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## **SRI DARMAWATI**

**The 1<sup>st</sup> International Conference on Health, Science and Technology (1<sup>st</sup> ICHeSTech)**

**“Current Trends and Future Perspective in the Food Sector : From Novel Concepts to Applications”**

on November 28<sup>th</sup> - 29<sup>th</sup> , 2018

at Universitas Muhammadiyah Semarang (Unimus), Central Java, Indonesia

as

## **PRESENTER**

Vice President of Global Affairs of MSU,

  
Prof. Eddy Yusuf, Ph.D.

  
**ICHESTECH**  
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Dr. Nurrahman, M.Si.

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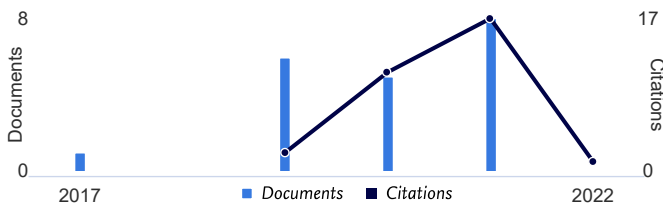
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Potential of fibrinolytic protease enzyme from tissue of sand sea cucumber (*Holothuria scabra*) as thrombolysis agent

Hidayati, N., Fuad, H., Munandar, H., ...Darmawati, S., Ethica, S.N.

*IOP Conference Series: Earth and Environmental Science*, 2021, 743(1), 012007

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*IOP Conference Series: Earth and Environmental Science* • Open Access • Volume 292, Issue 1 • 2019 • Article number 012049 • International Conference on Food Science and Technology 2018, ICFST 2018 • Semarang • 28 November 2018 through 29 November 2018 • Code 149235

**Document type**

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10.1088/1755-1315/292/1/012049

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## Protein profile and hemagglutination activity of pilli, an adhesion factor causing typhoid fever by salmonella typhi

[Darmawati S.<sup>a</sup>](#) ✉, [Ethica S.N.<sup>a</sup>](#), [Dewi S.S.<sup>a</sup>](#)[Save all to author list](#)

<sup>a</sup> Department of Medical Laboratory Technology, Faculty of Nursing and Health Sciences, Universitas Muhammadiyah Semarang, Indonesia

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The purposes of this study was to analyze protein profile of pilli member in two *S. typhi* isolates, BA07.4 and KD30.4, and assessing their hemagglutination activity on human red blood cells. Methods: Profile of pillin proteins extracted from two *S. typhi* isolates (BA07.4 and KD30.4) were observed using SDS-PAGE 12% method, hemagglutination activity of the isolated pilli proteins was tested on four erythrocyte of human blood groups ABO. Results showed that SDS-PAGE analysis on pillin proteins of *S. typhi* BA07.4 resulted two major protein subunits sized 87 and 42 kDa along with 14 minor ones. Meanwhile, pillin proteins of *S. typhi* KD30.4 isolate showed two major protein subunits sized 87 and

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# PROCEEDING



The Topic of 1st ICHESTECH – ICFST'18 is  
“Current Trends and Future Perspectives in the Food Sector :  
From Novel Concepts to Applications”

November 28-29<sup>1</sup><sub>h</sub>, 2018

Universitas Muhammadiyah Semarang  
Indonesia

Held by :

Universitas Muhammadiyah Semarang (UNIMUS)  
Jl. Kedungmundu Raya No. 18, Semarang  
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***PROCEEDING***

**INTERNATIONAL CONFERENCE ON HEALTH, SCIENCE AND  
TECHNOLOGY (ICHESTECH) 2018**

**Theme :**

**“Current Trends and Future Perspectives in the Food and Health Sector:  
From Novel Concepts to Applications”**

**Keynote Speaker I**

**Dr. Satoshi Futo Riztyan**

**FASMAC Co. Ltd, Japan**

Keynote Speaker II

**Prof. Eddy Yusuf, Ph.D.**

**Management & Science University, Malaysia**

Keynote Speaker III

**Najwa Santiworakun, Ph.D.**

**Chulalongkorn University, Thailand**

Keynote Speaker IV

**Prof. Fatchiyah, Ph.D.**

**Universitas Brawijaya, Indonesia**

***Wednesday, October 28<sup>th</sup>, 2018***

***Universitas Muhammadiyah Semarang, Semarang, Indonesia***

Organized by :

Research and Community Service Institute,  
Universitas Muhammadiyah Semarang (UNIMUS)

### Welcome Message from the Conference Chair

Alhamdulillah, blessings and mercy from Allah SWT, the report on the implementation of the international conference called International Conference on Health, Science and Technology (ICHeSTech) could be completed.

Keynote speakers of the international conference were :

1. Prof. Eddy Yusuf, Ph.D from Management and Science University Malaysia;
2. Prof. Fatchiyah, M.Kes., Ph.D from Universitas Brawijaya Indonesia;
3. Dr. Satoshi Futo Riztyan from FASMAC Co. Ltd. Japan;
4. Najwa Santiworakun, M.Sc. from Chulalongkorn University, Thailand.

International Conference on Health, Science and Technology that was held in Universitas Muhammadiyah Semarang was collaborating between Universitas Muhammadiyah Semarang and Management and Science University Malaysia (MSU). So the International Conference was collaborating with IOP Conference Series Earth and Environment Science. It was the first **International Conference on Health, Science and Technology** series by Universitas Muhammadiyah Semarang (UNIMUS) **with co-host MSU** was held on **November 28-29<sup>th</sup>, 2018 at Semarang, Indonesia**. The theme was **International Conference on Food Science and Technology**. Sub-theme was **Current Trends and Future Perspectives in the Food Sector: From Novel Concepts to Applications**. The presence of highly affiliated personality's, food scientists, health researchers, entrepreneurs, technologists, student and more together to network, collaborate, share best practices to explore the future and trends in Food Science and Technology.

InsyaAllah, next year **International Conference on Health, Science and Technology will be held on Management and Science University Malaysia**.

To Rector Universitas Muhammadiyah Semarang Prof. Dr. Masrukhi, I will report that there are 120 participants in which 86 presenters those from within (some Universities from Sumatra, Kalimantan, Java and Sulawesi) and outside the country (from Japan, Equador, Thailand, Malaysia and Philipin).

To participants welcome and thank you to Universitas Muhammadiyah Semarang and God Bless followed the international conference. And I apologized if there were some mistakes. To the committee, I am proud of you and thank you very much on all of the activities so that the international conference could be held.

Finally, I thanked very much to everyone who involved it.

January 28<sup>th</sup>, 2019, Semarang

Sincerely,

**Dr. Nurrahman, M.Si.**

Conference Chair.



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Published online: 04 July 2019

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Reduction of Pb(II) Ion in Soybean Seeds (*Glycine max*) Using Corncob Liquid Smoke

T Handayani, D Xyzquolyna, Y Pranoto and A Suratman

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The Effects of Linseed Supplementation in Ration on Milk Production and Quality of Lactating Friesian Crossbreed Dairy Goats

The effects of linseed supplementation in ration on milk production and quality of lactating Friesian crossbreed dairy goats



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S B Wahjuningsih, Haslina and H Catur  
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Selyo, A Permatasari and D Sumanto



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# Osmotic concentration of pineapple (*Cayenne lisse*) as a pretreatment for convection drying

D M Salazar<sup>1</sup>, F C Álvarez<sup>1</sup>, L P Acurio<sup>1</sup>, L V Perez<sup>1</sup>, M Y Arancibia<sup>1</sup>, M G Carvajal<sup>1</sup>,  
A F Valencia<sup>1</sup> and C A Rodriguez<sup>1</sup>

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IOP Conference Series: Earth and Environmental Science, Volume 292, International Conference on Food Science and Technology 28–29 November 2018, Semarang, Indonesia


**Citation** D M Salazar *et al* 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **292** 012039

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<https://doi.org/10.1088/1755-1315/292/1/012039>

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## Abstract

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Osmotic dehydration as a pretreatment for convection drying is used with the purpose to get high quality dried foods. The effect of osmotic treatment at sucrose concentration of 40 °Brix and convection drying at 60 and 70 °C (air velocity of 0.8 m/s) were investigated. The quality of dehydrated pineapple was investigated by physicochemical properties, weight loss, textural characteristics, and sensorial parameters. Samples dried at 70 °C showed the fastest drying kinetics reached the required humidity at 2.5 hours. The sensory analysis allows establishing that the dehydrated pineapple at conditions of soluble solids of 40 °Brix, air temperature of the dryer at 70 °C be the best in acceptability in comparison with samples dried at 60°C. The samples were microbiologically safe for the consumer because they do not present a count of *Escherichia coli* and molds and yeasts.

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# Fatty Acids Content of Yogurt Drink by Mangosteen Rind Extract (*Garcinia mangostana* L.)

J M W Wibawanti<sup>1</sup>, Zulfanita<sup>1</sup> and D Runanto<sup>2</sup>

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**Citation** J M W Wibawanti *et al* 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **292** 012071

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<sup>1</sup> Animal Science Departmen, Faculty of Agriculture, Muhammadiyah University of Purworejo, Central Java, **Indonesia**

<sup>2</sup> Management Department, Faculty of Economic, Muhammadiyah University of Purworejo, Central Java, Indonesia

<https://doi.org/10.1088/1755-1315/292/1/012071>

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## Abstract

This research was aimed to study the content of fatty acid from yogurt drink by mangosteen rind extract. Completely Randomized Design (CRD) was throughout the research with different concentrations of mangosteen rind extract (0, 1, 2, and 3% (v/v)). The results were differences on the yogurt drink product. The addition of mangosteen rind extract on yogurt drink of goat's milk contains fatty acids both saturated and unsaturated fatty acids. The highest saturated fatty acids were observed on the of palmitic fatty acids, while the highest unsaturated fatty acids were found on the oleic acid. There were changes in the profiles of fatty acids during processing of fresh goat milk into yogurt drink by mangosteen rind extract.

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# A review of quality characteristics of solar dried food crop products

C L Hii<sup>1</sup>, S P Ong<sup>1</sup>, C L Chiang<sup>1</sup> and AS Menon<sup>2</sup>

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**Citation** C L Hii *et al* 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **292** 012054[cl.chiang@nottingham.edu.my](mailto:cl.chiang@nottingham.edu.my)<sup>1</sup> Food and Pharmaceutical Engineering Research Group, Faculty of Engineering, University of Nottingham Malaysia Campus Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, **Malaysia**<sup>2</sup> 7/1151 Abhayam, Vimala Nagar, Movie road, Cheroor, Thrissur, Kerala, India. 680008<https://doi.org/10.1088/1755-1315/292/1/012054>

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## Abstract

Sun drying is perhaps one of the oldest methods of food preservation that has been practiced for centuries. The direct usage of solar radiation which is renewable and abundant favours farmers that harvest and process at small quantity. As technology advances, an alternative to sun drying evolves to maximize the potential of solar radiation and this technology is known as solar drying. Solar drying has several inherent advantages over sun drying namely faster drying rate, better protection of products, reduce risk of prolonged drying, lesser risk of product spoilage and improvement in product quality. Various studies have reported the application of solar drying for fruits, vegetables, grains, seeds, beans, herbs, spices and medicinal plants. Product quality improvement is definitely associated with solar dried products as compared to sun dried and to some extent oven/hot air dried products. However, uptake of this technology especially among farmers in developing countries are

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C L Hii<sup>1</sup>, S P Ong<sup>1</sup>, C L Chiang<sup>1</sup> and AS Menon<sup>2</sup>

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**Citation** C L Hii *et al* 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **292** 012054[cl.chiang@nottingham.edu.my](mailto:cl.chiang@nottingham.edu.my)<sup>1</sup> Food and Pharmaceutical Engineering Research Group, Faculty of Engineering, University of Nottingham Malaysia Campus Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, Malaysia<sup>2</sup> 7/1151 Abhayam, Vimala Nagar, Movie road, Cheroor, Thrissur, Kerala, [India](#), 680008<https://doi.org/10.1088/1755-1315/292/1/012054>

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