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# Certificate

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

***Nur Hidayati***

PARTICIPATE AS :

**PRESENTER**

2nd Annual Conference On Health and Food Science Technology  
November, 25th 2020

Scientific Committee



Andri Pramesyanti Pramono, Ph.D

Director

PT. Kresna Acitya Nusantara Mediatama



**KRESNA**  
Mochammad Tanzil Multazam, M.Kn



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# Book of Abstract (BOA)

**2<sup>nd</sup>**

**Annual Conference on Health and  
Food Science Technology**

25th November, 2020

**Publication  
Partner:**

**IOP** Conference Series  
Earth and Environmental Science



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## Welcoming Note

We are delighted to introduce the 2nd Annual Conference on Health and Food Science Technology with theme “Covid-19, Food Security and Panic Buying”. The technical program has brought researchers and practitioners around the world to a good forum for discussing, leveraging and developing all scientific and technological aspects that are relevant to technology, food and biology. Moreover, it is with a great pleasure to have the keynote and invited speakers of 2<sup>nd</sup> ACHOST, Dr. Wahyu Caesarendra and Andri Pramasyanti, Ph.D who will share their knowledge and best innovative research findings.

This conference is held by Kresna Acitya Media Nusantara in collaboration with Relawan Jurnal Indonesia. Kresna Acitya Media Nusantara is a company that dedicated to maximize impact of scientific publication, and Relawan Jurnal Indonesia, is a non-profit organization in field of scientific publication. The conference will be held virtually using Zoom webinar on November 25, 2020. This conference was successfully acquire 150 participants and 71 presenters. Thus, all selected papers will be submitted for publication to our publishing partner IOP. We hope that the future ACHOST will be as successful and stimulating, as indicated with the contributions presented in this volume.

Yogyakarta, 23 November 2020

Conference Chair

Dwi Fajar Saputra



## Rundown

Time	Event	PIC
08.00 – 08.30 AM	Waiting Room Zoom	PIC Event
08.30 – 09.00 AM	Preparation	PIC Event
09.00 – 09.15 AM	Opening Remarks	Director Kresna Nusantara
09.15 – 09.30 AM	Information About Publication	Publication Chair
09.30 – 10.30 AM	Technology Role Playing Within COVID-19	Dr. Wahyu Caesarendra (Universiti Brunei Darussalam)
10.30 – 11.30 AM	Antimicrobial and antivirus potential from natural product	Andri Pramesyanti, Ph.D (Universitas Pembangunan Nasional Veteran Jakarta)
11.30 – 12.00 AM	Discussion	Moderator
12.00 – 12.30 PM	Closing	Moderator

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AR-0003	The Effect Of Indonesian Honey <i>Tetragonula Sp.</i> And Indonesian Royal Jelly <i>Apis Mellifera (Ceiba Pentandra)</i> To Human Preputium Cell Proliferation In Serum-free DMEM
AR-0005	The Relationship Between The Use Of Rational Antibiotics With Body Temperature In Patient With Pneumonia
AR-0006	The Role Of Diffusion Of Innovation In Agricultural Business To Compete In Economic Asean Community
AR-0008	Material and Service Life of The Septic Tank Have an Influence On The Biological Pollution Of Groundwater (Case Study Kelurahan
AR-0009	Green Open Space Implementation On The Underground Building
AR-0015	Social Consideration For Blue Carbon Management
AR-0017	The Use Of Bioremediation Technology On Oil-Contaminated Soil
AR-0018	The Strategy Of Conservation Development For <i>Cacatua Sulphurea</i> In Bontomarannu Education Park, Gowa Regency Animal Park.
AR-0019	Somatic Embryogenesis Of Todolo Toraja Coffee Leaf Cells ( <i>Coffea Arabica</i> Var. <i>Typica</i> ) With The Addition Of 2,4-Dichlorophenoxyacetic Acid (2,4-D) And 6- Furfurylaminopurine (Kinetin) In Vitro.
AR-0021	Isolation, Characterization, Molecular Identification Of Probiotic Bacteria From Meconium
AR-0023	Analysis Of Changes In Health Of Coastal Mangrove Forest On The East Coast Of Lampung
AR-0027	COVID-19 Human Movements Monitoring System
AR-0032	Proteolytic and Clot Lysis Activity Screening of Crude Proteases Extracted from Tissues and Bacterial Isolates of <i>Holothuria Scabra</i>
AR-0033	Actualization Of Local Community Participation In Critical Land Management In Gorontalo
AR-0034	<i>Meistera chinensis</i> fruit properties: Chemical compound, antioxidant, antimicrobial, and antifungal activity
AR-0037	Natural Antibacterial And Its Use
AR-0038	Collaborative Empowering Model of Dry Lands Farmer (Case Study West Halmahera District, North Maluku Province)
AR-0040	The Effect Of Temperature Change On Ant Diversity In Haruku Island
AR-0042	<i>Acanthocephaliasis</i> And <i>Sparganosis</i> Occurrence In An Asian Vine Snake ( <i>Ahaetulla Prasina</i> ): A Perspective Of Neglected Zoonotic Disease

# 2<sup>nd</sup> Annual Conference

On Health And Food Science Technology

AR-0043	Specific Immunomodulatory Effect Of Water Extract Of Stachytarpheta Jamaicensis Herbs
AR-0044	Antihypertensive Effects Of Purslane (Portulaca Oleracea) Extract In Animal Model Of
AR-0046	Application Of Supply Chain Requirements For Smallholders: Impact On Sustainable Palm Oil Management Policies In Indonesia
AR-0047	Papalele's Household Economic Dynamics In Increasing Income
AR-0048	Analysis Of Chemical Quality Of Dried Sendfish Sea Cucumber (Holothuria Scabra) Using Different Enzyment Methods
AR-0049	Epidemiological Characteristics Of The First Cluster Of Covid-19 In Magetan District – East Java, 2020
AR-0053	The Effect Of Microwave Aid Extraction Temperature Of Kedawung Leaves (Parkia Biglobosa) On Antioxidant Activity And Flavonoid
AR-0054	Variation Of Nutrition Intake For Pregnant Women In Tembuku
AR-0055	Literatur Review: Potential Pharmacological Activity Of Luffa Acutangula L. Roxb
AR-0057	Effect Of Ammonium Chloride And Disodium Hydrogen Phosphate With Molasses As A Substrate For Saccharomyces Cerevisiae In
AR-0060	Twenty Weeks Of Centella Asiatica Improved Cognitive Function Of Women Elderly With Dementia
AR-0064	Bontomarannu Education Park Reviewed From Conservation, Social, And Environmental Aspects

## Proteolytic and Clot Lysis Activity Screening of Crude Proteases Extracted from Tissues and Bacterial Isolates of *Holothuria Scabra*

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### Abstract

Cardiovascular diseases (CVDs) are still the leading mortality causes in the last decades. The ailments are multifactorial characterized by excessive clot (thrombus) formation in the blood vessels. Thrombus could be degraded through thrombolysis mechanism by plasmin activated by various fibrinolytic agents including, urokinase, nattokinase, or streptokinase. However, the use of these agents is restricted by relatively high cost, short half-life, allergic reaction, and bleeding effects. The search for more economical and safer thrombolytic (clot lysis) agents are essential to address the underlying problem in CVD therapy. Among Holothurians, *H. scabra* has been known to have the highest protein content making it ideal substrate for protease enzymes including fibrinolytic types with clot lysis properties. However, isolation of a proteases with antithrombotic activities either from tissue or from bacteria of *H. scabra* has not been reported. This study aimed to screen proteolytic and clot lysis activities of crude protease extracts from tissue and bacteria isolated from fermented intestine of *H. scabra*. Crude protease of tissue of *H. scabra* was extracted by cold centrifugation, which activity was measured using UV-spectrophotometer. Crude protease of proteolytic bacteria selected by clear zones on skim milk agar (SMA) medium was isolated from nutrient broth (NB). Extracts showing proteolytic activity were subjected to gravimetry-based clot lysis test. As results, crude proteases isolated directly from the *H. scabra*'s tissue showed low proteolytic activities, thus were no proceed to clot lysis activity test. Crude protease extracted bacteria could show both proteolytic and clot lysis activities. In conclusion, based on this screening study, intestine of *H. scabra* is a rich source of proteolytic bacteria. Some of them could produce crude enzymes showing competitive thrombolysis activities with Nattokinase. Thus, they appeared to have more potentials to be developed as thrombolysis agent than those directly extracted from the organism's tissue.

**Keyword** : *Holothuria scabra*, cardiovascular disease, anti-thrombotic agent, fibrinolytic protease

**Subject** : food and disease