

LAMPIRAN

Lampiran 1. Hasil Determinasi Tanaman

HERBARIUM JATINANGOR
LABORATORIUM TAKSONOMI TUMBUHAN
JURUSAN BIOLOGI FMIPA UNPAD
Gedung D2-212, Jl. Raya Bandung Sumedang Km 21 Jatinangor
Wa. 089689992695, email: phanerogamae@yahoo.com

LEMBAR IDENTIFIKASI TUMBUHAN
No.255/HB/05/2026

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

Nama : Mujahidah Putri Mapenda Wati
NIM/NIDN : P20630123078
Instansi : Poltekkes Kemenkes Tasikmalaya
Lokasi : Tasikmalaya.

Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -
Tanggal Koleksi : 15 Mei 2026.

Hasil Identifikasi
Nama Ilmiah : *Artocarpus heterophyllus* L.
Sinonim : *Artocarpus brasiliensis* Ortega
Nama Lokal : Biji Buah Nangka
Suku/Famili : Moraceae

Klasifikasi (Hirarki Taksonomi)
Kingdom : Plantae
Divisi : Magnoliophyta
Class : Magnoliopsida
Ordo : Rosales
Famili : Moraceae
Genus : *Artocarpus*
Species : *Artocarpus heterophyllus* L.

Referensi:

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

Jatinangor, 16 Mei 2026.

Identifikator,

LABORATORIUM TAKSONOMI TUMBUHAN
JURUSAN BIOLOGI FMIPA-UNPAD

Drs. Joko Kusmoro, M.P.
NIP. 19600801 199101 1 001

Lampiran 2. Certificate of Analysis (COA) Kultur Starter Bakteri

LACTINA Ltd. Bankya, Bulgaria
 web: www.lactina-ltd.com
 e-mail: office@lactina-ltd.com



ANALYTICAL REPORT

No. 68 - II / 23.05.2023

1. Product: Freeze - dried starters - DVS application yoghurt LAT BY /11 2. Composition: Lactobacillus bulgaricus, Streptococcus thermophilus 3. No : 05 4. Quantity: 50 pcs 5. Exp. Date: 05.2025		
	NORM	RESULT
Physical & Chemical data: - dry matter - acidification activity starter yoghurt (43°C)	not less than 94%	conform specif. 10-12h (according technology)
Microbiological data: - lactic acid bacteria CFU / g (FIL-IDF 146:1991,149:2010) - Enterobacteriaceae: (FIL-IDF 73B:1998,170A-1(1999) - Yeast and mould: (FIL-IDF 94 B:1990) -Staphylococcus aureus: (FIL-IDF 60 C:1997) - Salmonella: (FIL-IDF 93 B : 1995)	>5 x 10 ⁹ negative 1g negative 1g negative 1g negative 25 g	8 x 10 ⁹ conform spec. conform spec. conform spec. conform spec.

Conclusion: The freeze-dried cultures meet specification

23.05.2023, Bankya, BG	General manager.....
Lab:..... Dr. E.Karaivanova	eng. G.Georgiev



Lampiran 3. Certificate of Analysis (COA) Media *Lactobacillus* MRS Agar

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

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

Salinan Terkendali
 Certificate of Analysis, Quality and Conformity

Material Code : GM641	Material Name : Lactobacillus MRS Agar (MRS Agar), Granulated	Lot No : 0000830008
Report No : 40001444880	Date of Release & Report : 2024-02-26	Expiry Date : 2028-01

For Bacteria : Soyabean Casein Digest Agar / Columbia Blood Agar base enriched with 5% v/v SheepHorse 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 <= 7.5 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

This is to certify that this lot passes and it conforms 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 particular use, other than that specified in the current Himedia manual or product sheets. The results reported were obtained at the time of release.
 This document has been produced electronically and is valid

[Signatures]
 Microbiologist/Executive Microbiologist Asst./QC Manager Dy-QA Manager

2024-02-26

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

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

Salinan Terkendali
 Certificate of Analysis, Quality and Conformity

Material Code : GM641	Material Name : Lactobacillus MRS Agar (MRS Agar), Granulated	Lot No : 0000830008
Report No : 40001444880	Date of Release & Report : 2024-02-26	Expiry Date : 2028-01

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

Gelling
 Firm, comparable with 1.2% Agar gel.

Colour and Clarity of Prepared Medium
 Medium to dark amber coloured, clear to slightly opalescent gel forms in Petri plates

Reaction
 Reaction of 6.71% w/v aqueous solution at 25°C.

pH
 pH Range : 6.30-6.70 Observed : 6.54

Cultural Response
 Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours or longer (with 5% CO₂)

Organism	Inoculum (CFU)	Growth	Recovery
Cultural Response			
<i>Lactobacillus rhamnosus</i> ATCC 2999	50-100	luxuriant	>=50%
<i>Lactobacillus fermentum</i> ATCC 9138	50-100	luxuriant	>=50%
<i>Lactobacillus trichmannii</i> ATCC 7830	50-100	luxuriant	>=50%
<i>Lactobacillus plantarum</i> ATCC 8014	50-100	luxuriant	>=50%
<i>Lactobacillus sakei</i> ATCC 33521	50-100	luxuriant	>=50%
<i>Lactobacillus lactis</i> ATCC 19413 (NCTC 05016)	50-100	luxuriant	>=50%
<i>Pediococcus pentosaceus</i> ATCC 31216	50-100	luxuriant	>=50%
<i>Escherichia coli</i> ATCC 25922 (NCTC 00013)	>=10 ⁶	inhibition	0%
<i>Bacillus cereus</i> ATCC 11778 (NCTC 00001)	>=10 ⁶	inhibition	0%

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 :

PAGE : 1/2

Lampiran 4. *Certificate of Analysis (COA) Media Lactose Broth*



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

Himedia Laboratories Private Limited
 C-46, 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 : M1003	Material Name : Lactose Broth	Lot No : 000029586
Report No.: 40001440143	Date of Release & Report : 2024-02-16	Expiry Date : 2029-01

Appearance

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

Colour and Clarity of prepared medium

Light to medium amber coloured clear solution without any precipitate

Reaction

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

pH

pH Range : 5.78-7.10 Observed : 7.09

Cultural Response

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

Strain	Conc. (CFU)	Growth	Test
Cultural Response			
<i>Enterobacter aerogenes</i> ATCC 29522 (NCTC 00173)	50-100	luxuriant	positive reaction
<i>Enterococcus faecalis</i> ATCC 29212 (NCTC 00050)	50-100	luxuriant	negative reaction
<i>Escherichia coli</i> ATCC 25922 (NCTC 00013)	50-100	luxuriant	positive reaction
<i>Pseudomonas aeruginosa</i> ATCC 27853 (NCTC 00023)	50-100	luxuriant	negative reaction
<i>Pseudomonas aeruginosa</i> ATCC 9027 (NCTC 00050)	50-100	luxuriant	negative reaction
<i>Escherichia coli</i> ATCC 8739 (NCTC 00012)	50-100	luxuriant	positive reaction
<i>Escherichia coli</i> NCTC 5002	50-100	luxuriant	positive reaction

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.1:2016 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 73°C for no less than 2

PAGE : 1/2

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

SALINAN TERKENDALI

Material Code : M1003	Material Name : Lactose Broth	Lot No: 000029586
Report No.: 40001446143	Date of Release & Report : 2024-02-16	Expiry Date : 2025-01

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. Spongiform venteran's supervision and were apparently free from infectious and contagious diseases. BSE (Bovine Spongiform Encephalopathy) TSE (Transmissible Spongiform Encephalopathy) and diseases 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

This is to certify that this lot passes and it conforms 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. The results reported were obtained at the time of release.

This document has been produced electronically and is valid

(Signature)
Microbiologist/Sr.Executive
Microbiologist

(Signature)
Asst./Dy/QC Manager

(Signature)
Dy/QA Manager

2024-02-10

PAGE : 2/2

Lampiran 5. Certificate of Analysis (COA) Media Brilliant Green Bile Lactose Broth (BGLB)

Certificate of Analysis



Certificate of Analysis ID:

1054540500_VM1142754_EN

Producer and client:

Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany

Test laboratory:

Merck KGaA Qualitätskontrolle für mikrobiologische Produkte
Frankfurter Str. 250, 64293 Darmstadt, Germany

Sample Identification:

GranuCult®
BRILA (Brilliant-Green Bile Lactose) Broth acc. ISO 4831,
ISO 4832 and FDA-BAM

Ordering number:

1.05454.0500

Lot number:

VM1142754

Sample ID:

201622871

Accreditation:



Test method:

DIN EN ISO 11133:2020
Performance testing of liquid culture media:
Qualitative single tube method (turbidity) for performance testing of
liquid media)

Date of analysis:

2025/07/31

Date of release:

2025/08/11

Minimum shelf life:

2030/07/31

Composition (g/l):

Enzymatic digest of casein 10.0; Lactose 10.0; Ox bile 20.0;
Brilliant green 0.0133.

Preparation & sterilization:

Dissolve 40 g in 1 l of purified water. Fill into tubes containing Durham
tubes and autoclave 15 min at 121 °C. The Durham tubes shall not
contain any air bubbles after autoclaving.

Application:

For the selective enrichment, enumeration and confirmation of
Escherichia coli and other faecal coliform organisms from food and
animal feed, water and other materials.

Storage:

Store at +15 °C to +25 °C, dry and tightly closed. Do not use clumped
or discolored medium. Protect from UV light (including sun light).

The reported results refer exclusively to the specified medium, see Certificate of Analysis ID.

Merck KGaA · Frankfurter Straße 250, 64293 Darmstadt, Germany; +49 6151 72-2440
EMD Millipore Corp. · 290 Concord Road, Billerica, MA 01821, USA +1-978-715-4321
ATCC is a registered trademark of ATCC, Manassas, VA, USA. Lit. No. TN105406EN00

1054540500_VM1142754_EN
Certificate version 01
Page 1/3

Certificate of Analysis



Release: Culture medium released by Approving Officer or delegate LS-SC-PCDQ56



Dr. Lukas Mechler

Responsible Manager of LS-SC-PCDQ56 (Test Laboratory D-PL-15185-01-00)

Certificate of analysis revision history:

Certificate version	Date	Reason for version
01	2025/08/11	Initial version

Lampiran 6 Alat Yang Digunakan Dalam Penelitian



Autoklaf



Inkubator



Colony Counter



Viscometer MRC VIS-8



Timbangan Analitik



Hot Plate



Biosafety Cabinet



pH Meter



Termometer Digital



Spatel, Kaca Arloji dan Batang pengaduk



Beaker Glass

Lampiran 7. Bahan Yang Digunakan Dalam Penelitian



Sari Biji Nangka



Sari Buah Nangka



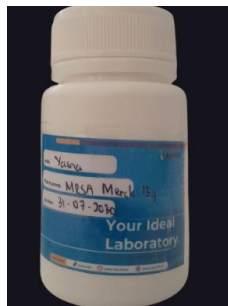
Strain Kultur
Lactobacillus
bulgaricus dan
Streptococcus
thermophilus



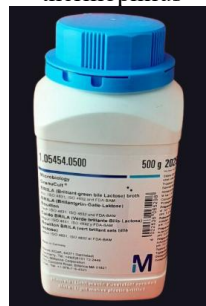
Susu UHT



Sukrosa



Media MRSA



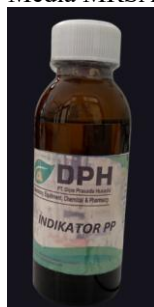
Media BGLBB



Media LB



Serbuk Kultur
Lactobacillus
bulgaricus dan
Streptococcus
thermophilus



Indikator PP



Aquadest



Nacl



NaOH



Buffer pH

A. Hasil Pembakuan NaOH

Percobaan	Volume NaOH (mL)
1	9,8
2	10,1
3	9,6
Rata-rata	9,83

$$\text{Normalitas NaOH} = V_I \times N_I = V_2 \times N_2$$

$$= 9,83 \text{ mL} \times N_I = 10 \text{ mL} \times 0,1 \text{ N}$$

$$= 0,1017 \text{ N}$$

B. Hasil Uji Asam Laktat

Formula	Replikasi Ke			Rata Rata $\pm$ SD	Dokumentasi
	1	2	3		
F0	0,81	0,81	0,81	$0,81 \pm 0,00$	
F1	1,08	1,08	1,125	$3,02 \pm 0,029$	
F2	1,53	1,53	1,53	$1,53 \pm 0,00$	
F3	1,98	1,98	1,98	$1,98 \pm 0,00$	

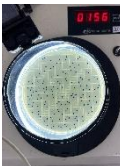
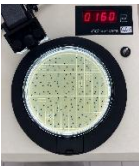
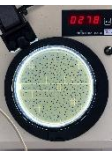
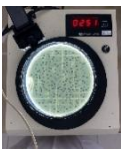
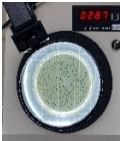
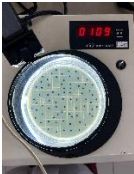
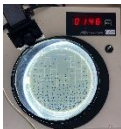
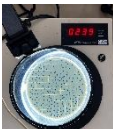
C. Uji pH

Formula	Replikasi Ke			Rata Rata $\pm$ SD	Dokumentasi
	1	2	3		
F0	5,43	5,42	5,42	5,42 $\pm$ 0,006	
F1	3,00	3,05	3,00	3,02 $\pm$ 0,029	
F2	2,80	2,80	2,80	2,80 $\pm$ 0,000	
F3	2,64	2,64	2,64	2,64 $\pm$ 0,000	

D. Uji Viskositas

Formula	Replikasi Ke			Rata Rata $\pm$ SD	Dokumentasi
	1	2	3		
F0	567,6	567,5	567,8	567,6 $\pm$ 0,15	
F1	584,3	584,0	584,3	584,2 $\pm$ 0,17	
F2	602,2	602,2	602,3	602,2 $\pm$ 0,06	
F3	647,0	647,0	647,9	647,0 $\pm$ 0,06	

E. Uji Bakteri Asam Laktat

Formula	Pengenceran			Total BAL (CFU/mL)
	1	2	3	
F0				$1,58 \times 10^7$
	156	160	158	
F1				$2,34 \times 10^7$
	278	251	173	
F2				$1,91 \times 10^7$
	287	178	109	
F3				$1,82 \times 10^7$
	162	146	239	

F. Uji *Coliform*
1. Uji Penduga

Formula	Dokumentasi		
	10 ⁻¹	10 ⁻²	10 ⁻³
F0			
	(-)	(-)	(-)
F1			
	(-)	(-)	(-)
F2			
	(-)	(-)	(+)

F3			
			
	(+)	(-)	(-)

2. Uji Konfirmasi

Formula	Dokumentasi		
	10^{-1}	10^{-2}	10^{-3}
F2	(-)	(-)	
			(-)
F3		(-)	(-)
	(-)		

Lampiran 8. Angka Paling Mungkin (APM) per 1 g

Tabung yang positif			APM	Tabung yang positif			APM
0,1	0,01	0,001		0,1	0,01	0,001	
0	0	0	<3	2	2	0	21
0	0	1	3	2	2	1	28
0	1	0	3	2	2	2	35
0	1	1	6	2	3	0	29
0	2	0	6	2	3	1	36
0	3	0	9	3	0	0	23
1	0	0	4	3	0	1	39
1	0	1	7	3	0	2	64
1	0	2	11	3	1	0	43
1	1	0	7	3	1	1	75
1	1	1	11	3	1	2	120
1	2	0	11	3	1	3	160
1	2	1	15	3	2	0	93
1	3	0	16	3	2	1	150
2	0	0	10	3	2	2	216
2	0	1	14	3	2	3	290
2	0	2	20	3	3	0	240
2	1	0	15	3	3	1	460
2	1	1	20	3	3	2	1100
2	1	2	27	3	3	3	> 1100

Lampiran 9. Hasil Uji Kadar Protein dan Kadar Lemak



LABORATORIUM TERPADU
UNIVERSITAS BAKTI TUNAS HUSADA
 Jl. Letjen Mashudi No.20 Cibeureum, Kota Tasikmalaya, 46196
 Telp : 0821-2920-0500 Email : uptlaboratorium@universitas-bth.ac.id

LAPORAN HASIL UJI
CERTIFICATE OF ANALYSIS
Nomor : 049/LT-UBTH/HU/VI/2026

Nama Konsumen <i>Customer</i>	: Mujahidah Putri M.W
Alamat <i>Address</i>	: Poltekkes Tasikmalaya
No Telp/WhatsApp <i>Telephone & WhatsApp</i>	: 0831-2064-2687
Nomor Permintaan Pengujian <i>Code Of Order Sheet</i>	: S-38/MI-02/LT-UBTH/TT/2026
Sampel <i>Sample</i>	: Yogurt
Parameter Analisis <i>Kind of Analysis</i>	: Uji Kadar Lemak dan Uji Kadar Protein
Pengemasan Sampel <i>Packaging of Sample</i>	: Botol Plastik
Deskripsi Sampel <i>Sample Description</i>	: Minuman, Sari Biji Nangka, Segar
Diterima Oleh <i>Received by</i>	: Ajeng Rahmi Pratiwi, A.Md.AK
Tanggal diterima <i>Date of Receipt</i>	: 21 Mei 2026
Tanggal Pengujian <i>Date of Analysis</i>	: 21 Mei – 15 Juni 2026
Hasil Uji <i>Test Result</i>	: Terlampir

CATATAN :

1. HASIL PENGUJIAN INI TIDAK UNTUK DIGANDAKAN DAN HANYA BERLAKU UNTUK CONTOH-CONTOH TERSEBUT DIATAS
2. HASIL UJI HANYA BERDASARKAN SAMPEL YANG DITERIMA
3. LABORATORIUM TIDAK BERTANGGUNG JAWAB ATAS PENYALAHGUNAAN HASIL ANALISIS OLEH PIHAK MANAPUN
4. KELUHAN AKAN DILAYANI DALAM JANGKA WAKTU 7 HARI SETELAH LAPORAN HASIL UJI DIAMBIL, DENGAN SYARAT SAMPEL DISIMPAN DI LABORATORIUM MINIMAL 50% DARI JUMLAH TOTAL

Tasikmalaya, 17 Juni 2026
 Kepala Laboratorium Terpadu UBTH,


 UNIVERSITAS BAKTI TUNAS HUSADA
 Riansi Nursalah, M.Si
 NIDN. 0402017801

F-10/LT-UBTH/SOP.13/01/02 | Terbitan : 03



**LABORATORIUM TERPADU
UNIVERSITAS BAKTI TUNAS HUSADA**

Jl. Letjen Mashudi No.20 Cibeureum, Kota Tasikmalaya, 46196
Telp : 0821-2920-0500 Email : uptlaboratorium@universitas-bth.ac.id

**LAMPIRAN HASIL UJI
ATTACHMENT OF CERTIFICATE OF ANALYSIS
Nomor : 049/LT-UBTH/HU/VI/2026**

No.	Identitas Sampel	Parameter Analisis	Satuan (Unit)	Hasil	Metode Uji / Teknik
1	Yogurt Sari Biji Nangka	Kadar Protein	% b/b	3,16	SNI 01-2891-1992 (7.1)
		Kadar Total Lemak	% b/b	4,04	SNI 01-2891-1992 (8.2)

CATATAN :

- HASIL PENGUJIAN INI TIDAK UNTUK DIGANDAKAN DAN HANYA BERLAKU UNTUK CONTOH-CONTOH TERSEBUT DIATAS
- HASIL UJI HANYA BERDASARKAN SAMPEL YANG DITERIMA
- LABORATORIUM TIDAK BERTANGGUNG JAWAB ATAS PENYALAHGUNAAN HASIL ANALISIS OLEH PIHAK MANAPUN
- KOMPLAIN AKAN DILAYANI DALAM JANGKA WAKTU 7 HARI SETELAH LAPORAN HASIL UJI DIAMBIL, DENGAN SYARAT SAMPEL DISIMPAN DI LABORATORIUM MINIMAL 50% DARI JUMLAH TOTAL

Tasikmalaya, 17 Juni 2026
Kepala Laboratorium Terpadu UBTH,

Rianti Nurpalah, M.Si
NIDN. 0402017801

F-10/LT-UBTH/SOP.13/01/02 | Terbitan : 03

Hasil Yogert Nangka

$$1. \text{ Kadar protein} = \frac{(V1-V2) \times N \times 14 \times F.K \times f.p}{w \times 1000} \times 100\% =$$

$$a. \text{ Kadar protein} = \frac{(2,60-0,65) \times 0,0096 \times 14 \times 6,25 \times 10}{0,5117 \times 1000} \times 100\% = 3,20\%$$

$$b. \text{ Kadar protein} = \frac{(2,55-0,65) \times 0,0096 \times 14 \times 6,25 \times 10}{0,5119 \times 1000} \times 100\% = 3,12\%$$

$$\text{Rata-rata Kadar Protein} = \frac{3,20 + 3,12}{2} = 3,16\%$$

$$2. \text{ Kadar Lemak} = \frac{W2-W0}{W1} \times 100\% =$$

$$a. \text{ Kadar Lemak} = \frac{167,3530 - 167,2687}{2,0794} \times 100\% = 4,05\%$$

$$b. \text{ Kadar Lemak} = \frac{166,0905 - 166,0079}{2,0475} \times 100\% = 4,03\%$$

$$\text{Rata-rata Kadar Lemak} = \frac{4,05 + 4,03}{2} = 4,04\%$$

Lampiran. 10 Kartu Pemantauan dan Logbook Bimbingan KTI

Nama: Mujahida Putri Mapenda Wati

Nim: P20630123078

Judul Kti:

Pembimbing Utama:

Pembimbing Pendamping:

PEMANTAUAN BIMBINGAN KARYA TULIS ILMIAH

No	Hari/tanggal	Kegiatan	Pembimbing Utama	Pembimbing Pendamping
1	5 Mei 2025 Senin	Judul KTI		
2	7 Mei 2025 Rabu Kamis	Bimbingan BAB 1		
3	16 Mei 2025 Kamis	Bimbingan BAB 2		
4	25 Juli 2025 Jumat	Bimb. BAB 3		
5	28 Oktober 2025 Senin	Diskusi 1-3 & Formulasi		
6	31 Oktober 2025 Jumat	Revisi Bakteri		
7	3 November 2025 Senin	Revisi & Diskusi		
8	7 November 2025 Jumat	Revisi & diskusi		
9	14 Nov 2025 Jumat	Revisi & Diskusi		
10				

NAMA : Mujahidah Putri Mapenda Wati
NIM : P20630123078
JUDUL KTI : Formulasi dan Uji Karakteristik Minuman Probiotik Sari Biji dan Buah Nangka Menggunakan Kultur Bakteri *Lactobacillus Bulgaricus* dan *Streptococcus*
PEMBIMBING UTAMA : apt. Nunung Yulia, M.Si.
PEMBIMBING PENDAMPING : apt. Rani Rubiyanti, M.Farm.

PEMANTAUAN BIMBINGAN KARYA TULIS ILMIAH

No	Hari/tanggal	Kegiatan	Pembimbing	
			Utama	Pendamping
1	Senin 4 Maret 2026	Konsultasi mengenai Penelitian, alat, bahan, metode		
2	Rabu 6/03/2026	Konsultasi pembuatan formula hewan & Nabati		
3	Selasa 12/03/2026	Konsultasi pada sample nabati yang cair		
4	Sabtu 2 mei 2026 C200M	Membahas hasil formulasi Formula hewan / Nabati		
5	Senin 25 mei 2026	Konsultasi Hasil Pengujian		
6				
7				
8				
9				
10				
11				
12				

LOGBOOK KEGIATAN PENELITIAN KTI

Formulasi dan Uji Karakteristik Minuman Probiotik Sari Biji
dan Buah Nangka Menggunakan Kultur Bakteri

Nama : Mujahidah Putri Mapenda Wati

NIM : P20630123078

Dosen Pembimbing : 1. apt. Nunung Yulia, M.Si.
2. apt. Rani Rubiyanti, M.Farm.

NO.	HARI/ TANGGAL	NAMA KEGIATAN	URAIAN KEGIATAN	HASIL YANG DIPEROLEH	PARAF	
					Dospem 1	Dospem 2
1.	2 Maret 2026	Sterilisasi Alat	Menggunakan autoklaf 121 °C 15 - 20 menit			
2.	12 Maret 2026	Pembuatan Starter Sari biji Nangka		Menggumpal, creamy. Saat di masukan kulkas mengering.		
3.	12 Maret 2026	Pembuatan formulasi Probiotik Sari biji nangka (Nabati)	F1 kontrol F2 (40% s.b.N) F3 (60% s.b.N) F4 (80% s.b.N)	Cair Sari biji nangka tdk memiliki pro tein & laktosa spt pada s. sapi. bakteri kekurangan makanan		
4.	7 Mei 2026	Pembuatan starter S. Sapi (Dairy)	1. Susu dipasteurisasi 2. Menambahkan gula 3. Jika suhu sudah 40 °C Masukan starter susu 200 ml bakteri 200 mg			

NO.	HARI/ TANGGAL	NAMA KEGIATAN	URAIAN KEGIATAN	HASIL YANG DIPEROLEH	PARAF	
					Dospem 1	Dospem 2
5.	8 Mei 2024	Hasil formulasi; 2. Organoleptik 2. pH	1. kontrol 2. Organoleptik pH (pH meter digital) kalibrasi	Bau → Asam, susu rasa → Asam khas fermentasi; Tekstur → kental FD (1) = 5,43 (2) = 5,42 (3) = 5,42		
			2. f. 1 100% pH meter kalibrasi	Bau → Nangka, susu, Asam Rasa Asam khas Tekstur → kental FI (1) = 3,00 (2) = 3,05 (3) = 3,00		
			3. f. 2 Hasil pH f. 2 F2 (1) = 2,8 (2) = 2,8 (3) = 2,8	Bau → Nangka, susu Asam Rasa Asam khas fermentasi; Tekstur = kental		
			4. f. 3 Hasil pH 2,64 (1) 2,64 (2) 2,64 (3)	Bau → Nangka, susu, Asam Rasa Asam khas fermentasi; Tekstur = kental		
6.	11 Mei 2024	Viskositas	Masukan Bampie ke dalam beaker glass hingga spindileterendam - spindile no 3 - 30 rpm - Triplo	Ulangan 1 FD = 567,6 F1 = 584,3 F2 = 602,2 F3 = 647,0 Ulangan 2 FD = 567,6 F1 = 584,0 F2 = 602,2 F3 = 647,0 Ulangan 3 FD = 567,8 F1 = 584,3 F2 = 602,3 F3 = 646,9 Rata rata FD = 567,6 F1 = 584,2 F2 = 602,2 F3 = 647,0		
						

NO.	HARI/ TANGGAL	NAMA KEGIATAN	URAIAN KEGIATAN	HASIL YANG DIPEROLEH	PARAF	
					Dospem 1	Dospem 2
		Perhitungan	$\frac{9+9+9}{3} \times 100\%$ $= 981\%$ $\frac{12+12+12,5}{3}$ $\times 0,09 = 109,5\%$		↓	
			$\frac{17+17+17}{3}$ $\times 0,09 = 1,93\%$ $\frac{22+21+21}{3} \times 0,09$ $= 1,92\%$		↓	
10	18/06/2026	Uji Kadar Abu	• Cawan porselen, di dibersihkan, di masukan ke tanur pada suhu 550 °C di keluarkan dan dimasukkan ke dalam desikator, lalu timbangan satu/satu • Sampel sebanyak 5 gram di masukan ke cawan timbangan masukan ke tanur 550 °C 4 jam, sampel di abu putih. Cawan dikeluarkan masukan ke desikator • Cawan timbangan cawan	$R = \frac{w_2 - w_0}{w_1 - w_0} \times 100\%$ $w_0 = \text{berat cawan kosong}$ $w_1 = \text{cawan + sample}$ $w_2 = \text{cawan + abu}$ $F_0 = 16,3055 - 16,346$ $24,434 - 16,346$ $= \frac{0,0395}{9,088} \times 100\%$ $= 0,78\%$ $F_1 = 16,7427 - 16,698$ $21,698 - 16,698$ $= 0,0447$ $\frac{5000}{8000}$ $= 0,84\%$ $F_2 = 20,246 - 20,189$ $25,109 - 20,189$ $= \frac{0,057}{8000} \times 100\%$ $= 1,14\%$	↓	
				$F_3 = \frac{10,9492 - 10,491}{23,655 - 10,491}$ $= \frac{0,0582}{5,164} \times 100\%$ $= 1,13\%$	↓	

NO.	HARI/ TANGGAL	NAMA KEGIATAN	URAIAN KEGIATAN	HASIL YANG DIPEROLEH	PARAF																					
					Dospem 1	Dospem 2																				
11	18/09/2026	Uji Conform	Mengapikan Sample 10^{-1} 10^{-2} dan 10^{-3} (triplo) uji penduga dgn Lacros broth dgn memasukkan masing masing sample yg di lempari tabung durham	Hasil Uji Penduga <table><tr><th>F0</th><th>10^{-1}</th><th>10^{-2}</th><th>10^{-3}</th></tr><tr><td>F0</td><td>-</td><td>-</td><td>-</td></tr><tr><td>F1</td><td>-</td><td>-</td><td>-</td></tr><tr><td>F2</td><td>-</td><td>-</td><td>+</td></tr><tr><td>F3</td><td>+</td><td>-</td><td>-</td></tr></table>	F0	10^{-1}	10^{-2}	10^{-3}	F0	-	-	-	F1	-	-	-	F2	-	-	+	F3	+	-	-		
F0	10^{-1}	10^{-2}	10^{-3}																							
F0	-	-	-																							
F1	-	-	-																							
F2	-	-	+																							
F3	+	-	-																							
			Infus 37°C 48 jam o Amati o Terlepot + pd $\neq 2 \cdot 10^{-3}$ dan F_3 10^{-1} o Larutan uji konfir masi pada BG188 Inkubasi 24 jam	$F_2 \cdot 10^{-3} = (-)$ $F_3 \cdot 10^{-1} = (-)$ Semua APM > 3																						
12	22 Mei Mei 2026	Hasil Uji Protein & lemak (Lab BTH) $\neq (1)$	o Protein (Metode SKI Guir 7.1 Metode Kjeldahl Hasil $3,16\%$ bbb sample $\rightarrow$ destruksi $\rightarrow$ destilasi $\rightarrow$ pe	Hasil Pengukuran (1) = $3,20\%$ (2) = $3,12\%$ rata-rata = $3,16\%$																						
			o Lemak Hidrolisis HCl $\rightarrow$ Titrasi $\rightarrow$ kadar Nitrogen $\rightarrow$ kadar Protein.																							
			o Lemak SNIBIR 0.2 = Metode hidrolisis Hidrolisis HCl 25% $\rightarrow$ Penimbangan - penge rim dan $\rightarrow$ ekstrak dgn Soxhlet $\rightarrow$ pergo	Hasil $P(1) = 4,05\%$ $P(2) = 4,03\%$ $\frac{4,05 + 4,03}{2} = 4,04\%$																						
			apian pelarut $\rightarrow$ Penimbangan lemak																							

NO.	HARI/ TANGGAL	NAMA KEGIATAN	URAIAN KEGIATAN	HASIL YANG DIPEROLEH	PARAF	
					Dospem 1	Dospem 2
7	18 Mei 2026	Uji Total BAL	- Melakukan Pengenceran sampel hingga tahap 10^{-5} dan penanaman media MRSa, inkubasi 37°C (48 jam) - Menghitung koloni BAL	$F0 = 156, 160, 150$ Koloni $\rightarrow 1,50 \times 10^7 \text{ CFU/ml}$ $F1 = 270, 251, 173$ $\rightarrow 2,34 \times 10^7 \text{ CFU/ml}$ $F2 = 207, 170, 109$ $\rightarrow 1,91 \times 10^7 \text{ CFU}$ $F3 = 162, 146, 239$ $\rightarrow 1,82 \times 10^7 \text{ CFU}$ $R = \text{rata-rata}$		
				$R = \frac{1,50 + 2,34 + 1,91 + 1,82}{4} \times 10^7$ $\text{Total Bal} = \frac{1,50 + 2,34 + 1,91 + 1,82}{4} \times 10^7$		
8	18 Mei 2026	Pembakuan NaOH	Melakukan Pembakuan NaOH menggunakan 10 ml larutan asam oksalat 0,1N dan indikator PP dan kemudian di titrasi.	Hasil = Percobaan (1) 9,0 ml (2) 10,1 ml (3) 9,6 ml Rata-rata vol NaOH $\frac{9,0 + 10,1 + 9,6}{3} = \frac{28,7}{3}$ $= 9,57 \text{ ml}$		
				Normalitas NaOH $= N_1 V_1 = N_2 V_2$ $9,83 \times N_{\text{NaOH}} = 10 \times 0,1$ $N_{\text{NaOH}} = \frac{10 \times 0,1}{9,83}$ $= 0,1017 \text{ N}$		
9	10/06/26	Uji total Asam laktat	10 ml sampel + 2 tetes indikator PP lalu dititrasi oleh NaOH hingga merah muda. 3 x pengulangan	Hasil $F(0) = (1) 9 \text{ ml}$ $(2) 9 \text{ ml}$ $(3) 9 \text{ ml}$ $F(1) = (2) 12 \text{ ml}$ $(3) 12,5 \text{ ml}$ $f(2) = 17 \text{ ml}$		
			$R = \frac{\% \text{Asam laktat}}{V \times N \times 0,09 \times 100}$ W	$0,17 \text{ ml}$ $0,17 \text{ ml}$ $f(3) = 22 \text{ ml}$ 21 ml 21 ml		

Lampiran 11. Biodata Penulis

BIODATA



Nama Lengkap : Mujahidah Putri Mapenda Wati
 Tempat dan Tanggal Lahir : Mukomuko, 13 Juli 2005
 Agama : Islam
 Alamat Asal : Cirebon
 Nomor Telepon/HP : 083120642687
 E-mail : putrimapenda13@gmail.com
 Judul Penelitian : Formulasi Dan Uji Karakteristik Minuman Probiotik Sari Biji Dan Buah Nangka Menggunakan Kultur Bakteri *Lactobacillus Bulgaricus* Dan *Streptococcus Thermophilus*

Riwayat Pendidikan

Sekolah Dasar : SD Negeri 1 Sampih
 Sekolah Menengah Pertama : MTs Tarbiyatul Muta'allimin Pasawahan
 Sekolah Menengah Atas : SMA Negeri 1 Lemahabang
 Perguruan Tinggi : Prodi D-III Farmasi Jurusan Farmasi Poltekkes Kemenkes Tasikmalaya

Organisasi Yang Pernah Diikuti

1. Sekretaris UKM Pramuka Poltekkes Kemenkes Tasikmalaya 2023 - 2024
2. Wakil Ketua UKM Multimedia Poltekkes Kemenkes Tasikmalaya 2024-2025
3. Sekretaris Pramuka Dewan Kerja Racana Tawang 2023-2026

4. Anggota Bidang Media Design & Dokumentasi Kapal Ekspedisi Cirebon 2024- 2025
5. Ketua Bidang Ilmu Pengetahuan Teknologi KIR SMA Negeri 1 Lemahabang 2021-2022
6. Wakil Ketua Kelompok Ilmiah Remaja SMA Negeri 1 Lemahabang 2022-2023
7. Wakil Ketua Osis MTs Tarbiyatul Muta'allimin Pasawahan 2018- 2019

Kegiatan yang Pernah Diikuti

1. Webinar “*Microorganisms Causing Tropical Infectious Diseases*”
2. Webinar “Teknologi Formulasi Nano”
3. Webinar “Asuhan Gizi Penderita Jantung”
4. Webinar “Mikroorganisme Penyebab Penyakit Infeksi Tropis”
5. Peserta Kemah Kesehatan Nasional V Saka Bakti Husada 2023
6. Lurah Putri Kwartir Ranting Tawang Jambore III & Raimuna Kanira IV kota Tasikmalaya
7. Bina Akhlak dan Ketaqwaan with Pembinaan Karakter Islami (BAKMI 2023)
8. Latihan Dasar Kepemimpinan dan Bela Negara Poltekkes Kemenkes Tasikmalaya 2023
9. Pengenalan Kehidupan Kampus Bagi Mahasiswa Baru (PKKMB) Tahun Akademik 2023/2024

Penghargaan Yang Pernah Diterima

1. Juara 1 Lomba Poster dalam rangka Hari Gizi Nasional ke 64 dengan Tema MP-ASI Kaya Protein Hewani Cegah Stunting yang diselenggarakan oleh Prodi D-III Gizi Poltekkes kemenkes Sorong 2024
2. Juara 2 “Scout Talent Competition” tingkat nasional tahun 2024 yang diselenggarakan oleh Pramuka UPI
3. Favorite Video Competition, International Conference and Competition of Politeknik Kesehatan Kartini Bali 2024
4. Juara 2 Essay Competition IMATELKI The Champion Sulawesi Utara 2024
5. Hak Kekayaan Intelektual (HKI) – Hak Cipta “X-Banner Dagsibu” 2024
6. Juara 2 Video Kreatif sewilayah KCD X Jawa Barat 2022