

# IOP Conference Series

Book Series of the International Union of Pure and Applied Chemistry

For more information on this or any of our other books, visit our website at [www.iop.org](http://www.iop.org)  
or contact our customer service team at [books@iop.org](mailto:books@iop.org)

# Table of contents

Volume 207

2018

◀ Previous issue    Next issue ▶

1st International Conference on Food and Agriculture 2018 20–21 October 2018, Bali, Indonesia

Accepted papers received: 12 November 2018

Published online: 07 December 2018

Open all abstracts

---

## Preface

---

OPEN ACCESS 011001

1st International Conference on Food and Agriculture 2018

+ Open abstract  View article  PDF

---

OPEN ACCESS 011002

Peer review statement

+ Open abstract  View article  PDF

---

## Papers

---

### Agriculture Engineering and Biotechnology

---

OPEN ACCESS 012001

Potential of *Beauveria bassiana* Lowland Isolates against *Spodoptera litura* in Tobacco Plant

D N Erawati, I Wardati and S Humaida

+ Open abstract  View article  PDF

---

OPEN ACCESS 012002

The effects of different concentration of sucrose and various auxin on in vitro shoot and microtuber formation of red potato (*Solanum tuberosum*, L. var Desiree)

S L Asmono, V K Sari and Djenal

+ Open abstract  View article  PDF

---

OPEN ACCESS 012003

Design and performance test of a batch system rotary vacuum dryer with a 50-liter capacity to dry basidiomycota class mushrooms

S Djamila, Iswahyono and A Bahariawan

+ Open abstract  View article  PDF

---

OPEN ACCESS 012004

Optimization of Design Heat Exchanger to Reduce Fouling Resistance in Milk Pasteurization

T Budiati and T R Biyanto

+ Open abstract  View article  PDF

---

OPEN ACCESS 012005

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.

The impact of land use changes on carrying capacity of sampean watershed in Bondowoso Regency



[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012006

Characterization of Morphology from Orchid Vanda sp. as a Genetic Information Source for Preservation and Agribusiness of Orchids in Indonesia

K Kasutjjaningati and R Firgiyanto

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012007

Mathematical Model of the Water Quality in Kalibaru Watershed

B Hariono, R Wijaya, M F Kurnianto, Sugiyarto, M J Wibowo and S Anwar

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012008

Effect of ultraviolet and ultrasonic on potential antidiabetic activity of in vitro shoot cultures of *Orthosiphon aristatus*

D. Hunaefi, N.D. Yuliana, I. Smetanska and N. Gruda

[+ Open abstract](#) [View article](#) [PDF](#)

---

**Agroindustry and Agribusiness**

---

**OPEN ACCESS**

012009

Determination of Water Quality Status of Stored Method in Tlogo Ampel Watershed

Saiful Anwar, M Joko Wibowo, Sugiyarto, Budi Hariono and Rizza Wijaya

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012010

Determination of Agro-Industry Area Based on Cassava Commodity in Bondowoso Regency

D. Hermanuadi, A. Brilliantina and E.K. Novitasari

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012011

Quality Improvement of Vannamei Shrimp Production Process Using ISO 9001:2015

R Iskandar, W Dhamayanthi and I A A Pongoh

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012012

The main problems of na-oogst tobacco agribusiness in Jember

Muksin, R Hari, K Tanti and I Titik

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012013

Modeling of rainfall and fertilization factor of sugarcane productivity in Asembagus sugar factory Situbondo

I Harlianingtyas, D Hartatie and A Salim

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012014

Deficiency factors in rehabilitation and capacity building of local farmers national parks through interpretative structural modeling approaches

H Rujito, M M D Utami, Rizal and H Y Riskiawan

[+ Open abstract](#) [View article](#) [PDF](#)



<p><b>OPEN ACCESS</b></p> <p>Development of Agroindustry Based on Region Superiority in The Efforts to Accelerate Economic Growth in Arjasa District</p> <p>D E Putra and A M Ismail</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012015
<p><b>OPEN ACCESS</b></p> <p>Design of Agroindustry Development Strategy Based on Fisheries Cacthe of Merauke Regency</p> <p>R A Djamali and P Betaubun</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012016
<p><b>Animal Nutrition, Animal Production, and Veterinary Science</b></p>	
<p><b>OPEN ACCESS</b></p> <p>Effects of zeolite in aflatoxin B1 contaminated diet on aflatoxin residues and liver histopathology of laying duck</p> <p>I Sumantri, H Herliani, M Yuliani and N Nuryono</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012017
<p><b>OPEN ACCESS</b></p> <p>In Vitro Studies: Potential Of Natural Source Herbal As Anti Cholesterol Agent</p> <p>R Widyani, MH Hermawan and K Tirtodihardjo</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012018
<p><b>OPEN ACCESS</b></p> <p>Probiotics based on Local Microorganism as a substitute of Antibiotic Growth Promotor (AGP) on Broiler productivity</p> <p>U Suryadi and A F Prasetyo</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012019
<p><b>OPEN ACCESS</b></p> <p>Personality assessment of different horse breeds trained for military purposes</p> <p>T S M Widi, G A Rakasiwi, T Nugroho and N Widyas</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012020
<p><b>OPEN ACCESS</b></p> <p>Effect of supplement Maggot Black Soldier Fly live on the percentage of carcass and weight of carcass of male Alabio ducks</p> <p>A. Gunawan, S. Erlina, R. Samudera, M. Syarif D, M.Y. Noor and A.X. Lantu</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012021
<p><b>OPEN ACCESS</b></p> <p>Precaution in Introducing Double-Musclcd Exotic Breeds into Indonesian Cattle Population</p> <p>N Widyas, S Prastowo, T S M Widi and I G S Budisatria</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012022
<p><b>OPEN ACCESS</b></p> <p>The effects of rice hull supplementation or inclusion on performance and gastrointestinal weight of broiler chickens</p> <p>S Hartini, DD Rahardjo and H Sasongko</p> <p><a href="#">+</a> Open abstract   <a href="#">View article</a>   <a href="#">PDF</a></p>	012023

Supplementation of probiotic and prebiotic on the performance of broilers

M M D Utami and N D Wahyono

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012025

Sustainability status of integrated rice-corn and beef cattle farming agriculture business in Jember regency

N B E Sulistyono, Z Fanani and M M D Utami

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012026

An analysis of marketing channels on broiler carcass in Jember Regency

N D Wahyono and M M D Utami

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012027

Current and future goat production in Jembrana Regency, Bali Province

L Doloksaribu, B P McLachlan, R S Copland and P J Murray

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012028

Body dimensions of primiparous Bali cattle (*Bibos sondaicus*) supplemented with concentrate at their first three month of pregnancy

A A Oka, N N Suryani, M Dewantari, N P Sarini and N P Mariani

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012029

Increasing antioxidant activity of quail (*cortunix-cortunix japonica*) eggs with the addition of sweet flag (*acorus calamus*) powder as a feed additive

Y F Nuningtyas and E Widodo

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012030

Effects of Mount Agung eruption on botanical composition and nutritive value of ration fed and rumen performance of Bali cattle in evacuation zones

N N Suryani, I W Suarna and I G Mahardika

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012031

Allele frequency estimation of BLAD (Bovine Leukocyte Adhesion Deficiency) in dairy cattle in Enrekang regency South Sulawesi Indonesia

M I A Dagong, L Rahim, R R S R Aprilita Bugiwati and Nurmulyaningsih

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012032

Identify the diversity of helminth parasites in cattle in Jember district (East Java - Indonesia)

A Awaludin, Nurkholis and S Nusantoro

[+](#) [Open abstract](#) [View article](#) [PDF](#)

---

OPEN ACCESS

012033

The blood haematological profile on laying hens that treated by different levels of yeast supplementation

D Pantya and M M D Utami



[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012034

The effect of adding probiotic *Saccharomyces cerevisiae* on dietary antibiotic-free on production performance and intestinal lactic acid bacteria growth of broiler chicken

S Wulandari and T M Syahniar

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012035

Addition garlic extract in ration on fat deposition of broiler

M M D Utami, D Pantaya, N Nofida, N H D Larasati and A Agus

[+ Open abstract](#) [View article](#) [PDF](#)

### Food Safety

OPEN ACCESS

012036

Antimicrobial activity of essential oil from Indonesian medicinal plants against food-borne pathogens

T Budiati, W Suryaningsih, S. Umaroh, B. Poerwanto, A Bakri and E Kurniawati

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012037

Increasing of fish quality using ice-sterof foam container for paseban fisherman at Jember Regency East Java, Indonesia

D E Rahmanto and N Nurhayati

[+ Open abstract](#) [View article](#) [PDF](#)

### Food Science and Technology

OPEN ACCESS

012038

The Potency of betacyanins extract from a peel of dragon fruits as a source of colourimetric indicator to develop intelligent packaging for fish freshness monitoring

Ardiyansyah, Mulia W Apriliyanti, A Wahyono, M Fatoni, B Poerwanto and W Suryaningsih

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012039

Utilization of edamame soybean (*Glycine max (L) Merril*) as modified of enteral formula high calories

A. Widiyawati and Y. Susindra

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012040

Full Trap Method in Handling Warehouse Pests in Ledokombo, Jember

I Erdiansyah, F Mayasari, S U Putri, V Kartikasari and Eliyatiningasih

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012041

Performance of Resistance of Rice Varieties Recommendation of Jember Regency to Brown Planthopper Pest (*Nilaparvata lugens Stal.*)

I Erdiansyah and Damanhuri

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012042

Exploring the potency of gathotan and gathot as diabetes functional food: resistant starch analysis

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).



[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012043

Purple Yam Flour (*Dioscorea alata* L.) Processing Effect on Anthocyanin and Antioxidant Capacity in Traditional Cake "Bolu Cukke" Making

R. Larief, A. Dirpan and Theresia

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012044

Antioxidant Activity, Total Phenol, and Sensory Properties of Melinjo Peel Tea with Pre-Treatment

M W Apriliyanti, M Ardiyansyah and A M Handayani

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012045

The effect of blanching and drying temperature upon proximate composition of okra flour

R Rindiani, H Warsito and N Maria Rosiana

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012046

Surimi from Freshwater Fish with Cryoprotectant Sucrose, Sorbitol, and Sodium Tripolyphosphate

Fahrizal, N Arpi, S Rohaya and R Febriani

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012047

Determination of Water Content Of Intact Sapodilla Using Near Infrared Spectroscopy

Kusumiyati, Yuda Hadiwijaya and Ine Elisa Putri

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012048

Improvement of Sensory and Chemistry Quality of Fried Edamame by Freezing

B Hariono, MF Kurnianto, A Bakri, M Ardiyansyah and R Wijaya

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012049

Utilization of different nitrogen sources for the growth of microalgae isolated from mangrove leaves in Banda Aceh - Indonesia

S H Anwar, S Harzaki, M I Sulaiman and T Rinanda

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012050

Preparation and characterization of biodegradable film based on skin and bone fish gelatin

N Arpi, Fahrizal, Martunis and E Hardianti

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012051

The characteristics of Aloe vera gel as an edible coating

L Suriati, I G P Mangku and I N Rudianta

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012052

Thermal penetration study for the purpose of formulating sterilization procedures of yellowfin tuna canning



[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012053

The effect of native chicken legskin gelatin concentration on physical characteristics and molecular weight of edible film

M Sompie, S E Surtijono and Ch Junus

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012054

Physical properties and cellular structure of bread enriched with pumpkin flour

Agung Wahyono, A Z Tifania, E Kurniawati, Kasutjningati, W W Kang and S K Chung

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012055

Formulation of Artificial Rice Cereal by using Fermentation of *L Plantarum* POLIJE 15420 for Diabetes Mellitus Patients

H Warsito, A Santoso and Y Wibisono

[+](#) Open abstract [View article](#) [PDF](#)

---

**Organic Agriculture**

---

**OPEN ACCESS**

012056

Improving Soil Fertilizer Through Application of Organic Fertilizer Humid Acid and Mikoriza in Supporting Growth and Production of Chilli Plants In Sand Land

M Z Sukri, V K Sari and R Firgiyanto

[+](#) Open abstract [View article](#) [PDF](#)

---

**IT for Agriculture**

---

**OPEN ACCESS**

012057

Going Digital: A New Concept of Indonesian Food Composition Databases

M Iqbal and M R Permadi

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012058

Development of Low Cost Toxic Gas Explosive Modeling System using Wireless Array Sensor Network

D P S Setyohadi, H Y Riskiawan, S Kautsar and P Destarianto

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012059

The Precision Agriculture Based on Wireless Sensor Network with MQTT Protocol

Y Syafarinda, F Akhadin, Z E Fitri, Yogiswara, B Widiawan1 and E Rosdiana

[+](#) Open abstract [View article](#) [PDF](#)

---

**Renewable and Novel Energy Sources**

---

**OPEN ACCESS**

012060

An investigation of dummy load energy in gunung sawur 1 microhydro power plant - Lumajang East Java

DE Rahmanto and V Femintasari

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012061

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.





Bioethanol Production from Sugarcane Molasses with Simultaneous Saccharification and Fermentation (SSF) Method using *Saccaromyces cerevisiae*-*Pichia stipitis* Consortium

Audiananti Meganandi Kartini and Yeny Dhokhikah

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012062

A novelty design of GHG Emission Reduction Cost for the Province of Nusa Tenggara Timur, Indonesia: A quantitativebased scientific view

A Amheka and Y Higano

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012063

Implementation microcontroller-based bioethanol levels measurement tool on bioethanol purification equipment

E Antika and Y Susmiati

[+](#) Open abstract [View article](#) [PDF](#)

---

**The Other**

---

**OPEN ACCESS**

012064

Studies on inhibition of *Morinda citrifolia* leaf extract (*Morinda citrifolia* L) against the growth of *Aeromonas hydrophilla* in vitro

I A A Pongoh and A A Gemaputri

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012065

Ethyl Acetate Fraction Of Secang As Anti Cervical Cancer By Inducing p53 and Caspase 9

N P L Laksmiani, N M W Astuti, C I S Arisanti and N L P V Paramita

[+](#) Open abstract [View article](#) [PDF](#)

---

**OPEN ACCESS**

012066

The Influence of Sediment Loads on the Irrigation Discharge in The Upstream and Downstream of the Major River in Banyuwangi Regency

Z Erwanto, D Dwi Pranowo, D S W P J Widakdo and N S R Wilujeng

[+](#) Open abstract [View article](#) [PDF](#)

---

**JOURNAL LINKS**

[Journal home](#)

[Journal scope](#)

[Information for organizers](#)

[Information for authors](#)

[Contact us](#)

[Reprint services from Curran Associates](#)





# International Conference on Food and Agriculture

ICoFA | 20-21 October 2018 | BNDCC Bali

[HOME](#)[CALL FOR PAPERS](#)[COMMITTEE](#)[REGISTRATION FEE](#)[VENUE](#)[SUBMISSION SYSTEM](#)  
**Committee**[ABOUT](#)

## Scientific Committee

Prof. Dr. Dong Hwa Kim, Ph.D. (President of Society of HuCARE, Korea)  
 Prof. Thong Kwai Lin, Ph.D. (University of Malaya, Kuala Lumpur, Malaysia)  
 Prof. Woo-Won Kang (Kyungpook National University, South Korea)  
 Prof. Dr. Xiong Ying (WUXI Institute of Technology, China)  
 Prof. Dr. Abdul Karim Alias (Universiti Sains Malaysia, Malaysia)  
 Prof. Dr. Nurul Huda, (Universiti Sultan Zainal Abidin, Malaysia)  
 Prof. Dr. Tjakko Abee, (Wageningen University & Research, Netherland)  
 Prof. Dr. Ali Agus, DAA DEA (Universitas Gadjah Mada, INDONESIA)  
 Prof. Dr. Budi Guntoro, M.Sc., Ph.D.IPU (Universitas Gadjah Mada, INDONESIA)  
 Prof. Dr. Kudang Boro Seminar. (Institut Pertanian Bogor, INDONESIA)  
 Prof. Dr. Dewi Apri Astuti (Institut Pertanian Bogor, INDONESIA)  
 Prof. Dr. Joko Santoso. (Institut Pertanian Bogor, INDONESIA)  
 Prof. Dr. Tri Agus Siswoyo. (Universitas Negeri Jember, INDONESIA)  
 Assoc. Prof. Dr. Maria Cynthia R. Oliveros. (University of the Philippines Los Banos, Philippines)  
 Assoc. Prof. Dr. Weerapon Thongma (Maejo University Thailand)  
 Assoc. Prof. Dr. Sashinitta Thanomwong-watana (Rajamangala University of Technology Thanyaburi, Thailand)  
 Dr. Titik Budiati. (Politeknik Negeri Jember, INDONESIA)  
 Dr. Dadik Pantaya. (Politeknik Negeri Jember, INDONESIA)  
 Dr. Edi Siswadi. (Politeknik Negeri Jember, INDONESIA)  
 Dr. Hari Rujito. (Politeknik Negeri Jember, INDONESIA)  
 Dr. R. Abdoel Djamali (Politeknik Negeri Jember, INDONESIA)

## Organizing Committee

Chairman of International Advisory Board	: Dr.Nanang Dwi Wahyono
Advisor	: Abi Bakri, M.Si : Saiful Anwar, MP : Moh. Munih Dian Widiarta, MT : Dr. N. Bambang Eko S
Chairman of Steering Committee	: Dr. Budi Hariono
Chairman of Organizing Committee	: Agung Wahyono, Ph.D
Secretary	: Dr. Merry Muspita Dyah Utami
Editor in Chief	: Dr. Titik Budiati
Editor	: Adriadi Novawan, M.Ed : Dr. Dadik Pantaya : Dr. Edi Siswadi : Dr. Hari Rujito : Dr. R. Abdoel Djamali



### LINKS

Hosted By :



Politeknik Negeri Jember

Supported By :



Sponsored By :



Financial Treasury	: Hendra Yufit Riskiawan, M.Cs
Financial Treasury Support	: Indriana Rahmawati
Social Program Coordinator	: Netty Ermawati, Ph.D
Social Program	: Sustin Farlinda, MT
Publication and Book Program	: Vigo Dewangga, M.Pd
Supporting	: Yogyarsi Budiwiyanti
	: Ahmad Nuril Firdaus
	: Mery Hadiyah Wati
	: Suryadi.
	: Dwi Putro Sarwo Setyohadi

Indexed By :  




Published By :  
IOP Conference Series: Earth  
and Environmental Science  
(EES)

Listed in  
