

Conference Programme
Papers Abstracts

Global Innovation on Sustainability and Sustainable Development



SAFE 2017 - International Conference
Sustainable Agriculture, Food and Energy
August 22-24, 2017, MALAYSIA

Muthia Dewi



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**5th International Conference
Sustainable Agriculture, Food, and Energy
SAFE2017**

August 22-24, 2017
Acapella Suites Hotel Shah Alam, MALAYSIA

**“Global Innovation on Sustainability and
Sustainable Development of Agriculture,
Food and Energy”**

Organizing Institution



SAFE NETWORK
Asia Pacific Network for Sustainable Agriculture, Food and Energy

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Welcome Message from SAFE-Network Coordinator **Dr. Novizar Nazir**

Welcome Remark from the Rector of Andalas University-INDONESIA, **Prof. Dr. Tafdil Husni.**

Welcome Remark from Conference Chairman/Vice Chancellor of Universiti Teknologi MARA (UiTM),
PROFESSOR EMERITUS DATO' DR HASSAN SAID

The composition of SAFE2017 Organizing Committee

Networking Discussion

SAFE2017 Program

List of Abstract based on Code of Sub-theme

Abstracts

SUB-THEME 1 Sustainable Agriculture and Technology (SAT)

SUB-THEME 2 Food Science and Technology (FST)

SUB-THEME 3 Alternative Energy (AE)

SUB-THEME 4 Sustainable Development, Management and Empowerment (SDME)

SUB-THEME 5 Innovation and Product Development (IPD)

SAFE2017 PROGRAM

DAY 0: Monday, August 21, 2017
ARRIVAL OF PARTICIPANTS

DAY 1: Tuesday, August 22, 2017
PRE-CONFERENCE TOUR

DAY 2: Wednesday, August 23, 2017
VENUE: ACAPELLA SUITES HOTEL, SHAH ALAM. MALAYSIA

Time	Activity
7.30-8.30 AM	Registration
8.30-9.00	Opening Ceremony Venue: SERAYA BALL ROOM, Acapella Suites Hotel
8.40-8.50	Opening by MC National anthem of Malaysia "Negaraku" National anthem of Indonesia "Indonesia Raya" Do'a
8.50-8.55	Conference Program Introduction by Local Conference Coordinator, Prof. Axizah Hanom Ahmad, Universiti Teknologi MARA, MALAYSIA
8.55-9.00	Welcome Remark from Rector of Andalas University, Prof. Dr. Tafdil Husni
9.00-9.05	Welcome Remark from Vice Cancellor of Universiti Teknologi MARA, PROFESSOR EMERITUS DATO' DR HASSAN SAID
9.05-9.10	Welcome Remark by the Ambassador of the Republic of Indonesia in MALAYSIA
9.10-9.15	Presentation of Opening Gimmick Presentation of Certificate of Appreciation and Special Gift from Dr. Novizar Nazir (SAFE-Network) to Universiti Teknologi MARA-MALAYSIA and Andalas University-INDONESIA
9.15-9.25	Presentation SAFE2018 logo to Delegates from PHILIPPINES, the President of CBSUA, Philippines and Dr. Norman de Jesus , Resident Coordinator of SAFE-Network (Philippines) from Pampanga State Agricultural University. Official Photo session

FST-09

Effects of cryoprotective in surimi-like material of spent laying hen meat during frozen storage

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Abstract— The objective of this research was to study the influence of different and levels of cryoprotectan (dextrose and sorbitol) added (0%, 0%, 4%, 8%) on physicochemical of surimi prepared from spent laying hen meat. The surimi can damaged during occur of freezing process, so it should be added cryoprotectant compounds that has function to prevent protein denaturation during freezing. The analysis was include the pH, water holding capacity, moisture content, protein content, fat content (14, 21 days). The adding dextrose and sorbitol generally was showed no significant different ($P>0.05$) in pH than the control, but there were increased in moisture, protein and fat content and WHC among the frozen storage ($P<0.05$) samples. Surimi were using cryoprotektant able to maintain WHC compared to raw surimi without using cryoprotektant during frozen storage. Therefore, it is reasonable to assume that processing of surimi based on spend laying hen can preserve better the physicochemical of surimi by using dextrose and sorbitol at 4-8% levels among storage.

Keywords— cryoprotectan, dextrose, sorbitol, surimi, spent laying hen meat

FST-10

Performance, Carcas Quality and Percentage of Internal Organ of Duck, Muscovy Duck and Tiktok

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Abstract— Duck has been developed as egg producer and muscovy duck is good meat producer, but the later slow reproduction; hence, tiktok (mule duck - cross between duck and muscovy duck) has been used as an alternative for increasing meat production. An experiment was conducted to evaluate performance, carcass quality and percentage of internal organ of duck (Mojosari), muscovy duck (Manila) and tiktok. The three species were used as treatments with six repetition-animals, arranged under Complete Design. All animals were reared in brooding cage for two weeks, and then reared in individual battery with feed containing 18% protein and 2992 kcal/kg energy until ten weeks when the animals were slaughtered for analysis. Results of the experiment demonstrated that there were no significant difference between the three species in term of feed consumption and cooking loss. However, they differed in term of body weight gain, feed conversion ratio, the percentage of carcass and its division, meat bone ratio, abdominal fat, chest fat, chest cholesterol, internal organ percentage and drip loss. In general, muscovy duck showed the best growth performance and carcass quality, followed by tiktok and duck being the last; except carcass percentage of tiktok (64%), being higher than those of duck (61.6%) and muscovy duck (62.7%). In addition, meat cholesterol of tiktok (2.2%) and muscovy duck (1.8%) were similar, higher than those of duck (2.9%). However, loss of nutrition in tiktok during thawing proseses was higher than those in duck and muscovy duck.

Keywords— performance, carcass quality, fat, cholesterol, duck, muscovy duck, tiktok.



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CERTIFICATE

Asia Pacific Network for Sustainable Agriculture, Food and Energy (SAFE-Network)
and Universiti Teknologi MARA, MALAYSIA
Jointly certify that,

MUTHIA DEWI

PRESENTER

International Conference-Sustainable Agriculture, Food and Energy (SAFE 2017)
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Global Innovation on Sustainability and Sustainable Development



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SAFE Network Resident Coordinator
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