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LAMPIRAN

LAMPIRAN 1

ETHICAL CLEARENCE (EC)

Kementerian Kesehatan
Poltekkes Medan
Komisi Etik Penelitian Kesehatan
Jalan Jamin Ginting KM. 13,5
Medan, Sumatera Utara 20137
(061) 8368633
https://poltekkes-medan.ac.id

KETERANGAN LAYAK ETIK
DESCRIPTION OF ETHICAL EXEMPTION
"ETHICAL EXEMPTION"

No.01.26.1421/KEPK/POLTEKKES KEMENKES MEDAN 2025

Protokol penelitian versi 1 yang diusulkan oleh :
The research protocol proposed by

Peneliti utama : **Putri Aisyah Sitompul**
Principal In Investigator

Nama Institusi : **Poltekkes Kemenkes Medan**
Name of the Institution

Dengan judul:
Title
"ANALISA PRODUKSI ASAM LAKTAT PADA BAKTERI ASAM LAKTAT YANG BERASAL DARI FASES LUWAK DI KECAMATAN SIDIKALANG"

"ANALYSIS OF LACTIC ACID PRODUCTION IN LACTIC ACID BACTERIA ORIGINATING FROM LUWAK FACESS IN SIDIKALANG DISTRICT"

Dinyatakan layak etik sesuai 7 (tujuh) Standar WHO 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, 4) Risiko, 5) Bujukan/Eksploitasi, 6) Kerahasiaan dan Privacy, dan 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan oleh terpenuhinya indikator setiap standar.

Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards, 1) Social Values, 2) Scientific Values, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and 7) Informed Concent, referring to the 2016 CIOMS Guidelines. This is as indicated by the fulfillment of the indicators of each standard.

Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 07 Juli 2025 sampai dengan tanggal 07 Juli 2026.

This declaration of ethics applies during the period July 07, 2025 until July 07, 2026.

July 07, 2025
Chairperson,

Dr. Lestari Rahmah, MKT

00453/EE/2025/0159231271

LAMPIRAN 2.

SURAT PERMOHONAN PENELITIAN

Surat Permohonan Penelitian

Kepada :
Yth. Direktur Poltekkes Kemenkes Medan

Di tempat
Dengan Hormat, Saya yang bertanda

tangan dibawah ini :

Nama : Putri Aisyah Sitompul

Institusi : Poltekkes Kemenkes Medan

NIM/NIP/NIDN : P07534022035

Jurusan :DIII TEKNOLOGI LABORATORIUM MEDIS

Judul Penelitian : ANALISA PRODUKSI ASAM LAKTAT YANG BERASAL DARI FASES DI KECAMATAN SIDIKALANG

Dengan ini saya memohon izin kepada Direktur Poltekkes Kemenkes Medan untuk difasilitasi penelitian di Laboratorium Terpadu Poltekkes Kemenkes Medan dalam menyelesaikan penelitian.

Demikianlah surat Permohonan saya sampaikan, atas perhatiannya saya ucapkan terimakasih.

Medan, 21 Mei 2025

Mengetahui
Dosen Pembimbing

(Febri Sembiring, S.Si, M.Si)
NIP. 199202102022031002

Mahasiswa

(Putri Aisyah Sitompul)
NIM. P07534022035

LAMPIRAN 3

KARTU BIMBINGAN

Kementerian Kesehatan
Direktorat Jenderal
Sumber Daya Kesehatan Manusia
Poltekkes Medan
Jalan Jamin Ginting KM. 13,5
Medan, Sumatera Utara 20137
(061) 8368633
https://poltekkes-medan.ac.id

PRODI D-III JURUSAN TEKNOLOGI LABORATORIUM MEDIS
POLTEKKES KEMENKES MEDAN

KARTU BIMBINGAN KARYA TULIS ILMIAH
T.A. 2025

NAMA : **Putri Aisyah Sitompul**
NIM : **P07534022035**
NAMA DOSEN PEMBIMBING : **Febri Sembiring, S. Si, M.Si**
JUDUL KTI : **Analisa Produksi Asam Laktat Pada Bakteri Asam Laktat Yang Berasal Dari Fases Luwak Di Kecamatan Sidikalang**

No	Hari/ Tanggal Bimbingan	Materi Bimbingan	Paraf Dosen Pembimbing
1.	Kamis, 09 Januari 2025	Pengajuan Judul KTI	
2.	Kamis 30 Januari 2025	ACC Judul KTI	
3.	Senin, 03 Januari 2025	Konsultasi Bab I	
4.	Senin, 07 Februari 2025	Konsultasi Bab I – Bab II	
5.	Rabu, 19 Februari 2025	Konsultasi Bab I – Bab III	
6.	Senin, 10 Maret 2025	Revisi Bab I - III	
7.	Selasa, 18 Maret 2025	ACC Proposal	
8.	Selasa, 25 Maret 2025	Revisi Proposal	
9.	Kamis, 11 Mei 2025	Konsultasi Bab IV – Bab V	
10.	Selasa, 23 Mei 2025	Revisi Bab IV – Bab V	
11.	Kamis, 22 Mei 2025	ACC Bab IV - V	
12.	Kamis, 05 Juni 2025	Seminar Hasil	

Medan, 30 Juni 2025
Dosen Pembimbing

Febri Sembiring, S. Si, M.Si
NIP: 199202102022031002

LAMPIRAN 4

SURAT BEBAS LABORATORIUM

Kementerian Kesehatan
Poltekkes Medan
Unit Laboratorium Terpadu

Surat Keterangan Bebas Laboratorium
No. YK.05.03/V/18/2025

Kepala unit Laboratorium Terpadu Poltekkes Kemenkes Medan dengan ini menerangkan bahwa:

Nama	: Putri Aisyah Sitompul
NIM/NIP/NIDN	: P07534022035
Jurusan	: TEKNOLOGI LABORATORIUM MEDIS
Instansi	: POLITEKNIK KESEHATAN MEDAN

Benar yang namanya tersebut diatas telah menggunakan fasilitas Laboratorium Terpadu dan telah menyelesaikan tanggungan biaya fasilitas laboratorium dalam rangka melaksanakan penelitian karya tulis ilmiah dengan judul:
"Analisa Produksi Asam Laktat Pada Bakteri Asam Laktat Yang Berasal Dari Fases Luwak Di Kecamatan Sidikalang"
Dibawah bimbingan/pengawasan :
Pembimbing : Febri Sembiring, S.Si, M.Si
Demikian surat keterangan ini dibuat, agar dapat digunakan semestinya.

Medan, 27 Mei 2025
Kepala Unit Laboratorium Terpadu

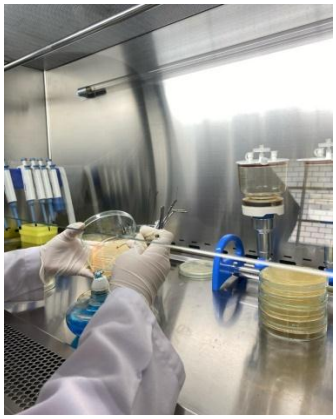
Wardati Hanifa, SST, M. Kes
NIP. 198004302002122002

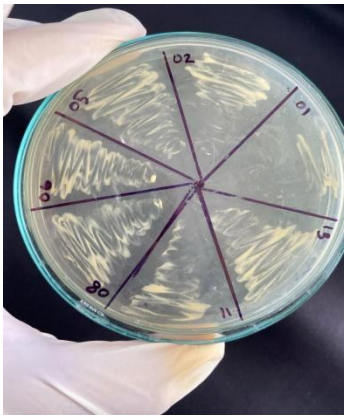
LAMPIRAN 5

DOKUMENTASI PENELITIAN

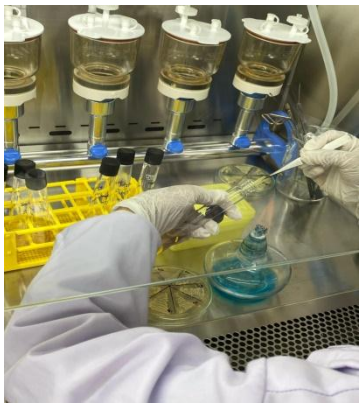
1. Pembuatan media pertumbuhan


2. Inokulasi 5 isolat BAL hasil inkubasi ke media MRSA

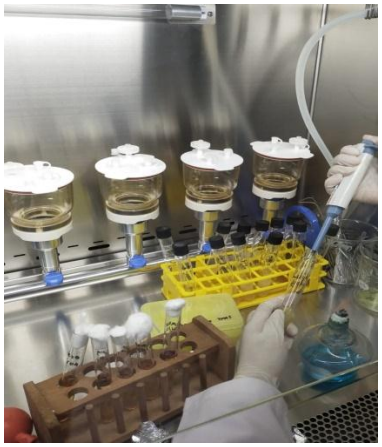




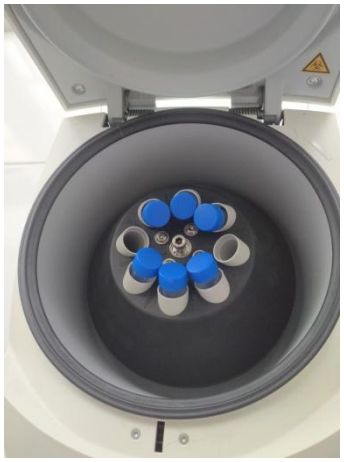
3. *Seed Culture* BAL pada media MRSB

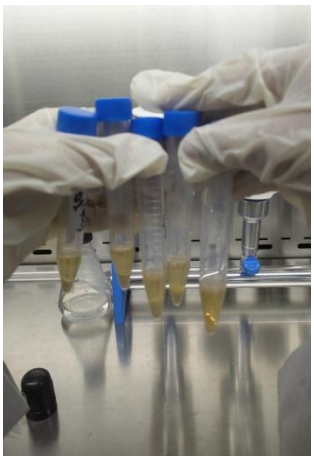



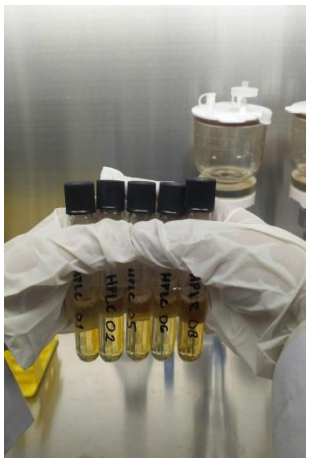
4. *Production Culture* 1% *Seed Culture*



5. Pemisahan *Cell Free Supernatant* (CFS)







LAMPIRAN 6

RIWAYAT HIDUP PENULIS

Putri Aisyah Sitompul Lahir di Pematang Siantar pada tanggal 14 September 2003. Anak dari Bapak Tamba Sitompul dan Ibu Nurmala Sari Siregar. Merupakan anak ke tiga dari 4 bersaudara, kakak pertama Riska Khairani Sitompul, kakak kedua Hotrina Sitompul, dan adik Ismail Hasan Sitompul. Penulis mengawali jenjang pendidikan di TK Al-Ikhlas Padangsidimpuan, kemudian melanjutkan ke SDN 200112 Padangsidimpuan pada tahun 2010 dan menyelesaikannya pada tahun 2016. Selanjutnya, penulis menempuh pendidikan di MTSN 1 Padangsidimpuan dari tahun 2016 hingga lulus pada tahun 2019, lalu melanjutkan ke jenjang pendidikan menengah atas di MAN 1 Padangsidimpuan dan berhasil menyelesaikannya pada tahun 2022. Penulis kemudian melanjutkan studi di Poltekkes Kemenkes Medan pada program DIII Teknologi Laboratorium Medis, dimulai pada tahun 2022.

E-mail: putriaisyahsitompul2003@gmail.com

LAMPIRAN 7

HASIL TURNITIN

KTI_PUTRI AISYAH SITOMPUL_TURNITIN.docx

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