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The 3rd ICOLIB

International Conference on Life Sciences and Biotechnology
Biology Department, Faculty of Mathematics and Natural Sciences, University of Jember
(ICOLIB 2019)

BIODIVERSITY Molecules to Biosphere



ABSTRACT BOOK

Dafam Lotus Hotel Jember
East Java, Indonesia
November 25 - 26, 2019



PT. NEW MODULE INT
SCIENTIFIC TECHNICAL SUPPLIES



Acknowledgements

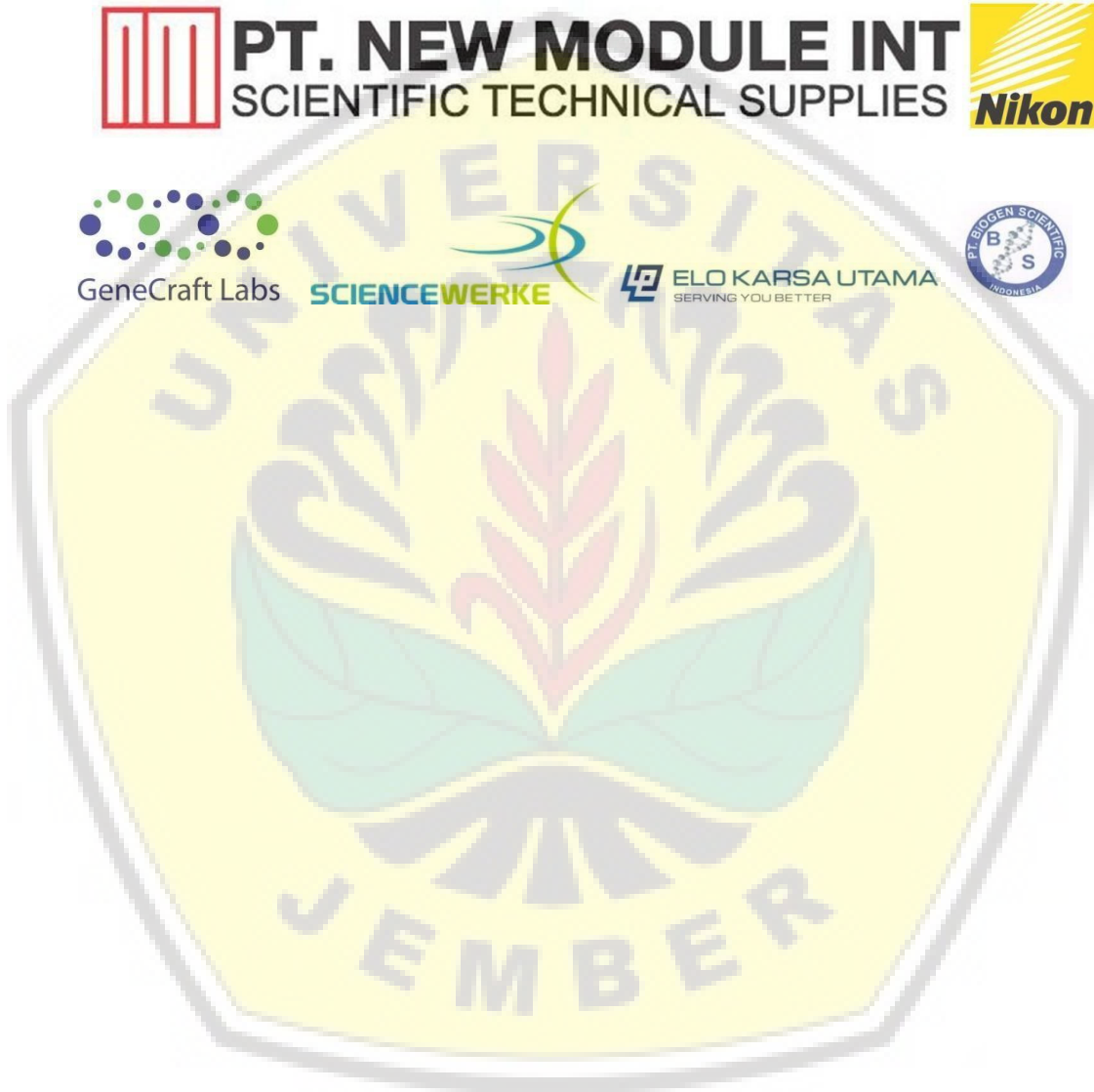
The organizers 3rd ICOLIB 2019 express sincere appreciation and grateful thanks to all those who have contributed their kind support to facilitate this conference



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Welcome Message

It is my great pleasure to welcome all of the speakers and participants to the 2019 International Conference on Life Sciences and Biotechnology (3rd ICOLIB), which is held from the 25th to 26th of November, located in Dafam Lotus Hotel Jember, Indonesia. The theme of the 3rd ICOLIB 2019 "BIODIVERSITY Molecules to Biosphere" provide a platform for researchers, academics, professionals, industries, and policy makers to exchange ideas, sharing the recent advanced and development on life sciences, and can be a valuable place for starting fruitful collaboration, especially in uncovering the potential of biodiversity at the molecular level to biosphere.

The conference is organized by the Department of Biology, Faculty of Mathematics and Natural Sciences, the University of Jember. This conference covers all subjects in Life Sciences and Technology including cell Biophysical and Biological Science biology, Mathematics, Statistics, and Modeling, Health And Medicine, Horticulture, Molecular Medicine Bioinformatics, Breeding, Food Science, System Biology, Genomics, Biodiversity and Conservation Biology. I am very much excited that this conference has been well recognized by researchers and academic communities. In addition, more than hundreds scientists send their research titles to present in this conference. Furthermore, all of the article submitted to 3rd ICOLIB 2019 will be peer reviewed by expert, and the selected one will be published in Scopus-indexed journals or proceedings.

On behalf of organizing committee, I would like to thank all of distinguished invited speakers and presenters for participating in the 3rd ICOLIB 2019. In particular, I want to express my sincerely gratitude to Rector of University of Jember and Dean of Faculty of Mathematics and Natural Sciences, and also a deep appreciation of the member of the organizing committee for excellent team work that bring to the success of this conference.

Finally, I wish you have a fruitful meeting, and I hope that you will have a plentiful benefit in this conference, and wonderful memories after visiting Jember.

Thank you.

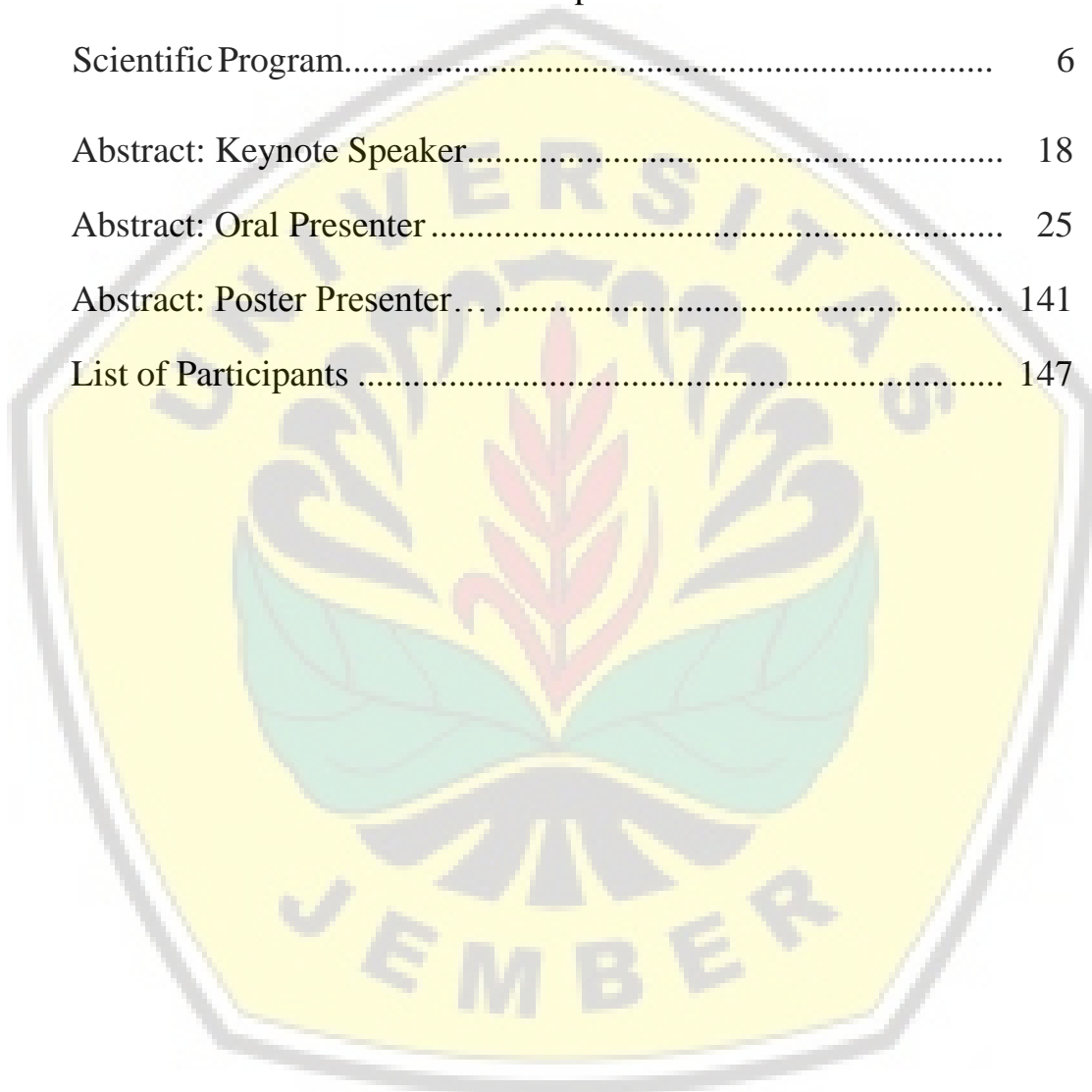
Jember, November 2019

Mukhamad Su'udi

Chairman of The 3rd ICOLIB 2019

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General Information for the Participant

Registration Information

Conference Venue

- The venue for the conference is the Dafam Hotel, Jember, East Java, Indonesia

Registration

- Registration includes:
 - ❖ Seminar kit
 - ❖ ID Card
 - ❖ Refreshment (coffee & tea) during the conference day
 - ❖ Buffet Lunch

ID Card

- Participants are requested to display their ID Card during the conference for entry to scientific sessions, melas and the wellcome reseption. Please also show the ID Card to committee before transportation to the conference venue.

Instruction for the Moderator

- Please ensure that the sessions and speaker presentations are kept stricly on time

Instruction for Speakers (Keynote Speaker and Oral Presenter)

- Speaker are requestes to submit their presentation to staff in the audio-visual room at the least 1 hours before each presentation, then upload and ensure that the proper presentation is in the computer provided
- 45 minutes have been allocated for each keynote speakers (please allowtime within this period for answering the questions)
- Free oral presenter will last 10 minutes only (please allow time within this period for answering questions)
- Please be aware that the above times must be strictly adhered to

Instructions for PosterPresenter

- Poster presentations will be located in the front of the conference space along the second floor.
- Poster will be display throughout the conference, and presenters are responsible for putting them and removing them.

3rd ICOLIB Committes

Mukhamad Su'udi, Ph.D, Indonesia	msuudi.fmipa@unej.ac.id
Dr. Sattya Arimurti, S.P, M.Si, Indonesia	arimurti30@gmail.com
Purwatiningsih, Ph.D, Indonesia	purwatiningsih2000@gmail.com
Dr. Retno Wimbaningrum, Indonesia	wimbaningrum.fmipa@unej.ac.id
Dra Mahriani, M.Si, Indonesia	yani_hendro.fmipa@unej.ac.id
Dr. Rike Oktarianti, Indonesia	oktarianti@gmail.com
Hari Sulistiyowati, Ph.D, Indonesia	sulistiyowati.fmipa@unej.ac.id
Dwi Setyati, M.Si, Indonesia	setyatidwi.fmipa@unej.ac.id
Esti Utarti, S.P, M.Si, Indonesia	esti.fmipa@unej.ac.id
Dra. Susantin Fajariyah, M.Si, Indonesia	susantin.mipa@gmail.com
Rendy Setiawan, S.Si, M.Si, Indonesia	rendy.fmipa@unej.ac.id
Syubbanul Wathon, S.Si, M.Si, Indonesia	syubbanulwathon@unej.ac.id
Arif Mohammad Siddiq, S.Si, M.Si, Indonesia	arifsiddiq.fmipa@unej.ac.id
Yoyok Yulianto, Indonesia	yoyok@unej.ac.id
Eva Tyas Utami, S.Si, M.Si, Indonesia	evatyas.utami@gmail.com
Husnatun Nihayah, S.Si, M.Si, Indonesia	husnatunnihayah@unej.ac.id
Drs. Rudju Winarsa, M.Kes, Indonesia	rudju_win@yahoo.co.id
Drs. Siswanto, M.Si, Indonesia	siswanto.fmipa@unej.ac.id
Dr. H. Teguh W. M.Pd, Indonesia	teguh.unej@gmail.com

3rd ICOLIB Scientific Committes

Prof. Ir. Bambang Sugiharto, Ph.D, Indonesia	sugiharto.fmipa@unej.ac.id
Prof. Drs. Sudarmadji, Ph.D, Indonesia	sudarmadji.fmipa@unej.ac.id
Kahar Muzakhar, Ph.D, Indonesia	kaharmzk@unej.ac.id
Merites Buot, Philipines	mmbuot@up.edu.ph
Prof. Fahrul Huyop, Malaysia	fahrul@utm.my
Palaksha K.J., India	palakshakj1@gmail.com
Dr. rer. nat. Kartika Senjarini, Indonesia	senjarini@unej.ac.id
Deirdre Conroy, USA	Dconroy1@vt.edu
Prof. Inocencio E. Buot Jr, Philipines	Inocencio.buot@upou.edu.ph

Programme Chair

Mukhamad Su'udi, Ph.D, Indonesia

Finance and Fund-Raising Committee

Dr. Rike Oktarianti, M.Si, Indonesia

Dra. Susantin Fajariyah, M.Si, Indonesia

Secretary

Dr. Sattya Arimurti, S.P, M.Si, Indonesia

SCIENTIFIC PROGRAM

Monday, November 25th 2019

TIME	VENUE: HALLROOM	PAGE
07.00-08.00	Registration	
08.05-08.15	Indonesia Raya Anthem and Hymne UNEJ	
08.20-08.20	Speech: Chairman 3 rd ICOLIB : Mukhamad Su'udi, Ph.D	
08.20-08.30	Speech: Rector of Jember University : Moh. Hasan, Ph.D	
08.30-08.40	Token of Appreciation	
08.40-08.45	Pray (Kosala, S.Si, M.Si)	
08.45-09.00	Gandrung Dance	
09.00-09.15	Opening ceremony	
09.15-09.45	Coffea Break	
09.45-10.30	Speaker 1. Bioengineering Challenges Toward Regenerative Medicine Prof. Koichi Kato , Department of Biomaterials, Graduate School of Biomedical and Health Science, Hiroshima University Chairperson: Prof. Dr. Ir. Bambang Sugiharto, M.Agr.Sc	
10.30-11.15	Speaker 2. The Dynamics and Evolution of Plant Viruses in Indonesia Influenced by Climate Change Prof. Budi Setiadi Daryono , Laboratory of Genetics and Breeding, Faculty of Biology, Universitas Gadjah Mada, Yogyakarta Chairperson: Prof. Dr. Ir. Bambang Sugiharto, M.Agr.Sc	
11.15-12.00	Speaker 2. Regulation of Aliphatic Glucosinolates Biosynthesis in Radish (<i>Raphanus sativus L.</i>) Plant Prof. Kim Jongkee , Department of Plant Science and Technology, Chung-Ang University, Anseong, South Korea Chairperson: Prof. Dr. Ir. Bambang Sugiharto, M.Agr.Sc	
12.00-13.30	ISHOMA and Poster Session	
	VENUE: HALLROOM	
13.30-14.30	Parallel Oral Session I Chairperson: Dr. Sri Rahayu 1. Kinetic of Endo-1,4-b-D-xilanase in the Hydrolysis of Xylan Cassava Peel Substrate Wuryanti Handayani 2. Experimental Infection of Raw-Bluetm Isg Cell Cultures With Chequa Iflavirus and Athtabvirus: The First Report	27

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	Adinda Kusuma Pertiwi, Muhammad Habiburrohman, Yoshinta Debby, Bawon Triatmoko, Antonius Nugraha Widhi Pratama, Ari Satia Nugraha	42
VENUE: WIJAYA KUSUMA 1		
15.00-17.00	Parallel Oral Session II	
	Chairperson: Asmoro Lelono Ph.D	
	1. Homeostasis of Immune System in Mice Fed High Fat Diet with Single Garlic Oil	
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Epitopes Characterization of *S. pneumoniae* Pili Protein

Diana Chusna Mufida¹, Yunita Armiyanti², Dini Agustina¹

¹Microbiology of departement, Faculty of Medicine, University of Jember

². Parasitology of departement, Faculty of Medicine, University of Jember

Abstract

Streptococcus pneumoniae is Gram positive, extracellular, highly invasive bacterial pathogen. Its virulence factors includes the pneumolysin toxin, capsule, pneumococcal surface protein and pilus. *S. pneumoniae* pili is composed of three proteins: RrgA, RrgB and RrgC. Our previous research has identified that: (1) The 54 kDa hemagglutinin protein of *S. pneumoniae* has a similar structure to the chain A RrgB and; (2) In silico test showed that RrgB protein has 5 epitopes with different amounts of AA. To determine the immunogenicity of the epitope, information about physicochemical characteristics of the epitope is required. The characteristics and immunogenicity of epitope can be studied with the Protparam tool ExpASY and the Vaxi jen V 2.0 SERVER program respectively. Physicochemical characteristic test showed that all epitopes are classified as stable. The identification of AA residues indicated that the 4th epitope has 4 positive charge residues dan no negative charge residue of AA. It implies that the 4th epitope is the most immunogenic epitope. This data contradicts the results of the immunogenicity test (Vaxi jen V 2.0 SERVER) which shows that the 4th epitope is not an antigen so it is not immunogenic. However, as computerised tools is not gold standart to identity of immunogenicity, an invitro dan invivo experiment is needed to determinent the immunogenicity that epitopes.

Key word : epitope, pili, *S. pneumonia*



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CERTIFICATE

given to

Dr. dr. Diana Chusna Mufida, M.Kes.

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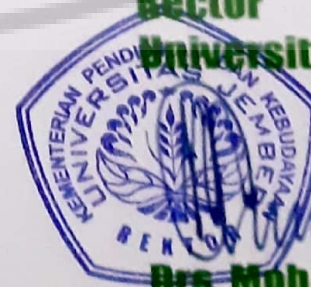
Dalam Lotus Hotel Jember, East Java, Indonesia, November 25 - 26, 2019

**Chairman of Organizing
Committee**

International Conference on Life Sciences and Biotechnology

Mukhamad Su'udi S Si, Ph.D.

**Rector
University of Jember**



Dr. Mub Hasan M Sc, Ph.D.