



International Conference On Natural And Social Science Education

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October 21 – 22 , 2020

Research and Development Institute, Universitas Muhammadiyah Prof. DR. HAMKA

LETTER OF ACCEPTANCE

Dear,

Fitri Yuniarti

Assalamu'alaikum wr wb.

Greetings from ICNSSE 2020: International Conference On Natural And Social Science Education

We are pleased to inform you that your abstract entitled **ANTIBACTERIAL SCREENING OF LACTIC ACID BACTERIA FROM FERMENTATION OF RED CACAO FRUIT (THEOBROMA CACAO L. VARIETAS CRIOLLO) ON SHIGELLA DYSENTERIAE BACTERIA** has been **accepted** for:

ORAL PRESENTATION

on ICNSSE 2020 (Jakarta, 19 Oktober 2020).

Please kindly completed your payment Rp.300.000,00 transfer to:

Bank Name : Bank Negara Indonesia - BNI

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After completing the payment please upload your payment proof and full paper (in a word format) to your account as soon as possible. Your presentation schedule will be added to the conference program upon completion of the payment process.

More details about template of presentation and payment process available at

<https://conference.uhamka.ac.id/lic>

We are looking forward for welcoming you on ICNSSE 2020 by virtually.

Sincerely,

Dr.Apt.Supandi.M.Si,

Chairman ICNSSE 2020



**ANTIBACTERIAL SCREENING OF
LACTIC ACID BACTERIA FROM
FERMENTATION OF RED CACAO FRUIT
(*THEOBROMA CACAO* L. VARIETAS
CRIOLLO) ON *SHIGELLA DYSENTERIAE*
BACTERIA**

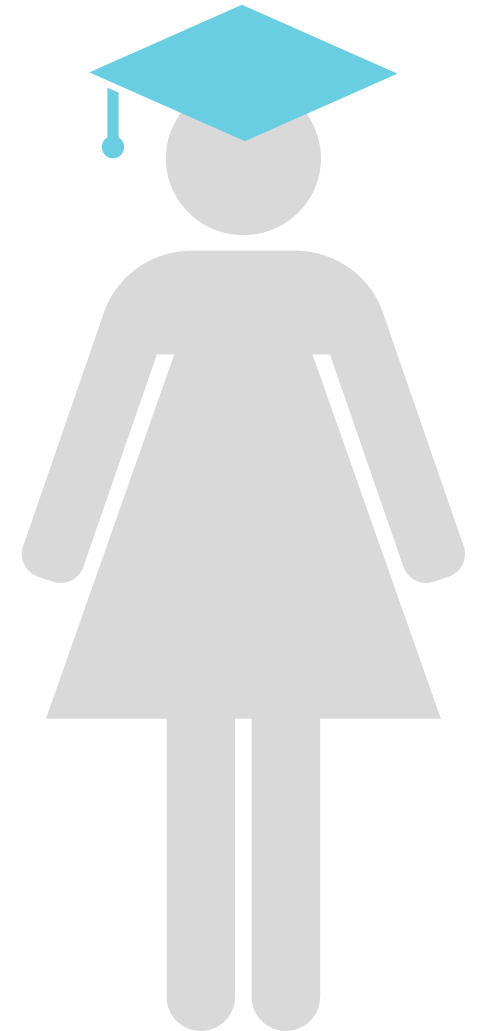
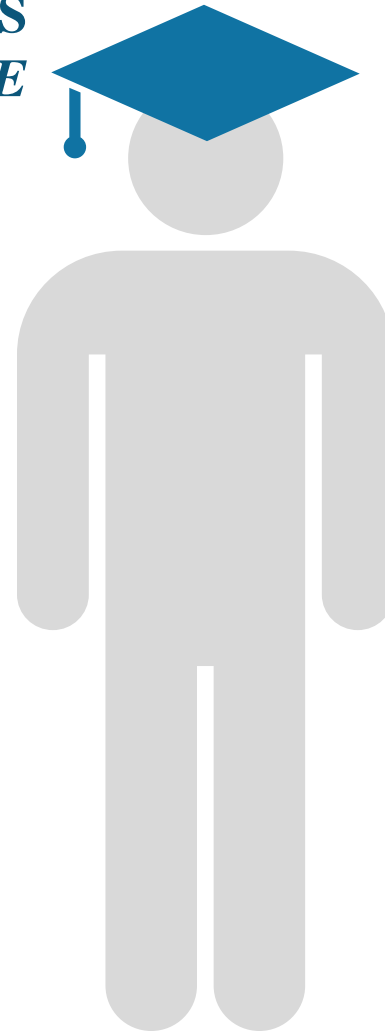


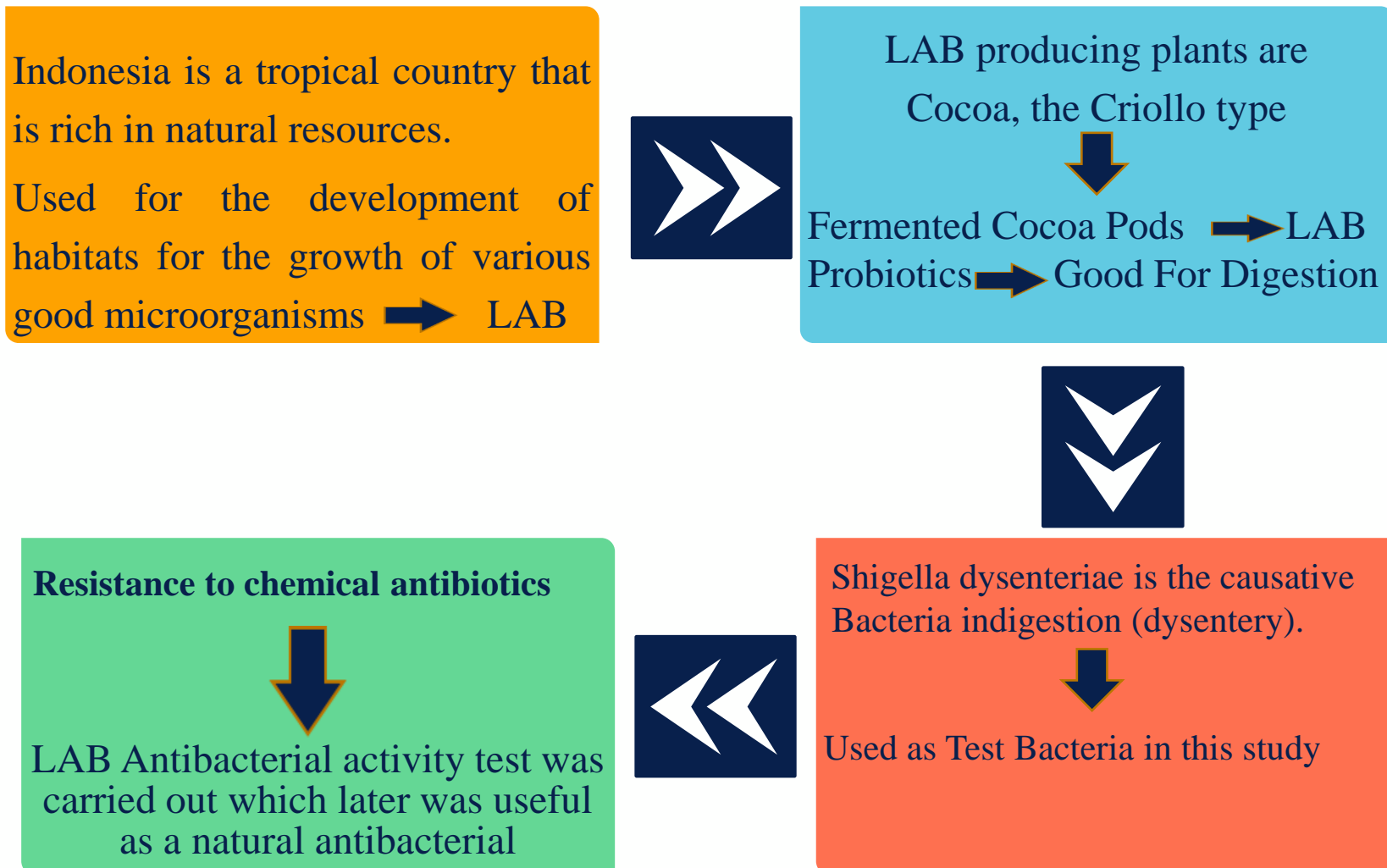
Fitri Yuniarti, M.Si

Dra. Fitriani, M.Si

Wahyu Hidayati, S.Si., M. Biomed

Audina Sarah, S. Farm





TUJUAN PENELITIAN



Obtaining lactic acid bacterial isolates from the fermentation of red cacao fruit (*Theobroma cacao* L. criollo variety), and carrying out antibacterial screening against the pathogenic bacteria *shigella dysenteriae*.

METODOLOGI PENELITIAN

The research was conducted at the Laboratory of Microbiology-Virology, Integrated Chemistry, and Biotechnology, Faculty of Pharmacy and Science, Prof. Dr. HAMKA, Jakarta and the Oral Laboratory of the Faculty of Dentistry, University of Indonesia.

**Preparation and
sampling.**

Fermented Red
Cocoa Fruits
(Theobroma cacao
L. criollo variety)

Isolation of Lactic
Acid Bacteria
from
Fermentation of
Red Cocoa Pods

Morphological
Characterization
of Lactic Acid
Bacteria

Antibacteri
al Activity
Test



ISOLATION AND CHARACTERIZATION OF LAB

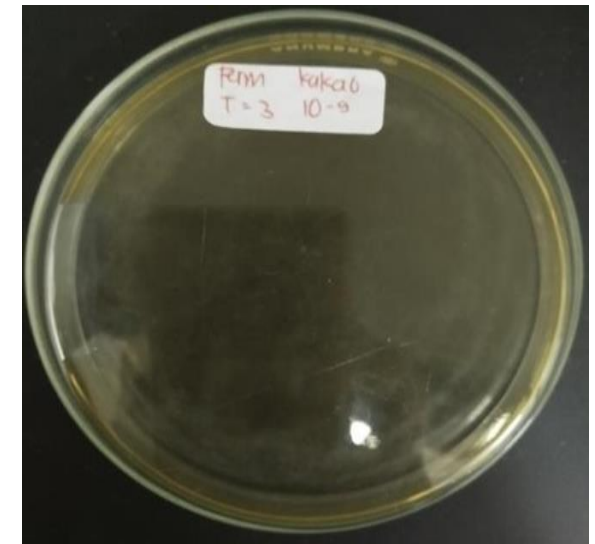
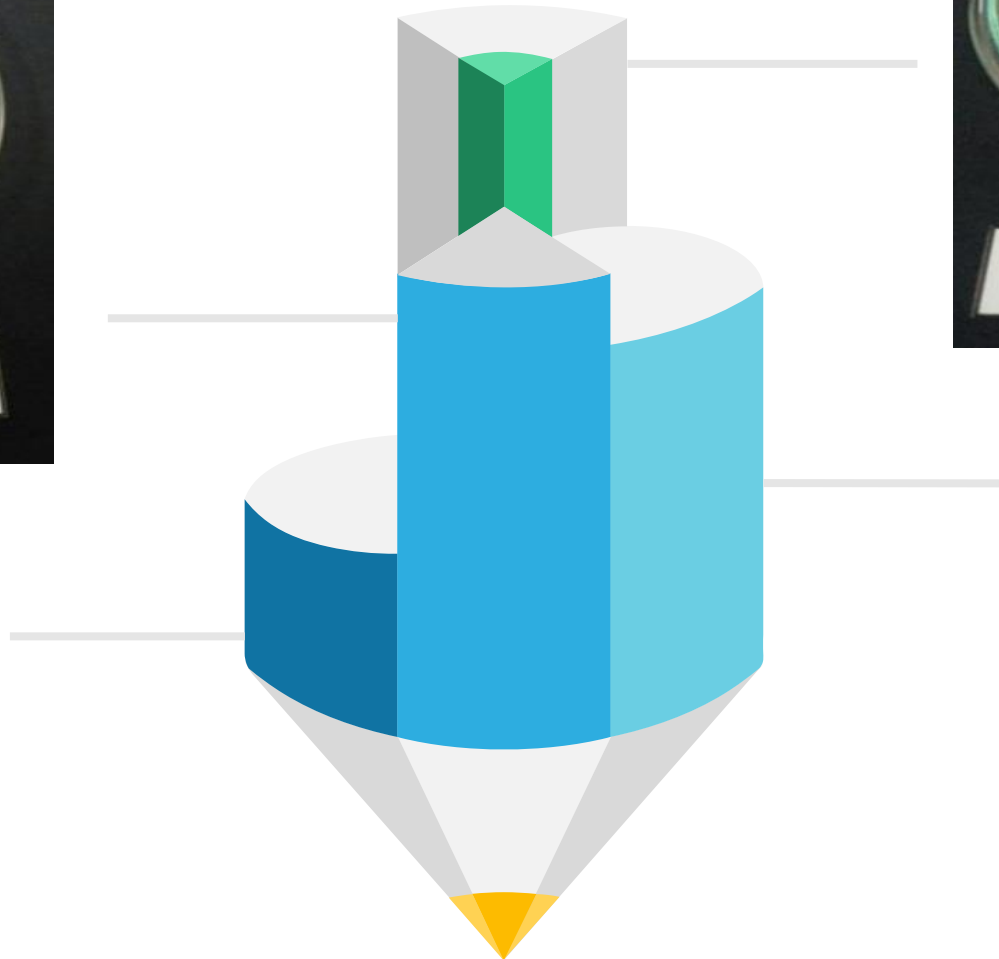


Table 1. The results of the morphological identification of LAB from red cocoa

Parameter	Kode Isolat					
	KAT371	KAT372	KAT373	KAT374	KAT381	KAT382
Warna	Putih	Putih	Putih	Putih	Putih	Putih
Koloni	susu	susu	susu	susu	susu	susu
Bentuk Koloni	Bulat, cembung	Bulat, cembung	Bulat, cembung	Bulat, cembung	Bulat, cembung	Bulat, cembung
Tepi Koloni	Rata	Rata	Rata	Rata	Rata	Rata
Warna Sel	Ungu	Ungu	Ungu	Ungu	Ungu	Ungu
Bentuk Sel	Basil	Basil	Basil	Basil	Basil	Basil
Gram	Positif	Positif	Positif	Positif	Positif	Positif

Table 2. Results of Lactic Acid Bacteria Activity Test Against Bacteria *Shigella dysenteriae*

Kode Isolat	Hari Fermentasi						
	1	2	3	4	5	6	7
Zona Hambat (mm)							
KAT371	7,017	10,125	9,275	8,125	6,717	6,867	7,017
KAT372	7,083	9,267	9,367	8,425	7,233	7,033	7,117
KAT373	6,708	8,558	8,333	7,767	6,700	6,750	6,817
KAT374	6,725	8,075	8,367	6,767	6,717	6,717	6,873
KAT381	6,717	7,575	9,342	7,175	6,783	6,817	6,910
KAT382	6,783	8,875	8,175	6,725	6,767	6,783	6,717
Kontrol +	16,47						
Kontrol -	0						

Based on Table 2, it can be seen that all lactic acid bacteria isolates have antibacterial activity against *Shigella dysenteriae* at all fermentation times. KAT372 isolate has an average inhibition zone value greater than other isolates and has the highest average inhibition zone every day in *Shigella dysenteriae* bacteria.



TERIMAKASIH

