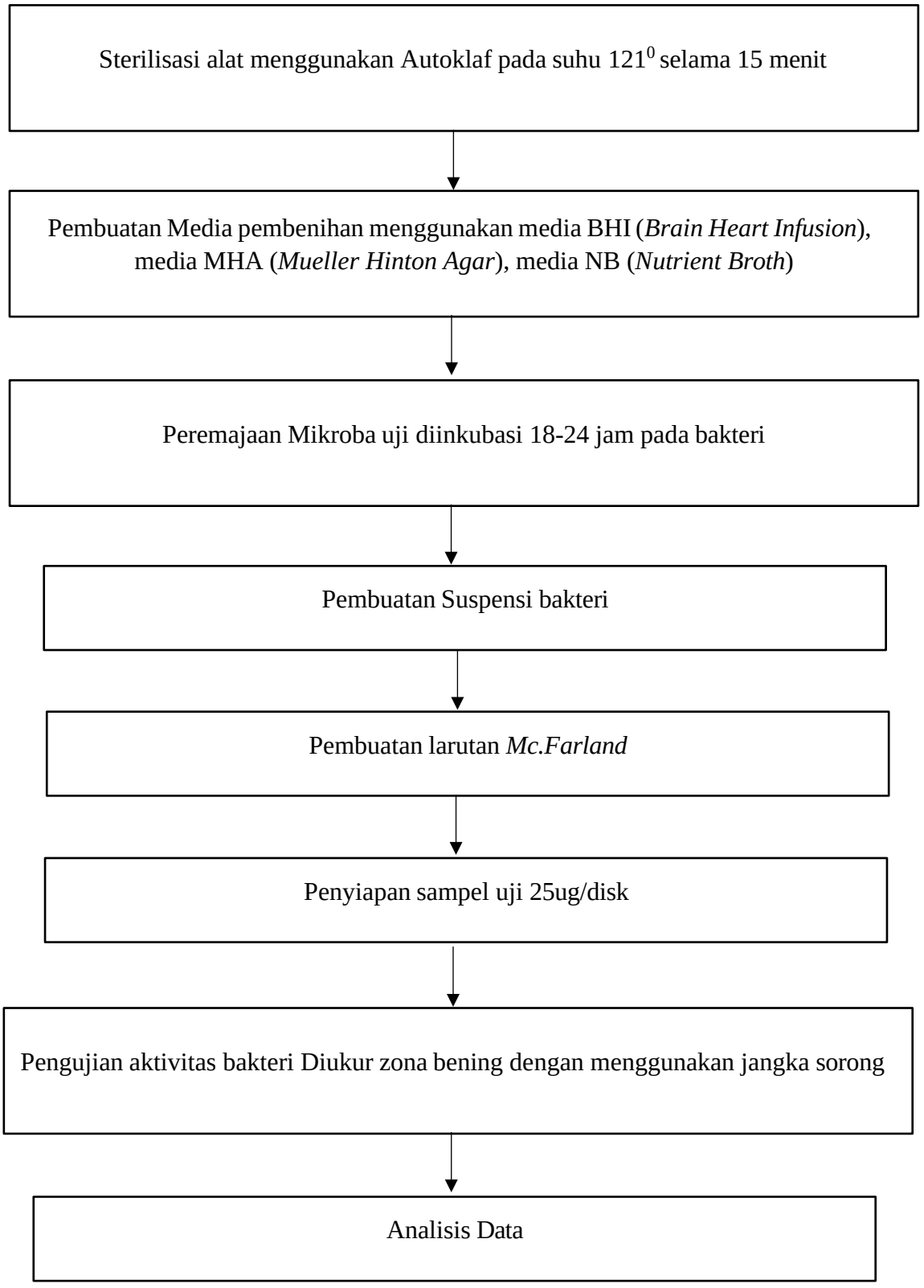
Date 14.07.2025 **Signature** Quality Control
(This document has been established electronically and is valid without signature)

The results reported were obtained at the time of release.

Lampiran 11. Skema Kerja Ekstrak Fraksi Biji Petai Cina



Lampiran 12. Skema Kerja Aktivitas Antibakteri Fraksi Biji Petai Cina



Lampiran 13. Proses Preparasi sampel



Pengambilan sampel



Hasil pemisahan biji dari kulitnya



Pencucian sampel



Proses perajangan



Proses pengeringan di oven



Hasil pengeringan sesudah di oven

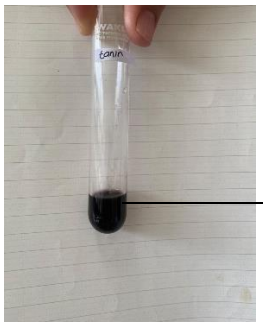


Proses penghalusan menggunakan belender



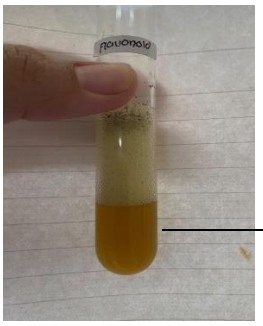
Penimbangan sampel setelah dibelender

Lampiran 14. Skrining Fitokimia



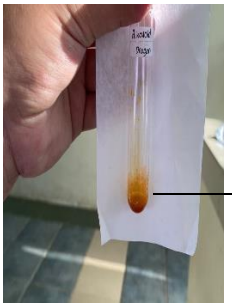
Hijau Kehitaman

Tanin



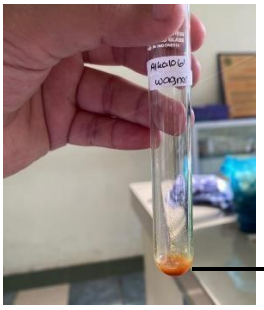
Jingga/orange

Flavonoid



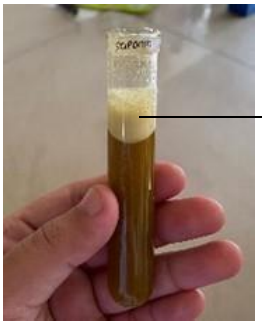
Berwarna Merah Bata

Alkaloid (Wagner)



Terdapat Endapan Coklat

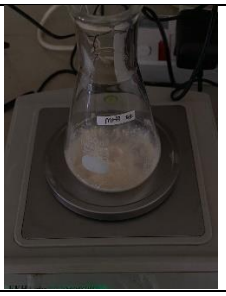
Alkaloid (Dragondrof)



Busa stabil

Saponin

Lampiran 15. Pembuatan Media Agar

	
Bahan Media yang digunakan yaitu MHA,BHI,NB	Penimbangan media
	
Pengadukan Media diatas Magnetic Stirer setelah dicampurkan aquades	Penuangan Media ke dalam cawan petri sebanyak 20 mL/cawan
	
Proses pembekuan Media di dalam kulkas	

1. Perhitungan Pembuatan Media *Mueller Hinton Agar*

Total volume media = Cawan petri 20 ml

Jumlah cawan = 3 Cawan petri

= 3 x 20 ml = 60 ml

Penyelesaian = Berat MHA = $\frac{38\ g}{1000\ ml}$ x 60 ml = 2,28 gram

Jadi, banyak aquadest yang dibutuhkan adalah 60 ml dan berat media MHA yang akan ditimbang adalah 2,28 gram

2. Perhitungan Pembuatan Media *Brain Heart Infusion*

Total volume media = Cawan petri 20 ml
Jumlah cawan = 3 Cawan petri
= 3 x 20 ml = 60 ml

Penyelesaian = Berat BHI = $\frac{52\ g}{1000\ ml}$ x 60 ml = 3,12 gram

Jadi, banyak aquadest yang dibutuhkan adalah 60 ml dan berat media BHI yang akan ditimbang adalah 3,12 gram

3. Perhitungan Pembuatan Media *Nutrient Broth*

Total volume media = Cawan petri 20 ml
Jumlah cawan = 3 Cawan petri
= 3 x 20 ml = 60 ml

Penyelesaian = Berat NB = $\frac{13\ g}{1000\ ml}$ x 60 ml = 0,78gram

jadi, banyak aquadest yang dibutuhkan adalah 60 ml dan berat media NB yang akan ditimbang adalah 0,78 gram

Pembuatan larutan uji

Pembuatan konsentrasi 10%, 25%, 50%, dan 75%

Diketahui:

1 mg = 1.000 μg

1 ml = 1.000 μL

1 disk = 10 μL

Larutan stok = 100 mg/ml

1. Konsentrasi 10%

$$\text{b/v } 10\% = \frac{10\ gr}{100\ ml}$$

$$= \frac{10.000\ mg}{100\ ml}$$

= 100 mg/ml

Jadi, 10% setara dengan 1.000 µg/disk

Cara pembuatan:

Ambil 100 mg ekstrak, larutkan dalam 1 ml DMSO 10%. Lalu ekstrak diambil 10 µL (per disk = 1.000 µg/disk).

2. Konsentrasi 25%

$$\text{b/v } 25\% = \frac{25\ gr}{100\ ml}$$

$$= \frac{25.000\ mg}{100\ ml}$$

= 250 mg/ml

Jadi, 25% setara dengan 2.500 µg/disk

Cara pembuatan:

Ambil 250 mg ekstrak, larutkan dalam 1 ml DMSO 10%. Lalu ekstrak diambil 10 µL (per disk = 2.500 µg/disk).

3. Konsentrasi 50%

$$\text{b/v } 50\% = \frac{50\ gr}{100\ ml}$$

$$= \frac{50.000\ mg}{100\ ml}$$

= 500 mg/ml

Jadi, 50% setara dengan 5.000 µg/disk

Cara pembuatan:

Ambil 500 mg ekstrak, larutkan dalam 1 ml DMSO 10%. Lalu ekstrak diambil 10 µL (per disk = 5.000 µg/disk).

4. Konsentrasi 75%

$$\text{b/v } 75\% = \frac{75\ gr}{100\ ml}$$

$$= \frac{75.000\ mg}{100\ ml}$$

= 750 mg/ml

Jadi, 75% setara dengan 7.500 µg/disk

Cara pembuatan:

Ambil 750 mg ekstrak, larutkan dalam 1 ml DMSO 10%. Lalu ekstrak diambil 10 µL (per disk = 7.500 µg/disk).

Lampiran 16. Diameter Zona Hambat Aktivitas Antibakteri Media *Staphylococcus Aureus*

1. *Mueller Hinton Agar* (MHA)

Kelompok perlakuan	sampel	I (mm) V	H	II (mm) V	H	III (mm) V	H	Rata-rata
Kontrol +	Amoxicillin 1%	32,5	28,4	30,4	30,0	31,6	32,7	30,9
Kontrol -	DMSO 10%	0	0	0	0	0	0	0
Konsentrasi 10%	1.000 µg/disk	10,3	10,3	8,2	8,22	10,0	10,4	9,5
Konsentrasi 25%	2.500 µg/disk	9,5	10,5	11,5	11,0	10,6	10,6	9,6
Konsentrasi 50%	5.000 µg/disk	13,2	13,9	13,5	13,8	11,6	12,3	13,0
Konsentrasi 75%	7.500 µg/disk	13,14	13,4	14,1	14,3	12,3	12,9	13,3

2. *Nutrient Broth* (NB)

Kelompok perlakuan	sampel	I (mm) V	H	II (mm) V	H	III (mm) V	H	Rata-rata
Kontrol +	Amoxicillin 1%	33,1	35,3	32,1	33,6	34,5	30,1	33,1
Kontrol -	DMSO 10%	0	0	0	0	0	0	0
Konsentrasi 10%	1.000 µg/disk	8,1	8,5	8,4	8,5	8,6	8,4	8,4

Konsentrasi 25%	2.500 µg/disk	8,9	9,3	11,2	9,3	9,7	9,7	8,0
Konsentrasi 50%	5.000 µg/disk	9,5	11,6	12,3	11,6	9,3	10,4	10,7
Konsentrasi 75%	7.500 µg/disk	10,4	10,0	12,7	12,5	12,4	13,1	11,8

3. *Brain Heart Infusion* (BHI)

Kelompok perlakuan	**sampel**	**I (mm) V**	**H**	**II (mm) V**	**H**	**III (mm) V**	**H**	**Rata-rata**
Kontrol +	Amoxicillin 1%	28,7	28,6	25,7	26,7	28,2	28,2	27,6
Kontrol -	DMSO 10%	0	0	0	0	0	0	0
Konsentrasi 10%	1.000 µg/disk	7,6	7,2	7,3	7,1	9,5	9,0	7,9
Konsentrasi 25%	2.500 µg/disk	8,7	8,2	9,6	8,7	8,5	8,7	8,7
Konsentrasi 50%	5.000 µg/disk	10,9	10,5	9,7	9,21	9,2	9,1	9,7
Konsentrasi 75%	7.500 µg/disk	11,7	11,4	11,7	11,8	10,7	10,0	11,2

Keterangan:

$$Dz = \frac{(Dv - Dc) + (Dh - Dc)}{2}$$

Dv : Diameter Vertikal zona hambat yang tidak di tumbuhi bakteri

Dh : Diameter Horizontal zona hambat yang tidak di tumbuhi bakteri

Dc : Diameter Cakram atau lubang sumuran

Lampiran 17. Analisa Data

a. Uji Normalitas

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Zona	.108	45	.200*	.971	45	.321

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b. Uji Homogenitas

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
Zona	Based on Mean	1.555	14	30	.151
	Based on Median	.181	14	30	.999
	Based on Median and with adjusted df	.181	14	19.655	.999
	Based on trimmed mean	1.340	14	30	.243

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

a. Dependent variable: Zona

b. Design: Intercept + Media + Konsentrasi + Media * Konsentrasi

c. Uji ANOVA

Tests of Between-Subjects Effects

Dependent Variable: Zona

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3087.803[a]	14	220.557	225.519	.000	.991
Intercept	3156.747	1	3156.747	3227.758	.000	.991
Media	45.342	2	22.671	23.181	.000	.607
Konsentrasi	3008.496	4	752.124	769.043	.000	.990
Media * Konsentrasi	33.965	8	4.246	4.341	.001	.537
Error	29.340	30	.978			
Total	6273.890	45				
Corrected Total	3117.143	44				

a. R Squared = .991 (Adjusted R Squared = .986)

d. Uji Tukey HSD

Multiple Comparisons

Dependent Variable: Zona

Tukey HSD

(I) Konsentrasi	(J) Konsentrasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
10%	25%	-.989	.4662	.238	-2.341	.363
	50%	-2.422*	.4662	.000	-3.774	-1.070
	75%	-3.467*	.4662	.000	-4.819	-2.114
	Amoxicillin 1%	-21.944*	.4662	.000	-23.297	-20.592
25%	10%	.989	.4662	.238	-.363	2.341
	50%	-1.433*	.4662	.034	-2.786	-.081
	75%	-2.478*	.4662	.000	-3.830	-1.126
	Amoxicillin 1%	-20.956*	.4662	.000	-22.308	-19.603
50%	10%	2.422*	.4662	.000	1.070	3.774
	25%	1.433*	.4662	.034	.081	2.786
	75%	-1.044	.4662	.193	-2.397	.308
	Amoxicillin 1%	-19.522*	.4662	.000	-20.874	-18.170
75%	10%	3.467*	.4662	.000	2.114	4.819
	25%	2.478*	.4662	.000	1.126	3.830
	50%	1.044	.4662	.193	-.308	2.397
	Amoxicillin 1%	-18.478*	.4662	.000	-19.830	-17.126
Amoxicillin 1%	10%	21.944*	.4662	.000	20.592	23.297
	25%	20.956*	.4662	.000	19.603	22.308
	50%	19.522*	.4662	.000	18.170	20.874
	75%	18.478*	.4662	.000	17.126	19.830

Based on observed means.

The error term is Mean Square(Error) = .978.

*. The mean difference is significant at the .05 level.

Lampiran 18. Dokumentasi Penelitian



Penimbangan simplisia



Proses maserasi



Penyaringan hasil maserasi



Maserasi



Proses evaporasi dengan *rotary evaporator*



Ekstrak hasil *rotary evaporator*



Pengentalan ekstrak di *waterbath*



Uji kadar air serbuk



Uji susut pengeringan serbuk



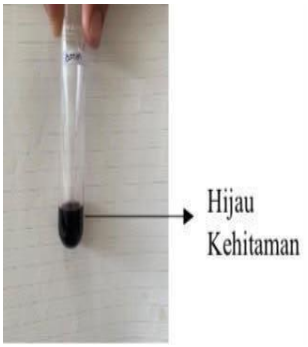
Uji organoleptis ekstrak biji petai cina



Uji bebas etanol



saponin (etanol + Aquadest)



Tanin ($FeCl_3$)



Flavonoid (Mg +HCl pekat)



Alkaloid pereaksi (wagner)



Alkaloid pereaksi (dragendrof)



Penimbangan bahan buat fraksi 10gr



Proses fraksinasi (etil asetat)



Proses pemisahan fraksi etil asetat dengan air



Hasil 3 kali pengulangan fraksi



Proses evaporasi dengan *rotary evaporator*



Proses pengentalan di *waterbath*



Penimbangan ekstrak untuk konsentrasi



Konsentrasi 75%, 50%,25%,10%



Peremajaan bakteri



Pembuatan larutan Mc farland



Pensuspensi bakteri



Pembuatan media MHA, NB, BHI



Proses pengujian antibakteri



Proses inkubasi bakteri



Pengujian aktivitas antibakteri metode dilusi cair



Kontrol + (Amoxicillin disk), kontrol – (DMSO)